UMHLATHUZE MUNICIPALITY

5TH GENERATION SPATIAL DEVELOPMENT FRAMEWORK 2022/2023 – 2026/2027 DRAFT (MARCH 2022)

Contact Details:
Acting Municipal Manager:
Mr NG ZULU
Private Bag X1004
RICHARDS BAY
3900

Telephone: 035-9075000
Facsimile: 035-9075444/5/6/7
Website: www.umhlathuze.gov.za
Email: creg@umhlathuze.gov.za

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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 2016 wards with the new municipal boundary of uMhlathuze*

1. INTRODUCTION

1.1 BACKGROUND

The document represents the Fifth Generation Spatial Development Framework (SDF) for uMhlathuze Municipality for 2022/23 – 2026/2027 and aims to achieve the following:

- Include any updated information, specifically sector plan information, available since the preparation and subsequent reviews 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 fourth review of the 2017/2018 – 2021/2022 SDF as adopted in May 2021.
- 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.

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) also requires that:

"(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) …"

Section 21 of the Spatial Planning and Land Use Management Act (Act No 16 of 2013) requires, amongst others, 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 …
(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 …"

1.3 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.

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"

1.4 PREPARATION OF FIFTH GENERATION 2022/2023 – 2026/2027 METHODOLOGY AND APPROACH

Figure 1: Action Items for the SDF Preparation

No.	Description	Comment
1.	Update of the Policy Context of the SDF to ensure that amendments, additions, changes etc. are captured.	Ongoing Activity. Accuracy of updates to be confirmed at time of submission of draft SDF (March 2022) and final SDF (May 2022).
2.	Update of status quo information and presentation thereof in line with the SPLUMA themes and sub-elements provided as a guide, i.e. the biophysical, socio-economic and built environment, i.e.: - Population Growth Estimates - Housing Demand	Ongoing Activity. Accuracy of updates to be confirmed at time of submission of draft SDF (March 2022) and final SDF (May 2022). Estimates for housing demand to be derived from population growth estimates as well as Human Settlements Plan.
3.	o Identify areas in the municipality where incremental upgrading approaches to development and regulation will be applicable.	Process to be informed by mainly the Human Settlements Plan and associated processes.

	○ Identify designated areas where a national or provincial inclusionary housing policy may be applicable.	
4.	Various norms and standards have been adopted by KZN CoGTA and these are mainly intended to assist municipal officials during the assessment of land development applications in relation to the various topics.	These norms and standards will be also be evaluated and the manner in which they have an impact on SDF development determined and, where required, provisions made in the SDF.
5.	Engagement on the long term spatial vision	A long term spatial vision was prepared during one of the reviews of the fourth generation SDF and this will (1) confirmed or (2) amended if required.
6.	Confirmation of spatial structuring elements	Review and/or confirmation of the structuring elements, including nodes, corridors etc.
7.	Include a strategic assessment of the environmental pressures and opportunities within the municipal area.	Ongoing Activity. Accuracy of updates to be confirmed at time of submission of draft SDF (March 2022) and final SDF (May 2022) and based on availability of information.
8.	Estimates of economic activity and employment trends and localities.	Ongoing Activity. Accuracy of updates to be confirmed at time of submission of draft SDF (March 2022) and final SDF (May 2022) and based on availability of information.
9.	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.	This process to be undertaken in conjunction and considering the land use scheme for alignment.
10.	Identify, quantify and provide location requirements of engineering infrastructure and services provision for existing and future development needs	Ongoing Activity. To be informed by various process, i.e. updated infrastructure sector plans as well as the Review of the uMhlathuze Capital Expenditure Framework (CEF)*.
11.	Determine capital expenditure framework	Review of the uMhlathuze Capital Expenditure Framework (CEF)* critical during this process.
12.	The five-year spatial development plan for the municipality outlined, including anticipated areas of growth along with areas that require infrastructure intervention and implementation as well as other regulatory compliance matters.	The five-year spatial development plan to be informed by the various processes that have been listed above.

The comments of the MEC of the KwaZulu-Natal Department of Cooperative Governance and Traditional Affairs (dated 19 October 2021) of the uMhlathuze Local Municipality 2021/2022 Reviewed Integrated Development Plan, Cross Cutting Issues, is as follow:

- Noted overall legislative compliance with the development and submission of an SDF.

- Commented for developing a spatial vision that is aligned to the vision of the 2030 National Development Plan and its translation into strategies and projects.
- The development of a Capital Investment Framework and Capital Expenditure Framework is commended.
- It is recommended that institutional arrangements necessary for implementation be specified in the SDF to outline how implementation of planning functions will take place and resourcing requirements. It is also suggested that the CIF/CEF prioritizes and identifies risks for each proposal /programme and or project as well as mitigation strategies.
- The comprehensive environmental analysis is applauded as well as the IEM tools as well as related projects and programmes. The review of the actions plans for climate change, the air quality management plan and biodiversity plan have to be prioritised.

1.5 REPORT STRUCTURE

- Section 1 Introduction
- Section 2 Policy Context
- Section 3 Spatial Analysis
- Section 4 Demographic and Socio-Economic Analysis
- Section 5 Environmental Analysis
- Section 6 Agricultural Review
- Section 7 Land Reform
- Section 8 Infrastructure and Services
- Section 9 Human Settlement Overview
- Section 10 Disaster Management
- Section 11 Spatial Development Framework
- Section 12 Implementation of the Spatial Development Framework
- Section 13 Government Project Pipeline and Cross Border Matters

Details in respect of Consultation are contained in the Annexure

1.6 INFORMATION SOURCES

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

- uMhlathuze Spatial Development Framework 2017/2018 – 2021/2022
- 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
- Various Municipal Sector Plans

2. POLICY CONTEXT

The global agenda and policy 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 policy pronouncements both at national and provincial levels as well as the KwaZulu-Natal Provincial Growth and Development Strategy (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 2: United Nations Sustainable Development Goals

Table 1: Description of SDGs

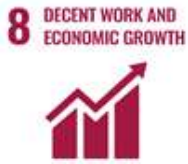
Goal 1: No Poverty	End poverty in all its forms everywhere
Goal 2: Zero Hunger	End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
Goal 3: Good Health and Well-Being for People	Ensure healthy lives and promote well-being for all at all ages
Goal 4: Quality Education	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

In partnership with its social partners, the Municipality has embarked on a process of localising the SDGs in the uMhlathuze context. This initiative is at its infancy stage and as such, broader consultation with various stakeholders and role-players is yet to be achieved. As part of the first attempt to localisation, the following localisation framework has been agreed to.

Table 2: Municipal Response and Vision on SDGs

SUSTAINABLE DEVELOPMENT GOAL	RESPONSE	VISION
	• Creating a concessive environment for investors, this in turn will lead to the creation of employment opportunities for local communities.	By 2030, we should have created an environment that is conclusive for employment and efficient livelihoods.
	• Within the broader economic development imperative: by using agriculture to include communities in the economy can result in an agriculture support plan.	The municipality should ensure that local communities have an opportunity to participate in the municipality's economy through the agricultural industry.
	• 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.	By 2035, HIV/AIDS and lifestyle diseases (i.e. heart disease, obesity and diabetes) statistics should be reduced by 50%.
	• 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.	A city attracting citizens for quality educational institutions promoting inclusive and equitable learning opportunities for all through partnerships with institutions and industries.
	• Empowerment through: • Education and skills development • Employment • SCM processes • Leadership • Mentorship	Attaining gender equality by promoting that women and girls have the same opportunities.

SUSTAINABLE DEVELOPMENT GOAL	RESPONSE	VISION
	• Conserve water resources such as lakes and rivers • Provide basic sanitation (i.e. VIP toilets).	By 2030, all households should have access to basic services such as potable water and sanitation.
	Building sustainable energy generation infrastructure: • Solar energy • Gas to power energy • Waste to energy • Wind energy Public participation exercises are required for community's investment.	By reducing the dependency on coal for electricity generation by 30%.
	Promote and incentivise investments.	To promote and incentivise investments.
	By upgrading the municipality's infrastructure as the agenda for smart cities.	By 2030, increase/expand municipal areas (inclusive of marginalised) with contemporary and innovative infrastructure.
	Identify community members in need of employment opportunities to alleviate poverty and increase skills development training programs (Operation Sukuma Sakhe).	Reduce inequality within the municipality
	• Planning integrated human settlements • Incorporate functional recreational spaces within human settlements • Create catalytic economic activities outside of core urban areas.	Ensure integrated and inclusive planning for human settlements

SUSTAINABLE DEVELOPMENT GOAL	RESPONSE	VISION
	Reduce consumption of non-renewable resources through introduction of waste usage (By Product)	• Moving away from using of non-renewable resources • Minimization of waste to by product (feedstock)
	• 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	Reduce greenhouse gases while adapting to climate change
	• 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 operation Phakisa	• To conserve the marine life by sustainably using resources provided by the ocean. • Effective partnerships, awareness campaigns and enforcing Bylaws.
	• Identify conservation areas in the Spatial Development Framework (SDF). • Partnerships with environmental authorities, civil society and businesses. • Promote tourism opportunities with natural assets.	No net loss of sensitive ecosystems (to be declined).

The above provides a base from which the Municipality is to expand its vision and localisation programmes through various municipal programmes. Of critical importance is how the Municipality responds to "The New Urban Agenda"; which amplifies SDG 11 by presenting a shared vision on managing urbanisation for sustainable urban development.

A very prominent, emerging global issue is the recession as a result of the Covid-19 pandemic which is forcing everyone to re-imagine the future. When considering sustainable development, the Municipality has to look into how it can mitigate risks and evolve toward smarter infrastructure development, economic facilitation and spatial planning. Whereas the impact of the Covid-19 pandemic has been

sudden, and to a degree unexpected, Municipalities are also confronted with the looming climate change impacts that affirm the need to mitigate risks as mentioned.

2.2 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. The National Planning Plan priorities and its alignment with Municipal Strategic Goals are summarized in the table below:

Table 3: National Development Plan Priorities

No.	National Plan Priorities	uMhlathuze Alignment thereof
1	Create jobs	Goal 3: Viable Economic Growth and Development Objective 3.1.2: Stimulate key sectors that promote economic growth and create jobs
2	Expand infrastructure	Goal 2: Integrated infrastructure and efficient services 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 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

No.	National Plan Priorities	uMhlathuze Alignment thereof
		Objective 1.1.4: To promote a municipal governance system that enhances and embraces the system of participatory governance.
5	Quality education	Municipal Mission 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 Objective 1.1.1: To ensure effective and efficient administration complying with its legal mandates
8	Fight corruption	Municipal Mission Creation of Secure and Friendly City Through Fighting Crime
9	Unite the nation	Goal 3.4: Social Cohesion Objective 3.4.1 : To promote Social Cohesion

2.3 MEDIUM TERM STRATEGIC FRAMEWORK (2019 – 2024)

The 2019-2024 Medium Term Strategic Framework (MTSF) is the second 5-year implementation plan for the NDP. The MTSF sets out the package of interventions and programmes that will advance the seven priorities adopted by government as illustrated hereunder.

Figure 3: MTSF Priorities (2019-2024)

The MTSF focusses on the triple challenges of poverty, inequality and unemployment and is based on the following pillars:

- Strong Inclusive Economy
- Capable Developmental State
- Capable South Africans

Women, People with Disability and the Youth are cross cutting focus areas. The following table details the alignment of some initiatives of the Municipality in relation to the MTSF priorities:

Table 4: Alignment of uMhlathuze Initiatives with MTSF Priorities

1. Capable, Ethical, Developmental State	○ Internalization of SDGs ○ Land Use Management Challenges in Rural areas ○ Effective JMPT ○ Alignment with SOE by way of a Memorandum of Understanding ○ Hierarchy of Plans in place ○ Council Codes of Ethics ○ Consultation approach ○ Improved Business Processes (SAP) ○ Youth Desk ○ Women's Forum
2. Economic Transformation & Job Creation	○ Ease of Doing Business ○ Green Economy: Materials Recovery & Waste Management ○ Comprehensive Integrated Transport Plan ○ Securing Water Supply ○ Energy Sector Plan & Alternatives ○ Biodiversity Economic Opportunities ○ Agricultural Support Plan ○ Informal Economy Support ○ Ongoing business (including SMME) support
3. Education, Skills & Health	○ Public Wi-Fi ○ Proposed Maritime TVET (Operation Phakisa) ○ Target areas of known educational backlogs ○ Operation Sukuma Sakhe War Rooms to assist with Community Health ○ Completion of ECD (Early Childhood Development) Centres
4. Consolidating the Social Wage Reliance & Quality Basic Services	○ Batho Pele Committee ○ Target Areas of Poverty as per socio-economic indicators ○ Target assistance to known Child Head Households and Indigents (OSS) ○ Support for EPWP ○ Pursue Food Security (Agricultural Support Plan) ○ Food Bank ○ Water, Sanitation, Electricity & Waste Removal
5. Spatial Integration, Human Settlement & Local Government	○ Settlement patterns, Nodes & Corridors ○ Spatial Transformation Agenda ○ Priority Housing Development Areas (PHDAs) process ○ Green House Gas Inventory ○ Green Building Guideline ○ Rural Planning & Agrarian Support ○ Infrastructure Sector Plans ○ Water Re-use PPP ○ Public Transport Planning & Investment

	○ Land Reform Task Team
6. Social Cohesion & Safer Communities	○ Disaster Management Plan (Level 2) ○ Arts & Culture Events ○ Functionality of OSS & War Rooms ○ Grant-in-Aid ○ Special Programmes
7. A Better Africa & World	○ National & International Collaboration & Coordination ○ Partnerships (UWASP, ICLEI, GiZ etc.) ○ Disaster Management Services ○ Climate Action

2.4 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 Chapter 8 of the National Development Plan (NDP).

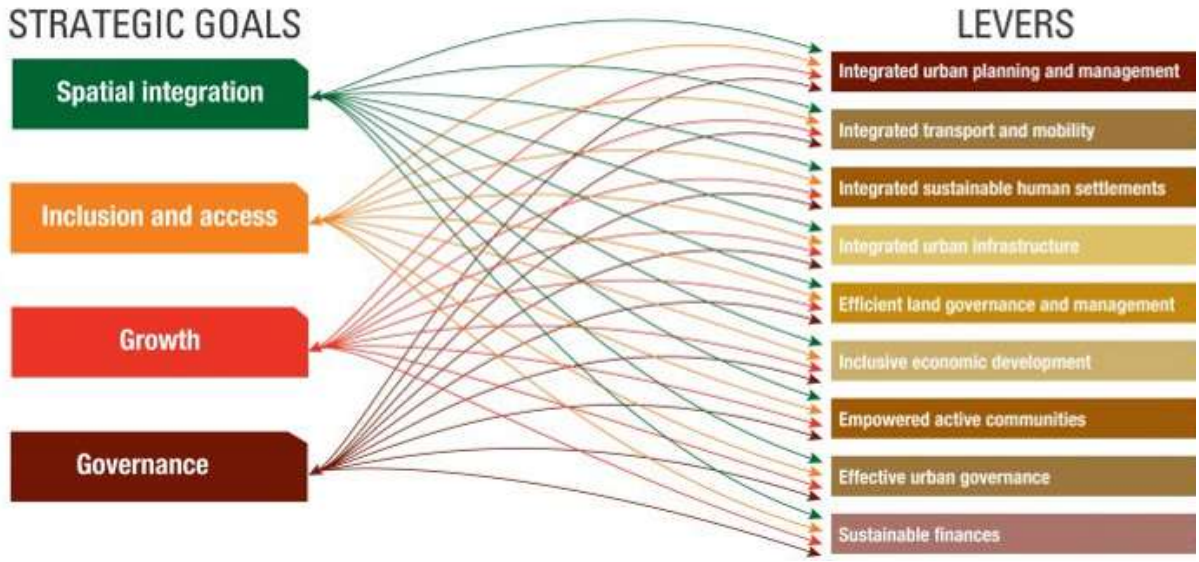
The overall outcome of the IUDF is spatial transformation. This new focus for South Africa steers urban growth towards a sustainable growth model of compact, connected and coordinated cities and towns. The IUDF implementation plan identifies a number of short term proposals to achieve spatial transformation.

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

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

The IUDF objective conforms to the New Urban Agenda (NUA) vision of “cities for all”. The NUA is a global commitment to sustainable urban development at all levels (global, regional, national, subnational and local), and encourages agencies and role-players to provide practical guidance for the implementation of the New Urban Agenda and the urban dimensions of the Sustainable Development Goals. In South Africa, more than 60% of the population lives in urban areas. The IUDF, which is South Africa’s urban policy, articulates how South Africa will transform urban areas to overcome both historical and prevailing challenges, while working together to ensure more integrated, sustainable and equitable human settlements.

Figure 4: Strategic Goals and Levers of the IUDF



These above IUDF levers relate very specifically to the pillars of **spatial transformation** and such is embraced by the uMhlathuze Municipality. The Municipality is planning and implementing for improved public transport, investment is aimed at aiding the Informal Economy and a number of processes are underway to establish integrated human settlements in the municipal area. Specific projects are identified in support of spatial transformation and in line with the listed levers.

2.5 STATE OF THE NATION AND STATE OF THE PROVINCE ADDRESS

President Cyril Ramaphosa delivered the State of the Nation Address on 10 February 2022 before a joint sitting of the two houses of Parliament. A humble 2022 State of the Nation (SONA) address took place as President Cyril Ramaphosa discussed the country's present and future, post- devastating pandemic.

The State of the Province Address (SOPA) 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 following table provides a summary of the alignment between key elements of the SOPA and SONA, their relationship with the MTSF priorities as well as the practical application thereof in the uMhlathuze context.

Table 5: Alignment between MTSF, SONA, SOPA and application in uMhlathuze

MTSF PRIORITIES (2019-2024)	STATE OF THE NATION ADDRESS KEY POINTS	STATE OF THE PROVINCE ADDRESS KEY POINTS	PRACTICAL APPLICATION (examples)
1. Capable, Ethical, Developmental State	○ Special Economic Zones ○ Growing the Economy ○ to revitalise manufacturing base and create globally competitive export industries	○ Building Good Governance, Ethical and Developmental State ○ Operation Clean Audit ○ Investing in Human Resource Development to Build Professional Civil Servants ○ Development of Dube Trade Port and Richards Bay IDZ	○ Internalization of SDGs ○ Land Use Management Challenges in Rural areas ○ Effective JMPT ○ Alignment with SOE by way of a Memorandum of Understanding ○ Hierarchy of Plans in place ○ Council Codes of Ethics ○ Consultation approach ○ Improved Business Processes (SAP) ○ Smart City Initiatives (enterprise Resource planning, broadband connectivity, Richards techno hub ○ Implementation of Integrated Urban Development Framework (CoU as Secondary Cities pilot project) ○ Industrialisation through special economic zones (RIDZ) and Port Expansion
2. Economic Transformation & Job Creation	○ Accelerate economic recovery ○ Implement economic reforms to create sustainable jobs and drive inclusive growth ○ Solidarity Fund ○ Employment Tax Incentive ○ Sugar Master Plan ○ Department of home affairs to recruit 10 000 unemployed young people for digitization of paper records. ○ Department of higher education and training will place 10 000	○ The Cannabis Industry ○ KZN Youth Employment Fund. ○ Cannabis Master Plan ○ Social Employment fund will create 50 000 work opportunities. ○ Cannabis Sector to create 130 000 new jobs. ○ 10 000 job opportunities in housing projects	○ Economy Recovery Plan ○ Ease of Doing Business ○ Green Economy: Materials Recovery & Waste Management ○ Comprehensive Integrated Transport Plan ○ Securing Water Supply ○ Energy Sector Plan & Alternatives ○ Biodiversity Economic Opportunities ○ Agricultural Support Plan ○ Informal Economy Support ○ Ongoing business (including SMME) support

MTSF PRIORITIES (2019-2024)	STATE OF THE NATION ADDRESS KEY POINTS	STATE OF THE PROVINCE ADDRESS KEY POINTS	PRACTICAL APPLICATION (examples)
	unemployed TVET Graduates in workplaces from April 2022. o implement measures to unleash the potential of small businesses o review labour market regulations for smaller businesses o redesigned loan guarantee scheme o Red tape established to review red tape affecting the SMMEs		o King Cetshwayo District Fresh Produce o Investment in strategic economic o Implementation of catalytic projects "game changers" o Preferential procurement Policy
3. Education, Skills & Health	o Defeat the coronavirus pandemic o Presidential Youth Employment Initiative o 1000 Youth to be trained as artisans. o National Health Insurance o The amendment of Criminal Law (Sexual Offences and Related Matters) o Focus on school infrastructure and speed up delivery of infrastructure including building new schools in rural areas	o Youth in Agriculture o Managing and cleaning the Ocean shores/beaches. o Recycling, Tree Planting and waste energy initiatives. o Youth Ranger Programme. o Youth in Construction o Unemployed Youth Programme	o District Demand Council o District Joint Operations Committee o Local Joint Operations Committee o uMhlathuze COVID 19 Task team o Approved Work from Home Policy o Public Wi-Fi o Proposed Maritime TVET (Operation Phakisa) o Target areas of known educational backlogs o Operation Sukuma Sakhe (OSS) War Rooms to assist with Community Health o Completion of ECD (Early Childhood Development) Centres o Internships prioritizing young girls o Smart City Initiatives (Enterprise Resource planning, broadband connectivity, Richards bay Techno hub) o Strategic Partnerships with Institutions of higher learning (Signed MoU) o Mayoral Bursary Fund and Back to school fund.

MTSF PRIORITIES (2019-2024)	STATE OF THE NATION ADDRESS KEY POINTS	STATE OF THE PROVINCE ADDRESS KEY POINTS	PRACTICAL APPLICATION (examples)
			○ Partnership with Private Sector /Public entities _ Phelo Phepha campaign ○ Established HIV/AIDS Council ○ Support and Promotion of Senior Citizens sporting activities
4. Consolidating the Social Wage Reliance & Quality Basic Services	○ Railways ○ Water and Sanitation ○ Electricity and Energy ○ Infrastructure ○ Turning the corner in Water Provision ○ Catalytic Housing D Upgrade of Nation network by SANRAL ○ Welisizwe Projects ○ Rehabilitation of Passenger Rail Network ○ National Water Resources Infrastructure Agency. ○ Department of Water and Sanitation –Reviewing Water boards in terms of District Development Models, ○ Infrastructure and Economic Growth ○ Energy, road, water management projects to be prioritised under the R100 billion Infrastructure Fund, focusing on water, sanitation, and student accommodation among other projects	○ Basic services, in particular water; ○ Agriculture, rural development and food security ○ Agriculture and Agro-processing Master Plan ○ Establishment of Mega-Nurseries and Agronomic Seed Production ○ Programme to establish Four AgriHubs in the Province ○ Commercialization of Goat Farming ○ Re-igniting economic growth through infrastructure development ○ Road Safety ○ Renewable Energy programme ○ Bulk Infrastructure ○ Welisizwe Rural Bridges Programme ○ Umzimvubu Water Projects ○ Empangeni IRDP Project ○ Amaoti Greater Housing ○ Ethekwini Inner City Regeneration ○ Bridge City Housing ○ Alfred Duma Housing Developments ○ Kanku Road Projects ○ Expanded Public Works Programme ○ Water master plan	○ Batho Pele Committee ○ Target Areas of Poverty as per socio-economic indicators ○ Target assistance to known Child Head Households and Indigents (OSS) ○ Support for EPWP ○ Pursue Food Security (Agricultural Support Plan) ○ Food Bank ○ Water, Sanitation, Electricity & Waste Removal ○ Investment in strategic economic infrastructure ○ Water Conservation ○ Water Re-use initiatives ○ Long Term infrastructure investment plan

MTSF PRIORITIES (2019-2024)	STATE OF THE NATION ADDRESS KEY POINTS	STATE OF THE PROVINCE ADDRESS KEY POINTS	PRACTICAL APPLICATION (examples)
		○ Operations and Maintenance	
5. Spatial Integration, Human Settlement & Local Government	○ Implementation Of District Development Model	○ Environmental sustainability ○ Catalytic Housing Developments ○ Infrastructural Development	○ Empangeni Mega Housing Project
6. Social Cohesion & Safer Communities	○ Fighting crime and building safer communities ○ Gender-based violence crisis	○ fighting crime and corruption; ○ Strengthen intergovernmental relations for effective services ○ Community Safety and Liaison-Fighting Crime ○ Social development and social cohesion ○ Gender-Based Violence ○ Sport as tool for socioeconomic transformation	○ Disaster Management Plan (Level 2) ○ Arts & Culture Events ○ Functionality of OSS & War Rooms ○ Grant-in-Aid ○ Special Programme ○ One stop shop for youth development ○ CoU Crime Prevention Strategy ○ Community Policing Forums
7. A Better Africa & World	○ Paris Climate Agreement ○ Glasgow International Climate Conference ○ Presidential Climate Commission ○ Hydrogen Society Roadmap for the next ten years		○ National & International Collaboration & Coordination ○ Partnerships (UWASP, ICLEI, GiZ etc.) ○ Disaster Management Services

2.6 DRAFT NATIONAL SPATIAL DEVELOPMENT FRAMEWORK (NSDF)

The National Spatial Development Framework (NSDF) seeks to bring about a peaceful, prosperous and transformed South Africa. In accordance with its transformative agenda, and guided by the Spatial Planning and Land Use Management Act, Act 13 of 2013 (SPLUMA), the NSDF consist of the following parts:

- Part One provides the background to the need for and role of the NSDF, within the context of the NDP and outlines the NSDFs theory of change;
- Part Two provides an overview of the process that was followed in the compilation of the NSDF;
- Part Three provides a high-level overview of a series of significant national spatial development dynamics, challenges and opportunities;
- Part Four puts forward the national spatial development vision of a shared and just South Africa and outlines the "shifts" that must be made by way of six levers to give expression to the national spatial development vision as well as five outcomes to achieve the national development objectives;
- Part Five provides national spatial development and investment guidance in the form of an ideal spatial pattern, sub-frames as well as action areas; and
- Part Six deals with the implementation of the NSDF.

The National Spatial Development Vision Statement:

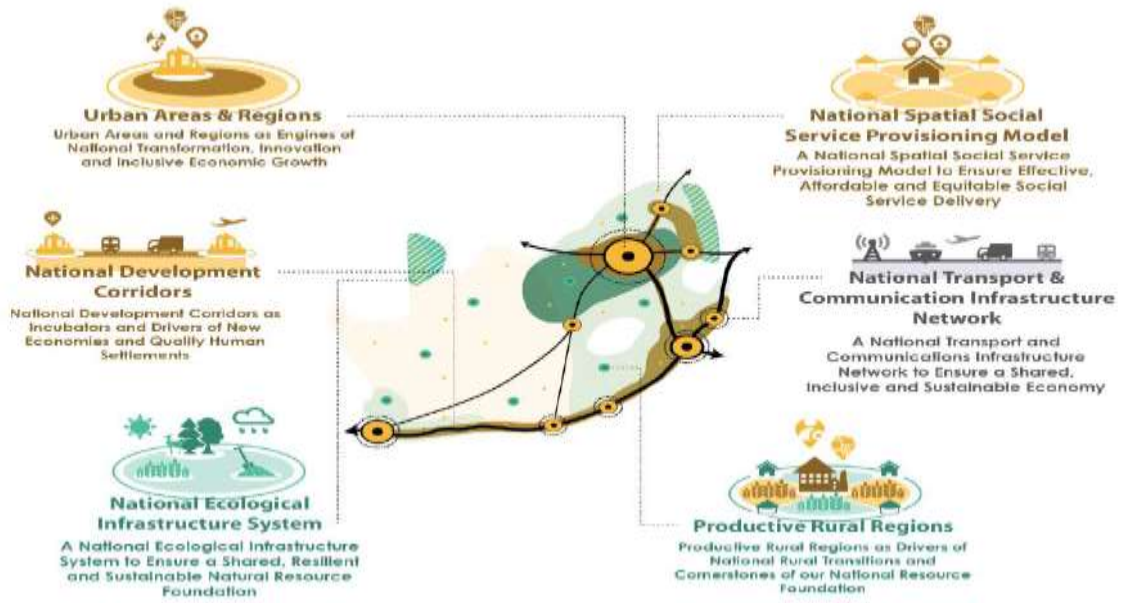
"All Our People Living in Shared and Transformed Places in an Integrated, Inclusive, Sustainable and Competitive National Space Economy"

The National Spatial Development Logic proposes a number of interrelated shifts to ensure the movement to a Post-Apartheid National Spatial Development Pattern with regard to:

- The beneficiaries of national spatial and spatial development
- The natural resource base
- The nature, function and performance of our settlements
- Our rural areas
- The nature, significance, form and impact of spatial development planning

The National Spatial Development Framework Levers are outlines in the following figure:

Figure 5: NSDF Levers



The 5 National Spatial Development Outcomes are summarised in the following table.

Table 6: NSDF Outcomes

Nr.	Outcome Description
1	A network of consolidated, transformed and well-connected national urban nodes, regional development anchors, and development corridors that enable South Africa to derive maximum transformative benefit from urbanization, urban living and inclusive economic development.
2	National corridors of opportunity enable sustainable and transformative national development, urbanization, urban consolidation, mutually beneficial urban and rural linkages, and ecological management.
3	National connectivity and movement infrastructure systems are strategically located, extended and maintained, to support a diverse, adaptive and inclusive space economy and a set key national and regional gateway cities and towns.
4	Productive rural regions, supported by sustainable resource economic and strong and resilient regional development anchors that provide access to people living in rural areas to the national and global economy.
5	National ecological infrastructure and the national resource foundation is well-protected and managed, to enable sustainable and just access to water and other natural resources, both for current and future generations.

As noted, sub-frames and action areas are also derived and the following table provides a summary thereof:

Table 7: Overview of Actions required in the National Spatial Action Areas in accordance with the NSDF Sub-Frames

National Spatial Action Areas	Relevant NSDF Sub-Frames			
	National System of Nodes and Corridors	National Resource Economy Regions	National Movement and Connectivity Infrastructure System	National Ecological Infrastructure and Natural Resource System
National Transformation Corridors	• Consolidating development in fully-fledged and transformed national urban nodes • Supporting and strengthening regional development anchors to play their crucial (1) national connecting, and (2) regional development anchoring and enhancing roles	• Supporting and strengthening and emerging farmers and small and medium-scale agriculture • Supporting eco-production and eco-entrepreneurs • Ensuring sustainable food production for national food security	• Creating new connections, e.g. the N2-extension, and strengthening existing connections	• Managing land development and land uses to ensure the protection of critical national water resources • Supporting agricultural practices and human settlement patterns and forms that optimise the use of land, and limit the impact on the ecology and the associated ecological service systems
Central Innovation Belt	• Diversifying the economy and supporting its transition to the secondary and tertiary sectors • Creating transformed, well-functioning settlements	• Supporting agro-processing, viable mineral and metals beneficiation and alternative energy production	• Strengthening existing connections to, and links with the core areas of the Gauteng Urban Region	• Managing and mediating the impacts of (1) dense human settlement and (2) intense economic activity on critical national water resources, e.g. the pollution-mitigation actions in the case of the Vaal River
National Resource Risk Areas	• Ensuring the sustainable use of resources, and preventing pollution and resource depletion	• Managing competing and incompatible land uses, e.g. mining, agriculture and eco-tourism	• Strengthening infrastructure networks to facilitate regional, national and cross-border flows	• Prioritising resource management by, amongst others, introducing far more stringent and binding protection of strategic (1) water resource and ecological systems services areas, and (2) high-value agricultural land
National Urban Regions	• Strengthening the network and nodes on it to become national centres of economic and human resource development and innovation	• Managing national and cross-border interdependencies for national and wider SADC benefit	• Refurbishing and developing infrastructure to enable and support (1) economic diversification and expansion, and (2) more youthful and larger populations • Strengthening regional, national and cross-border linkages	• Managing national and regional cross-border interdependencies to the benefit of all concerned • Managing the impact of human settlement and economic activities on strategic water resource areas
Arid-Innovation Region	• Strengthening regional development anchors as connecting, catalytic and interface points	• Supporting intensive, high-value productive agriculture • Strengthening and expanding alternative energy generation	• Supporting connections between urban cores and regional development anchors	• Ensuring sustainable aquaculture activities that assist with ensuring regional and national food security • Managing land development and economic activities, to ensure the protection of critical natural resources

Figure 6: Draft National Spatial Development Framework

2.7 STRATEGIC INTEGRATED PROJECTS

There are currently 36 SIPs (Strategic Integrated Projects) as per Government Notice No. 812 in Gazette Number 43547 (24 July 2020) under the Presidential Infrastructure Coordinating Commission Council of the Department of Public Works and Infrastructure. Twelve (12) of these SIPs relate directly to the KZN province.

Table 8: Strategic Integrated Projects

1.	**Strategic Integrated Project No. 19: Water and Sanitation** a. Vaal System including Phase 2 of the Lesotho Highlands Water Project: Gauteng b. Phase 2A of the Mokolo Crocodile River (West) Augmentation Project: Limpopo c. uMkhomazi Water Project: KwaZulu-Natal d. Olifants River Water Resource Development Projects – Phase 2: Limpopo e. Vaal-Gamagara: Northern Cape f. Mzimvubu Water Projects: Eastern Cape g. Rehabilitation of the Vaalharts-Taung Irrigation Scheme: Northern Cate & North West h. Groot Letaba River Water Development Projects – Nwamitwa Dam: Limpopo i. Berg River Voëlvlei Augmentation Scheme: Western Cape j. Rustfontein Water Treatment Works: Free State k. Orange-Riet Canal Increase of Bulk Raw Water Supply: Free State
2.	**Strategic Integrated Project No. 20: Energy** a. Emergency/Risk Mitigation Power Purchase Procurement Programme (2000MW): National b. Small IPP Power Purchase Procurement Programme (100MW): National c. Embedded Generation Investment Programme (EGIP) – 400MW: National

3.	**Strategic Integrated Project No. 21: Transport** a. N1 Windburg Interchange to Windburg Station: Free State b. N1 Musina Ring Road: Limpopo c. N1 Polokwane Eastern Ring Road Phase 2: Limpopo d. N1 Ventersburg to Kroonstad: Free State (2 projects in one) e. N2 Mtunzini Toll Phase to Empangeni T-Junction: KwaZulu-Natal f. N3 Cato Ridge to Dardanelles: KwaZulu-Natal g. N3 Dardenelles to Lynfield Park: KwaZulu-Natal h. N3 Paradise Valley to Mariannhill Toll Plaza: KwaZulu-Natal i. N2 Edwin Swales to South of EB Cloete Interchange: Kwazulu-Natal j. N3 Mariannhill Toll Plaza to Key Ridge: KwaZulu-Natal k. N2 EB Cloete Interchange: KwaZulu-Natal l. Small Harbours Development: National m. N3 New alignment via De Beers Pass: Free State n. Boegoebaai Port and Rail Infrastructure Project: Northern Cape
4.	**Strategic Integrated Project No. 22: Digital Infrastructure** a. National Spatial Infrastructure Hub
5.	**Strategic Integrated Project No. 23: Agriculture and Agro-processing** a. Marine Tilapia Industry: Eastern Cape b. Natural Dehydrated Foods: Mpumalanga
6.	**Strategic Integrated Project No.24: Human Settlements** a. Greater Cornubia: KwaZulu-Natal b. Vista Park ll & lll: Free State c. Lufhereng: Gauteng d. Malibongwe Ridge: Gauteng e. N2 Nodal Development: Eastern Cape f. Matlosana N12 West: North West g. Green Creek: Gauteng h. Mooikloof Mega Residential City: Gauteng i. Fochville Extension ll: Gauteng j. Germiston Ext 4 Social Housing Project: Gauteng k. Newcastle Hospital Street Social Housing Project: KwaZulu-Natal l. Hull Street Social Housing Project Phase 1: Northern Cape m. Kwandokuhle Social Housing Project: Mpumalanga n. Phola Heights – Tembisa Social Housing Project: Gauteng o. Sondela Phase 2: Gauteng p. Willow Creek Estate: Mpumalanga q. Joe's Place Social Housing: Gauteng r. Jeppestown Social Housing Project (Unity House): Gauteng
7.	**Strategic Integrated Project No. 25: Rural Bridges "Welisizwe" Programme**
8.	**Strategic Integrated Project No. 26: Rural Roads Upgrade Programme**
9.	**Strategic Integrated Project No. 27: Upgrading and Repair of Township Rods in Municipalities Programme**
10	**Strategic Integrated Project No. 28: PV and Water Savings on Government Buildings Programme**

11.	**Strategic Integrated Project No. 29: Comprehensive Urban Management Programme**
12.	**Strategic Integrated Project No. 30: Digitising of Government Information Programme**
13.	**Strategic Integrated Project No. 31: Removal of Alien Vegetation and Innovative Building Materials Programme**
14.	**Strategic Integrated Project No. 32: National Upgrading Support Programme (NUSP)**
15.	**Strategic Integrated Project No. 33: Solar Water Initiatives Programme**
16.	**Strategic Integrated Project No. 34: Student Accommodation**
17.	**Strategic Integrated Project No. 35: SA Connect Phase 1B Programme**
18.	**Strategic Integrated Project No. 36: Salvokop Precinct**

2.8 PGDS SPATIAL PLANNING PRINCIPLES

The strategic and targeted nature of the Provincial Growth and Development Strategy (PGDS) 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 Environmental Management Framework (EMF) and Environmental Services Management Plan (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.

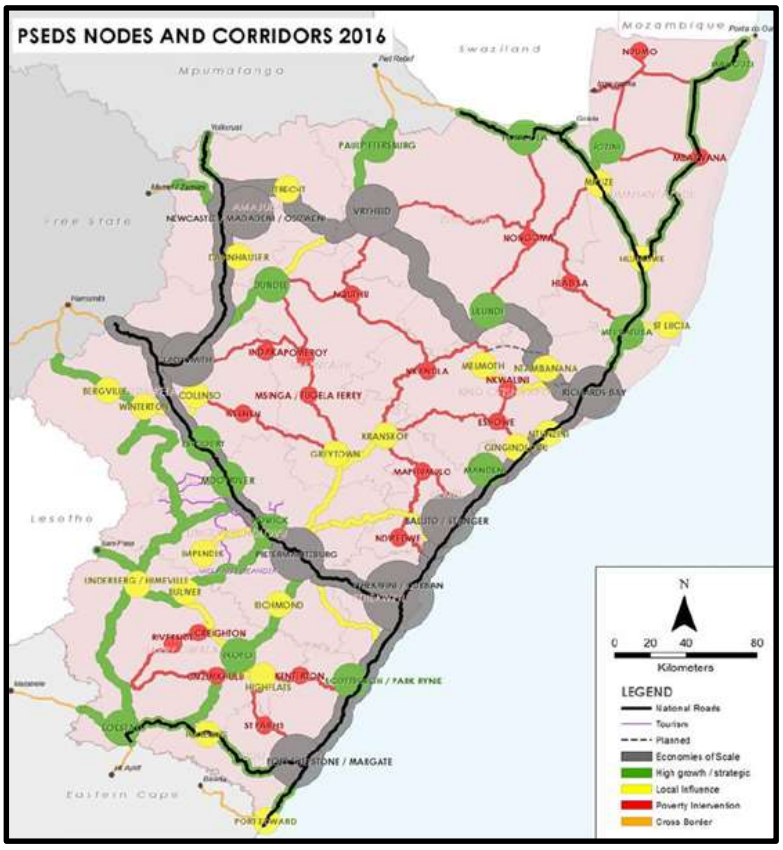
2.9 PROVINCIAL SPATIAL ECONOMIC DEVELOPMENT STRATEGY: CORRIDOR AND NODAL FRAMEWORK - 2016

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 difference 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.

Map 1: Composite mapping of PSEDS Nodes and Corridors



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.

2.10 FINAL DRAFT KWAZULU-NATAL PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK (PSDF)

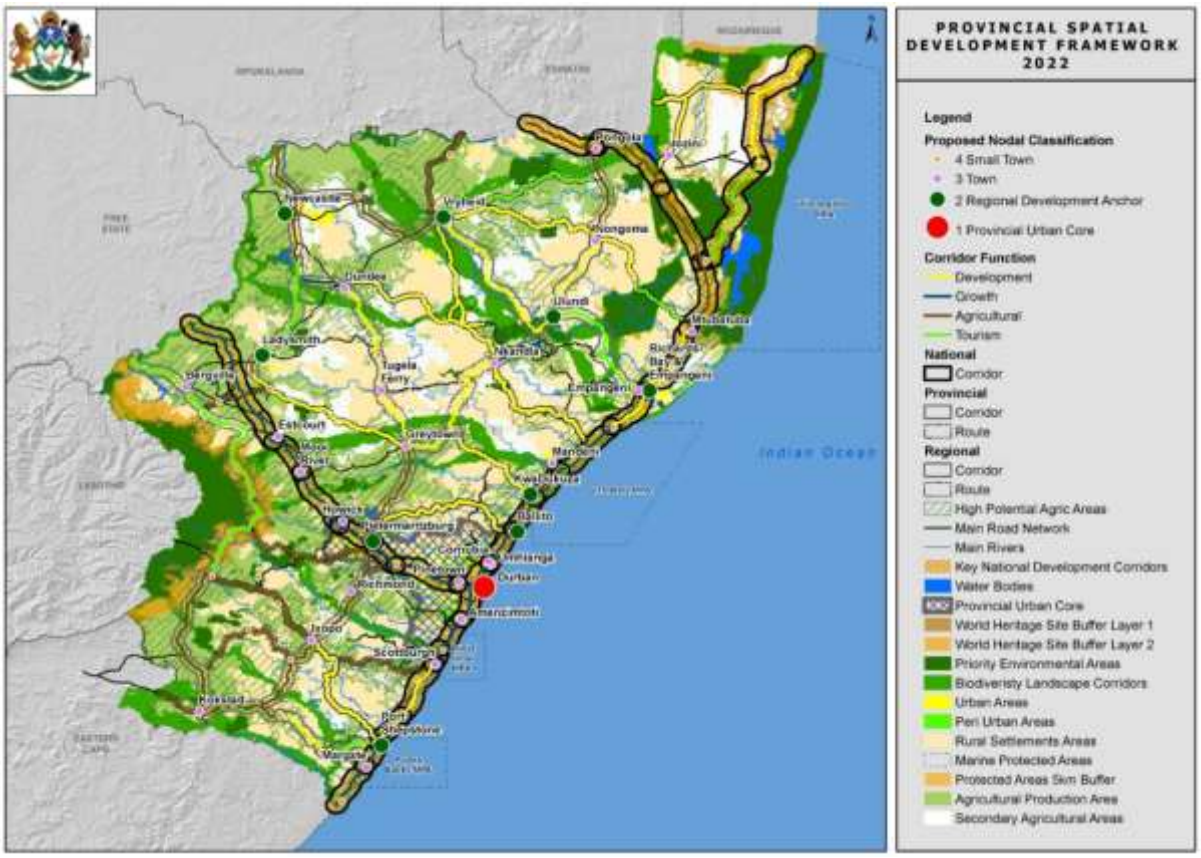
The Kwazulu-Natal Provincial Spatial Development Framework (PSDF) represents the long-term spatial vision of the province to be consistent with and be formulated within the context of the National Spatial Development Framework. It is the spatial expression of the KZN Provincial Growth and Development Strategy (PGDS) and provides spatial context for proposed strategic interventions. It must guide the spatial dimension to achieve the goals and objectives of the PGDS in a targeted and spatially coordinated manner.

The spatial development framework is developed and informed by subframes, which relate to a number of spatial concepts, i.e. small town revitalization, biodiversity management, urban networks, global integration, functionality etc. The intention of the subframes is to provide a spatial representation of the desired spatial and land use pattern for the province. The subframes were developed representing the development policy strategies and objectives of the province in a spatial manner, where possible and include the following:

- Natural Resource Protection
- Productive Rural Regions
- Cross Border Alignment and Linkages
- Provincial Development Corridors, Accessibility and Cross Border Alignment
- Development Nodes
- Sustainable and Integrated Human Settlements
- Integration Zones

The various subframes were consolidated to reflect the intended spatial development pattern for the province as reflected hereunder:

Map 2: Consolidated Final Draft PSDF



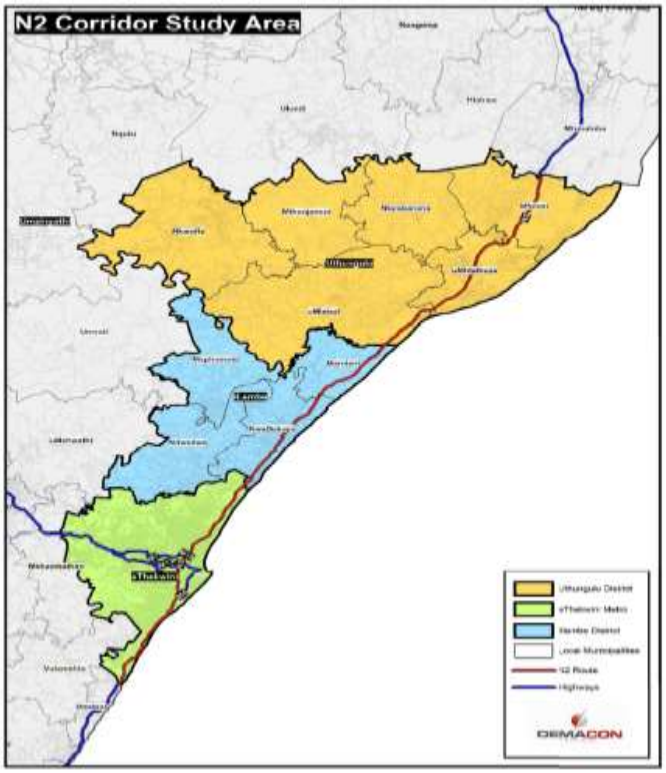
2.11 STRATEGIC CORRIDOR DEVELOPMENT PLAN FOR THE N2 CORRIDOR FROM DURBAN TO RICHARDS BAY

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 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 3: N2 Corridor Study Area



2.12 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.

The main objective is to:

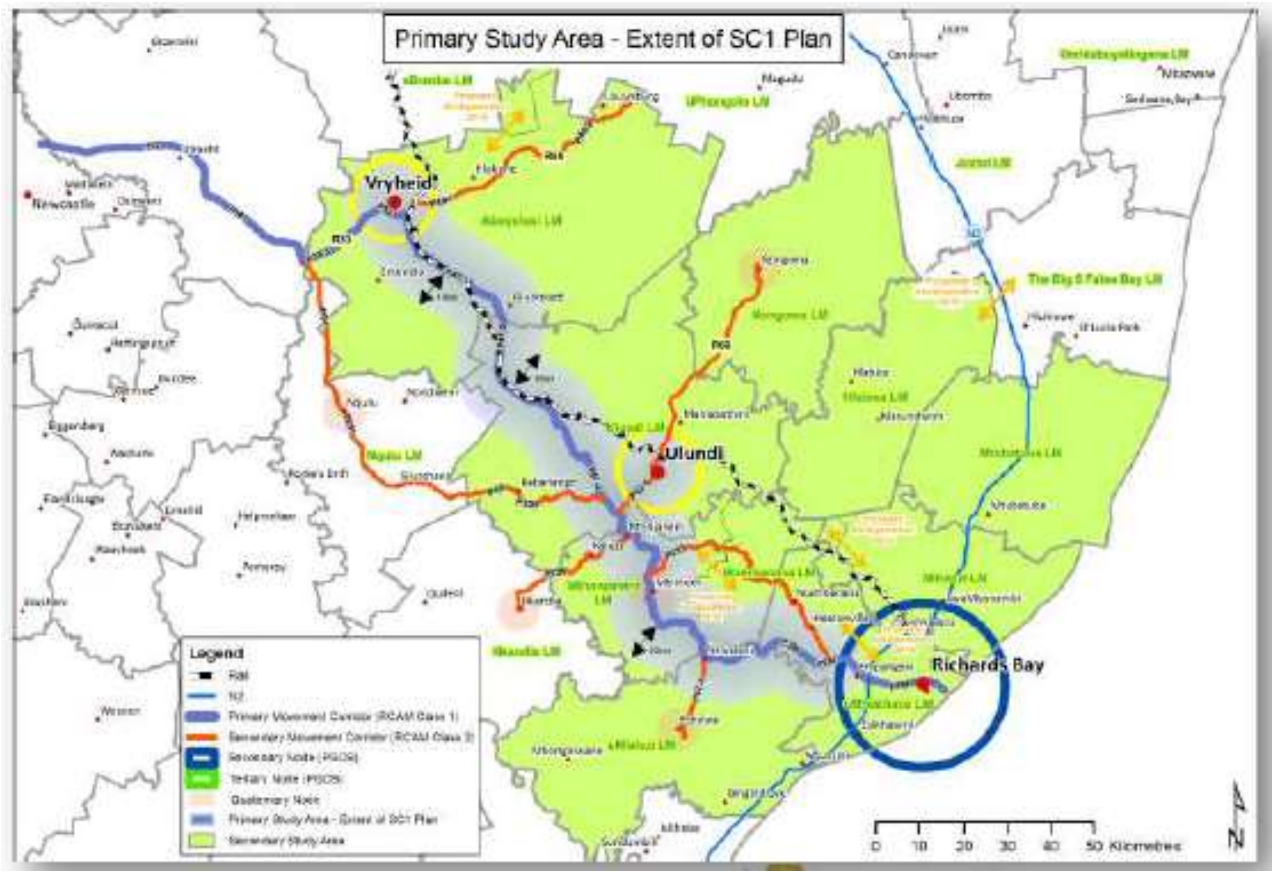
i. Develop a 25-year strategic framework that identifies spatial issues, opportunities and a vision for the Corridor.
ii. Coordinate public sector resources to support the vision and create a framework for private investment that promotes economic growth and social well-being in an environmentally sustainable manner.

The project area consisted 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

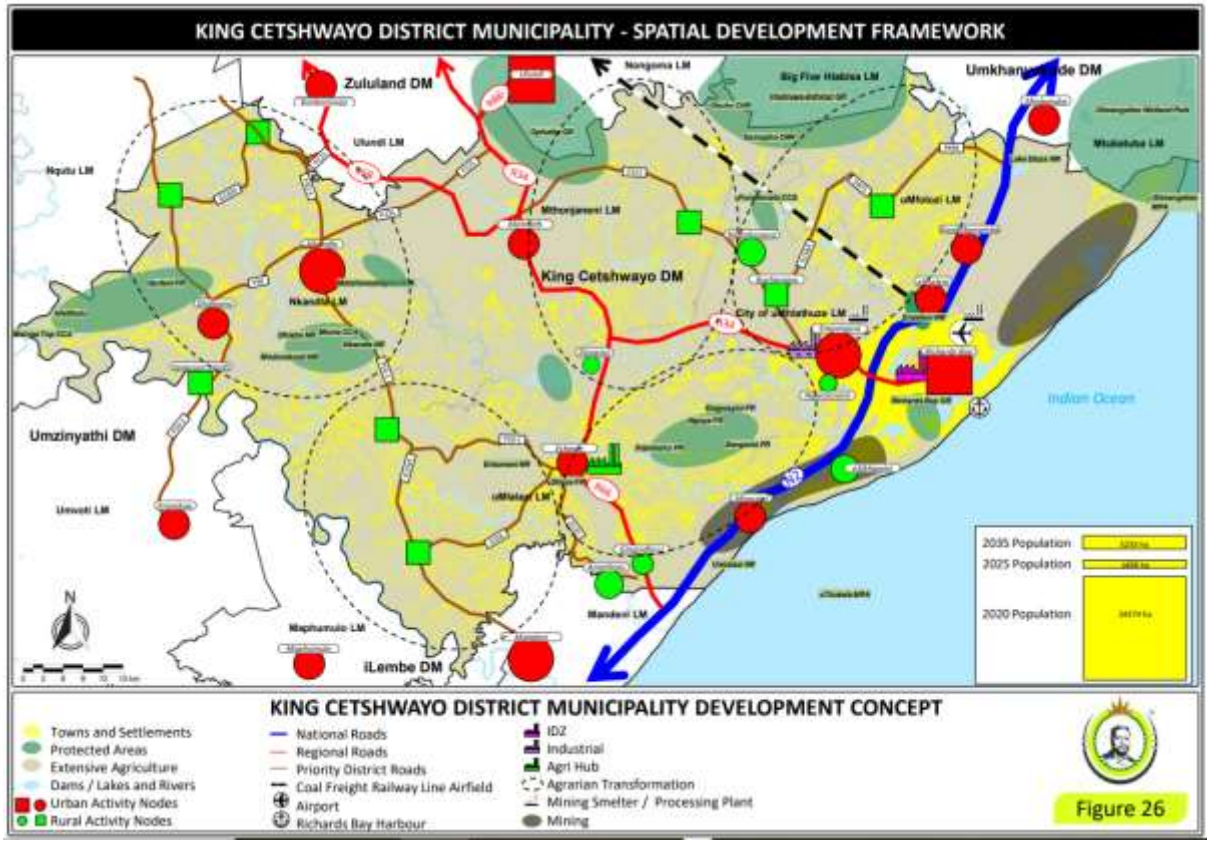
Map 4: uMhlathuze-Ulundi-Vryheid Secondary Corridor Project Study Area



2.13 KING CETSHWAYO DISTRICT SDF

During November 2021 the King Cetshwayo District Municipality completed the preparation of its Spatial Development Framework (SDF). The following map depicts the spatial development concept and denotes urban development areas, protected areas, areas of extensive agriculture, water features, rural activity nodes, roads, freight lines, transport hubs, various industry types, areas for agrarian transformation, mining etc.

Map 5: King Cetshwayo District Municipality Spatial Development Concept



The following objectives represent the points of departure for the above:

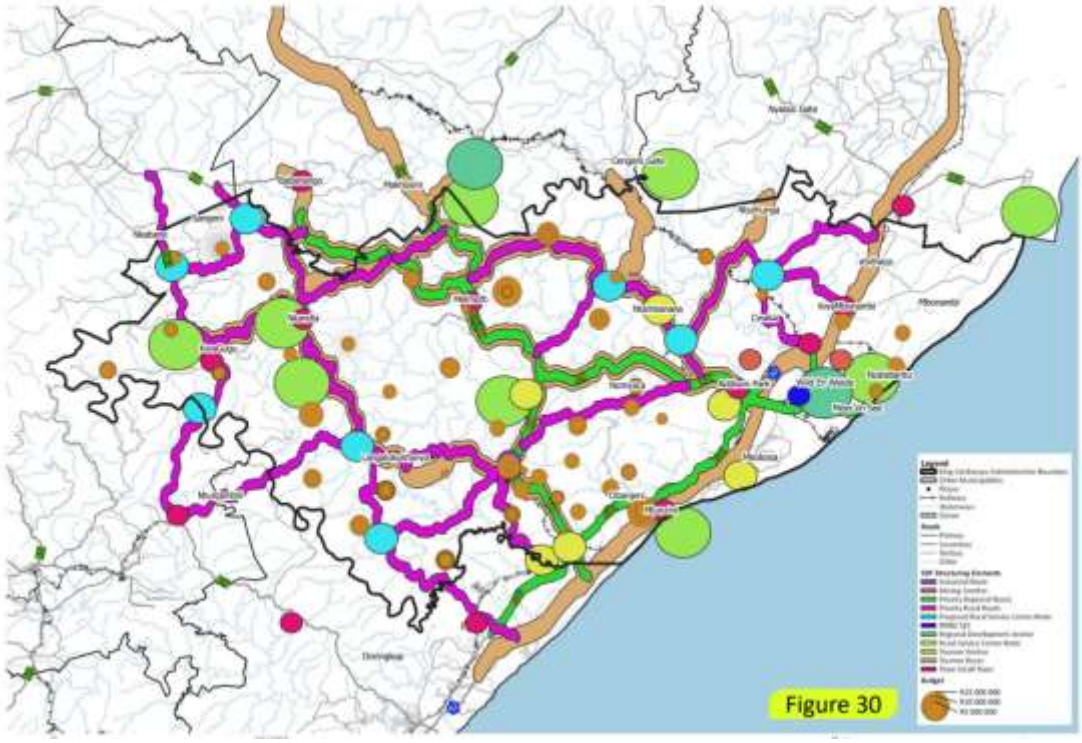
- Objective 1: Facilitate the protection and sustainable management of the KCDM natural environmental resources
- Objective 2: Enhance spatial efficiency in the KCDM by defining a range of urban and rural nodes around which to consolidate future infrastructure investment and economic development
- Objective 3: Optimise regional connectivity and mobility as well as local access and accessibility via a comprehensive multi-modal movement network
- Objective 4: Facilitate the establishment of sustainable human settlements in all identified urban and rural nodes
- Objective 5: Align district infrastructure maintenance and construction programmes with spatial development directives
- Objective 6: Facilitate development of a diverse range of economic development opportunities in all parts of the district

The following represents the composite Spatial Development Framework for the King Cetshwayo District Municipality, representing the spatial outcomes of the spatial strategies associated with each of the six development objectives of the KCDM SDF

Map 6: Kind Cetshwayo Composite SDF

The district SDF includes an Integrated Infrastructure Investment Framework, Prioritisation Rationale, Budget Scenario Analysis as well as a consolidated 10-year Capital Expenditure Framework (CEF). The latter is inserted hereunder:

Map 7: King Cetshwayo District Municipality CEF



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 clarifying 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 9: 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	The purpose of the initiative is to: o create interfaces between industry and educational institutions in order to determine skills supply and demand balances o 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 ○ mobilize 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 INTIATIVES	
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.

2.16 UMHLATHUZE INTEGRATED DEVELOPMENT PLAN

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

2.16.1 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

2.16.2 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**
1.1 Democratic, Responsible, Transparent, Objective and Equitable Municipal Governance	1.1.1 To ensure effective and efficient administration complying with its Legal Mandates
	1.1.2 To maintain an organizational performance management system as a tool to monitor progress of service delivery
	1.1.3 Ensure Institutionalisation of Batho Pele Culture
	1.1.4 To promote a municipal governance system that enhances and embraces the system of participatory Governance
	1.1.5 To promote Access to Information and Accountability
	1.1.6 To bring the organization to an enabled risk maturity level
	1.1.7 Ensure reliability and maintain independence of internal audit activity
NATIONAL KPA 2 : BASIC SERVICES AND INFRASTRUCTURE PROVISION	
GOALS	**OBJECTIVES**
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
	2.1.2 To promote the achievement of a non-racial, integrated society, through the development of sustainable human settlements and quality housing
	2.1.3 To ensure effective Fleet Management
NATIONAL KPA 3 : LOCAL ECONOMIC DEVELOPMENT	
GOALS	**OBJECTIVES**
3.1 Viable Economic Growth And Development	3.1.1 To promote and facilitate investment
	3.1.2 Stimulate key sectors that promote economic growth and create jobs
	3.1.3 To create enabling environment for the informal economy
	3.1.4 Clear City identity

NATIONAL KPA 1 : GOOD GOVERNANCE AND PUBLIC PARTICIPATION	
GOALS	**OBJECTIVES**
	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
3.2 Public Safety and Security	3.2.1 Provision of efficient and effective security services
	3.2.2 To ensure Provision of fire and rescue services
3.3 Safe and Healthy Living Environment	3.3.1 Efficient an effective waste management services
	3.3.2 To ensure air quality management
	3.3.3 Cater for alternate future burial option
3.4 Social Cohesion	3.4.1 To promote social cohesion
NATIONAL KPA 4 : MUNICIPAL INSTITUTIONAL DEVELOPMENT AND TRANSFORMATION	
GOALS	**OBJECTIVES**
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
NATIONAL KPA 5 : MUNICIPAL FINANCIAL VIABILITY AND MANAGEMENT	
GOALS	**OBJECTIVES**
5.1 Sound Financial And Supply Chain Management	5.1.1 Compliance with financial legislation and policies
	5.2.1 Sustainable Financial and supply chain Management
NATIONAL KPA 6 : CROSS CUTTING	
GOALS	**OBJECTIVES**
6.1 Integrated Urban and Rural Development	6.1.1 To plan and manage existing and future development
6.2 Immovable Property Management	6.2.1 To ensure fair valuation of properties
	6.2.2 Effective Management of Council owned Immovable properties.
6.3 Disaster Management	6.2.3 To prevent and mitigate disaster incidents

3. SPATIAL ANALYSIS

The uMhlathuze Local Municipality (LM) 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:

- uMfolozi
- 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 (approximately 50% increase) and in 2016, the uMhlathuze population is estimated at to have been 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.

3.1 SPATIAL STRUCTURING ELEMENTS

There are a number of existing natural and man-made phenomena 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.

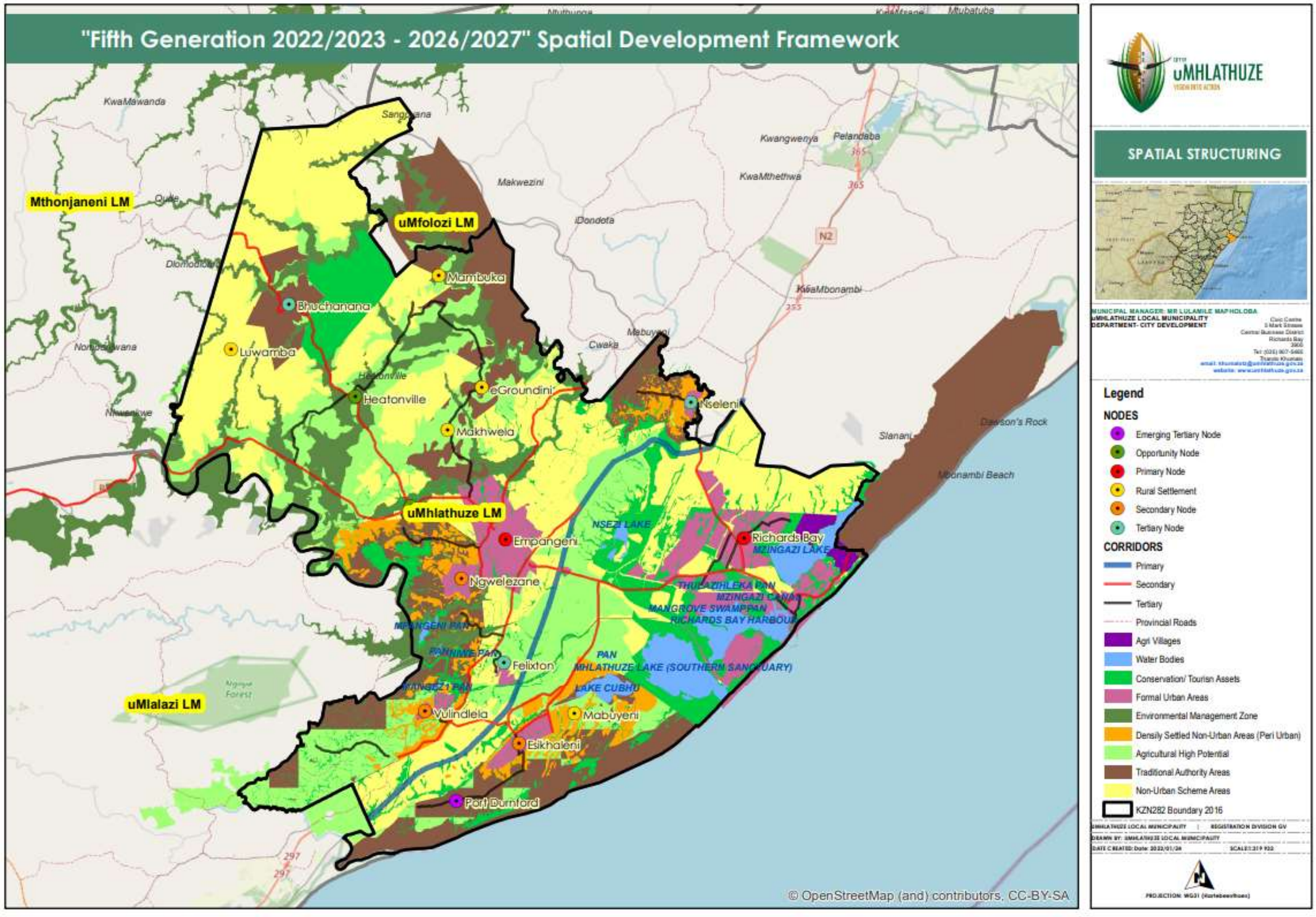
The main access into the municipal area is via the N2 in a north south direction and in an east west direction the R34. Other significant roads in the area include the MR431 (that provides a northerly entry into Richards Bay from the N2) as well as the Old Main Road that straddles the N2 on its inland. 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.

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.

Map 8: Spatial Structuring Elements



3.2 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. Such 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 and the most efficient use of scarce productive agricultural lands.

3.2.1 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.

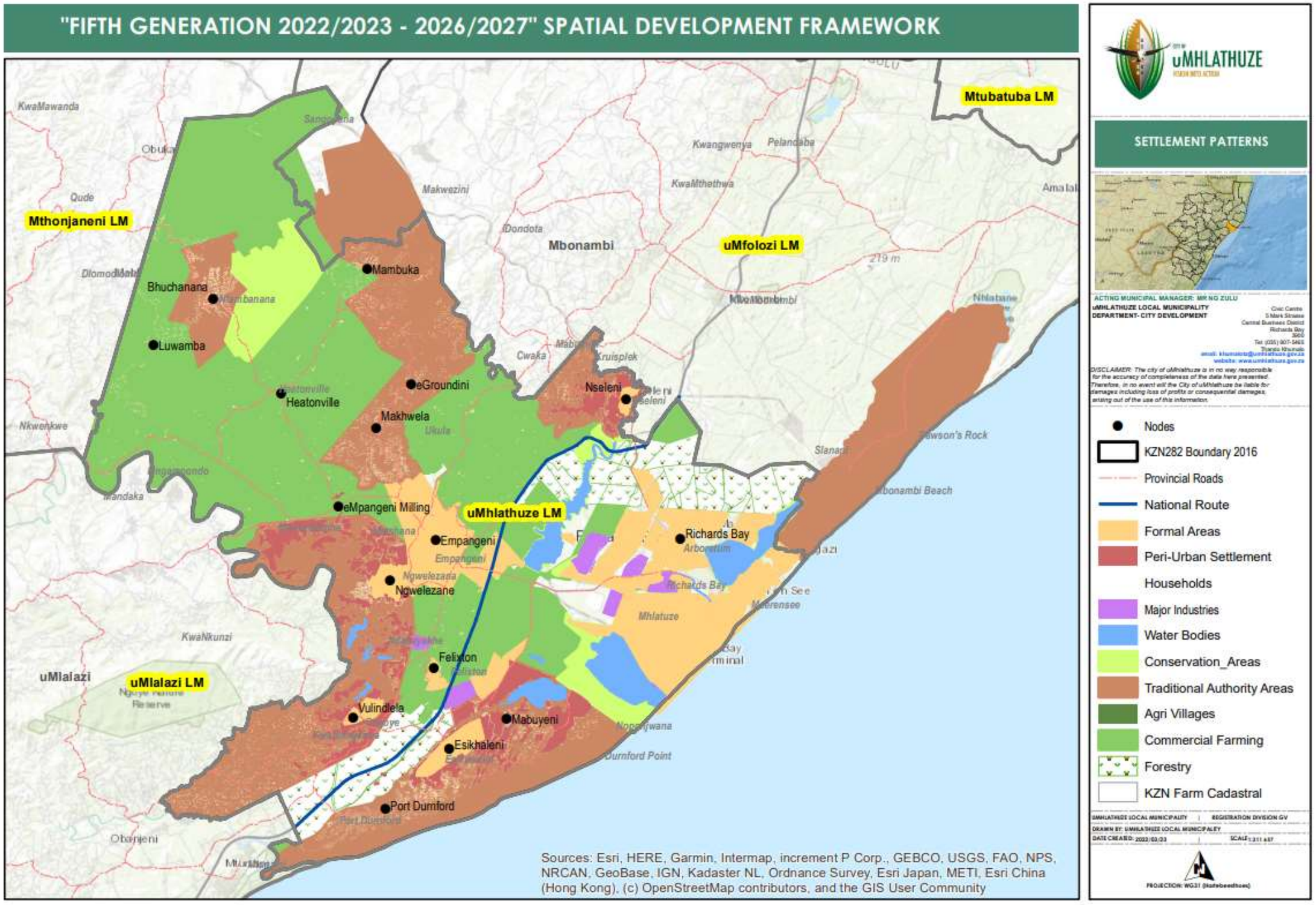
3.2.2 Analysis of the uMhlathuze Municipal Nodal Areas

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

Table 10: Analysis of Empangeni Node

Role in the City	It is regarded as the major service and retail centre in uMhlathuze. The CBD commercial floor space presently exceeds 7200 m². Centre of employment, industrial, residential, offices and commerce.
Role in the Region	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	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	**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. **Commerce & Industry**: manufacturing, hotel, restaurants, informal trading, retail, finance & insurance, banking facilities, building supplies, furniture, motor showrooms, wholesalers **Transportation:** Rail and Road. **Rail**: Linked to the National System **Road**: Highways- Public (Buses, minibuses, vans & metred taxis) & Private transportation. **Residential**: Mixed used development (low to high density).
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 industrial areas.
Open Space/Environment	**Open Space and Conservation**: Public parks, private open spaces and conservation areas.

Map 9: Settlement Patterns



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

Table 11: Analysis of Richards Bay Node

Role in the City	• 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	• 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	• 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	**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. **Commerce & Industry**: Harbour, manufacturing, hotel, restaurants, informal trading, retail, finance & insurance, banking facilities, building supplies, furniture, motor showroom and, wholesalers. **Transportation:** Rail, Sea, Air and Road. **Road**: Highways- Public (Buses, minibuses, vans & metred taxis) & Private transportation. **Rail**: Linked to the National System **SEA**: Linked to the World **AIR**: Linked to the National System **Residential**: Mixed used development (low-high density).
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 industrial areas.
Open Space/Environment	**Open Space and Conservation**: Urban recreation (Public parks, private open spaces and conservation areas).

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/Dlangezwa and accessible via the N2. Esikhaleni is located approximately 15 km from Empangeni and 20 km from Richards Bay primary nodes.

Table 12: Analysis of Esikhaleni Node

Role in the City	• 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	• 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	• N2 and P535 are major access and linkage systems traversing the Esikhaleni Node. • P106, Madlebe Nsthona, Mdlebe Mpuma and Mthombothi Roads provide access and linkage within and between the other Municipal nodes.
Current Urban Form & Land Uses	**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. **Commerce & Industry**: B&B''s, restaurants, informal trading, retail, finance & insurance, building supplies, banking facilities, furniture, butcheries, wholesalers, Supermarkets, bottle stores and car washers Transportation: Road. **Road**: Highways & Provincial- Public (Buses, minibuses, vans & metred taxis) & Private transportation. **Residential**: Mixed used development (low-medium density).
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**: Urban recreation (Public parks, private open spaces and conservation areas).

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

Table 13: Analysis of Ngwelezane Node

Role in the City	• 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	• 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	**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. **Commerce & Industry**: B&B''s, restaurants, informal trading, retail, finance & insurance, building supplies, butcheries, bottle stores, Supermarkets and car washers. Transportation: Road.

	Road: Provincial- Public (Buses, minibuses, vans & metred taxis) & Private transportation. **Residential**: Mixed used development (low-medium density).
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**: Urban recreation (Public parks, private open spaces and conservation areas).

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 14: Analysis of Felixton Node

Role in the City	• It offers a combination of mixed used development such as manufacturing industry, educational, medium-high income residential (urban living)
Role in the Region	• 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	**Social Infrastructure**: Private administration offices, recreation, residential, public transport facilities, educational facilities, SAPS, churches, library, entertainment. **Commerce & Industry**: Manufacturing, B&B''s, informal trading and pubs Transportation: Road. **Road**: Provincial- Public (Buses, minibuses & metred taxis) & Private transportation. **Residential**: Mixed used development (medium-density).
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 15: Analysis of Vulindlela/Dlangwezwa Node

Role in the City	• 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	• 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	**Social Infrastructure**: recreation, residential, public transport facilities, educational facilities, SAPS, churches, library, entertainment, community hall. **Commerce & Industry**: B&B''s, Supermarkets, bottle stores, informal trading and car washers

	Transportation: Road. **Road**: Provincial- Public (Buses, minibuses & metred taxis) & Private transportation. **Residential**: Mixed used development (low-medium density).
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 16: Analysis of Nseleni Node

Role in the City	• 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	• 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	**Social Infrastructure**: recreation, residential, public transport facilities, educational facilities, SAPS, churches, library, entertainment, administration offices, limited health services community hall. **Commerce & Industry**: Supermarkets, bottle stores, informal trading and car washers Transportation: Road. **Road**: Provincial- Public (Buses, minibuses, vans & metred taxis) & Private transportation. **Residential**: Mixed used development (low-medium density).
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 Ntambanana Municipal area.

Table 17: 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 18: Analysis of Bhejane Node

Role in the City	• 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	• It plays a dominant role in Region especially within agricultural activities.
Movement System	TBD after mapping/more detailed planning.
Current Rural Form & Land Uses	**Social Infrastructure**: recreation, rural residential, limited public transport facilities, educational facilities, SAPS, churches, community halls. **Commerce & Industry**: Supermarkets, bottle stores, informal trading and car washers **Transportation:** Gravel Roads. **Road**: Provincial & District- Public (Buses, vans & limited minibuses) & Private transportation. **Residential**: Rural (low-high density).
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).

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 19: Analysis of Mkhwanazi North & South Node

Role in the City	• 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	• 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	**Social Infrastructure**: recreation, rural residential, limited public transport facilities, educational facilities, SAPS, churches, community halls. **Commerce & Industry**: Supermarkets, bottle stores, informal trading and car washers. **Transportation:** Gravel Roads. **Road**: Provincial & District- Public (Buses, vans & limited minibuses) & Private transportation. **Residential**: Rural (low-high density).
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).

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 20: Analysis of Madlebe Node

Role in the City	• 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	• It plays a dominant role in Region especially within agricultural activities.
Movement System	TBD after mapping/more detailed planning.
Current Rural Form & Land Uses	**Social Infrastructure**: recreation, rural residential, limited public transport facilities, educational facilities, SAPS, churches, community halls. **Commerce & Industry**: Supermarkets, bottle stores, informal trading and car washers **Transportation:** Gravel Roads. **Road**: Provincial & District- Public (Buses, vans & limited minibuses) & Private transportation. **Residential**: Rural (low-high density).
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 21: Analysis Dube Node

Role in the City	• 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	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	**Social Infrastructure**: recreation, rural residential, limited public transport facilities, educational facilities, SAPS, churches, community halls. **Commerce & Industry**: Supermarkets, bottle stores, informal trading and car washers **Transportation:** Gravel Roads. **Road**: Provincial & District- Public (Buses, vans & limited minibuses) & Private transportation, **Residential**: Rural (low-high density).
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).

3.2.3 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.

3.2.4 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).

3.2.5 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.

3.2.6 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, Mondi-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 Birdswood 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 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.

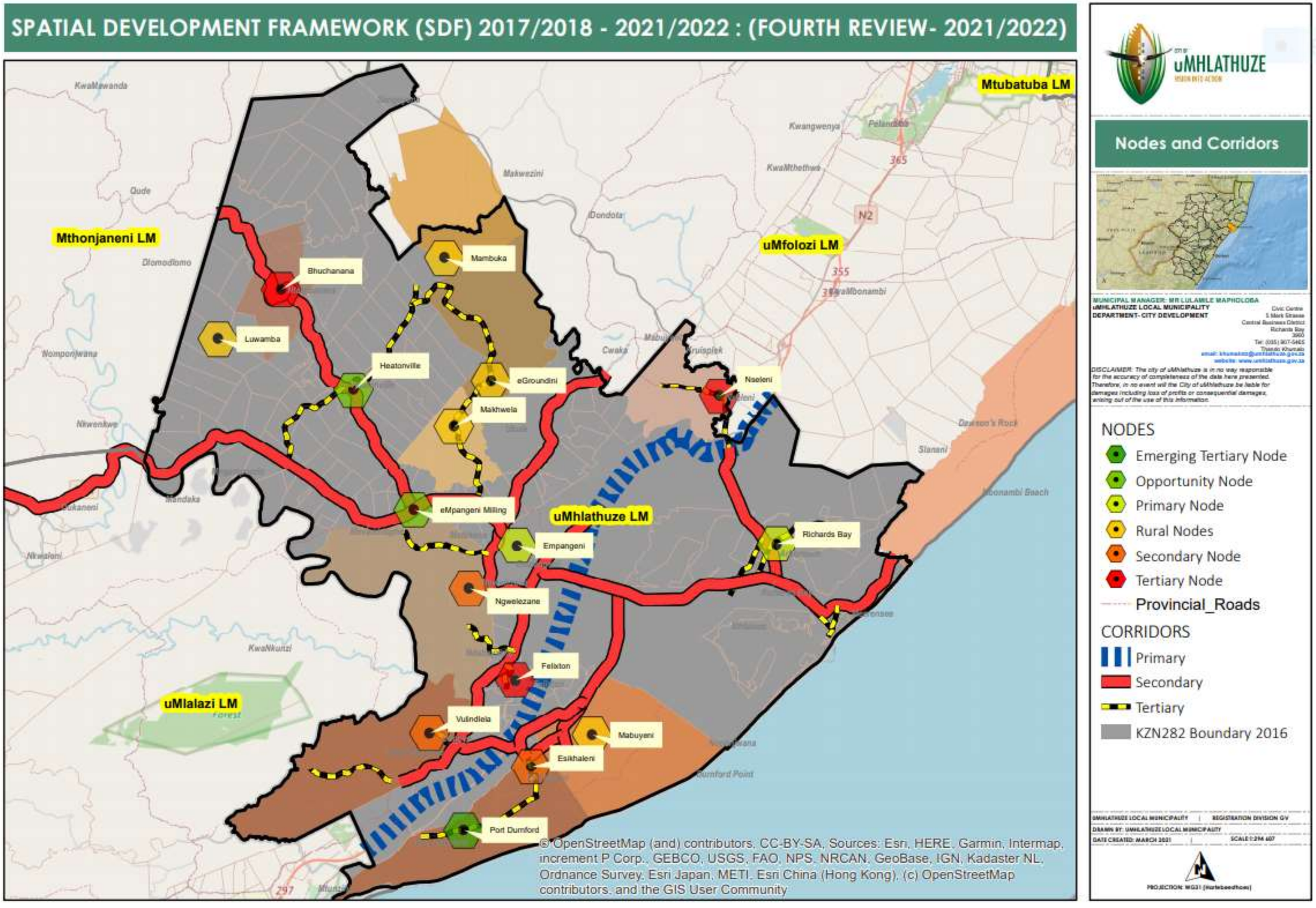
With regard to the locality of rural settlements (nodes), these rural settlements are accessible locations for community services and infrastructure. Specific planning and development interventions are required (and underway) to identify community services that are to be encouraged at these nodes.

Table 22: 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, provides 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 10: Nodes and Corridors



3.3 LAND GOVERNANCE

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

Table 23: Land Governance Breakdown

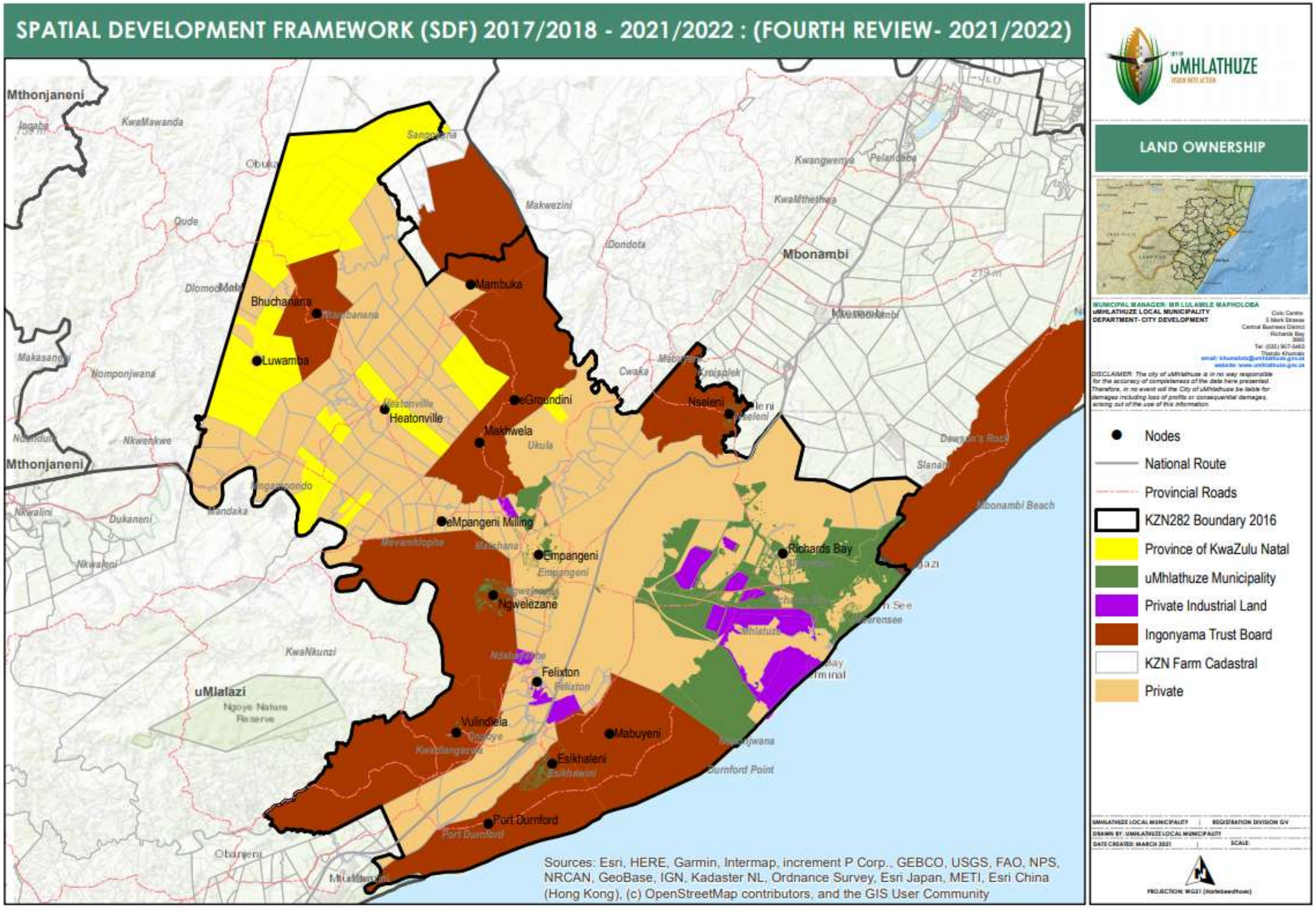
Land Owners	Area(Hectares)	Percentage (%)
Province of KZN	14167	11.49
City of uMhlathuze	4259	3.45
Transnet	2989	2.42
IDZ	107	0.09
Ingonyama Trust Board	63795	51.73
Private	32467	26.33
Lakes	5541	4.49
Total	**123325**	**100.00**

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 has led to the 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 (re)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-formalized 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.

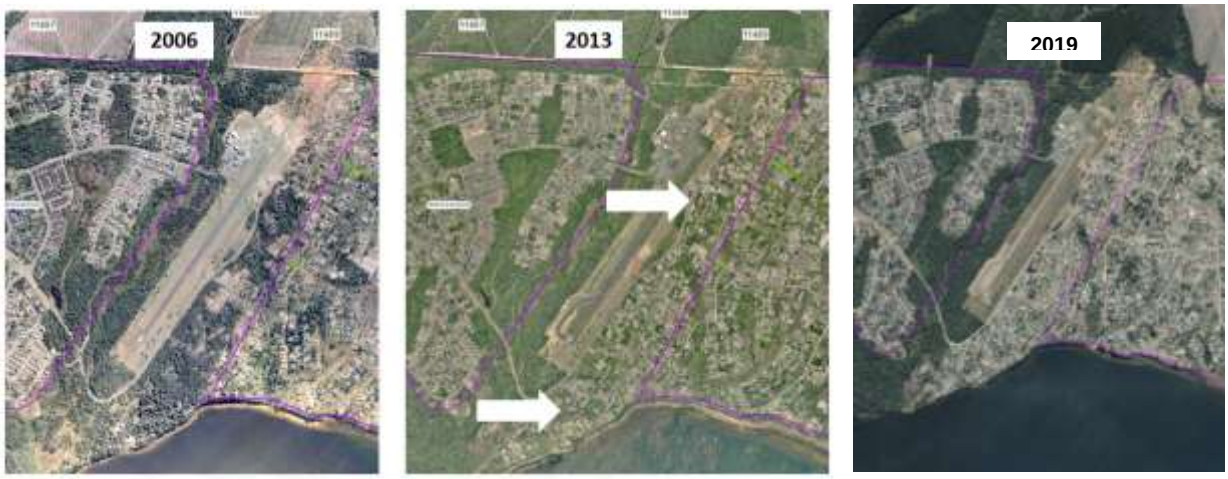
Map 11: Land Ownership



The following inset provides images of the peri-urban settlement increase between 2006, 2013 and 2019 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 and sustainability is compromised.

The Municipality has finalised its Land Use Scheme in terms of SPLUMA for the whole municipal area noting that 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, notably for urban areas, peri-urban areas as well as rural areas.

The following summary is provided of some legislative functions and objectives of stakeholders:

3.3.1 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 organizations 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 also outlined.

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.

3.3.2 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

3.3.3 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".*

3.3.4 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 the 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

3.3.5 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 land allocation guidelines for 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

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 applications 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.

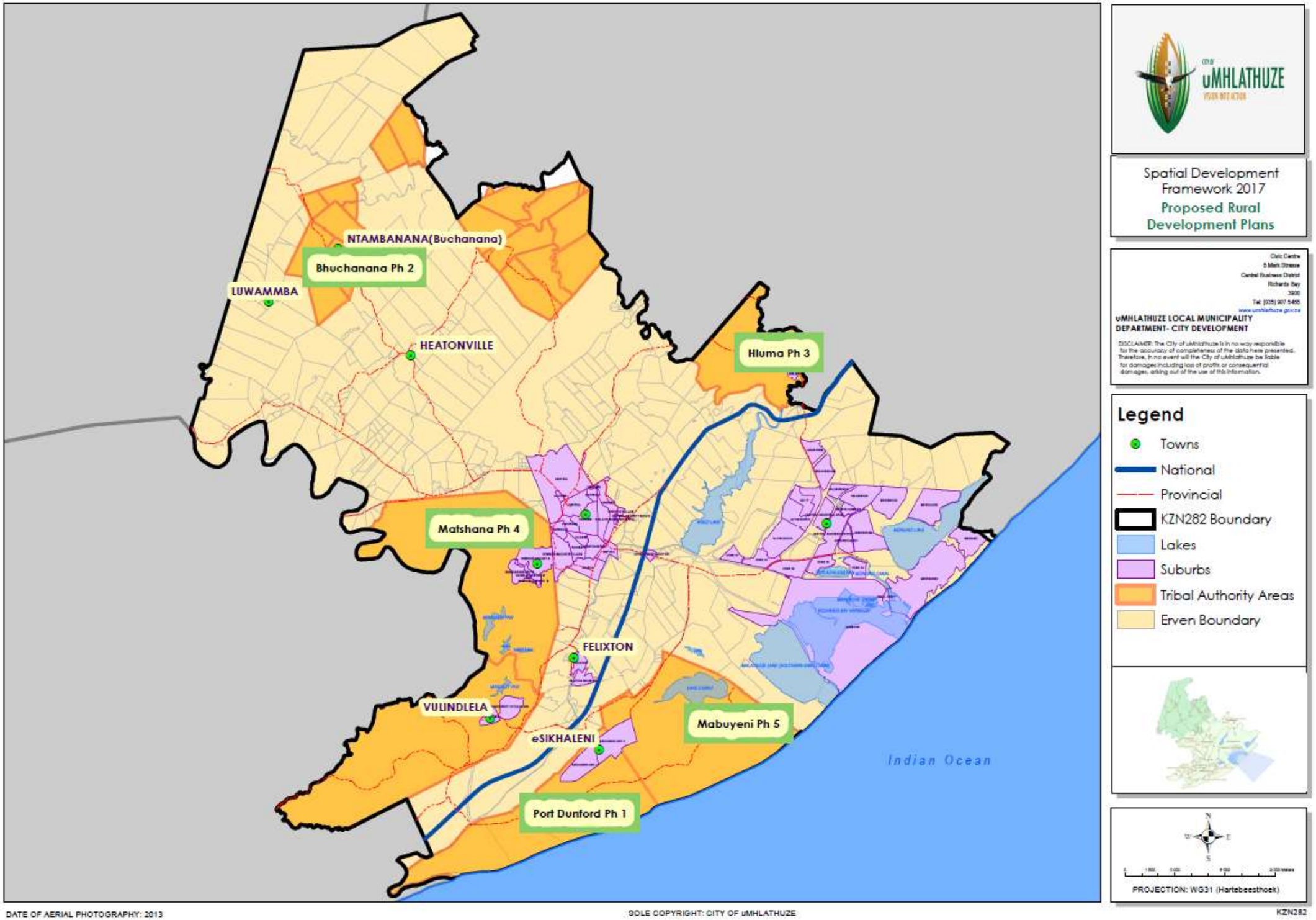
3.4 RURAL PLANNING

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 24: Rural Settlement Plan Phases

No.	Project Name	Phase
1	Port Dunford Rural Settlement Plan-Mkhwanazi Traditional Authority - ***Completed***	1
2	Buchanana Rural Settlement Plan-Obuka Traditional Authority - ***Completed***	2
3	Hluma Rural Settlement Plan-KwaBhejane Traditional Authority - ***Completed***	3
4	Mabuyeni Rural Settlement Plan-Madlebe Traditional Authority	4
5	Matshana Rural Settlement Plan-Dube Traditional Authority	5

Map 12: Rural Settlement Plans Phases



CITY OF uMHLATHUZE
VISION INTO ACTION

Spatial Development Framework 2017

Proposed Rural Development Plans

Civic Centre
5 Mark Strasse
Central Business District
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uMHLATHUZE LOCAL MUNICIPALITY
DEPARTMENT- CITY DEVELOPMENT

Legend

- Towns
- National
- Provincial
- KZN282 Boundary
- Lakes
- Suburbs
- Tribal Authority Areas
- Erven Boundary

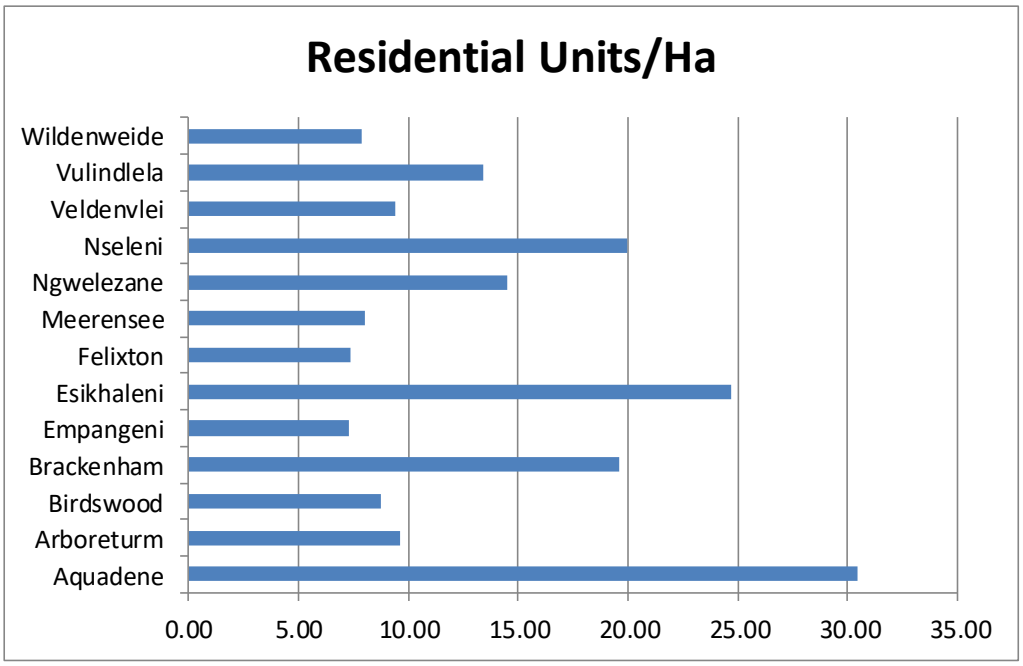
PROJECTION: WG31 (Hartebeesthoek)

KZN282

3.5 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

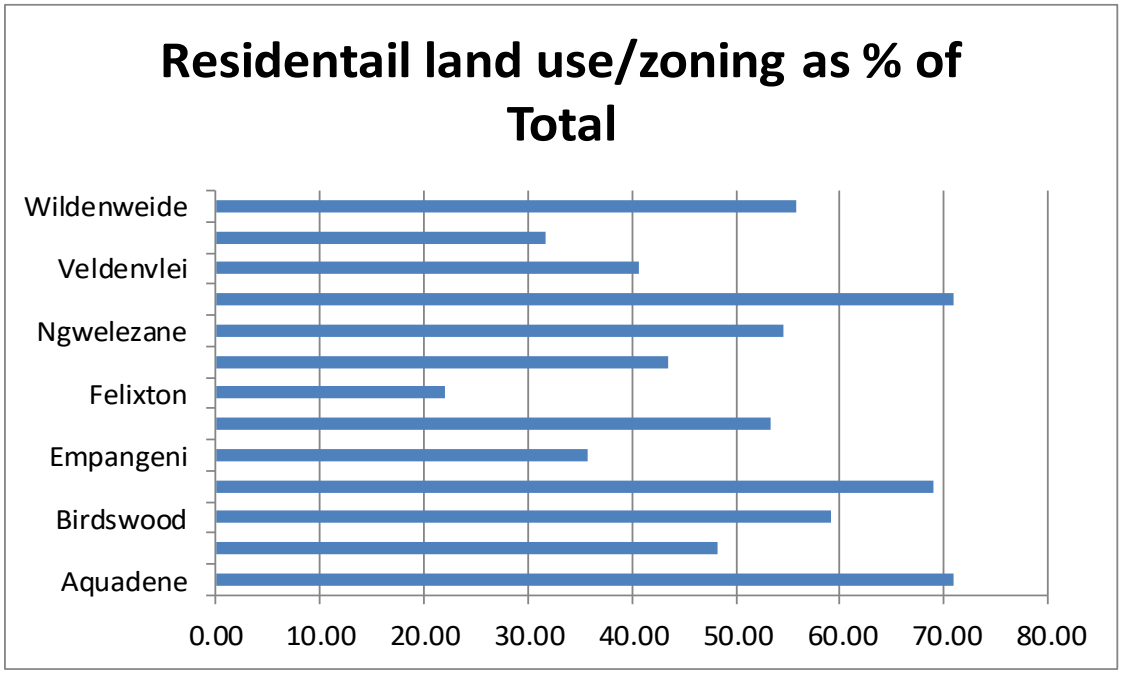


From the above table it is clear that Aquadene, Brackenham, Esikhaleni and Nseleni have the highest residential densities in the municipal area. Higher densities are synonymous with urban developed areas. Higher densities make for more efficient and cost effective provision of services. With the onset of the global COVID-19 pandemic, there has been debate about whether higher densities are desired. The key response to this lies in ensuring adequate access to basic services, i.e. water, sanitation and decent integrated housing in more densely population areas. The global pandemic has also elevated the importance of technology and the 4th Industrial Revolution and the need for all sectors and ages of the community to have connectivity.

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:

- 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.

Table 25: Residential Land Use Types



3.6 SUMMARY OF KEY SPATIAL ISSUES

- uMhlathuze Municipality has an area of 123 325Ha.
- 51% of the area is under the jurisdiction of the Ingonyama Trust Board.
- Richards Bay and Empangeni are the most significant economic centres in the Local Municipality and in the 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. 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.
- 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.
- There are a number of land claims that, to date, have not been resolved in the municipal area. More details in respect of these are provided later in the report but at this stage, their existence and spatial impact is noted.

4. DEMOGRAPHIC AND SOCIO-ECONOMIC ANALYSIS

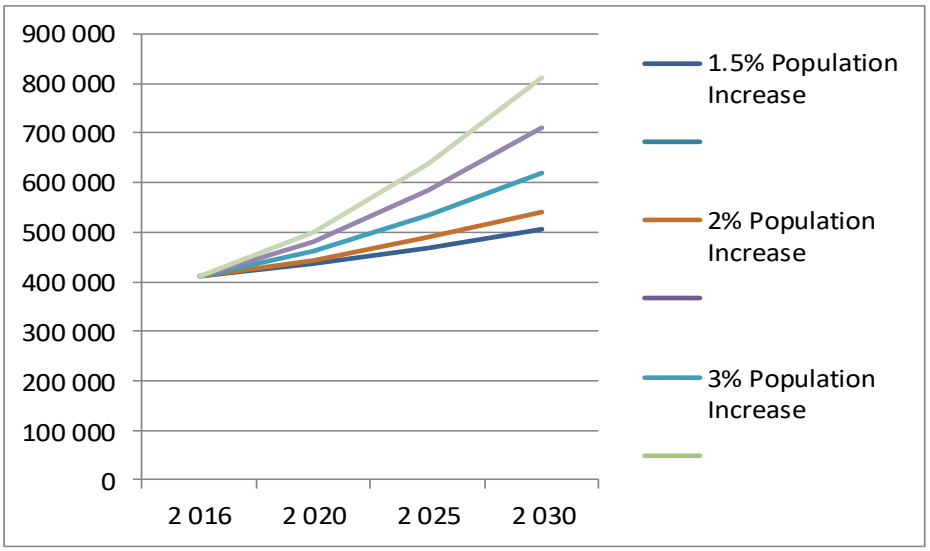
4.1 DEMOGRAPHIC INDICATORS

According to the 2016 Community Survey, uMhlathuze has the following main demographic indicators:

Population: 410 465 people
Households: 103 915
Household Size: 3.95

The following graph is a graphical illustration of a 1.45%, 2%, 3%, and 5% annual population growth rate applied to the 2016 base of 410 465 people.

Figure 11: Population Increase Forecasts



From the following table provided, it can be seen that the uMhlathuze Municipality has the highest population of all the municipalities in the King Cetshwayo District with a 22,73% portion. The population increase (as at 2016) in the King Cetshwayo District, broken down per municipality is indicated in the following table.

Table 26: Population Numbers in King Cetshwayo District Municipality

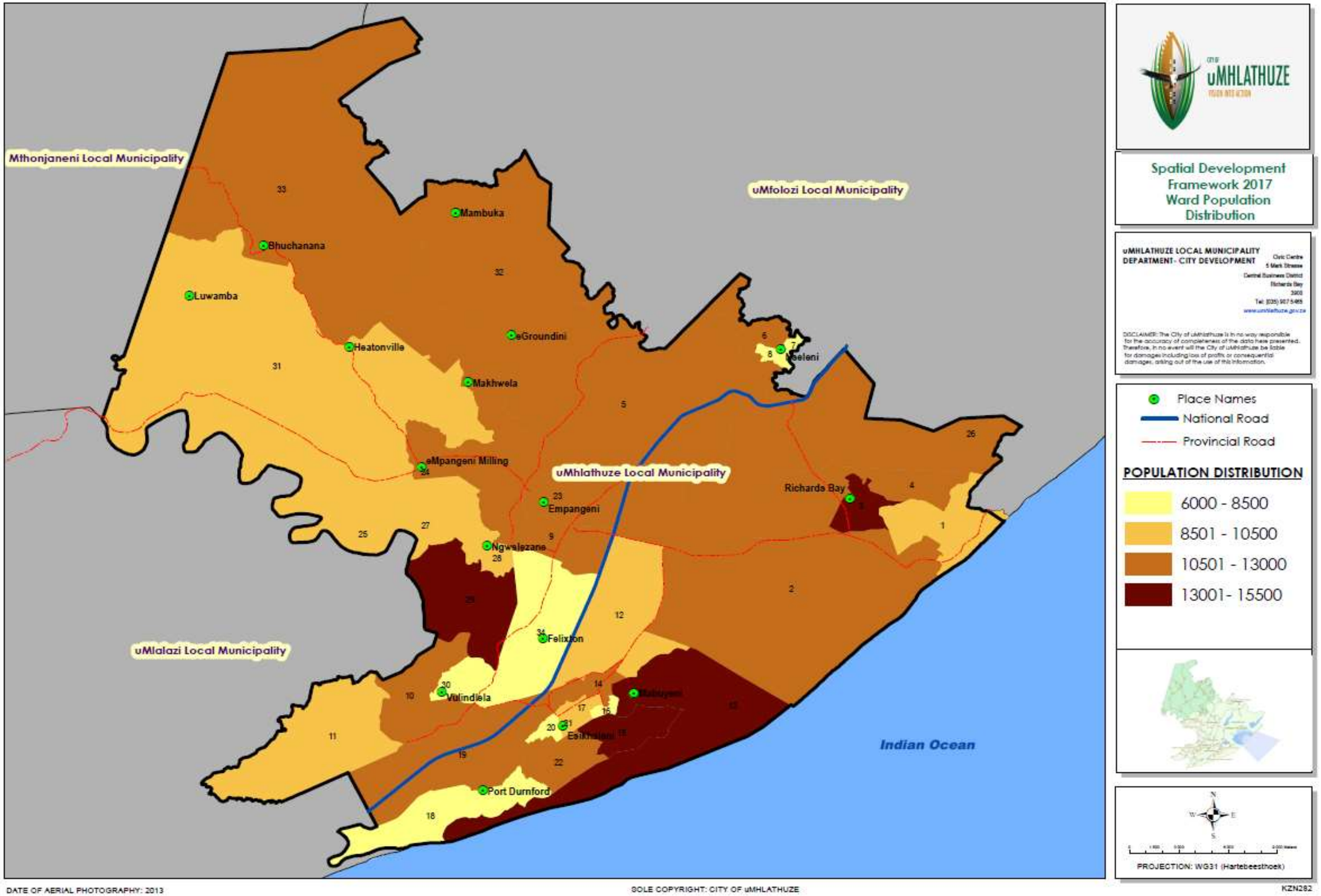
	KCDM	IMFOLOZI	UMHLATHUZE	UMLALAZI	MTHONJANENI	NKANDLA
2011	907519	122889	334459	213601	47818	114416
2016	971135	144363	410465	233140	78883	114284
% Growth	7,01%	17,47%	22,73%	9,15%	64,97%	-0,12%

Source: Community Survey 2016

The uMhlathuze and Mthonjaneni Local Municipalities experienced the largest population increase, mainly due to the dissemination and incorporation of the former Ntambanana Municipality into the two listed municipalities.

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

Map 13: Population Density



The higher population densities in the formal urban, and surrounding areas, as well as some of the Traditional Council areas is observed. 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.

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 source

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 27: Population Growth Scenarios from 2016 to 2030

	2 016	**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	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**	**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	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**	**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	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**	**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	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**	**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	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**	**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 28: 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 ResidentialLand @ 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 ResidentialLand @ 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 ResidentialLand @ 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 ResidentialLand @ 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 ResidentialLand @ 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 29: 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:

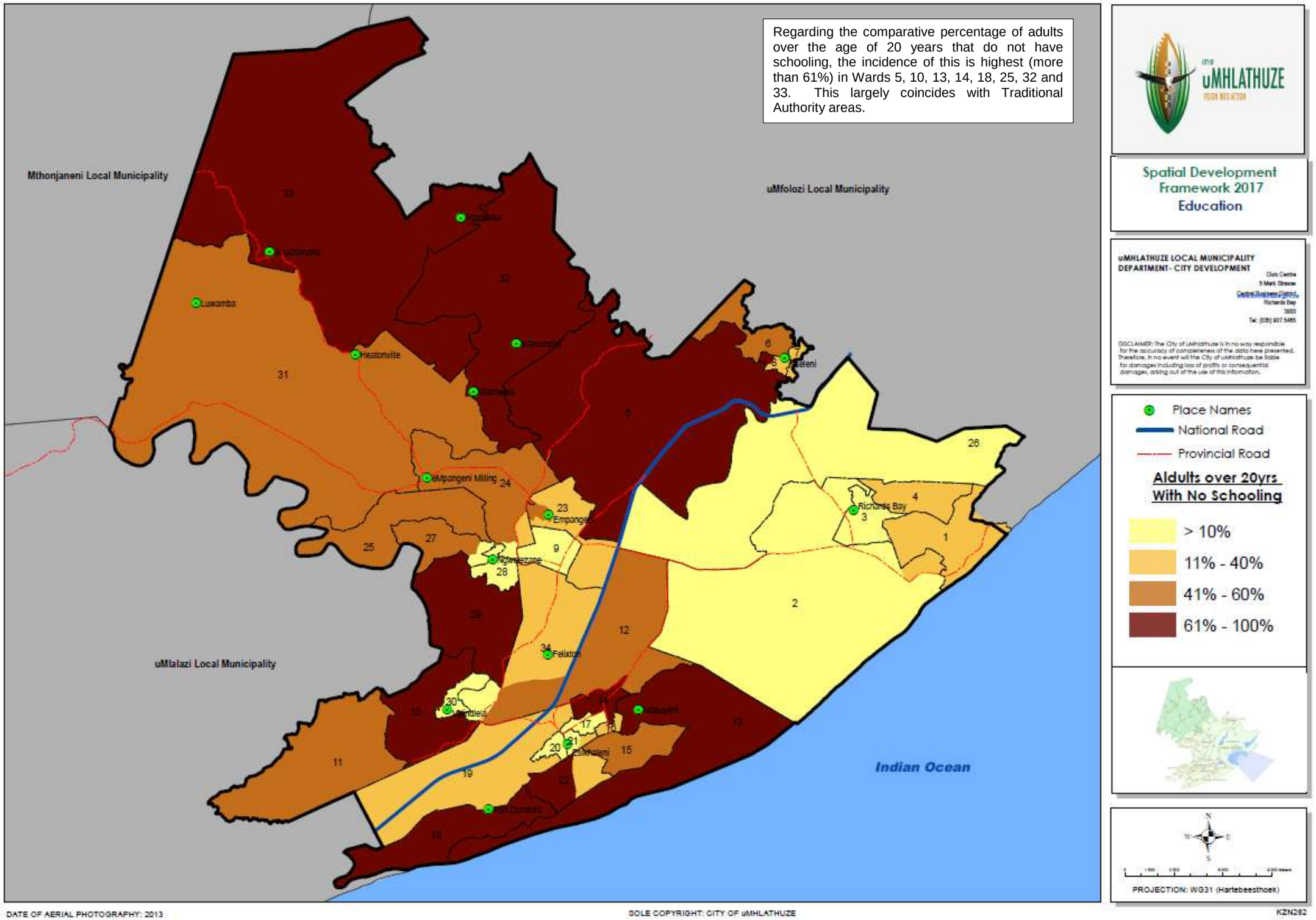
- An estimated additional 6800 ha of land may be needed from 2016 to 2030 to accommodate a 1,5% population increase at a development density of 15 units per hectare. An estimated additional 4000 ha of land may be needed from 2016 to 2030 to accommodate a 1,5% population increase at a development density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

4.2 SOCIO-ECONOMIC INDICATORS

The following series of maps provides information pertaining to:

- Adult education levels; Household income levels below R1600 per month; Unemployment levels.

Map 14: Level of Education



Spatial Development Framework 2017

Education

uMHLATHUZE LOCAL MUNICIPALITY
DEPARTMENT- CITY DEVELOPMENT
Civic Centre
5 Mark Strasse
Richards Bay
3900
Tel: (035) 907 5465

Place Names
National Road
Provincial Road

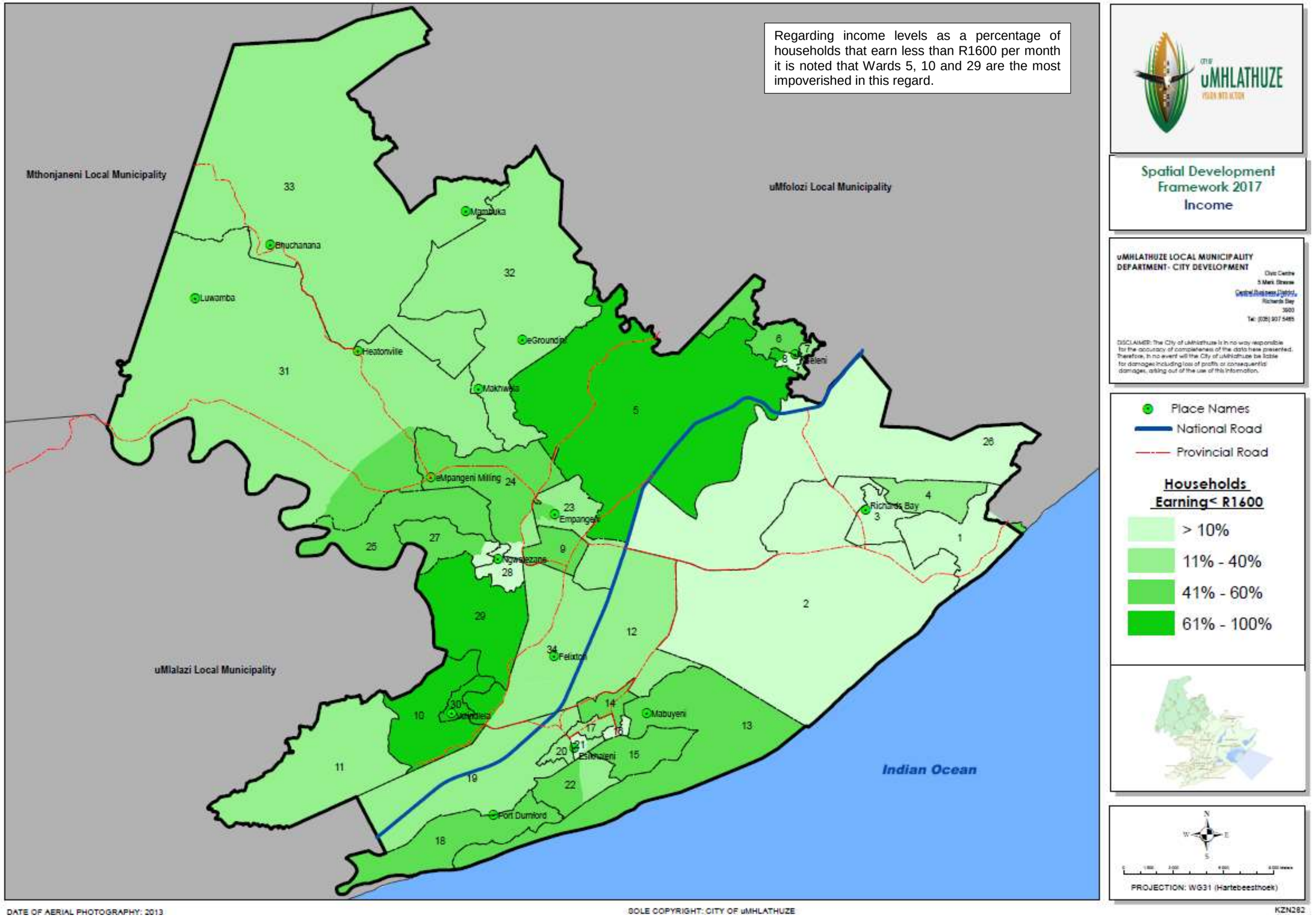
Aldults over 20yrs With No Schooling

- > 10%
- 11% - 40%
- 41% - 60%
- 61% - 100%

PROJECTION: WG31 (Hartebeesthoek)

KZN282

Map 15: Income Level below R1600 per month



CITY OF uMHLATHUZE
VISION INTO ACTION

Spatial Development Framework 2017
Income

uMHLATHUZE LOCAL MUNICIPALITY
DEPARTMENT- CITY DEVELOPMENT
Civic Centre
5 Mark Strasse
Central Business District
Richards Bay
3900
Tel: (035) 907 5465

Place Names
National Road
Provincial Road

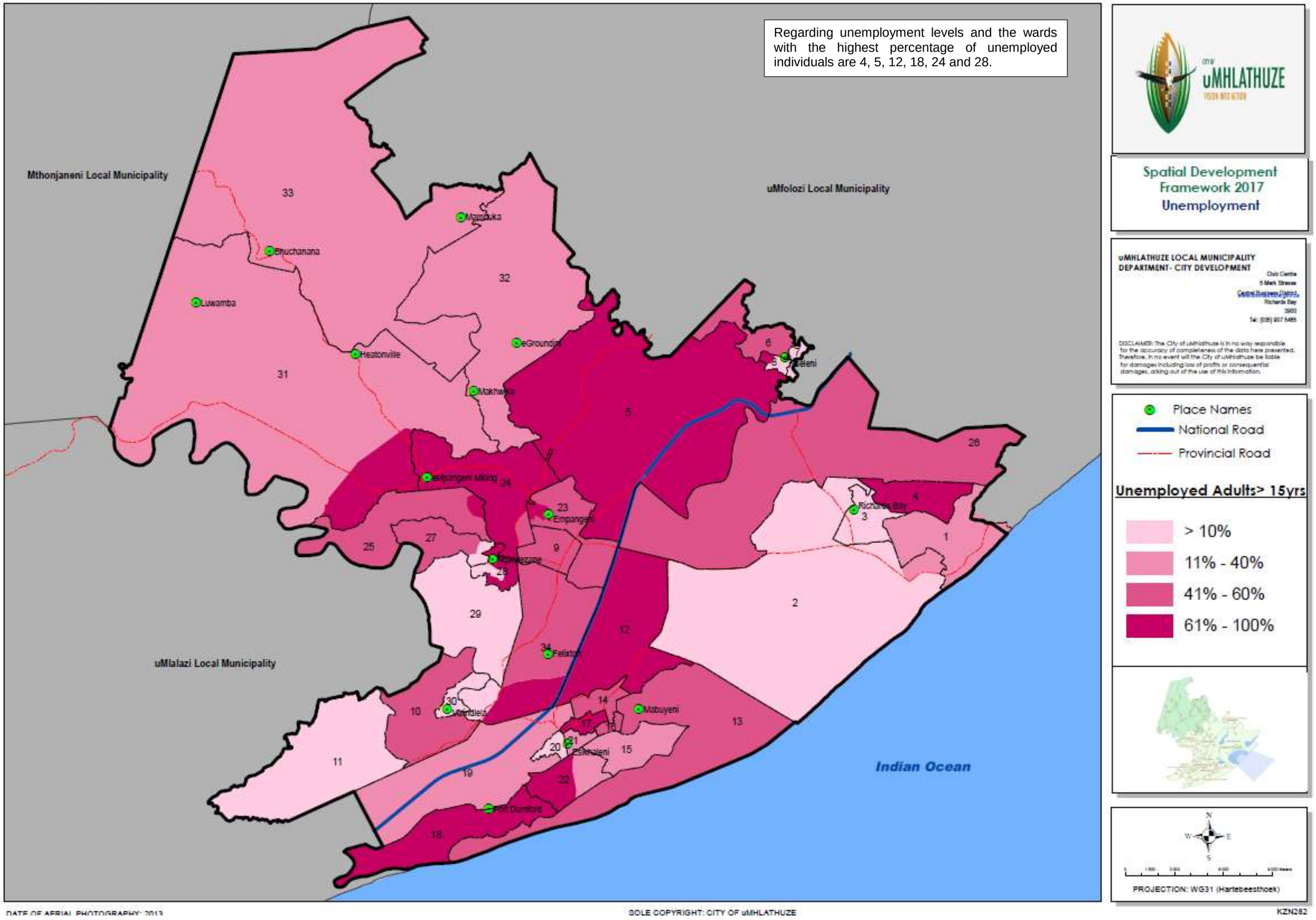
Households Earning< R1600

- > 10%
- 11% - 40%
- 41% - 60%
- 61% - 100%

PROJECTION: WG31 (Hartebeesthoek)

KZN282

Map 16: Unemployment Levels



4.3 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 provides a comparison between the 2007, 2012 and 2017 years in respect to economic active population for uMhlathuze and the other municipalities in the King Cetshwayo District.

Table 30: 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	16787	11635	14 576	-2,8	2,6	3,9	-1,4

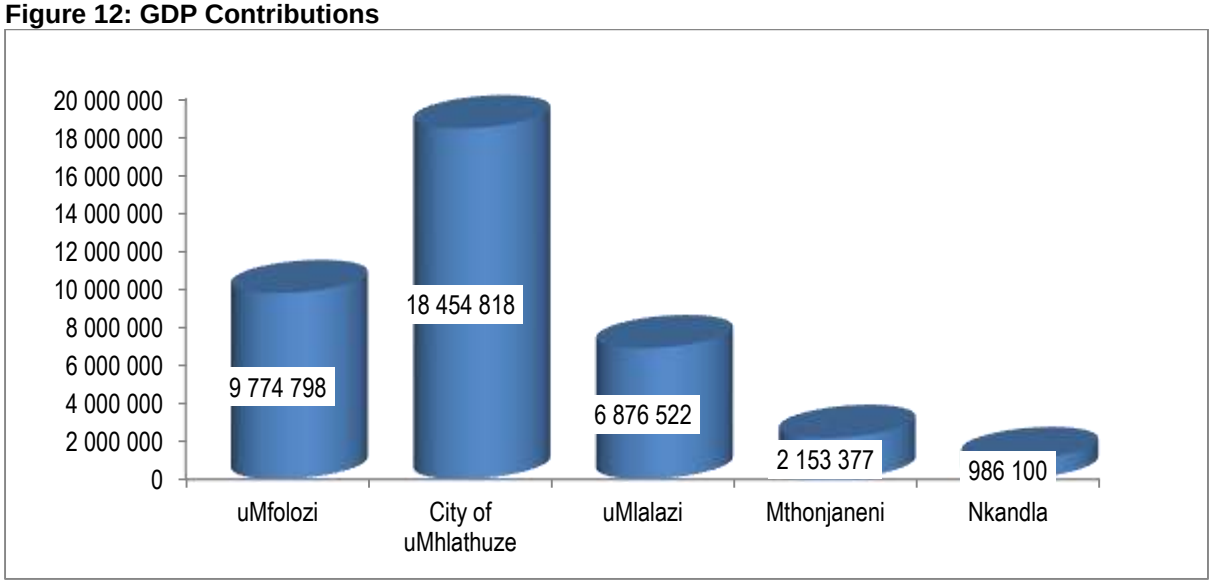
Source: IHS Markit, 2018

4.3.1 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). 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 12: GDP Contributions



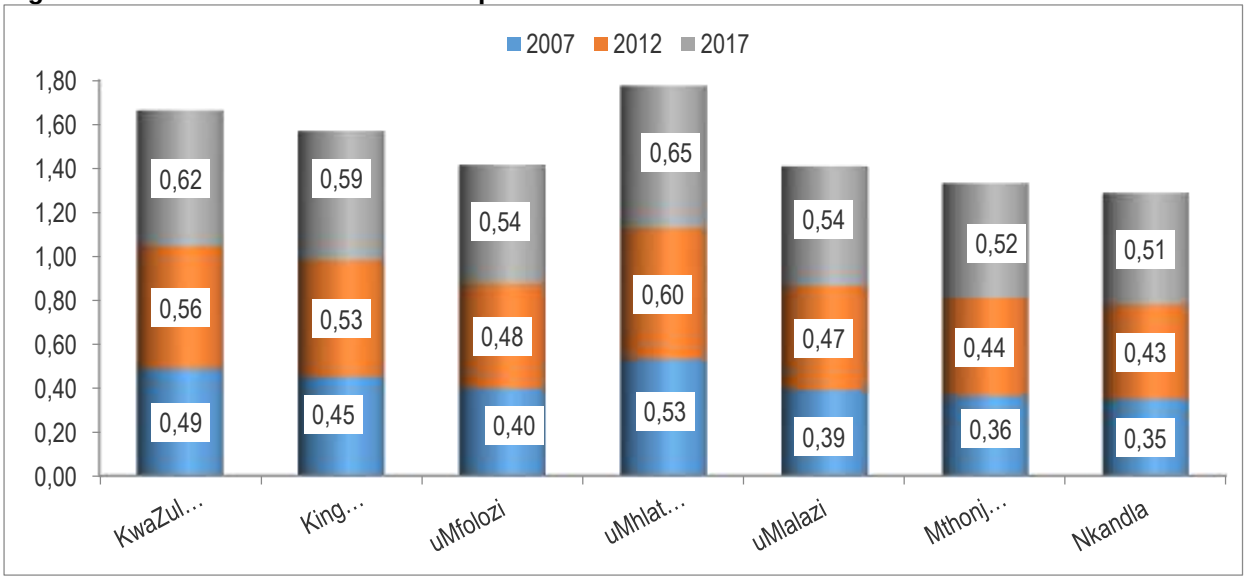
Source: Global Insight 2015

4.3.2 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.

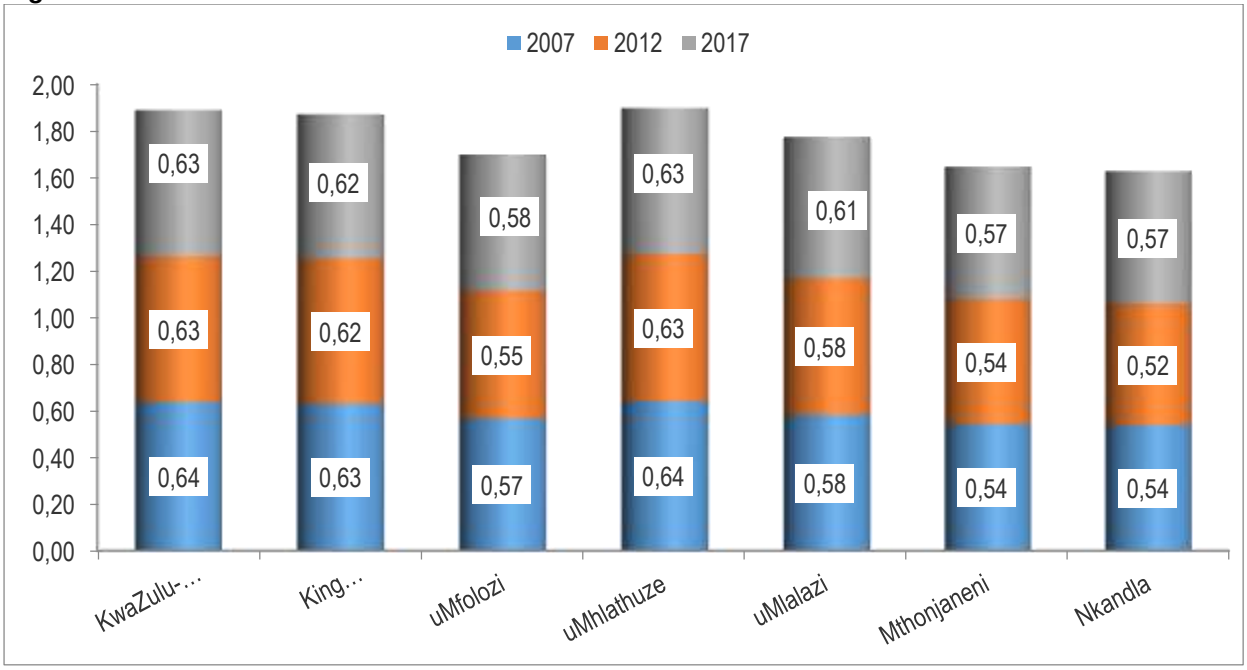
Figure 13: uMhlathuze Human Development Index



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.

Figure 14: uMhlathuze Gini Coefficient



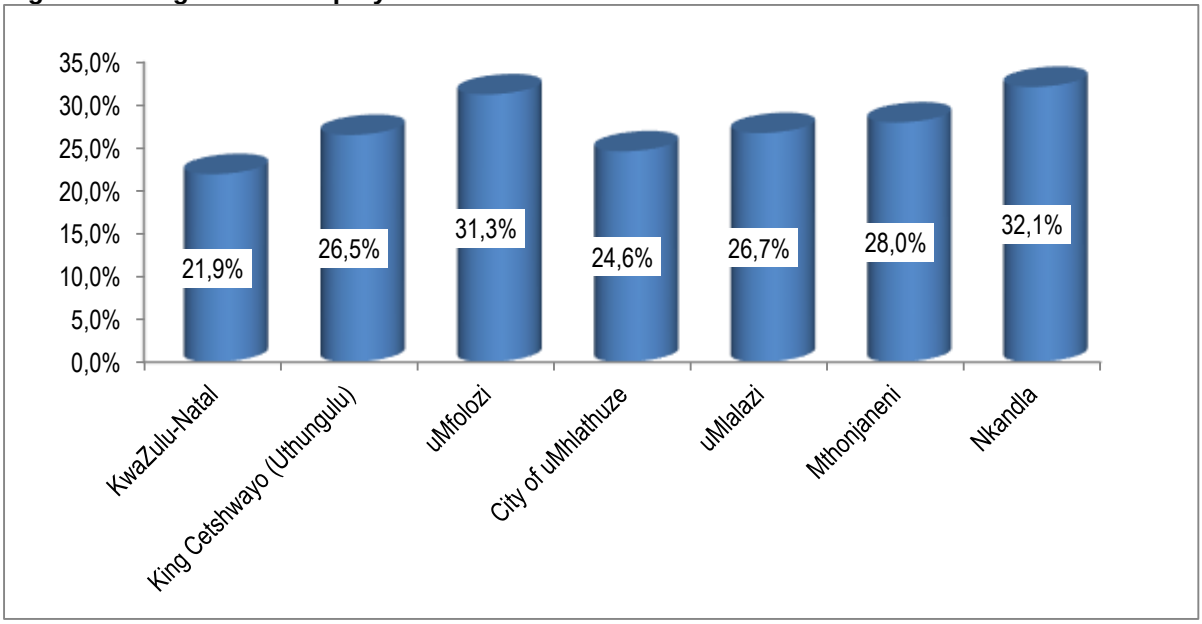
Source: IHS Markit, 2018

4.3.3 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 15: Regional Unemployment



Source: Global insight 2015

Table 31: **Formal and Informal Sector Employment**

	Formal employment	Informal employment	Total employment	% share of King Cetshwayo formal employment	% share of King Cetshwayo informal employment
King Cetshwayo District	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 32: 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 33: 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.

4.3.4 INCOME AND DEPENDENCY

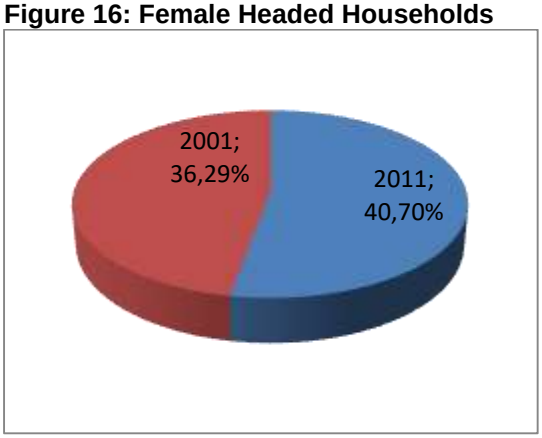
Income levels and the number of dependents have a significant impact on the ability of an employed person to meet the financial needs of his/her dependents.

Table 34: **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

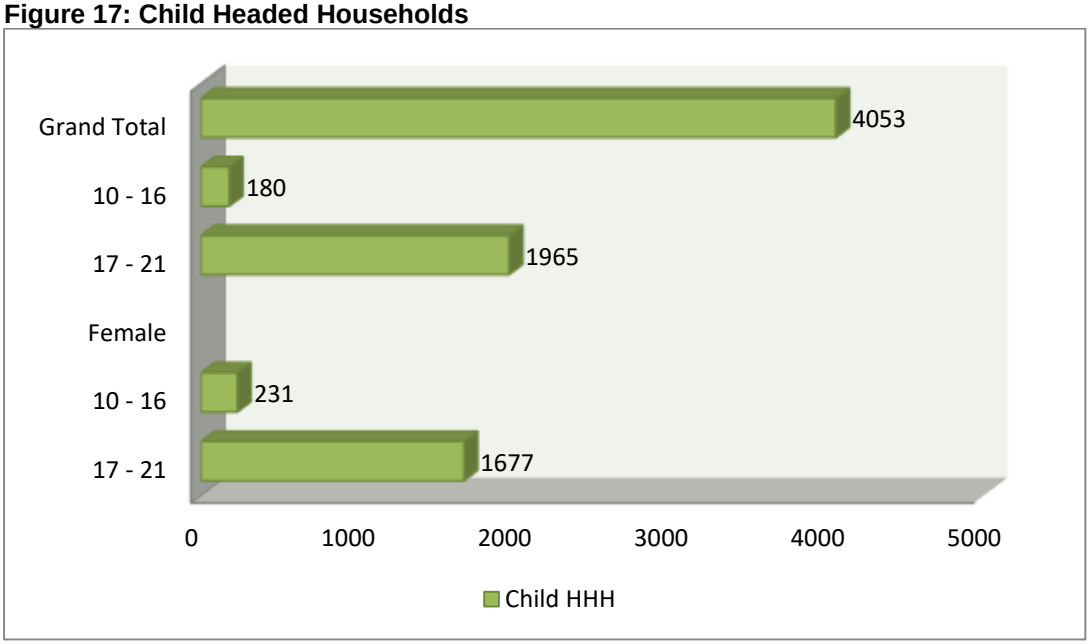
Figure 16: Female Headed Households



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.

Source: Statistics SA, (Census 2011)

Figure 17: Child Headed Households



4.3.5 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. Below are recent statistics on HIV Prevalence in the Province, District and uMhlathuze Municipality.

Figure 18 : 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)

4.4 IMPLICATIONS OF COVID-19 PANDEMIC ON EMPLOYMENT AND INCOME

Whereas, the COVID-19 pandemic and associated national lockdown is very present-day, and the implications of this, and possible future pandemics, cannot be accurately determined, it would be irresponsible not to respond in a manner that protects communities from the loss of income and essentially the loss of food security.

STATSSA have published the “Results from Wave 2 survey on the impact of the COVID-19 pandemic on employment and income in South Africa” on 20 May 2020 noting that the survey may not be representative of the general population of South Africa. However, a number of potential lessons stand out that urge suitable responses. A few of these are summarized hereunder:

- The COVID-19 pandemic and subsequent national lockdown forced working from home. It has become apparent that, although working from home is very possible in many economic sectors, individuals have to be equipped with the necessary tools of trade and business and government environment has to become smarter, i.e. SMART CITIES in terms of connectivity and virtual ways of doing business need to be aspired to.
- In response to working from home, regulatory requirements have to be adjusted to facilitate rather than restrict working from home. The survey indicated that very few people worked from non-residential building before the lockdown. As such, incentives could be pursued to encourage working in virtual spaces. The implications of such are immense, from a time management perspective as well as a climate impact to mention a few.
- People did and expected to continue to lose their jobs and livelihoods as a result of the pandemic/lockdown. During the lockdown many households were reliant on savings for survival. The economic development of a community is therefore critical to elevate households out of poverty into a situation where households can withstand times of reduced or loss of income by way of having been able to make use of savings.
- Income and food security emerged as a major concern and these are more prominent for the poorest sector of the community. As such, efforts to support subsistence livelihoods have to be increased to counter this concern.
- Many findings of the above survey indicate anxiety about the longer term impact of the pandemic and lockdown. This uncertainty in itself is reason enough to take action immediately to counter undesirable longer term impacts that are looming.

4.5 SUMMARY OF KEY DEMOGRAPHIC AND SOCIO-ECONOMIC ISSUES

- 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.
- In uMhlathuze, the highest population densities are found in the in the formal urban and surrounding areas, i.e. peri-urban areas.
- At a steady population increase of 1,5% per annum, the municipal population will surpass 500 000 people by 2030. 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 housing 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 housing 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 housing 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 housing land may be needed from 2016 to 2030 to accommodate a 1,5% population increase at a development density of 25 units per hectare.
- Timeous provision has to be made for planning and development as bulk infrastructure provision in particular has long lead times.
- 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. Efforts are needed to facilitate the provision of education facilities, e.g. provision of services for such purposes.
- 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 and economic development support efforts have to focus in these areas.
- 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. The municipality has embarked on a number of initiatives to support the informal economy, especially in former township areas.
- The COVID-19 pandemic and associated national lockdown is very present-day. Although, the implications thereof, and possible future pandemics, cannot be accurately determined at this stage it would be irresponsible not to respond in a manner that protects communities from the loss of income and essentially the loss of food security.

5. ENVIRONMENTAL ANALYSIS

5.1 GOVERNANCE AND INSTITUTIONAL ARRANGEMENTS

The South African sustainable development model requires that a healthy environment is necessary for social well-being which is a prerequisite for economic prosperity. The economic system, social system and ecological systems are integrated via the governance system that holds all the other system together via a legitimate regulatory framework. The uMhlathuze Integrated Development Plan and Spatial Development Framework hence takes credence from various policies of development that enhance the principles enshrined by the National Environmental Management Act and further, Chapter 5 of the National Development Plan.

5.2 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.

5.3 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 costlier constraints
- Developed
- No Development recommended
- No restriction on development

5.4 WATER RESOURCE MANAGEMENT

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.

5.5 BIODIVERSITY MANAGEMENT

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 meetings its conservation objectives in the province.

5.6 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.

5.7 COASTAL MANAGEMENT

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.

5.8 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 Alkantstrand, 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.

5.9 THREATS TO ECOSYTEM 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.

5.10 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 authorization 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 the 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

5.11 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 optimize 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 recognized 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.

Table 35: Ecosystems Services in uMhlathuze

Environmental Services	Estimated annual value (millions)	Environmental services	Estimated annual value (millions)
Atmosphere regulation - CO2, etc.	R 23,39	Pollination - legume and fruit crops	R 1,53
Climate regulation - urban heat sinks	Unknown	Disease and pest control	R 9,74
Flood and drought management	R 244,11	Refugia - for wildlife and nursery for fisheries	R 15,90
Water regulation - timing, rate	R 137,39	Food production	R 30,18
Water supply – volume	R 297,92	Raw materials - housing, medicinal, craft	R 20,90
Erosion control	R 16,10	Genetic resources – chemicals	R 2,33
Soil formation	R 0,65	Recreation	R 37,73
Nutrient cycling	R 714,90	Cultural	R 67,20
Waste treatment - assimilation and dilution	R 137,74	**Annual total value (millions)**	**R 1,757,72**

5.12 THE ENVIRONMENTAL MANAGEMENT FRAMEWORK (EMF)

An Environmental Management Framework was commissioned for the Richards Bay Port expansion area and the IDZ in 2010, whilst was subsequently gazetted in 2016. The study area was confined to the Port expansion and IDZ area owning to environmental sensitivity (mainly hydrological and ecological) versus enhancement of socio-economic incentives that such development would foster. The King Cetshwayo District Municipality undertook a broader EMF in 2018/2019, which incorporated uMhlathuze entirely.

Key findings of the EMFs are summarised hereunder:

5.12.1 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 Aluminum; and
    - The potential conflict between conservation and port/harbour expansion that would require strict development control.

5.12.2 IDZ Development

The Richards Bay IDZ (Industrial Development Zone) provides a prime industrial business and trade hub that attracts export-orientated investment. The Special Economic Zone is linked to the international deep-water port of Richards Bay and has prime rail and road access. The RBIDZ has identified the following sectors of focus:

- Agro-processing
- ICT and Techno-parks
- Metals beneficiation
- Marine Industry Development
- Renewable Energy

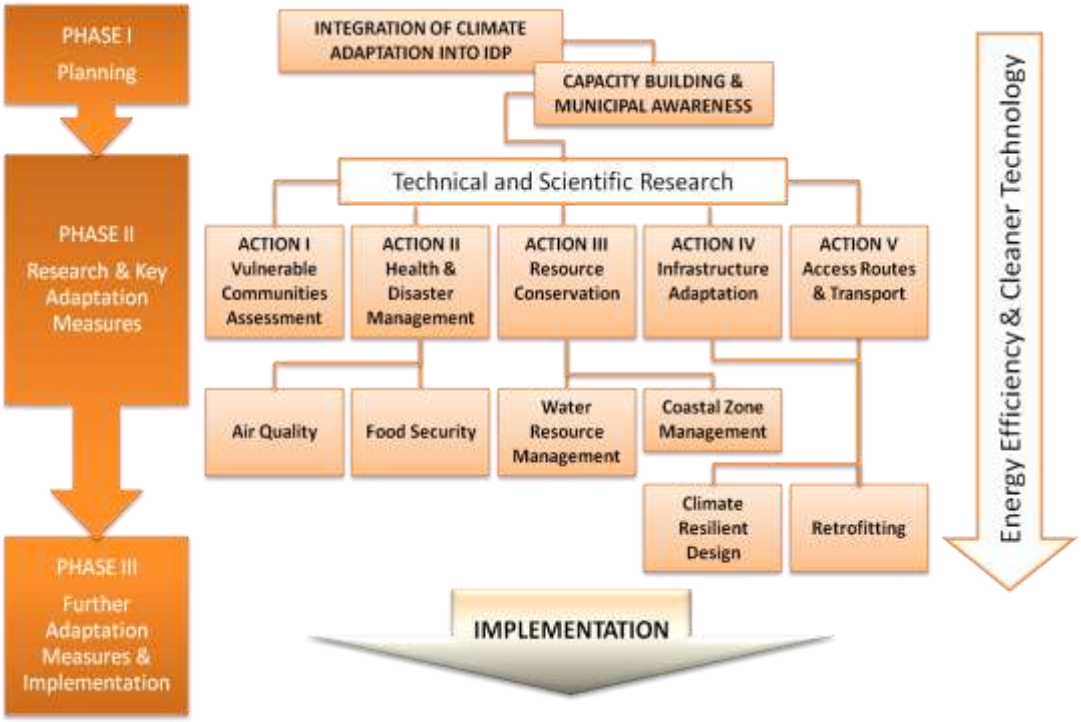
- The EMF sensitivity analysis points to areas that are of great concern for the IDZ from a geotechnical perspective as well as the presence of Kwambonambi Grassland in certain areas, notably IDZ 1D and the IDZ 1C site.
- There are also a number of significant environmental management issues that would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

5.13 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 19: 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.

5.13.1 Governance 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.

5.13.2 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.

5.13.3 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.

5.13.4 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

5.13.5 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

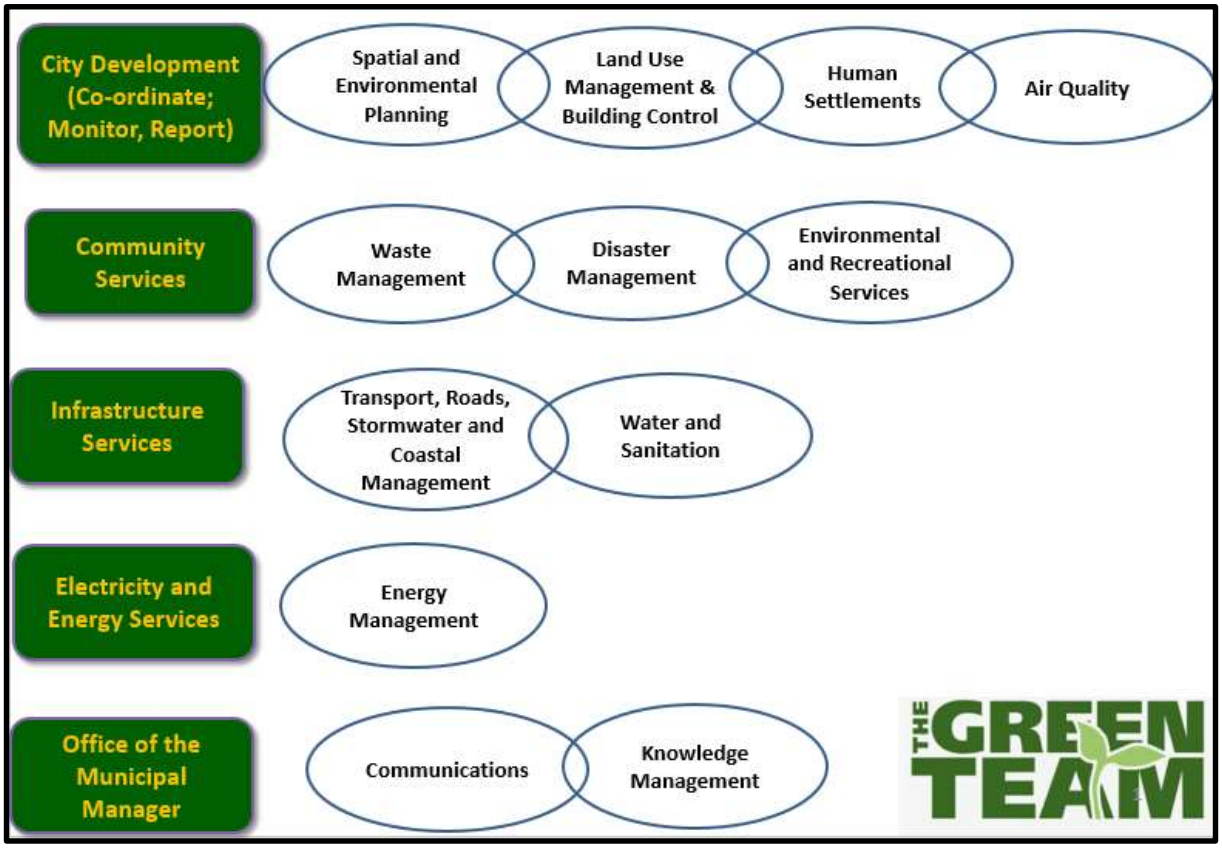
- The Low Emissions Development Strategy, through strategic partners ICLEI
- The uMhlathuze Water Stewardship Partnership climate interventions at uMzingwenya
- The Global Compact of Mayors on Climate Change and Energy

5.13.6 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 20: Composition of the uMhlathuze Green Team



5.14 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 21: Development Setback Lines along Northern Beaches

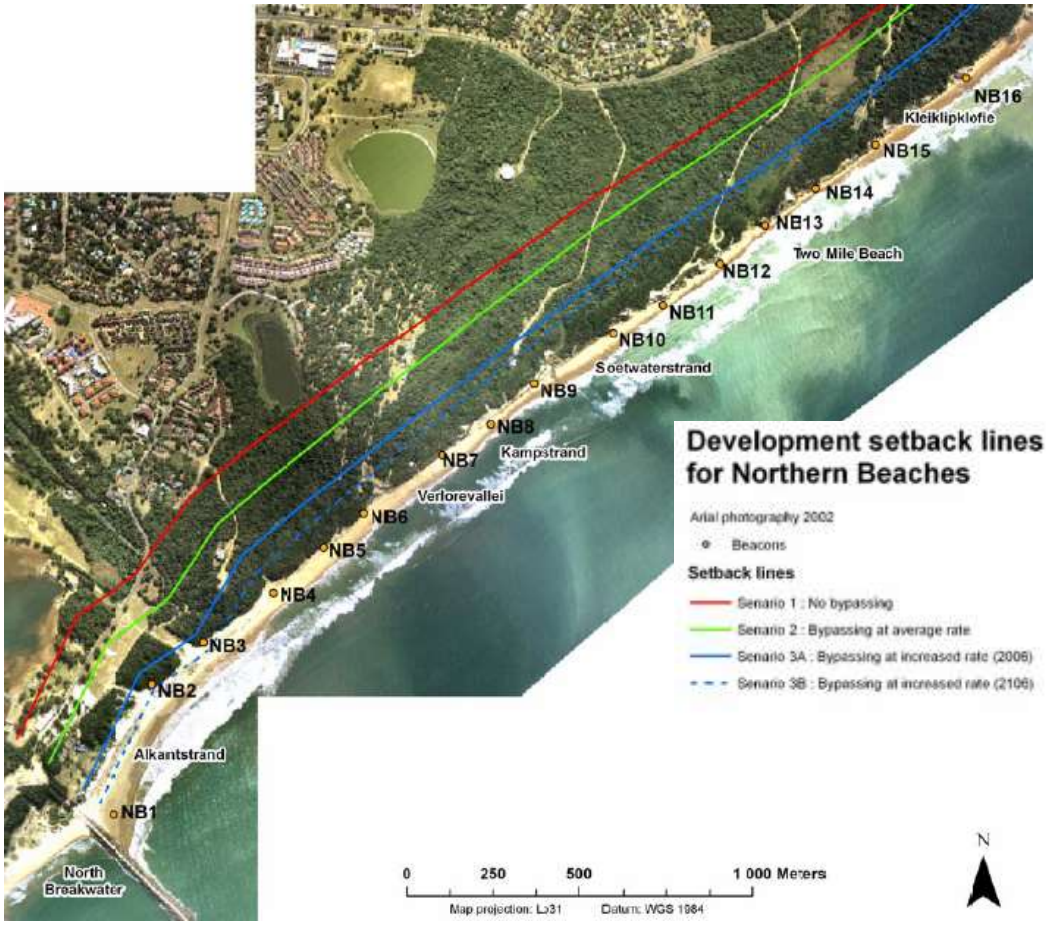


Figure 22: Coastal Erosion and Installed Defenses

5.15 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).

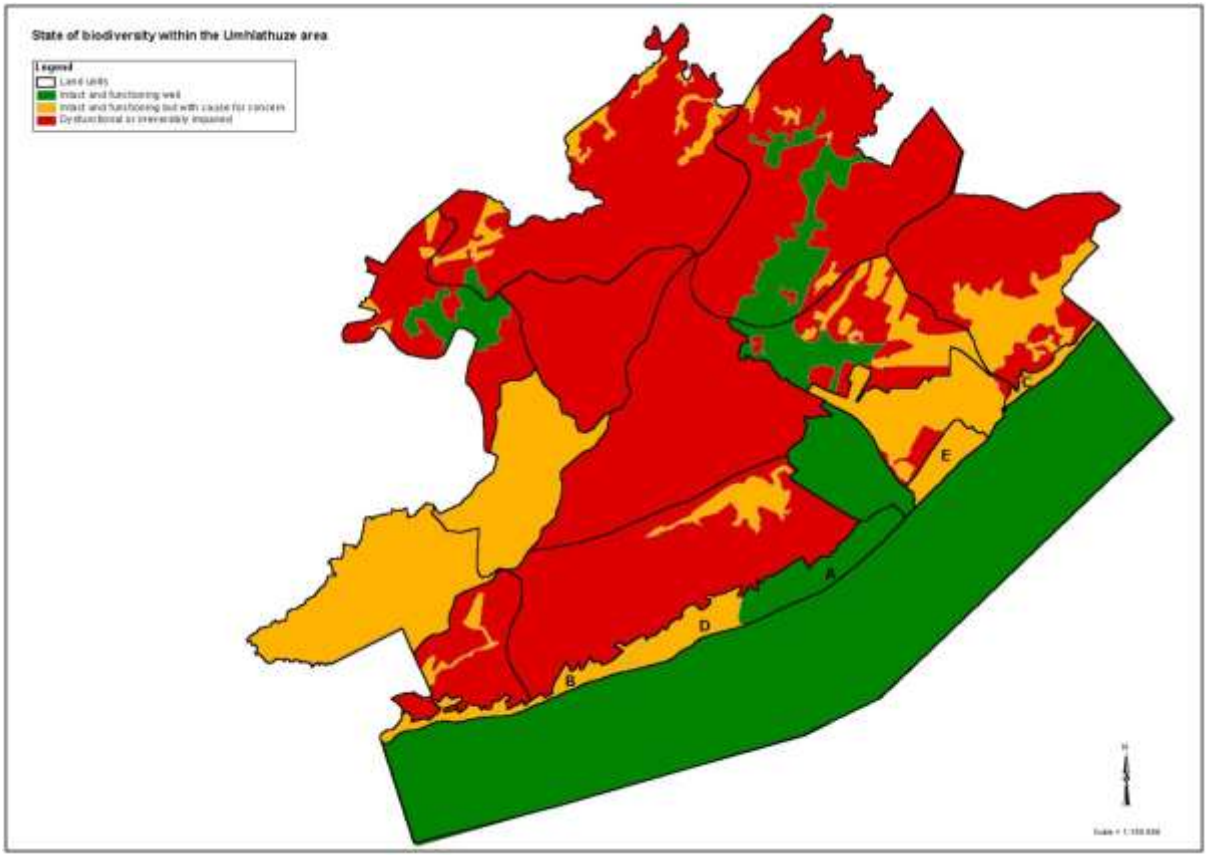
Other biodiversity assets of significance include the following:

- 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 17: 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 36: 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
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

Landscape unit	Size	Condition	Landscape context	Functionality Rank
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
2 Lake Cubhu and catchment	Catchment highly transformed by cultivation and urbanisation	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 (i.e. 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 Esikhaleni (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
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

Landscape unit	Size	Condition	Landscape context	Functionality Rank
5 uMhlathuze river on Quaternary sands	Almost completely transformed, including drainage lines	Terrestrial systems and drainage lines have been irreversibly impaired. Mhlathuze river in poor condition for aquatic biota because of low flow resulting from abstraction and impoundments (e.g. Goudertrou 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. Mhlathuze river offers a dysfunctional linkage for aquatic and floodplain biota. Mhlathuze 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 Mhlathuze.	5
6 Estuary (sanctuary) complex	Large connected components of mangrove forest, salt marsh, mudflats and *Phragmites australis* 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 Mhlathuze 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.	Kwambonambi 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
11 Upper Mhlathuze 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

Landscape unit	Size	Condition	Landscape context	Functionality Rank
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
13 Upper Mhlathuze 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, savannah 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 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 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 37: 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	
Estuaries	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.

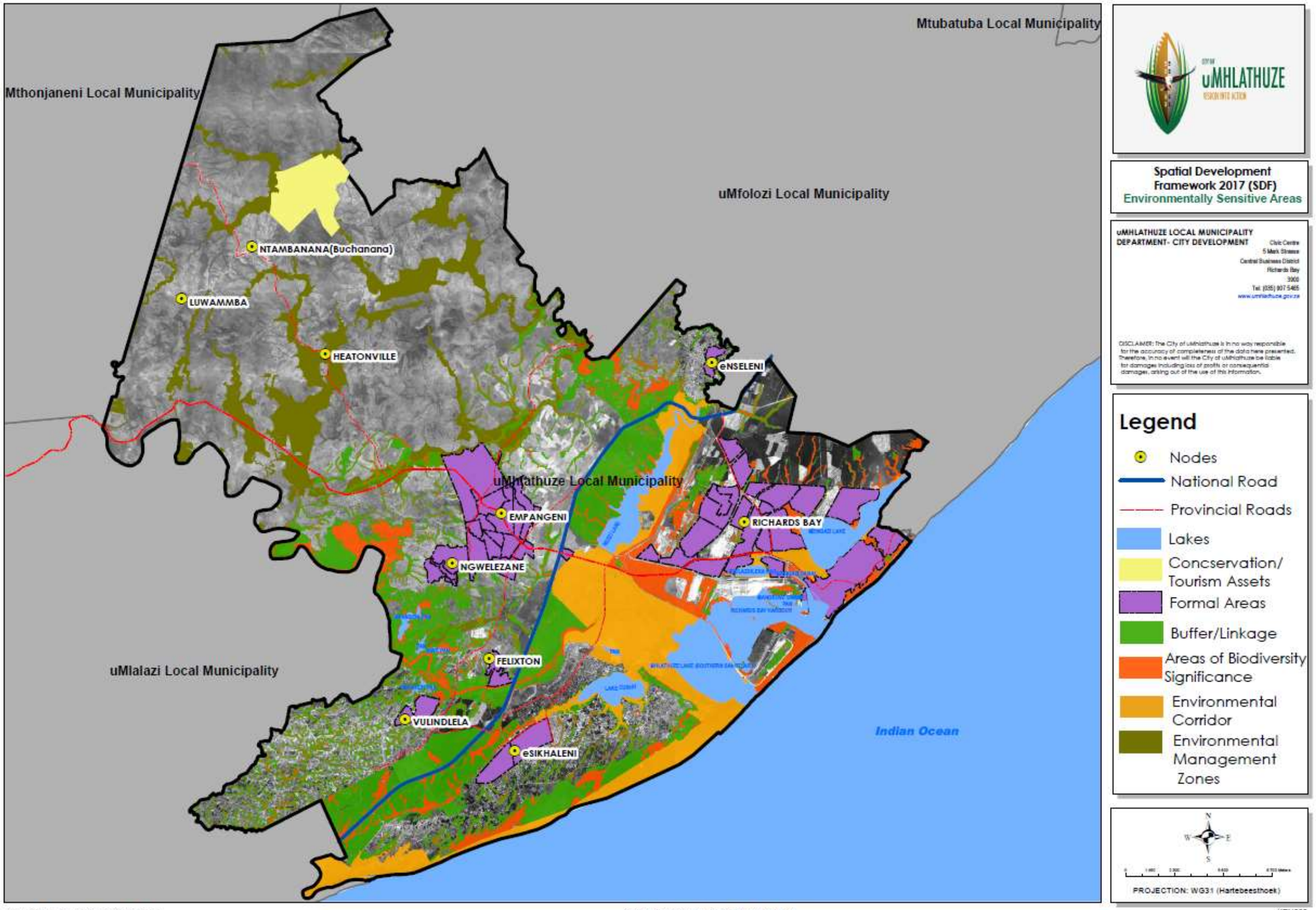
Irrespective of attempts by authorities to protect environmental assets in terms of land use limitations for the obvious reasons provided, a number of other factors are impeding attempts. There is a continuous encroachment of development (mainly unauthorised) into public open space areas and create ways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

5.16 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 at a local scale.
- 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 the 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 proposed 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 18: Environmental Sensitive Areas



uMHLATHUZE

Spatial Development Framework 2017 (SDF)
Environmentally Sensitive Areas

uMHLATHUZE LOCAL MUNICIPALITY
DEPARTMENT- CITY DEVELOPMENT
Civic Centre
5 Mark Strasse
Central Business District
Richards Bay
3900
Tel: (035) 907 5465
www.umhlathuze.gov.za

DISCLAIMER: The City of uMhlathuze is in no way responsible for the accuracy or completeness of the data here presented. Therefore, in no event will the City of uMhlathuze be liable for damages including loss of profits or consequential damages, arising out of the use of this information.

Legend

- Nodes
- National Road
- Provincial Roads
- Lakes
- Concservation/ Tourism Assets
- Formal Areas
- Buffer/Linkage
- Areas of Biodiversity Significance
- Environmental Corridor
- Environmental Management Zones

N
W
E
S

PROJECTION: WG31 (Hartebeesthoek)

KZN282

6. AGRICULTURAL OVERVIEW

Agriculture has a critical role to play in not only providing primary product input into various manufacturing/beneficiation processes but also in food security for numerous impoverishes households in particular the rural areas of the Municipality. Support for agriculture has to be targeted to redress poverty but also boost economic development as well as increase involvement of small farmers in value chains. For such a good understanding has to be developed of agriculture potential and opportunities.

South Africa's agricultural background can be best understood against the backdrop of the 1913 Natives Land Act which deprived black South 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.

The current 2019-2024 Medium Term Strategic Framework (MTSF) seeks to address the Triple Challenges of Poverty, Inequality and Unemployment and is based on the Pillars of a Strong, Inclusive Economy, Capable South Africans and a Capable Development State. The Cross Cutting Focus Areas are Women, Youth and People with Disabilities. Agriculture has a pivotal role to play is all these elements of the current MTSF.

Figure 23: MTSF Triple Challenges, Pillars Cross Cutting Focus Areas

The seven Pillars of the MTSF are:

1. A Capable, Ethical, and Developmental State
2. Economic Transformation and Job Creation
3. Education, Skills and Health
4. Consolidating the Social Wage through Reliable, Quality Basic Services
5. Spatial Integration, Human Settlements and Local Government
6. Social Cohesion and Safer Communities
7. A Better Africa and World

In the context of uMhlathuze, Pillars 4 and 5 has particular importance for Agriculture noting ongoing efforts in pursuit of food security as well as rural planning and agrarian support.

6.1 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 states 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 an area analysis for each identified node, and will further survey areas 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 in uMhlathuze.

Table 38: 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.

6.2 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 and requires 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 agricultural support 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

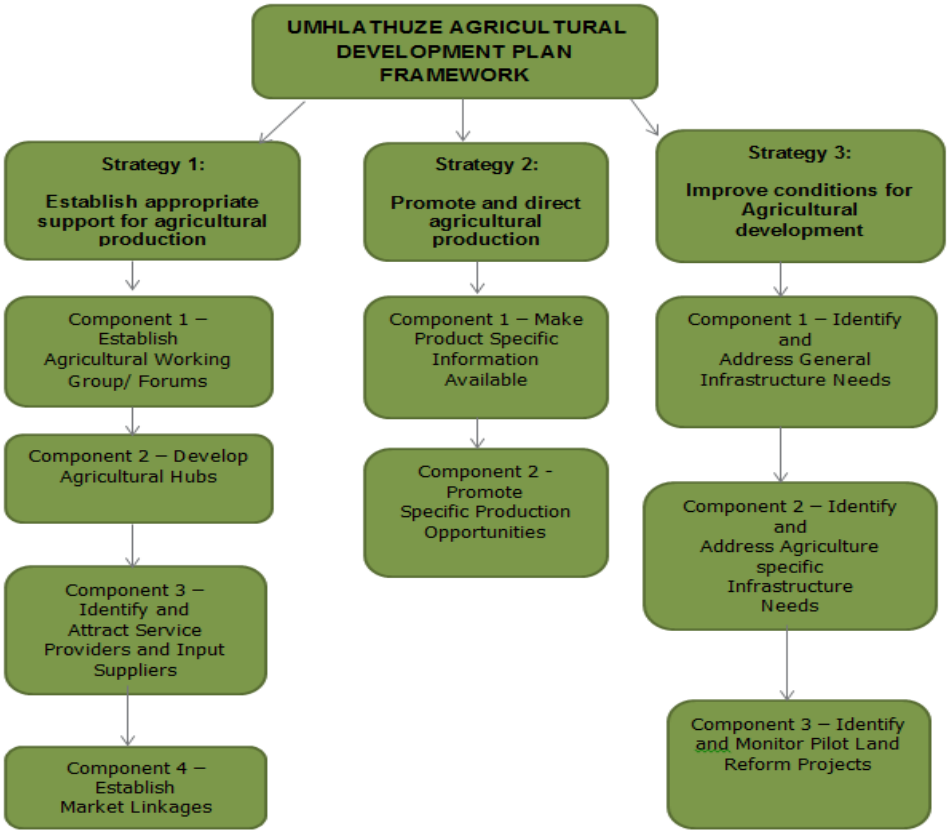
The said plan identified the following strengths, weaknesses and opportunities relating to agriculture.

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

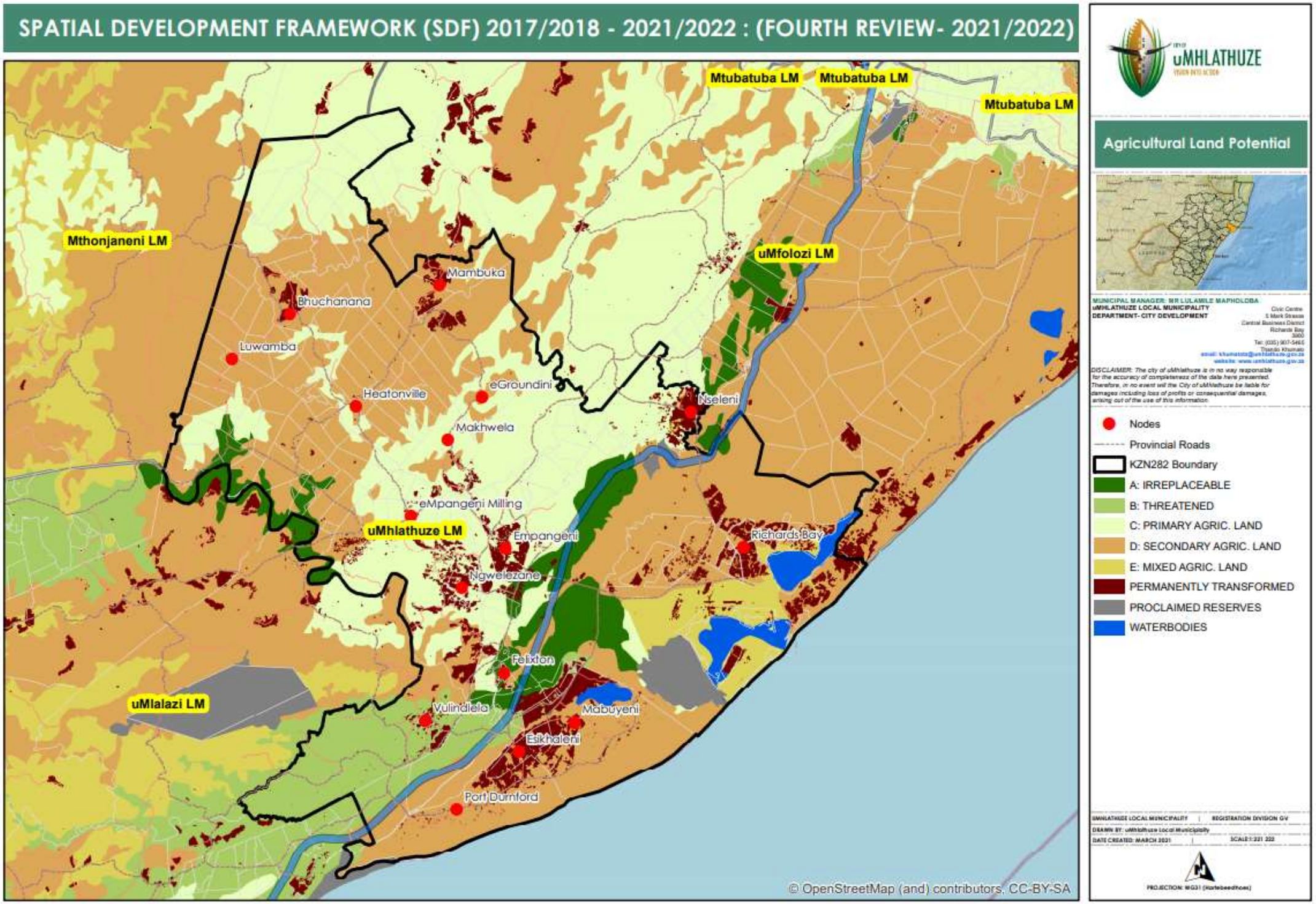
Figure 24: Agricultural Support Plan Strategies



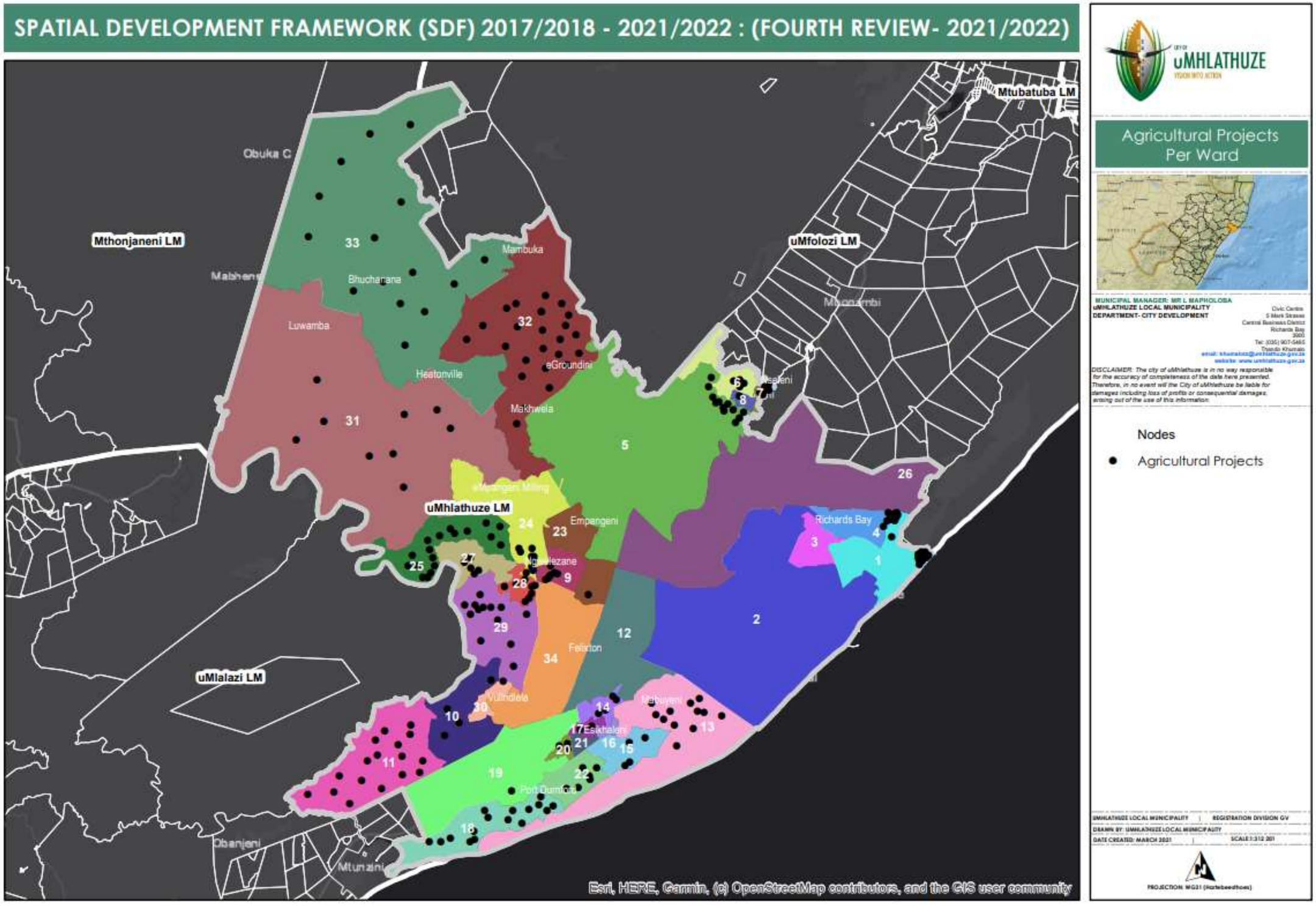
The Agricultural Support Plan also identified niche communities, opportunities, partnerships etc. as summarized hereunder:

- Niche Commodities: Essential Oils, Macadamia Nuts
- Animal Enterprise Opportunities: Goat Production (ongoing), Beef Production, ongoing Poultry Production of meat and eggs, ongoing Aqua Culture
- Partnership 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 infrastructure support.

Map 19: Land Potential



Map 20: Agricultural Projects per Ward



7. 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)

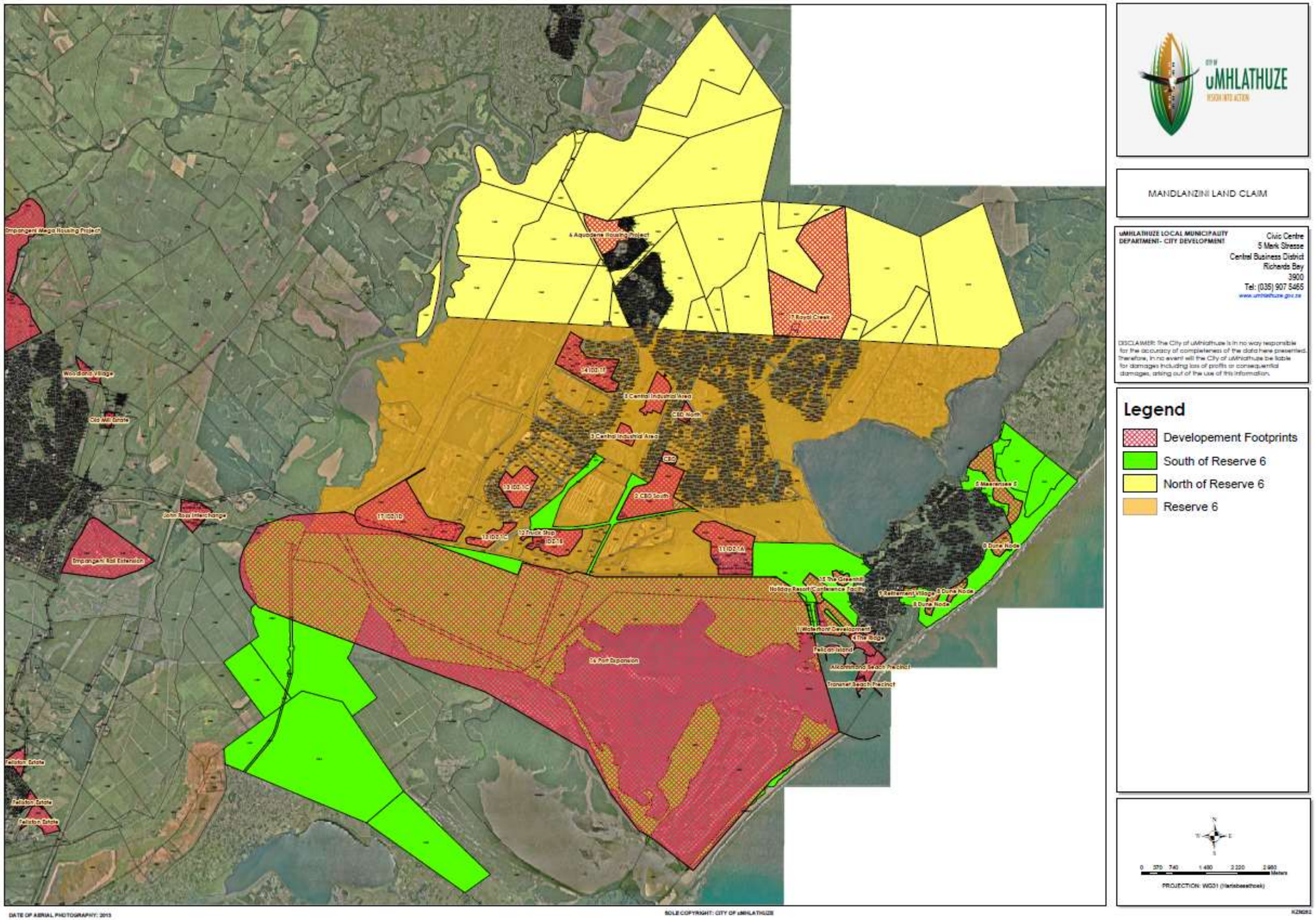
Mapping, based on information available, in respect of numbers 1, 2 and 3 above is provided. The relation of the Mambuka claim in relation to developments is also indicated.

Land claims in respect of Mkhwanazi and Obizo (Cebhekulu) are understood to have been finalised and, once detailed information is available, such will be included into this document.

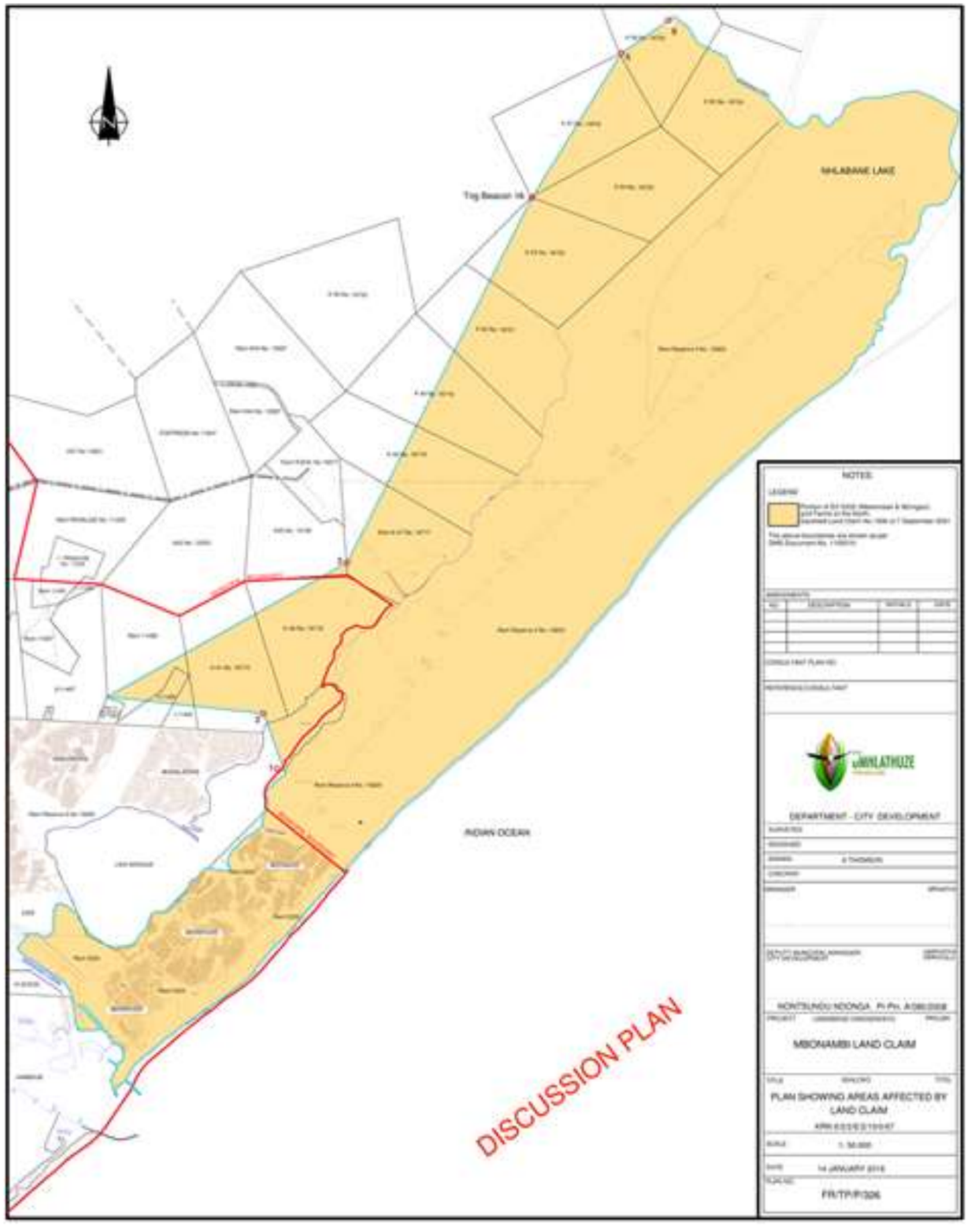
7.1 SUMMARY OF KEY LAND REFORM ISSUES

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.

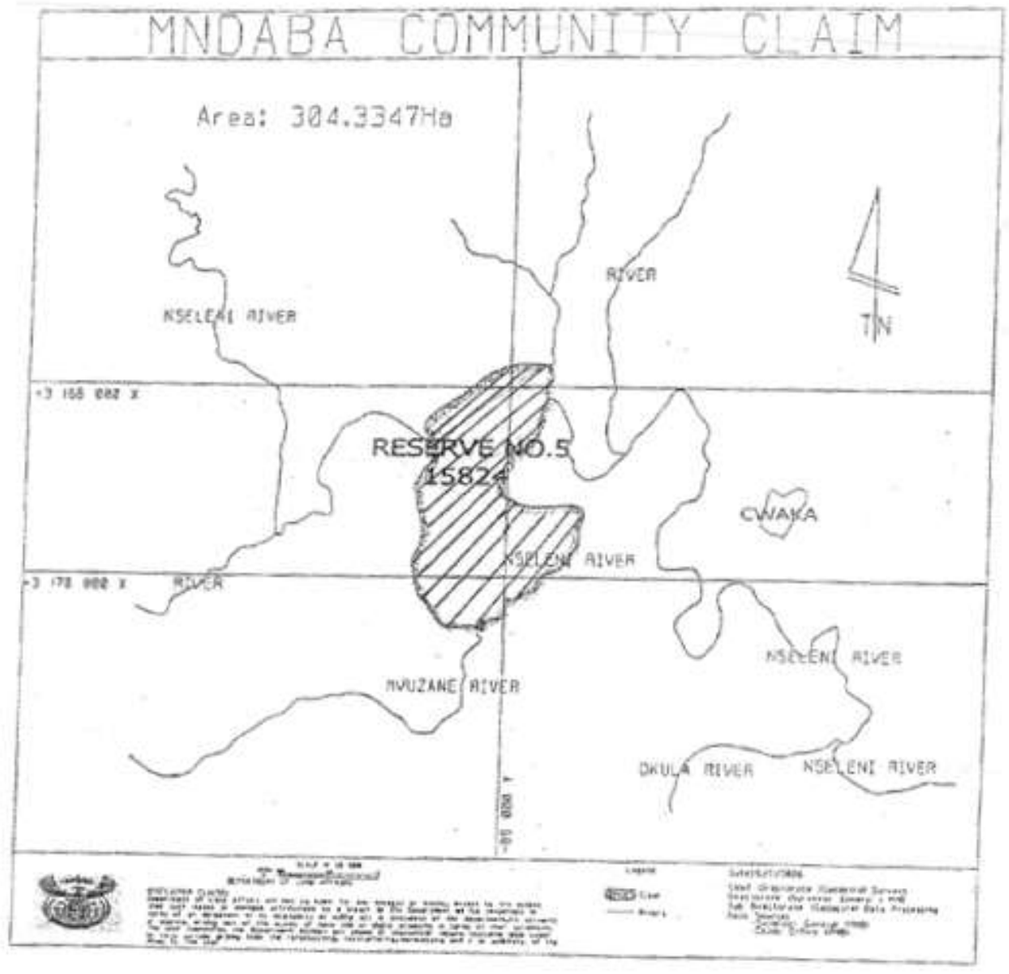
Map 21: Extent of Original and Extended Mambuka Land Claim



Map 22: Mbonambi Land Claim



Map 23: Mndaba Land Claim

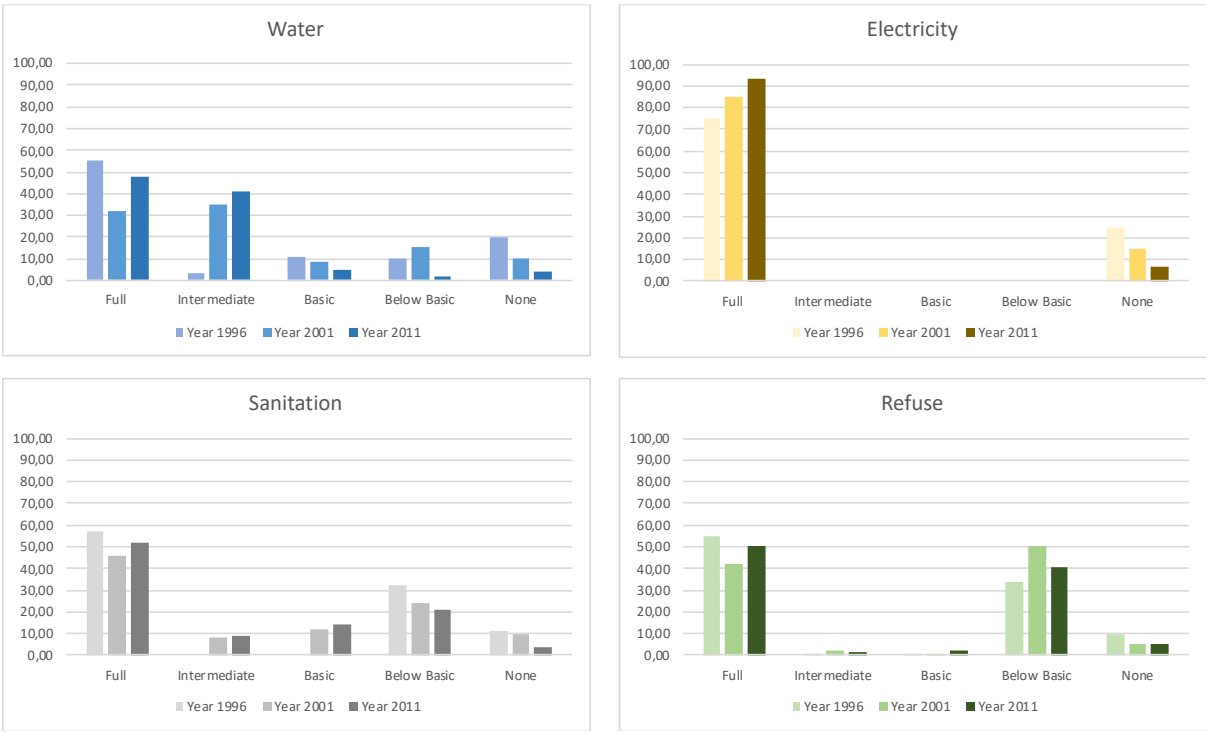


8. INFRASTRUCTURE AND SERVICES

Infrastructure Master and Sector Plans are in the process of review and updates 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 provision of infrastructure and services is at the core of development and the improvement of the quality of life of all people. The lack of infrastructure and services can lead to degradation but in the same vein, the provision of infrastructure can also lead to degradation. As such, due care has to be taken when planning and implementing infrastructure and services provision.

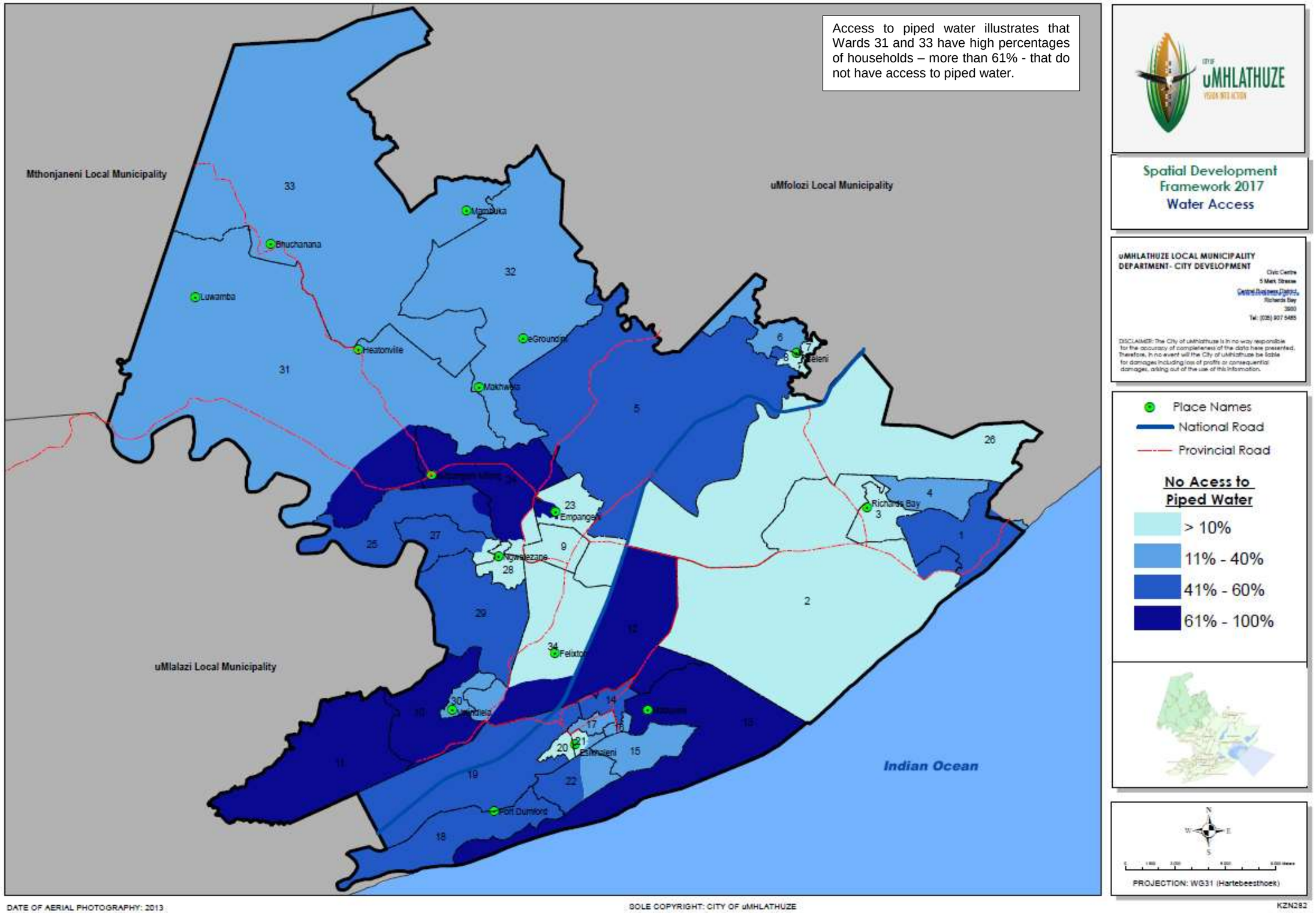
To understand the baseline, the comparative access to services is indicated in the following graphs, i.e. water, electricity, sanitation and refuse compared over the period 1996, 2001 and 2011.

Figure 25: Access to Services

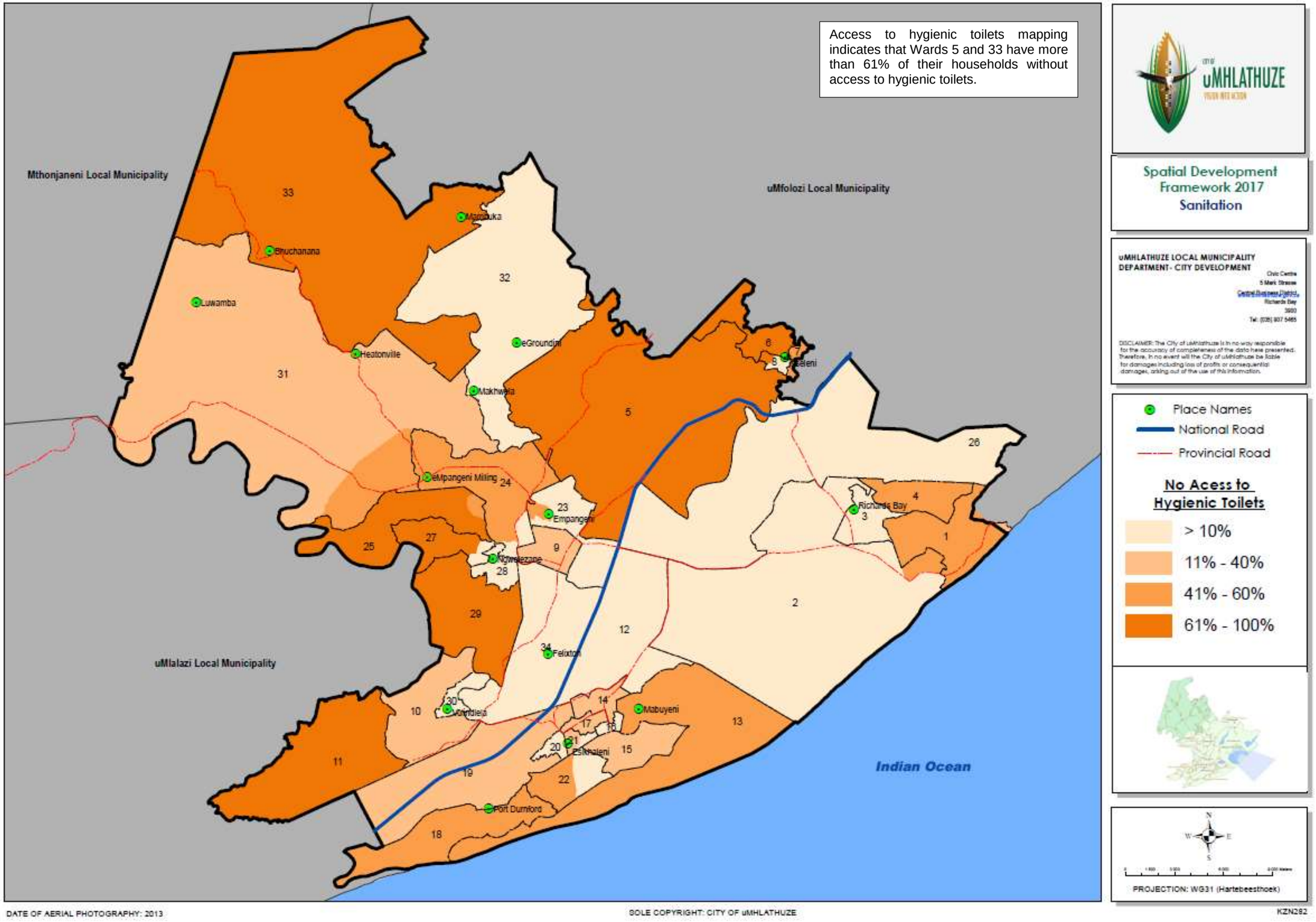


As per the maps attached at overleaf, access to water and sanitation services are illustrated spatially. The remainder of this chapter will provide updated information in respect of the various sector plans that exist, have been updated or are under review.

Map 24: Access to Piped Water



Map 25: Access to Hygienic Toilets



8.1 BULK WATER MASTER PLAN

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

8.1.1 Existing Bulk Water Supply Infrastructure

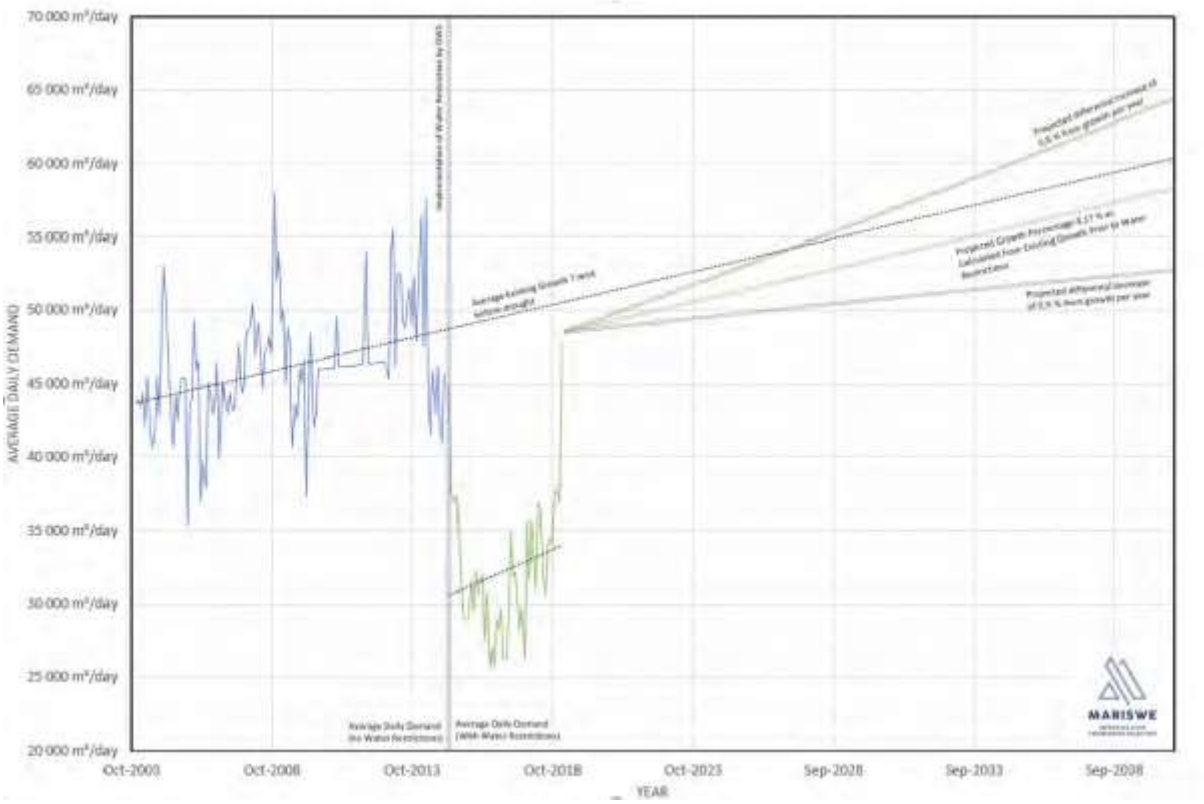
The following main water supply schemes have been identified, i.e.:

- 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 is 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 26: Northern Scheme Demand Growth Projection



8.1.2 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 39: 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
	Ngwelezane	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 Department of Water and Sanitation (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

8.1.3 Interventions

A summary of interventions per supply scheme is provided herewith:

Figure 27: Proposed Interventions (Northern Scheme)

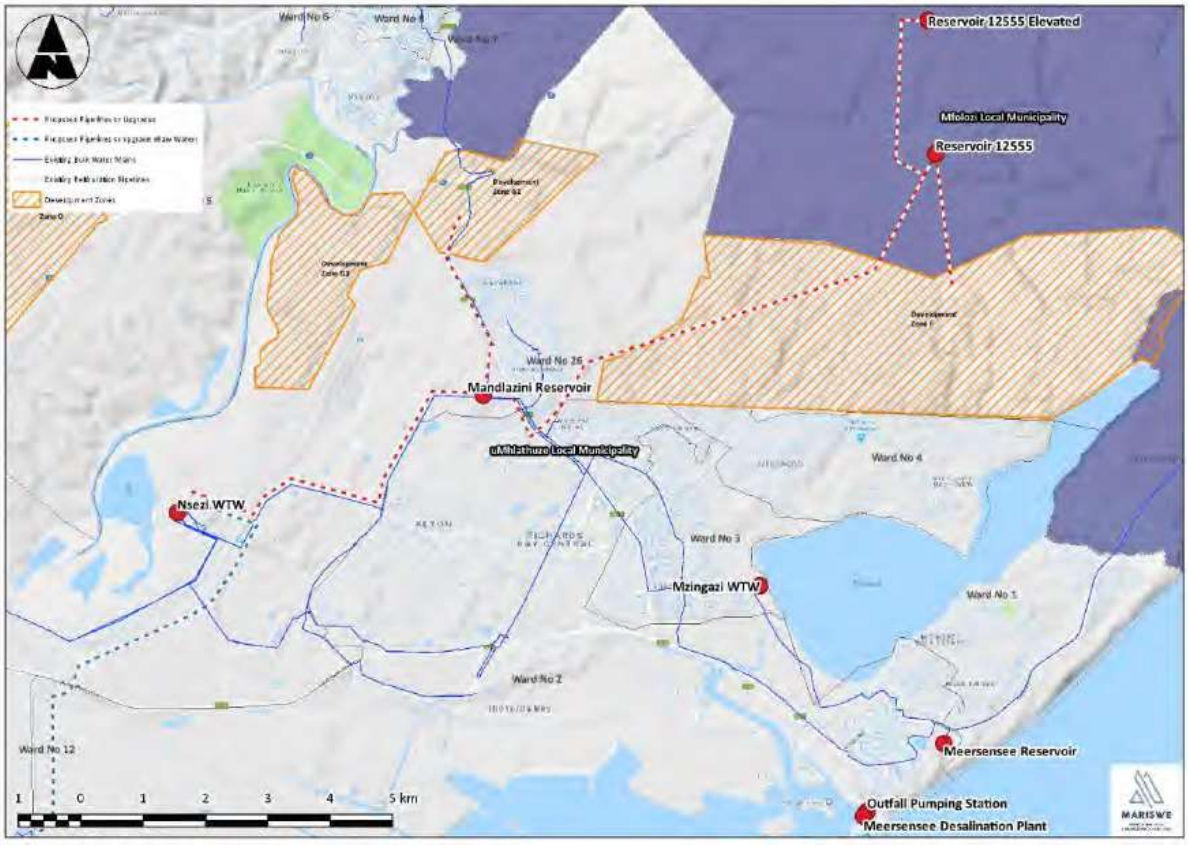


Figure 28: Proposed Interventions (Empangeni Scheme)

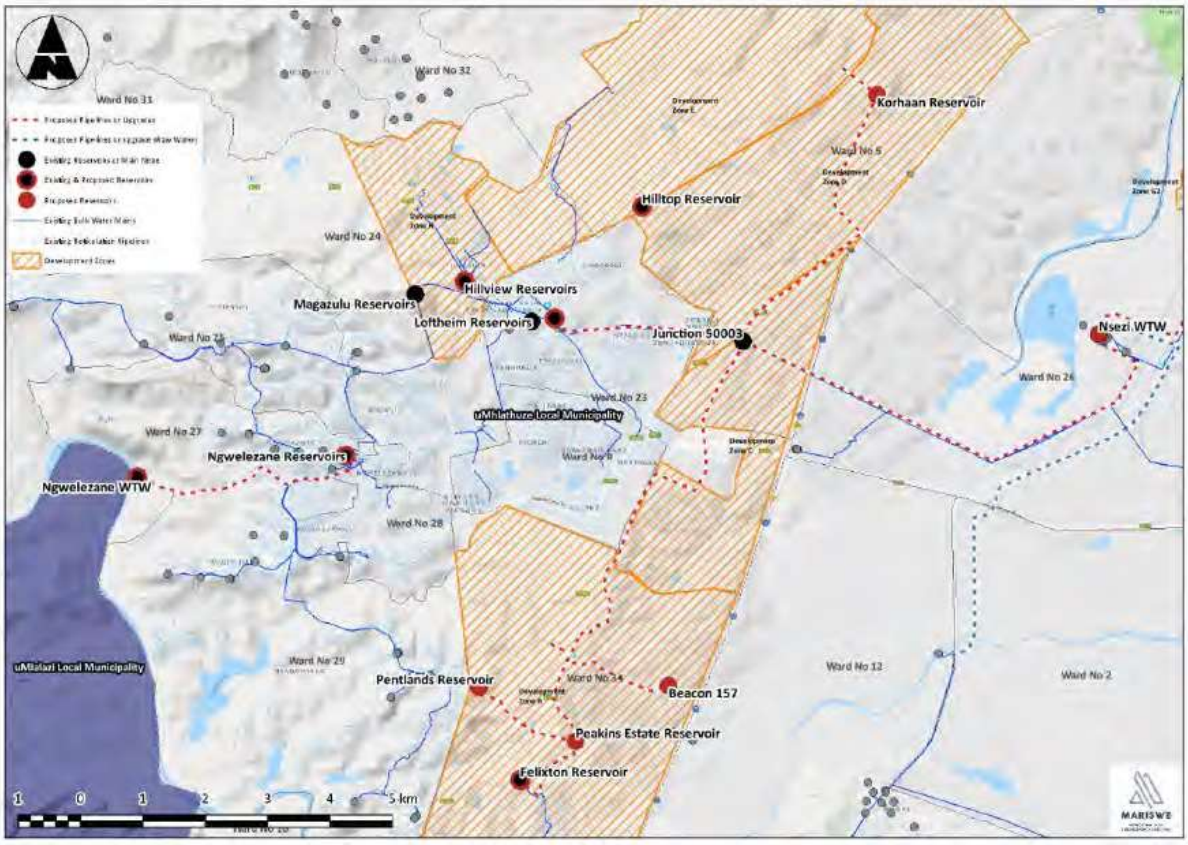


Figure 29: Proposed Interventions (Western Scheme)

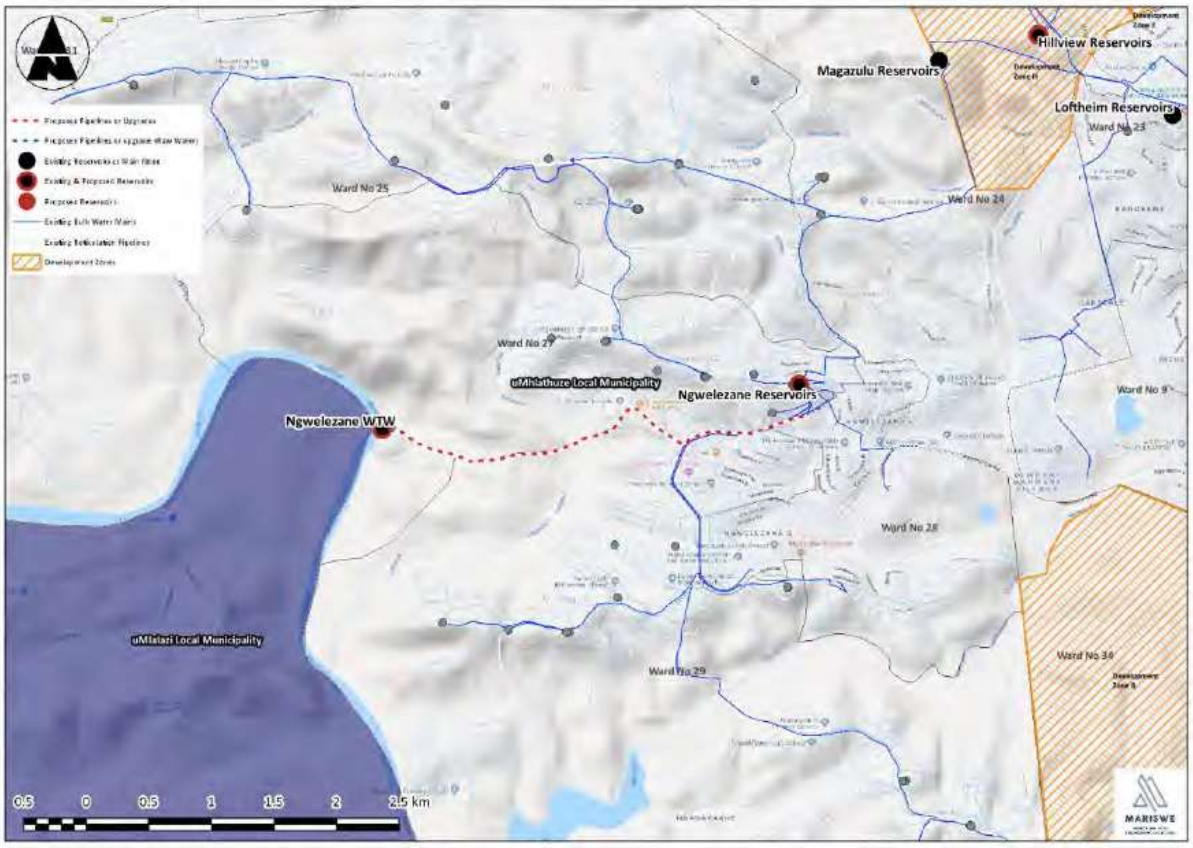


Figure 30: Proposed Interventions (Southern Scheme)

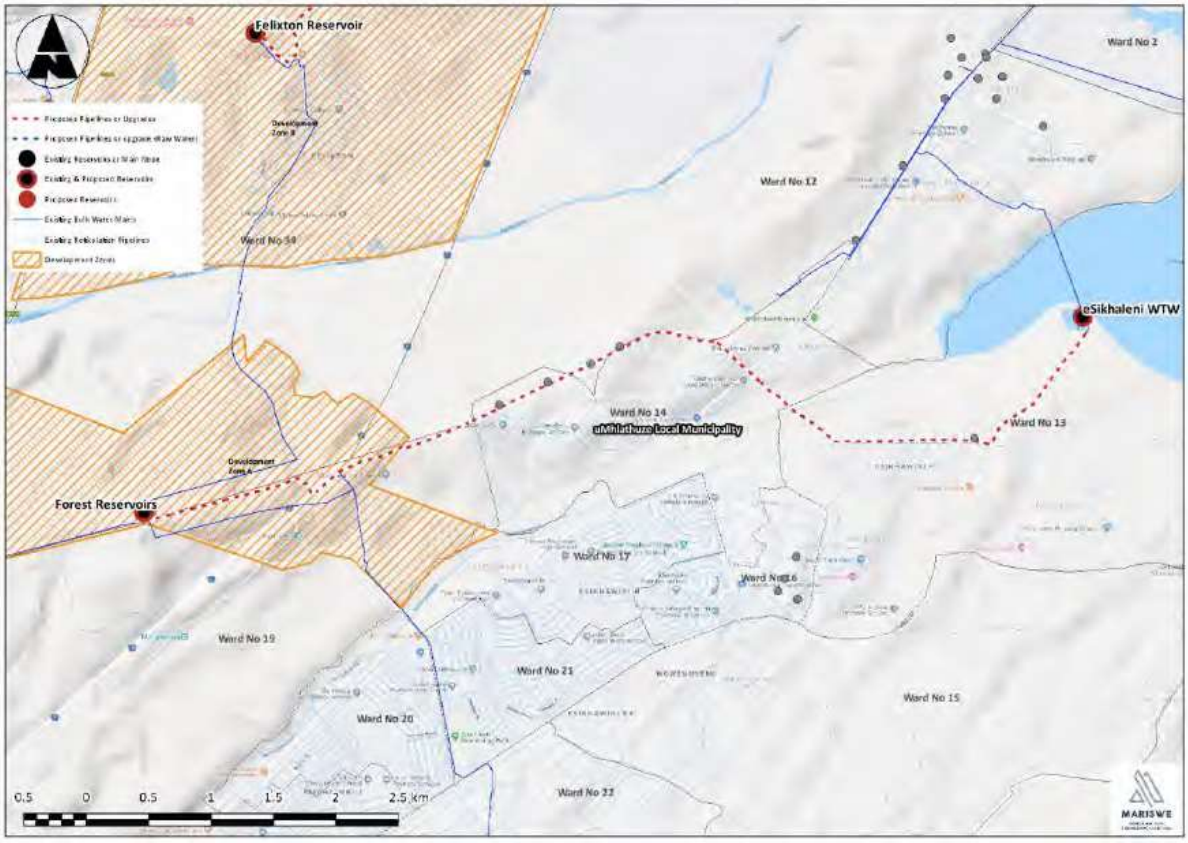


Figure 31: Proposed Interventions (Ntambanana Scheme)

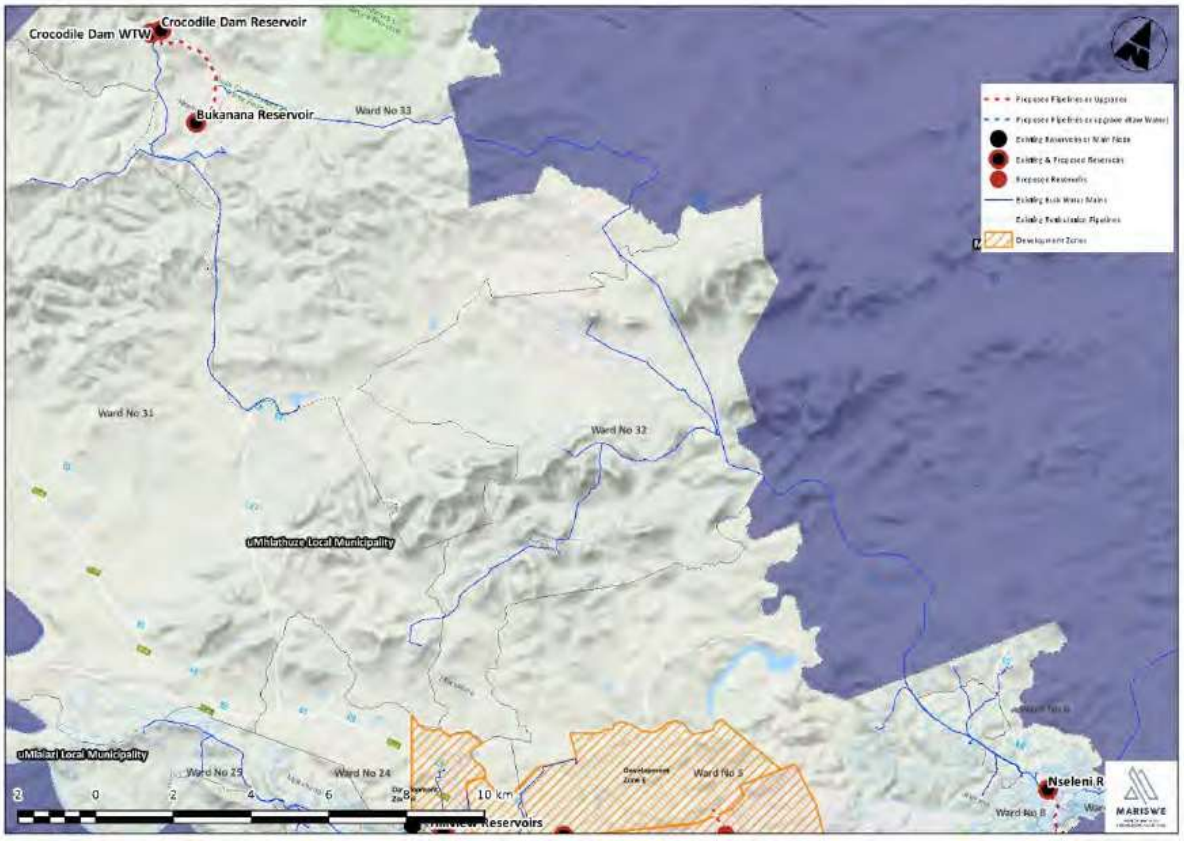
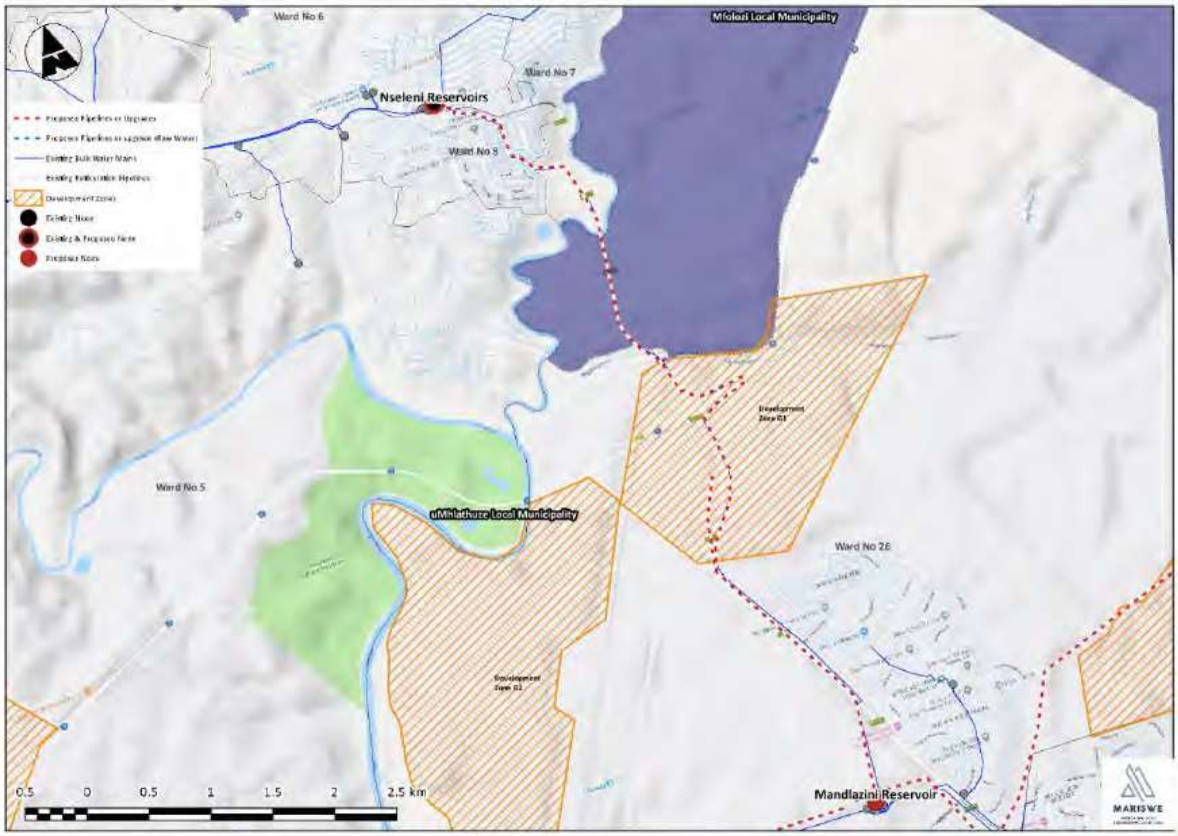


Figure 32: Proposed Interventions (Nseleni Scheme)



A costed summary of the planned interventions is provided herewith:

Table 40: Costed Summary of Planned Interventions

Scheme Name	Estimated Cost (Escalated to 2019)
Northern Scheme	336 355 335
Empangeni Scheme	912 826 268
Western Scheme	50 126 399
Southern Scheme	265 330 641
Ntambanana Scheme	17 875 000
Nseleni Scheme	119 000 000
TOTAL	**1 701 513 643**

8.2 WATER SERVICES DEVELOPMENT PLAN

The Review of the uMhlathuze Water Services Development Plan (WSDP) 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.

8.2.1 Service Levels

During 2016/2017, 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 during 2016. The households that have access to water services during 2017/2018 was 94.95% (104 552 households) and the overall water backlog was **5.41%** (5 967 households). Bulk water infrastructure needs to be installed within the new wards before the installation of water meters can be done.

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 was also adjusted due to the new wards that were added to the CoU during 2016 and the revised figure was 73.32%. The sanitation backlog was **26.68%** (29 483 households).

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.

8.2.2 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, their 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 41: 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 estimated replacement cost at R 2.34 billion. The replacement cost of the water treatment works accounts for R 1.38 billion followed by the wastewater treatment works at R463 million.

Figure 33: Replacement Cost

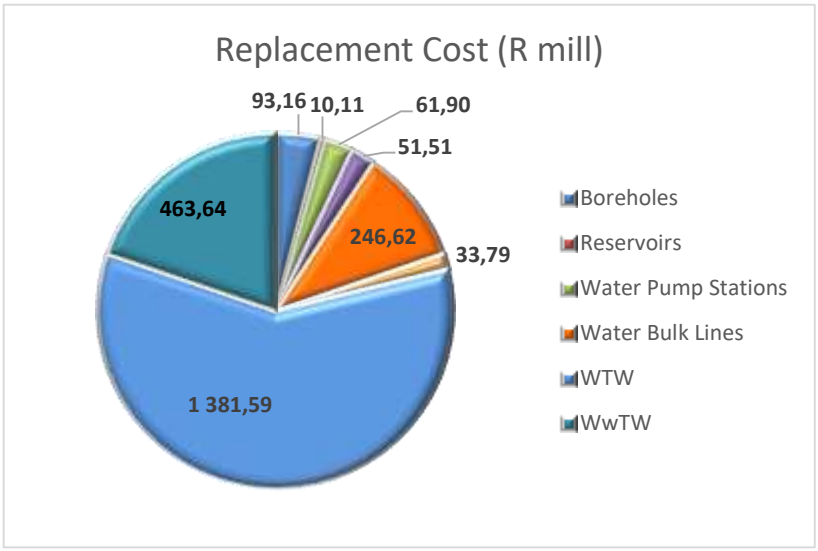
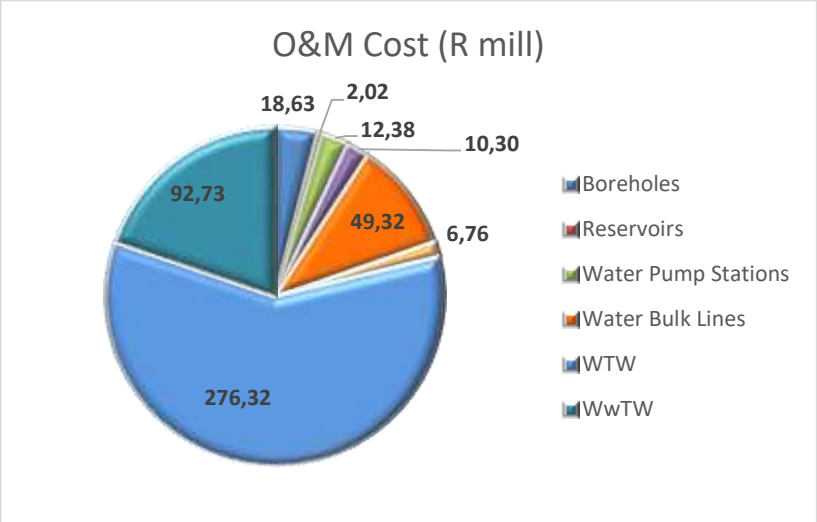


Figure 34: Operation and Maintenance Cost



The quantum of expenditure is significant and the prioritization of capital expenditure has to be informed by the Capital Expenditure Framework (CEF). The CEF reflects on all the municipal capital expenditure needs for all the sectors and then, through prioritization and due consideration of affordability, provides project for implementation over a ten-year period.

8.2.3 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.

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.

8.2.4 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 – Alkantstrand 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.

8.3 BULK SEWERAGE MASTER PLAN

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 42: Estimated Increase in Housing Units

	Household size (persons/household)	**Estimated new unit requirement**			
		2015	**2025**	**2030**	**2040**
Population change at an annual growth rate of 2.00% pa	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 43: 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
	Ml/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 35 Ml/d. The required capacities for the anticipated flow for the existing, planned and approved developments are expected to be 75 Ml/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 185 Ml/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 CoU 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 wastewater being discharged to sea through the Alton/Arboretum marine outfall initially and that the volume could increase after 2030.

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 44: 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

	2015-2020	2020-2025	After 2025
Component	Total (Rand)	Total (Rand)	Total (Rand)
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 45: 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 46: 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

The required expenditure is significant and the prioritization of capital expenditure is informed by the municipal Capital Expenditure Framework (CEF). The CEF reflects on all the municipal capital expenditure needs for all the sectors and then, through prioritization and due consideration of affordability, provides project for implementation over a ten-year period.

The Bulk Sewer Master Plan is undergoing review and, when available, the content of this section will be updated.

8.4 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 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.

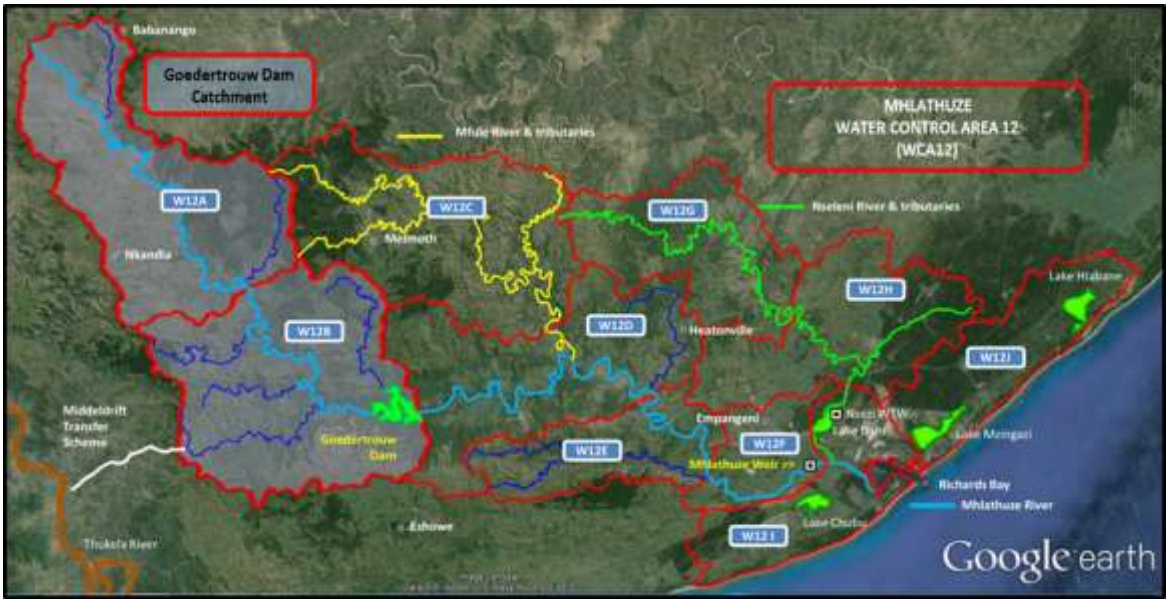
7) As a social project, a composting operation should be implemented as a final sludge treatment for the sludge produced by the waste water treatment works.

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 35: Mhlathuze Water Control Area 12 (WCA12)



The project consists of two phases:

1. Feasibility Phase: The National Treasury approved the Feasibility Study and thereafter Council approval was obtained in December 2018.
2. Procurement Phase: The Procurement phase consists of the following stages and Council has approved its commencement:

   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

8.5 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. 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 and included the following:

- 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

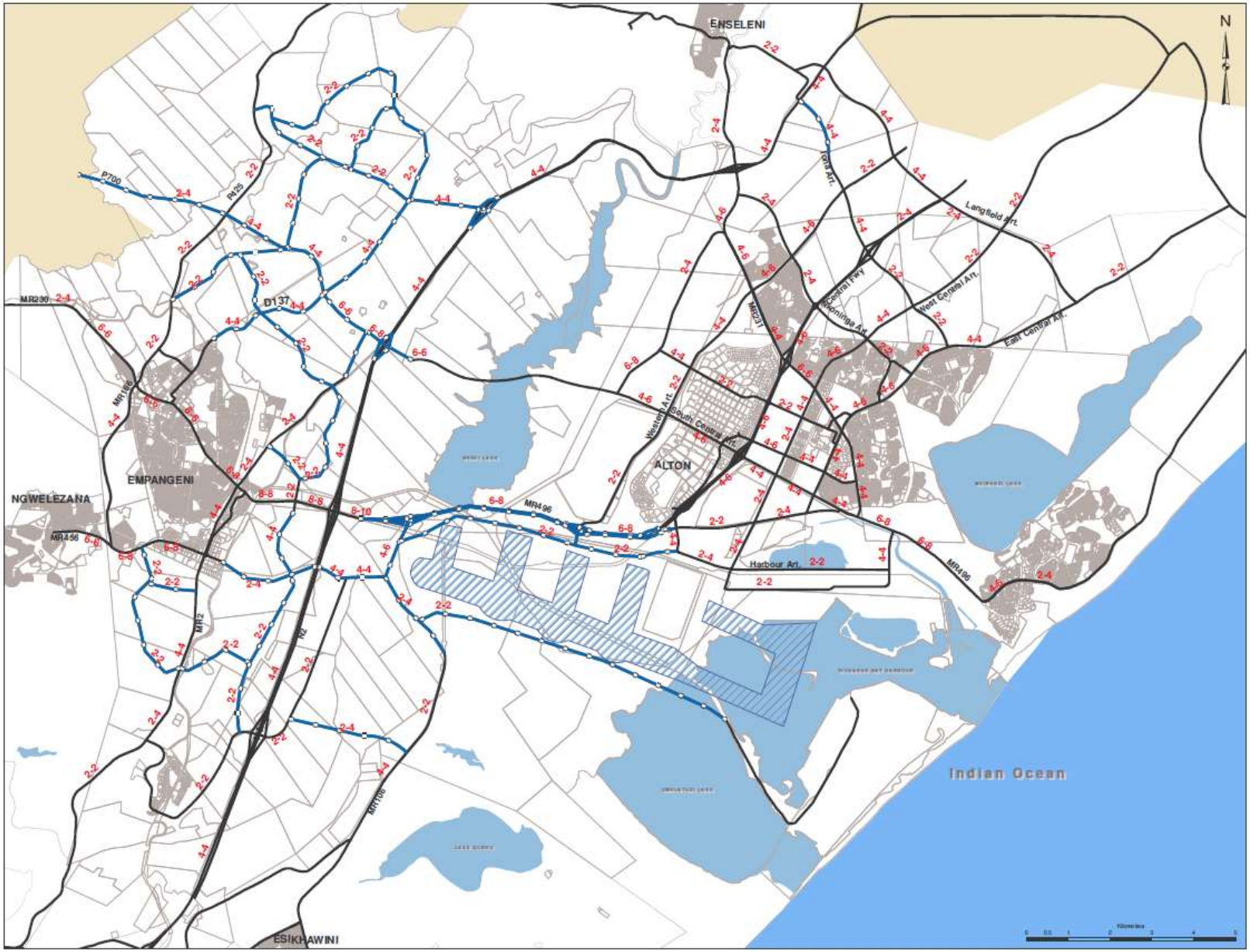
The uMhlathuze Municipality has completed a **Comprehensive Integrated Transport Plan (CITP)** with the assistance of the National Department of Transport. The plan consists of the following chapters.

Table 47: 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: o Demographic o Transport supply and demand o Description of the public transport system o Description of public transport services including non-motorized transport and learner transport o Description of the institutional and organizational set-up of the public transport industry o Traffic demand and road infrastructure o Freight transport routes and movements o 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.

Map 26: Arterial Road Framework Plan



8.6 AIRPORT PLANNING

The City of uMhlathuze plays a major role in the regional economy of Northern Zululand as a service centre, commercial and industrial centre. The area has also been identified as a secondary node in terms of the Provincial Spatial Economic Development Strategy.

The current Richards Bay Airport operates under a number of operational and locational constrains. Not only is the current Richards Bay airport limited in terms of runway length and width, it is also land locked by residential development (formal and informal) with no expansion potential and is more than 10 kilometres from the N2 (National Road), to mention a few. In context of the above and the inherent growth potential and imminent investment in the area, the uMhlathuze Municipality completed a pre-feasibility study for the relocation and redevelopment of the Richards Bay Airport into a fully-fledged regional airport.

Amongst others, the report contained the following chapters/sections:

1. Aviation Demand and Land Suitability
2. Economic Assessment
3. Planning and Layout
4. Financial Assessment
5. Proposal for the use of the existing airport site

The study area for the pre-feasibility is indicated in the following figure.

Figure 36: Site under investigation for Proposed Airport Relocation and Redevelopment

The 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 pre-feasibility study proposed that the development of the airport takes place in phases. Phase 1 would refer to the area "inside the fence" and the proposed land uses are considered essential for the operation of the airport with a total area of 92 Ha. The Phase 2 onwards refers to the area that is "outside the fence" and is proposed for catalytic development and covers an area of 441 Ha.

Figure 37: Proposed "inside the fence" Layout

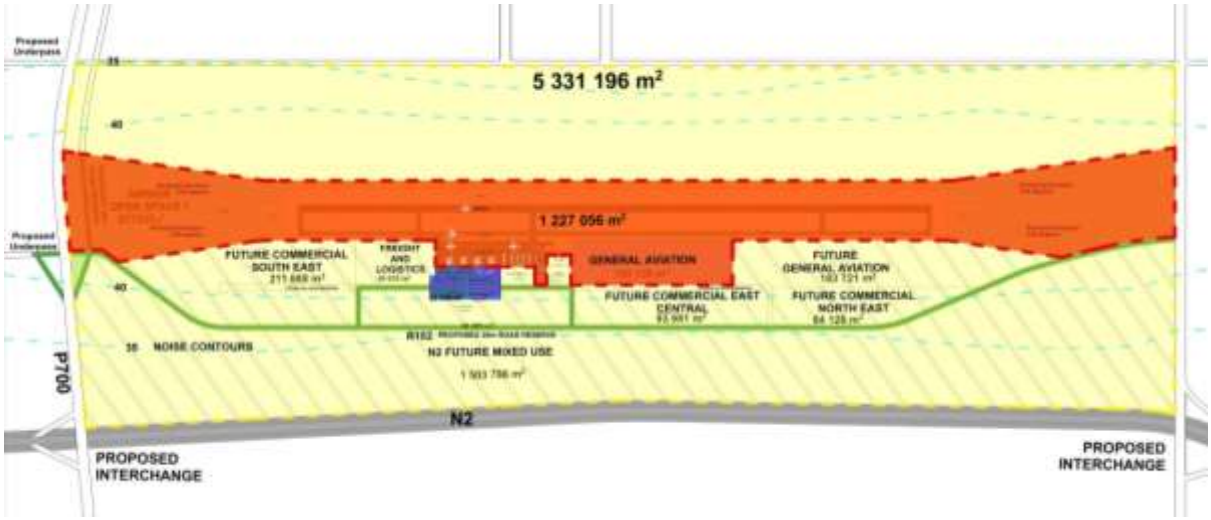
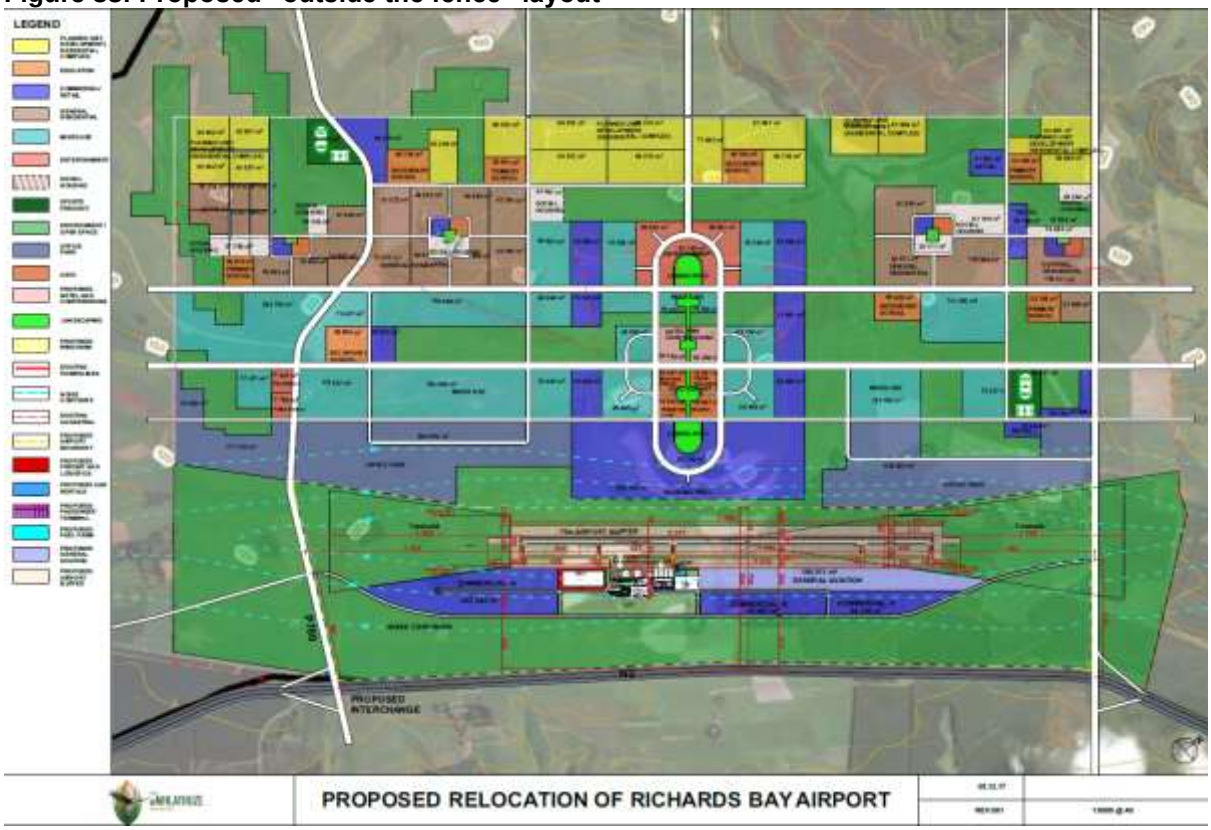


Figure 38: Proposed "outside the fence" layout



Plans have also been drafted to inform the proposed redevelopment of the existing airport site to cater for several requirements for both the economic development of the City and the municipality in general as well as the social imperatives such as the integration of communities and the provision of services required. To this end, the following is proposed.

The outcome of the pre-feasibility study warranted 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 Council has appointed a Transaction Advisor in this regard to undertaken a fully-fledged PPP process.

The above PPP process consists of the following phases:

Phase 1: Feasibility Study

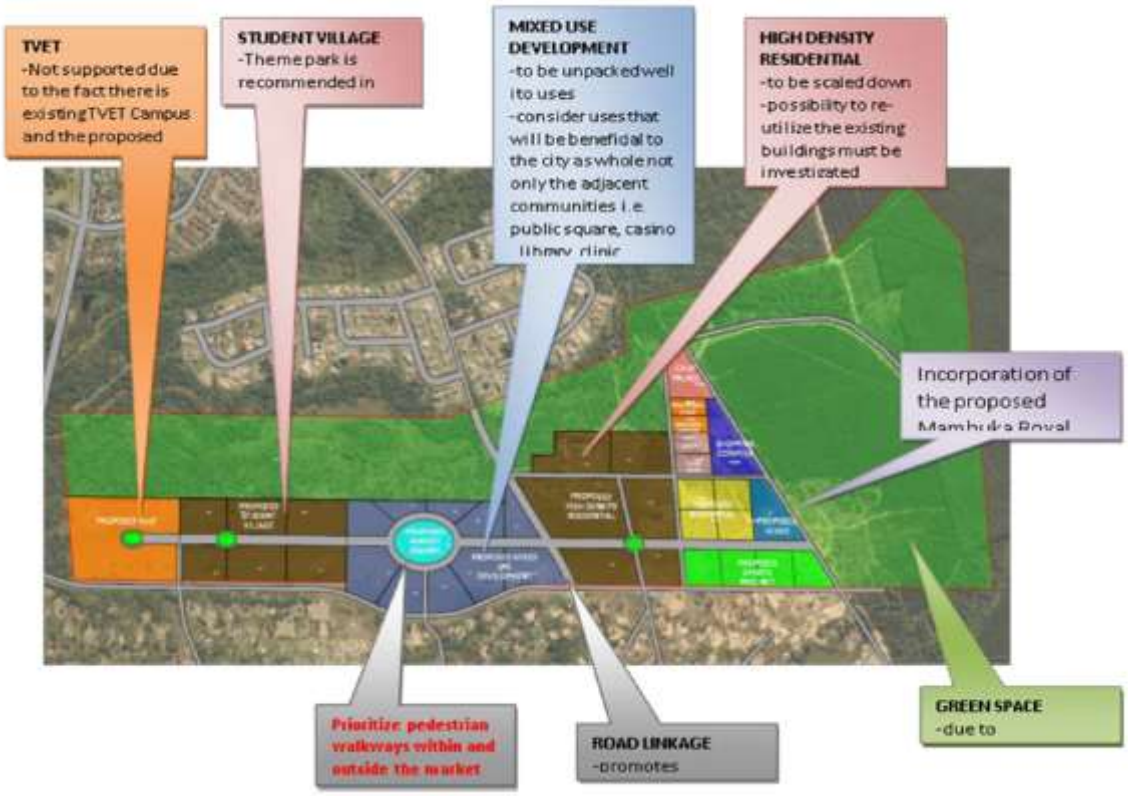
- Phase 1.0: Project Mobilisation – *complete*

- Phase 1.1: Needs Analysis – *complete*
- Phase 1.2: Technical Solutions Options Analysis – *complete*
- Phase 1.3: Service Delivery Options Analysis – *complete*
- Phase 1.4: Project Due Diligence – *complete*
- Phase 1.5: Value Assessment
- Phase 1.6: Statement of Compliance
- Phase 1.7: Statement of Views
- Phase 1.8: Procurement Plan
- Phase 1.9: Presentation of the Feasibility Study

Phase 2: Procurement

- Phase 2.1: Bid preparation and administration of the bidding process
- Phase 2.2: Evaluation of Bids, Demonstrating Value for Money
- Phase 2.3: Preparation of the Value-for-Money report
- Phase 2.4: Preparation of the TVR III report
- Phase 2.5: Close-out report and Case study

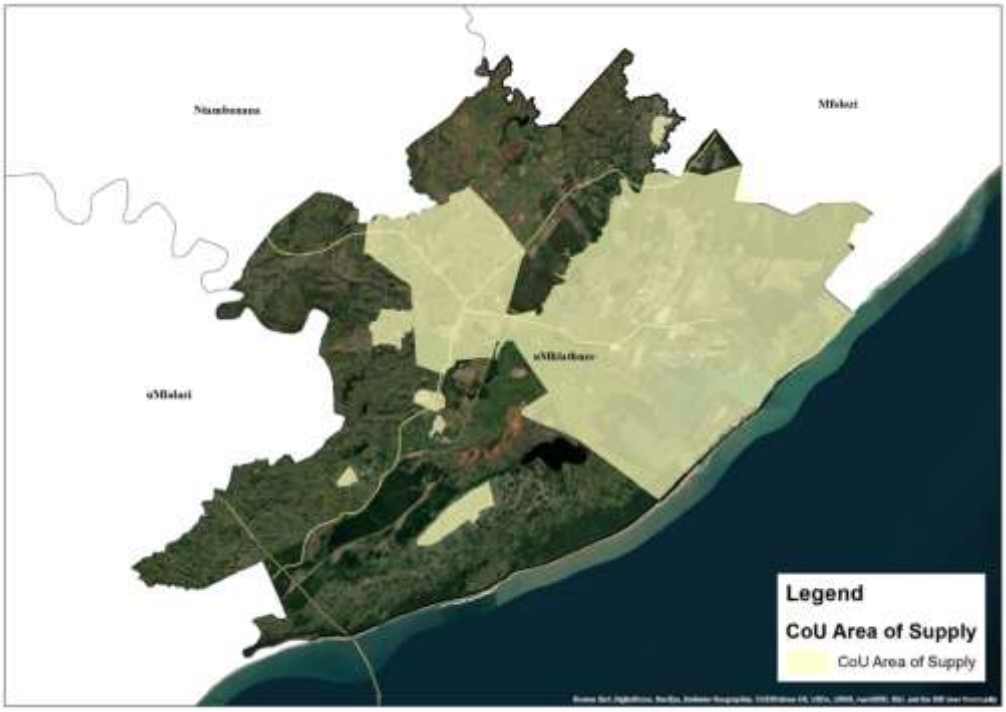
Figure 39: Proposed Redevelopment of the existing Airport site



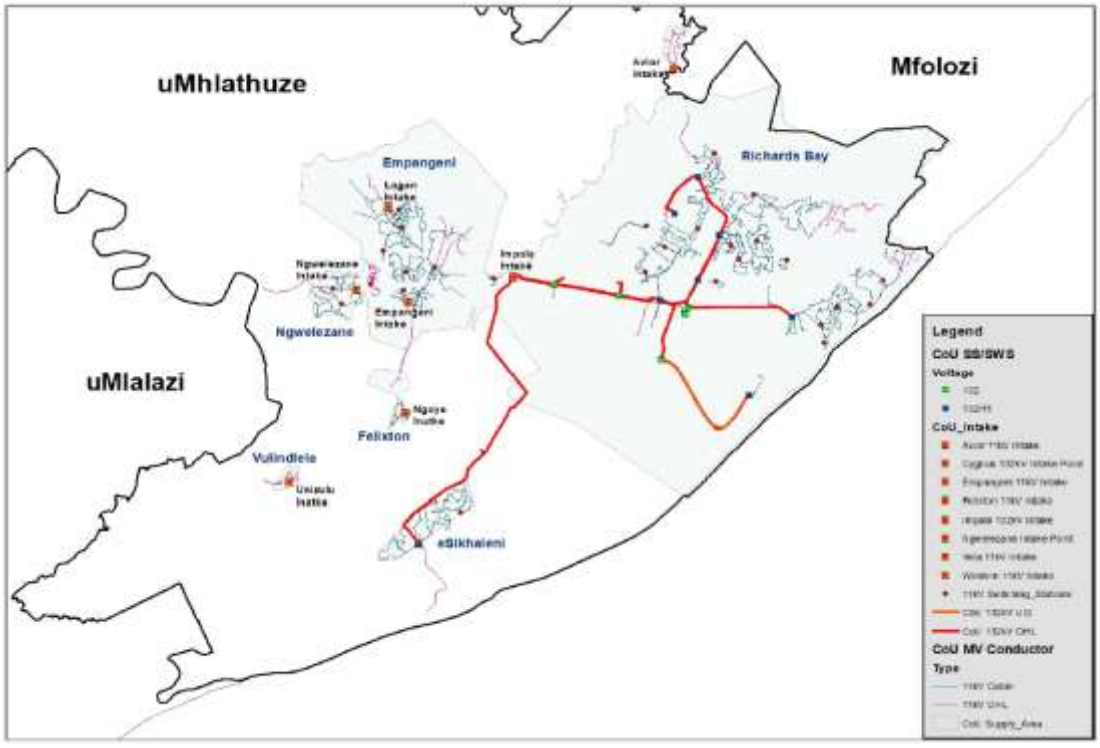
8.7 ELECTRICITY MASTER PLAN

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.

Map 27: uMhlathuze Area of Supply



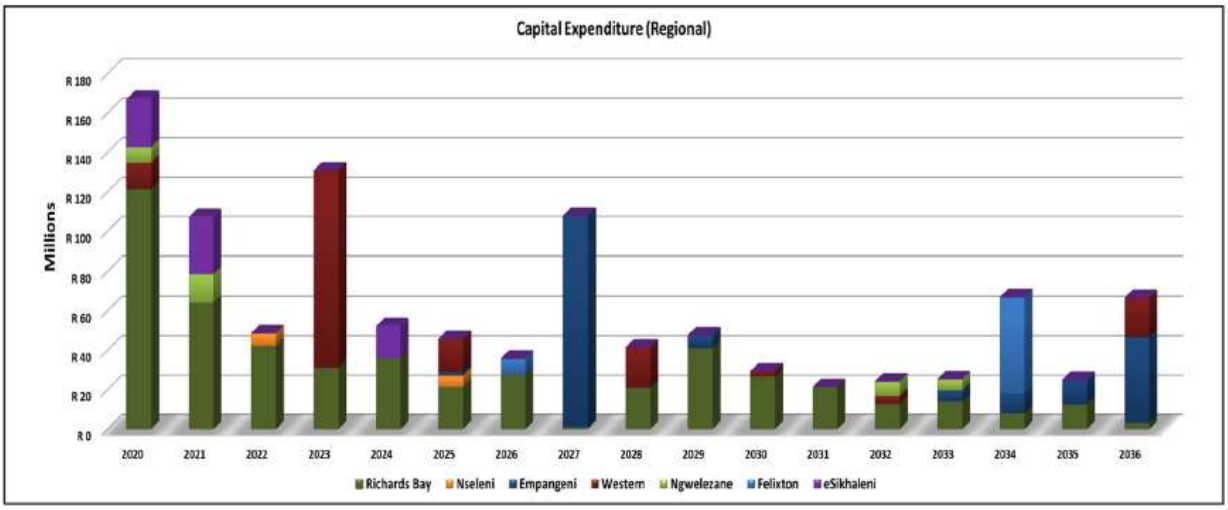
Map 28: Bulk Distribution Infrastructure



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

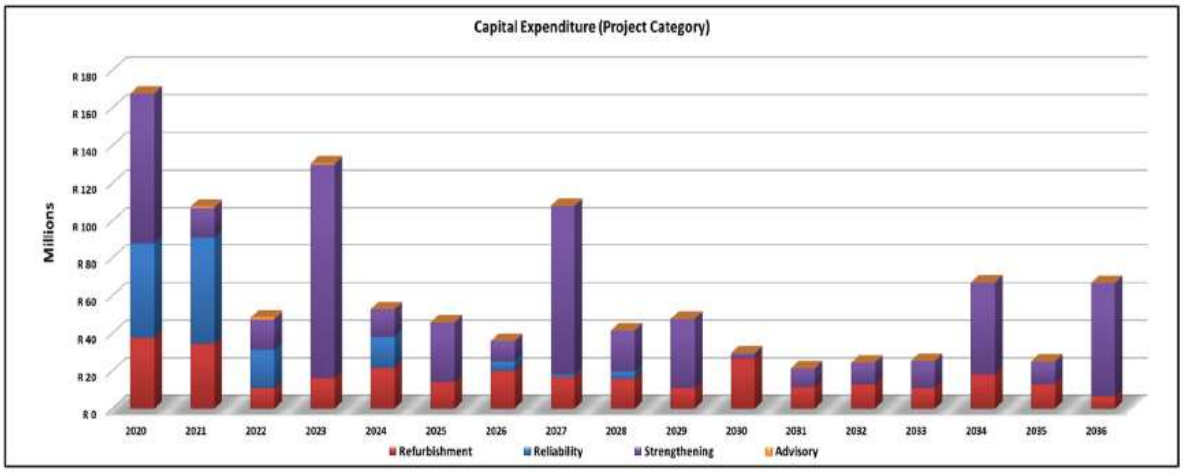
- Development Perspective to determine the present and future electricity requirements of electrical end-users and reconcile such with available resources and services.
- Electricity Demand Forecast to develop a 20-year forecast in support of the development perspective.
- Refurbishment Assessment to 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 40: Estimated Capital Expenditure/Region



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

Figure 41: Estimated Capital Expenditure/Project Type



The above highlights that system strengthening (expansion) forms a significant portion of the capital spend of approximately 60% with the bulk of the strengthening component allocated to Richards Bay, Empangeni and Western. The quantum of expenditure is significant and the prioritization of capital expenditure is informed by the Capital Expenditure Framework (CEF). The CEF reflects on all the

municipal capital expenditure needs for all the sectors and then, through prioritization and due consideration of affordability, provides project for implementation over a ten-year period.

8.8 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 and includes proposals for renewable energy.

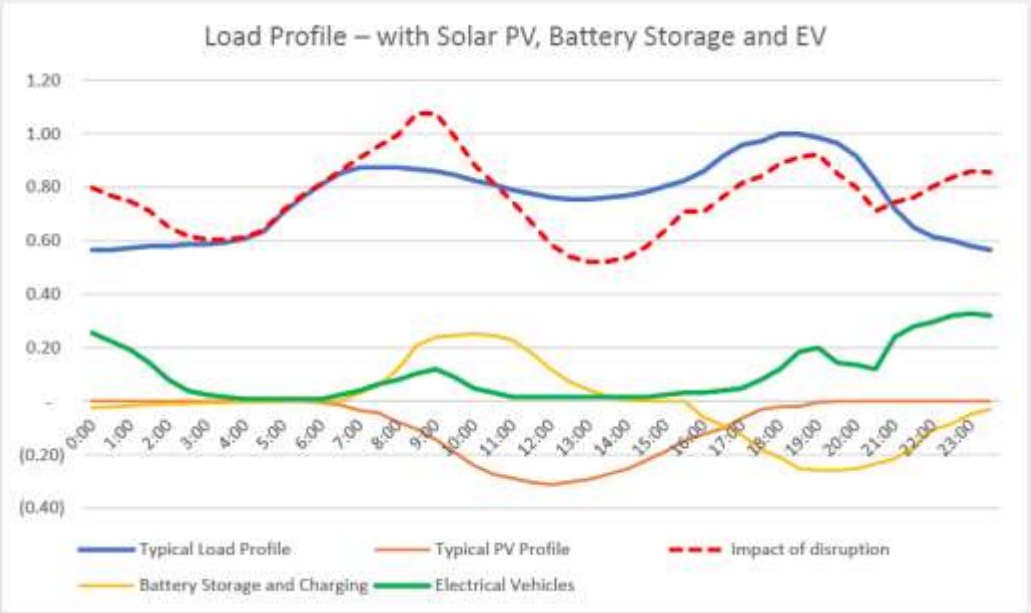
The plan contains an analysis that informs possible energy solutions and concludes with suggestions and strategies for the CoU to transition to a sustainable energy future. The Municipality has the vision to reduce greenhouse gases in line with the Sustainable Development Goal (SDG) 13 and the preparation and implementation of this plan supports the attainment of SDG 13. The Municipality has also prepared an Economic Recovery Plan to outline measures that will be undertaken to assist businesses in distress and facilitate access to new business opportunities in lieu of the COVID-19 pandemic. Definite opportunities exist in this regard relating to energy.

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

Figure 42: 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 43: Load Profile with Alternative Energy Options

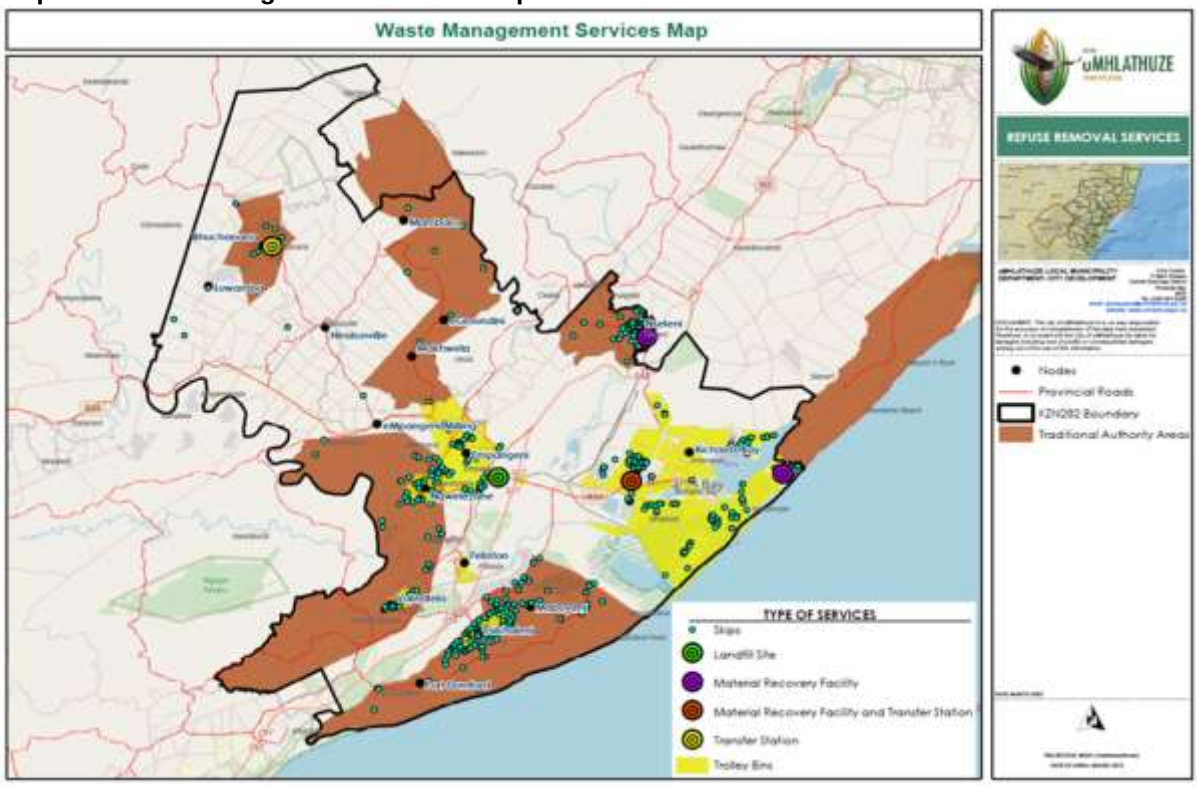


The Energy Sector Plan concludes with an implementation roadmap as a workable way forward that is structured per category of focus, supported by the rational for the sustainability driver and proposed actions with short, medium and long-term focus.

8.9 INTEGRATED WASTE MANAGEMENT PLAN

The Municipality has finalized the Review of its Integrated Waste Management Plan (IWMP). 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.

Map 29: Waste Management Services Map



The City of uMhlathuze Municipality has identified five focus points that the IWMP to focus on and these are:

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

The above focus points are in line with the vision of the Municipality to reduce greenhouse gases in line with the Sustainable Development Goal (SDG) 13 and the preparation and implementation of this plan supports the attainment of SDG 13. The Municipality has also prepared an Economic Recovery Plan to outline measures that will be undertaken to assist businesses in distress and facilitate access to new business opportunities in lieu of the COVID-19 pandemic. Definite opportunities exist in this regard relating to waste management, notably with regard to materials recovery, recycling, compost production and diversion of waste from landfill.

8.9.1 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 48: 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

8.9.2 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.

8.10 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 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.
- 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 Ml/d. The required capacities for the anticipated flow for the existing, planned and approved developments are expected to be around 75 Ml/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 Ml/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 prepared 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.

9. HUMAN SETTLEMENT OVERVIEW

Chapter 2 of the Constitution of South Africa gives “everyone the right to have access to adequate housing”. Section 26b of the Constitution further mandates the State to take reasonable legislative and other measures within its available resources to achieve the progressive realisation of the rights to adequate housing. Schedule 4 of the Constitution furthermore makes the provision of housing a concurrent nation and provincial function.

Regarding the three national priority programmes of (1) mining towns, (2) catalytic projects and (3) informal settlements, uMhlathuze’s human settlement programme is centred on catalytic projects and the NUSP (National Upgrading and Support Programme). Emphasis is placed on accelerating the delivery of housing in order to improve access to basic services and improve access to social and economic opportunities hence the importance of spatial location.

9.1 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
- Linkage to Spatial Development Framework

Table 49: 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 & Veld-en-vlei	State	Mixed Residential	No
Expansion Area G	Nseleni Interchange	Private	Mixed Residential and Industrial development	No
Expansion Area H	Empangeni (Empangeni Mega Housing)	Council	IRDP	Yes, surrounding

The following table indicates identified State owned land that is suitable for housing development:

Table 50: 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

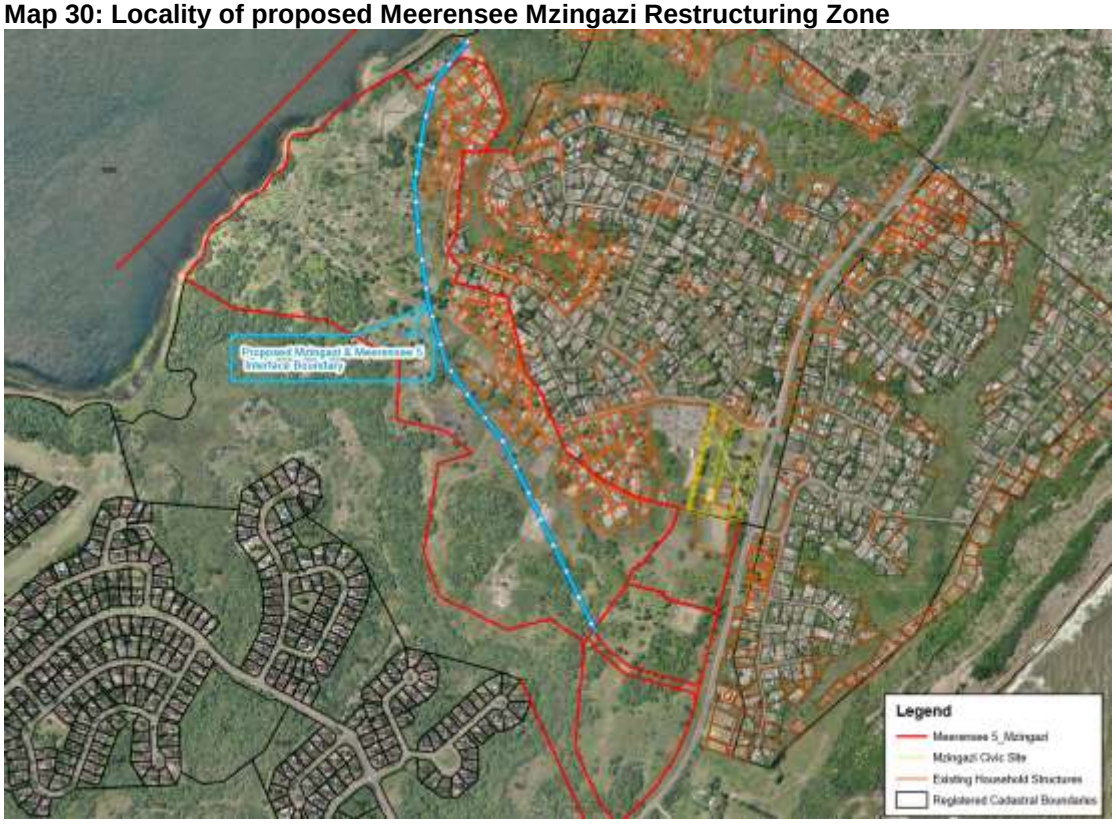
9.2 RESTRUCTURING ZONES

The uMhlathuze Municipality has identified two Restructuring Zones (RZ) called Aquadene and uMhlathuze Restructuring Zones. These restructuring zones have been approved by the National Human Settlements Department and they were Gazetted on the 28 April 2017 Gazette number 40815. Theses RZ cover the following IRDP projects:

- Aquadene Housing Project
- Dumisani Makhaye Village
- Empangeni Mega Housing Project

The Municipality has also considered to declare 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 30: Locality of proposed Meerensee Mzingazi Restructuring Zone



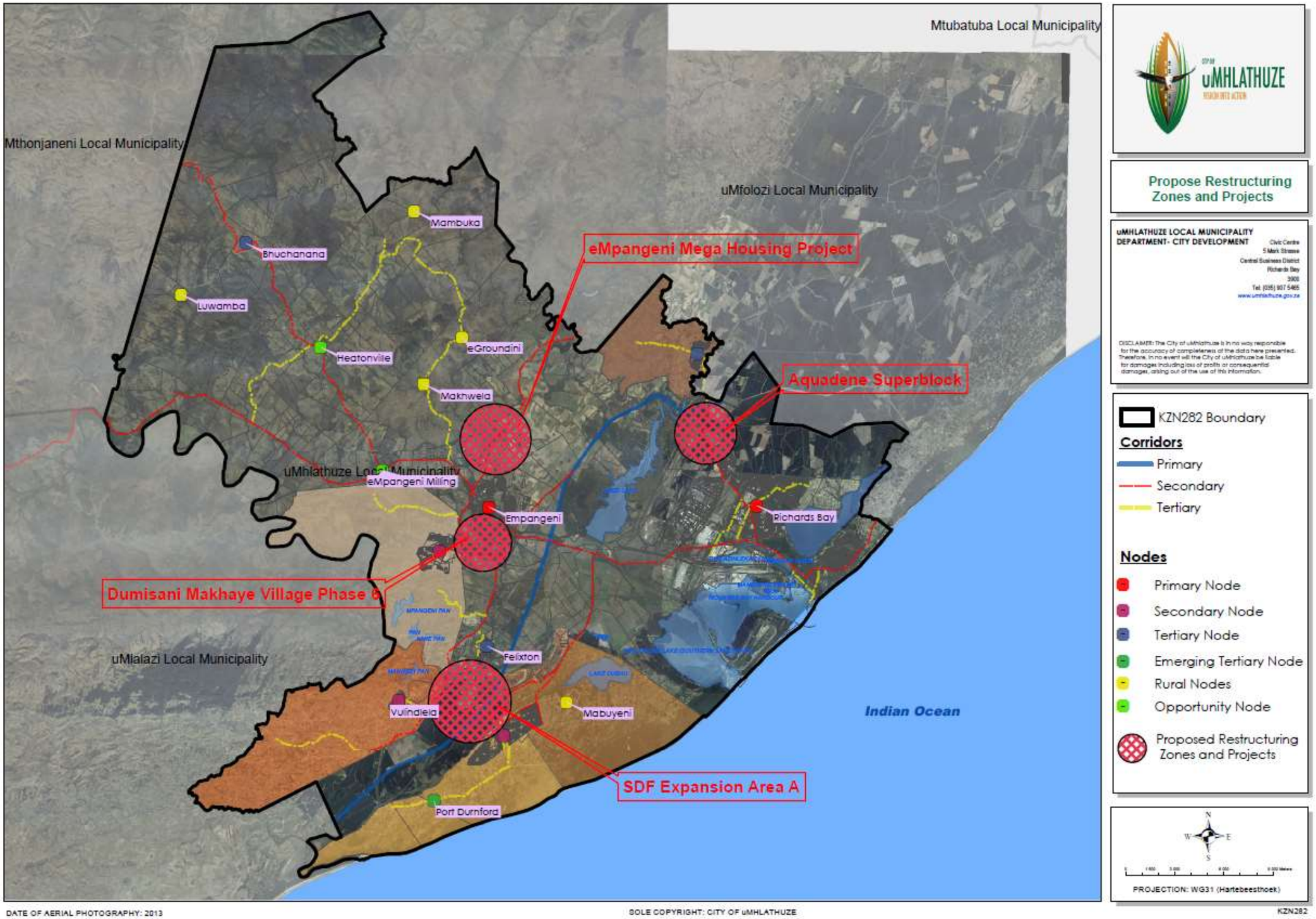
The provision of infrastructure to the **Aquadene Superblock Housing project** is underway. The successful implementation of **uMhlathuze Village Phase 6** as the Community Residential Unit/Social will also reduce the housing demand in the uMhlathuze Municipality.

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 flood line. 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).

Map 31: uMhlathuze Restructuring Zones



9.3 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 as expanded upon hereunder:

- Empangeni
- Richards Bay
- Esikhaleni Vulindlela Corridor

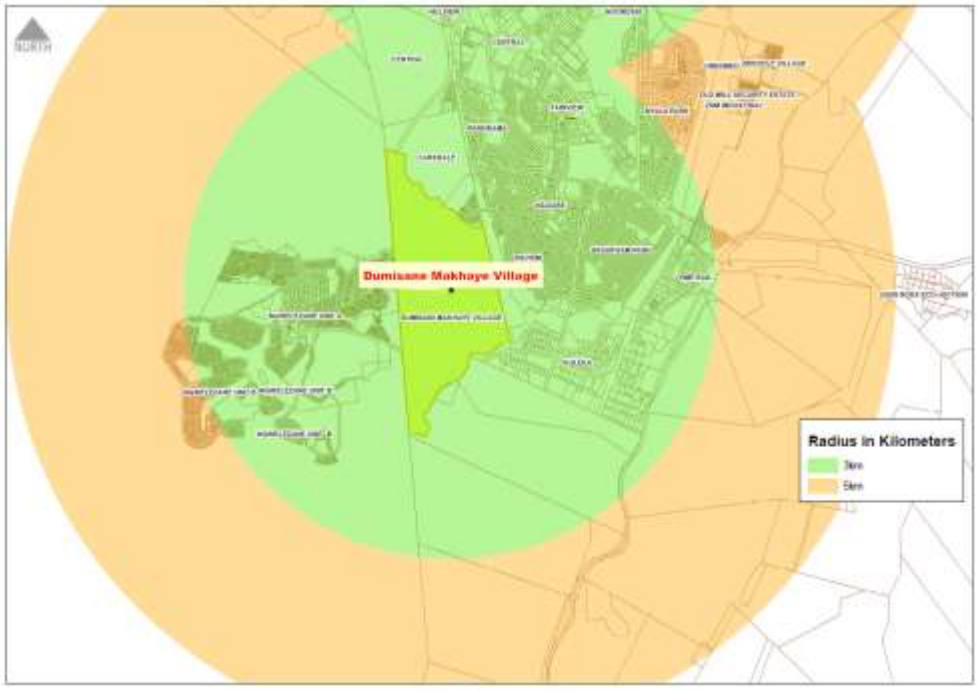
9.3.1 EMPANGENI

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 this area, notably **Dumisani Makhaya Village Phase 6 and 8** (an infill project) 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 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.

Figure 44: Radius around DMV Housing Project



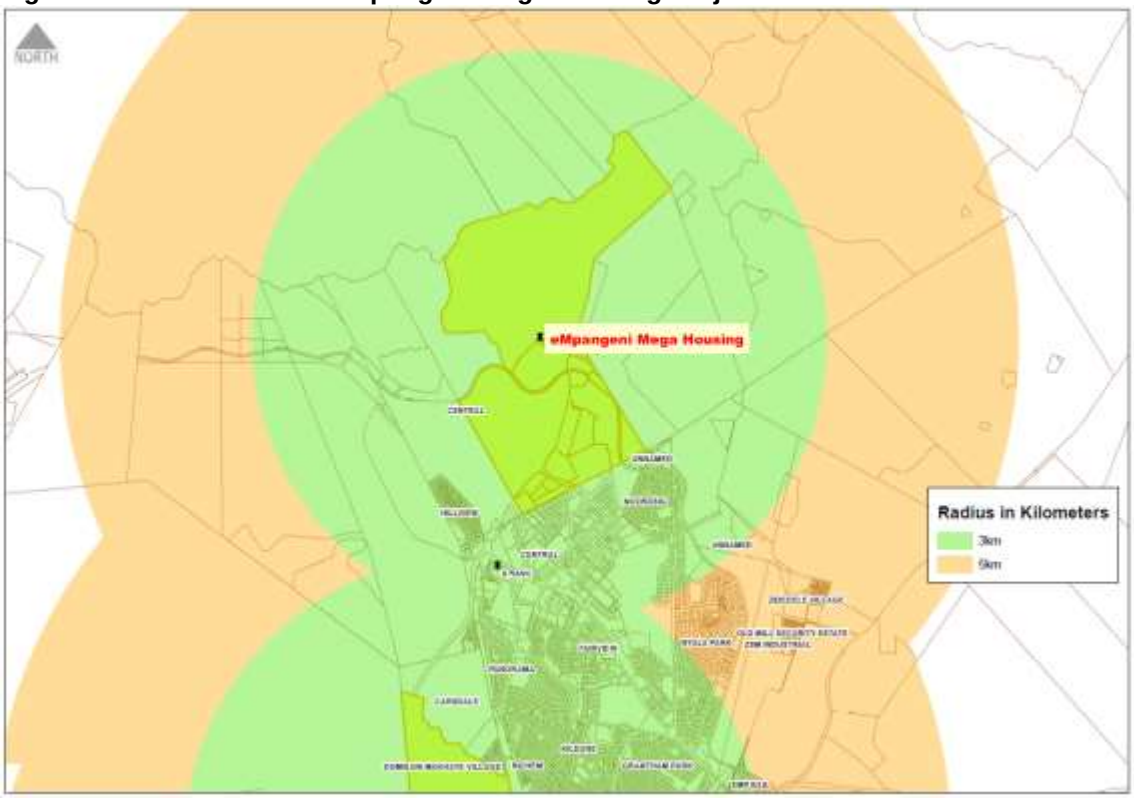
The **Empangeni Mega Housing** project has the following housing typologies:

- RDP & Finance Linked Individual Subsidy Programme: 2065
- Social Housing: 1200
- Bonded Houses: 5791
- Serviced Sites: 578
- Mixed Use Residential: 304
- Medium Density Residential Cluster: 83

In addition, there is a proposal also to cater for student accommodation.

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

Figure 45: Radius around Empangeni Mega Housing Project



In recent years, an Informal Settlement Upgrade and Relocation Plan was prepared for a portion of **Ngwelezane** 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 increasing given efforts by the Municipality to foster the Township Economy.

Ngwelezane offers a combination of mixed used development such as commercial, medical, educational, mixed density and mixed income (urban and urban peri-urban living) and small scale commercial facilities. The area is surrounded by dense peri-urban development which in turn emphasizes the importance of the area as a suburb but also as a service centre to the surrounding community. Ngwelezane is well located to offer student accommodation given its accessibility and proximity to the University of Zululand main campus.

9.3.2 RICHARDS BAY

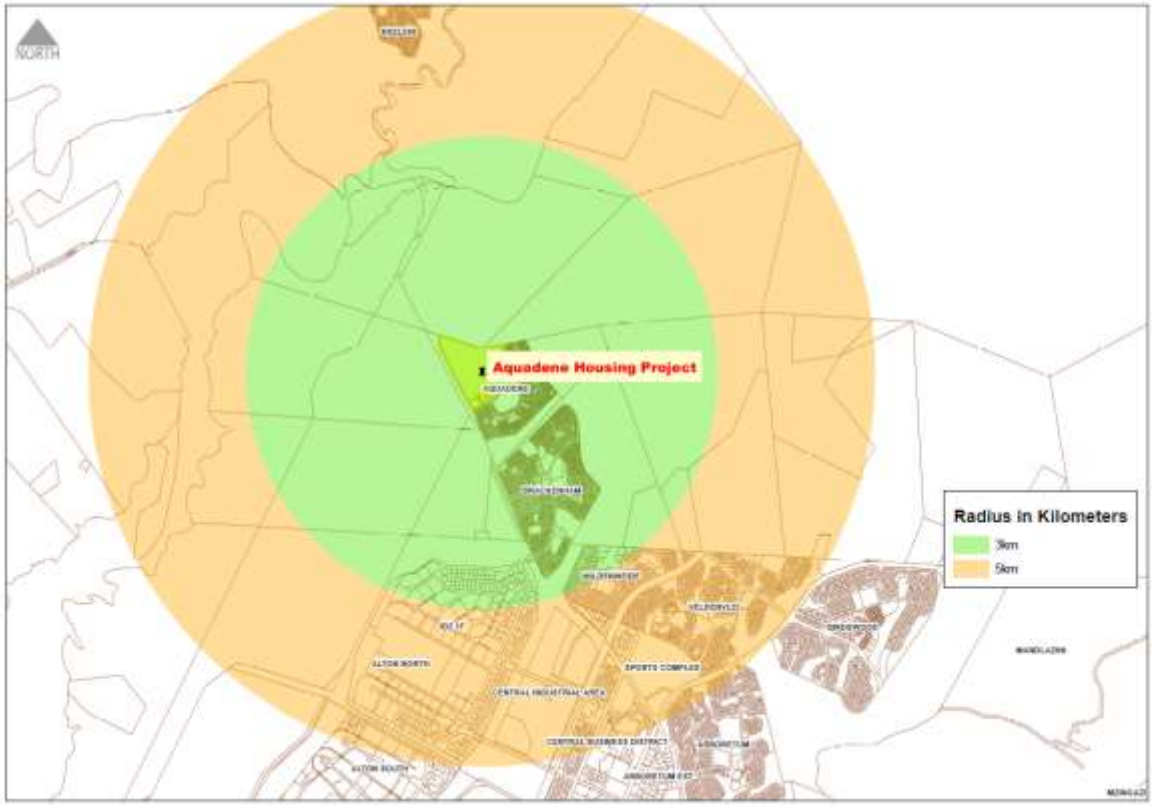
The Richards Bay PHDA includes the towns of Richards Bay, its suburbs, as well as Mandlazini and Mzingazi Agri-Villages. Richards Bay is a primary node in terms of the uMhlathuze Municipal SDF and is a pprominent developing industrial centre of in South Africa that provides a centres of employment, industrial, 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 an 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 provide 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 46: 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.

9.3.3 ESIKHALENI-VULINDLELA CORRIDOR

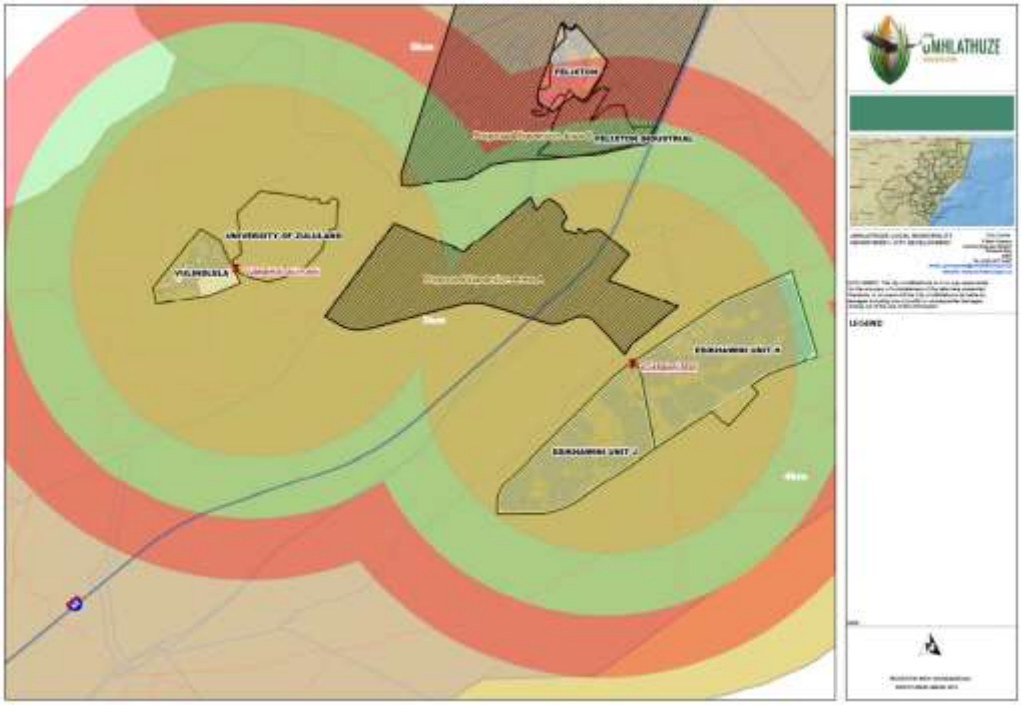
The Esikhaleni Vulindlela PHDA includes the towns of Esikhaleni and Vulindlela as well as the corridor in between. This area is a priority expansion area of the municipality in terms of the SDF.

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 provides a tertiary education facility to the region with the location of the uMfolozi TVET College – Esikhaleni campus on the periphery. In recent years, the hostel upgrading programme has been completed in Esikhaleni and 20 blocks were successfully upgraded. The main focus in 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.

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. Vulindlela offers a combination of mixed used development such as educational, low –medium income residential (urban and 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 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 47: Radius around Vulindlela and Esikhaleni



9.4 INFORMAL SETTLEMENT UPGRADE

The Municipality will ensure that it fulfils the requirements of the National Upgrading of Informal Settlements Programme (UISP) through the 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:

9.4.1 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 Municipalities 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.

9.4.2 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 is challenging to the Municipality to control the allocation of land in unsuitable land.

9.4.3 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.

9.4.4 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.

9.4.5 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.

9.4.6 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.

9.4.7 MANDLAZINI AGRI-VILLAGE INFILL AREAS

The provision of government housing subsidies in Mandlazini Village will be twofold as a result that 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.

Mapping in respect of the above NUSP projects is provided on the following pages. A map indicating all the human settlements projects underway is also provided.

9.5 MZINGAZI VILLAGE FORMALIZATION PROJECT

The Municipality is in the process of finalizing the township establishment processes for Mzingazi Village, which was initiated in the early1990's. The aim of the project is to transfer ownership of created properties to various beneficiaries, thereby providing full title to the properties.

Map 32: Mzingazi Project Boundary

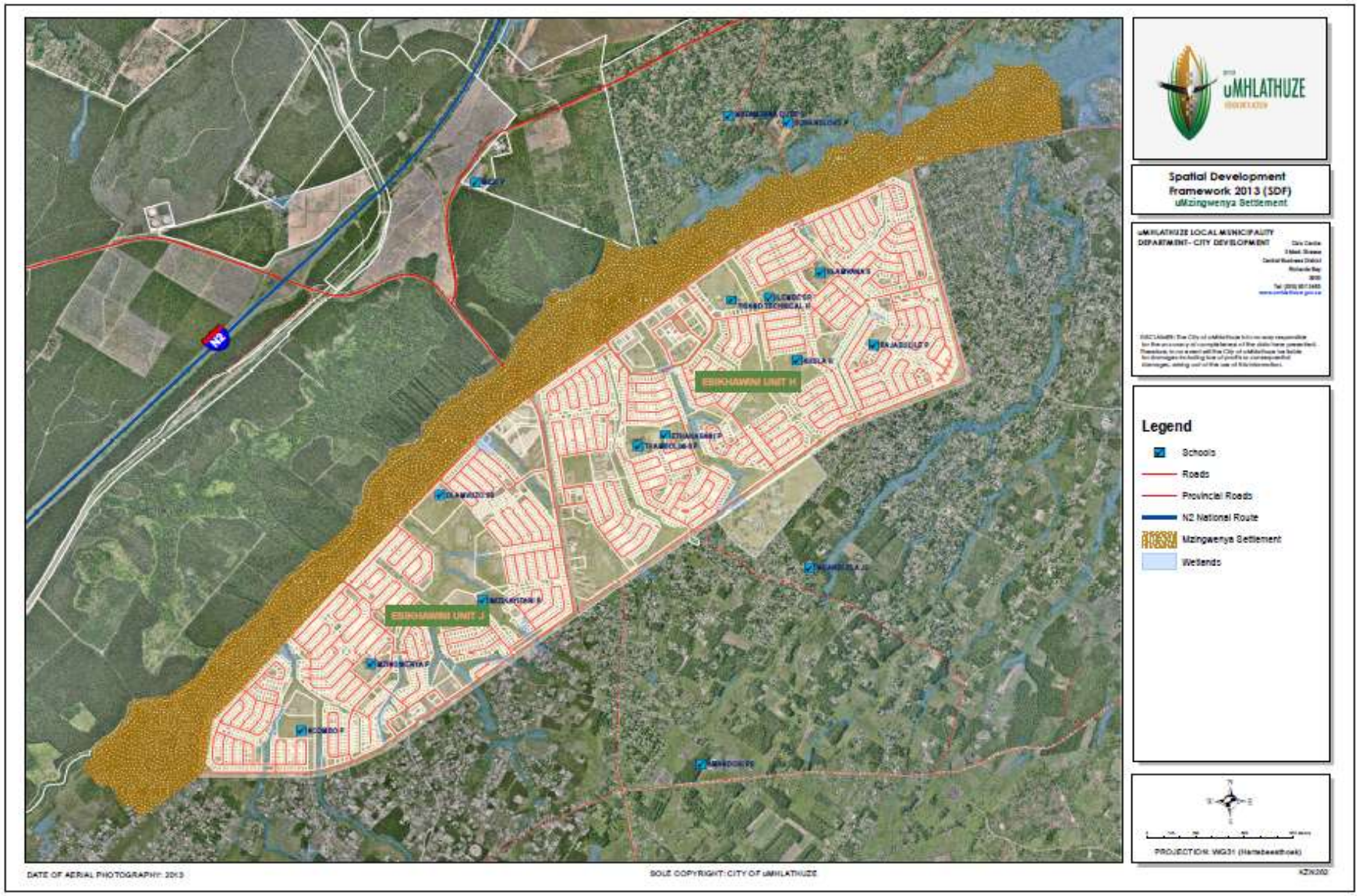
Financial and technical support for the project has been obtained from the KZN Department of Human Settlements. A number of issues are being considered/attended to during the process, i.e.:

- A land claim was submitted by the Mbonambi Community that affects the project area, and the finalization of this claim is understood to be imminent. The go-ahead has been obtained from the Regional Land Claims Commission and the township register was opened in the Deeds Office during August 2018.
- Flood line and geotechnical assessments were undertaken to identify settlement in wetland areas. In some instances, it may be necessary to provide occupants in such areas with an alternative or safe site.
- A formal planning application was completed in order to register the layout applicable to the 565 families.
- In some cases, original beneficiaries have informally subdivided their properties to give ownership to purchasers or family members.
- There are various encroachments of site boundaries being attended to.
- A formal planning process to amend the approved layout plans in order to make provision for:
    - Amended site boundaries; and
    - Informal subdivisions (in order to transfer these subdivided sites to multiple beneficiaries).
- The project would have to determine which of the sites occupied should be formalised by means of township establishment, and which of the sites should not be formalised as a result of environmental risks or other factors.

9.6 SUMMARY OF HUMAN SETTLEMENT ISSUES

- Informal Settlement Upgrade and Relocation Plans for seven identified information settlements is in place, i.e. Mzingazi Infills, Mzingazi Informal Settlement, Mandlazini-Airport Buffer Strip, Mandlazini Infills, Mzingwenya, 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 33: uMzingwenya Settlement



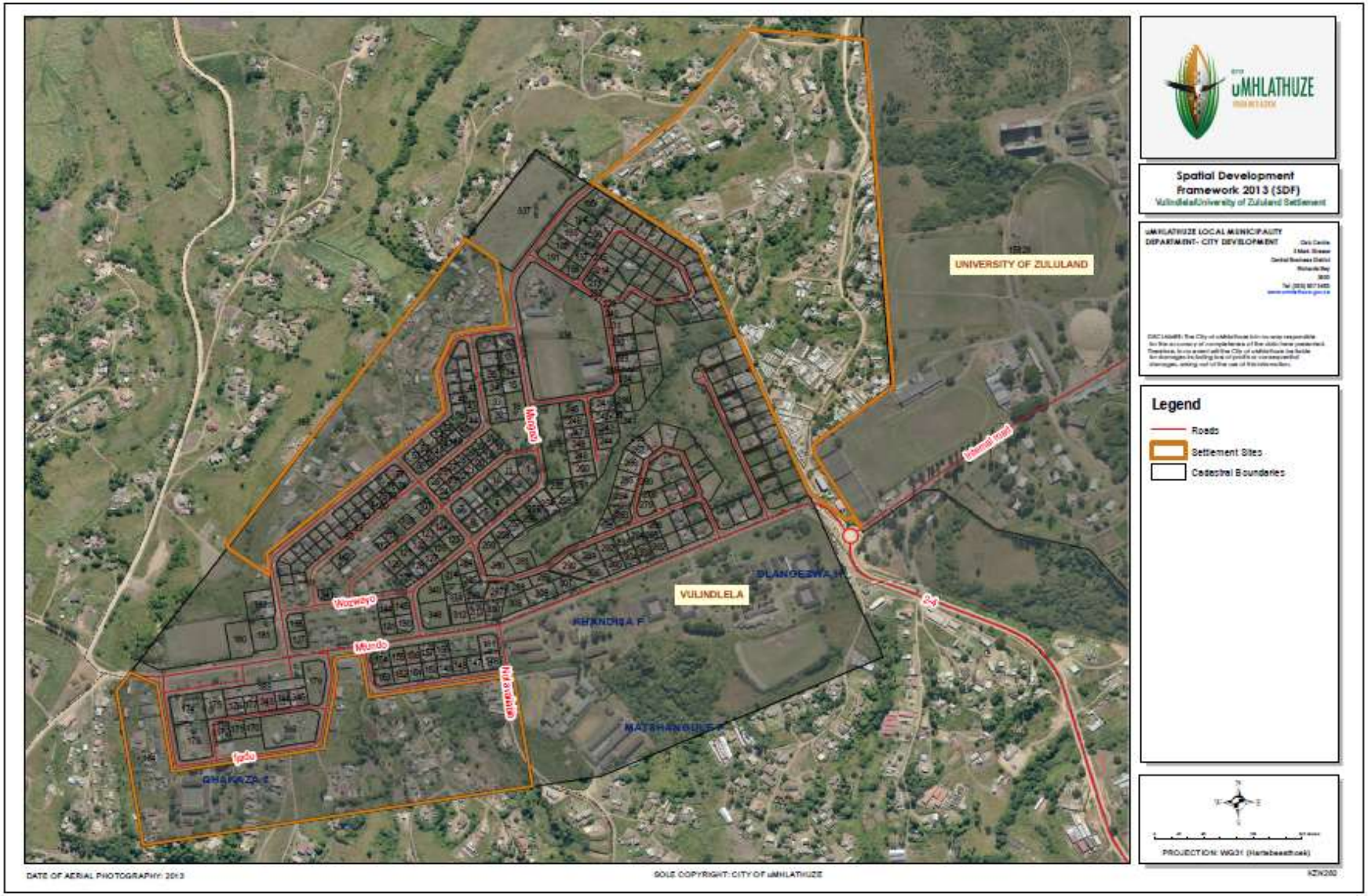
Map 34: Nseleni Peri-Urban Settlement

Map 35: Mzingazi Informal Settlement

Map 36: Mandlazini-Airport Buffer Strip Informal Settlement

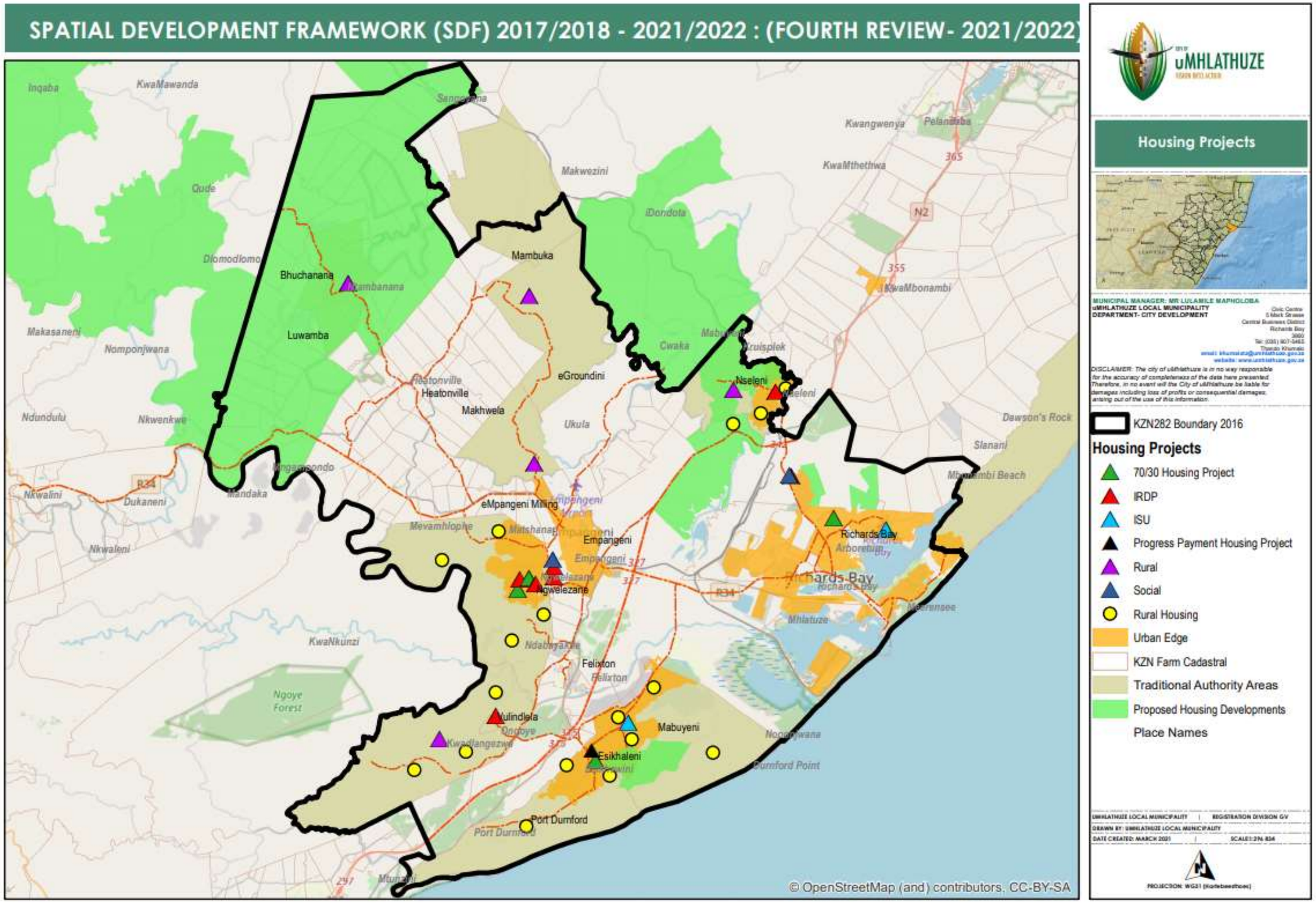
Map 37: Ngwelezane Hospital Settlement

Map 38: Vulindlela/University of Zululand Settlement



Map 39: Mandlazini Village Infill Areas

Map 40: Human Settlements Projects in uMhlathuze



10. 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 51: 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

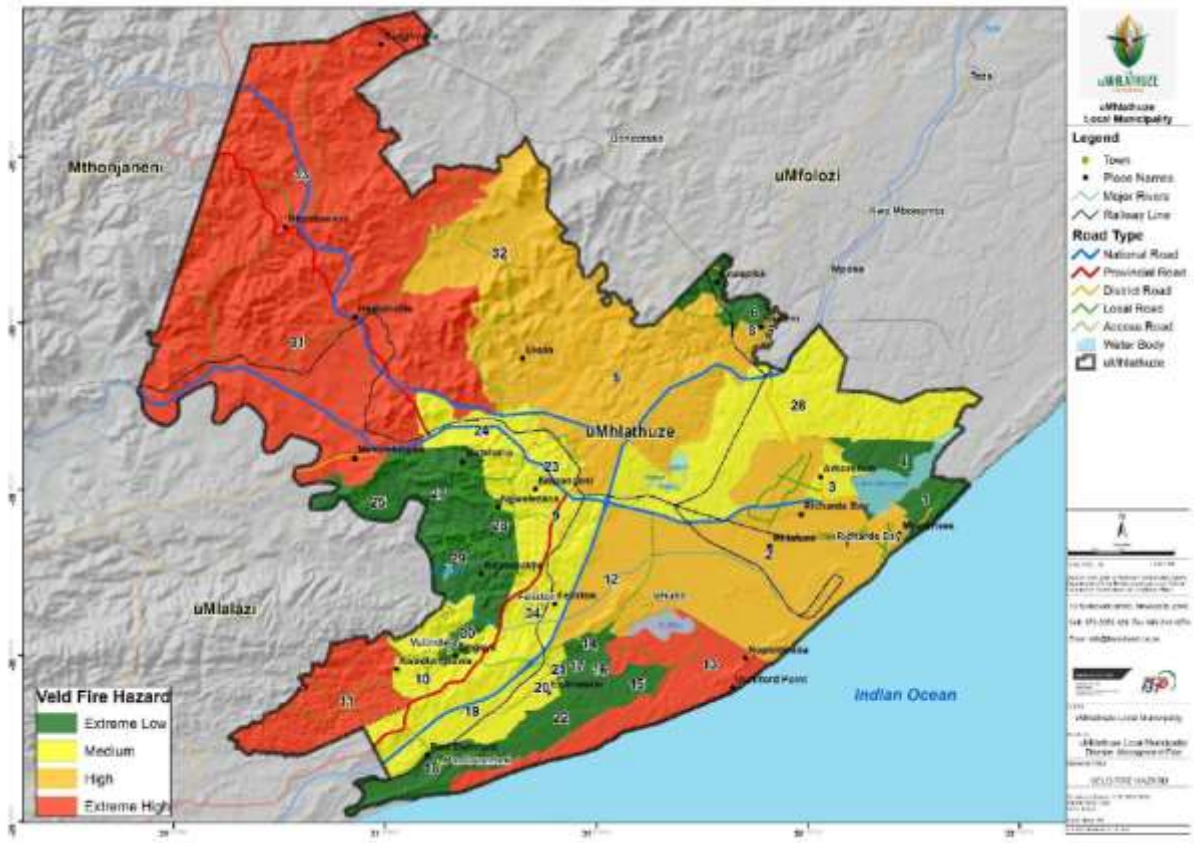
The following indicates the City of uMhlathuze Risk Rating.

Table 52: Risk Rating

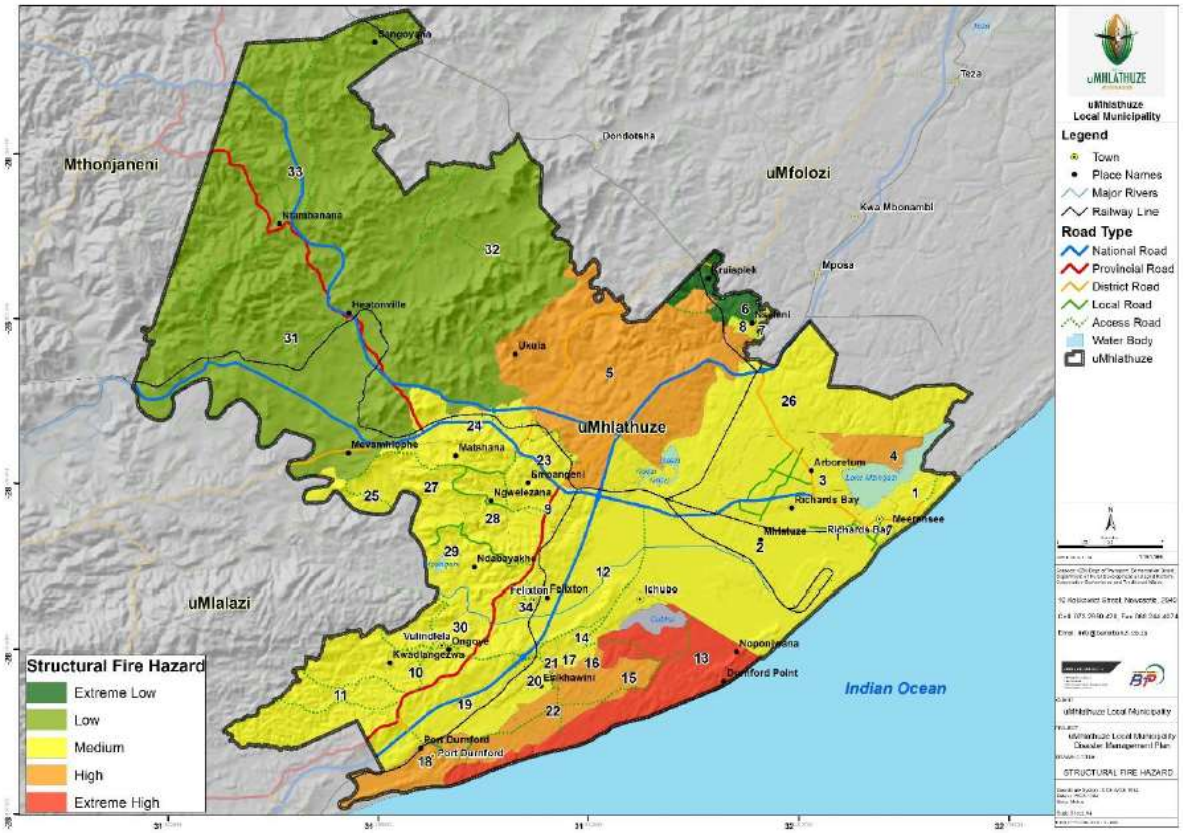
Main Category (CITY RISK RATING)	RISK (City)
Hydro-meteorological Hazards - Severe Storms (Lightning)	0.90
Hydro-meteorological Hazards - Severe Storms (Heavy Rainfall)	0.86
Hydro-meteorological Hazards - Floods (River)	0.83
Fire Hazards - Veld/Forest Fires	0.77
Hydro-meteorological Hazards - Severe 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, lighting and drought hazards.

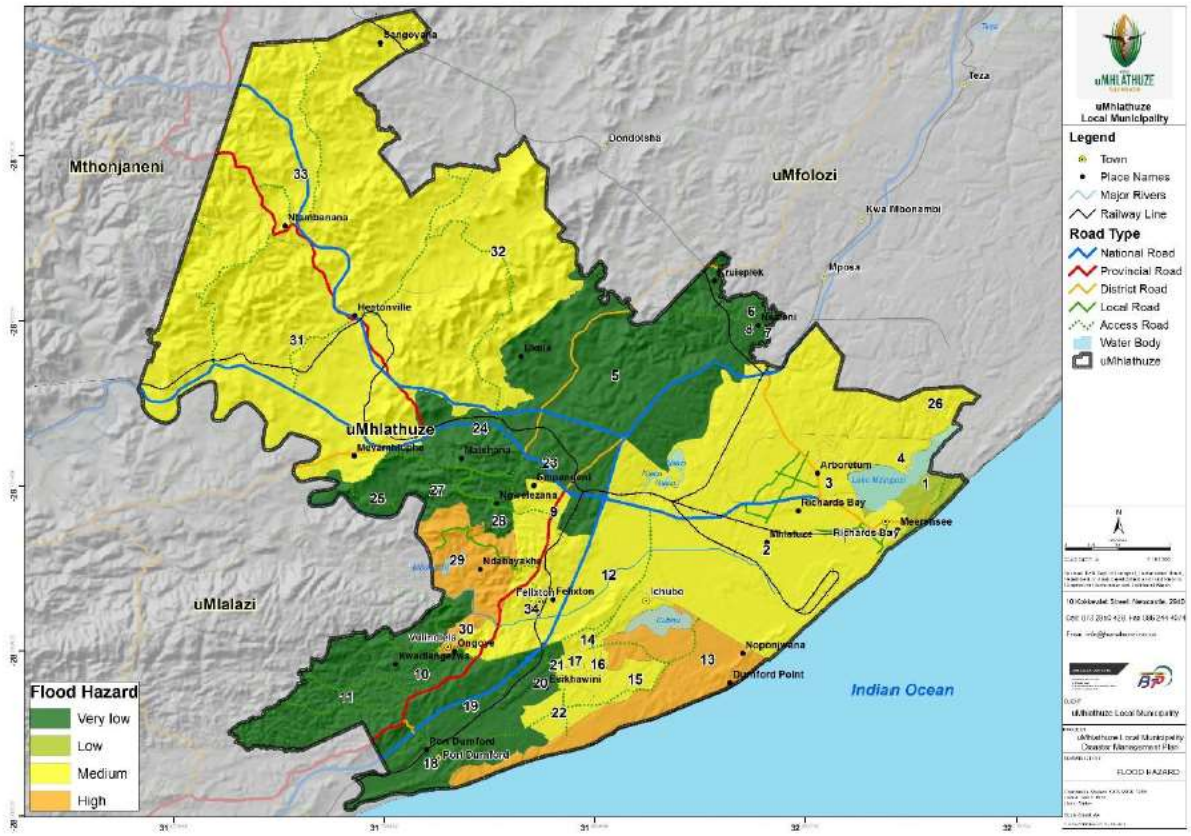
Map 41: Veld Fires Hazard Assessment



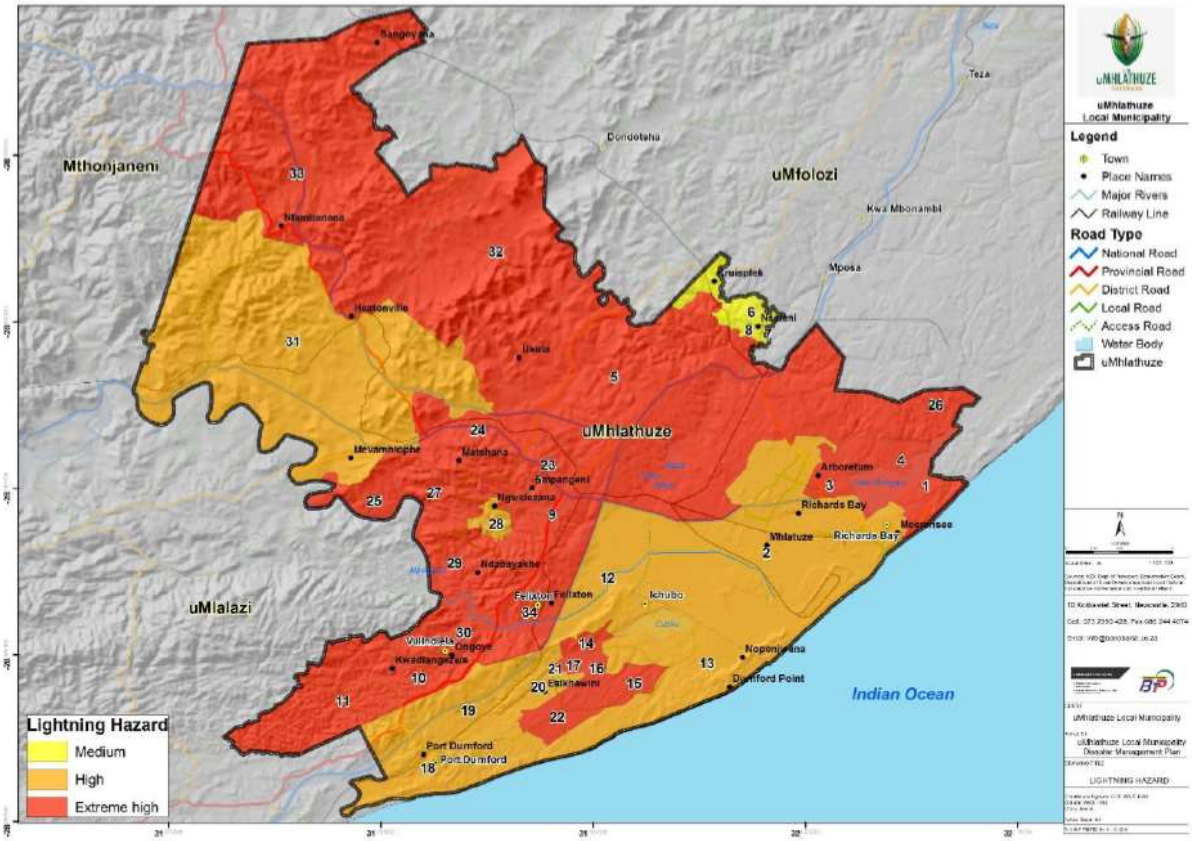
Map 42: Structural Fires Hazard Assessment



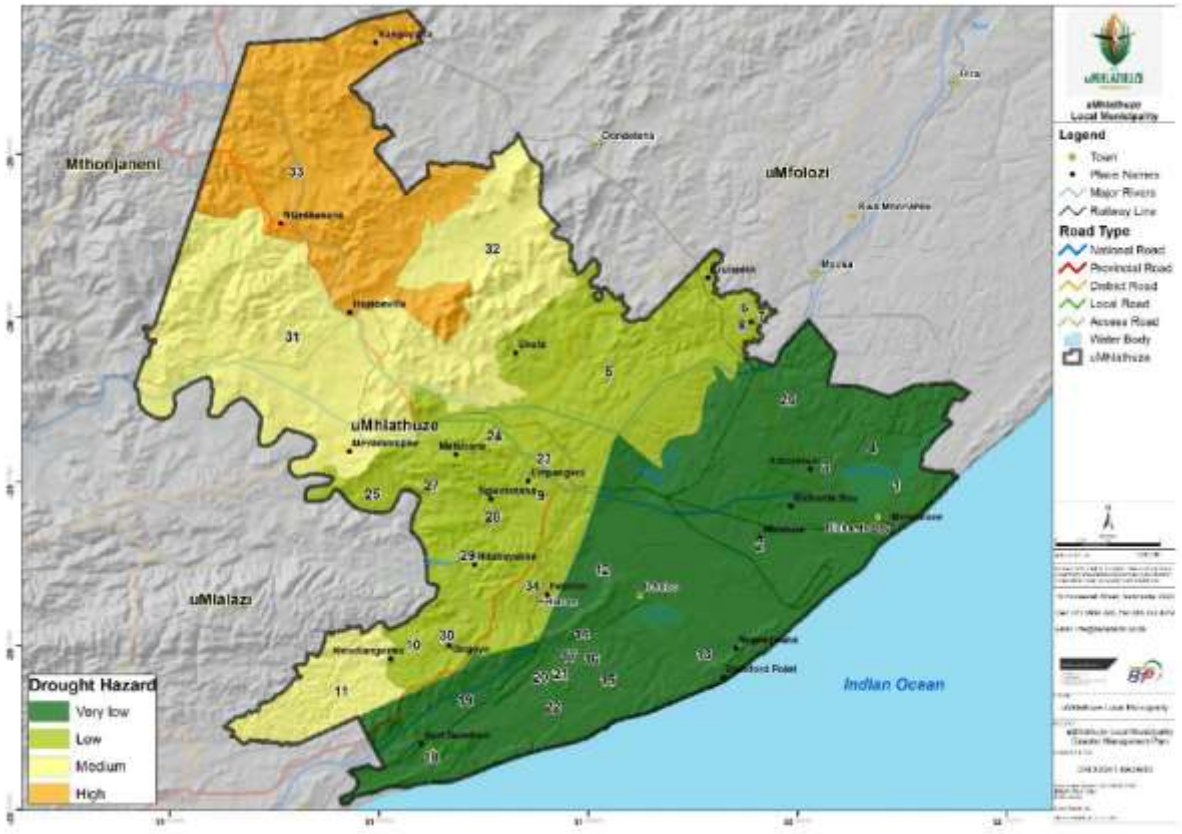
Map 43: Flood Hazard Assessment



Map 44: Lighting Hazard Assessment



Map 45: Drought Hazard Assessment



In context of the aforementioned, the following is noted:

- The prepared maps indicate that many rural communities are more exposed to potential hazards than urban areas. A thorough understanding of where our most vulnerable communities are located is needed. It has been proven that vulnerable communities suffer the most in times of disasters. In recent years, the Municipality completed a fire station in Esikhaleni that provides significant disaster preparedness to the area.
- The Municipality has established a Disaster Management Advisory and Industrial Forum. This forum was instrumental during the recent prolonged drought in facilitating engagement between government and industry/private sector role players.
- There are a number MHI (Major Hazardous Installations) and other existing and proposed industrial activities that warrant disaster preparedness and understanding in the Municipal area.
- An indication of the locality of MHI's is needed and general widespread understanding of response plans that are in place, including emergency evacuations procedures.
- Responsiveness to a disaster, notably in respect of accessing a disaster site and evacuating an area is reliant on main roads/routes. In recent years, a main access route into Richards Bay partially collapsed and the resultant congestion created concerns should an emergency evacuation be needed.
- Disaster preparedness to medical type emergencies, such as the current COVId-19 pandemic, also has to be undertaken.
- New developments that pose potential disaster, i.e. airports, have to be considered.

10.1 SUMMARY OF DISASTER MANAGEMENT ISSUES

- The spatial locality of hazards identified in the DMP is noted in relation of areas where the most vulnerable communities reside.
- Hazards associated with industry need to be indicated and response plans developed/shared.
- Various new developments also have to be mapped as potential disaster sites.

11. SPATIAL DEVELOPMENT FRAMEWORK

Uncertainty and rapid change has become the norm in the World. Natural disasters are more frequent and intense and a 2020 Pandemic has changed the essence of life – the way we work, the way we play and that way we live. Planning has the ability to improve the readiness of communities and households to respond to this in pre-empting situations and ensuring the impacts are mitigated and human responses facilitated.

11.1 INFORMANTS OF SPATIAL DEVELOPMENT

The following provides a consolidation of the sectoral key development issues/consolidated themes that have been extracted from the various analysis chapters in this report.

Access to Services

i. The municipal area of uMhlathuze has increased by roughly 50% following the 2016 Local Government Elections. The prevailing levels of services in the newly added Wards are generally lower than in wards that were formerly part of uMhlathuze. Also, the newly added wards are predominantly rural with comparatively high poverty rates, have comparatively low economic activity and lower levels of service provision. This has placed additional pressure on the uMhlathuze Municipality's budget to provide services in line with policy and standards.
ii. The highest percentage of adults over the age of 20 years that do not have schooling, are in wards 5, 10, 13, 14, 18, 25, 32 and 33. These areas largely coincide with Traditional Authority areas and are an indicator for specific interventions needed in these listed areas. Also, the highest percentages of households that earn less than R1600 per month reside in wards 5, 10 and 29. Wards are 4, 5, 12, 18, 24 and 28 also have the highest percentage of unemployed persons.
iii. Wards 31 and 33 have high percentages of households, more than 61% that do not have access to piped water while wards 5 and 33 have more than 61% of their households without access to hygienic toilets. The above two points confirms that certain wards are experiencing low levels of service provision coupled with other indicators of poverty, i.e. low income, low education and low employment.
iv. Various sector plans have been updated to inform the provision of infrastructure and services in the municipal area. For securing the provision of water, at least six additional reservoirs are required to meet estimated daily peak requirements. At present, the Municipality has five wastewater treatment works (WWTW) and a marine outfall and a feasibility study is underway for wastewater re-use. A further two sewerage sub-systems and possibly to a third new sub-system within the identified SDF Expansion Areas may be required.
v. An annual maintenance and refurbishment/replacement budget is required in addition to the capital budget. This is estimated at 4% of the estimated capital cost of the infrastructure per annum; and refurbishment/replacement is estimated at 2% of the estimated capital cost.
vi. The City of uMhlathuze is implementing a strategic management plan for water conservation and water demand management.
vii. 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. Although a plan for the development of arterial roads is in place, it has not been implemented nor expanded for the new municipal area. Failure of any one of the above routes renders a concern for the Municipality in the event of a disaster that requires evacuation and/or response.

Governance and Partnerships

viii. More than 50% of the municipal area is under the jurisdiction of Ingonyama Trust Board. Whereas the Municipality has extended its Land Use Scheme to cover the whole municipal area, challenges with the management of rural land remain from a development control perspective.

ix. Extensive land claims over portions of the municipal area and institutional procedures, in cooperation with the Department of Rural Development and Land Reform, are being put into place toward the resolution of these land claims.

x. Cooperation between the Municipality and SOE (State Owned Enterprises) are being pursued in the interest of economic development but also the conservation of natural assets, notably the need for sand replenishment by Transnet along the Northern Beaches that are experiencing severe coastal erosion. Apart from Transnet, the Richards Bay Industrial Development Zone has the potential to create many opportunities in the Municipality.

xi. Strong partnerships are also in place with various government departments in attaining goals of mutual interest, i.e. assistance from the Department of Transport with the uMhlathuze Comprehensive Integrated Transport Plan (CITP). Also, increasing and improved alignment is needed to ensure the integrated implementation of human settlement projects.

Spatial Form and Disaster Management

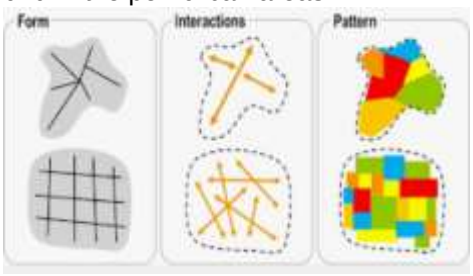
xii. The Municipality has a disjointed spatial form. Travelling distances to places of employment and economic opportunity are unsustainable and unnecessary. Interventions are needed to improve access to services and opportunities in former Township and other marginal areas.

xiii. Linkages between areas of opportunity and densely populated areas need to be improved by way of improved roads/routes and public transport facilities.

xiv. Richards Bay and Empangeni are the most significant economic centres in the larger District while Esikhaleni has the potential to develop into a primary node if the local economy becomes more sustainable and diversified, specifically in respect of growth and employment opportunities.

xv. Aquadene, Brackenham, Esikhaleni and Nseleni have the highest residential densities in the municipal area. High population densities are also found in the peri-urban areas.

xvi. Existing bulk infrastructure capacities will have to be increased at all nodes and growth areas to accommodate increased densities and expansion/development.



xvii. The spatial locality of hazards or hazard prone areas identified in the Disaster Management Plan largely correlate with areas where the most vulnerable communities reside.

xviii. Hazards associated with industry need to be further investigated and response plans developed/shared. The potential disaster implications of new developments have to be evaluated and provided for during the planning stage of such a development.

xix. Disaster responses and readiness need to be more pro-active, i.e. proposals have to be in place to facilitate the multi-use of spaces when needed in disaster situations such as currently being experienced worldwide as a result of COVID-19.

xx. Increasing densities is an objective of the IUDF. Densities can be maintained during Pandemics as long as appropriate services are available to create a safe environment for residents of densely developed areas to maintain social distancing and other measures that may be needed.

Environment and Climate Change

xxi. Vast peri-urban settlements lack proper planning and are often located in environmental high risk areas compromising their sustainability.

xxii. The complex hydrology of the area, whilst attributing to unique natural features, poses challenges for development. This is particularly the case to east of the Municipality that 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.

xxiii. The impacts of Climate Change are experienced locally, i.e. the abstraction of water from the various Coastal Lakes have reached ecological reserve limits during periods of extended drought, severe flood events have yielded disaster implications for unplanned settlements with flood prone/ flood risk areas and the Richards Bay northern beaches in particular have been confronted with severe coastal erosion.

xxiv. The disjointed spatial structure of the Municipality is adding to the vulnerability of communities and hampering the Climate Change response of the Municipality.

Human Settlement

xxv. A number of population growth scenarios have informed the need for land for human settlements, at varying densities, and ancillary land uses over the planning horizon to which suitable planning responses and provision of infrastructure is needed.

xxvi. The uMhlathuze Municipality has three Restructuring zones, i.e. Aquadene, Empangeni and Expansion Area A and Priority Housing Development Areas have also been gazetted.

xxvii. Informal Settlement Upgrade and Relocation Plans for seven identified information 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.

Economic Growth and Development

xxviii. The municipality has the benefit of about 45km of coastline that renders a range of economic/tourism opportunities and linked to its coastal locality is the Richards Bay deep-water port that has been instrumental in the spatial development of the area.

xxix. The location of the current Richards Bay airport poses challenges in terms of operations and future development. A pre-feasibility study for the proposed relocation of the Richards Bay airport has been completed for its redevelopment as part of a larger airport city.

xxx. The need to move towards being a SMART city has been expedited by the COVID-19 pandemic in all sectors, i.e. commercial, education, government etc.

The following important imperatives for the future spatial and economic development of the uMhlathuze Municipality are restated:

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 also foster industrial development. It is very likely that there will be conflict between the use of land for productive agriculture versus industrial related/supportive activities.
2. **Investment in human** and community development has to be informed by certain non-negotiables, i.e. all have to be provided with basic services irrespectively of where they live and investment in

human capital is very important in areas that offer lesser economic opportunities. Planning for sustainable human settlements is critical.

3. The spatial implication of the proposed Richard Bay **Port Expansion** has been considered 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 has also recently been reviewed.
6. **Cross border** planning is critical for service delivery and economic development. Coastal planning in terms of the ICMA (Integrated Coastal Management Act) as well as planning for tourism purposes cannot abide by municipal boundaries. When it comes to disasters, the shared services concept is ideal for firefighting and the rendering of other emergency services. Basic service provision, such as waste, is also sometimes more efficiently provided from another municipality.

11.2 SPATIAL DEVELOPMENT VISION

Visions are strategic planning instruments; they are "soft instruments" that act as a guideline to establish policies. 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 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.

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

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 are:

- 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 subsequently approved:

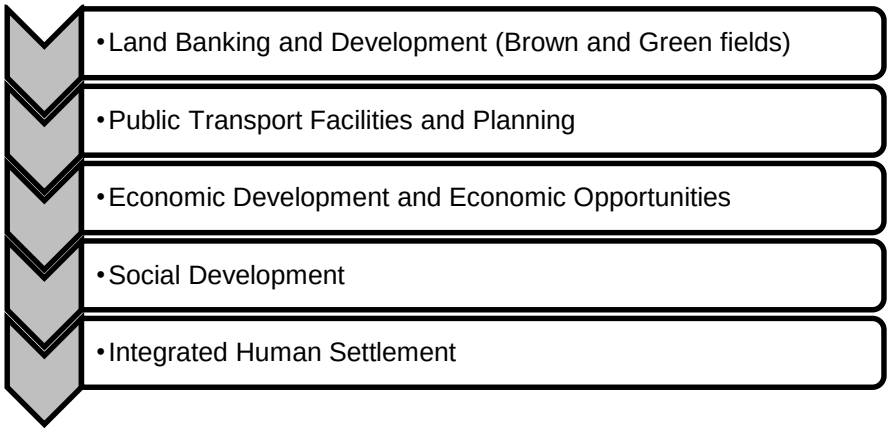
"An agile institution that fosters spatial sustainability, resilience, equity and compact growth, supported by appropriate ICT solutions"

The concept of **transformation** is inscribed in the uMhlathuze municipal IDP and spatial visions. 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 cities, government has 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 and Plan, Spatial Planning and Land Use Management Act.

In uMhlathuze the said process is informed by the following five key Pillars:

Figure 48: uMhlathuze Spatial Transformation Pillars



The main objective of uMhlathuze Municipal Spatial Transformation approach is to address integrated development, city compacting, structural elements, equal access to land and creating sustainable economic development and opportunities which will contribute to job opportunities. It is also to prioritise development within and along Municipal Nodes and Corridors as well as developing partnership with neighbouring Municipalities and other stakeholders. More details on municipal responses in relation to the above spatial transformation pillars is outlined hereunder.

Table 53: Municipal Responses to Spatial Transformation Pillars

SPATIAL TRANSFORMATION PILLARS	MUNICIPAL SPATIAL TRANSFORMATION RESPONSES
Land Banking and Development (Brown and Green fields)	Optimize and maximize land distribution and development through: o Densification o Infill development o Promotion of environmental friendly and sustainable development o Encourage equal access to land. o The SDF and development plans are used as a catalyst to address sustainable land distribution. o A clear urban edge and development guidelines and incremental approach for certain areas to be applied. o Development of Rural Development Framework Plans.
Public Transport Facilities and Planning	Further planning and development of Municipal Public Transport that will address the following: o Intermodal Public Transport System o Adequate Public Transport Facilities o Relationships with public transport stakeholders o Attract Investment
Economic Development and Economic Opportunities	Municipal Economic Development Roadmap that addresses the following: o Encourage investment o Discourage new investment that will create exclusive enclaves for the rich o Promote equal access to economic development opportunities o Tourism investment enhancement

SPATIAL TRANSFORMATION PILLARS	MUNICIPAL SPATIAL TRANSFORMATION RESPONSES
	○ Port Development ○ Industrial Development and Special Economic Zone ○ Food security
Social Development	○ Safety and Security ○ Health ○ Education ○ Job creation ○ Promote gender equity and equality ○ Food security
Integrated Human Settlement	○ New integrated housing developments in Restructuring Zones. ○ Planning for integrated suite of land uses ○ Partnerships with government departments/service providers to provide in all needs

11.3 PLANNING FOR FUTURE SPATIAL DEVELOPMENT

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

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

Spatial Transformation is being sought in the municipal nodal areas in the following manner.

11.3.1 UMHLATHUZE SETTLEMENT/NODAL AND CORRIDOR 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.

- In some countries, areas area defined as urbanized areas on the basis of urban-type land uses;
- In some less developed countries, in addition to land use and density requirements, a requirement to be classified as urbanized is that a large proportion of the population, typically 75%, is not engaged in agriculture and/or fishing.

In context of the above, 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/Nodal Hierarchy for the municipal area is discussed herewith:

Table 54: Summary of uMhlathuze Settlement Hierarchy

PRIMARY SETTLEMENTS	RICHARDS BAY AND EMPANGENI
○ 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
○ 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
○ 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. (Note: The Mandlazini and Mzingazi area, albeit considered part of the Richards Bay formal area, are in the process of formalization)	
OPPORTUNITY NODES	HIGHLY ACCESSIBLE AREAS WITH UNTAPPED POTENTIAL
○ 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
○ 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	
○ Remainder of the Municipal Area. ○ Potentially viable for in-situ rural housing projects if not too far removed from Secondary or Rural Settlements.	

In context of the above, the following 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.

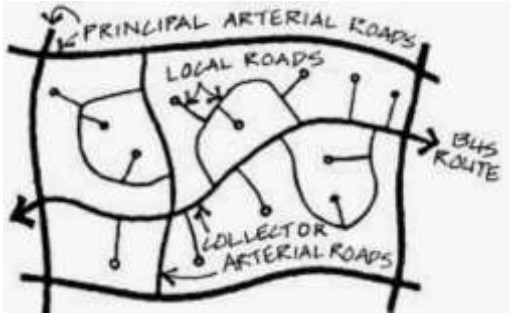
Ngwelezane Node:
A socio-economic node that offers sustainable mixed use development opportunities to its inhabitants and the larger surrounding area.

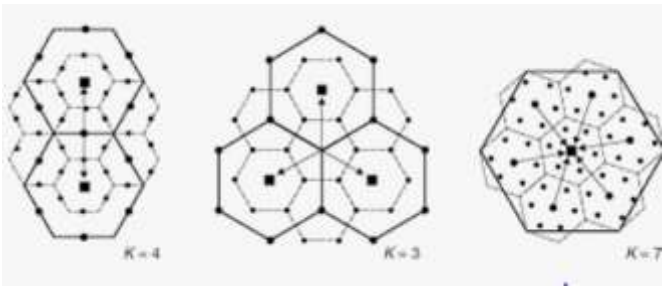
Nseleni Node:
A socio-economic node that offers sustainable mixed use development opportunities based on a human scale principle to its inhabitants and the larger surrounding area.

Buchanana 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.

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.

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).

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.

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, Mondi-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 Birdswood 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.

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

The Municipality is committed to achieve spatial transformation. 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. has 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.

The following table indicates proposed interventions at the respective nodal areas to achieve spatial transformation.

Table 55: Municipal Spatial Transformation Intervention at Nodal Focus Areas

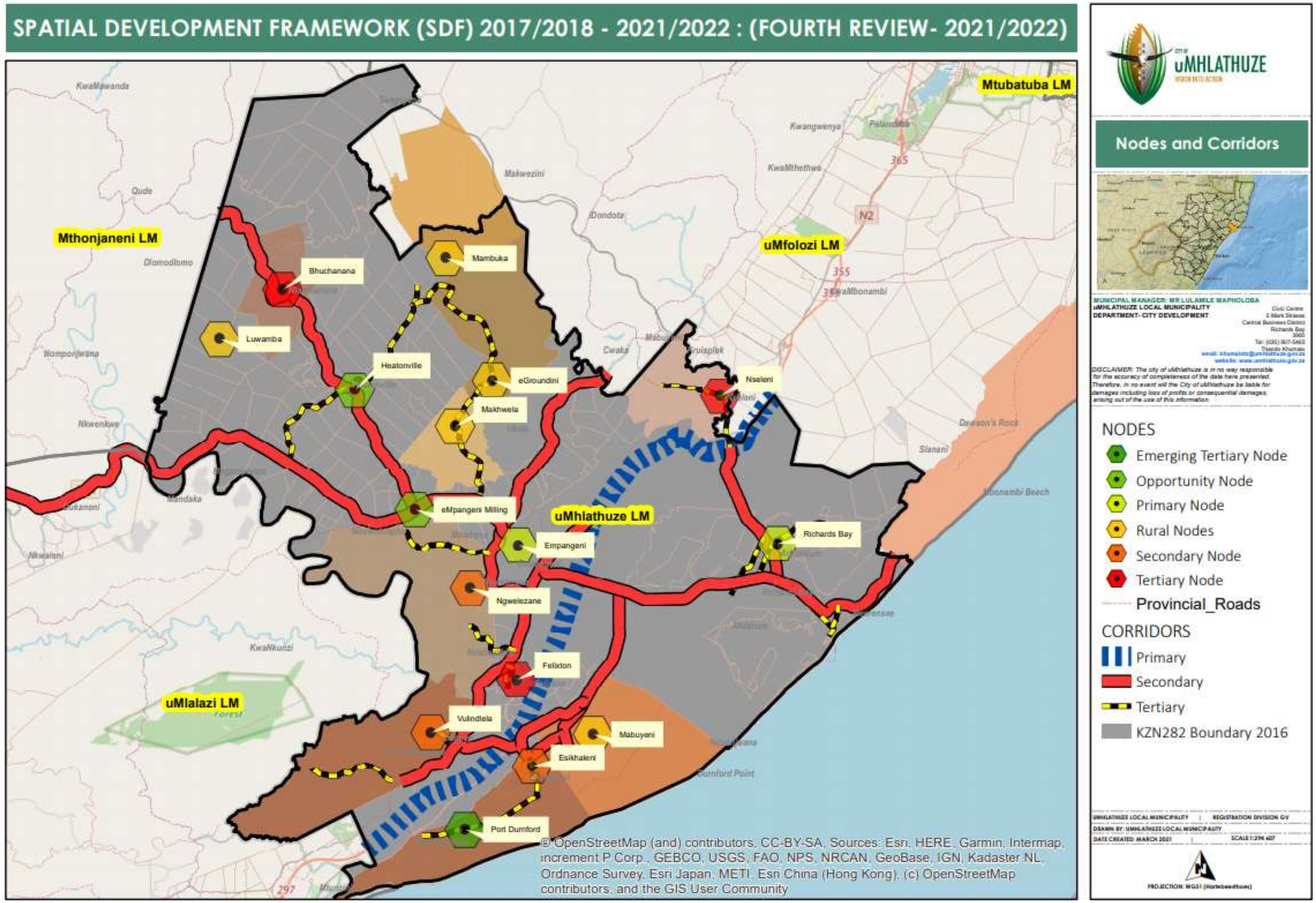
NODAL FOCUS AREA	DESCRIPTION	INTERVENTION
Richards Bay and Empangeni	Primary urban centre with servicing capacity and opportunity. The development of these nodes has a multi-pronged approach, providing for densification, supporting thresholds for a range of services, industry and public transport.	○ Review of 2006 CBD Framework for Richards Bay was finalized in 2019. ○ Implementation of the CBD Revitalization Plan. ○ Development of the CIA (Central Industrial Area) in line with IUDF principles and climate resilient development. ○ Empangeni Mega Housing development as an integrated residential development project (IRDP). ○ Further Development of Dumisani Makhaye Village (DMV) as an

NODAL FOCUS AREA	DESCRIPTION	INTERVENTION
		integrated residential development project (IRDP).
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

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

Map 46: Nodes and Corridors in uMhlathuze



11.3.2 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 at Alkantstrand, 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 has 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.

11.3.3 EXPANSION AREAS

A future development scenario has been quantified for the Municipality based on the following on the premise that there will be an increase in economic activity as well as an increase in population.

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:

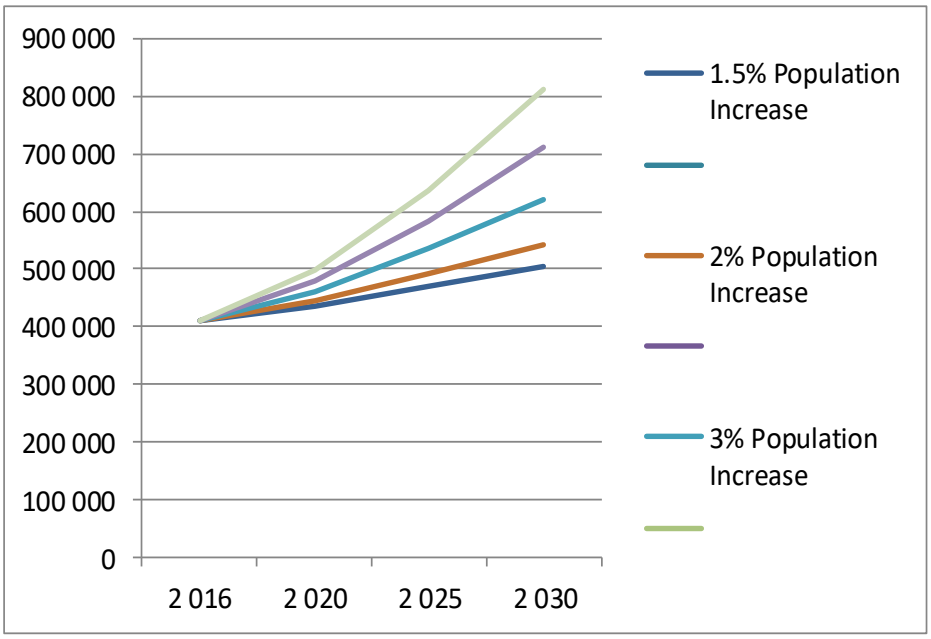
Table 56: Extent of SDF Expansion Areas

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.

The following graph is a graphical illustration of various population growth scenarios for uMhlathuze.

Figure 49: Population Growth Scenarios to 2030



In context of the above, the following is noted:

Based on a 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.

Based on a 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 57: 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.

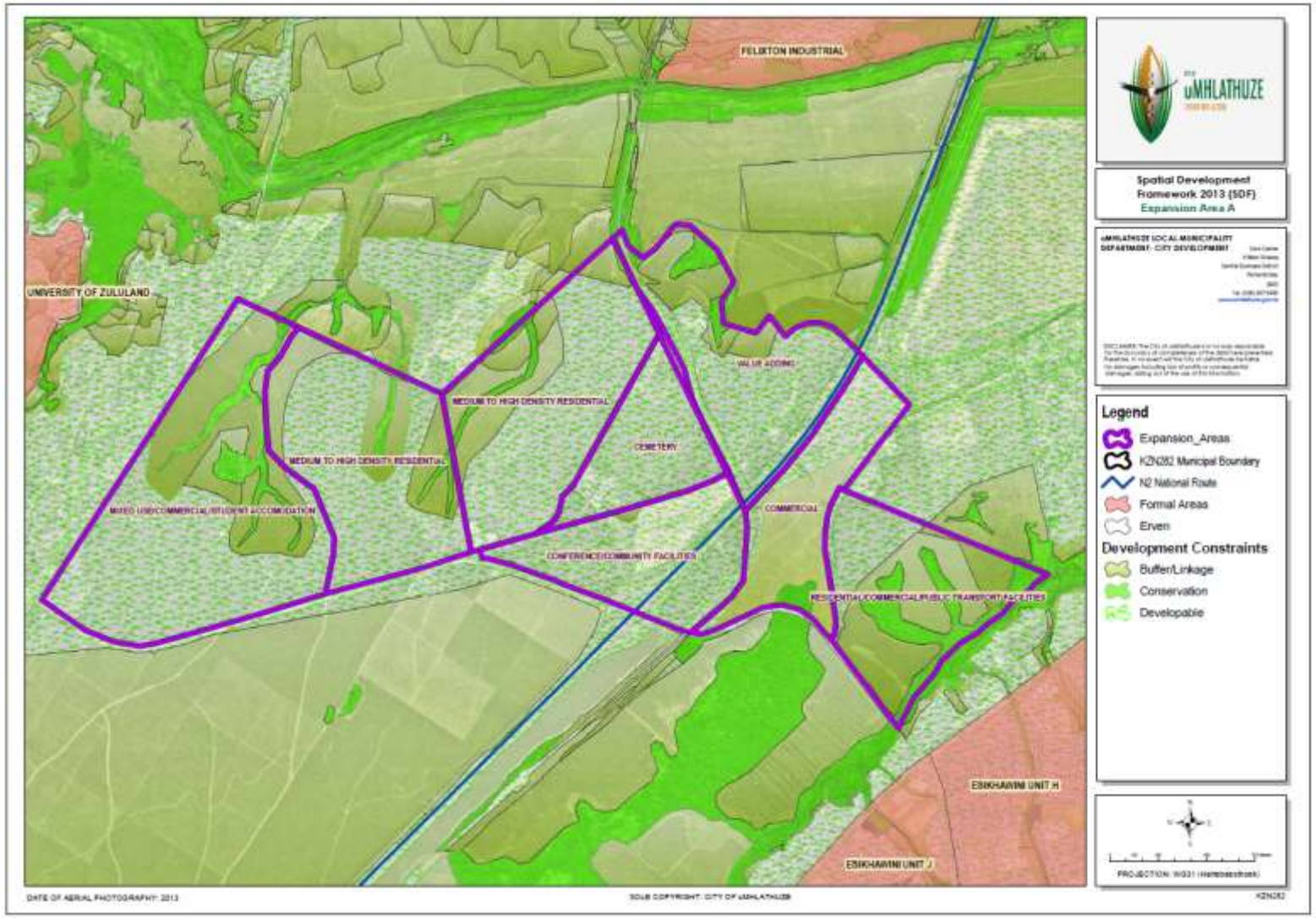
Table 58: Anticipated land usages in Expansion Areas

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 are still required as per the relevant legislation and bylaws. Council can only make an informed decision upon consideration of the specialist studies as part of the development application processes.

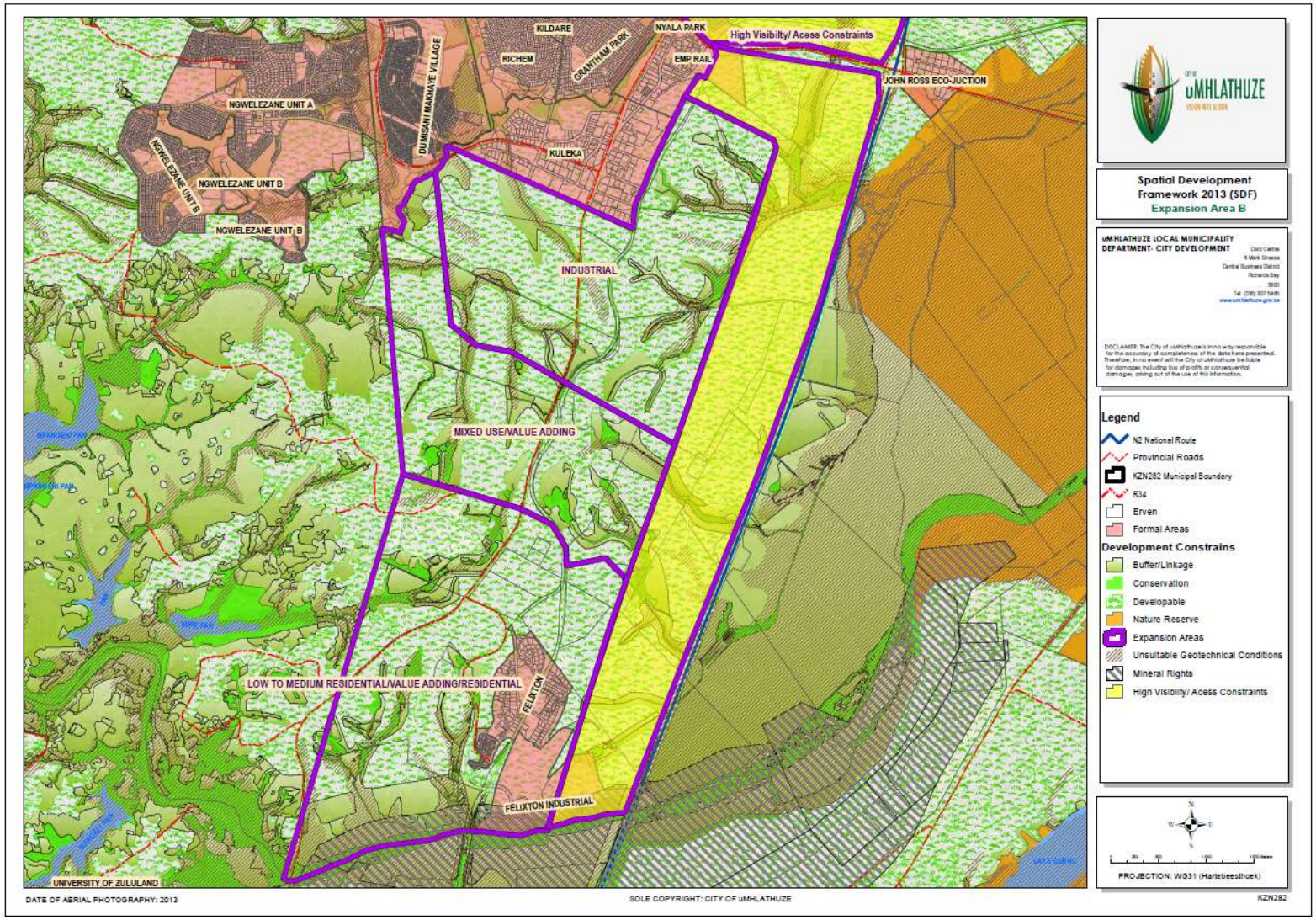
Figure 50: Expansion Areas A



Potential Developable Area: 360 Ha

- Area subject to long term forestry lease
- Subject to prospecting (mineral) rights
- High visibility and accessibility
- Potential development: Community Residential Units; Social/Rental Housing; Gap Market Housing; Commercial and Low Income Housing

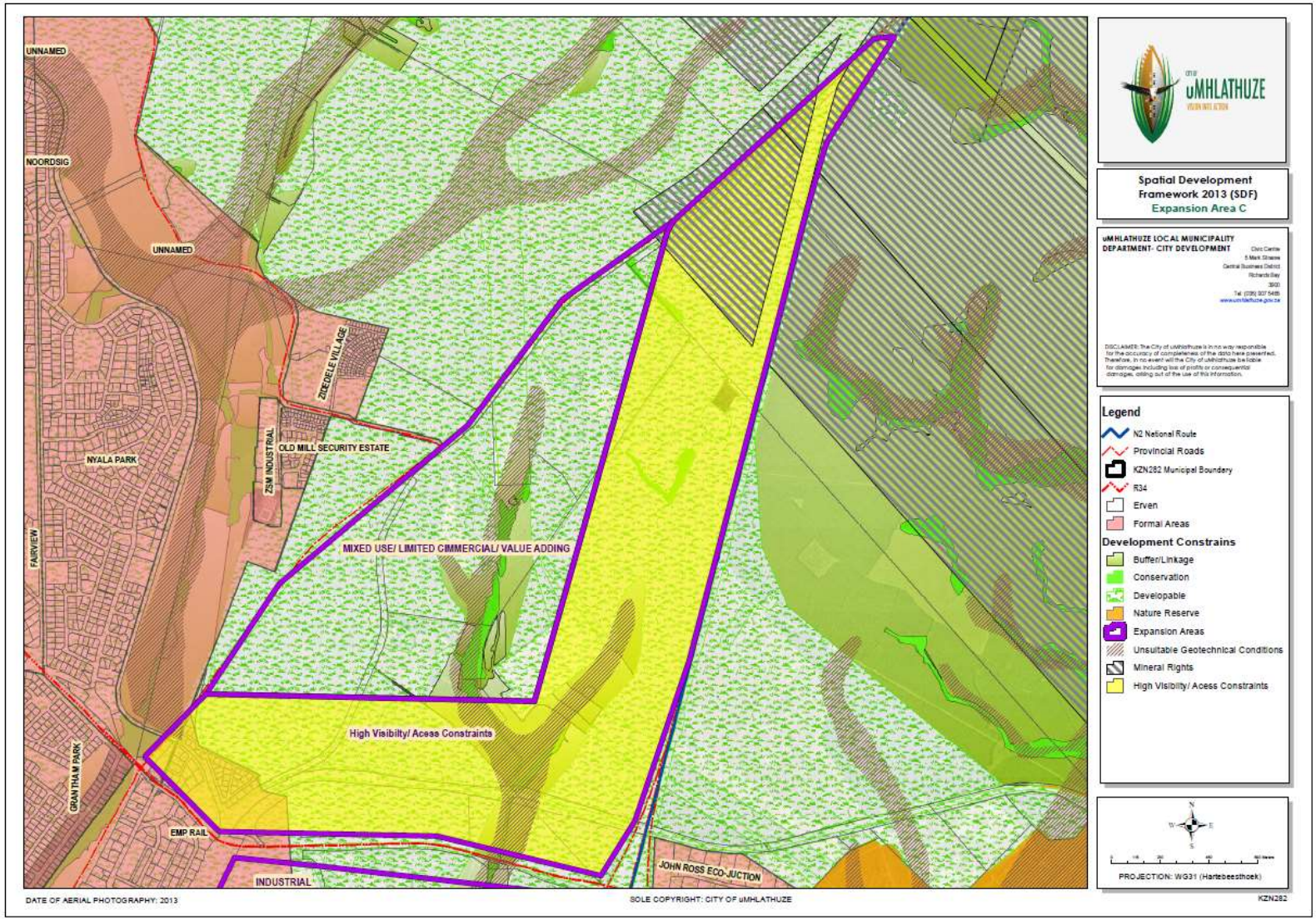
Figure 51: Expansion Area B



Potential Developable Area: 2200 Ha

- High potential agricultural land
- High Visibility from the N2
- Accessibility from Old Main Road

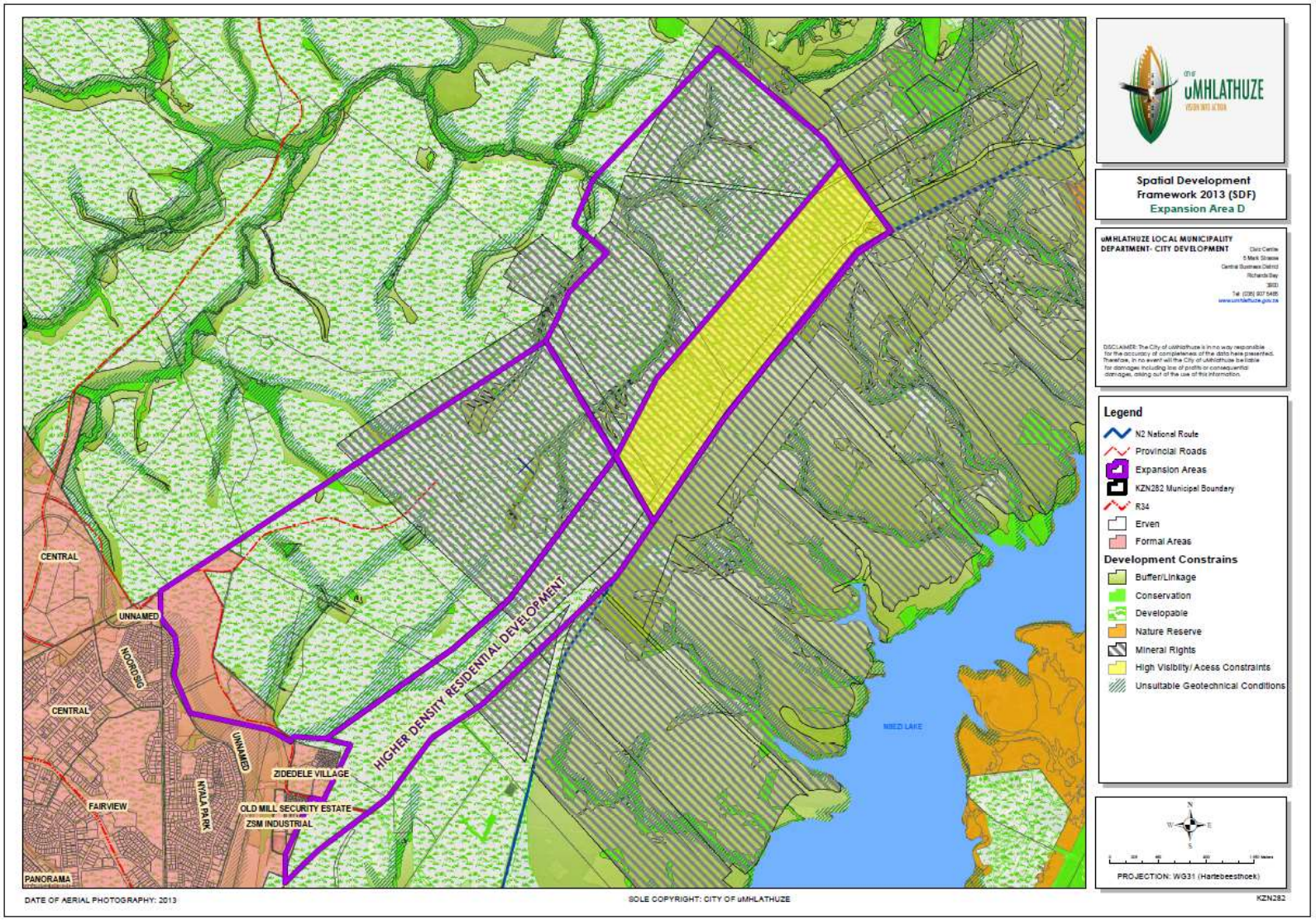
Figure 52: Expansion Area C



Potential Developable Area: 430 Ha

- High potential agricultural land
- High Visibility
- Some accessibility constraints
- Portion subject to prospecting (mineral) rights
- Potential Richards Bay Airport relocation area

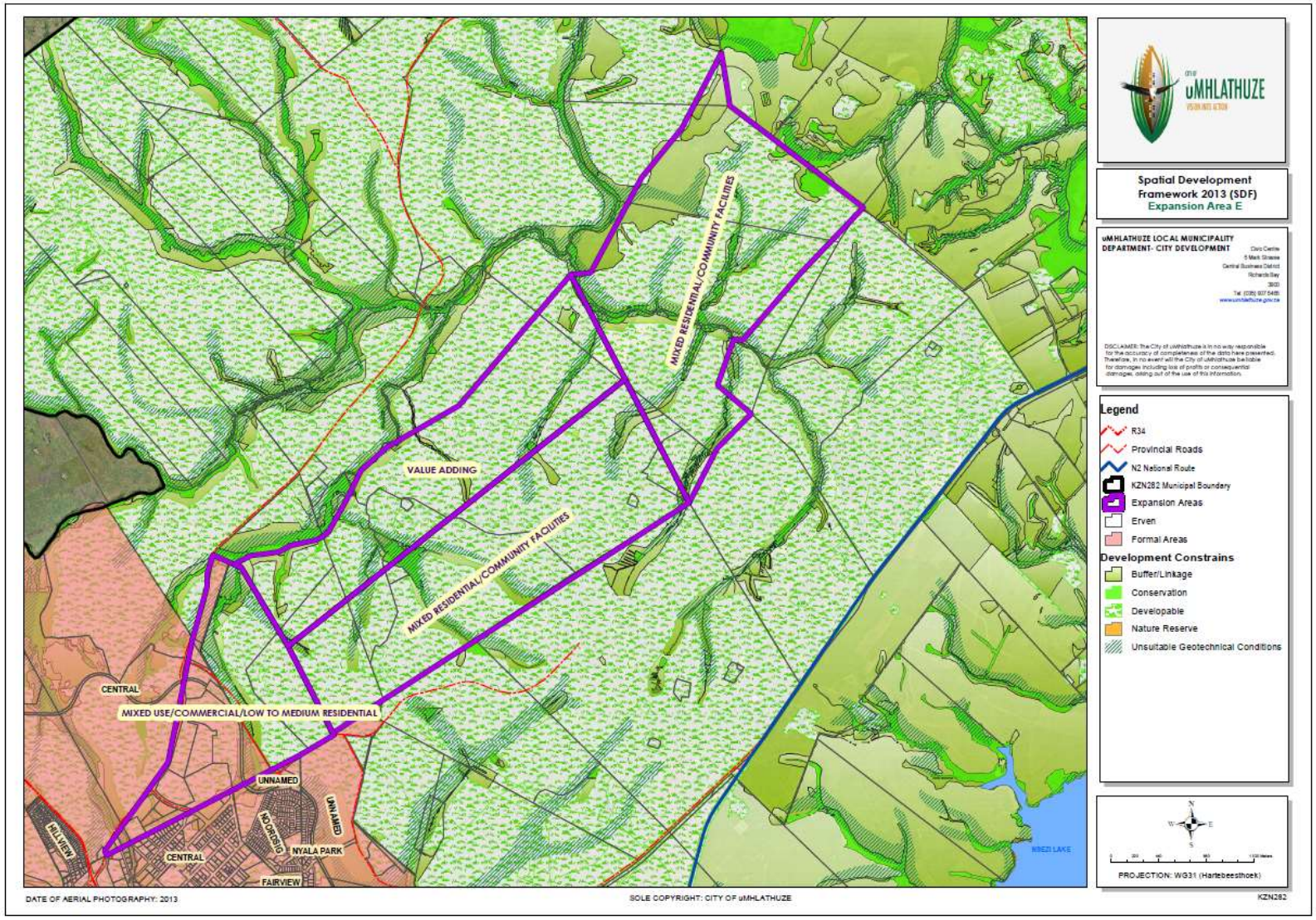
Figure 53: Expansion Area D



Potential Developable Area: 350 Ha

- High potential agricultural land
- High Visibility
- Some accessibility constraints
- Portion subject to prospecting (mineral) rights
- Potential Richards Bay Airport relocation area

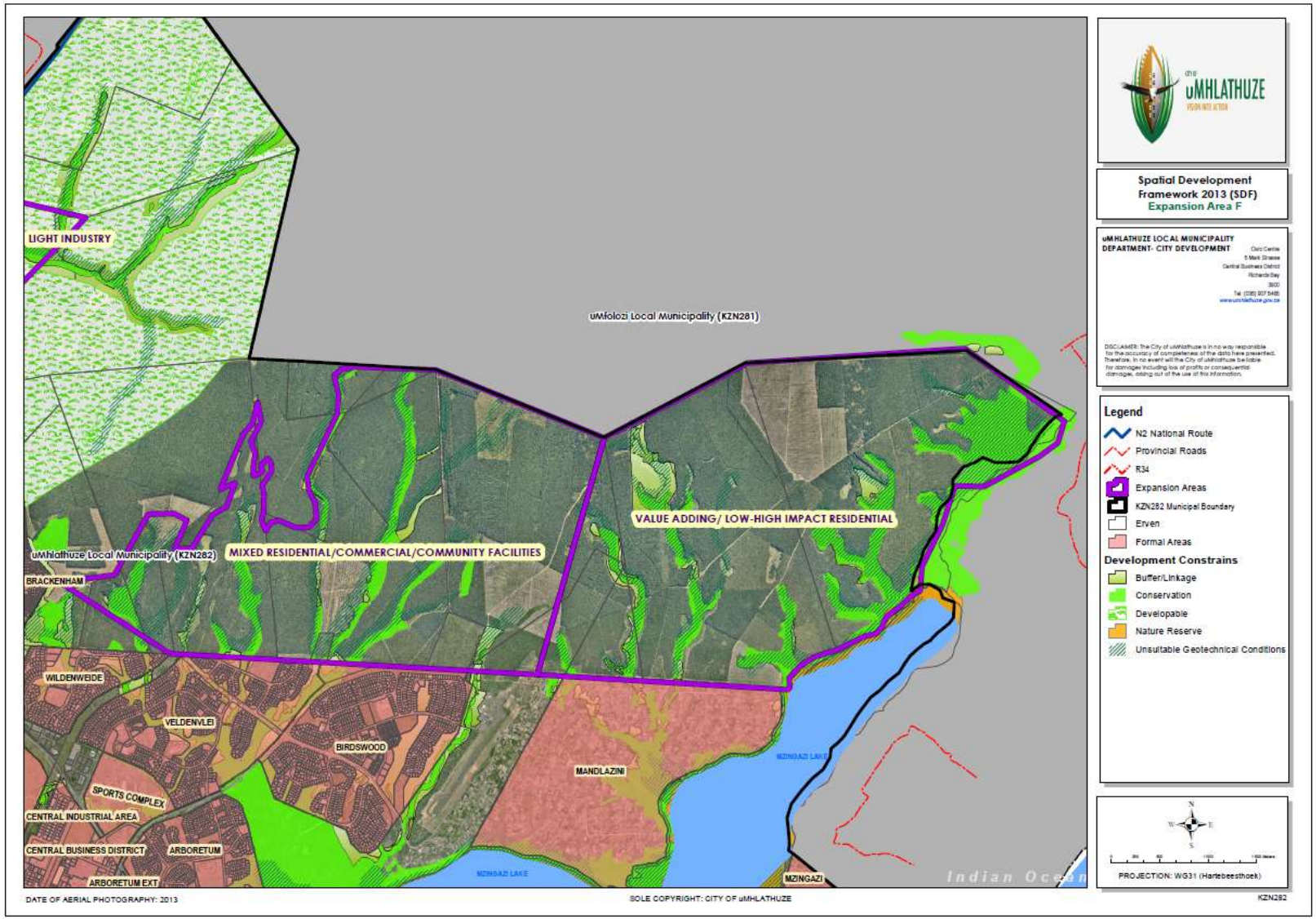
Figure 54: Expansion Area E



Potential Developable Area: 1900 Ha

- High potential agricultural land
- High Visibility
- Access and services to be developed

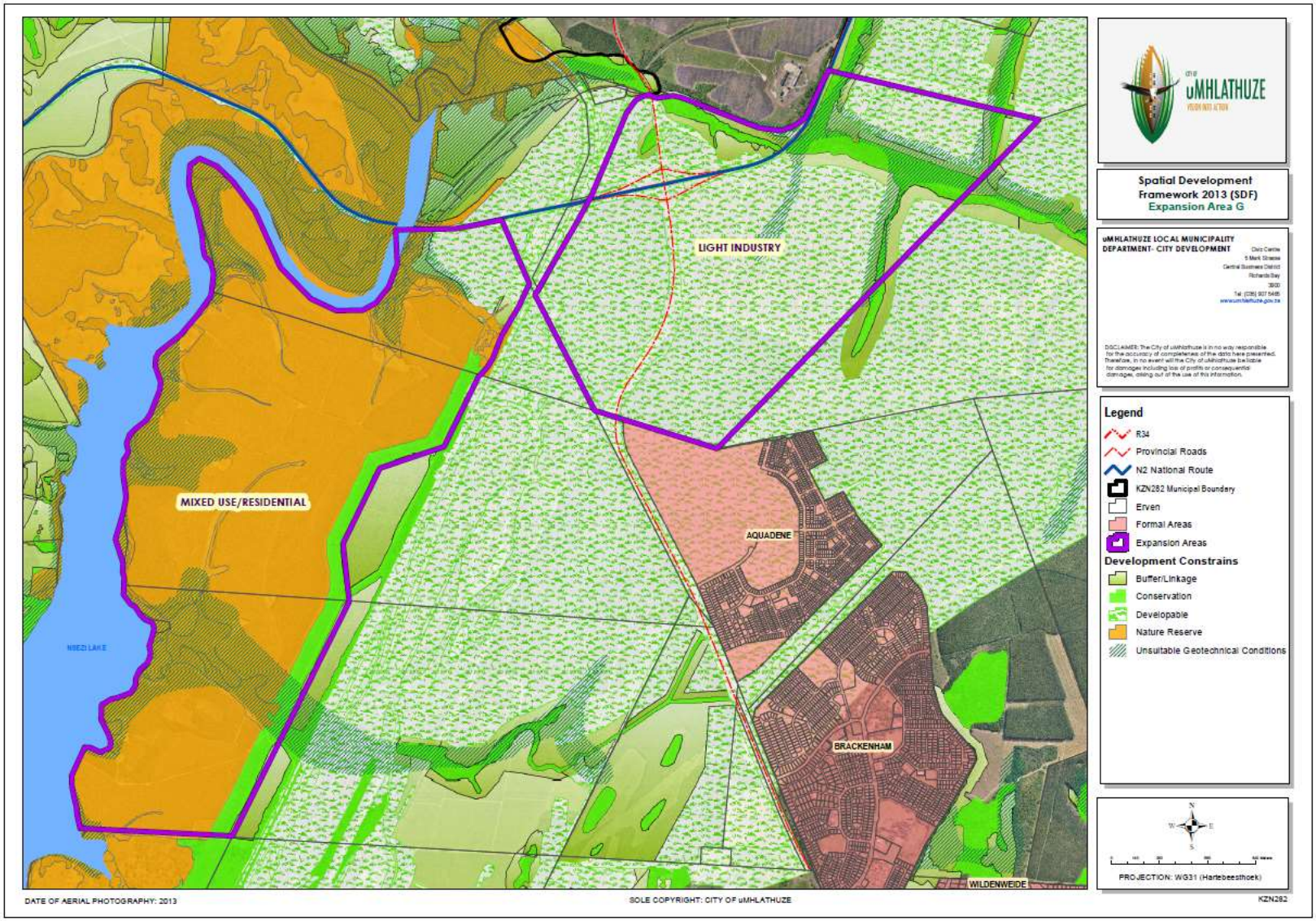
Figure 55: Expansion Area F



Potential Developable Area: 1700 Ha

- Area subject to long term forestry lease
- Access and services to be developed
- Proposed mixed use residential development (Royal Creek)
- Aquadene Integrated Human Settlement Project

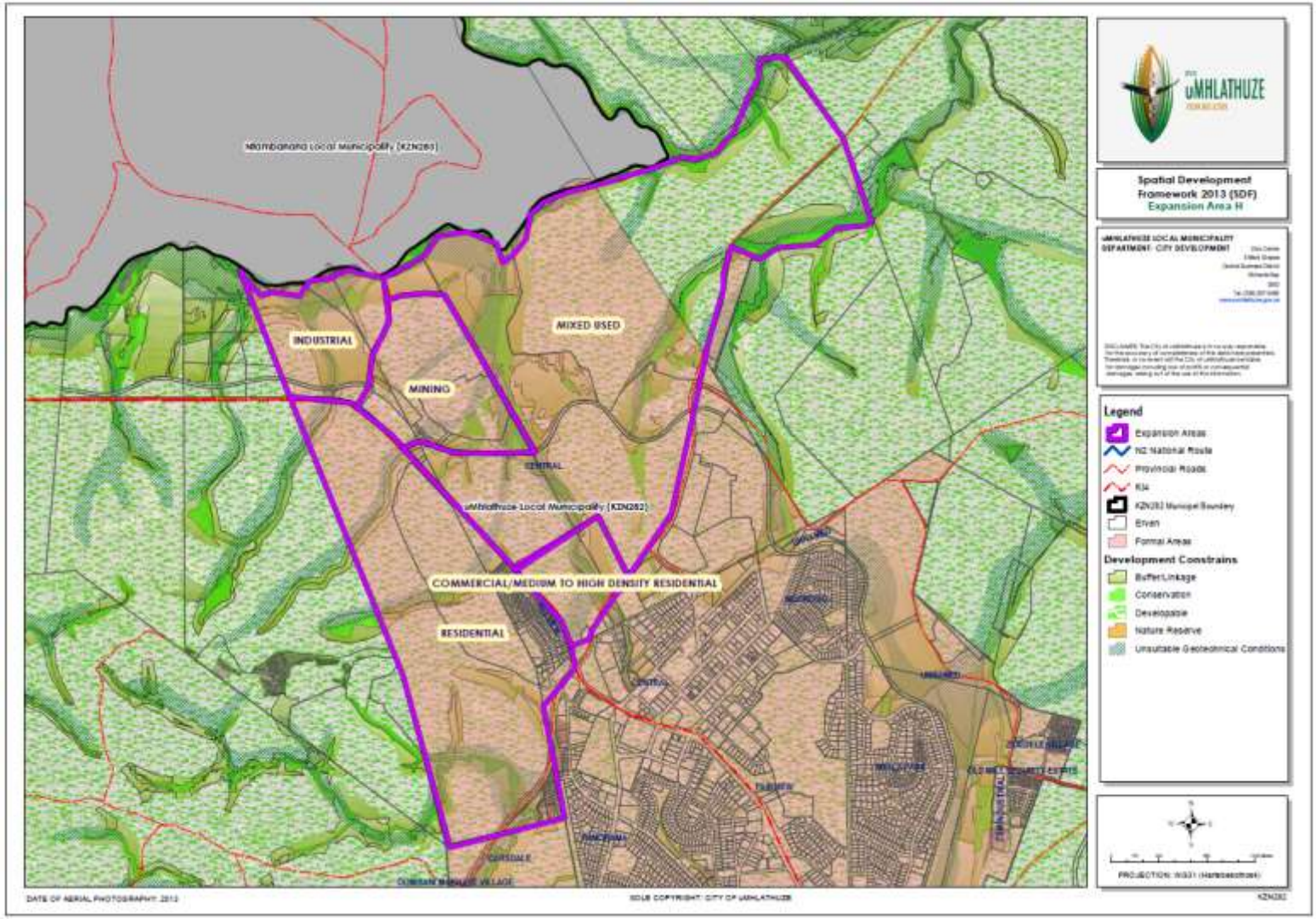
Figure 56: Expansion Area G



Potential Developable Area: 400 Ha

- Portion good visibility and good access
- Future cross boundary industrial development between uMfolozi and uMhlathuze Municipalities

Figure 57: Expansion Area H



Potential Developable Area: 780 Ha

- Good access
- Good visibility
- Developments proposed and underway in the area
- Empangeni Mega Housing Development (IRDP)

11.3.4 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 59: Extracted 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/Veldenveli	266	399
Brackenham	54	81
Meerensee	436	654
Empangeni	498	747
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

11.3.5 URBAN DEVELOPMENT BOUNDARY

Essentially the formal settlements, notably the former TLC and former R293 town areas, are regarded as the urban areas. Also, in context of future planning and development, the expansion areas are considered to be urban. 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.
- Should peri-urban areas be formalized, and the subsequent provision of an urban standard of services to such areas is 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.

11.4 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.

11.4.1 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
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

11.4.2 OPPORTUNITY FOR AGRICULTURAL INVESTMENT

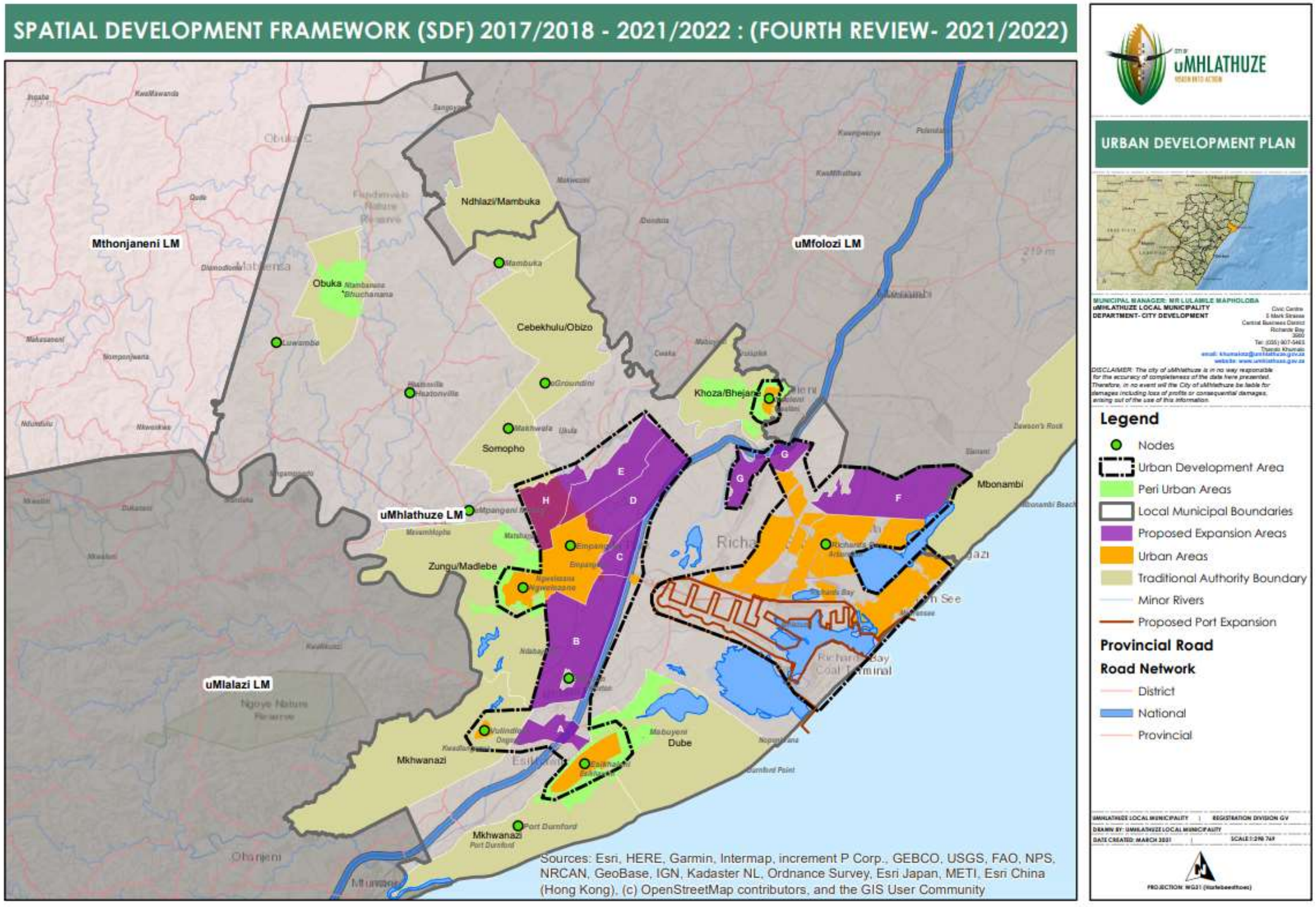
Very little of uMhlathuze's area would be available for future development if the National Department of Agriculture's land capability mapping classes 1, 2 and 3 were used as a deciding factor for determining future development areas. To this end, the Municipality has to engage with the National Department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

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

Map 47: Urban Development Boundary



11.4.3 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.

11.4.4 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) and private hospital development has taken place.
- N2 and the proposed future South Central Arterial (which would link up with P700) when such is development. 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. This intersection would also be pivotal should the proposed relocation and redevelopment of the Richards Bay Airport take place.
- 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.

11.4.5 TOURISM AND AREAS OF NATURAL BEAUTY

The following development principles could inform development applications in these areas:

- 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. if development is proposed in these areas, clear mitigation or offset measures to 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 the ESMP (Environmental Services Management Plan) these are 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. A tourism development should not occur at the expense of local environmental, economic and social values and efficient provision of engineering infrastructure is needed. Tourism should also provide for a wide range of experience opportunities from low cost family type tourism developments to large single destination development. It should aim to maintain public access.

11.5 INTERVENTION AREAS

11.5.1 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 area. A number of open spaces/environmentally sensitive areas 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. Examples are school sites, sites for infrastructure as well as public open spaces.

The identification of spatial intervention areas, for remedial action, is working toward achieving the desired spatial pattern. The following intervention areas are proposed in the uMhlathuze Municipality:

a) As identified as part of the Nodal/Settlement Hierarchy of the Municipality, **peri-urban** areas are characterized by dense populations, small stands not necessarily able to support agricultural activities, continuous infill-development, pressure for connection to municipal services (individual connections) and possible health impacts as a result of over-crowding. 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. In some instances, development has taken place over sensitive environmental areas over which national environmental legislation prevails.
b) In terms of planning for peri-urban nodes, the principle of *"work where you live" should be promoted.* Typical examples of such densely populated peri-urban areas are areas surround Esikhaleni, specifically the uMzingwenya area as well as peri-urban areas around other former R293 towns.
c) 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, amongst others, 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. Amongst others, seven informal settlements in the municipality have been investigated and planned for through the NUSP (National Upgrading and Support Programme) as outlined in the Human Settlements section of this report.

11.5.2 RURAL DEVELOPMENT FRAMEWORK PLANS

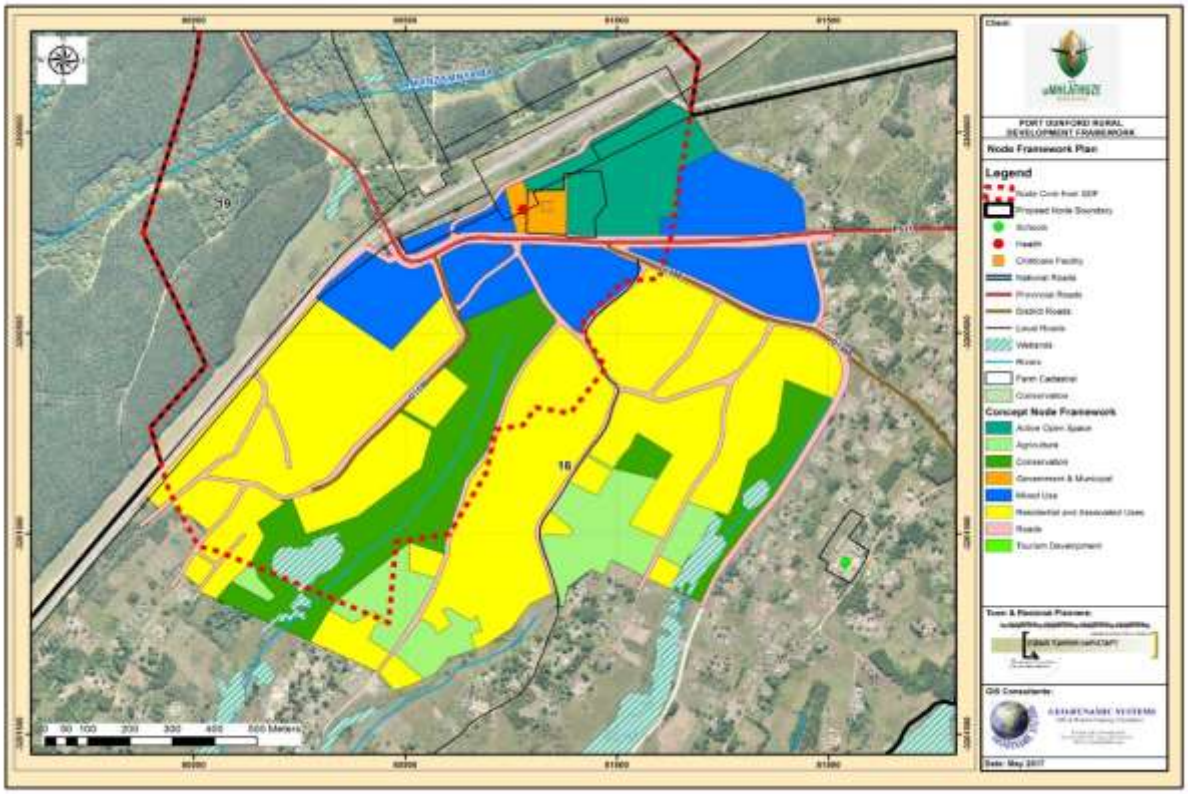
In order to facilitate feasible service provision, Rural Development Framework Plans have to be developed and adopted, to be used as a guiding tool when land allocations are effected.

The municipality has a five phase plan for the preparation of Rural Development Framework Plans. Phase 3 of the process is underway. The following table illustrates the complete phasing approach for the preparation of the proposed Rural Development Framework Plans.

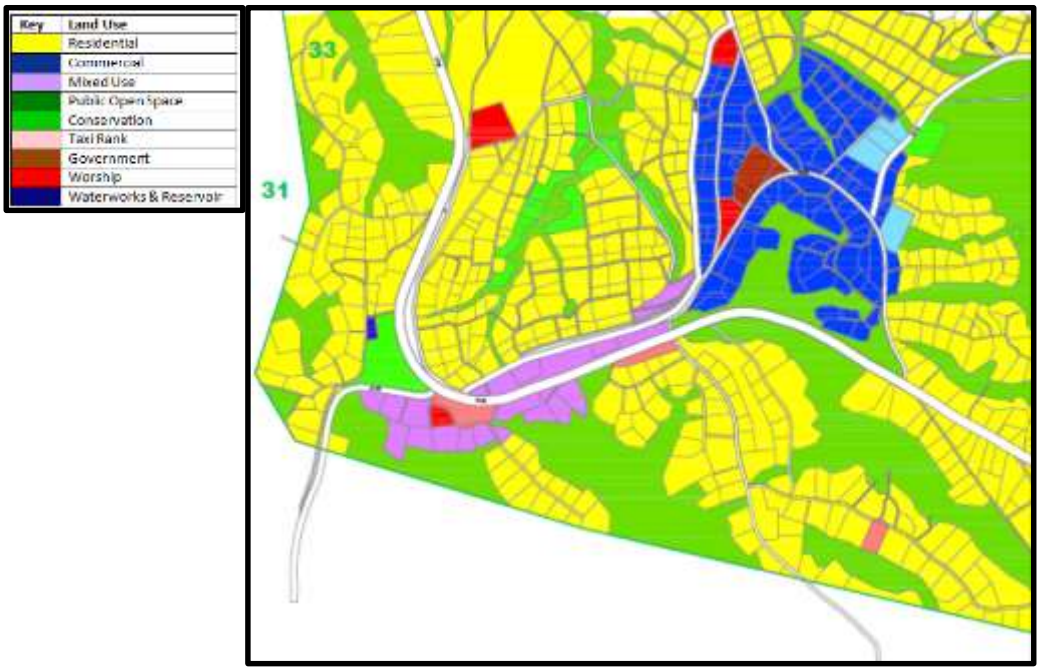
Phase	Project Name
1	Port Dunford Rural Development Framework Plan-Mkhwanazi Traditional Authority - completed
2	Buchanana Rural Development Framework Plan-Obuka Traditional Authority – completed
3	Hluma Rural Development Framework Plan-KwaBhejane Traditional Authority – completed
4	Mabuyeni Rural Development Framework Plan-Madlebe Traditional Authority
5	Matshana Rural Development Framework Plan-Dube Traditional Authority

The respective concept plans of the completed Rural Development Framework Plans are provided hereunder. Each of the said Rural Development Framework Plans also contains a detailed implementation plan with projects requiring implementation.

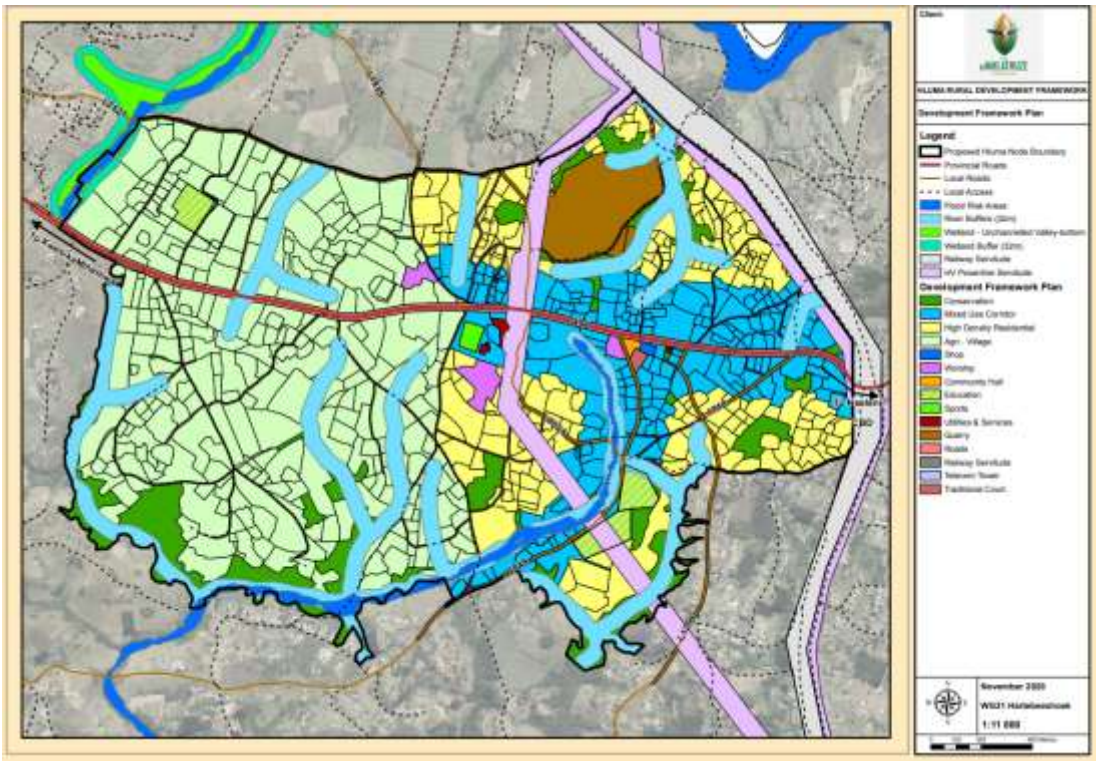
Map 48: Port Dunford Concept Plan



Map 49: Buchanana Concept Plan



Map 50: Hluma Concept Plan



11.6 DEVELOPMENT OF INGONYAMA TRUST BOARD LAND

It is a legal requirement for all municipalities to prepare and enforce a wall-to-wall scheme within its area of jurisdiction for all large developments to be compliant and approved by the planning authority. The process in terms of the development in Ingonyama Trust Board (ITB) land remains challenging. In most cases the ITB does not approve land sales in their areas but they provide long term leases – noting that developers may prefer the outright purchase of land in some instances.

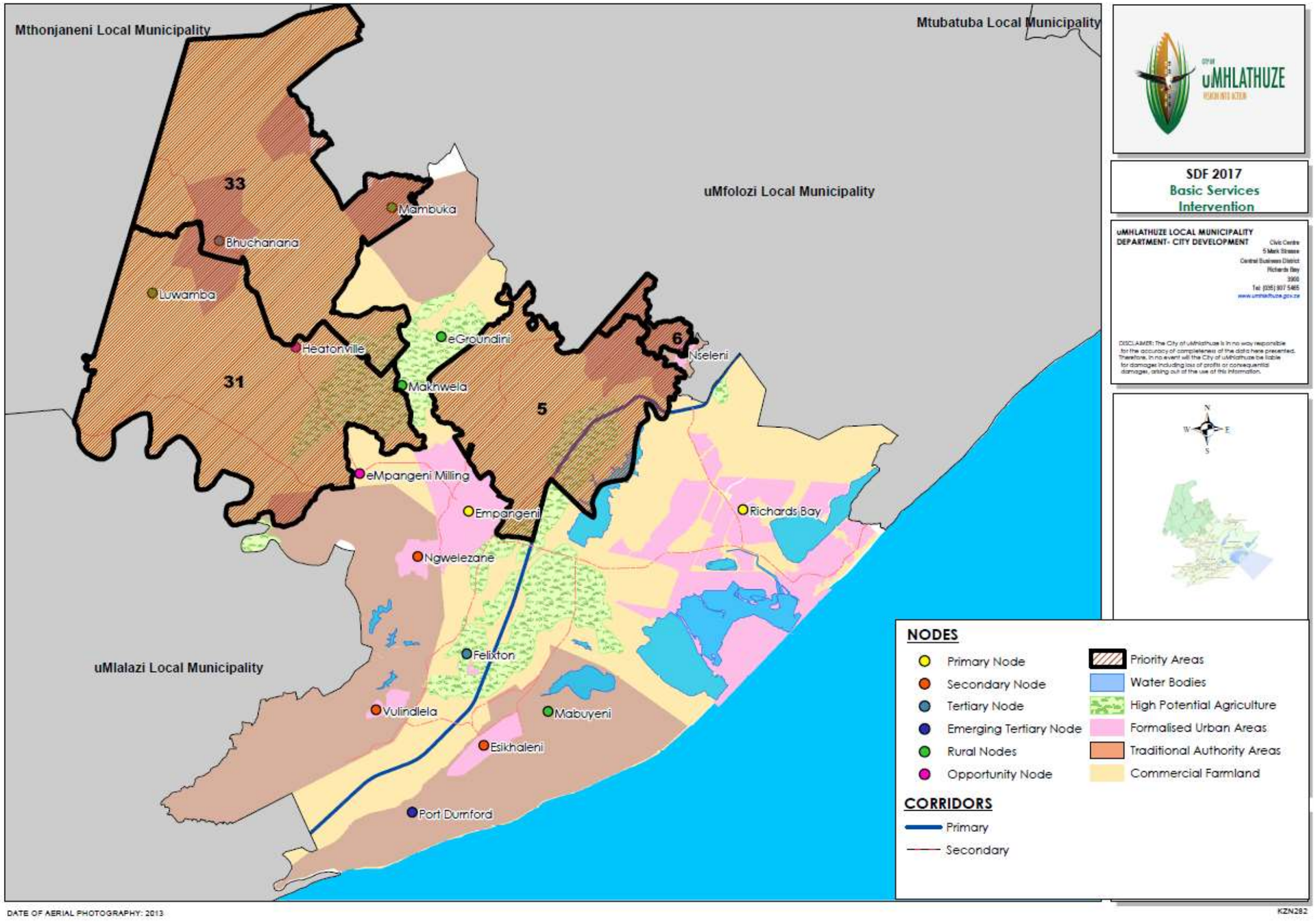
The uMhlathuze Municipality has a licence to supply electricity to formalised areas but not Ingonyama Trust Land areas. Resistance to approve the formalisation of certain developments on ITB land sometimes causes delays in the provision of services. From the community's perspective, there is also a fear that once their area is formalised, those residing within that proclaimed area would have to pay rates. Settlement in ITB areas, specifically in peri-urban areas, is increasing rapidly with increased pressure on the Municipality to provide services. An example being the peri-urban area of Mhlanga outside Empangeni.

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 cannot be implemented or used at this stage.

The uMhlathuze Municipality notes the need. The following actions have been undertaken to date to develop a better understanding in respect of development on the Ingonyama Trust areas within the municipal area of jurisdiction:

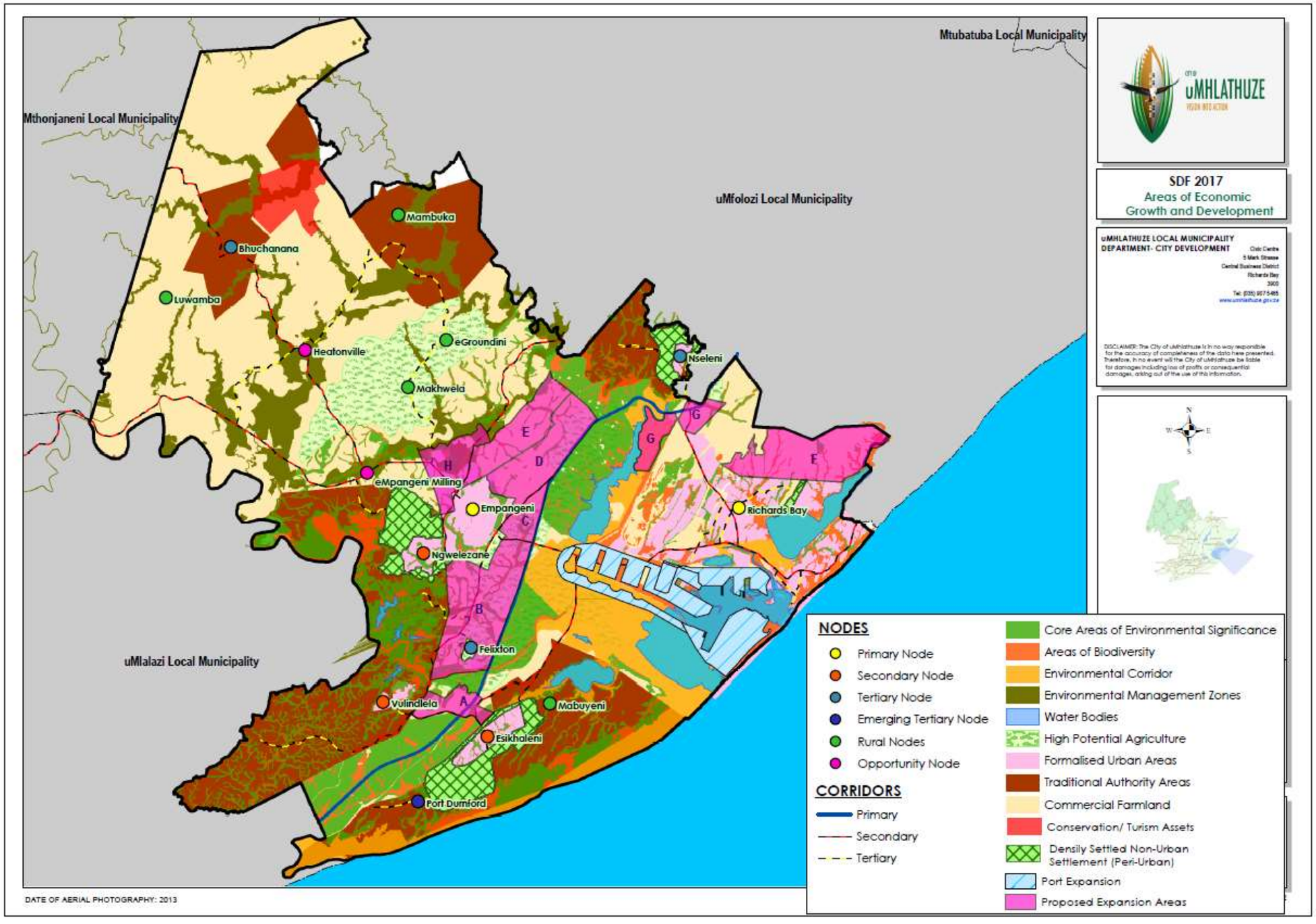
1. Council has recently (2019) updated its aerial photography.
2. The need to confirm cadastral information of ITB areas, the extent of leases over such areas as well as servitudes or service corridors.
3. Create affected properties in GIS in order to start preparations for populating databases for the areas.
4. Confirm ownership (or occupant) information of leases specifically and add to the GIS and Council financial system.
5. Prepare for the inclusion of properties, where possible, in the valuation roll.
6. Determine the level and state of services in the area; add assets to Council's asset register; to determine areas that would require basic services, etc.

Map 51: Basic Services Intervention Areas



The portions of the municipality for basic services intervention 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

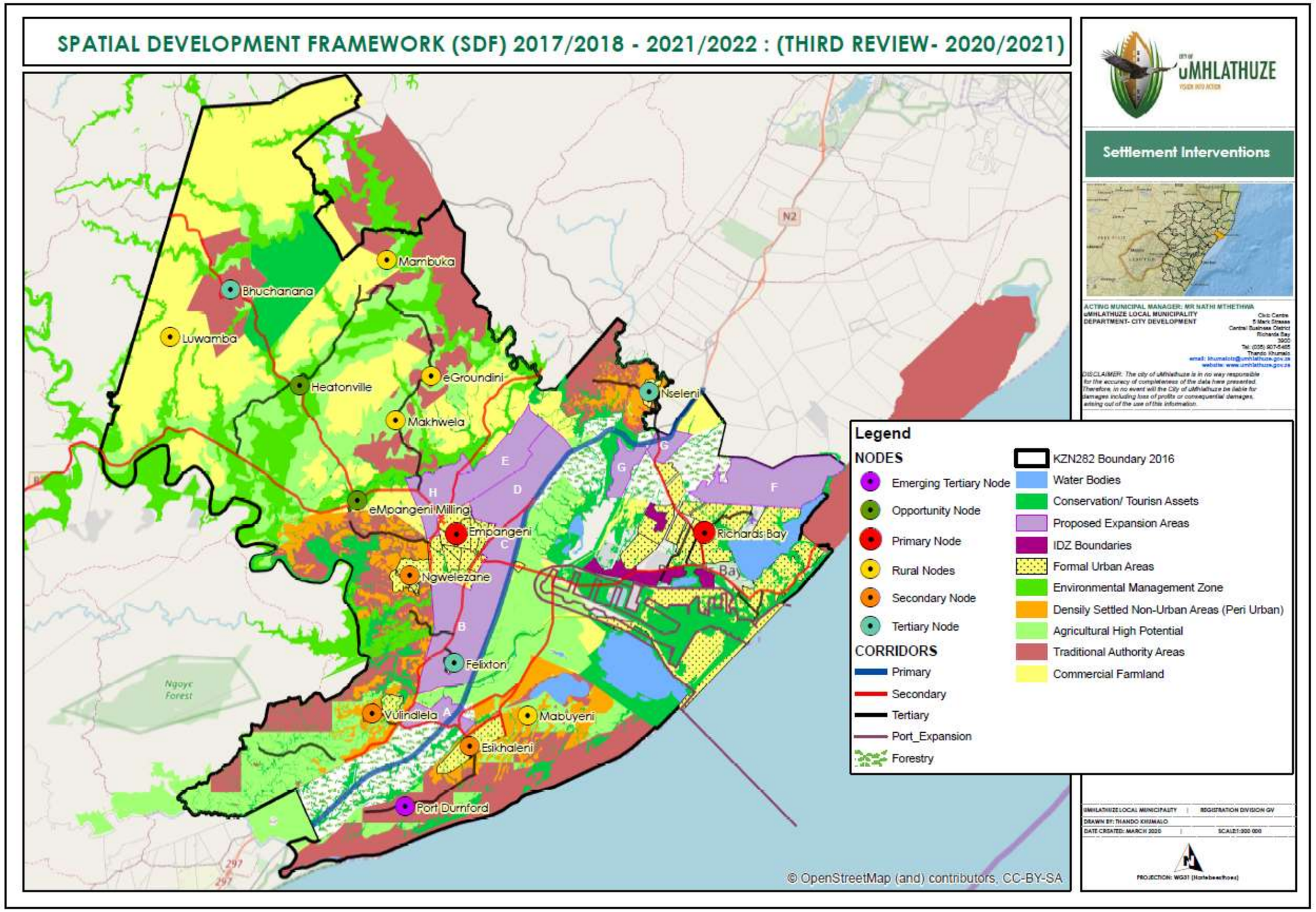
Map 52: Areas of Economic Growth and Development



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.
- 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.

Map 53: Settlement Intervention Areas



Primary Nodes

- Review of 2006 CBD Framework for Richards Bay was finalized in 2019.
- Implementation of the Empangeni CBD Revitalization Plan.
- Development of the CIA (Central Industrial Area) in line with IUDF principles and climate resilient development.
- Empangeni Mega Housing development as an integrated residential development project (IRDP).
- Aquadene Human Settlement Development as an IRDP.
- Further Development of Dumisani Makhaye Village (DMV) as an IRDP.

Secondary Nodes

Development of Precinct Plans 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.

Tertiary Nodes

Development of Precinct Plans 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.

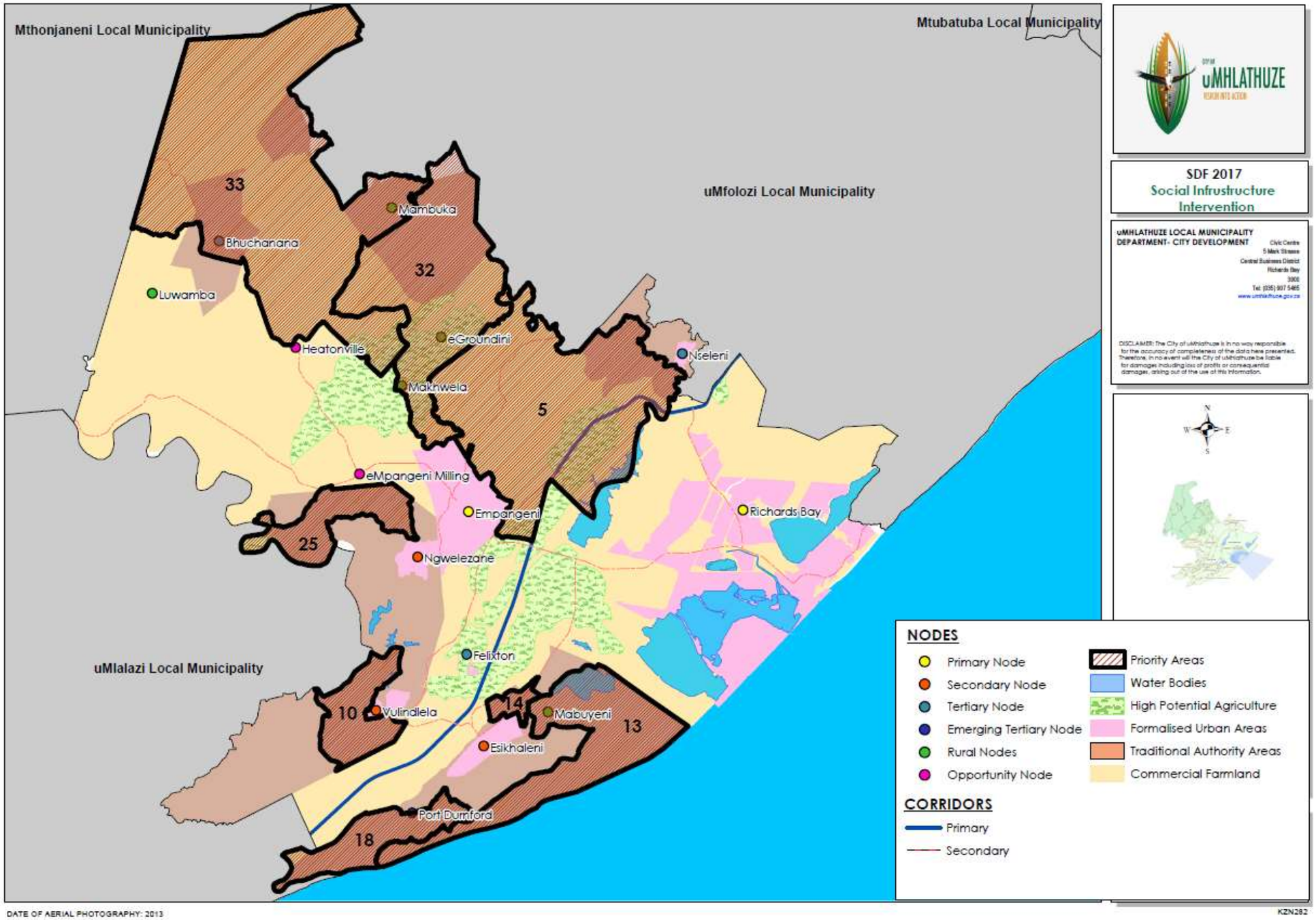
Opportunity Nodes

Development of Precinct Plans to provide development vision for the area and provide guidance for the development, land use management and economic growth.

Rural Nodes

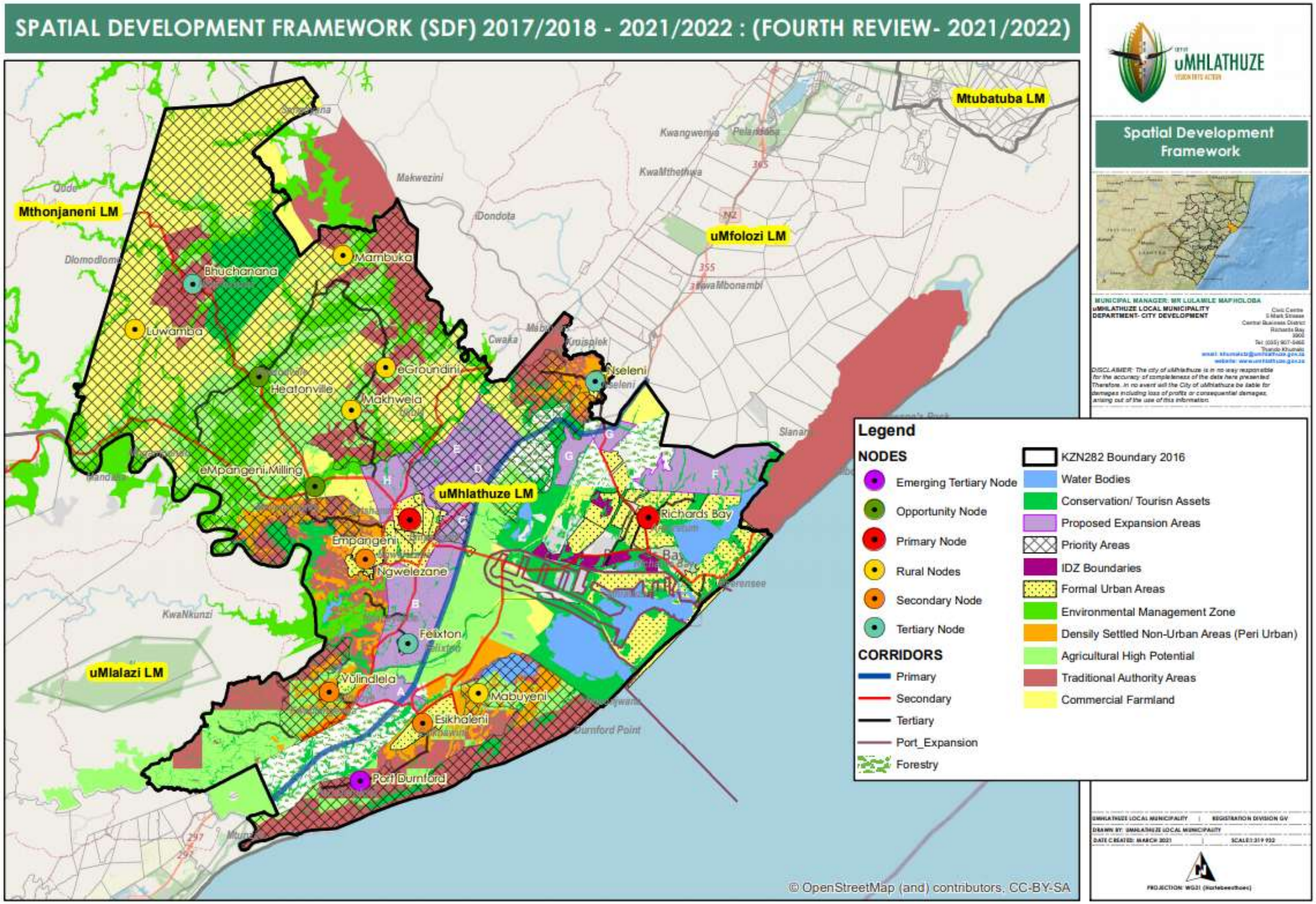
Development of Development Framework Plans which will provide guidelines for translation of Spatial Development Intentions into Land Use, Transport, Environmental, Infrastructure developments.

Map 54: Social Infrastructure Intervention



The portions of the municipality that have been identified as priority areas for Social Infrastructure Intervention 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 55: Consolidated SDF



12. 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:

- Spatial Development Framework (SDF) and Land Use Scheme Alignment
- Zoning Categories
- The Municipal Suite of Plans

- The implementation of strategic and catalytic projects
- Details of required interventions in investment, inclusive of the capital expenditure framework (CEF)
- Summary of Interventions being pursued at Nodes and Corridors

12.1 SDF AND LAND USE SCHEME ALIGNMENT

Section 21 (l)(i) and (ii) of the Spatial Planning and Land Use Management Act, states that a municipal spatial development framework must 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.

Whereas Section 26 (f) of the Municipal Systems Act states that an Integrated Development Plan must reflect a Spatial Development Framework which must include the provision of basic guidelines for a land use management system for the municipality.

The section demonstrates the alignment between the municipal Spatial Development Framework (SDF) and municipal Land Use Scheme (LUS) as required by the Spatial Planning and Land Use Management Act, 2013 (Act No. 16 of 2013) and Municipal Systems Act, 2002 (Act No. 32 of 2002).

On 25 September 2019 Council adopted Single Land Use Scheme which replaced the 2014 Land Use Scheme. All land parcels are included in the current municipal Land Use Scheme including Traditional Authority Areas and Agricultural land. The Traditional Authorities were consulted during the preparation of the municipal Spatial Development Framework and Land Use Scheme, in line Section 24 of SPLUMA where the municipal objectives in as far as strategic and statutory planning is concerned. The municipality further consulted the Department of Agriculture, Land Reform and Rural Development and presented its proposal to incorporate agricultural land into a municipal Land Use Scheme. The Department supported the proposal, hence all prime agricultural areas are zoned as *Agriculture 1* and any development in these areas such as subdivision and rezoning will require the Department's consent before it can be considered by the Municipality.

As outlined under the land ownership section of this document, more than 50% of the municipal area falls within Traditional Authority land and all these areas have been incorporated into the municipal Land Use Scheme and zoned as land use zones *Imizi/Rural/Transitional Settlement*. As much as the municipality has introduced the Land Use Scheme in the Traditional Authority Areas, land use management in these areas remains a challenge due to land allocation that takes place haphazardly.

The municipal Land Use Scheme has also incorporated the former R293 Towns such as Esikhaleni, Vulindlela, Ngwelezane and Nseleni. Land use management in these Towns is also a challenge. However, the Municipality has introduced incremental law enforcement measures and also introduced residential and commercial land use zones that will cater for the current situation in these areas. The municipality undertook a city wide land use survey which assisted in terms of understanding the different land uses in different municipal areas. This survey played an important role in the preparation of the current Land Use Scheme which has been incrementally implemented in both former R293 Townships and Traditional Authority Areas.

In support of the incremental implementation of the municipal Land Use Scheme in the Traditional Authority Areas and former R293 Towns, the Municipality has developed a Spatial Planning and Land Use Management Bylaw consisting of streamlined applications processes and requirements in particular for Traditional Authority Areas (Schedule 5B of the SPLUM Bylaw). This also includes less applications fees as compares to the application fees for Empangeni and Richards Bay Towns. On average, 2 of 6 applications received by the Municipality on a monthly basis are from Traditional Authority Areas.

The preparation of the single Land Use Scheme is regarded as an incremental process of the Municipality which intends to encourage and assist citizens, investors and developers to apply and obtain business rights or any other intended rights which protects their investments.

The following zoning categories in the uMhlathuze LUS and the uMhlathuze SDF are expanded herewith, i.e. environmental, residential and agricultural.

12.1.1 Zone Category: Environmental

The SDF indicates the following environmental type areas/categories, i.e. Forestry, Conservation/Tourism Assets, Water Bodies and Environmental Management. In the uMhlathuze Land Use Scheme, the environmental zone category is expanded upon and the LUS has land use zones for:

Environmental services (Conservation):
A zone that provides part of the sustainable open space system which includes independent or linked space areas, and permits only limited and specific developments.

Nature Reserves:
A zone that is intended to demarcate formally managed public and private Conservation areas, such as Nature Reserves and Amenity Reserves. Includes Nature Reserves as proclaimed in terms of the National Environmental Management: Protected Areas Act.

Active Open Space:
A zone that provides for sporting and recreational needs and permits a limited range of associated development and parking space.

Passive Open Space:
To provide land for the sustainable open space system consisting of isolated and linked open space areas as part of a sustainable open space system and the municipality's environmental services.

Sea Shore:
A zone that provides for the management and development of the land along the coast located within the low and high water mark, with due regard to the requirements of the Integrated Coastal Management Act, Act No. 24 of 2008.

Dam:
A zone that provides for dams that are used for water supply and/or recreational purposes. Use of the water body requires permission from the Department of Water and Sanitation.

Environmental Nature and Culture-based Tourism:
A zone that is intended to manage the development of land and buildings for eco-tourism and nature-based tourism development. The main focus on accommodation in the form of lodges, conference facilities, caravan and tented accommodation and eco-educational facilities; outdoor recreation and participatory travel experience, to both natural as well as to cultural environments, that contribute to the sustainable use of these environments, respect the integrity of the host communities, and which produce economic opportunities that contribute to the long-term Conservation of the resource base, and reinforce the concept that Conservation can bring meaningful benefits.

The listed zones for the environmental land use category respond to the essence of the SDF in respect of the environment. The importance of maintaining environmental linkages/corridors is emphasised as well as the need to protect legally proclaimed nature reserves and coastal areas. Very importantly, the LUS is providing for recreational activities in certain environmental zones that can be beneficial to residents as well as the environment. A synergy between tourism and the environment, again for the benefit of the environment and land users, is also fostered in the environmental nature and culture-based tourism zone. From the above, a balance between environmental conservation and controlled development in sensitive areas can be achieved.

12.1.2 Zone Category: Residential

The SDF indicates the following areas/categories relevant to residential, i.e. Nodes, Expansion Areas, Formal Urban Areas, Densely Settled Non-Urban Areas (Peri-Urban) and Traditional Authority Areas. In the uMhlathuze Land Use Scheme, the residential zone category is expanded upon and the LUS has land use zones for:

Residential Only Detached:
This zone is intended to promote the development of primarily detached dwelling units, limited to not more than 2 dwellings, and where a limited number of compatible ancillary uses, which have a non-disruptive impact on a neighbourhood amenity, may be allowed.

Residential Only Medium Density:
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.

Residential Only High Density:
This zone is intended to promote the development of multi-unit residential units for a wide range of residential accommodation at a high density, together with a mix of activities to cater for broader community needs.

Residential Medium Impact:
A zone that contains a high incidence of residential land uses with an increasing number of appropriate ancillary land uses to satisfy local demands and convenience, and excludes industrial and trade uses. The residential density may increase. This is essentially a buffer zone where change of use is permitted with preservation of the existing format.

Residential High Impact:
A zone that contains all types of residential development and provides a wide range of services and activities, but excludes industrial and trade uses. The residential density may increase. This is essentially an interface zone where change is permitted with construction of low-rise residential type buildings.

Waterfront Residential:
A residential estate-type development that has direct access to a waterfront.

Residential Estate:
A large mixed use zone that makes provision for the development of an aesthetically pleasing residential estate, providing a mix of residential and recreational options, and sometimes limited educational and commercial options for the convenience of the residents, located with a secure gated environment.

Imizi/Rural/Transitional Settlement:
This land use is used primarily for residential purposes either on freehold or communal basis, and includes associated land uses that support livelihoods. This may include low-cost housing provided by government either as new development or as in-situ upgrades. Provides for land used for low intensity and small scale agricultural practices in association with other related uses in Traditional Authority

areas, and may include market gardening, wood lots, the production of small areas of crops such as sugar cane and livestock.

Small Holdings:
This zone is intended to contain small holdings and set aside land for both low density housing and related urban scale agriculture.

Small Scale Informal Settlements:
A zone that demarcates areas that have been settled and may require urgent land use interventions to address environmental impacts; service provision and residential development:

- Increased density (e.g. 0.5 du/ha)
- Areas of extent, at least a radius of 500m
- Some facilities such as a school, shop/spaza.

Medium Scale Informal Settlements:
A zone that demarcates areas that have been informally and may require urgent land use interventions to address environmental impacts; service provision and residential development:

- Increased density (e.g. 1.0 du/ha)
- Areas of extent, at least a radius of 1000m
- Some facilities such as a school, shop/spaza, Thusong Centre.

Large Scale Settlements:
A zone that demarcates areas that have some level of formal layout:

- Increased density (e.g. 0.5 du/ha)
- Areas of extent, at least a radius of 2000m
- Some facilities such as a school, shop/spaza, Thusong Centre, Taxi Rank, Market Place.

Rapid Urbanization Management Area:
A zone that is intended to manage informal settlements adjacent to or near to formal areas, usually identified for future “upgrading”.

Hotel:
A zone that makes provision for holiday accommodation, including a licensed hotel, and includes a range of related facilities such as conference centre, recreational facilities, shop and laundromat for the exclusive use of guests, public lounge, restaurant and bar areas.

Resort 1:
A zone intended to promote the development of tourism associated residential units in conjunction with recreation and other resort facilities.

Resort 2:
A zone for the purposes of tourism facilities such as Bed and Breakfast, small scale chalet complexes, camping and caravan facilities, cottage industries and art and craft outlets expressly in former R293 Townships and Agri-villages.

Harbour Resort:
The provision of land for mixed-use harbour resort purposes.

The listed zones for the residential land use category are supporting the incremental planning approach. Provision is made for detached residential with the provision of more than one dwelling thereby supporting densification. A range of minimum property sizes that reflects the reality on the ground is also provided for. In addition, a range of higher impact residential development options are available and in particular these are relevant to the various human settlement processes of the Municipality, notably in the municipal restructuring zones. In support of attracting economic development, including tourism, zonings to accommodate a range of resort type development is provided. It is further critical that mixed uses along development corridors are provided for as such areas are Priority Development Areas in the Municipality.

12.1.3 Zone Category: Agriculture

The SDF indicates the following areas/categories relevant to agriculture, i.e. Agriculture High Potential and Commercial Farmland and Traditional Authority Areas. In the uMhlathuze Land Use Scheme, the agricultural zone category is expanded upon and the LUS has land use zones for:

Agriculture 1:
A zone that provides for land and buildings where the primary activity is both intensive and extensive agricultural production of crops, livestock or products.

Agriculture 2:
A zone that provides for land used for low intensity and small scale agricultural practises in association with other related uses in Traditional Authority Areas, and may include market gardening, wood lots, the production of small areas of crops such as sugar cane and livestock.

Restricted Agriculture:
A zone that restricts intensive agriculture and cropping, so that it retains a level of natural vegetation.

Special Agriculture:
A zone that provides for farming that comprises a substantial number of physical developments/buildings such as greenhouses, poultry farming, windfarms etc.

Urban Agriculture:
A zone that provides for land located in urban areas for agricultural purposes, utilized for small scale agricultural production, market gardening, horticulture, aquaponics and community gardens.

Forestry:
A zone that provides for land used or authorised for the growing of trees with the valid permission of Department of Water and Sanitation and the Department of Environment, Forestry and Fisheries.

The listed zones for the agricultural land use category are supporting agriculture in a variety of ways. Agriculture is provided for subsistence purposes, in harmony with the environment and also for more commercial purposes. In line with more efficient practises and greener economies, consideration has also been given to greenhouses and windfarms on agricultural land. The very importance of urban agriculture is also elevated by way of appropriate zoning provisions in the LUS.

12.1.4 Zone Category: Mixed Use

Core Mixed Use:
This is a zone intended to provide for the use of retail, personal services, entertainment, offices, residential, public facilities and related commercial uses at high intensities that normally comprise a town centre and activity corridor.

Medium Impact Mixed Use:
This zone is intended to provide for a range of retail, office and service industrial uses at key interceptor locations, along activity corridors and within residential areas.

Low Impact Mixed Use:
This zone is intended to provide for a range of low-key retail, office and service industrial uses at key interceptor locations, along activity corridors.

Office (1&2):
This zone is intended to accommodate areas designed primarily for office development in different forms and various appropriate locations.

Business Park:
This zone is a mixed-used zone that permits a range of office uses which are generally compatible with each other, as well as adjacent sensitive zones, such as residential, commercial, mixed use, and open space zones. These areas are typically described as office business parks and involve large campus-like developments in prestigious landscaped settings.

Fuel Filling Station:
This zone permits activities such as service station, public garage, and a restricted amount of space devoted to restaurants, shops and related services.

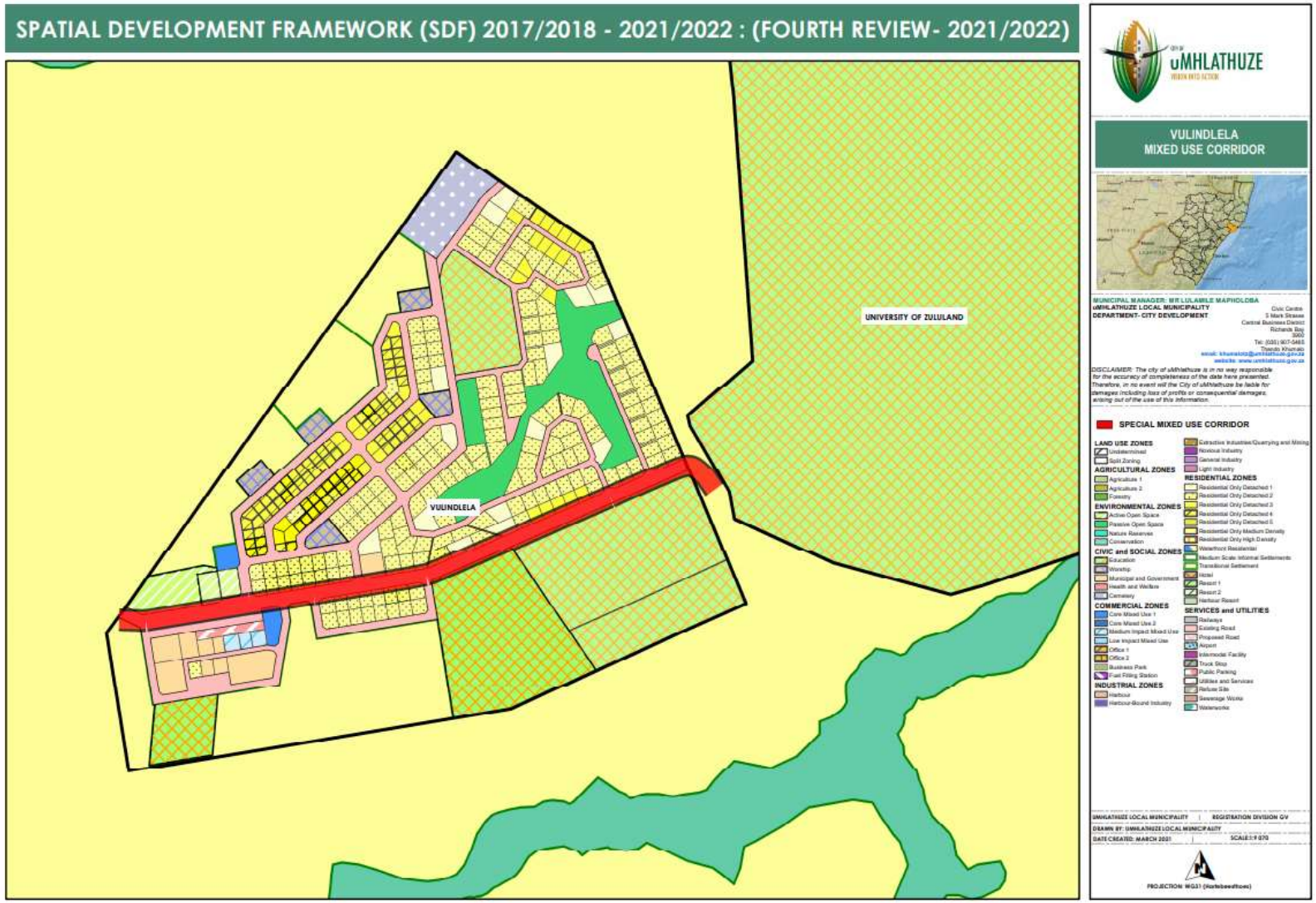
Logistics:
Warehousing of material considered non-noxious or non-hazardous are permitted in buildings in this zone. Transportation, transhipment and related uses are permitted. Outdoor storage, as both an independent and an ancillary use, may be permitted in this zone, subject to certain restrictions involving the amount of areas permitted on a lot. Office uses, retail stores and certain eating establishments will be permitted in this zone with certain conditions

Special Mixed Use:
This zone is intended to provide for a range of low-key retail, office and service industrial uses which are compatible ancillary uses, which have a non-disruptive impact on a neighbourhood amenity, may be allowed at the discretions of Council, along activity corridors within residential areas in the Dumisani Makhaye Village; Esikhaleni; Vulindlela; Nseleni and Ngwelezane Townships.

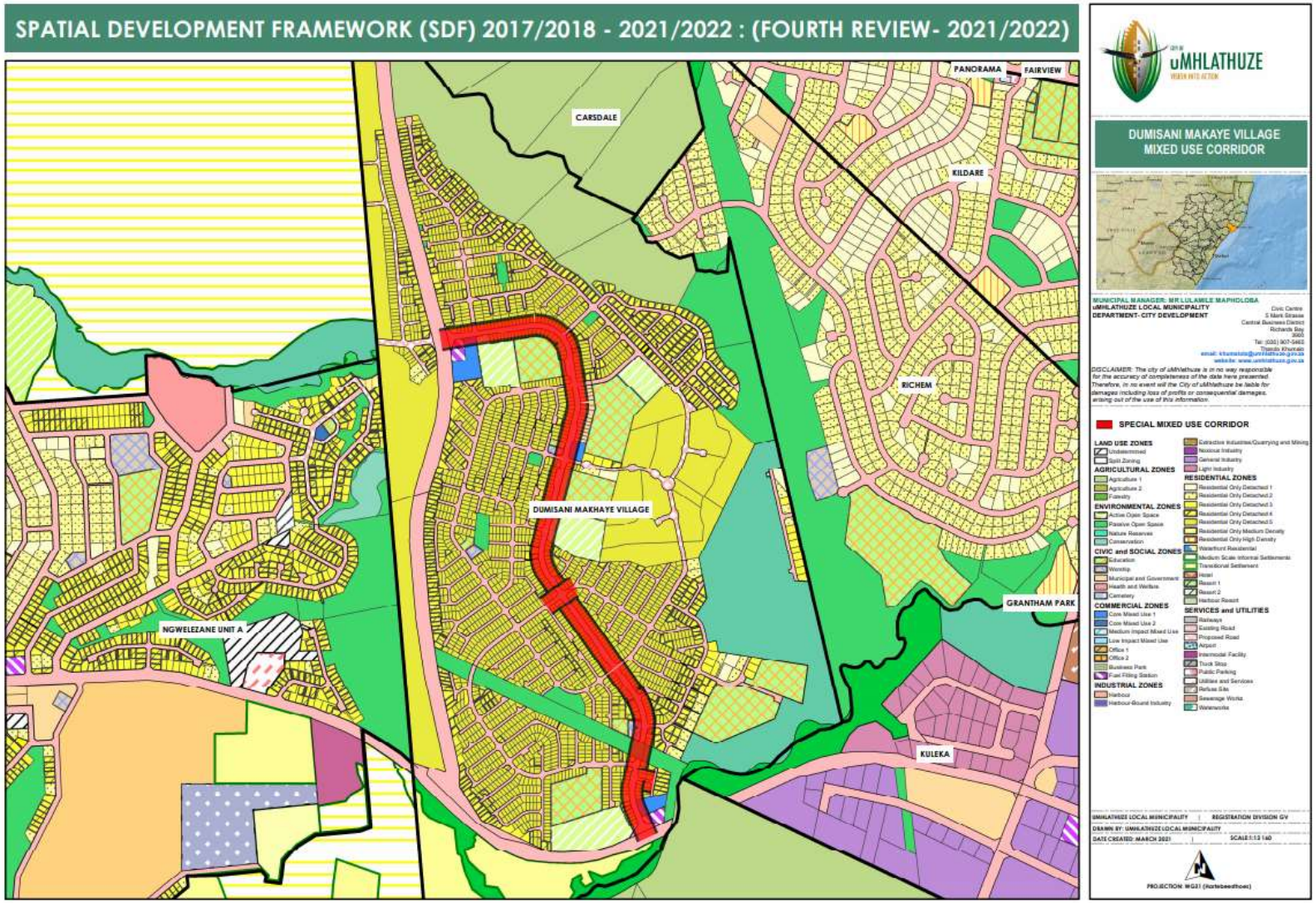
The listed zones for the mixed use land use category are supporting the incremental planning approach and socio-economic spatial transformation of the Municipality. Provision is made for the use of retail, personal services, entertainment, offices, residential, public facilities and related commercial uses at high to low intensities. In addition, a range of higher to low impact mixed use development options are available and in particular these are relevant to the various human settlement processes of the Municipality, notably in the municipal restructuring zones, agri-villages, Traditional Authority Areas and former Townships. In support of attracting economic development, including rural and township economy, zonings to accommodate a range of mixed use type development is provided for by way of a very informal procedural system, shortened land use procedures and low or no applications fees. the process assists the Municipality to keep records of all development applications to ensure bulk infrastructure requirements can be met. It is further critical that mixed uses along development corridors are provided for as such areas are Priority Development Areas in the Municipality.

As per the following series of maps, it can be seen that the municipal Land Use Scheme has identified such mixed use zones in Vulindlela, DMV, eSikhaleni, Ngwelezane and Nseleni.

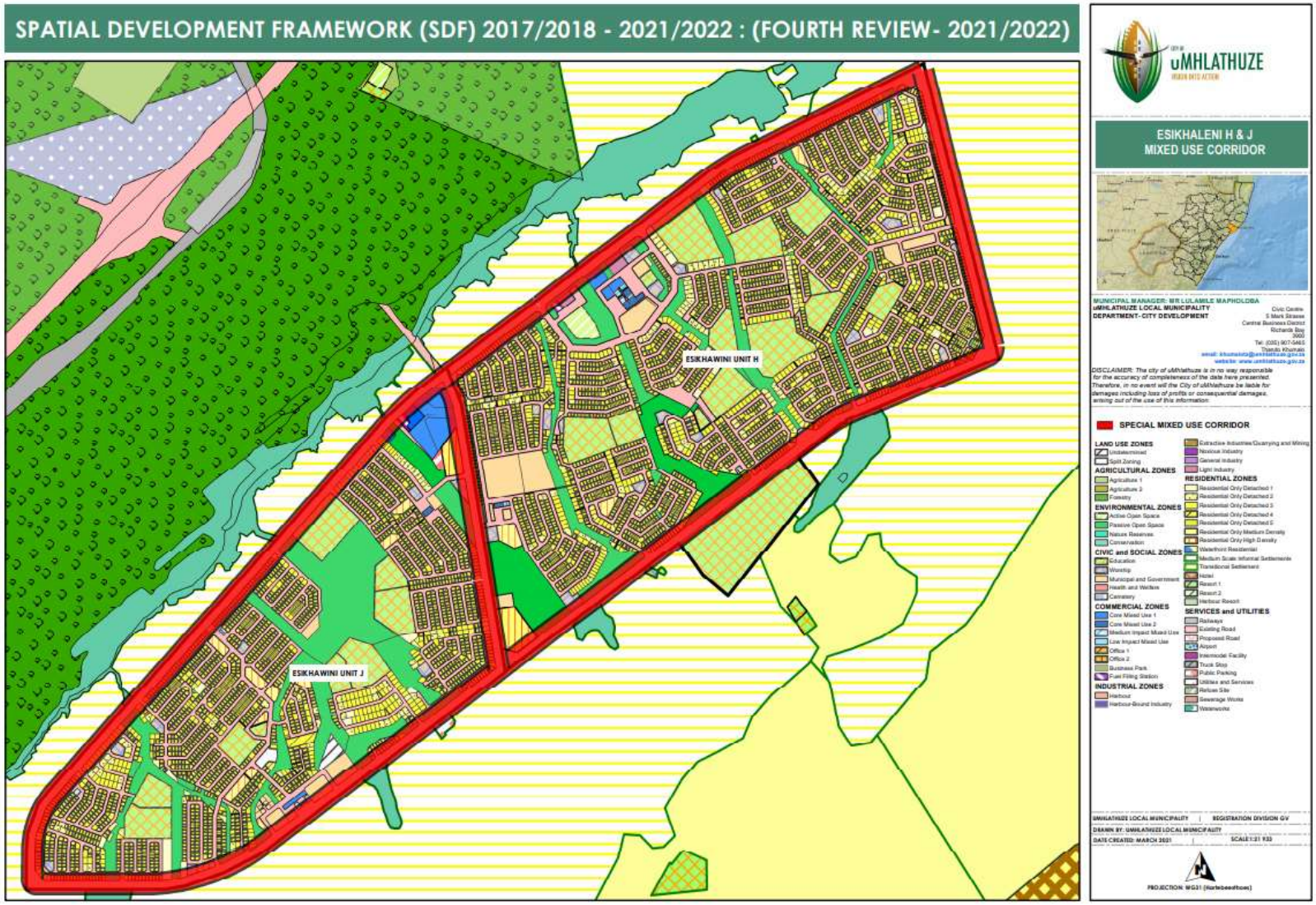
Map 56: Vulindlela Special Mixed Use Corridor



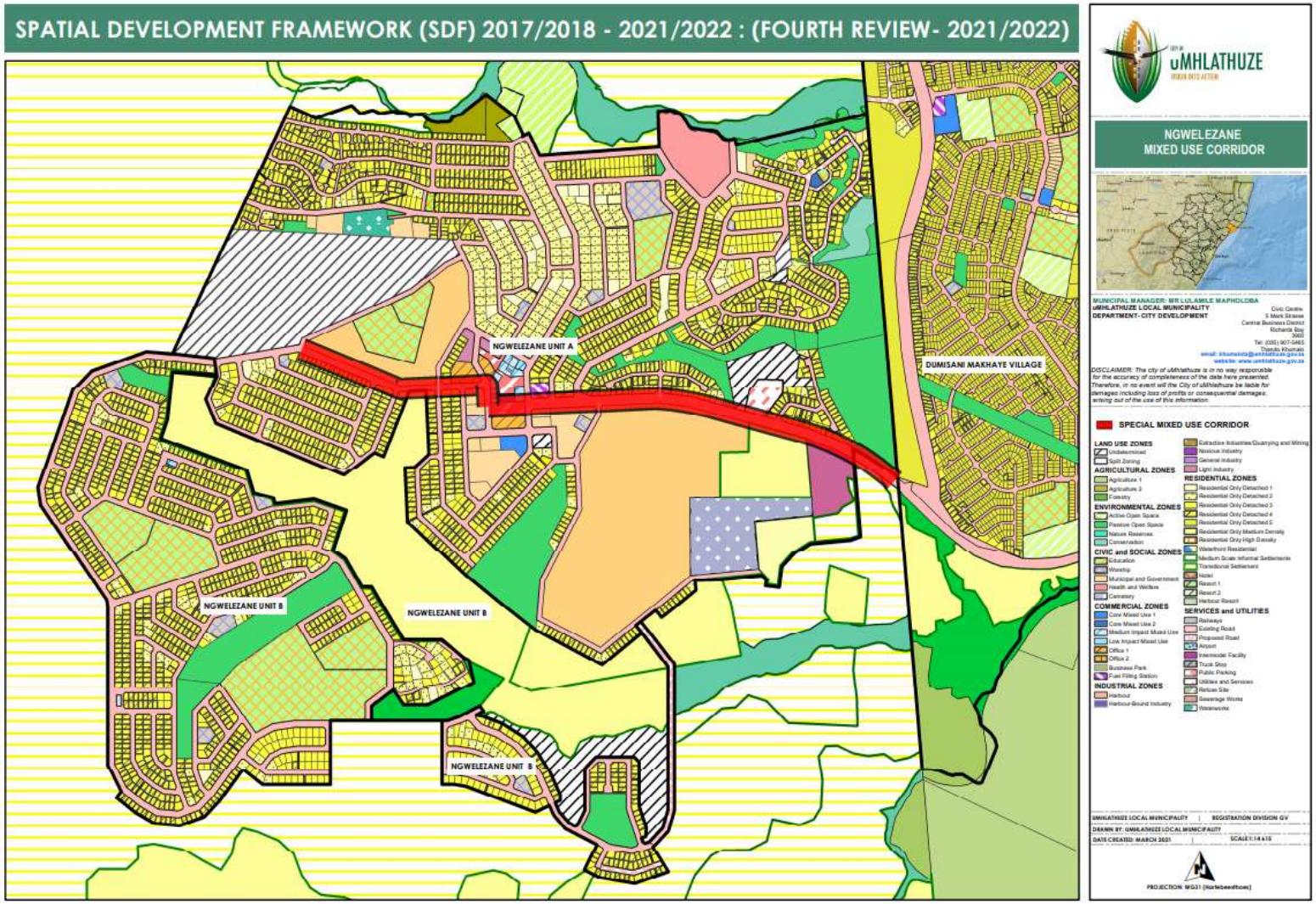
Map 57: DMV Special Mixed Use Corridor



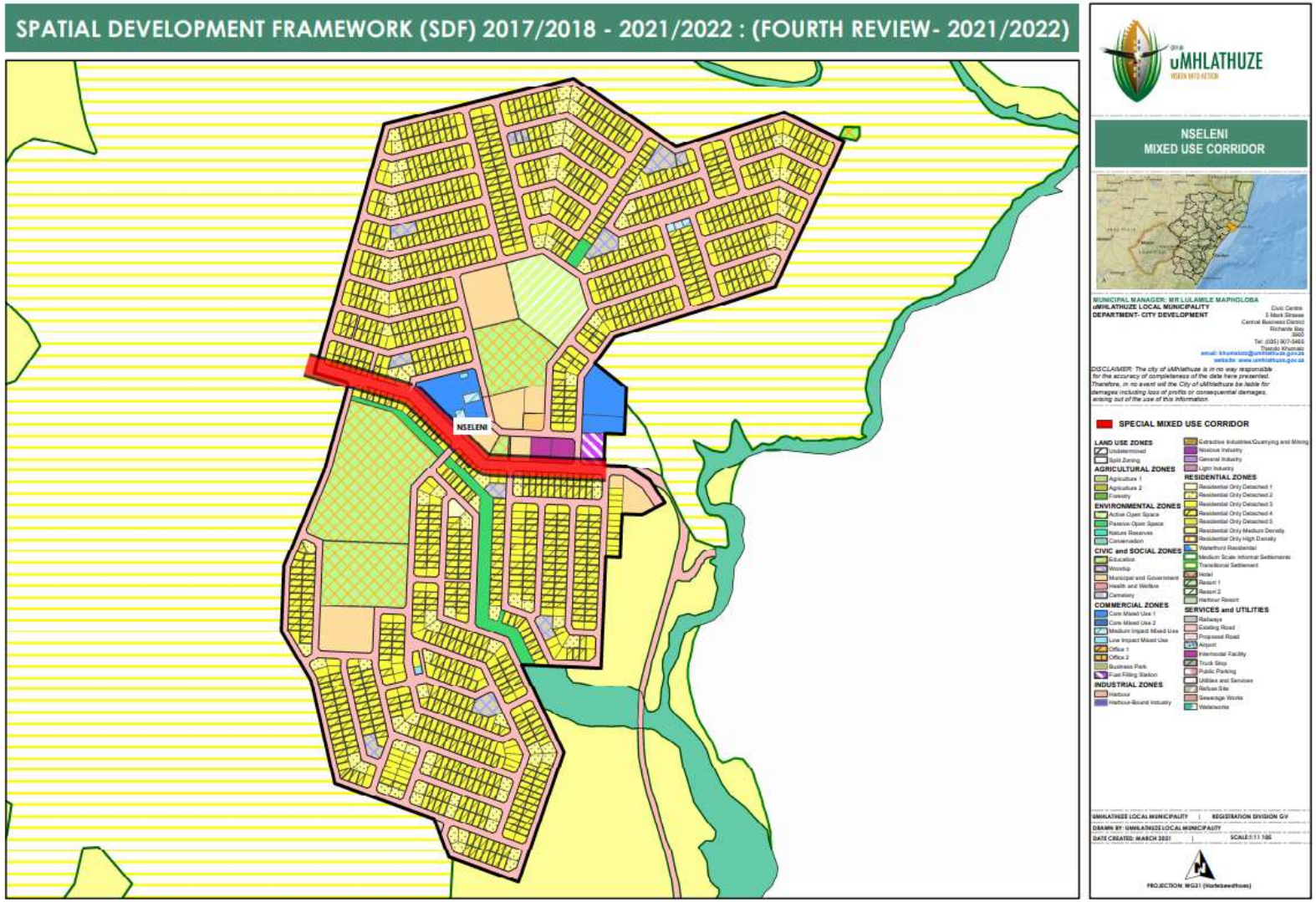
Map 58: eSikhaleni Special Mixed Use Corridor



Map 59: Ngwelezane Special Mixed Use Corridor



Map 60: Nseleni Special Mixed Use Corridor



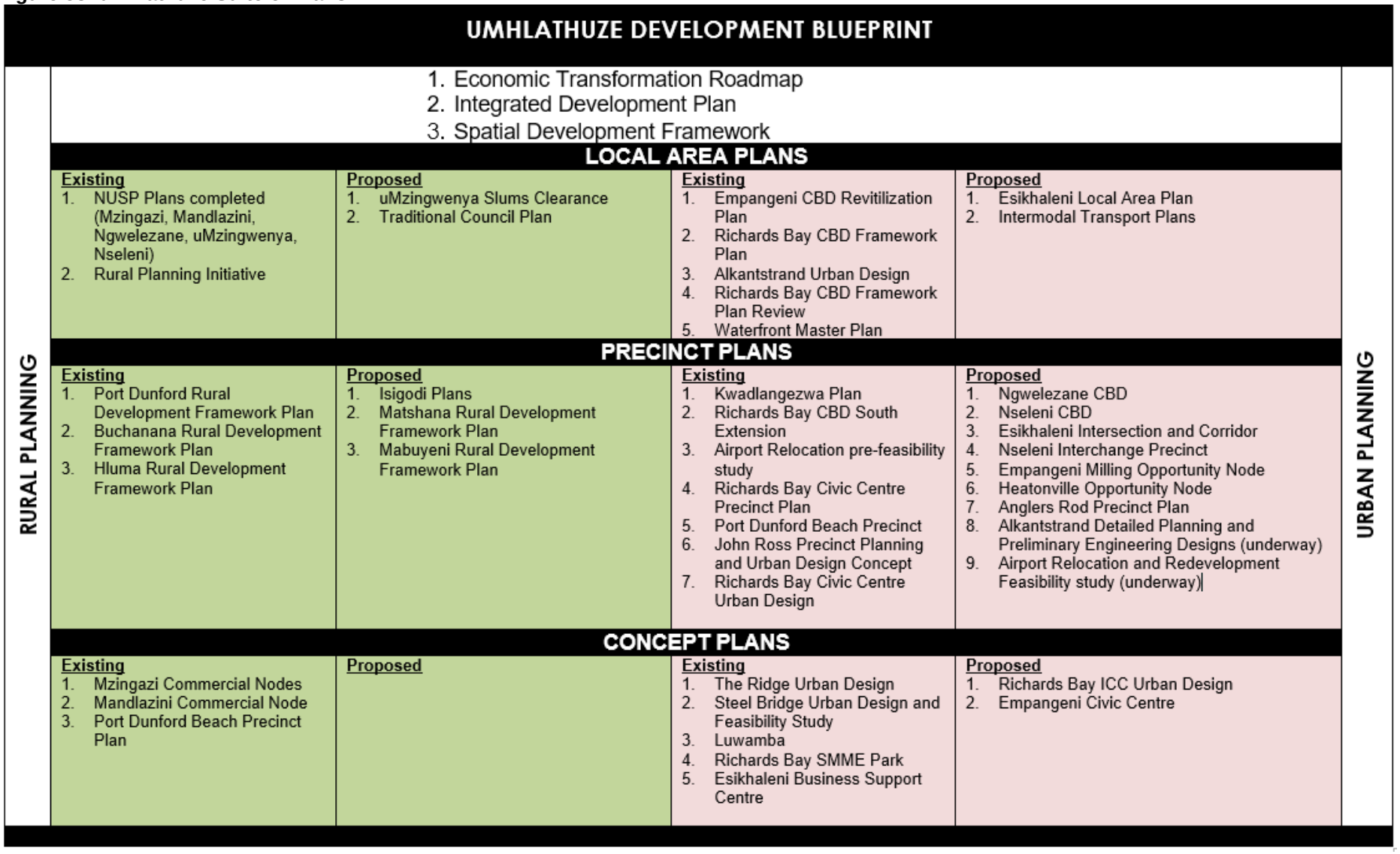
12.2 UMHLATHUZE SUITE OF PLANS

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.

Where additional and more detailed land use management, beyond that stipulated in the Scheme and Map/s is required, Management Overlays and Management Plans are applied/used. The Management Overlay identifies the boundary of the area or precinct for which additional regulations or guidelines pertain. The Management Overlay redirects the user to the “informant” or “plan” that contains the additional information and this is a parallel or coordinating plan. The Management Overlay also redirects the user to the source (date) of the plan concerned.

The Municipality is in an ongoing process of preparing a “suite of plans” to bridge the gap between the SDF and the detailed land use scheme Details of the current municipal suite of plans is indicated in the following diagram:

Figure 58: uMhlathuze Suite of Plans



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 and the Esikhaleni Business Support Centre.

Figure 59: Linkage between SDF and LUF for Richards Bay CBD South Extension

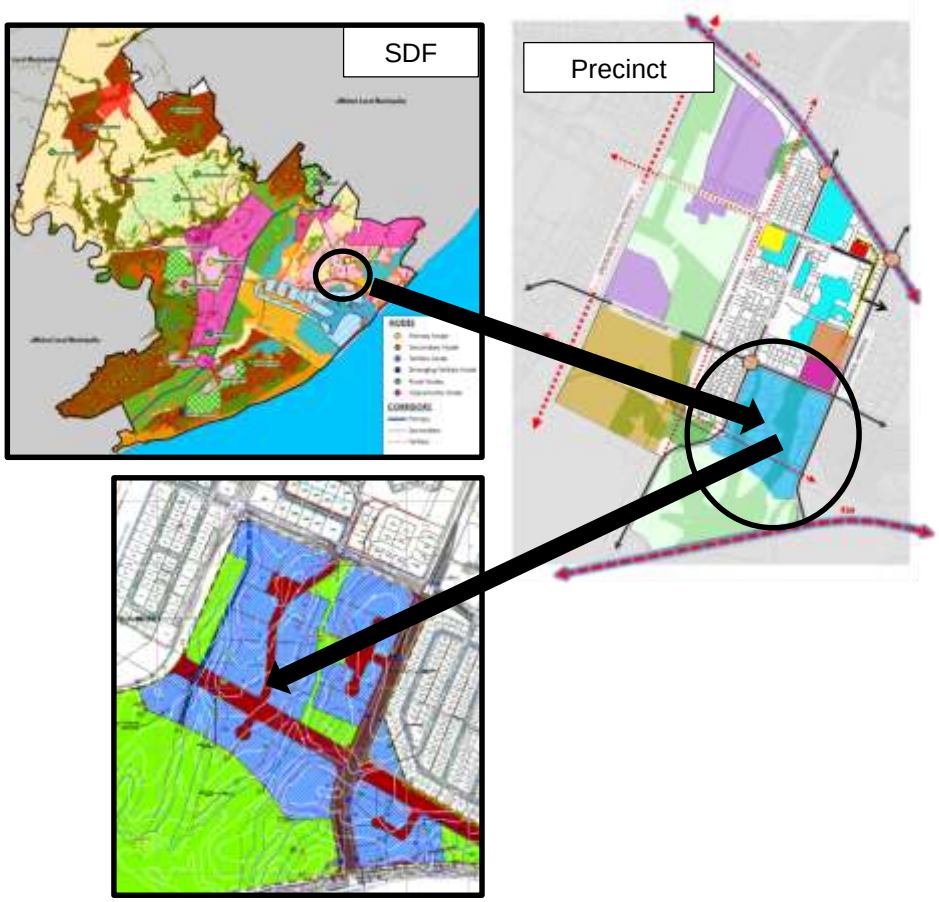
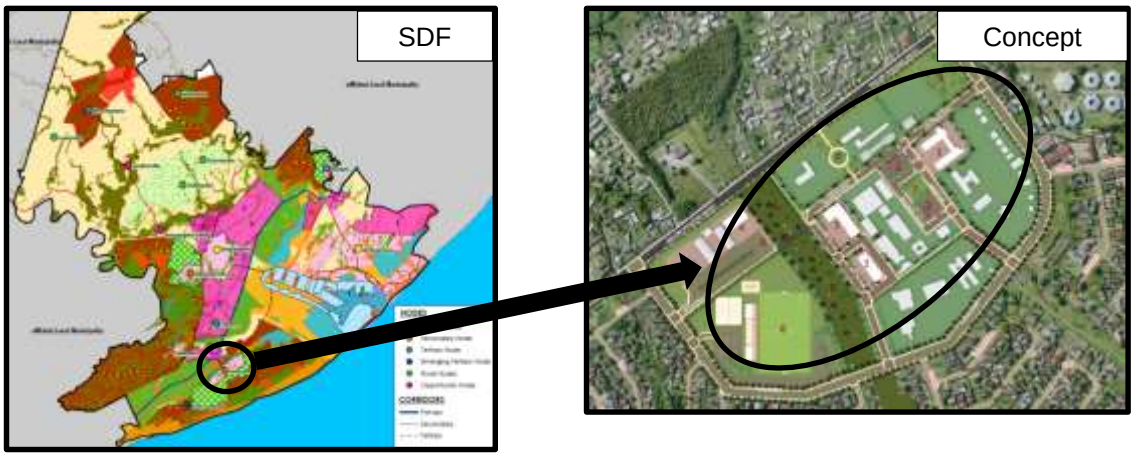


Figure 60: Linkage between SDF and LUF for Esikhaleni Business Support Centre



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.

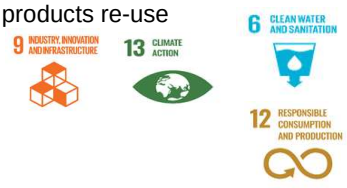
12.3 STRATEGIC AND CATALYTIC PROJECTS

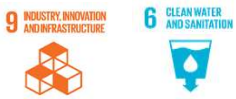
12.3.1 Catalytic Projects

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 at present as summarized hereunder. The broad alignment of these projects to the SDGs (Sustainable Development Goals) as discussed in this document is also indicated.

Table 60 : Strategic and Catalytic Projects Description and Alignment to SDGs

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 a Transaction Advisor has been appointed to undertake the Feasibility Study.
2. Waterfront Development 	The Municipality intends to develop the Waterfront Area that will delivers a space for the maritime economy, education and businesses, local and international port activities. The following is already in place: 1. An Urban Design for Alkantstrand/Newark Beach adopted by Council; and 2. A Master Plan for the extended waterfront area. A service provider has been appointed to undertaken detailed planning and prepare preliminary engineering designs for the Waterfront area.
3. 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 detailed planning.
4. Green Hill 	Greenhill is situated on a Portion of the Remainder of Erf 5333, Greenhill, and is 22 758 m² in extent. An Expression of Interest (EOI) for the development of a mixed use development with a health care centre as an anchor has been awarded. Documentation outstanding to conclude the lease agreement.
5. Richards Bay Multi-Modal Facility Precinct 	A number of processes have been completed and further work is underway for the development of the area from the Richards Bay Public Transport Facility, through the Central Industrial Area (CIA), to IDZ 1D in the Alton Industrial Area. Investment from public and private sources is being applied to create the precinct that has various facets, i.e. roads and bulk infrastructure, public transport facility upgrade, SMME support, commercial development as well as industrial development.
6. Expression of Interest for the Remainder of Erf 2627 	An Expression of Interest (EOI) for the development is being pursued for the future use and development of the said area.
7. Hydra Capella 132 kV 	Replacement of two oil filled cables (132kV) between CAPELLA and HYDRA substations feeding RBCT (Richards Bay Coal Terminal) in progress.

PROJECT NAME	STATUS
8. Steel Bridge (Mzingazi Bridge) 	The concept design phase for the Richards Bay Waterfront Steel bridge recommended future phases for implementation. The feasibility study has been finalised and outlined: ○ Determined the 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 initiate the next phase of detail designs, execution, procurement and construction. The next phase in the process is detailed design and implementation. A design consultant has been appointed to attend to the detailed designs.
9. Comprehensive Integrated Transport Plan (CITP) 	A Comprehensive Integrated Transport Plan (CITP) for the whole municipal area has been prepared. The CITP is a tool that links transports planning elements with related infrastructure in relation to the spatial development framework. It gives attention to measures to promote public transport, the needs of learners and people with disabilities, non-motorised transport, private transport and travel demand estimation. The CITP responds to transformative levers of the Integrated Urban Development Framework and implementation of the SDF. Given that the transport sector is a significant contributor of Greenhouse Gas emissions, the CITP (Non-motorized transport; efficient transport corridors; public transport etc.) is a key intervention area on the Municipal Climate Change Action Plan.
10. Empangeni CBD Revitalisation Plan 	Empangeni developed beyond its planned framework and there is increasing pressure for land for housing and interrelated land use components, including transport related requirements. The town suffers substantial urban decay with associated (1) deteriorating ecological infrastructure, (2) hardened urban form and building inefficiencies and (2) spatial and land use inefficiency. A suite of plans has been developed or are under implementation for more efficient transport, stormwater management, energy efficiency as well as greening and landscaping etc. The Revitalization of the Empangeni CBD has further been earmarked as a demonstration project for the implementation of the IUDF (Integrated Urban Development Framework).
11. Empangeni Mega Housing 	Housing project of 10 000 units of an IRDP (Integrated Residential Development Programme) type. Installation of services has commenced. The project has the following proposed housing typologies: - BNG & Finance Linked Individual Subsidy Programme - Social Housing - Bonded Houses - Serviced Sites - Mixed Use Residential - Medium Density Residential Cluster
12. Feasibility Study into wastewater and associated by-products re-use 	The City of uMhlathuze (CoU) seeks to secure an adequate water supply to underpin its planned growth. As such, the CoU has undertaken a comprehensive feasibility study and identified the most viable solution for dealing with wastewater and associated by-products re-use generated within the City, in accordance with Section 120 of the Municipal Finance Management Act, 56 of 2003, the Municipal PPP Regulations (1 April 2005) and the Municipal PPP Guidelines (2007). Phase 1, the Feasibility Study, has been finalised and Phase 2, the Procurement, is being initiated.

PROJECT NAME	STATUS
13. Esikhaleni Fitness Centre 	Funding support was received from the KZN Department of Sport and Recreation for the development of a fitness centre in eSikhaleni. Support was also provided for designs and Specifications. The project has three main phases and an estimated cost of R165 million. Phase 1 is under implementation, i.e. fencing, relocation of services, earthworks, main entrance, guardhouse and combo courts.
14. Desalination Plan 	Plant was developed by Department of Water Service - DWS (completed February 2017) at a 10ML/day capacity. As part of the handover, it was agreed that DWS would cover all costs relating to the plant until transferred.

The uMhlathuze Municipality has developed an Economic Recovery Plan to outline measures to assist businesses in distress as a result of the COVID-19 pandemic. Some of the initiatives/projects are summarized hereunder as they relate, and are in support of, the above catalytic/strategic projects.

1. Support to businesses in distress and new business opportunities, notably One Stop Shop SMME support by circulating relief and support information.
2. Business incubation by imparting entrepreneurial skills to young people.

- Information technology and digital economy to build a smart and safer city by enhancing operational efficiency and deliver sustainable solutions to enable economic growth.
- Land release packages to attract investment and specifically aiming at establishing partnerships.
- Supporting green economy initiatives thereby reducing greenhouse gases and creating income generation opportunities.
- Support to the tourism industry.

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

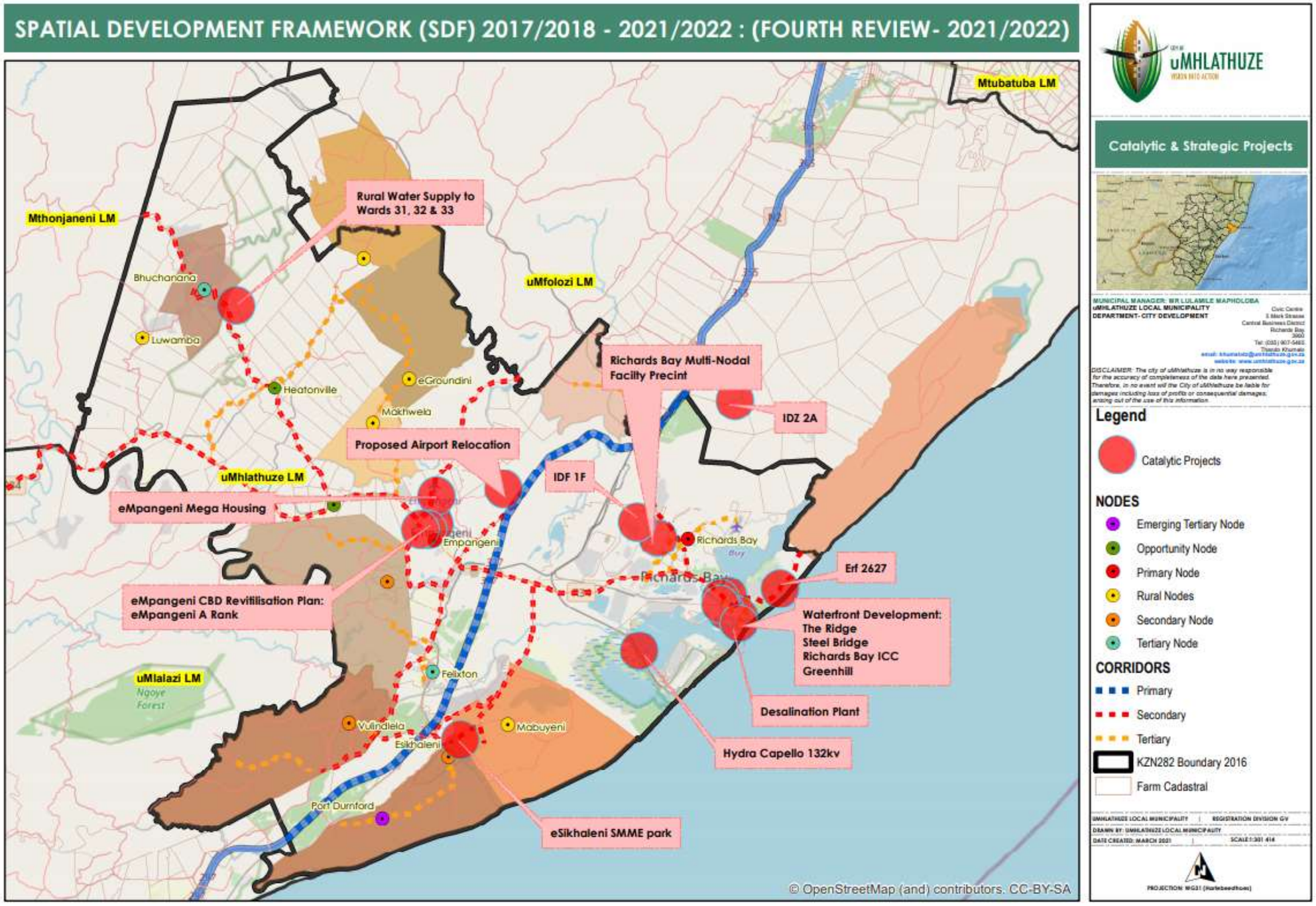
- Employment
- Sustainability
- Township Economy
- Promotion of Economy (Tourism, LED and Agriculture)
- Social Investment
- Mobility
- Significant Capital Infrastructure Investment

Table 61: 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. Waterfront Development							
3. The Ridge							
4. Green Hill							
5. Richards Bay Multi-Modal Facility Precinct							

PROJECT NAME	Employment	Sustainability	Township Economy	Promotion of Economy (Tourism, LED, Agriculture)	Social Investment	Mobility	Significant Capital Infrastructure investment
6. Expression of Interest for the Remainder of Erf 2627							
7. Hydra-Capella 132 kV							
8. Steel Bridge (Mzingazi Bridge)							
9. CITP							
10. Empangeni CBD Revitalisation Plan							
11. Empangeni Mega Housing							
12. Feasibility Study into wastewater re-use							
13. Esikhaleni Fitness Centre							
14. Desalination Plan							

Map 61: Location of Catalytic and Strategic Projects



Some projects in the catalytic Development Programme of the Municipality is implemented by way of public private partnerships; some have a focus on critical infrastructure, economic infrastructure, economic regeneration and also stimulating the economy as per the summary insets hereunder.

Public Private Partnerships as Procurement method

Richards Bay Airport Relocation & Redevelopment

- The strategic positioning of uMhlathuze has necessitated long terms plans to relocate/ upgrade the current airport and develop an Airport City
- Pre-feasibility study completed
- Transaction Advisor appointment for feasibility study has been appointed and the study is underway

Waster Water Re-use

1. Growth in water demand will exceed available yield.
2. The current total potential re-use volume for the CoU is estimated to be 79,5 Mℓ/day.
3. The site for the regional treatment works has been secured by the CoU.
4. The Environmental Impact Assessment authorisation process has commenced.
5. Status
   - Phase 1: Feasibility has been completed
   - Phase 2: Procurement has commenced.

Critical Infrastructure

132kV Hydra Capella Cable (under construction)

- Assured supply to: Richards Bay Coal Terminal (RBCT), Bidvest Tank Terminals, Engen, Coallink, Transnet National Ports Authority (TNPA)
- Value: R103 million

Economic Infrastructure

Richards Bay Multi-Modal Facility Precinct

(under construction/operational)

- IUDG Incentive Grant (approx. R80 million) accessed to construct link roads.
- Upgrade of public transport facility by Municipality and private land owner.
- Development of SMME Park (Phase1) completed
- Pooling of efforts, i.e. public transport facility upgrades, industrial area road upgrades, IDZ development (1F).

Economic Regeneration

Empangeni CBD Revitalization (demonstration project)

To attain the IUDG vision for Empangeni: *Liveable, safe, resource-efficient cities and towns that are socially integrated, economically inclusive and globally competitive, where residents actively participate in urban life.*

- Interventions by Council includes various climate proofing initiatives, investing in the public realm, public transport interventions etc.
- The Zululand Chamber of Commerce and Industry (ZCCI) is an important vehicle to champion business collaboration and endorsement of urban regeneration actions.

Stimulating the Economy

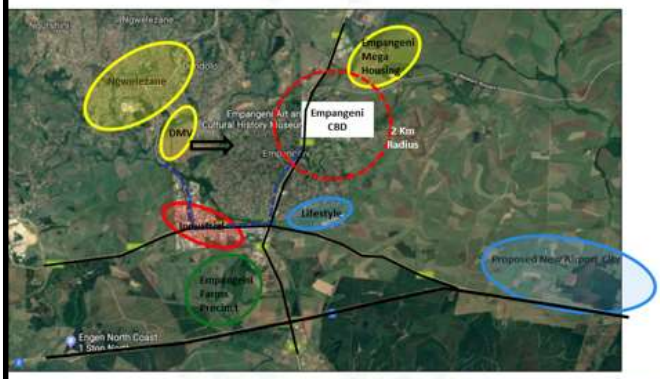
Waterfront Development

- To develop the Waterfront Area that will deliver a place for maritime industries, education and businesses, local and international port activities, as well as recreation.
- A number of interventions underway in the Greater Waterfront area:
  - Steel Bridge Redevelopment
  - The Ridge Development
  - Central waterfront development
  - Greenhill

In order to further enable catalytic project development, strategic land parcel acquisition and servicing has to be done as per inset hereunder.

Strategic Land Parcels

1. Proposed Site for Richards Bay Airport Relocation and Redevelopment
2. Proposed Development of Expansion Area B: Empangeni Farms



Strategic Land Parcels Servicing

- Apart from acquiring strategic land parcels, funding is needed to provide bulk and link infrastructure to these.
- The development of an Airport City will require significant financial to augment the suite of bulk services and more details will become known during the Feasibility Study
  - Detailed planning has been done for the development of the Richards Bay CBD South and the site has to be made ready for the market … serviced
  - The development of the Greater Richards Bay Waterfront will be guided by the detailed planning preliminary engineering designs process underway.
  - The development of the Mzingazi Commercial Node also requires bulk and link services intervention.

CITY OF uMHLATHUZE

12.3.2 Strategic Investment in the Municipal Area

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, private mining company, Rio Tinto (formerly Richards Bay Minerals), has significant development plans in the area as well. A synopsis of some of the major proposals affected the uMhlathuze Municipality in this regard is provided herewith.

12.3.3 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 potential future container capacity being planned for the Port of Richards Bay amounts to approximately 24 million TEUs pa over a period of approximately fifty years. In addition to the development of container handling facilities, 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 and the Municipality to take cognisance of such in its Spatial Development Framework.

Figure 61: Current Richards Bay Port Layout

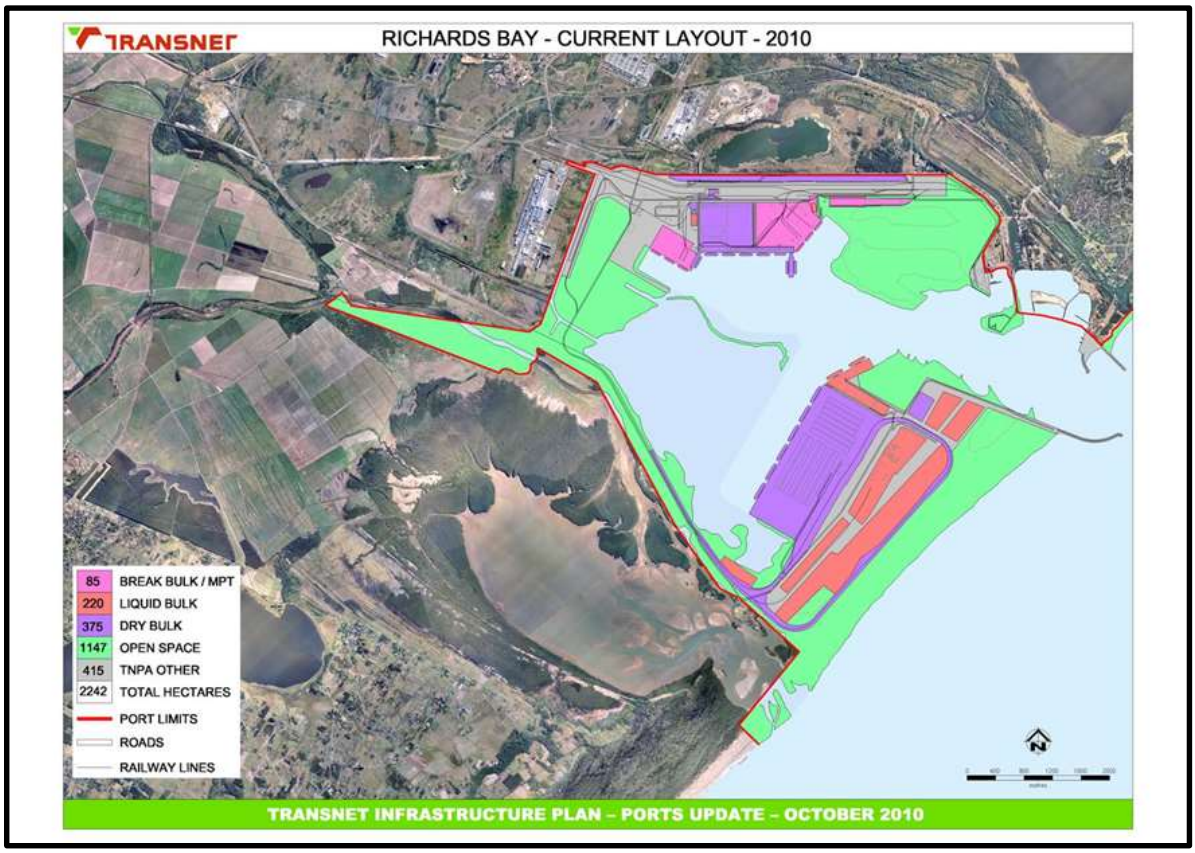
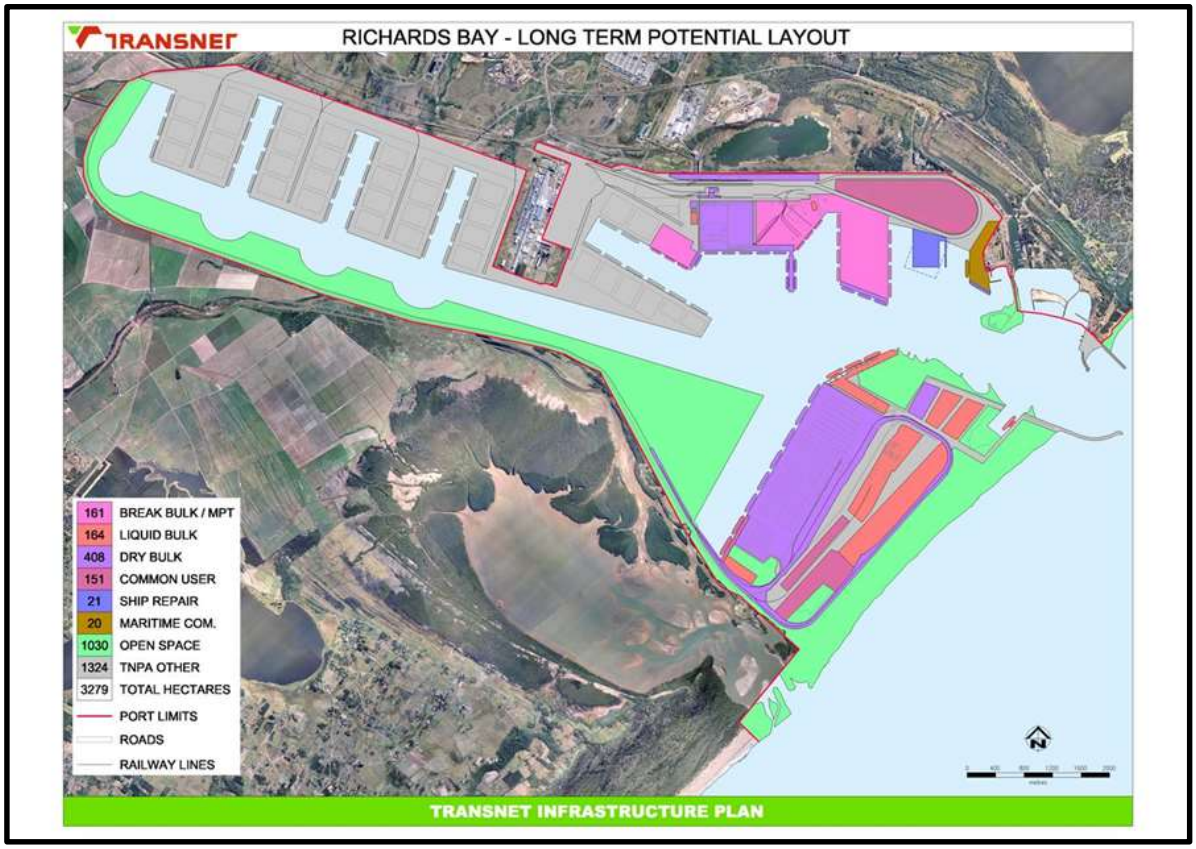


Figure 62: Long Term Potential Layout for Richards Bay Port



12.3.4 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 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: Aluminum, 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.

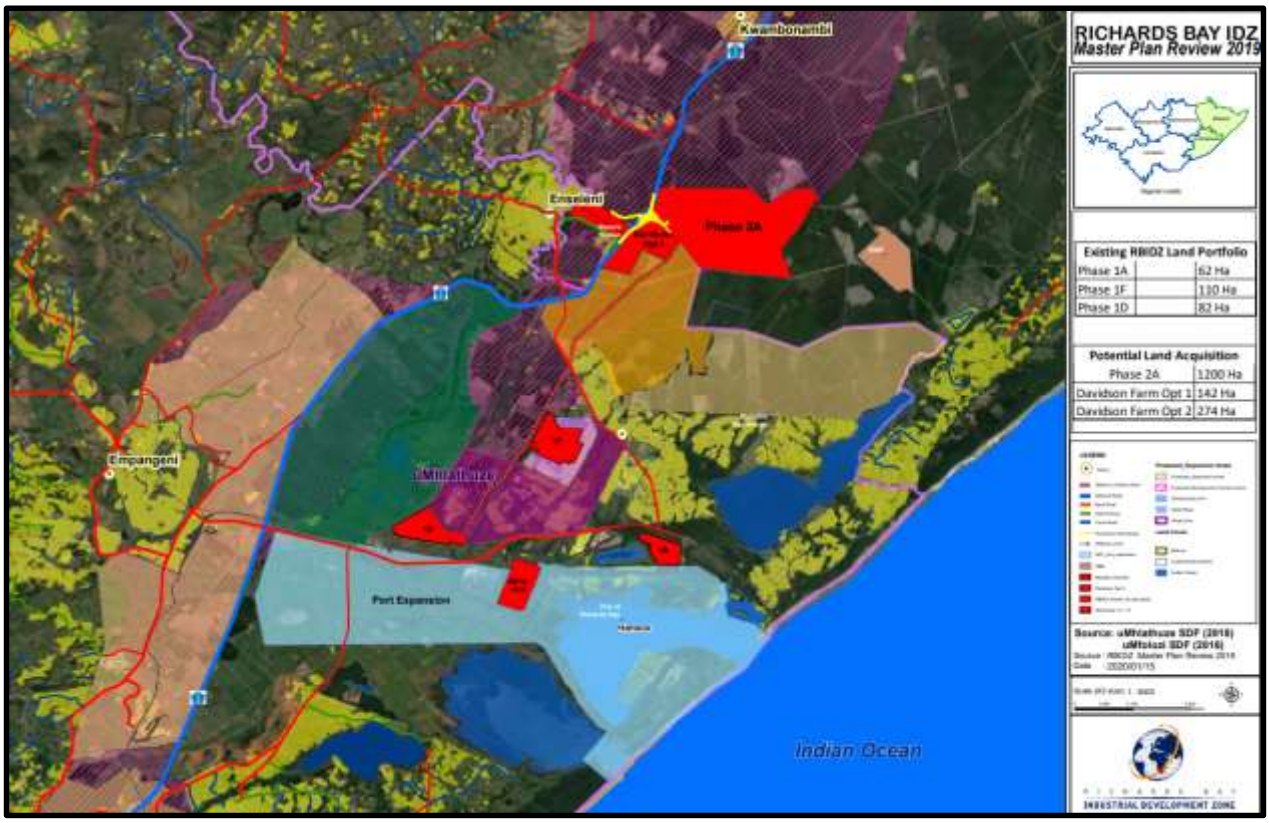
The RBIDZ (Richards Bay Industrial Development Zone) have compiled a 50 Year Master Plan and 10 Year Business Plan and is in the process of reviewing the 50 Year Master Plan:
The purpose of the above IDZ Master Plan is as follow:

- 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 player 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 identified Phase 2A as their priority intervention area beyond their existing land portfolio. The location of Phase 2A is indicted on the inset herewith:

Figure 63: IDZ 50 Year Master Plan Priority Areas



12.3.5 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.

RBM Road:
The proposed 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. This project was initiated but has not yet been implemented.

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.

12.4 CAPITAL EXPENDITURE FRAMEWORK

(Information contained in the section is informed by the current municipal CEF. The procurement process for the Review of the CEF is at an advanced stage)

A CEF (Capital Expenditure Framework) is also a core component of an SDF in terms of SPLUMA (Spatial Planning and Land Use Management Act). As such, it cannot be considered as a lone standing document but rather forms an integral part of the municipal strategic documents, i.e. SDF and IDP, and informs municipal processes, notably the budget prioritisation process. The CEF assists in spatially aligning public infrastructure investment that will lead to functional and efficient urban spaces and to ultimately unlock urban growth. The latter is in essence the fulfilment of the IUDF (Integrated Urban Development Framework).

According to the IUDF 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 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

It is the intention that a CEF to, amongst others, provide a municipality with guidance in respect of:

- Not only the rolling out new infrastructure but also focus on the management, maintenance and renewal of existing infrastructure; and
- Ensuring greater value for money for the funds spent.

In support of the above planning approach, the DORA (Division of Revenue Act) now publishes a consolidated infrastructure grant, the IUDG (Integrated Urban Development Grant) that has the following clear intentions:

- Provide funding for public investment in infrastructure for the poor;
- 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.

12.4.1 COMPONENTS OF THE CEF

The uMhlathuze Municipality finalized and adopted its first CEF during 2019. The CEF consists of the following key components that are to be discussed in more detail:

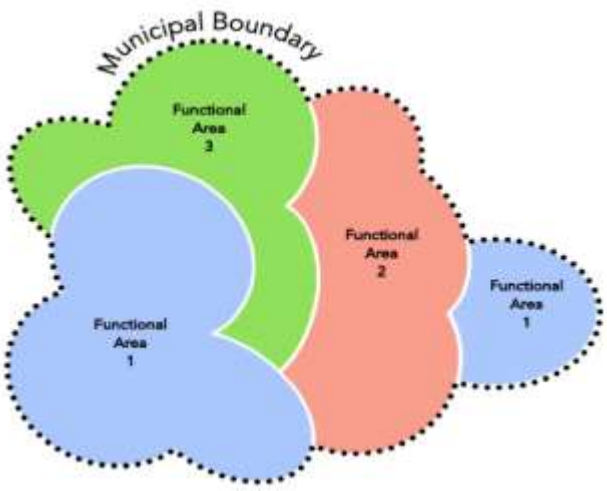
- Functional Areas and Priority Development Areas
- Demand Quantification
- Modelling Outcomes and Grant Impact Forecasts
- Planned Capital Expenditure
- Prioritisation Model and Budget Fit
- Functional Area Budget Split
- Poor versus Non-Poor Capital Expenditure Ratio
- 2019/2020 MTREF Capital Budget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

It should be noted that the preparation of the CEF is informed by the municipal spatial vision, demographic and socio-economic details as well as an array of local sector plans as prepared by the Municipality. The CEF is therefore a mechanism to bind together various plans and processes and that can be considered to be loose standing. The process for the review of the CEF has commenced.

12.4.2 FUNCTIONAL AREAS AND PRIORITY DEVELOPMENT 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. An FA is a delineated area characterized by common (homogenic) geographical, spatial, developmental and service demand conditions, where the functioning is predominantly similar. Another method of identifying different FAs is to spatially delineate areas with similar developmental challenges. Hereunder a conceptual explanation is provided of an FA.

Figure 64: Conceptual representation of FAs within a municipal boundary



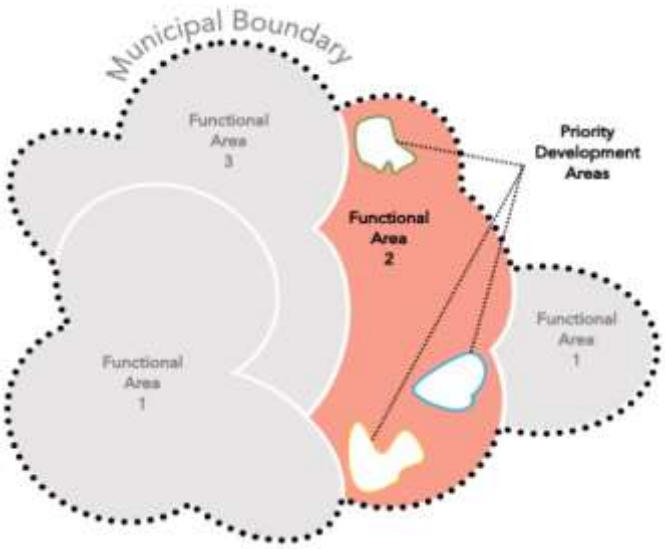
An example of an FA is to demarcate the rural part of the municipality or the Traditional Authority land as an FA because it has more or less similar attributes (i.e. low density, lack of high order services, etc.) and requires a specific development strategy that is unique to the development challenges 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 the figure, the sum of all delineated FAs is equal in coverage to that of the municipal jurisdiction boundary.

As such, 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.

Priority Development Areas (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 as indicated in the following conceptual explanation.

Figure 65: Conceptual representation of PDAs within a FA 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 traditional authority FA.

The four main FAs within the City of uMhlathuze are defined as follows:

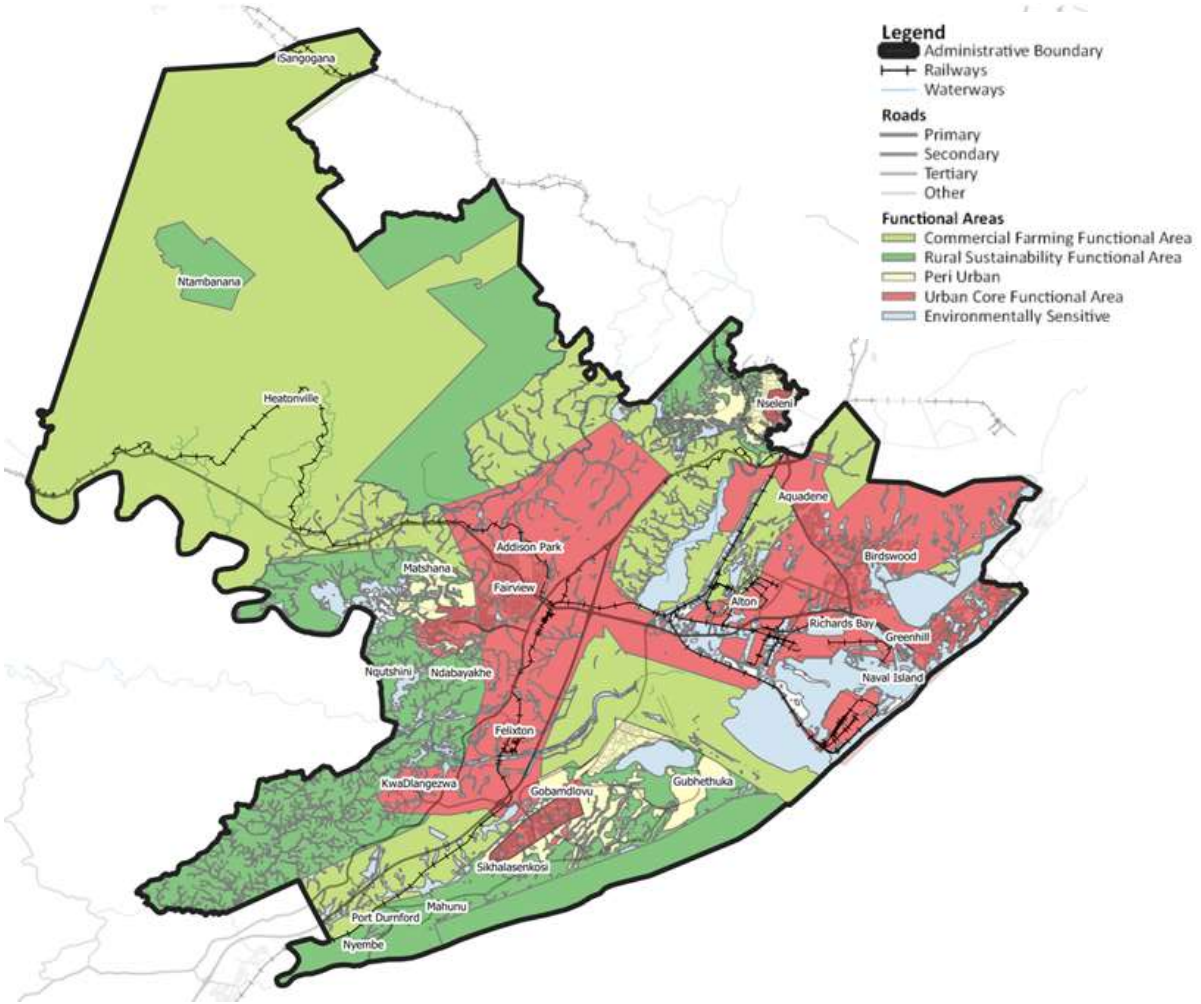
- **Urban Core**: The Urban Core Function is defined by the dominant urban characteristic of the area, boasting a variety of uses – centred around the primary economic centres of the Municipality. The key areas contained within the Urban Core consist of primarily Richards Bay and Empangeni. Additionally, given the spatial vision of the municipality, the surrounding SDF expansion areas (Area A, B, C, D, E, F, G and H) together with Esikhaleni, Vulindlela and Nseleni are also included as Urban Core Function areas.

- **Secondary Urban Improvement**: The Secondary Urban Improvement 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 bounded 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 traditional authority boundary to the far north and the urban core function to the east.

- **Rural sustainability**: 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 include Ntambanana, Mambuka, eGroundini and Makhwela.

- **Commercial farming**: 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.

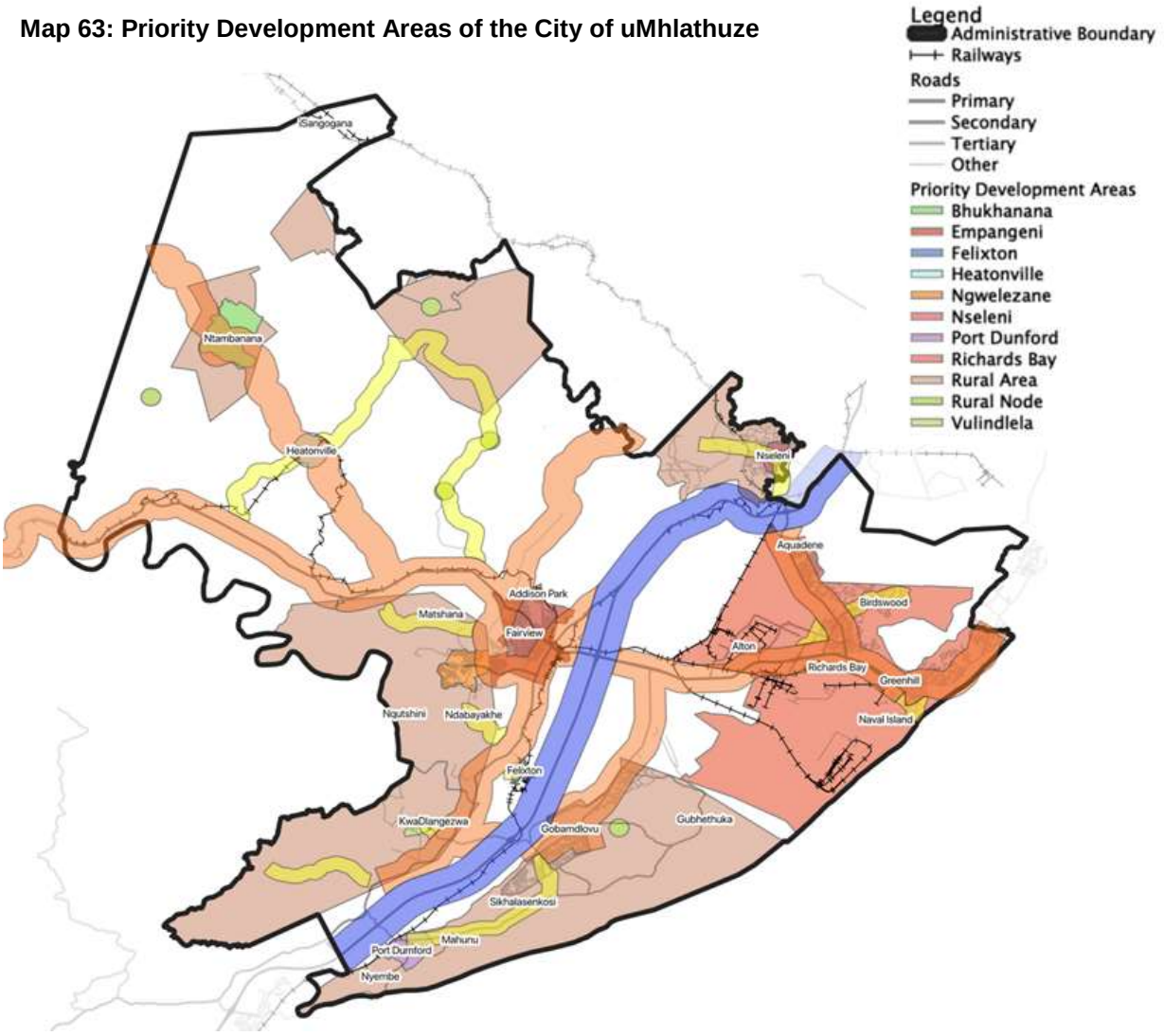
Map 62: Functional Areas of the City of uMhlathuze



The compilation of the uMhlathuze SDF is informed by an analysis of, amongst others, human activities and needs, the biophysical, the economy and the built environment. During the process, an understanding of the spatial dynamics within the municipality is developed. As such, the SDF responds to the local dynamics by way of proposing growth areas, nodes and corridors, areas to promote local economic development, tourism etc. The CEF is a response SDF proposals by directing capital investment accordingly. More specifically, the SDF components that inform the CEF, and specifically the identification of Priority Development Areas (PDAs) are:

- Settlement/Nodal hierarchy
- Natural features
- Expansion areas
- Infill and densification
- Urban development boundary
- Residential infill
- Agricultural investment
- Mining investment
- Nodes
- Corridors
- Tourism
- Informal settlement areas
- Rural development nodes
- Strategic focus areas
- Catalytic Project Areas

Map 63: Priority Development Areas of the City of uMhlathuze



12.4.3 DEMAND QUANTIFICATION

Over the past two decades, the emphasis has been on extending services to poor households. At the same time, major population shifts have occurred, through accelerated urbanization and decreased growth and even population decline in rural areas. Extending access to services is regarded as one of the following three major investment areas that require attention in order to sustain or accelerate development in any municipality:

- The first investment challenge is existing households without access to services
- The second is investment required to renew (rehabilitate and maintain) existing infrastructure
- The third is the growth in households and the economy

12.4.4 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 similar in terms of actual numbers but the challenge is that growth in traditional areas is dispersed over vast areas at very low densities.

Table 62: 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 traditional areas will increase as farming populations decrease. The implication is that the demand for infrastructure and services will grow in the traditional areas at a higher rate and that these areas will become increasingly more important in the municipality's development and service delivery strategies. In context of the above, a number of assumptions are applied.

Modelling Outcomes

Following the modelling process, the land use demand for the 2019-2028 period was determined and also the incremental capital expenditure required to provide/support in the anticipated land development over the said period. The results of both the above are provided in the following tables.

Table 63: 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

Table 64: 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 65: 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

12.4.5 PLANNED CAPITAL EXPENDITURE

Amongst others, the following sector and master plans have informed the determination of planned capital expenditure for the first uMhlathuze CEF (2019):

- 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

It should be noted that since the preparation of the CEF in 2019, a number of the above sector and master plans have been reviewed as outlined in previous sections of this report. The updated project specifics will be considered during the review of the CEF.

The capital expenditure project pipeline of the municipality includes the capital expenditure demand up to financial year 2028/2029. The current municipal capital expenditure process is based on the three-year budget cycle as per the Medium Term Expenditure Framework (MTREF). The change with the CEF is that the total capital expenditure view is based on a ten-year horizon and in the long-term this approach will result in a better understanding of capital expenditure.

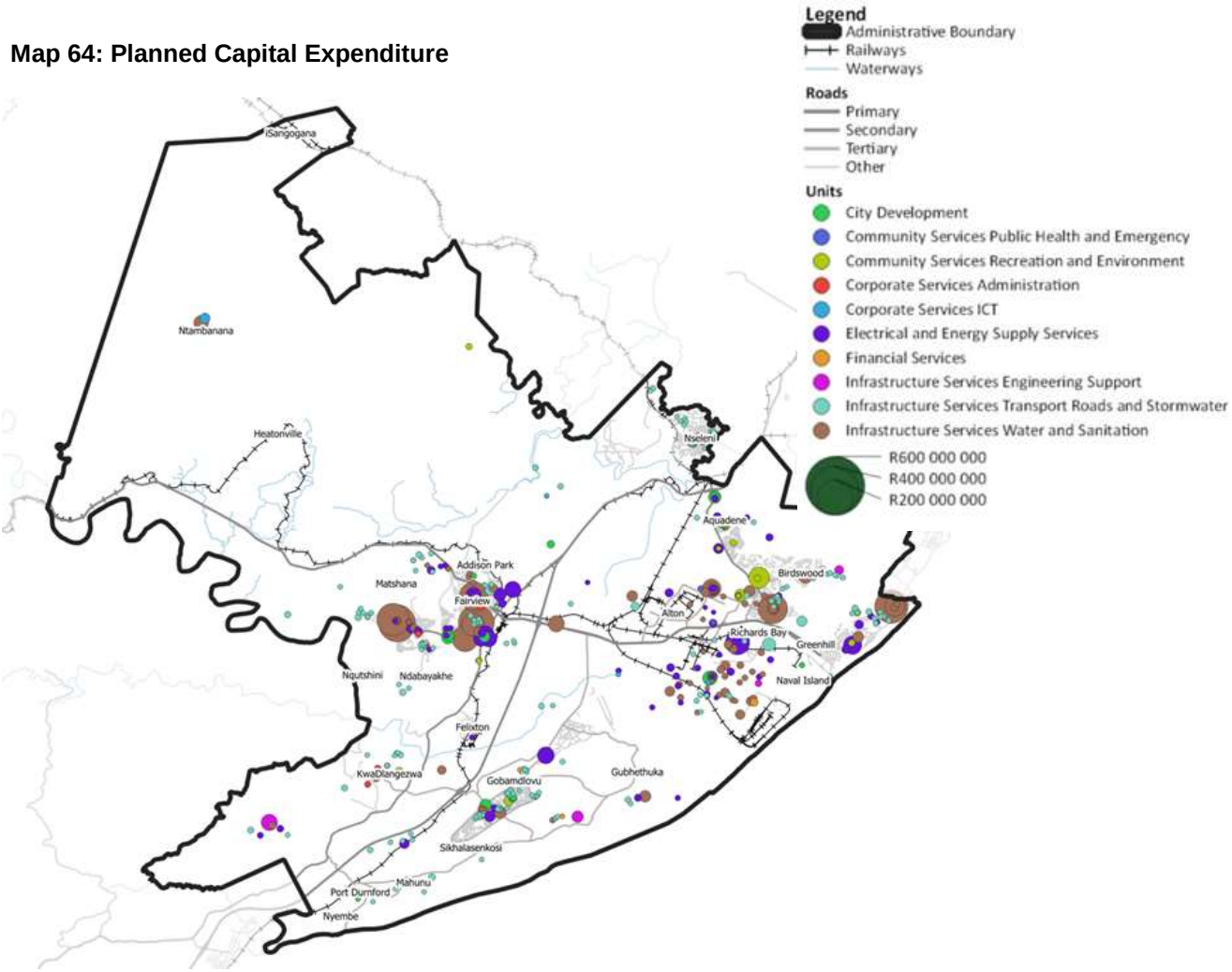
There is a slight increase in Planned Capital Expenditure within the MTREF second and third year. The Planned Capital Expenditure drops in FY 2022/2023 then increases again in FY 2024/2025, and this trend occurs again for the next three financial years as indicated in the following table. In total, the total planned capital expenditure amounts to R11 841 494 355.

Table 66: 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 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 64: Planned Capital Expenditure



12.4.6 PRIORITIZATION MODEL AND BUDGET FIT

The reality is that the municipal affordability – funding envelope, as indicated in the Long Term Financial Plan (LTFP), is less than the capital demand as indicated in the following tables:

Table 67: Planned Capital vs Funding Envelope

Year	Total Planned Capital	Funding Envelope
2019/2020	R1 823 196 907	R531 998 700
2020/2021	R1 224 439 065	R550 771 500
2021/2022	R2 465 662 841	R500 000 000
2022/2023	R818 262 746	R515 000 000
2023/2024	R638 957 000	R540 750 000
2024/2025	R1 309 178 225	R567 787 500
2025/2026	R68 100 000	R596 176 875
2026/2027	R74 300 000	R625 985 719
2027/2028	R3 419 397 570	R657 285 005
2028/2029	R-	R690 149 255
Total	**R11 841 494 355**	**R5 775 844 553**

The Long Term Financial Plan (LTFP) has provided critical input into the prioritization model and affordability envelope of the CEF. 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 and given that the CEF is informed by the SDF, the interventions as identified in the SDF are funded.

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. A further explanation is given herewith on the affordability envelope, project scoring and project status.

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. As noted, this is derived from the LTFP.

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 process, projects can be allocated a specific status based on their publication in a previous MTREF or IDP. Typical statuses include:

i. 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.

ii. 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 is status of each project, after executing of the budget fit mechanism and includes:

i. **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.

ii. **Provisioned-In:** "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.

iii. **Provisioned-in with delay**: "Provisioned-in with delay" projects are those projects which formed part of either the approved IDP capital budget or the 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 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.

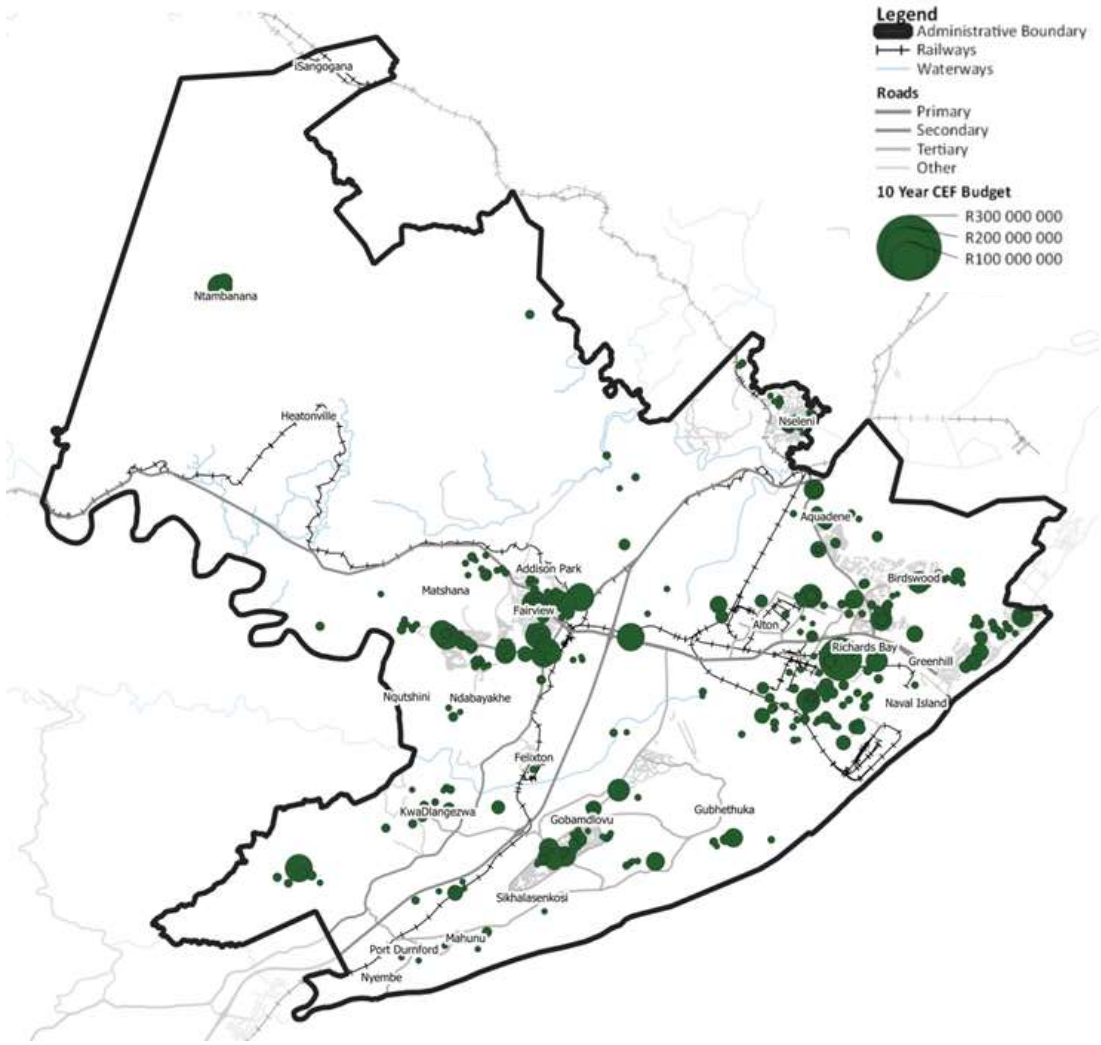
iv. **Fit**: "Fitted" projects are projects that scores highest in relation to the remaining projects to be fitted, with the provision that the budget cap total has not been exceeded.

v. **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.

vi. **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.

vii. **No Fit – Zero Budget**: This status is assigned to projects that do not request budget in the modelling period.

Map 65: 10-year Capital Expenditure Framework



12.4.7 FUNCTIONAL AREA BUDGET SPLIT

Hereunder, the draft 2019/2020–2028/2029 capital budget expressed in terms of FAs:

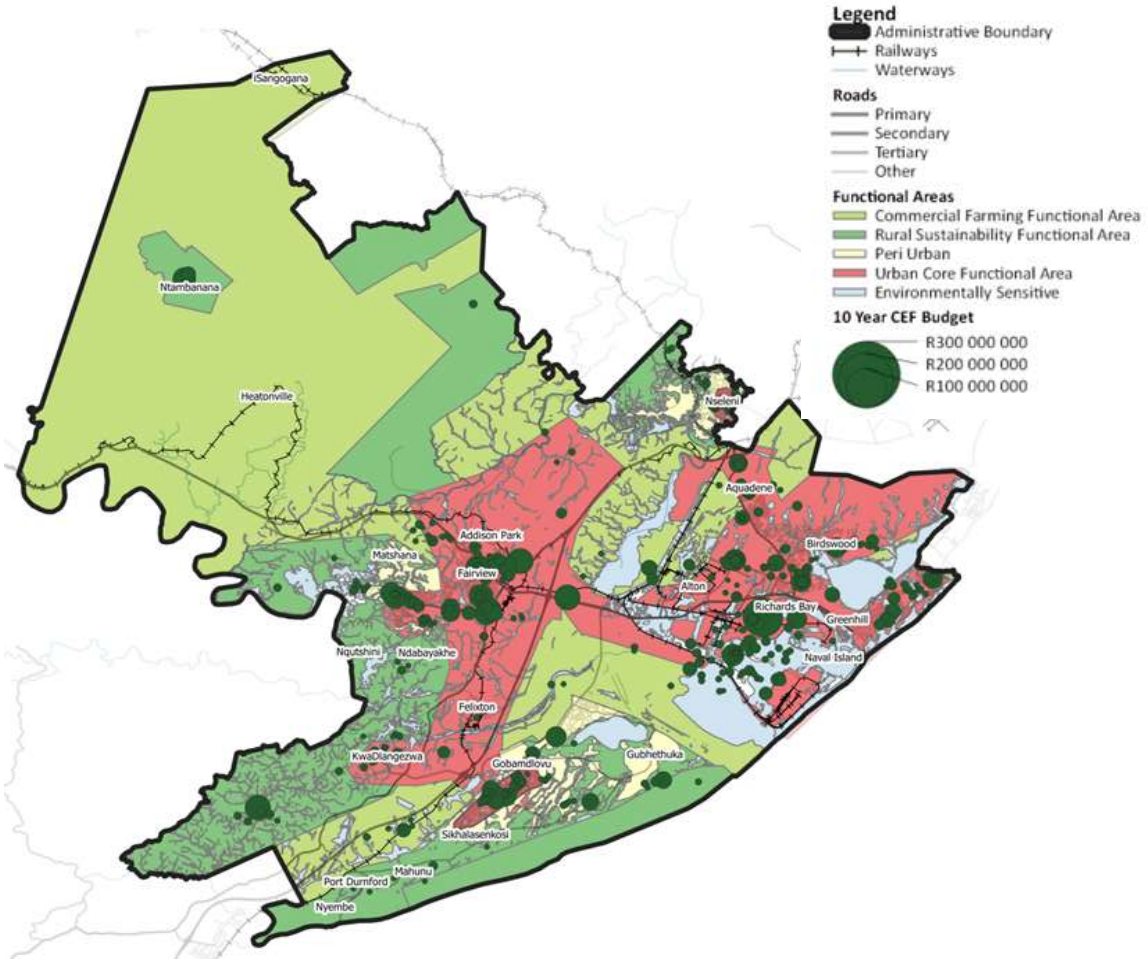
Table 68: Programme Totals per Functional Area

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 if focused on the Urban Core Functional Areas, which are areas centred around the primary economic centres of

the municipality, i.e. the primary nodes as per the SDF. 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. The Rural Sustainability Functional area includes the newly included wards post the 2016 LGE. In the Rural Sustainability functional area, the focus is to ensure that both commercial, social facilities and infrastructure are provided closer to the people.

Map 66: 10 Year CEF Budget – Functional Areas



12.4.8 POOR VS NON-POOR CAPITAL EXPENDITURE RATIO

As per the following, 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.

Map 67: 10 Year CEF Budget – Priority Development Areas

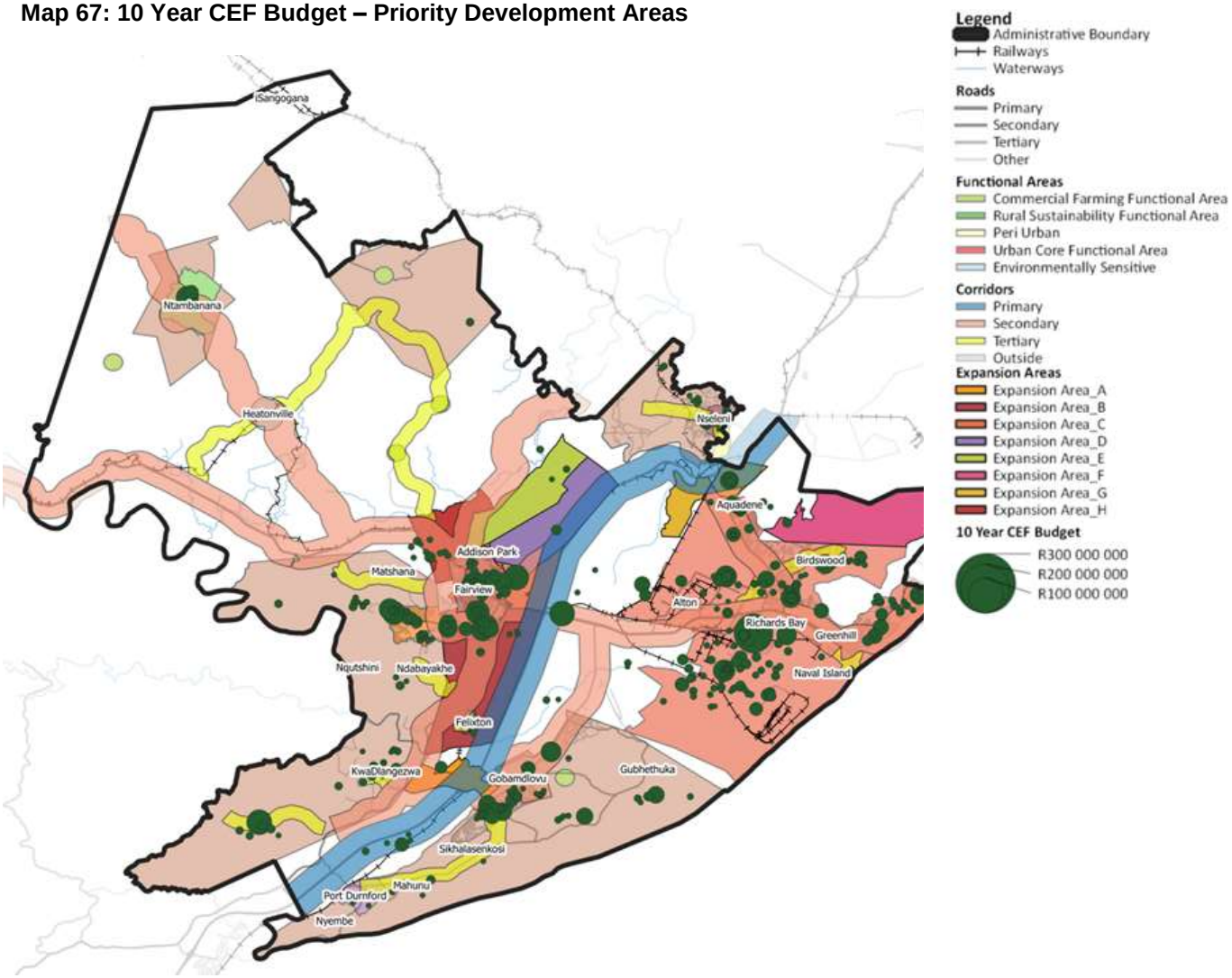


Table 69: Poor: Non Poor Capital Expenditure Ratio

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Administrative HQ	44 502 300	38 498 400	36 791 700	6 053 000	4 518 300	13 019 300
City Wide	79 865 000	147 313 000	100 342 100	132 194 713	176 218 785	82 752 815
No Intersect	6	7	9	3	2	7
Not Mapped	97 116 200	76 859 500	78 083 000	-	10 000 000	2 361 401
Non Poor	132 964 279	159 813 523	164 575 780	179 985 171	195 284 698	179 222 859
Poor	243 085 215	175 387 272	225 164 011	196 763 154	154 728 031	290 435 832
Total	597 533 000	597 871 702	604 956 600	514 996 040	540 749 816	567 792 214
Poor : Non Poor	1 : 1,8	1 : 1,1	1 : 1,4	1 : 1,1	1 : 0,8	1 : 1,6
	2025/26	**2026/27**	**2027/28**	**2028/29**	**Total**	**%**
Administrative HQ	30 000	-	16 435 000	13 971 000	173 819 000	3%
City Wide	68 534 700	58 096 100	86 037 700	35 220 000	966 574 913	16%
No Intersect	0	1	0	-	36	0%
Not Mapped	151 830 526	76 328 742	4 000 000	10 000 000	506 579 370	8%
Non Poor	222 665 227	252 457 482	254 633 315	188 482 828	1 930 085 163	32%
Poor	53 116 449	239 113 154	296 110 037	502 373 515	2 476 276 671	41%
Total	596 176 902	625 995 480	657 216 053	750 047 344	6 053 335 153	100%
Poor : Non Poor	1 : 0,7	1 : 0,9	1 : 1,2	1 : 2,7	1 : 1,3	

12.4.9 2019/2020 MTREF CAPITAL BUDGET BY DISCIPLINE-BASED SERVICES

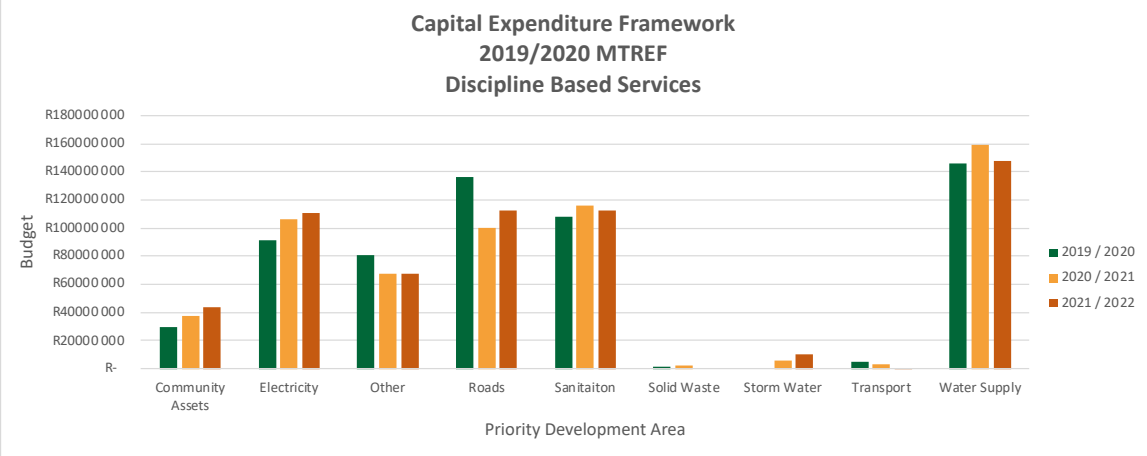
The following table and figures provide the MTREF capital budget by discipline-based services

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%.

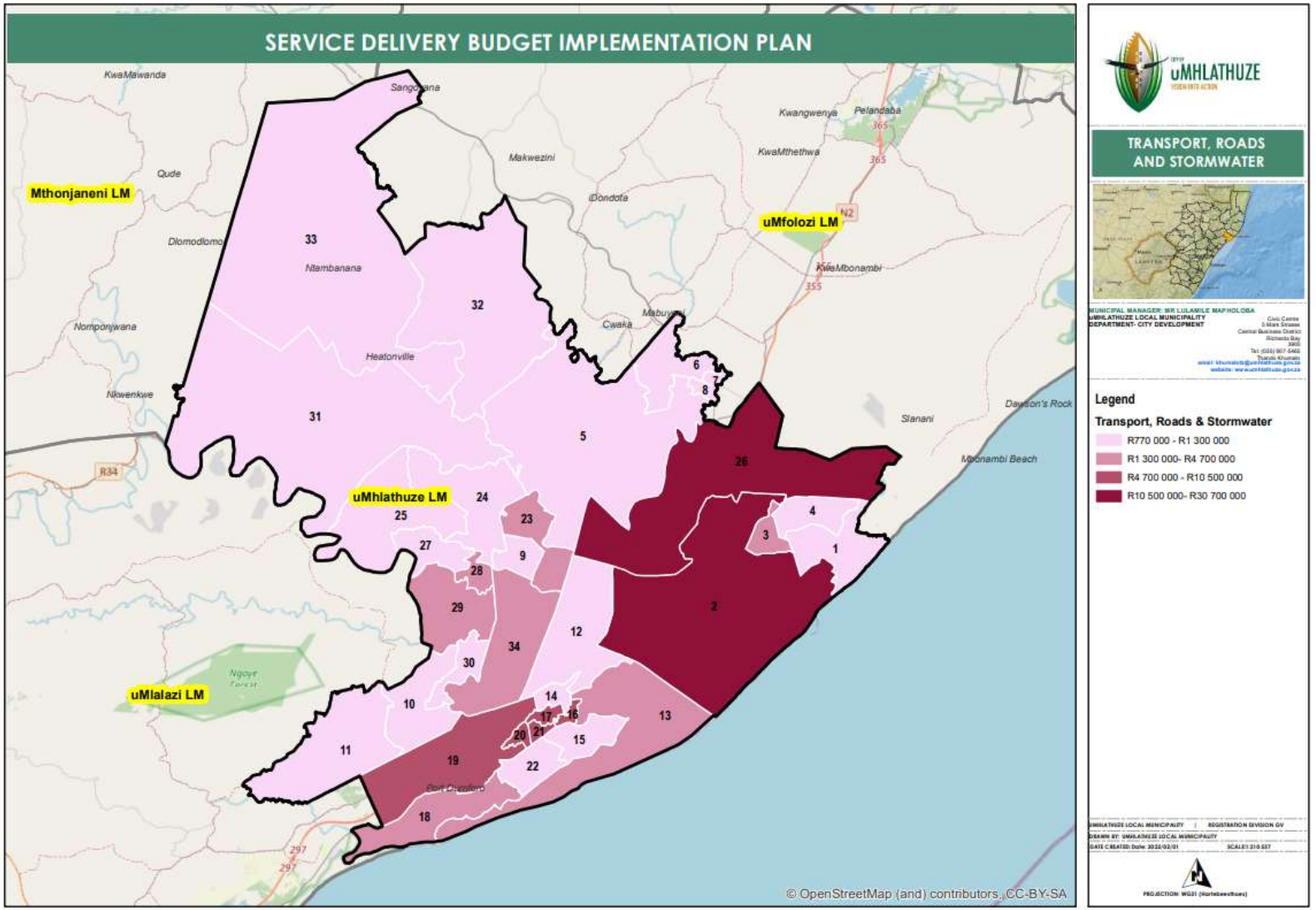
Figure 66: Capital Expenditure Framework per Service



12.4.10 SPATIAL REPRESENTATION OF 2021/2022 CAPITAL PROJECTS

The process for the three yearly review of the 2019 CEF has been initiated to be undertaken during the 2021/2022 financial year. For this fourth review of the SDF, mapping of capital projects has been prepared informed by the 2021/2022 capital budget as inserted herewith for the following disciplines. Comments on significant capital projects at various locations is also provided:

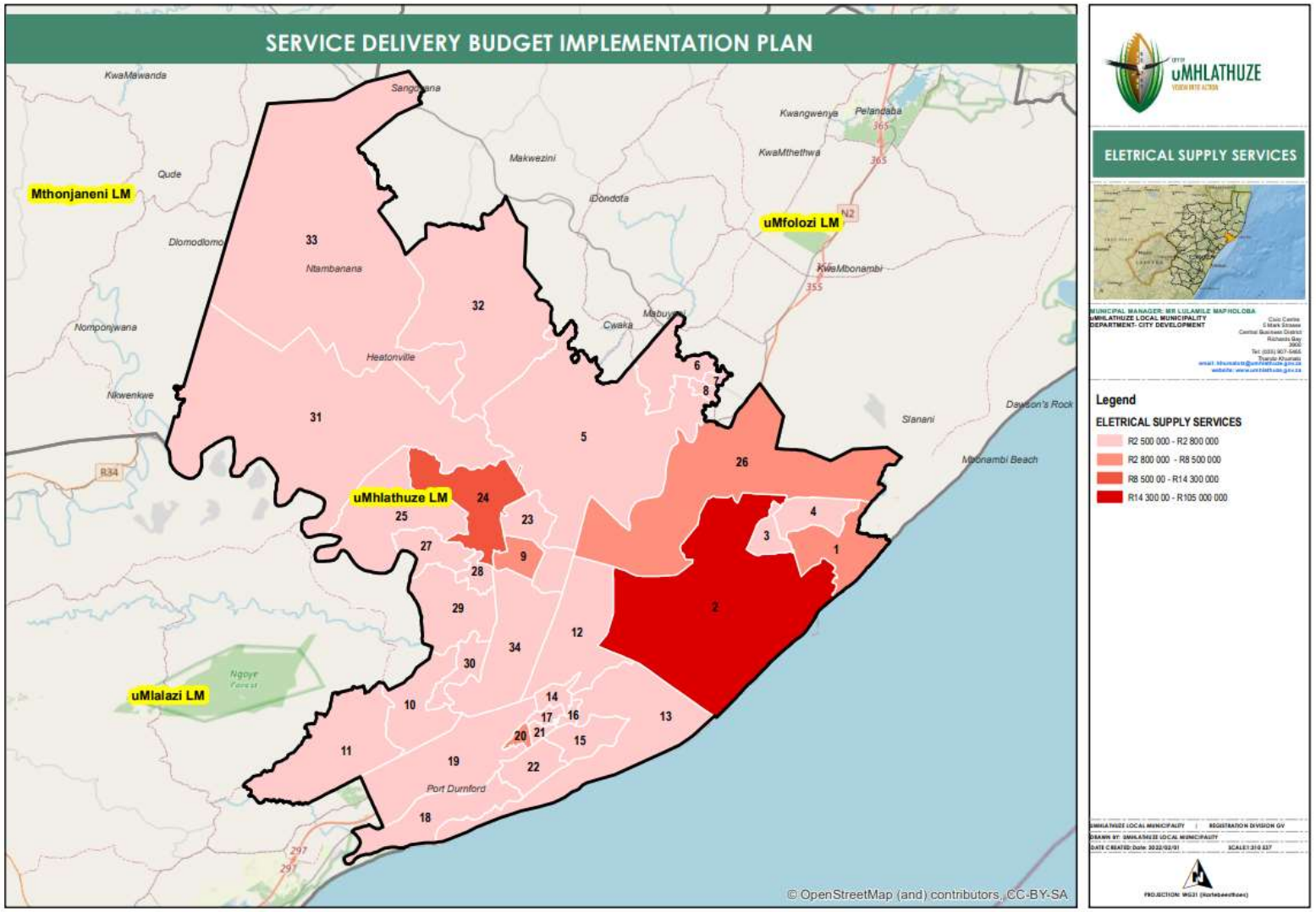
Map 68: Transport, Roads and Stormwater Capital Expenditure Distribution (Draft budget 2022/2023)



Projects Include:

- Aquadene stormwater approx. R20m
- Esikhaleni intersection approx. R35m
- Mzingazi Bridge R5m
- Pedestrian Bridges R10m

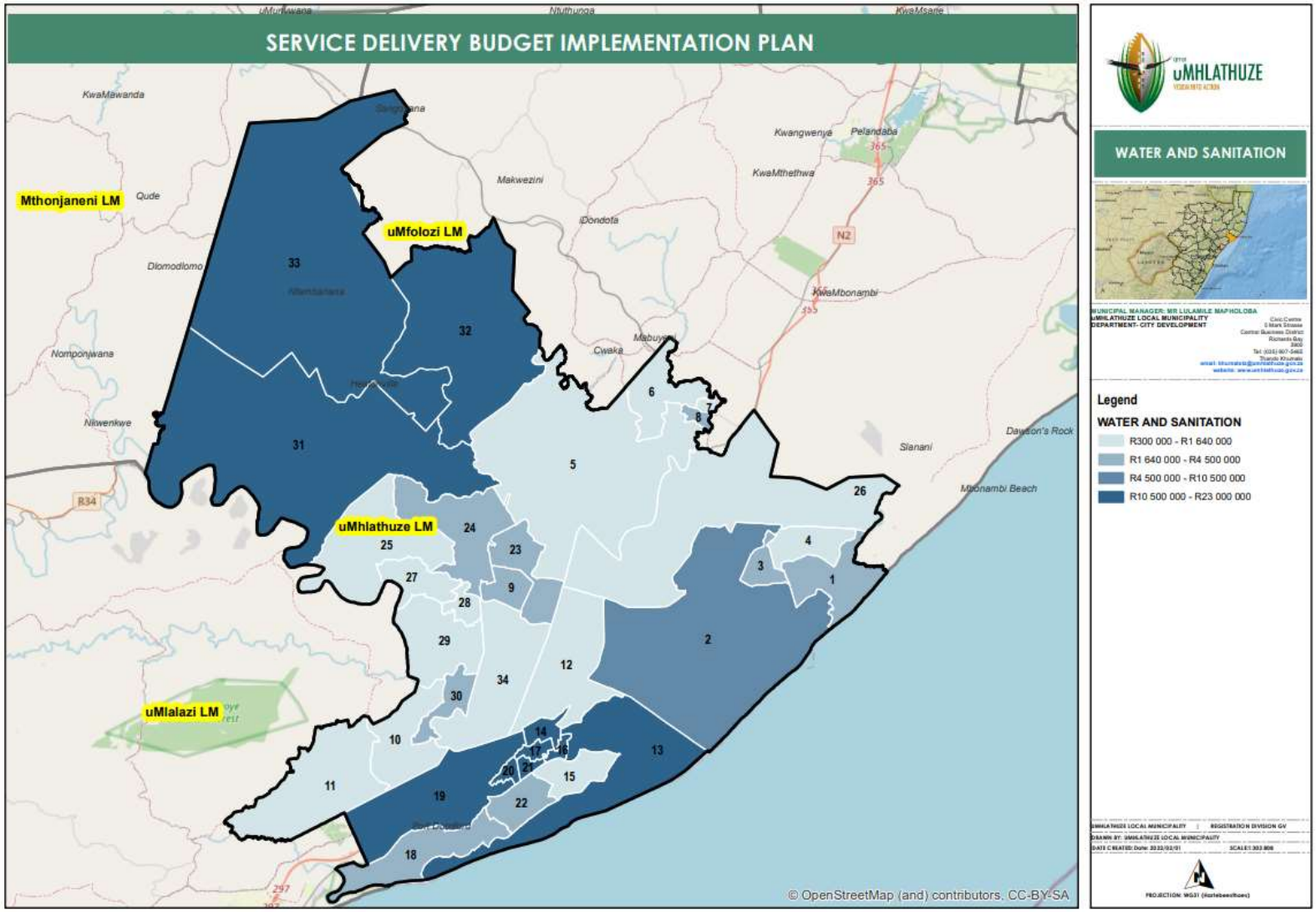
Map 69: Electrical and Energy Capital Expenditure Distribution (Draft budget 2022/2023)



Projects Include:

- Consider CoU licensed supply area
- Hydra-Capella R20m
- Various substation refurbishments (W2) of approx. R81m
- Empangeni Mega-housing (Ph. 1) approx. R11m

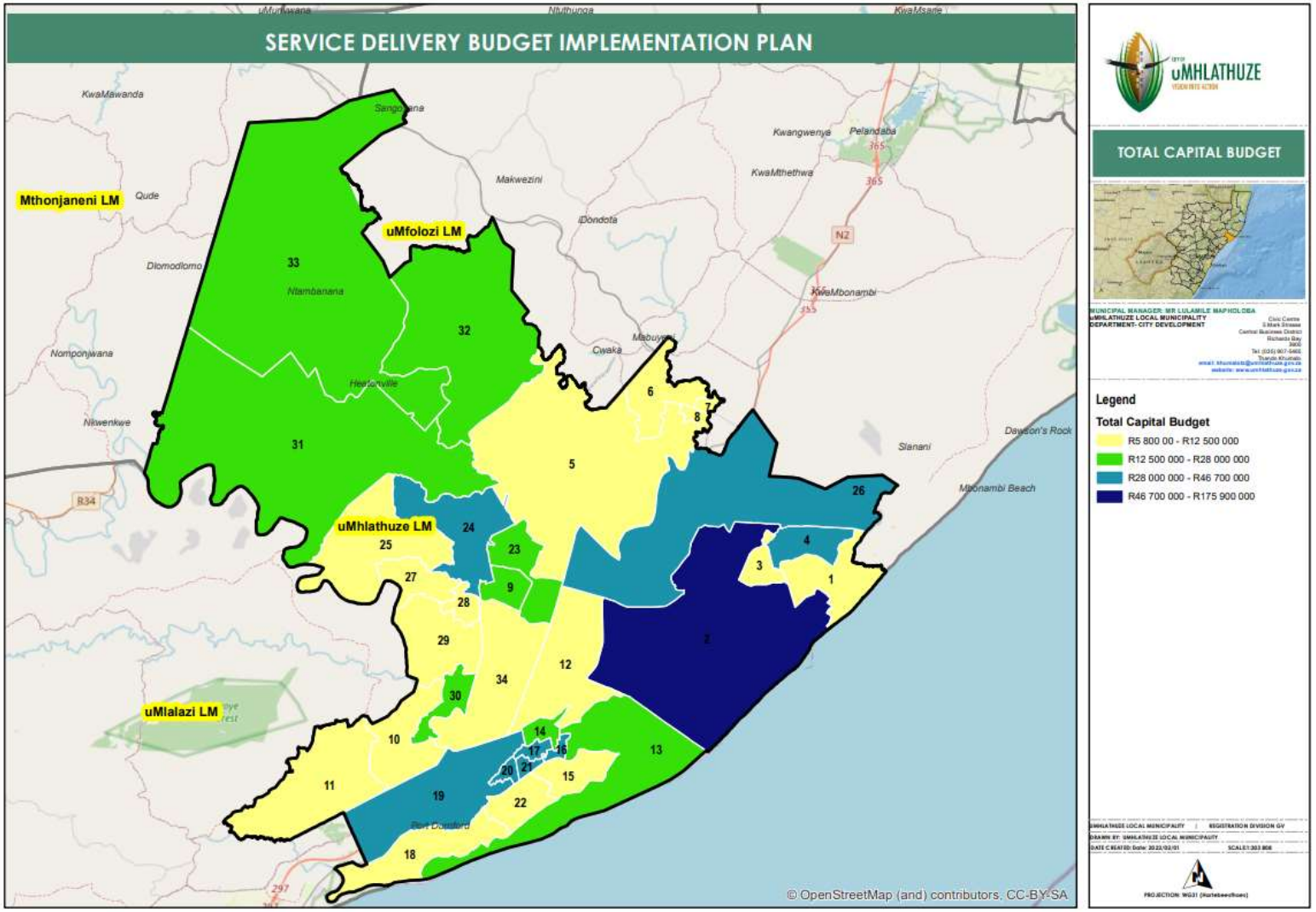
Map 70: Water and Sanitation Capital Expenditure Distribution (Draft budget 2022/2023)



Projects Include:

- Water interventions in Wards 31, 32, 33 approx. R59m
- Esikhaleni water intervention approx. R100m
- Empembeni Bulk (W13, 14) approx. R40m

Map 71: Total Capital Expenditure Distribution (Draft budget 2022/2023)



12.5 SPATIAL DISTRIBUTION OF APPLICATIONS

(Update to be finalized and included in final SDF during May 2022)

A first analysis of land use and building applications for the 2019/2020 financial year has been undertaken. The said applications have been grouped per suburb. The number of applications processed are reported quarterly to the Council and information has been extracted from these reports for the purpose.

It is observed that the number of applications during Quarter 4 CoVID Levels 5,4 and 3 was significantly lower than the other quarters.

The value in this exercise is to consider trends, notably investment, over a number of years at various localities in the Municipality. Over time it can also be observed whether the Municipality has initiated incentives to attract investment in certain areas (i.e. priority development areas) but noting that building plans are an important measure. Reason being, if the Land Use Scheme in an area facilitates a certain type of development, no consent or rezoning will be recorded but more likely a building plan submission.

The following tables and graphs depict the spatial distribution of application in uMhlathuze for 2019/2020. This analysis will henceforth be undertaken annually.

Table 71: Applications by Type per Suburb

Area/Suburb	Rezoning	Consent	Building Plans
	TOTAL	TOTAL	TOTAL
Empangeni	4	7	38
Vulindlela	0	2	6
Esikhaleni H	2	2	8
Esikhaleni J	2	2	7
Felixton	1	0	3
Nseleni	0	0	0
Ngwelezane	1	1	21
Alton Industrial	3	0	11
Richards Bay CBD	1	1	14
Richards Bay Suburbs	19	7	140
Meerensee	*7*	*1*	*42*
Widenweide	*0*	*0*	*4*
Birdswood	*2*	*2*	*27*
Aquadene	*2*	*0*	*6*
Brackhenham	*1*	*1*	*16*
Veld-en-Vlei	*0*	*1*	*16*
Arboretum	*7*	*2*	*29*
Sub-Total	**33**	**22**	**248**
Records	**36**	**22**	**266**
Variation	**3**	**0**	**18**
%	*8,33*	*0,00*	*6,77*

Figure 67: Applications per Type

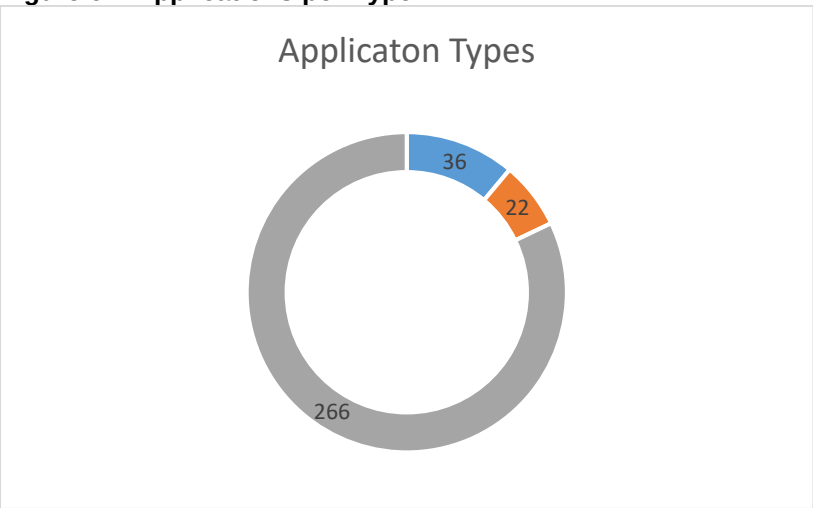
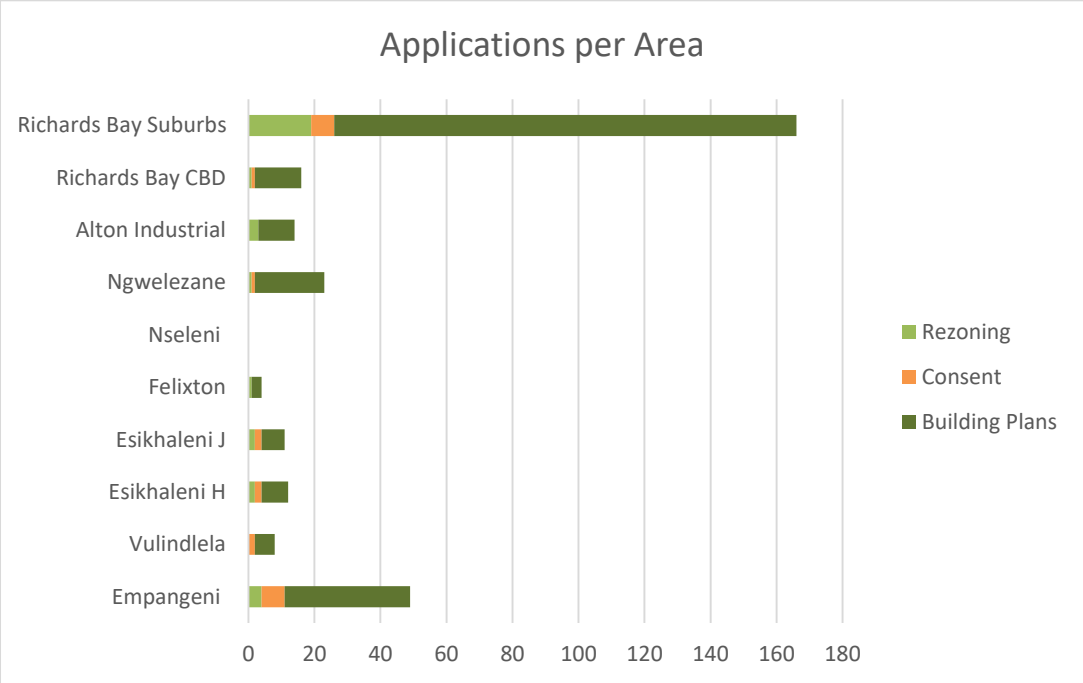


Figure 68: Applications per Area

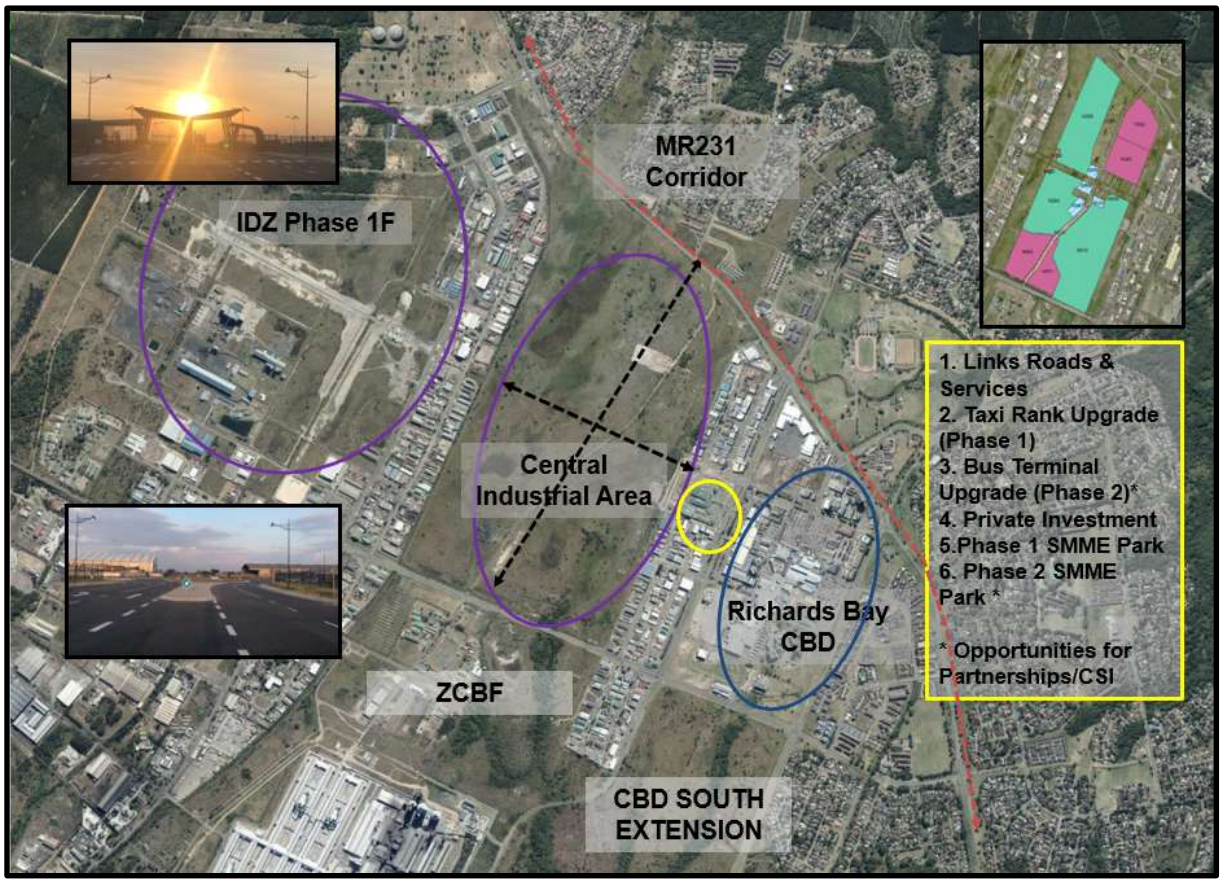


From the information provided it is observed that building plans account for the majority of applications (82%) followed by rezoning and consent applications with 11% and 7% respectively. More than 60% the applications are also located in Richards Bay.

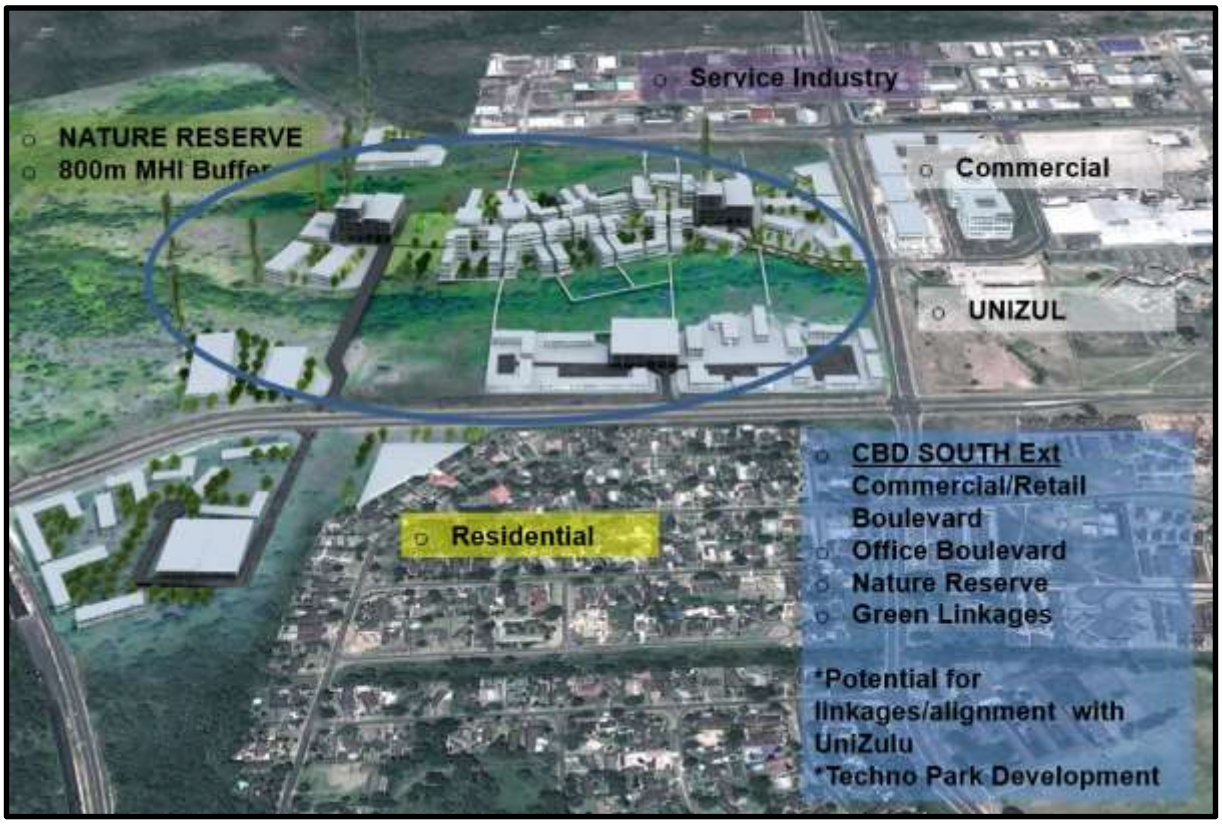
12.6 SUMMARY OF INTERVENTIONS AT NODES AND CORRIDORS

To conclude the chapter on the Implementation of the SDF, selected interventions that are underway or being pursued at various nodes, corridors and precincts in the municipal area is graphically indicated hereunder:

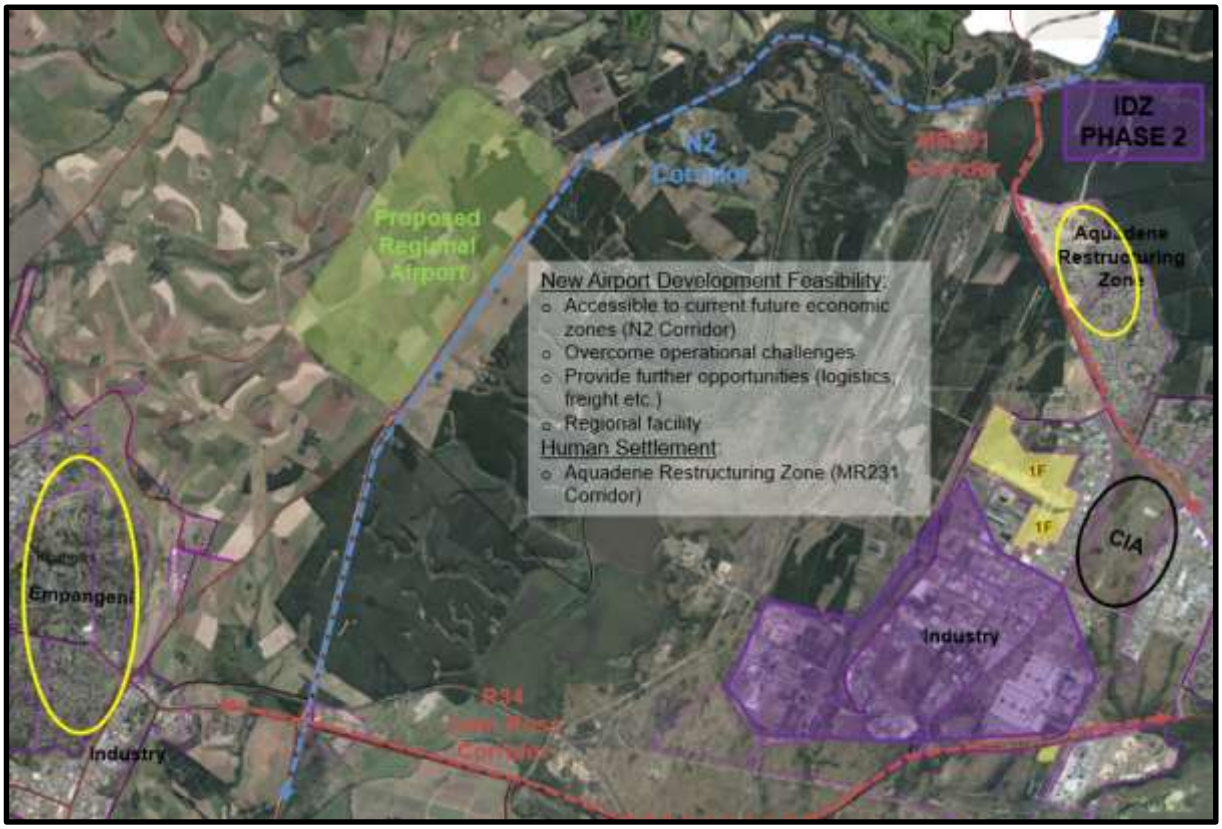
Inset 1: Richards Bay Multi Modal Facility Precinct



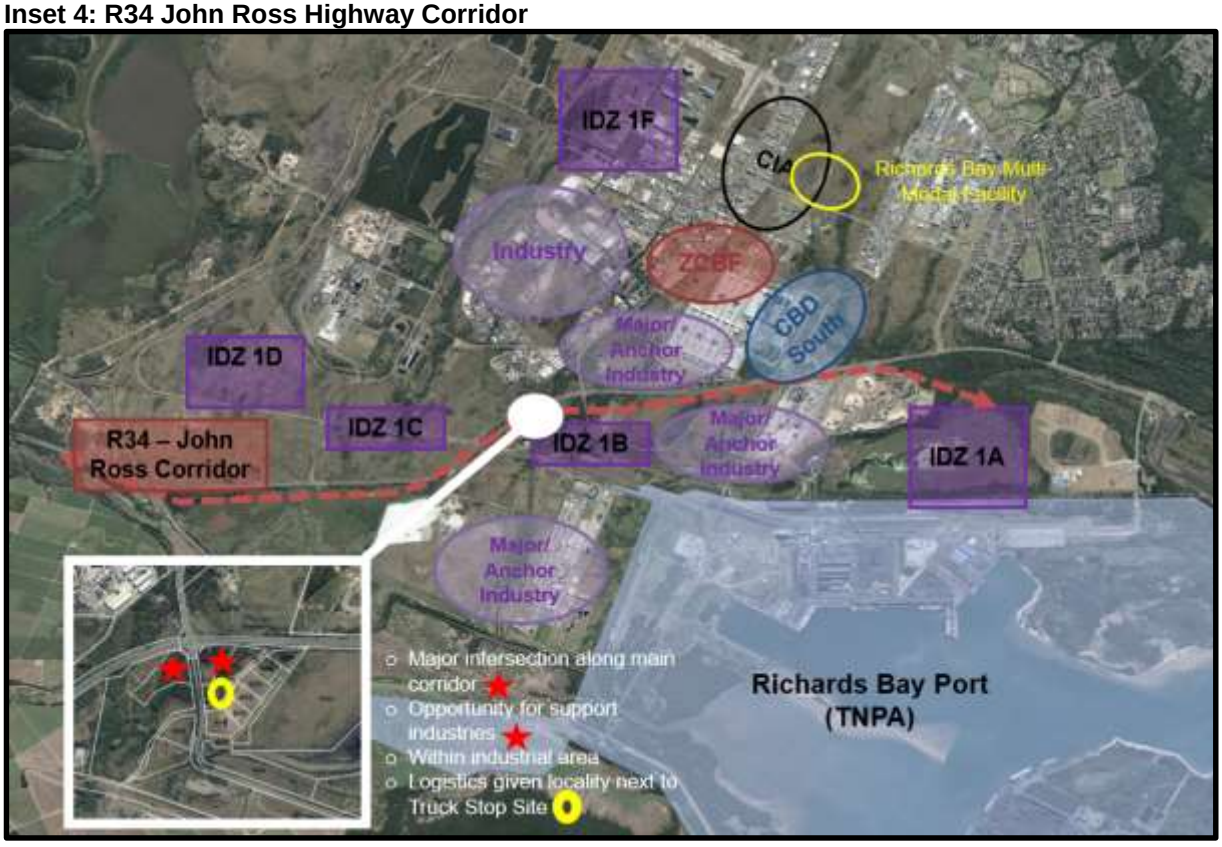
Inset 2: Richards Bay Commercial District



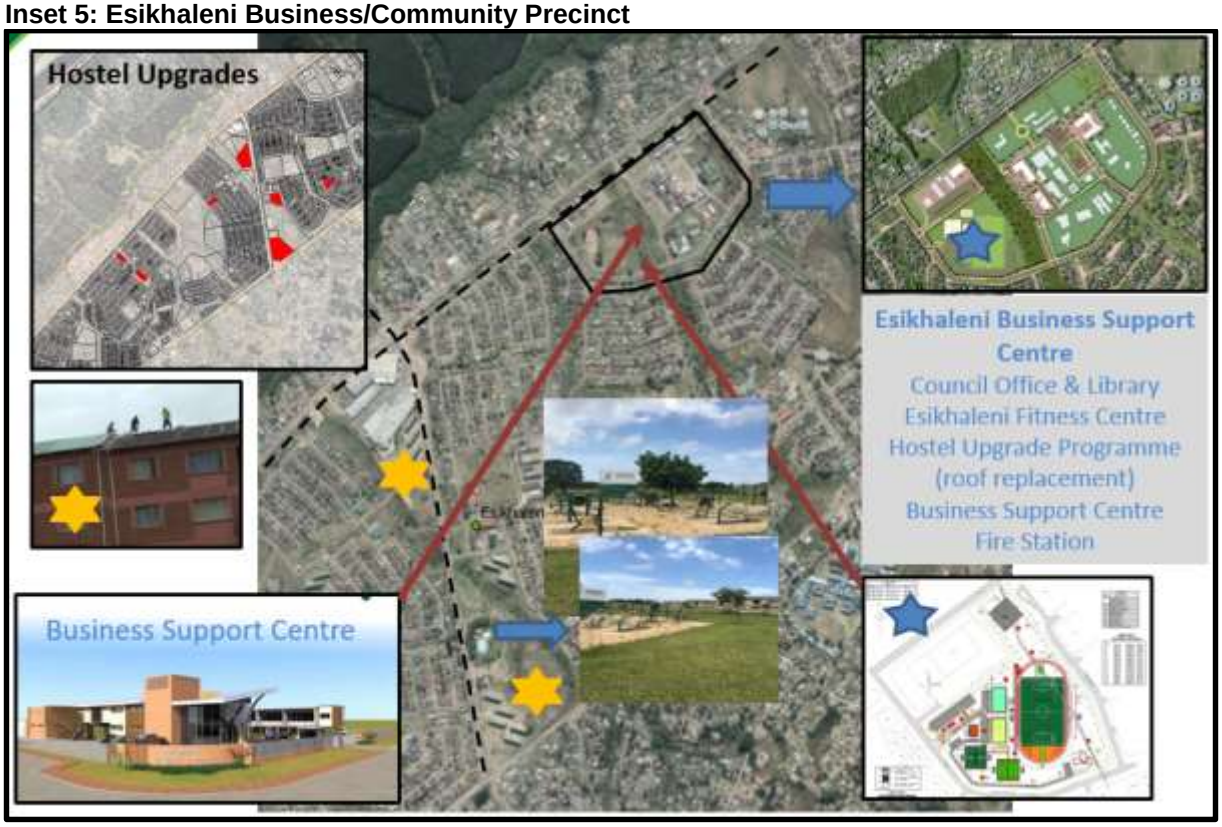
Inset 3: MR231 and N2 Corridor



Inset 4: R34 John Ross Highway Corridor



Inset 5: Esikhaleni Business/Community Precinct



13. GOVERNMENT PROJECT PIPELINE AND CROSS BORDER INTERVENTIONS

13.1 GOVERNMENT PROJECT PIPELINE

Details of the Governmental project pipeline have been sourced and the spatial distribution of government projects is depicted on the map at overleaf. The information sourced will also be used during the Review of the municipal Capital Expenditure Framework (CEF).

Table 72: Projects from CoGTA

Project	Project Stage	Target Start	Target Completion	Cost
Madlebe Community Service Centre	Stage 1: Initiation/Pre-feasibility	01-Apr-21	30-Nov-21	R4,250,000.00

Table 73: Projects from the Department of Education

Project	Project Stage	Target Start	Target Completion	Cost
NKOSITHANDILE SECONDARY SCHOOL	Stage 1: Initiation/ Pre-feasibility	02-Nov-17	03-Nov-24	R2,000,000.00
ENGWENI PRIMARY SCHOOL	Stage 3: Design Development	01-Jan-18	30-Aug-23	R4,488,000.00
DLAMVUZO HIGH SCHOOL	Stage 4: Design Documentation	20-Feb-16	25-Mar-24	R8,860,885.00
MAQHAMA PRIMARY SCHOOL	Stage 4: Design Documentation	01-Jan-18	01-Mar-24	R1,782,500.00
WOOD AND RAW PRIMARY SCHOOL	Stage 4: Design Documentation	01-Jan-16	03-Dec-24	R7,011,305.00
GRANTHAM PARK PRIMARY SCHOOL	Stage 4: Design Documentation	01-Jan-17	30-Mar-24	R2,954,000.00
DLANGEZWA SECONDARY SCHOOL	Stage 4: Design Documentation	20-Jun-16	25-Mar-24	R21,214,773.00
BHEKUKWAZI SECONDARY SCHOOL	Stage 4: Design Documentation	08-Jun-13	30-Mar-23	R39,449,000.00
THANDINKOSI PRIMARY SCHOOL	Stage 4: Design Documentation	01-Jan-18	01-Mar-24	R1,782,500.00
MKHONTO HIGH SCHOOL	Stage 4: Design Documentation	01-Jan-18	01-Mar-24	R10,807,006.00
UMGABHI COMBINED SCHOOL	Stage 4: Design Documentation	21-Aug-19	21-Aug-23	R2,900,000.00
MANDLOSUTHI HIGH SCHOOL	Stage 4: Design Documentation	21-Aug-19	21-Aug-23	R2,900,000.00
NONGAMLANA HIGH SCHOOL	Stage 4: Design Documentation	20-Aug-19	20-Aug-23	R2,900,000.00
UBAMBISWANO HIGH SCHOOL	Stage 4: Design Documentation	21-Aug-19	21-Aug-23	R2,900,000.00
SALIGNA PRIMARY SCHOOL	Stage 4: Design Documentation	20-Jan-19	20-Apr-23	R2,700,000.00
THOLOKUHLE HIGH SCHOOL	Stage 4: Design Documentation	01-Jan-18	25-Apr-24	R21,906,788.00
UFASIMBA PRIMARY SCHOOL	Stage 4: Design Documentation	01-Jan-18	01-Mar-24	R1,782,500.00
MVUZEMVUZE PRIMARY SCHOOL	Stage 4: Design Documentation	01-Jan-18	01-Mar-24	R1,782,500.00
ESHOWE SECONDARY SCHOOL	Stage 4: Design Documentation	21-Aug-19	21-Aug-24	R2,900,000.00
ETHAKASANI PRIMARY SCHOOL	Stage 4: Design Documentation	01-Jan-18	30-Mar-24	R1,782,500.00

MUNTONOKUDLA SECONDARY SCHOOL	Stage 4: Design Documentation	14-Jun-15	21-Feb-23	R4,450,293.00
MUNTUYEDWA PRIMARY SCHOOL	Stage 4: Design Documentation	20-Aug-19	20-Aug-24	R2,900,000.00
AMANGWE SECONDARY SCHOOL	Stage 4: Design Documentation	15-Jun-16	30-Jun-23	R5,563,778.00
BHEJANE PRIMARY SCHOOL	Stage 4: Design Documentation	01-Jan-18	01-Mar-24	R1,782,500.00
MNQANDI HIGH SCHOOL	Stage 4: Design Documentation	20-Aug-19	20-Aug-23	R2,900,000.00
BANAMUVA PRIMARY SCHOOL	Stage 4: Design Documentation	20-Feb-16	26-Feb-21	R9,338,151.00
NONGWELEZA HIGH SCHOOL	Stage 4: Design Documentation	01-Jan-16	01-Dec-24	R1,611,000.00
NKUME PRIMARY SCHOOL	Stage 4: Design Documentation	20-Aug-19	20-Aug-23	R2,900,000.00
DOVER COMBINED SCHOOL	Stage 4: Design Documentation	19-Nov-16	30-Mar-22	R3,064,000.00
MATSHANGULE PRIMARY SCHOOL	Stage 4: Design Documentation	01-Jan-16	01-Dec-24	R2,000,000.00
SIYAKHANYISA PRIMARY SCHOOL	Stage 4: Design Documentation	20-Jan-19	20-Sep-24	R25,125,000.00
AMANDOSI PRIMARY SCHOOL	Stage 4: Design Documentation	06-Oct-16	31-Jan-21	R9,623,765.00
GEGEDE PRIMARY SCHOOL	Stage 4: Design Documentation	01-Apr-16	21-Aug-24	R2,900,000.00
LUZINDELA PRIMARY SCHOOL	Stage 4: Design Documentation	10-May-19	15-Apr-24	R2,700,000.00
LIZWI HIGH SCHOOL	Stage 4: Design Documentation	21-Aug-19	21-Aug-23	R2,900,000.00
NQUNDU COMBINED SCHOOL	Stage 4: Design Documentation	10-May-19	31-Mar-24	R4,000,000.00
GUBHETHUKA PRIMARY SCHOOL	Stage 4: Design Documentation	01-Jan-18	01-Mar-24	R1,782,500.00
DOVER COMBINED SCHOOL	Stage 4: Design Documentation	20-Feb-16	25-Mar-24	R4,474,724.00
EMPUNGENI PRIMARY SCHOOL	Stage 4: Design Documentation	06-Jun-16	15-Dec-23	R21,359,343.00
LUZINDELA PRIMARY SCHOOL	Stage 4: Design Documentation	21-Aug-19	21-Aug-23	R2,900,000.00
BINGOMA PRIMARY SCHOOL	Stage 4: Design Documentation	01-Jan-18	25-Mar-24	R1,782,500.00
SANGOYANA PRIMARY SCHOOL	Stage 4: Design Documentation	20-Aug-19	20-Aug-23	R2,900,000.00
AMANDOSI PRIMARY SCHOOL	Stage 4: Design Documentation	13-Jun-16	30-Jun-24	R8,125,000.00
SARON PRIMARY SCHOOL	Stage 4: Design Documentation	20-Aug-19	20-Aug-23	R2,900,000.00
NSUNGUZA PRIMARY SCHOOL	Stage 4: Design Documentation	20-Aug-19	20-Aug-23	R2,900,000.00
NSIWA PRIMARY SCHOOL	Stage 4: Design Documentation	01-Jan-18	01-Mar-24	R1,782,500.00
SINAYE PRIMARY SCHOOL	Stage 4: Design Documentation	01-Jan-18	30-Mar-24	R1,782,500.00
AMABUYE PRIMARY SCHOOL	Stage 4: Design Documentation	20-Sep-17	28-Feb-24	R5,169,472.00
KHANDISA PRIMARY SCHOOL	Stage 4: Design Documentation	12-Sep-14	01-Dec-24	R2,900,000.00
NSEZI PRIMARY SCHOOL	Stage 4: Design Documentation	01-Jan-18	01-Mar-24	R1,782,500.00
MANYANE PRIMARY SCHOOL	Stage 4: Design Documentation	21-Aug-19	21-Aug-23	R2,900,000.00
AMATIMOFU PRIMARY SCHOOL	Stage 4: Design Documentation	21-Aug-19	21-Aug-24	R2,900,000.00
ZIPHOZONKE PRIMARY SCHOOL	Stage 4: Design Documentation	06-Jun-16	26-Sep-24	R7,760,128.00
NXUSA PRIMARY SCHOOL	Stage 4: Design Documentation	21-Aug-19	21-Aug-23	R2,900,000.00
PHAN PRIMARY SCHOOL	Stage 4: Design Documentation	20-Aug-19	20-Aug-23	R2,900,000.00
BHILIYA PRIMARY SCHOOL	Stage 4: Design Documentation	01-Jan-18	12-Mar-24	R4,025,000.00
AQUADENE SECONDARY SCHOOL	Stage 4: Design Documentation	20-Nov-15	17-Oct-24	R3,168,348.00

CANAAN PRIMARY SCHOOL	Stage 4: Design Documentation	21-Aug-19	21-Aug-24	R2,900,000.00
EZISHABENI PRIMARY SCHOOL	Stage 4: Design Documentation	01-Jan-18	01-Mar-24	R1,782,500.00
MGITHSWA HIGH SCHOOL	Stage 4: Design Documentation	20-Aug-19	20-Aug-23	R2,900,000.00
MHAWU PRIMARY SCHOOL	Stage 4: Design Documentation	20-Aug-19	20-Aug-23	R2,900,000.00
NCOMBO PRIMARY SCHOOL	Stage 4: Design Documentation	02-Jun-19	02-Jun-22	R4,700,000.00
UMKHANYAKUDE CIVIL/STRUCTURAL	Stage 4: Design Documentation	02-Jun-18	30-Mar-22	R4,500,000.00
ZENZELENI MASHAMASE SECONDARY SCHOOL	Stage 5: Works	06-Jun-16	01-Jun-22	R4,082,400.00
BRACKENHAM PRIMARY SCHOOL	Stage 5: Works	01-Jan-18	28-Feb-21	R815,599.00
QHAMUKA SECONDARY SCHOOL	Stage 5: Works	01-Apr-15	18-Oct-16	R6,380,000.00
QHAMUKA HIGH SCHOOL	Stage 5: Works	22-Jun-16	26-Feb-21	R8,427,307.00
TSHUTSHUTSHU HIGH SCHOOL	Stage 5: Works	12-Sep-17	30-Jun-23	R1,542,844.00
THUTHUKANI SPECIAL SCHOOL	Stage 5: Works	05-Jan-20	14-Jul-22	R9,594,554.00
MUNTONOKUDLA SECONDARY SCHOOL	Stage 5: Works	01-Jan-16	10-Jun-19	R6,165,299.00
UGOME SECONDARY SCHOOL	Stage 5: Works	19-Feb-16	30-Jun-23	R4,430,278.00
MATAMZANA DUBE SECONDARY SCHOOL	Stage 5: Works	20-Feb-17	31-Jan-22	R1,994,719.00
PHESHE PRIMARY SCHOOL	Stage 5: Works	31-Mar-18	31-May-20	R6,927,000.00
CANAAN PRIMARY SCHOOL	Stage 5: Works	20-Feb-16	14-Jul-19	R2,927,129.00
NQUTSHINI PRIMARY SCHOOL	Stage 5: Works	13-Jun-16	30-Mar-21	R3,295,943.00
MBUYISENI HIGH SCHOOL	Stage 5: Works	30-Apr-20	25-Feb-21	R1,928,652.00
SIPHUMELELE SECONDARY SCHOOL (MEER-EN-SEE)	Stage 5: Works	24-Jun-15	21-Feb-22	R122,414,000.00
COVID-19 MOBILE ALL DISTRICTS	Stage 5: Works	02-Jun-20	30-Mar-23	R100,000,000.00
QANTAYI SECONDARY SCHOOL	Stage 5: Works	01-Apr-16	21-Aug-20	R42,349,000.00
VONDLO JUNIOR PRIMARY SCHOOL	Stage 5: Works	06-Jun-17	31-Mar-22	R1,092,252.00
UMDLAMFE SECONDARY SCHOOL	Stage 5: Works	06-Jun-16	08-Jun-22	R7,208,584.00
RICHARDS BAY SECONDARY SCHOOL	Stage 5: Works	01-Apr-16	30-Mar-23	R20,869,280.00
AMANGWE SECONDARY SCHOOL	Stage 6: Handover	24-Oct-17	16-Oct-20	R7,306,799.00
MZUVUKILE PRIMARY SCHOOL	Stage 6: Handover	01-Jan-18	01-Mar-24	R1,782,500.00
SIGISI PRIMARY SCHOOL	Stage 6: Handover	20-Feb-16	10-Jun-19	R5,175,430.00
ESIKHAWINI HIGH SCHOOL	Stage 6: Handover	19-Apr-16	27-Mar-20	R5,317,946.00
IMIZIKAYIFANI PRIMARY SCHOOL	Stage 6: Handover	06-Jun-16	10-Jun-19	R9,744,535.00
BHEKIKUSASA HIGH SCHOOL	Stage 6: Handover	10-Jun-17	10-Jun-19	R4,546,610.00
KANGIKHO PRIMARY SCHOOL	Stage 6: Handover	20-Jun-16	31-May-18	R5,268,422.00

Table 74: Projects from the Department of Health

Project	Project Stage	Target Start	Target Completion	Cost
Northern KZN Tertiary Hospital: Phase 1 - Core Block	Stage 1: Initiation/ Pre-feasibility	07-Jan-20	06-Jan-26	R0.00
Empangeni EMS Station - Major refurbishment of the building and services	Stage 2: Concept/ Feasibility	20-Jan-20	30-Jun-22	R0.00
Ngwelezane Hospital: Construction of New Orthotics and Prosthetics Centre with Parking Area	Stage 2: Concept/ Feasibility	07-Jul-17	31-Dec-24	R0.00
Nseleni CHC- New HR Offices, additional clinical space, guardhouse & general waste	Stage 2: Concept/ Feasibility	03-Apr-19	28-Nov-25	R0.00
Queen Nandi Regional Hospital: Replacement of 1600 kVA transformer	Stage 2: Concept/ Feasibility	01-Nov-19	30-Jun-23	R0.00
Ngwelezane Field Hospital - HT for Covid-19	Stage 2: Concept/ Feasibility	01-Sep-20	31-Mar-21	R0.00
Ntuze Clinic - Replace Roof	Stage 4: Design Documentation	02-Jan-19	28-Feb-22	R0.00
Ngwelezane Hospital - Category A (Corrective Maintenance Outsourced)	Stage 5: Works	06-Jan-20	30-Apr-21	R1,000,000.00
Nseleni CHC - Category B (Preventative Maintenance Outsourced)	Stage 5: Works	03-Jan-20	30-Apr-21	R150,000.00
Nseleni CHC - Category A (Corrective Maintenance Outsourced)	Stage 5: Works	03-Jan-20	30-Apr-21	R150,000.00
Ngwelezane Hospital - Category D (Materials for In-sourced maintenance activities)	Stage 5: Works	01-Oct-19	30-Apr-21	R200,000.00
Queen Nandi Regional Hospital - Category D (Material in-sourced maintenance activities)	Stage 5: Works	01-Oct-19	30-Apr-21	R200,000.00
Queen Nandi Regional Hospital - Category B (Preventative Maintenance Outsourced)	Stage 5: Works	03-Jan-20	30-Apr-21	R1,500,000.00
Ngwelezane Hospital - Category B (Preventative Maintenance Outsourced)	Stage 5: Works	03-Jan-20	30-Apr-21	R1,000,000.00
Nseleni CHC - Category D (Materials for in-sourced maintenance activities)	Stage 5: Works	01-Oct-19	30-Apr-21	R50,000.00
Queen Nandi Regional Hospital - Category A (Corrective Maintenance Outsourced)	Stage 5: Works	03-Jan-20	30-Apr-21	R1,300,000.00
Queen Nandi Regional Hospital - Category C (Minor projects outsourced)	Stage 5: Works	01-Oct-19	30-Apr-21	R800,000.00
Ngwelezane Hospital: 192 Bed Ward Block - Surgical Wards	Stage 7: Works	31-Jul-14	31-Mar-21	R272,408,952.00

Table 75: Projects from Social Development

Project	Project Stage	Target Start	Target Completion	Cost
Slindokuhle Creche	Stage 4: Design Documentation	01-Apr-20	31-Mar-21	R250,000.00
Lower Umfolozi Service Office	Stage 6: Handover	01-Apr-14	31-Mar-19	R11,495,000.00

Table 76: Projects from Sports and Recreation

Project	Project Stage	Target Start	Target Completion	Cost
UMVOTI SPORTFIELD PHASE 1	Stage 4: Design Documentation	01-Apr-19	31-Mar-21	R9,000,000.00
MACHIBINI SPORTFIELD	Stage 5: Works	01-Apr-19	31-Mar-21	R9,000,000.00

Table 77: Projects from Arts and Culture

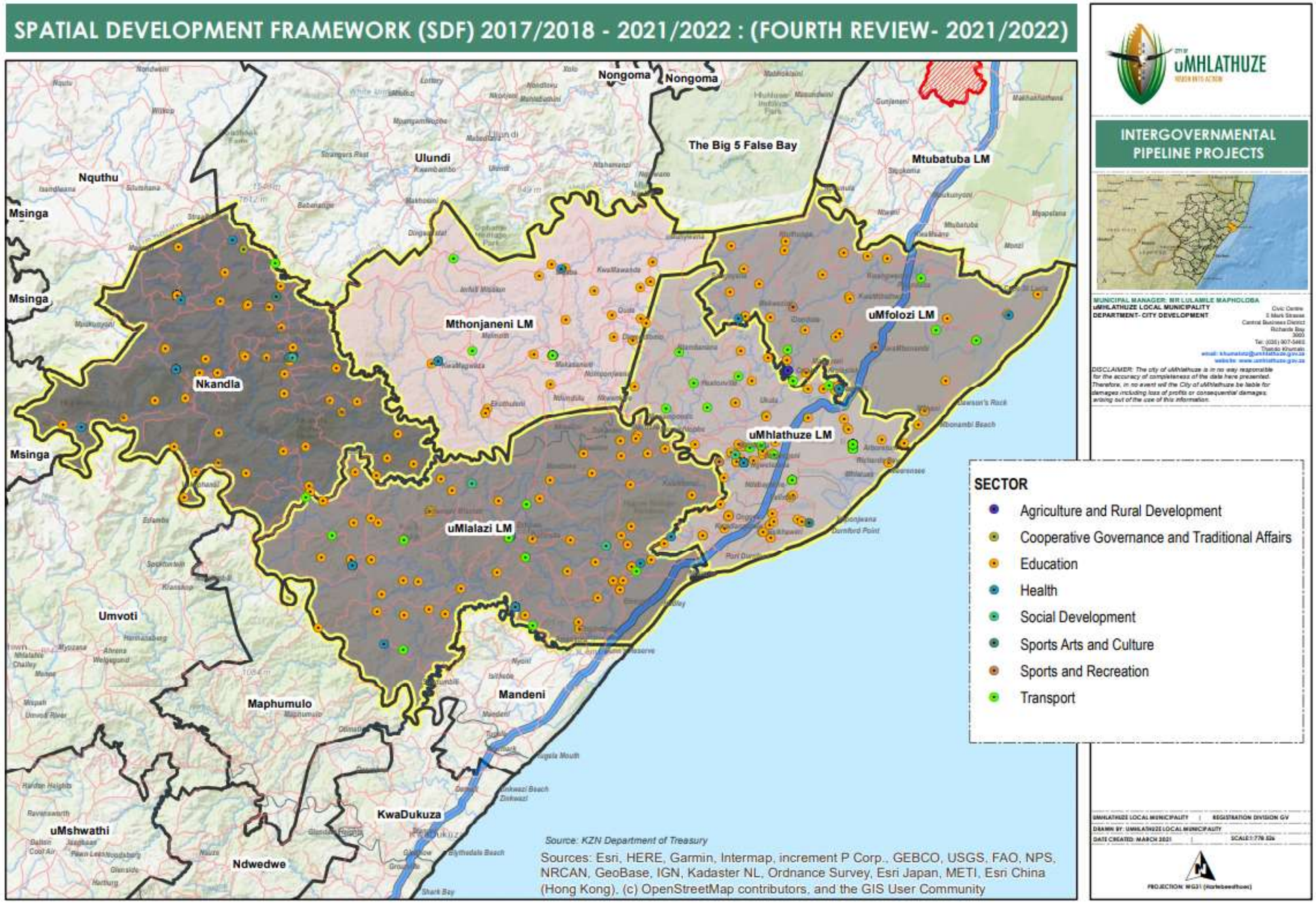
Project	Project Stage	Target Start	Target Completion	Cost
Mpembeni Modular Library	Stage 1: Initiation/ Pre-feasibility	18-Feb-19	30-Sep-20	R3,600,000.00
Kwadllangezwa	Stage 1: Initiation/ Pre-feasibility	11-Feb-19	31-Mar-23	R29,000,000.00

Table 78: Projects from the Department of Transport

Project	Project Stage	Target Start	Target Completion	Cost
CONSTRUCTION OF MZIMANE RIVER BRIDGE NO.3509 ON D1905	Stage 2: Concept/ Feasibility	01-Apr-10	31-Mar-23	R57,500,000.00
CONSTRUCTION OF L1421 -NEW GRAVEL ROAD (KM4.6 TO KM5.8)	Stage 3: Design Development	01-Apr-16	31-Mar-21	R1,000,000.00
CONSTRUCTION OF L3335- NEW GRAVEL ROAD (KM0 TO KM1.6)	Stage 3: Design Development	01-Apr-16	31-Mar-22	R2,462,000.00
CONSTRUCTION OF L595 - NEW GRAVEL ROAD (KM0 TO KM1)	Stage 3: Design Development	01-Apr-16	31-Mar-22	R2,132,000.00
CONSTRUCTION OF MASOLOSOLO (L3362) ACCESS ROAD - NEW GRAVEL ROAD (KM0 TO KM1.5)	Stage 3: Design Development	01-Apr-16	31-Mar-22	R2,354,000.00
CONSTRUCTION OF MHLUSHWA (L3333) - ROAD - NEW GRAVEL ROAD (KM1.5 - KM2.5)	Stage 3: Design Development	01-Apr-16	31-Mar-21	R2,140,000.00
CONSTRUCTION OF BANGIZWE PRIMARY SCHOOL ACCESS - L3026 - NEW GRAVEL ROAD (KM0-KM0.5)	Stage 3: Design Development	01-Apr-16	31-Mar-22	R500,000.00
CONSTRUCTION OF CORRIDALE (L1240) SCHOOL ACCESS ROAD - NEW GRAVEL ROAD (KM4.9 TO KM8.4)	Stage 3: Design Development	01-Apr-16	31-Mar-22	R4,280,000.00
CONSTRUCTION OF 3886 MABEDLANA PORTAL CULVERT STRUCTURE	Stage 4: Design Documentation	01-Apr-17	31-Mar-22	R7,700,000.00
3800 CONSTRUCTION OF MHLATHUZANA BRIDGE ON L3984	Stage 4: Design Documentation	01-Apr-10	21-Dec-25	R97,750,000.00
UPGRADE OF P494 (KM13.8 TO KM1)	Stage 5: Works	01-Apr-13	31-Mar-26	R389,502,319.00
SPECIAL MAINTENANCE_HANDRAIL REPAIR/REPLACE_DC28	Stage 5: Works	01-Apr-20	31-Mar-23	R1.00
ROUTINE MAINTENANCE_CRACK SEALING_DC28	Stage 5: Works	01-Apr-20	31-Mar-23	R1.00
PREVENTATIVE _BETTERMENT & REGRAVELLING _DC28	Stage 5: Works	01-Apr-20	31-Mar-24	R377,066,250.00
SPECIAL MAINTENANCE_MINOR STRUCTURE REPAIRS_DC28	Stage 5: Works	01-Apr-20	31-Mar-24	R1.00

SPECIAL MAINTENANCE_BRIDGE JOINTS REPAIR/REPLACE_DC28	Stage 5: Works	01-Apr-20	31-Mar-23	R1.00
SAFETY MAINTENANCE_TRAFFIC CALMING_DC28	Stage 5: Works	01-Apr-20	31-Mar-23	R1.00
REHABILITATION OF 2-4 (KM 9 to KM 21)	Stage 5: Works	31-Mar-19	14-Dec-22	R239,495,267.00
MAINTENANCE ADMINISTRATION KZN_EMP	Stage 5: Works	01-Apr-20	31-Mar-23	R1.00
ROUTINE MAINTENANCE_ZIBAMBELE CONTRACTORS_DC28	Stage 5: Works	01-Apr-20	31-Mar-24	R190,308,615.00
ROUTINE MAINTENANCE_PATCH GRAVELLING_DC28	Stage 5: Works	01-Apr-20	31-Mar-23	R1.00
UPGRADE OF P700 LINK OF P253 (KM69 TO KM75)	Stage 5: Works	01-Apr-03	31-Mar-22	R59,400,000.00
UPGRADE OF D880 (KM0 TO KM7,7)	Stage 5: Works	01-Apr-16	19-Sep-21	R69,000,000.00
RESEAL OF MAIN ROAD P47-3(KM 9.00 to KM 17.00)	Stage 5: Works	28-Nov-18	31-Mar-21	R1.00
MECHANICAL FOR KZN_EMP	Stage 5: Works	01-Apr-20	31-Mar-23	R1.00
SAFETY MAINTENANCE_BLACKTOP PATCHING AND RUT REPAIR_DC28	Stage 5: Works	01-Apr-20	31-Mar-24	R54,769,825.00
SAFETY MAINTENANCE_REGULATORY AND WARNING SIGNS_DC28	Stage 5: Works	01-Apr-20	31-Mar-24	R13,730,000.00
ROUTINE MAINTENANCE_INFORMATION AND DIRECTION SIGNS_DC28	Stage 5: Works	01-Apr-20	31-Mar-24	R77,104,000.00
ROUTINE MAINTENANCE_BLADING_DC28	Stage 5: Works	01-Apr-19	31-Mar-24	R66,845,942.00
ROUTINE MAINTENANCE_EPWP DEPARTMENT_EMP	Stage 5: Works	01-Apr-19	31-Mar-21	R18,280,000.00
ROUTINE MAINTENANCE_FENCING AND KM POST MAINT_DC28	Stage 5: Works	01-Apr-20	31-Mar-24	R77,105,000.00
Maintenance Admin 2 ABC EMP	Stage 5: Works	01-Apr-20	31-Mar-21	R24,810,000.00
ROUTINE MAINTENANCE_FOG SPRAY_DC28	Stage 5: Works	01-Apr-20	31-Mar-23	R1.00
ROUTINE MAINTENANCE_ZIBAMBELE TOOLS_DC28	Stage 5: Works	01-Apr-20	31-Mar-23	R1.00
SAFETY MAINTENANCE_TRAFFIC SIGNALS_DC28	Stage 5: Works	01-Apr-20	31-Mar-23	R1.00
SPECIAL MAINTENANCE_PROTECTION WORKS_DC28	Stage 5: Works	01-Apr-20	31-Mar-23	R1.00
ROUTINE MAINTENANCE_ROAD MAINTANANCE SUBSIDIES_DC28	Stage 5: Works	01-Apr-20	31-Mar-23	R1.00
ROUTINE MAINTENANCE_DRAIN CLEANING & VERGES MAINT_DC28	Stage 5: Works	01-Apr-20	31-Mar-24	R77,104,000.00
SAFETY MAINTENANCE_ GUARDRAIL REPAIR_DC28	Stage 5: Works	01-Apr-20	31-Mar-24	R13,730,000.00
UPGRADE OF P700 LINK OF P253 (KM80 TO KM84,5)	Stage 5: Works	01-Apr-03	31-Mar-22	R117,169,643.00
UPGRADE OF P700 LINK OF P253 (KM75 TO KM80)	Stage 5: Works	01-Apr-03	31-Mar-22	R46,200,000.00
SAFETY MAINTENANCE_ROAD MARKING AND STUDS_DC28	Stage 5: Works	01-Apr-20	31-Mar-24	R13,730,000.00
THE RESEAL OF P393 (KM24 TO KM28)	Stage 6: Handover	01-Apr-17	31-Mar-22	R10,881,096.00
CONSTRUCTION OF P218 2.4M BOX CULVERT	Stage 6: Handover	01-May-17	31-Mar-21	R8,000,000.00

Map 72: Intergovernmental Project Pipeline



13.2 CROSS BORDER MATTERS

Engagement have been taking place with neighbouring municipalities in the District Family and also with the Kind Cetshwayo District. To date, the following issues and challenges, of a cross border nature are noted:

Restrictions on beach access for social and economic purposes remains a challenged in many ways. the uMlalazi Coastal Development Plan does address this matter. Beach Access is also hampered in some areas due to historical lease agreements that restricts access to the coast. In context of the above, it is important that neighbouring municipalities work together to direct and manage development within coastal areas.

The P230 is a secondary corridor with potential tourism, heritage and cultural linkages to the Ongoye Forest. Infrastructure investment on local linkages/routes (i.e. poor road network) towards the Ongoye Forest and the Escarpment are very important to boost the local economy.

There are no development plans between uMlalazi and uMhlathuze Local Municipalities to improve, enhance and boost the Ongoye Tourism, Cultural and Heritage landscape.

Of importance to all municipalities is the unknown impact of land claims.

Infrastructural failures impact on the ecological health of riverine and estuary and these impacts extend beyond municipal borders.

Infrastructure planning also traverses borders. An example being the uMhlathuze Arterial Framework plan. This plan is not limited to arterial routes within the uMhlathuze Municipality but extends into the uMfolozi Municipal area. This does provide some linkages to the proposed IDZ 2 A development.

Inset 6: Extract from Arterial Framework Plan

Apart from coastal development planning, nodal planning that has an influence, and will be influenced, by cross border matters. As alluded to before, the proposed IDZ 2A zone is located within uMfolozi Municipality but cannot be separated from the uMhlathuze Municipality. An uMfolozi/IDZ Nodal Plan is currently underway.

Inset 7: Extended Study Area for uMfolozi/IDZ Nodal Plan

The overall aim of the project is to develop a clear, comprehensive nodal plan to manage and guide development and land use in the study area

A further matter that needs to be aligned between municipalities related to the process and outcomes of the preparation of wall to wall schemes. In a same way that land use need to be compatible within a scheme for a certain area, land uses need to be compatible, and take due cognisance of development proposals in neighbouring municipalities as well. A case in point being the Aquadene human settlement development in relative close proximity to the proposed IDZ 2A phase.

Various strategic and catalytic projects are being pursued within the KCDM. Given their nature as projects that promote cross-cutting sustainability outcomes that mirror goals and targets to promote the overall sustainability of a larger area due consideration has to be given to cross border inputs and outputs from as early as the planning stage.

Apart from the matters elaborated upon above, the uMhlathuze Municipality is undertaking the Mzingazi Formalization project and also pursuing human settlement development in the vicinity of Nseleni. Both these processes have cross border impacts and open communication has to be maintained between the municipalities involved.