uMHLATHUZE MUNICIPALITY

5TH GENERATION: SPATIAL DEVELOPMENT FRAMEWORK 2022/2023 – 2026/2027 SECOND REVIEW (MAY 2024)

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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*
- *Data from the 2022 Census that has been made available by STATSSA at Municipal Level has been used*

1. INTRODUCTION

1.1 BACKGROUND

The document represents the Second Review of 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 2022/23 – 2026/2027 SDF.
- 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 First Review of the Fifth Generation Spatial Development Framework (SDF) for uMhlathuze Municipality for 2022/23 – 2026/2027, dated May 2023.
- 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 obtained 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 SECOND REVIEW OF THE FIFTH GENERATION SDF (2022/2023 – 2026/2027) METHODOLOGY AND APPROACH

Table 1: Action Items for the SDF Preparation

No.	Item	Description
1.	Mapping of historic applications data	Mapping of historic data in respect of environmental approval applications, rezoning and consent applications as well as building plan submissions. The purpose of this activity is to identify any spatial trends in applications in relation to nodal areas, interventions areas etc.
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	Information to be augmented by Socio-economic profiling deliverable of, amongst others, the CEF (Capital Expenditure Framework) Review process.
3.	Identify, quantify and provide location requirements of infrastructure and services provision for existing and future development needs.	Information to be augmented from infrastructure demand and project list deliverable of, amongst others, the CEF Review process.
4.	Update of the Policy Context of the SDF to ensure that amendments,	This is an ongoing activity as part of the SDF Review and is undertaken as and when new information becomes available.

No.	Item	Description
	additions, changes etc. are captured.	
5.	Include a strategic assessment of the environmental pressures and opportunities within the municipal area (Environmental Analysis Chapter).	For this process, updated environmental base data has to be sought and the Environmental Analysis Chapter updated accordingly.
6.	Identify/Confirm 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. The existing provisions in the SDF to be reviewed and updated as required in this regard.
7.	Updated CEF Review information	Incorporation of updated information (as available) from the ongoing CEF Review process into the SDF.
8.	The five-year spatial development plan for the municipality.	The five-year spatial development plan to be informed by the various processes that have been listed above. The said plan to outline anticipated areas of growth along with areas that require infrastructure intervention and implementation as well as other regulatory compliance matters.
9.	Intergovernmental project pipeline	The compilation of an intergovernmental project pipeline and the reflection of such public investment spatially. At present, the provided datasets are not all complete and not all the information is reflected spatially. Further assistance has also been sought from the Department from the Department of Cooperative Governance. Assistance also to be sought from the KwaZulu-Natal Department of Cooperative Governance and Traditional Affairs.
10.	Stakeholder engagement	The SDF is to be presented during the IDP and/or Budget Roadshows. In addition, an abridged summary of the SDF that can also be translated for publication and distribution has is to be prepared.

Apart from the above listed key activities, the following activities will also be pursued in an ongoing manner as summarised hereunder:

1. Engagement to improve cross border alignment of spatial development issues and interventions/implementation. Details of adopted provincial/district interventions/plans (e.g. rural development plans) to be considered and included where relevant. Amongst others, the King Cetshwayo District (KCDM) Planners Forum could guide this process.
2. Compilation of an intergovernmental project pipeline and the reflection of such public investment spatially in the municipal Capital Expenditure Framework (CEF). This is to be undertaken as part of the CEF Review but also ongoing with the respective government departments/institutions. Ongoing involvement in the District Development Plan (DDM) compilation process is contributing to this process.
3. Details on the identified strategic and catalytic projects to be updated explaining the nature of their targeted intervention, their potential to change the socio-economic landscape and to trigger further

investment. Updates in this regard are done quarterly to Council and updated information to be appropriately reflected in the SDF.

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

1.6 INFORMATION SOURCES

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

- uMhlathuze Spatial Development Framework (2022/23 – 2026/2027)
- STATSSA 2011 Census results
- STATSSA 2016 Community Survey results
- STATSSA 2022 Census results
- uMhlathuze IDP (2022/23 – 2026/27)
- 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 (2022/23 – 2026/27)
- King Cetshwayo District Municipality SDF
- Kind Cetshwayo District Municipality Environmental Management Framework
- Various Municipal Sector Plans
- Draft uMhlathuze Capital Expenditure Framework (CEF) dated February 2023

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. The seventeen (17) Sustainable Development Goals (SDGs) are intended to be action-oriented, concise and easy to communicate, limited in number, aspirational, global in nature and **universally applicable to all countries**, while taking into **account** different national realities, capacities and levels of development and respecting national policies and priorities.

Figure 1: United Nations Sustainable Development Goals

The following table provides a brief description of each of the SDGs.

Table 2: Description of SDGs

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

Goal 6: Clean Water and Sanitation	Ensure availability and sustainable management of water and sanitation for all
Goal 7: Affordable and Clean Energy	Ensure access to affordable, reliable, sustainable and modern energy for all
Goal 8: Decent Work and Economic Growth	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Goal 9: Industry, Innovation and Infrastructure	Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation
Goal 10: Reducing Inequalities	Reduce income inequality within and among countries
Goal 11: Sustainable Cities and Communities	Make cities and human settlements inclusive, safe, resilient, and sustainable
Goal 12: Responsible Consumption and Production	Ensure sustainable consumption and production patterns
Goal 13: Climate Action	Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy
Goal 14: Life Below Water	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
Goal 15: Life on Land	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Goal 16: Peace, Justice and Strong Institutions	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
Goal 17: Partnerships for the Goals	Strengthen the means of implementation and revitalize the global partnership for sustainable development

South Africa has endorsed a National Development Plan (NDP) as a policy driver for development. There are clear synergies between our NDP and the SDGs. When considering the full suite of SDG targets and indicators (associated with the 17 SDGs) it is clear that the municipal service delivery mandate and legislated functions responds to many of the targets and associated indicators. As such, local governments have a crucial role to play in this process of localizing the SDGs, i.e. working toward their implementation and reporting accordingly.

The City of uMhlathuze is involved in a programme of "Localising the SDGs through the Voluntary Local Reviews (VLRs)". The Municipality has identified a preliminary set of SDGs to initiate the process of local reporting (VLR) on SDGs for uMhlathuze. The reporting on SDGs will be an incremental process and will require internalization of the process within the organisation but also consultation with external stakeholders.

The following table provides details of the SDGs and associated/proposed indicators that the City of uMhlathuze intends to report on as part of the current VLR process:

Table 3: SDG Indicators for Reporting by uMhlathuze Municipality

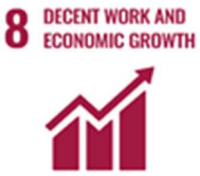
Goal 6: Water and Sanitation
Description: Ensure availability and sustainable management of water and sanitation for all).
Targets and Indicators
6.1 Safe and Affordable Drinking Water 6.1.1 Proportion of population using safely managed drinking water services ***6.3 Improve Water Quality, Wastewater Treatment and Safe Reuse*** 6.3.1 Proportion of domestic and industrial wastewater flows safely treated ***6.4 Increase Water-Use Efficiency and Ensure Freshwater Supplies*** 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources
Goal 7: Affordable and Clean Energy
Description: Ensure Access to Affordable, Reliable, sustainable and modern energy for all
Targets and Indicators
7.1 Universal Access to Modern Energy 7.1.1 Proportion of population with access to electricity
Goal 11: Sustainable Cities and Communities
Description: Makes cities and human settlements inclusive, sage, resilient and sustainable
Targets and Indicators
11.1 By 2030, ensure access to all to adequate, safe and affordable housing and basic services and upgrade slums 11.1.1 Proportion of urban population living in slums, informal settlement or inadequate housing ***11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management*** 11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of the total urban solid waste generated by cities 11.6.2 Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities
Goal 16: Peace, Justice and Strong Institutions
Description: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
Targets and Indicators
16.6 Develop Effective, Accountable and Transparent Institutions 16.6.1 Primary government expenditures as a proportion of original approved budget, by sector (or by budget codes or similar) ***16.7 Ensure Responsive, Inclusive and Representative Decision-Making*** 16.7.1 Proportions of positions in national and local institutions, including (a) the legislatures; (b) the public service; and (c) the judiciary, compared to national distributions, by sex, age, persons with disabilities and population groups

Apart from the four listed SDGs above, the Municipality is also collating information to potentially also report on SDG 13: Climate Action and SDG 17: Partnerships for the Goals.

As noted, the municipal service delivery mandate and legislated functions responds to many of the SDG targets and associated indicators and the following table provides an overview of our municipal responses (in terms of actions/commitments as well as vision elements) to the SDGs.

Table 4: Municipal Response and Vision on SDGs

SUSTAINABLE DEVELOPMENT GOAL	RESPONSE	VISION
	• Creating a conducive 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 conducive for employment and efficient livelihoods.
	• Within the broader economic development imperative, agriculture is a means to include communities in the economy.	The municipality should ensure that local communities have an opportunity to participate in the municipality's economy through the agricultural industry.
	• Coordination with the Department of Health and various stakeholders. • Operation Sukuma Sakhe (OSS) facilitates 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) 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 focus on 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 ensuring that women and girls have the same opportunities.

SUSTAINABLE DEVELOPMENT GOAL	RESPONSE	VISION
	• Conserve water resources such as lakes and rivers • Provide basic sanitation	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	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 and promoting 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
	• 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.
	• Promote peaceful and inclusive societies for sustainable development. • Provide access to justice for all • Build effective, accountable and inclusive institutions at all levels	• Employment equity • Implementation of Batho Pele principles • Good customer care

SUSTAINABLE DEVELOPMENT GOAL	RESPONSE	VISION
	• Strengthen the means of implementation and revitalize the Global Partnerships for Sustainable Development	• Ongoing engagements with Traditional Council Structures • Forums with industry and bilateral with State owned Enterprises • Partnerships with external stakeholders on matters of climate change and urban development

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 due to the Covid-19 pandemic which created a new-normal. Regarding 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 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 5: 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 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 2: 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 6: 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

2.4 INTEGRATED URBAN DEVELOPMENT FRAMEWORK (IUDF)

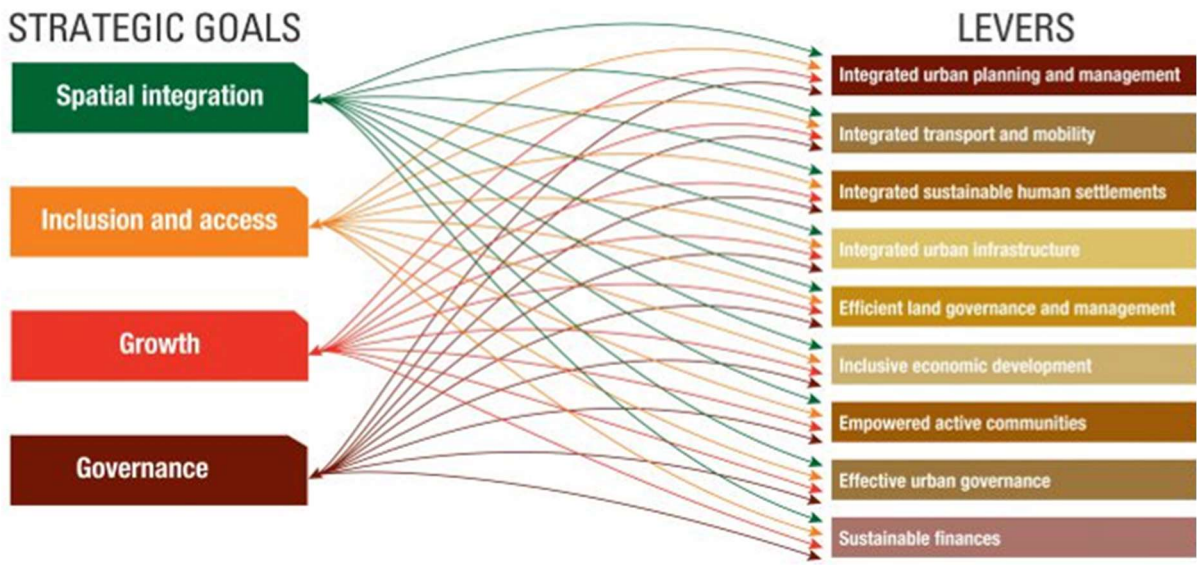
The Integrated Urban Development Framework (IUDF) is a policy framework guiding the reorganization of the urban system of South Africa so that cities and towns can become inclusive, resource efficient and adequate places to live, as per the vision outlined in Chapter 8 of the National Development Plan (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 3: Strategic Goals and Levers of the IUDF



These above IUDF levers related very specifically to the pillars of **spatial transformation** and such These above IUDF levers relate very specifically 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 (SONA - 2023) AND STATE OF THE PROVINCE ADDRESS (SOPA KZN - 2023)

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

Table 7: 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	○ Cutting Red Tape ○ Making and buying Local Goods ○ Improving Education ○ Reducing inequality ○ Establishment of State –owned Holding Company. ○ Public Service Reform ○ Appointment of qualified public Servants ○ Address failures at local government level and improve basic service delivery. ○ Presidency and National Treasury will work together to rationalize government departments and entities. ○ Investment in Green Economy ○ Finalise SOE Shareholder Management Bill to ensure effective oversight of SOEs ○ Amend legislation and strengthen Public Service Commission ○ Introduction of Integrity Assessments as a mandatory Requirement. ○ Introduce entry exams to ensure high competency standards. ○ Enhance the capacity of public representatives and officials. ○ Turning around local government	○ Energy security plan for the province ○ Building a capable and agile state machinery ○ Black Industrialist programme ○ Newcastle and Ladysmith Special Economic Zones ○ A decisive Action to grow and transform KZN Economy. ○ Enterprise the province into the fourth industrial Revolution. ○ Establishment of Coastal Smart Cities and Realising Vision 2030 ○ Industrialization through Special Economic Zones ○ Operation Pay –on-time ○ Recovery from floods ○ Resettlement of flood victims ○ Progress on schools damaged by floods ○ Rehabilitation of infrastructure (Roads and Bridges) ○ Building Good Governance, Ethical and Developmental State ○ Operation Clean Audit ○ Investing in Human Resource Development to Build Professional Civil Servants ○ Maintenance and construction ○ Operation Clean Audit	○ Internalization of SDGs ○ 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 ○ Industrialisation through special economic zones (RIDZ) and Port Expansion

MTSF PRIORITIES (2019-2024)	STATE OF THE NATION ADDRESS KEY POINTS	STATE OF THE PROVINCE ADDRESS KEY POINTS	PRACTICAL APPLICATION (examples)
	○ Maintain and upgrade local infrastructure. ○ Maintain and Upgrade Local Infrastructure. ○ Develop a proposal for rationalisation of departments and entities. ○ Improving Access to water and sanitation ○ Infrastructure rehabilitation		
2. Economic Transformation & Job Creation	○ Presidential Employment Stimulus ○ Freeing Small business ○ Fund to support SMME growth ○ Supporting women –owned businesses ○ Cutting Red Tape ○ Making and buying local ○ Cultivation of hemp and cannabis ○ Structural Reforms ○ Transnet and private sector companies will conclude partnerships. ○ Completion of the spectrum Auction in the telecommunications sector. ○ Skills for a growing economy ○ Skills for growing economy ○ Flexible points based system to attract skilled immigration. ○ Implementation of a trusted employer scheme. ○ Processing the backlog of tittle deeds. ○ Water security ○ Investing in major infrastructure projects	○ Job opportunities for young people ○ Mass employment creation ○ Faster implementation of the economic recovery, reconstruction and transformation plan. ○ KZN Maritime University ○ Wealth Fund ○ Rationalisation of entities ○ Transformed and Sustainable Human Settlements ○ Introduction of amendments to the Business Act. ○ Strengthen the bounce-back loan scheme to assist SMMEs ○ Provide financing to SMMEs through SEFA. ○ Establish SMME growth fund with SA SMMEs Fund. ○ Support Women entrepreneurs ○ Access to Funds earmarked by development finance institutions. ○ Reduce red tape in priority arears. ○ Changes to the policy and regulatory framework for hemp and cannabis ○ Finalise awards to preferred bidders for container terminals.	○ 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 ○ Investment in strategic economic ○ Implementation of catalytic projects “game changers”

MTSF PRIORITIES (2019-2024)	STATE OF THE NATION ADDRESS KEY POINTS	STATE OF THE PROVINCE ADDRESS KEY POINTS	PRACTICAL APPLICATION (examples)
	○ Lack of technical skills and project management capacity. ○ Umzimvubu water project. ○ Construction of Ntabelanga Dam ○ Lesotho Highlands phase two ○ Rural and under-resourced arears. ○ Development of the Cannabis Industry ○ Investment Attraction ○ Futurelife food processing facility. ○ LM Diapers expansion of personal care manufacturing plans. ○ Synergy blenders processing plant. ○ Readiness of Agrizone 2 ○ Solving Youth Unemployment ○ Ithala Development Finance Corporation	○ Migrate the remaining households to digital television signal. ○ Capacitate people with relevant skills to enter the job market. ○ Work Visa Review ○ High Growth Start-ups. ○ Title deeds for subsidized housing ○	
3. Education, Skills & Health	○ Simplify requirements for ECD Centres ○ Building The Sanitation Appropriate for Education (Initiative). • Accelerated School Infrastructure Delivery Initiative(ASIDI)	○ E-health programme ○ Make me look like a hospital programme ○ Education and Skills Development ○ Building a healthy society ○ Establishment of KZN Maritime University. Social Relief programme	○ District Demand Council ○ District Joint Operations Committee ○ Local Joint Operations Committee ○ uMhlathuze COVID 19 Task team ○ Approved Work from Home Policy ○ Public Wi-Fi ○ Proposed Maritime TVET (Operation Phakisa) ○ Target areas of known educational backlogs ○ Operation Sukuma Sakhe (OSS) War Rooms to assist with Community Health ○ Completion of ECD (Early Childhood Development) Centres ○ Internships prioritizing young girls ○ Smart City Initiatives (Enterprise Resource planning, broadband

MTSF PRIORITIES (2019-2024)	STATE OF THE NATION ADDRESS KEY POINTS	STATE OF THE PROVINCE ADDRESS KEY POINTS	PRACTICAL APPLICATION (examples)
			connectivity, Richards bay Techno hub) ○ Strategic Partnerships with Institutions of higher learning (Signed MoU) ○ Mayoral Bursary Fund and Back to school fund. ○ 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	○ Addressing Load shedding ○ Exempt critical infrastructure such as hospitals and water treatment plants from load shedding. ○ Improve smooth running and to improve the reliability of the power stations. ○ Fighting hunger and poverty ○ Address poverty and counter the rising cost of living ○ Implementation of National State of Disaster. ○ Appointment of Minister of Electricity. ○ Addition of new generation capacity. ○ Improve the performance of Eskom's existing power stations. ○ Roll out solar panels. ○ Invest in new transmission lines and substations in arrears of concern. ○ Expedite the leasing of Solar panels to the clients. ○ Deploy people and resources.	○ Delivering quality basic services ○ Maintenance of infrastructure ○ Fixing Potholes ○ Progress on catalytic infrastructure ○ Curbing Road Carnage Social relief of distress grant ○ Cushion the poor against rising inflation ○ Targeted basic income support. ○ KZN Energy war room ○ Panel of energy expects ○ Rollout of rooftop solar panels ○ Plans for government departments to save energy ○ Ocean Economy ○ Tidal Wave ○ Hydrogen and renewables. ○ Battery Energy Storage systems ○ Stimulating townships and Rural Economies	○ Load shedding schedule ○ Capital Expenditure framework ○ Municipal Catalytic Project ○ Eskom Electricity projects ○ Eskom (bulk and households) projects worth R47 425 594 ○ CoU (Eskom Schedule 5B households) = R9 000 000 ○ CoU (Bulk) = R5 000 000 ○ 1610 Planned household connections ○ Research on alternative energy

MTSF PRIORITIES (2019-2024)	STATE OF THE NATION ADDRESS KEY POINTS	STATE OF THE PROVINCE ADDRESS KEY POINTS	PRACTICAL APPLICATION (examples)
	○ Finalise a debt solution ○ Start operating the National Transmission Company.		
5. Spatial Integration, Human Settlement & Local Government	○ Just transition to a low –carbon economy. ○ Amendment Bill to transform the energy sector ○ Establish a competitive electricity market. Develop and undertake an implementation plan for the JET Investment Plan ○ Table the Electricity Regulation Amendment Bill. ○ Provincial Government Precinct ○ Radical Agrarian and socio-economic Transformation	○ State Land for Housing Development ○ Airport Development Master Plan ○ KZN Film industry ○ Biodiversity Economy ○ Support of emerging wildlife Business ○ Ecosystem Restoration and Job Creation	○ 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 ○ Climate Change Adaptation and Mitigation Programme ○ Accelerated low emission development ○ Urban Air Quality Management
6. Social Cohesion & Safer Communities	○ Fighting crime and corruption ○ Combating Gender Based Violence ○ Strengthen the criminal Justice system ○ Functional of Sexual Offences Court ○ Expand the network of of Thuthuzela Care Centres ○ Provide Financial Support for Various programmes that address GBVF. ○ Improve the effectiveness of our fight against crime, corruption and sabotage.	○ Identify and targets crime hotspots. ○ Permanent Investigating Directorate. ○ Overhaul and strengthen anti-corruption ○ Curbing the proliferation of guns ○ Identify and targets crime hotspots. ○ Permanent Investigating Directorate. ○ Overhaul and strengthen anti-corruption ○ Curbing the proliferation of guns ○ Community safety intervention unit ○ The role of community in the fight against crime.	○ 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 ○ SMME One Stop Shop ○ Crime Prevention Strategy ○ Special Programs Action Plan prioritizes the GBV Awareness Campaigns

MTSF PRIORITIES (2019-2024)	STATE OF THE NATION ADDRESS KEY POINTS	STATE OF THE PROVINCE ADDRESS KEY POINTS	PRACTICAL APPLICATION (examples)
	○ Undertake reforms in safety and security using the Operation Vulindlela Approach. ○ Continue to tackle Economic sabotage and related crimes through multi-disciplinary economic infrastructure task teams. ○ Government to increase police presence on the streets. ○ Finalization of Draft Public Procurement Bill to close policy gaps in procurement as a measure to prevent corruption. ○ Introduction of amendments to the Protected Disclosures Act and Witness Protection Act. ○ Improve Access to the witness protection programme. ○ Introduction of Procurement Bill to improve efficiency. ○ Recruit an additional 10 000 new personnel. ○ The National Anti-Advisory Corruption Advisory Council to Stem Corruption. ○ Creating a gender-based violence and femicide free society. ○ Enrol unemployed graduates to be placed in community organizations. ○ GBFV programmes through R10 million funding from the gaming and betting board. ○ War on drugs ○ Tackling Fraud, maladministration and corruption	○ Five-year plan to tackle Gender Based Violence and femicide ○ Refurbishment of shelters ○ 50 victims friendly Rooms ○ Developing Gender Based Violence and femicide App with panic button.	○ Mayoral Imbizo Yamadoda (Grooming Boys to Men) ○ Support of Zulu Maidens initiatives ○ Database for unemployed youth ○ Functional Youth Office , focusing on youth development programs ○ Roll out of high mast lights in traditional areas ○ Roadblocks by SAPS working with municipal police ○ Construction of Vulindlela Police Station for 2023/2024

MTSF PRIORITIES (2019-2024)	STATE OF THE NATION ADDRESS KEY POINTS	STATE OF THE PROVINCE ADDRESS KEY POINTS	PRACTICAL APPLICATION (examples)
	○ Freezing and recovery of money and assets linked to crime		
7. A Better Africa & World			○ Host international delegations and diplomats ○ Membership of international organisations ○ National & International Collaboration & Coordination ○ Partnerships (UWASP, ICLEI, GiZ etc.) ○ Disaster Management Services ○ Climate Action

2.6 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:

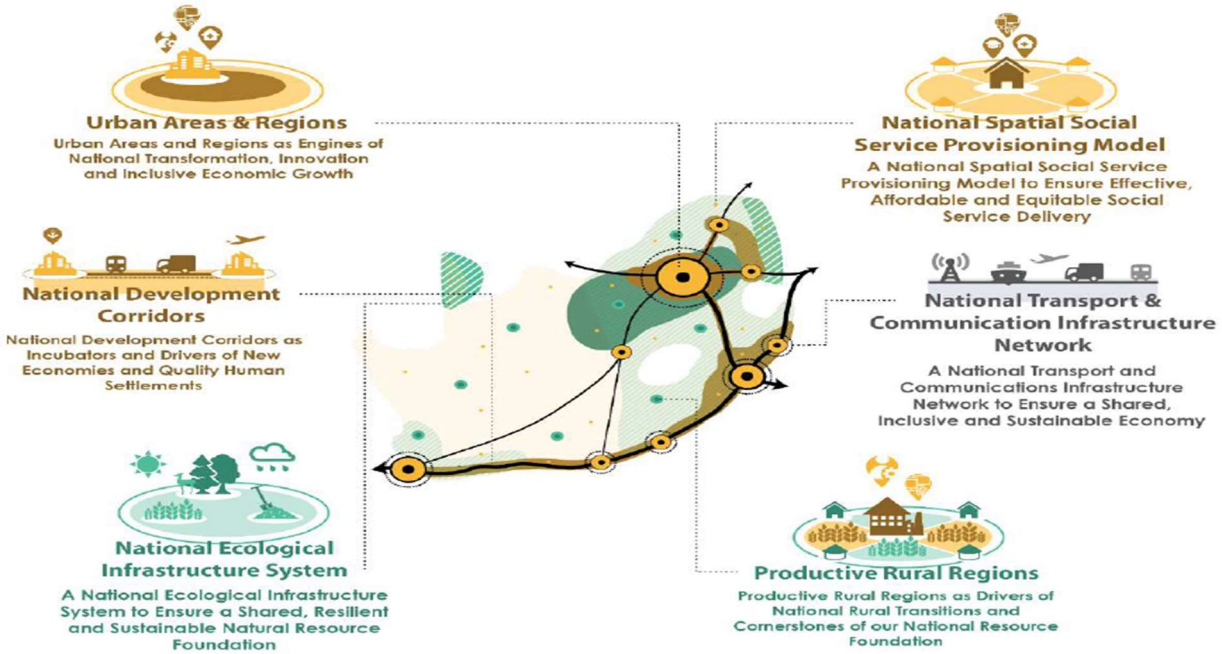
"All Our People Living in Shared and Transformed Places in an Integrated, Inclusive, Sustainable and Competitive National Space Economy"

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 4: NSDF Levers



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

Table 8: NSDF Outcomes

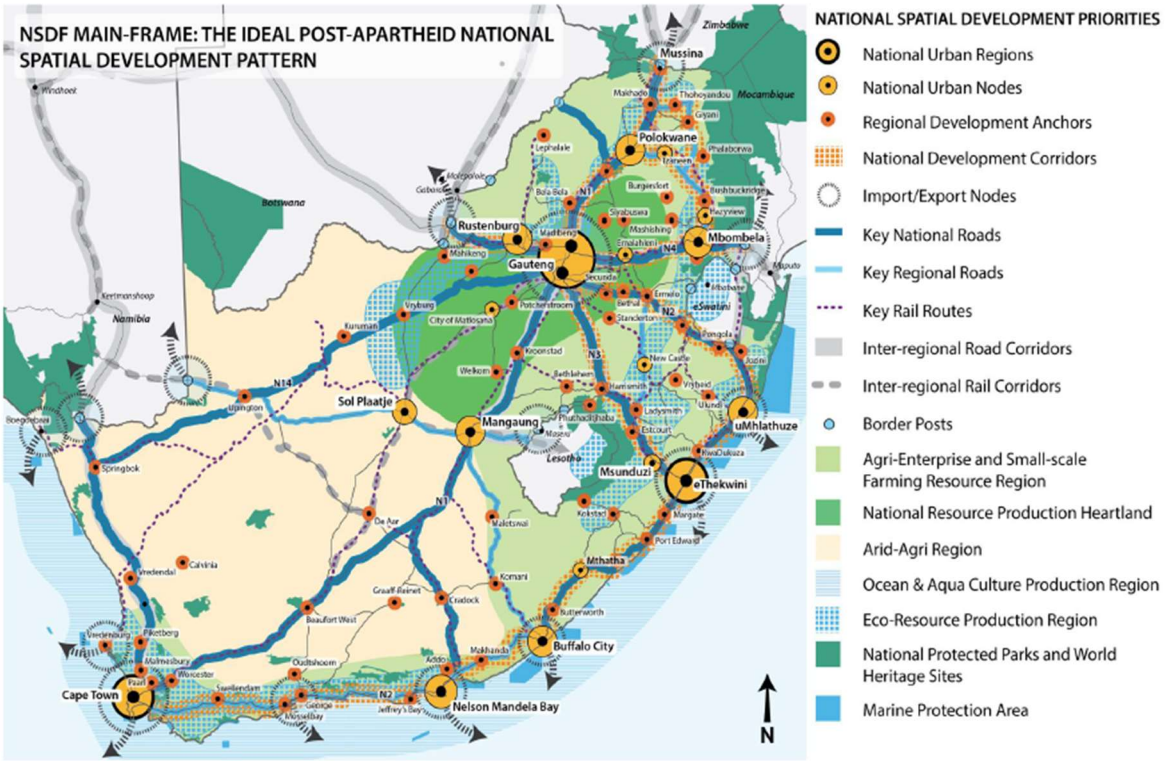
Nr.	Outcome Description
1	A network of consolidated, transformed and well-connected national urban nodes, regional development anchors, and development corridors that enable South Africa to derive maximum transformative benefit from urbanization, urban living and inclusive economic development.
2	National 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 9: 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 5: 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 10: 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 II & III: 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 II: 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 PROVINCIAL GROWTH AND DEVELOPMENT STRATEGY - PGDS

The 2021 PGDS, reflects the following seven priorities:

Priority 1: Building a Capable, Ethical and Development State
A capable, ethical and developmental state underpins all seven priorities of this PGDS. The successful implementation of the PGDS is therefore heavily dependent on there being effective and efficient governance systems, across all sectors, but particularly in the Government Sector.

Priority 2: Economic Transformation and Job Creation
Economic growth is paramount for socio-economic development and it is accepted that inclusive, expanded and sustained economic output is a fundamental driver for economic transformation and job creation. In order for everyone to have a bigger slice of the cake, the increase in its size needs be considered as the first priority. There is an urgent need to derive measures that stimulate growth and development in order to continuously grow the KZN economy.

Priority 3: Education, Skills and Health
Education, skills and health are vital components in the mix of the critical building blocks of socio-economic development. As such, investments in developing the capabilities of all our people extends from early childhood development (ECD) through to skills development is critical. In this regard, investment in all four stages of the education and skills system are fundamental to building the capabilities of citizens, developing their social assets, and ultimately addressing the triple challenge of poverty, inequality and unemployment. Furthermore, the health of all people affects the quality of life and productive capacity of citizens which is also fundamental to our development and growth prospects.

Priority 4: Consolidating the Social Wage through Reliable and Quality Basic Services
A comprehensive, inclusive and responsive social protection system ensures the resilience of citizens which requires actions improve the reliability and quality of basic services with a focus on affordability and meeting the needs of vulnerable communities.

Priority 5: Spatial Integration, Human Settlements and Local Government
The priority incorporates the following 5 key programmes:

- Spatial Integration
- Environmental Management and Climate Change
- Rural Economy
- Human Settlements
- Basic Services

Priority 6: Social Cohesion and Safer Communities
A socially cohesive and safe South Africa and KZN, requires a series of intersecting interventions that unite our country. To achieve this vision, a democratic culture of participation and equality must be instilled, but it also requires dedicated interventions to address actions that undermine these values. Achieving social cohesion and safe communities requires strengthening criminal justice platforms,

police services and community participation in public policing. This work cannot be done without improving trust in our public sector and its institutions.

Priority 7: Better Africa and World
The Province's aspirations and development are linked to that of a prosperous Africa and World. Building a 'Better Africa and a Better World' begins with us embracing our African identity and developing an active and positive interest in our home continent while ensuring ethical and effective leadership and optimum essential service delivery. We have a shared vision as Africans, which is the African Union's Agenda 2063, and we must therefore ensure that intra-continental and inter-continental cooperation propel us to move with speed towards the Africa we aspire to be in 2063. The Province needs to play an active role in African and global affairs.

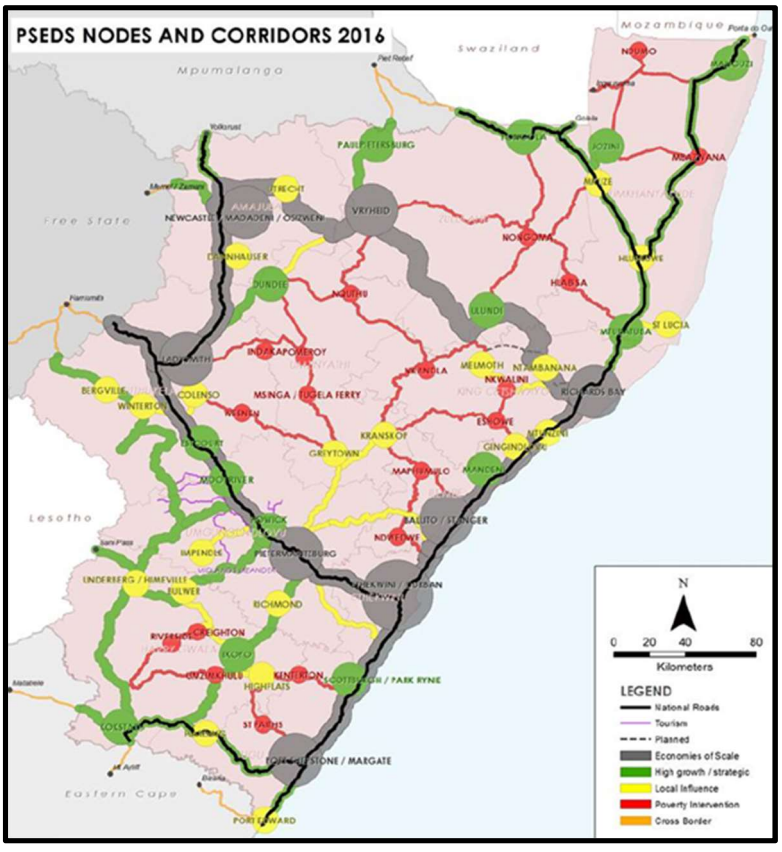
2.9 PROVINCIAL SPATIAL ECONOMIC DEVELOPMENT STRATEGY: CORRIDOR AND NODAL FRAMEWORK - 2016

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)

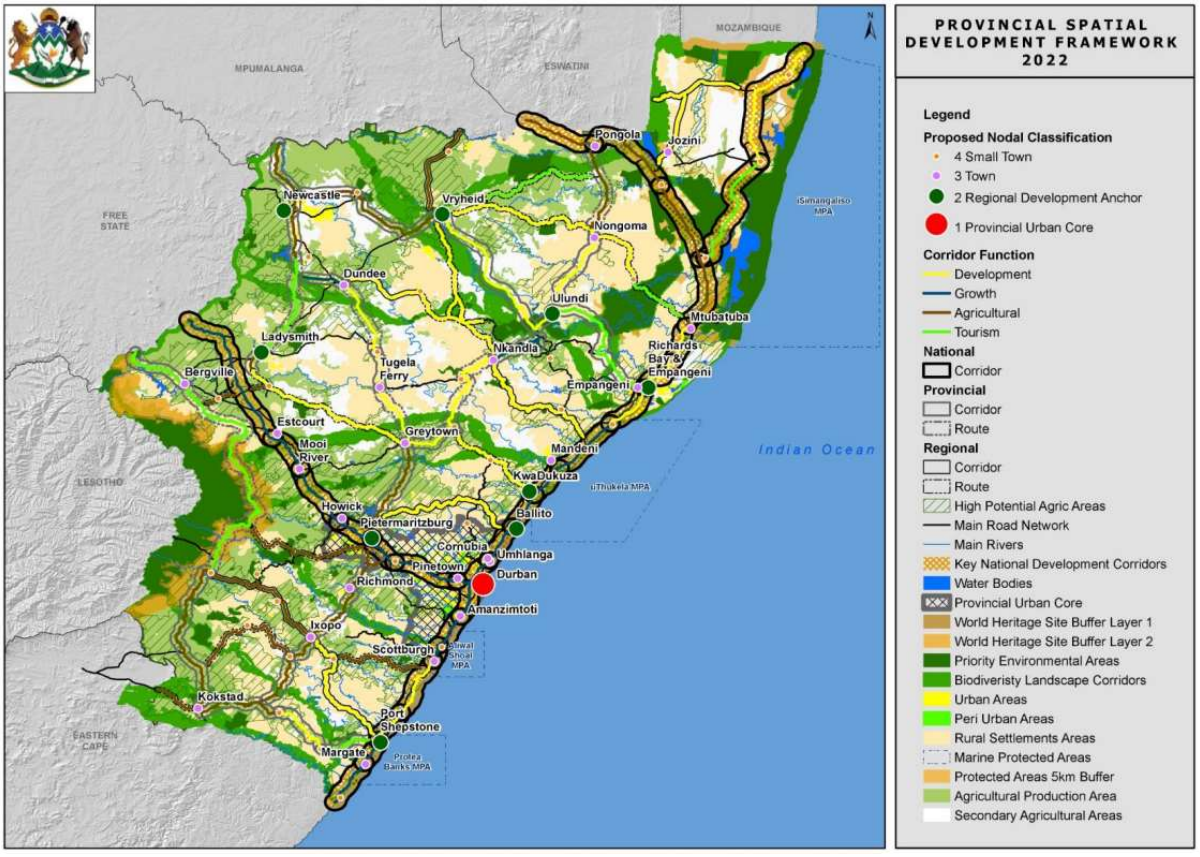
The Kwazulu-Natal Provincial Spatial Development Framework (PSDF) represents the long-term spatial vision of the province to be consistent with and be formulated within the context of the National Spatial Development Framework. It is the spatial expression of the KZN Provincial Growth and Development 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



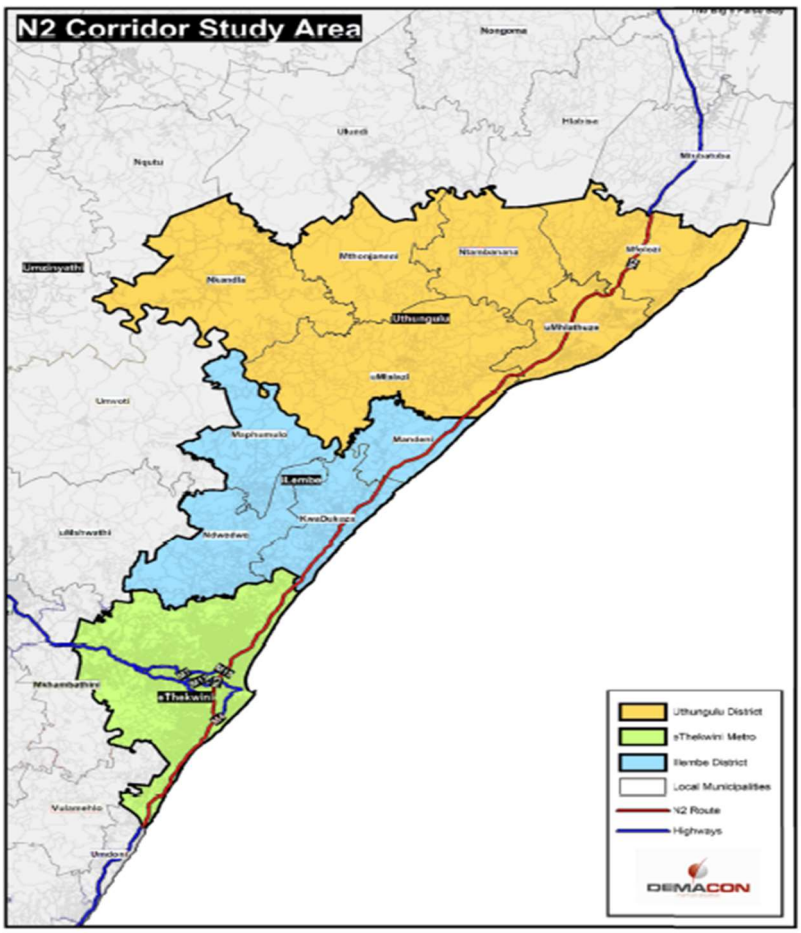
2.11 STRATEGIC CORRIDOR DEVELOPMENT PLAN FOR THE N2 CORRIDOR FROM DURBAN TO RICHARDS BAY

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 as well as the King Cetshwayo District Family of Municipalities

Map 3: N2 Corridor Study Area



2.12 UMHLATHUZE-ULUNDI-VRYHEID SECONDARY CORRIDOR PLAN

The 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.

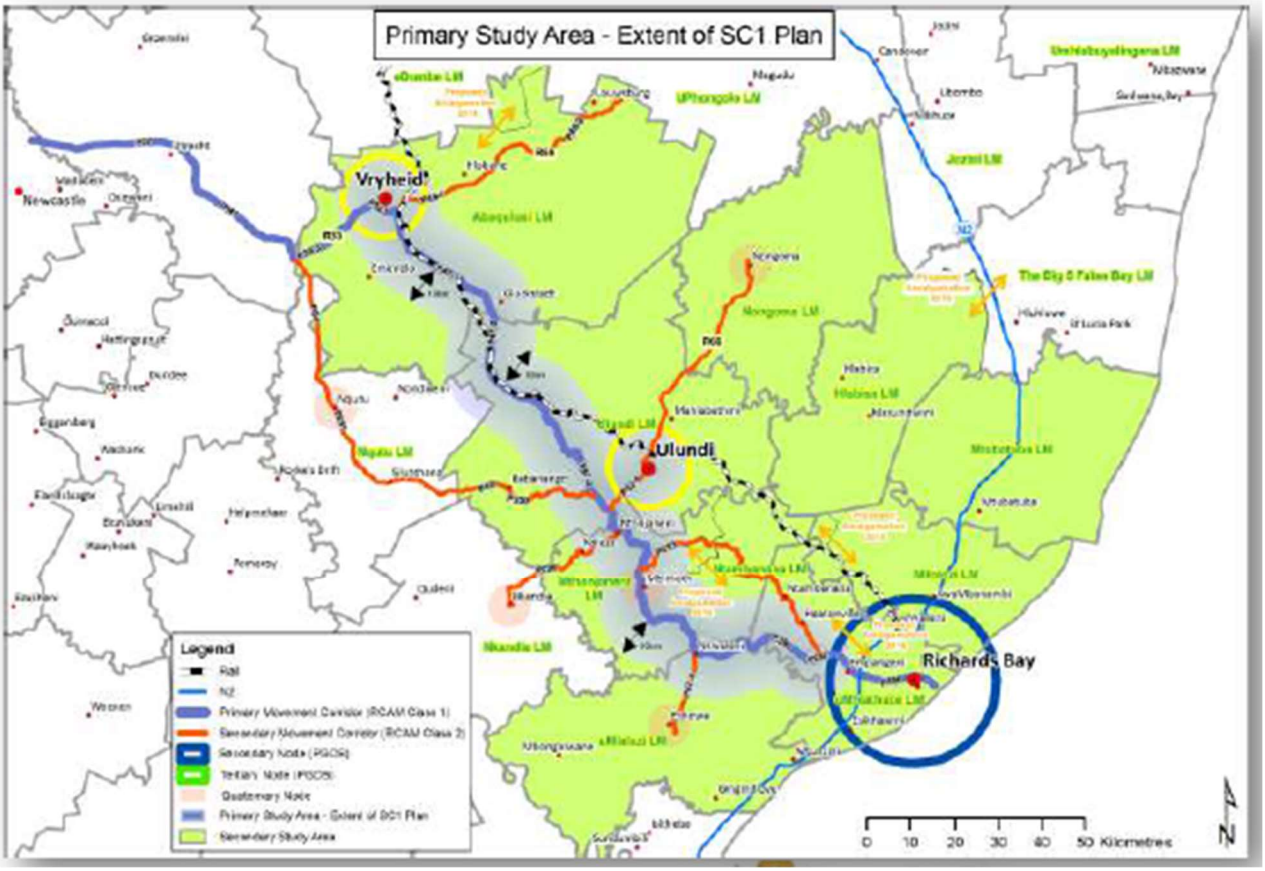
The main objective is to:

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

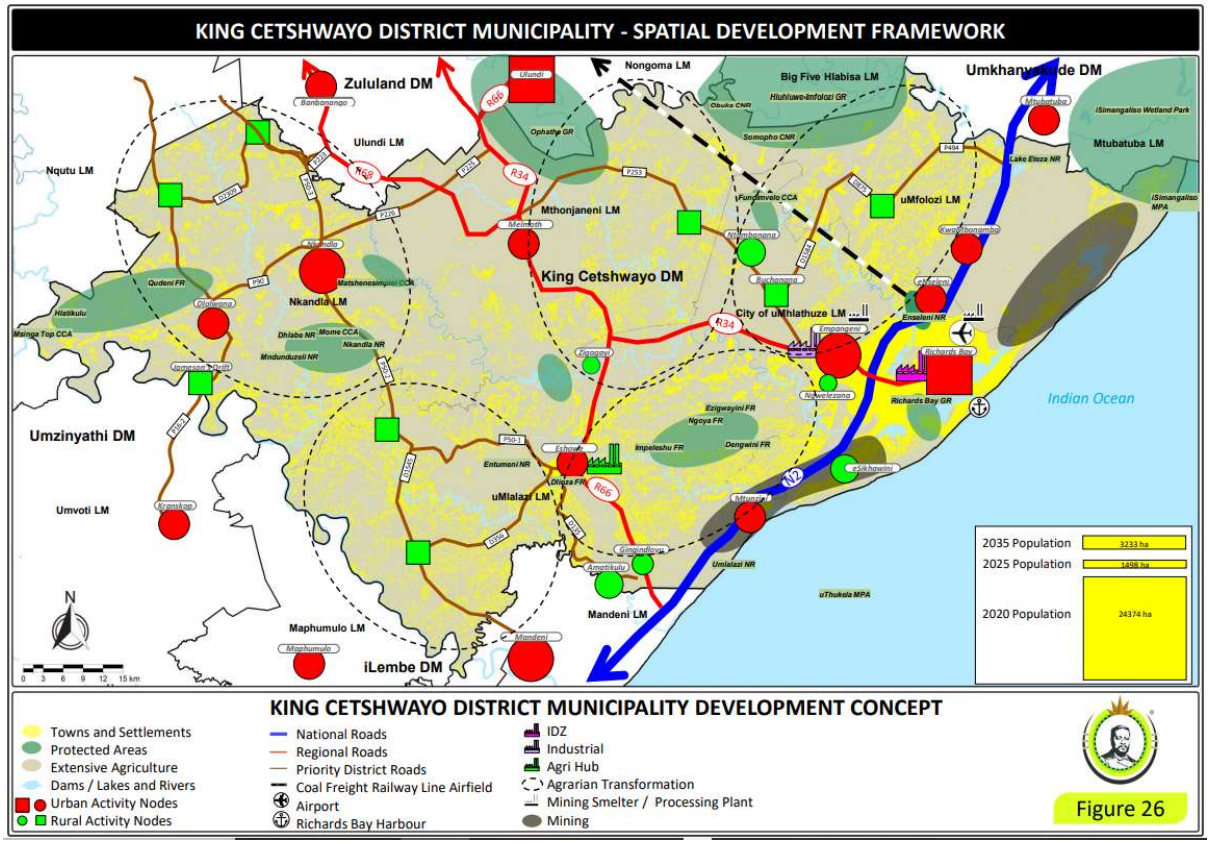
Map 4: uMhlathuze-Ulundi-Vryheid Secondary Corridor Project Study Area



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

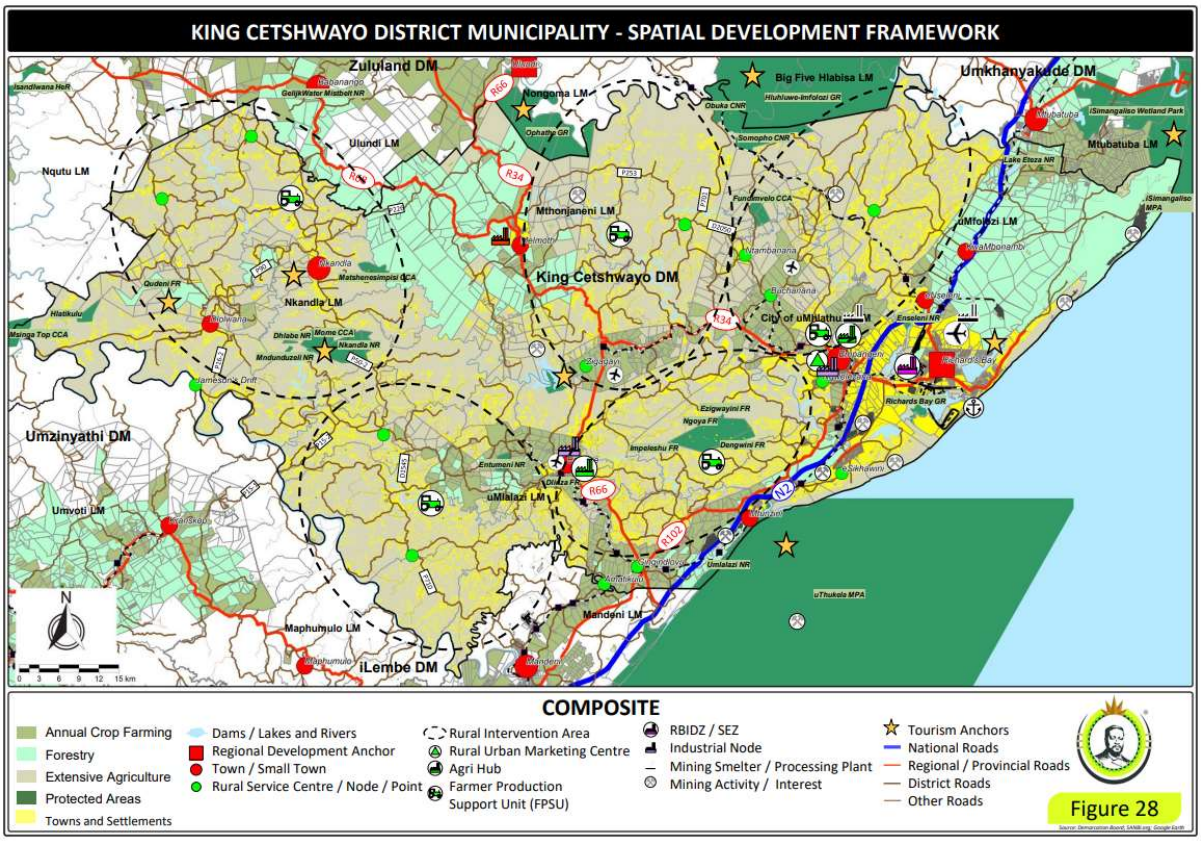


The following objectives represent the points of departure for the above:

- 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: Optimize 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

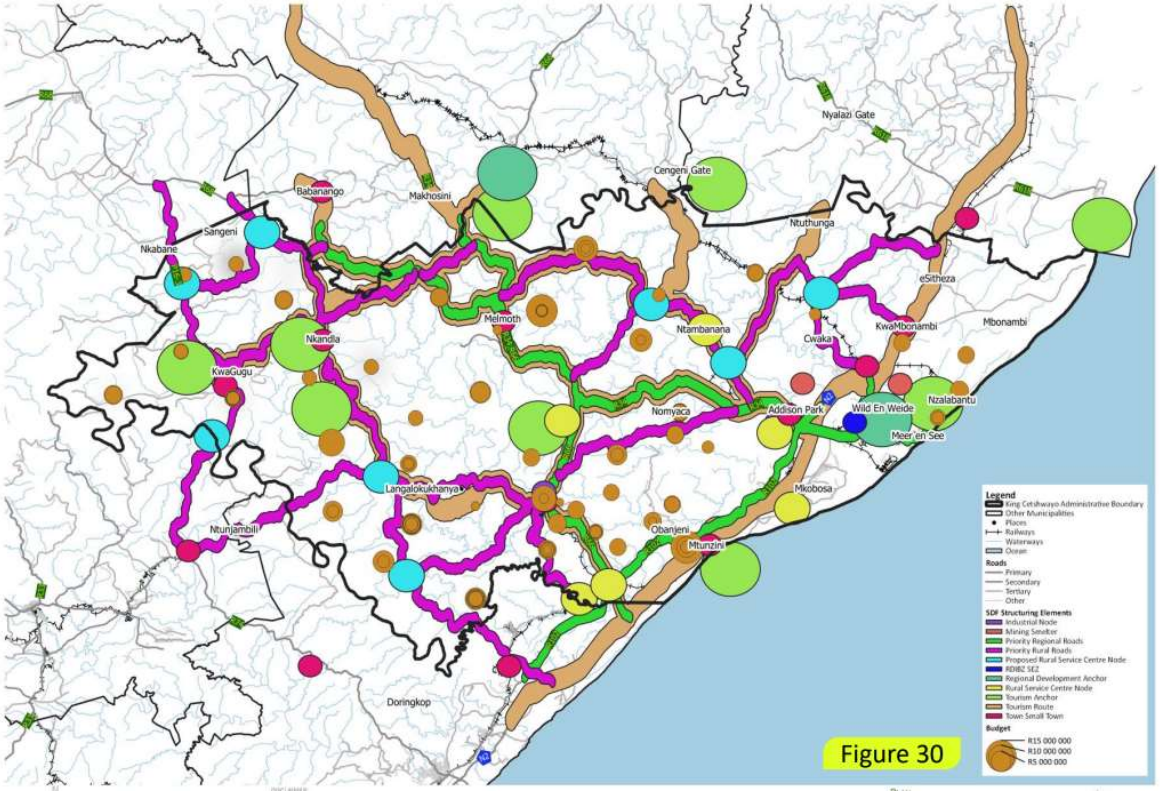
The following represents the composite Spatial Development Framework for the King Cetshwayo District Municipality, representing the spatial outcomes of the spatial strategies associated with each of the six development objectives of the KCDM SDF

Map 6: King 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 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 11: 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 o forecast new skill requirements and facilitating expedited acquisition of such skills through defined partnership agreements and other means o 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.

2.15 UMHLATHUZE LOCAL ECONOMIC DEVELOPMENT STRATEGY REVIEW

The uMhlathuze Municipality has reviewed its Local Economic Development (LED) Strategy. The LED strategy recognizes that the local economic development function needs to be reimagined. This LED Strategy is based on a new approach which requires the municipality to facilitate the setting up of institutional arrangements and creation of an enabling environment for business development. The following is an outline of the **strategic issues** that inform the reimagined uMhlathuze LED Strategy.

i. Local Government should mainstream economic considerations into their sectoral departments and into the accompanying strategies of those departments
ii. Local governments need to use municipal levers, such as land-use planning, to support their economies
iii. Municipalities should do more to rebuild economic intelligence, with the assistance of other sphered of government
iv. Local governments should strengthen economic strategies that are appropriate for their specific economic context and based on solid economic intelligence
v. Local governments should development economic partnerships, as municipalities need to facilitate, not drive, economic development
vi. Local government should create appropriate institutional arrangements that support economic development

The reviewed LED Strategy has the following **goals**:

- to capacitate and empower communities
- to create jobs and employment
- to grow small informal, rural and township enterprises
- to create a productive and sustainable local economy

The following are the **strategic drivers** that are further expanded upon in the strategy with recommendations as well as projects and programmes:

i. Development of Enterprises and Emerging Economies
ii. Infrastructure Development and Support
iii. Partnerships and Social Compacts
iv. Access to Markets and Wider Value Chains
v. Access to Finance and Funding
vi. Rural and Township Economic Revitalization
vii. Ease of Doing Business
viii. Skills Development
ix. Support for the Tourism Sector
x. Agricultural Support and Development
xi. Development of Innovative Economies
xii. Manufacturing and Logistics

2.16 UMHLATHUZE INTEGRATED DEVELOPMENT PLAN

The uMhlathuze Municipality has compiled its fifth generation IDP.

2.16.1 UMHLATHUZE VISION

The reviewed long term vision of the Municipality is:

"An aspirant metropolitan Port City focused on investing on quality infrastructure and service delivery in partnership with Traditional Councils, Communities and the Private Sector"

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

The following are the Values of the Municipality

- Efficiency
- Professionalism
- Commitment
- Respect
- Good governance, integrity and transparency
- Innovation
- Equity, Equality and fairness
- Unity in diversity
- Compassion and dignity
- Good Customer Care
- Service Excellence
- Mutual trust and understanding
- Courtesy

2.16.2 UMHLATHUZE GOALS, OBJECTIVES AND STRATEGIES

The following provides a summary of the amended goals and objectives of the Municipality as well as their relation to the Sustainable Development Goals (SDGs):

Table 12: uMhlathuze IDP Goals, Objectives and Strategies

NATIONAL KPA 1: GOOD GOVERNANCE AND PUBLIC PARTICIPATION		
SUSTAINABLE DEVELOPMENT GOALS (SDGs)		
6 | 7 | 10 | 11 | 16 | 17		
GOALS	**OBJECTIVES**	**STRATEGIES**
1.1 Democratic, Responsible, Transparent, Objective and Equitable Municipal Governance	1.1.1 To ensure effective and efficient administration complying with its Legal Mandates	1.1.1.1 Provide administrative support for all Council Committees
		1.1.1.2 Strengthening Council Oversight through training on Legislation and Policies
		1.1.1.3 Development and review of policies that will lead to improved service delivery and legislative compliance
		1.1.1.4 Compliance with the Occupational Health and Safety Act and Compensation for occupational injuries and diseases
		1.1.1.5. Development of an Integrated Development Plan within prescribed legislative guidelines
	1.1.2 To maintain an organizational performance management system as a tool to monitor progress of service delivery	1.1.2.1 Monitor, evaluate, measure and review the performance of the municipality against indicators and targets set in the IDP
	1.1.3 Ensure Institutionalisation of Batho Pele Culture	1.1.3.1 Implement a Service Charter to meet set standards
	1.1.4 To promote a municipal governance system that enhances and embraces the system of participatory Governance	1.1.4.1 Effectiveness of Ward Committees, Special Programs, Youth Council and OSS Structures
		1.1.4.2.Facilitation of Stakeholder and Community participation in policy making
		1.1.4.3. Implementation of effective communication strategy
		1.1.4.4. Adequate implementation of ICT Systems enabling Informed decision making and communication
	1.1.5 To promote Access to Information and Accountability	1.1.5.1 Ensure access of information in line with relevant legal prescripts
	1.1.6 To bring the organisation to an enabled risk maturity level	1.1.6.1 Implementation and maintenance of an efficient Enterprise Risk Management system and Business Continuity
	1.1.7 Ensure reliability and maintain independence of internal audit activity	1.1.7.1 Effective Audit Committee
		1.1.7.2 Effective and value adding internal audit activity
	1.1.8 To ensure continuous monitoring of internal controls	1.1.8.1Implementation of adequate Internal Controls

NATIONAL KPA 2 : BASIC SERVICES AND INFRASTRUCTURE PROVISION		
SUSTAINABLE DEVELOPMENT GOALS (SDGs)		
4 | 6 | 7 | 9 | 11 | 13 | 15		
STRATEGIES	**OBJECTIVES**	**STRATEGIES**
2.1 Integrated infrastructure and efficient services	2.1.1 To expand and maintain infrastructure in order to improve access to basic services and promote local economic development	2.1.1.1 Eradicate water services backlogs through provision of basic water services
		2.1.1.2 Eradicate sanitation services backlogs through provision of basic sanitation services
		2.1.1.3 Eradicate electricity supply backlogs through provision of basic electricity supply services
		2.1.1.4 Eradicate refuse removal backlogs through provision of basic waste management services
		2.1.1.5 Provision and maintenance of access roads
		2.1.1.6 Provision of public transport infrastructure facilities
		2.1.1.7 Provision and Maintenance of storm water and coastal engineering infrastructure
		2.1.1.8 Strive to improve reliability and service life of Municipal infrastructure, facilities and assets
	2.1.2 To maintain quality of services as per standard and legal prescripts	2.1.2.1 Provide a weekly domestic solid waste removal service to the community
		2.1.2.2 provision of environmental safe, effluent that meets the requirements of standards and prescripts
		2.1.2.3 Implementation of energy efficiency, and renewable energy technologies
		2.1.2.4 provision of electricity supply as per NERSA standards
	2.1.3 To promote the achievement of a non-racial, integrated society, through the development of sustainable human settlements and quality housing	2.1.3.1 Improve community standard of living through accelerated development of Integrated Human settlement
	2.1.4 To ensure effective Fleet Management	2.1.4.1. Review and Implement Fleet management Plan

NATIONAL KPA 3 : LOCAL ECONOMIC DEVELOPMENT		
SUSTAINABLE DEVELOPMENT GOALS (SDGs)		
1 2 3 4 5 7 8 10 11		
STRATEGIES	**OBJECTIVES**	**STRATEGIES**
3.1 Viable Economic Growth and Development	3.1.1 To promote the agricultural potential	3.1.1.1 Implement (and Review) Agricultural Support Plan
		3.1.1.2 Identify land to facilitate agricultural programs
		3.1.1.3 Provide support for prioritised agricultural sectors
	3.1.2 Enhanced sectoral development trough trade investment and business retention	3.1.2.1 Implement (and Review) Economic Development Sector Plans
		3.1.2.2 Develop investment promotion and facilitation plan
		3.1.2.3 Package council land to facilitate economic growth
	3.1.3 To create an enabling environment for the informal economy	3.1.3.1 Review and implement Informal Economy Bylaw and Policy
	3.1.4 Clear City identity	3.1.4.1 To promote the city as destination of choice
		3.1.4.2 Review and Implement Tourism Marketing Strategy
	3.1.5 To Improve the efficiency, innovation and variety of government-led jobs	3.1.5.1 Promoting economic growth by providing employment opportunities for Women, Youth and People Living with Disabilities
		3.1.5.2 Promote economic growth by successful implementation of EPWP and CWP community based projects
		3.1.5.3 Implementation of an Enterprise Development Program
	3.1.6 Promote SMME and Entrepreneurial development	3.1.6.1 Facilitate SMMEs access to finance , markets, trading facilities and infrastructure with linked services
		3.1.6.2 Implementation of the emerging contractor development programme
3.2 Public Safety and Security	3.2.1 Provision of efficient and effective law enforcement, registration, licensing and security services	3.2.1.1 Development and implementation of a crime prevention and safer city strategy
	3.2.2 To ensure Provision of fire and rescue services	3.2.2.1 Develop and Implement a fire prevention strategy
3.3 Safe and Healthy Living Environment	3.3.1 Efficient an effective waste management services	3.3.1.1 Review and Implementation of Integrated Waste Management Plan
	3.3.2 Provision of a dignified burial and crematorium facilities Cater for alternate future burial option	3.3.2.1 provision of cemetery maintenance and management Provision of cemeteries
		3.3.4 Provision of dignified indigent burial service

3.4 Social Cohesion	3.4.1 To promote social cohesion	3.4.1.1 Development and maintenance of community facilities
		3.4.1.2 Review and implement of Arts and Culture Strategy
		3.4.1.3 Development of sports and recreation programs
		3.4.1.4 Develop and maintain parks facilities

NATIONAL KPA 4 : MUNICIPAL INSTITUTIONAL DEVELOPMENT AND TRANSFORMATION		
SUSTAINABLE DEVELOPMENT GOALS (SDGs)		
4 | 5 | 7 | 10 | 11 | 12 | 16 | 17		
STRATEGIES	**OBJECTIVES**	**STRATEGIES**
4.1 A Municipality that is Resourced and Committed to attaining the vision and mission of the organisation	4.1.1 To create an appropriate organisational climate that will attract and ensure retention of staff	4.1.1.1 Review and implement the attraction, recruitment and retention strategies.
		4.1.1.2 Review and implement Employment Equity Policy
		4.1.1.3 Review and Implement EAP Policy and plans
		4.1.1.4 Develop an effective training and development strategy and programs
		4.1.1.5 Create and maintain sound labour relations between employer and employees
		4.1.1.6 Maintenance of an organisational structure in line with organisational objectives

NATIONAL KPA 5 : MUNICIPAL FINANCIAL VIABILITY AND MANAGEMENT		
SUSTAINABLE DEVELOPMENT GOALS (SDGs)		
1 | 2 | 3 | 4 | 7 | 11 | 17		
STRATEGIES	**OBJECTIVES**	**STRATEGIES**
5.1 Sound Financial And Supply Chain Management	5.1.1 Compliance with financial legislation and policies	5.1.1.1 GRAP compliant
		5.1.1.2 mSCOA compliant
		5.1.1.3 Review of all financial related policies
		5.1.1.4 Compliance with all MFMA and relevant local government financial legislation
	5.2.1 Sustainable Financial management (Expenditure and Revenue)	5.2.1.1 Provide continuous Internal Communication and support on Budget and Financial Management matters

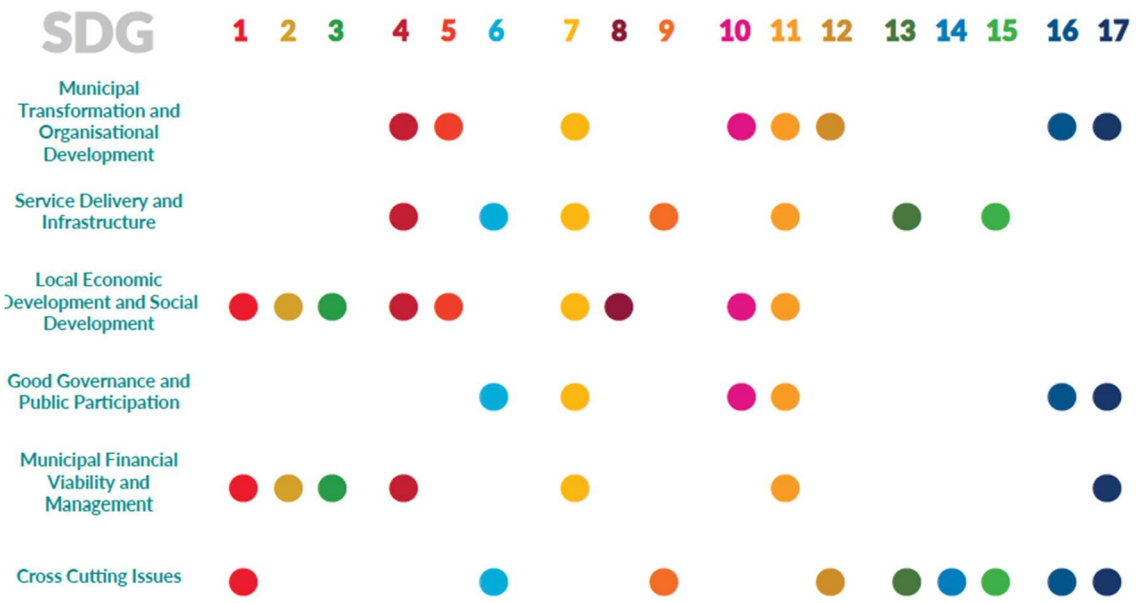
		5.2.1.2 Asset Accounting Management
		5.2.1.3 Accurate and timeous billing and receipting of revenue
		5.2.1.4 Apply Adequate Internal controls
		5.2.1.5 Accurate and timeous payments of creditors
		5.2.1.6 Apply adequate financial management methodologies
	5.3.1 Supply Chain Management	5.3.1.1 Demand and acquisition management
		5.3.1.2 Accurate contracts and logistics management
		5.3.1.3 Apply adequate financial management methodologies

NATIONAL KPA 6 : CROSS CUTTING		
SUSTAINABLE DEVELOPMENT GOALS (SDGs)		
1 6 9 12 13 14 15 16 17		
STRATEGIES	**OBJECTIVES**	**STRATEGIES**
6.1 Integrated Urban and Rural Development	6.1.1 To plan and manage existing and future development in a sustainable manner	6.1.1.1 Implement (and Review) Spatial Development Framework
		6.1.1.2 Development of a hierarchy of plans (i.e. precinct, nodal, concept etc.)
		6.1.1.3 Implement (and Review) Human Settlement Sector Plan
		6.1.1.4 Implement, Enforce and Review uMhlathuze Land Use Scheme
		6.1.1.5 Compliance with national SPLUMA, SPLUM Bylaw, National Building Regulations and Municipal Building Control Bylaw.
		6.1.1.6 Efficient processing of land use, land development applications and building plans
		6.1.1.7 Implement, Enforce and Review Aesthetics Bylaw
		6.1.1.8 Implement, Enforce and Review Outdoor Advertising Signs Bylaw and Policy.
	6.1.2 to ensure effective Environmental Management in compliance with legislation	6.1.2.1 Incremental development of strategic environmental assessment for the entire municipal area
		6.1.2.2 Review and implement Climate Change Action Plan

		6.1.2.3 Air quality monitoring and implementation of the Air Quality Management Plan
		6.1.2.4 Efficient processing of environmental applications
6.2 Immovable Property Management	6.2.1 To ensure fair valuation of properties	6.2.1.1 Development and maintenance of Valuation Roll in line with Municipal Property Rates Act.
	6.2.2 Effective Management of Council owned Immovable properties.	6.2.2.1 Update immovable asset register
		6.2.2.2 management of leased municipal properties
6.3 Disaster Management	6.2.3 To prevent and mitigate disaster incidents	6.2.3.1 Review and Implement Disaster Management Plan

The process underway to localize the SDGs has been alluded to. The relation between the above Key Performance Areas (KPAs) and the 17 SDGs is also indicated in the following figure.

Figure 6: Relationship between KPAs and SDGs



Source: ICLEI

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.

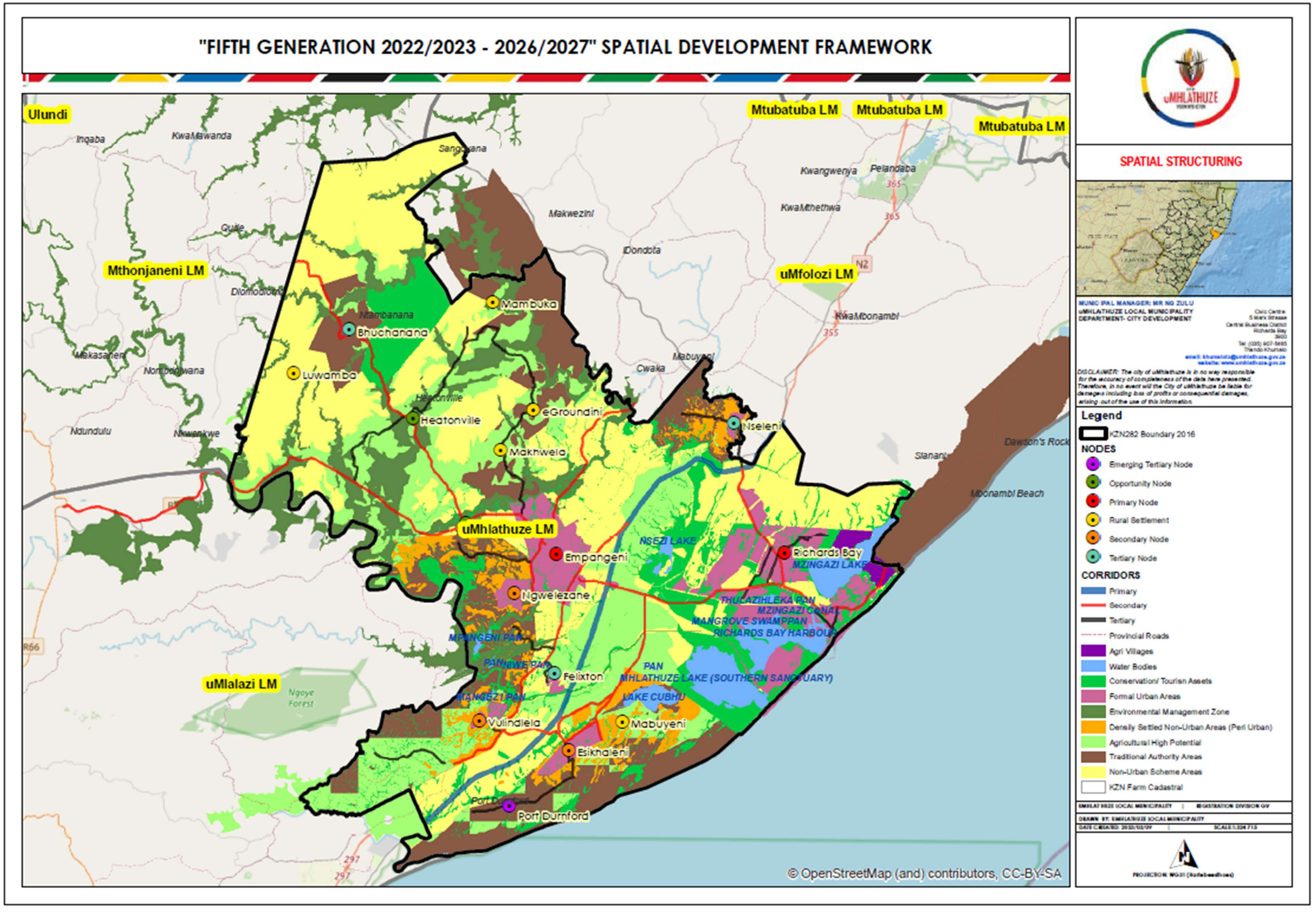
The main access into the municipal area is via the N2 in a north south direction and in an east west direction the R34. Other significant roads in the area include the MR431 (that provides a northerly entry into Richards Bay from the N2) as well as the Old Main Road that straddles the N2 on its inland.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

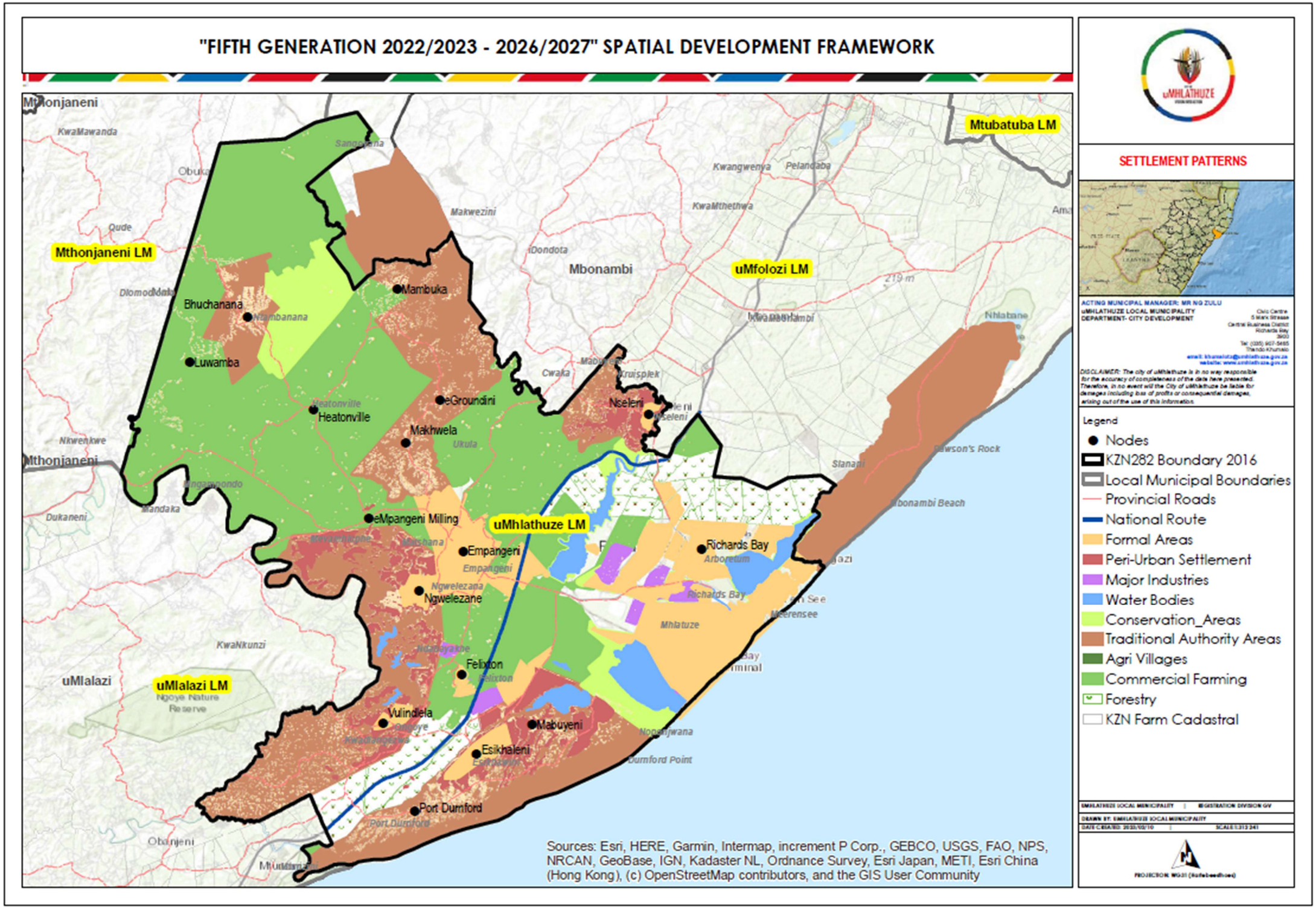
3.2.2 Analysis of the uMhlathuze Municipal Nodal Areas

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

Table 13: 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 14: 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 15: 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 16: 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 17: 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 18: Analysis of Vulindlela/Dlangezwa 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 19: 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 20: 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 21: 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 22: 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 23: 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 24: 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.

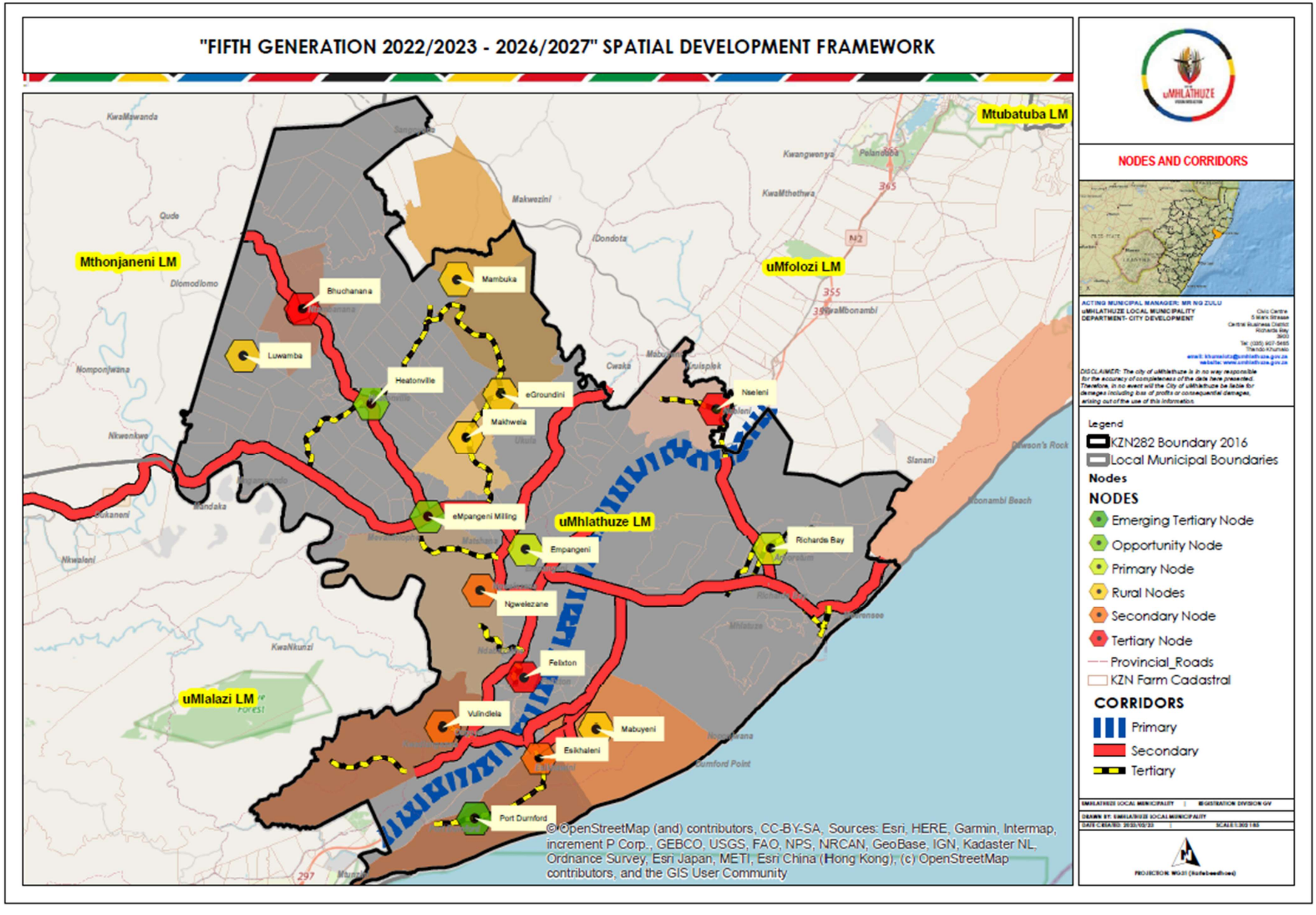
With regard to the locality of rural settlements (nodes), these rural settlements are accessible locations for community services and infrastructure. Specific planning and development interventions are required (and underway) to identify community services that are to be encouraged at these nodes.

Table 25: 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 use 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 26: Land Governance Breakdown

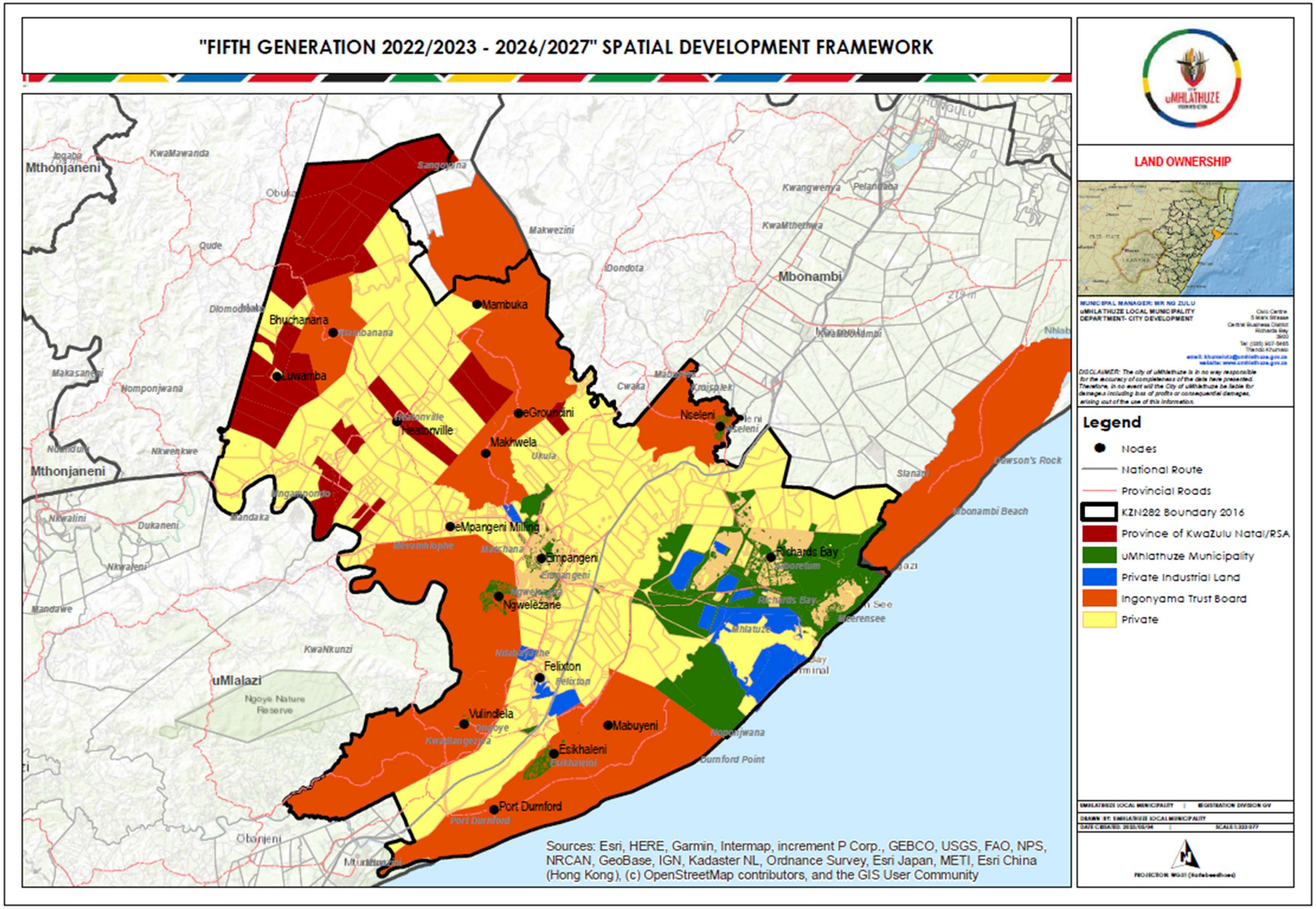
Land Owners	Area (Hectares)	Percentage (%)
Province of KwaZulu-Natal	14 167	11,49
City of uMhlathuze	3 503	2,84
Transnet	2 989	2,42
Industrial Development Zones (IDZ)	107	0,09
Ingonyama Trust Board (ITB)	63 795	51,73
Private	33 223	26,93
Lakes / Waterbodies	5 541	4,49
Total	**123325**	**100,00**

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 7: Peri-urban Development adjoining Ngwelezane

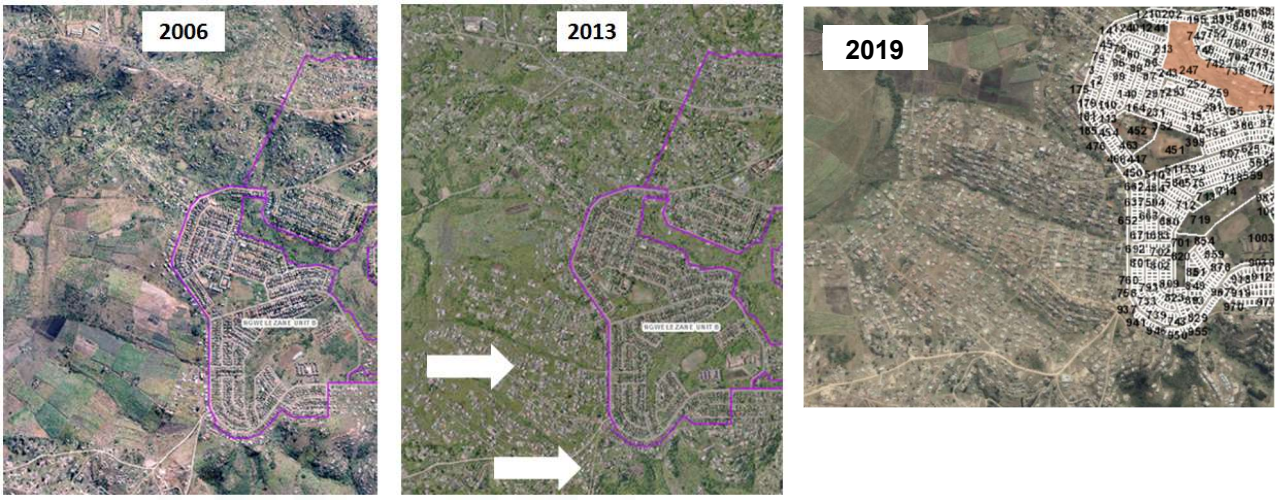


Figure 8: Peri-urban Development adjoining the Richards Bay Airport

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 has been undertaking the preparing Rural Development Framework Plans for 5 different rural nodes. This Rural Development Framework Plan project will be implemented in 5 different phases as per the implementation framework hereunder.

Table 27: 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

3.5 LAND USE ANALYSIS

The primary economic sector is an important contributor to the municipal economy. Primary economic activities cover 38.32% of the municipality's total area. Overall, there has been a 4.4% decrease in land cover related to primary economic activities from 1990 to 2014 in the municipality. Sugarcane fields and forests and plantations highlight the importance of agriculture in the municipality. Cultivated commercial and small holdings show a large decline in land cover, decreasing by 87.7% and 52.2%, respectively over the same period. Please note mapping at overleaf.

Table 28: Land Cover: Primary Economic Activities

Land Cover Category	Extent 1990 (Ha)	%	Extent 2014 (Ha)	%	% Change
Cultivated Commercial fields	1 284	1,7	158	0,2	-87,7
Cultivated Commercial pivot	0	0	0	0	0
Cultivated orchards and vines	637	0,8	719	1,0	12,9
Sugarcane	19 543	25,9	24,652	34,1	26,1
Subsistence farming	71	0,1	34	0	-52,2
Forests & Plantations	21 056	27,9	16 639	23,0	-21,0
Mining	159	0,2	284	0,4	78,4
Total	**49 503**	**65,5**	**47 341**	**65,4**	**-4,4**

Source: CEF, 2023

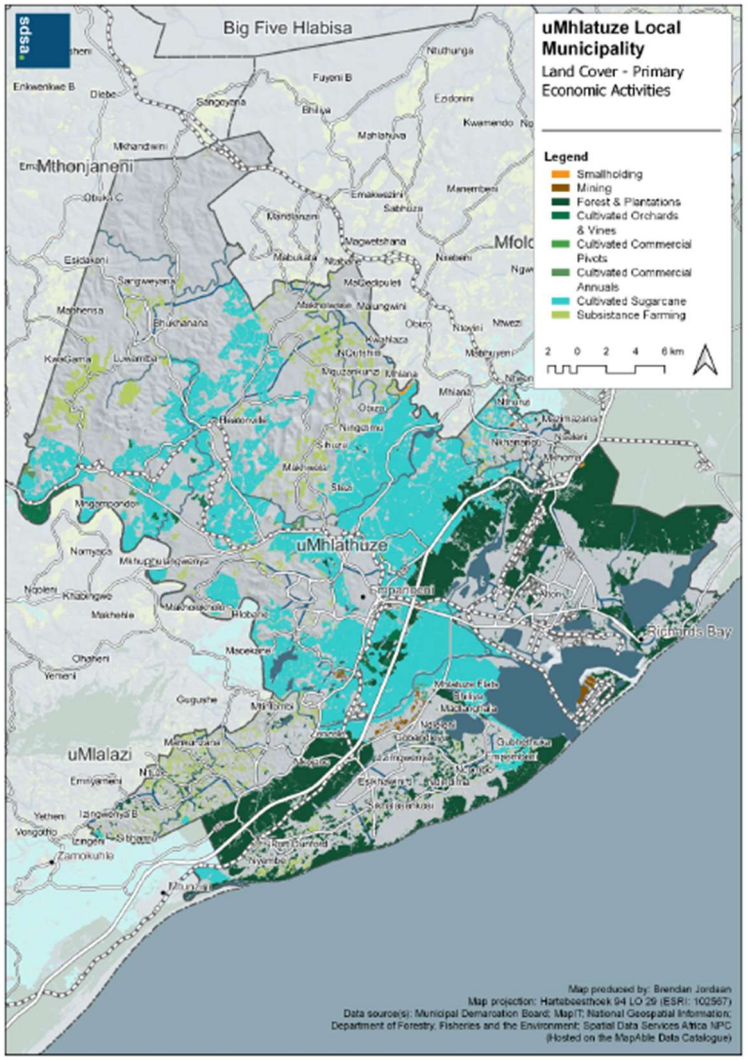
Human settlement activities include, amongst others, residential, commercial, industrial and community/recreational facilities. Overall, the footprint of human settlement-related activities has increased by 0.8% between 1990 and 2014. This accounts for 3 600 hectares. These activities represent 16% of the total municipal area. Six of the nine categories show increases in footprint, with urban commercial increasing by 37.1% and urban industrial by 19.2%. Urban built up and urban informal show significant growth but this is only due to the small base from which these categories are measured. The most significant contributor to human settlement activities is rural villages. This category covers 14 320 hectares; this is 19.8% of the land cover of the municipality. Rural villages, urban sports and golf, as well as school and sports grounds are the three categories that decreased in sized from the year 1990 to 2014. Please note mapping at overleaf.

Table 29: Land Cover: Human Settlement Activities

Land Cover Category	Extent 1990 (Ha)	%	Extent 2014 (Ha)	%	% Change
Urban built-up		0	221	0,3	22032
Urban commercial	339	0,4	464	0,6	37,1
Urban industrial	770	1	918	1,3	19,2
Urban residential	1 756	2,3	1 934	2,7	10,1
Urban townships	1 532	2	1 605	2,2	4,7
Urban informal	2	0	19	0	715
Rural Villages	14 335	19	14 320	19,8	-0,1
Urban sport and golf	180	0,2	171	0,2	-4,8
School and sports grounds	139	0,2	123	0,2	-11,4
Total	**19 053**	**25,2**	**19 775**	**27,3**	**3,8**

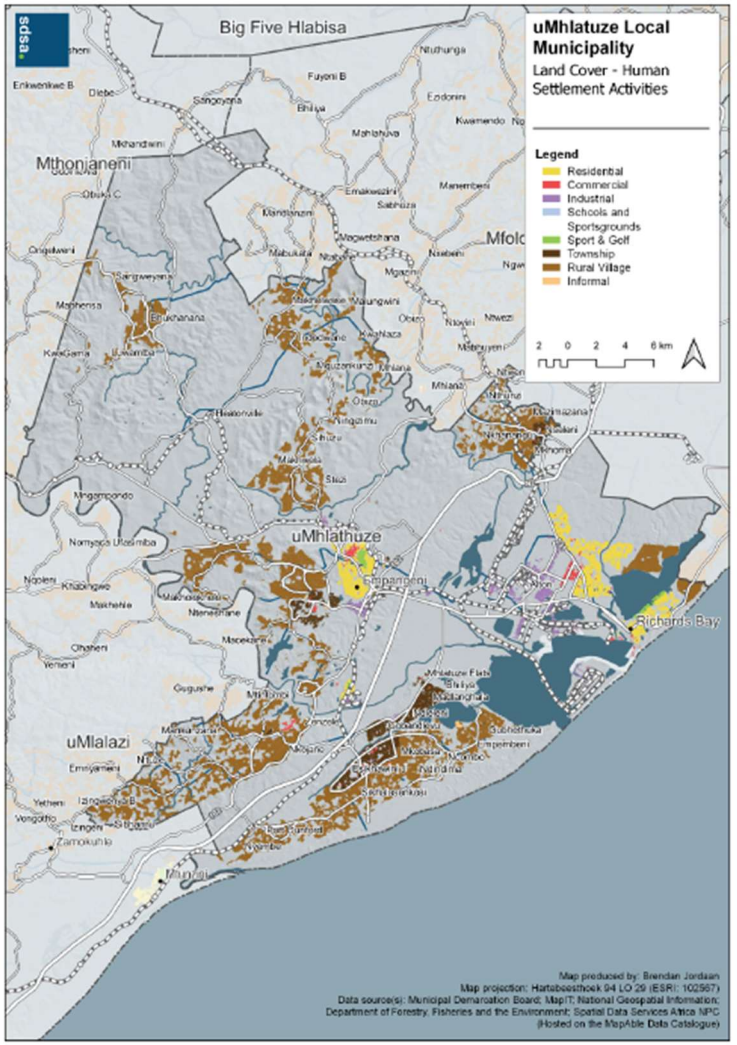
Source: CEF, 2023

Map 12: Land Cover: Primary Economic Activities



Source: CEF, 2023

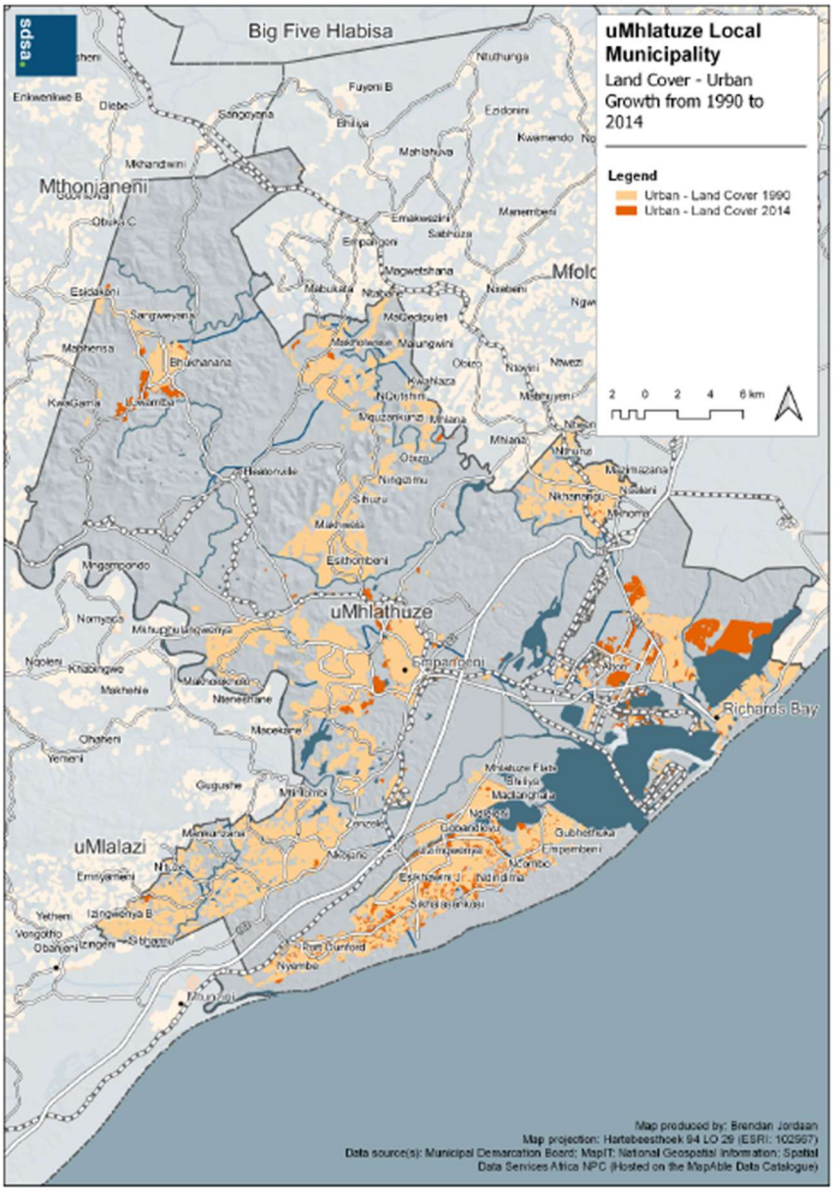
Map 13: Land Cover: Human Settlement Activities



Source: CEF, 2023

The physical expansion of urban-related growth in the municipality from 1990 to 2014 is depicted in the following map. It clearly indicates peripheral growth. The majority of this growth has taken place on the periphery of Richards Bay, Buchanana and the Dumisani Makhaye Village. A lot of growth has also taken place in the towns along the coast to the south of the port of Richards Bay.

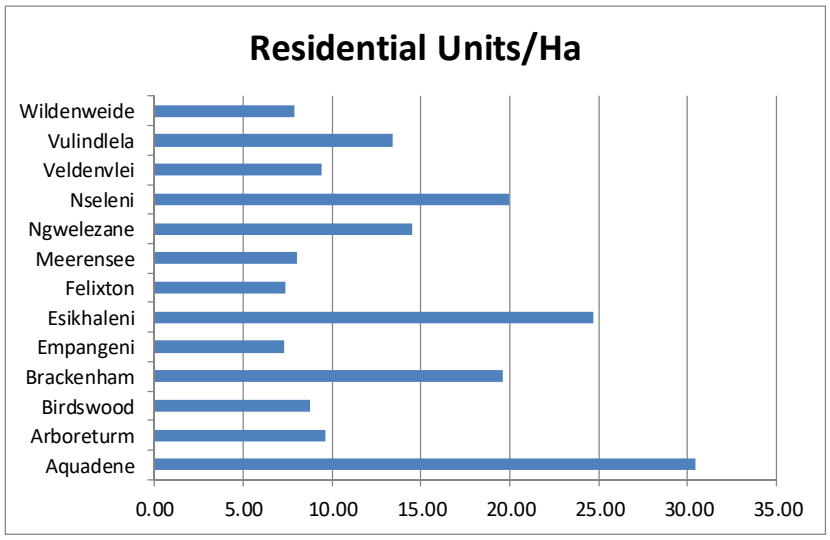
Map 14: Settlement Growth: 1990 - 2014



Source: CEF, 2023

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 9: Comparative Urban Residential Densities

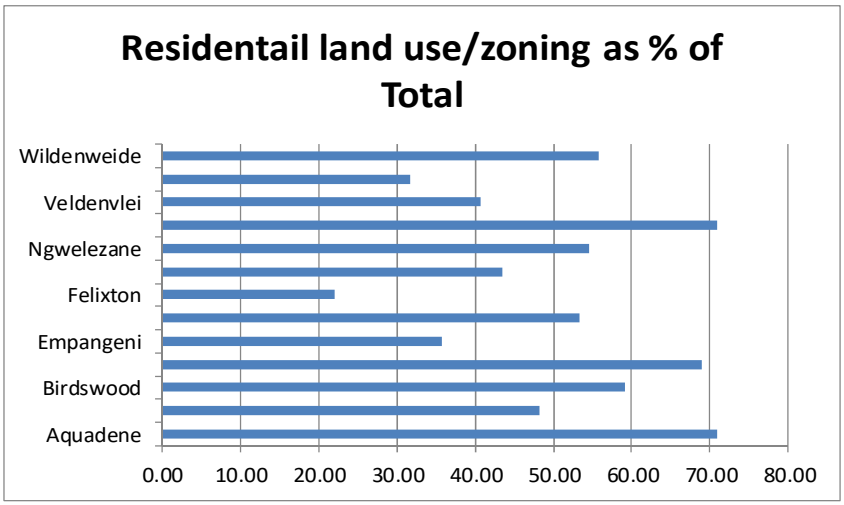


From the above table it is clear that Aquadene, Brackenham, Esikhaleni and Nseleni have the highest residential densities in the municipal area. Higher densities are synonymous with urban developed areas. Higher densities make for more efficient and cost effective provision of services. With the onset 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 30: 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:

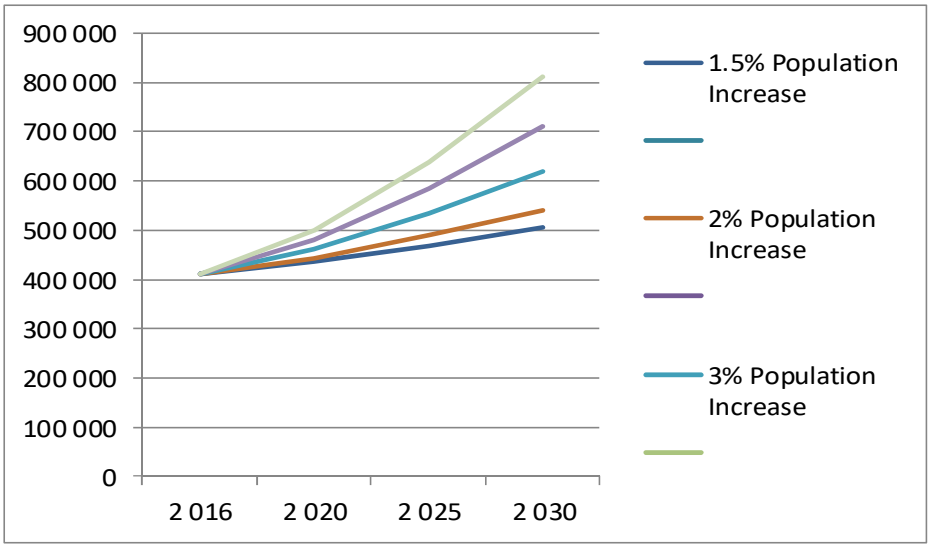
Population: 410 465 people
Households: 103 915
Household Size: 3.95

According to the 2022 Census, uMhlathuze has the following main demographic indicators:

Population: 412 075 people
Households: 100 441
Household Size: 4.1

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 10: 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 40,3% portion. The population increase (as at 2022) in the King Cetshwayo District, broken down per municipality is indicated in the following table.

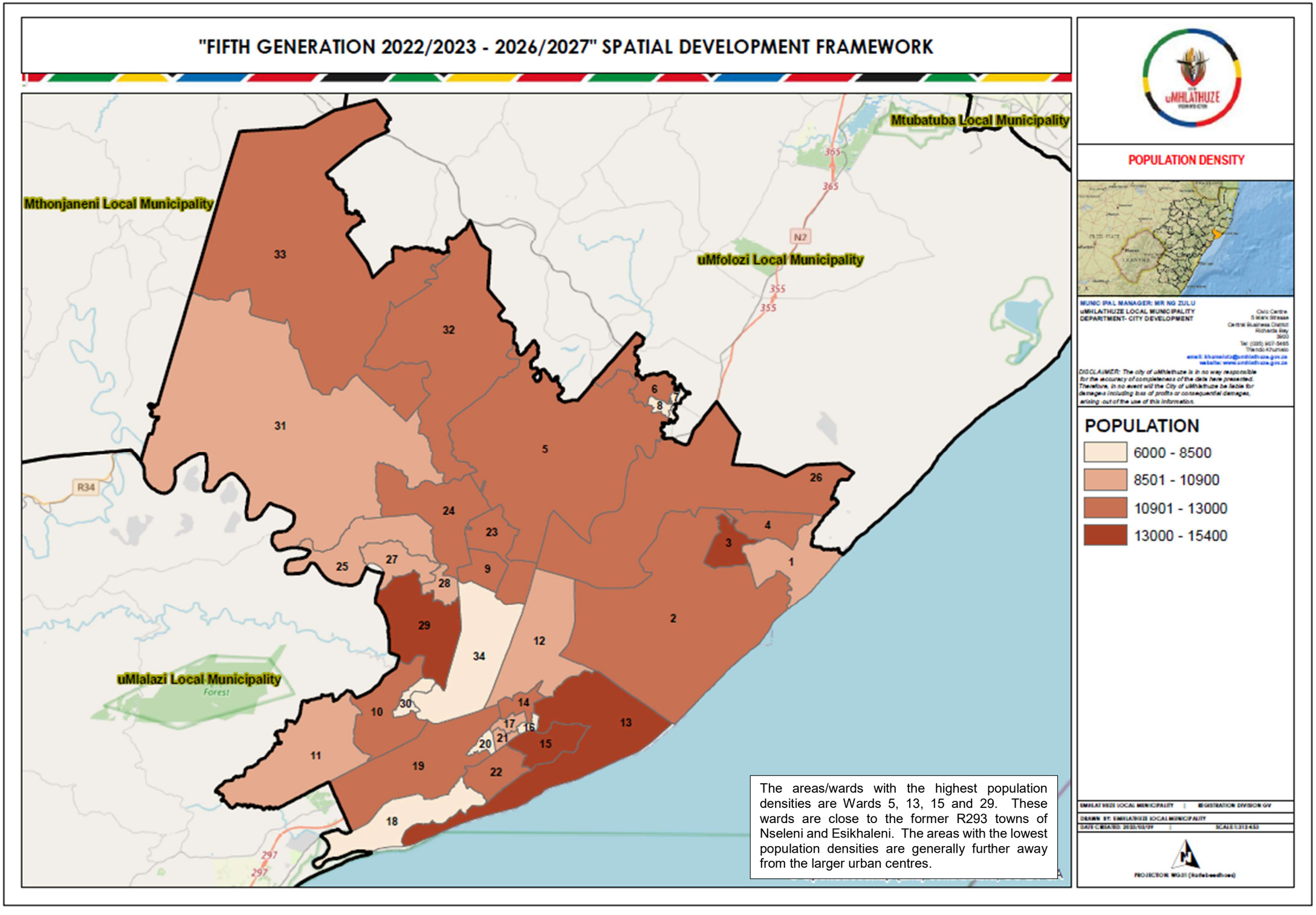
Table 31: Population Numbers in King Cetshwayo District Municipality

	KCDM	IMFOLOZI	UMHLATHUZE	UMLALAZI	MTHONJANENI	NKANDLA
2011	907519	122889	334459	213601	47818	114416
2016	971135	144363	410465	233140	78883	114284
2022	1021344	159668	412075	241416	99289	108896

Source: Community Survey 2016, Census 2022

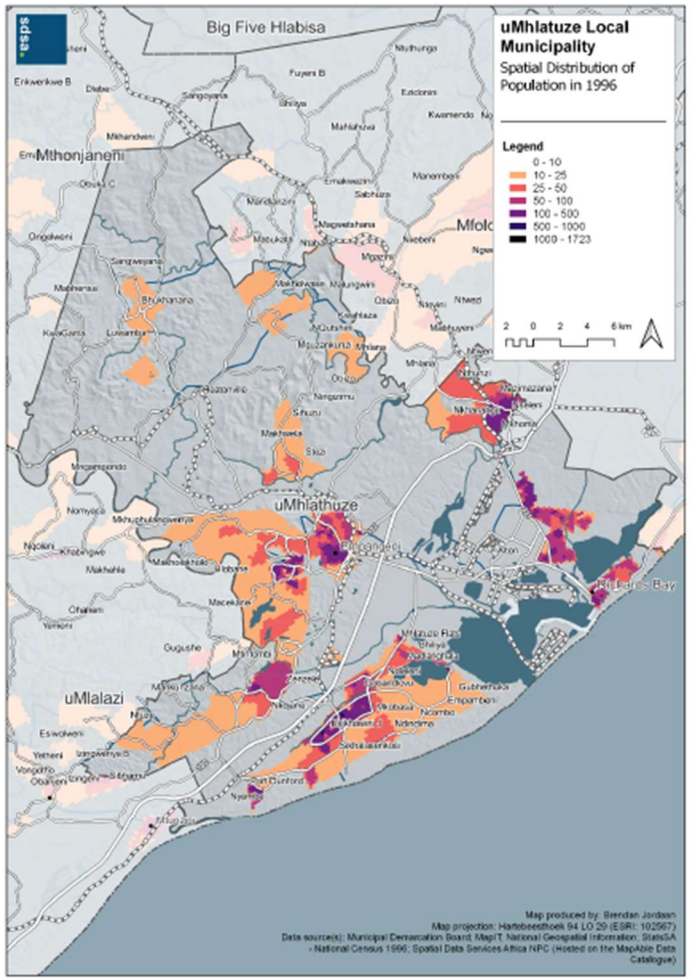
The following map inset provides a visual representation of the population density distribution (informed by the 2011 Census) in the uMhlathuze Municipal area.

Map 15: Population Density



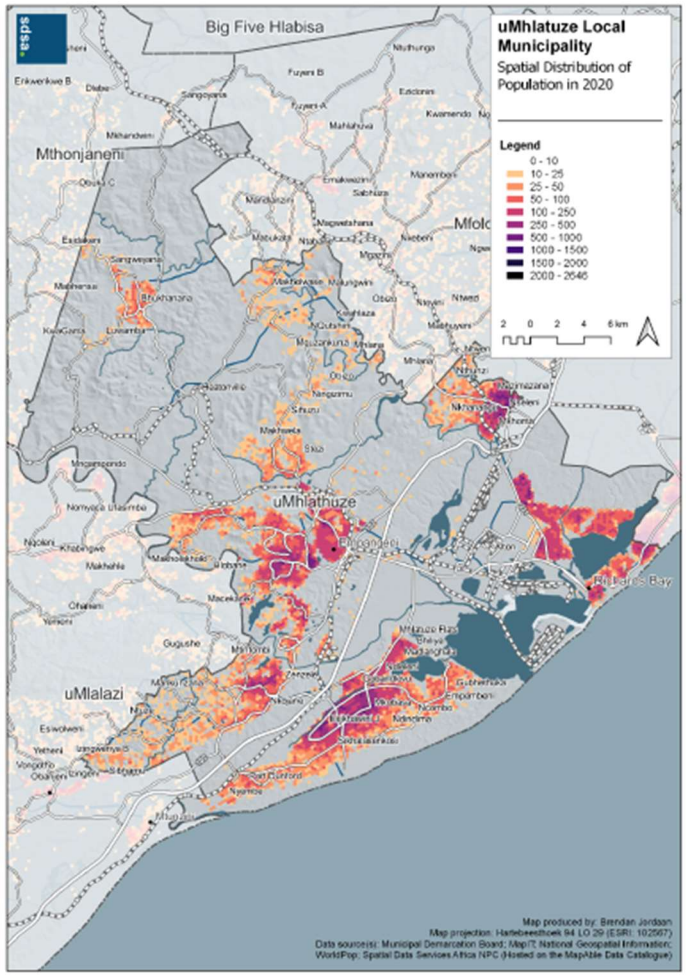
Further to the above, the following to maps indicate the spatial distribution of the municipal population in uMhlathuze during 1996 and 2020 respectively:

Map 16: Spatial Distribution of Population 1996



Source: CEF, 2023

Map 17: Spatial Distribution of Population 2020



Source: CEF, 2023

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.

As part of the process for the compilation of the 2023 Capital Expenditure Framework (CEF) various data sources have been analyzed and population projections/forecasting completed. The various results are not included in this report.

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 32: 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.

Based on an 1,5% population increase, the population of uMhlathuze is determined to be 448 820 in 2022 with a corresponding number of households of 113 625. The corresponding figures at a 3% increase is 490 117 people and 124 080 households in 2022.

Table 33: 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 34: 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:

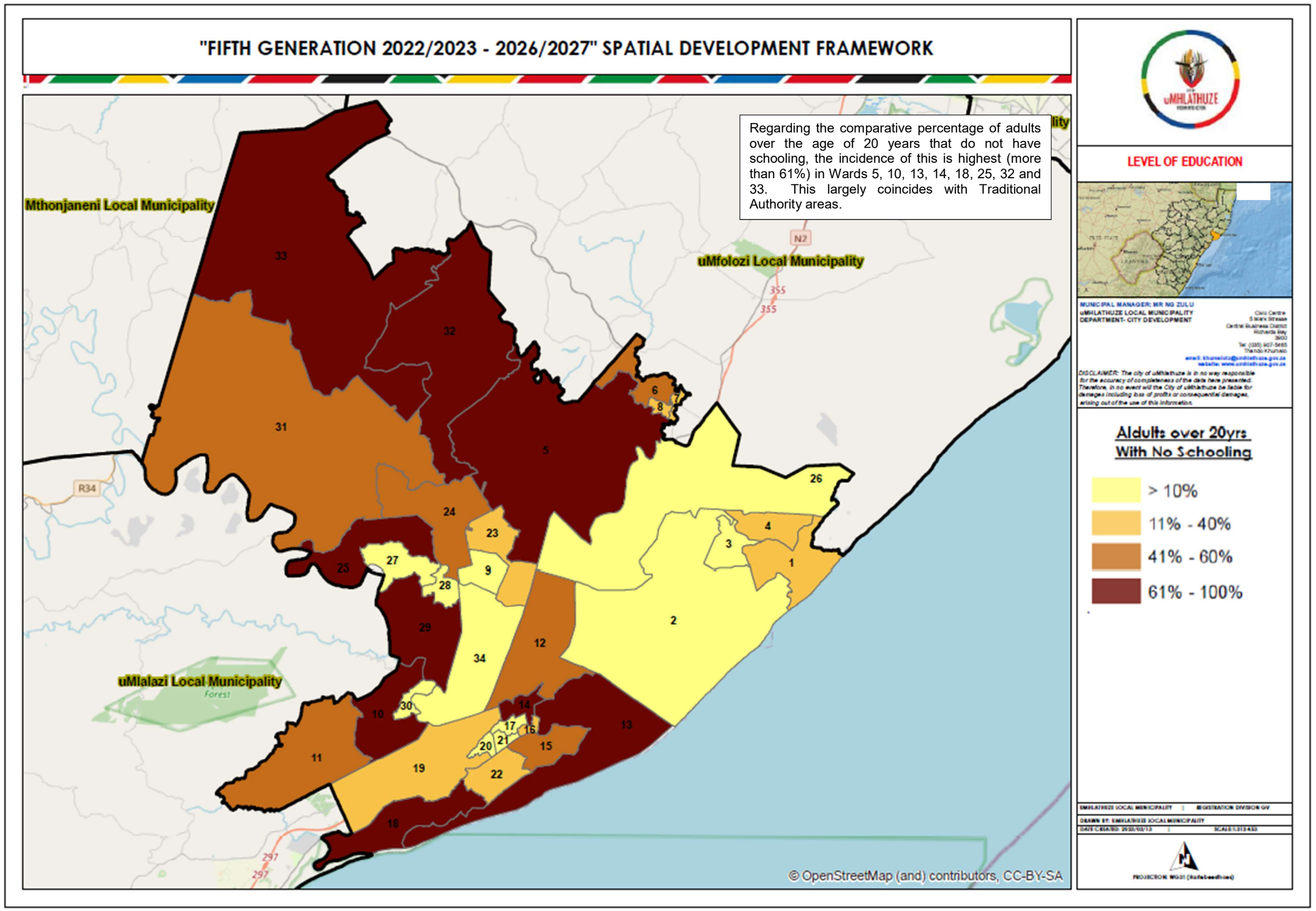
- An estimated additional 6800 ha of land may be needed from 2016 to 2030 to accommodate a 1,5% population increase at a development density of 15 units per hectare. An estimated additional 4000 ha of land may be needed from 2016 to 2030 to accommodate a 1,5% population increase at a development density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

4.2 SOCIO-ECONOMIC INDICATORS

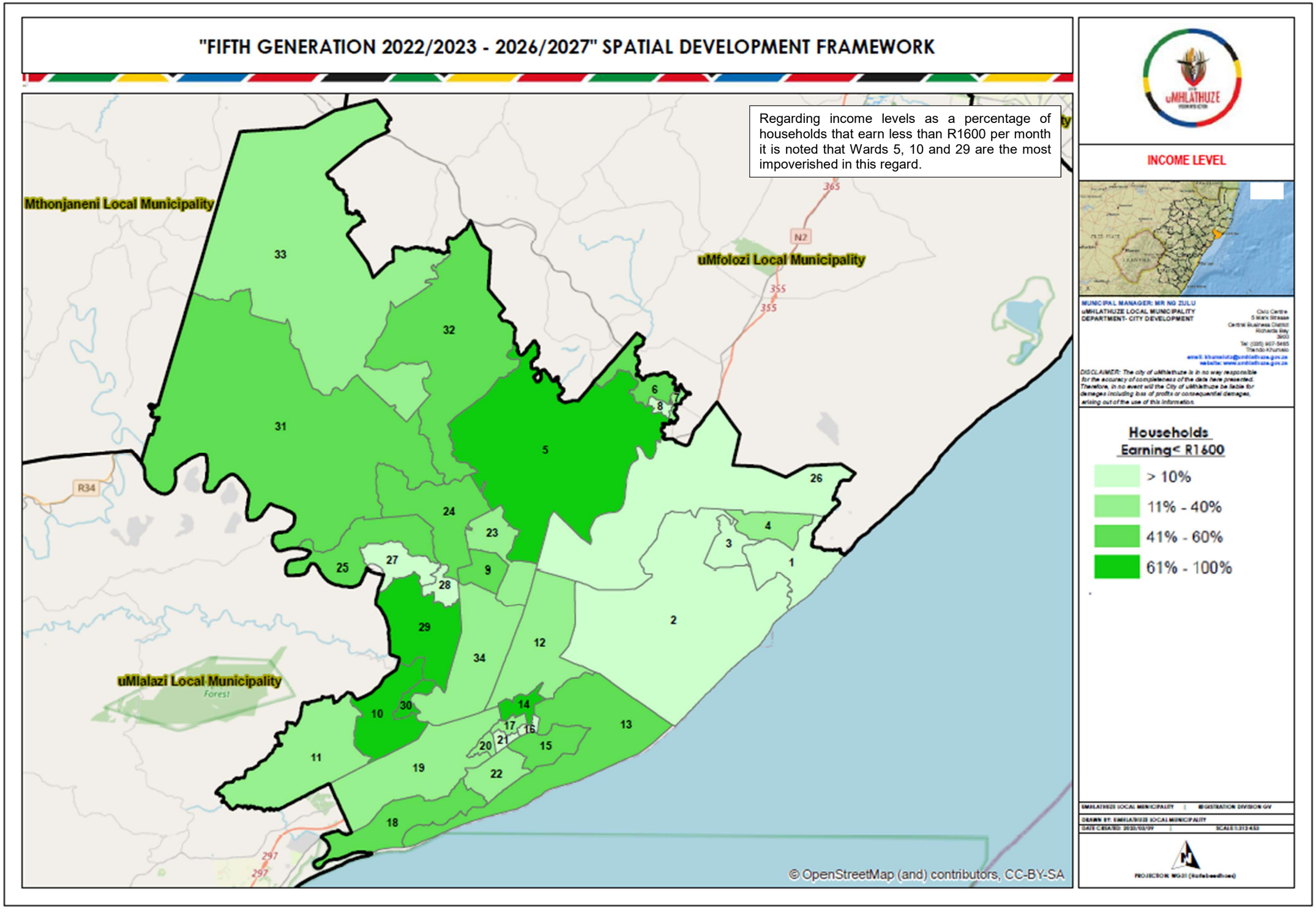
The following series of maps provides information pertaining to:

- Adult education levels; Household income levels below R1600 per month; Unemployment levels. All of these are reflected at the Ward level.

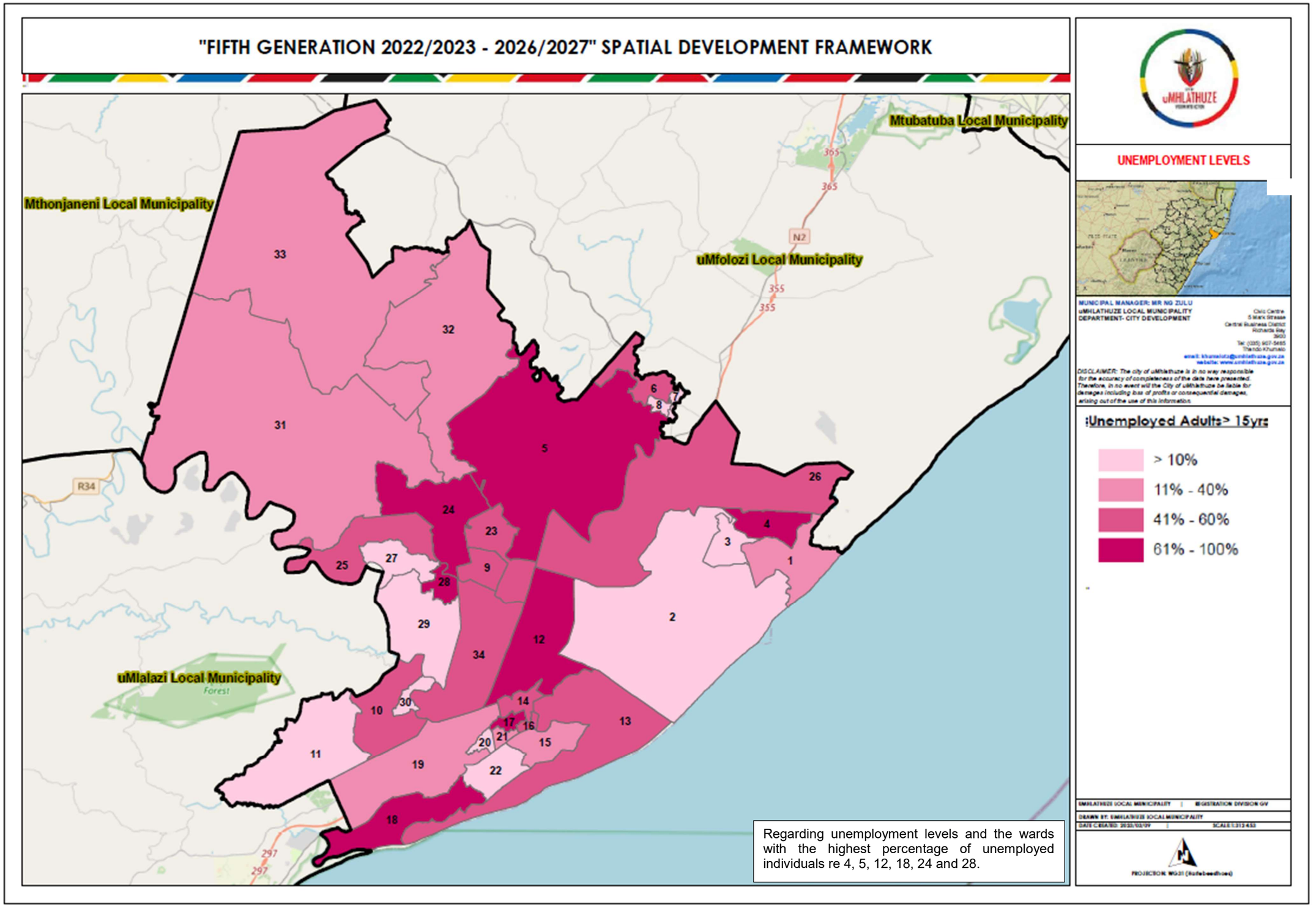
Map 18: Level of Education



Map 19: Income Level below R1600 per month

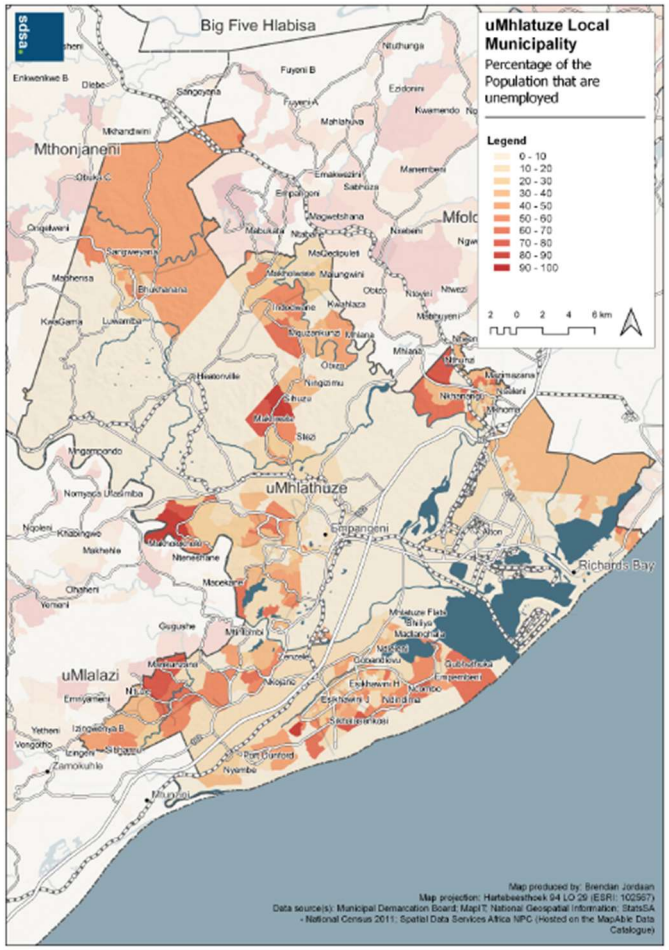


Map 20: Unemployment Levels



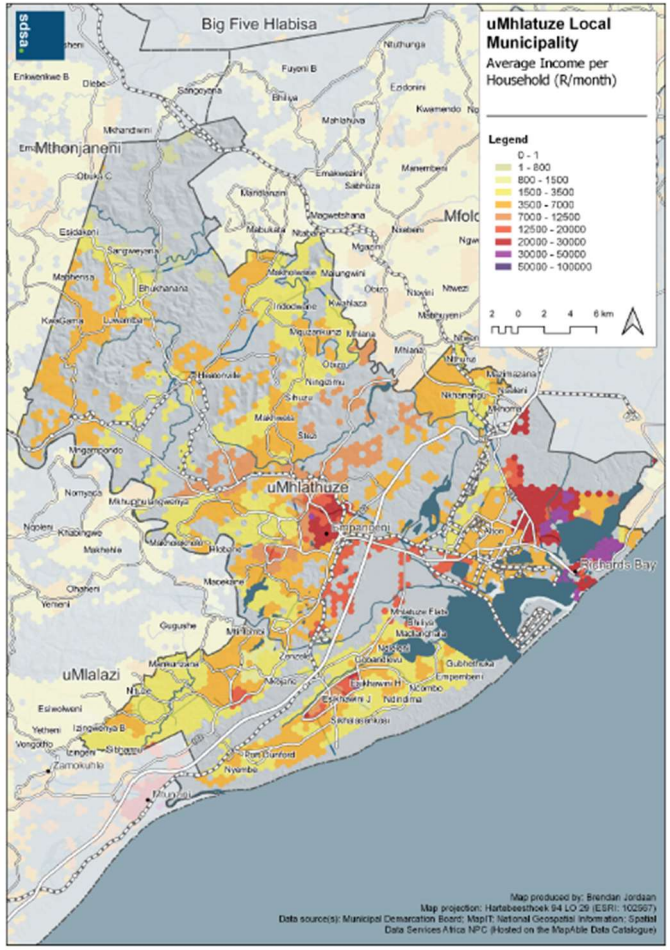
Further to the above maps the following maps indicate average income per household and unemployment percentage at a smaller than ward level as derived from the CEF:

Map 21: Percentage of the Population that are unemployed



Source: CEF, 2023

Map 22: Average Income per Household



Source: CEF, 2023

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 35: Economically Active 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

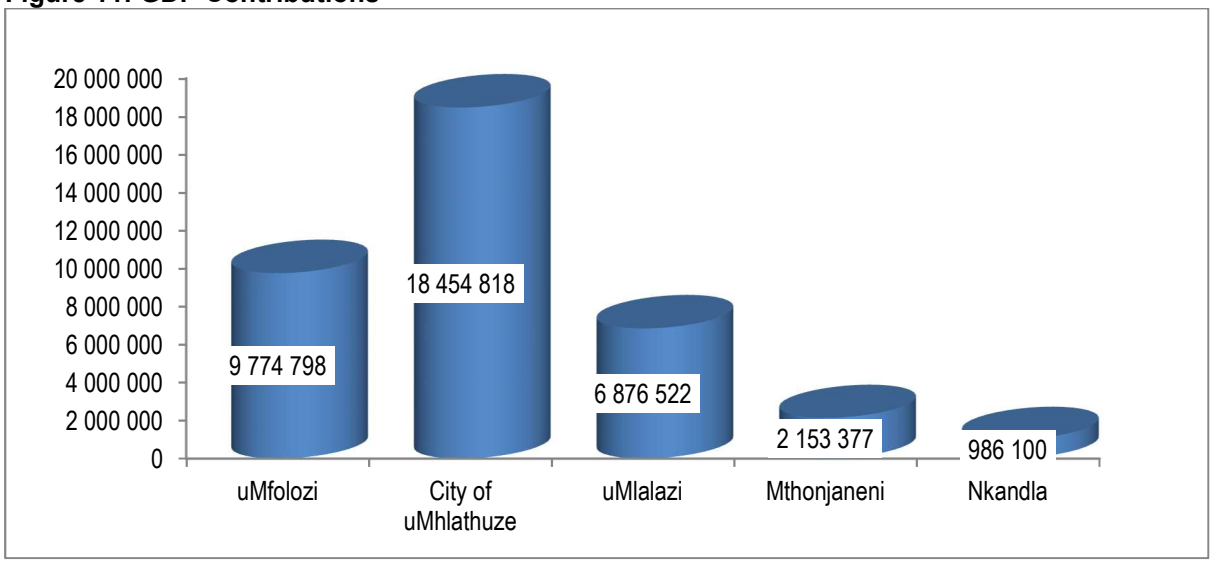
Source: IHS Markit, 2018

4.3.1 ECONOMIC GROWTH

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.

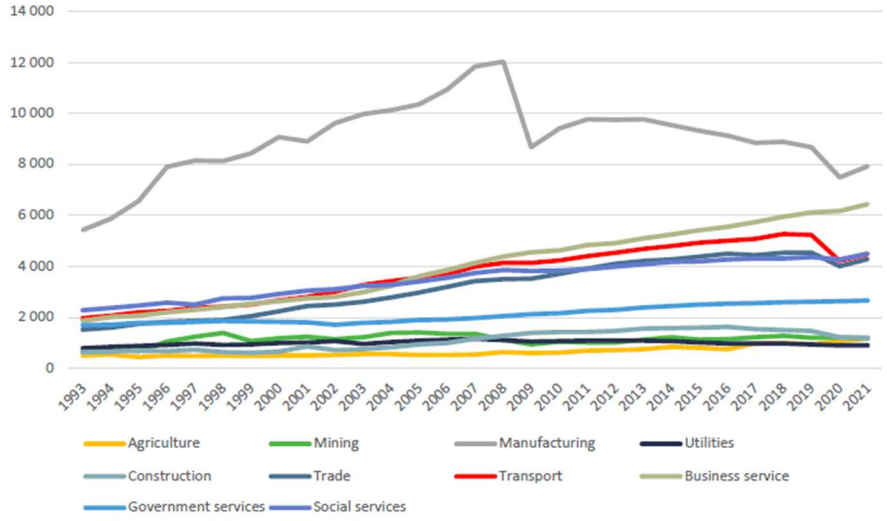
Figure 11: GDP Contributions



Source: Global Insight 2015

When considering the specific sectors of the economy in uMhlathuze, the following figure indicates the GVA (Gross Value Add) from 1993 to 2021.

Figure 12: GVA per Sector



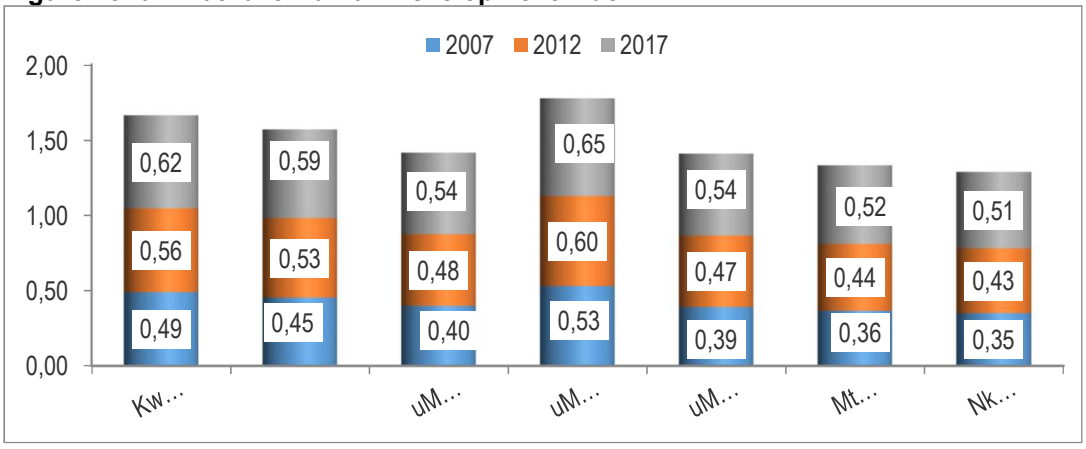
From the above it is noted that the local Municipality has had an average annual economic growth rate of 2.52% during the indicated period. The most significant contributing sector is manufacturing, contributing 22.8% to the local economy. The second-largest sector is business services at 18.54%, followed by social services at 12.96%. Most sectors' decline between or increased a small amount form the year 2019 to 2021 due to the CoVID- 19 crisis is noticeable except for agricultural sector that continued to grow. The business sector is the largest growing sector in the municipality with a growth rate of 4.5%.

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.

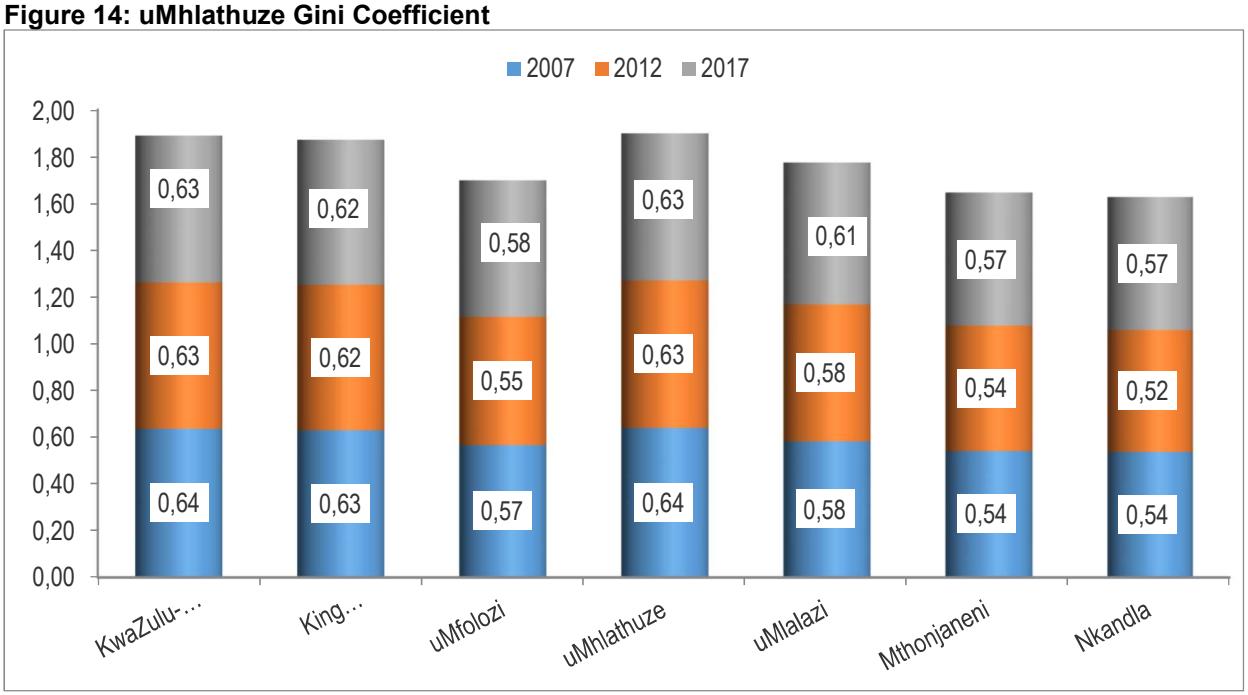
Figure 13: uMhlathuze Human Development Index



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



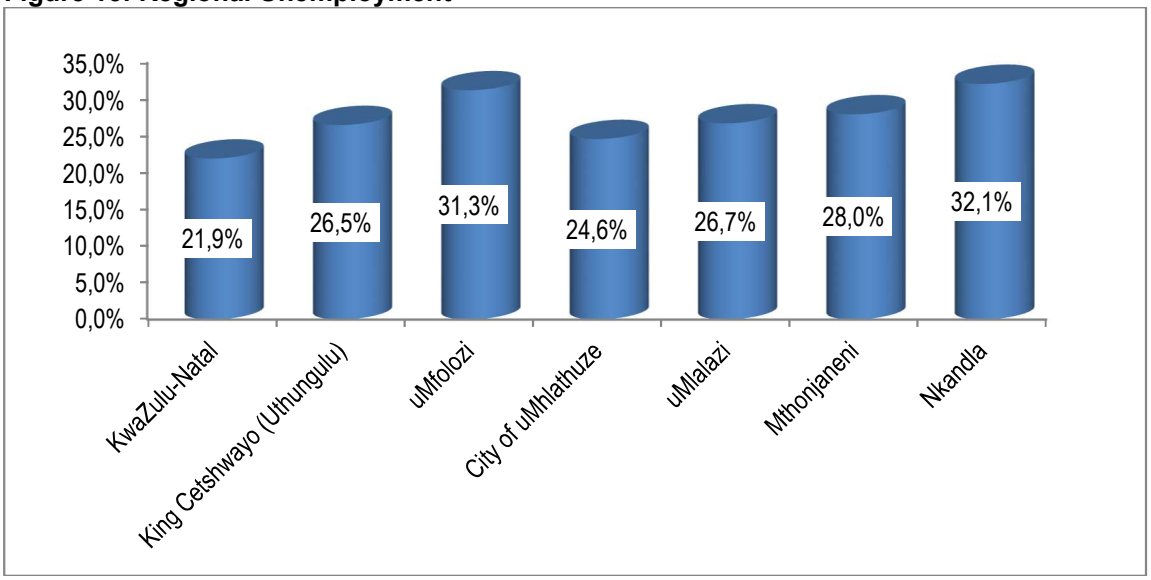
Source: IHS Markit, 2018

4.3.3 EMPLOYMENT

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 36: **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

Source: 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 37: 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 38: 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.

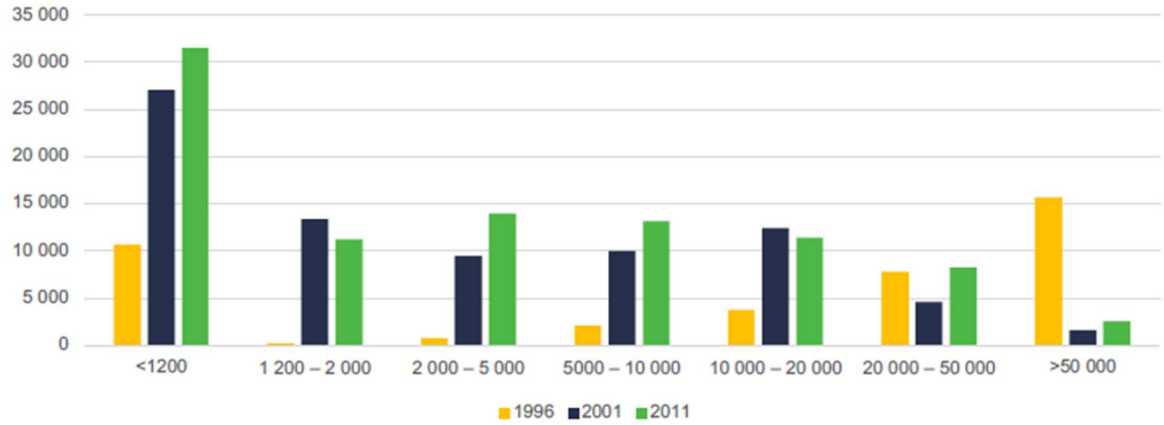
4.3.4 INCOME

Household income and consumption expenditure directly impact the municipal area's potential revenue base. The following table and graph indicates how the population has become poorer. The number of households whose income is below R1 200 per month has increased from 26% in 1996 to 34% in 2011. On the other hand, households earning more than R50 000 per month has decreased from 38% in 1996 to 3% in 2011. This is concerning as it significantly impacts the municipality's revenue base and its ability to sustain itself financially.

Table 39: Distribution of Household Income (R/month)

Income group (R)	1996		2001		2011	
<1 200	10 602	26%	27 053	35%	31 454	34%
1 200 – 2 000	220	1%	13 265	17%	11 135	12%
2 000 – 5 000	787	2%	9 352	12%	13 909	15%
5 000 – 10 000	2 105	5%	9 923	13%	13 049	14%
10 000 – 20 000	3 806	9%	12 328	16%	11 352	12%
20 000 – 50 000	7 929	19%	4 670	6%	8 296	9%
>50 000	15 651	38%	1 662	2%	2 571	3%
Total	**41 100**	**100%**	**78 252**	**100%**	**91 767**	**100%**

Figure 16: Comparative Household Income Distribution 1996 – 2011



Source: CEF, 2023

4.3.5 DEPENDENCY

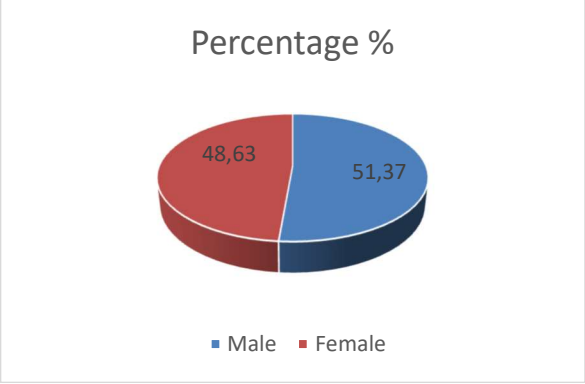
Income levels and the number of dependents have a significant impact on the ability of an employed person to meet the financial needs of his/her dependents.

Table 40: **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

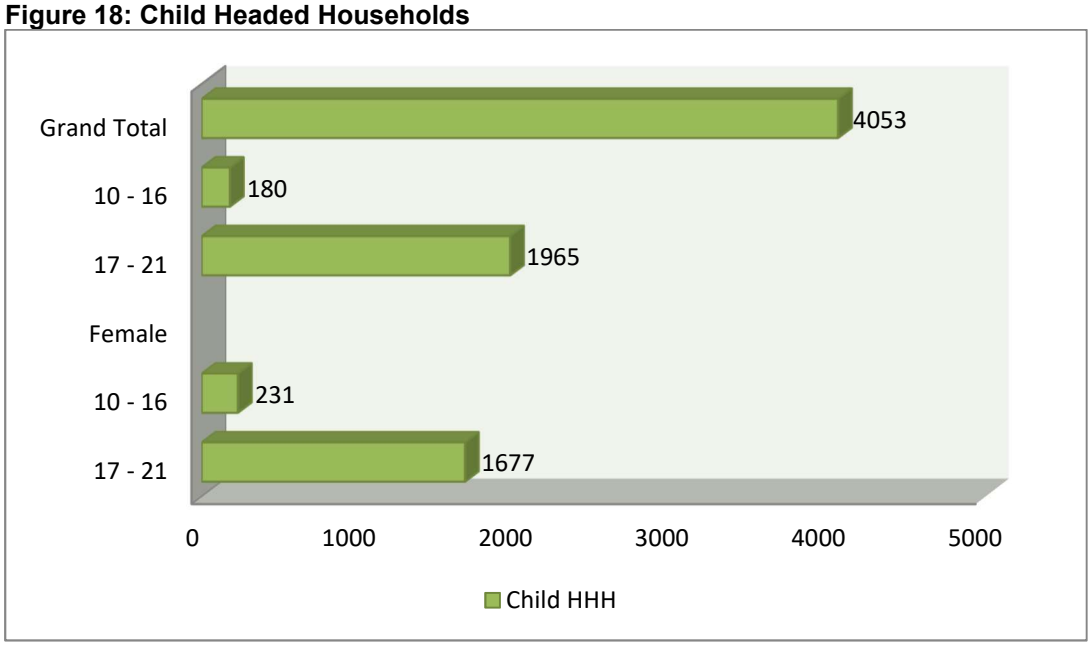
Figure 17: Head of Households



The number of Female headed households is slightly lower than the number of Male headed households.

Source: Statistics SA, (Census 2022)

Figure 18: Child Headed Households



4.3.6 DEATH RATES

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.

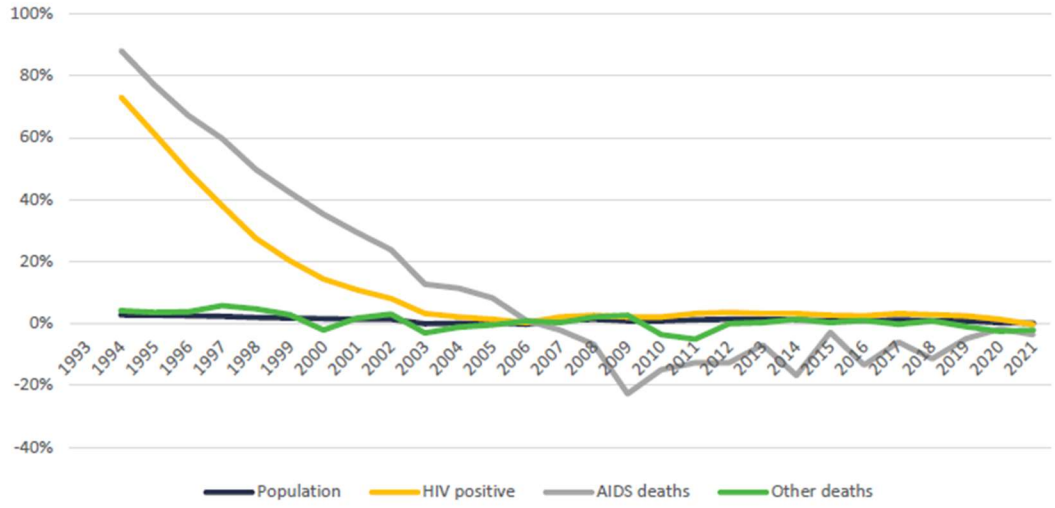
Figure 19 : HIV/AIDS Statistics

	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)

At the national level, there has been a decline in infection and death rates attributed to AIDS up to about 2003 as per the Figure hereunder.

Figure 20: Population Growth, HIV Infection and Related Deaths 1993 to 2021



4.4 IMPLICATIONS OF COVID-19 PANDEMIC ON EMPLOYMENT AND INCOME

Whereas the COVID-19 pandemic and associated national lockdown happened very recently, the impact of 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 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 residential buildings 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 employment 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 eZemvelo KZN Wildlife for meeting 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.

Recently the Municipality undertook the preparation of an Air Quality Management Plan (AQMP) for its area of jurisdiction. The main objectives of the City of uMhlathuze in developing an AQMP in accordance with the provisions of the NEMAQA are:

- Assess the status of air quality within the uMhlathuze Area;
- Set new goals to improve the quality of the air, and provide a basis for the development of implementation strategies to achieve these improvements;
- Identify significant gaps and provide recommendations to strengthen the implementation of interventions; Define and quantify the baseline of ambient air quality, and set air quality objectives for the area;
- Address the possible need for changes to functional and operational structures, AQM systems, and management objectives in light of poor performances, changing circumstances, the commitment to continual improvement and any other relevant factors;
- Include current and future economic realities and their associated impacts thereof;
- Develop interventions to improve ambient air quality in a cost-effective manner.

The AQMP has been concluded and is currently awaiting adoption by Council. In addition the City of uMhlathuze, in terms of Section 156 (2) of the Constitution, 1996 (Act No 108 of 1996), has finalized the Public Participation Phase for the Air Quality By-law. The Air Quality By-law will be submitted to Council for adoption prior to gazetting. Once the process has been finalized the outcomes of the AQMP and the Air Quality By-law will be incorporated into the SDF.

Evidence of the commitment from the uMhlathuze Municipality to attend to matters of air quality, the following three projects are being undertaken in the 2023/2024 financial year:

PROJECT NAME	**QUANTITY**
Installation of 10 dust fallout monitoring buckets	10
New Air Quality Management Station	1
Replacement of (PM10 and PM2.5) analysers for Arboretum and Brackenham monitoring stations.	2

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. Moreover, the Municipality has implemented the use of 3 tonne geofabric as a defense structure. The geobags were established to run parallel in front of the existing lifeguard tower for approximately 60 meters. However, in the context of climate change additional measures are being explored to determine a sustainable response to the coastal erosion experienced at Alkantstrand beach. 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 and the hosting beach events at Alkantstrand, 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 development 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 the ecological integrity. It is known 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.

Illegal Mining Activities: Small scale illegal mining activities presents a growing risk to the environmental spheres within the City of uMhlathuze. The impacts include depletion of soil nutrients, degradation of forest resources, destruction of natural habitats and pollution of surrounding water bodies.

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 41: 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**

The above stems from the compilation date of the ESMP (pre 2010), therefore it is a very conservative indication of value in comparison to current values. The City of uMhlathuze is currently exploring ways in which the ESMP may be updated to ensure the ecosystems are accurately assessed using current data.

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 Richards Bay 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 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 Industrial Development Zone (RBIDZ) 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

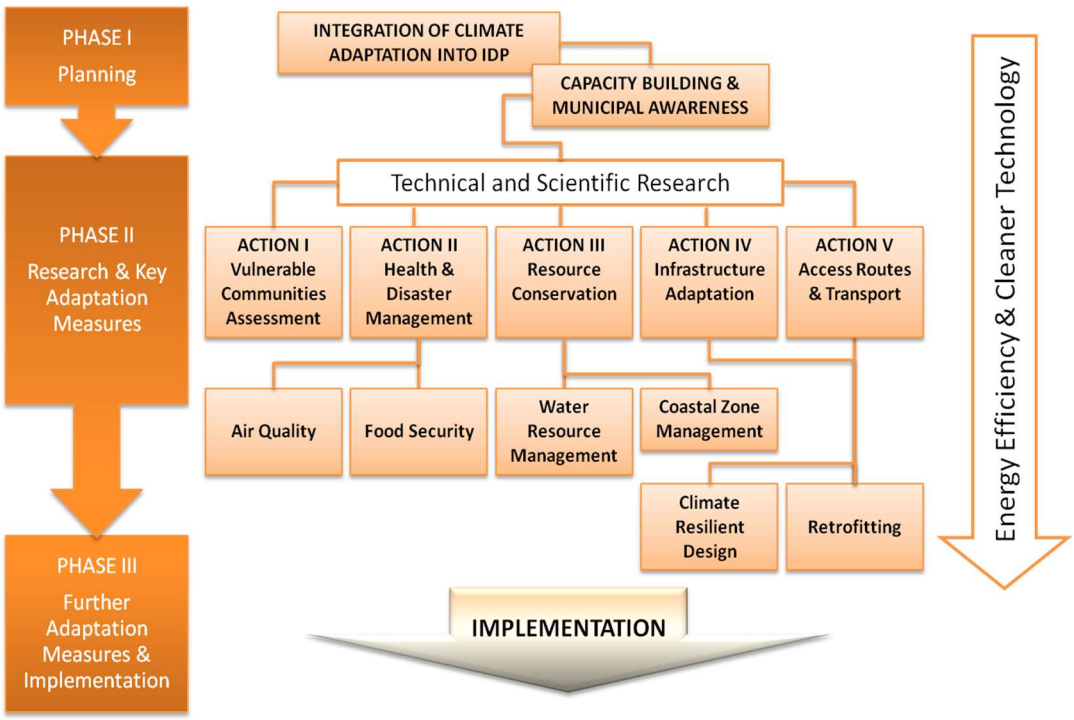
The EMF sensitivity analysis points to areas that are of great concern for the IDZ from a geotechnical perspective as well as the presence of Kwambonambi Grassland in certain areas, notably IDZ 1D and the IDZ 1C site. There are also a number of significant environmental management issues that would require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

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



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

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

Two aspects needed addressing in this regard:

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

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

1. An outline of the institutional framework for Climate Change linking global policy with national, provincial and local imperatives;
2. An overview of the uMhlathuze climate risk profile and associated vulnerability for the Municipality;
3. A presentation of the adopted Climate Change and Energy strategies as a basis for prioritising actions/projects for implementation of the Climate Change Action Plan;

4. Development of a Climate Change Action Plan which focuses on priority climate adaptation and mitigation interventions;
5. Strategic Partners and Global affiliations to scale up on climate actions; and
6. Institutional arrangements, which talks to the establishment of a formally constituted committee to implement and report on the climate change action plan.

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 the National, Provincial 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, water situation is 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.

- 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:

i. Coastal Management
ii. Water Resources Management
iii. Stormwater Management
iv. Open Space and Biodiversity Management
v. Waste Management
vi. Energy Management
vii. Integrated Transport Planning
viii. Spatial Planning, Land Use and Designing for sustainability
ix. Human Settlement Planning
x. Disaster Management Responses
xi. Air Quality Management

It is the fifth (5^{th}) year since the adoption of the Climate Change Action Plan making it opportune to track performance and reassess the Municipality's risks but also, opportunities. As such the Climate Change Action Plan and the Climate Change Strategy is currently being revised. The anticipated date for the conclusion of the revision of the Climate Change Action Plan and Strategy is December 2024.

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. On account of this the City of uMhlathuze is a longstanding member with ICLEI and through their programs signed a compact with the Covenant of Mayors. Being part of the compact requires the Municipality to declare their climate action on the Carbon Disclosure Project (CDP). This is a universal online platform that streamlines climate reporting. The CDP seeks to address the followings sectors:

- Governance and leadership
- Energy
- Waste
- Transport
- Climate Hazards and adaptation responses
- Resilience

The City participated in the African Circular Cities Initiative (ACCI) and other Circular Activities initiatives through the ICLEI partnership and the aim of this initiative being to develop a system of resource management which ensures continuous use of materials, goods, energy and waste, retaining their highest value throughout their lifecycle. Also coordinated by ICLEI was the Transformative Urban Mobility Initiative (TUMI) African City Network with the aim of providing a global response to climate change using low emissions and energy efficient urban transport systems. This is in line with the Paris Climate Agreement to keep global temperature rise this century well below 2°C and to pursue even greater efforts to limit it to 1.5°C. The network aims to support cities transition into electric bus systems. Through this network, the City Network will have access to the following:

- Capacity building
- Knowledge Hub
- Trainings
- Technical online workshops
- City-to-City exchanges and Networking
- Communications kit and programme within TUMI Network and at TUMI Partners' events

As part of the process, a series of exchange workshops were held with city participants and a member of the Green Team also attended the TUMI e-Bus Mission City Network Learning Exchange from in Dakar, Senegal during October 2022.

The following conclusions and lessons learnt from the above learning exchange were captured noting that some form part of the Dakar Declaration that was signed at the conclusion of the session:

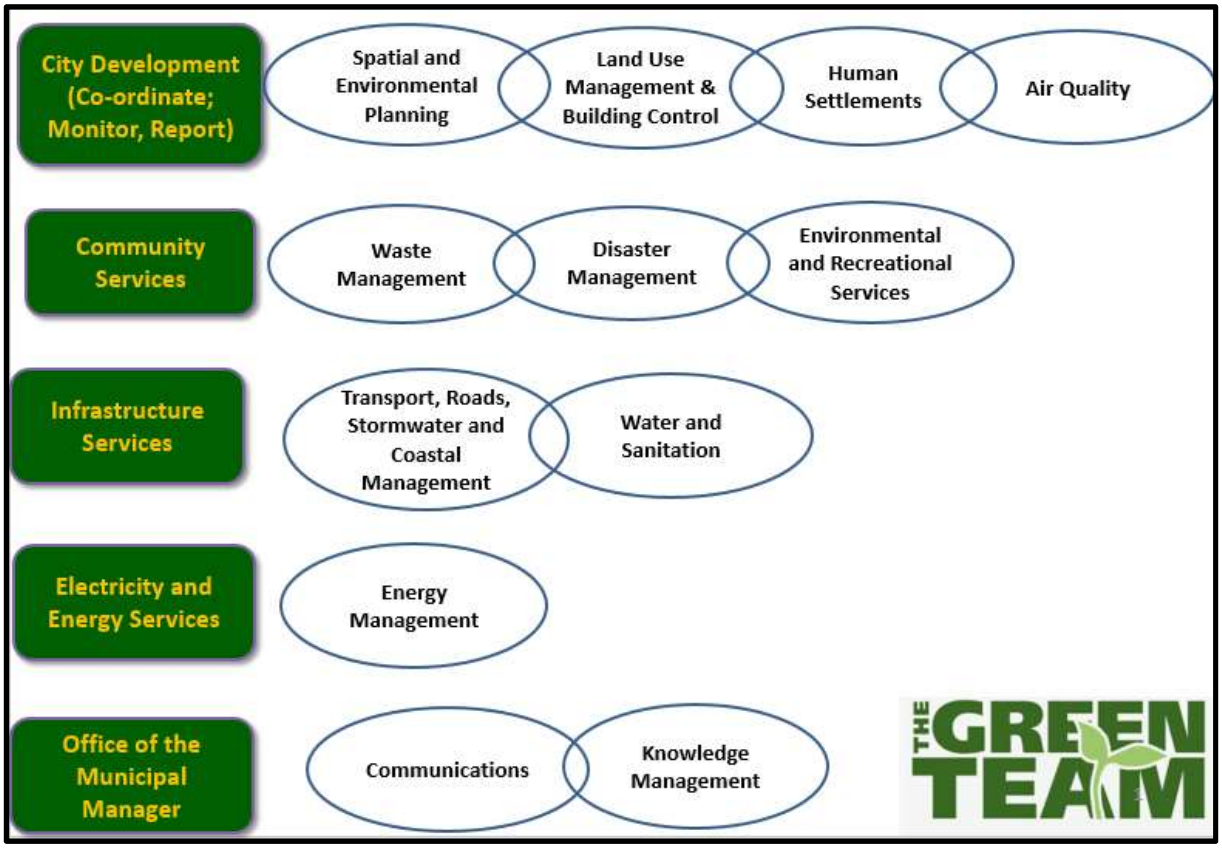
- The need to further understand and investigate the unbundling transit models that help distribute risks for e-bus adoption.
- The need to strengthen access to all types of financing at the local level.
- The need for innovation in green financing, which must be more accessible to developing countries.
- The establishment of partnerships and the role of collaboration to enable a successful modal shift to e-Buses.

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 22: Composition of the uMhlathuze Green Team



5.13.7 The Cities Adapt Project

The Cities Adapt project is a partnership between the South African National Department of Forestry, Fisheries and the Environment (DFFE) and the South African National Department of Cooperative Governance and Traditional Affairs (CoGTA) with support from GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit). The project is funded by the International Climate Initiative (IKI) of the Government of Germany.

The purpose of this project is to build the resilience to climate change impacts in selected cities and disadvantaged urban neighbourhoods in South Africa and Mexico. The project is planned to run until August 2025. The partners noted above, i.e. DFFE, COGTA and GIZ were searching for a South African Partner Municipality to support one selected disadvantaged neighbourhood to transform towards a more climate-resilient and pro-poor urban development pattern. During August 2022, the City received a favorable response to their application for selection as a partner city. The project location motivated by the Municipality was Esikhaleni/uMzingwenya.

The objectives of the project are to:

1. Mainstream climate change adaptation measures into urban development strategies and capacity building of key stakeholders
2. Support the planning and implementation of a concrete demonstration project for adaption in a public space.

To date several engagements have been held with the community and the green team to ensure capacity development amongst all roleplayers. The demonstration project will be scalable and easily replicable to other areas in the province and country. The demonstration project will have a sustainable impact that can be continued by the Community and/or the Municipality after the end of the Cities Adapt project.

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.

Whilst studies suggest that sand bypassing at an increased rate can shift the setback line seaward, it is dependent on the consistency of sand bypasssing. Furthermore, global sea levels are rising mostly due to a combination of added water from melting ice sheets and glaciers and thermal expansion of seawater as it warms. As a result extreme marine events are becoming increasingly evident along the coastline further exasperating the rate of coastal erosion. The Municipality is currently exploring additional measures that can be implemented to counteract the impacts of the sea level fluctuations occurring at the Alkantstrand beach.

The following figures provide the setback line for the three scenarios explained above.

Figure 23: Development Setback Lines along Northern Beaches

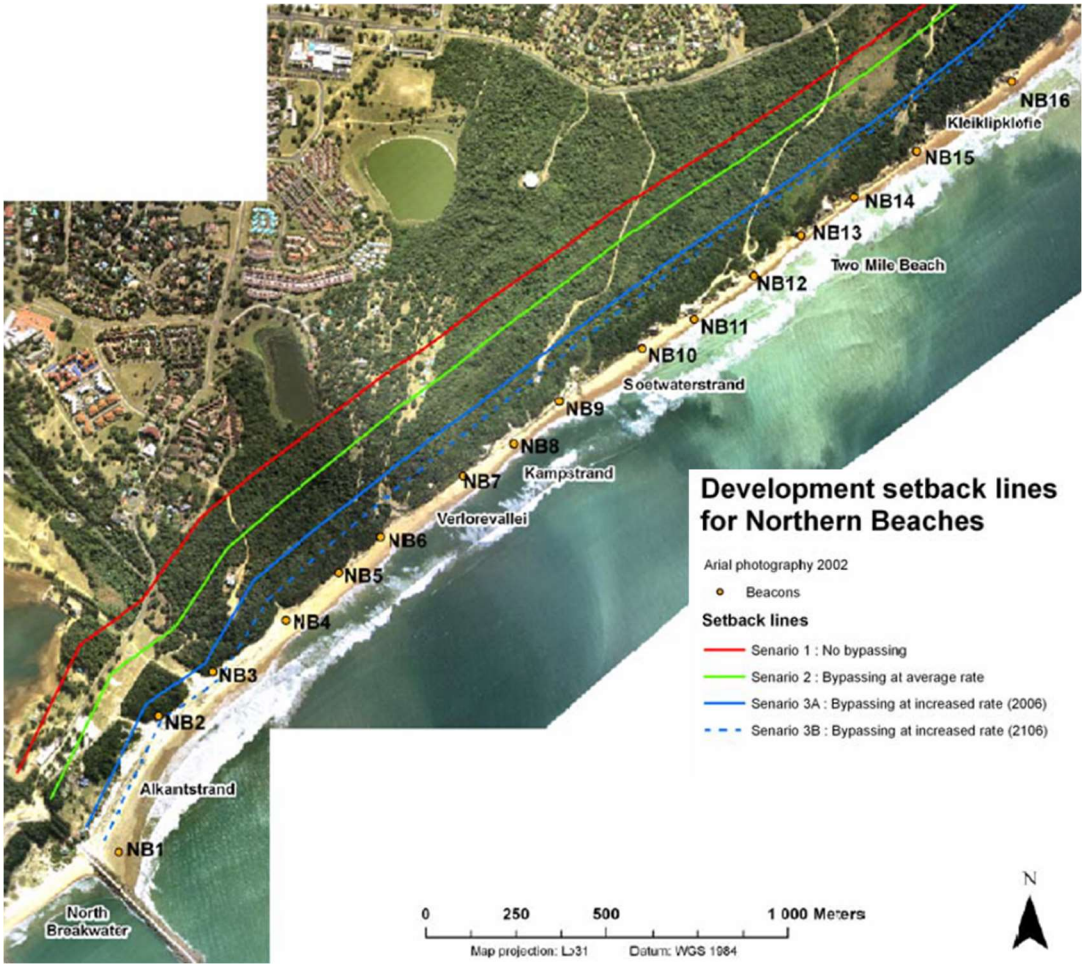


Figure 24: Coastal Erosion and Installed Defenses

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).

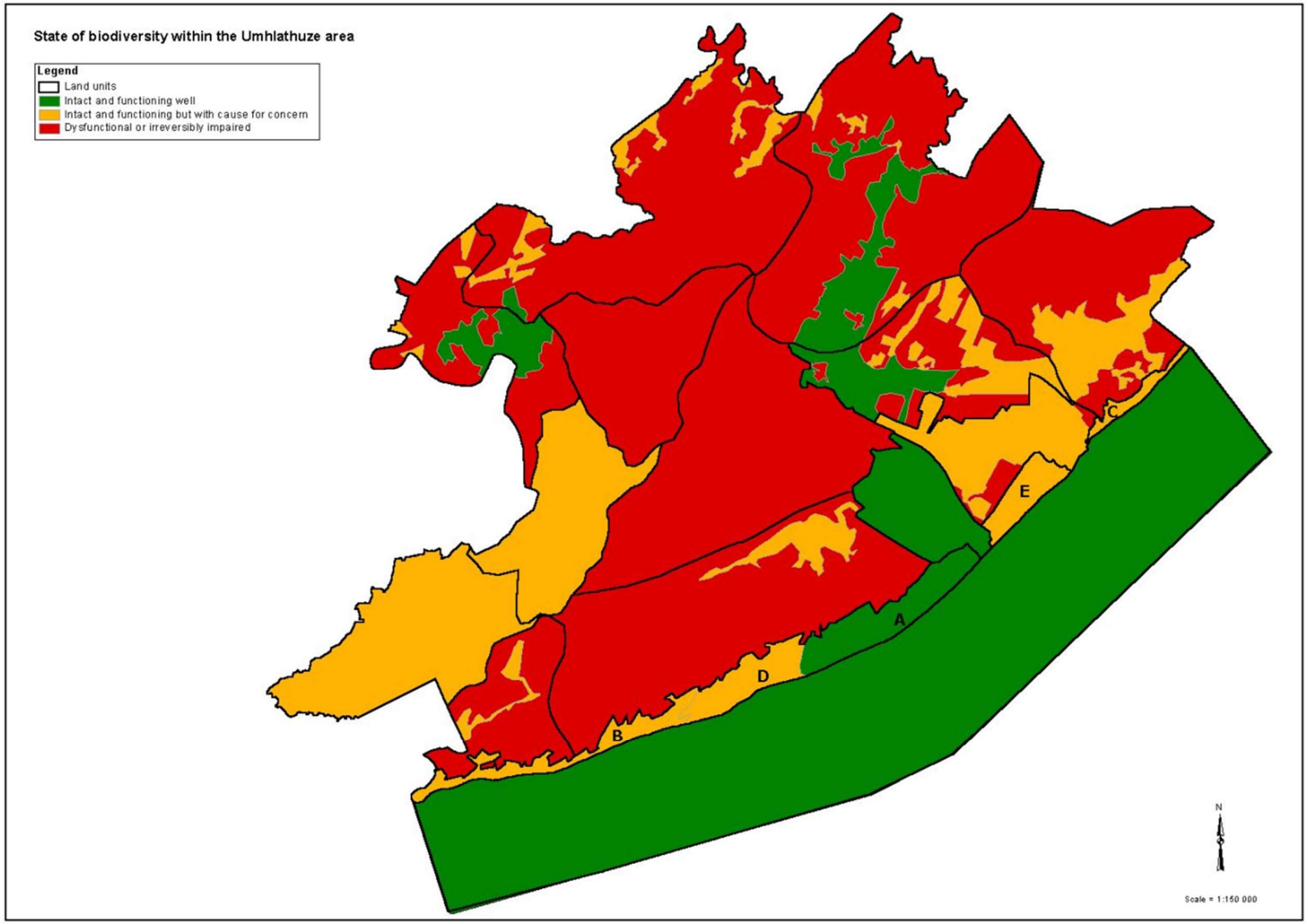
Biodiversity assets of significance include the following:

- 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 23: 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 42: The Functionality of Landscape Units in Respect of Maintaining Biodiversity

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

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

Landscape unit	Size	Condition	Landscape context	Functionality Rank
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
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

Landscape unit	Size	Condition	Landscape context	Functionality Rank
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
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

Landscape unit	Size	Condition	Landscape context	Functionality Rank
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, savannah, 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, savannah 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 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 43: 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	

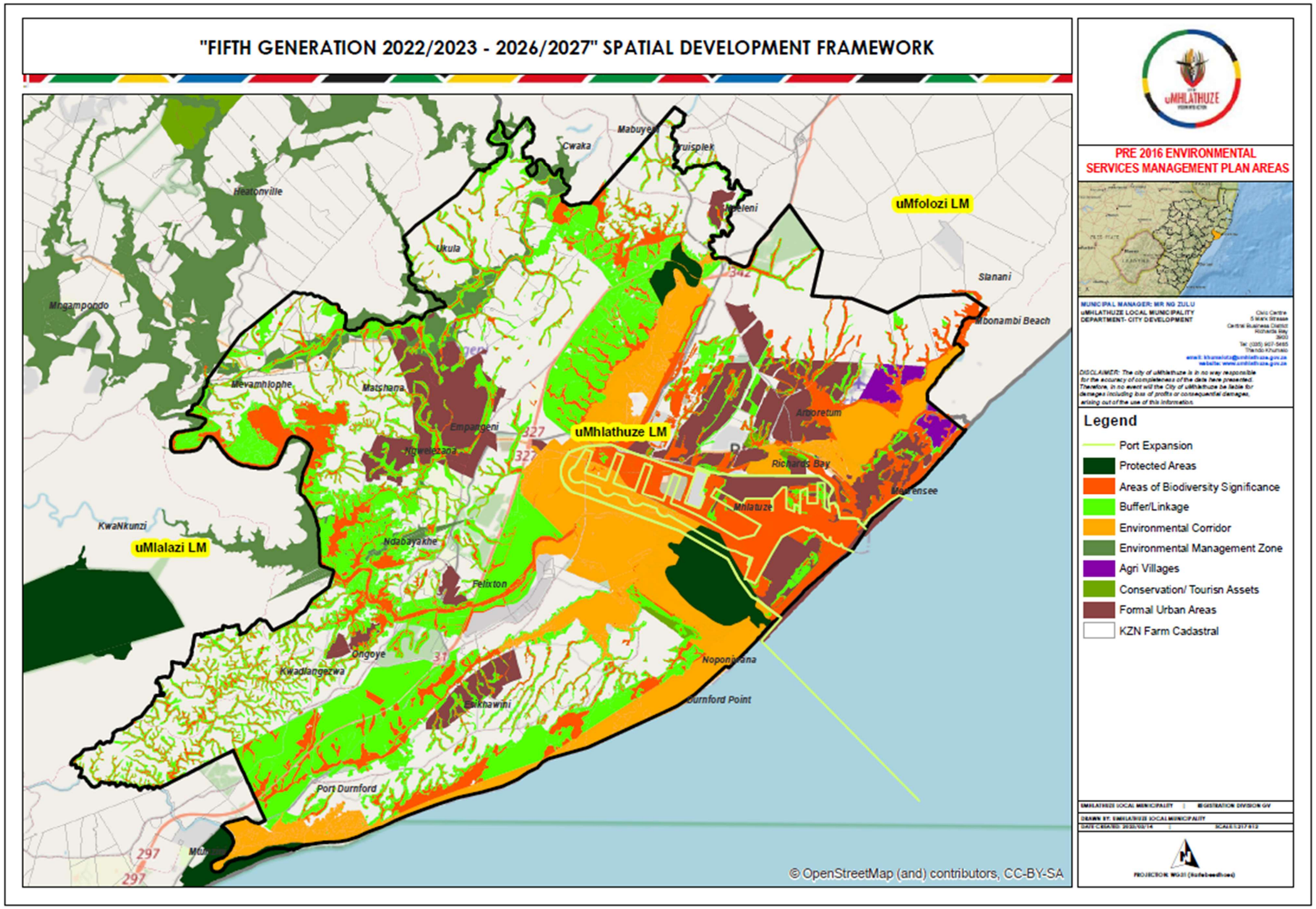
All of the remaining ecosystem types are important for supporting Red Data Species, implying that there is a direct conflict with future development imperatives. The Spatial Development Framework has identified such development opportunities for the area. Port expansion with associated industrial development 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 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.

At overleaf, mapping is provided indicating the Environmental Services Management Plan (ESMP) as prepared for the pre-2016 boundaries of the City of uMhlathuze as well as the Environmental Sensitive Areas, further refined with information from the Kind Cetshwayo District Municipality (KCDM) Environmental Management Framework (EMF).

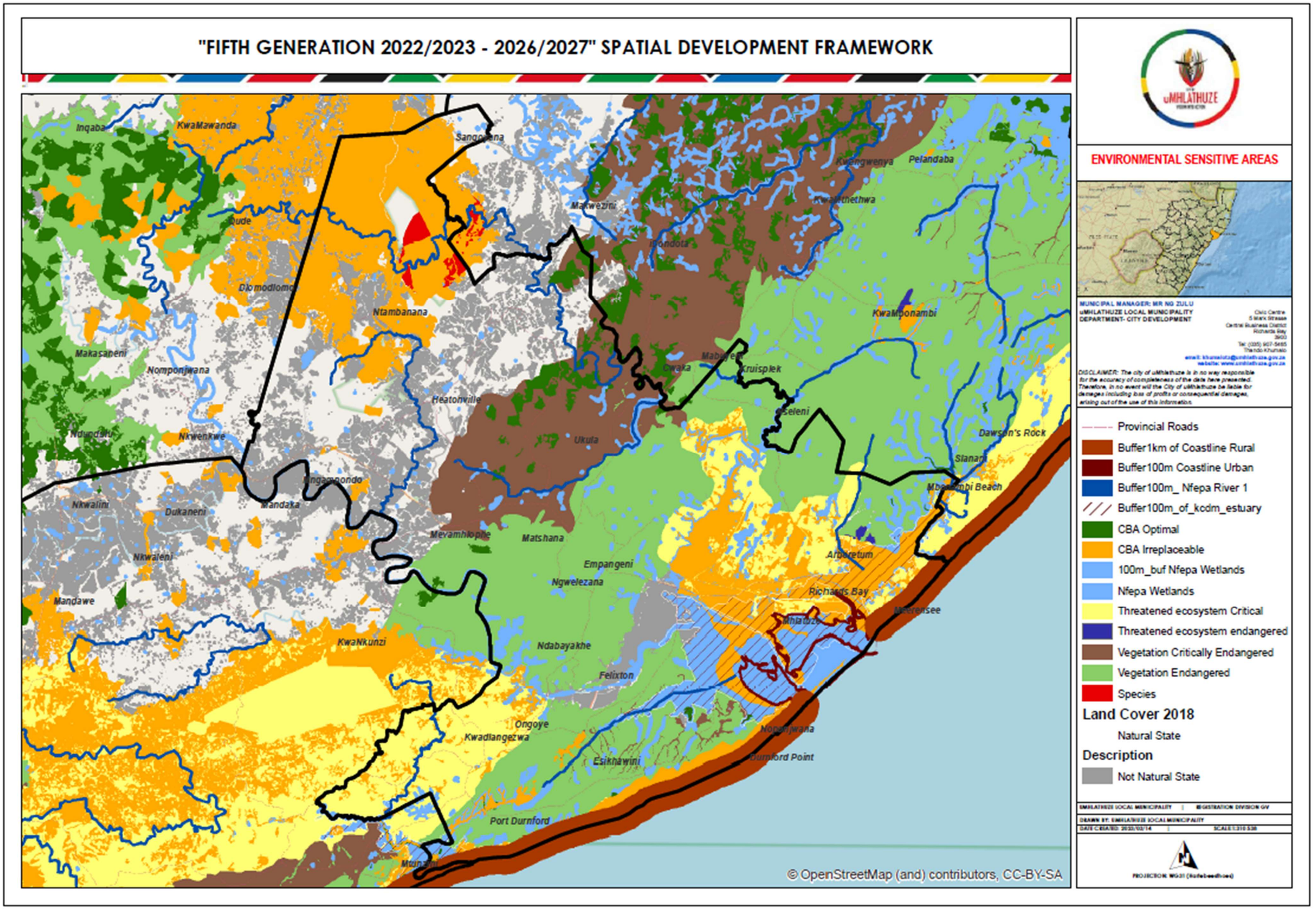
5.16 SUMMARY OF KEY ENVIRONMENTAL ISSUES

- 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 needs 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 within 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, and emergency coastal defenses were required. It is also a fact that the northern beaches are not being adequately replenished at the required volumes of sand volumes from the 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 environment from current land use.
- The impacts of development and climate change have significantly contributed to the shift in the distributional range of some species affecting the overall biodiversity index of the City of uMhlathuze. Moreover, there is no recent data gathered to determine the current environmental status of the City of uMhlathuze.
- Further land development is likely to render biodiversity implications.

Map 24: Environmental Services Management Plan (pre 2016 Municipal Area)



Map 25: Environmental Sensitive Areas



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.

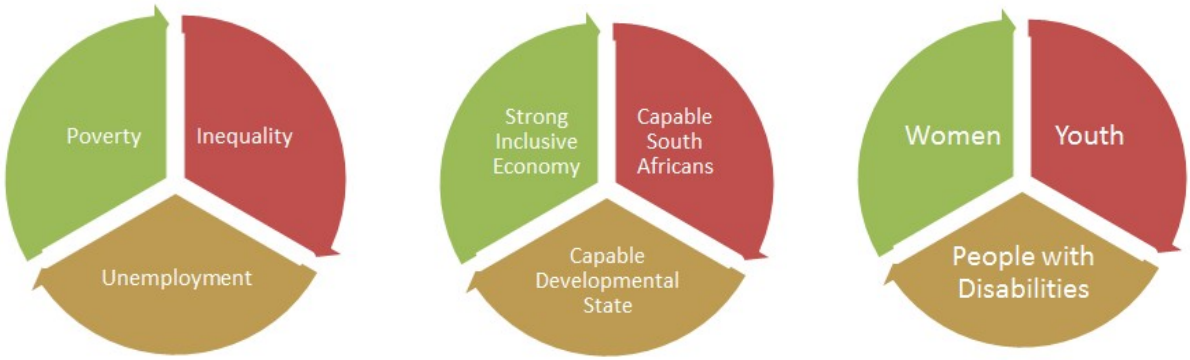
The underlying principles to rural development and land reform are:

- 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 25: 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 capability in terms of hectares and percentages in uMhlathuze.

Table 44: 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

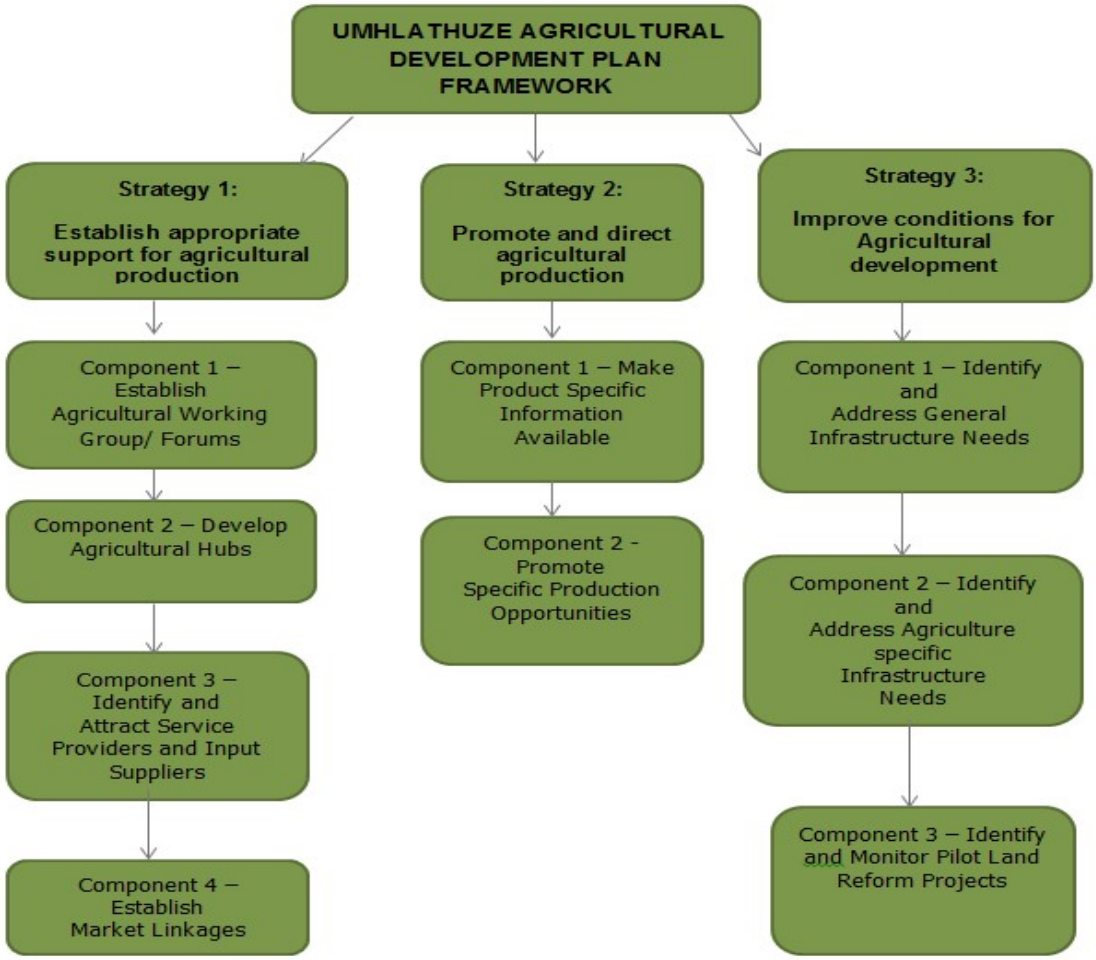
The said plan identified the following strengths, weaknesses and opportunities relating to agriculture.

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 26: Agricultural Support Plan Strategies



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

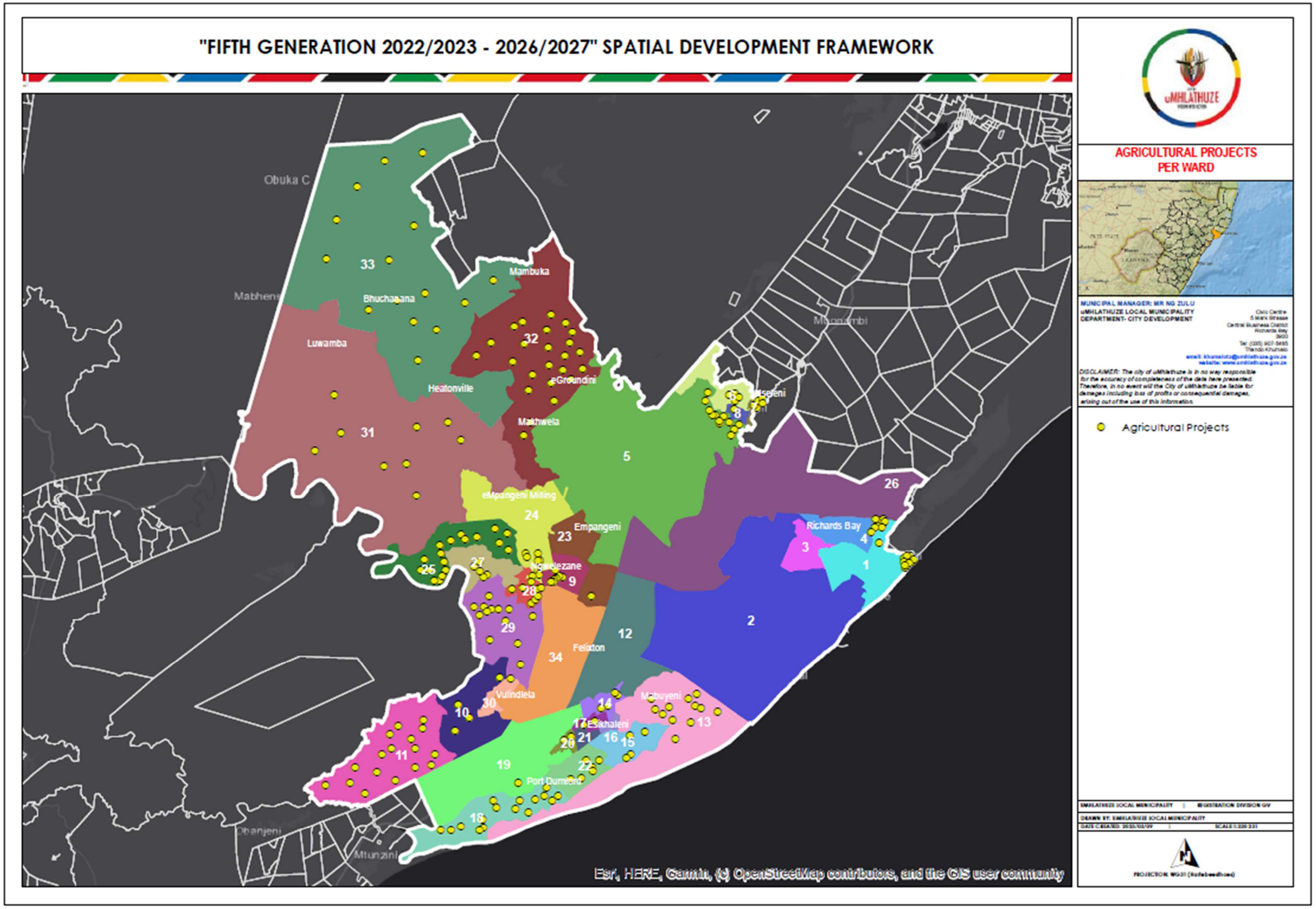
- Niche Commodities: Essential Oils, Macadamia Nuts
- Animal Enterprise Opportunities: Goat Production (ongoing), Beef Production, ongoing Poultry Production of meat and eggs, ongoing Aqua Culture
- Partnership Required: Department of Trade and Industry, Department of Agriculture, Fisheries and Forestry, Operation Phakisa, Operation VULA, Private Sector
- Skills Development Required: Need market linkage and technical infrastructure support.

The Municipality is in the process of initiating a small-scale inland and coastal fisheries Policy.

Some projects to note include:

- Sobusa Aquaponics project in Ward 13 in the Dube Traditional Authority, as a secondary agricultural activity.
- Permanent Sale Yard Livestock (Goat Production) at eSikhaleni.
- Commercial poultry project (egg production) in Ward 13 in the Dube Traditional Authority.
- Commercial project called Arms Don Nursery in the Somopho Traditional Authority.
- Disability Poultry in Ward 11 at Ntuze.
- Ntambanana Moringa Products in Ward 32.

Map 26: 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 and there is ongoing progress:

1. Mbonambi Land Claim (Ref No Krn6/2/2/E/21/0/0/67)
2. Mndaba Group Land Claim (Ref No Krn6/2/2/E/21/0/0/53)

It has been noted that the following land claims in the municipality have been settled:

1. Mandlazini / Mambuka Land Claim (Ref No Krn6/2/2/E/21/0/0/3)
2. Mambuka Amendment Claim (Amendment Notice 255 Of 2017)

The memorandum of agreement of sale between uMhlathuze Municipality and National Department of Agriculture Land Reform and Rural Development have been signed on 05 August 2022 on acquisition of land in settlement of the Mandlazini Community Land Claim in terms of the restitution of land rights Act 1994.

7.1 SUMMARY OF KEY LAND REFORM ISSUES

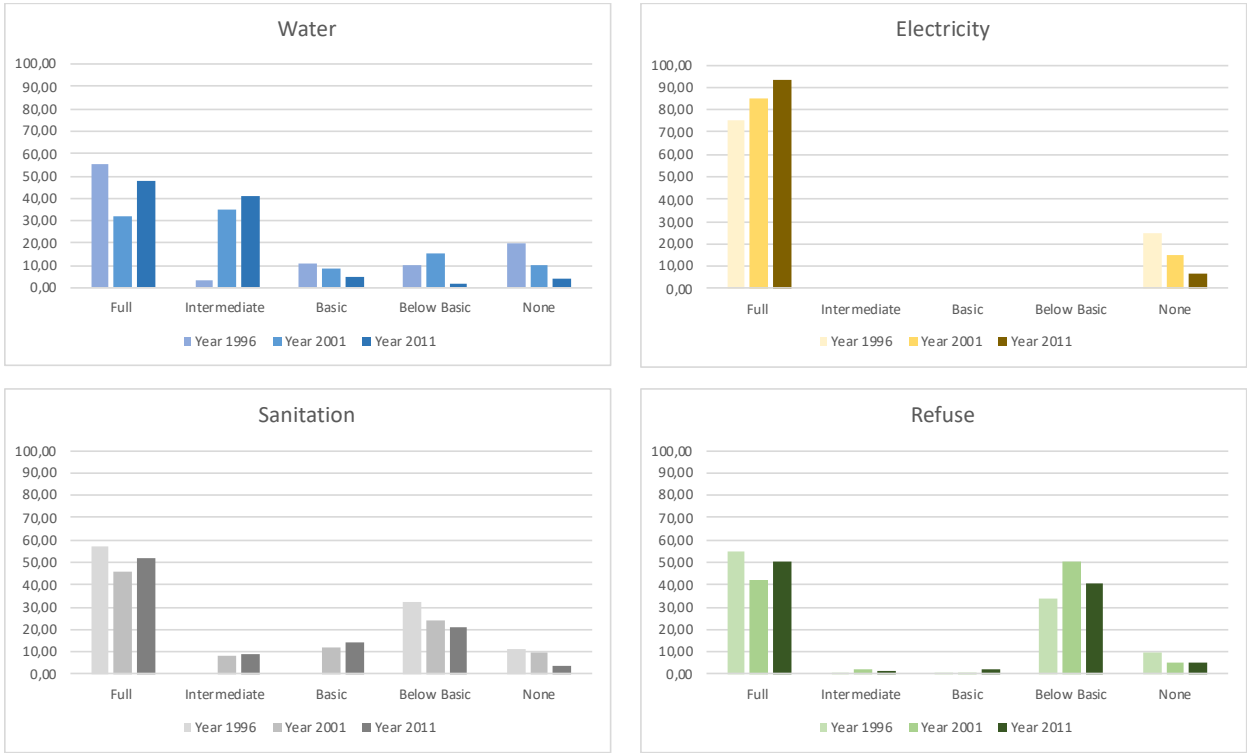
The opportunity to lodge land claims was extended to 30 June 2019 and, to a degree, some developers feel uncertain about the prospects of pursuing a development on land that may be subject to claim in future. However, the Regional Land Claims Commission has made it clear that the intention of land claims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

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 27: Access to Services



Source: CEF, 2023

The above provides an indication of the trends between 1996, 2001 and 2011 with regard to the access to water, sanitation, electricity and refuse services. The situation with regard to access to the listed services as per the Census 2022 results is provided hereunder.

Table 45: Water Services by Households (2022)

Description of Water Access	Households
Regional/local water scheme (operated by municipality/other service provider)	89029
Borehole	1383
Spring	703
Rain-water tank	646
Dam/pool/stagnant water	416
Water vendor	791
Flowing water/river/stream	477
Water tanker	6076
Other	920
Total	**100441**

Source: Census 2022

The majority of households have access to a regional or local water scheme or boreholes. Very few households in the Municipality rely on water vendors/tanks or natural water sources.

Table 46: Access to Piped Water by Households (2022)

	Households
Piped (tap) water inside the dwelling	58241
Piped (tap) water inside the yard	35101
Piped (tap) water on community stand: distance less than 200m from dwelling	1845
Piped (tap) water to community stand: distance less than 200m and 500m from dwelling	681
Piped (tap) water to community stand: distance less than 500m and 1000m from dwelling	215
Piped (tap) water on community stand: distance greater than 1000m (1 km) from dwelling	104
No access to piped (tap) water	4252
Total	**100441**

Source: Census 2022

Similar to the results of Table 44, the majority of the households in the municipal area have access to piped water either inside the dwelling/yard or within 200m from the dwelling. However, there is a high number of households that do not have access to any form of piped water.

Table 47: Energy or Fuel for Cooking by Households (2022)

	Households
Electricity from mains	77091
Other source of electricity (e.g. generator etc.)	251
Gas	21700
Paraffin	92
Wood	1140
Animal dung	3
Coal	27
Solar	6
Other	33
None	98
Total	**100441**

Source: Census 2022

The majority of households in the Municipality have access to either electricity (from mains) or gas for cooking purposes. Not many households relay on other natural sources of energy or paraffin.

Table 48: Energy or Fuel for Lighting by Households (2022)

	Households
Electricity from mains	99409
Other source of electricity (e.g. generator etc.)	178
Gas	145
Paraffin	42
Candles	498
Solar	29
Other	51
None	88
Total	**100440**

Source: Census 2022

The majority of households in the municipal area have access to electricity from mains for lighting purposes.

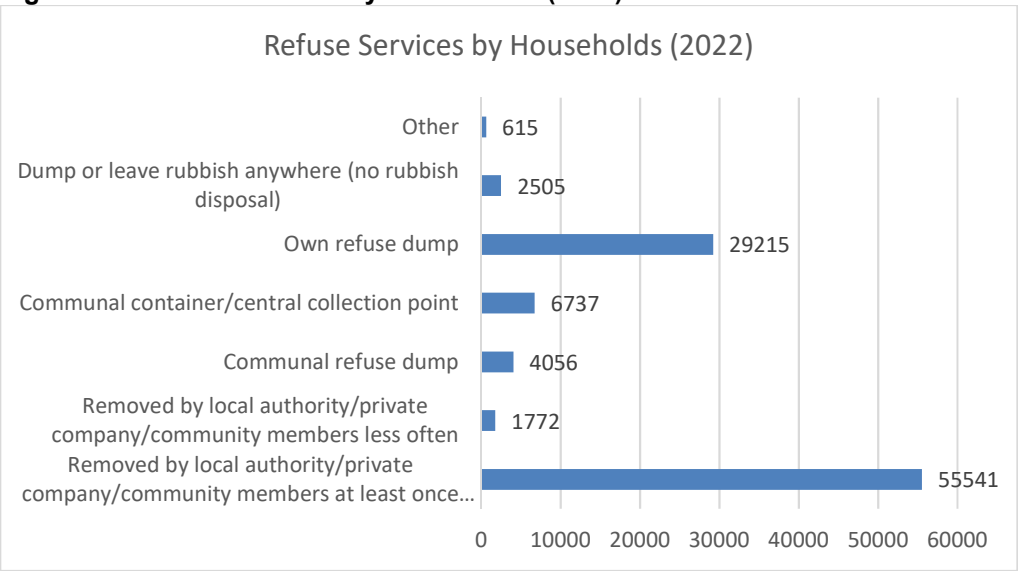
Table 49: Access to Sanitation by Households (2022)

	Households
Flush toilet connected to a public sewerage system	58198
Flush toilet connected to a septic tank or conservancy tank	4602
Chemical toilet	7732
Pit latrine/toilet with ventilation pipe (VIP)	20599
Pit latrine/toilet without ventilation pipe	8042
Ecological toilet	64
Bucket toilet (collected by municipality)	22
Bucket toilet (emptied by household)	131
None	661
Other	390
Total	**100441**

Source: Census 2022

Household access to sanitation has improved as per Figure 28 but a large number of households still do not have access to an acceptable level of sanitation provision, i.e. more than 8000 households have non-ventilated pit latrines.

Figure 28: Refuse Services by Households (2022)



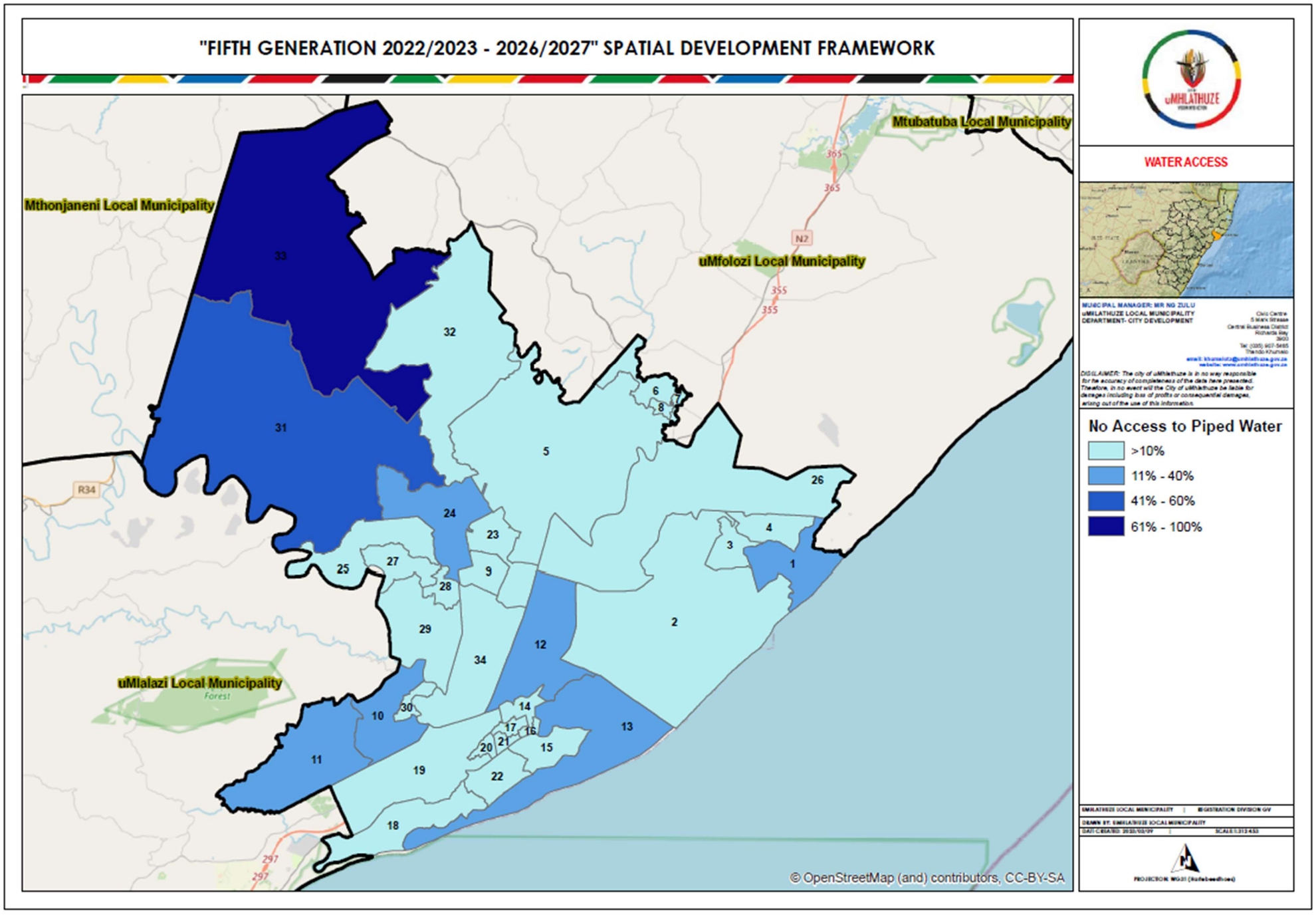
Source: Census 2022

According to the above, just over 50% of households have refuse removed at least once a week and many are reliant on alternative refuse disposal methods and/or standards.

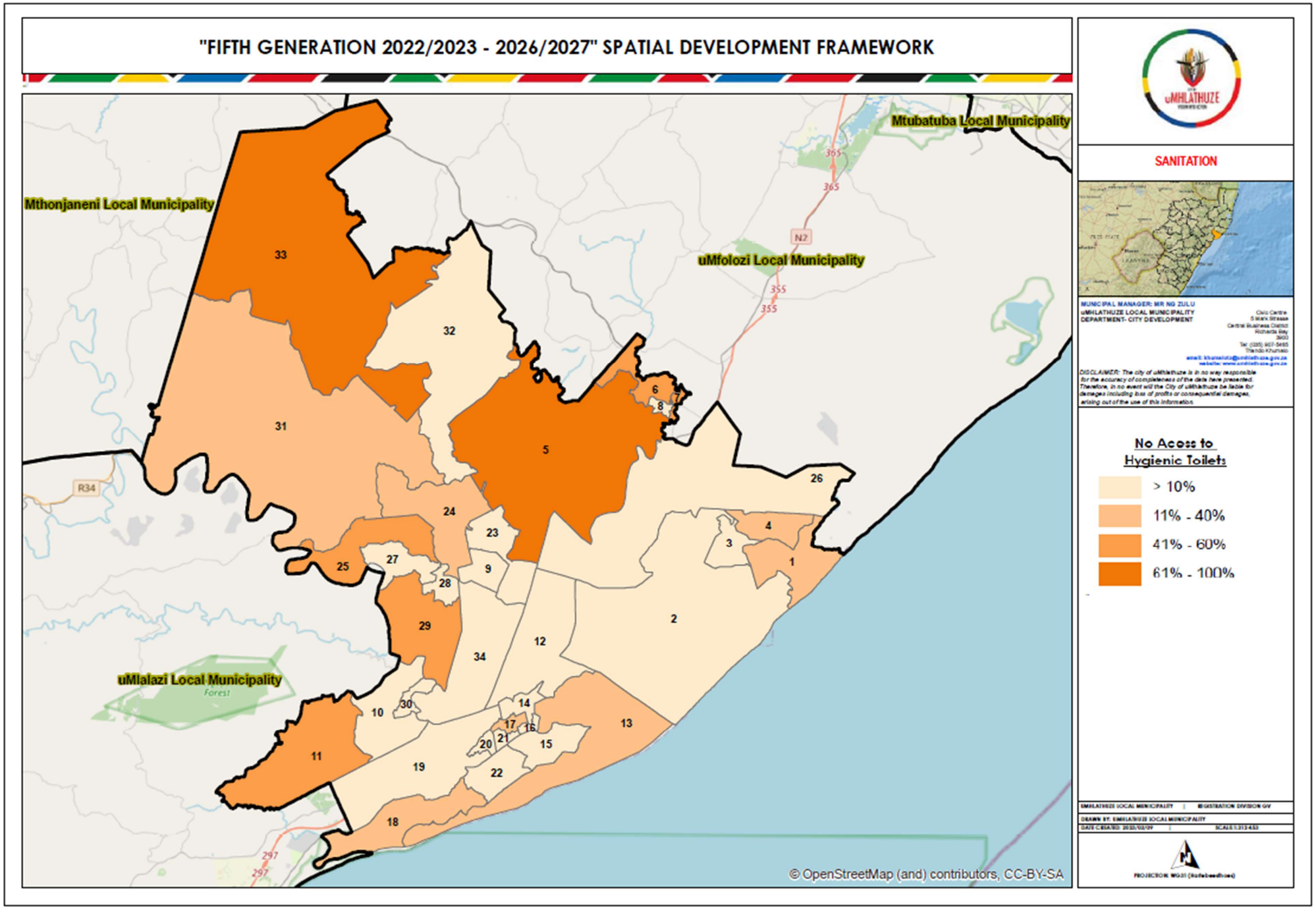
The maps attached at overleaf illustrate access to water and sanitation services spatially. The remainder of this chapter will provide updated information in respect of the various sector plans and related processes that have been updated or are under review, notably those in respect of:

- Bulk water
- Water Services
- Bulk Sewerage
- Waste Water Re-Use
- Roads
- Seaport and airports
- Electricity and Energy
- Waste Management

Map 27: Access to Piped Water



Map 28: 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

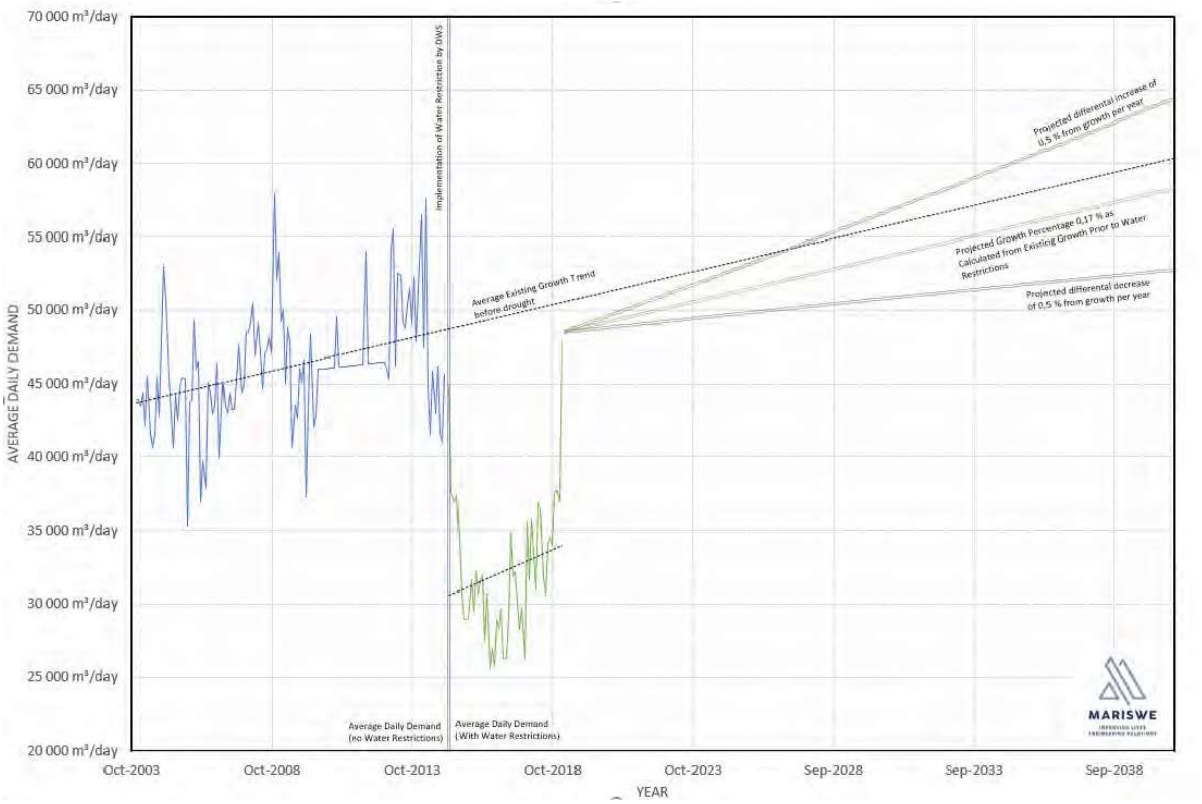
The following main water supply schemes have been identified, i.e.:

- 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 29: 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 50: 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 30: Proposed Interventions (Northern Scheme)

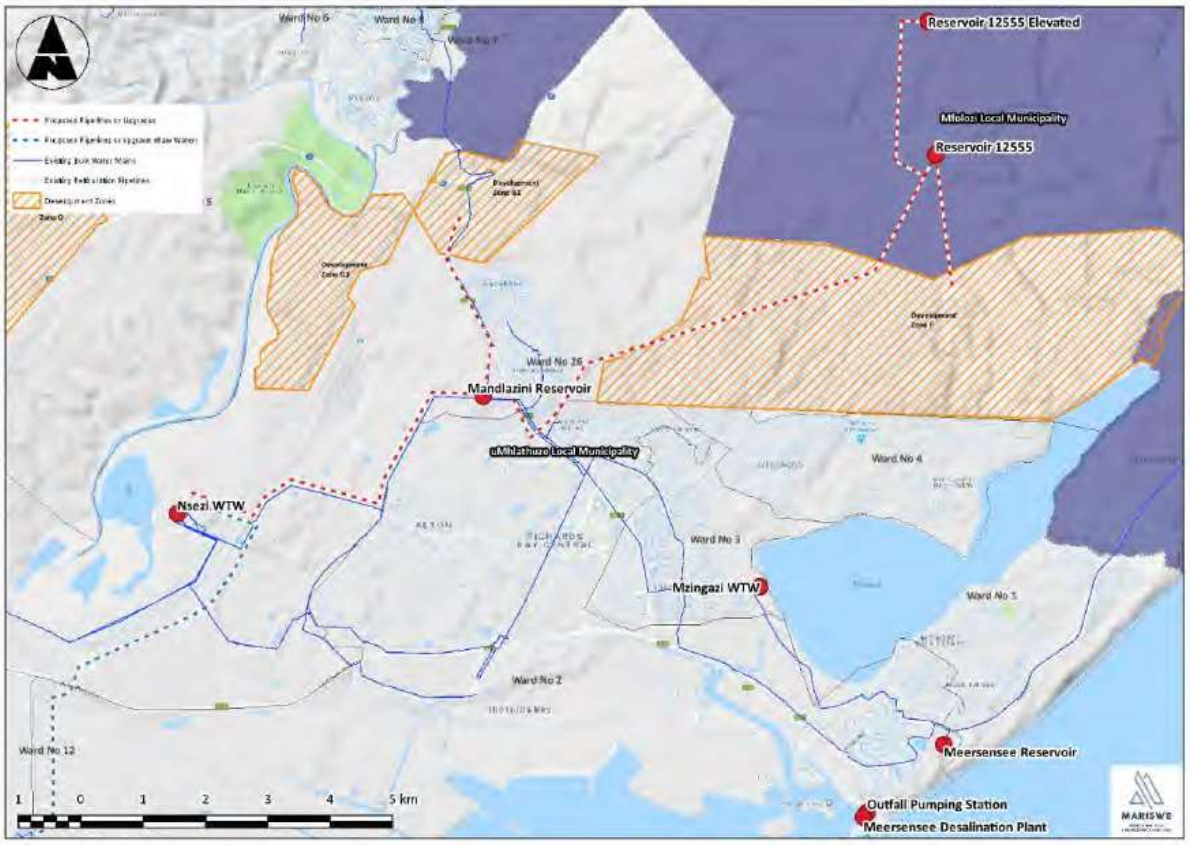


Figure 31: Proposed Interventions (Empangeni Scheme)

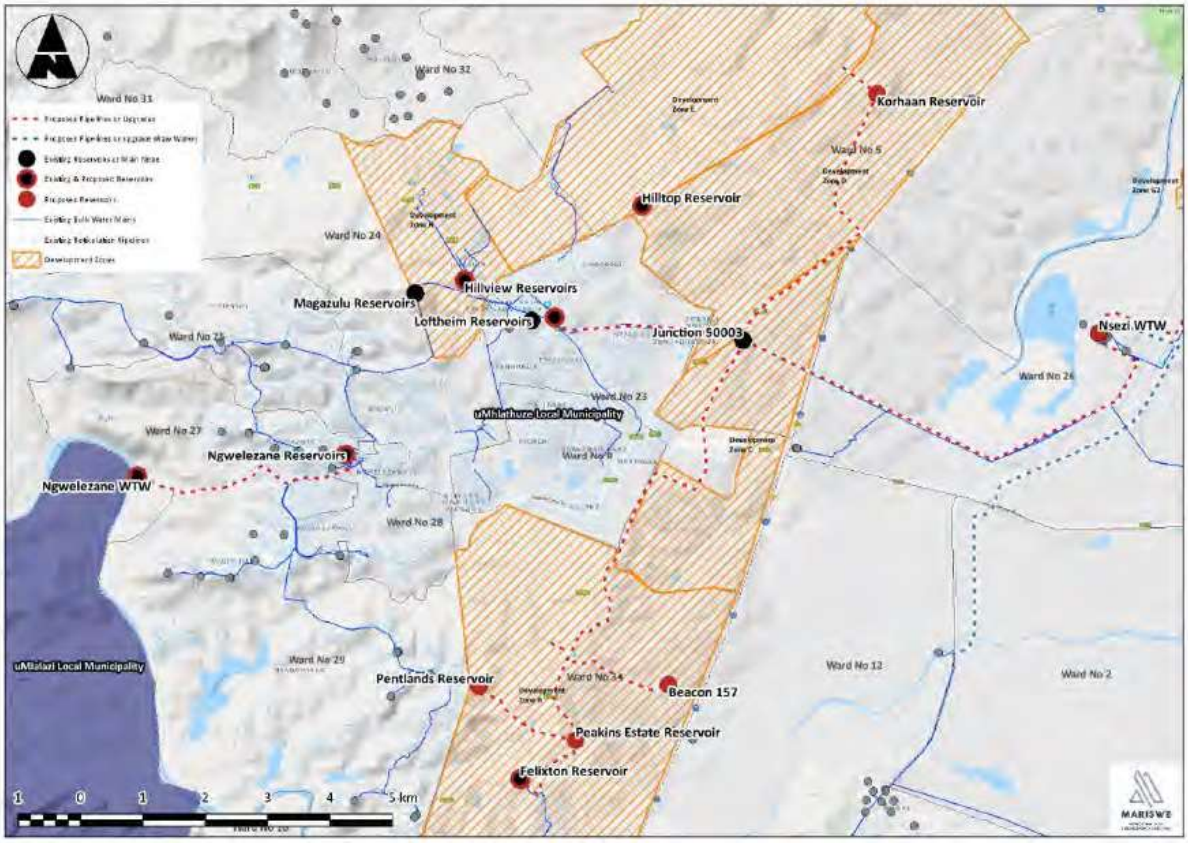


Figure 32: Proposed Interventions (Western Scheme)

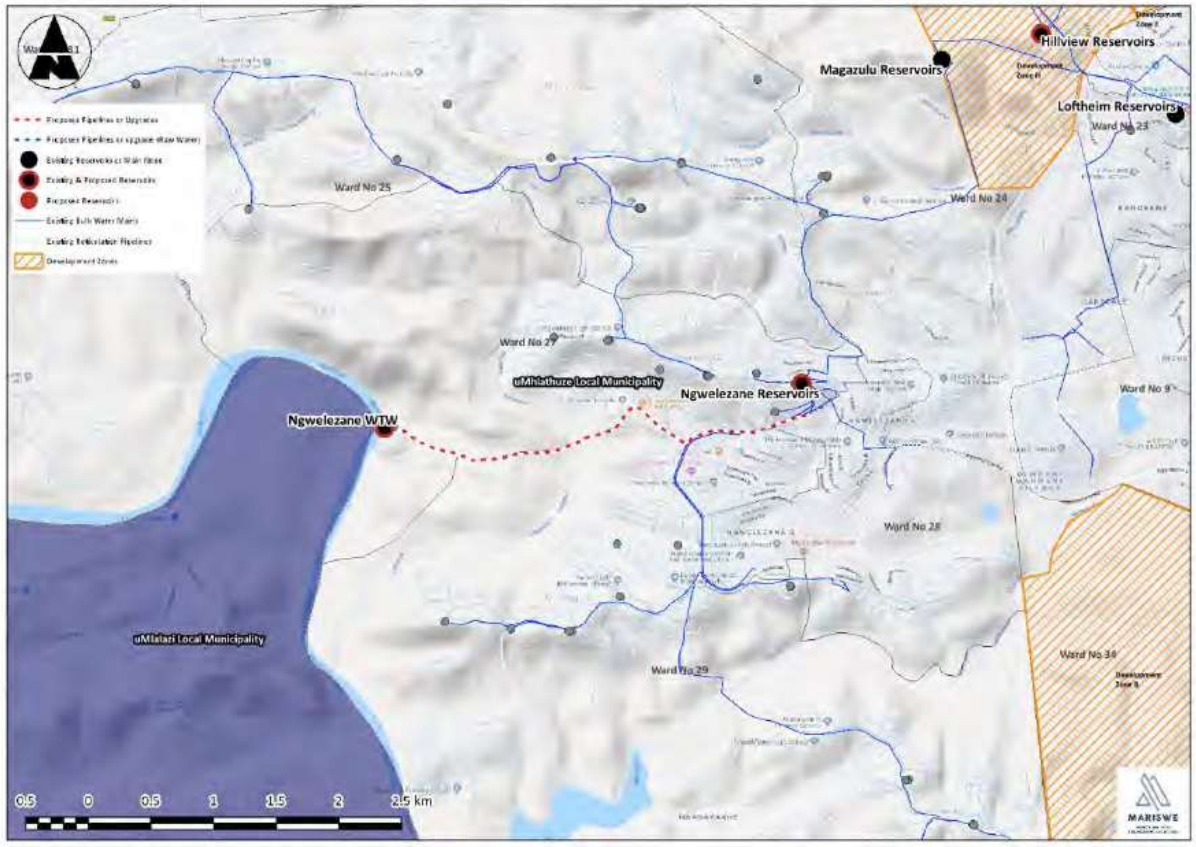


Figure 33: Proposed Interventions (Southern Scheme)

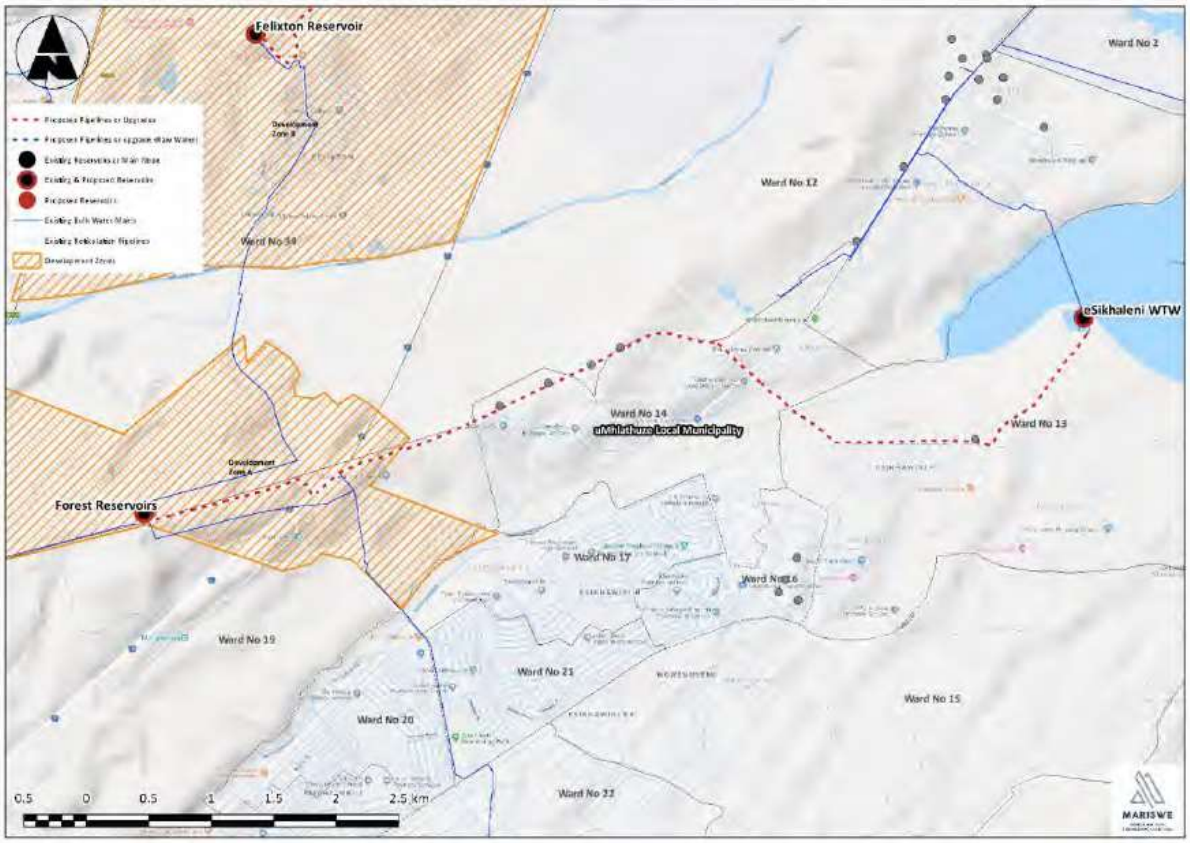


Figure 34: Proposed Interventions (Ntambanana Scheme)

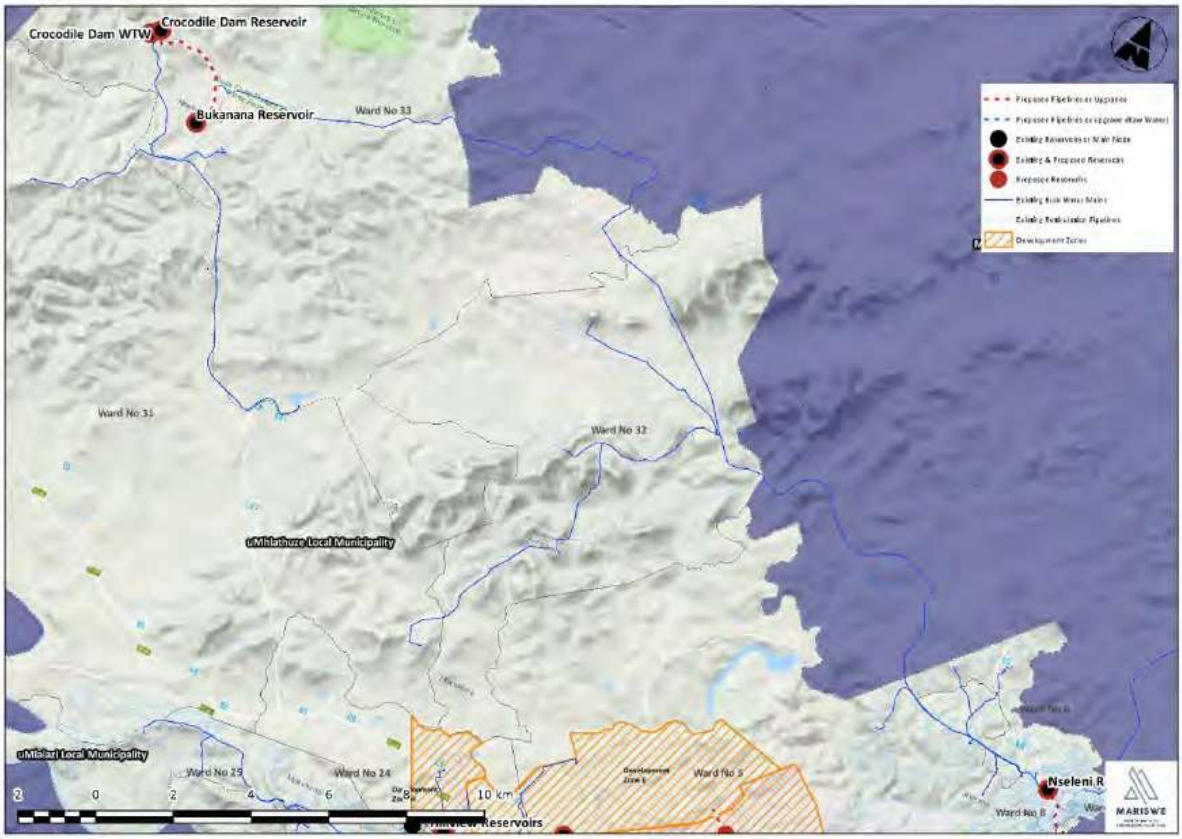
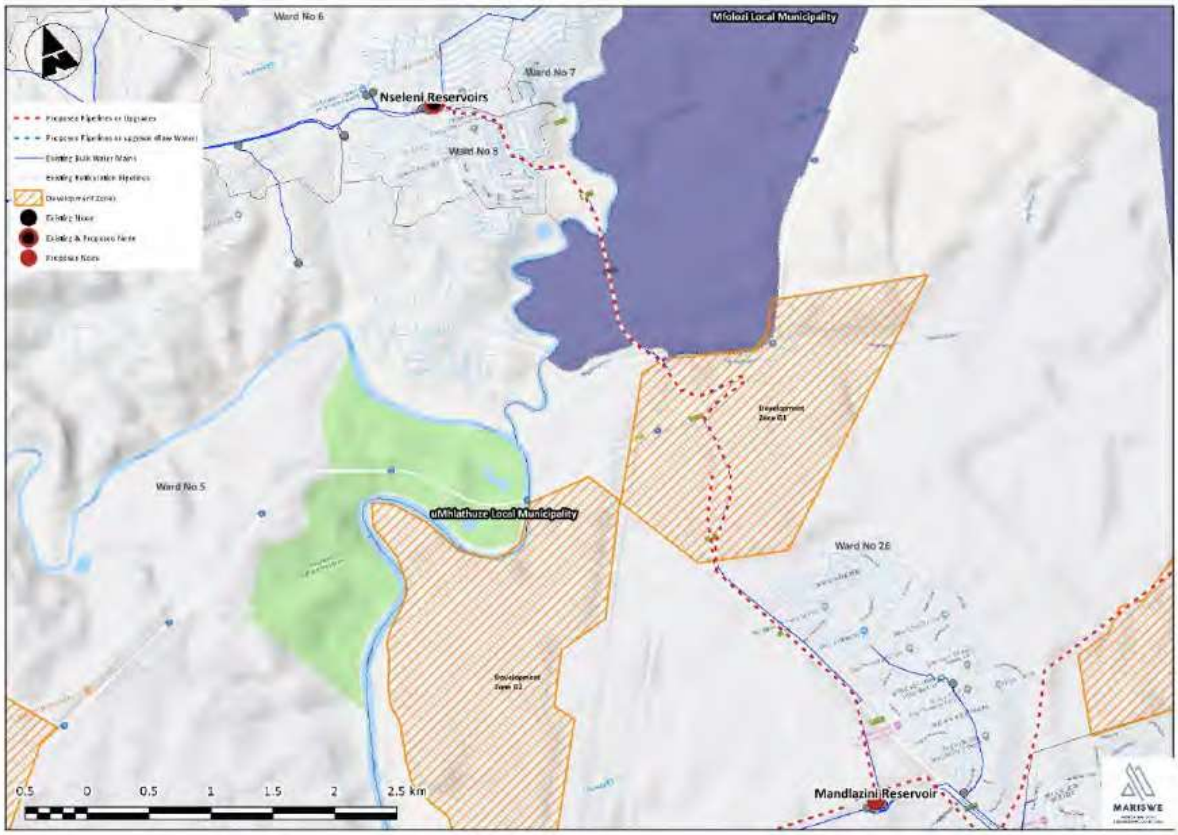


Figure 35: Proposed Interventions (Nseleni Scheme)



A costed summary of the planned interventions is provided herewith:

Table 51: 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 52: 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 36: Replacement Cost

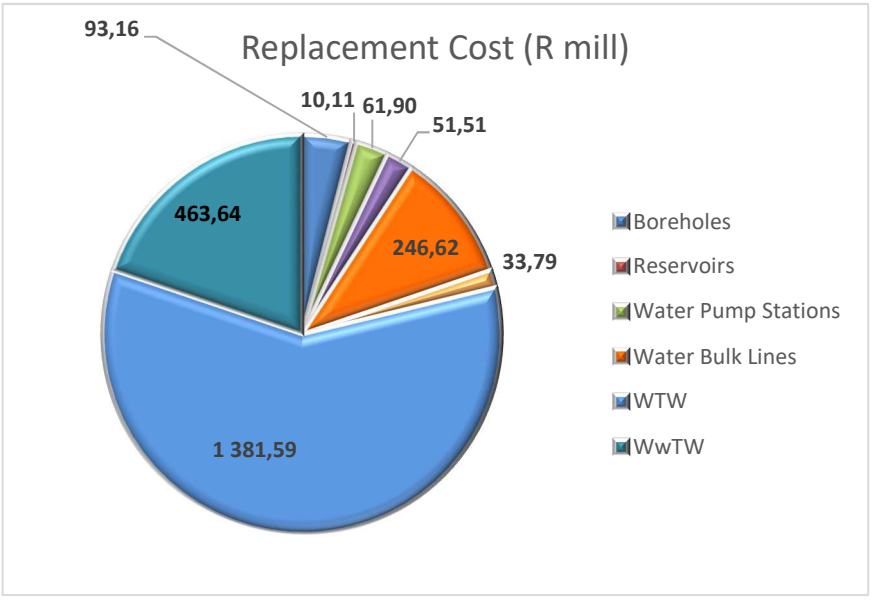
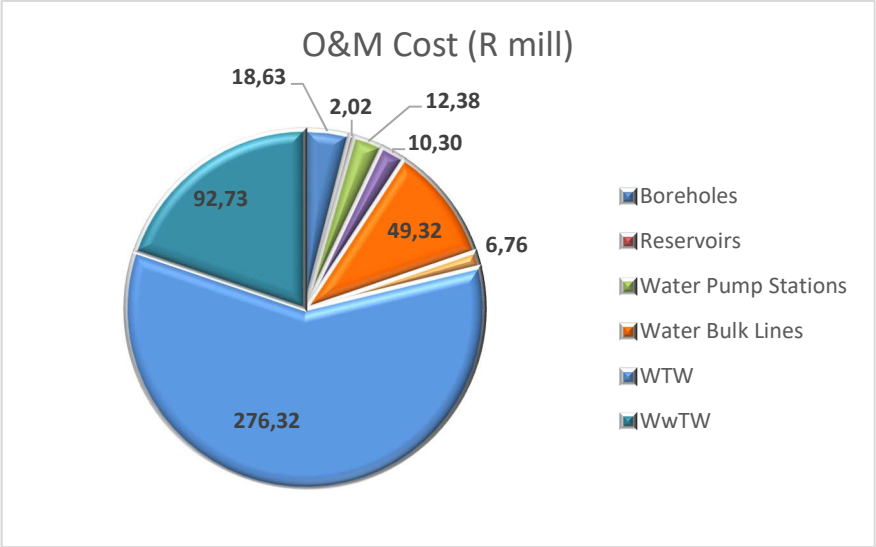


Figure 37: Operation and Maintenance Cost



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 53: 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 54: 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 55: Cost Estimate for Augmentation of Bulk Sewage System

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

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

Table 56: 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 57: 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.

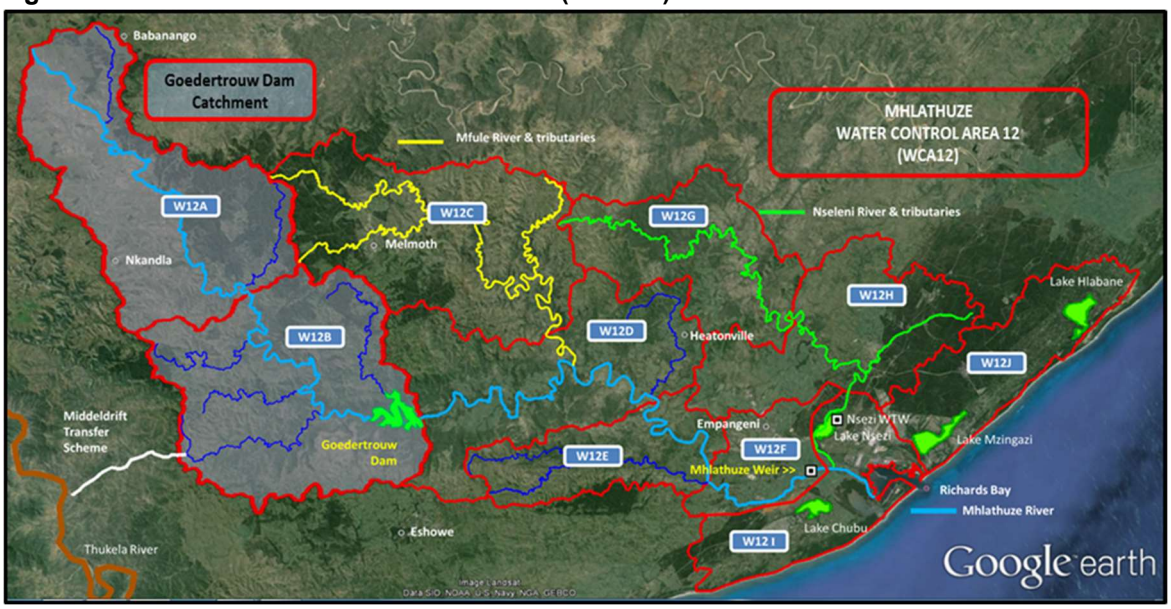
7) As a social project, a composting operation should be implemented as a final sludge treatment for the sludge produced by the waste water treatment works.

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 38: 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 is to commence.

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

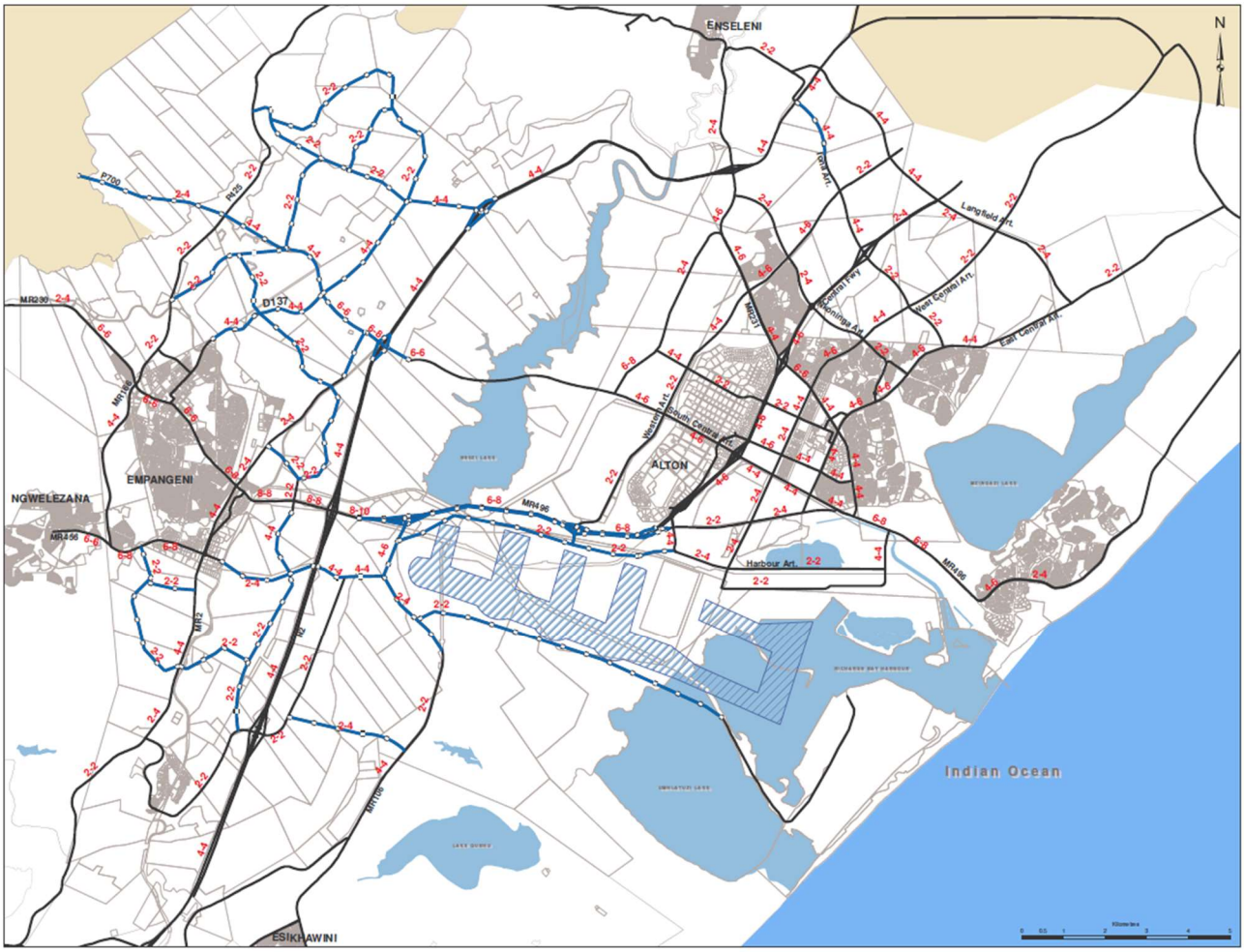
The uMhlathuze Municipality has completed a **Comprehensive Integrated Transport Plan (CITP)** with the assistance of the National Department of Transport. The plan consists of the following chapters.

Table 58: 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 29: Arterial Road Framework Plan



In recent months, Richards Bay has experienced an **unprecedented influx of trucks** into the area that are en route to deliver bulk goods to the Port of Richards Bay or delivering such bulk commodities to various sites in the Municipality for temporary storage prior to delivery to the Port of Richards Bay for export.

Various reasons have been mooted for the situation but the solution requires a concerted effort by all affected and interested stakeholders. The situation is aggravated by the fact that the operations at the Port of Richards Bay were designed for rail.

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.

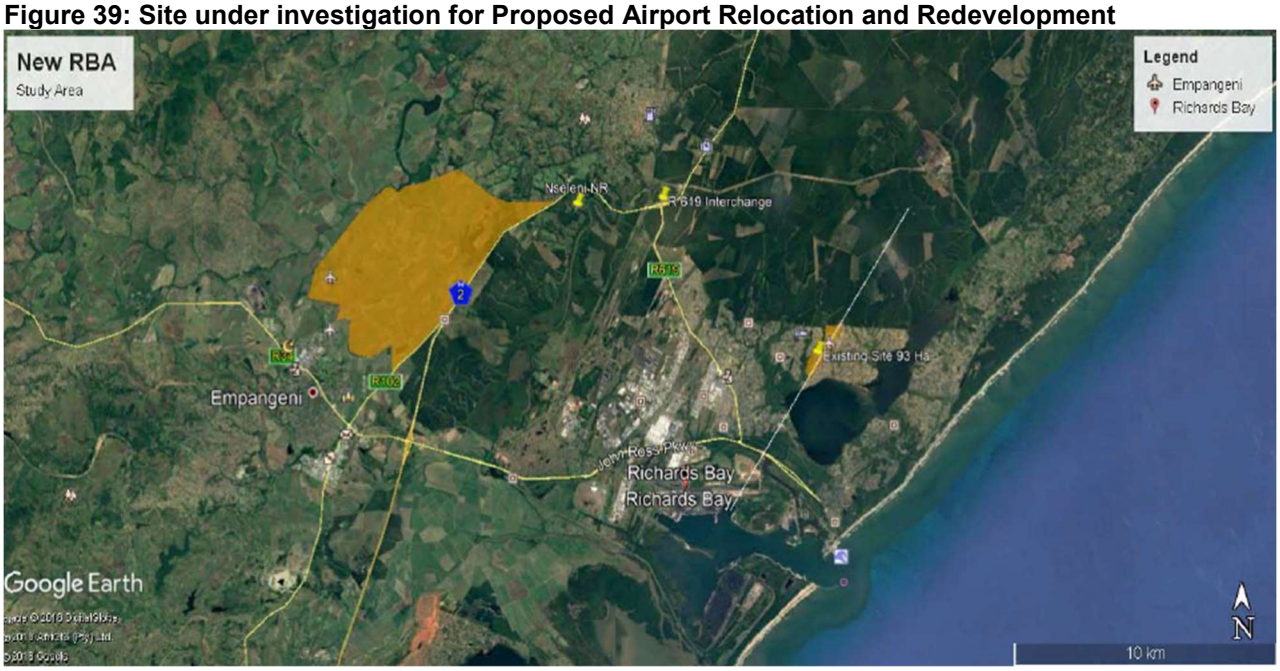
The current Richards Bay Airport operates under a number of operational and locational constrains. Not only is the current Richards Bay airport limited in terms of runway length and width, it is also land locked by residential development (formal and informal) with no expansion potential and is more 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 39: 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 40: Proposed "inside the fence" Layout

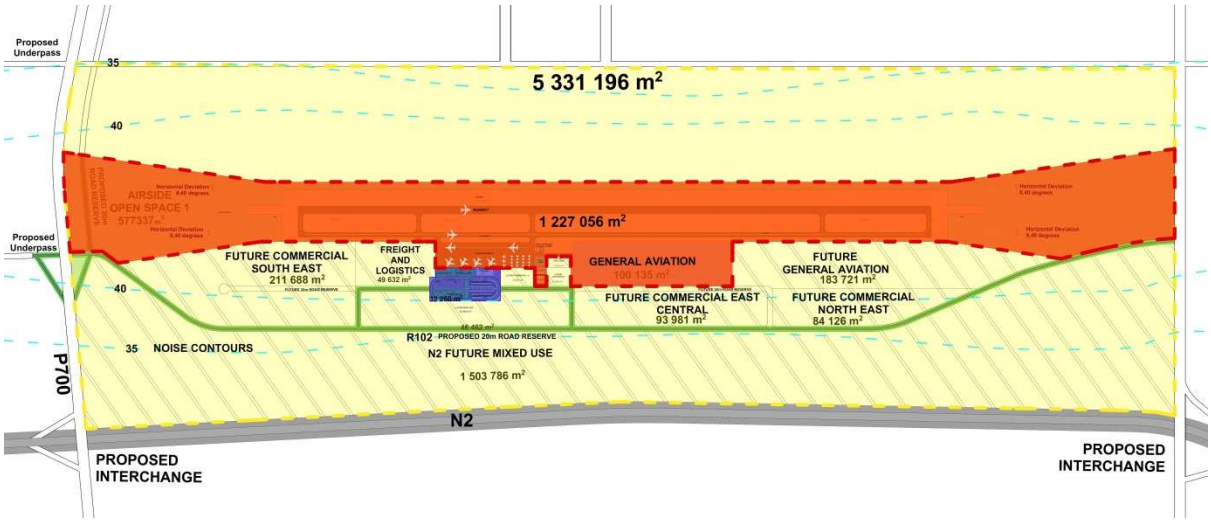
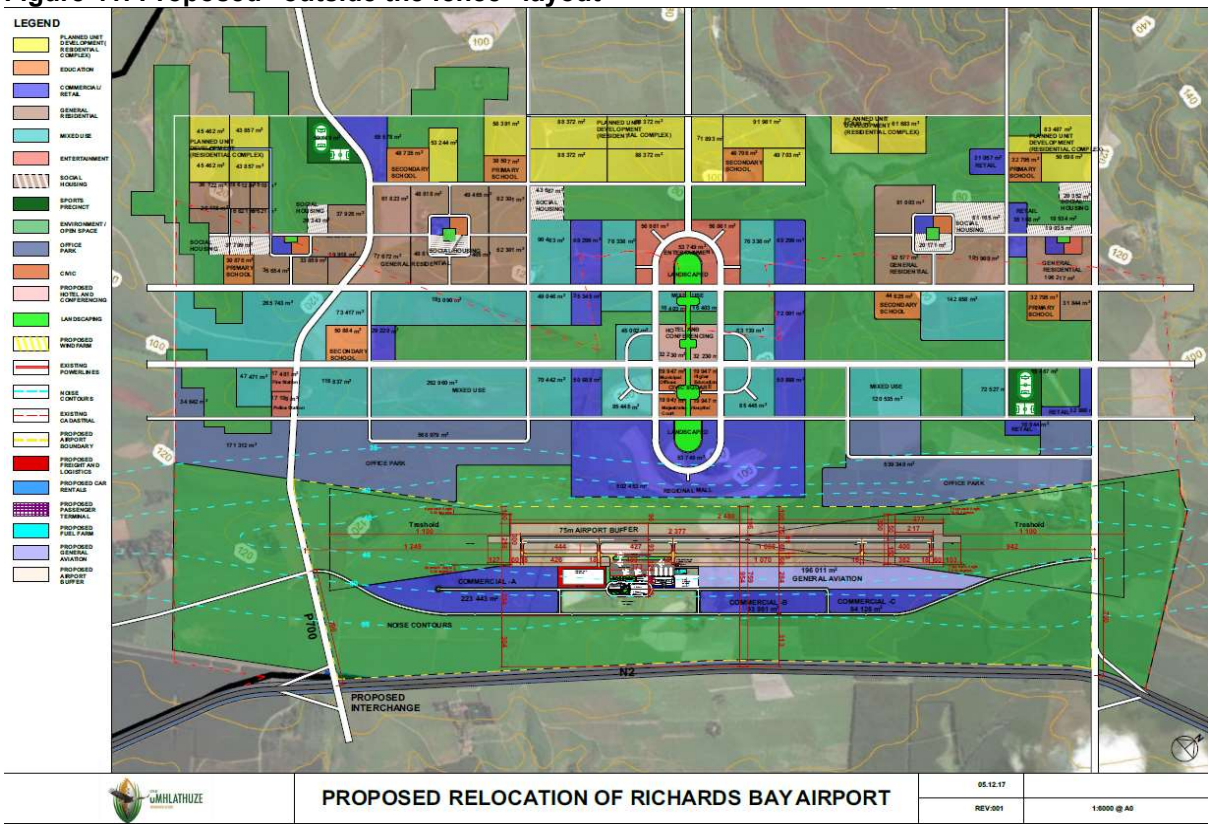


Figure 41: Proposed "outside the fence" layout



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:

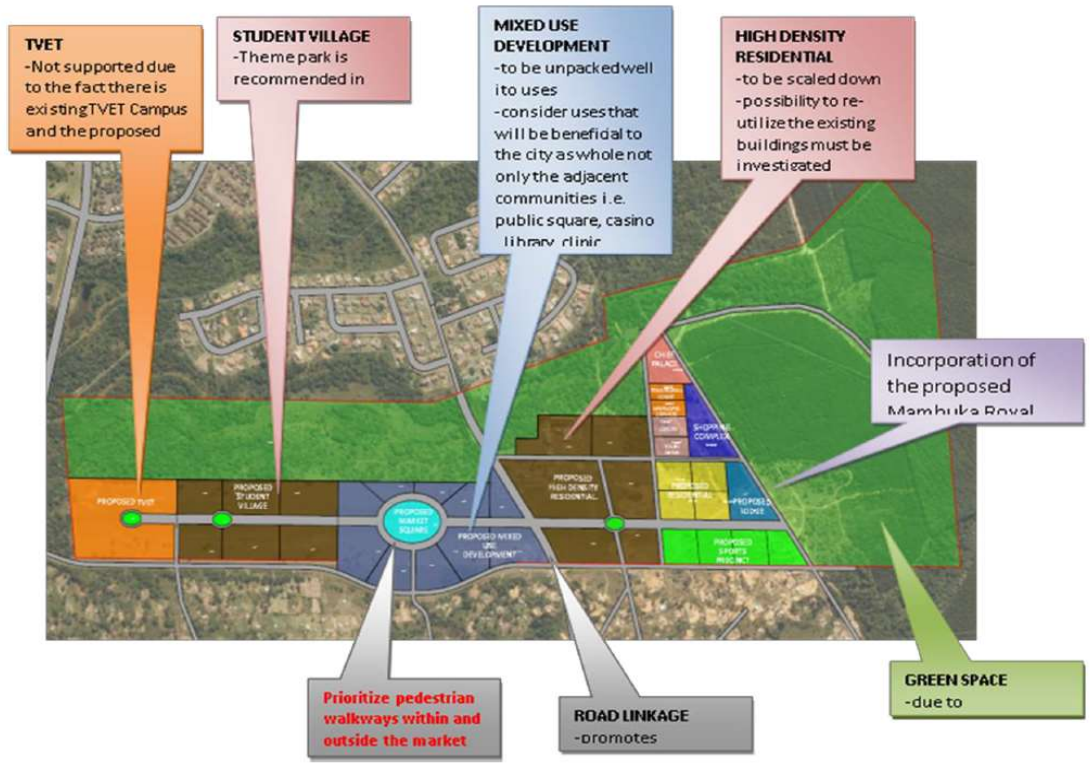
Phase 1: Feasibility Study

- 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 – *complete*
- Phase 1.6: Statement of Compliance – *in progress*
- 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

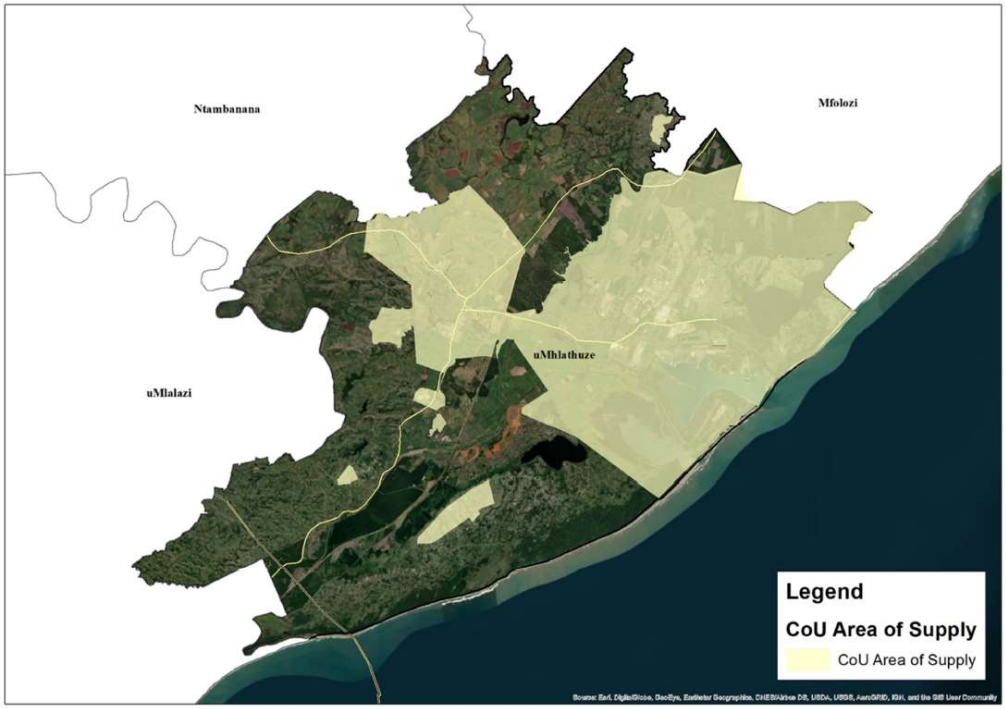
Figure 42: Proposed Redevelopment of the existing Airport site



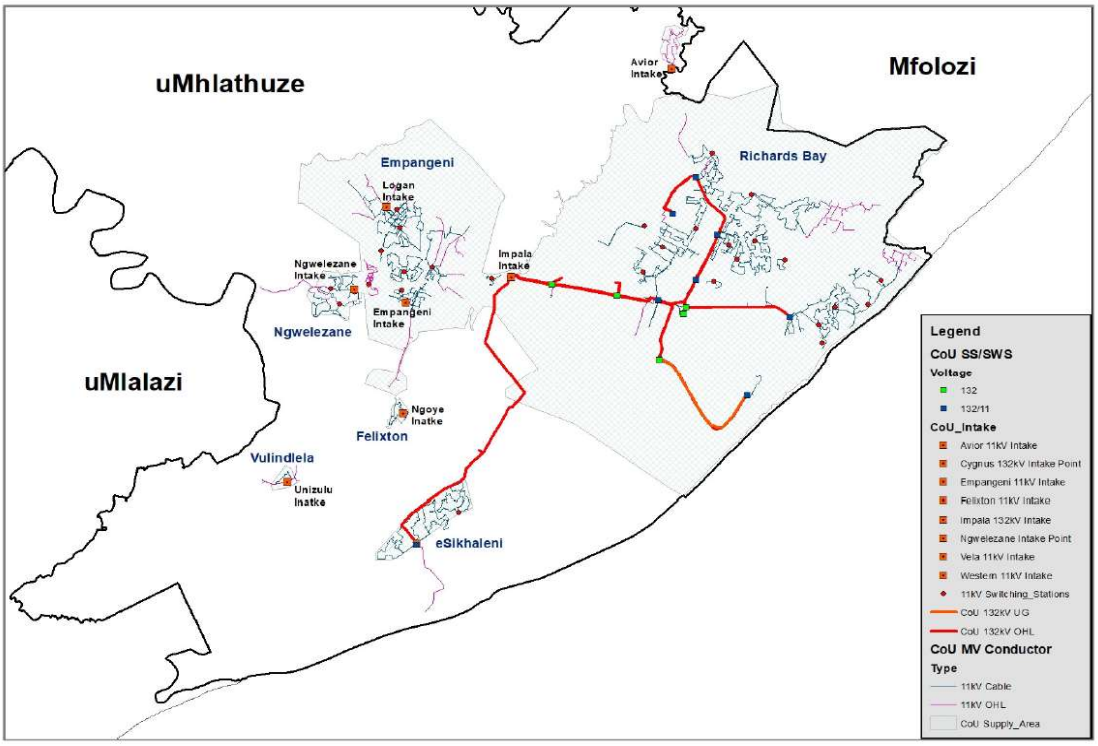
8.7 ELECTRICITY MASTER PLAN

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 30: uMhlathuze Area of Supply



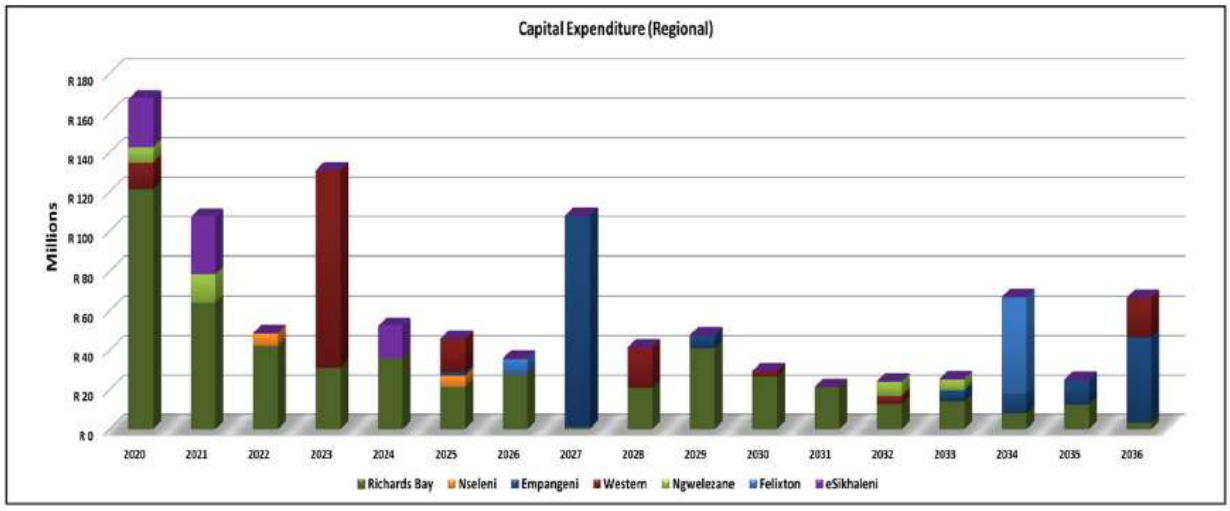
Map 31: Bulk Distribution Infrastructure



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:

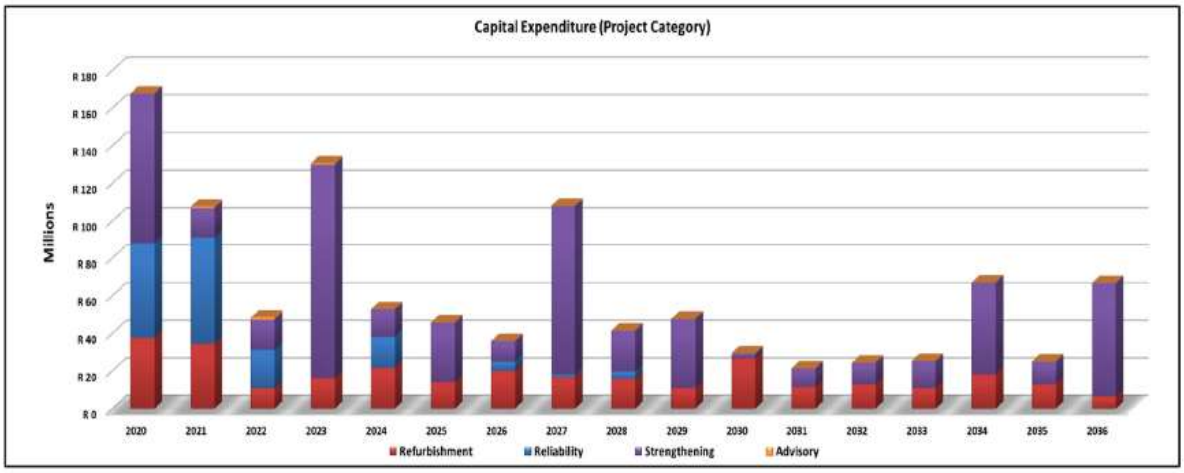
- Development Perspective to determine the present and future electricity requirements of electrical end-users and reconcile such with available resources and services.
- Electricity Demand Forecast to develop a 20-year forecast in support of the development perspective.
- Refurbishment Assessment to 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 43: 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 44: 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.

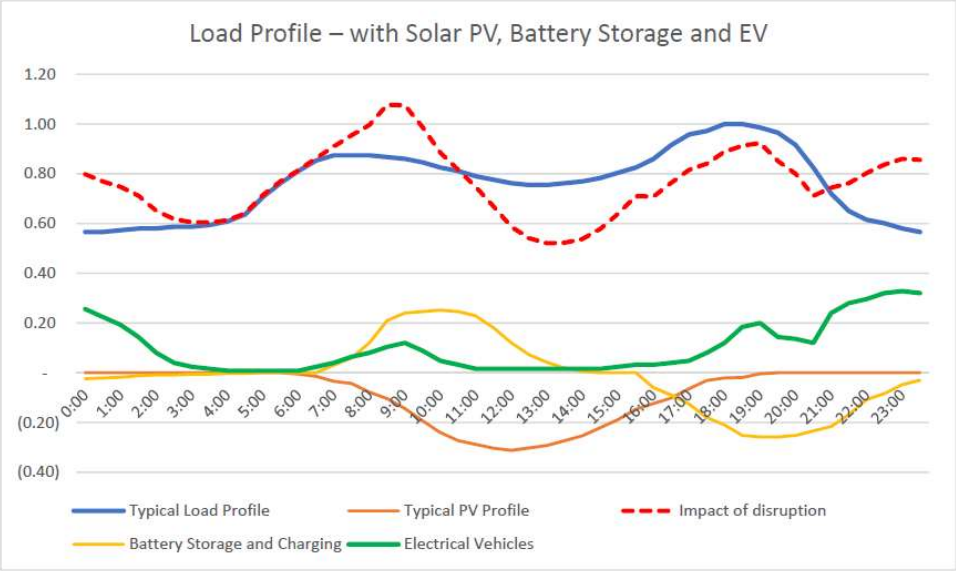
The plan contains an analysis that informs possible energy solutions and concludes with suggestions and strategies for the CoU to transition to a sustainable energy future. The Municipality has the vision to reduce greenhouse gases in line with the Sustainable Development Goal (SDG) 13 and the preparation 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 45: 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 46: Load Profile with Alternative Energy Options

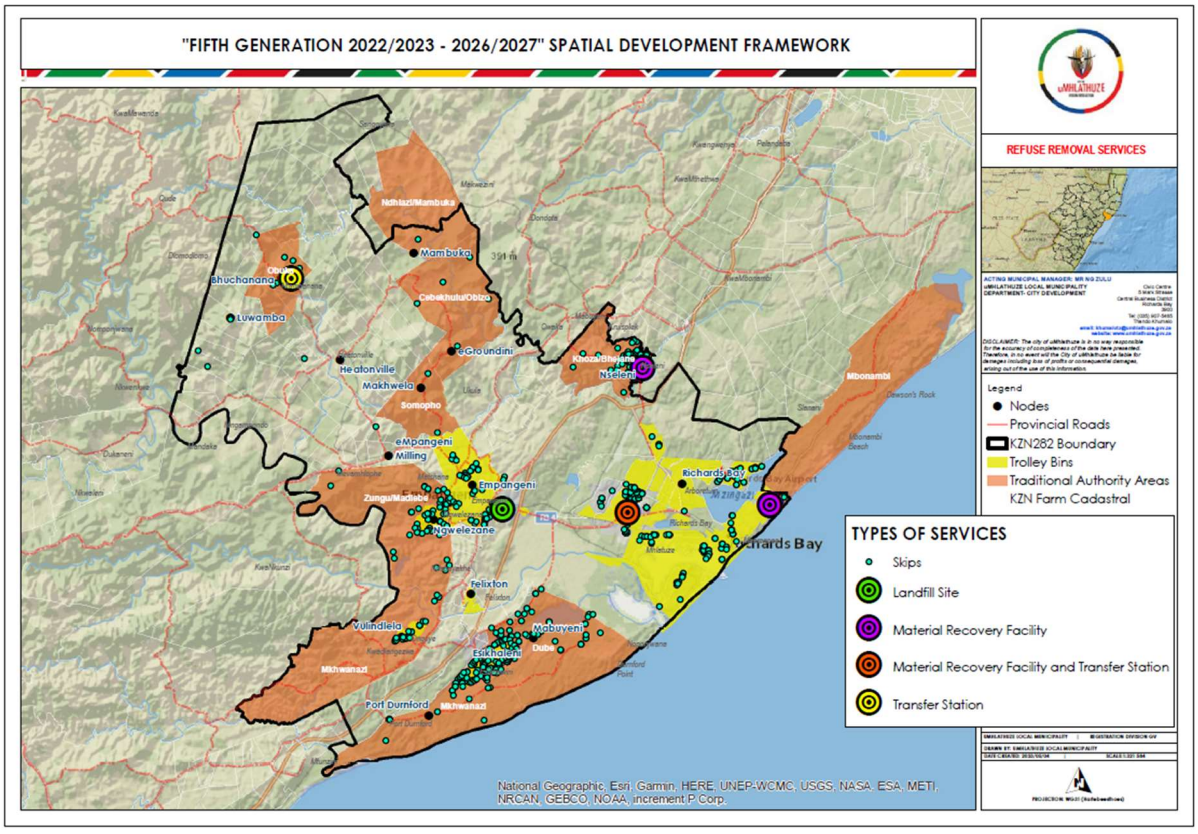


The Energy Sector Plan concludes with an implementation roadmap as a workable way forward that is structured per category of focus, supported by the rational for the sustainability driver and proposed actions with short, medium and long-term focus.

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 32: 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

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 other wards to be acquired from Ntambanana local municipality based on the new demarcation system. Out of the total households, 81106 households are serviced (2 046 additional households). Free basic service is also rendered to 37 641 low-income (indigent) households. There are more than 285 skips currently dedicated to rural communities. Service delivery is accessible to at least 73.36 % 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 59: 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.
- A very pertinent transport/roads matter that is having a severe impact on the Municipality is the prevailing congestion and influx of trucks into the municipal area to deliver bulk goods to the Port of Richards Bay or delivering such bulk commodities to various sites in the Municipality for temporary storage prior to delivery to the Port of Richards Bay for export.

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. The following table provides details of the main type of dwelling for households in uMhlathuze.

Table 60: Main Type of Dwelling in uMhlathuze (2022)

	Households
Formal dwelling/house or brick/concrete block structure on a separate stand or yard or on farm	91675
Traditional dwelling/hut/structure made of traditional materials	2009
Flat or apartment in a block of flats/flat or apartment in a block of flats in a complex	3288
Cluster house in complex	227
Town house (semi-detached house in complex)	291
Semi-detached house	504
Formal dwelling/house/flat/room in backyard/servants quarters/granny flat/cottage	1431
Informal dwelling/shack in back yard	395
Informal dwelling/shack not in backyard	383
Caravan/tent	9
Other	228
Not applicable	-
Total	**100440**

Source: Census 2022

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:

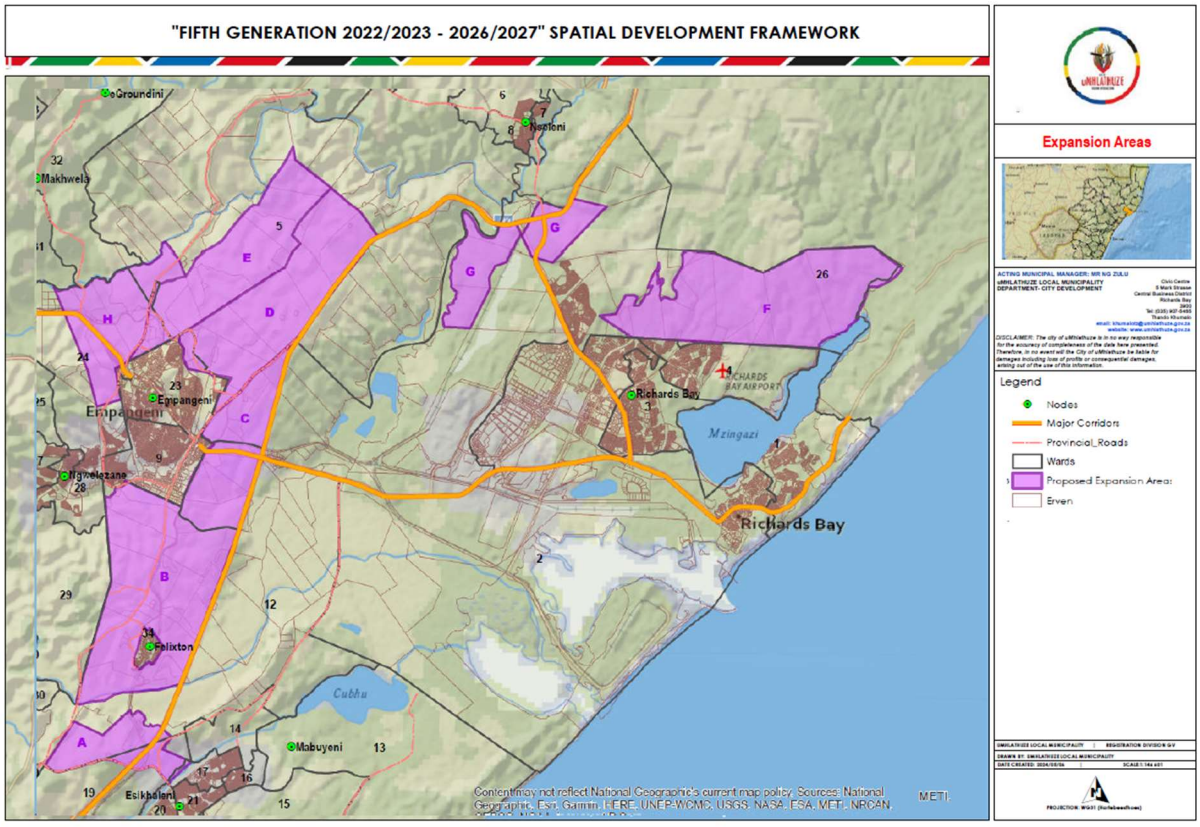
- Location
- Ownership
- Availability of bulk and/or connector services
- Accessibility in terms of transport and economic opportunities
- Linkage to Spatial Development Framework

Table 61: 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 location of the above listed expansion areas is shown on the following map:

Map 33: Location of Expansion Areas



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

Table 62: 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

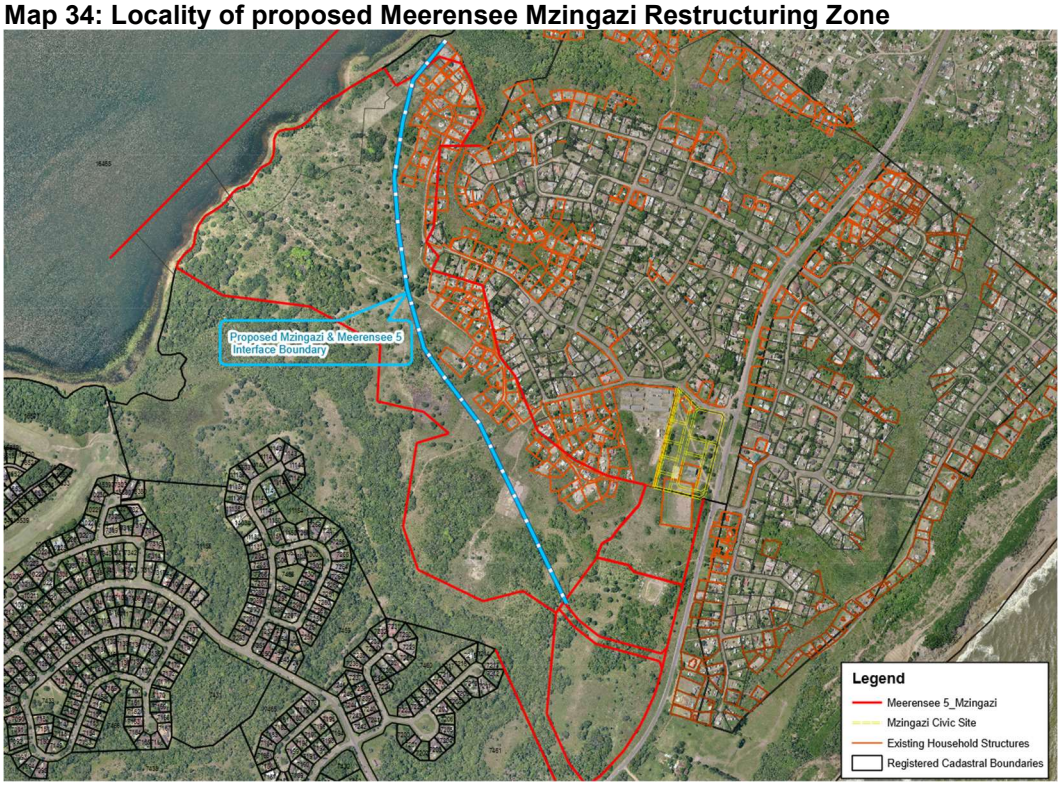
The uMhlathuze Municipality has identified two Restructuring Zones (RZ) namely the Aquadene and uMhlathuze Restructuring Zones. These restructuring zones have been approved by the National

Human Settlements Department and they were Gazetted on the 28 April 2017 Gazette number 40815. Theses RZ cover the following IRDP projects:

- Aquadene: Phase 1
- Dumisani Makhaye Village Phase 6: Phase 2
- SDF Expansion Area A (Erf 16833): Phase 3
- Empangeni Mega Housing Project: Phase 1 and 2

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 34: Locality of proposed Meerensee Mzingazi Restructuring Zone



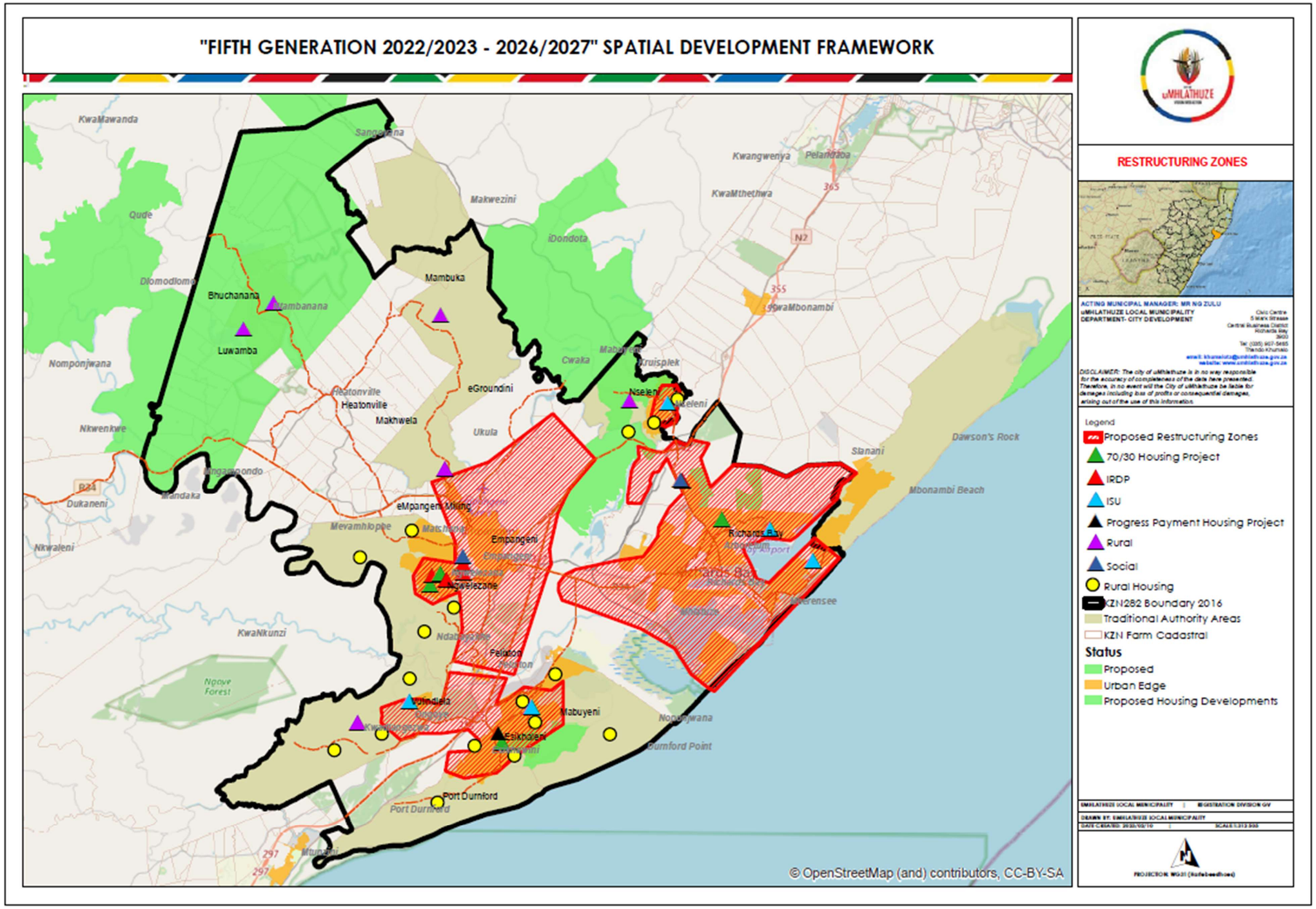
The provision of infrastructure to the **Aquadene Superblock Housing project** is underway. The successful implementation of **uMhlathuze Village Phase 6** as the Community Residential Unit/Social will also reduce the housing demand in the uMhlathuze Municipality.

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 35: uMhlathuze Restructuring Zones



9.3 PRIORITY HUMAN SETTLEMENTS AND HOUSING DEVELOPMENT AREAS

The former Minister of Human Settlements, Water and Sanitation declared 136 Priority Human Settlements and Housing Development Areas (PHSHDAs) across the entire country. These were gazetted on 15 May 2020 as per Gazette number 43316. The PHSHDAs intend to advance Human Settlements Spatial Transformation and Consolidation by ensuring that the delivery of housing is used to restructure and revitalize towns and cities, strengthen the livelihood prospects of households and overcome apartheid spatial patterns by fostering integrated urban forms.

This is underpinned by the principles of the National Development Plan (NDP) and allied objectives on the National Spatial Development Framework (NSDF) and the Integrated Urban Development Framework (IUDF) which includes:

- Spatial Justice: reversing segregated development and creation of poverty pockets in the peripheral areas, integrate previously excluded groups and resuscitate declining areas;
- Spatial Efficiency: consolidating spaces and promoting densification and efficient communication patterns;
- Access to connectivity, economic and social infrastructure: ensure the attainment of basic services, job opportunities, transport networks, education, recreation, health and welfare to facilitate and catalyze increased investment and productivity;
- Access to adequate accommodation: emphasis is on the provision of affordable and fiscally sustainable shelter in areas of high need; and
- Provision of quality housing options: ensure that different housing typologies are delivered to attract different market segments of appropriate quality and innovation

The following table details the identified PHSHDAs in the uMhlathuze Local Municipality.

Table 63: Priority Human Settlements Development and Housing Development Areas (PHSDHAs) in uMhlathuze

District	Local Municipality	PHSHDA	Main Places	Ward numbers
King Cetshwayo	uMhlathuze	Empangeni	Empangeni Ngwelezane	5,9,23,24,25,27,28,29 & 34
King Cetshwayo	uMhlathuze	eSikhaleni Vulindlela Corridor	Esikhaleni Vulindlela	10,12,13,14,15,16,17,18,19,20,21,22 & 30
King Cetshwayo	uMhlathuze	Richards Bay	Richards Bay, Nseleni	1,2,3,4,5,6,7,8 & 26

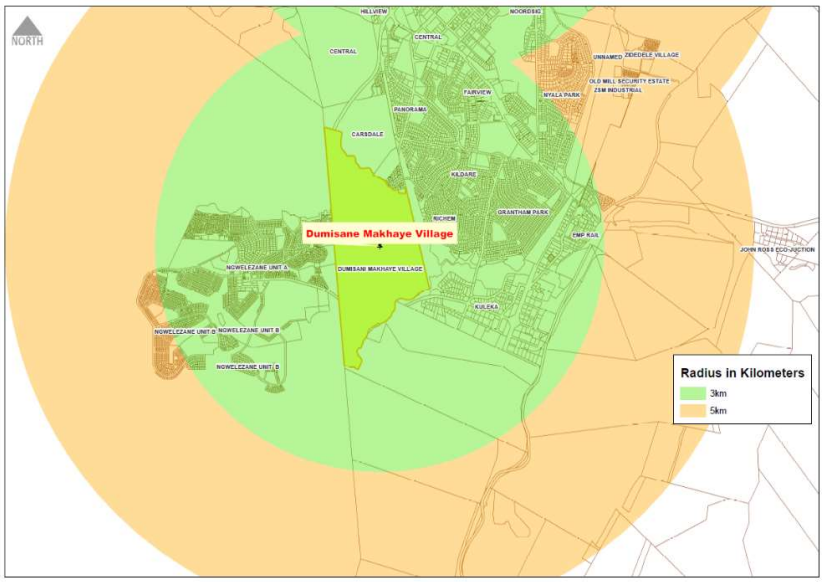
9.3.1 EMPANGENI

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 Makhaye Housing Project to the Empangeni CBD by way of distance radii of 3km and 5km respectively.

Figure 47: Radius around DMV Housing Project



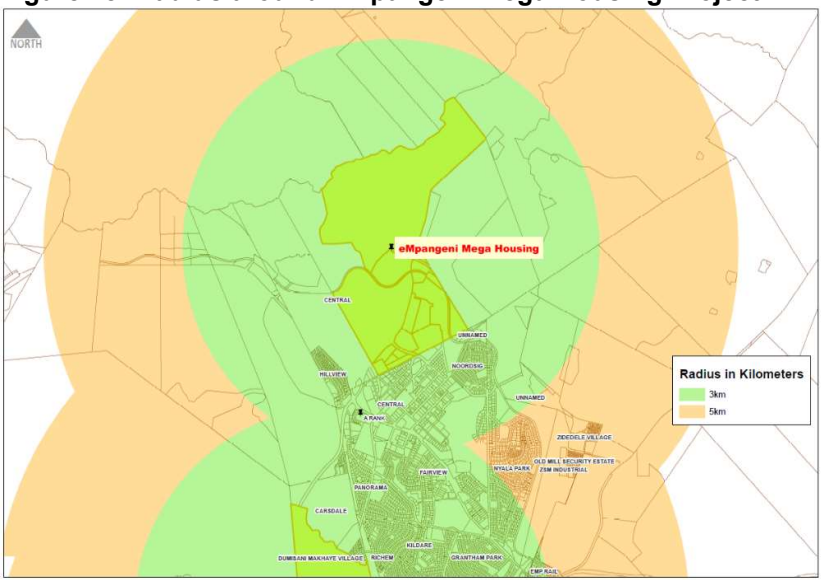
The **Empangeni Mega Housing** project has the following housing typologies:

- 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 48: 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

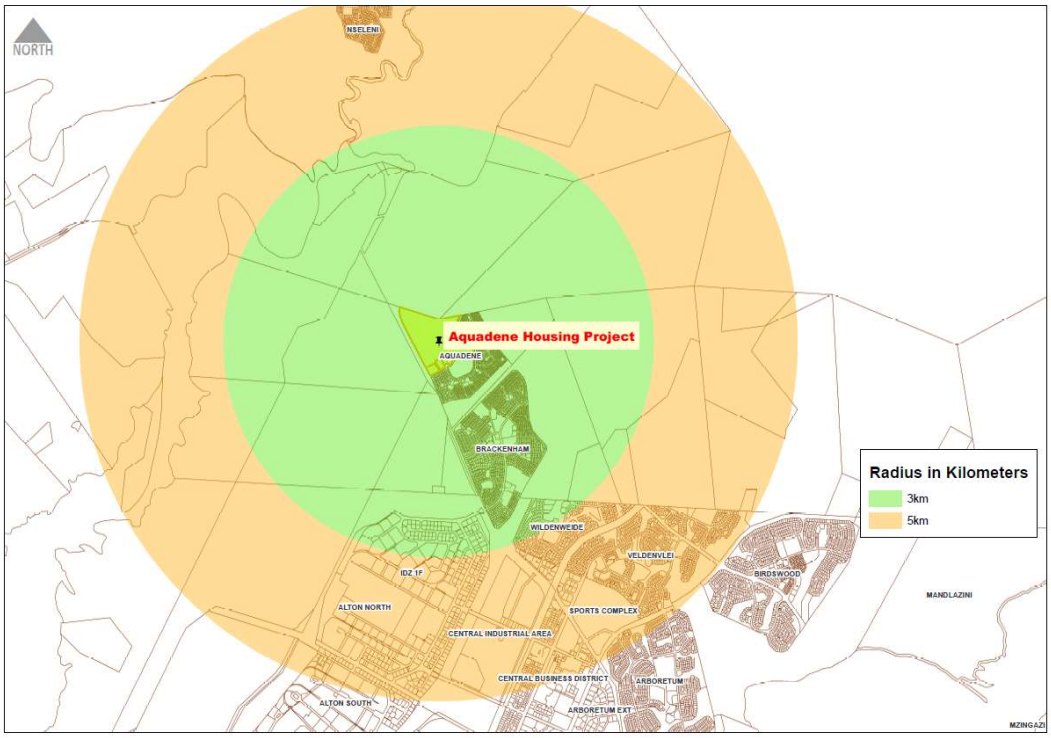
The Richards Bay PHDA includes the towns of Richards Bay, its suburbs, as well as Mandlazini and Mzingazi Agri-Villages. Richards Bay is a primary node in terms of the uMhlathuze Municipal SDF and is a pprominent developing industrial centre of in South Africa that provides a centres of employment, industrial, 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 : 615
- 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 49: 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

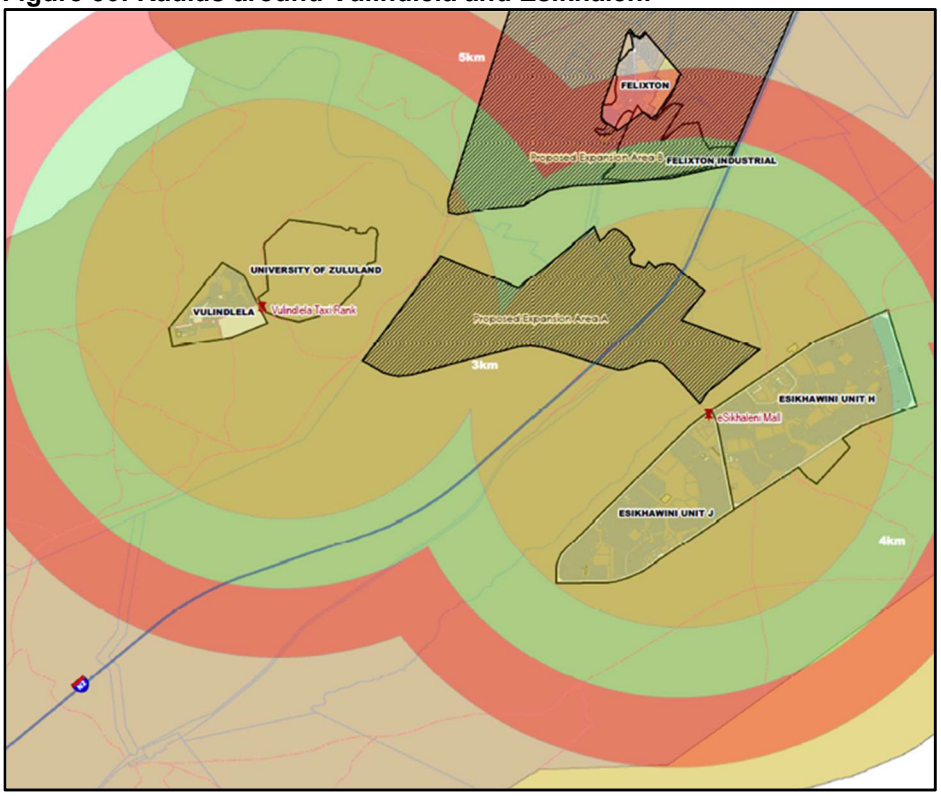
The Esikhaleni Vulindlela PHDA includes the towns of Esikhaleni and Vulindlela as well as the corridor in between. This area is a priority expansion area of the municipality in terms of the SDF.

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 50: 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.

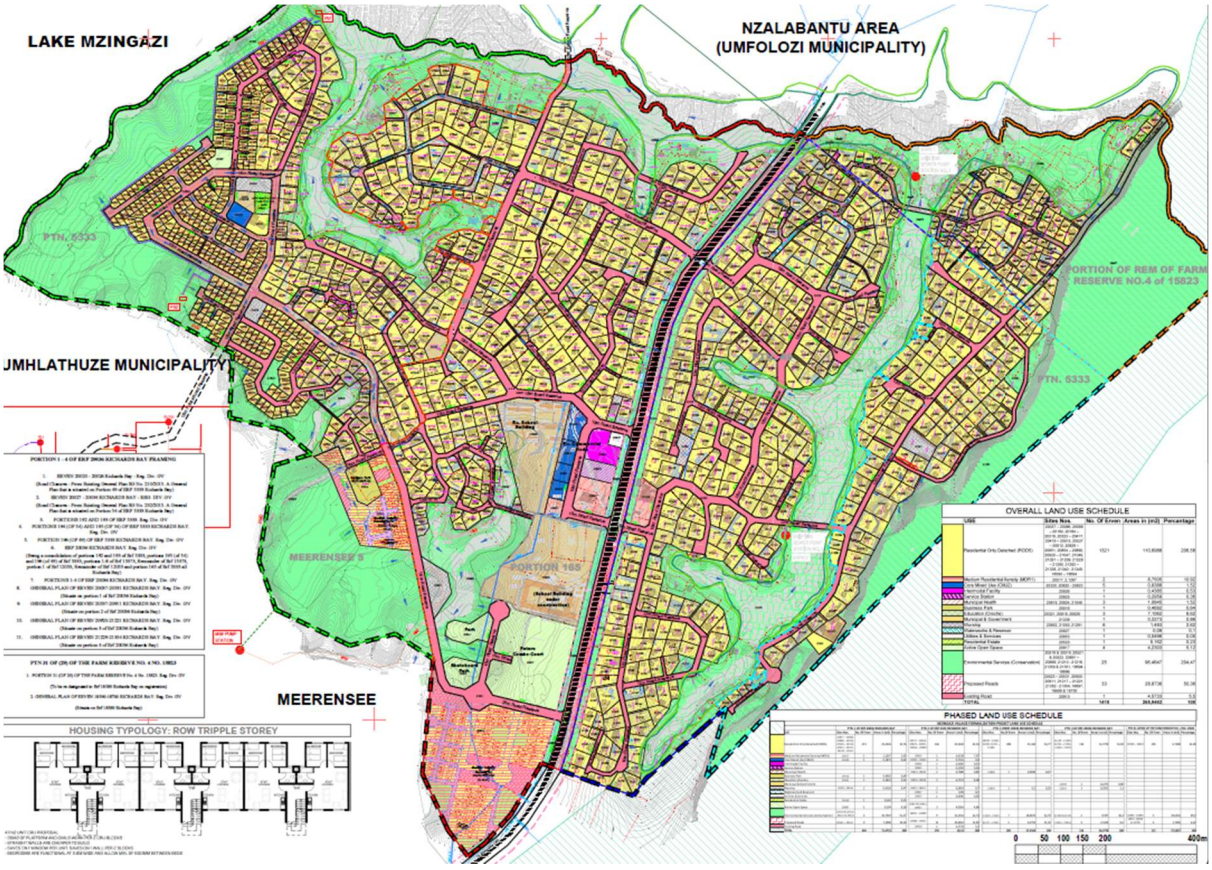
The Municipality is currently installing waterborne sewerage system in the area and an EIA (Environmental Impact Assessment) has been approved. Recent indications are that the more than 300 families reside in the infill areas. It is essential that an appropriate sanitation solution is provided for the 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 has finalized the township establishment process for Mzingazi Village, a process 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 36: Mzingazi Village Formalization



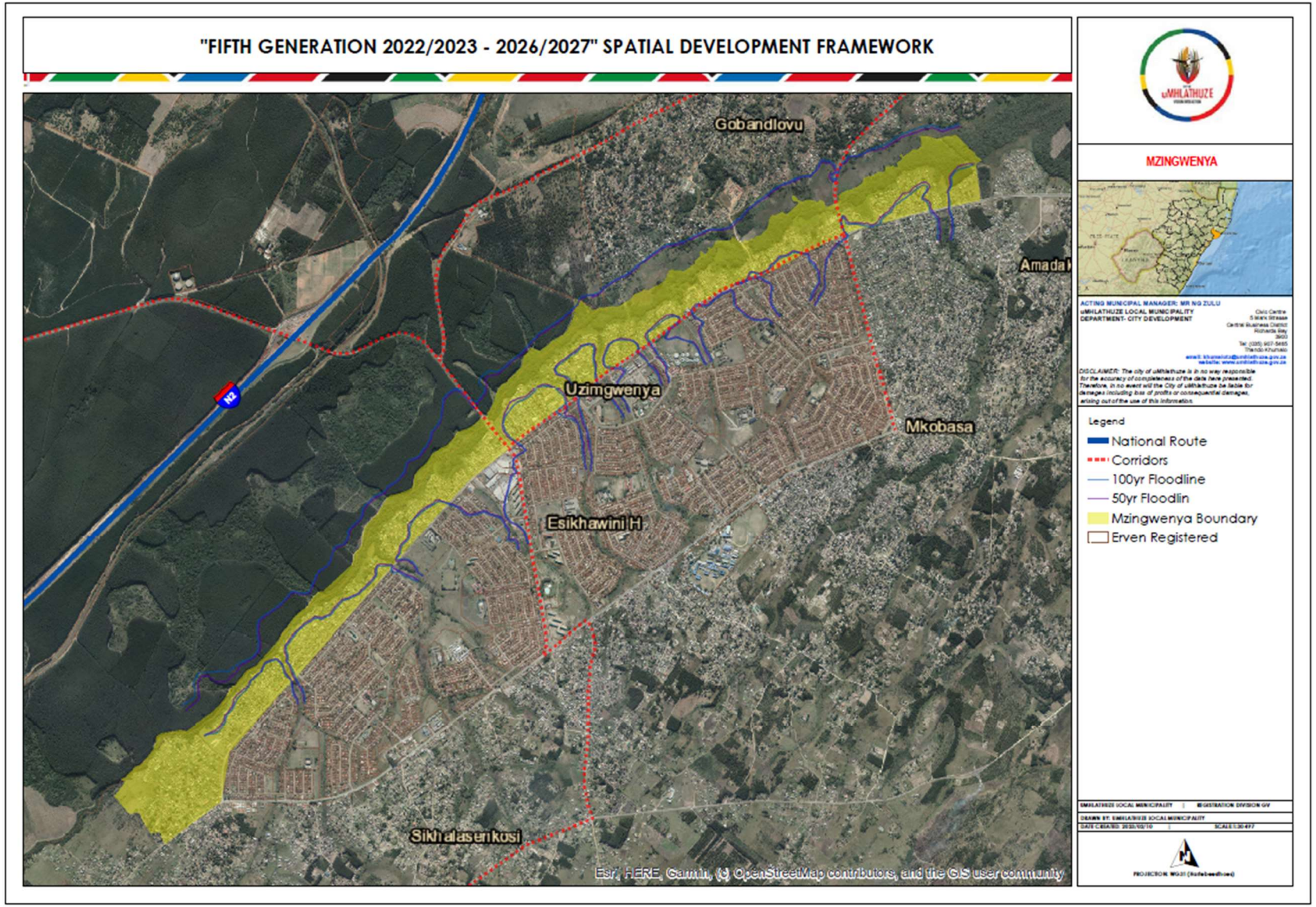
Financial and technical support for the project has been obtained from the KZN Department of Human Settlements. A number of issues are being considered/attended to during the process, i.e.:

- A land claim was submitted by the Mbonambi Community that affects the project area. The go-ahead was 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.
- 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.
- A formal planning process (SPLUMA) was completed 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 has determined which of the sites occupied can 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.

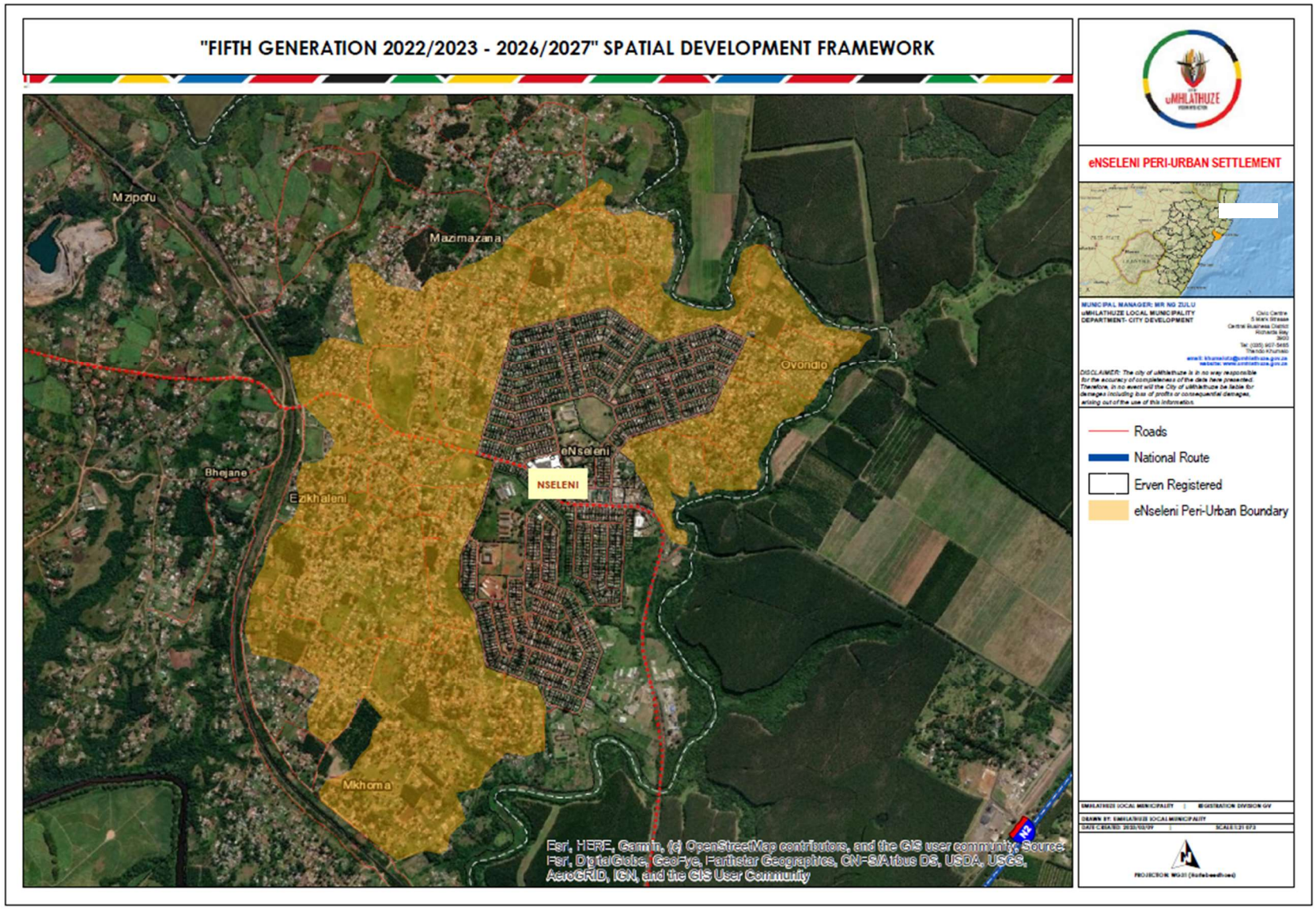
9.6 SUMMARY OF HUMAN SETTLEMENT ISSUES

- 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 Human Settlements and Housing Development Areas have been identified for Empangeni, Richards Bay and the Esikhaleni Vulindlela Corridor.

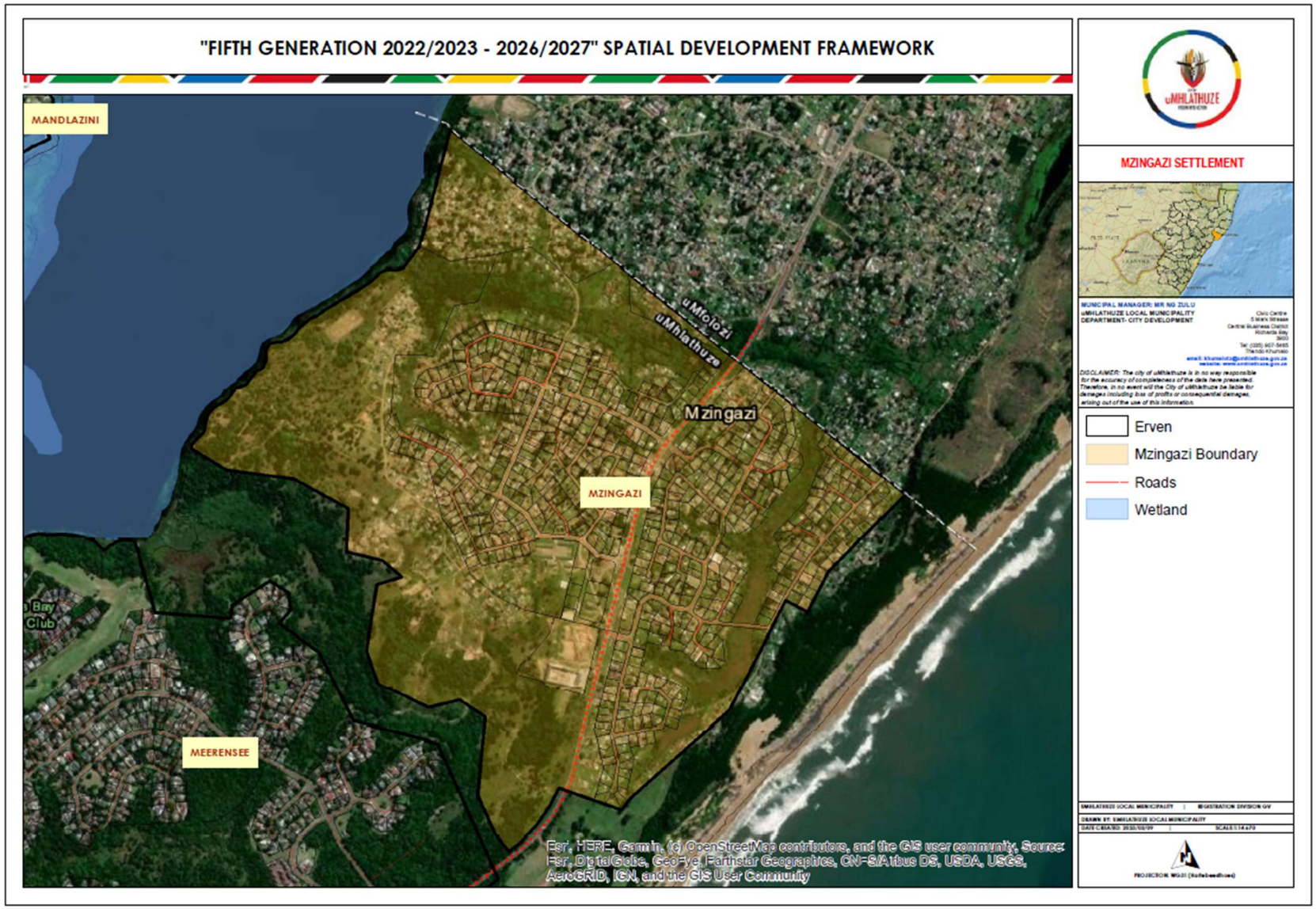
Map 37: uMzingwenya Settlement



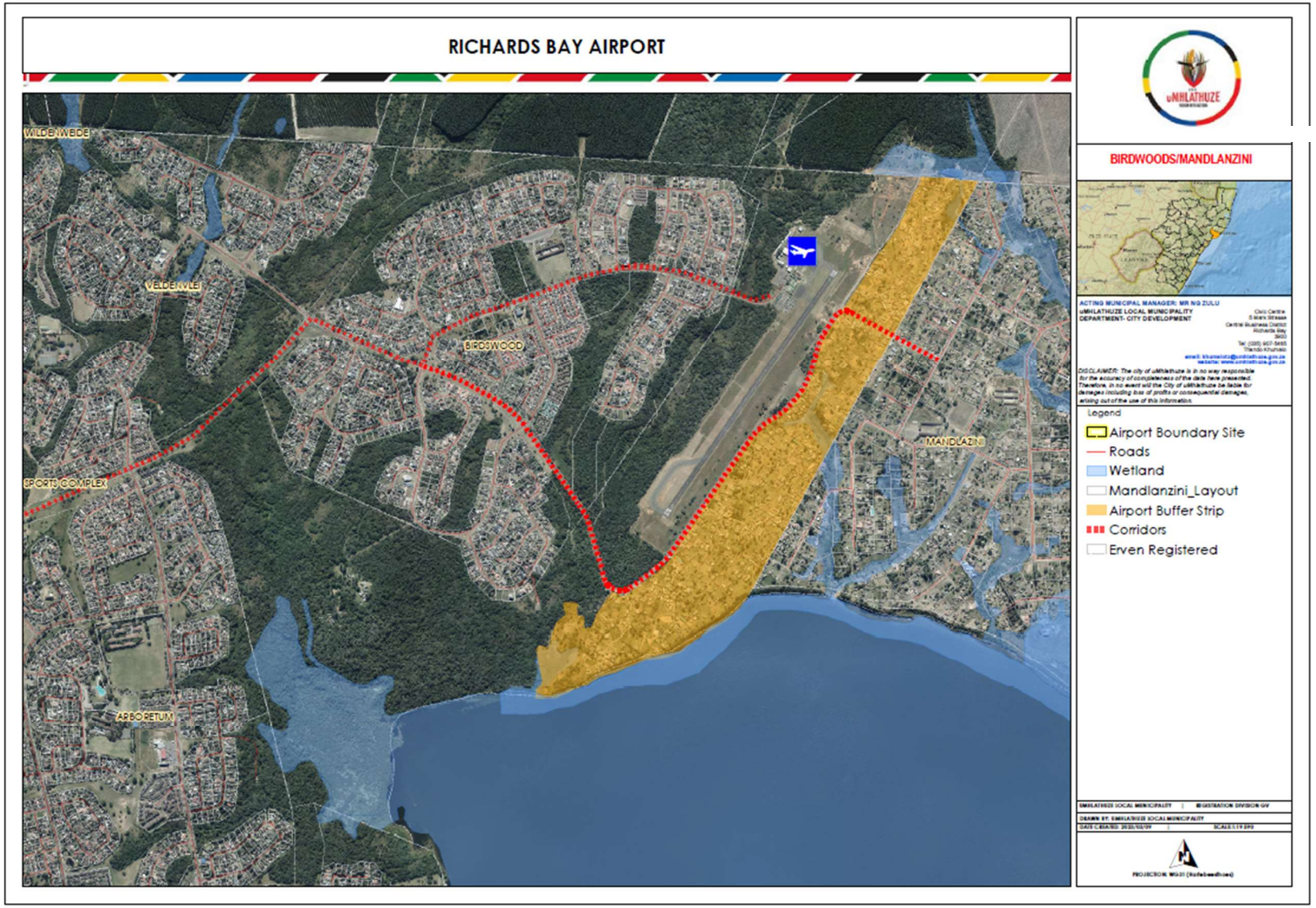
Map 38: Nseleni Peri-Urban Settlement



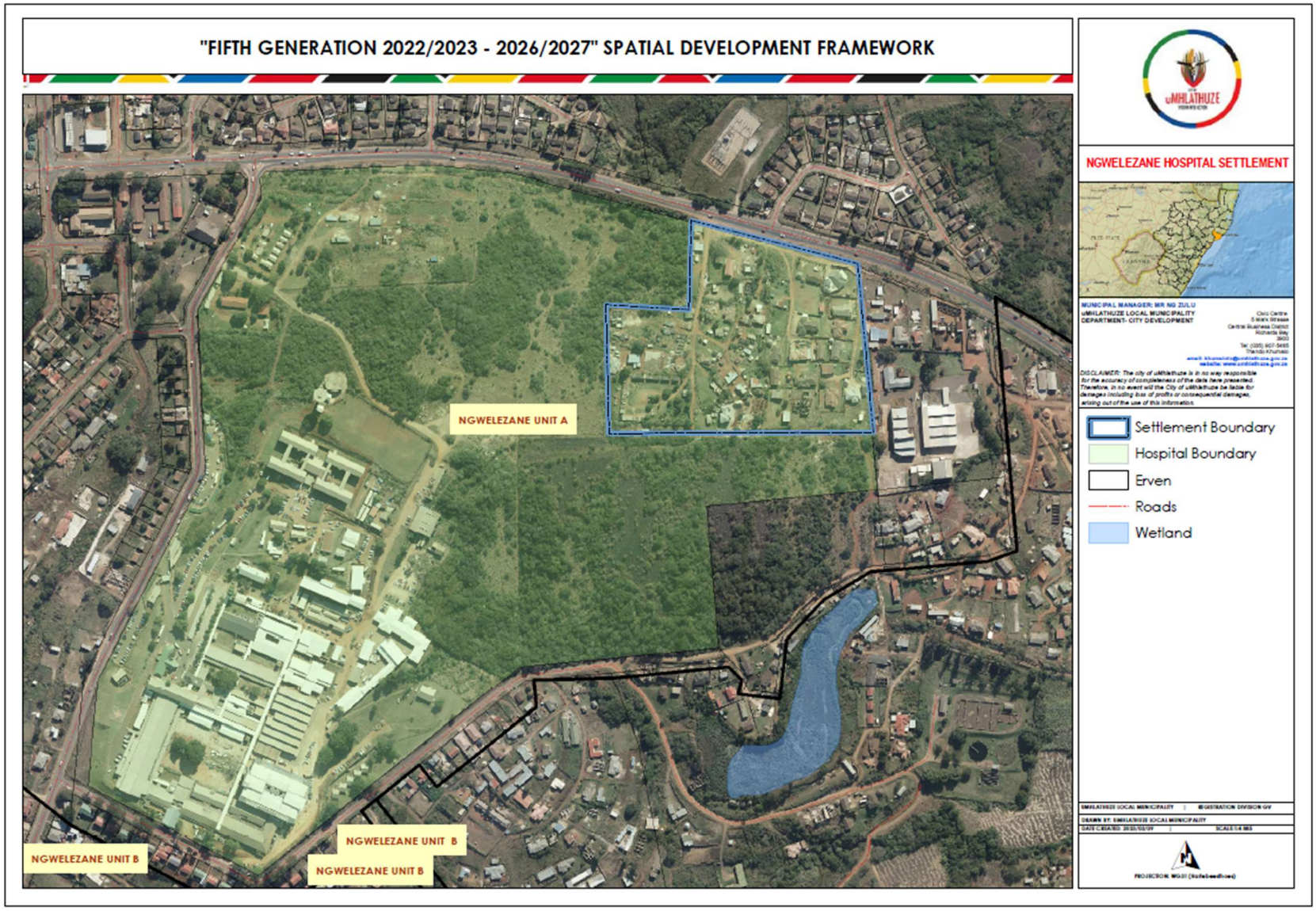
Map 39: Mzingazi Informal Settlement



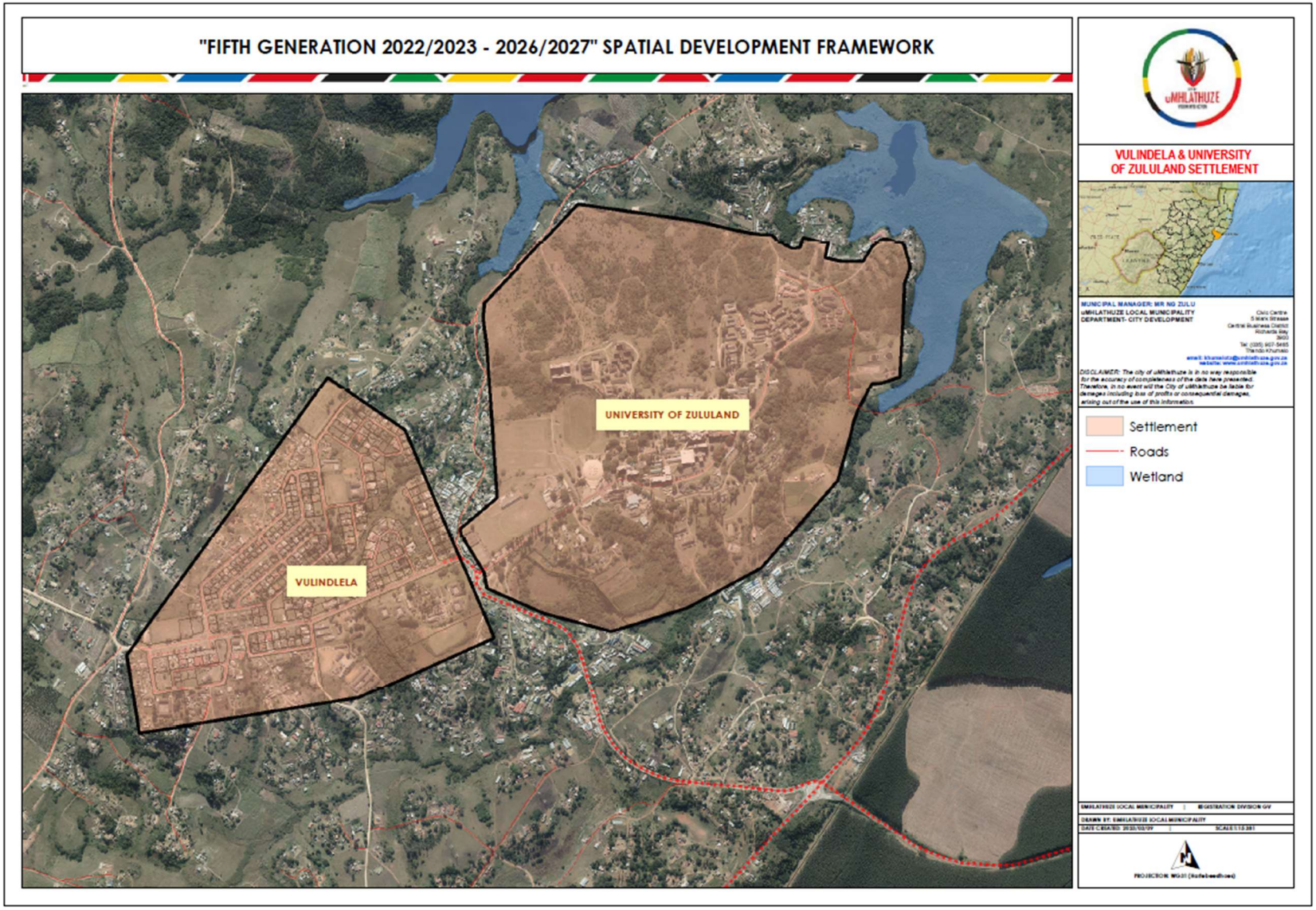
Map 40: Mandlazini-Airport Buffer Strip Informal Settlement



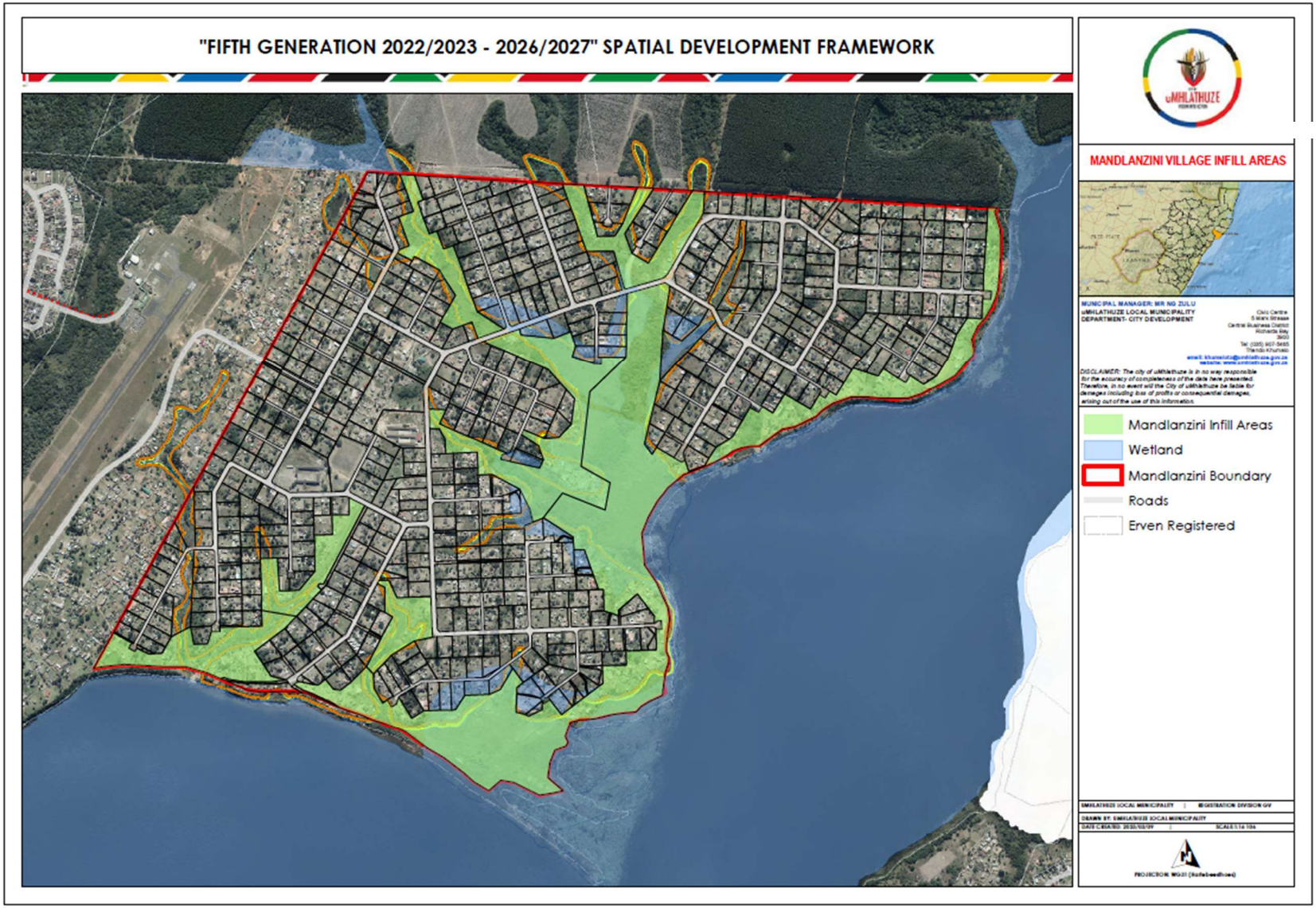
Map 41: Ngwelezane Hospital Settlement



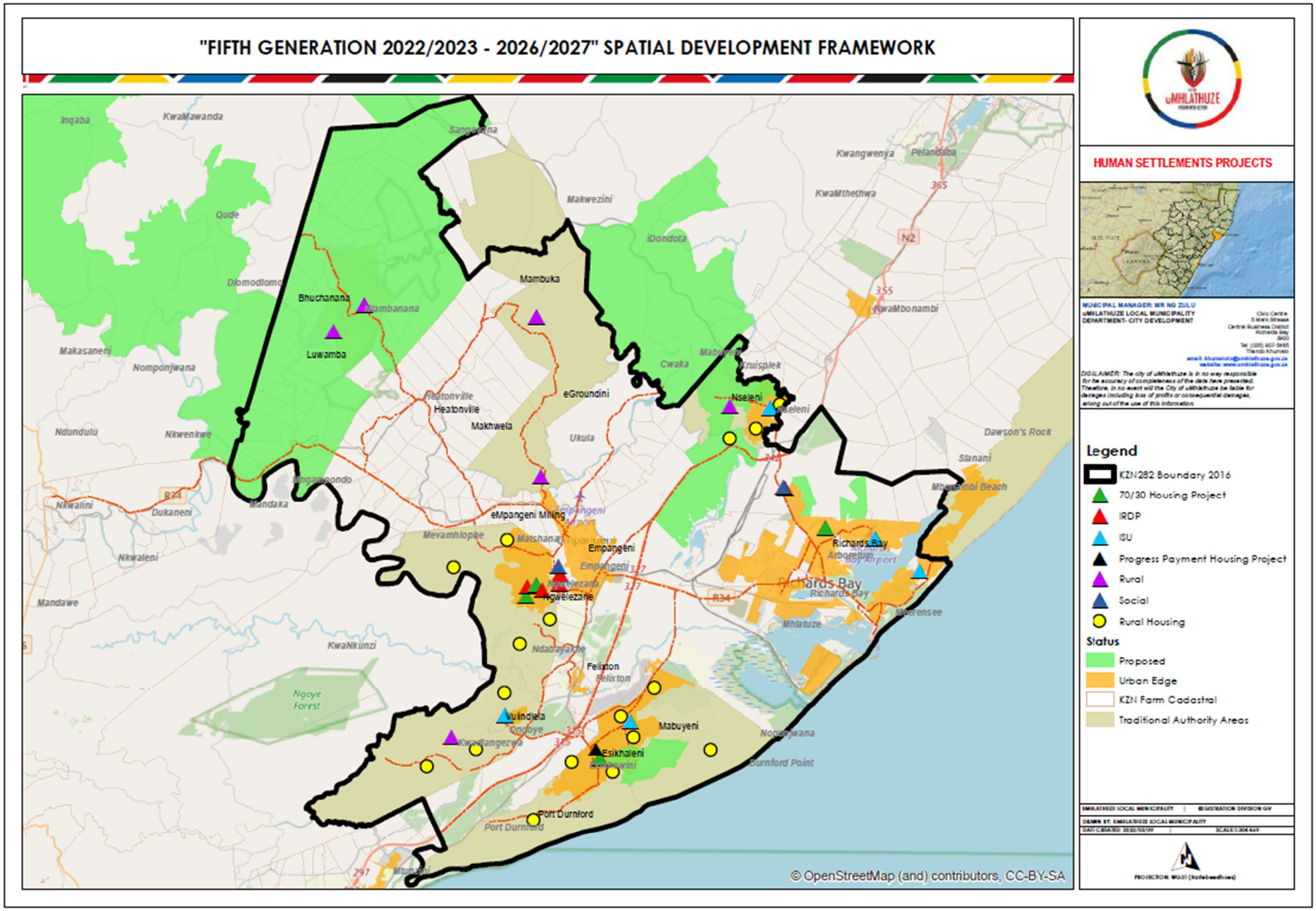
Map 42: Vulindlela/University of Zululand Settlement



Map 43: Mandlazini Village Infill Areas



Map 44: 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 included:

- 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 64: 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

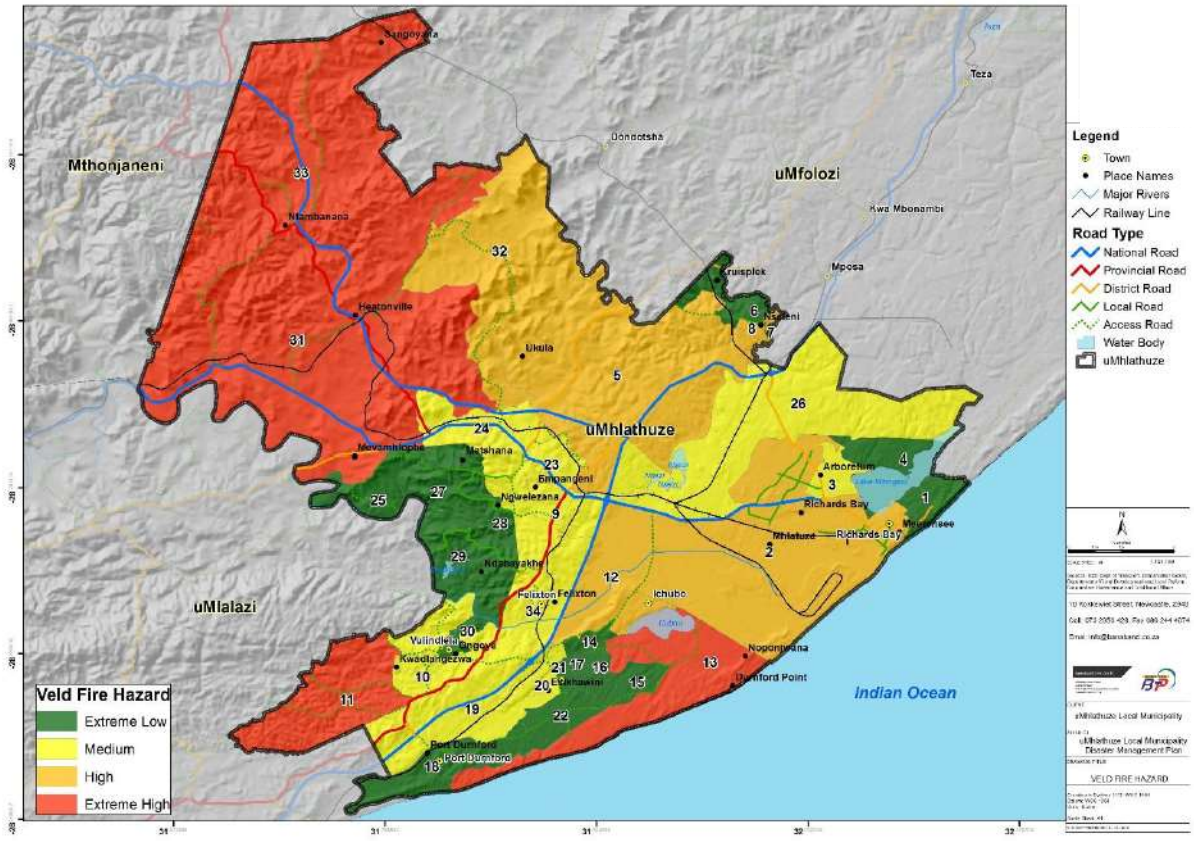
The following indicates the City of uMhlathuze Risk Rating.

Table 65: Risk Rating

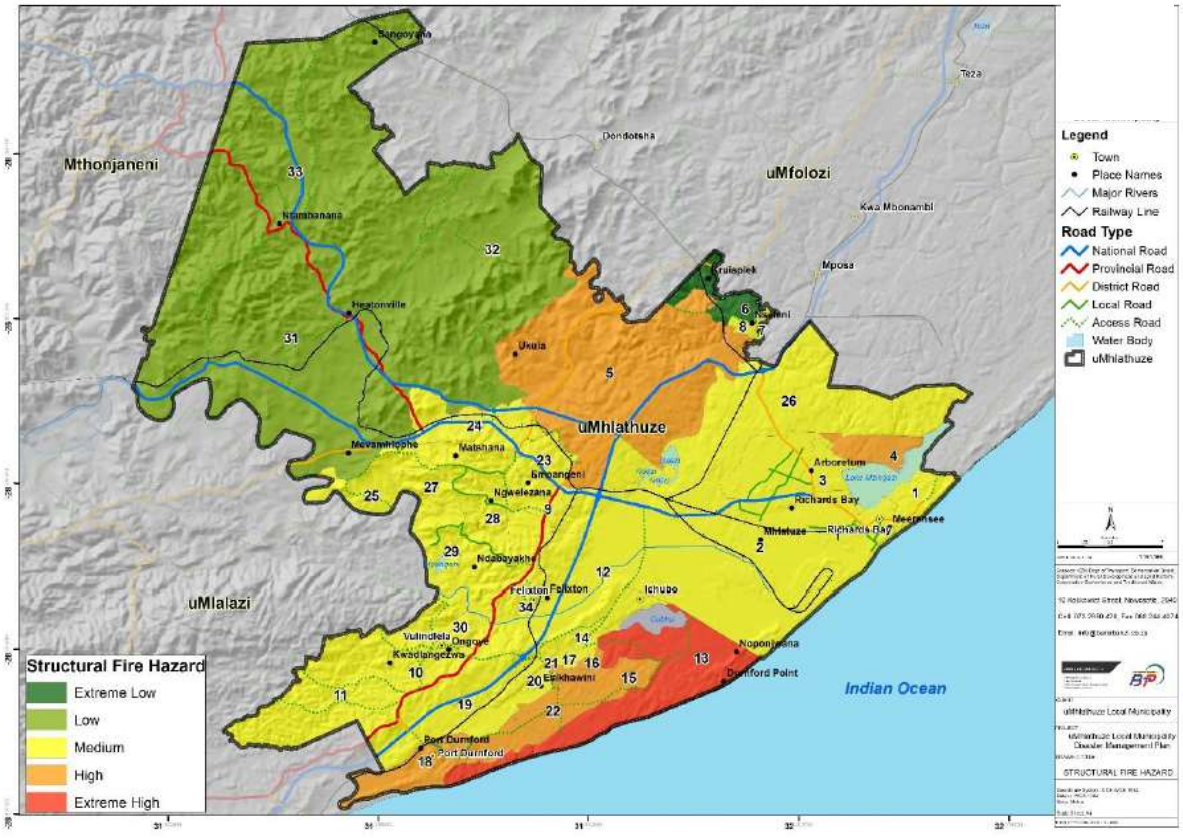
Main Category (CITY RISK RATING)	RISK (City)
Hydro-meteorological Hazards - Severe Storms (Lightning)	0.90
Hydro-meteorological Hazards - Severe Storms (Heavy Rainfall)	0.86
Hydro-meteorological Hazards - Floods (River)	0.83
Fire Hazards - Veld/Forest Fires	0.77
Hydro-meteorological Hazards - Severe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

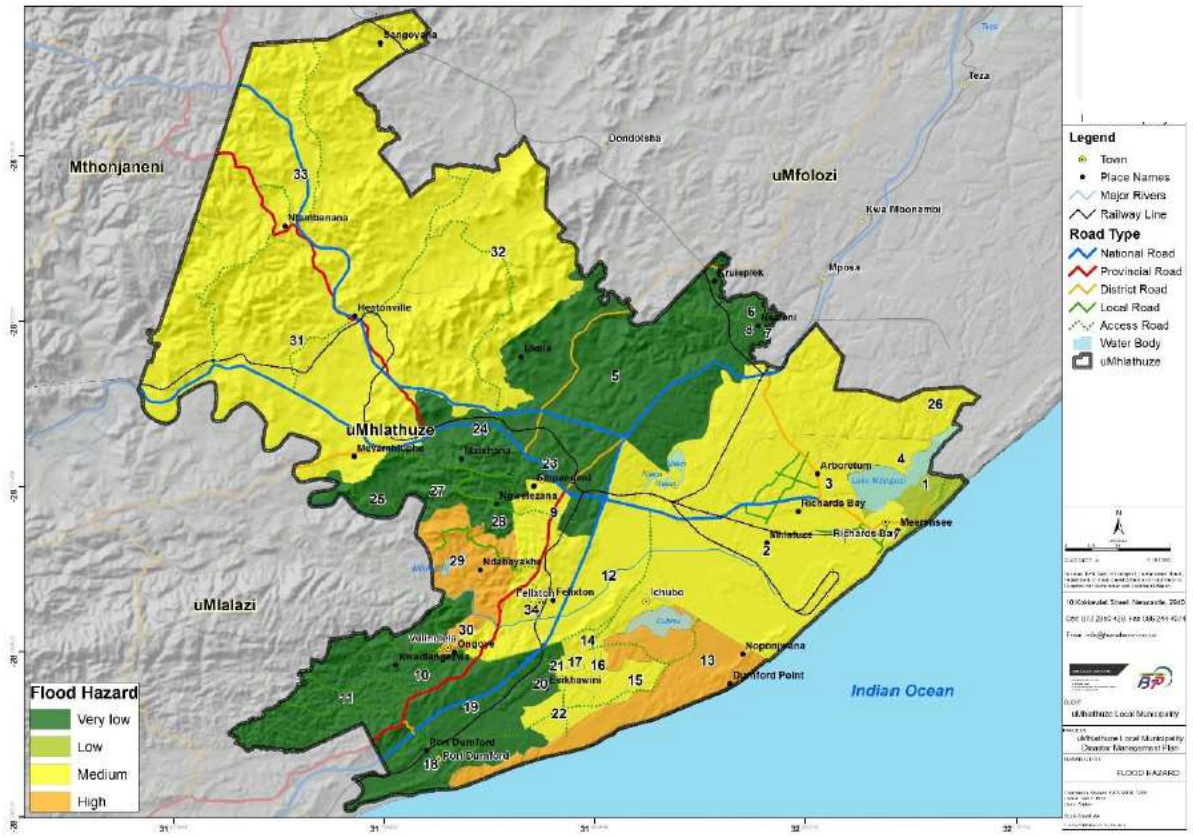
Map 45: Veld Fires Hazard Assessment



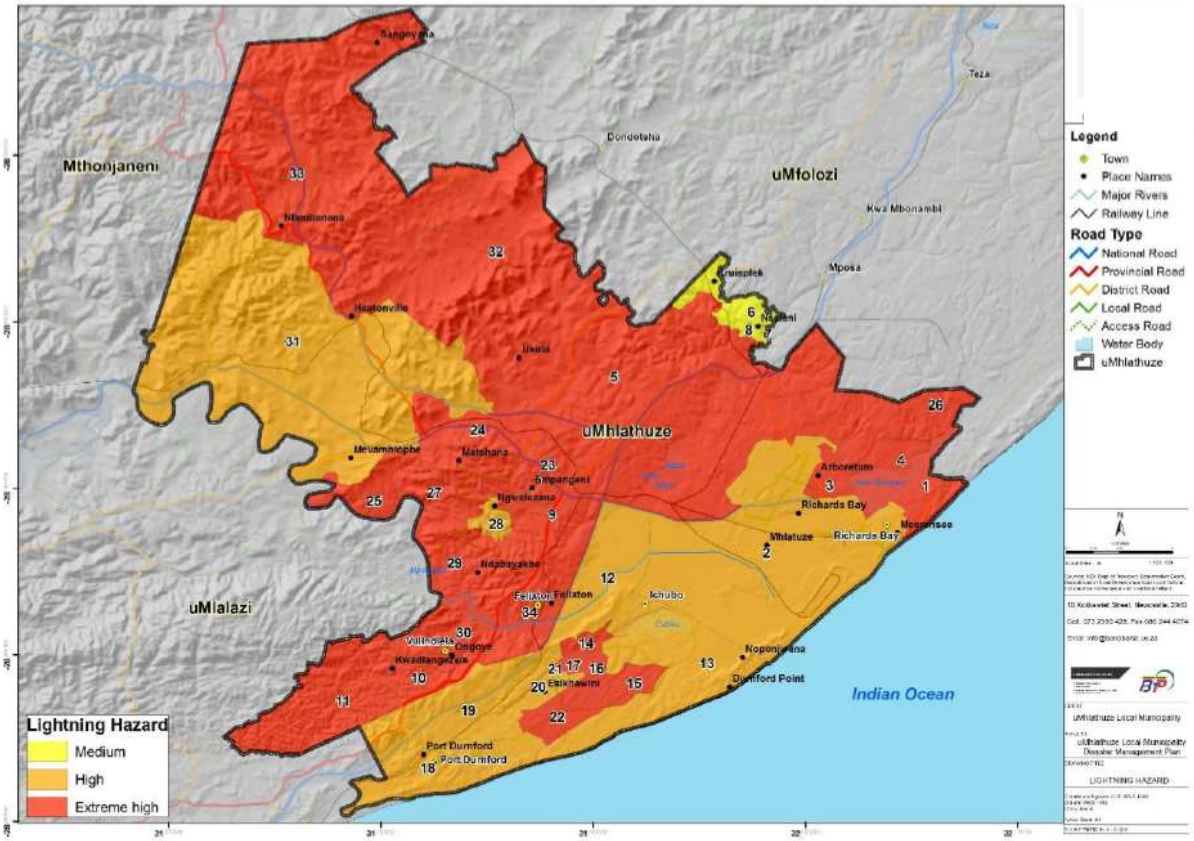
Map 46: Structural Fires Hazard Assessment



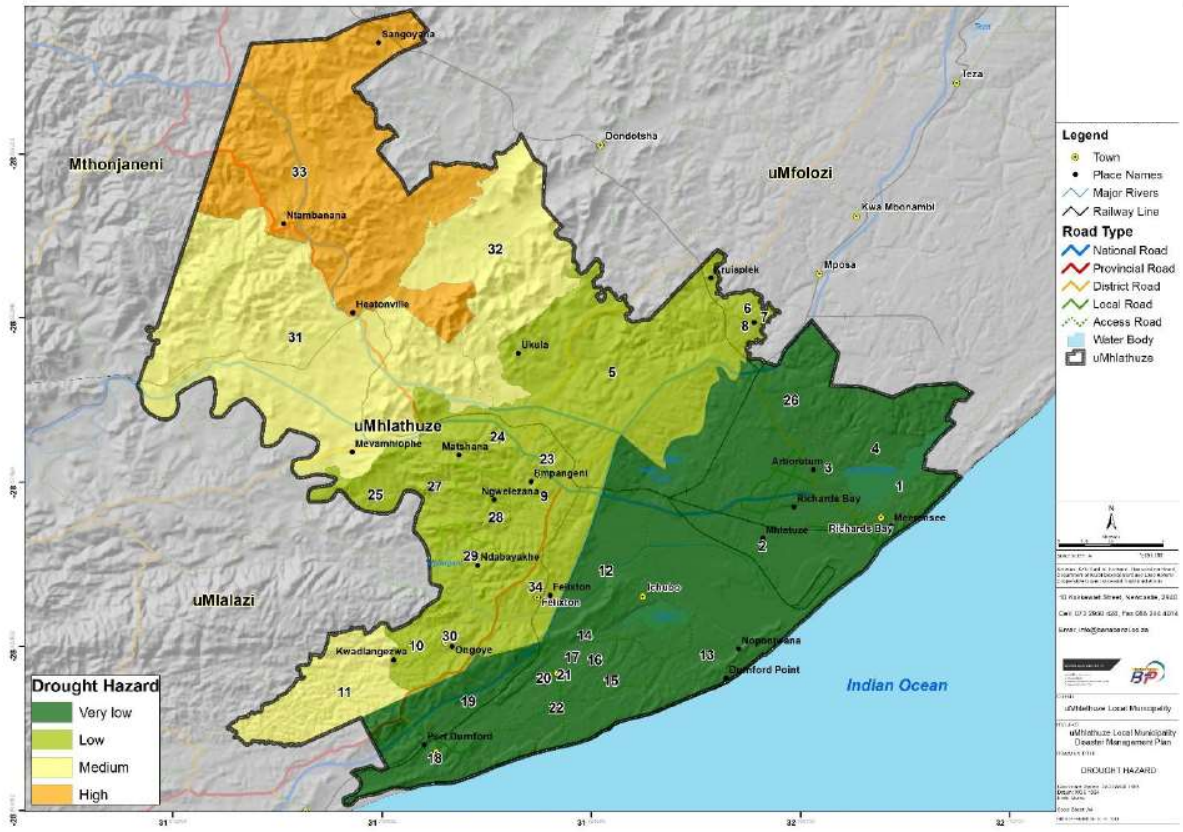
Map 47: Flood Hazard Assessment



Map 48: Lighting Hazard Assessment



Map 49: 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 PANDEMIC: COVID 19

Since the discovery of the Novel Corona Virus 2019 (COVID-19) in Wuhan, China in December 2019 and the subsequent declaration of a pandemic by the World Health Organisation (WHO), the rapid spread of the virus and its variants has resulted in continuing health, economic, and development impacts globally. Following the WHO recommendations to prevent and reduce the transmission of the virus, Governments across the world have implemented various levels of national lockdowns including strict curfews, limiting public gatherings, travel bans and restrictions and many have mandated their citizens to exercise social distancing and to wear face masks at all times in public. In 2020 and throughout 2021, as the focus of governments' COVID strategies shifted to the mass roll-out of vaccines, development works also need to be adjusted to support health systems that minimize COVID-19 deaths, account for varying variants, while ensuring livelihood opportunities and protection of natural resources.

A literature review of other Disaster Risk Management (DRM) Plan and pandemic responses offers a compilation of resources that are meant to guide how the City of can incorporate timely responses to pandemics such as the COVID-19 pandemic in its Level 2 Disaster Management Plan. A review of international, regional, and South African best practices aided in the identification of any gaps in the current CoU Disaster Management Plan. It will also contribute to identifying related implementing guidelines to address these gaps to ensure, through improved awareness and resilience:

- the alleviation of the impacts of pandemics;
- safeguarding of the health of citizens;
- continuous business operations;
- services, and supplies assurance; and
- natural environment protection

10.1.1 PANDEMIC RESPONSE PLAN

The Disaster Risk Management Plan requires strengthening to support the municipality's effective response and recovery from natural disasters, human-induced disasters, epidemics, and pandemics. Therefore, it makes it challenging to calculate resources and financial support (logistics, facilities, medical supply, food, ventilators, ICU beds, isolation facilitates, quarantine sites, testing kits and biometrics, laboratories, essential workers, and first responders, etc.) necessary for impactful and lifesaving pandemic response.

The Government set out relief funds to support businesses and individuals during the COVID-19 pandemic including the COVID-19 Youth Relief Fund, the National Committees Commission relief fund for non-government organisations, sports, arts and culture relief funding, emergency tax relief for businesses. In the absence of documented recovery measures in the CoU Disaster Risk Management Plan, it is unclear how much the relief funds and other initiatives have benefited the municipality. Monitoring of resource use and finances is challenging when there are no clear monitoring guidelines.

10.2 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.
- The Disaster Management Plan needs has to respond to the alleviation of the impacts of pandemics, safeguarding the health of citizens, continuous business operations, services and supplies assurances as well as natural environment protection.

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 SPATIAL DEVELOPMENT ISSUES

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.

viii. A very pertinent transport/roads matter that is having a severe impact on the Municipality is the prevailing congestion and influx of trucks into the municipal area to deliver bulk goods to the Port of Richards Bay.

Governance and Partnerships

ix. 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.

x. 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.

xi. 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.

xii. 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

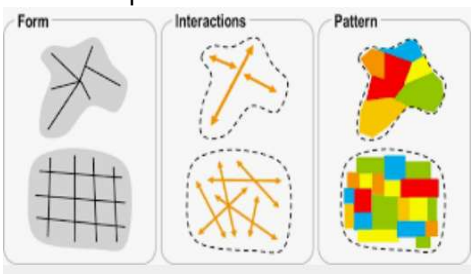
xiii. The Municipality has a disjointed spatial form. Travelling distances to places of employment and economic opportunity are unsustainable and unnecessary. Interventions are needed to improve access to services and opportunities in former Township and other marginal areas.

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

xv. 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.

xvi. 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.

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



xviii. 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.

xix. 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.

xx. 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.

xxi. 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

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

xxiii. 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.

xxiv. 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.

xxv. 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

xxvi. 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.

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

xxviii. 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

xxix. 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.

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

xxxi. 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:

"An aspirant metropolitan Port City focused on investing in quality infrastructure and service delivery in partnership with Traditional Councils, Communities and the Private Sector"

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:

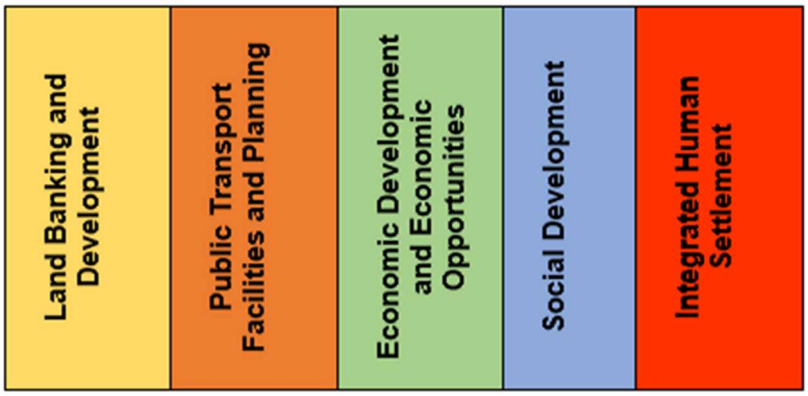
"An agile institution that fosters spatial sustainability, resilience, equity and compact growth, supported by appropriate ICT solutions"

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 51: 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 66: Municipal Responses to Spatial Transformation Pillars

SPATIAL TRANSFORMATION PILLARS	MUNICIPAL SPATIAL TRANSFORMATION RESPONSES
Land Banking and Development (Brown and Green fields) **SDG 10, 11, 13, 15**	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 and Implementation of Rural Development Framework Plans.
Public Transport Facilities and Planning **SDG 11, 17**	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 **SDG 2,10, 11**	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 **SDG 3, 4, 5, 11, 16**	○ Safety and Security ○ Health ○ Education ○ Job creation ○ Promote gender equity and equality ○ Food security
Integrated Human Settlement **SDG 6, 7, 10, 11**	○ 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

The relationship between the spatial transformation pillars and SDGs are indicated hereunder.

Table 67: Relationship between uMhlathuze Spatial Transformation Pillars and SDGs

	Land Banking and Development	Public Transport Facilities and Planning	Economic Development and Economic Opportunities	Social Development	Integrated Human Settlement
1. No Poverty					
2. Zero Hunger					
3. Good Wealth and Well-Being					
4. Quality Education					
5. Gender Equality					
6. Clean Water and Sanitation					
7. Affordable and Clean Energy					
8. Decent Work and Economic Growth					
9. Industry, Innovation and Infrastructure					
10. Reduced Inequalities					
11. Sustainable Cities and Communities					
12. Responsible Consumption and Production					
13. Climate Action					
14. Life Below Water					
15. Life on Land					
16. Peace, Justice and Strong Institutions					
17. Partnerships for the Goals					

The above table illustrates the interrelated nature of the SDGs to each other but also in relation to the Municipal Spatial Transformation approach – as reflected by interventions being pursued by the Municipality.

The following section provides a summary of some of the main interventions that the City of uMhlathuze are pursuing to give effect the municipal spatial transformation pillars.

11.3 SPATIAL TRANSFORMATION PILLARS

11.3.1 LAND BANKING AND INTEGRATED HUMAN SETTLEMENS

As a Municipality that is Level 2 Accredited, we have been investing in, amongst others, green field human settlements projects that are considering a type of land banking as well. New guidelines direct these areas to be termed PHSHDA (Priority Human Settlements and Housing Development Areas). The three main current projects in this regard are summarised hereunder:

Empangeni Mega Housing

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.

Dumisani Makhaye Village (DMV) Phase 6 and 8

The Dumisani Makhaye 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

Aquadene

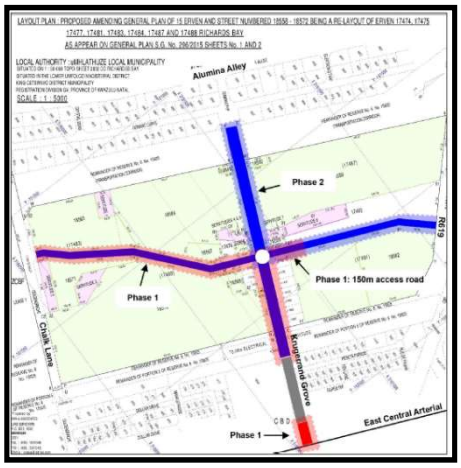
The Aquadene project is the main human settlement intervention in Richards Bay and is also an IRDP. The projects provide for the following housing typologies:

- RDP Houses: 615
- Social houses/CRU: 1579

11.3.2 PUBLIC TRANSPORT FACILITIES AND PLANNING

The uMhlathuze Municipality has (and continues) to give effect to public transport transformation by way of creating multi-modal precincts, the upgrade of public transport facilities as well as the compilation of a Comprehensive Integrated Transport Plan (CITP). Specific initiatives and project include the development of the Richards Bay Multi-Modal Facility Precinct, i.e. the improvement of public transport facilities at the Richards Bay Taxi Rank, support for SMME activities and the construction of a strategic link road. Investment has also taken place at public transport facilities at other localities in the Municipality such as Nseleni.

Figure 52: Initiatives to Support Public Transport



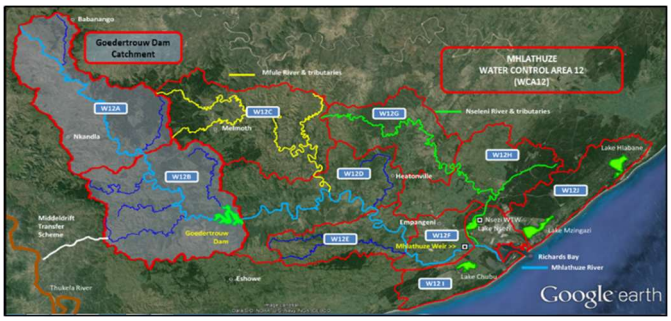
11.3.3 ECONOMIC AND SOCIAL DEVELOPMENT AND CREATING OPPORTUNITIES

The Municipality has been pursuing a number of ways to achieve the above and these include PPPs as procurement methods, the provision of critical and economic infrastructure, acquiring and servicing of strategic land parcels as well as stimulating the economy and economic regeneration.

The Municipality has embarked on two PPP processes to facilitate the development of two catalytic project namely the Proposed Richards Bay Airport Relocation and Redevelopment as well as the Waste Water Re-Use. In both instances, Phase 1: Feasibility has been completed and Phase 2: Procurement is the next step.

Examples of the provision of critical and economic infrastructure in uMhlathuze include the recently completed 132kV Hydra Capella Cable construction to assure supply to the Richards Bay Coal Terminal (RBCT), Bidvest Tank Terminals, Engen as well as the Transnet National Ports Authority (TNPA) with the value of more than R100 million. Also, the development of the Richards Bay Multi-Modal Precinct is underway with the ongoing investment into strategic link roads, the upgrade of the public transport facility as well as SMME park development.

Figure 53: Municipal PPP Projects



Apart from acquiring (and initiating the process to acquire) strategic land parcels – such as needed for the airport relocation, detailed planning has been completed and/or is underway as a precursor to development and servicing strategic land parcels. Detailed planning has been done for the development of the Richards Bay CBD South as well as the Greater Waterfront area. In addition, statutory processes are also at an advanced stage to enable development in Mzingazi and specifically the Mzingazi Commercial Node.

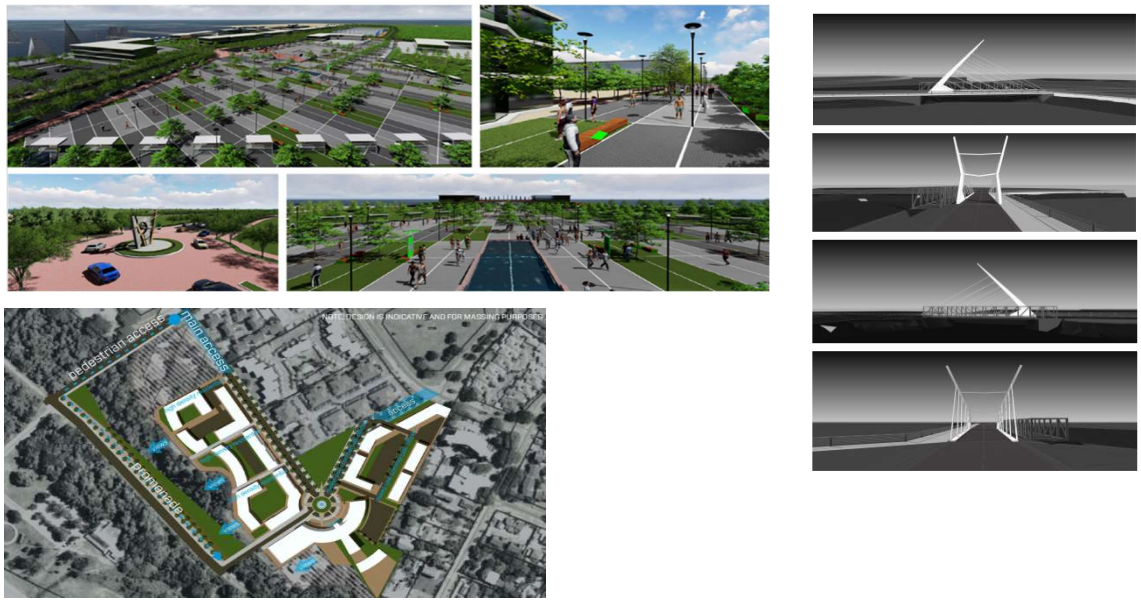
An example of Economic Regeneration is the Empangeni CBD Revitalization project that is underway to attain for Empangeni the following vision: Liveable, safe, resource-efficient cities and towns that are socially integrated, economically inclusive and globally competitive, where residents actively participate in urban life. Interventions by Council includes various climate proofing initiatives, investing in the public realm, public transport interventions etc.

Figure 54: Empangeni Revitalization Interventions

Reference has already been made to the Waterfront project. More specifically, the intention is to development 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 are planned for the Greater Waterfront area, including:

- Steel Bridge Redevelopment
- The Ridge Development
- Richards Bay ICC

Figure 55: Planned Interventions at the Richards Bay Waterfront



11.4 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.

11.4.1 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 68: Summary of uMhlathuze Settlement Hierarchy

PRIMARY SETTLEMENTS	RICHARDS BAY AND EMPANGENI
o Centres of employment, industrial and commercial activity. o Continue to serve as main municipal administrative centres. o Main public transportation nodes (Richards Bay Taxi City and Empangeni A and B-Ranks). o A range of specialized services and facilities are available to a larger hinterland.	
SECONDARY AND TERTIARY SETTLEMENTS	ESIKHALENI, NSELENI, VULINDLELA, NGWELEZANE AND FELIXTON
o Formalized towns, mainly residential in nature. o 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. o 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
o 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. o In-situ rural housing projects not necessarily viable as a result of high densities. o Opportunities for formalization for some of these areas. o 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
o Characterized by good accessibility but very limited development economic opportunities. o Potential to provide services and economic opportunities to surrounding hinterland	
RURAL SETTLEMENTS	DENSER SETTLEMENTS WITHIN THE TRADITIONAL COUNCIL AREAS
o Identified in line with the uMhlathuze Rural Housing Projects. o Accessible locations for community services and infrastructure. o Specific planning and development interventions are required to identify community services that are to be encouraged at these nodes.	

SCATTERED SETTLEMENT
o Remainder of the Municipal Area. o 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.

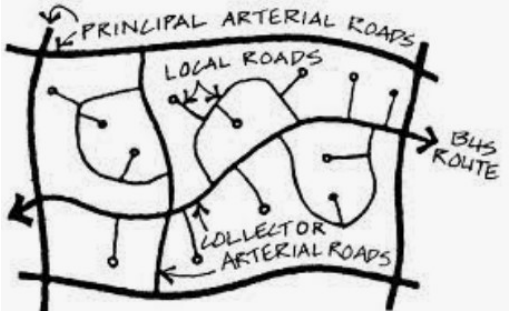
Nseleni Node:
A socio-economic node that offers sustainable mixed use development opportunities based on a human scale principle to its inhabitants and the larger surrounding area.

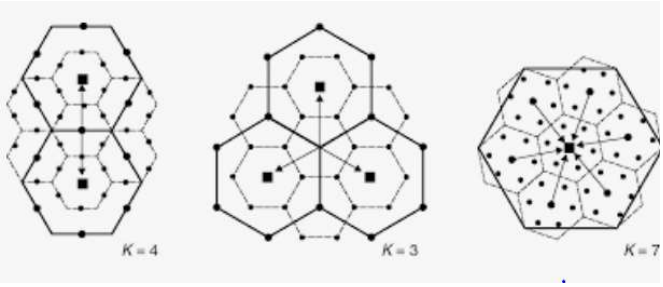
Buchanana Node:
A socio-economic node that offers sustainable mixed use development opportunities based on a human scale principle to its inhabitants and the larger surrounding area.

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.

N2 Intersection Nodes:
The intersecting of routes with the N2 poses a number of development opportunities by virtue of accessibility as well as visibility. At present, four routes intersect with the N2 either horizontally or by way of slipways off bridge crossings, notably at the eSikhaleni intersection, the John Ross intersection, the R102 intersection and at the Nseleni off ramp intersection. A future intersection with the P537/P525 providing a coastal link with Port Dunford and also inland is recognized and poses significant potential for further development.





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 69: Municipal Spatial Transformation Intervention at Nodal Focus Areas

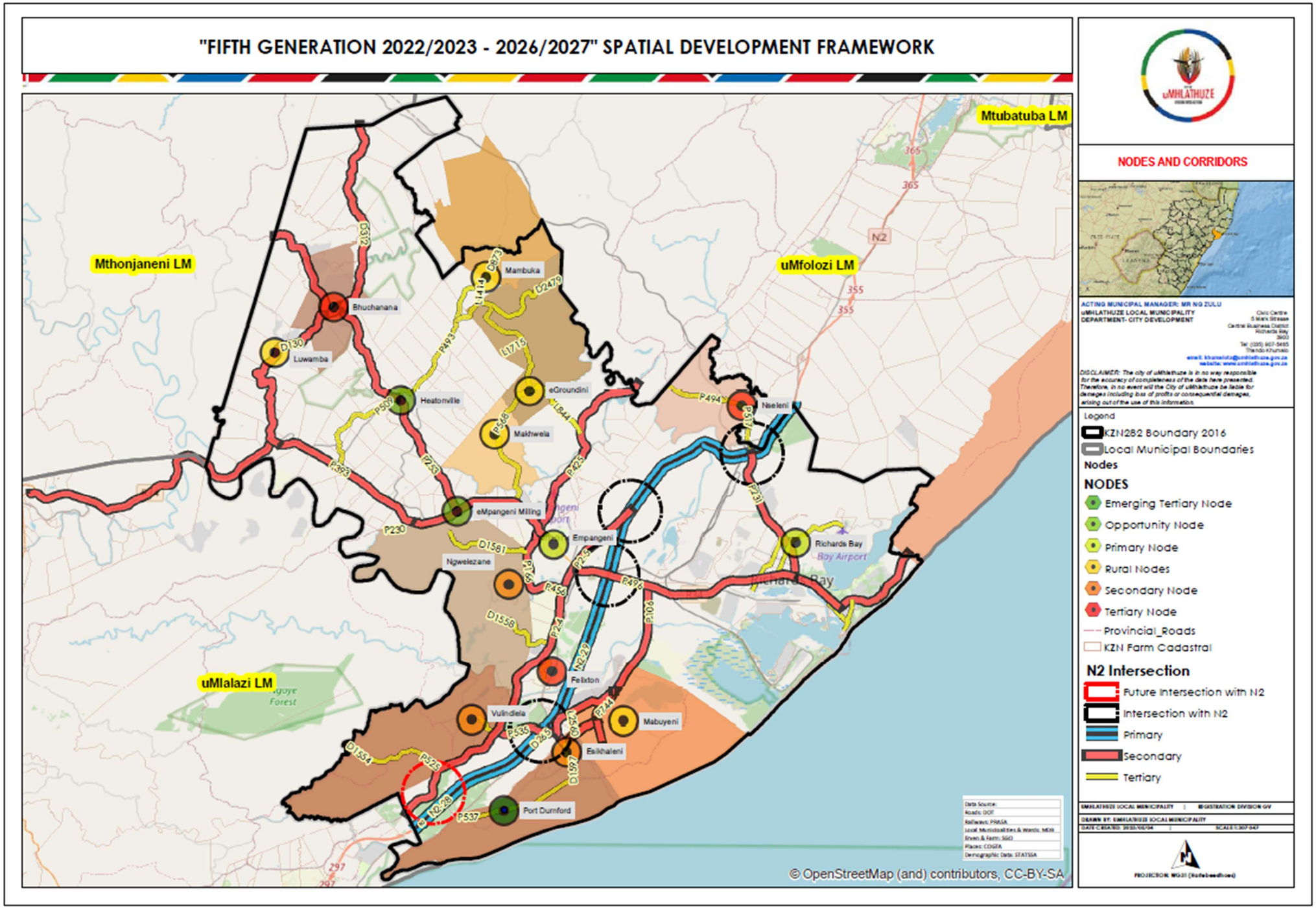
NODAL FOCUS AREA	DESCRIPTION	INTERVENTION
Richards Bay and Empangeni	Primary urban centre with servicing capacity and opportunity. The development of these nodes has a multi-pronged approach, providing for densification, supporting thresholds for a range of	o Review of 2006 CBD Framework for Richards Bay was finalized in 2019. o Implementation of the CBD Revitalization Plan. o Development of the CIA (Central Industrial Area) in line with IUDF principles and climate resilient development.

NODAL FOCUS AREA	DESCRIPTION	INTERVENTION
	services, industry and public transport.	o Empangeni Mega Housing development as an integrated residential development project (IRDP). o Further Development of Dumisani Makhaye Village (DMV) as an 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 50: Nodes and Corridors in uMhlathuze



11.4.2 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.

11.4.3 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:

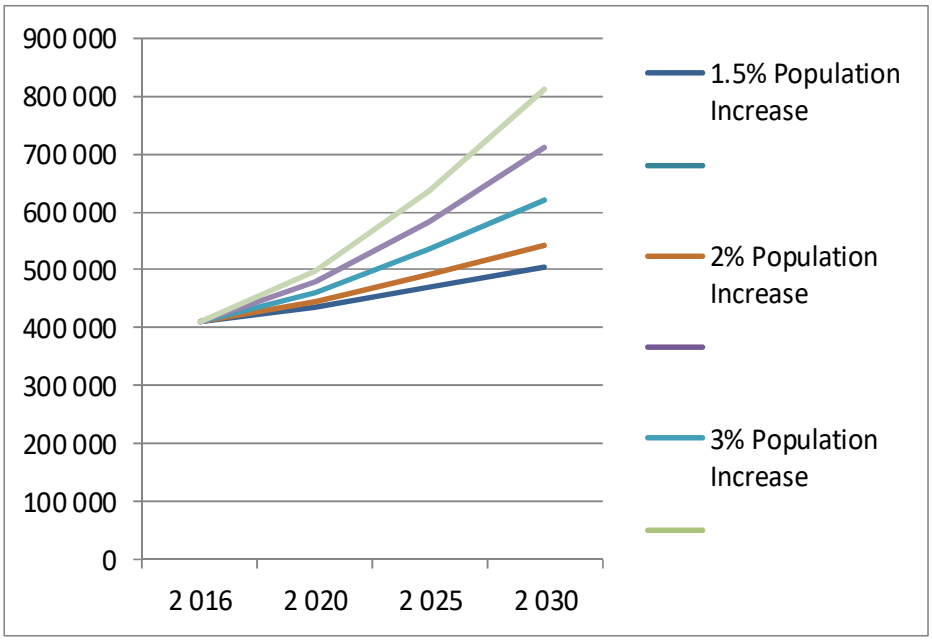
Table 70: Extent of SDF Expansion Areas

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 56: 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 71: 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.

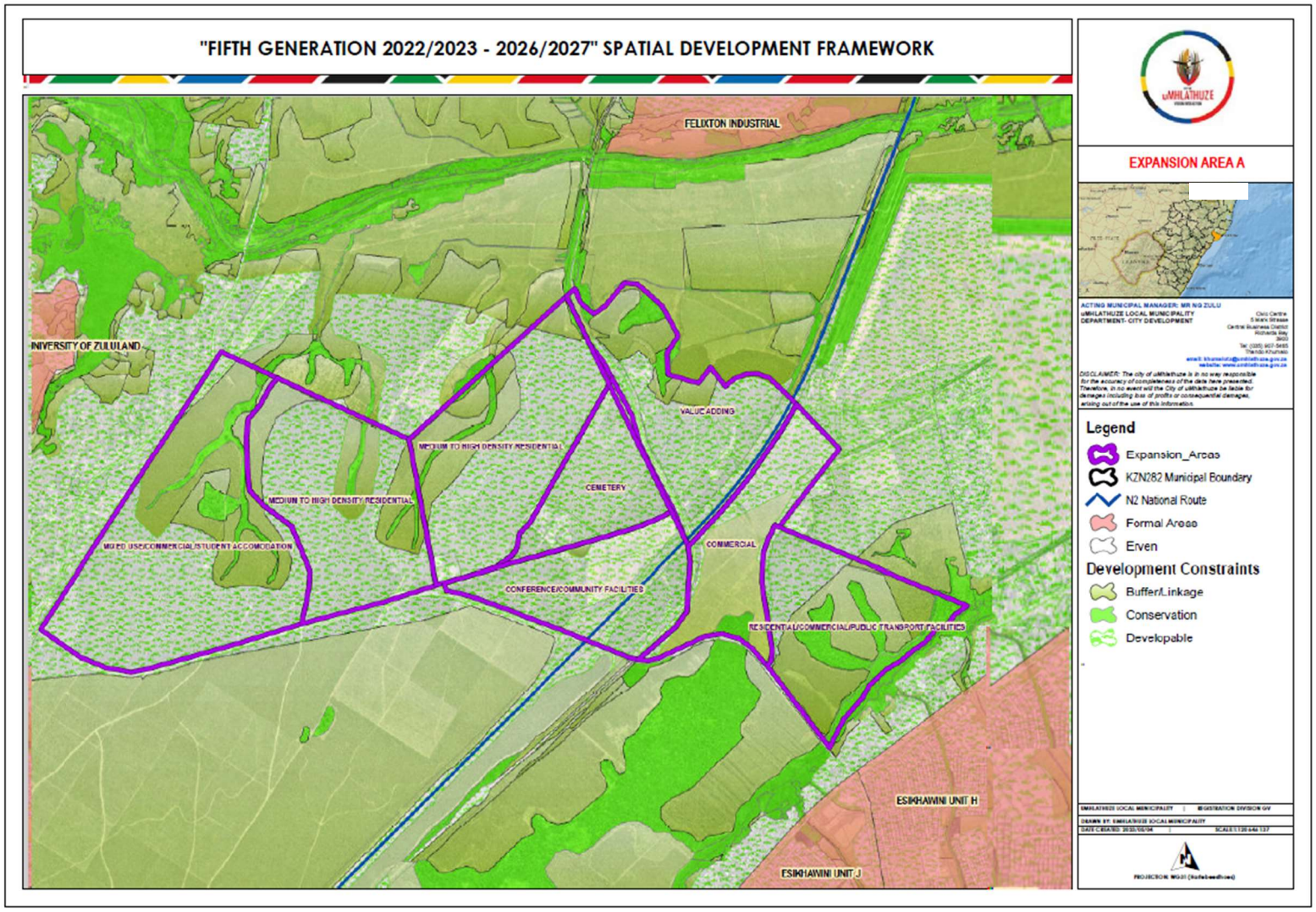
Table 72: Anticipated land usages in Expansion Areas

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.

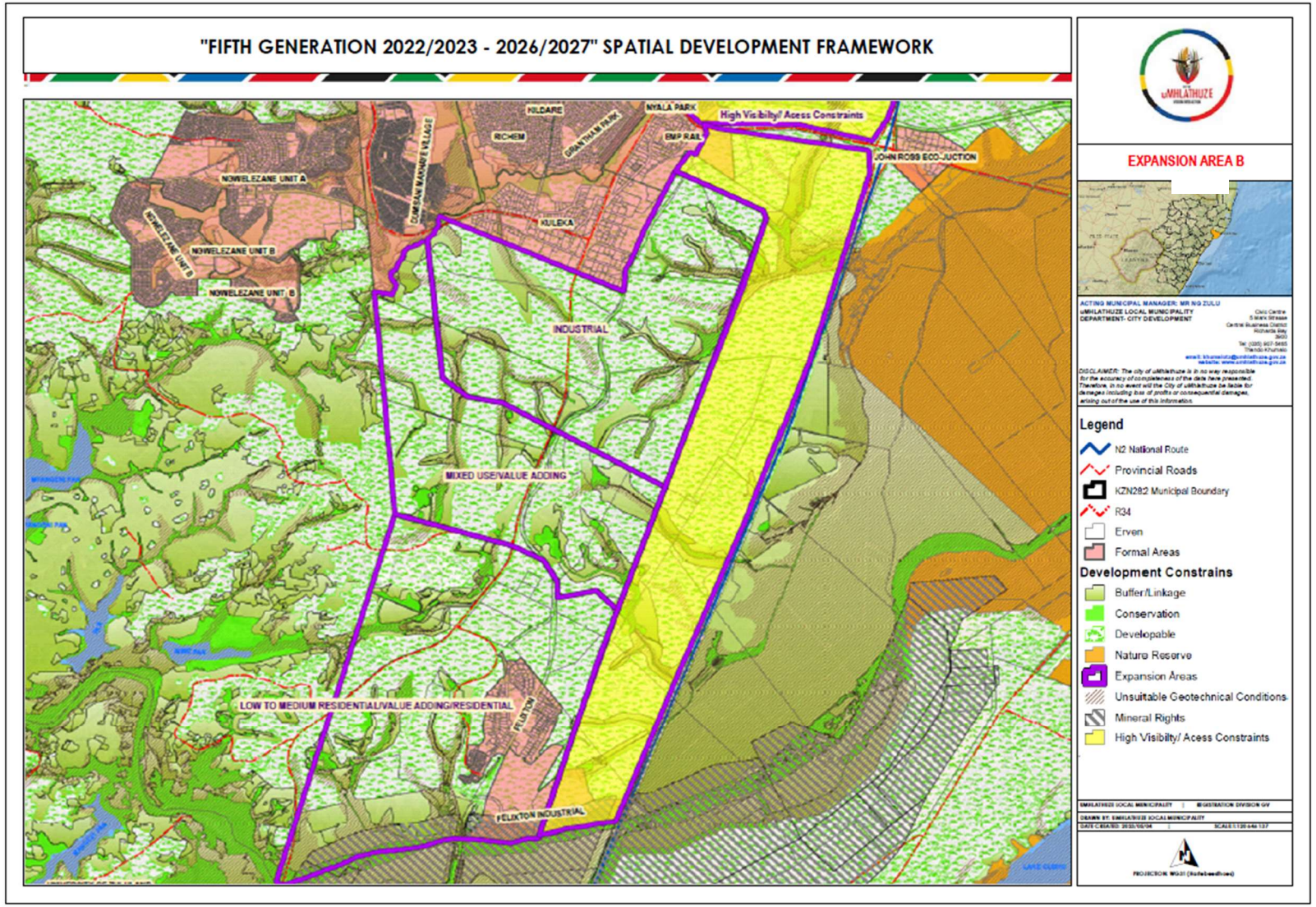
Figure 57: Expansion Areas A



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

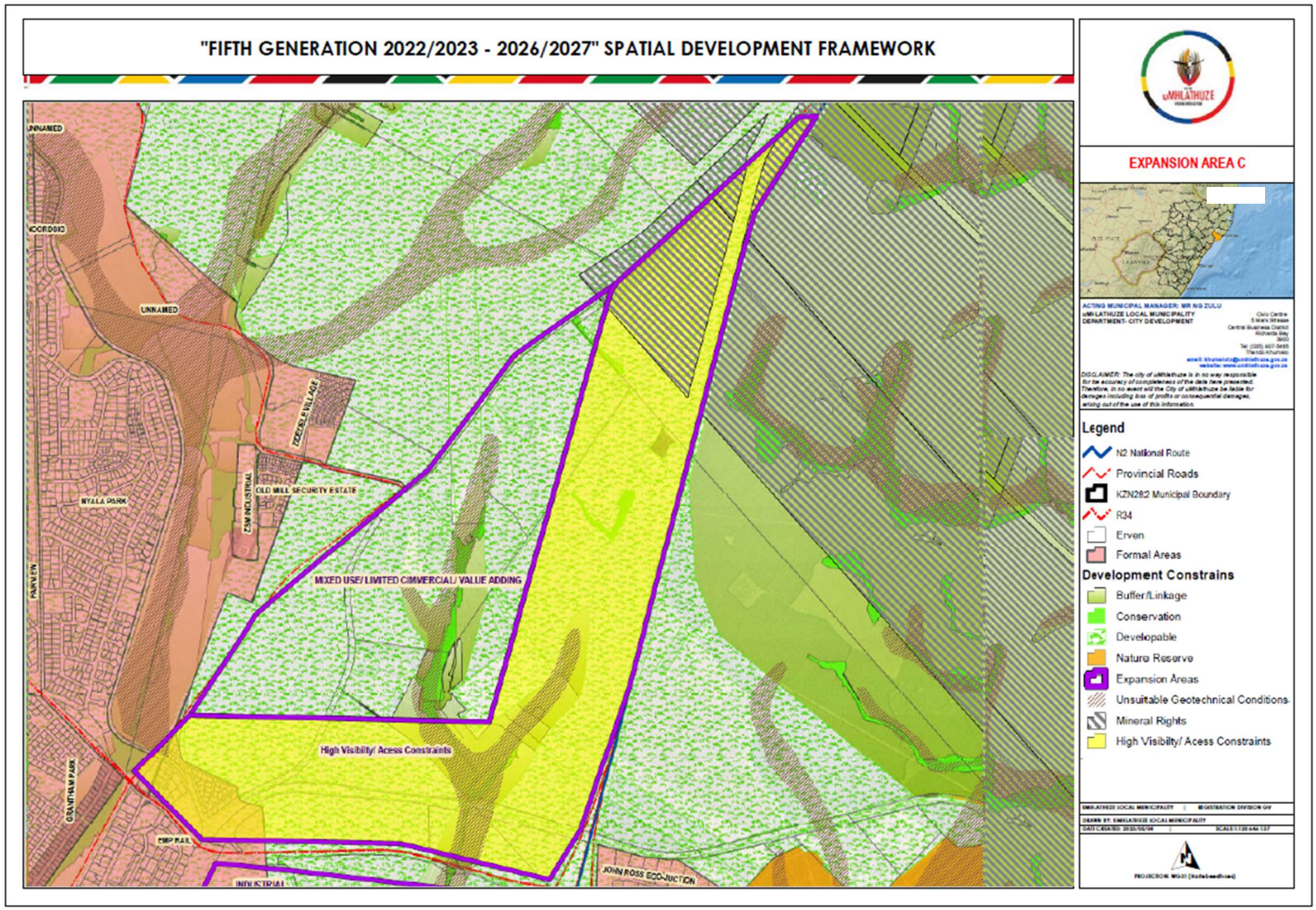
Figure 58: Expansion Area B



Potential Developable Area: 2200 Ha

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

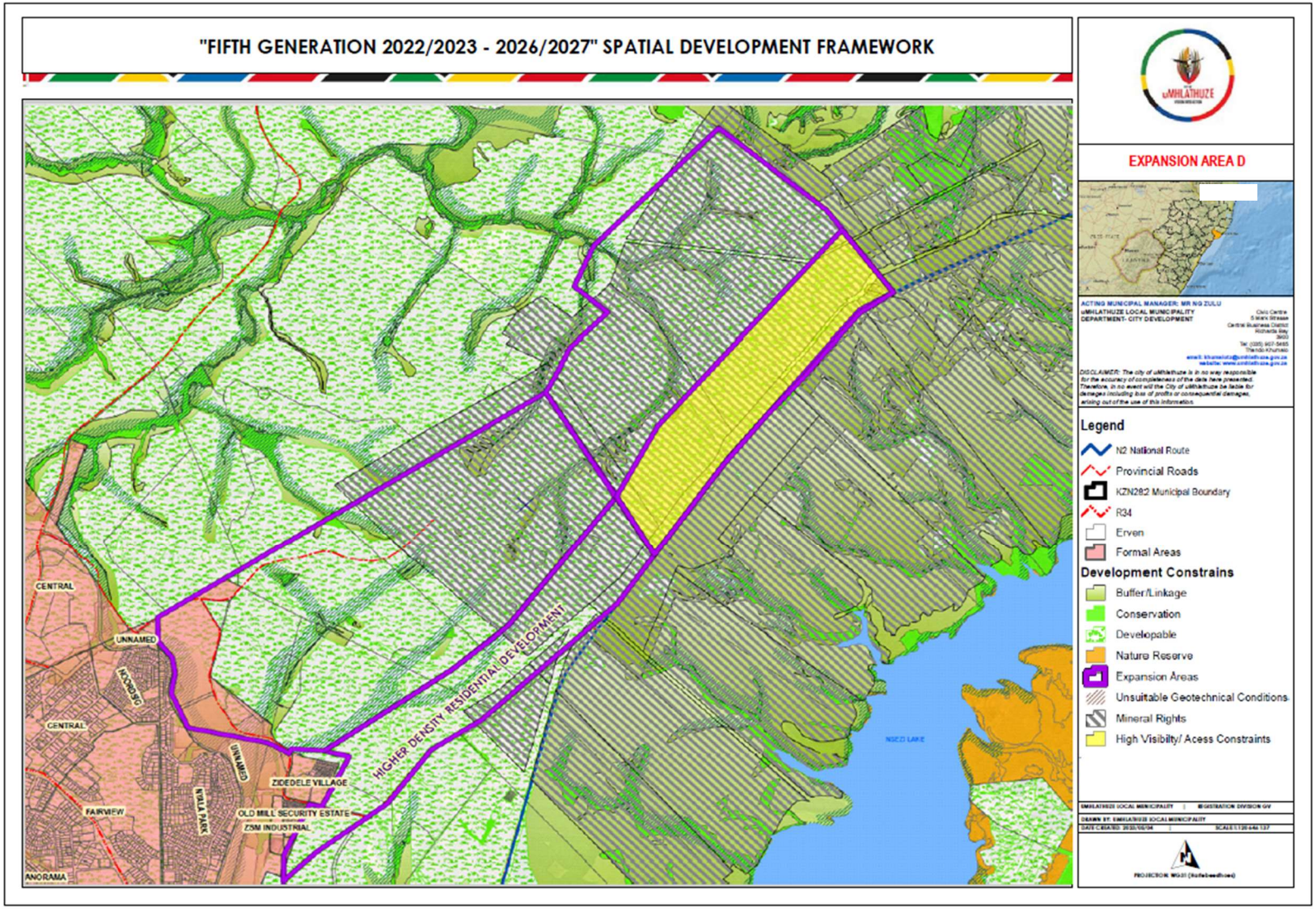
Figure 59: Expansion Area C



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

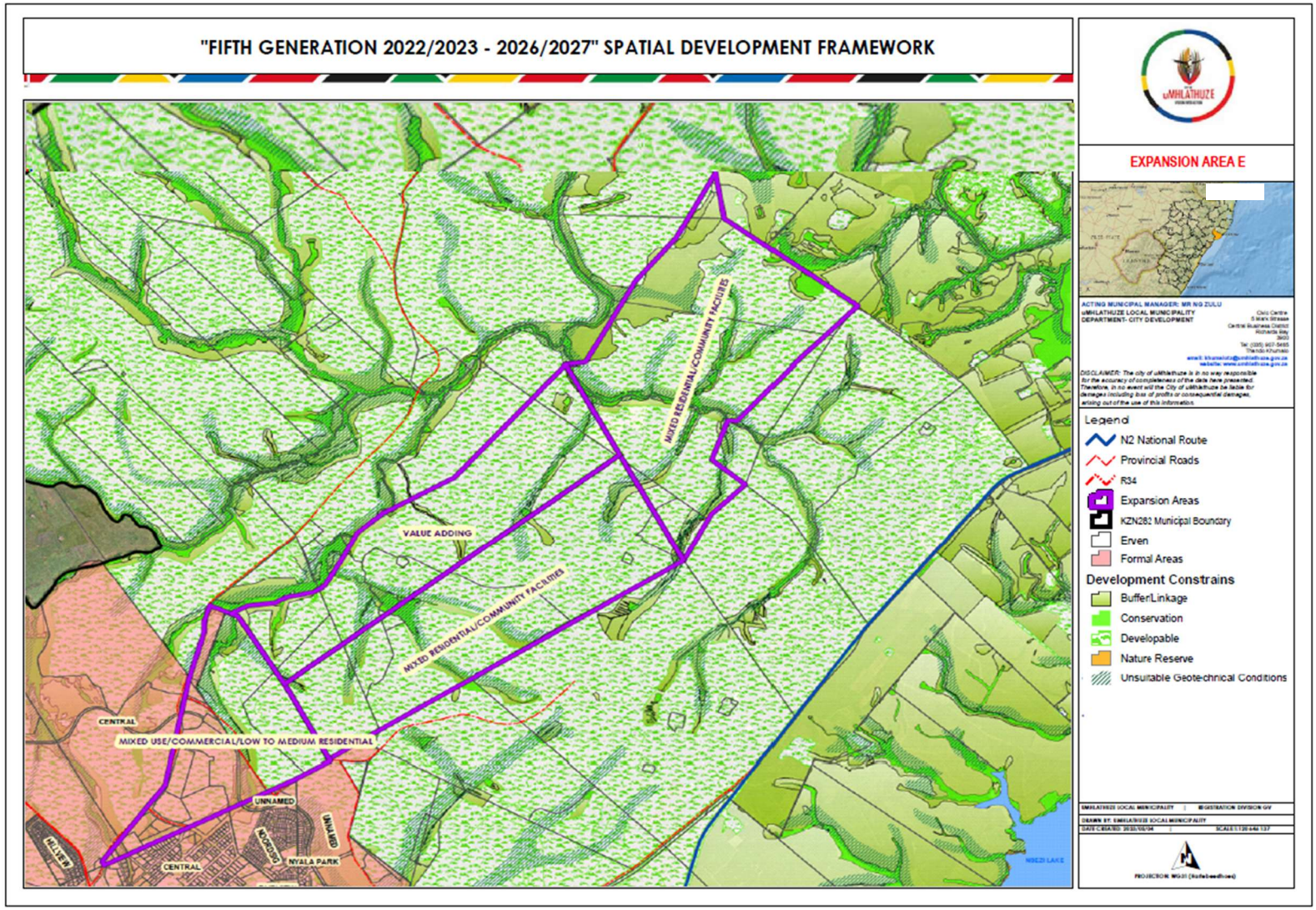
Figure 60: Expansion Area D



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

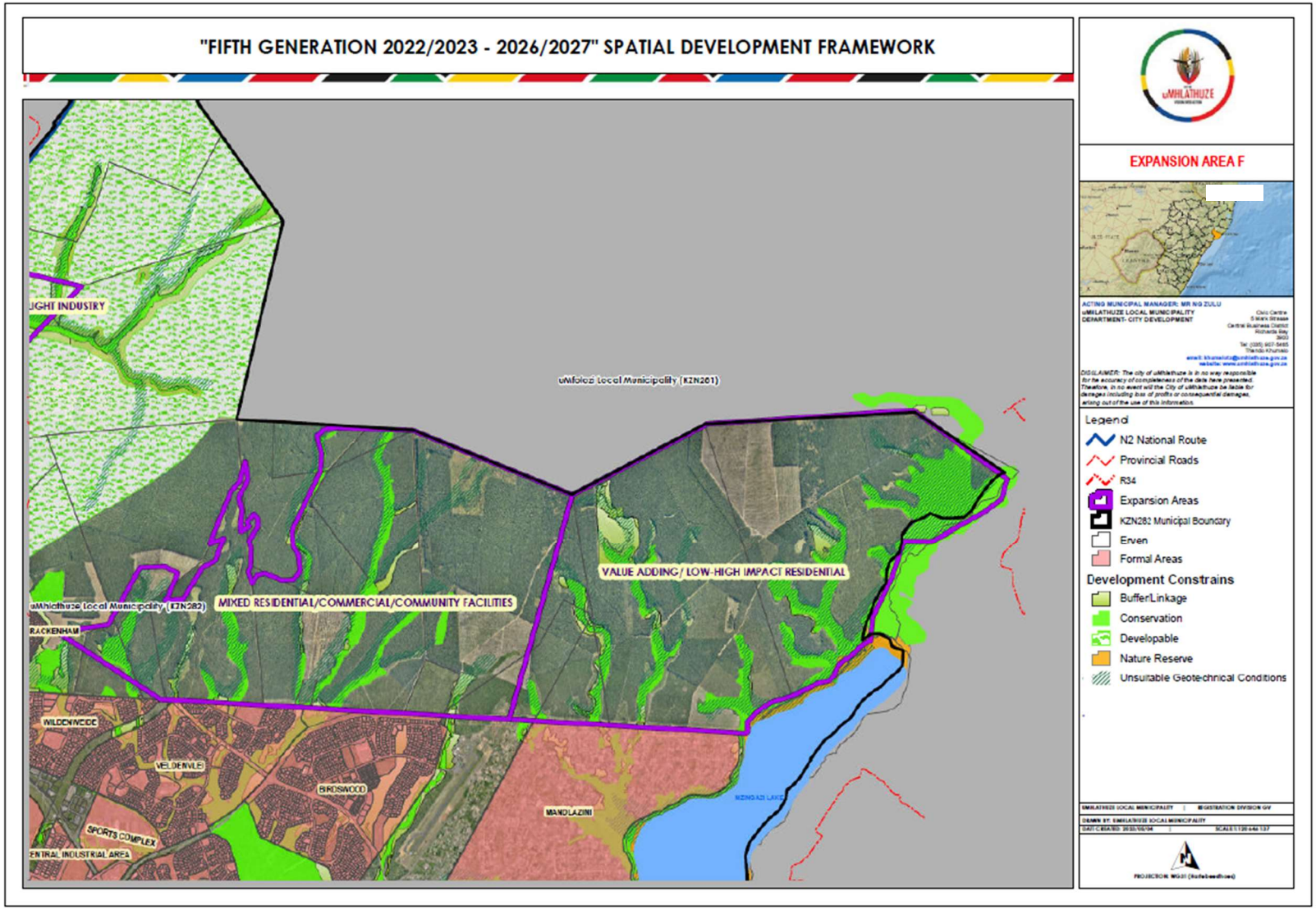
Figure 61: Expansion Area E



Potential Developable Area: 1900 Ha

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

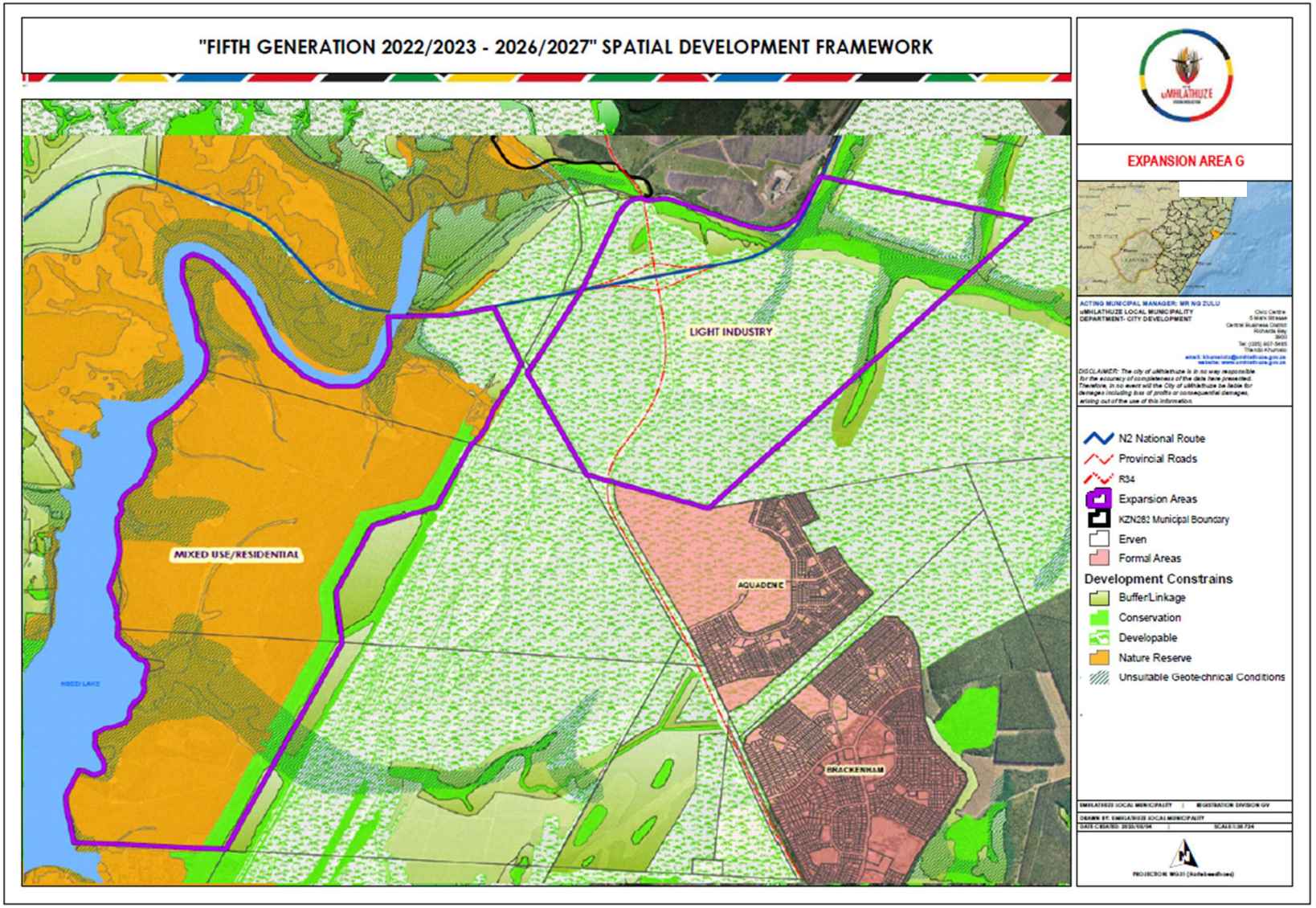
Figure 62: Expansion Area F



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

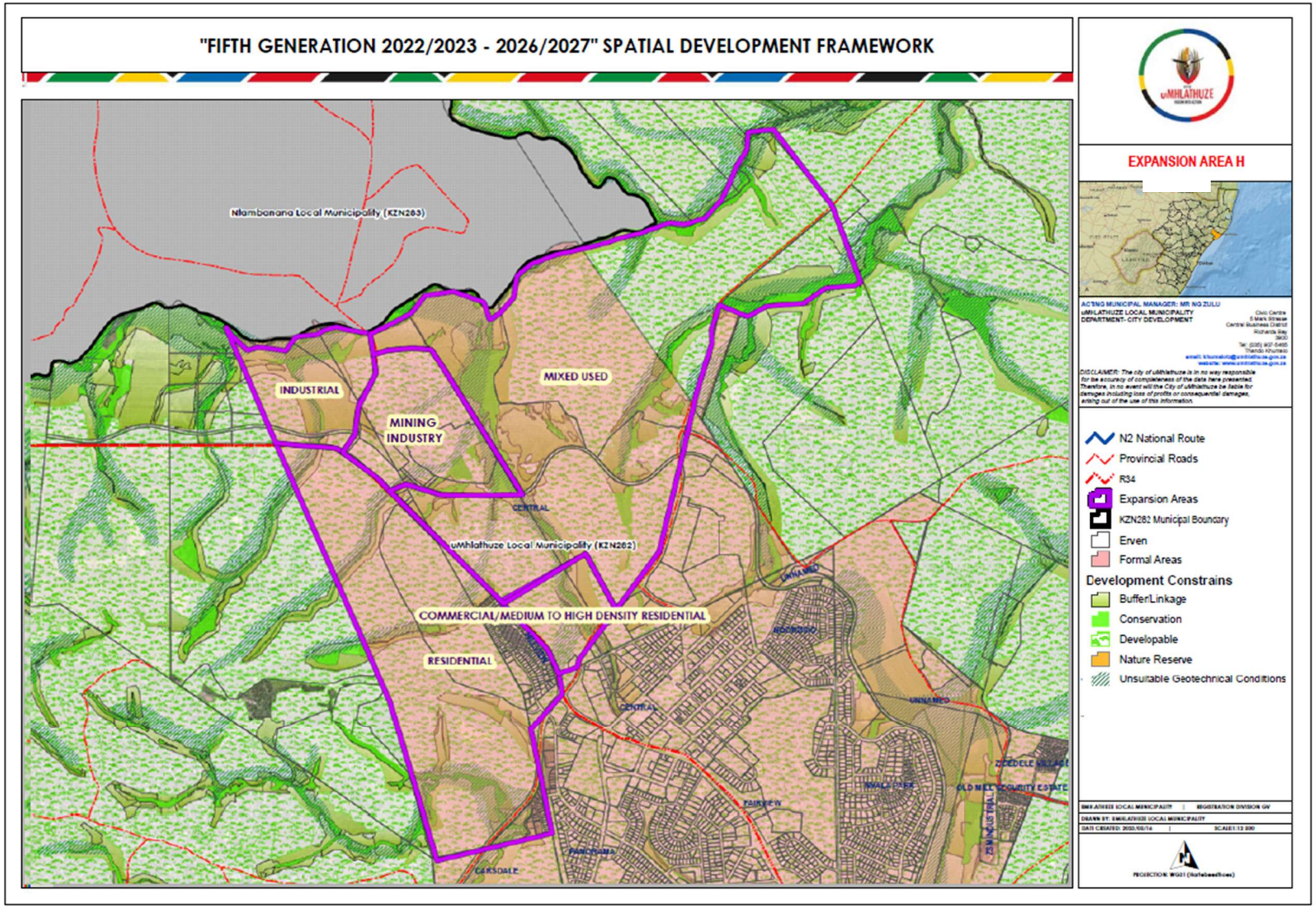
Figure 63: Expansion Area G



Potential Developable Area: 400 Ha

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

Figure 64: Expansion Area H



Potential Developable Area: 780 Ha

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

11.4.4 INFILL AND DENSIFICATION

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 73: 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

11.4.5 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 (future) 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 and comparable commercial uses that also provide in a more localized need.
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:

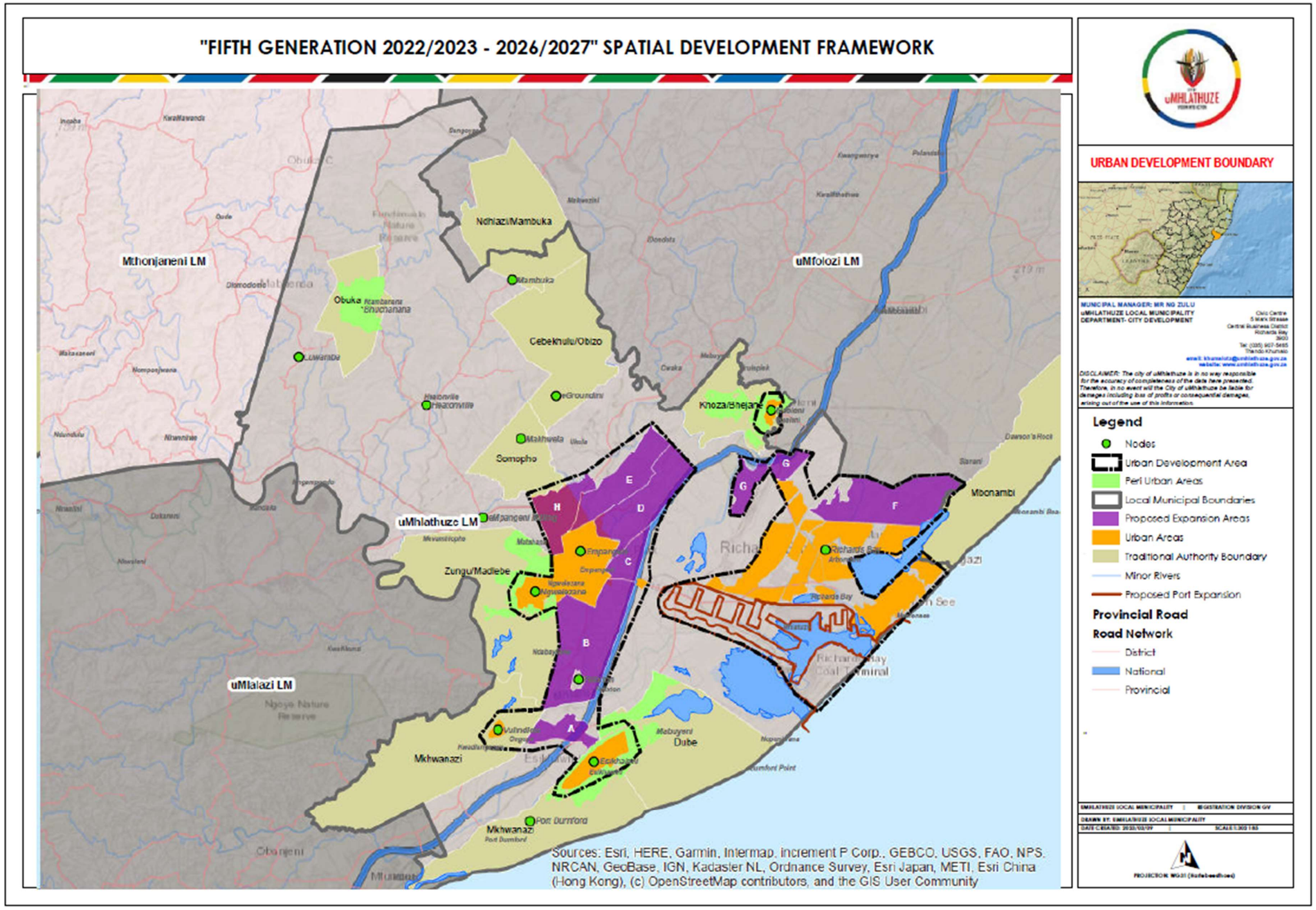
1. Environmental listing notices in terms of the relevant NEMA Regulations at the time.
2. Bulk infrastructure capacity.
3. The development has to be in keeping with the character/ambience of the surrounds.

The UDB is not cast in stone and should be reviewed when the need arises or during the annual IDP/SDF process. 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.

Map 51: Urban Development Boundary



11.5 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.

11.5.1 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

11.5.2 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.

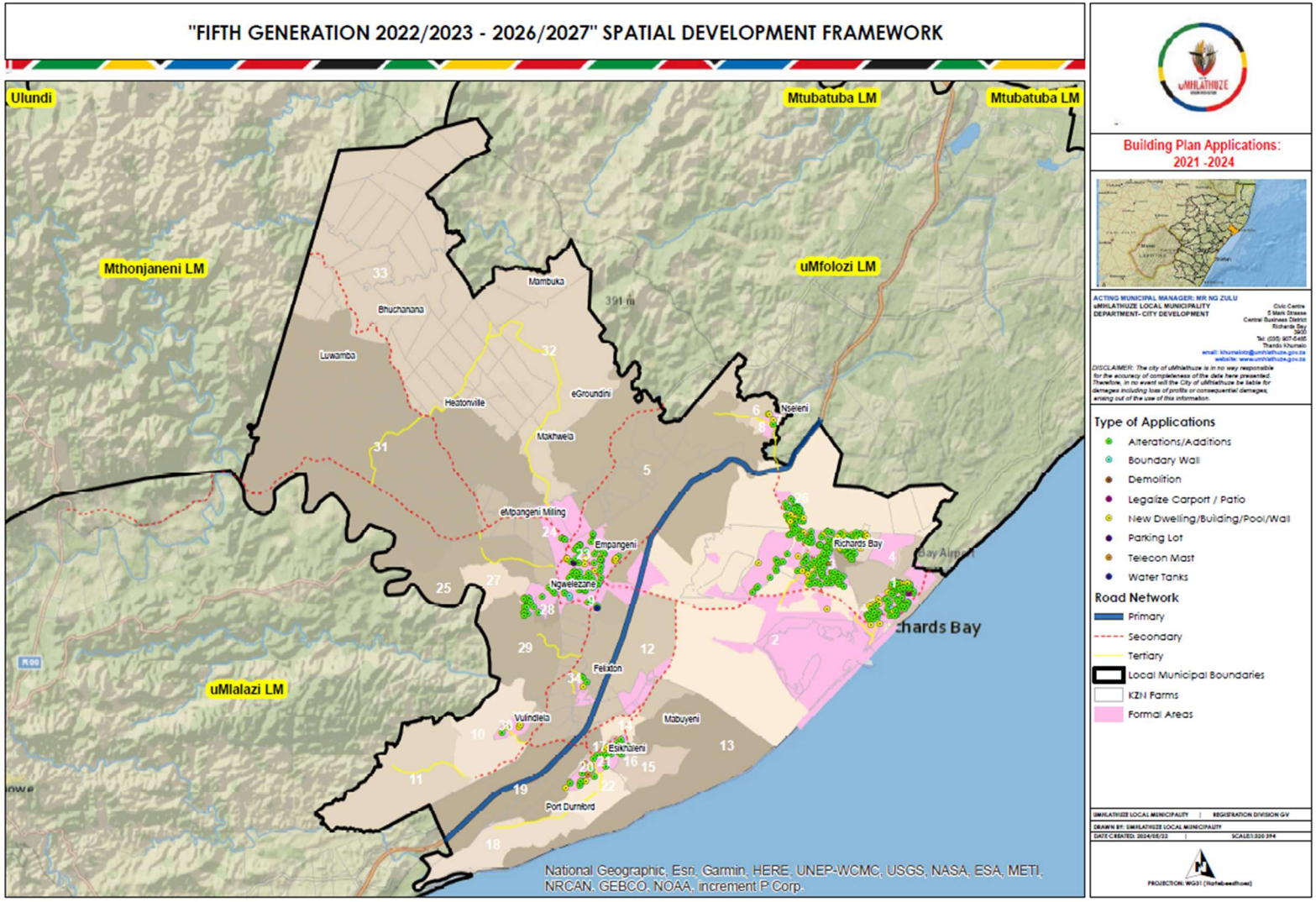
Given the above, it is imperative that:

- 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).

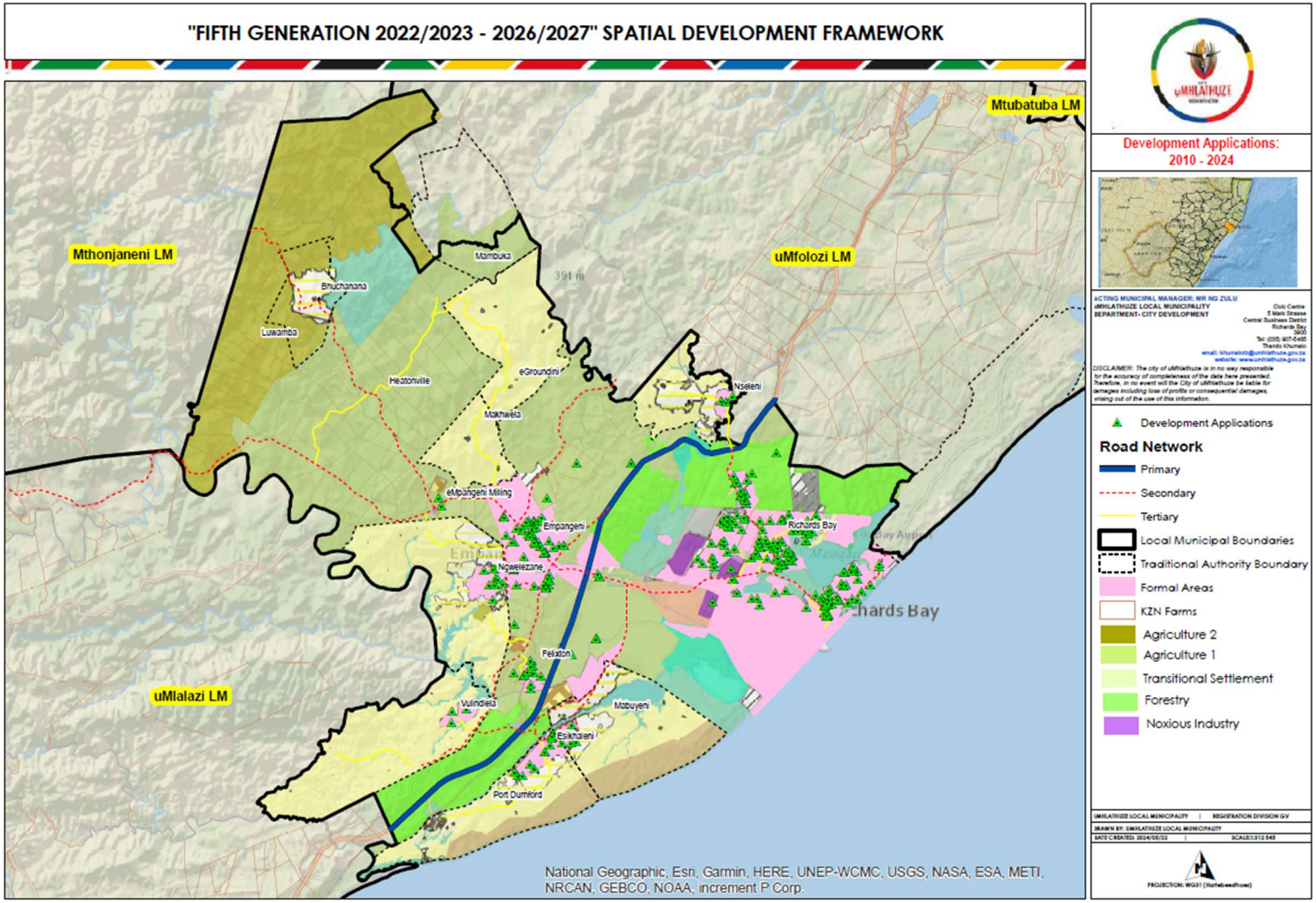
A series of maps has been prepared indicating historic applications in respect of building plans, environmental authorisations as well as development applications as inserted at overleaf:

Map 52: Building Plan Applications



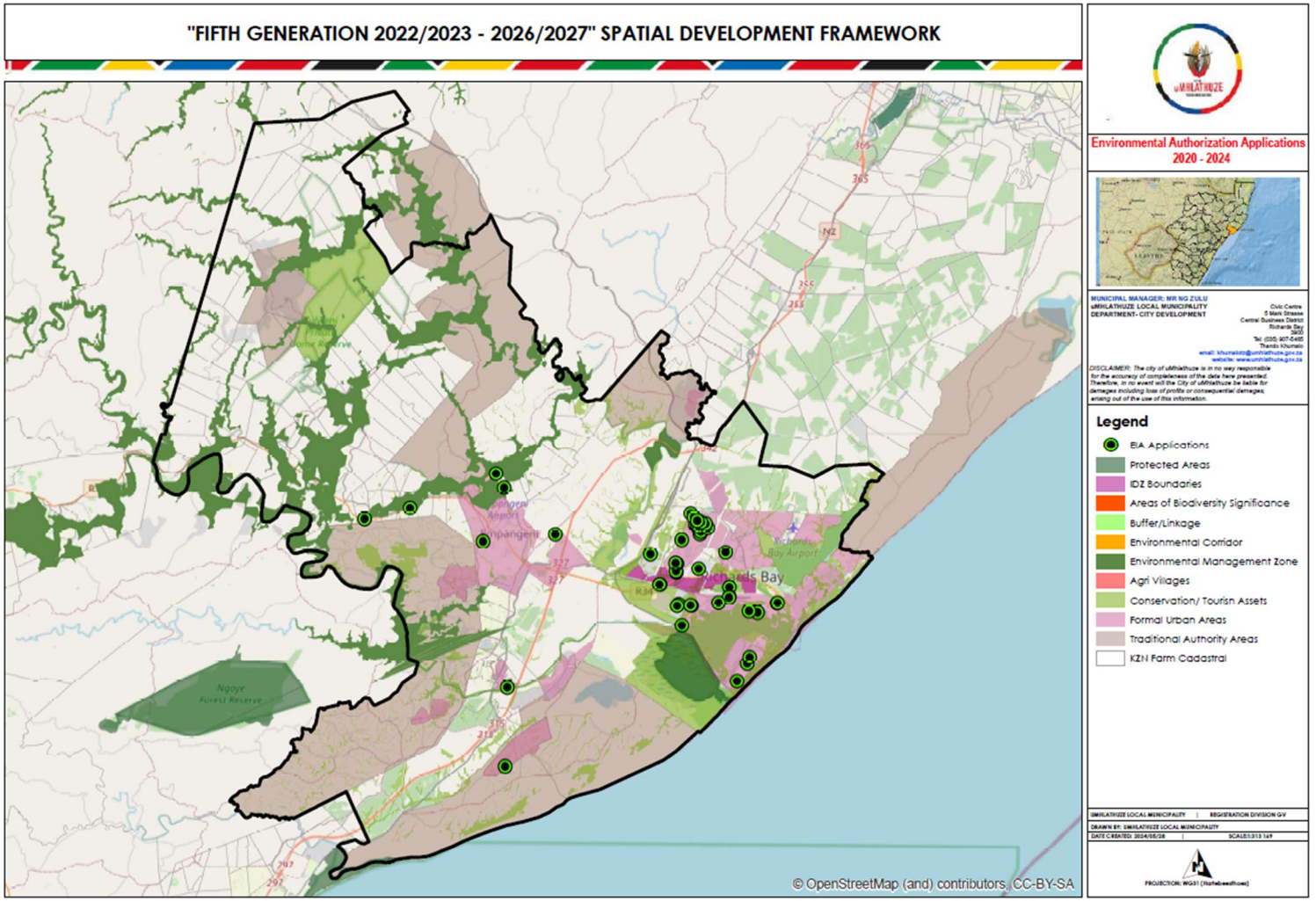
The spatial distribution of building plans applications if focused in the larger, formal urban areas. This is not an indication that building is not taking place in other areas.

Map 53: Development Applications



The spatial distribution of development administration applications is concentrated in the larger, formal urban areas. However, there is some distribution of applications to non-urban areas where the SPLUM Bylaw is also applicable.

Map 54: Environmental Authorisation Applications



Applications for environmental authorization were recorded in both urban and non-urban areas in the municipal area although the concentration of application were from the Richards Bay industrial and commercial areas.

11.5.3 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.

11.5.4 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.
- The intersection from the N2 onto the P537 toward Port Dunford is also very strategic in facilitating access to the Port Durnford node, specifically when considering its attraction as a tourist destination.

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.

11.5.5 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 risks 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.

11.6 INTERVENTION AREAS

11.6.1 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:

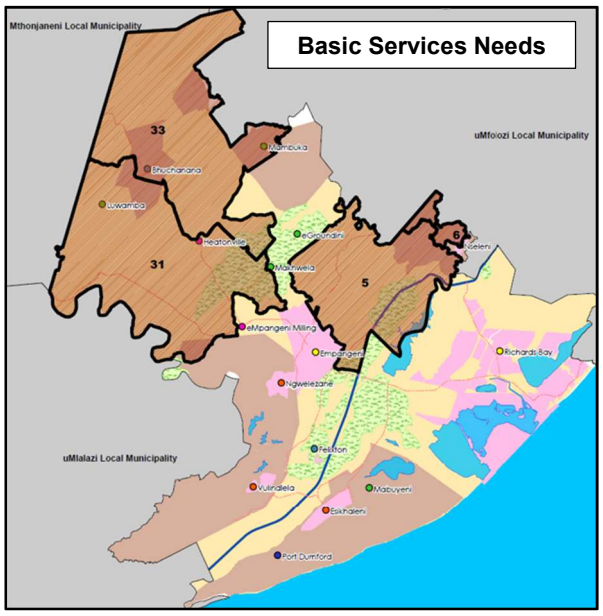
a) As identified as part of the Nodal/Settlement Hierarchy of the Municipality, **peri-urban** areas are characterized by dense populations, small stands not necessarily able to support agricultural activities, continuous infill-development, pressure for connection to municipal services (individual connections) 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.

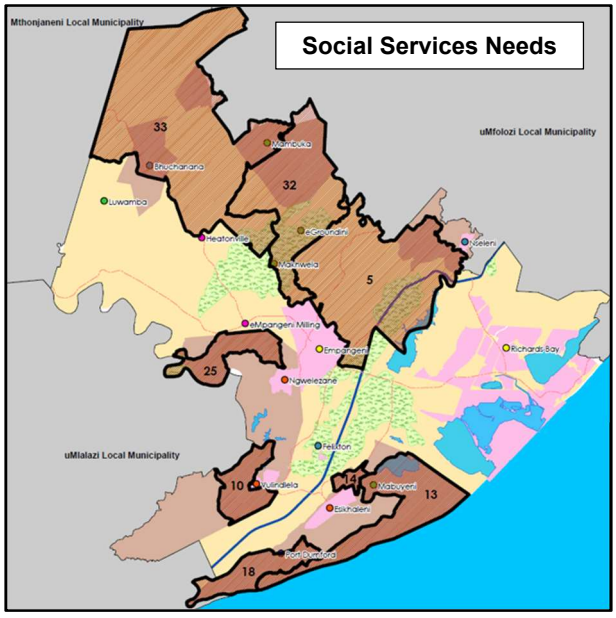
11.6.2 RURAL DEVELOPMENT

Analysis indicated and confirmed that the municipal poverty pockets correlate to the rural. predominantly Traditional Authority areas. As per the mapping hereunder the poverty pockets, based on access to basic services and access to social infrastructure.

Map 55: Municipal Poverty Pockets



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.



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.

The municipality has responded to the above situation with prioritising significant infrastructure investment, with a focus on service delivery in rural areas, as per the following table:

Table 74: Summary of Service Delivery Investment for Rural Areas

Project Description	2023/2024	2024/2025	2025/2026
Water Tankers	R4 400 000	R6 600 000	-
Sustainable Rural Roads (Ngamla eNIWE)	R7 640 000	R8 484 000	R8 000 000
Skips	R1 500 000	R2 000 000	R3 000 000
Rural Sanitation (VIPs)	R30 000 000	R37 839 900	R43 428 000
Ntambanana Boreholes	R4 000 000	R5 000 000	R5 000 000
Ntambanana Bulk Water Supply	-	-	R5 614 300
Mkhwanazi North – Zone J	-	R15 000 000	-
Mkhwanazi North – Zone Z	-	R15 000 000	R10 000 000
Mkhwanazi North – Zone G	R10 000 000	-	-
Ntambanana Water Reticulation	R25 000 000	R15 000 000	R20 000 000
Empembeni Bulk and Reticulation	R10 000 000	R15 000 000	R40 000 000
Madlebe (Bomvini) Reservoir 6 Upgrade	R1 500 000	R5 000 000	R1 500 000
Madlebe (Iniwe) Reservoir Upgrade	R1 500 000	R5 000 000	R2 000 000

High Mast Lighting Installation in Traditional Areas	R4 000 000	R4 000 000	R4 000 000
TOTAL	**R99 540 000**	**R133 923 900**	**R142 542 300**

Other measures are also being pursued and mooted to facilitate development and the delivery of projects in rural areas. Amongst others, partnerships are important to assist where municipal resources cannot meet the required needs. Access remains critical and where social type services cannot be established on a permanent basis in rural areas, mobile services should be considered. Also, improved economical access via public transport, should be prioritised to assist rural communities to access higher order services in more urban areas.

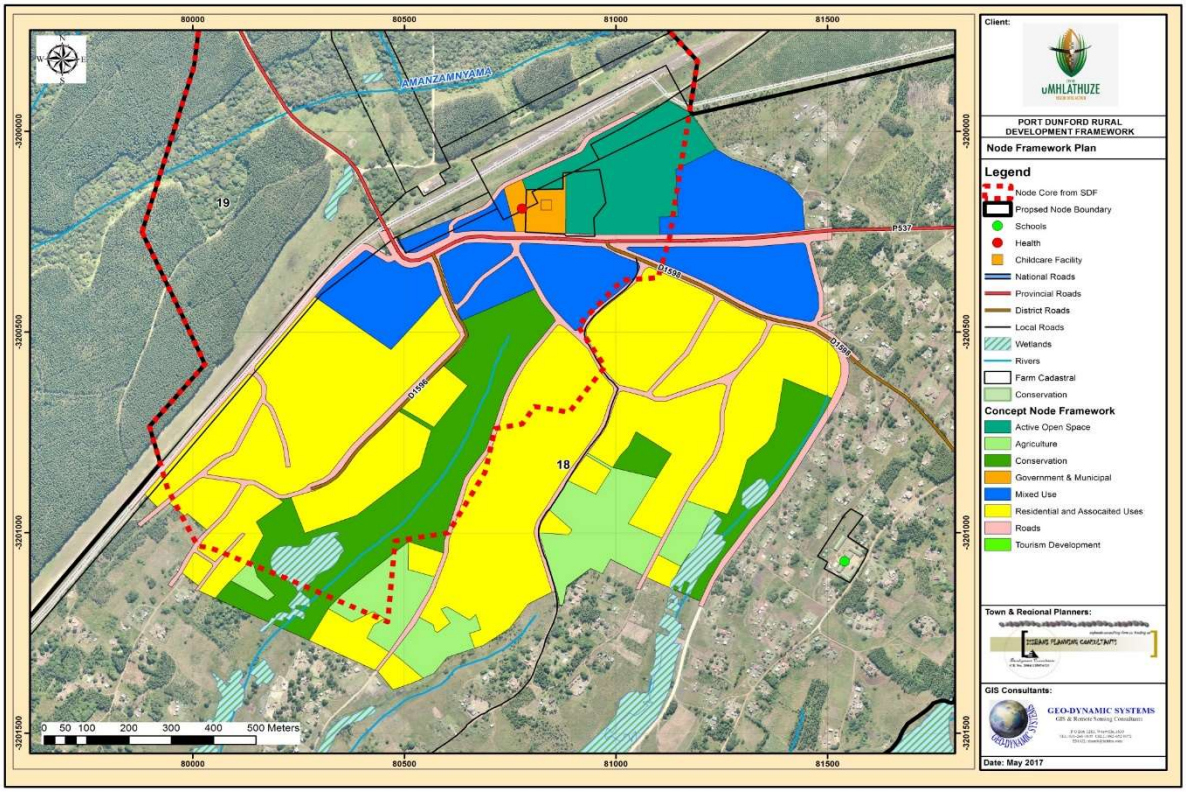
11.6.3 RURAL DEVELOPMENT FRAMEWORK PLANS

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.

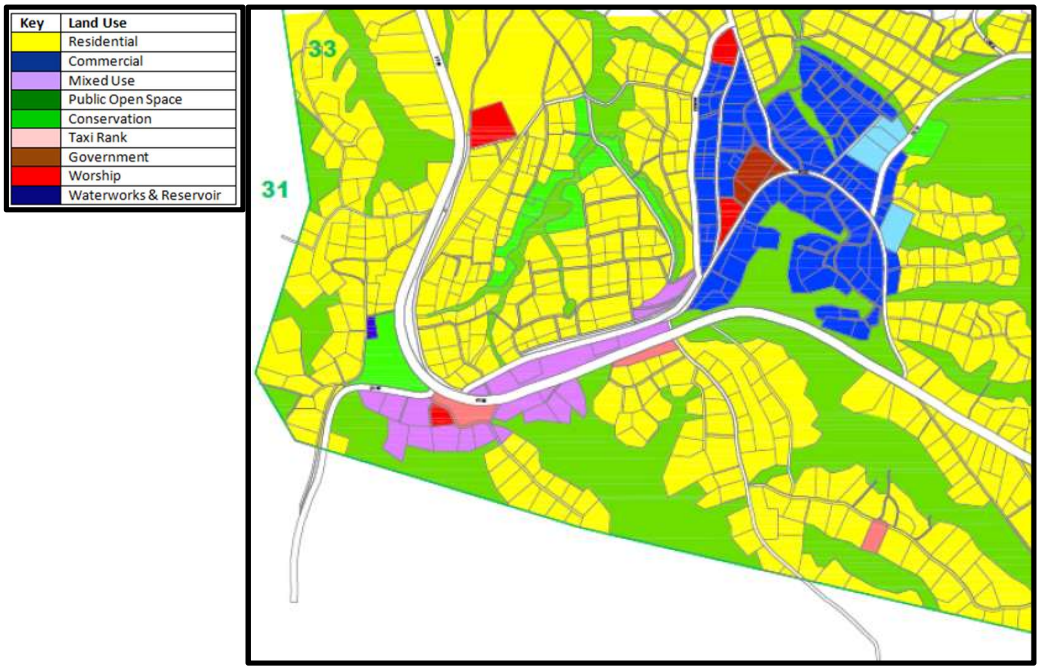
Phase	Project Name
1	Port Dunford Rural Development Framework Plan-Mkhwanazi Traditional Authority - completed
2	Buchanana Rural Development Framework Plan-Obuka Traditional Authority – completed
3	Hluma Rural Development Framework Plan-KwaBhejane Traditional Authority – completed
4	Mabuyeni Rural Development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

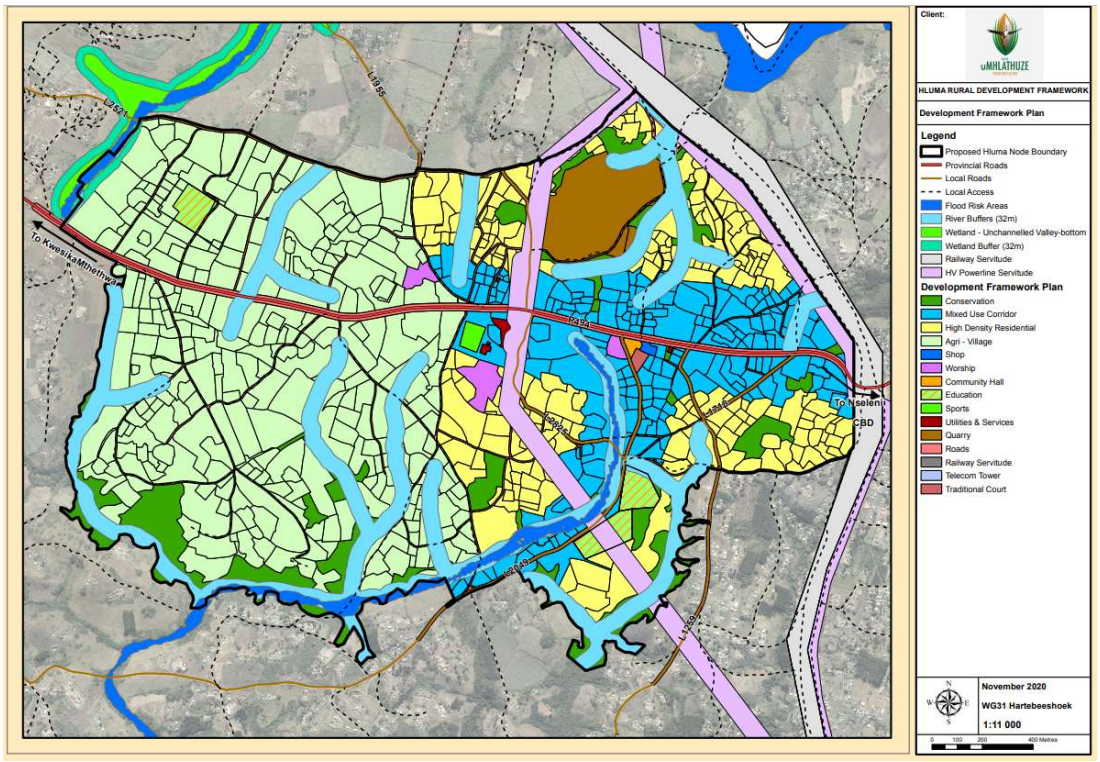
Map 56: Port Dunford Concept Plan



Map 57: Buchanana Concept Plan



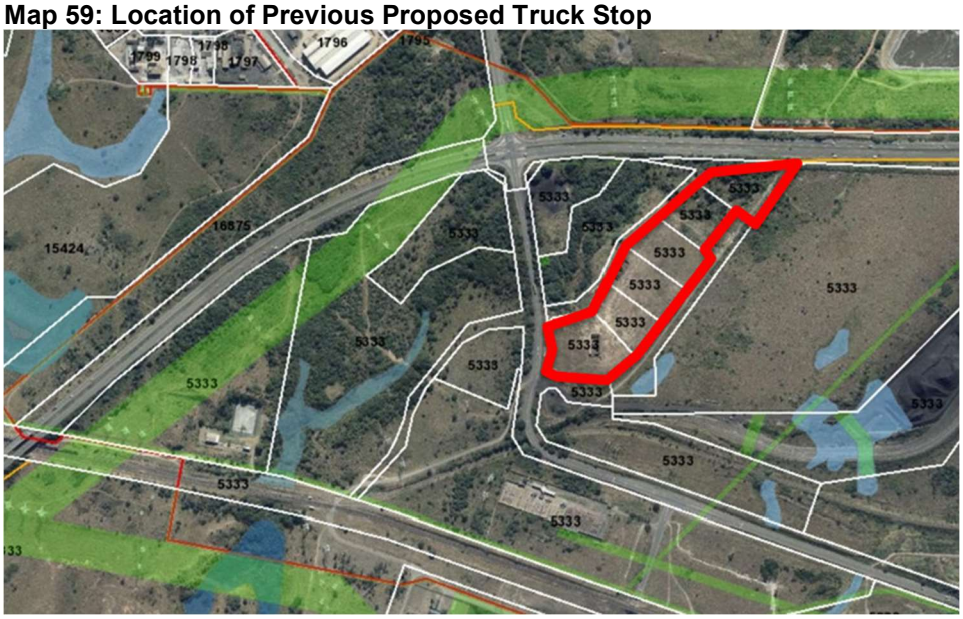
Map 58: Hluma Concept Plan



11.6.4 RESPONSES TO TRUCK CONGESION

During the last decade the Municipality has embarked on a process to develop a truck stop/staging areas. To this end, a tender process was followed and the rights to develop a truck stop awarded to a developer on 4 different portion of the Remainder of Erf 5333 with a combined area of 4,5Ha. The said property locality is as per hereunder:

Map 59: Location of Previous Proposed Truck Stop



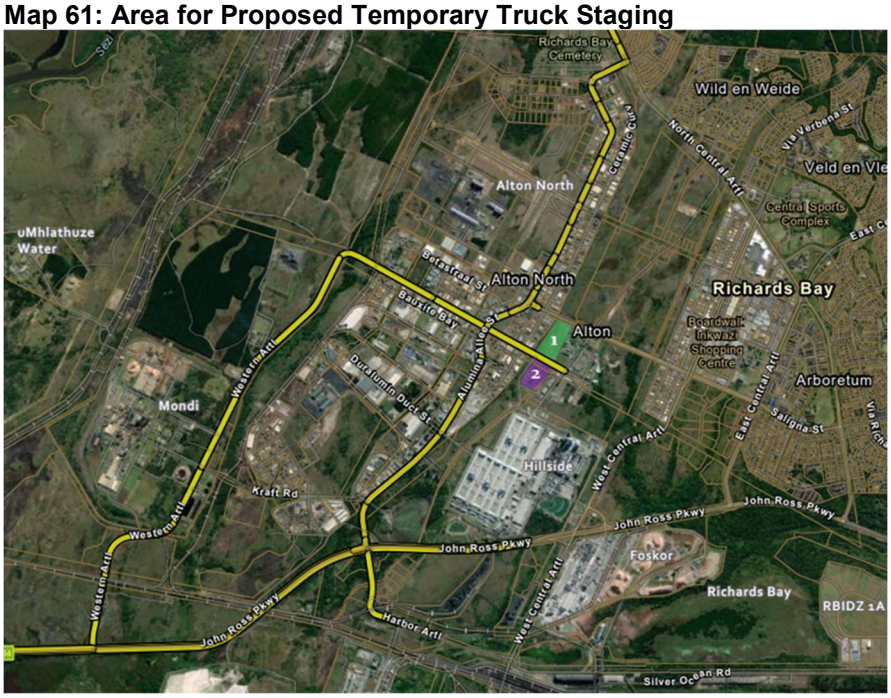
The above development did not take place though. The City of now pursuing the development of a truck stop on an alternative site, located on the Remainder of Erf 5333, accessed via the John Ross Parkway (R34) and approximately 15Ha in extent. The said property locality is as per hereunder:

Map 60: Location of Proposed Truck Stop

The process of obtaining the required environmental approvals has commenced for the above and a developer has also been procured for the above development.

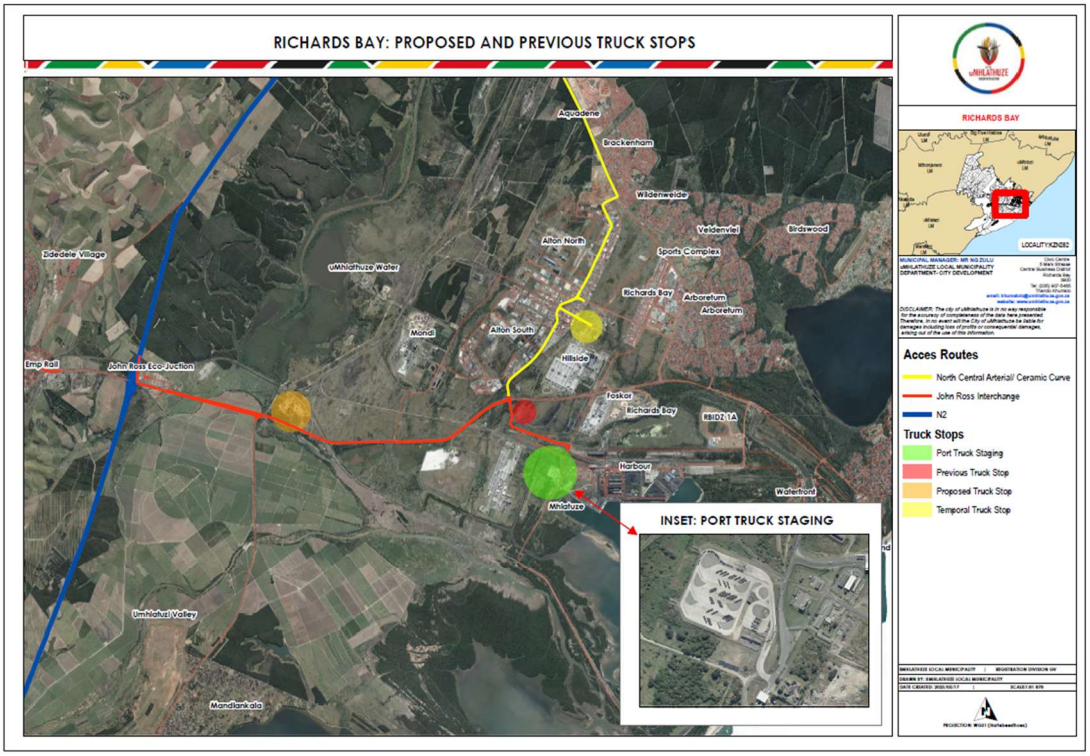
Given that the development of the truck stop will take some time, Council is pursuing a temporary solution and are investigating the possibility of utilizing two properties in the Alton Industrial Area for temporary truck staging purposes. The location of the said properties is indicated in the following map and are located on a Portion of Reserve 6 of 15825. The situation is critical given the unsafe situation of truck congestion on N2 emergency lane, John Ross Highway, Richards Bay and the Port of Richards Bay. The combined area of the two proposed portions is approximately 11,7 Ha and an estimated 350 trucks could be accommodated.

Map 61: Area for Proposed Temporary Truck Staging



A composite map of the proposals as outlined above is provided hereunder:

Map 62: Proposed, Previous and Temporary Truck Stop Localities



11.7 SPATIAL DEVELOPMENT PLAN (SDP)

The MEC has provided comments on the uMhlathuze SDF as follow:

i. The Municipality is encouraged to develop a Spatial Development Plan (SDP) and ensure alignment with SDF.
ii. The identification of portions of land for future housing development areas have to be undertaken.
iii. The Municipality should develop an Infrastructure Master Plan to re arrange the projects according to their levels of priority to determine in which phase of the 20-year plan they feature.
iv. The SDF should include a five year SDP that includes mapping and should identify what needs to be undertaken over the next five years to ensure that the overall spatial development vision, objectives, and strategies of the SDF will eventually be met in the longer term

Items (i) and (iv) are the focus of this section. It has to be noted that the Human Settlements Plan, and summarised Human Settlements Chapter, does reflect on (ii) above. Also, a very detailed assessment of infrastructure development projects is provided in the municipal CEF as well as the summary chapter that is contained in the SDF document.

11.7.1 APPROACH TO DEVELOPING A SPATIAL DEVELOPMENT PLAN

Whereas guidelines for the compilation of an SDP are not available, the uMhlathuze Municipality is herewith presenting information contained in the SDF and its source documents in a format toward compliance with the requirements of an SDP.

The main source documents being:

- uMhlathuze SDF Review (May 2023) – review in progress
- uMhlathuze CEF (May 2023) – review in progress

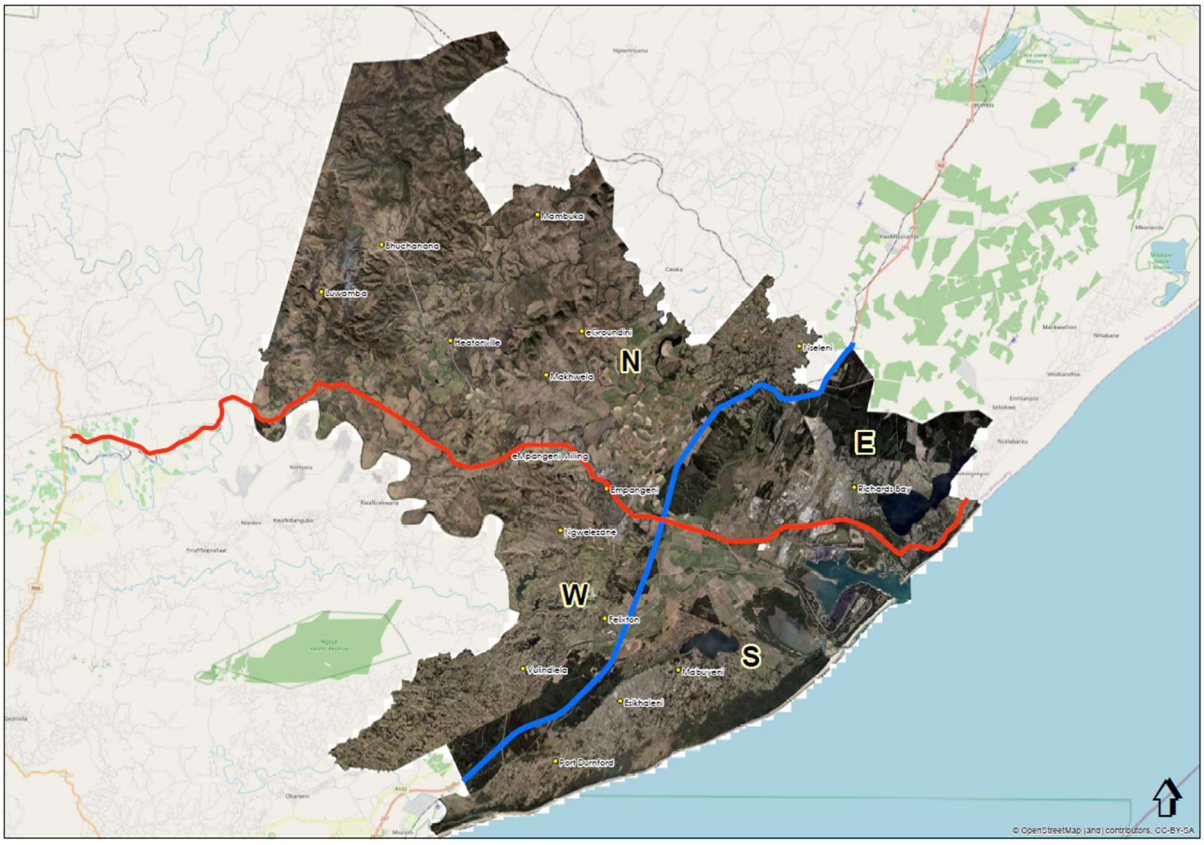
The following section provides more details on the following main components of the uMhlathuze SDP:

i. Development Quadrants
ii. Characteristics of the Quadrants
iii. Areas of Growth
iv. Service Delivery Priority Areas

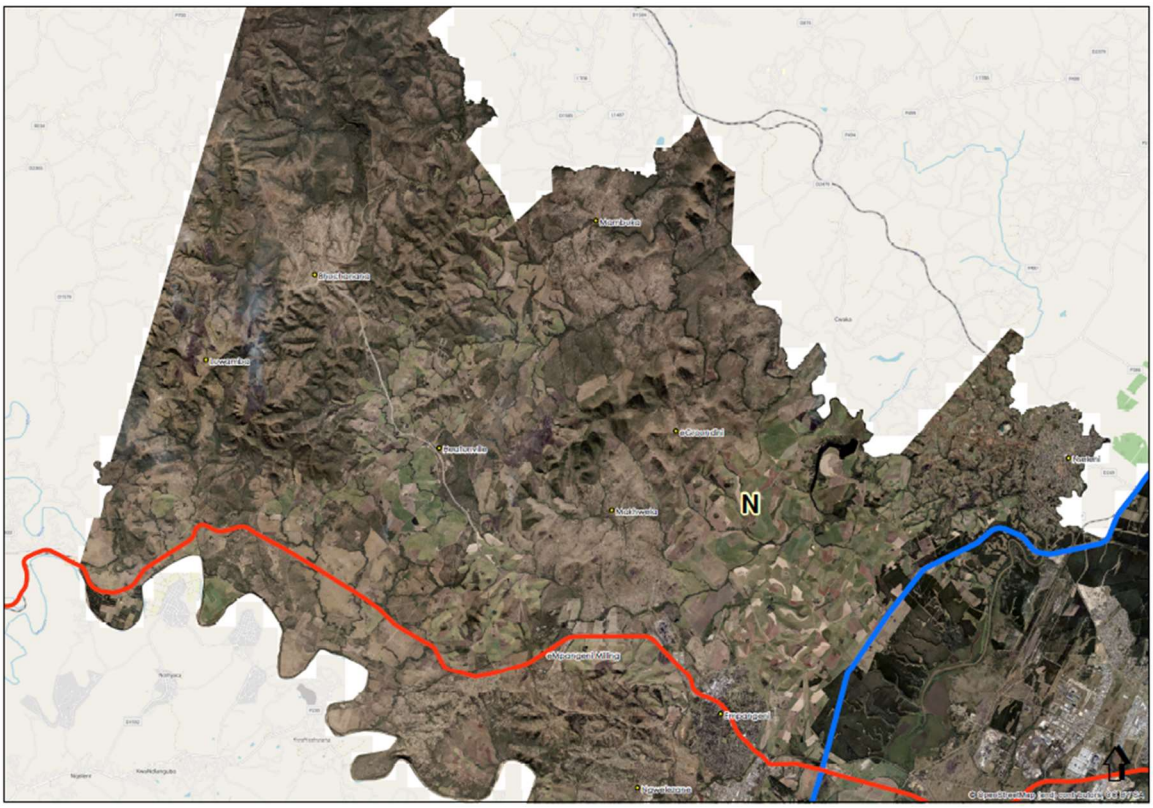
11.7.2 UMHLATHUZE DEVELOPMENT QUADRANTS

The municipal area has been divided into the four quadrants, referenced as N (North), E (East), S (South) and W (West). The purpose of the quadrant division is the creation of manageable areas for analysis, planning and future implementation monitoring. The quadrant division has been along the hard infrastructure boundary created by major transport routes, notably the N2 and the R34.

Map 63: Proposed Quadrants in uMhlathuze



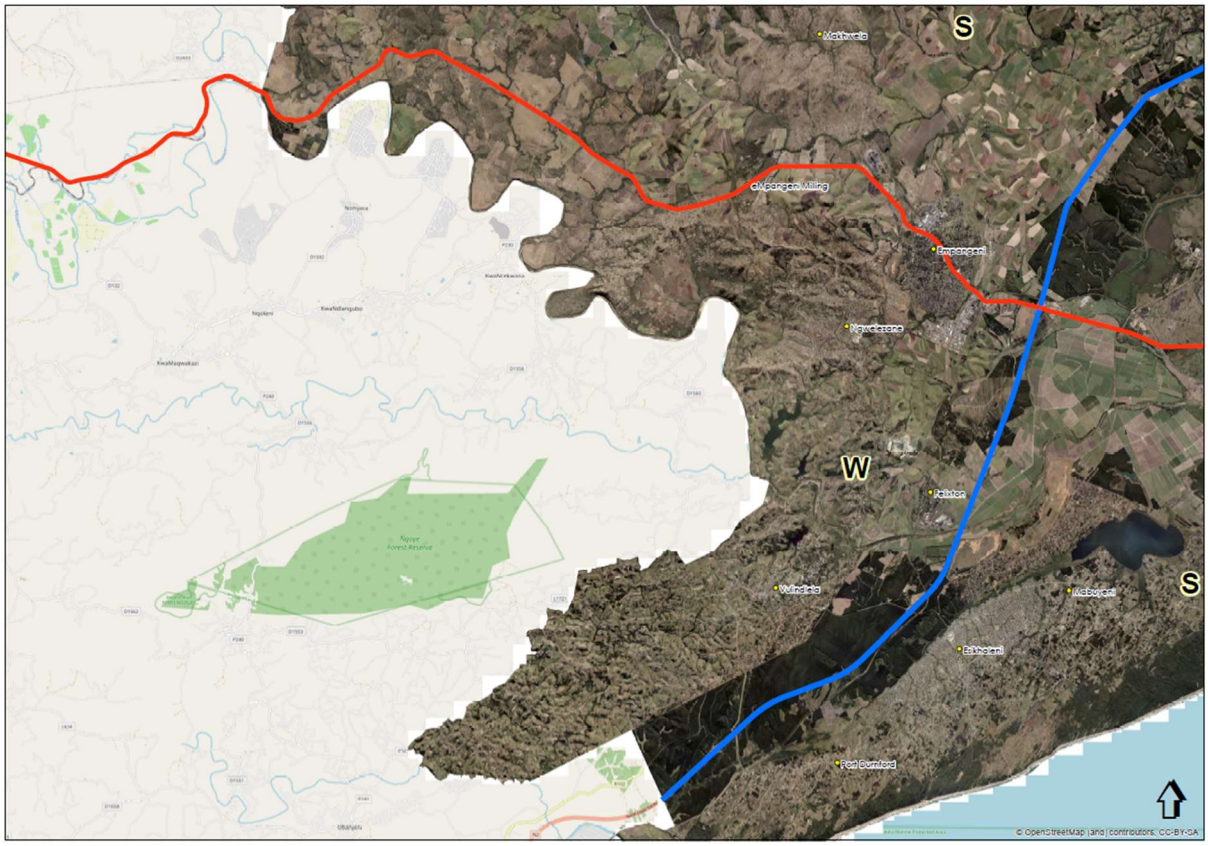
Map 64: Northern Quadrant



Map 65: Eastern Quadrant

Map 66: Southern Quadrant

Map 67: Western Quadrant



11.7.3 CHARACTERISTICS OF THE QUADRANTS

In this section, the quadrants are analyzed in terms of:

i. Spatial structuring elements
ii. Nodal structure prevalent in the quadrant area
iii. Poverty as indicated by levels of education, income levels, unemployment levels, access to piped water, access to hygienic toilets and waste management services.

This understanding of the quadrants is to inform service delivery and budget prioritization in relation to the identified quadrants.

NORTHERN QUADRANT

1.	**Spatial Structure Elements** Refer to: Map 8: Spatial Structuring Elements	○ Traditionally settled areas ○ Commercial agriculture areas ○ Formal Nature Reserve
2.	**Nodal Structure** Refer to: Map 10: Nodes and Corridors	○ Partial Primary Node of Empangeni ○ Tertiary Node of Nseleni and Buchanana ○ Opportunity Node of Heatonville ○ Rural Settlement Nodes
3.	**Poverty Indicators** Refer to: Map 18: Level of Education	○ More than 61% of adults over 20 years have not schooling ○ A large portion of the households earn less than R1600 per month

	Map 18: Income Levels Map 20: Unemployment Levels Map 27: Access to Piped Water Map 28: Access to Hygienic Toilets Map 32: Waste management services	○ High percentage of adults (over 15 years) are unemployed ○ Very high percentage (in some areas more than 61%) do not have access to piped water. ○ Wards 5 and 33 have the highest percentage of households (more than 61%) without access to hygienic toilets. ○ Access to waste management services is limited to skips apart from the urban areas of Empangeni that have access to trolley bins.

EASTERN QUADRANT

1.	**Spatial Structure Elements** Refer to: Map 8: Spatial Structuring Elements	○ Commercial agricultural areas ○ Agri-Villages of Mzingazi and Mandlazini ○ Coastal/Natural lakes ○ Coastline ○ Richards Bay Industrial Area ○ Richards Bay Commercial Area ○ Industrial Development Zone
2.	**Nodal Structure** Refer to: Map 10: Nodes and Corridors	○ Primary Node of Richards Bay
3.	**Poverty Indicators** Refer to: Map 18: Level of Education Map 19: Income Levels Map 20: Unemployment Levels Map 27: Access to Piped Water Map 28: Access to Hygienic Toilets Map 32: Waste management services	○ Less than 10% of adults have not schooling ○ Less than 10% of the households earn less than R1600 per month ○ Comparatively lower percentage of adults (over 15 years) are unemployed ○ Majority if the quadrant has less than 10% of households with no access to piped water. ○ This quadrant has a comparatively low percentage (less than 10% of households) without access to hygienic toilets. ○ The majority of the quadrant is serviced with trolley bin refuse removal

SOUTHERN QUADRANT

1.	**Spatial Structure Elements** Refer to: Map 8: Spatial Structuring Elements	○ Port of Richards Bay ○ Coastal/Natural lakes ○ Coastline ○ Traditionally settled areas ○ Commercial agriculture areas
2.	**Nodal Structure** Refer to: Map 10: Nodes and Corridors	○ Secondary Node of Esikhaleni ○ Emerging Tertiary Node of Port Durnford ○ Rural Settlement Nodes
3.	**Poverty Indicators** Refer to: Map 18: Level of Education Map 19: Income Levels	○ Some areas (notably the formal urban areas) have a higher level of schooling while some parts of the quadrant – mainly at more remote distances from the Esikhaleni town – have a low level of adult education.

	Map 20: Unemployment Levels Map 27: Access to Piped Water Map 28: Access to Hygienic Toilets Map 32: Waste management services	○ A large portion of the households earn less than R1600 per month ○ In the formal town of Esikhaleni, unemployment levels are not as high as in the surround Traditional Council land. High levels of unemployment (above 61%) prevalent in Ward 18. ○ Generally the majority of the quadrant has less than 10% of households with no access to piped water but this percentage is higher in Wards 12 and 13 ○ This quadrant has a comparatively low percentage (less than 10% of households) without access to hygienic toilets. The area of wards 13 and 18 have between 11 and 40% households with no access to hygienic toilets. ○ Access to waste management services is limited to skips apart from the urban areas of Esikhaleni that have access to trolley bins.

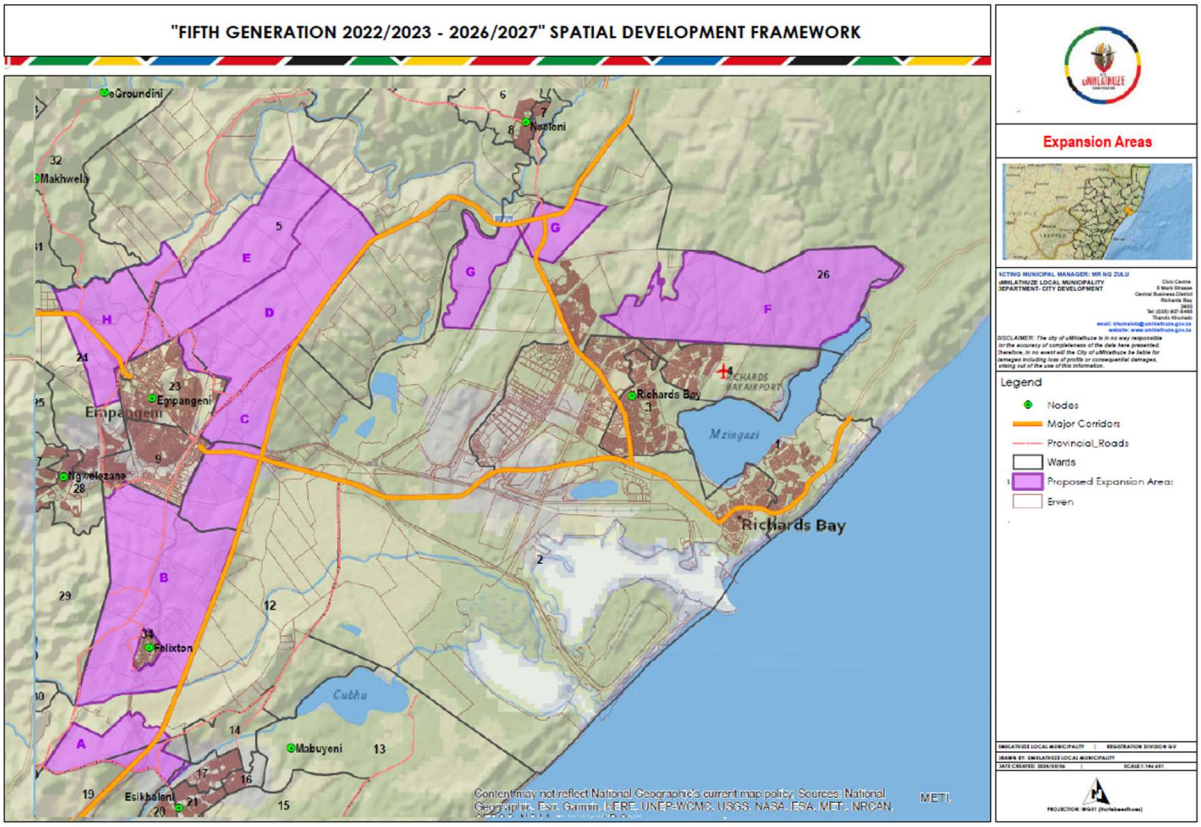
WESTERN QUADRANT

1.	**Spatial Structure Elements** Refer to: Map 8: Spatial Structuring Elements	○ Port of Richards Bay ○ Traditionally settled areas ○ Commercial agriculture areas
2.	**Nodal Structure** Refer to: Map 10: Nodes and Corridors	○ Partial Primary Node of Empangeni ○ Secondary Node of Ngwelezane ○ Tertiary Node of Felixton
3.	**Poverty Indicators** Refer to: Map 18: Level of Education Map 19: Income Levels Map 20: Unemployment Levels Map 27: Access to Piped Water Map 28: Access to Hygienic Toilets Map 32: Waste management services	○ Some areas (notably the formal urban and private owned areas) have a higher level of schooling while some parts of the quadrant have a low level of adult education ○ A large portion of the households earn less than R1600 per month ○ High percentage of adults (over 15 years) are unemployed ○ Unemployment levels similar to S quadrant and highest level of unemployment in Wards 24 and 28. ○ Ward 31 has more than 41% of households with no access to piped water, Wards 10, 11 and 24 has between 11 and 40% of households with no access. ○ Access to hygienic toilets in this quadrant is lower than in the Eastern and Western quadrant but better than the northern quadrant. ○ Access to waste management services is limited to skips apart from the urban areas of Felixton and Vulindlela that have access to trolley bins.

11.7.4 AREAS OF GROWTH

The uMhlathuze SDF has identified a number of expansion zones (refer to map hereunder) following a technical analysis and consideration of a number of development principles, i.e. to limit development expansion into environmentally sensitive areas, to concentrate development at areas of opportunity etc.

Map 68: SDF Expansion Areas



Development and urbanization trends have been observed for the municipal area. Of significance is the extent of per-urban development that has taken place as indicated in the series of aerial images herewith:

Figure 65: Peri-urban Development adjoining Ngwelezane

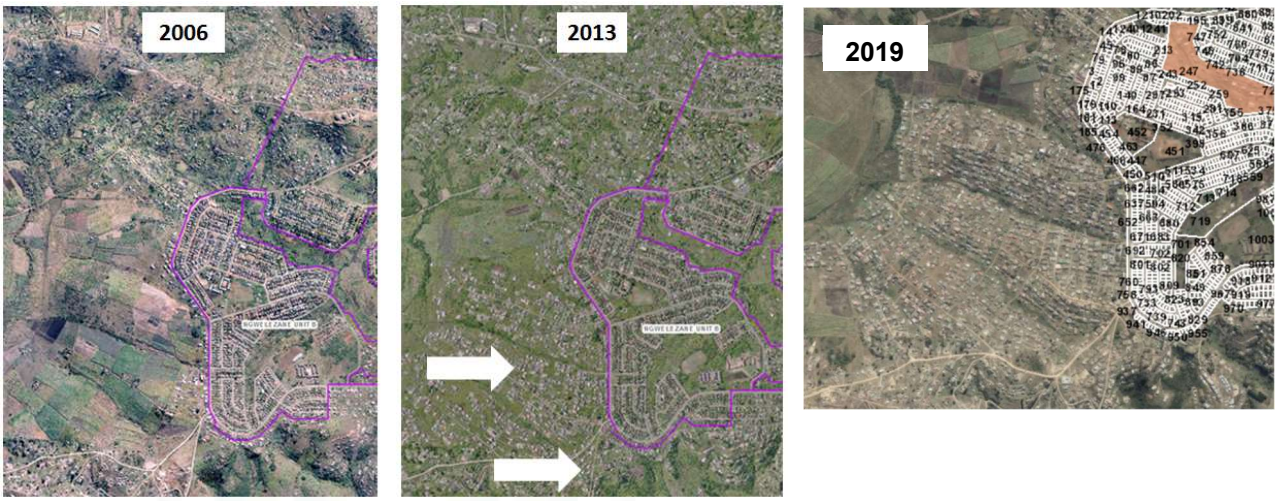
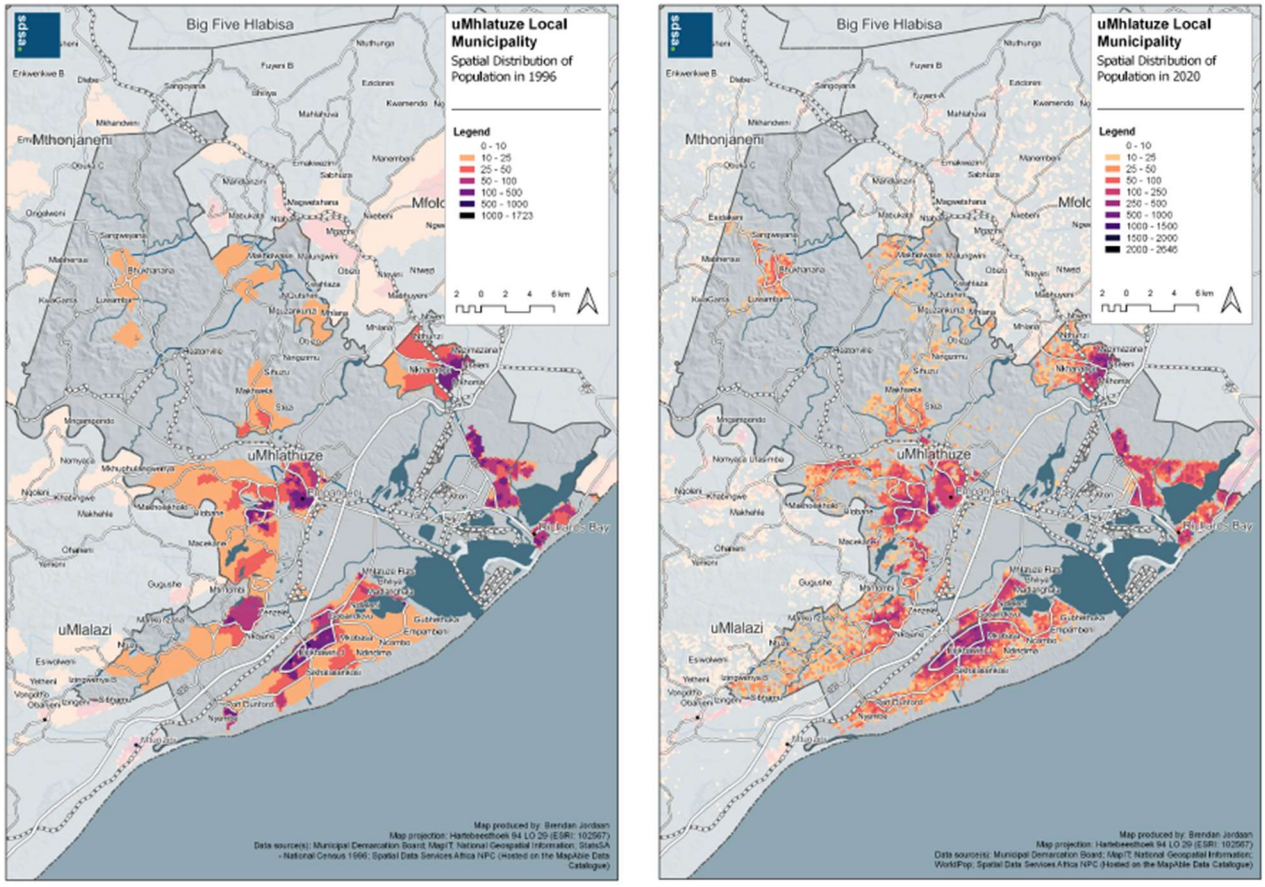


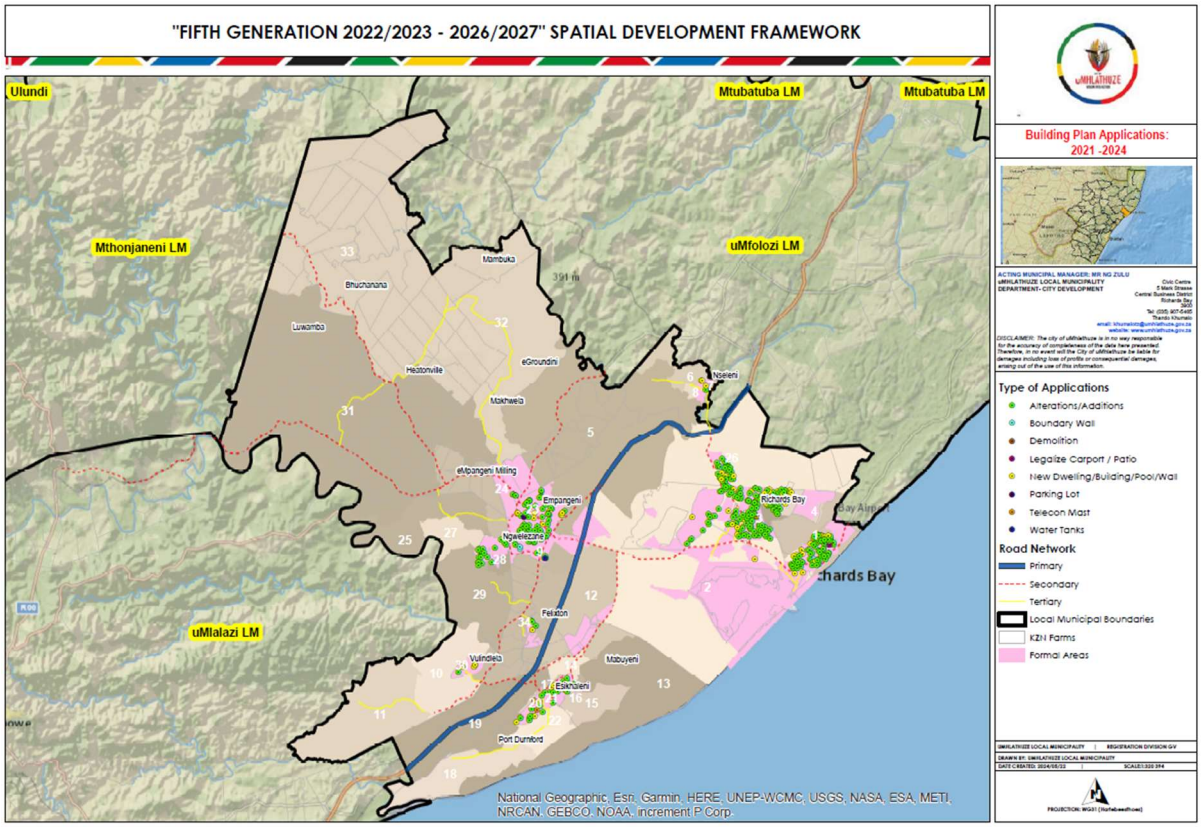
Figure 66: Peri-urban Development adjoining the Richards Bay Airport

Map 69: Spatial Distribution of Population in 1996 and 2020



A further indication of growth/development taking place in the main urban nodes can be made from the following analysis of building plan applications as reflected in the following map.

Map 7: Building Plan applications (2021-2024)



From the above the concentration of applications in the formal urban areas of Richards Bay, Empangeni, Ngwelezane, Esikhaleni and Nseleni is noted. This trend is considered as an indication that development is taking place in the larger nodal areas.

11.7.5 SERVICE DELIVERY PRIORITY AREAS

HUMAN SETTLEMENT DEVELOPMENT

The location of human settlement developments, given the due process that is followed, is indicative of a priority awarded to a certain type (integrated human settlement) at a specific location. The Municipality undertook a process to identify land suitable for human settlement development based on the following criteria:

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

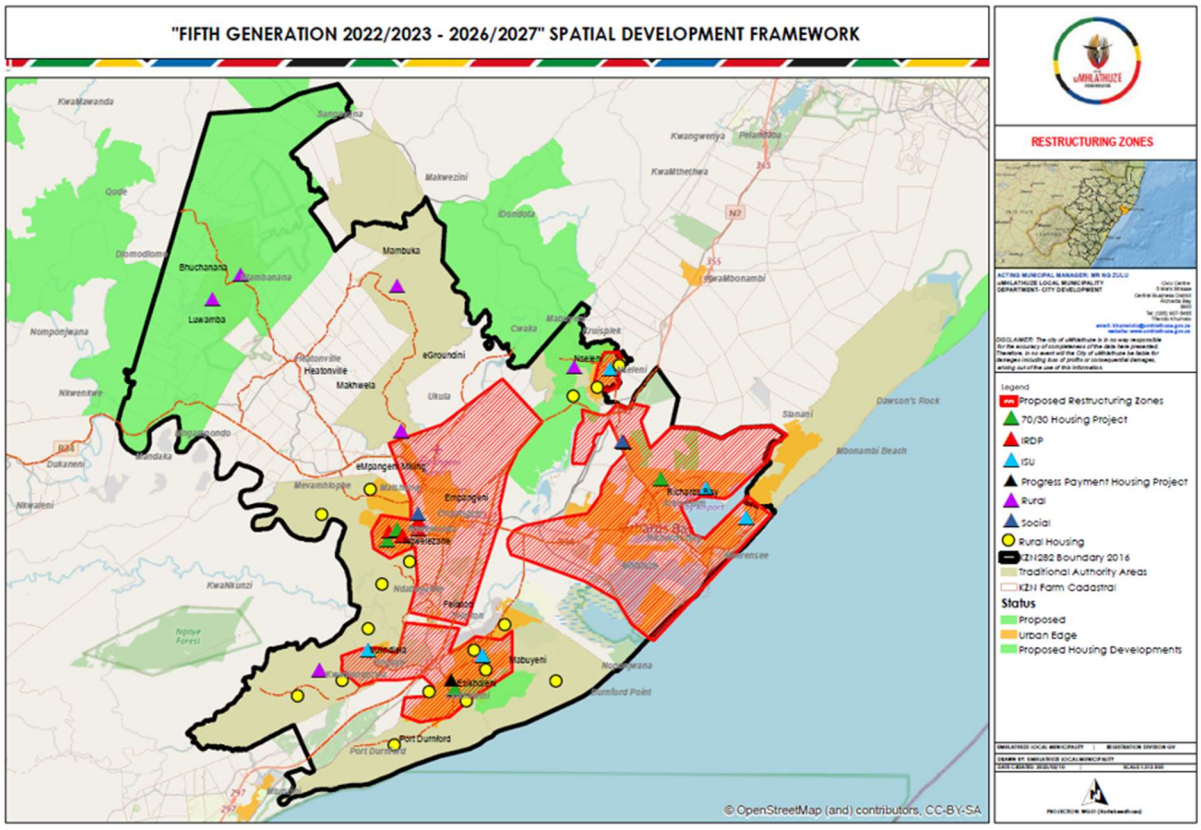
In context of the above, Priority Human Settlements and Housing Development Areas (PHSHDAs) were gazetted for uMhlathuze. The intention of PHSHDAs being to advance human settlement spatial transformation and consolidation by ensuring the delivery of housing to restructure and revitalize towns and cities, strengthen the livelihood prospects of households and overcome apartheid spatial patterns by fostering integrated urban forms.

The following table details the identified PHSHDAs in the uMhlathuze Local Municipality.

Table 75: Priority Human Settlements Development and Housing Development Areas (PHSDHAs)

PHSHDA	Main Places	Ward numbers
Empangeni	Empangeni Ngwelezane	5,9,23,24,25,27,28,29 & 34
eSikhaleni Vulindlela Corridor	Esikhaleni Vulindlela	10,12,13,14,15,16,17,18,19,20,21,22 & 30
Richards Bay	Richards Bay, Nseleni	1,2,3,4,5,6,7,8 & 26

Map 8: Restructuring Zones

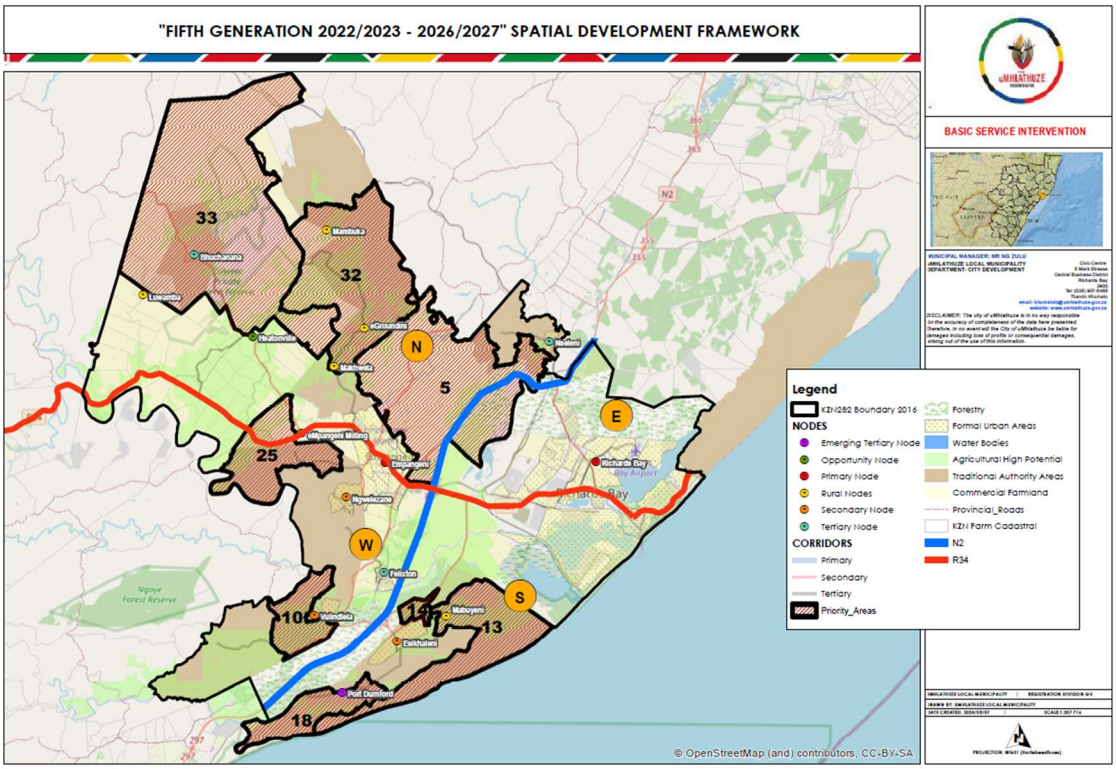


An informal settlement upgrade programme is also being pursued that will contribute to alleviating challenges that have emerged in peri-urban areas.

BASIC SERVICES INTERVENTION AREAS

From the analysis of the four quadrant areas, area characteristics in terms of levels of access to a set of basic services was provided. In response to such, the following mapping is a consolidation of these areas in relation to the quadrant as earmarked.

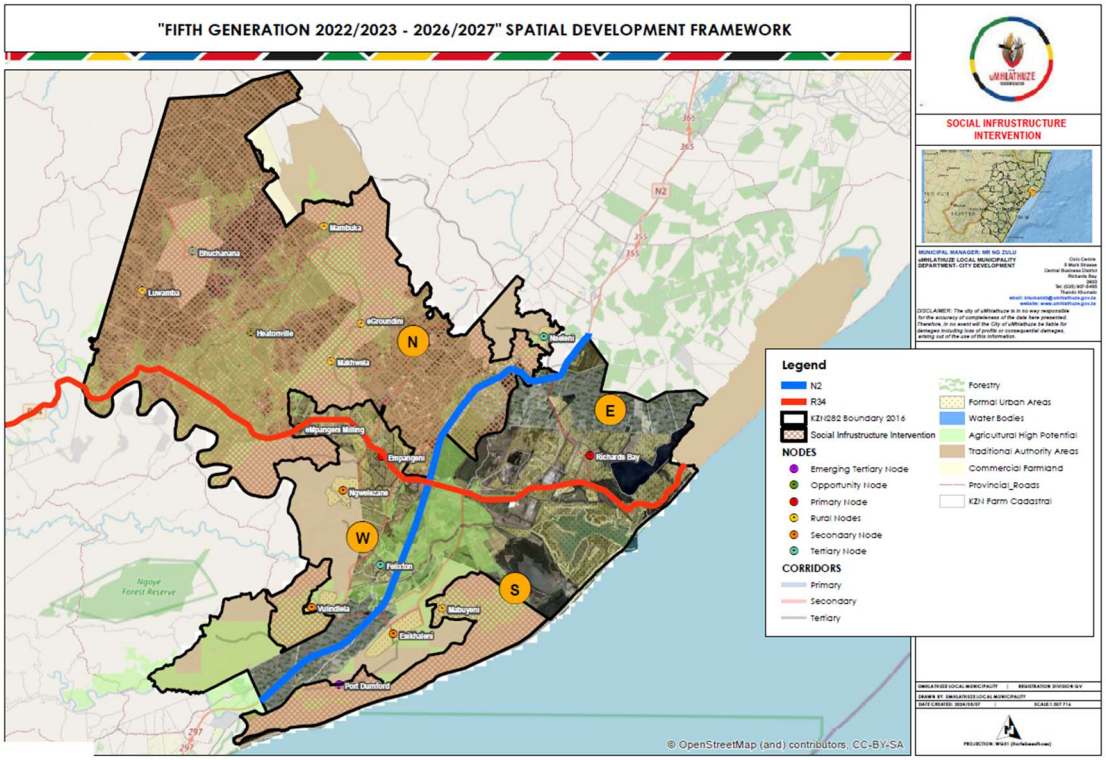
Map 70: Basic Services Intervention Areas



SOCIAL INFRASTRUCTURE INTERVENTION

From the analysis of the four quadrant areas, area characteristics in terms of levels of access to social infrastructure was provided. In response to such, the following mapping is a consolidation of these areas in relation to the quadrant as earmarked.

Map 71: Social Infrastructure Intervention Areas



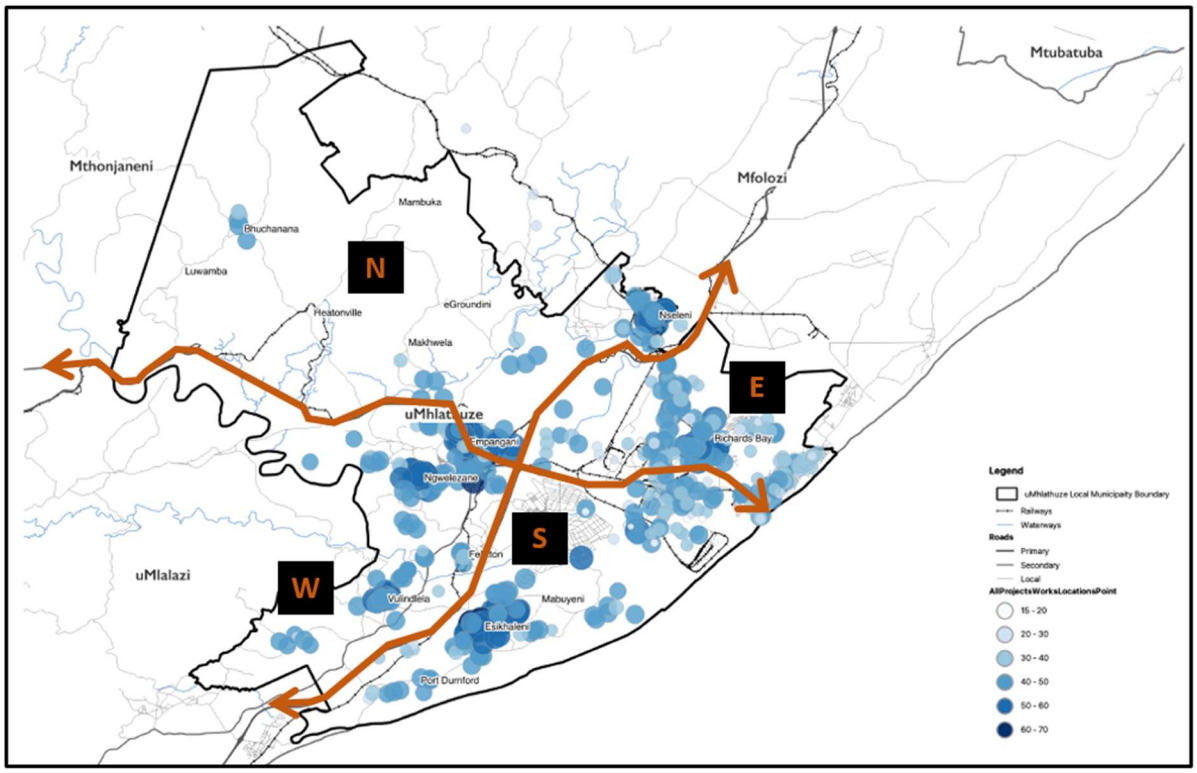
BUDGETING PRIORITY AREAS

The municipal funding envelope, as determined in the Long Term Financial Plan (LTFP), is less than the required capital demand. A prioritisation model has been compiled as per the following rationale:

- Economic Alignment: Revenue generating assets, economic activity index, population density, priority portfolio (catalytic projects)
- Financial Alignment: Monetary impact, co-funding, affordability
- Social Alignment: Social facilities and responsible units, priority programmes, social facilities index
- Technical Alignment: Services, urban morphology index, service based priority index, ruggedness index, population index
- Strategic Alignment: Functional area, priority development area, specific development area, urban development boundary

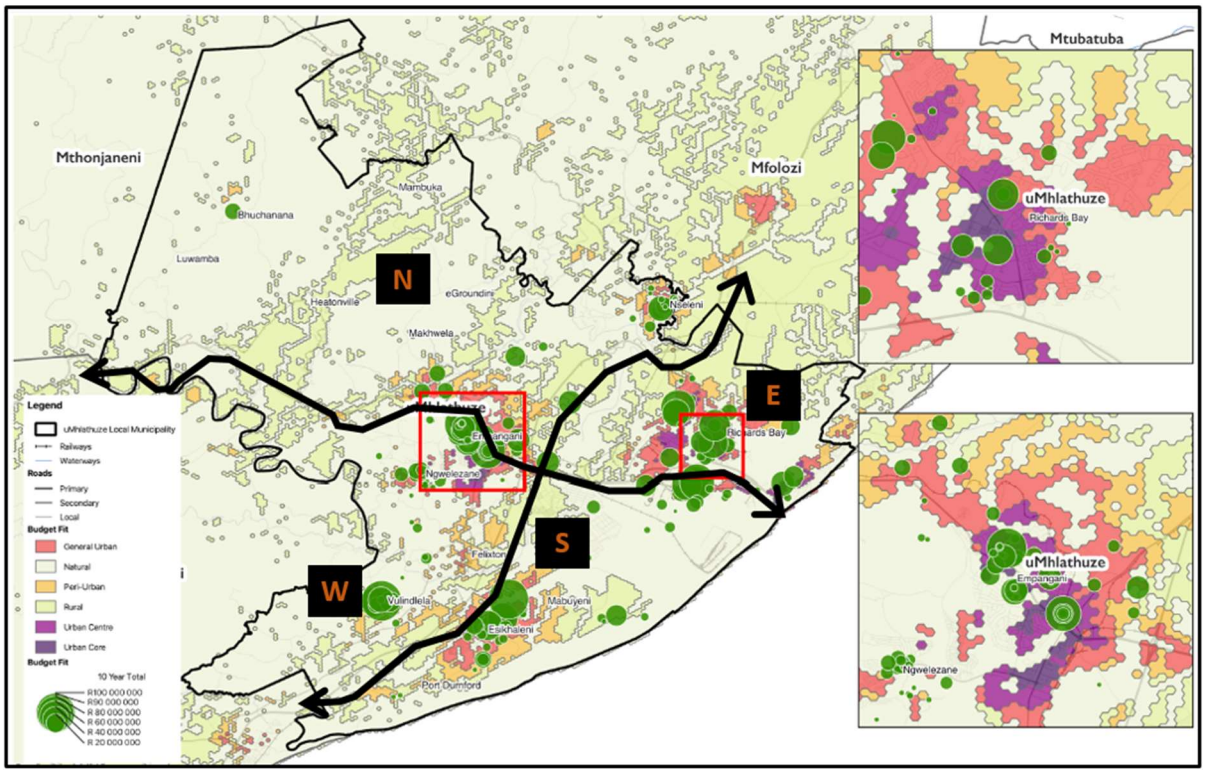
Various strategic documents/strategies/plans and frameworks informed the above prioritization rationale and the outcome of the application of the spatial prioritisation has the result of spatially based prioritisation enables, i.e. spatial targeting as outlined in the following map.

Map 72: Spatial Distribution of Prioritisation



The spatial representation of the 10-year budget is depicted in the following map in relation to the identified quadrants. Considering the prioritisation rationale the location and quantitative value of investment is indicated.

Map 73: Planned 10 Year Budget Scenario



11.8 DEVELOPMENT OF INGONYAMA TRUST BOARD LAND

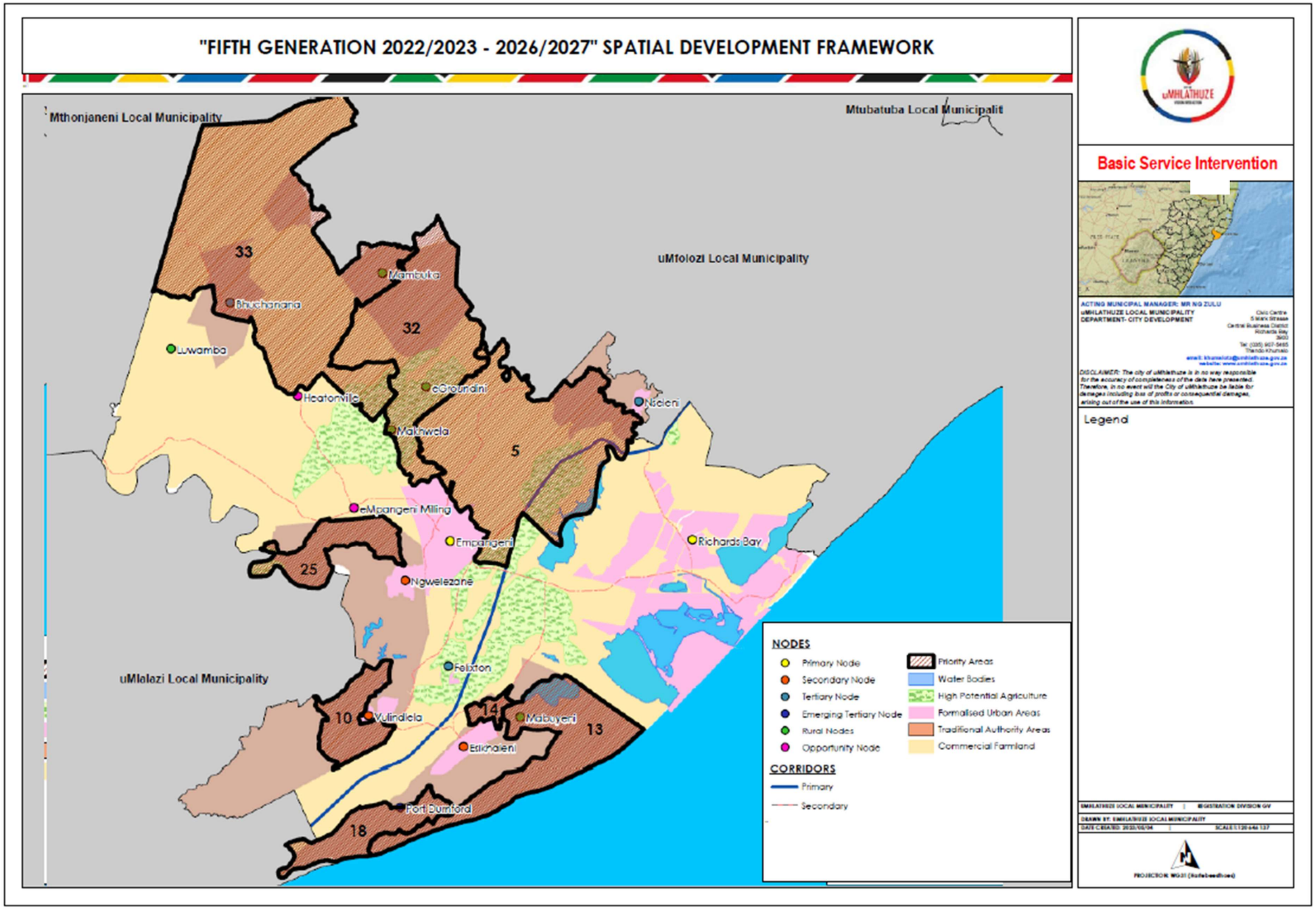
It is a legal requirement for all municipalities to prepare and enforce a wall-to-wall scheme within its area of jurisdiction for all large developments to be compliant and approved by the planning authority. The process in terms of the development in Ingonyama Trust Board (ITB) land remains challenging. 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:

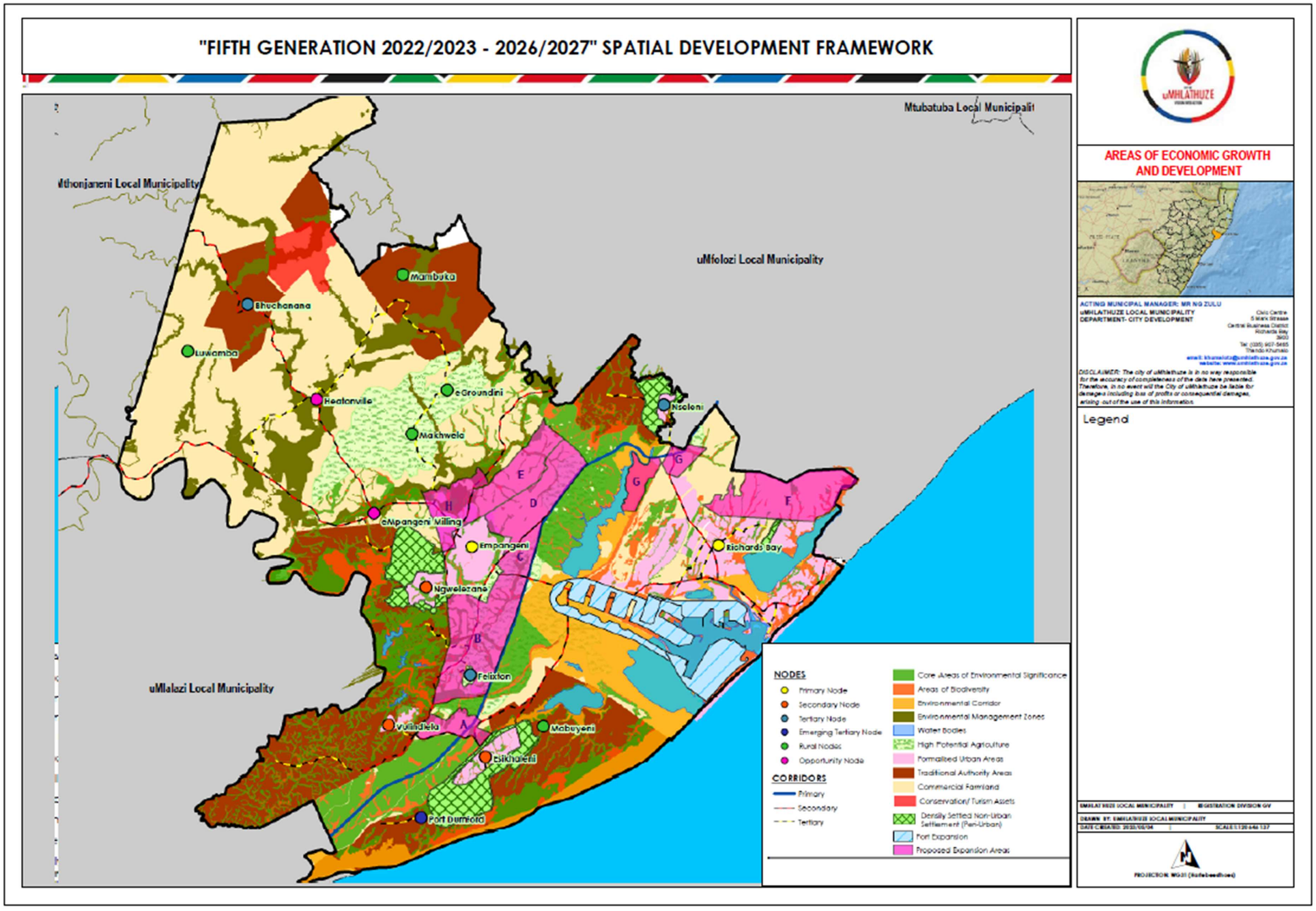
1. Council has (2019) updated its aerial photography and this has to be undertaken at regular intervals.
2. The need to confirm cadastral information of ITB areas, the extent of leases over such areas as well as servitudes or service corridors.
3. Create affected properties in GIS in order to start preparations 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 74: 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

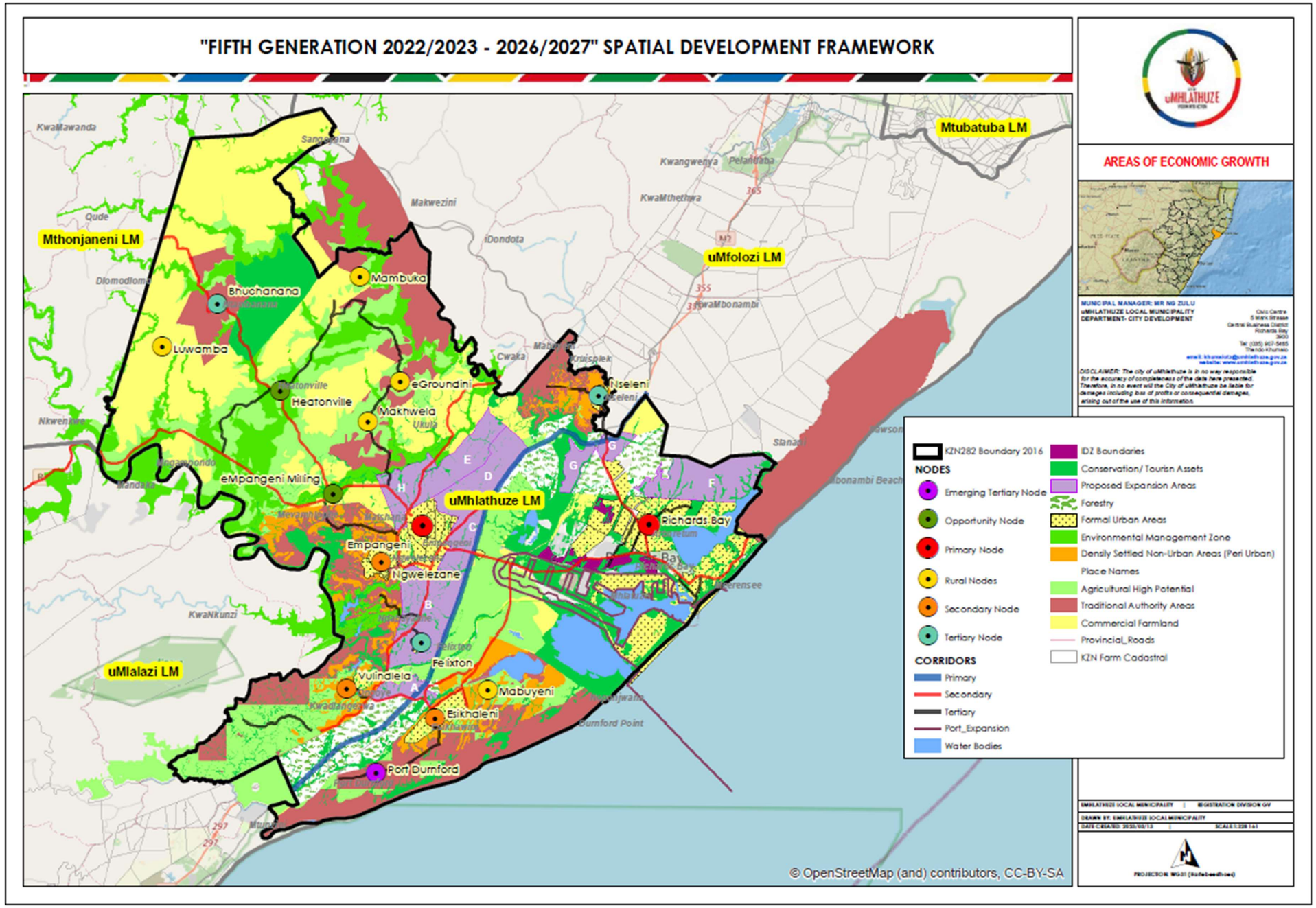
Map 75: Areas of Economic Growth and Development



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 76: Settlement Intervention Areas



<u>Primary Nodes</u>

- 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.

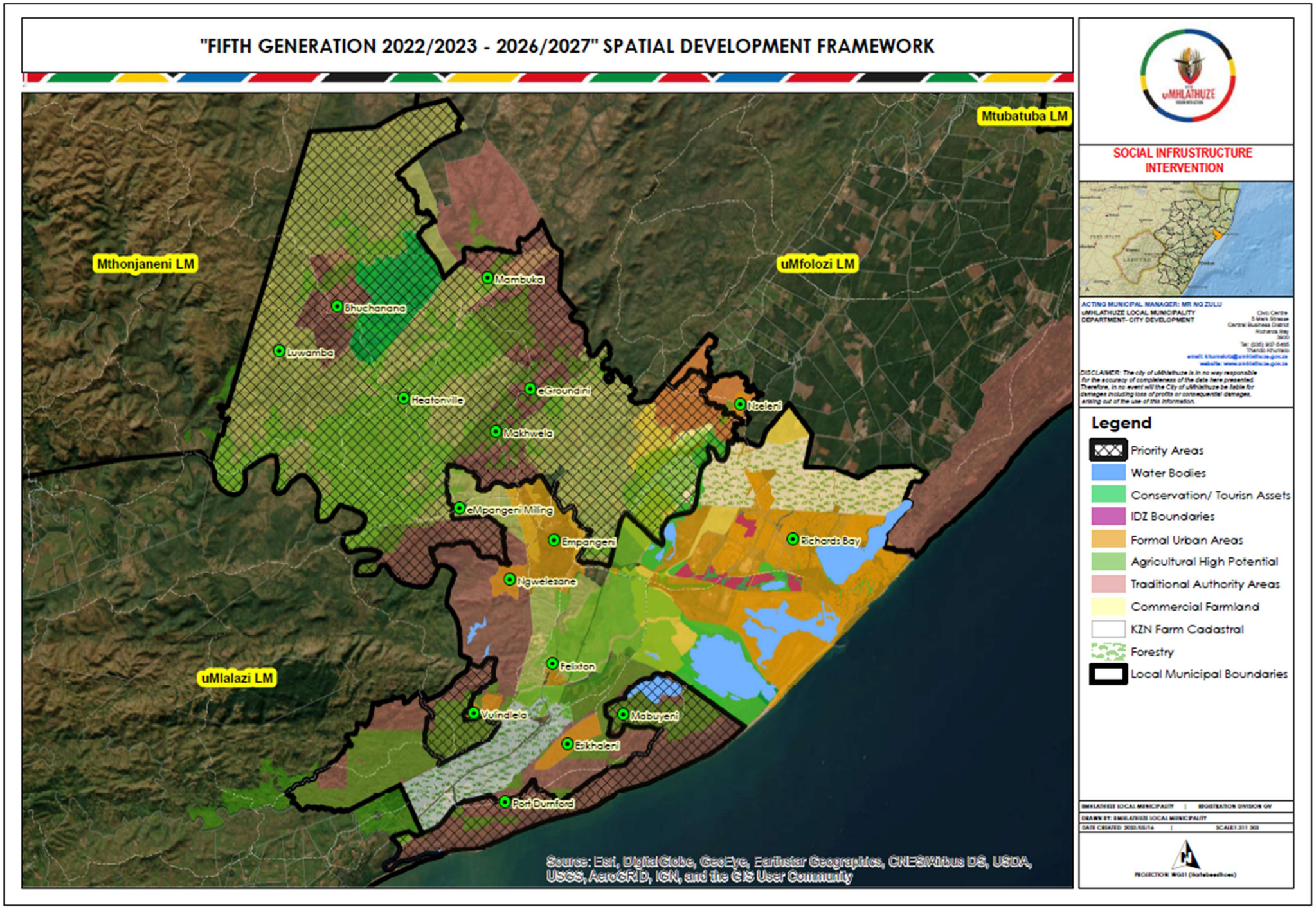
<u>Secondary Nodes</u>
Development of Precinct Plans to provide development vision for the area and provide possible solutions to the development, densification, land use management and economic challenges. Interventions aimed at fostering the Township Economy and supporting the second economy.

<u>Tertiary Nodes</u>
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.

<u>Opportunity Nodes</u>
Development of Precinct Plans to provide development vision for the area and provide guidance for the development, land use management and economic growth.

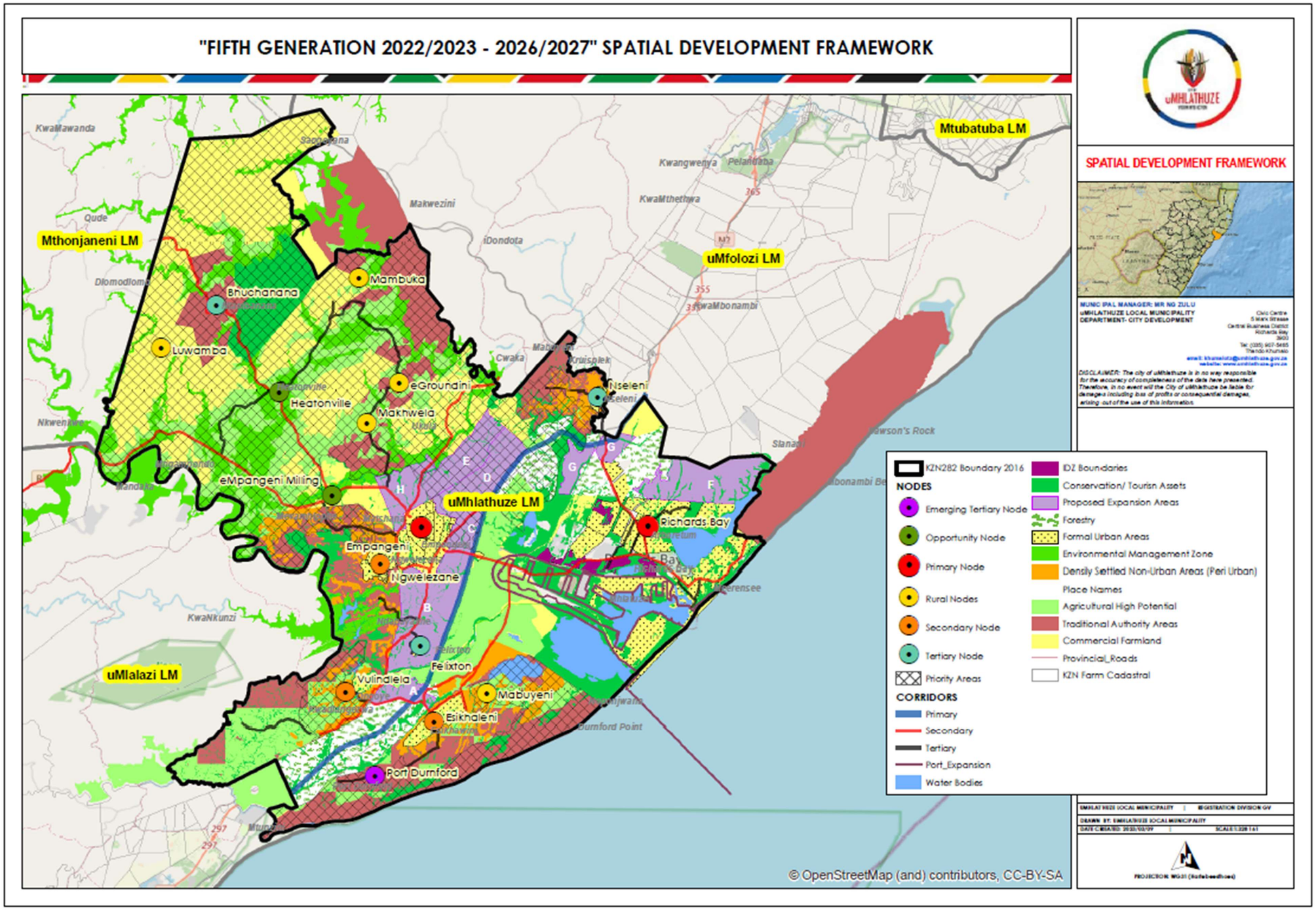
<u>Rural Nodes</u>
Development of Development Framework Plans which will provide guidelines for translation of Spatial Development Intentions into Land Use, Transport, Environmental, Infrastructure developments.

Map 77: 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 78: 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
- 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.

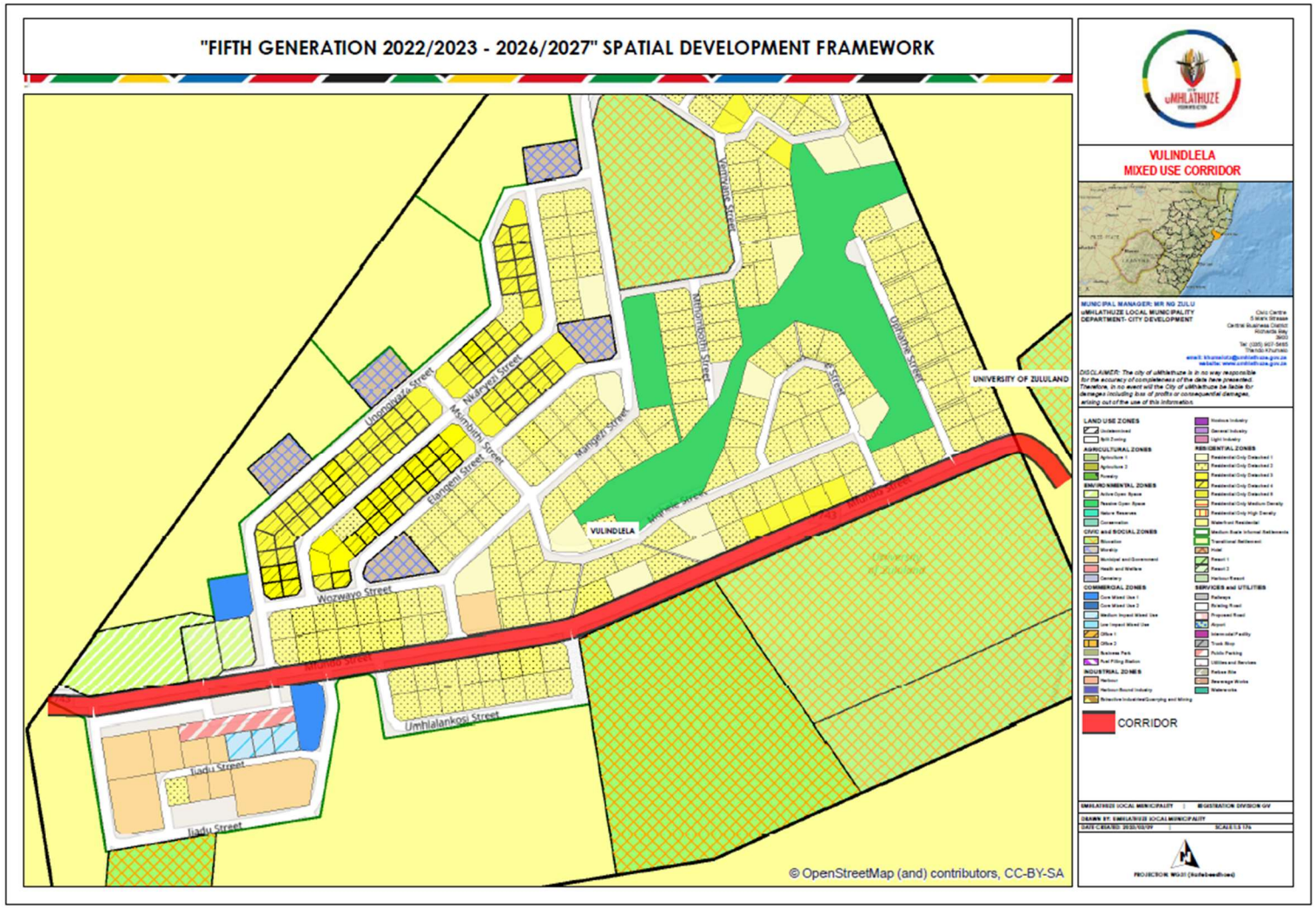
Logistics:
Warehousing of material considered non-noxious or non-hazardous are permitted in buildings in this zone. Transportation, transhipment and related uses are permitted. Outdoor storage, as both an independent and an ancillary use, may be permitted in this zone, subject to certain restrictions 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.

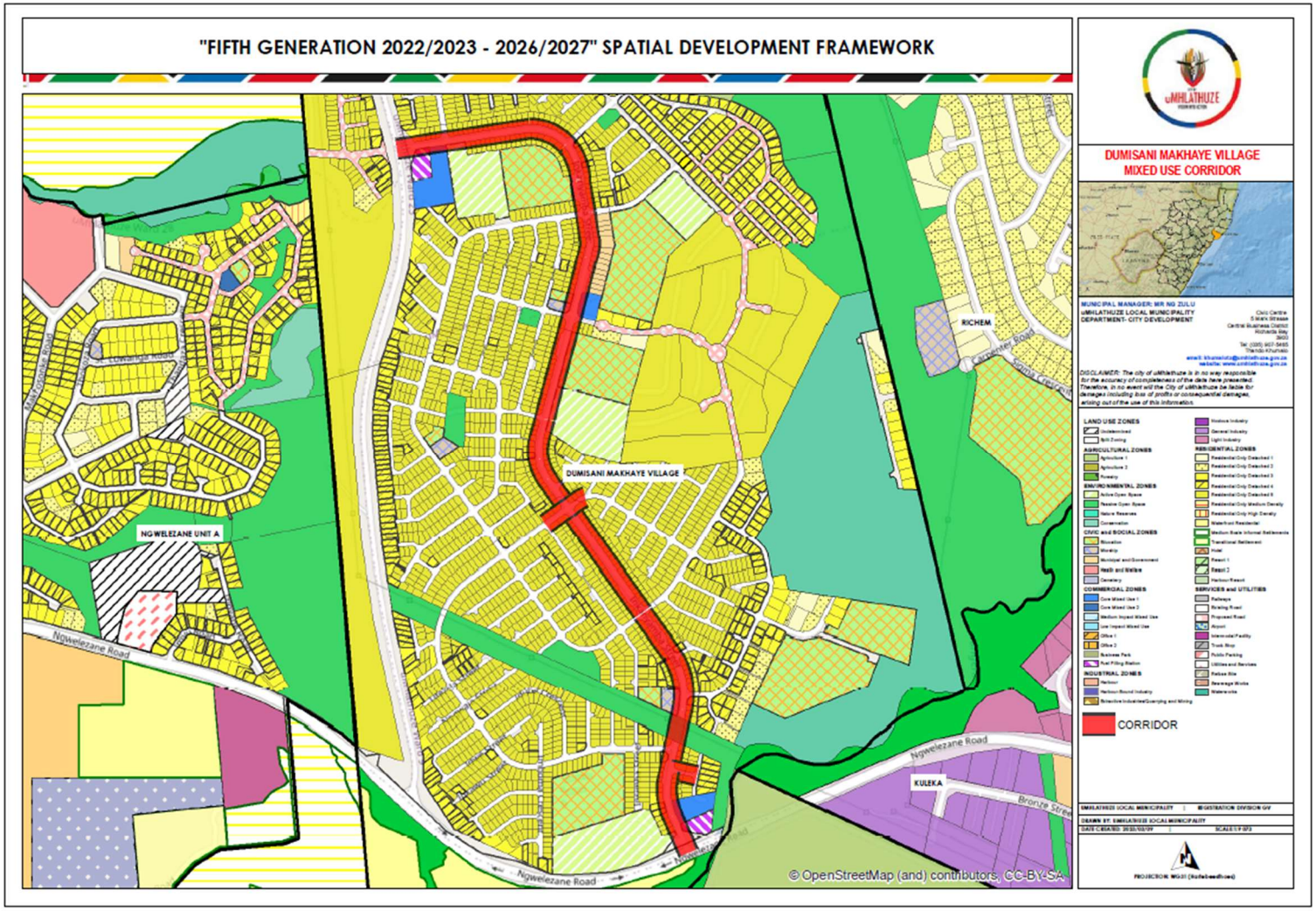
The listed zones for the mixed use land use category are supporting the incremental planning approach and socio-economic spatial transformation of the Municipality. Provision is made for the use of retail, personal services, entertainment, offices, residential, public facilities and related commercial 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.

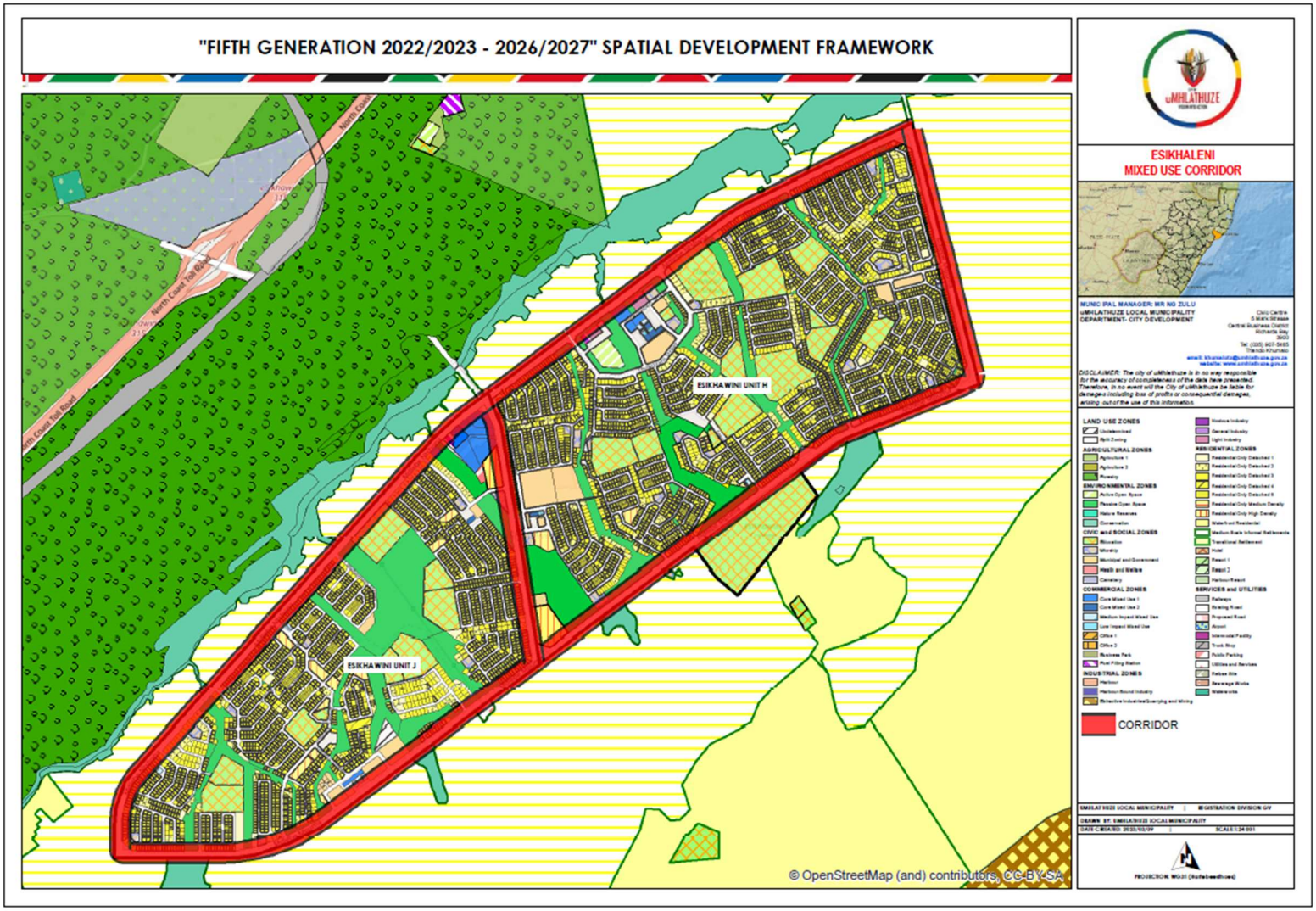
Map 79: Vulindlela Special Mixed Use Corridor



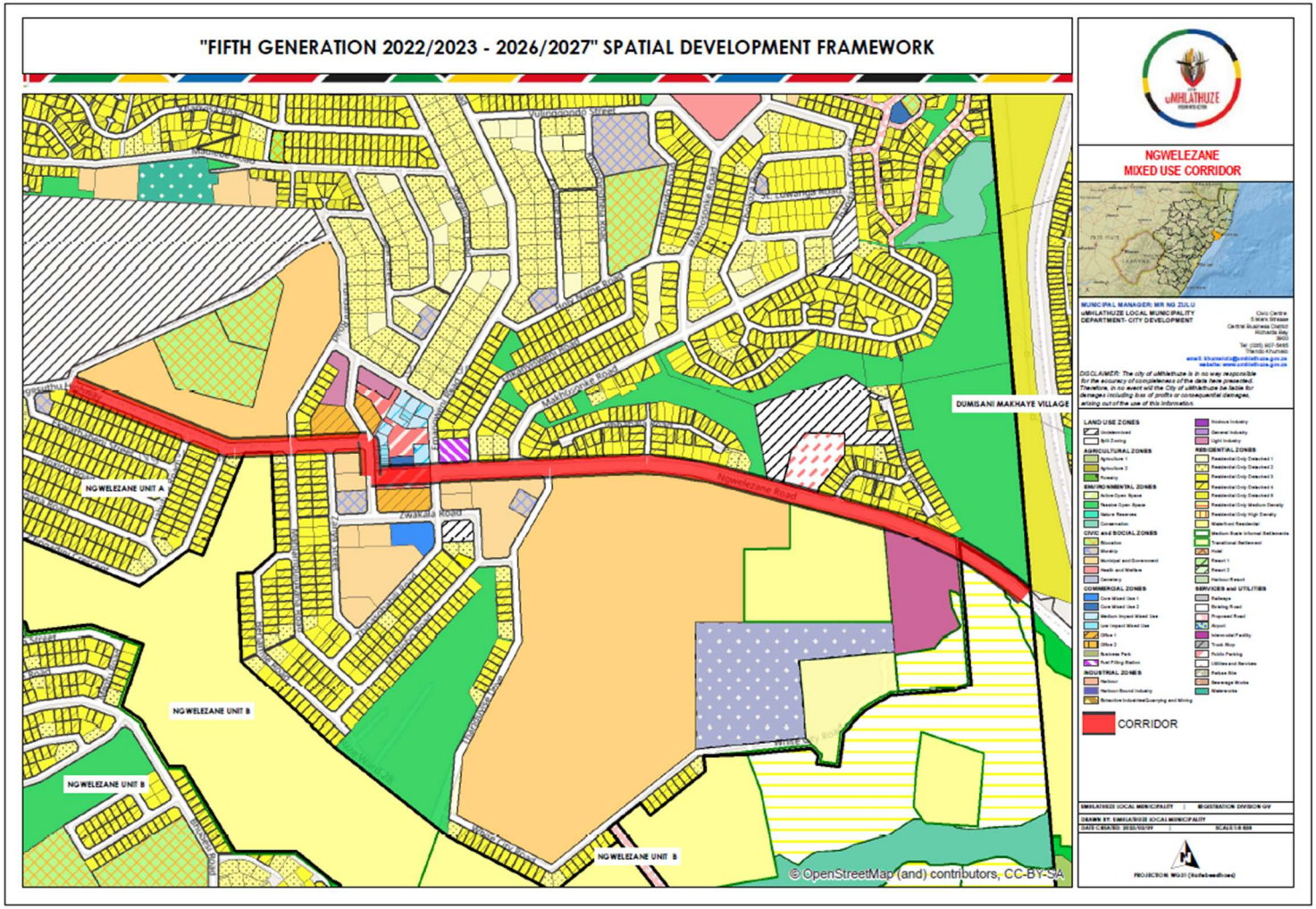
Map 80: DMV Special Mixed Use Corridor



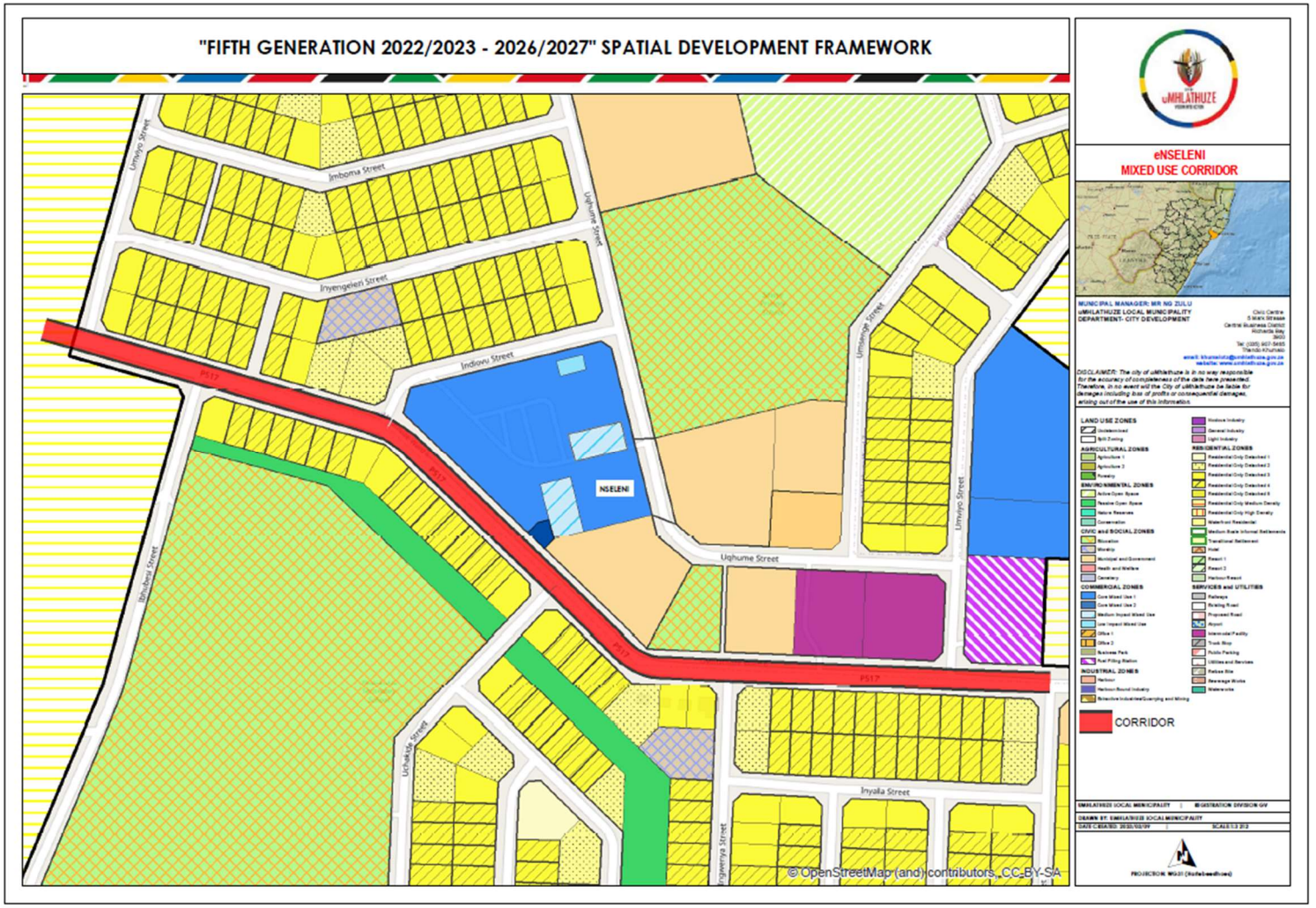
Map 81: eSikhaleni Special Mixed Use Corridor



Map 82: Ngwelezane Special Mixed Use Corridor



Map 83: Nseleni Special Mixed Use Corridor



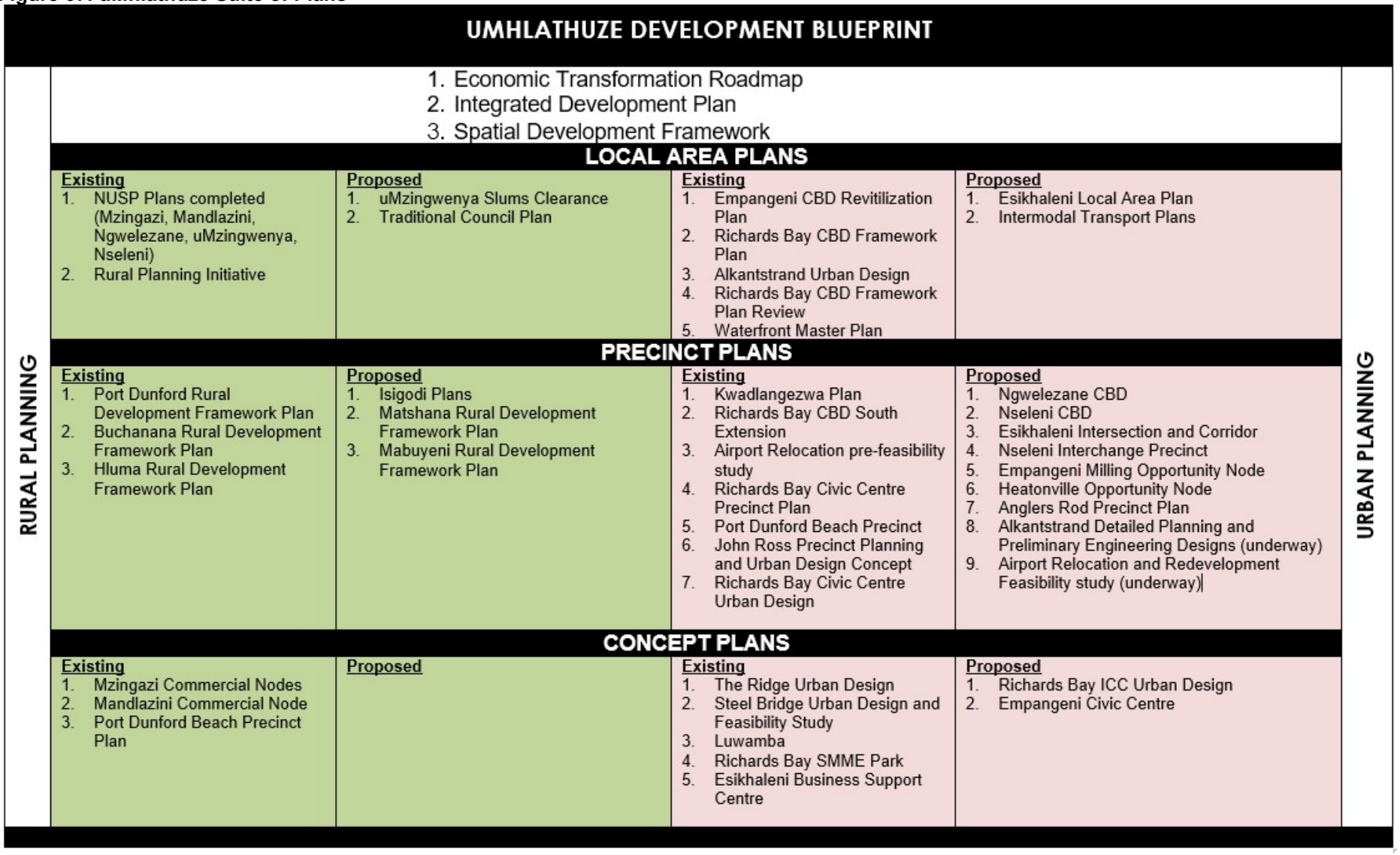
12.2 UMHLATHUZE SUITE OF PLANS

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 67: 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 68: Linkage between SDF and LUF for Richards Bay CBD South Extension

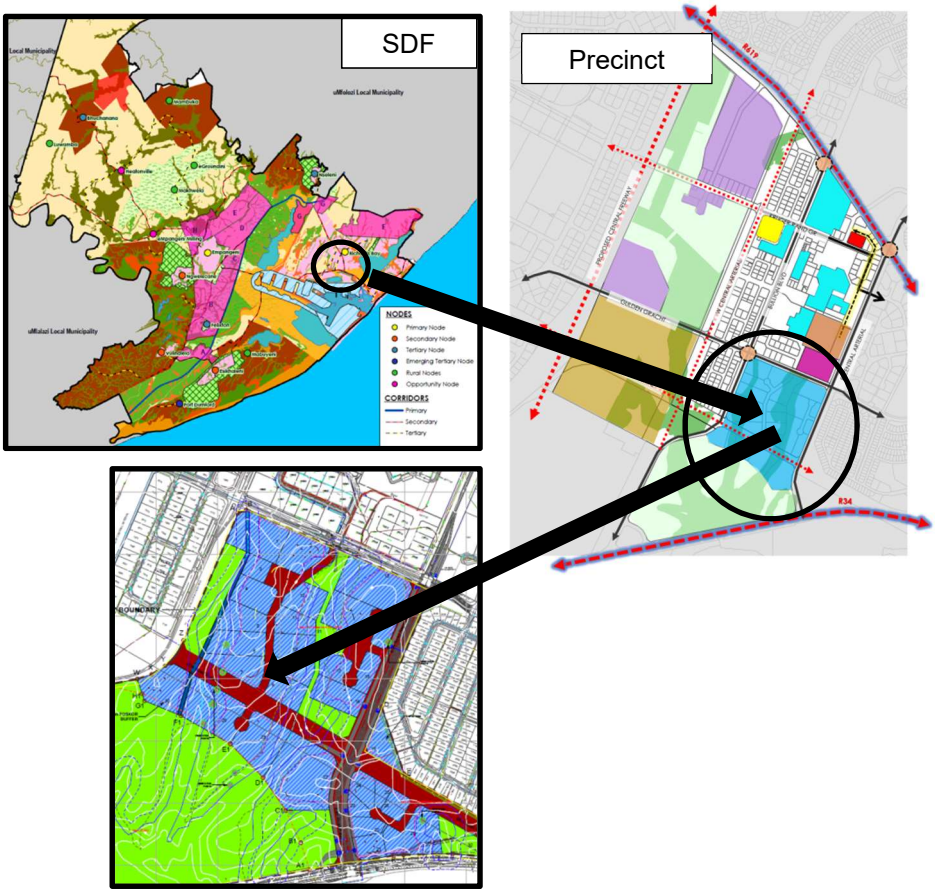
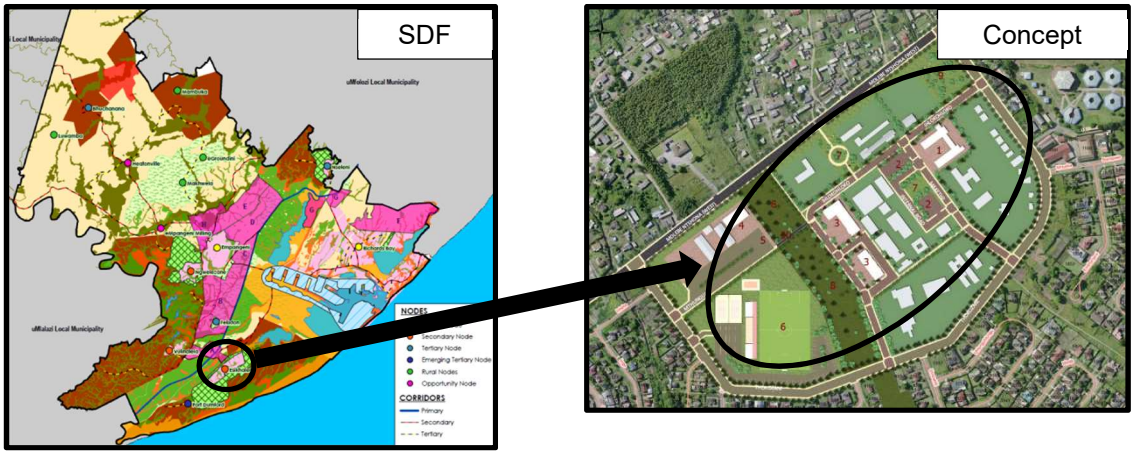


Figure 69: Linkage between SDF and LUF for Esikhaleni Business Support Centre



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

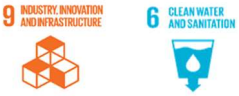
12.3.1 CATALYTIC PROJECTS

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 76 : 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 was appointed to undertake the Feasibility Study that has been completed.
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 and the project is nearing completion.
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.
4. Green Hill 	Green Hills is situated on a Portion of the Remainder of Erf 5333, Greenhill, and is 22 758 m² in extent. Development of the area remains a priority given its potential for catalytic/strategic development. This site is requested by the Navy to cater for accommodation purposes.
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) has been completed.

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). A project to provide informal trading facilities as part of the CBD regeneration has commenced.
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:

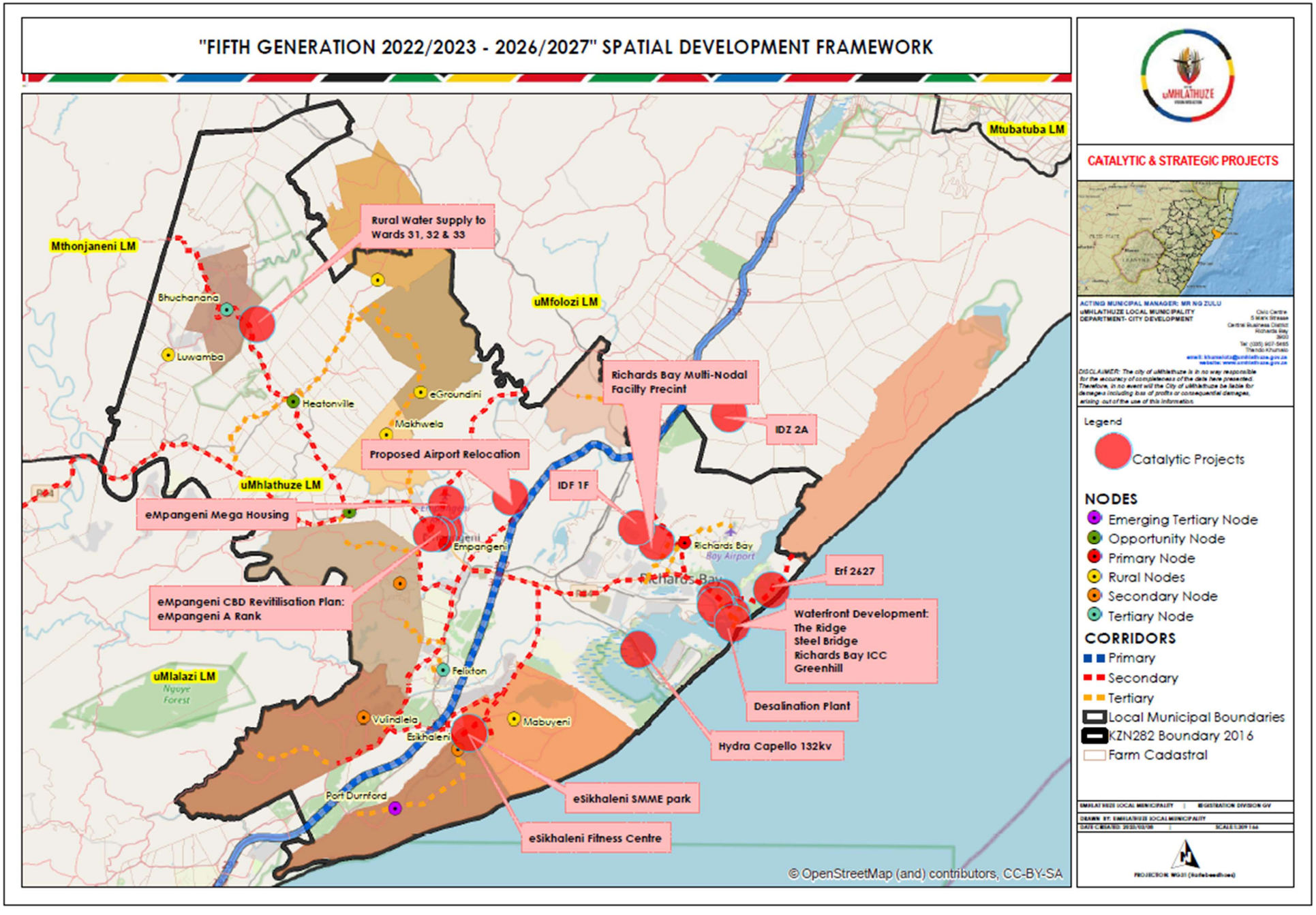
- Employment
- Sustainability
- Township Economy
- Promotion of Economy (Tourism, LED and Agriculture)
- Social Investment
- Mobility
- Significant Capital Infrastructure Investment

Table 77: 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							
6. Expression of Interest for the Remainder of Erf 2627							

PROJECT NAME	Employment	Sustainability	Township Economy	Promotion of Economy (Tourism, LED, Agriculture)	Social Investment	Mobility	Significant Capital Infrastructure investment
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 84: 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

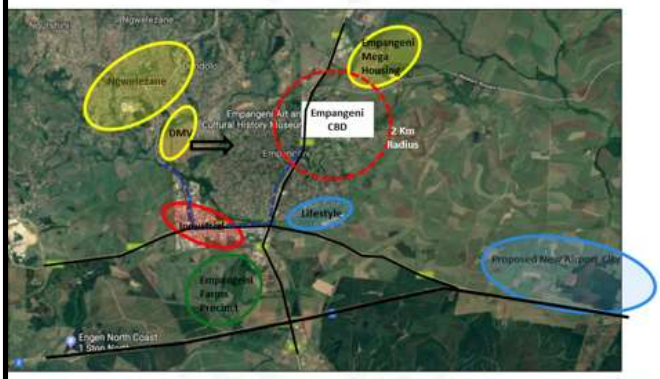
Waterfront Development

- 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.

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 one 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, inclusive of extensive development inside the existing port boundary.

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 70: Current Richards Bay Port Layout

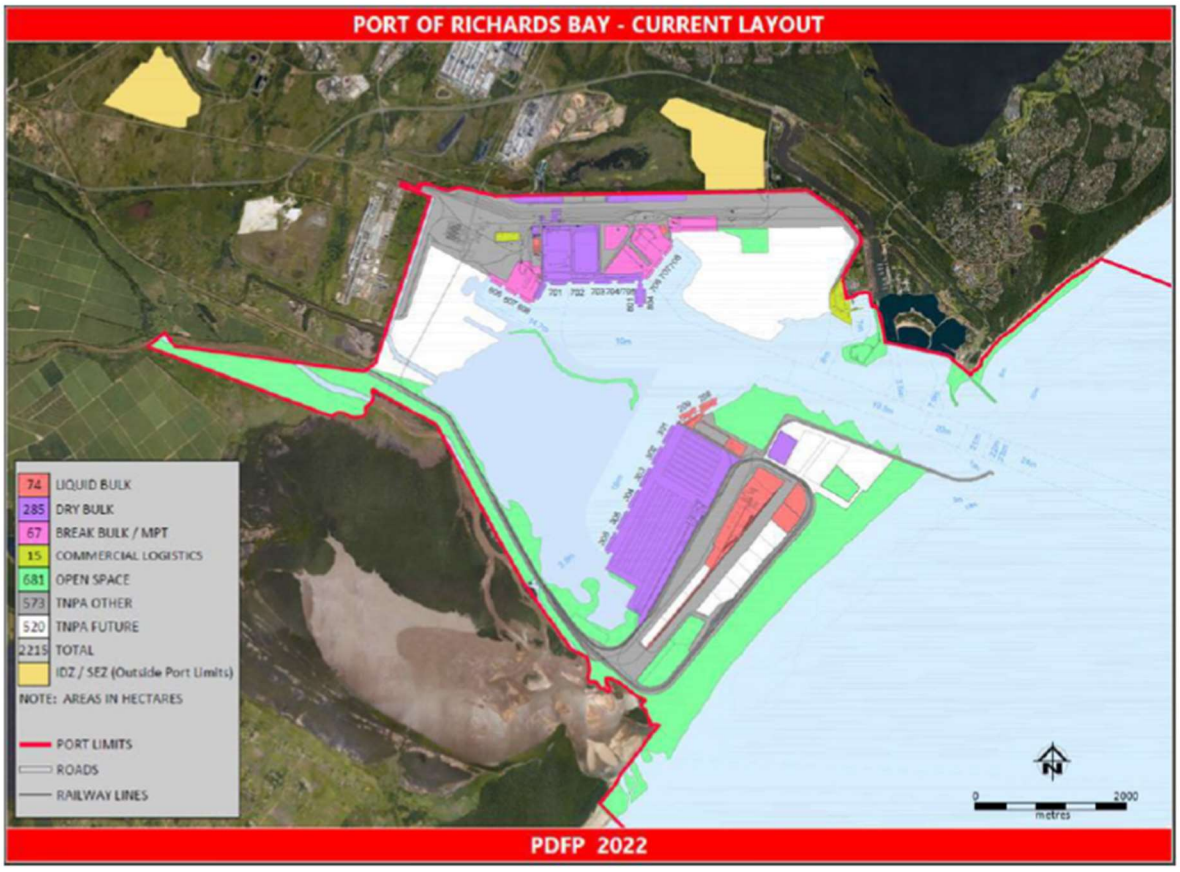
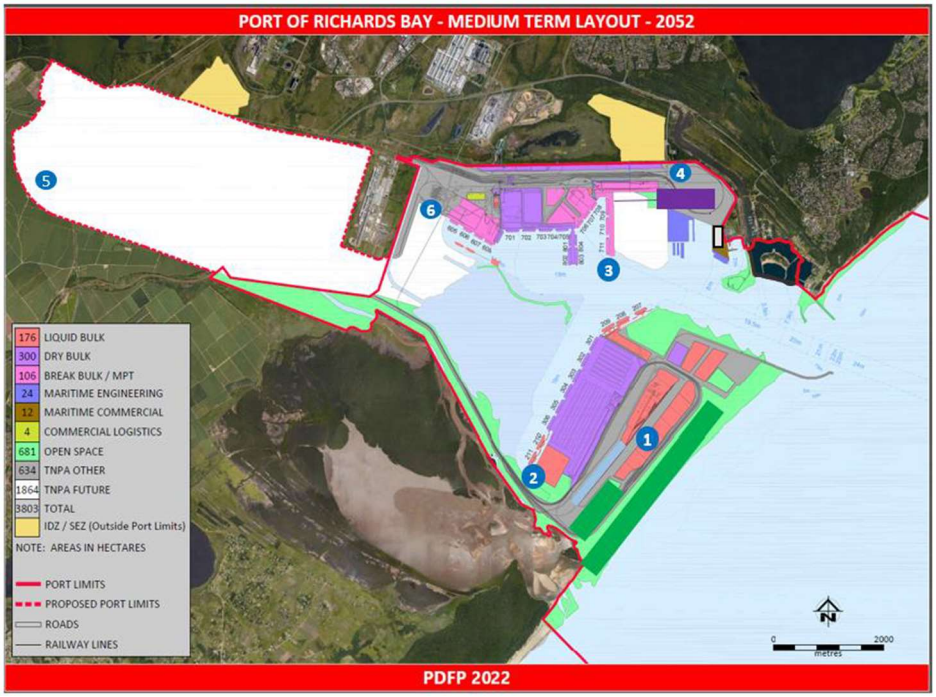


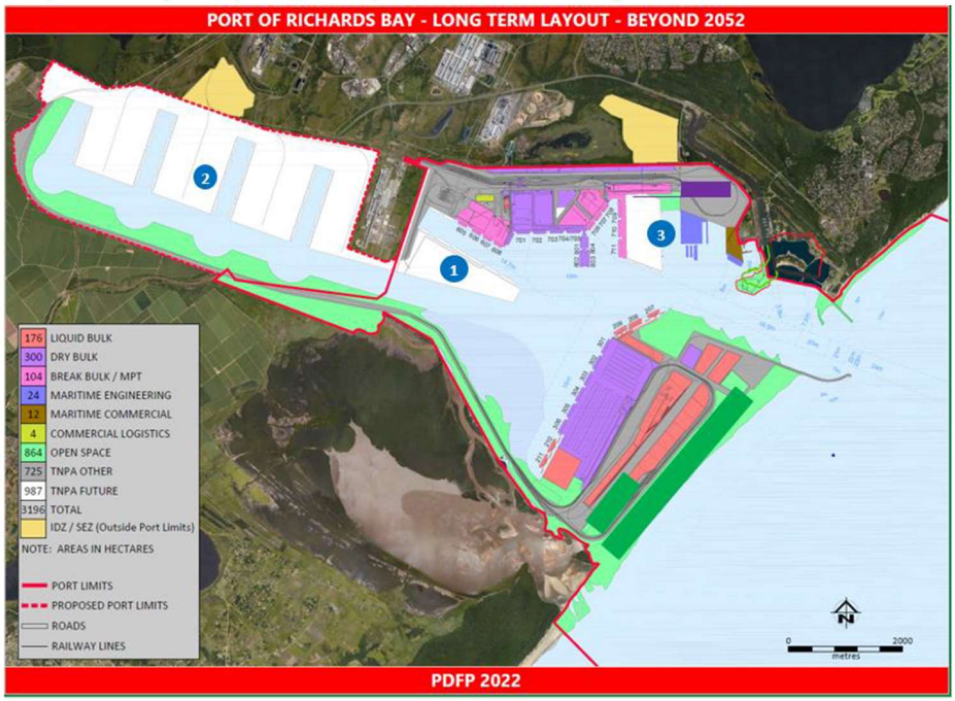
Figure 71: Medium Term Potential Layout for Richards Bay Port



Amongst others, the following changes are foreseen from the current to the medium-term port layout:

i. More liquid bulk terminals at the South Dunes and provision for Gas to Power and LPG;
ii. Bayview rail yard expansion
iii. Additional berthing capacity at a number of locations
iv. Land acquisition for future port development of 3 803Ha

Figure 72: Long Term Potential Layout for Richards Bay Port



Amongst others, the following changes are foreseen for the long-term layout:

i. Additional dig-out of Bayview precinct for additional quay lengths and berths
ii. Dig-out inside the new proposed port limits for additional port activities
iii. Land between the break-bulk and proposed dry-dock to be converted for additional quay lengths and berths

(Source: Port Development Framework Plans, 2022)

12.3.4 RICHARDS BAY INDUSTRIAL DEVELOPMENT ZONE

The history and potential of the Richards Bay Industrial Development Zone (RBIDZ) 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 the 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/incentives to industries located in the IDZ include:

- Dedicated in-house Customs Controlled Area (CCA) that supports services to expedite forwarding and clearing;
- Duty-free on imports for production-related raw materials including machinery and assets used in production to export the finished products;
- VAT exemptions under specific conditions for supplies procured in South Africa.
- 15% corporate tax;
- Building allowance;
- Tax allowance; and
- Training allowance.

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 RBIDS 50 Year Master Plan was prepared and finalized in 2013. It primarily provided a spatial framework for the development and expansion of the RBIDZ land footprint within the context of existing established development nodes such as Richards Bay, the Port of Richards Bay, Empangeni, smaller surrounding towns, and the land use and infrastructural framework linking the development nodes to the other provinces of South Africa, and internationally by sea.

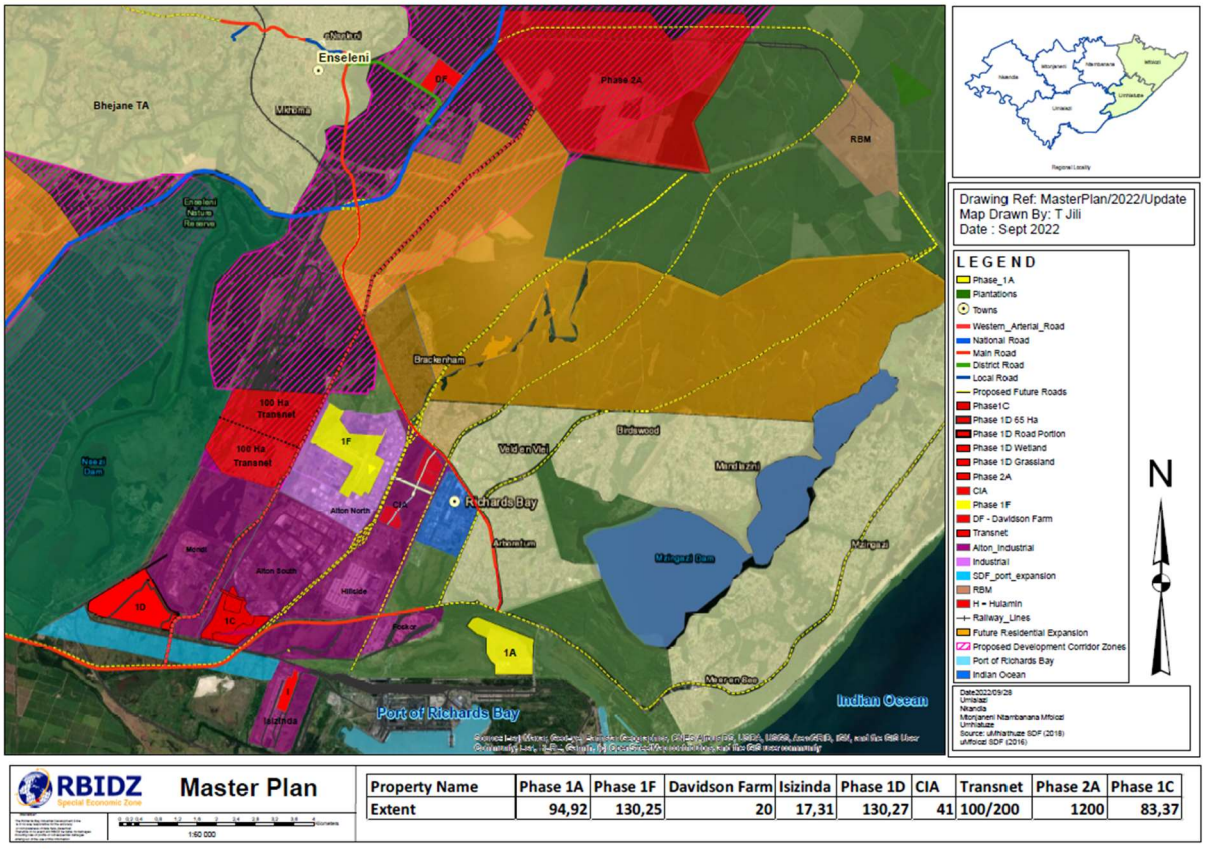
The preparation of the final spatial framework was based on the assessment of land along the coastal region between the uMlalazi and uMfolozi Rivers, with the primary criteria for site selection being:

i. Integration with the uMhlathuze urban framework, and natural expansion to existing urban areas;
ii. Proximity to the Port of Richards Bay;
iii. Inter and intraregional accessibility;
iv. Environmental suitability;
v. Land availability;
vi. Agricultural potential;
vii. Compliance with the spatial development frameworks of local municipalities, notably King Cetshwayo, uMfolozi;
viii. Availability of bulk engineering services i.e. water, electricity, sewer, landfill; and
ix. Linkage to existing and future road networks.

The RBIDZ land portfolio is interlinked with the development framework of the uMhlathuze and uMfolozi Municipalities and inter-regional networks such as the N2, electricity, and rail. Spatial development frameworks are also guided by national legislation notably the Spatial Planning and Development Act, 2013. In essence, the RBIDZ Master Plan complies with these guidelines specifically regarding the:

- Integration and compliance with the spatial development frameworks of the King Cetshwayo, uMhlathuze, and iMfolozi Municipalities;
- Focusing on logical infill, and extension to existing development;
- Maximising the utilization of available bulk infrastructure;
- Creating employment opportunities close to local communities;
- Access to national road and rail infrastructure;
- Proximity to the Port of Richards Bay;
- Utilizing land for the most appropriate land use in terms of intensity, scale and compatibility with surrounding land uses; and
- Observing the need to minimize any negative impact on the environmental, and the protection of high potential agricultural land.

Figure 73: IDZ 50 Year Master Plan Priority Areas



Property Name	Phase 1A	Phase 1F	Davidson Farm	Isizinda	Phase 1D	CIA	Transnet	Phase 2A	Phase 1C
Extent	94,92	130,25	20	17,31	130,27	41	100/200	1200	83,37

12.4 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.

12.5 CAPITAL EXPENDITURE FRAMEWORK

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

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

The role of a Capital Expenditure Framework (CEF) is to frame the outcomes of a multitude of planning documents within the municipality to ensure that implementation is guided by a strategic, spatial, financial, and socio-economic logic.

The primary outputs of the CEF are summarised below:

- The Spatial Development Framework (SDF)informs the identification of functional areas and priority development areas for the municipality to prepare a socio-economic and developmental profile for the municipality.
- The socio-economic and developmental profiling informs the demand quantification activity of the CEF process and the setting of long-term infrastructure investment targets required realise the spatial development vision of the municipality.
- The consolidated capital demand/needs, irrespective of whether the capital demand stems from local, provincial or national spheres of government, represents the Integrated Infrastructure Investment Framework (IIIF) or Capital Investment Framework (CIF) and aims to gather the long-term capital demand required for the municipality to function optimally.
- The spatial development vision of the municipality, along with other strategic, financial, policy, socio-economic and technical objectives are used to prepare a prioritisation model in order to rank/ score capital demand (projects) based on their alignment to the spatial, strategic, financial, policy, socio-economic and technical objectives of the municipality.
- The process of setting up a budget for the CEF draws from the outcomes of the long-term financial plan - whereby the affordability envelope and the optimal funding mix for capital investment for the municipal is modelled based on key socio-economic and population growth projections. Once the affordability envelope is known, the 10-year capital budget can be prepared with inputs from the project prioritisation results.
- The final step in preparing the CEF is to define an implementation programme for the medium term – in line with the Medium-Term Expenditure Framework (MTEF). The medium-term implementation plan of the CEF is known as the Capital Expenditure Implementation Programme (CEIP) which is essentially the first three budget years of the 10-year Capital Expenditure Framework.

12.5.1 FUNCTIONAL AREAS

A Functional Area (FA) is a region with similar characteristics from a development and service demand perspective. Various indexes and modelled in the determination of functional areas including urban morphology, social facilities, demographics and economic. The outcomes of the modelling resulted in the following classification of FAs in uMhlathuze:

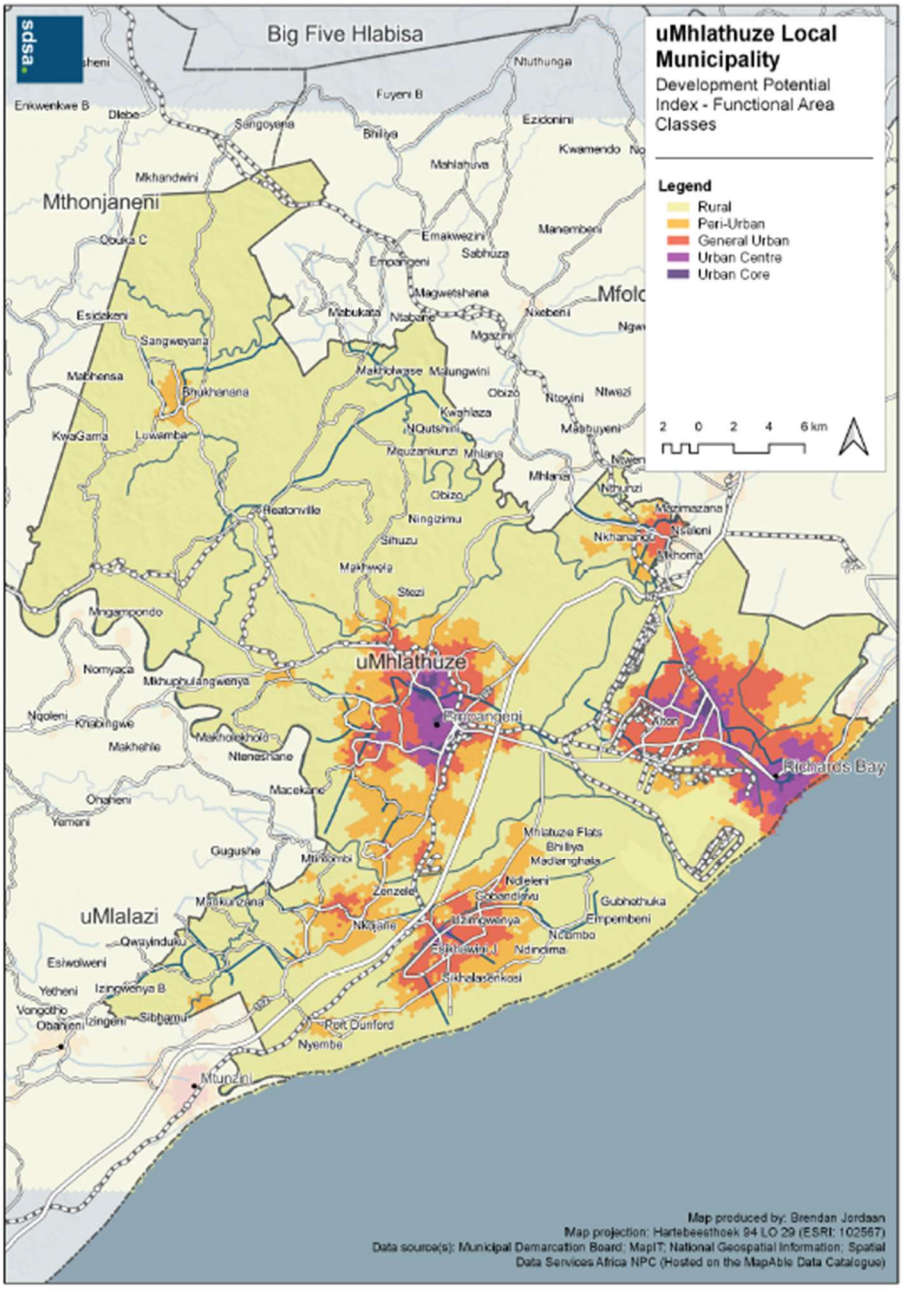
Table 78: Description of Functional Areas

Urban Core	The urban core zone consists of the highest density and building height, with the greatest variety of uses, and civic buildings of regional importance. It may have larger blocks, streets have tree planning, and buildings are set close to wide sidewalks. Typically found in large towns or cities. General development occurs through urban renewal as these areas are primarily associated with the oldest formal urban areas in the region. Densification, public transport and a focus on public space design and landscaping are often a priority. The urban core covers 644 hectares of the total municipal area.
Urban Centre	This area is located where potential exists to create a consolidated urban district featuring commercial uses mixed with retail frontages and residential apartments. These areas are situated in areas of high accessibility and often form part of community-oriented corridors. These areas have a more localised impact and serve as multipurpose destinations with an increased provision of amenities. This area can form part and support the urban core or function as a smaller, more local urban centre. The general development approach is one of intensification and consolidation. Development intensity is less than that of urban core areas, but both areas share similar characteristics in terms of a greater mix and diversity of uses. The urban centre constitutes 3,258 hectares of the total municipal area.
General Urban	Typically, a place for mid-scale employment but primarily residential in nature. This can be in existing or designated suburban areas. These areas can also accommodate a variety of light industrial, small office and retail typologies. This area is stable in nature but can allow for transformation by allowing for infill development. These areas are often supported by local neighbourhood transit stops, connecting the area to more prominent business districts. The general urban constitutes 11,020 hectares of the total municipal area.
Peri Urban	These are largely residential areas and semi-rural areas supporting the needs of the existing and future communities. These areas incorporate new and existing residential areas and townhouses as plot consolidation will allow. These areas are characterised by existing suburbs and larger industrial areas as well as smallholdings and some well-located agricultural land, often under pressure for new development. The peri-urban constitutes 17,640 hectares of the total municipal area.
Rural	This area is most associated with open land, formal agriculture, mining or smallholdings resulting in sparsely populated areas. The area can support rural farm workers housing and small agricultural-related industry. Development, in general, should be approached with caution and should only be allowed if and when infrastructure capacity is available. The rural constitutes 265,507 hectares of the total municipal area.

Each of the above are analysed in terms of size, demography and housing, social and community facilities, land cover as well as services access.

The following map shows the listed FA classes:

Map 85: Functional Areas



12.5.2 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

Long term investment demand is quantified by considering:

i. Population-based demand: Population change and characteristics determine the current and future customer base served by the Council and thus what the quantum of the services to be delivered should be;
ii. Level of Service (LOS) choices: The LOS offered by the Council for each infrastructure component varies but has a significant effect on the affordability of services; and,
iii. The land use requirements and the resulting capital and operating expenditure consequences of investment demand in the context of the service delivery policies and choices of the Council.

In context of the above a detailed analysis is undertaken detailing access to various services over time, asset renewals and renewal backlogs, growth demand as well as population growth. In addition, a land use budget is determined and lever of services (LOS) options considered. The following graphs depict some of the outcomes of the above process:

Figure 74: Contribution of each investment demand component to each of the infrastructure asset groups

Council will require 1069 Ha of **land** to accommodate growth and development over the next ten years. The demand from the low-density rural areas will account for 28,5% of the total demand, while single residential low and medium-income households will require another 302 Ha of 27,9% of the future land demand.

The **capital requirements** to address growth, access backlogs and asset renewal will average more than R543 million per annum. The Council will require about R91 million per annum to accommodate new growth and a further R80 million per annum to address service backlogs. The challenge lies with

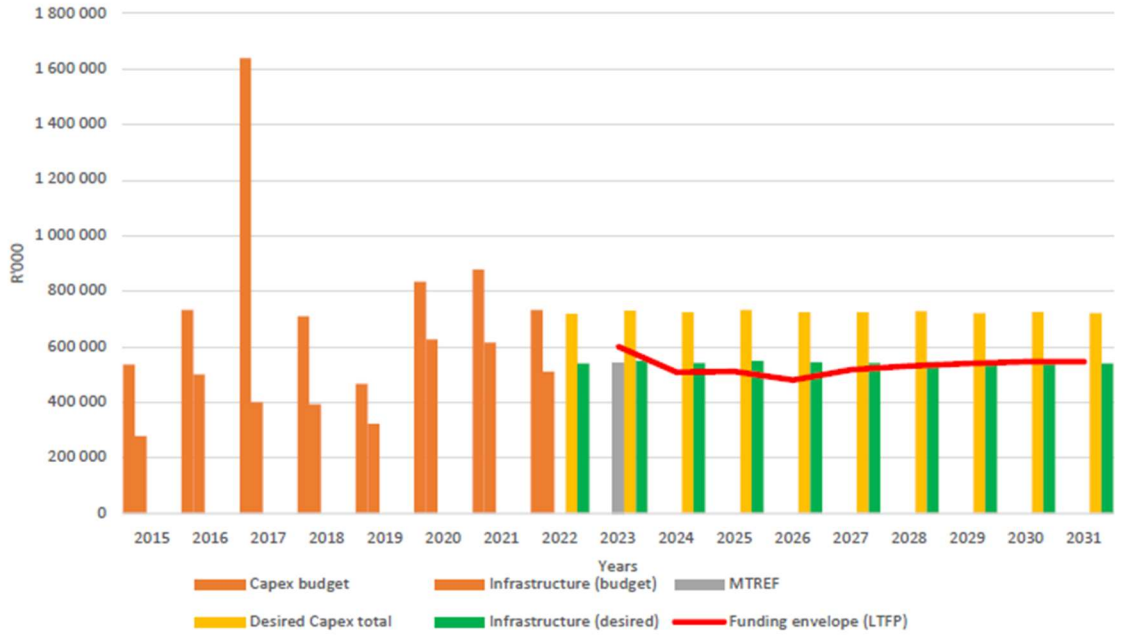
asset renewal and renewal backlogs. Based on the current replacement cost (CRC), renewal backlogs will require a further R138.7 million per annum and asset renewal a further R232 million per annum. This total is an average capex requirement of R544 million per annum. The capex budget for the past five years averaged R443 million per annum, and the planned expenditure for the MTREF years averaged R534 million per annum.

The **operating impact** of the investment demand will accumulate to an additional R129 million per annum at the end of 2032. An estimated 83% will come from growth and the following should be noted:

- Council has not control over growth and any inability to continuously address growth results in accumulating backlogs that become more challenging to address in the future.
- Future growth also represents predominantly poor people who cannot pay for services, which implies that the subsidy demand will increase.

The desired capex exceeds the Council's funding capacity. This implies that adjustments will have to be made in service delivery policies and strategies, allowing for lower demand for capex. The desired capex exceeds the funding capabilities with about R1.7 billion over the next ten years.

Figure 75: Capex Relationships



12.5.3 PLANNED CAPITAL EXPENDITURE

The Integrated Infrastructure Investment Framework (IIIF) also referred to as the Capital Investment Framework (CIF), outlines the demand identified for capital projects within the uMhlathuze local municipality's jurisdiction and, as such, it represents all capital projects identified across various sectors by various departments.

The IIIF should therefore not only show capital investment projects identified by the municipality but also the capital investment projects from other spheres of government operating within the jurisdiction of the municipality.

Various data sources were utilized to consolidate details of the planning capital expenditure including various asset management plans, bulk master plans, sector plans, renewal strategies etc. and the result is contained in the following table:

Table 79: 2022/2023 – 2031/32 Total Planned Capital Expenditure per Year

Financial Year	Budget	Budget %
2022/23	R 10 937 785 268,94	24%
2023/24	R 6 142 739 813,34	14%
2024/25	R 5 724 443 415,34	13%
2025/26	R 4 887 061 807,34	11%
2026/27	R 3 302 617 219,34	7%
2027/28	R 3 199 661 706,34	7%
2028/29	R 3 310 757 219,34	7%
2029/30	R 2 636 465 505,05	6%
2030/31	R 2 641 023 505,05	6%
2031/32	R 2 075 264 727,28	5%
Grand total	R 44 857 820 187,36	100%

The results were further analysed per unit and department, nature of investment, MSCOA types etc. and some of the outcomes are expanded upon hereunder.

Figure 76: Planned Capital Expenditure: Infrastructure Services

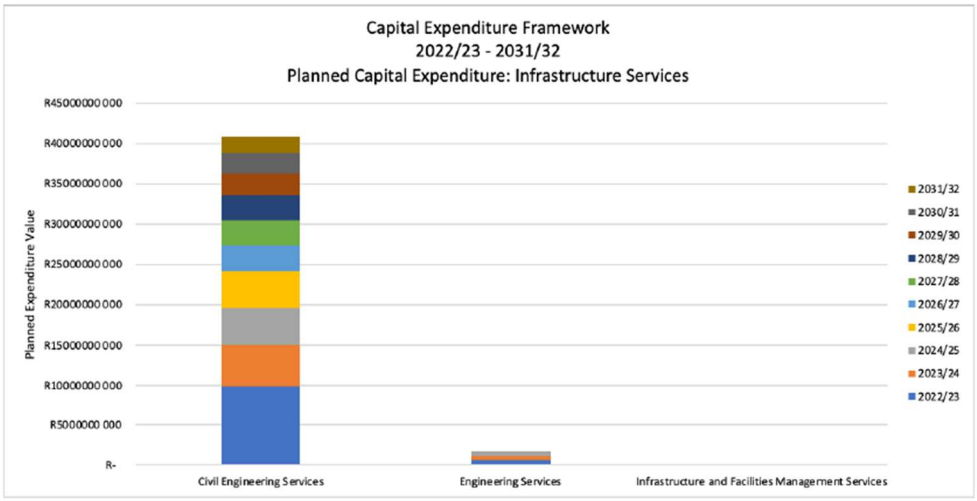
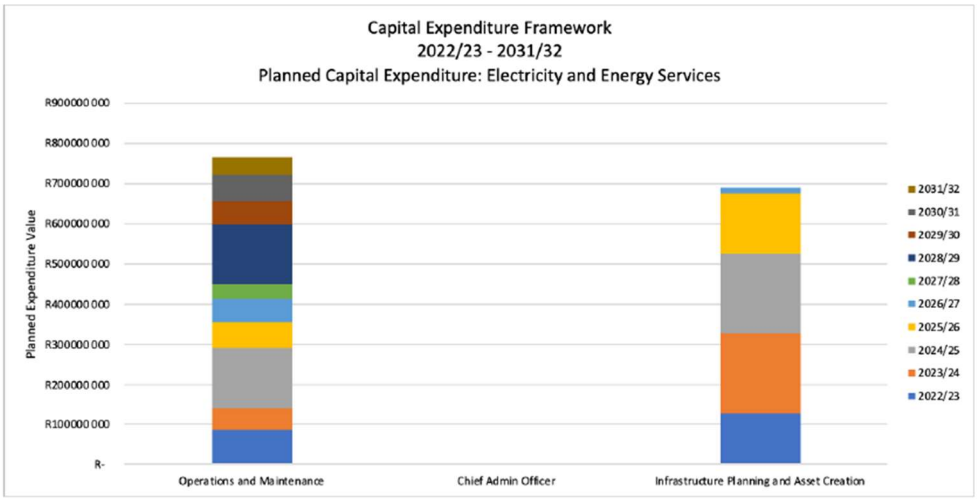
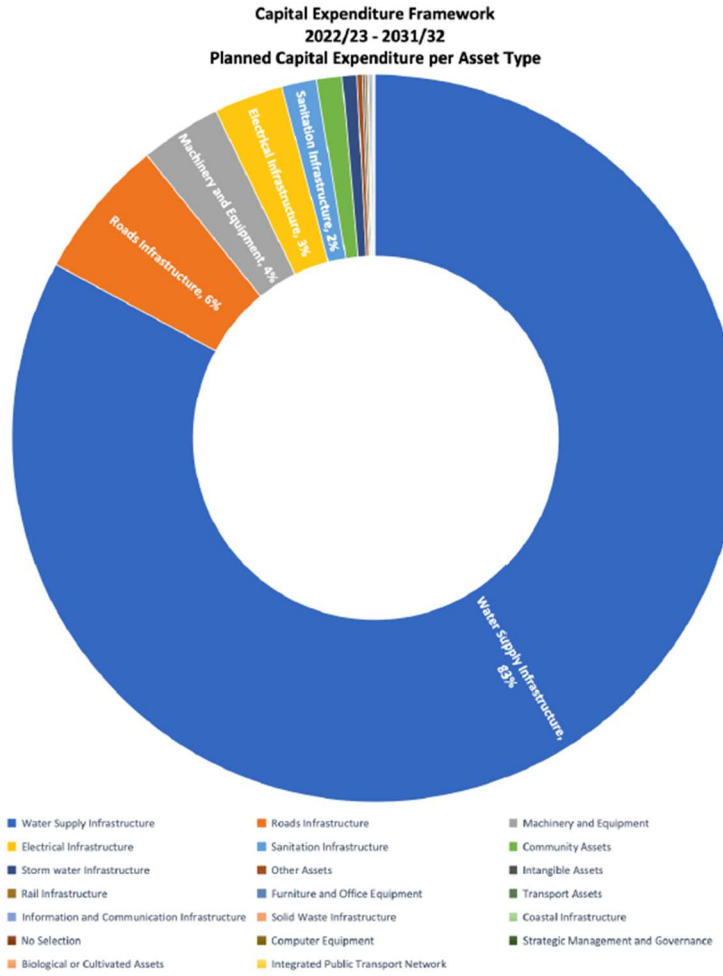


Figure 77: Planned Capital Expenditure: Electricity and Energy Services



The planned capital expenditure per mSCOA Asset Type and Sub-Type is further outlined in the following figure.

Figure 78: Total Planned Capital Expenditure per Asset Type 2022/23 – 2031/32

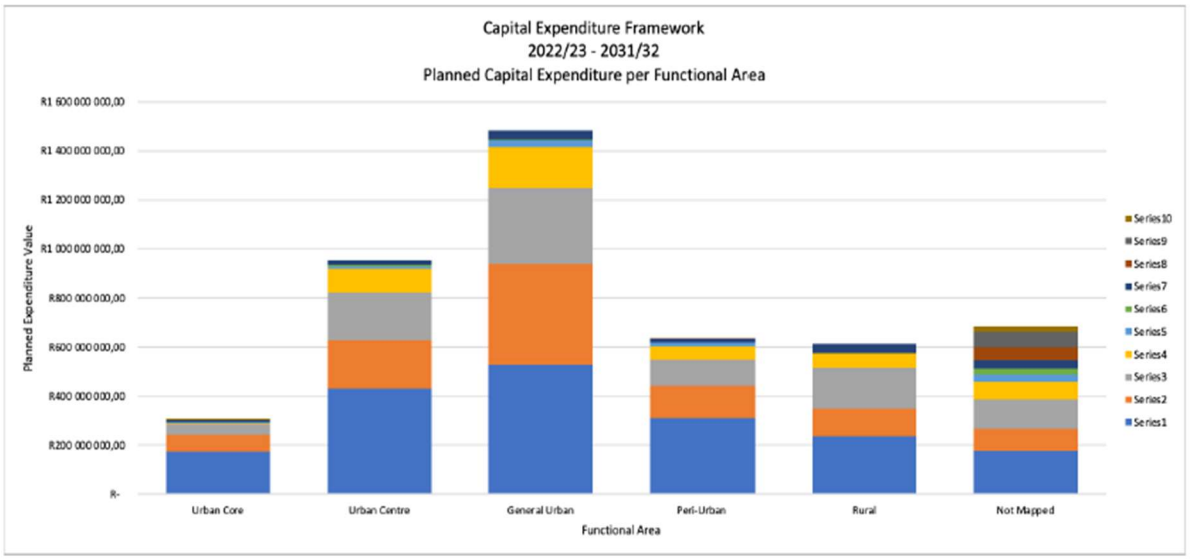


From the analysis the following was observed:

i. Water Supply Infrastructure: Dominant asset subtype is distribution. The uMhlathuze Bulk Water Master has taken cognizance of planned developments to mitigate the water supply issues and distribute to the households that do not have access to water supply.
ii. Roads Infrastructure: Dominant asset subtype is roads at 80% of the planned capital expenditure. Indicative that the municipality proposes a focus on additional arterial routes to provide access to the main urban centres.
iii. Electrical Infrastructure: Dominant asset subtype is LV Networks (43%) and HV Substations (34%). The demand on the asset subtypes can be linked to the deteriorating condition of the municipal substations.
iv. Sanitation Infrastructure: Dominant asset subtype is Outfall Sewers at 45%. The demand coincides with the intention to extend sewerage systems within the identified SDF Expansion Areas.
v. Community Assets: Dominant asset subtypes are Community Facilities (60%) such as such as community halls, Libraries, Cemeteries as well Sport and Recreation Facilities such as sport fields and parks (40%). Facilities are important within the municipality for the health and welfare of the citizens.

Further analysis of the data is available and presented as planned capital expenditure per Functional Area (FA) as well as per ward.

Figure 79: Planned Capital Expenditure per Functional Area



12.5.4 PRIORITISATION

The reality is that the municipal affordability, i.e. the funding envelope, as determined in the Long Term Financial Plan (LTFP), is less than the capital demand as outlined in the previous section.

The prioritisation rationale has been informed by the following criteria grouping:

- Economic Alignment: Revenue generating assets, economic activity index, population density, priority portfolio (catalytic projects)
- Financial Alignment: Monetary impact, co-funding, affordability
- Social Alignment: Social facilities and responsible units, priority programmes, social facilities index
- Technical Alignment: Services, urban morphology index, service based priority index, ruggedness index, population index
- Strategic Alignment: Functional area, priority development area, specific development area, urban development boundary

Various strategic documents/strategies/plans and frameworks informed the above criteria.

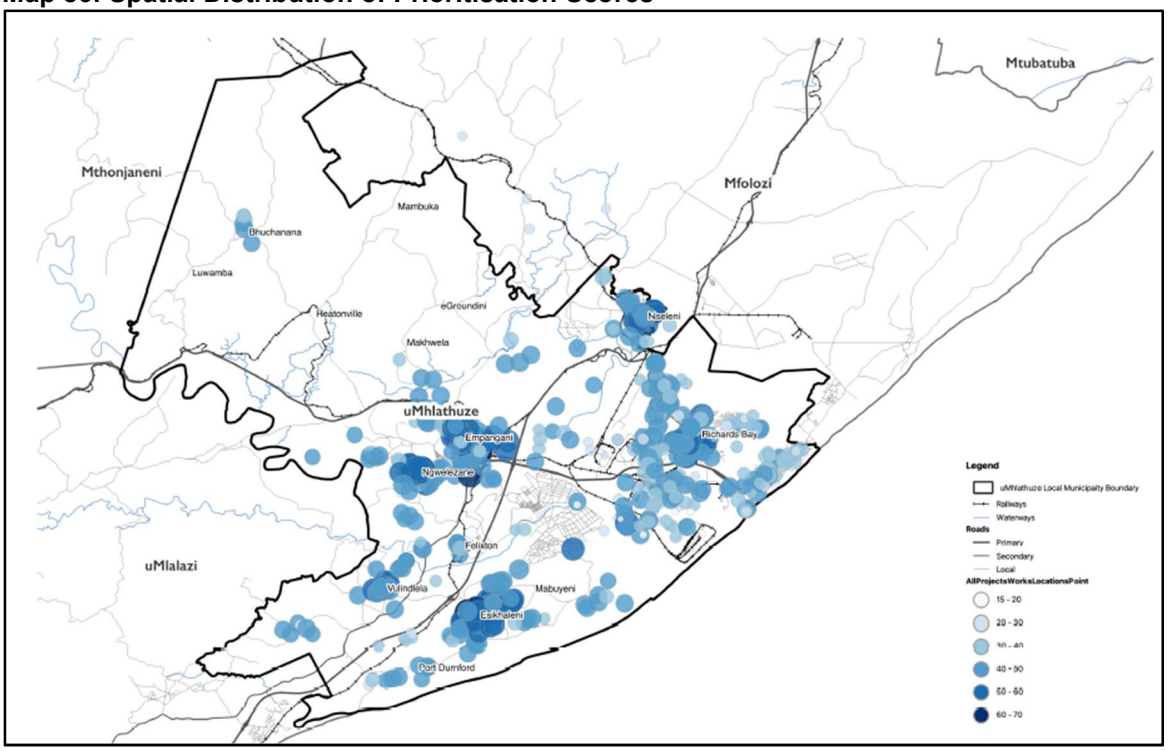
The outcome of the above process is that spatial inputs are used to prioritise projects. Spatial prioritisation and budget alignment is not only a prerequisite in terms of SPLUMA, but it is also a policy imperative for the IUDF – therefore, spatially-based prioritisation enables true spatial targeting.

It is important to take note of the following when interpreting the spatial distribution of project prioritisation scores:

- Projects geo-referenced locations are captured as either a point, line or polygon geometry;
- Project geo-referenced locations were reduced to the centroid of each project location for aggregation and displaying purposed, and;
- Project score distribution locations are therefore an approximation of a project's location, and not an absolute indication of the project's location or implementation area.

Hereunder the spatial distribution of projects in uMhlathuze is shown.

Map 86: Spatial Distribution of Prioritisation Scores



From the above it is evident that that priority areas influence the total score of the projects, i.e. the secondary and tertiary nodes of Empangeni, Ngwelezane, Nseleni and Esikhaleni – all areas within the urban edge – received higher score values when compared to the other nodes. Likewise, Richards Bay and the secondary corridor from Richard's Bay to Nseleni, are hosts of some of the highest concentration of scoring projects. It is worth noting that the nodes like Buchanana, Felixton and Nseleni received good scoring during the prioritisation model, indicating that these projects have sufficient information and readiness to be considered. Port Dunford which falls into the proposed expansion also has a moderate concentration of projects, which indicates that the model distributed scoring sufficiently.

Informed by the above the budget scenario outcome per Functional Area was analysed. The outcomes thereof are indicated in the following tables and map. Outcomes and results are also available per electrical ward, mSCOA project type, asset type etc.

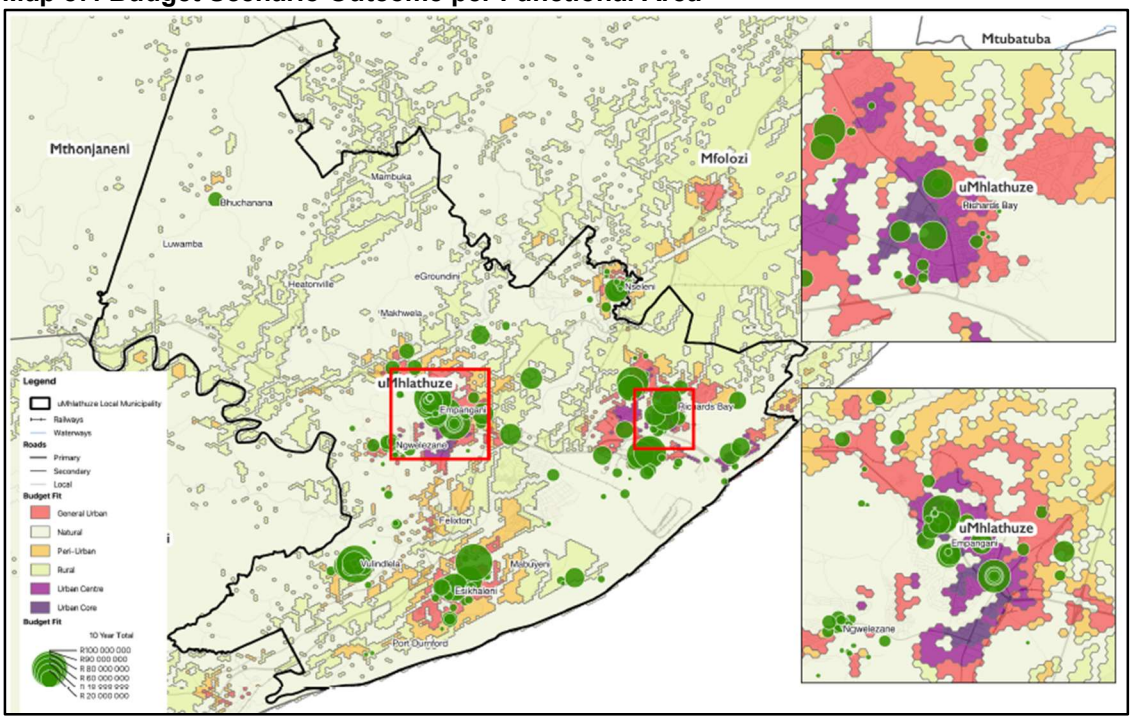
Table 80: Budget Scenario Outcome Functional Area analysis (part 1)

	No Intersect	Rural	Administrative HQ	General Urban
2022 / 2023	R2	R47 054 374	R1 043 000	R161 115 606
2023 / 2024	R120	R104 184 971	R2 862 000	R191 635 778
2024 / 2025	R5	R29 747 382	R2 583 000	R251 968 592
2025 / 2026	R57	R62 035 090	R114 000	R205 919 754
2026 / 2027	R109	R79 172 764	R137 000	R71 665 092
2027 / 2028	R0	R531 836	R599 000	R40 626 638
2028 / 2029	R0	R1 243 206	R14 093 000	R19 136 558
2029 / 2030	R0	R1 214 184	R12 156 000	R8 063 409
2030 / 2031	R0	R679 599	R7 595 000	R9 235 100
2031 / 2032	R0	R49 889	R30 000	R19 247 947
Total	R292	R325 913 296	R41 212 000	R978 614 473
%	0%	6%	1%	19%

Table 81: Budget Scenario Outcome Functional Area analysis (part 2)

	Peri-Urban	Urban Centre	Urban Core	City Wide
2022 / 2023	R26 345 353	R191 777 029	R78 722 468	R2 606 535
2023 / 2024	R88 454 408	R66 678 170	R57 454 500	R15 974
2024 / 2025	R60 569 527	R71 596 934	R64 985 418	R20 330
2025 / 2026	R41 746 216	R185 892 129	R19 130 718	R47 588
2026 / 2027	R68 775 853	R84 496 654	R115 412 005	R62 044 000
2027 / 2028	R2 990 034	R77 054 851	R45 031 226	R365 479 200
2028 / 2029	R2 001 107	R28 070 159	R7 330 769	R473 969 505
2029 / 2030	R 0	R20 549 253	R22 162 847	R483 082 544
2030 / 2031	R1 863 873	R -0	R 0	R426 715 944
2031 / 2032	R450 111	R11 329 055	R6 663 000	R508 091 526
Total	R293 196 481	R737 444 233	R416 892 951	R2 322 073 148
%	6%	14%	8%	45%

Map 87: Budget Scenario Outcome per Functional Area



With reference to the budget scenario outcome per Functional Area (10-year horizon) as indicated above it is noted that many projects are located within the General urban, Urban Centre and Urban Core. The investment intent has the focus on upgrading and renewal of existing infrastructure to maintain specific level of service and enhance attractiveness of areas with spatial economic agglomeration.

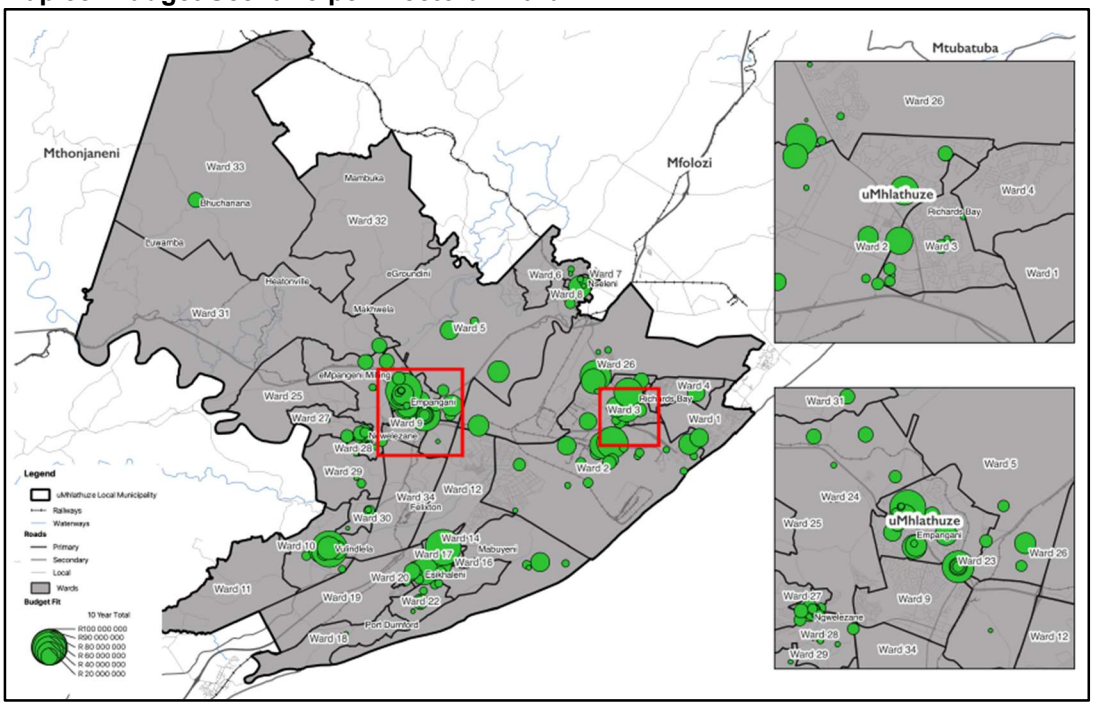
12.5.5 CAPITAL EXPENDITURE IMPLEMENTATION PLAN

Amongst others, the budget scenario outcome as per the capital investment plan for 2023/2024 has been stated in Wards over a 10-year horizon. Its purpose is to determine the level of spatial targeting used by the municipality within the defined Wards. City Wide and Administrative HQ do not necessarily benefit any specific ward and might benefit more than one service area. Projects without any spatial location are classified as "Not Intersect".

The following map indicates that 54% of the capital is distributed over 33 wards within the municipality and a total of 46% of the capital expenditure is at a City-Wide level and not spatially targeted to a specific ward – but rather all the wards. The top five wards within this budget scenario are Wards 23, 2, 30, 21, and 28. These wards include Empangeni, Ngwelezane, Esikhaleni and Richards Bay which

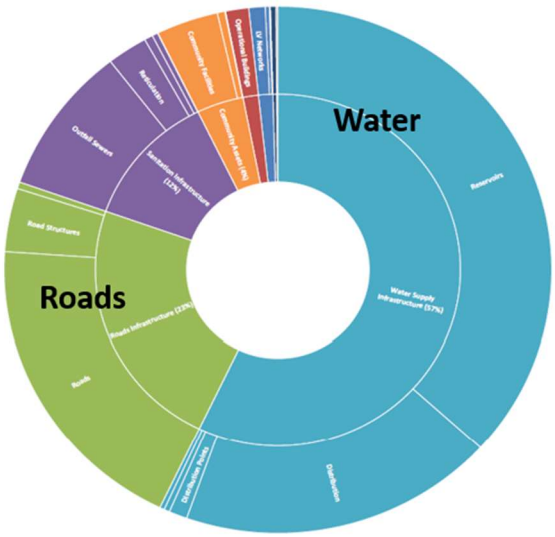
fall within the municipality's Urban areas. The Budget Scenario outcome further indicate planned capital expenditure within the Peri-urban and Rural wards. This aligns with the municipality's plans to invest in the upgrading of infrastructure within these areas particularly roads and water infrastructure.

Map 88: Budget Scenario per Electoral Ward



Further analysis is also provided of the outcomes, for example, with regard to the mSCOA asset classification Water Supply Infrastructure (57%), Roads Infrastructure (23%) and Sanitation Infrastructure (12%) make up the largest capital spending of the municipality within the MTREF while Community and Electrical Infrastructure make up the least. The MTREF analysis depicts a similar outcome when compared to the 10-year analysis. Under the Water Supply Infrastructure, the dominant asset sub-type is Distribution. This is evidence of the uMhlathuze Bulk Water Master Plans that seek to mitigate the water supply issues within the municipality. Under the Roads Infrastructure, the dominant asset subtype is Roads. The budget scenario outcome speaks to the municipality's plans to add arterial routes for better access to the main urban centre. Under the Sanitation Infrastructure, the dominant asset subtype is Outfall Sewers. The above is illustrated in the following figure.

Figure 80: MTREF Budget Scenario Outcome per Asset Type and Subtype



13. GOVERNMENT PROJECT PIPELINE AND CROSS BORDER INTERVENTIONS/ISSUES

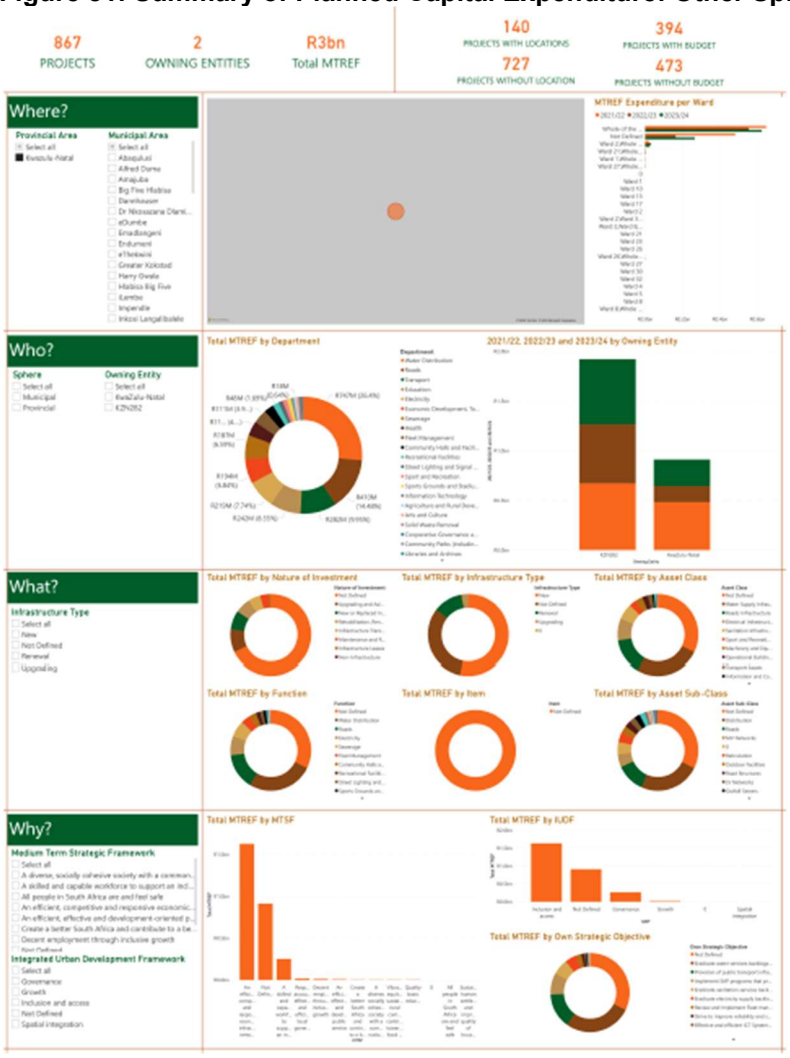
13.1 GOVERNMENT PROJECT PIPELINE

The Infrastructure Reporting Model (IRM) is the official reporting platforms for provincial government on planned capital expenditure and is hosted by National Treasury. The information unpacked in this section refers to planned capital expenditure as reported by other spheres of government, based on the formal reporting channels to National Treasury.

From the Integrated Infrastructure Investment Framework Dashboard, the following observations can be made regarding expenditure by other spheres of government within the uMhlathuze Local Municipal Area:

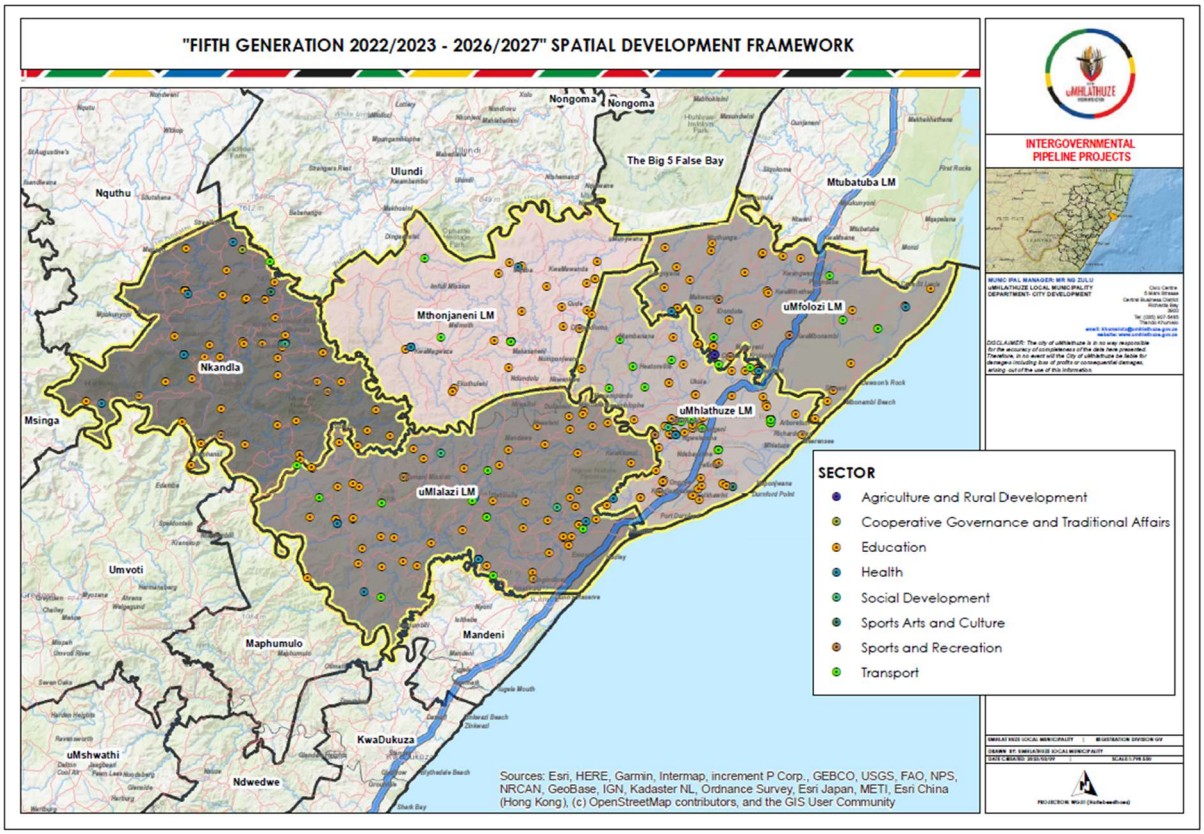
- Total of 867 capital projects, worth R3 billion has been identified by other spheres of government for implementation in City of uMhlathuze (CoU).
- Almost 50% of the projects are without budget, indicating that these projects are Wish List projects (no financial commitment yet).
- Spatial referencing of planned expenditure by national and provincial government is lacking, impacting on spatial targeted reporting.
- More than 50% of planned capital expenditure by other spheres of government is channeled to new assets; notably roads infrastructure.

Figure 81: Summary of Planned Capital Expenditure: Other Spheres of Government



The preparation of the following map has been informed by the information available from the Infrastructure Reporting Model (IRM) and should be viewed considering observations listed on the previous page.

Map 89: Intergovernmental Project Pipeline



13.2 CROSS BORDER ALIGNMENT MATTERS

Based on engagement with neighbouring municipalities in the District Family and also with the King Cetshwayo District, the following issues and challenges, of a cross border nature are noted:

i. 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.

ii. 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 Phase 2A development (refer to Inset 7).

iii. 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.

iv. 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 cognizance 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.

v. Restrictions on beach access for social and economic purposes remains a challenge 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. The Department of Forestry Fisheries and Environmental Affairs is currently undertaking a

feasibility study on how to open up beach access for general public at Mtunzini, South of the uMlalazi river estuary. Similarly, the uMhlathuze Municipality has been doing studies to inform potential future beach/recreational development at Port Dunford.

vi. In uMlalazi, there is a Mtunzini Nodal Mixed Use Development located along N2 that is proposed to consist of mixed use activities including business, commercial, residential, offices and retail. It is anticipated that this development could trigger the commute of people from Port Dunford and surround areas to the Mtunzini area for shopping purposes and other activities. In this regard, connectivity via the N2 is very important and the N2/Port Dunford interchange would play a significant role.

vii. In the uMlalazi Municipality, the P230 is a tertiary 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 and unlock these tourism/heritage opportunities.

viii. Installation of directional/information signs by uMhlathuze on certain corridors is noted and the value appreciated. To give effect to this process, inter-municipal engagements between affected Municipalities has to take place.

ix. The influx of cargo trucks heading to the Port of Richards Bay is also severely impacting the Mthonjaneni Municipality and an intergovernmental effort is needed to resolve the associated impacts.

x. There is a significant mushrooming of illegal coal and cargo related storage facilities in the neighboring Municipalities due to influx of cargo trucks going to Richards Bay Harbor.

Map 90: Extract from Arterial Framework Plan