WITZENBERG MUNICIPAL SPATIAL DEVELOPMENT FRAMEWORK 2025-2030

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WITZENBERG

Table of Contents

Figures

Tables

Maps

Annexures

ABBREVIATIONS

Abbreviation	Detail
ABET	Adult Basic Education and Training
AQMP	Air Quality Management Plan
BNG	Breaking New Ground (Comprehensive Housing Plan)
CBA	Critical Biodiversity Area
CBD	Central Business District
CEF	Capital Expenditure Framework
CMA	Catchment Management Agency
CMFNR	Ceres Mountain Fynbos Nature Reserve
COVID	Coronavirus Disease (COVID-19 pandemic)
CPTED	Crime Prevention Through Environmental Design
CRRP	Climate Resilience and Response Plan
CSAG	Climate System Analysis Group
CSIR	Council for Scientific and Industrial Research
CWDM	Cape Winelands District Municipality
DALRRD	Department of Agriculture, Land Reform and Rural Development
DBSA	Development Bank of Southern Africa
DEA&DP	Department of Environmental Affairs and Development Planning
DWF	Democracy Works Foundation
ECD	Early Childhood Development
EPWP	Expanded Public Works Programme
ESA	Ecological Support Area
FLISP	Finance-Linked Individual Subsidy Programme (housing finance support)
FSP	Financial Service Provider
GAP	Gap Housing
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GIS	Geographic Information System
ha	Hectare (10,000 m²)
HFO	Heavy Fuel Oil
HH / hh	Household(s)
I&AP	Interested and Affected Parties
IAS	Invasive Alien Species
ICT	Information and Communication Technology
IDP	Integrated Development Plan
IDZ	Industrial Development Zone
IRDP	Integrated Residential Development Programme
ISMC&E	Invasive Species Monitoring, Control and Eradication
ITP	Integrated Transport Plan
IUDF	Integrated Urban Development Framework
IWMP	Integrated Waste Management Plan
IZS	Integrated Zoning Scheme
KPIs	Key Performance Indicators
KV	kilovolt
KVA	kilovolt-ampere
LED	Local Economic Development
LOS	Level of Service
LTO	Local Tourism Organisation
LUMS	Land Use Management System
MBT	Minibus Taxi
MEMP	Municipal Electricity Master Plan
MERO	Municipal Economic Review and Outlook (Western Cape Provincial Treasury)
MMP	Maintenance and Management Plan
MPSR	Municipal Performance and Service Report
MRF	Materials Recovery Facility
MSA	Municipal Systems Act (Act 32 of 2000)
MSDF	Municipal Spatial Development Framework

MTREF	Medium-Term Revenue and Expenditure Framework
MVA	Megavolt-Ampere
MYPE	Mid-Year Population Estimates
NDP	National Development Plan
NEMA	National Environmental Management Act
NEM:BA	National Environmental Management: Biodiversity Act
NGOs	Non-Governmental Organisations
NHRA	National Heritage Resources Act
NMD	Notified Maximum Demand
NMT	Non-Motorised Transport
NR	Not Required
NSDF	National Spatial Development Framework
ODB	Op-Die-Berg
ONA	Other Natural Area
PAH	Prince Alfred Hamlet
PERO	Provincial Economic Review and Outlook
PHC	Primary Health Care
PRASA	Passenger Rail Agency of South Africa
PSDF	Provincial Spatial Development Framework
PV	Photovoltaic (solar power)
REDZ	Renewable Energy Development Zone
RRAMS	Rural Road Asset Management System
SAHRA	South African Heritage Resources Agency
SANBI	South African National Biodiversity Institute
SASSA	South African Social Security Agency
SDG	Sustainable Development Goal
SDBIP	Service Delivery and Budget Implementation Plan
SEP	Socio-Economic Profile

SLAs	Service Level Agreements
SMME	Small, Medium and Micro Enterprise
SO	Strategic Objective
SPLUMA	Spatial Planning and Land Use Management Act (Act 16 of 2013)
StatsSA	Statistics South Africa
SWSA	Strategic Water Source Area
TBD	To Be Determined
TMG	Table Mountain Group
UCT	University of Cape Town
UISP	Upgrading of Informal Settlements Programme
VIPL	Ventilated Improved Pit Latrines
WC	Western Cape
WC EIIF 2021	Western Cape Economic and Infrastructure Investment Framework
WCBA	Western Cape Biodiversity Act
WCBSP	Western Cape Biodiversity Spatial Plan
WCED	Western Cape Education Department
WCIF	Western Cape Infrastructure Framework
WCO14	Western Cape Provincial Treasury budget classification code (Programme 14)
WCPSDF	Western Cape Provincial Spatial Development Framework
WM	Witzenberg Municipality
WMA	Water Management Area
WWF-SA	World Wide Fund for Nature South Africa
WWTP	Wastewater Treatment Plant
WWTW	Wastewater Treatment Works

CHAPTER 1: MSDF Purpose, Principles and Legislative Context

The Municipal Spatial Development Framework (MSDF) shapes the desired spatial form of the Witzenberg municipal area. The MSDF achieves this outcome as it promotes principles that lay the foundation within its context, to do so. A contextual overview of what the MSDF seeks to achieve introduces the principles on which the desired spatial form rests.

1.1 Purpose

The purpose of the Witzenberg Municipal Spatial Development Framework (MSDF) is to guide growth and development in the Witzenberg municipal area in a sustainable manner. Hence, future growth, development and land use planning will embrace the spatial vision and key considerations to maintain and protect the integrity, authenticity and accessibility of Witzenberg's natural environment and associated resources, maintain and expand the Municipality's key regional and intra-regional infrastructure, maintain and grow the agricultural assets within the Municipality, and maintain and expand opportunities associated with Witzenberg's key settlements.

The MSDF in use was approved in April 2020 and requires review and updating. This rewritten version of the Witzenberg MSDF is for the 2025 – 2035 period.[1]

1.2 Structure of the MSDF Document

The MSDF provides the municipality with the necessary tools and guidelines for the effective management of future development to ensure that development is balanced, sustainable and creates socio-economic opportunities. The following figure illustrates the chapters in the MSDF.

Figure 1: Chapters of the MSDF

[1]Scope of Work: SPLUMA Section 12 and SMA Section 24 (1) and 26 (e)

1.3 Witzenberg MSDF Status, Process and IDP, National & Provincial Policy Alignment

The diagram below, developed by the Department of Agriculture Land Reform and Rural Development (DALRRD)[2], provides a general overview of the steps involved in the preparation of a Municipal Spatial Development Framework (MSDF). This process can be broadly divided into five phases.

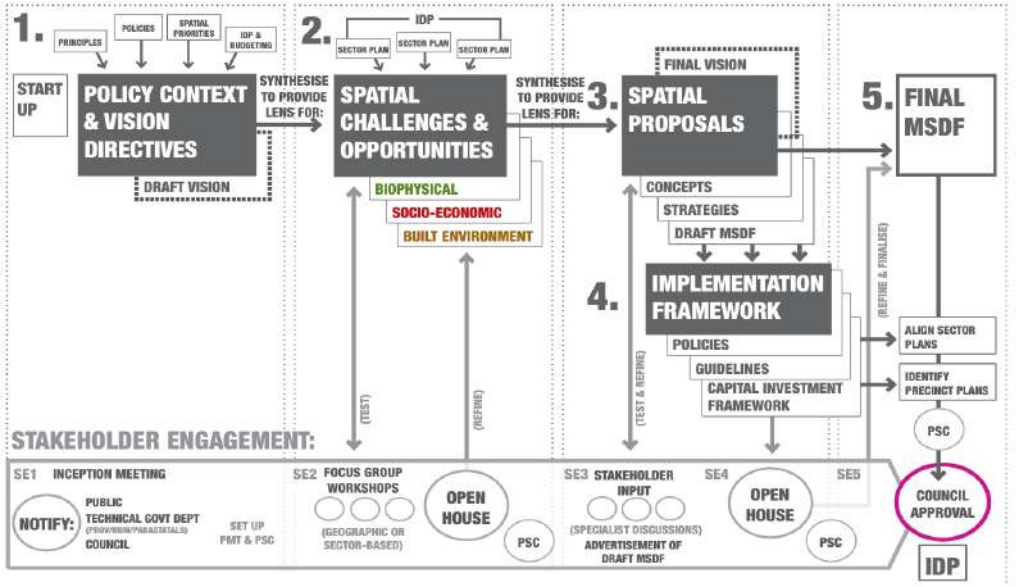
The initial two phases primarily focus on getting structures in place to support the development of the MSDF and an analysis of the policy context to derive directives for the subsequent phases. The compilation of the status quo, analysis of the sector plans and neighbouring MSDFs will generate more directives and identify gaps. The desired spatial form of the municipal area is conceptualised as directives and gaps identified are synthesised.

These two phases are followed by a compilation of spatial proposals and the first draft of the MSDF. Once the first draft MSDF is ready, the public and government departments are afforded the opportunity to comment. These comments are then considered and the first draft MSDF amended. The spatial and related proposals are costed and a Capital Expenditure Framework (CEF) is developed to prioritise proposals. The prioritised proposals are converted to an implementation framework. The MSDF, capital budget and implementation framework are presented to Council for adoption.

Once Council approves the MSDF as a sector plan of the Integrated Development Plan (IDP), the project is closed.

The Witzenberg MSDF, 2025 -2035, will be adopted as a core component of the Witzenberg IDP, 2022 – 2027 (Municipal Systems Act (MSA) Section 26(e)). The rewrite of the current MSDF, 2020 focuses on proposals that will be included as projects planned for the next five (5) years to twenty (20) years and the compilation of a Capital Expenditure Framework for these proposals. (MSA, 2000).

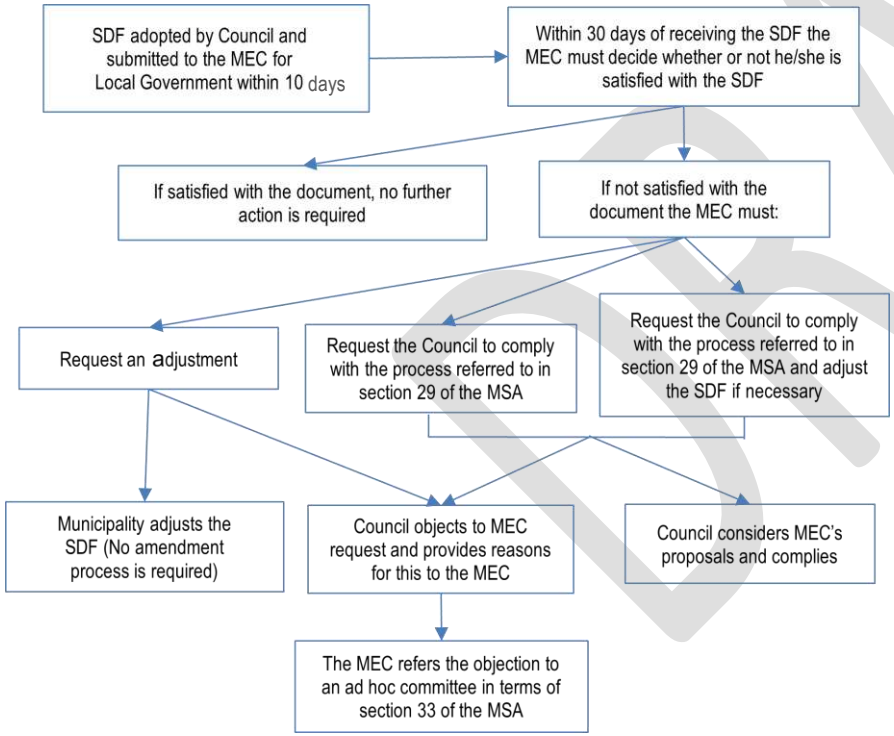
Figure 2: Diagram illustrating the procedural steps required in the process of preparing a MSDF (DALRRD)



[2] (DALRRD, 2017)

In addition, the Western Cape Department of Environment Affairs and Development Planning (DEA&DP) have compiled a detailed Practice Note which aims at providing guidance on distinguishing between "adoption", "review", and "amendment" of a Municipal Spatial Development Framework (MSDF). The Practice Note also addresses the concepts of "compilation", "deviation", and "adjustment." The document provides both legally binding requirements and recommended best practices. It further also details the link between the MSDF and the Integrated Development Plan (IDP). Detailed Standard Operating Procedures can be found in Annexure 1.

Figure 3: DEA&DP Circular 0021/2020 SOP



1.4 Locational Context

The Witzenberg Municipality (WC022) is located in the Western Cape Province and forms part of the Cape Winelands District Municipality (CWDM) together with four more municipalities: Stellenbosch, Drakenstein, Breede Valley and Langeberg.

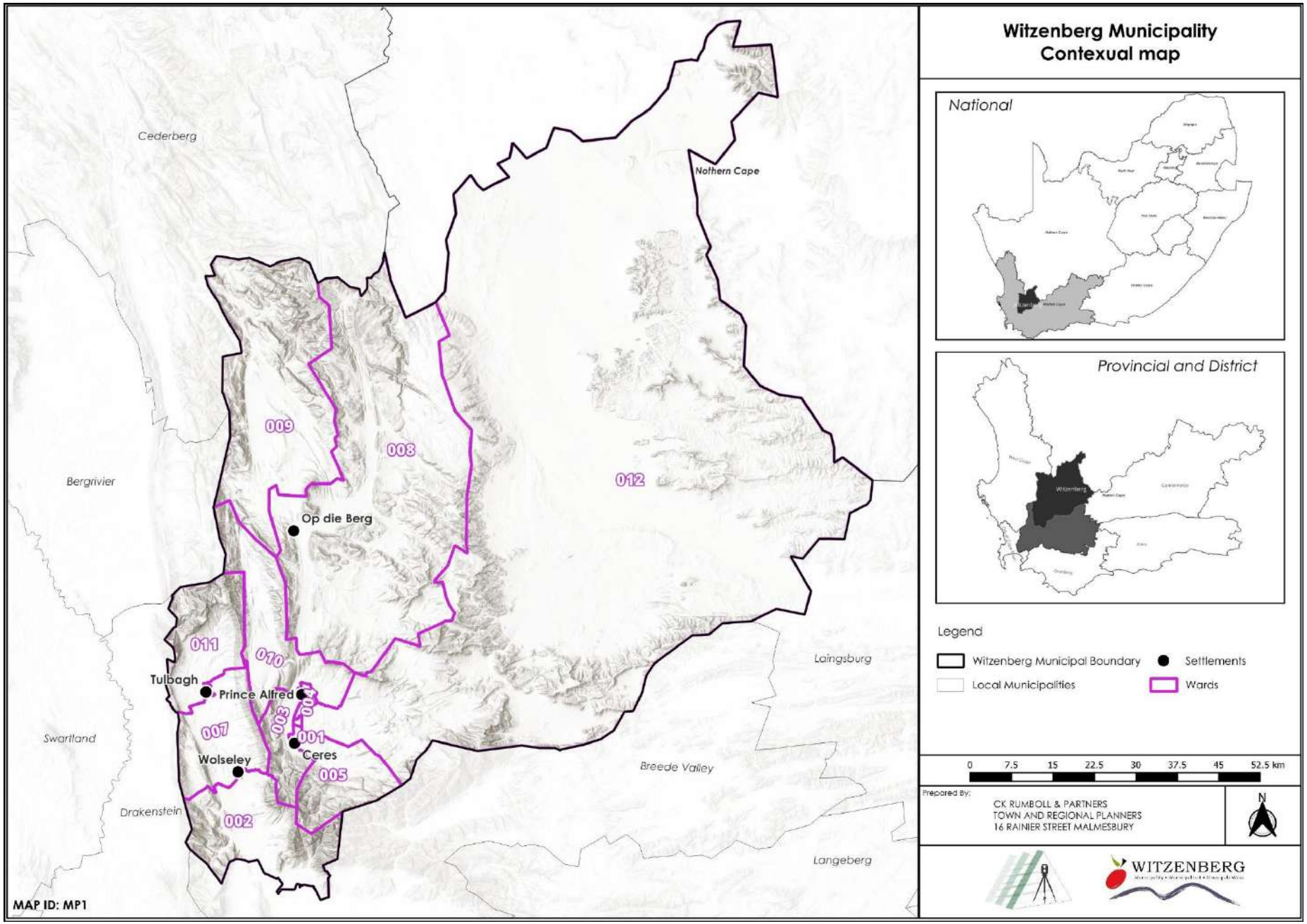
The Witzenberg Municipality, formally established on 22 September 2000 through the amalgamation of several former local authorities, including the municipalities of Ceres, Prince Alfred Hamlet, Tulbagh, Wolseley, and associated transitional councils, is situated approximately 90 minutes from the Cape Metropole. The municipality covers a total area of approximately 10 753km² and is the largest municipality of the five in the district, making up half of its geographical area. The region is surrounded by mountain ranges such as: the Kouebokkeveld Mountain Range to the north, the Swartruggens Mountain Range to the east, the Hex River Mountain Range to the south and the Limietberg, Elandskloof, Obiqua, and Grootwinterhoek Mountain Ranges to the west.

Rural areas within the municipal boundary are Ceres and Tankwa Karoo, Warm Bokkeveld, Koue Bokkeveld, Agter-Witzenberg and the northern portion of Breede River Valley (Het Land van Waveren). Encompassing an area of roughly 10 753km², it accounts for 13.27% of the Cape Winelands District making it the municipality with the largest topographical footprint in the district. Despite its relatively large size, around 60% of the municipal area

is uninhabitable due to mountainous terrain, reinforcing its strong agricultural and tourism character.

The municipality is defined by its fertile valleys, productive farmland, and scenic mountain landscapes. These natural features support a robust agricultural sector, particularly known for fruit and wine production, as well as the cultivation of olives and grain, and the farming of beef, pork, and livestock. In addition to its agricultural strengths, Witzenberg holds significant tourism potential. The area's rich cultural heritage, including San rock art, enhances its appeal as a destination for heritage and nature-based tourism.

Map 1: Locational Context Map



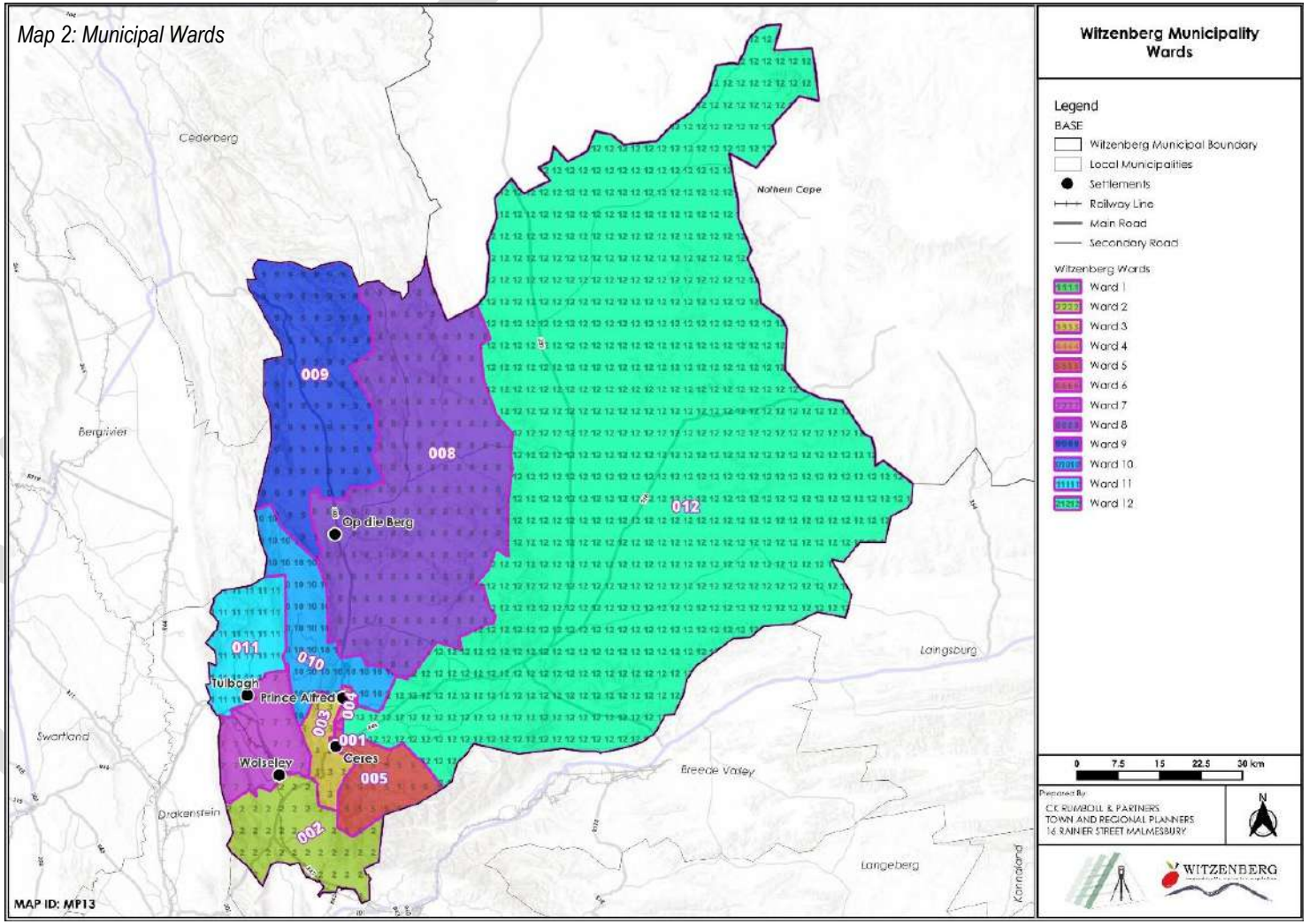
1.4.1 Wards

Witzenberg Municipality consists of 12 wards. These can be found listed in the table below and illustrated in the accompanying map.

Table 1: Municipal Wards

Settlement	Neighbourhood	Ward
Ceres	eNduli	1 & 12
	Bella Vista	6 & 4
	Ceres Town	3 & 5
Tulbagh	Tulbagh Town	11
	Chris Hani	11
	Witzenville	7
Wolseley	Montana	2
	Pine Valley	7
	Wolseley Town	7
Prince Alfred Hamlet	Prince Alfred Hamlet	4
	Op die Koppie	10
Op-Die-Berg		8
Rural Area		
Tulbagh Rural	Steinthal Estate	7
	Waterval	11
	Tulbagh Road (Railway Station)	11
	Drostdy	11
Wolseley Rural	Kluitjieskraal Forestry Station, (Swanenbergpark)	7
Prince Alfred Hamlet Rural	Prince Alfred Hamlet Station	4

Map 2: Municipal Wards



1.5 Legislative & Policy Directives

A synthesis and analysis of international, national and provincial legislation was undertaken to establish a framework and directives to facilitate spatial planning in Witzenberg Municipality. Similar themes and objectives emerge from the various legislation, polices, plans and frameworks at different levels:

- Spatial Justice and Inclusion - Addresses historical spatial imbalances and aims to promote equitable access to land, services, and opportunities for all communities. It focuses on redressing past spatial injustices, integrating marginalised settlements, ensuring tenure security, and promoting inclusive development across urban and rural areas.
- Infrastructure and Basic Services - Focusses on the provision, upgrading, and maintenance of critical infrastructure and basic services, such as water, sanitation, electricity, roads, and stormwater management. It supports sustainable human settlement development and aims to ensure that all communities, especially underserved rural and informal areas, have access to safe, reliable, and affordable infrastructure.
- Sustainable Land Use and Urban Growth - Promotes the efficient and coordinated use of land to support compact, integrated, and resource-efficient settlement patterns. It seeks to manage urban expansion, prevent urban sprawl into high-value agricultural or environmentally sensitive land, and guide future growth towards well-located, sustainable nodes through appropriate zoning, land use control, and spatial planning.
- Agriculture and Rural Development – Focusses on the strategic role of agriculture in Witzenberg's economy and identity. It seeks to protect high-potential agricultural land, support the agri-processing value chain, and strengthen rural livelihoods. It also addresses the development needs of farmworker communities and the diversification of rural economies beyond traditional farming.
- Economic Development, Access and Job Creation – Supports inclusive economic growth by promoting spatial strategies that improve access to employment opportunities, transport networks, markets, and economic infrastructure. It emphasises the importance of strengthening urban-rural linkages, enhancing mobility, and unlocking the potential of towns and nodes to serve as local and regional economic anchors.
- Environmental Resilience and Response to Climate Change. Focuses on building resilience to environmental risks and climate change impacts through spatial planning. It prioritises the protection of ecological infrastructure, sustainable resource management, and climate-adaptive development. It also considers risk mitigation for disasters such as droughts, floods, wildfires, and extreme heat, which increasingly threaten livelihoods and infrastructure in Witzenberg.

A status quo analysis was then conducted for each theme to assess the municipality's current level of compliance, followed by the formulation of directives aimed at improving alignment with legislative objectives. Detailed summaries of all the laws, policies and plans considered and referenced in the tables below are included as Annexure 2.

Spatial Justice and Inclusion				
Legal Framework & Level		**Directives/ Objectives/ Actions**	**Municipal Compliance**	**Directives for Witzenberg**
International	**Aligned SDGs**	SDG 1 – No Poverty. SDG 4 – Quality Education. SDG 5 – Gender Equality. SDG 10 – Reduced Inequalities. SDG 11 – Sustainable Cities and Communities. SDG 16 – Peace, Justice and Strong Institutions.	- Spatial planning in Witzenberg still mirrors apartheid patterns, with areas like Bella Vista and eNduli in Ceres located far from jobs, transport, and services. This spatial marginalisation reinforces inequality and limits socio-economic mobility. - Infill development is constrained by a shortage of suitable land, high-value agricultural areas, and conflicting land uses, such as agri-processing facilities near housing. These constraints prevent restructuring even where demand exists, especially in Ceres. - Informal settlements, notably in Wolseley, are growing on commonage land but remain unmanaged due to a lack of planning and upgrade frameworks. This leaves many residents without basic services, tenure security, or formal inclusion. - The municipality does not have a Human Settlements Plan or housing strategy for backyard dwellers. As a result, Witzenberg falls behind other municipalities in addressing housing and tenure needs. - The housing market is failing due to low affordability, no planning instruments, and little incentive for private developers to invest. Demand is growing, but it is mostly met through informal means or remains unaddressed.	- Prioritise the development of a Human Settlements Plan to guide integrated, well-located housing development. This to include a housing pipeline, informal settlement upgrades, and strategies for backyard and gap housing. - Promote a municipal land audit to identify suitable public and private land for redress-focused housing. Classify and upgrade informal settlements through the UISP. The focus to be on in-situ upgrading and secure tenure, using flexible zoning approaches. - Adopt a local inclusionary housing policy and facilitate rental and social housing near employment opportunities and services. - Prioritise infill and redevelopment of underutilised land, where available, to reduce sprawl and fragmentation. - Extend basic social services to historically excluded areas through a facility access audit particularly in Ceres and Wolseley. Align budgeting and planning to close infrastructure gaps. - Embed spatial justice principles in the SDF, LUMS and all land use decisions. Priority redress areas must be clearly defined and monitored through planning instruments.
National	**Relevant SPLUMA Principles**	Spatial Justice (7a): - Redress past imbalances; - Include disadvantaged areas; - Secure tenure; - Flexible systems.		
	Policies / Frameworks	- NDP – inclusive access to housing, land and services; - IUDF – integration and urban equity; - National Transport Plan – mobility for the underserved.		
Provincial	**Policies / Frameworks**	- Western Cape Inclusionary Housing Policy Framework (Oct 2022); - Western Cape Provincial Spatial Development Framework; - Western Cape Provincial Strategic Plan.		

Infrastructure and Basic Services				
Legal Framework & Level		**Directives/ Objectives/ Actions**	**Municipal Compliance**	**Directives for Witzenberg**
International	**Aligned SDGs**	SDG 3 – Good Health and Wellbeing. SDG 6 – Clean Water and Sanitation. SDG 7 – Affordable and Clean Energy. SDG 9 – Industry, Innovation and Infrastructure. SDG 11 – Sustainable Cities and Communities.	- Urban areas generally have well-developed infrastructure networks for the provision of basic services. Rural and Informal areas however, face significant challenges with service delivery as infrastructure networks are lacking. - Informal settlements in particular are underserved due to rapid growth and limited municipal capacity to either effectively monitor and manage this expansion or provide infrastructure. - Data on basic service provision in rural areas is not readily available, indicating a potential need for targeted rural area studies or assessments. - Municipal budget allocations prioritize upgrading, maintenance, and development of basic service infrastructure. - The municipality aligns with national and provincial infrastructure priorities in road maintenance, water service improvements, energy resilience, and community facility upgrades, supported by budget planning focused on sustainable growth. However, it faces challenges such as grant funding losses due to underperformance, non-compliance with environmental regulations in waste management, procurement delays, and past housing eviction practices that may not fully meet legal requirements.	- Prioritise applying for and securing external funding opportunities, such as grants and subsidies from the provincial government, to support the improvement of basic service delivery in underserved informal settlements and rural communities. This approach is particularly important in areas experiencing rapid population growth, such as Wolseley and Ceres, where infrastructure capacity must be expanded to meet increasing demand. - Commission detailed studies such as a Municipal Rural Areas Study to gather data on basic service delivery and economic development in rural areas to identify service gaps and inform equitable infrastructure planning and investment. - Address delays in procurement and project implementation by building technical and administrative capacity, ensuring compliance with legal frameworks, and promoting transparent public participation. - Ensure that budget allocations sustain essential upgrades for energy resilience, water service upgrades, road maintenance, and community facility enhancements. - Develop adaptive design standards such as flood-resistant roads with enhanced drainage, elevated critical services in flood-prone areas, and modular or relocatable housing in high-risk zones to ensure infrastructure can withstand and recover from climate-related shocks.
National	**Relevant SPLUMA Principles**	Spatial Sustainability (7b): - Cost-effective development; - Sustainable location; - Infrastructure provision; - Equitable land markets.		
	Policies / Frameworks	- National Infrastructure Plan (2022) – economic and social infrastructure; - NDP – basic services for all; - IUDF – infrastructure-led development; - National Transport Plan – integrated transport systems.		
Provincial	**Policies / Frameworks**	- Western Cape Department of Infrastructure Framework 2050 (WCIF 2050); - Western Cape Provincial Land Transport Framework (2024/25 - 2028/29).		

Sustainable Land Use and Urban Growth				
Legal Framework & Level		**Directives/ Objectives/ Actions**	**Municipal Compliance**	**Directives for Witzenberg**
International	**Aligned SDGs**	SDG 2 – Zero Hunger. SDG 11 – Sustainable Cities and Communities. SDG 12 – Responsible Consumption and Production. SDG 15 – Life on Land.	- Land use and spatial growth in Witzenberg are guided by national and provincial frameworks (e.g. SPLUMA, PSDF), the Witzenberg Municipal Land Use Planning By-Law, and the municipal zoning scheme. - Not all principles from relevant legislation are effectively implemented. Informal settlements dominate spatial growth, and the municipality lacks formal structures to plan for or manage informal expansion. - Although the MSDF and zoning scheme supports agricultural land protection, urban sprawl remains a risk due to limited enforcement capacity and unmanaged informal growth and limited developable land. - There is very limited development of viable, mixed-use communities. Most residents, particularly in rural or peripheral areas, must travel to access jobs, amenities, and services. - New land development has been scarce. Spatial restructuring and integration goals remain largely unmet, contributing to ongoing inequality and fragmented settlement patterns.	- Develop a proactive informal settlement management strategy, including land identification, incremental upgrading frameworks, and basic service delivery guidelines. - Incentivise densification in well-located areas by fast-tracking approvals for second dwellings and mixed-use development in existing urban footprints. - Strengthen land protection zones using GIS-based agricultural sensitivity mapping to prevent sprawl into high-potential agricultural land. - Identify priority nodes for mixed-use development, especially in and around transport corridors and existing towns (e.g., Ceres CBD, Wolseley, Tulbagh). - Build partnerships with the Western Cape Government for technical support (e.g., GIS, spatial data analysis). - Incorporate informal settlements into spatial planning to ensure inclusive, equitable, and sustainable planning and service provision.
National	**Relevant SPLUMA Principles**	Spatial Sustainability (7b): - Protect agricultural land; - Limit sprawl; - Promote viable communities.		
	Policies / Frameworks	- NSDF – compact growth and transformation corridors; - IUDF – densification and spatial integration; - NDP – sustainable settlement patterns.		
Provincial	**Policies / Frameworks**	- Western Cape Land Use Planning Guidelines: Rural Areas (Mar 2019); - Western Cape Provincial Spatial Development Framework.		

Agriculture and Rural Development				
Legal Framework & Level		**Directives/ Objectives/ Actions**	**Municipal Compliance**	**Directives for Witzenberg**
International	**Aligned SDGs**	SDG 2 – Zero Hunger. SDG 8 – Decent Work and Economic Growth. SDG 14 – Life Below Water. SDG 15 – Life on Land. SDG 1 – No Poverty.	- Agriculture is the primary economic driver in the Witzenberg Municipality, with extensive areas of high-value intensive cultivation, including fruit, vegetables, wine, and grains, concentrated around Ceres, Prince Alfred Hamlet, and Tulbagh. The region's favourable climate and fertile soils support commercial agriculture that contributes significantly to both exports and employment. In contrast the eastern region has low cultivation potential and extensive agricultural production is practiced. - The sector heavily relies on seasonal labour, leading to cyclical in-migration and population fluctuations. This places strain on rural infrastructure, housing, and service delivery, especially in towns like Ceres and Wolseley. - Rural settlements and farmworker communities often lack adequate infrastructure, public facilities, and secure tenure. Informal settlements near high-potential agricultural or conservation land and water sources are growing without structured development planning or reliable access to services. - Agricultural land is under pressure from urban residential expansion. There is a lack of land and limited policy directives for agri-processing nodes. Hence land fragmentation, conflicting uses, and ad hoc settlement growth continues as challenges. - The sector is vulnerable to climate change impacts such as drought, water scarcity, and soil degradation. While some irrigation and resilience programmes are in place,	- Formulate a spatially targeted Municipal Rural Development Framework aimed at guiding infrastructure investment, housing, service delivery, and settlement planning in rural and peri-urban areas. - Introduce local agricultural land protection zones in the zoning scheme to limit urban sprawl yet to provide for agri-processing (interrupted urban edges). - Expand participation in the Western Cape SmartAgri Plan by introducing municipal-level adaptation programmes that support small scale agriculture (including smallholder and emerging farmers) with access to climate-smart techniques, efficient irrigation, and resource conservation initiatives. - Conduct rural infrastructure audits and socio-economic assessments to identify investment needs, service gaps, and land-use aspacts to support decision-making based on findings. - Encourage and collaborate with the provincial government to develop a spatially targeted rural development strategy and structured farmer support programme, ensuring alignment with local priorities.
National	**Relevant SPLUMA Principles**	Spatial Sustainability (7b): - Protection and sustainable use of agricultural land and rural areas; - Spatial Justice; - Small scale Agriculture; - Spatial Resilience; - Climate change adaptation; - Spatial efficiency; - Agricultural Value Chain.		
	National Policies / Frameworks	- NDP – food security and rural economic growth; - National Biodiversity Strategy – conservation linked to rural livelihoods; - National Climate Adaptation Strategy (2019) – climate resilience in agriculture; - Integrated Urban Development Framework (IUDF) – inclusive rural development emphasis.		
Provincial	**Provincial Policies / Frameworks**	- SmartAgri Plan (2016); - WC Land Use Planning Guidelines: Rural Areas (2019); - WC Growth for Jobs Strategy (2023–2035);		

		- WC Provincial Spatial Development Framework (WCPSDF); - WC Climate Change Response Strategy (2022); - WC Infrastructure Framework 2050 (partially); - WC Provincial Land Transport Framework (supportive).	these are accessible to commercial farming operations, but singular or small scale operators (including smallholders and emerging farmers) have barriers to access adaptive support. - There is no integrated rural development plan at municipal level. While provincial guidelines (e.g. the Western Cape Land Use Rural Areas Planning Guideline) exist, Witzenberg lacks a spatially targeted rural development strategy or structured farmer support programme.	

Environmental Resilience and Climate Response				
Legal Framework & Level		**Directives/ Objectives/ Actions**	**Municipal Compliance**	**Directives for Witzenberg**
International	**Aligned SDGs**	SDG 6 – Clean Water and Sanitation. SDG 11 – Sustainable Cities and Communities. SDG 12 – Responsible Consumption and Production. SDG 13 – Climate Action. SDG 14 – Life Below Water (where applicable). SDG 15 – Life on Land.	- While there is no dedicated environmental management framework, various sectoral plans, such as the Disaster Management Sectoral Plan, Invasive Alien Species Plan, River Maintenance Management Plan, and Air Quality Management Plan, address specific environmental issues. However, these operate in isolation and are not aligned within a broader, integrated ecological network strategy, resulting in limited systematic integration with spatial and land use planning. Environmental considerations in terms of development proposals are referred to relevant provincial departments for comment. - Witzenberg in particular is highly vulnerable to climate-related hazards including droughts, heatwaves, floods, and wildfires, that are intensifying due to climate change	- Priortitse the protection of Biodiversity Priority Areas as outlined in the Western Cape Biodiversity Act. - Support the development of an environmental management framework that integrates various existing plans and helps guide urban development. - Protect and Strengthen Ecological Infrastructure by: o Delineating and protecting ecological corridors and buffers, especially along rivers, wetlands, and biodiversity hotspots. o Incorporating Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs) into land use planning to prevent fragmentation and maintain ecosystem services. - Encourage the enforcement of Climate-Responsive Land Use Management by:
National	**Relevant SPLUMA Principles**	Spatial Resilience (7d): - Flexibility to adapt to climate and economic shocks		
	National Policies / Frameworks	- National Environmental Management Act (NEMA) – sustainable environmental decision-making;		

		- National Biodiversity Strategy – conservation and ecosystem services; - National Climate Adaptation Strategy (2019) – climate-resilient planning; - NDP – low-carbon and climate-resilient development.	and which poses a significant threat to agriculture, human health, water security, and infrastructure. - Flood and wildfire risks are becoming more severe - Short-duration, high-intensity storms are projected to increase flash flooding risks, particularly in vulnerable areas like Tankwa. Wildfire threats are also rising due to erratic rainfall, rising temperatures, and fewer frost days, posing risks to people, property, and ecosystems. - Witzenberg benefits from national and provincial initiatives like the Western Cape Climate Change Response Strategy, SmartAgri, and EPWP (Working for Water/Fire). These efforts support climate adaptation, biodiversity protection, and sustainable agriculture while also creating local employment. - Partnerships with organisations such as CapeNature, WWF-SA, and Conservation South Africa help implement biodiversity stewardship and community-based resilience projects. These initiatives play a vital role in building adaptive capacity in vulnerable communities.	o Preventing formal and informal development in high-risk flood, fire, erosion, and in areas with sensitive biodiversity (CBAs) (to be identified via GIS layers) by delineating overlay zones, supporting vulnerable communities with well-located, serviced land, and ensuring emergency and relocation policies are in place. o Encouraging compact, nodal development to reduce sprawl and prevent encroachment on high-potential agricultural and conservation worthy land, particularly in Ceres and sensitive biodiversity areas (Tulbagh). - Require new developments to incorporate green infrastructure (e.g. permeable surfaces, tree planting, green roofs, rain gardens) to manage heat, stormwater, and air quality. - Reuse stormwater and/or clean stormwater before deposited back into water courses. - Protect existing urban green spaces and expand them as climate mitigation assets, particularly in heat-vulnerable communities such as Tulbagh and Wolseley. - Develop educational gardens and open spaces. - Encourage climate-proofing measures, such as green buffers, flood protection, and heat mitigation.
Provincial	**Provincial Policies / Frameworks**	- Western Cape Climate Change Response Strategy (Mar 2022); - (SmartAgri Plan) Western Cape Climate Change Response Framework and Implementation Plan for Agricultural Sector (2016).		

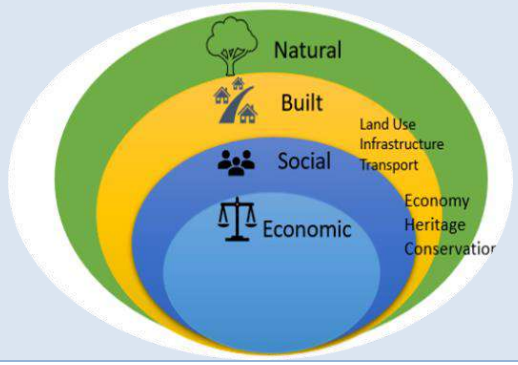
Economic Development and Accessibility				
Legal Framework & Level		**Directives/ Objectives/ Actions**	**Municipal Compliance**	**Directives for Witzenberg**
International	**Aligned SDGs**	SDG 2 – Zero Hunger. SDG 8 – Decent Work and Economic Growth. SDG 9 – Industry, Innovation and Infrastructure. SDG 11 – Sustainable Cities and Communities.	- Agriculture remains the main economic driver especially in fruit production, supported by a strong agro-processing sector concentrated around Ceres and surrounding areas. - Unemployment remains a challenge, particularly among youth and low-skilled individuals, despite the area's productive agricultural base. - Economic activity is spatially concentrated in settlements such as Ceres, Wolseley, Tulbagh and Prince Alfred Hamlet, which function as local service and employment hubs. - Seasonal labour trends are prominent, linked to the agricultural cycle, resulting in fluctuations in employment and income stability. - Support for emerging farmers and SMMEs is evident in local economic strategies, although access to markets and finance remains limited for small scale agriculture.	- Spatially plan for designated accessible, well-serviced areas for hawkers, street traders, and small enterprises to operate legally and safely, supporting local entrepreneurship and livelihoods. - Enhance the agricultural value chain to benefit informal traders and provide spaces for these activities. - Improve connections between rural areas and economic centres through enhanced road infrastructure, public transport options, and pedestrian-friendly links to enable residents to access jobs and services. - Develop tourism corridors linking key attractions with accommodation, retail, and transport nodes; facilitate community-based tourism initiatives within towns and rural areas. - Allocate space for co-working, training, and innovation centres to support skills development, technology uptake, and diversification into knowledge-based sectors. - Promote and manage development along tourism routes in a manner that supports tourism potential, protects scenic and environmental qualities, and ensures that land use and infrastructure investment enhance the visitor experience while benefiting local communities.
National	**Relevant SPLUMA Principles**	Efficiency (7c): - Maximise use of existing infrastructure; - Streamlined applications; - Reduce negative impacts.		
	National Policies / Frameworks	- NDP – inclusive economic growth; - National Infrastructure Plan (2022) – enabling economic infrastructure; - National Transport Plan – mobility for trade and productivity; - IUDF – access to economic opportunities.		
Provincial	**Provincial Policies / Frameworks**	- Western Cape Growth for Jobs Strategy (2023-2035); - Western Cape Provincial Strategic Plan.		

				- Support nodal agri-related development to enhance agri processing and agri-value chains. - Address Eskom capacity problem as a highest priority for Local Economic Development. - Consider positioning Wolseley as a new industrial centre and development corridor, leveraging its strategic location along major roads and rail infrastructure. - Promote alternative energy generation.

1.6 Settlement Values and Performance Qualities

Planning shifted from separate (silo) development based on modernism (functionalism) to human-scale and nature-centred settlement making informed by public opinion. Such settlements are scaled for pedestrians (neither pedestrians nor vehicles dominate); are compact (with high building densities); are integrated; have composite parts that reinforce each other; have a strong spatial feel with well-defined public spaces and have complex spatial structures offering choice in terms of intensity of interaction, privacy of living conditions, lifestyles, housing options and movement systems (physical, social and economic integration).

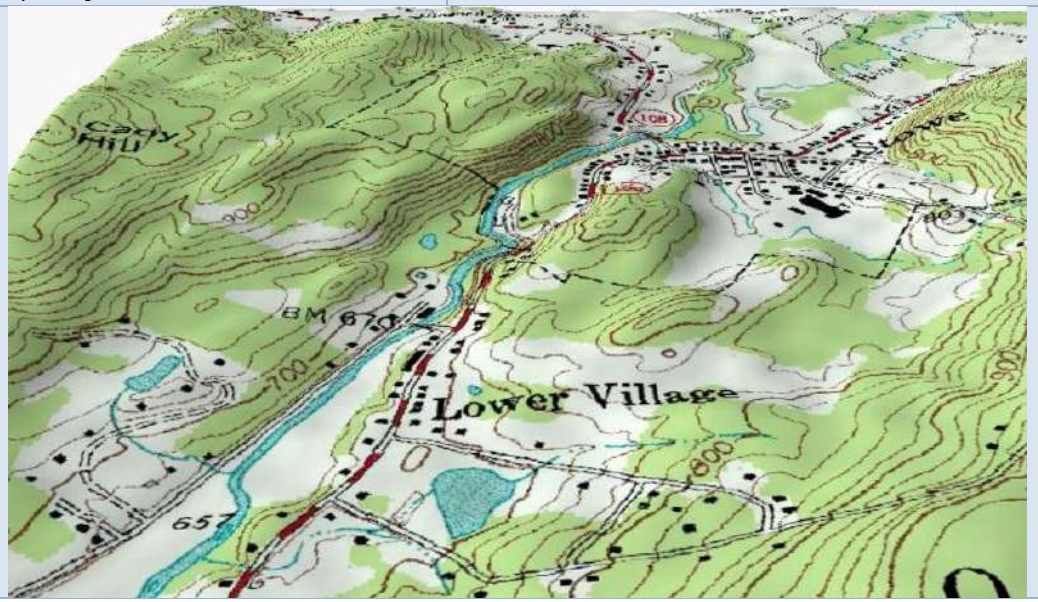
Well-performing settlements and regions have the qualities of Liveable Environments and Sustainable Settlements. These performance qualities are defined and described below and reference is made to the SPLUMA principle each quality represents:

Definitions	Features and qualities
Liveable Environments: A liveable settlement satisfies more than the basic needs of a community as the individual as well as the community's needs for social facilities and health facilities are met. Quality of life is key. (Van Kamp et al, 2003). (Social Justice)	Liveable environments are recognised by the present relationship between people and their settlements and feature economic growth, accessibility and place identity. (Resilience)
Sustainable Settlements: - Are well-managed, compact entities in which economic growth and social development are in balance with the carrying capacity of the natural systems on which they depend for their existence and result in sustainable development, wealth creation, poverty alleviation and equity. (Department of Local Government and Housing, 2005). (Sustainability) - Improve the liveability of settlements by reducing the impact on the environment through reduced use of resources and the generation of less waste. (Efficiency)	Present the future relationship between settlement and environment and feature Ecological integrity (Planet), Social justice (People) and Economical effectiveness (Prosperity). 

1.6.1 Spatial Elements of Settlements and Regions

Settlements are structured spaces that facilitate the interplay between formally planned development (assigned land uses and corresponding engineering services) and spontaneous development (settlement plans that accommodate uncertainty and change) as well as public environments, shared by all inhabitants, vs. private realms of individual households. The spatial elements of regions are topography (form), cultivation and landscape and man-made elements, which include road networks and settlements, as described below (CSIR, 2000):

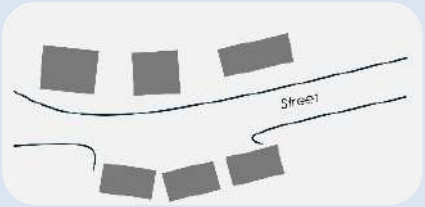
SPACE: BUILT AND NATURAL	
At settlement level	**At regional level**
• Consist of spaces in relation to the whole (settlement and its environment) and to each other within a settlement and are not spaces in isolation. • A continuum or hierarchy of public spaces and movement systems, which attract and give order to activities, events and elements in accordance with their need for publicness or privacy. • Structured and diverse, spaces characterised on continuum of public to private. [Public spaces are places where people meet, comprised of urban "rooms" and connectivity "seams". Streets are public spaces].	• Delineated and merged landscapes, which are characterised by conservation, cultivation and nature. • Mountains and Fynbos ecosystems, Rivers and Freshwater ecosystems, Wetlands, Formal and Informal Conservation areas, Arable land.



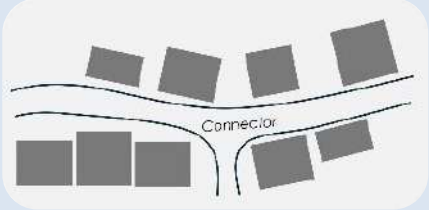
COMMUNITY FACILITIES/ INSTITUTIONS/ AMENITIES

- Most valued by society, which have the potential to foster social cohesion, such as institutions of learning, worship, exchange and markets; serve as structuring elements in settlements.
- Including public open space, demand safety and quality.
- Give unique character to places and often attract informal activities.
- Provision guided by population thresholds and access. (Department of Human Settlements, 2019).
- Location and clustering in relation to one another and to other structuring elements is critical to ensure efficient use of public land and resources (central places, easily accessible i.t.o movement patterns, announced by public space).
- Location often determines private or public use.

At settlement level



At regional level

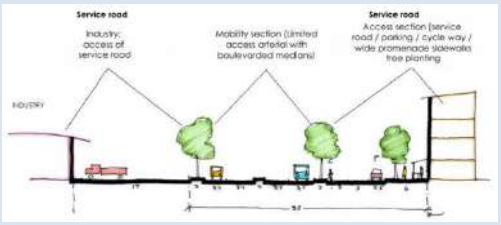


CONNECTION INCLUDING NETWORKS AND SYSTEMS

At settlement level

A movement system is:
A network of spaces that people move through and allows for the public life of a community.

Refers to e.g. roads and streets, pedestrian and bicycle routes, and public transport systems, such as passenger rail.

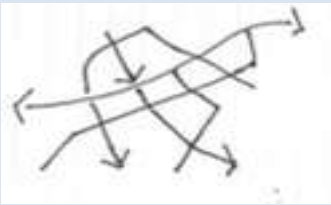


At regional level

Movement and/or circulation networks are:

- Linear systems connecting settlements.
- Specific routes along which people, goods and services are channelled.

Movement infrastructure such as main routes, highways, ports, and railway lines and stations between and within settlements.



UTILITY SERVICES (ENGINEERING SERVICES)

Settlement

- Essential for settlement function and public health, including water provision, sewerage removal, stormwater disposal, solid waste removal and electricity supply.
- Should be provided as efficiently and cost-effectively as possible, while appropriately considering human and nature centred approaches to settlement making.
- Should follow settlement structure, not lead it.

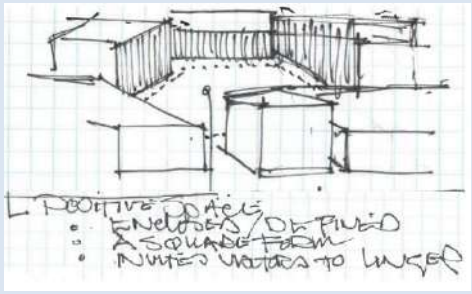
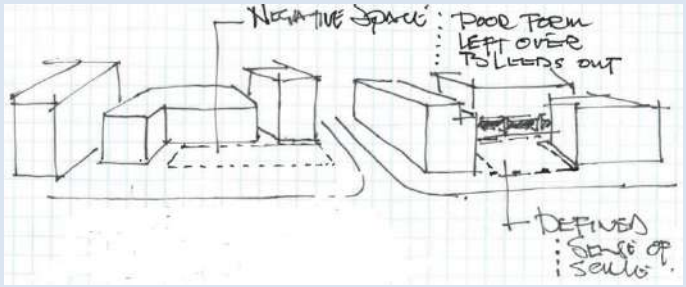
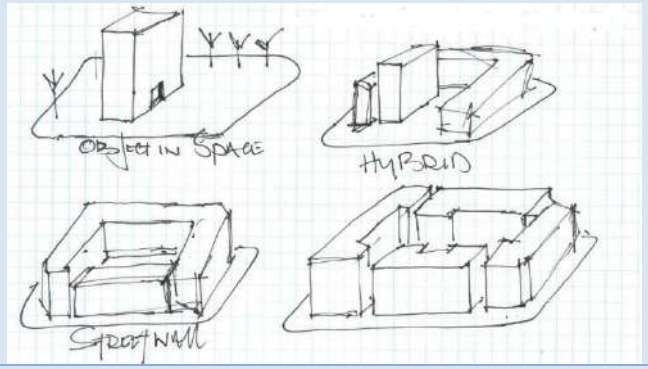
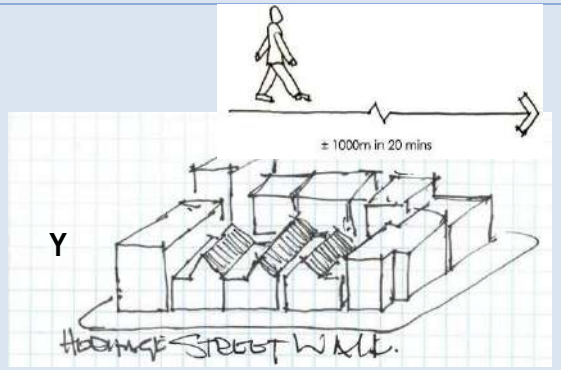
Regional

- Bulk services are essential to functioning of regions (area) e.g. solar farms.

1.6.2 Structural Tools: Measures and SPLUMA Principles

Settlements demonstrating desirable spatial qualities are scaled for pedestrians (neither pedestrians nor vehicles dominate); are compact (with high building densities); are integrated with composite parts reinforcing each other; have a strong spatial feel with well-defined public spaces; have complex spatial structures offering choices i.t.o. intensity of interaction, privacy of living conditions, lifestyles, housing options and movement systems.

The application of four spatial measures is central to the use of space to create positive settlements: definition, scale, flexibility and intensity. Each spatial measure consists of two opposite measures or structural tools as per the table below:

Spatial Measures
Definition: In positive environments, public open spaces are defined by buildings and other space-defining elements, such as walls and landscaping. The elements create a feeling of enclosure rather than free-standing elements with no relation to one another.
 X 
Structural Tools: Continuity and Discontinuity (Containment).
Scale: The relationship between size, distance and height. "Human Scale" is a norm for all development planning.
 X 
Structural Tools: Externalisation and Localisation.

Flexibility: The creation of spatial structures that accommodate unexpected change over a period of time.

Structural Tools: Same and Different (Homogeneity and Heterogeneity).

Intensity: Refers to the creation of:

- High-level support for economic and social goods and services.
- The conditions for sustainable public transport systems.
- Effective infrastructure use, improved land use, contributing to compact urban areas, reduced transportation and energy use as well as the reduction of pollution.

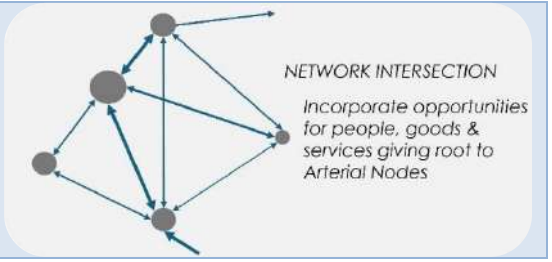
Structural Tools: Density and Sparsity (Openness).

Considerations:

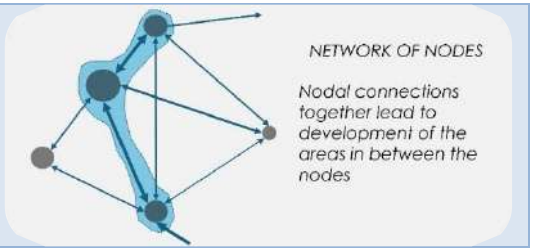
- Sensitively intensify development opportunities in apparently developed but often underdeveloped well-located urban areas paying attention to urban quality;
- Sensitive infill and redevelopment along main routes in well-located precincts;
- Sensitivity towards existing heritage buildings;
- Enhancing the street experience through landscaping and building design quality in new developments.

The application of structural tools creates man-made spatial elements such as:

- **Centres/ Parks/ Precincts** (e.g. Administrative, Educational, Legal and Services).
- **Nodes** (e.g. Collective & Specialised Economies, Services, Manufacturing, Tourist Attractions): Highly accessible, high-intensity land use activity located along or at the start and end points of existing, emerging or national corridors: include areas of residence, industrial activity or trade that are either generators of transport demand and/or supporters of transport functions.

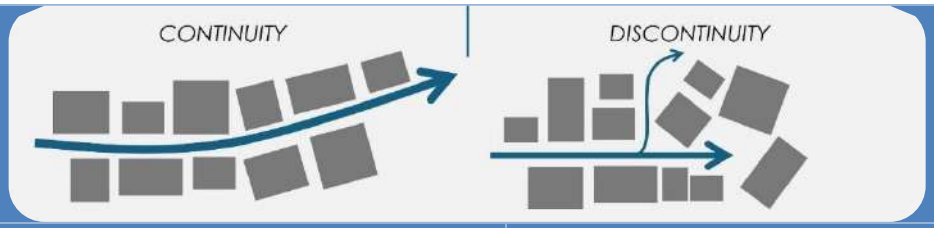


- **Hubs** (Economic specialisation: Jewellery, Petro-Chemical, Logistic). Highly accessible.
- **Axis or Streets** (Transport & mobility spines).
- **Corridors:** Include, but not limited to scenic, tourism, freight, transport, industrial development zones (IDZ), intensive agriculture or rural including agri-industry and related and supporting services and conservation.
- **Zones/ Precincts** (Tourism, Commercial (special economic zones), Agricultural and Irrigation, Alternative Energy, Industrial (IDZs and SIDZs).

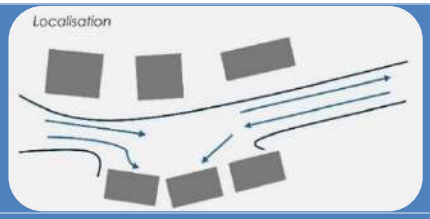


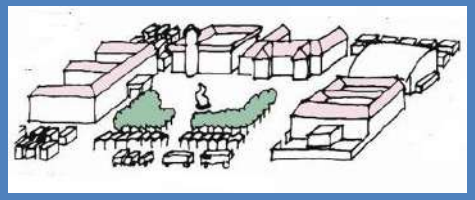
The table below provides a description of the structural tools applied to the spatial elements and its resultant man-made elements and or qualities:

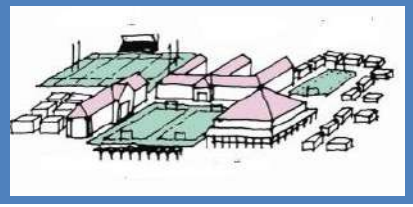
	DENSITY (REINFORCEMENT)	SPARSITY (OPENNESS)
Space	**Economic agglomeration:** Integration of different developments (new and old). **Densification:** Reduction of erf size, alternative housing types (housing typologies), infill, redesign, mixed-use development. **Natural open space network:** a key component of a sustainable urban landscape.	**Movement networks:** part of a system of public places. **Protection and enhancement of heritage and natural resources:** through either Heritage Overlay Zones or Conservation (biophysical) Overlay Zones and categories.
Connectivity/ Mobility	**Single corridor movement network:** Different forms of transport are brought together (pedestrian, bicycle, train, taxi, bus and vehicles). **Activity Axis:** The core of activity corridor/ tertiary network or street (local network). **Activity nodes:** Different forms of transport connect.	**Single mode transport networks or roads:** population thresholds are too low to justify other modes.
Public & Community Institutions	**Clustered, multipurpose facilities and nodes** where different social services and programmes are offered. A system of public spaces and hierarchy of facilities that order activities and resources.	**Single facility** e.g. school.
Public Utilities	**Infrastructure cluster** where different utilities are managed e.g. water & sewerage.	**Single Infrastructure yard** e.g. sewerage works or solar farm.



	CONTINUITY	DISCONTINUITY (CONTAINMENT)
Space	**Enclosure:** Create a sense of enclosure and definition. Buildings, either through the building itself, its walls, or planting, should contribute to defining the public space it abuts.	**Natural habitats:** Ecological systems, complex, continuous, allow migration of species, productive/ conservation/ preservation space. Integrate natural and rural areas into urban landscape.
Connectivity/ Mobility	**Ordering structure of movement networks:** *Settlement level:* Network energy released through stopping, exit (not through movement); retain rather than integrate space. *Inter-settlement level:* Routes that do not allow stopping (i.e. freeways) serve as integrators of space.	**Special Places:** Along higher-order routes, create special places, such as public open space (squares) and parks. **Privacy:** On lower-order routes create thresholds that encourage qualities of semi-private and private space, discouraging through-traffic.
Public & Community Institutions	**Integration:** Integrate new parcels of development with existing development to encourage agglomeration. **Absorb settlement output:** in green spaces i.e. evaporation ponds and stormwater retention systems.	**Access and Scale:** Use public space to interrupt built form, to ensure convenient access or create dimensions of scale. **Clustering:** Multifunctional centres and mobile services.
Public Utilities	**Above Ground:** Infrastructure.	**Underground:** Infrastructure.



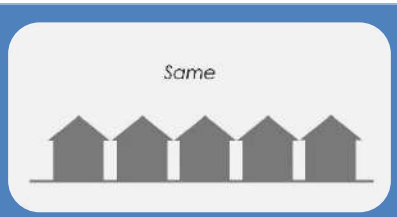
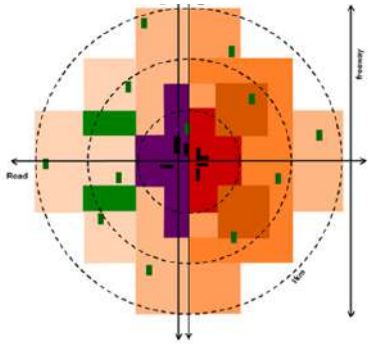




Higher Order – Tertiary | Middle Order -Secondary | Low Order - Primary

	EXTERNALISATION	LOCALISATION
Space	**Preserve Neighbourhood Character:** Higher order facilities should reinforce private quality of residential areas and contribute to symbiotic relationship between different activities and facilities.	**Multi-purpose facilities:** function as public spaces. **Corridors:** support agglomeration of economic and industrial activities.
Connectivity/ Mobility	**Support Activity Streets/High Streets**: Social facilities and higher order urban activities should be located along continuous movement routes rather than within residential precincts.	**Access:** Intensive activities to be concentrated at most accessible points along continuous movement routes.
Public & Community Institutions	**Access:** Higher order facilities should not depend on the resources of only one local community. Facilities to be widely accessible.	**Functional integration:** ensures availability and accessibility of a wide range of service and facilities.
Public Utilities	**District or regional:** Utilities.	**Local:** Utilities.

	• Three levels of hierarchy of urban nodes should be recognised containing business and community facilities which should be clustered together as far as possible to provide satisfactory access and clustering of activities:
	  ○ Tertiary: Technicons, hospitals, courts, multi-purpose centres, regional or metropolitan transport interchanges, museums, art galleries, indoor sports complexes, regional shopping centres;
	  ○ Secondary: High schools, day care centres, hospitals, libraries, sports and community halls, sports fields;
	  ○ Primary: Primary schools, crèches, clinics, bus and minibus taxi stops.
	• These nodes should be located at accessible intersections, the higher the node order, the greater should be the volume of passing traffic and trade.	

		
	SAME	**DIFFERENT**
Space	**Public and private spaces:** are either separated or clustered and could be part of a mixed-use development.	**Connection between space and structure:** Recognise that different activities, cultures, and lifestyles have their own requirements, which must be met in the settlement-making process.
Connectivity/ Mobility	**Non-motorised vs motorised:** Designate hierarchies, especially in the road network, to adequately accommodate different types of users, e.g. highway vs residential street.	**Non-motorised vs motorised corridors:** Intensification of development; mixed-uses; pedestrian and cycling friendly; high quality streetscaping.
Public & Community Institutions	**Minimise Institutional Complexity:** Centralise decisions at institutional level, not at site level.	**Mixed-use:** Commercial, social, service, trade and residential areas of different densities and types.
Public Utilities	**Minimise Institutional Complexity:** Centralise decision making involving local directives and needs.	**Various utility types:** Solar farm, electrical transformers, etc.
	Human Settlement projects should not be targeted at a single income group exclusively, e.g. BNG or site and service (S+S), but should always include at least a GAP housing and top structure BNG component even if only comprising 10% or 20% of the units. Where possible market housing should be included in projects as well. Arrangement of housing for various income groups should be according to the principle of the socio-economic gradient with higher end of market closest to main routes and giving serious consideration to the design of the interface between them. (CSIR, 2000)	Different income groups and/or densities and/or uses 

CHAPTER 2: Spatial and Sectoral Plan Analysis and MSDF Review

The spatial analysis of three environments, biophysical, socio-economic and built environment, and the sector plans will provide directives for the broader Witzenberg Municipal area. These, and the directives derived from the applicable legislation governing these environments and related sector plans, form the basis for the proposals to be made at settlement and rural area level. Directives generated from the legal and Status Quo analysis can broadly be categorised into three proposal types: to protect; to change; and to develop resources in the three environments. The proposals and directives in the chapters to follow, are presented accordingly.

BIOPHYSICAL SPATIAL ANALYSIS

2.1 Biophysical Spatial Analysis

2.1.1 Geology & Soils:

Soil types

Soil types in the Witzenberg Municipal (WM) area varies from limited pedological development soils to plinthic catena soils and rocky areas with minimal soil cover. Geologically, the municipal area is shaped by shale, sandstone, and arenite formations, causing some areas to be more prone to erosion than others.

Soils suitability

Soil clay percentage in the Witzenberg Municipal area is generally less than 15%.

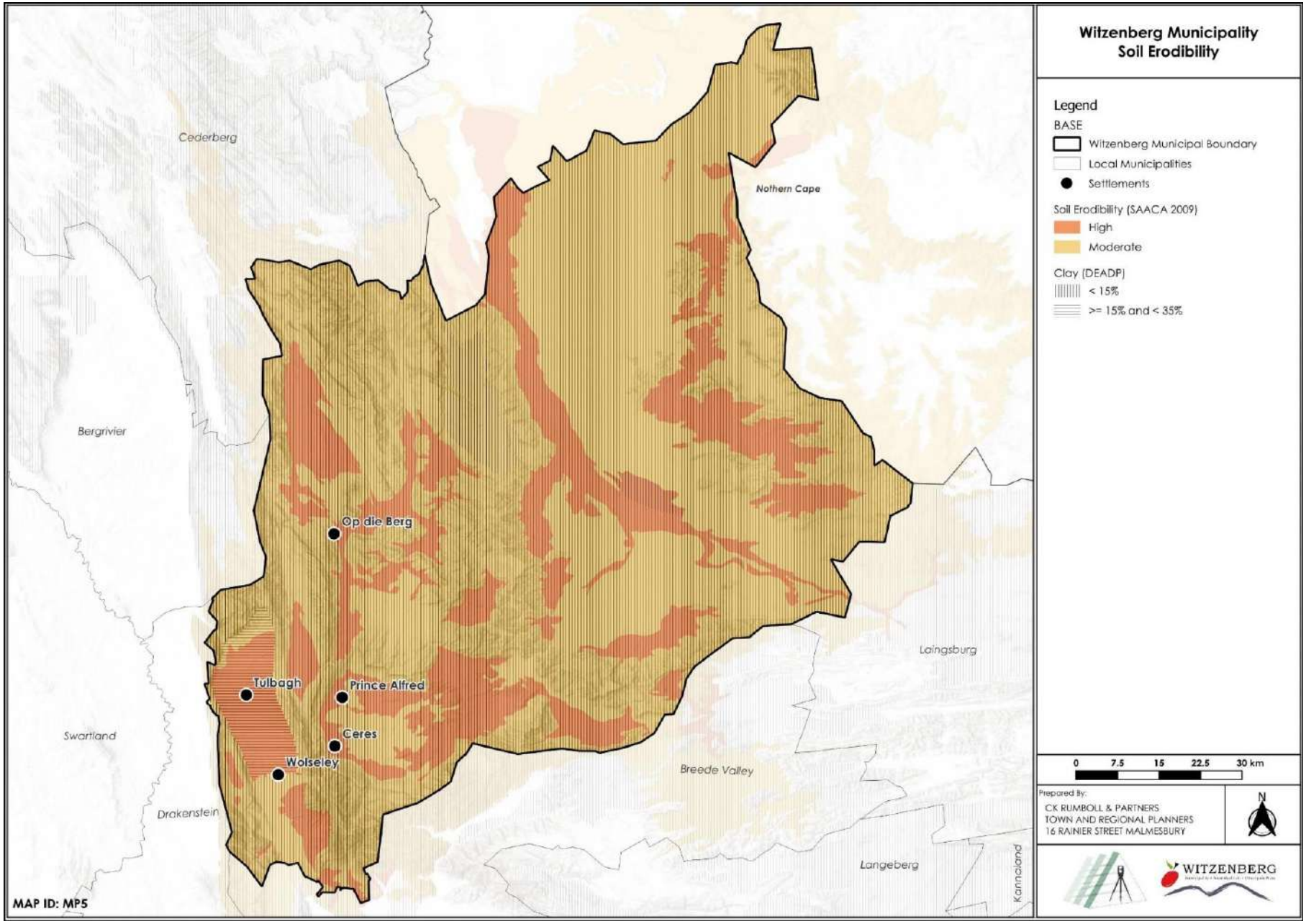
Soil depth

- Soils around Ceres and Wolseley are deeper soils (750mm or more), making them more suitable for intensive agriculture.
- Around Tulbagh and Prince Alfred Hamlet are mostly shallower soils (450mm), requiring careful land management to prevent erosion and degradation, yet suitable for extensive agriculture. However areas particularly above the Tulbagh, Little Berg valley, soil depth is below 450mm. It is considered very shallow: the minimum being ±400 mm according to the Feasibility Study for the Raising of Clanwilliam Dam by the Department of Water Affairs and Forestry (2009). Intensive agriculture is not excluded from these soils as often the topography enhances the climatic conditions, for example, in the upper Tulbagh Valley, the Prince Alfred Hamlet Valley and areas around Op-die-Berg.
- Op die Berg has the most challenging conditions, with soil depths of less than 450mm and high rock content, making it suitable mainly for conservation or low-impact activities.
- Erodibility is high in Tulbagh and Ceres, meaning these areas are prone to soil loss if not managed properly. It is more moderate in Wolseley, Prince Alfred Hamlet, and Op die Berg, where erosion risks are relatively lower.

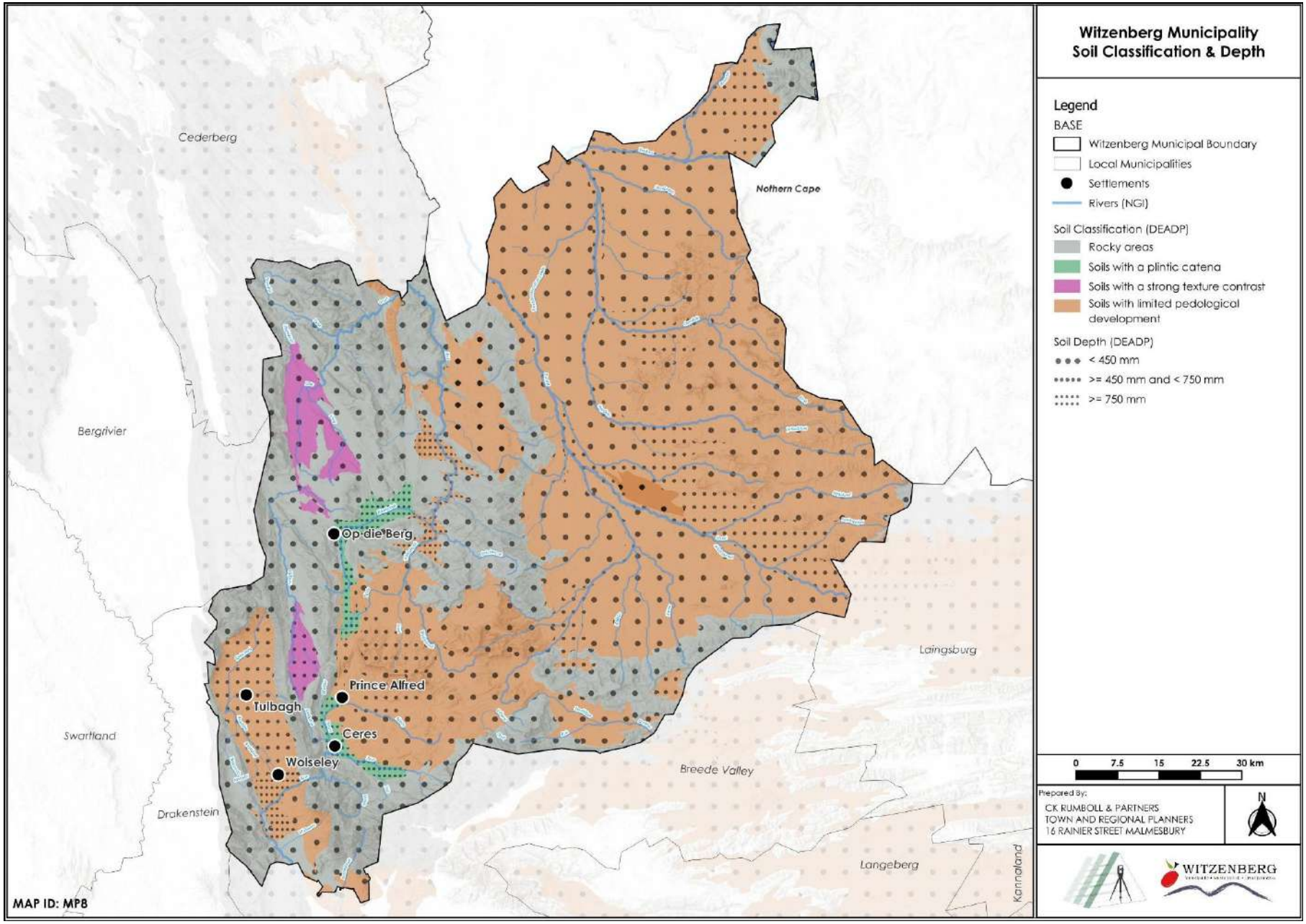
Directives

- Implement erosion control measures such as tree planting and sustainable farming to prevent soil degradation in areas such as Tulbagh and Op-die-Berg which has shallow rocky soils.
- Prevent wetlands from long-term erosion in Wolseley by managing stormwater runoff. Prioritise the protection of soils with greater depths.

Map 3: Soil Erodibility



Map 4: Soil Classification & Depth



2.1.2 Climate

Summers are hot and dry, while Winters are wet and relatively cold with a high annual rainfall.

Rainfall: Rainfall mostly occurs between May and October, with snowfalls occurring periodically on the highest mountain tops. Average rainfall is 1 088mm.

Wind: Winds are seasonal and generally north-westerly or south-easterly. The summer winds can exceed 30km/h wind speed.

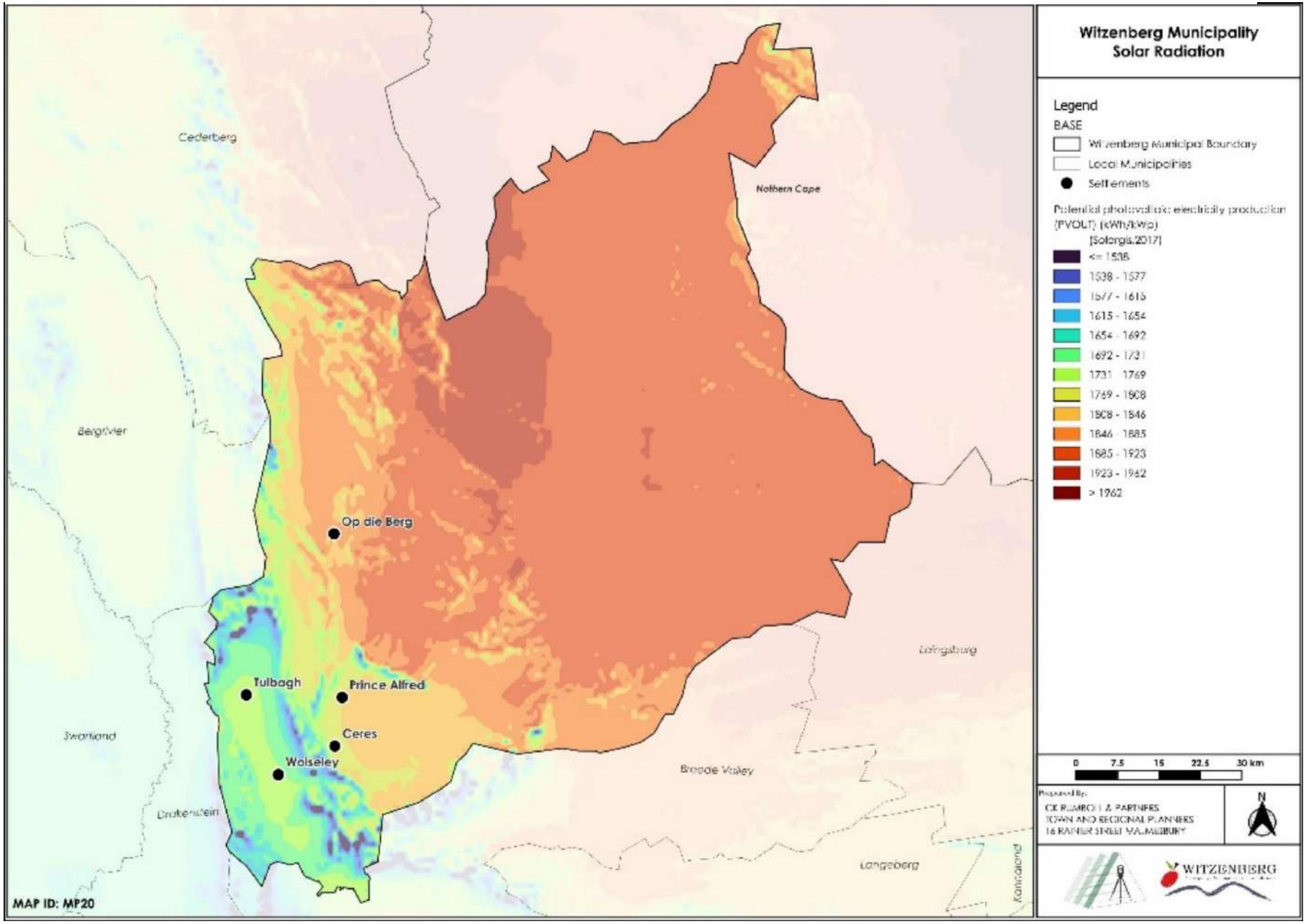
Sun: The average temperature range is 24°C to 29.9°C.

Directives

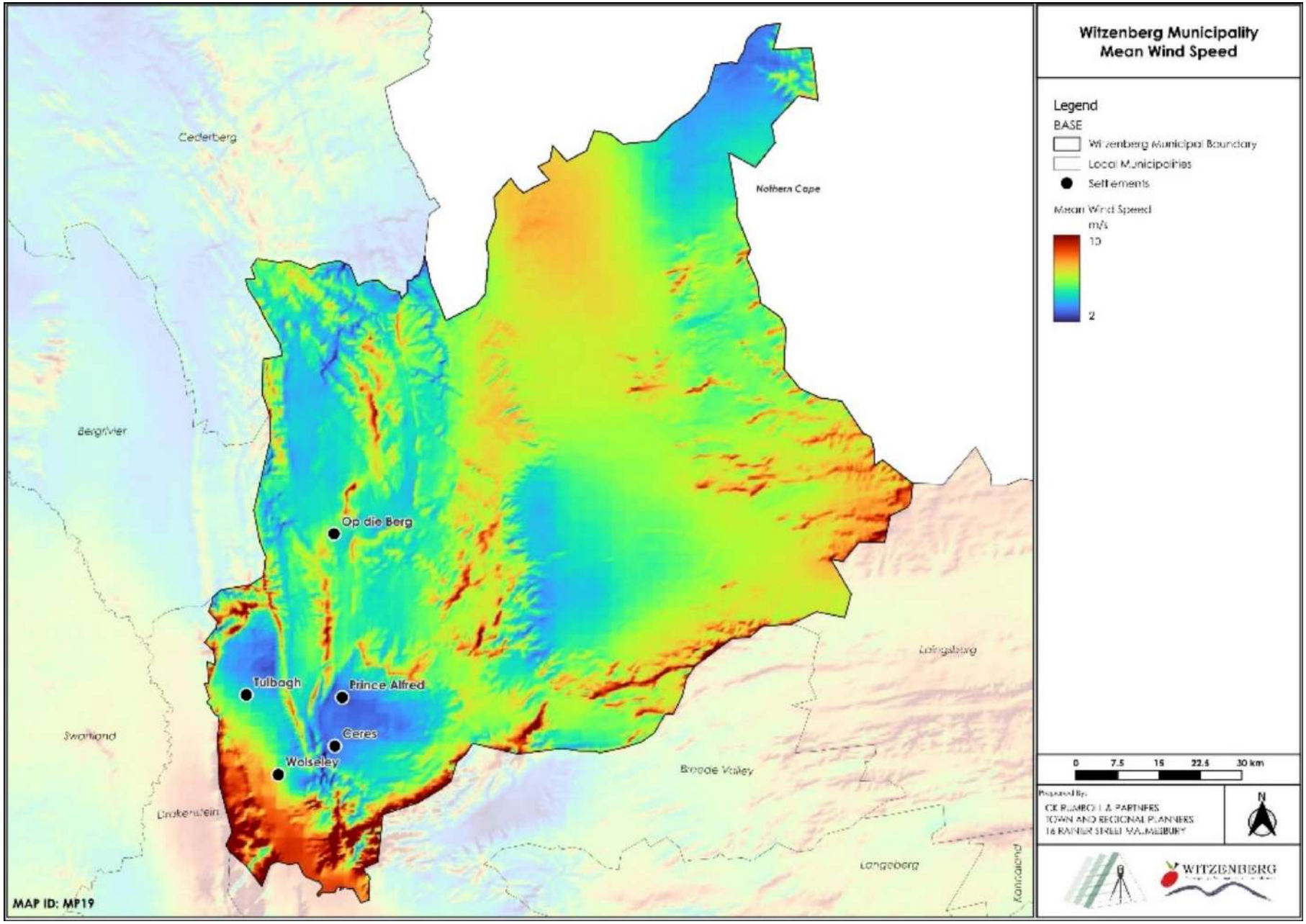
- Actively promote and manage the development of renewable energy sources particularly solar and wind within the municipality, in response to the increasing impacts of climate change and the need for energy security.
- Balance food security and energy generation.
  - Encourage renewable energy development, with specific recognition of the Kromsberg Renewable Energy Development Zone (REDZ) as a strategic focus area for wind energy, while also considering site-specific proposals elsewhere in Witzenberg where appropriate, to reduce reliance on fossil fuels and mitigate climate change impacts.
  - Develop guidelines for alternative energy facilities to ensure they are sited in areas that minimize impacts on critical biodiversity areas (CBAs) and protected natural zones, on high-value agricultural soils and on ecological integrity.
  - Promote energy-efficient technologies.
  - Ensure that the design and placement of energy facilities do not compromise the natural and agricultural landscape.
- Enhance Building Resilience to Climate Change:
  - Buildings in Witzenberg must be designed to withstand extreme temperature fluctuations, incorporating insulation, energy-efficient materials, and climate-sensitive orientation to reduce energy consumption and enhance comfort.
  - Encourage rainwater harvesting and integrate water-saving measures such as greywater recycling in all new developments to conserve local water resources, particularly in the light of projected reductions in rainfall and increased evaporation.
  - Provide education and awareness programmes for residents to promote sustainable building practices and waste reduction.
- Protect and Conserve Biodiversity and Landscapes:
  - Prioritize the conservation of critical biodiversity areas (CBAs) and nature reserves within the municipality to protect indigenous vegetation and wildlife habitats that are vital for climate resilience.
  - Protect riverine corridors, south-facing slopes, and topographically diverse areas that provide vital refuges for species, contribute to maintaining micro-climates, and offer climate resilience by regulating temperature and moisture levels.
  - Develop strategies to restore and maintain landscapes that play key roles in buffering the impacts of climate change, such as kloofs and hills that offer connectivity for species migration and temperature/moisture refuges.

- Water Resource Management and Protection:
  - Promote artificial groundwater recharge, greywater recycling, and local water resource monitoring to reduce reliance on surface water and safeguard against the impacts of reduced rainfall and increasing temperatures.
  - Introduce water conservation tariffs to encourage responsible water use among residents and industries, and ensure the municipality's Wastewater Treatment Works (WWTW) capacity is adequate for any future industrial development.
  - Secure a buffer zone around landfill sites to prevent contamination of water resources and protect the overall water quality in the region's catchment areas.

Map 5: Solar Radiation



Map 6: Mean Wind Speed



2.1.3 Climate Change

Climate change projections for the Western Cape suggest a warming of 1.5°C to 3°C by around 2050. Rising average temperatures disrupt weather patterns, leading to more extreme weather events (droughts, floods, heatwaves, wildfires, and storms) and changing rainfall patterns i.e. some areas experience more frequent and intense rainfall, while others face prolonged drought.

A study by the Climate Systems Analysis Group (CSAG) at the University of Cape Town (UCT) (2008) projected various climate changes for the Western Cape for 2030-2045 such as:

- Higher mean annual temperature.
- Higher maximum temperatures, more hot days, and more heat waves.
- Higher minimum temperatures, fewer cold days, and frost days.
- General drying trend in western parts.
- Intensification of rainfall events.
- Increased mean sea level and storm surges.

These changes could severely impact Witzenberg Municipality, particularly through reducing agricultural productivity, increasing water scarcity, and biodiversity loss, necessitating careful planning informed by research and collaboration across sectors.

Witzenberg formally adopted a Climate Change Needs Assessment and Response Plan in 2024, developed by Democracy Works Foundation (DWF) through Green Path Connect. The plan identifies the following existing municipal-level climate change-related vulnerabilities in Witzenberg:

- Climate hazards: Witzenberg is increasingly experiencing extreme weather events such as droughts, floods, and wildfires; and changes in weather patterns, including increased frequency and intensity of wind and thunderstorms, have been noted.
- Water Resources: Severe droughts and flooding events have significantly affected water availability and quality.
- Agriculture: Droughts and floods have disrupted agricultural activities, impacting food security and livelihoods.
- Biodiversity: Increased frequency of wildfires has hindered the regeneration of indigenous vegetation.
- Public Health: Flooding and extreme weather events have posed health risks, including the spread of waterborne diseases.
- Vulnerable Communities: Informal settlements and communities located in flood-prone areas are disproportionately affected by climate hazards. Seasonal agricultural workers and low-income households are particularly vulnerable due to economic instability and inadequate housing.

The plan also maps out recommended local government responses to address these vulnerabilities, with a focus on enhancing water storage, improving drainage systems, and promoting climate-smart agriculture.

Directives

- Support and promote existing policy and legislative guidance to enable sustainable agriculture, alien vegetation clearing and flood management.
- Improve and strengthen existing flood management plans by promoting the development of artificial wetlands and identifying areas that require additional stormwater catchment areas.
- Encourage rainwater harvesting and integrate water-saving measures such as greywater recycling.
- Continue efforts to reduce air pollutants and GHG emissions.
- Design buildings to withstand extreme temperature fluctuations, incorporating insulation, energy-efficient materials, and climate-sensitive orientation to reduce energy consumption and enhance comfort.
- Provide education and awareness programmes for residents to promote sustainable building practices and waste reduction.
- Stakeholder engagement, multi-level government coordination, adaptive capacity building.

2.1.4 Environmental Risk

The concept of 'risk' is understood as the result of the interplay between 'hazard' and 'vulnerability'. In this context, vulnerability is generally depicted as an averaged index derived from two main categories: socio-economic factors and governance, with optional additional factors used as sensitivity moderators. Environmental hazards or threats include ecosystem deterioration, terrestrial flooding, water security issues, air quality and health concerns, solid waste management, and wildfires – all of which are affected and sometimes amplified by climate change.

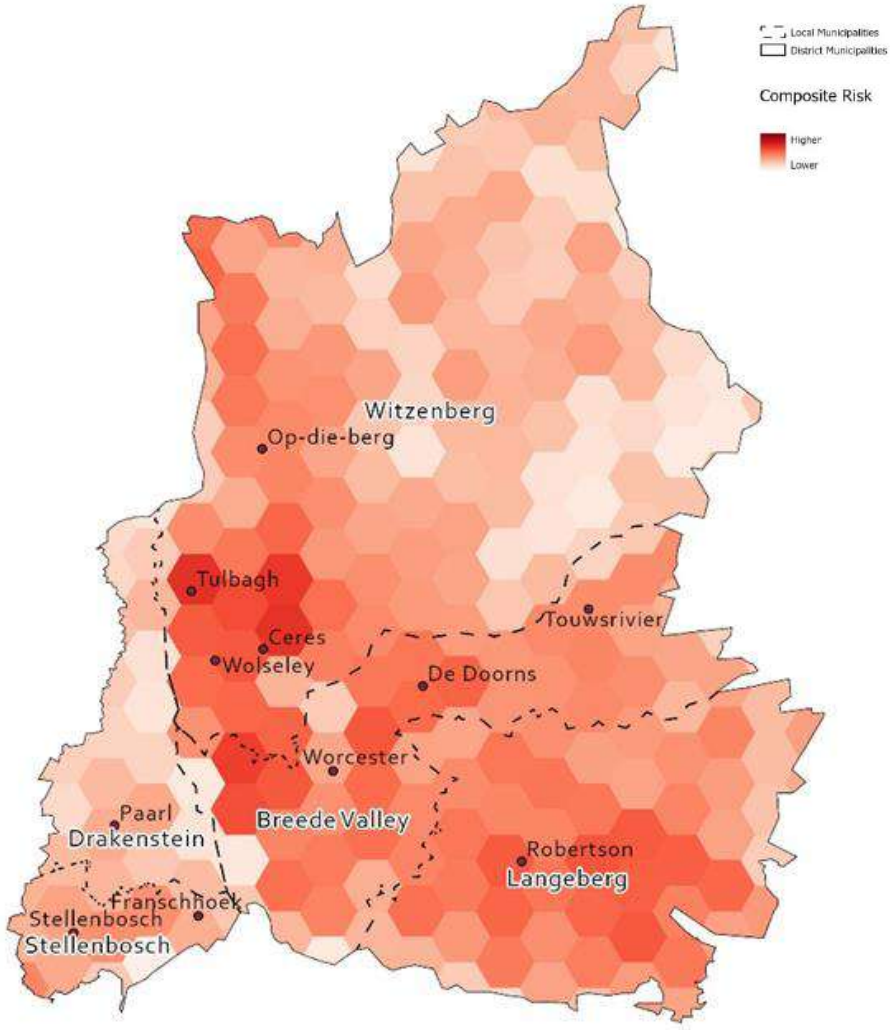
Witzenberg Municipality faces a medium risk of ecosystem deterioration that threatens the ecological infrastructure communities depend on and poses risks to vegetation and human health. The municipality is home to two highly climate-sensitive biomes: fynbos (part of the globally unique Cape Floristic Kingdom) in the south, and Succulent Karoo in the north and east. The Succulent Karoo's endemic flora is particularly vulnerable to shifting rainfall and temperature patterns, giving them low resilience to hotter, drier climate projections. At the same time, expanding commercial forestry and agriculture intensifies fire risk and reduces groundwater recharge, compounding both wildfire and water-scarcity hazards.

In terms of water security, all settlements in Witzenberg face increasing drought tendencies and worsening water scarcity, exacerbated by altered precipitation patterns and shifting rainfall distribution in an already surface-water-scarce area. The municipality's water supply, which already falls slightly below demand (vulnerability 1.02), is projected to worsen to 1.7 by 2050 due to extreme population growth, reduced average annual rainfall, higher evaporation rates, and lower mean annual runoff. Towns such as Wolseley, Tulbagh, and Touwsrivier face a medium risk of groundwater aquifer depletion under future recharge conditions.

These changes in rainfall patterns can also heighten soil erosion and terrestrial flooding risks. For example, parts of northern Witzenberg may experience a rise in extreme rainfall days, increasing the potential for flash floods.

Rising temperatures and drier shrubland increase the likelihood of wildfires. By 2050 Tulbagh, Ceres and Wolseley are projected to see an increase in wildfire likelihood on their wildland-urban interfaces.

Cumulative environmental hazards will influence agricultural productivity throughout the municipality. According to the Cape Winelands District Municipality Risk Profile Report (based on the Green Book), Ceres, Witzenberg's primary apple and pear production area and a major exporter, is particularly vulnerable, with the highest environmental risk in the municipality. Climate projections for Ceres point to a hotter, drier future and reduced winter chill units that will not only compromise fruit development and quality (e.g. sunburn damage) but also further strain limited water resources through increased evapotranspiration.



2.1.5 Topography

The western part of Witzenberg Municipality is mountainous, with deep valleys framed by steep mountain ascents that have formed over time on the resilient rocks of the Table Mountain Group. The region is home to three major mountain ranges: the Obiqua Mountains in the west, the Winterhoek Mountains in the north, and the Witzenberg Mountains to the east. These mountains are the source of four of the Western Cape's major rivers.

As the landscape extends towards the north and northeast, it becomes less rugged, gradually transitioning into the Ceres and Tankwa Karoo. The topography varies significantly across the municipality, with elevations ranging from 250 meters in the valleys to over 2,400 meters at its highest peak.

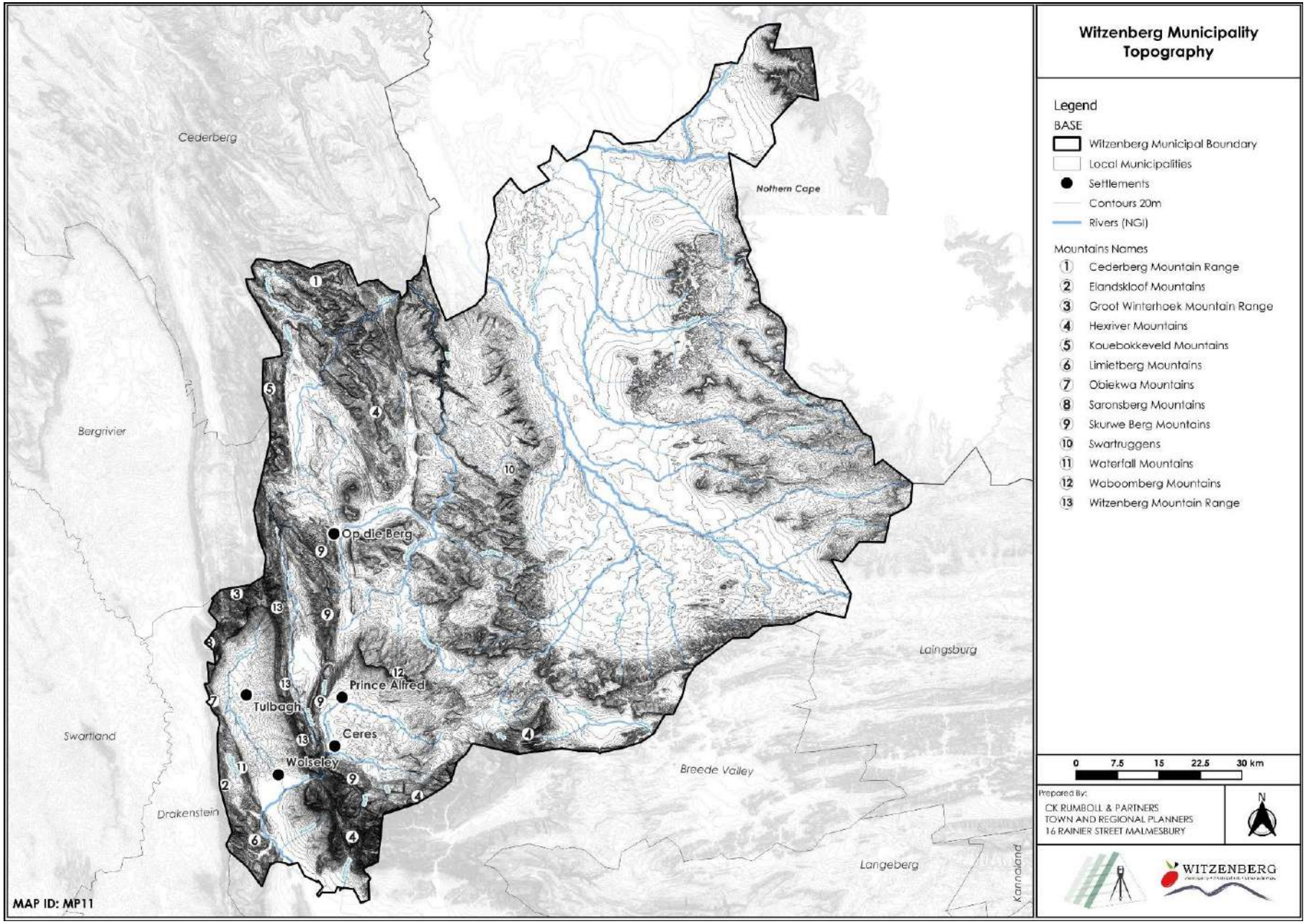
In the Koue Bokkeveld, elevations range between 750 and 1,900 meters, with Drie Koppe (1,781 m) and Tafelsig (1,910 m) standing out as prominent peaks. The Agter-Witzenberg area sits between 900 and 1,850 meters, featuring summits like Eureka Peak (1,987 m) and Hansiesberg (1,843 m). The Ceres Valley, known for its striking scenery, ranges from 450 to 2,000 meters in elevation, with well-known peaks such as Waboomsberg (1,694 m) and Milner Peak (1,995 m).

The highest point in Witzenberg is Matroosberg Peak, reaching 2,449 meters—making it the tallest peak in the Boland and even surpassing Sneeuberg in the Cederberg by about 250 meters. The Upper Breede River Valley, another defining feature of the municipality, has elevations ranging from 250 to 2,100 meters, with towering landmarks like Groot Winterhoek Peak (2,078 m), Bailey's Peak (1,516 m), and the Mostertshoek Twins (2,030 m).

Directives

- Protect landscape character (landscape heritage).
- Protect and maintain ecological infrastructure.
- Divert settlement development to more level areas (slopes of less than 1:4).
- Reduce potential negative impact of urban development along scenic corridors.
- Ensure land use changes maintain integrity, authenticity and accessibility of significant cultural landscapes. (WCPSDF, 2009).

Map 7: Witzenberg Typography



2.1.6 Water Resources and Supply

Water catchment areas are geographic regions where surface water, including rivers, streams, and rainfall runoff, drains toward a common outlet such as a river, dam, or wetland. They are essential for understanding water flow, managing resources, and planning sustainable land use, allowing authorities to monitor water quality and quantity, coordinate supply, and protect aquatic ecosystems. Catchments are grouped hierarchically into primary, secondary, and tertiary levels: primary catchments cover large river basins and support regional planning; secondary catchments subdivide these basins along major tributaries; and tertiary catchments focus on local rivers or sub-basins, supporting municipal water planning and monitoring. The eastern portion of Witzenberg Municipality falls within the Groot Winterhoek Strategic Water Source Area (SWSA), a nationally and regionally important zone that generates significant surface runoff and recharges groundwater, making it vital for long-term water security.

Tertiary catchment areas in Witzenberg includes H10 (Upper Breede River), G10 (Berg River), E10 (Olifants Valley/Agter-Witzenberg), E21 (Upper Olifants River), E22 (Upper Doring River), E23 (Lower Doring River), J12 (Lower Olifants River), and H20 (Lower Breede River). Northern and western catchments, such as H10, G10, E10, and H20, generally exhibit good to moderate groundwater quality, particularly around Ceres, Op-Die-Berg, Wolseley, and Tulbagh. These areas benefit from low-salinity water, supporting reliable domestic supply and high-value agricultural activities such as fruit orchards and vineyards. In contrast, eastern and some central catchments, specifically E21, E22, E23, and J12, show more variable to lower groundwater quality, with pockets of very poor quality in certain sections. Elevated salinity in these areas may limit crop selection, require treatment for domestic use, and increase the risk of soil salinization if used extensively for irrigation.

Water sources in terms of settlements

- Ceres is the largest town in Witzenberg LM and is mainly dependent on the Koekedouw Dam.
- Prince Alfred Hamlet has three water sources, namely a fountain and borehole that link to the main supply line from other two water sources, the Koekedouw Dam and the Wabooms River weir.
- At present, Moordenaarskloof, Tierkloof and Steinthal are the primary water sources for Tulbagh. Construction of the Waverenskroon dam and Kleinberg River pipeline has been completed to secure an additional 1.2 million m³ per annum from the Klein Berg River. Boreholes were also drilled near Nuwekloof Pass; however, their yields are insufficient to meet the town's water supply needs.
- Wolseley relies entirely on surface water for domestic use, placing it at risk during severe drought.
- Op-die-Berg is the smallest town and is entirely dependent on groundwater as the primary source for domestic use, placing it at risk during severe drought.

2.1.7 Invasive Alien Species (IAS)

Invasive alien plants (IAS) are a major threat to water resources in Witzenberg Municipality. Species such as Acacia cyclops (Rooikrans or Red Eye Wattle), mearnsii (Black Wattle) & saligna (Port Jackson Willow) form part of the top 10 most problematic invasive species for the Western Cape and are also likely to be of concern to the Witzenberg Municipal Area. (A comprehensive list of IAS is included as Annexure 7)

In addition to direct predation or herbivory on native species, IAS compete with indigenous species for essential resources. They also contribute to habitat alteration and degradation, disrupt ecological processes, and compromise ecosystem services such as flood regulation and shoreline protection. Furthermore, IAS can transmit and spread pathogens and parasites, ultimately driving environmental degradation that creates conditions conducive to further invasions.

IAS not only has ecological effects but also several direct and indirect economic effects, like Loss of crops due to introduced crop pests, Loss of export earnings due to prohibitions on exporting products infected by IAS and Loss of tourism revenue due to epidemics.

IAS poses a significant threat to water availability and freshwater ecosystems. Dense stands of alien plants along rivers and riparian zones consume substantially more water than indigenous vegetation, reducing water availability by 4–16% and runoff by up to 30% in heavily infested areas. These species also contribute to soil erosion, sedimentation, and degraded water quality, while altering hydrological processes and increasing flood and drought risks. Human activities, including informal land use and agriculture, can exacerbate these impacts. Strategic clearing of IAS in high-rainfall catchments and the protection of riparian zones are critical measures to safeguard Witzenberg's water resources and ensure the resilience of its freshwater ecosystems and remain a critical concern.

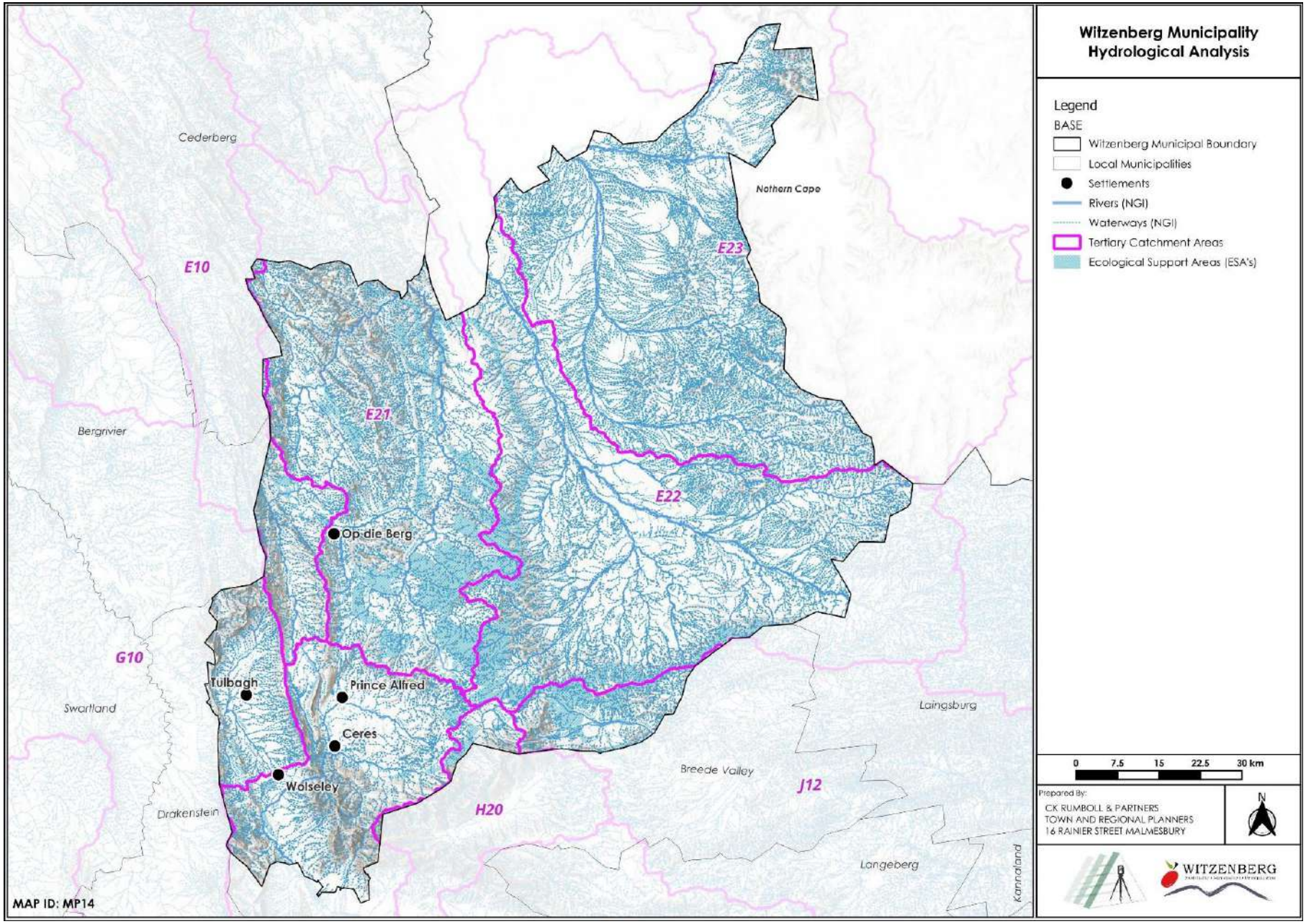
Maps 8 and 9, together with Table 2, provide a detailed overview of tertiary catchment areas located within the Witzenberg Municipal area including their groundwater quality.

The groundwater quality indicated in Table 2 refers only to the portions of the tertiary catchment areas that fall within the Witzenberg Municipal boundaries. It does not represent the groundwater quality of the catchment areas in their entirety.

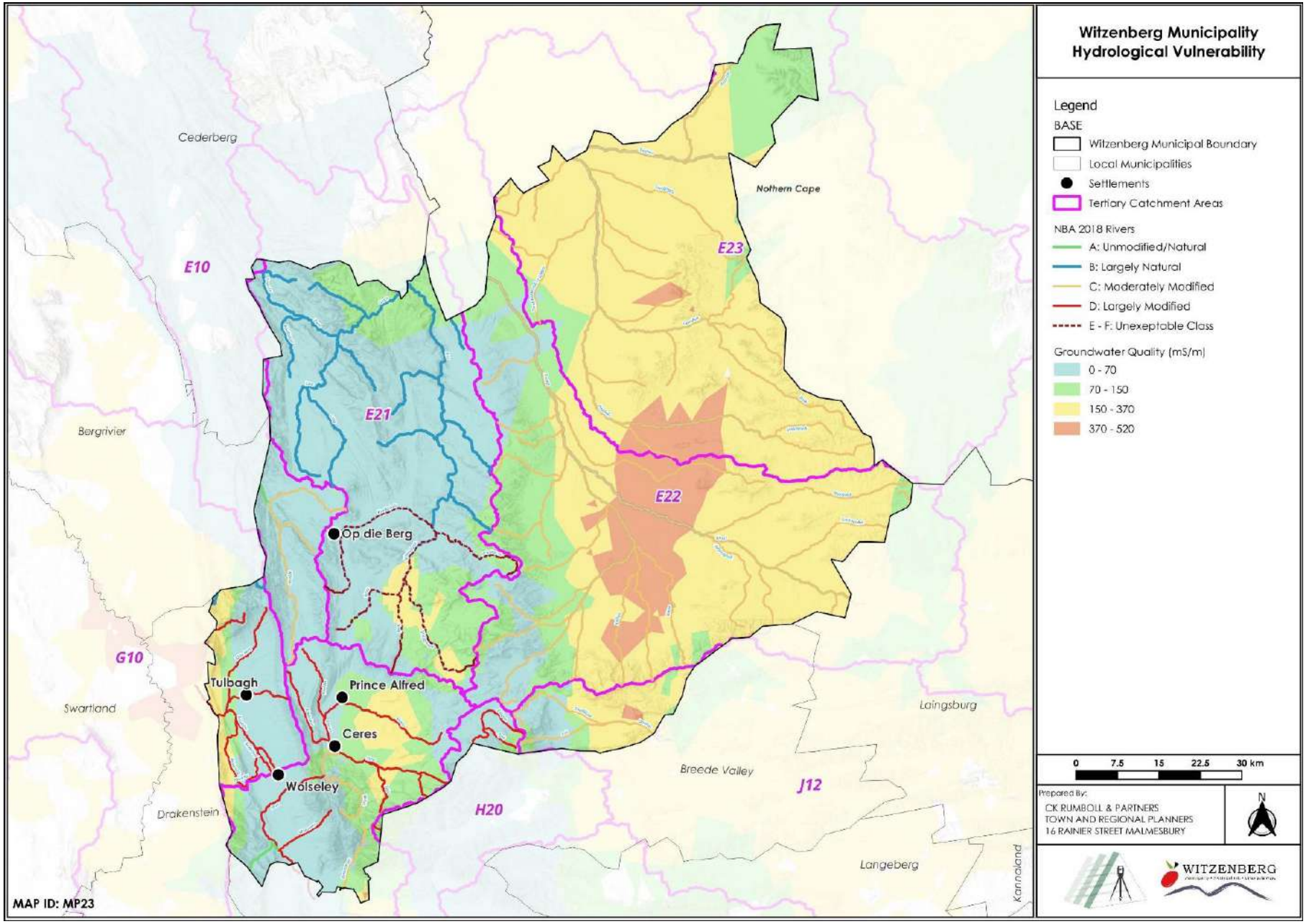
Table 2: Catchment Areas

Catchment	Location in Witzenberg		Main Settlements (Witzenberg)	Extent (ha)	Main Rivers	Key Features	Groundwater Quality	Ecological Importance
H10	Southern Witzenberg	33.528237°S 19.288807°E	Ceres, PAH, Wolseley (partially)	206076.64	Breede River	Wittebrug Nature Reserve; Hawequas Mountain Catchment Area, Koekedouw Dam.	Predominantly moderate to good quality, with higher quality groundwater evident in the south-western section and more variable conditions around Ceres and Prince Alfred Hamlet.	Agricultural Significance (i.e. Grape, pome fruit, oil seeds & planted pasture)
G10	South Western Witzenberg	33.366289°S 19.060536°E	Tulbagh	882162.45	Berg, Sout, Kleinberg	Grootwinterhoek Wilderness Area, Grootwinterhoek Nature Reserves.	Largely good groundwater quality, transitioning to moderate quality, with limited areas of lower quality near the municipal boundary.	Agricultural Significance (i.e., grains oil seeds & planted pastures)
E10	Western Witzenberg (Olifants valley)	33.060926°S 19.215565°E	Rural	288740.88	Olifants River	Koue Bokkeveld, Winterhoek & Cederberg Mountain Catchment Area.	Consistently good groundwater quality.	Significant Protected Areas with some significant agriculture (i.e. pome fruit, grains)
E21	Northern Western Witzenberg	32.947293°S 19.423085°E	ODB	304246.81	Groot, Riet	Maitjiesrivier Nature Reserve, Cederberg Mountain Catchment Area, Grootfontein Private Nature Reserve.	Predominantly good groundwater quality, with moderate to poor groundwater pockets in the southern area.	Significant protected areas, CBAs and ESAs, some agriculture (i.e., vegetables, pome fruit and grains)
E22	Northern and Central Witzenberg	33.089567°S 20.011463°E	Rural	417753.65	Doring, Groot	Inverdoorn Private Nature Reserve, Vaalkloof Private Nature Reserve.	Low groundwater quality overall, with very poor groundwater quality centrally, but pockets of moderate quality along the western boundary.	Moderate ecological value, mostly other natural areas with very limited protected area
E23	North Eastern Witzenberg	32.761686°S 20.049305°E	Rural	635924.58	Tankwa, Ongeluks	Tankwa Karoo National Park, Western Cape / Northern Cape Provincial Border.	Low groundwater quality, with isolated pockets of very poor and moderate groundwater quality.	Significant other natural areas
J12	Southern Witzenberg	33.495668°S 20.304280°E	Rural Area	630616.84	Touws	Anysberg Nature Reserve, Bokkeriviere Nature Reserve, Kapklip Private Nature Reserve, Elim Private Nature Reserve.	Predominantly low groundwater quality, but with small areas of very poor quality centrally and improving to moderate and good quality toward the western boundary.	Moderate CBAs, protected areas Moderate; water scarcity affects ecology
H20	Southern Witzenberg	33.484979°S 19.614964°E	Rural Area	84232.69	Hex & Spek	Matroosberg Mountain Catchment Area.	Good groundwater.	Supports agriculture (i.e., grapes and citrus; Significant protected area and CBAs)

Map 8: Hydrological Analysis



Map 9: Hydrological Vulnerability



According to the IDP, Witzenberg Municipality uses a mix of surface and groundwater for bulk supply:

- Ceres is the largest town in Witzenberg LM and is mainly dependent on the Koekedouw Dam.
- Prince Alfred Hamlet has three water sources, namely a fountain and borehole that link to the main supply line from other two water sources, the Koekedouw Dam and the Wabooms River weir.
- Tulbagh's relies entirely on surface water for domestic use, drawing from various sources such as Moordenaarskloof and Tierkloof.
- Wolseley is the second smallest town and relies entirely on surface water for domestic use, placing it at risk during severe drought.
- Op-die-Berg is the smallest town and is entirely dependent on groundwater as the primary source for domestic use, placing it at risk during severe drought.

Witzenberg Municipality was awarded third place in the 2011 Greenest Municipality Competition, particularly praised for its water management standards (Aurecon in SRK Consulting, 2011; Driver et al., 2011). This acknowledgment underscores the municipality's efforts to improve service delivery and raise awareness within the community regarding the importance of protecting and managing water resources.

Directives

- Establish a continuous groundwater monitoring programme, particularly in catchments with moderate to poor quality (E21, E22, E23, J12), to track salinity levels, seasonal fluctuations, and emerging risks.
- Maintain and update groundwater maps for integration into municipal planning.
- Support water management strategies such as blending high-salinity water with fresher sources, promoting desalination or treatment technologies where feasible, and encouraging water-efficient irrigation practices in agriculture. Protect high-quality catchments (H10, G10, E10, H20) from pollution caused by urban runoff, agricultural chemicals, and industrial activities.
- Implement effective water management systems in line with the Western Cape Ecological Infrastructure Investment Framework, 2021 to ensure the long-term sustainability of local water resources, with specific attention to the Groot Winterhoek Strategic Water Source Area (SWSA).
- Ensure Wastewater Treatment Works (WWTW) capacity can accommodate future industrial development, and maintain buffer zones around landfill sites to prevent contamination of water resources.
- Promote artificial groundwater recharge, greywater recycling, water conservation tariffs, and local water resource monitoring.
- Continue efforts under the Ceres River Restoration Programme (CRRP) to improve the ecological integrity of the Dwars, Modder, and Titus rivers.
- Implement major protected area management plans to safeguard high-quality natural and cultural environments, particularly around World Heritage Sites, through integrated spatial planning and heritage-sensitive development.

- Support the development of comprehensive Maintenance and Management Plans (MMPs) for stormwater and erosion control across the entire Witzenberg Municipality, building on the recently approved MMP for the Dwars, Breede, Witels, and Titus rivers in Ceres. These plans should cover all major rivers, tributaries, and critical drainage areas, aiming to mitigate erosion, manage stormwater effectively, protect water quality, and ensure the long-term sustainability of the municipality's watercourses and surrounding ecosystems.

2.1.8 Conservation

The Western Cape Biodiversity Spatial Plan (WCBSP) identifies a network of biodiversity priority areas defined as Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs) designed to meet the objectives as defined in Chapter 5 Section 34-35 of the WCBA. A table describing the Map Categories, recommended corresponding Spatial Planning Category as well as a table describing Biodiversity Priority Areas Categories and Land-use Zones with Desired Management Objectives is included in Annexure 3.

Witzenberg has two distinct areas in terms of the WCBSP:

The eastern portion of the municipal area predominantly consists of areas classified as Other Natural Areas (ONAs: Natural to Near-Natural), with some distinct CBA 1 protected areas. While this sub-region retains much of its natural character and ecological function, it is relatively degraded and supports limited intensive agriculture compared to the western portion of Witzenberg. Key protected areas include the Tankwa Karoo National Park (bordering Hantam and Karoo Hoogland municipalities) and private reserves such as Basjanskloof, Inveroorn, and Groenfontein. The management objective for these landscapes is to minimise habitat and species loss, safeguard ecosystem functionality, and apply strategic landscape planning. Although ONAs allow a degree of flexibility in permissible land uses, high-impact activities may require authorisation. In this area, inappropriate land-use change could accelerate biodiversity loss and undermine ecological infrastructure.

Moving westward towards the central Witzenberg, the landscape transitions into Terrestrial CBAs and Aquatic ESAs. Terrestrial CBAs represent critical ecological assets required to meet biodiversity targets for species, ecosystems, and ecological processes. These areas must be maintained in a near-natural state, with rehabilitation of degraded land encouraged, and only biodiversity-sensitive, low-impact uses deemed appropriate. Aquatic ESAs, while not critical for meeting biodiversity targets, play a supporting role by sustaining ecological processes, particularly in relation to protected areas and CBAs. Their primary function is to maintain ecological connectivity and ecosystem services such as water regulation. Limited habitat loss may be tolerated provided overall ecological functioning is preserved.

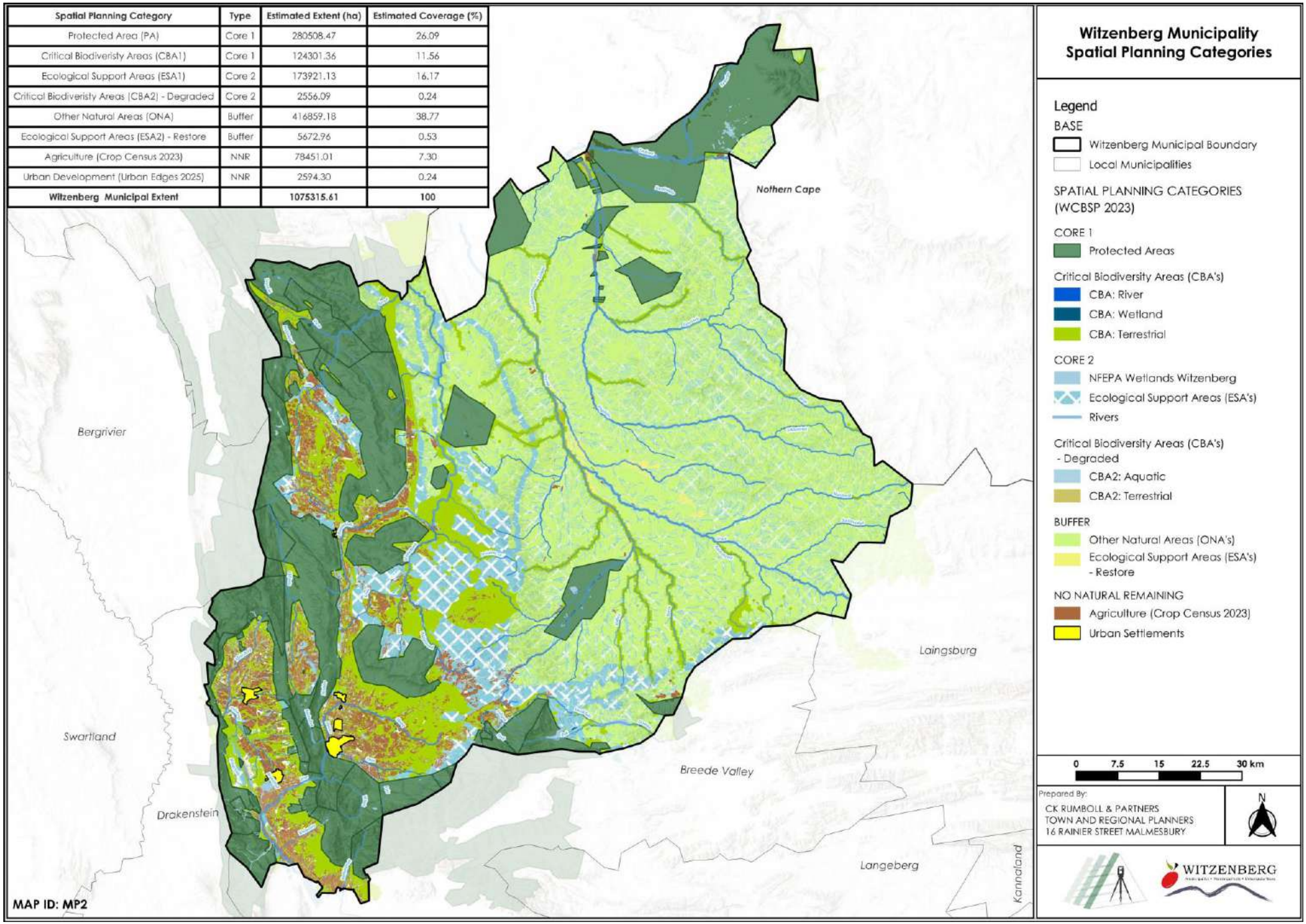
The western portion of Witzenberg is more complex, containing numerous types of CBAs (terrestrial, wetlands, and river systems) and ESAs alongside intensive agricultural land uses and the main municipal urban settlements. This spatial concentration of biodiversity assets, agricultural activity, and urban growth places significant pressure on land resources. Careful

balancing of conservation priorities with agricultural and urban development is required. If not, this could lead to fragmentation of ecological corridors, degradation of river systems, and conflict between conservation and development objectives.

Current extents per WCBSP map category are as follows:

Spatial Planning Category	Type	Estimated Extent (ha)	Estimated Coverage (%)
Protected Area (PA)	Core 1	280 508,47	26,09
Critical Biodiversity Areas (CBA1)	Core 1	124 301,36	11,56
Ecological Support Areas (ESA1)	Core 2	173 921,13	16,17
Critical Biodiversity Areas (CBA2) - Degraded	Core 2	2 556,09	0,24
Other Natural Areas (ONA)	Buffer	416 859,18	38,77
Ecological Support Areas (ESA2) - Restore	Buffer	5 672,96	0,53
Agriculture (Crop Census 2023)	NNR	78 451,01	7,30
Urban Development (Urban Edges 2025)	NNR	25 94,30	0,24
Witzenberg Municipal Extent		1 075 315,61	100

Spatial Planning Category	Type	Estimated Extent (ha)	Estimated Coverage (%)
Protected Area (PA)	Core 1	280508.47	26.09
Critical Biodiveristy Areas (CBA1)	Core 1	124301.36	11.56
Ecological Support Areas (ESA1)	Core 2	173921.13	16.17
Critical Biodiveristy Areas (CBA2) - Degraded	Core 2	2556.09	0.24
Other Natural Areas (ONA)	Buffer	416859.18	38.77
Ecological Support Areas (ESA2) - Restore	Buffer	5672.96	0.53
Agriculture (Crop Census 2023)	NNR	78451.01	7.30
Urban Development (Urban Edges 2025)	NNR	2594.30	0.24
Witzenberg Municipal Extent		**1075315.61**	**100**



CapeNature Biodiversity Stewardship Sites

While the Western Cape Biodiversity Spatial Plan (WCBSP) provides a regional framework for identifying Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs), CapeNature Stewardship sites translate these spatial priorities into tangible on-the-ground conservation actions. The CapeNature Biodiversity Stewardship Programme is a strategic initiative aimed at fostering cooperative partnerships with private landowners to promote the sustainable management and protection of biodiversity and natural resources located on privately owned land. The programme offers three levels of conservation agreements that vary in terms of legal status, eligibility criteria, permissible land uses, and associated benefits. These conservation options are tailored to accommodate varying levels of commitment and land suitability, thereby encouraging broader participation by aligning conservation objectives with landowners' interests and capabilities.

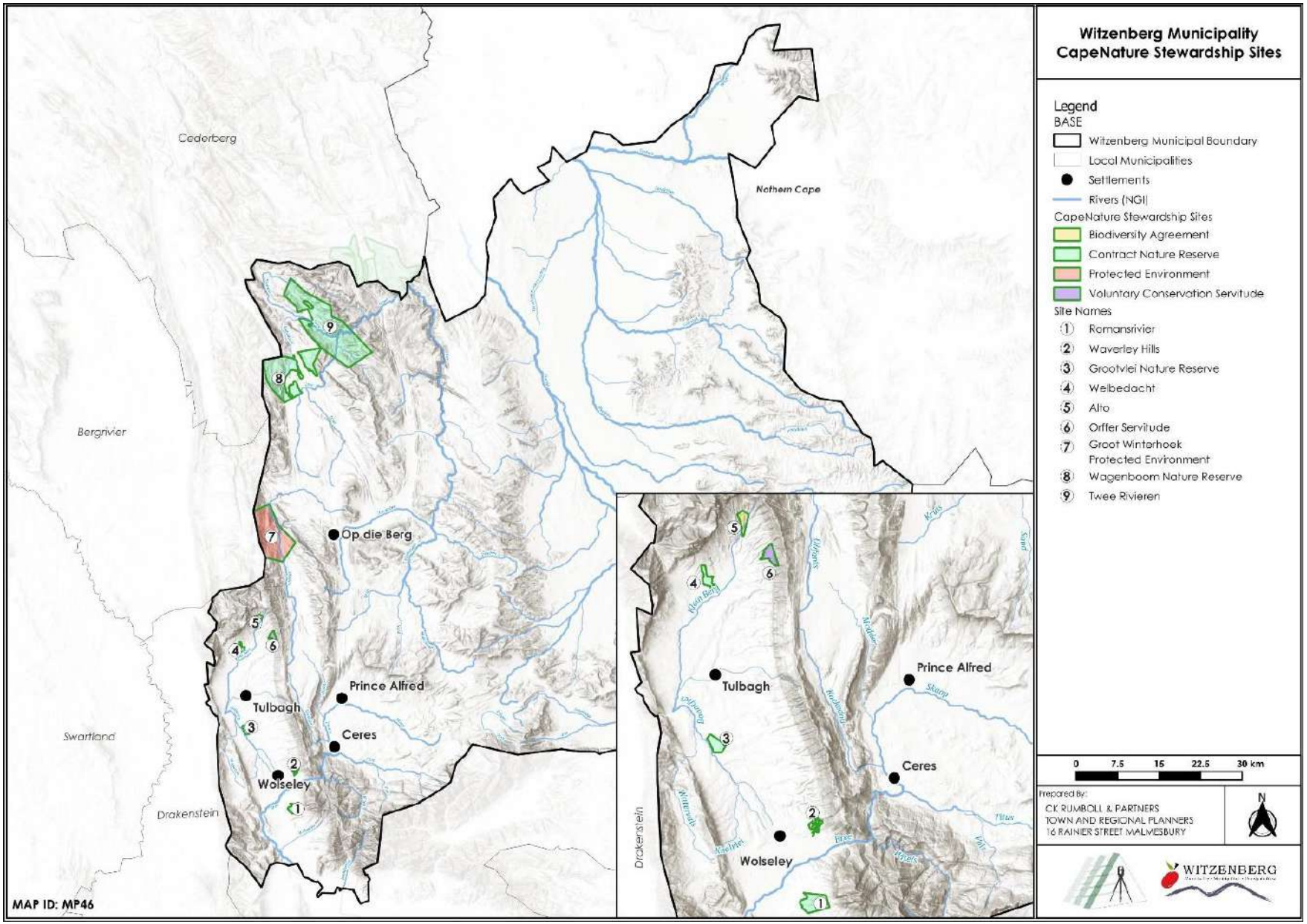
The following table illustrates the 9 CapeNature Stewardship sites located in the Witzenberg Municipal Area.

Nr	Name	Location	Type	Status	Area
1	Twee Rivieren	32.719054°S 19.326950°E	Contract Nature Reserves	Designated	8956.40
2	Wagenboom Nature Reserve	32.732405°S 19.268662°E	Contract Nature Reserves	Designated	4420.30
3	Groot Winterhoek Protected Environment	33.040602°S 19.201943°E	Protected Environment	Designated	4368.48
4	Alto	33.157148°S 19.167839°E	Biodiversity Agreement	Signed	114.20
5	Orffer Servitude	33.186524°S 19.189507°E	Voluntary Conservation Servitude	Registered	145.88
6	Welbedacht	33.207975°S 19.132439°E	Contract Nature Reserves	Designated	119.50
7	Grootvlei Nature Reserve	33.345939°S 19.139496°E	Contract Nature Reserves	Designated	148.72
8	Waverley Hills	33.406780°S 19.231478°E	Biodiversity Agreement	Signed	51.42
9	Romansrivier Nature Reserve	33.469892°S 19.234472°E	Contract Nature Reserves	Signed	324.10

Directives

- Prioritise rehabilitation of degraded CBAs, especially in areas linking eastern and western ecological networks, to restore ecological connectivity.
- Manage pressure between urban expansion (Ceres, Tulbagh, Wolseley, Prince Alfred Hamlet, Op-Die-Berg) and adjacent CBA/ESA areas by directing settlement growth to already transformed or low-biodiversity land.
- Align human settlement planning with WCBSP land-use guidelines, ensuring that future housing delivery is directed away from high-value aquatic ESAs and riparian CBAs.
- Prevent any further encroachment on and prioritise the rehabilitation of CBAs and ESAs that have been impacted by informal and unregulated land uses, including informal structures, farming, and illegal cemeteries, particularly in Tulbagh and Prince Alfred Hamlet. Rehabilitation efforts should include removal of unauthorized developments, restoration of natural habitats, and community engagement to prevent recurrence.
- Support the CapeNature Stewardship programme by encouraging the adoption of appropriate conservation agreements that align with land suitability and landowner commitment, ensuring the protection of biodiversity and natural resources on privately owned land.

Map 10: CapeNature Stewardship Sites



2.1.9 Biodiversity

Fauna - The Witzenberg region supports a diverse range of fauna, from large herbivores such as Cape mountain zebra and grey rhebok to small endemic mammals, reptiles, and amphibians. Bird species of conservation concern include the black harrier, blue crane, and the vulnerable Cape vulture, which rely on the mountainous regions for nesting and foraging.

Freshwater systems within the municipality provide critical habitats for endemic and endangered fish species such as the Berg-Breede River whitefish (Barbus andrewi) and the Cape galaxias (Galaxias zebratus). These waterways also sustain amphibians such as the critically endangered micro Cape Flats frog (Microbatrachella capensis), which is highly sensitive to habitat degradation.

Flora - Witzenberg Municipality is located at the transition between the Fynbos and Succulent Karoo biomes, making it highly diverse in terms of landscape and ecological characteristics. Both biomes are globally recognised biodiversity hotspots, supporting a rich variety of flora and fauna within the municipal area. Hence the Ceres Mountain Fynbos Nature Reserve (CMFNR) has been established.

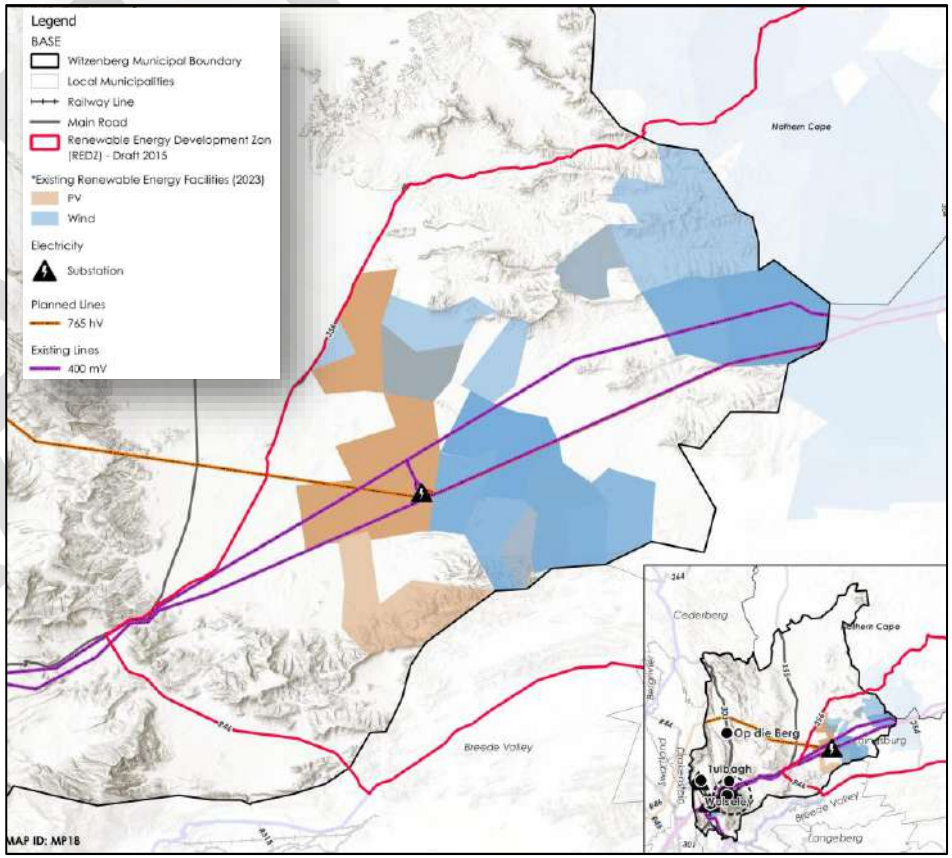
Nearly the entire Witzenberg municipal area falls within biodiversity conservation planning initiatives, including Fine Scale Planning (FSP) which identifies Critical Biodiversity Areas (CBAs) and prescribes associated land-use management guidelines.

The Witzenberg Municipality encompasses a diverse range of biomes and bioregions, which are closely linked to the area's topography, climate, and settlement patterns, and have important implications for planning, resource management, and sustainable development. The western portion, which contains the majority of urban and rural settlements and mountain ranges , is predominantly part of the Fynbos biome, including the Northwest Fynbos, Western Fynbos-Renosterveld, Southwest Fynbos, and East Coast Renosterveld bioregions. These areas are characterized by shrublands, proteas, ericas, and restios, with fire-adapted vegetation and high levels of plant endemism. They support agriculture where soils allow, contribute significantly to water catchment and groundwater recharge, and require careful management to prevent habitat loss, control invasive species, and protect biodiversity. The eastern portion of Witzenberg is largely part of the Succulent Karoo biome, specifically the Rainshadow Valley Karoo Bioregion, with traces of inland saline and azonal vegetation. This area is drier, with lower rainfall, saline soils, and vegetation adapted to arid conditions, making it suitable mainly for grazing and drought-tolerant crops while requiring careful water and soil management. Within this eastern portion, the Komsberg Renewable Energy Development Zone (REDZ) has been designated as a priority area for large-scale solar PV and wind energy projects. The inland areas of the REDZ, falling predominantly within the arid Rainshadow Valley Karoo Bioregion, are earmarked for PV development, while the wind energy zones are located closer to the municipal boundaries with Breede Valley and Laingsburg. The REDZ's strategic location allows

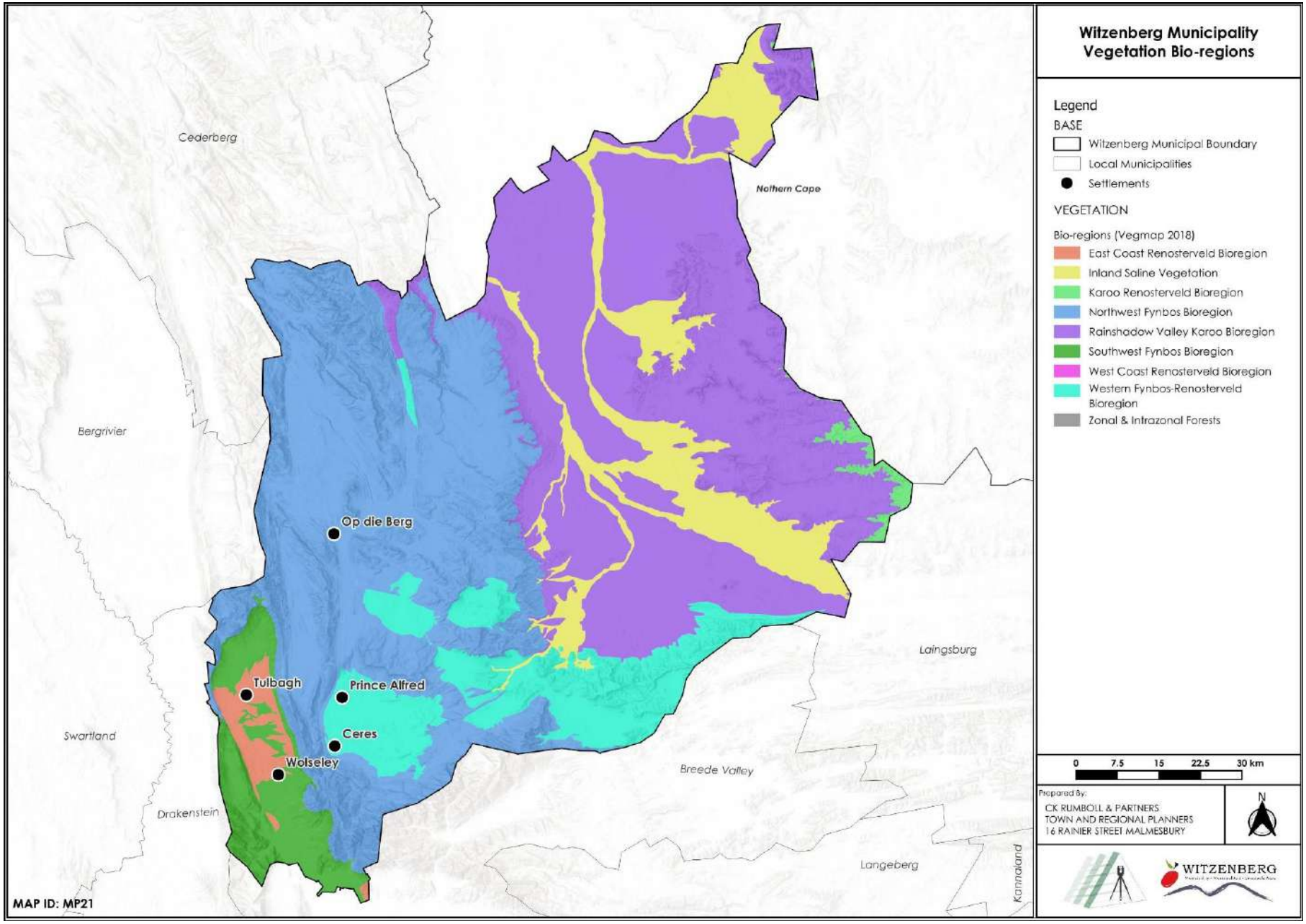
renewable energy development to occur in areas of lower ecological sensitivity, minimizing impacts on sensitive Fynbos-Renosterveld bioregions, maintaining biodiversity corridors, and supporting municipal energy and climate resilience objectives. Collectively, this ecological variation highlights the importance of integrating bioregional considerations into municipal planning, including urban and infrastructure development, water resource management, agricultural strategies, conservation, and climate adaptation measures, to ensure sustainable development, maintain ecosystem services, and protect biodiversity across the municipality.

Directives

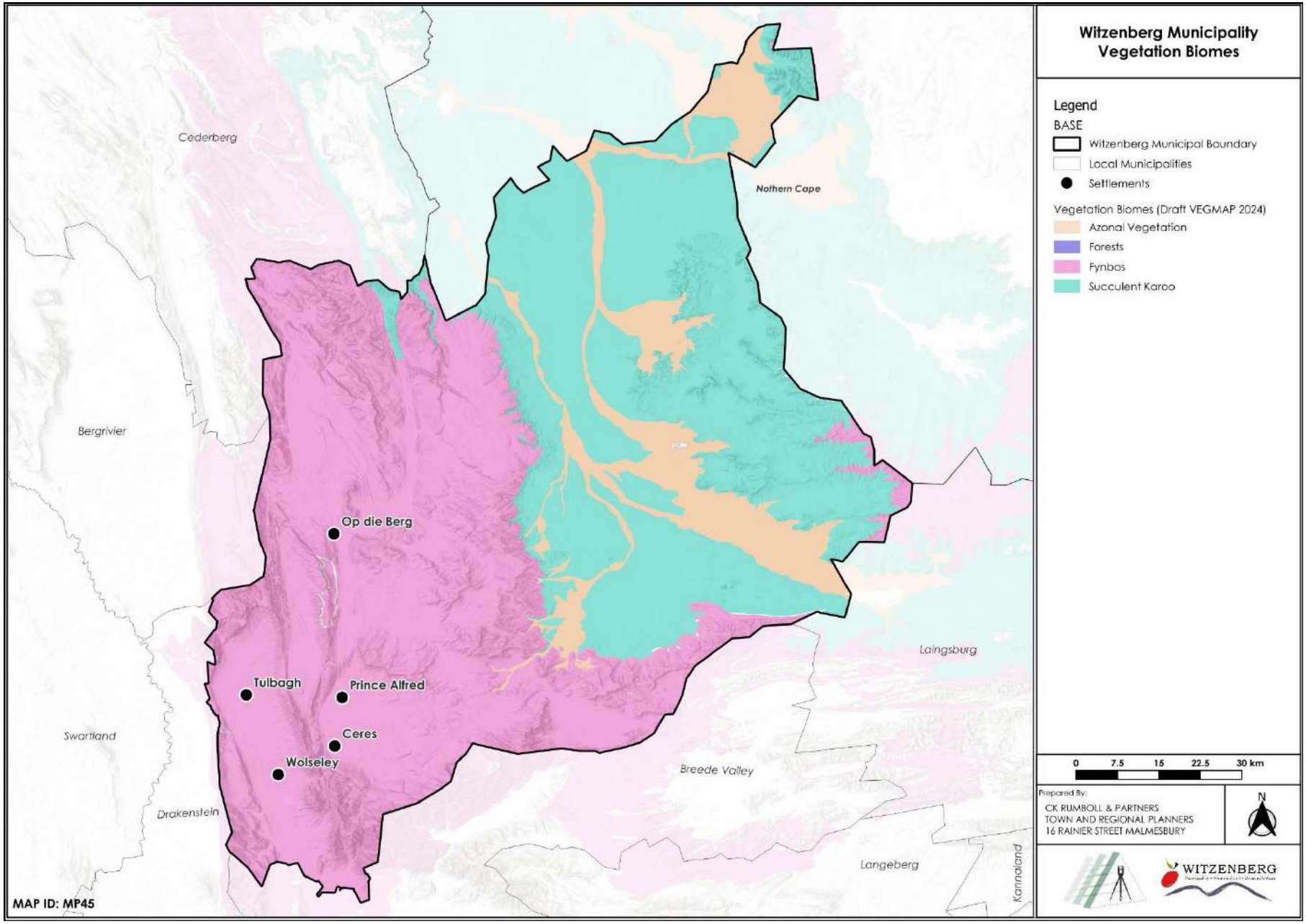
- Ensure all land-use and development decisions, including urban expansion, agriculture, and industrial projects, account for the ecological sensitivity of bioregions, particularly Western Fynbos-Renosterveld and East Coast Renosterveld areas. Implement biodiversity offsets and conservation corridors where development is unavoidable.
- Implement a 'no mowing' period for indigenous vegetation from August to the end of November to support wild plant blooming and pollination as part of biodiversity management efforts.
- Establish biodiversity and ecological corridors between identified priority biodiversity areas to sustain and consolidate the rich biodiversity of Witzenberg Municipality. Support conservation actions for species and habitats that maintain, protect, and enhance biodiversity and landscapes.
- Prioritize the conservation of critical biodiversity areas (CBAs) and both public and private nature reserves within the municipality to protect indigenous vegetation and wildlife habitats essential for climate resilience.
- Spatially delineate landscapes to be maintained and restored that play key roles in buffering the impacts of climate change, such as erosion-prone slopes, riparian zones, and degraded habitats.
- Support renewable energy development, including PV and wind, in suitable areas such as the Komsberg REDZ, while avoiding ecologically sensitive biomes and bio-regions (Fynbos and Renosterveld).



Map 11: Vegetation Bio-Regions



Map 12: Vegetation Biomes



2.1.10 Air Quality

According to the Witzenberg Draft Air Quality Management Plan, the main sources of atmospheric emissions in the municipality are linked to industrial processes, motor vehicles, residential fuel burning, agricultural activities, biomass burning, and pesticide use.

Industrial emissions are primarily associated with the combustion of fuels such as coal, wood, heavy fuel oil (HFO), diesel, and gas. In Ceres, four coal-fired boilers and one HFO-fired boiler are declared Controlled Emitters, while smaller boilers at other facilities are regulated by the municipality if their design capacity is less than 10 MW heat input. These point-source emissions are complemented by mobile sources, particularly motor vehicles. Vehicular traffic contributes significantly to air pollution, releasing pollutants such as nitrogen oxides (NOx), carbon monoxide (CO), particulate matter (PM10 and PM2.5), sulfur dioxide (SO_2), hydrocarbons (NMVOC), and lead (Pb). In addition, carbon dioxide (CO_2) is emitted, contributing to climate change. The impact of these emissions is particularly pronounced along major routes, including the N1 and access roads to Ceres, Tulbagh, Prince Alfred Hamlet, and Wolseley.

Beyond industrial and transport emissions, household energy use also affects air quality. While most households in Witzenberg rely on electricity for cooking, heating, and lighting, with occasional use of gas and paraffin, informal settlements where electricity access is limited depend heavily on wood, paraffin, and alternative fuels. This results in both indoor and ambient air pollution, particularly in informal areas around Ceres, Prince Alfred Hamlet, and Tulbagh.

Agricultural activities further add to the emission profile of the municipality. Pollutants such as methane from livestock, nitrous oxide from soil management, and the burning of vegetation and crop residues all contribute to the air quality of the municipal area. Pesticide and chemical spray use introduce additional harmful substances into the atmosphere, particularly across the fruit production areas surrounding Ceres, Tulbagh, and Wolseley.

Closely linked to agriculture is the issue of biomass burning. While controlled agricultural burning is regulated under a permit system overseen by the local fire department, uncontrolled burning of natural vegetation, crop residues, and waste remains a challenge. Such events release large volumes of pollutants into the air, causing seasonal declines in air quality and increased health risks.

Finally, pesticide use poses another concern for local air quality. Pesticides are broadly classified into four groups, herbicides, fungicides, insecticides, and bactericides, and are applied in liquid, solid, or gaseous form. A major risk is pesticide drift, where airborne particles are carried by the wind into unintended areas. This process can contaminate nearby settlements, water sources, and ecologically sensitive zones, compounding the cumulative impact of emissions on human health and the environment.

Emission Source	Key Pollutants	When They Occur	Where They Occur (Witzenberg)	Who is Mostly Affected	Directives
Industrial Processes	SO_2, NOx, CO, CO_2, PM, trace heavy metals.	Year-round, with peak during high production periods.	Ceres (coal & HFO boilers)	Industrial workers, nearby residential communities.	Support the enforcement of spatial buffers between industry and housing; Restrict locations of new fuel-intensive industries; Promote cleaner energy zones within industrial areas.
Motor Vehicles	NOx, CO, PM10, PM2.5, SO_2, hydrocarbons (NMVOC), Pb, CO_2.	Daily: peak during rush hours and harvest season.	Along N1, routes to Ceres, Tulbagh, Prince Alfred Hamlet, Wolseley.	Commuters, roadside residents, school children.	Support and prioritize the development of bypass roads to divert heavy traffic.
Residential Fuel Burning	PM10, PM2.5, CO, SO_2, volatile organic compounds.	Mainly winter months (heating) and in areas without electricity.	Informal settlements in Ceres, Tulbagh, Prince Alfred Hamlet.	Low-income households, women and children (spending more time indoors).	Promote affordable clean energy, awareness campaigns on health impacts.
Agricultural Activities	Methane (CH_4), nitrous oxide (N_2O), ammonia (NH_3), dust, pesticide residues.	Seasonal: planting, fertiliser application, harvest.	Orchards, vineyards, and fields around Ceres, Wolseley, Tulbagh.	Farmworkers, rural communities, ecosystems.	Support and encourage sustainable soil & livestock management.
Biomass Burning	PM10, PM2.5, CO, NOx, VOCs, dioxins.	Seasonal: late summer/autumn (land preparation), wildfire events.	Across rural agricultural areas; risk of uncontrolled fires near settlements.	Farmers, farmworkers, rural settlements near burning areas.	Enforce permit system, designate controlled burning areas, invest in fire management, encourage biomass-to-energy.
Pesticide Use	Herbicides, fungicides, insecticides, bactericides; VOCs, aerosols.	Seasonal: crop spraying periods.	Fruit production belt (Ceres, Tulbagh, Wolseley).	Farmworkers, nearby settlements, schools, water users.	Enforce buffer zones, integrated pest management (IPM), regulate application near water and sensitive areas

2.1.11 Agriculture

The Cape Winelands District Municipality's (CWDM) agriculture, forestry and fishing sectors account for more than one third (33.4% in 2022) of the Western Cape's agricultural output, making it the largest in the province. Witzenberg's economy is anchored by agriculture – the region's primary source of employment – and is renowned for its export-quality deciduous fruit, vegetables, and wine. Towns such as Tulbagh, Wolseley, Ceres, Prince Alfred Hamlet and Op-die-Berg are "agricultural service centres", with Ceres serving as the region's agri-processing hub.

The municipality's latest Integrated Development Plan (IDP) highlights the 10 largest crops by area, which can be seen in the table below.

Table 3: Crops by area

Crop	Area (ha)
Lucerne	9563.3
Small Grain	8577.2
Apples	6969.1
Pears	6665.5
Natural grazing	6224.9
Wine Grapes	5510.7
Planted Pastures Perennial	5290.4
Wheat	4360.0
Fallow	3434.9
Peaches	2832.5

According to the IDP, the analysis of Witzenberg's agri-economic environment has indicated a positive growth over the next five years. Key development implications outlined include:

- Supporting private sector-led institutional arrangements for joint planning and development of agriculture-related activities.
- Avoiding the subdivision of agricultural land or changes in land use to minimize the loss of agricultural activities and prevent the creation of uneconomical agricultural units.
- Enabling the diversification of farmer income through complementary land uses on farms that do not detract from the functionality and integrity of farming areas and landscapes.
- Developing incentives for smarter/green agricultural practices and technologies.
- Making municipal commonages and land on the edges of settlements available for small/emerging farmers and/or community gardens.
- Supporting alternative farming models, such as transforming unused and uncontaminated industrial land into community gardens.
- Supporting private initiatives to address the housing needs of agri-workers and the provision and management of associated social services.

According to the IDP, Witzenberg is recognized as a functional region within the broader agricultural space, prompting the development of an Agri-park in the municipality, specifically in Ceres which is situated within one of the Provincial Spatial Development Framework's (PSDF) identified Rural Development Corridors. Continued support for Agri-Park, including exploring

commonage land use, is expected to attract investment, generate jobs, empower previously disadvantaged, advance land reform, and foster local economic growth.

Climate change poses a real threat to the success of initiatives like Agri-Park and agriculture in general in Witzenberg. Farmers already contend with growing competition for water (from other sectors) and shifting rainfall patterns. This is evident in Tulbagh, for example, where insufficient water storage capacity has resulted in the implementation of water restrictions, affecting both individuals and farmers. Climate change projections for the Western Cape suggest a warming of 1.5°C to 3°C by around 2050, along with more hot days, fewer cold days, increased evaporation and reduced winter rainfall. Hence, while the need for irrigation increases, the replenishing of existing water sources such as rivers, ground water and dams becomes less certain, and improved bulk-storage infrastructure will be needed.

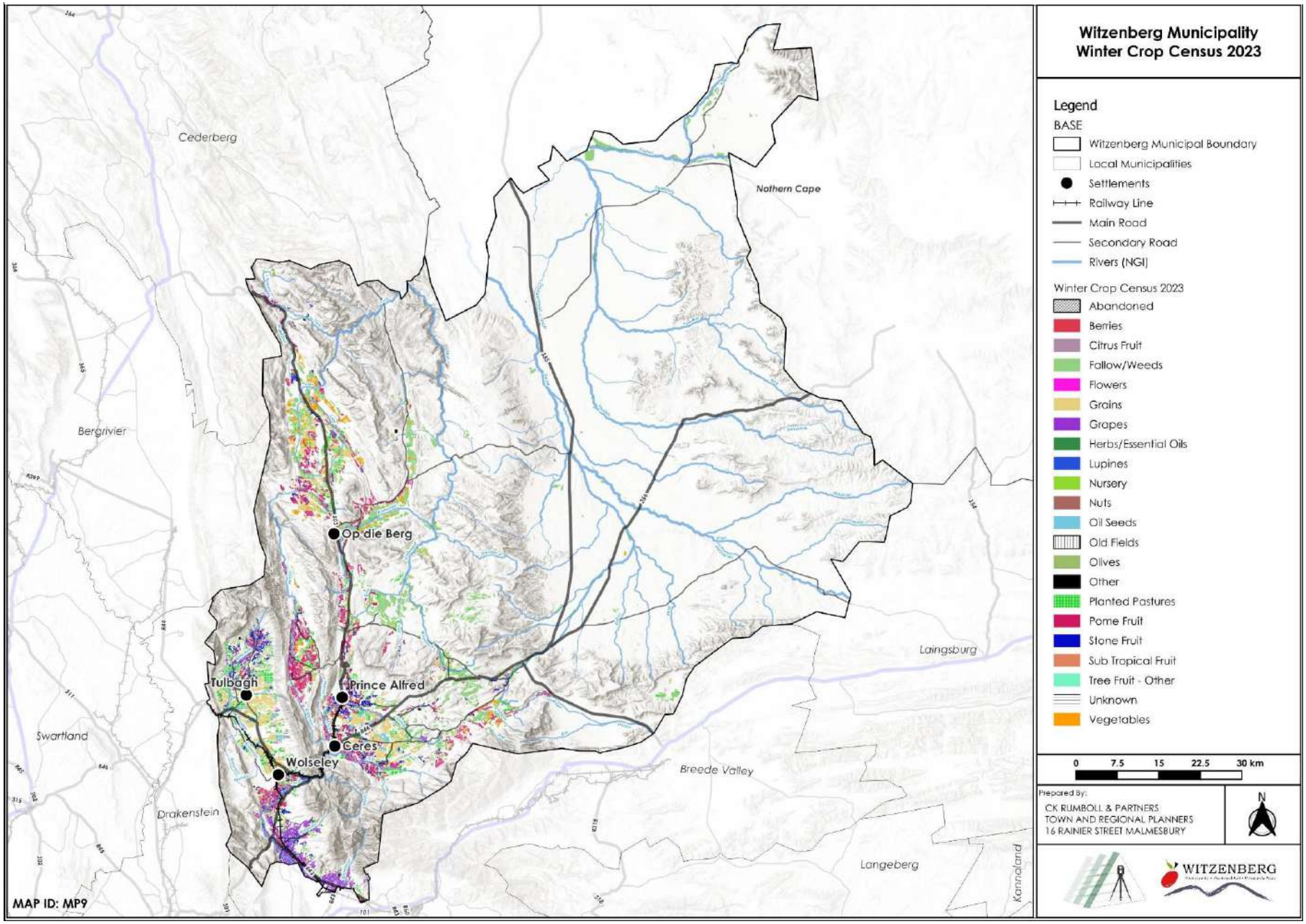
The Western Cape Government's SmartAgri Plan can guide Witzenberg's agricultural sector in responding to climate change. The plan outlines priority actions, available resources, and avenues for collaboration and coordination. Precision water and crop management using FruitLook also holds significant potential for farmers in the municipality to enhance agricultural sustainability and climate resilience. This advanced information system aims to reduce water consumption and input costs (including electricity, water, and fertilizers), improve crop yields, and, through ongoing data collection, identify cultivars that thrive under changing climatic conditions per region and sector. Over time, FruitLook could contribute to long-term sustainability and climate adaptation strategies.

While small scale and subsistence farming is limited in the municipality, peri-urban farming opportunities are emerging. For example, the Agri-Park initiative aims to empower small-scale producers, especially those from historically disadvantaged backgrounds. It supports access to markets, agro-processing, and training. Furthermore, the Local Economic Development (LED) programmes include support structures for SMMEs in agriculture and related sectors, promoting economic participation at different scales.

Directives

- Enhance the increasing uptake and potential for change to sustainable/climate-smart practices to absorb the impacts of climate change being experienced in the sector.
- Support uptake of renewable energy solutions and greater energy efficiency to compensate for energy insecurity.
- Encourage and support farmers experimenting and finding innovating responses to climate pressures, particularly early adopters of climate-smart practices.
- Support response to climate change by implementing the SmartAgri Plan.
- Support job creation, emerging farmers and land reform through programmes like Agri-Park.

Map 13: Crop Census

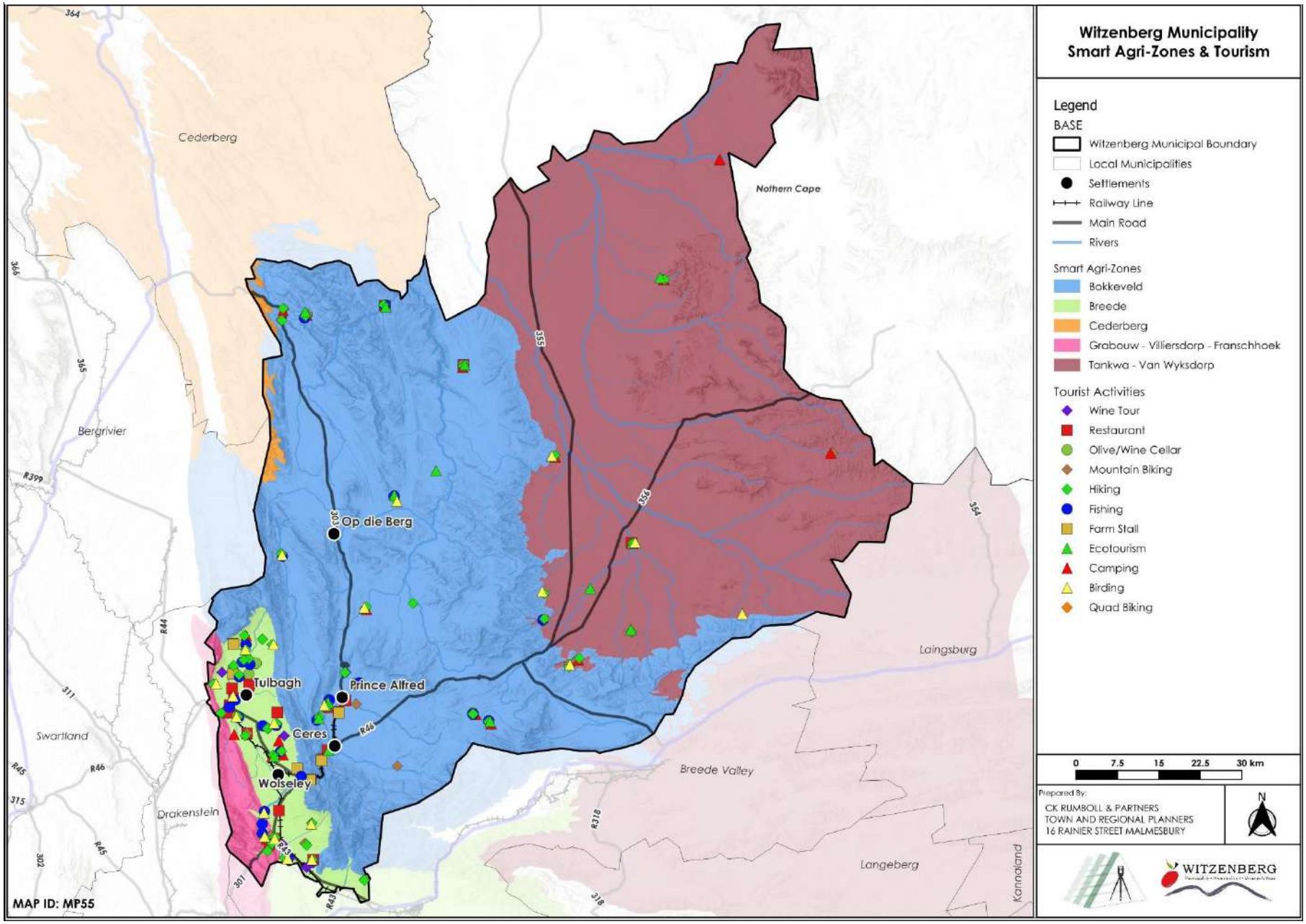


2.1.12 SmartAgri Plan

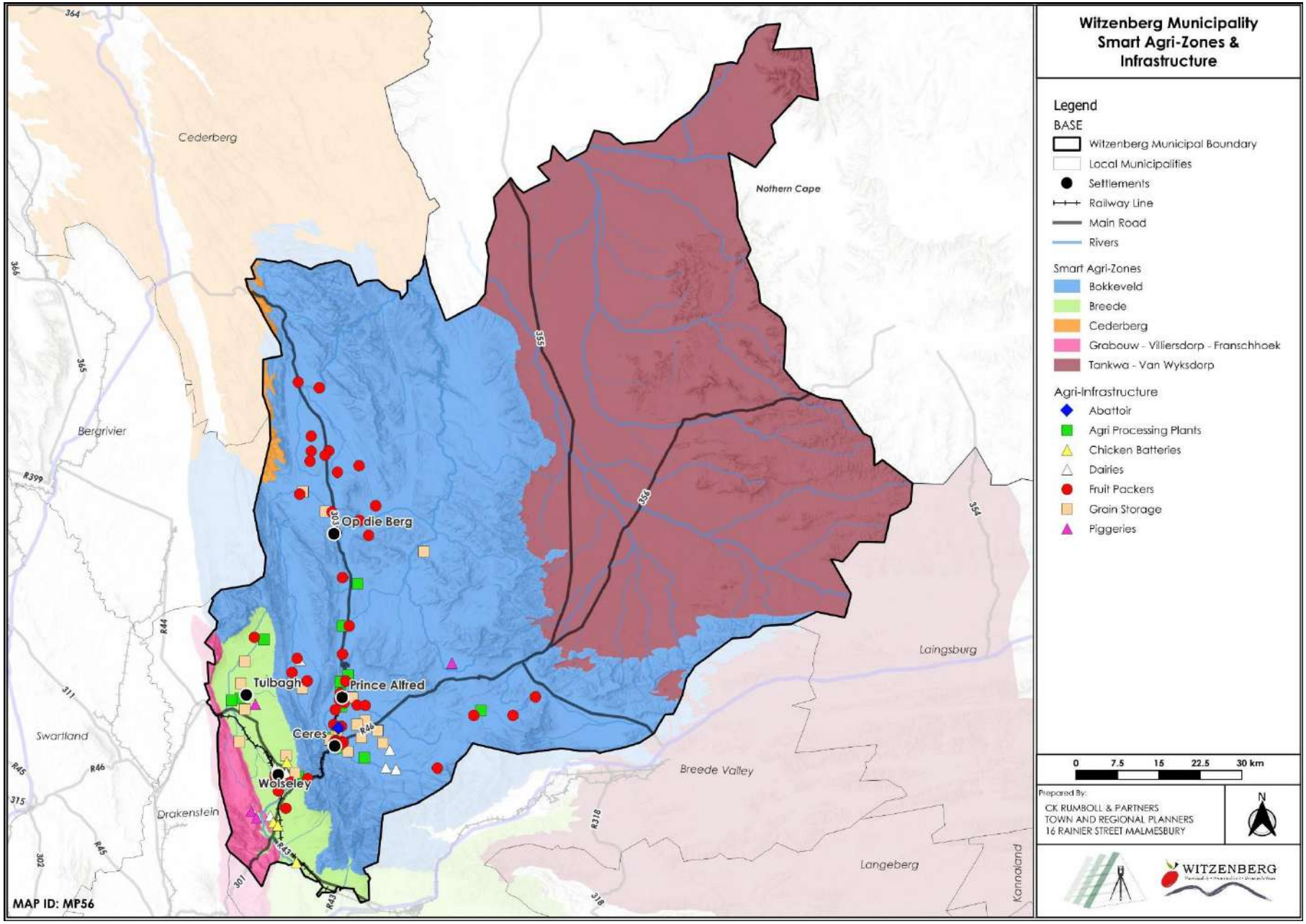
Precision Water and Crop Management using FruitLook: The continuous data collection over time, will provide valuable insights into the effects of changing weather patterns on different cultivars, regions, and agricultural sectors.

- To enhance agricultural sustainability and climate resilience, FruitLook technology shall be utilized to optimize water and nutrient management.
- A broader adoption and further refinement of FruitLook will significantly strengthen farmers' ability to monitor and adjust crop and water management practices in response to climate risks.

Map 14: SmartAgri Zones & Tourism



Map 15: SmartAgri Zones & Infrastructure



Socio-Economic Spatial Analysis

2.2 Socio-Economic Environment

2.2.1 History & Heritage

Witzenberg Municipality, established on 22 September 2000 through the amalgamation of several former municipalities and transitional councils, incorporates the settlements known as Ceres, Tulbagh, Wolseley, Prince Alfred Hamlet, and Op-die-Berg. The municipality's name is derived from the Witzenberg mountain range, named in 1699 by Willem Adriaan van der Stel in honour of his friend Nicholaes Witsen.

Before formal establishment, the region was part of a vital wagon route used by "togryers" and early farmers, traversing natural passes such as Karoopoort and Hottentots Kloof to reach the Karoo. These historic routes, formalised through roadworks like the Michell's Pass in 1848, laid the groundwork for agricultural expansion and settlement development. (Witzenberg MSDF, 2020). The geography influenced these early pathways: dispersed settlement patterns, cultivation and seasonal migration forged the rural nature of the municipality seen today.

The heritage of Witzenberg is shaped by both natural events and colonial settlement patterns. Tulbagh, one of South Africa's oldest towns, experienced rapid development in the 1800s, only to be severely damaged by the most destructive earthquake in South African history in 1969. The event led to the restoration of 23 historic buildings, many of which still stand today as testaments to Cape architectural traditions (Witzenberg MSDF, 2020).

Table 4: Scenic Routes & Mountain Passes

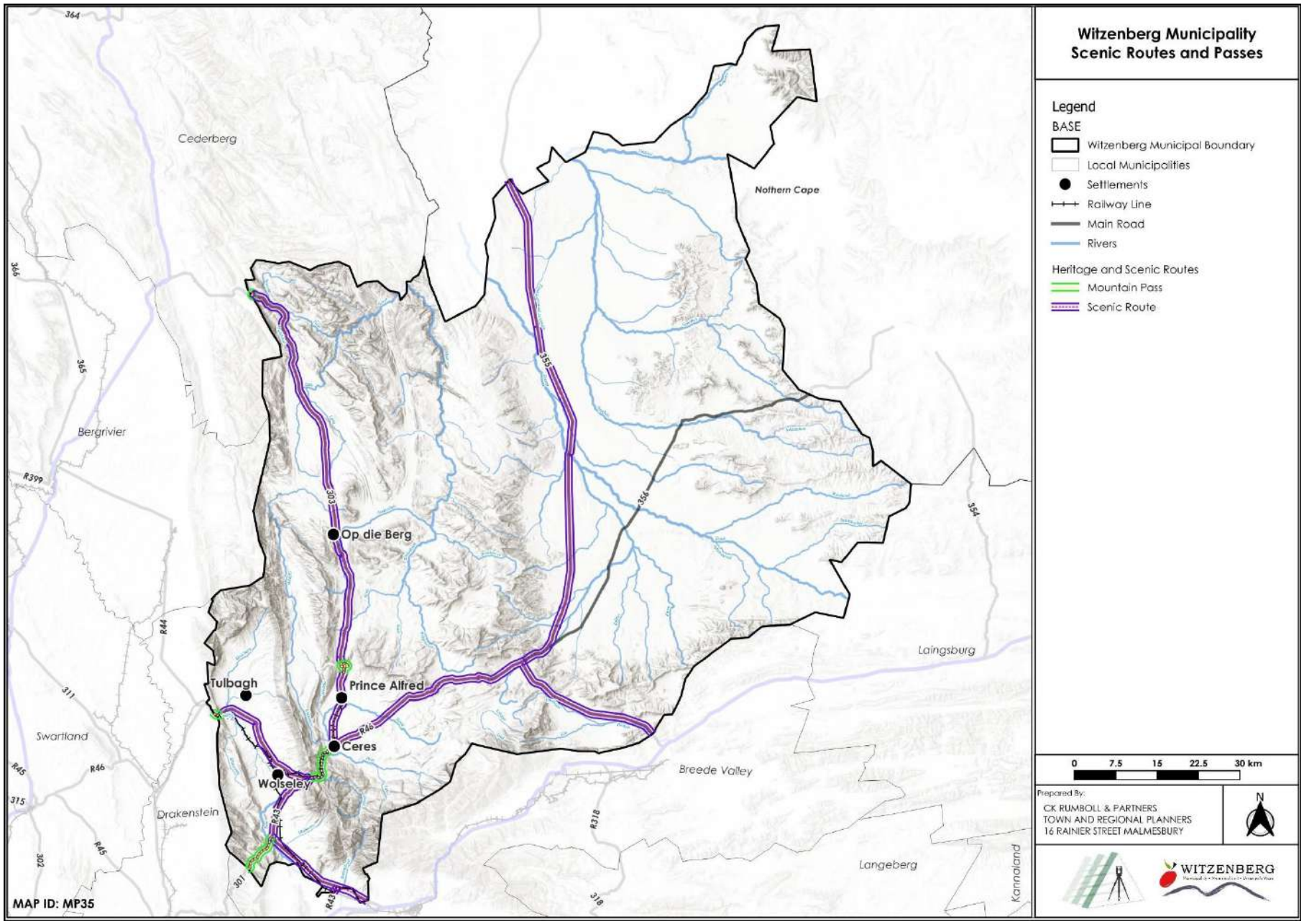
Scenic Routes	Historic Mountain Passes
R43 from Worcester to Ceres.	Roodezandt Pass/ Oudekloof Pass.
R46 from the N1 via Ceres and Wolseley to Tulbagh.	Nuwekloof.
R303 from Ceres via Prince Alfred Hamlet and Op-die-Berg to Citrusdal.	Gydo Pass.
R355 the gravel road from Karoopoort to Calvinia.	Mitchell's Pass.
R46 (original wagon route between Cape Town and the Karoo through Ceres). R355 to Calvinia and Sutherland and N1.	Karoopoort, (R355) including the Hottentotskloof (46) and Theronberg Pass (R46).

Directives

- Protect wagon and scenic routes, retain view lines and vistas.
- Protect all identified provincial heritage areas and cultural landscapes.
- Protect all identified rural heritage landscapes and settlements through the provisions of NHRA.
- Consider Wolseley as new industry center/corridor due to its strategic location and available infrastructure (roads and rail).
- Protect and enhance all landmarks, views and character areas (river corridors, koppies, unique vegetation, agricultural areas).
- Prioritise infill, intensification and redevelopment within settlements to avoid encroachment into surrounding scenic landscapes or sites of visual significance.

- Recognise historical settlement typologies and avoid indiscriminate or inappropriate forms of development, protecting historic precincts and creating new precincts.
- Identify key place-making and resource assets and define non-negotiable interfaces for these assets.
- Relax parking ratios and building lines prescribed in zoning schemes for heritage areas to retain the relationship between building and street and to allow for continuity of historic streetscapes.

Map 16: Scenic Routes and Mountain Passes



2.2.2 Demographic Profile

Population & Population Growth

According to the MYPE 2024[3], the population of the Witzenberg Municipality was estimated at almost 150,000 in 2020. The MYPE further projects that the population has now (2025) increased to 165,727, reflecting a total growth of approximately 11.7% over the five-year period. This corresponds to an average annual growth rate of 1.8%, which aligns with estimates provided in the latest Municipal Socio-Economic Profile (SEP) done in 2024.

The MYPE only provides projected population figures up to 2035, additional estimates were calculated using the estimated growth rate (determined by MYPE 2024) to determine population growth up to 2045.

Despite this steady growth and having the largest geographical area, Witzenberg remains the second least populated municipality in the Cape Winelands District, following Langeberg. While the 2024 SEP does not provide estimates in terms of the urban – rural split, the 2011 StastSA estimates the urban-rural split was about 54.97% / 45.02%.

Table 5: Population Statistics

Settlement	2023	2025	2030	2035	2040	2045
Ceres	50 777	53 033	59 115	65 911	73 487	81 934
Op-die-Berg	4 760	4 972	5 542	6 179	6 889	7 681
Prince Alfred Hamlet	11 107	11 601	12 932	14 418	16 075	17 923
Tulbagh	17 454	18 230	20 321	22 657	25 261	28 165
Non-Urban	53 950	56 347	62 810	70 030	78 080	87 055
Wolseley	20 628	21 545	24 016	26 776	29 854	33 286
Total	**158 677**	**165 727**	**184 736**	**205 971**	**229 647**	**256 044**

Age Cohorts

The largest percentage of the population are of working age, between 15 and 64 (72.8%). 22% of the population are aged between 0-14 years old and only 5% of the population are considered to be elderly.

Table 6: Age Cohorts

Group	**%**	**2024**	**2025**	**2030**	**2035**
Children (0-14)	22%	35 730	36 185	40 642	45 314
Working Age (15-64)	72.8%	118 167	121 097	134 857	150 359
Aged (65+)	5%	8 225	8 445	9 237	10 299
Total Population (MYPE 2024)	100%	162 121	165 727	184 736	205 971

[3] Mid-Year Population Estimate

Households

Average household sizes, as determined by the Socio-Economic Profile of Witzenberg for 2024, were applied to the current estimated population figures (from MYPE 2024) for each settlement.

The overall total number of households in Witzenberg is estimated to increase from about 57 000 households in 2025 to a total of about 63 700 in 2030 and nearly 71 000 by 2035. Nearly 35% of the total households are estimated to be located in the rural area of Witzenberg. Detail on population and household growth is indicated in the table below:

Table 7 Population and Household Estimates

Settlement	SEP HH Size	2025 HH	2030 HH	2035 HH
Ceres	2,9	18 287	20 385	22 728
Op-die-Berg	2,9	1 714	1 911	2 131
Prince Alfred Hamlet	2,9	4 000	4 459	4 972
Tulbagh	2,9	6 286	7 007	7 813
Non-Urban	2,9	19 430	21 659	24 148
Wolseley	2,9	7 429	8 281	9 233
Total		57 147	63 702	71 024

Dependency Ratio

According to the MYPE 2024, the dependency ratio per 100 people is expected to steadily decline in Witzenberg over the next five years. The ratio is estimated to decrease from 37.2 in 2024 to 36.9 in 2025, and further to 36.0 by 2029. Witzenberg Municipality, along with Stellenbosch Municipality, has a dependency ratio that is notably lower than that of the Cape Winelands district. In 2024, the district-level dependency ratio was estimated at 42.9.

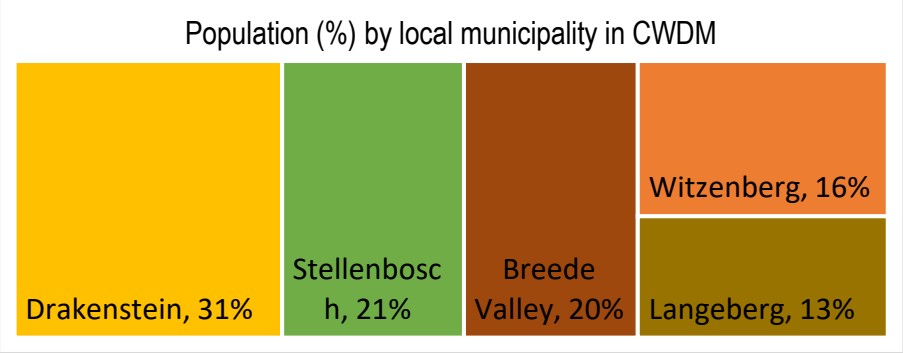
Table 8: Dependency Ratio

Location	2024	2025	2029
Witzenberg	37.2	36.9	36.0
Drakenstein	42.9	42.8	43.3
Stellenbosch	37.3	37.2	37.5
Breede Valley	49.0	49.0	49.8
Langeberg	51.6	51.6	51.9
Cape Winelands District Municipality	42.9	42.8	43.0

Population density

The 2020 MSDF recorded Witzenberg Municipality's population density at 13 persons per square kilometre in 2020. The 2024 SEP, however, projects a gradual rise in population density, with estimates indicating that there was an increase from 14.0 persons/km² in 2023 to 15.1 in 2024 and 15.4 in 2025, suggesting a steady but notable intensification in population pressure. Despite being the largest municipality in terms of geographic area, Witzenberg accommodates only about 16% of the district's population, in stark contrast to Drakenstein and Stellenbosch, which account for 31% and 21% respectively.

Figure 4 District Municipal Densities



Directives

- Encourage economic growth and education to provide employment and a skilled workforce, as the workforce represents the majority of the population and children aged 0 – 14 years a quarter (22%) of the population.
- Provide for social amenities and economic spaces required by growth trends in child, working and elderly populations (for example more schools, skills centres and amenities).
- Promote living spaces near families in need, focusing on orphans under 14, female-headed and child-headed households, and prioritize development at designated sites like social housing areas.
- Promote the provision of amenities at settlement and regional levels, driven by proximity.
- Accommodate family trends in social housing precincts.
- Support and advocate for the development of a Human Settlement Plan to help plan for projected increase in households.

2.2.3 Education

The educational landscape of Witzenberg Municipality generally aligns with CSIR norms for facility provision relative to population size. The municipality has 42 registered Early Childhood Development (ECD) centres (Western Cape Government). Early childhood education is aimed at children before age 6. The majority of these registered ECDs are connected to schools – during the drafting of this document there were 39 schools with Grade R classes. 38 of these centres were ordinary public schools, while one school, Rijk Tulbagh Private School, is private. There are three independent ECD centres, which operate exclusively as ECD centres, registered with the WCED.

According to data received from the Western Cape Education Department and information obtained via Western Cape Open Data Portal, most schools are situated in Ceres and the rural areas. Wolseley and Tulbagh each have 5 registered ECDs respectively, which is considered adequate given their smaller populations. Most education institutions in Witzenberg are primary schools, which make up 41 of the schools in the municipality. In terms of secondary education, the municipality is served by 6 secondary schools, 4 are in Ceres, 1 is in Tulbagh, and 1 is in Wolseley. The school in Op-die-Berg is a combined school, which serves the needs of pupils from Grade R to Grade 12. There are also 5 schools that are classed as 'intermediate'. These schools run classes up to Grade 9. During the drafting of this document, all settlements meet the CSIR norms for high school provision; however, by

2029, Tulbagh is projected to require an additional high school to maintain compliance due to expected population growth.

Figure 5: Total Number of Enrolled School-Goers by School Type and Fee Status

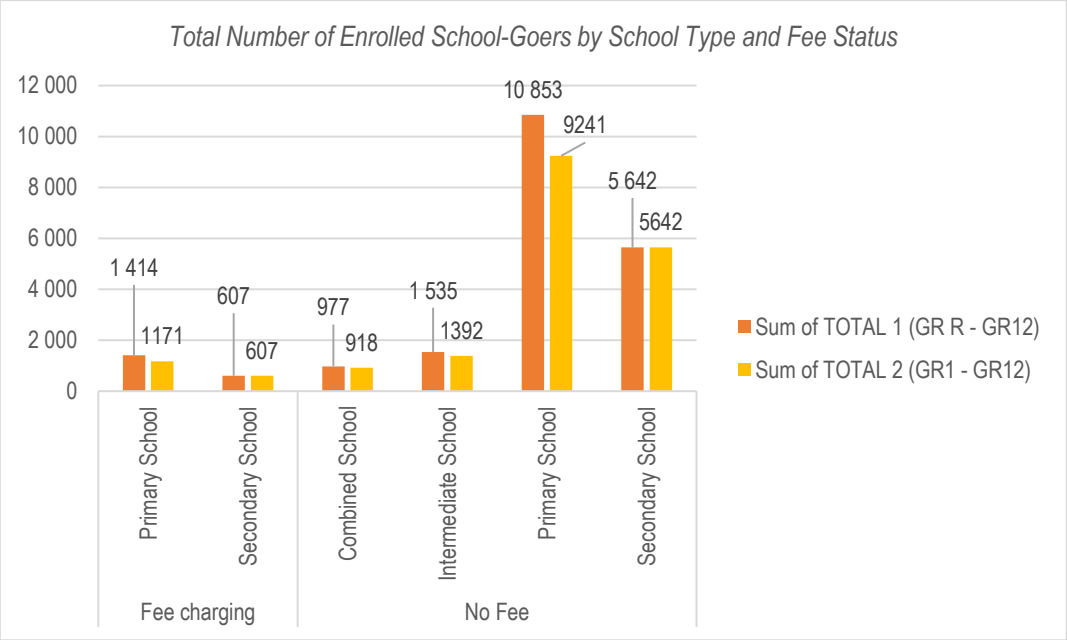


Table 9: Number of Schools by type

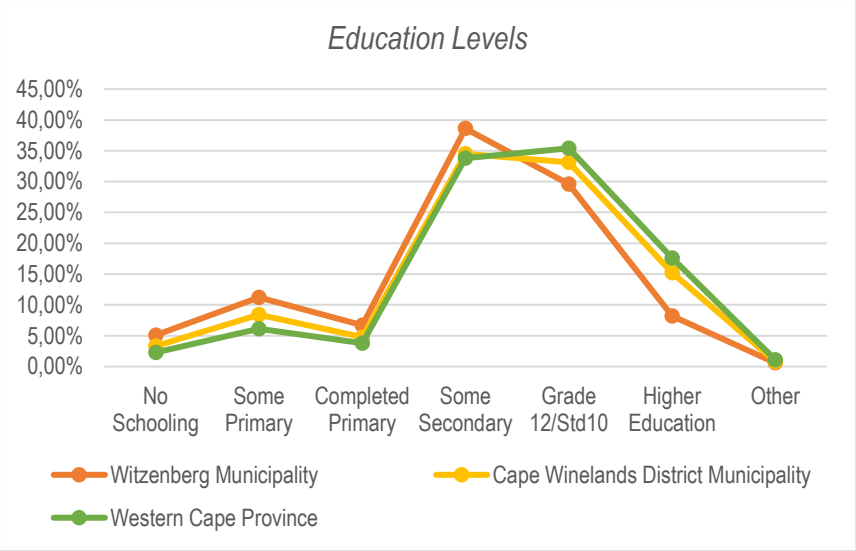
Type of School	Number of Facilities
Primary School	41
Intermediate School	5
Combined School	1
Secondary School	6
Total	53

Learner retention rates have shown significant improvement increasing from 65.4% in 2020 to 69.5% in 2022 and 73.6% in 2023. The matric pass rate however, has seen a decline going from a steady increase between 2020-2022 (65% -70.9%), but dropping to 68% in 2023.

There are currently 21 021 school-goers enrolled between Gr R and Gr 12 in Witzenberg. The number of school-goers between Gr 1 and Gr 12 is 18 971. There are therefore about 2 050 children accessing pre-school education at registered schools in the municipality. Most school-goers are enrolled at no-fee schools, making up 19 007 of all attendees from Gr R to Gr 12. The number of school-goers between Gr R and Gr 12 attending fee-charging schools is 2 021.

Furthermore, only 8.2% of residents have pursued higher education, indicating a limited progression beyond basic education levels. Of the 53 schools in the municipality, 46 are no fee schools, making 86.8% of the schools no-fee. According to the 2024 SEP, only 17 schools have libraries.

Figure 6: Municipal Education Level



Directives

- Prioritize densification strategies in urban areas to maintain amenity efficiency.
- Monitor and facilitate secondary school capacity, especially in Tulbagh. Consolidate planning for an additional school and related infrastructure.
- Encourage the development of tertiary and skills training facilities to leverage large working-age population by improving access to post-school education and skills training.

2.2.4 Health

According to the Witzenberg SEP 2024, the municipality has the following health facilities:

- 8 public primary healthcare clinics (PHC) and 6 mobile clinics.
- 1 district hospital.
- 7 ART clinics/treatment sites and 17 TB treatment clinics.

Provision of Health and Emergency services, e.g. clinics and mobile services, comply with CSIR norms.

During 2023/24, the municipality recorded nearly 7 500 registered patients receiving antiretroviral treatment (ART) with about 500 newly registered patients.

Witzenberg Municipality recorded an increase in the Maternal Mortality in Facility Ratio according to the SEP 2024, unlike the broader CWDM trend.

While the number of terminated pregnancies has remained unchanged, the birth rate among female patients between the age of 10-19 has increased, this is indicative of the need for urgent and focused strategies to reduce teenage pregnancies and targeted investment in comprehensive reproductive health services overall.

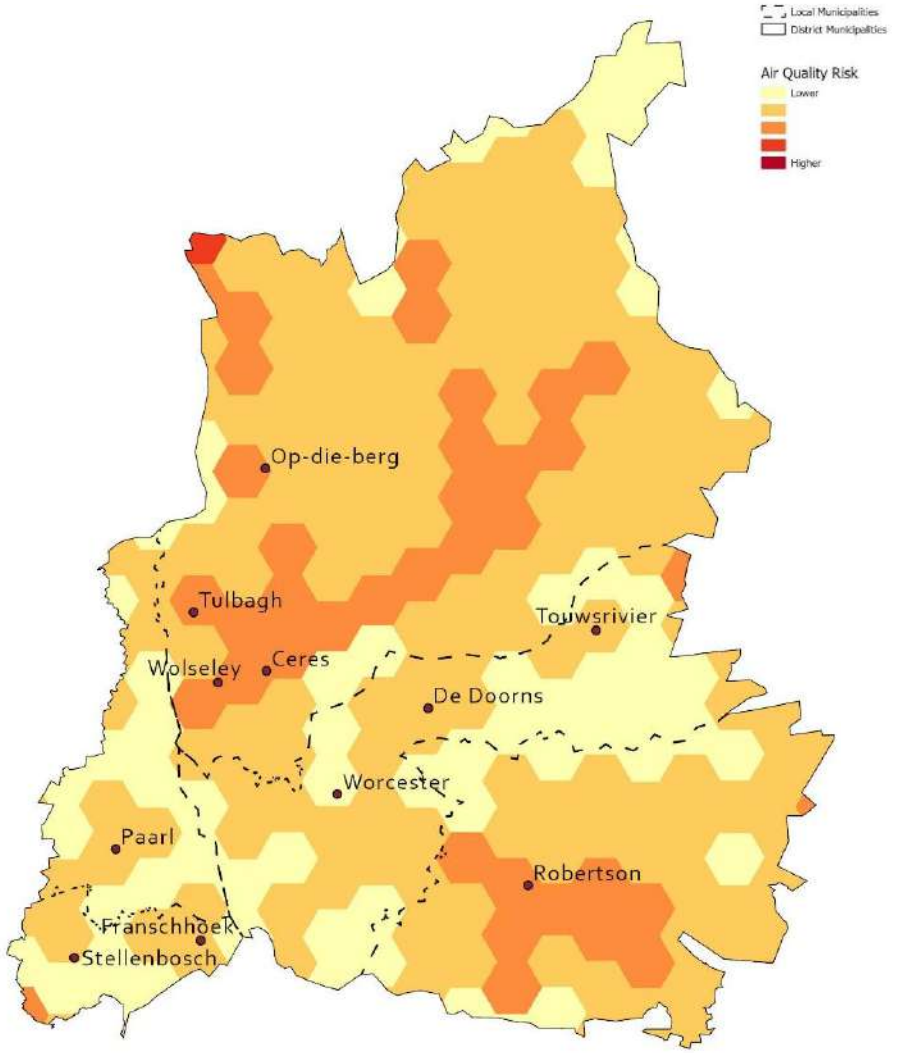
By 2024, Child Health in Witzenberg Municipality overall fluctuated:

- The immunisation rate decreased from 84.5% in 2023 to 71.9%.
- 51 cases of severe acute malnutrition for children under 5 were recorded in 2024, indicating a decrease from the previous 71 cases in 2022.

- Neonatal mortality rate (per 1000 live births) decreased from 14.3% in 2023 to 10.6%.
- Low birth weight was 14.5% in 2023 and decreased in 2024 to 13.6%.

The Witzenberg Municipal area has been assessed for environmental risks and vulnerabilities as part of the Western Cape Environmental Risk and Vulnerability Mapping project. This project evaluates how different people, systems, and resources are exposed to hazards and their capacity to withstand or adapt to pressures. A composite environmental risk map has been generated, combining hazard data with vulnerability indices to highlight areas where compound risks could threaten communities, livelihoods, and infrastructure. Potential hazards considered include poor air quality from facilities with atmospheric emissions licences, residential areas with limited socio-economic resources (as a proxy for likely indoor air quality challenges), proximity to major transport routes and airports, exposed bare ground, and coastal areas susceptible to marine aerosols. The interaction of these hazards with socio-economic vulnerability creates a spatial representation of relative risk across the municipality, identifying settlements that may experience heightened environmental stress. The map insight on potential communities that are socio-economically vulnerable and may be at higher risk of health and livelihood impacts, including those related to food insecurity and nutritional challenges.

Figure 7: Air Quality and Health Risk to Vulnerable Communities



Directives

- Prioritise Adolescent Reproductive Services in high-risk settlements.
- Direct infrastructure and staff investment to primary healthcare centres where access is limited, such as Nduli, and in outlying areas such as Op-die-Berg and Prince Alfred Hamlet.
- Map and target communities with high malnutrition prevalence for the rollout of community-based nutrition centres and/or food garden projects.
- Spatially map agro-ecological zones and promote agro-ecology and collaboration with stakeholders in local agriculture to address nutrition support.
- Promote the provision of temporary satellite clinics during peak cultivation and harvesting seasons to support migratory workers with young children.
- Use risk maps to guide the siting of healthcare, early childhood development, and social service facilities to ensure they serve the most at-risk communities effectively.

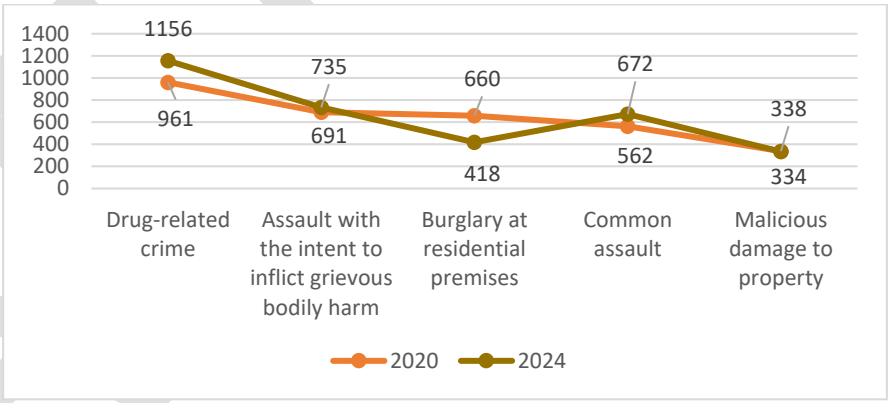
2.2.5 Safety

Provision of Emergency Services related to safety i.e. fire stations and police stations in all settlements in Witzenberg Municipality, comply with the CSIR norms. The municipal SEP 2023 indicates that Witzenberg municipal area is served by about 6 ambulances, which means that there are 2.4 ambulances per 10 000 people.

Overall, crime in the municipal area has risen over the past five years according to statistics from Crime Hub (Crime Hub, n.d.). Drug-related offences and common assault represent the most significant increases.

The five most common types of crimes are illustrated in the graph below.

Figure 8: Municipal Crime Statistics



The municipality is compliant with CSIR norms in terms of police stations and satellite services, the socio-economic implications of this rise in crime may include increased pressure on law enforcement resources, higher security and insurance costs for property owners, potential negative impacts on property values, and a growing need for targeted community interventions and strategic law enforcement initiatives.

Directives

- Provide spatially for safety and disaster infrastructure gaps informed by demarcated target reach according to fire and police station norms and for any other emergency and safety services.

- Promote urban upgrade programmes and earmark areas for future upgrades.
- Identify and repurpose abandoned buildings and vacant lots into community centres, sports facilities, youth hubs, and rehabilitation outreach points to provide constructive alternatives for at-risk populations.
- Promote the inclusion of Crime Prevention Through Environmental Design (CPTED) Principles (limiting access to potential crime hotspots, and encouraging territorial reinforcement through community ownership of space).
- Promote the development of decentralized Health and Rehabilitation Facilities including mental health.

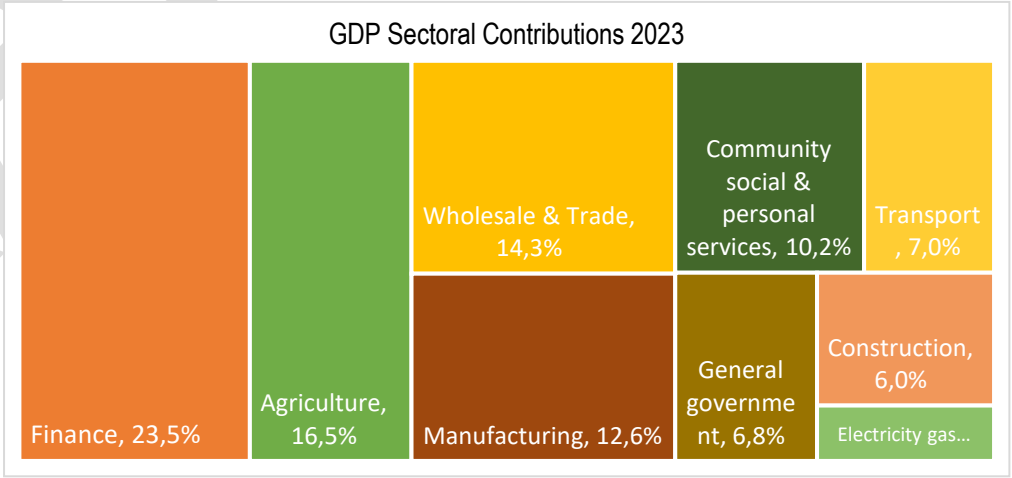
2.2.6 Economy

In comparison to the rest of the CWDM, Witzenberg Municipality stands out for being highly effective at engaging its labour force, as reflected in its high labour force participation (91.2%) and absorption rates (86.3%). With 82.6% of workers formally employed and the lowest unemployment rate (5.4%) in the CWDM, Witzenberg has been successful at ensuring that most of its economically active residents are productively engaged in the economy. The municipality's economy has also shown resilience by remaining stable, compared to the rest of the district, despite various financial crises.

The high labour performance and economic stability, however, exist alongside notable structural limitations. Most of the workforce is low-skilled or unskilled, indicating a reliance on sectors such as agriculture, basic manufacturing, and low-technology services, which typically offer limited upward mobility and are more vulnerable to economic shocks. This can be attributed to the low contribution to overall GDP, despite its large geographic footprint. While Witzenberg is the second smallest contributor to the district's GDP, it achieved the highest GDP growth in the district 2023, suggesting that economic activity is accelerating, albeit from a relatively low base.

This combination of high employment with low economic output represents both a challenge and an opportunity. The data indicates that Witzenberg has the labour capacity, and work ethic, but its full economic potential remains underdeveloped.

Figure 9: GDP Sectoral Contributions 2023

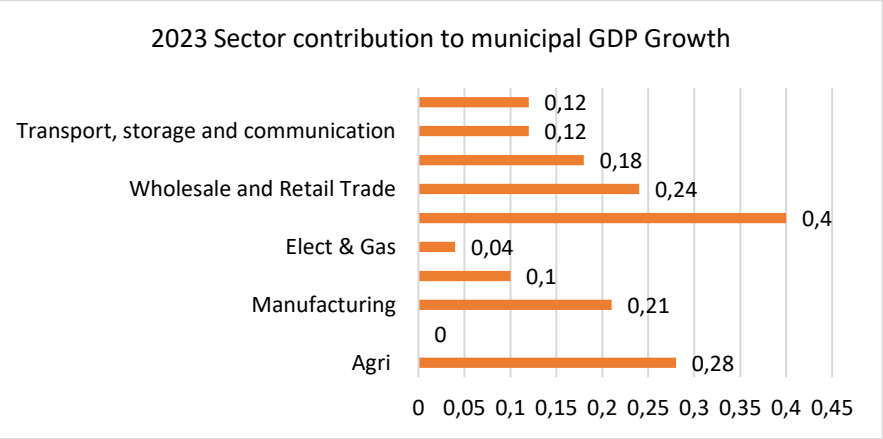


In 2024, Witzenberg's economic growth is projected at 3.0%, driven by strong recoveries in key sectors. The agriculture, forestry, and fishing sectors are expected to grow by 5.5%, following a contraction in 2023. The mining and

quarrying sector is projected to increase by 6.1%, while the electricity, gas, and water sector is projected to grow by 8.1%. In contrast, the transport, storage, and communication sector is expected to decline sharply by 9.2%, which may pose risks to economic stability. Economic growth is expected to moderate to 2.7% in 2025.

The United States was the leading export destination for Witzenberg products, followed by the Netherlands and the United Kingdom. In 2023, the top three imports were forklift trucks, harvesting or threshing machinery, and carboxylic acids, highlighting a trend in modernisation of agricultural methods, as well as the need for municipal investment in agricultural and industrial capacity. Figure 10 GDP Sectoral Contributions for 2023 (Source: CWD MERO 2024-2025).

Figure 10: Municipal Sector Contribution to GDP Growth

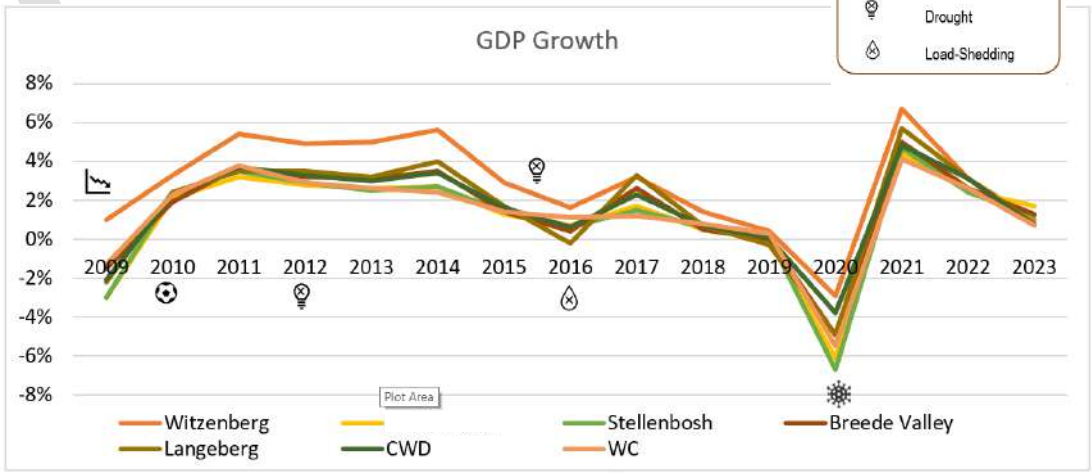


At a settlement level, Op-die-Berg's primary employment sector is mixed farming, Tulbagh specialises in the processing and preservation of fruit and vegetables, while Prins Alfred Hamlet and Wolseley focus mainly on the cultivation of pome and stone fruits.

Impact of International Trade Tariffs on the Local Agricultural Economy

The recent imposition of tariffs by the USA, could potentially result in the reduction in demand and export revenues as the USA is Witzenberg's primary export market for key export products such as citrus, dried fruit, and fruit juices. This could have ripple effects on local agricultural producers, agri-processing businesses, and employment in the sector. To mitigate these impacts, Witzenberg may need to diversify its export markets, invest in value-added processing, and support SMMEs along the export value chain, thereby strengthening economic resilience against international trade

Figure 11: GDP Growth



Investment Trends

Investment patterns in Witzenberg are closely reflected in building plan submissions, which act as both a response to and a driver of economic growth.

Submission of formal building plans

Submissions have declined over the past decade, nearly halving from 2013/2014 to 2023/2024. Applications dropped from 461 in 2018/2019 to 250 in 2022/2023, before recovering slightly to 354 in 2023/2024. This decline could be linked to the economic impact of the COVID-19 pandemic and broader development constraints.

Figure 12: Building Plan Submissions per financial year.

The building plan submission data for Witzenberg Municipality from 2020 to 2024 reveals distinct spatial patterns in development activity. Ceres has consistently recorded the highest number of building plan submissions, indicating its ongoing role as the primary growth and investment node in the municipality. A notable increase in submissions in 2023 (from 149 in 2022 to 269), likely driven by post-COVID economic recovery, infrastructure investments, or the clearance of a backlog of applications, was followed by a sharp decline in 2024 (123 submissions).

Prince Alfred Hamlet and Op-die-Berg reflect modest and inconsistent levels of formal development activity. Wolseley, despite notable population growth in recent years, has also recorded relatively low numbers of formal building plan submissions. Of particular concern is Op-die-Berg, which recorded only five submissions in 2023, pointing to limited formal investment despite having over 800 people on the municipal waiting list. This may be attributed to several development constraints, including topography and a shortage of available undeveloped erven for new development opportunity. In contrast, Tulbagh shows a relatively stable trend, suggesting a consistent, though modest, level of development demand. Wolseley's peak in 2021, followed by a sharp decline in subsequent years, indicates a brief period of growth that has not been sustained.

Despite the reduction in the number of applications, the value of building plans has generally increased over time, with a significant increase in

2018/2019 attributed to the development of the Paardekraal East Windfarm.

Further data indicates shifting investment dynamics:

- Residential extensions, commonly the second most common application submitted, surpassed that of new residential dwellings applications in 2020/2021
- Rural applications peaked in 2018/2019.
- Business extension applications grew modestly from 2018/2019 onwards.
- New business building applications remained low, indicating weak investment in new office and commercial infrastructure.

Table 10: Building Plan Submissions 2020-2024

Year	Ceres	PAH*	ODB*	Tulbagh	Wolseley	Total Per Year
2020	193	35	16	26	43	**313**
2021	178	19	19	42	56	**314**
2022	149	30	30	30	48	**287**
2023	269	29	5	38	31	**372**
2024	123	24	8	25	43	**223**
Total per settlement	**912**	**134**	**78**	**161**	**221**	

*Prince Alfred Hamlet (PAH), Op-die-Berg (ODB)

Figure 13: Value of applications, 2013/2014 - 2023/2024 (Source: LED Strategy 2025)

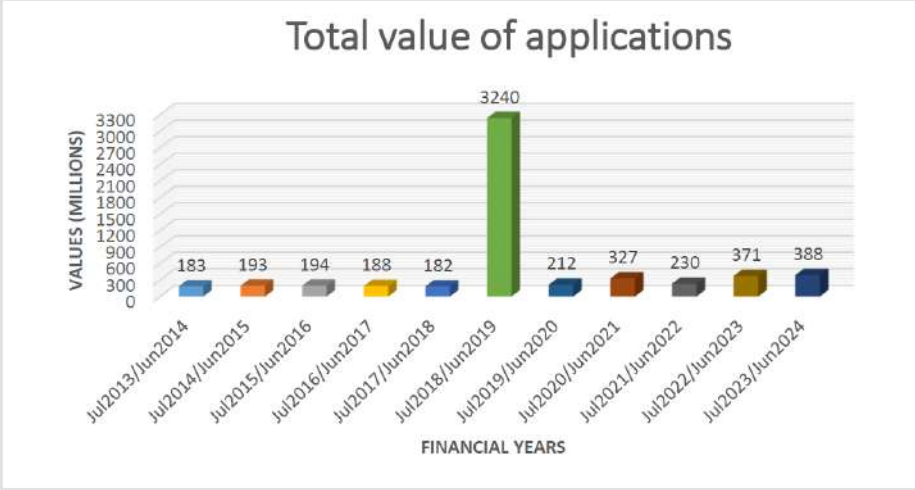
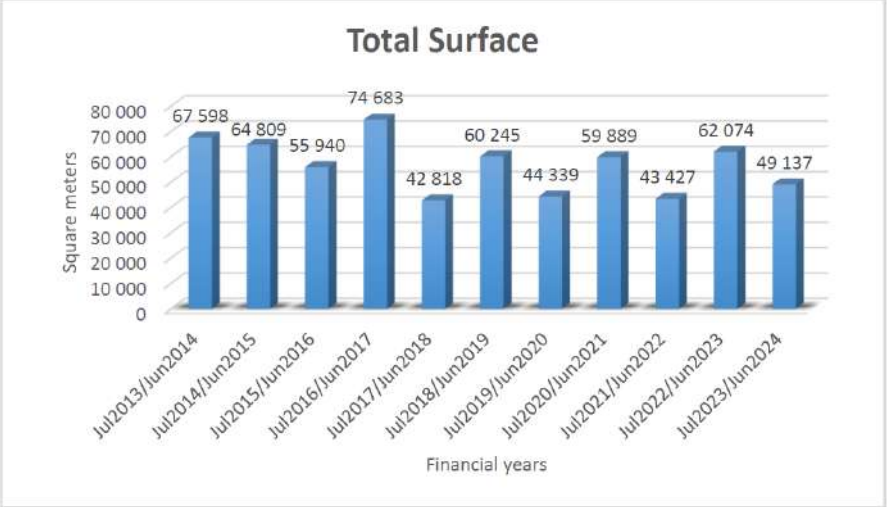


Figure 14: Total surface per square meter 2013/2014- 2023/2024 (Source: LED Strategy 2025)



Attracting investment to Witzenberg:

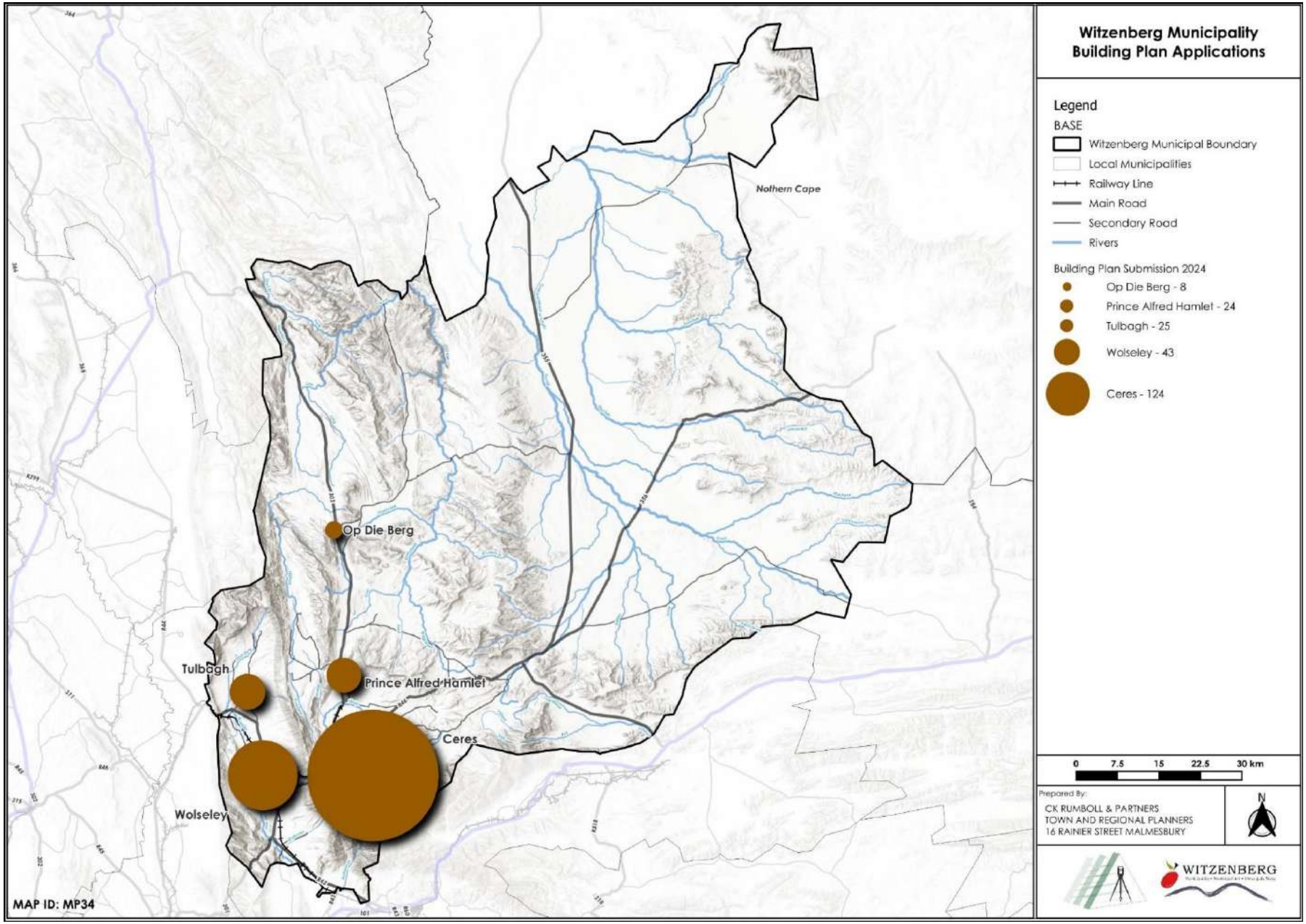
The Witzenberg LED Strategy notes the following in terms of attracting investors to the Municipality.

- Market the area as a desirable place to live, work, and invest, highlighting its scenery, leisure appeal, and proximity to Cape Town.
- Provide reliable basic services, electricity, water, sanitation, and public transport.
- Invest in strategic infrastructure to support business operations and reduce costs.
- Maintain transparent and predictable regulations to build investor confidence.
- Promote a clean, high-quality living environment to attract both businesses and residents.
- Develop support infrastructure and adopt a pro-business approach from government.
- Establish export processing zones and industrial parks as investment hubs.
- Offer targeted incentives (e.g., tax breaks, regulatory exemptions, information support), while being cautious with financial incentives at municipal level.
- Strengthen the local workforce through skills development and training.
- Foster international trade links to expand markets.
- Engage with high-impact investors, especially labour-intensive industries and large businesses that can create jobs quickly.
- Prioritise transport and road infrastructure to reduce logistics costs and improve competitiveness.
- Encourage residential property development by collaborating directly with developers and responding to market demand.

Directives

- Support agricultural innovation hubs in close proximity to major farms, that could accommodate research, training, and small-scale processing.
- Establish mixed-use economic nodes, particularly in underutilised urban centres with access to infrastructure to encourage clustering of SMMEs, markets and training facilities.
- Promote brownfield development in existing towns to maximise existing bulk services while revitalising declining commercial areas.
- Develop thematic spatial tourism routes (fruit picking routes, wine routes, mountain trails) linking heritage, nature, and agri-tourism destinations across Witzenberg and neighbouring Municipalities.
- Identify precincts for agri-lodges, guesthouses, and local craft markets in key tourism nodes like Tulbagh and Prince Alfred Hamlet.
- Prioritise the upgrading of primary freight and agri-logistics corridors, especially those linking production areas to the N1 and R46.
- Develop intermodal nodes (road and rail storage) near Ceres and Wolseley to enhance market access for perishable goods.
- Improve rural access roads to enable year-round connectivity for farmworkers and produce transport.
- Identify suitable areas for waste-to-resource and green economy initiatives, such as composting from agricultural waste or water reuse plants.
- Formalise and spatially support informal trade areas in town centres to provide economic space for micro-enterprises.

Map 17: Building Plan Applications



Property Market patterns, growth pressures & Land Reform

Witzenberg Municipality faces significant pressure to address the housing needs of its low-income population, particularly those dependent on state assistance. A notable proportion of residents live in informal settlements, with 11.2% of the municipal population residing in informal dwellings, higher than the CWDM average of 10.3%. This trend is commonly observed in municipalities with large agricultural economies, where seasonal workers followed by their families tend to settle permanently. It is also characteristic of areas where informal and low-skilled employment dominates over semi- and skilled occupations. In addition, a growing number of backyard dwellers further highlights the housing need. Consequently, the number of people on the municipal housing waiting list continues to increase, with many households reliant on government-subsidized housing.

According to the municipal waiting list, there are approximately 8 853 persons requiring housing. About 19% of those on the waiting list require fully subsidized housing. While the municipality has several housing projects planned (see council approved housing pipeline), these are expected to accommodate only a limited portion of the current demand and will not sufficiently reduce the backlog.

At the same time, the private property market is under pressure with an estimated 69.2% of the population earning more than R22,000 per month, placing them in the lower-middle-income bracket. Despite this, there appears to be a limited supply of properties affordable for this income group.

According to Property24, the average sale price of properties in 2024 was approximately R1 million. Wolseley and Prince Alfred Hamlet recorded the most affordable listings, particularly for vacant land, with average asking prices around R600,000. In contrast, Ceres and Tulbagh reflected the highest average asking prices, ranging between R1.8 million and R2 million. A significant disparity remains between asking and final selling prices, indicating a mismatch between market expectations and actual affordability.

Property sales trends also varied across the municipality. Between 2023 and 2024, Ceres and Tulbagh saw an increase in property transactions, whereas Wolseley and Prince Alfred Hamlet recorded a slight decline. However, the overall number of properties entering the market remains limited and the continued constrained supply, exacerbate prices and decrease affordability, excluding the middle-income cohort from the property market.

Table 11: Annual Sale & Listing Trends Source: Property24

Year	No. of Sales	Average asking price	Average sale price
2016	978	R1 044 250,00	R487 750,00
2017	802	R1 021 250,00	R553 125,00
2018	708	R1 280 000,00	R534 816,25
2019	3079	R1 188 375,00	R478 750,00
2020	459	R1 037 625,00	R715 000,00
2021	698	R1 581 750,00	R605 625,00
2022	6572	R1 588 750,00	R855 687,50
2023	370	R1 875 625,00	R849 750,00
2024	599	R2 219 875,00	R781 250,00

Figure 15: Annual Sale & Listing Trends: Source: Property24

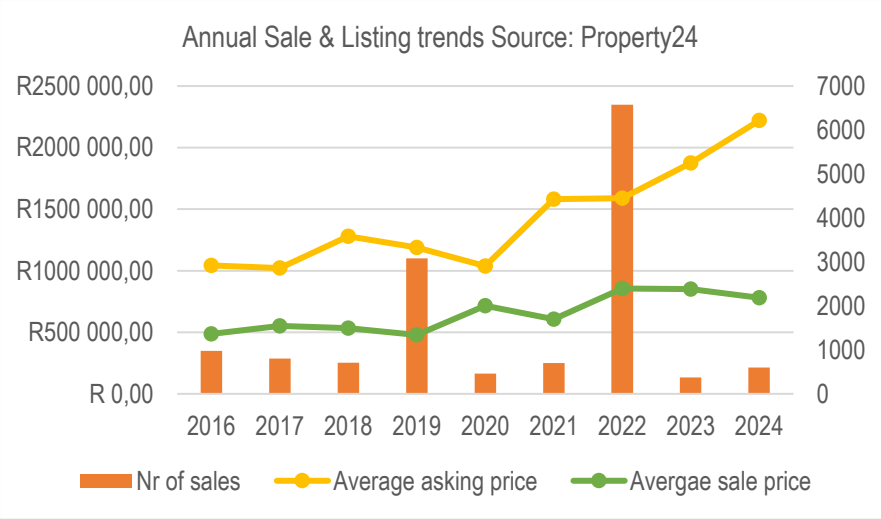


Figure 16: Annual Sale and Listing Trends, Bella Vista

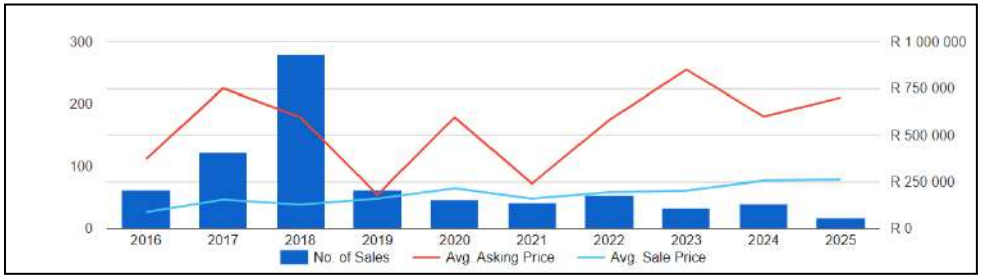


Figure 17: Annual Sale and Listing Trends, Wolseley

Figure 18: Annual Sale and Listing Trends, Prince Alfred Hamlet

Figure 19: Annual Sale and Listing Trends, Ceres

Figure 20: Annual Sale and Listing Trends, Tulbagh

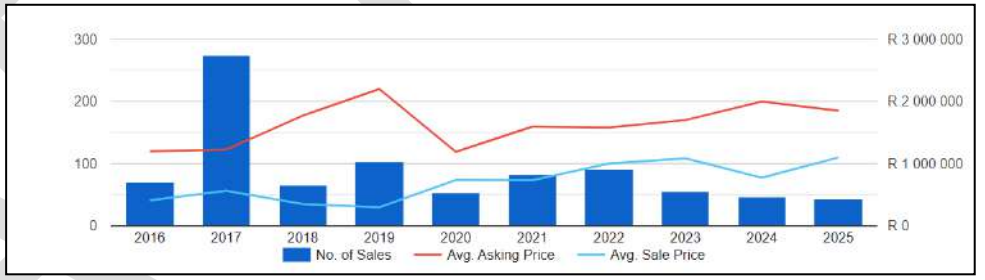


Figure 21: Annual Sale and Listing Trends, Op-Die-Berg

Built Environment Analysis

2.3 Built Environment Analysis

2.3.1 Hierarchy and Role of Settlements

Urban Settlements

Ceres is the main administrative and service centre in the Witzenberg Municipal Area, located about 90 minutes from Cape Town, and acts as a gateway to Cederberg and Route 62.

Tulbagh functions as a secondary commercial centre, set in a mountain bowl bordered by the Obiqua, Winterhoek, and Witzenberg mountain ranges, and is home to the country's oldest wine co-operative.

Wolseley, positioned on a watershed between the Berg and Breede rivers, developed initially as a rail terminus in 1876 and later established the country's first wool washery and a fruit-canning plant in 1936. It is also known for its outdoor recreational appeal.

Prince Alfred Hamlet is a small town located 10 km north of Ceres along the R303, with municipal status since 1910, serving nearby agricultural areas.

Op-die-Berg, a small agri-village 50 km north of Ceres, lies atop a mountain range and is marked by a stream that separates low-income housing in the south from its commercial core.

Rural Areas

The rural areas are characterised by history, land use and geography. **Tulbagh Road, Drostdy, and Breede River Station** are small, mostly agricultural communities that grew around old railway stations. They have limited housing, no municipal services, and remain somewhat disconnected from the towns in close proximity. In contrast, **Steinthal** stands out as a place of social upliftment as it was originally founded as a refuge for freed slaves, it has grown into a vibrant estate with schools, farms, and care facilities that serve both the vulnerable and the broader community. **Waterval**, once staff housing for conservation workers, still holds potential despite aging infrastructure, with residents hoping to gain land for small-scale farming and long-term security. **Kluitjieskraal**, a forestry station near Wolseley, offers housing to about 80 families but its distance from the town centre makes daily life more challenging, especially in terms of services and access to opportunities. **Prince Alfred Hamlet Station**, on the other hand, has developed around industry and logistics, offering both work and housing while benefiting from better infrastructure links.

Settlement Growth Potential

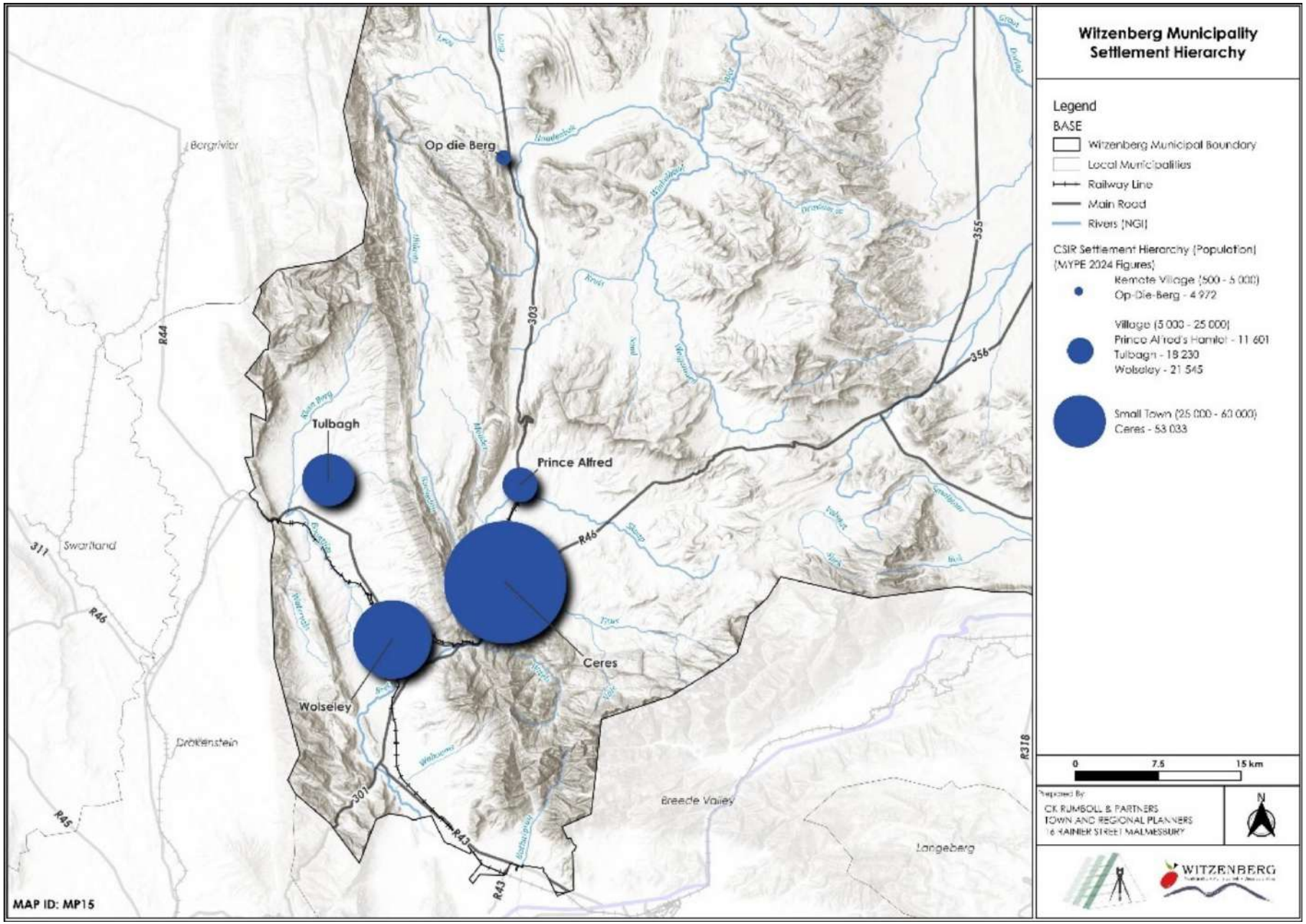
The Growth Potential Study indicate the growth potential of the Witzenberg Municipal area is moderate in relation to the Western Cape Province. Composite Growth potential of Ceres is very high to moderate, Tulbagh and Wolseley are moderate, and those of Op-die-Berg and Prince Alfred Hamlet is relatively low.

Level	Growth Potential / Size	Settlement
1	Areas of Major Growth	Ceres
2	Area of Intermediate Growth	Tulbagh
3	Area of Intermediate Growth	Wolseley
4	Areas of Limited Growth	Op-die-Berg, Prince Alfred Hamlet
Lower order	Rural Nodes	Tulbagh Road, Steinthal, Drostdy, Waterval, Kluitjieskraal, Breede River Station, Prince Alfred Hamlet Station

Directives

- Wolseley and Tulbagh (Tourism): Promote their roles as tourism destinations while protecting agricultural industries and reintroducing remodelled historic agri-industries. Advance mixed land uses and multi-purpose facilities.
- Position Wolseley as a recreation destination, enhancing its appeal for outdoor activities.
- Ceres (Agriculture, Alternative Energy, and Conservation): Support agriculture (small and large scale), alternative energy, and conservation. Strengthen hubs that enhance agri-services, processing, and alternative energy generation.
- As Ceres, Tulbagh, and Wolseley exhibit strong growth potential, introduce spatially directives for economic development and related residential areas. Provide spatially for training, skills development and especially innovation in Tulbagh, with its high commercial and trading potential and history as the country's oldest wine co-operative.
- Integrate the settlement hierarchy into a phased infrastructure investment strategy that strengthens connections across all settlement types to ensure equitable access to opportunities and services.
- Improve physical and functional linkages between smaller, rural, and less-resourced settlements and municipal hubs.

Map 18: Settlement Hierarchy



Settlement Function

Determining the functionality of a settlement ensures that the basic needs of the settlement population are met. It supports the development of integrated and suitable human settlements and helps the municipality and other spheres of government make informed investment decisions based on technical data rather than political influence. It furthermore assists in identifying not only current but also future gaps and the needs in terms of service provision, which ultimately allows for better planning and resource allocation.

Overall settlement functionality is determined by using a refined classification of settlements determined by Guidelines For The Provision Of Social Facilities In South African Settlements developed by The Council for Scientific and Industrial Research (CSIR) and is based on their size and type (Role they play in the context of the broader municipality and even district).

This assessment involves determining whether a settlement meets the required thresholds for various social facilities, such as the number of clinics, libraries, parks, and other amenities needed relative to its population size. Factors such as population density, community size, levels of mobility, and socio-economic variation are also considered in this evaluation. The process draws on previous and adapted settlement typologies, including the CSIR 2002 and Cities Network 2005 models. While economic and administrative feasibility is taken into account, these considerations play a secondary role in determining whether a settlement is functionally equipped to meet the needs of its residents. The figure and table below outline the various CSIR settlement classifications and indicates the corresponding category for each settlement within the Witzenberg Municipality.

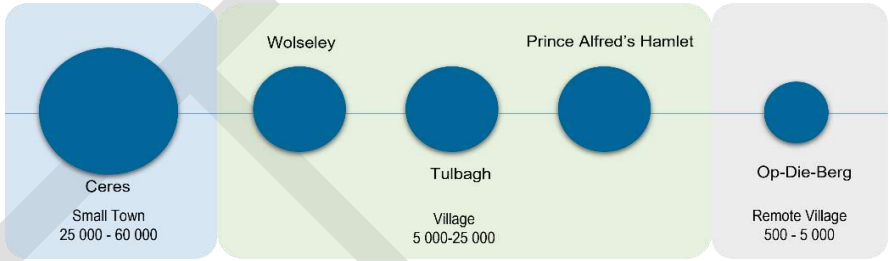


Table 12: CSIR Settlement Classification Categories

	Hierarchy Of Settlements	Catchment Size (No. Of People)	Examples Of Settlement Types
A	Metropolitan cities/regions	> 1 000 000	Johannesburg, eThekwini, Cape Town.
B	Large cities/small	350 000 – 1 000 000	metros Port Elizabeth, Bloemfontein, Pietermaritzburg, Welkom.
C	Large towns/regional service centres	100 000 - 350 000	Nelspruit, Witbank, Krugersdorp, Newcastle, George, Stellenbosch.
D	Small to medium towns/regional service centres	60 000 - 100 000	Ermelo, Harrismith, Mossel Bay, Bethlehem, Bronkhorspruit, Grahamstown.
E	Small towns/isolated regional service centres	25 000 - 60 000	Mount Fletcher, Delareyville, Beaufort West, Graaff-Reinet, Kokstad & **Ceres.**
F	Dense dispersed settlements (Large continuous development with 10+ persons per hectare and up to 10 km2 in extent)	10 000 - 100 000	Ingwavuma, Jozini, Acornhoek.
G	Villages	5 000 - 25 000	Merweville, Stella, **Wolseley, Tulbagh and Prince Alfred's Hamlet.**
H	Remote villages (Villages more than 20 km from larger settlements)	500 - 5 000	Prieska, Pofadder, Loxton, Keiskammahoek & **Op-die-Berg.**

2.3.2 Roads & Transportation Modes

Provincial Road Network

Major provincial roads[4] include MR310 (R301 or R303) from Ceres, past Op-die-Berg towards Citrusdal, TR22/1 and TR22/2 (R46), and MR302 (R43).

Table 13: Extent of Provincial Road Network

Functional Road Type	Km
National	00.0km
Trunk	104.3km
Main	329.26km
Divisional	471.78km
Minor	979.29km
Total	1884.46km

The provincial road that passes through the town areas are loosely called the 80/20 roads, referring to the 80% subsidy contribution for repairs funded by the Western Cape Provincial Department and the 20% funded by the local municipality. These sections of provincial road are however listed as an asset belonging to the relevant Local Municipality. Divisional roads connect rural areas to trunk and main roads, while minor roads serve as routes for local access.

Table 14: Extent of provincial roads in settlements

Settlement	Km
Ceres	5.45
Op-Die-Berg	0.46
Prince Alfred Hamlet	1.90
Tulbagh	2.76
Wolseley	3.15
Total	13.71

Municipal Road Network

The municipal road network is mainly made up of Class 4 (Collectors) and Class 5 (Access Roads). The road lengths were recorded per surface type, reflected in the table below. It shows that roughly 91% of the roads are covered with bituminous surfaces, 2% have a block paving surface and 7% are gravel roads.

Table 15: Road lengths per surface types

Settlement	Paved Flex	Paved Block	Paved Concrete	Gravel	Earth	Total
Bella Vista	29.2	0.0	0.0	3.3	0.0	32.5
Ceres	55.6	0.3	0.0	1.0	0.0	56.9
Nduli	12.7	0.3	0.0	0.0	0.0	13.0
ODB	2.4	3.0	0.0	1.4	0.0	6.8
PAH	19.0	0.1	0.0	3.3	0.0	22.4
Tulbagh	29.3	0.7	0.0	3.3	0.0	33.4
Wolseley	38.1	0.0	0.0	1.8	0.0	39.9
Total	186.3	4.3	0.0	14.2	0.0	204.8

[4] Provincial roads are classified into four categories according to function, and include trunk roads, main roads, divisional roads and minor roads. Trunk roads and main roads link larger towns and provide access to bordering districts. Divisional roads link rural areas to trunk and main roads, while minor roads provide local access. (SMEC, 2020)

Current Road Condition

SMEC completed a Pavement Management Report for Witzenberg Municipality under a RRAMS[5] appointment from the Cape Winelands District Municipality. Under this appointment, all municipal roads in the areas of Ceres, Bella Vista, Nduli, Op-die-Berg, Prince Alfred Hamlet, Tulbagh and Wolseley were assessed. The table below shows the condition of the municipal roads in each of the abovementioned towns.

Table 16: Conditions of roads in settlements

Settlement	1 - Very Good	2 - Good	3 - Fair	4 - Poor	5 - Very Poor	Total
Bella Vista	9.0	11.1	9.3	1.6	1.5	32.5
Ceres	6.4	19.7	24.8	4.5	1.4	56.9
Nduli	5.7	4.3	3.0	0.0	0.0	13.0
ODB	0.4	2.3	2.4	0.7	1.0	6.8
PAH	4.6	10.1	4.8	1.7	1.2	22.4
Tulbagh	9.3	9.8	8.6	4.3	1.4	33.4
Wolseley	8.3	19.4	9.0	2.9	0.3	39.9
Total	43.6	76.7	62.0	15.7	6.8	204.8

Intersection Operations

A municipal-wide operational analysis was done on 108 intersections, 6 of those were identified as hazardous with 5 out of the 6 being located in Ceres.

Table 17: Intersections

	Location	Detail
CERES	Panorama / Vos Intersection (AM & PM Peak Hour)	- 4-way intersection prioritizes the main road. - Stop signs on the side streets. - Delays of up to 70 seconds on right-turn lanes from Panorama and Blouberg. - Hazardous and requires short-term safety improvements.
	Vos / Vreeland Intersection (AM Peak Hour)	- 3-way intersection. - Up to 43 seconds expected delays. - Hazardous and requires short-term safety improvements.
	Owen / Oak Intersection (AM & PM Peak Hour)	- 4-way stop controlled. - Operating at LOS D[6] in the AM peak hour. - Western Oak Street approach fitted with a yield sign in conjunction with the stop-sign. - Low service levels is a direct result of the type of control thus acceptable for the current situation. - No action is proposed in the short term.
	Vos / Retief Intersection (AM & PM Peak Hour)	- 4-way stop controlled. - Two Vos Street approaches are both exceeding LOS D in the peak hours. - Retief Street is an access industrial cluster generating heavy vehicles. - Further investigated required.
	Voortrekker / Albert Intersection (AM & PM Peak Hour)	- 4-way stop controlled. - Operating at LOS D in both peak hours. - Double lane configuration and the current control measure. - Further investigated required.
PAH	Voortrekker / Mill Intersection (AM & PM Peak Hour)	- 4-way stop controlled. - Overall LOS E[7] in the PM peak. - Southern Voortrekker approach has a 55-second average delay, resulting in a 68m average queue length. - Service levels within the PM peak are tolerable. - No short term action required.

[5] Rural Roads Asset Management System (RRAMS)
[6] LOS A to D is considered acceptable in accordance with international standards
[7] LOS E - Indicate near-capacity flow and unstable conditions

Rural and Peri-Urban Accessibility

The rural areas of Witzenberg are connected to trunk and main roads by means of divisional roads. Local access is facilitated through minor roads.

Tourism is an important sector for economic growth in this region, since it encompasses, heritage, diversity and transformation. Two new travel routes are planned within Witzenberg to promote social cohesion and promote formal trade in township and rural areas.

Many of the issues faced by people living in peri-urban areas relate to NMT and public transport.

The following priorities have been identified in relation to rural transport:

- Ward 1 and 12: Rest areas are needed on rural roads, as well as maintenance. The district is requested to stop cutting down trees.
- Ward 3 and 5: Bus shelters are needed for scholars on rural roads.

Directives

- Secure the compilation of a municipal transport and mobility plan including priorities.
- Enhance NMT and road design within settlements to enhance tourism.
- Correct hazardous intersections.
- Support the development of two new tourism routes to enhance this sector in the rural areas of Witzenberg.
- Develop and maintain more rest areas on rural roads.
- Build bus shelters for scholars on rural roads.

Freight

Freight from Ceres primarily moves along the R46 and R303 routes, driven largely by the area's agricultural sector and its four agri-processing facilities (production, processing, packing, and distribution). A dedicated overnight facility is a priority as overnight truck parking in town has been curbed through signage and enforcement.

Freight from Tulbagh moves along the R46, and Van Der Stel Street, the historic main freight route through the settlement. Freight is mainly generated by Tulbagh's agriculture and wine industries, which include one agri-processing facility and around 17 wine cellars, such as Del Monte. To reduce truck traffic in the town centre, a Western Road link was constructed to provide direct access to the industrial area.

Freight network

The primary strategic freight road network is supported by a secondary network as per the table below.

Table 18: Primary freight network

Primary	
R44 / R46 loop	Somerset West – Klapmuts – Wellington – Tulbagh – Ceres – Touws River.
R60	Worcester (N1) – Robertson – Ashton – Swellendam (N2).
R43	Wolseley – Worcester.
Secondary	
R44	Gouda – Saron.
R43	Worcester – Caledon.

Directives

- Upgrade key gravel roads to all-weather bitumen or paving, especially in and around Op-die-Berg, Tulbagh, and Prince Alfred Hamlet to ensure year-round access for produce transport and tourists.
- Prioritise MR310 (R301), TR22/1, TR22/2, and MR302 (R43) for upgrades, particularly where they pass through towns or link farms to markets.
- Transfer high-traffic town segments back to the province or explore full provincial maintenance responsibility for critical segments if the municipality lacks capacity.
- Prioritize the redesign of identified hazardous intersections in Ceres with appropriate engineering interventions (e.g., traffic calming, signage, mini-circles, traffic signals).
- Improve road signage and wayfinding along tourism routes (e.g., Tulbagh Wine Route, Ceres Zipline, Witzenberg Meander).
- Designate and upgrade "Tourism Priority Routes" linking Tulbagh, Ceres, and Prince Alfred Hamlet.
- Pave or improve access to key tourist attractions and local accommodations (e.g., gravel access roads to wine estates, guest farms, nature reserves).
- Include scenic lay-bys and parking bays on high-viewpoint roads for tourists to stop safely and enjoy the scenery.

Public transport

There is a lack of data on the reliability, safety and affordability of public transport in WLM.

Public transport within the municipal area is extremely limited with no formal bus service operating within the municipal area other than learner bus transport provided by the Western Cape Education Department (WCED), (restricted to certain schools). For **long-distance bus** services, residents are required to travel to neighbouring towns.

Farm workers typically rely on **privately owned buses or trucks** to travel to town centres, most often on Fridays.

Metrorail services the Witzenberg area via the Worcester line with train stations at Tulbach Road, Artios, Wolseley, Romans River, Breë River and Botha which are all situated within the Witzenberg border. The train passing the abovementioned stations in the direction of Cape Town, only passes once in the morning and returns once in the evening.

Minibus-taxis are therefore the primary mode of public transport within the municipal area.

Demand for taxi services peaks on Saturdays and at month-end, particularly in Wolseley and Tulbagh, when residents from smaller settlements travel to larger service centres. Seasonal patterns also strongly influence public transport use, with demand increasing during the harvest season and prompting more frequent trips between farms and towns.

Overall mobility and access however, remain constrained by fragmented settlement patterns (particularly around Ceres), and limited, dispersed and in some cases underutilisation, of existing public transport facilities.

According to the CWDM Operating License Strategy (2016-2020), there are 374 operating licenses issued in the municipal area and two taxi associations (Ceres Nduli Taxi Association and Ceres District Taxi Association) which govern the taxi routes. The table below provides data on various Taxi Ranks in the municipal area.

Table 19: Taxi Ranks

Name	No of Bays	Max Number of Bays	Utilisation
Ceres			
Ceres Nduli Taxi Rank (Formal)	14	33	236%
Vos Street (Formal)	4	28	700%
Koue Bokkeveld (Informal)	3	5	167%
Vos Street (Off Street)	4	4	100%
Nduli			
Nduli Taxi Rank (Formal)	13	2	15%
Prince Alfred Hamlet			
PAH Taxi Rank (Formal)	5	14	15%
Tulbagh			
Tulbagh Rank (On Street)	4	4	280%
Wolseley			
Wolseley Rank (Informal)	5	6	100%
Op-Die-Berg			
ODB Rank (Informal)	4		

Table 19 confirms a significant over-utilization of both formal and informal taxi ranks. Many informal ranks operate over capacity during peak hours, highlighting the need for dedicated, formal infrastructure.

These informal ranks often rely on public parking areas, where the lack of designated bays for public transport leads to ongoing competition with private vehicles.

Directives

- Provide dedicated parking areas for taxis, particularly in central business districts (CBDs) on weekends. These parking areas may have dual purposes i.e. doubling up as recreational spaces during the week or as general parking.
- Upgrade or build formal taxi ranks in Ceres, Wolseley, and Tulbagh to better accommodate commuter volumes and improve safety and efficiency.
- Promote shifting towards sustainable and low-emission transport systems (from road to rail for freight).
- Commission further research on the accessibility, reliability, safety and affordability of public transport services to inform evidence-based decision-making for public transport provision and support.

Non-Motorized Transport (NMT)

Non-motorized transport, such as walking and cycling, remains a critical mode of daily movement in Witzenberg, especially for those without access to cars or regular public transport.

In many areas, residents walk between residential areas and nearby settlements for work, school, or shopping.

According to the Witzenberg Municipality Local Integrated Transport Plan 2022, community needs assessments have shown a clear demand for well

maintained and sufficient NMT infrastructure, especially during harvest periods, when movement intensifies.

Table 20: NMT Conditions

Location	Detail
Sidewalk along R303 (Ceres - BV)	Overgrown vegetation reduces the width of the sidewalk. Exposed basecourse due to surfacing that has deteriorated over the years.
Sidewalk along the bridge in Voortrekker Street (Ceres Town)	Surface needs maintenance.
Sidewalk Voortrekker Street (Ceres Town)	Needs maintenance at the sidewalk along the bridge. Also allow for easy transition between the two.
Sidewalk along R46 (Ceres - Nduli)	Edge break and overgrown vegetation results in irregular sidewalk width. Surfacing also requires maintenance.
Sidewalk along R46 (Ceres - Nduli)	Surfacing requires maintenance.
Kerk Street sidewalk (ODB)	Paving and kerbs need to be replaced.
Sidewalk along Angelier Street (Wolseley)	Needs maintenance

The high percentage of residents making use of NMT infrastructure daily to access educational facilities and places of employment warrants the need to invest in new, upgrading and maintaining NMT infrastructure.

Directives

- Upgrade and maintain NMT routes for walking and cycling.
- Provide shelter and transport options for goods, especially for people traveling from markets.
- Connect distant settlement areas through the development of safe NMT paths.
- Promote alternative forms of NMT modes such as cycling and skating, especially for youth.
- Install climate-resilient infrastructure such as shade/ shelter, water stations, and ablution blocks—along common walking and cycling routes.
- Advocate for a modal shift of freight from road to rail, reducing pressure on road infrastructure while connecting local economies to Cape Town, Gauteng, and the Northern Cape.

Rail

The railway line traversing the Witzenberg Local Municipality historically formed an important part of the country's broader national rail infrastructure, connecting agricultural inland towns to Cape Town and the port. It supported transport of both passengers and agricultural produce, particularly from fruit-producing settlements. The line played a critical role in the economic development of the region by enabling access to regional markets and export nodes.

Today, however, the rail line within Witzenberg is significantly underutilized. Operated by Metrorail (a division of PRASA), it functions as a limited regional rail service rather than a commuter service. The route includes six stations within the Witzenberg area: Tulbagh Road, Artois, Wolseley, Romansrivier, Breërivier, and Botha. These connect the municipality to Worcester, Drakenstein, and Cape Town along the Cape Town–Wellington–Worcester corridor.

Only three scheduled trains per direction are provided: one on weekdays, one on Saturdays, and one on Sundays. Travel times are long (about 2.5 to 3 hours between Wolseley and Cape Town) making the service less competitive compared to minibus taxis (MBTs) or private vehicles. In addition, integration between rail and other transport modes is poor, with MBT ranks often located far from rail stations, limiting the system's convenience and accessibility.

Declining investment in rail infrastructure and safety concerns have further contributed to the modal shift away from rail. This reflects a national trend of declining rail services in favour of road-based transport.

Directives

- Plan for better integration between rail and MBT systems by relocating or developing taxi ranks near train stations. Facilitate discussions between local taxi associations and rail authorities.
- Support the reintroduction or enhancement of rail freight services for agricultural products. This could relieve pressure on local roads and support farmers with more efficient bulk transport.
- Identify development nodes around railway stations to encourage higher-density, mixed-use development that can support greater rail use.
- Commission a study to understand current and potential demand for rail services in Witzenberg, including peak travel patterns and the needs of vulnerable user groups.
- Work with provincial government to investigate subsidy schemes or integrated ticketing options that make multimodal travel (rail + MBT) more affordable and seamless.
- Promote the use of rail infrastructure from Ceres to support industrial development and goods movement, reducing pressure on road networks, lowering transport costs, and enhancing regional economic competitiveness.

2.3.3 Stormwater

Stormwater Master Plans have been developed for all towns in Witzenberg.

These experienced urban development growth in recent years and it is essential that all development planning be guided by a predetermined Stormwater Plan. The Vision for Witzenberg LM Stormwater Plan was formulated "To provide a database for the Witzenberg Municipality where all stormwater data can be viewed, queried, stored, added, maintained and expanded. The Stormwater Master Plans must identify upgrades to the existing stormwater system and propose new infrastructure in order to meet current and future infrastructure needs to accommodate growth. It must include a funding model and a programme for the implementation of all the projects identified and prioritized. It must evaluate the long-term viability of existing infrastructure to cope with expansion and augmentation."

The Witzenberg LED Strategy (2004) stated that flooding of stormwater pipes is common in winter as these pipes are not inspected for blockages in the summer as required. Minor stormwater infrastructure is cleaned throughout

the year with the employment of EPWP workers. Major infrastructure is cleaned per an annual programme. The Draft Reviewed IDP 2019-2020 indicated that some areas within the Witzenberg Municipality have inadequate stormwater systems. The existing stormwater infrastructure within Witzenberg is made up of 68.6 km of reticulation and 35.6 km of open channel. The condition of the storm water infrastructure was assessed based on blockage and structural integrity. 92% was found to be less than 25% blocked, 3% partially blocked, and 5% full of material (litter or debris). 46% of the structures were in a good condition, 39% were found to be in fair condition, and 15% were found to be in poor (damaged or broken) condition. For the study area, 28% of the Witzenberg PCSWMM model (existing minor system) require new stormwater infrastructure (upgrades, replacements, and additional stormwater systems). Pipe replacement and new minor systems for resolving the problem areas are proposed. The total cost estimate for the installation and upgrading of the local minor stormwater network to either the 1:2 year and 1:5 year return period standard amounts to R180.8 million, excluding long-term upgrade proposals, and R190.2 million including long-term upgrade proposals. The hydrological analyses have indicated that the future developments require the inclusion of detention facilities in the modelling in order to reduce the estimated post-development flood peaks to the predevelopment flood peaks. Where practically possible, developments should be required to accommodate the difference between the pre- and post development run-offs up to the 1:50 year flood, on the development. This will reduce major and minor stormwater run-off and improve water quality.

Detention ponds are modelled and proposed to be implemented to reduce the future peak floods within the Witzenberg Municipal area. The high-level cost estimate to construct these detention ponds amounts to R159.9 million. The bulk stormwater infrastructure required to connect the future developments to existing watercourses or the existing stormwater network amounts to R19.7 million. The main concern is that developments within Ceres and Wolseley are within the 1:50 Koekedouw Flood lines.

A bridge / culvert assessment was conducted during the drafting of the Municipal Roads Master Plan in 2020, this assessment is a requirement as part of the Cape Winelands District Municipality RRAMS[8]. During the inspection, the five (5) bridges were found to be in acceptable condition, with some repairs required. At Twee Jonge Gezellen St Bridge in Tulbagh, a follow-up inspection is due. The three (3) major culverts were in acceptable condition. Over the next 5 years, urgent and most significant repairs and improvements include cracked and spalling concrete and installation of guardrails.

[8] Rural Roads Asset Management Systems

Table 21: Conditions of Culverts & Bridges

Pedestrian Bridges	Rietvalley Pedestrian Bridge (Ceres)	Average Condition.	Several deck wooden planks are rotten and are a tripping hazard. Requires Upgrading/Maintenance.	Both urgent and less urgent.
	Gemsbok Street Pedestrian Bridge (Tulbagh)	Steel Structure: Acceptable Condition. Plastic Walkway: Requires replacement.	Concrete nosing poorly constructed and loose planks are tripping hazard. Requires Upgrading/ Maintenance.	Urgent.
	Kerk Street Pedestrian Bridge (ODB)	Not inspected.	Fulfilling temporary purpose adequately.	-
	Bergsig Road Pedestrian Bridge (ODB)	Good Condition.	No repairs required.	
	Voortrekker St Culvert (Major Culvert) (PAH)	Acceptable Condition.	Overgrown by reeds. Clear reeds to inspect cell walls.	Less Urgent.
Culverts	Waboom Street Culvert (Major Culvert) (PAH)	Average Condition.	Impact damage to gabion top of wingwall. Requires Upgrading (To enhance structural and user safety) / Maintenance.	Partially Urgent.
	Wheeler Culvert (Major Culvert) (Tulbagh)	Acceptable Condition.	Upgrade Required.	Partially Urgent.
Bridge	Twee Jonge Gezellen Street Bridge (Tulbagh)	Acceptable Condition.	Upgrade Required (To enhance structural and user safety).	Urgent

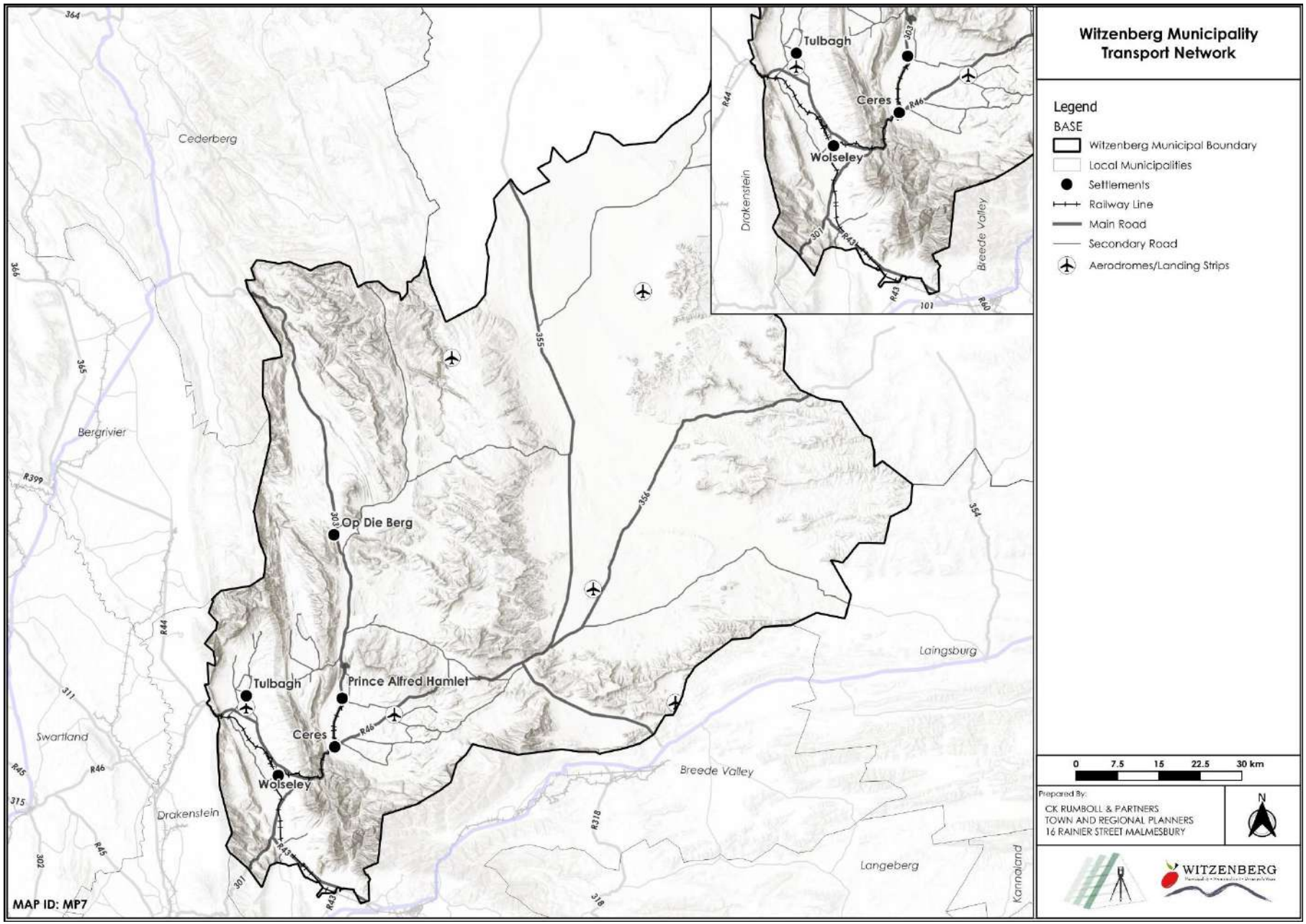
Witzenberg Municipality has a centralized stormwater database, allowing for better data management, enabling officials to view, query, store, and maintain key information in one place. A partnership with the Department of Local Government and the Development Bank of South Africa (DBSA) supports the development of municipal roads and stormwater master plans, as only Prince Alfred Hamlet and Tulbagh have stormwater plans in place.

Directives

- Peak flows downstream of new developments may not be increased above those generated by the original rural, or undeveloped catchment. In order to achieve this, flood attenuation structures (detention/retention ponds) should become mandatory for all new developments.
- Promote the utilisation of all the existing possible retention/detention facilities available.
- Support the development of a multi-stage outlet to attenuate the 2 to 50 year recurrence intervals, to predevelopment levels and accommodate future development around existing retention/detention facilities.
- Ensure that proposed developments located adjacent to rivers/ major watercourses and confluences to these rivers adhere to the requirements of the City of Cape Town's "*Floodplain and River Corridor Management Policy*".
- Promote the determination of an ecological buffer width[9] for significant watercourses and wetlands as per "*Floodplain and River Corridor Management Policy*".
- Encourage incorporation of stormwater servitudes in future development as part of the development public open spaces area to route the major storms overland and the minor storms in an underground pipe system from the future development sub-catchments. Servitudes to be accommodated along major stormwater routes.

[9] Within the City of Cape Town metropolitan area the ecological buffer width varies between 10m and 40m for watercourses, and up to 75m for wetlands. A minimum buffer of 10m should be allowed for concrete canals as per "*Floodplain and River Corridor Management Policy*" (2009).

Map 19: Transport Network



2.3.4 Water / Infrastructure

Water Sources

The Municipal Water Master plan shows water pressures in Nduli, Bella Vista, Wolseley, areas in Tulbagh, Prince Alfred Hamlet and Op-Die-Berg.

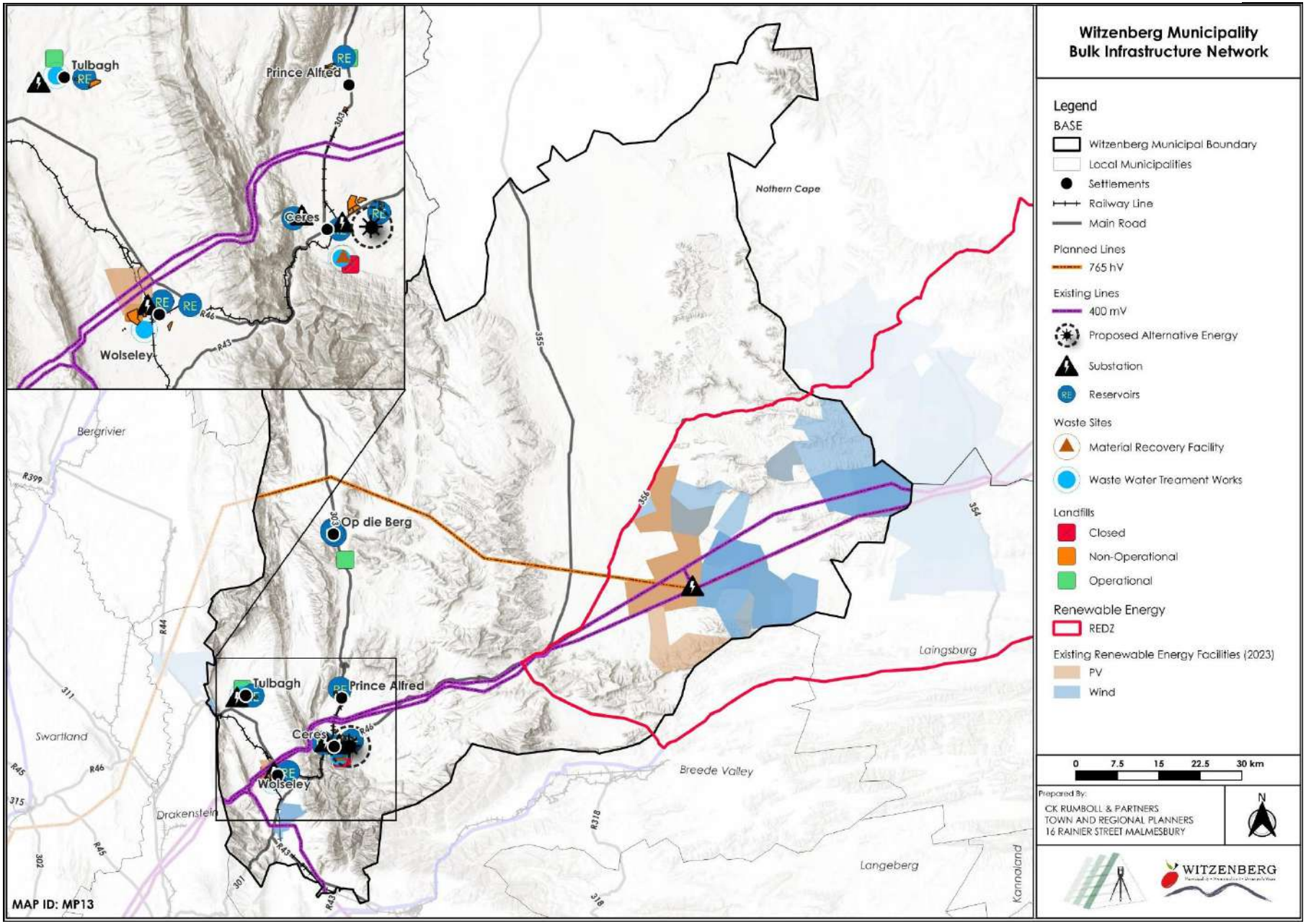
Table 22: Existing Water System summary - Reservoirs and Water Towers

	Name	Type	Capacity (kL)	TWL (m.a.s.l.)
Ceres	Bella Vista reservoirs	Reservoir	4 000	512.0
	Bella Vista tower	Tower	500	522.0
	Nduli reservoirs	Reservoir	5 250	509.0
	Groenplaatjie reservoir 1	Reservoir	5 000	542.7
	Groenplaatjie reservoir 2	Reservoir	3 000	542.7
	Sub-Total		17 750	
Tulbagh	Tulbagh Lower reservoir 1	Reservoir	800	199.5
	Tulbagh Lower reservoir 2	Reservoir	1 000	199.5
	Tulbagh tower	Tower	250	222.7
	Sub-Total		2 050	
PAH	PAH reservoir 1	Reservoir	500	545.5
	PAH reservoir 2	Reservoir	500	545.5
	PAH reservoir 3	Reservoir	500	545.5
	PAH reservoir 4	Reservoir	500	545.5
	Sub-Total		2 000	
ODB	Fontein reservoir	Reservoir	50	981.6
	Odendaal reservoir 1	Reservoir	500	1002.4
	Odendaal reservoir 2	Reservoir	60	1002.4
	North reservoir	Reservoir	-	-
	Sub-Total		610	
Wolseley	Cerespad reservoir 1	Reservoir	680	311.5
	Cerespad reservoir 2	Reservoir	6 000	311.5
	Stamperstraat reservoir	Reservoir	4 500	285.0
	Sub-Total		11 180	
	Grand Total		33 590	

Directives

- Manage water demand to permanently reduce demand and avoid future capital expenditure.
- Improve and upgrade existing water distribution systems, with insufficient capacity, to supply future demand. Maintain reservoirs at all settlements.
- Support a long-term water conservation and water demand management strategy study to define priorities for water loss reduction, and demand management measures for each settlement.
- Investigate and resolve low water pressure issues, particularly where daily demand is below total system capacity. Facilitate proper water pressure management given the landscape/ topography.
- Optimise infrastructure performance and conduct regular leak detection, maintenance and monitoring.

Map 20: Infrastructure Network



2.3.5 Waste

A long-standing international partnership with Essen Municipality in Belgium has enabled the municipality to significantly improve its waste management systems by implementing the Waste Management Programme (Witzenberg Municipality, 2023).

Waste management facilities in the Witzenberg Municipal Area are listed below: (Witzenberg Municipality, 2012).

Table 23: Municipal Waste Sites

Location	Site Status:	Notes and Challenges:
Worcester (Regional)	Approved	- Accommodating the municipalities (Witzenberg, Breederiver and Langeberg).
Ceres – (Material Recovery Facility)	Operational	- Materials Recovery Facility which processes recyclables is fully operational.
Wolseley Landfill	Operational	- Site is currently occupied by informal structures. - This site had interim status as a landfill facility, with its permit expiring in 2013. Witzenberg Municipality needs to obtain the rights to reapply to ensure long-term viability. - As the site services Ceres, Wolseley, Tulbagh, and Prince Alfred Hamlet, capacity upgrades are necessitated.
Tulbagh Landfill	Operational	- Waste disposal is limited to garden waste and builders' rubble. - Room for improvement in site management, operational efficiency, and compliance with waste management standards exist.
Prince Alfred Hamlet	Operational	- The only fully operational site, out of the 5 licenced landfill sites in WM.
Op-die-Berg Landfill	Operational/ to be closed	- This site was licensed as a communal landfill to accommodate larger volumes of waste from nearby communities. As nearby communities grew, the site's capacity to handle waste effectively became increasingly strained given the trench methodology used.

Directives

- Promote waste reduction, reuse and recycling.
- Reduction:
  - Promote waste separation at the sources of origin.
- Recycling:
  - Provide recycling igloo spaces/ waste separation and collection spaces in all settlements.
  - Provide for recycling space/ facilities at transfer stations (Such space is provided at the landfill site).
- Reuse:
  - Encourage providing garden waste to private composting plants and building rubble to infill projects.
  - Provide spatially for waste re-use plants on or close to site at agri- and fish-processing and industrial facilities.
- Secure funds and implement the IWMP:
  - Given the establishment of a regional landfill, waste disposal will be regulated by an Integrated Waste Management by-law for all waste management facilities. Such a by-law will fast-track integrated waste management as all local waste disposal facilities and systems will be audited on a regular basis as required in terms of each respective waste permit.
- Maintain a minimum of 500m buffer around solid waste sites where no residential development or other habitation development should be located.
- Highlight areas requiring law enforcement to regulate illegal dumping.
- Institute regular waste removal services and the building of transfer stations and recycling depots at strategically located sites to address challenges related to the Op-die-Berg Landfill.

2.3.6 Sewage/ Wastewater

According to the Witzenberg Spatial Development Framework, Witzenberg municipality services 13,984 consumer units for water and 13,155 for sewerage across its urban areas. The region is supported by an extensive infrastructure network, with 224 km of water pipes and 199 km of sewer pipes, featuring varying diameters to accommodate different areas. Wastewater treatment works are located in Ceres WWTW, Wolseley WWTW, Tulbagh WWTW and Op-die-Berg WWTW.

All urban areas have access to water connections, except for the informal settlements in Tulbagh, Wolseley, and N'Duli, which rely on communal water points. Similarly, while most urban areas are connected to sewer networks, about 25% of consumers in Op-die-Berg and Prince Alfred Hamlet are not connected to a sewer system. Instead, they use septic tanks, which are emptied upon request. The septic tanks in these areas are serviced by two sewerage trucks that cover a vast area of 10,753 km², predominantly rural regions (Witzenberg Municipality, 2012).

The informal settlements, though lacking individual connections, are provided with communal toilets to ensure basic sanitation.

Significantly, the Wolseley Wastewater Treatment Works (WWTW) achieved a Green Drop score of 86%. It scored well on all criteria except for effluent and sludge compliance. Despite scoring well for microbiological and physical compliance of the final effluent, the chemical compliance score was only 42%. Wolseley WWTW also did not have sludge classification during the assessment period. The Wolseley WWTW is not a poorly performing WWTW, as is evident from its Green Drop score of 86%. Nevertheless, the Green Drop Report 2022 indicates that the Municipality has budgeted R1.9m for plant and equipment upgrades at the Wolseley WWTW using internal funds. This, together with appropriate management actions, will hopefully result in this WWTW achieving Green Drop certification in the next round (Western Cape Provincial Parliament, 2022). The sewerage system includes 6 booster pump stations. Mechanical and civil upgrades to the plant are planned to ensure that the plant performs at an optimum level and to ensure compliance with national standards.

Overall, urgent upgrading of sewerage works and plans to address challenges experienced are needed.

<u>Challenges include:</u>

- Sludge handling and sludge disposal, experienced at most Wastewater Treatment plants.
- Availability of adequate and qualified staff.
- Vandalism at specific plants and at critical pump stations.
- The placement of skips in open spaces within residential areas, intended only as a temporary measure, has become problematic. When the skips are removed, illegal dumping often continues at the same locations. the skips are also often used to dispose of environmentally and health-hazardous materials, including animal carcasses.

Table 24: Municipal WWTP

Name	Capacity	IPDWF (L/s)	Process
Ceres WWTP	9905	±300	
Tulbagh WWTP	957	±57	Activated Sludge
Op-Die-Berg WWTP	300	±10	
Wolseley WWTP	1850	±85	

Directives

Integrated Sanitation and Wastewater Strategy.

- Re-use wastewater at the municipal level.
- Promote off-grid, small bore, dry and alternative technologies such as biogas (permanent occupation) or enviro-loos/biolytic filters/ventilated improved pit latrines (VIPL) (also suitable for periodic occupation).
- Implement master plan, increasing total sewer system capacity across the municipality, as communities in informal settlements and rural regions are not connected, and would thereafter require regular maintenance of infrastructure.
- Promote alternative forms of sewerage disposal and treatment for new developments: minimise wastewater pollution of surface and groundwater, as well as deter vandalism.
- Protect all wetland ecosystems. Maintain their ecological and stormwater purification function. Prohibit water abstraction from and effluent discharge into wetlands.
- Where urban development proposals will exceed infrastructure capacity, qualified staff should be able to assess applications and refuse until the provision is made to deal with the additional loads.

2.3.7 Energy

According to the Witzenberg Municipality's Amended Integrated Development Plan (IDP), in Ceres, the cable network is considered adequate to handle a reasonable increase in capacity over the short to medium term. However, Wolseley and Tulbagh face challenges with an insufficient cable capacity of only 2.38 MVA, which fails to meet the Maximum Notified Demand. This necessitates replacing the current 35 mm cables with 70 mm cables to support future growth. The Electricity Master Plan for Ceres, Wolseley and Tulbagh was updated in the 2022/23 financial year with MER funding from the Western Cape Government. It includes a condition assessment of the major network components, information that is considered critical when determining future budget requirements.

A significant constraint, however, lies with Eskom's bulk electricity provision. The Eskom network is under severe capacity pressure across Witzenberg, with demand regularly exceeding the Notified Maximum Demand (NMD). This not only impacts the ability to expand supply but also results in penalties being levied on the Municipality. These constraints present a major risk to Local Economic Development (LED), as they limit growth potential and investment opportunities.

While the Municipality is upgrading street and public lighting to enhance safety, challenges such as cable theft and vandalism continue to undermine efforts to provide reliable electricity and lighting. In certain areas, especially N'Duli and Pine Valley (Wolseley), illegal connections are a significant

concern. These unauthorised connections not only increase electrical losses but also lead to lost income and pose public safety risks.

Table 25: Electrical Capacity

Major Towns	Notified Maximum Demand	Maximum Demand Growth (NMD) from previous years	Maximum Demand Peak (NMD)
Ceres	36.5 MVA (Additional 5 MVA applied for in 2019 and additional 1 MVA in 2022).	+0.29 MVA	36.21 MVA
Wolseley	5.2MVA.	+ 0.4 MVA	4.80 MVA
Tulbagh	4.5 MVA (additional 2 MVA applied for in 2023).	+ 0.12 MVA	4.62 MVA

Electricity Demand and Supply

Electricity power stations that supply areas such as Ceres (Ceres power station, Bon Chretien substation), Wolseley (Wolseley substation) and Tulbagh (Tulbagh substation).

Although the Municipality has effectively managed overall electricity losses, keeping it at 10.5% annually, which is just above the Department of Energy's norm, the Amended Integrated Development Plan further states that certain areas like N'Duli see losses exceeding 85%, as only 15% of the electricity supplied is metered. The situation worsens in winter, with the N'Duli network frequently tripping due to overload, disrupting services for legitimate consumers. However, the Municipality is in the final stages of implementing an Illegal Connection Strategy, which is expected to significantly reduce losses once fully operational. The goal is to bring total losses below 9% once all affected areas are addressed.

Directives

Development of a Municipal Electricity Master Plan (MEMP).

- Finalise and implement the MEMP to guide the long-term development of the Municipality's electricity system. This plan should:
  - Address current and projected energy demand and infrastructure needs.
  - Identify areas for new energy generation facilities and the integration of distributed energy resources like rooftop solar panels.
  - Include a funding model for infrastructure upgrades, ensuring that necessary investments are prioritised.
  - Promote spatial planning informed by energy demand projections to ensure that new developments are served by adequate infrastructure.
- Collaboration with External Stakeholders:
  - Maintain collaboration with external partners, such as Eskom, renewable energy providers, and other stakeholders, to ensure a sustainable energy supply and reduce dependency on traditional power sources.
  - Leverage twinning agreements with international municipalities, like Essen, Belgium, to share knowledge and implement innovative solutions for waste avoidance and energy management.

2.3.8 Cemetery

Due to population growth, the Amended Integrated Development Plan maintains that the demand for burial space has significantly increased, leading to overcapacity at existing cemeteries. This escalating demand requires a strategic approach to ensure that there is adequate space to meet future needs. Currently, areas like Ceres, Bella Vista, N'Duli, and Op-die-Berg face urgent needs for additional burial sites. Approximately 4 hectares of land will be required to accommodate the growing demand for burial space in these areas.

Due to the scarcity of suitable land, the municipality is exploring the option of developing a regional burial site to serve the greater Ceres area, which could help alleviate some of the pressure on local cemeteries. While Wolseley and Tulbagh cemeteries have the potential for expansion, both require significant upgrades, including fencing to prevent increasing instances of vandalism and theft that have become a major concern in recent years.

Table 26: Cemeteries

Names	Service areas and Issues
Wolseley	Wolseley (soil and vandalism issues).
Tulbagh	Tulbagh (adjacent area available for expansion; soil issue).
Prince Alfred Hamlet	Prince Alfred Hamlet (water table issue).
Bella Vista	Bella Vista (also serves Ceres and Nduli; water table issue. Would have reached capacity by 2022).

Table 27: Land Required for Cemeteries

Settlement	2025	2030	2035	10 Year Total Land Required
Ceres	0,32	0,36	0,40	1,09
Wolseley	0,13	0,15	0,16	0,44
Tulbagh	0,11	0,12	0,14	0,37
PAH	0,07	0,08	0,09	0,24
ODB	0,03	0,03	0,04	0,10
Non-Urban	0,34	0,38	0,43	1,16
Total Municipal Land Required for Cemeteries	1,01	1,13	1,26	3,40

Directives

- Identify and Secure Land for New Cemeteries.
- Expand and Upgrade Existing Cemeteries:
  - Expand Wolseley and Tulbagh cemeteries to accommodate future demand, ensuring that all new plots are accessible and adequately planned.
  - Invest in security measures, such as installing proper fencing, to combat vandalism and theft at existing cemeteries.

2.3.9 Amenities

The following table provides an overview of the current provision of amenities per settlement. Each settlement has been classified according to the CSIR Guidelines (see section on Settlement Function), which uses total population figures to determine the appropriate settlement type. This classification forms the basis for assessing the adequate provision of existing amenities in relation to current population needs. The number and type of existing amenities within each settlement were recorded and compared against the normative standards set out in the CSIR Guidelines to identify any existing gaps or surpluses. The 2025 population figures used in this analysis are based on the latest available estimates and provide a baseline for future spatial planning.

Settlement Classification	E Small towns/isolated regional service centres		G Village				H Remote Village	
	25 000-60 000		5 000- 25 000				500-5 000	
2025 Population	53 033			21 545	18 230	11 601	4 972	
Amenity Type	NORM	Ceres	NORM	Wolseley	Tulbagh	Prince Alfred Hamlet	NORM	ODB
Health & Emergency Services								
District Hospital (L1) (DH), Specialised (S)	NR	1	NR	NR	NR	NR	NR	0
Community Health Centre	60 000	0	NR	NR	NR	NR	NR	0
Primary Health Clinic	24 000 - 70 0000	4	5 000 - 7 000	1	1	1	5 000 - 7 000	1
Satellite (S)	NR	NR	V	0	0	0	V	0
Mobile (M)	NR	2	V	1	2	1	V	1
Municipal Fire Station	V	1	NR	1	1	0	NR	1
District Fire Station	V	1	NR	NR	NR	NR	NR	NR
Fire Bakkie	V	V	NR	V	V	V	NR	NR
Fire Bakkie Deployment Pump	V	V	V	V	V	V	V	V
Police Station - SAPS Contact Point (24km)	NR	1	V	1	1	1	V	1 Satellite
Civic								
Home Affairs – medium office	N/R	0	NR	0	0	0	NR	0
Home Affairs – small office	40 000	1	NR	0	NR	NR	NR	NR
Thusong Centre (community-based “one-stop” development centre)	1 Per Mun	1	NR	NR	NR	NR	NR	NR
Magistrate’s Court	V	1	NR	0	1	0	V	0
Municipal Office	1 Per Mun	1	1 Per Mun	1	1	1	1 Per Mun	0
Solid Waste Disposal Site and Recycling Depot	N/A	1	NR	1	1	1	V	1
Cultural								
Community Performing Arts Centre	50 000 (20km)	1	NR	NR	NR	NR	NR	NR
Museum - medium / small	V	1	V	V	1	V	V	0
Local Library	20 000	4	5 000	1	2	1	V	1

Mobile Library / Periodic Library	V	V	V	V	V	V	V	V
Social Services								
Community Hall – large	60 000		10 000 - 15 000				NR	0
Community Hall – medium/small (fringe areas)	10 000 - 15 000	1	10 000 - 15 000	1	3	1	NR	0
Children's Home	V	0	V	0	1	0	NR	0
Home for the Aged	V	2	V	0	1	1	NR	0
Service Centres for Older Persons	NR	2	NR	1	1	0	NR	0
ICT Access Point	10000	0	10 000+	0	0	0	5 000 - 10 000	0
Post Office/Agency with post boxes	10 000- 20 000	1	10 000 - 20 000	1	1	1	V	1
SASSA Office (Social Service Office)	40 000	0	40 000	0	0	0	40 000	0
Social Grant Pay Point	V	0	V				V	
Education								
Further Education and Training	V	0	NR	0	0	0	NR	0
Secondary School	12 500	4	12 500	1	1	0	2 500	1
Primary School (Including intermediate school & Private)	7 000	6	7 000	3	3	2	1 000	1
ABET (A) /Skills Training (S)	V	0	V	0	0	0	NR	0
Special Education	TBD	0	TBD	0	0	0	NR	0
Grade R Class at Primary School	1 000	20	1 000	8	6	5	1 000	2
ECD Resource Hub and Care Centre	20000	1	NR	1	1	0	NR	0
Small Crèche / Early Childhood Development Centre	3 000	0	2 400 - 3 000	0	0	0	V	0
Recreation Facilities								
Local/Neighbourhood Park (includes play equipment for children)	15 000	0	1 000				1 000	
Level surface playing field	NR		3 000				1 000	
Sports Complex	60 000	3	15 000	1	2	0	NR	0
Grassed Surface (2 football fields equivalent) with or without 500 seat stand	30 000	9	30 000	2	3	4	NR	1
Cricket Oval	60 000	3	NR	1	1	2	NR	0
Athletics/Cricket Stadium (grassed field/ athletics track / stand 3000/ seats)	60 000	3	NR	3	1	4	NR	1
Combi-court surface (x2)	15 000	11	15 000	0	5	3	NR	2
Community Pool	80 000	1	10 000	1	1	1	NR	0

2.3.10 Tourism

According to Witzenberg IDP (2024), tourism is regarded as a key driver of Local Economic Development (LED) in Witzenberg. The local municipality facilitates tourism through service level agreements (SLAs) with three Local Tourism Organisations (LTOs), such as Ceres Business Initiative, Tulbagh Tourism Bureau and Wolseley Tourism Bureau, which promote the area and support local businesses by attracting investment.

The Witzenberg IDP (2024) notes that the sector has experienced strong growth and now contributes significantly to the local economy. In addition to adventure tourism, activities such as fishing, community festivals, seasonal snowfall in Ceres, agri-tourism, and fruit tours draw a range of tourists from Cape Town, other parts of the Western Cape, and inland provinces.

Agri-tourism in particular is growing, as local farmers diversify into tourism-related enterprises to supplement income. The scenic agricultural landscape featuring productive farmland, mountain backdrops, and wilderness areas forms the foundation of the region's tourism appeal. Some farms now operate primarily as tourism destinations, catering to both local and international visitors.

The Witzenberg SDF (2020) recognizes the municipality's value in scientific, recreational, aesthetic, economic, and cultural terms. Regionally, Witzenberg functions as a gateway to the Warm and Koue Bokkeveld and the Tankwa Karoo, making it a vital tourism node in the Cape Winelands and Karoo. It is important to note that rural tourism, especially agri-based initiatives, is preserved and developed in a manner that does not compromise the environmental and cultural character of these areas.

The Department of Tourism (2025), in the *Bojanala: Tourism Newsletter*, highlights the Tulbagh Wine Route as a key destination within Witzenberg. Tulbagh, a Priority Development Area, lies in a valley surrounded by mountains and features a mix of historic wine estates and new boutique wineries. Church Street in Tulbagh, with its provincial heritage monuments, is a key heritage attraction.

Despite these strengths, the Witzenberg SDF (2020) notes that a comprehensive heritage inventory for the full municipal area, particularly in Ceres and the Tankwa Karoo, is still lacking. Some heritage resources have been listed by the South African Heritage Resources Agency (SAHRA) and other secondary sources. The Witzenberg Zoning Scheme provides for overlay zones to manage specific land use challenges. Tulbagh's Church Street has already been designated as a heritage overlay zone to protect its historic value.

<u>Tourism Demand Trends</u>

Tourism in Witzenberg is largely driven by visits to friends and relatives, which, while recording the highest tourist volumes (25,100 visitors in 2021),

showed a modest decline of -1.61% per year over the past decade. Business tourism, by contrast, experienced the sharpest decline at -12.06% annually.

Most visitors to Witzenberg originate from other regions within South Africa (87.95%), though domestic trips declined by -2.10% annually from 2011 to 2021. International visitors account for 12.05% of trips, and while total international arrivals declined by -8.91% annually, their average length of stay increased, resulting in international tourists overtaking domestic tourists in total bednights spent.

In terms of spending, Witzenberg recorded R589 million in tourism expenditure in 2021, reflecting steady growth of 4.4% annually since 2011. Tourism spend per capita was R4,250, ranking the municipality fourth in the Cape Winelands.

Directives

- Support the development of agriculture-based tourism, particularly in the Bokkeveld and Tankwa Karoo regions, while ensuring that development is environmentally and culturally appropriate.
- Implement and promote new tourism routes that support social cohesion and extend tourism activity into townships and rural areas, linking cultural, historical, and natural assets.
- Prioritize the compilation of a full municipal heritage inventory, with particular focus on underrepresented areas like Ceres and Tulbagh, to inform planning and conservation.
- Extend the use of heritage overlay zones beyond Tulbagh where necessary, to safeguard important cultural landscapes and manage land use around heritage assets appropriately.
- Enable the collaboration between Local Tourism Organizations and the farmers to enhance and provide an inclusive environment that will be of benefit to the municipality and greater district.

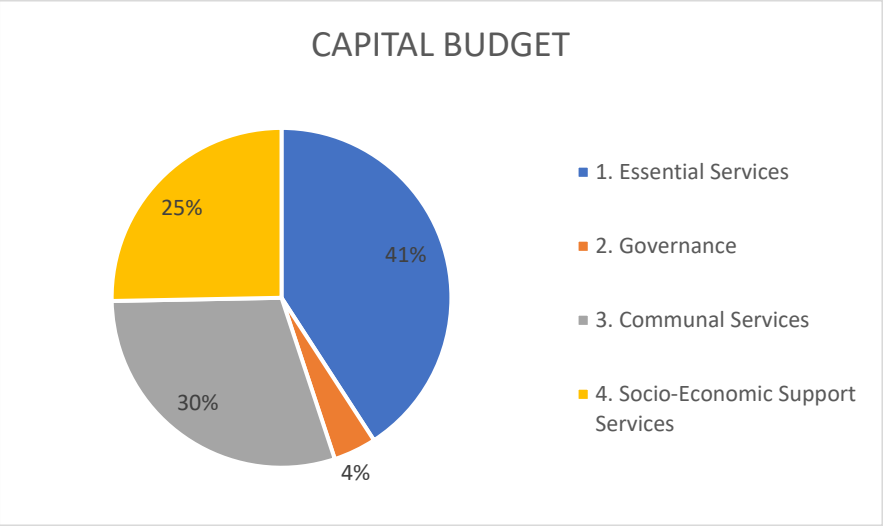
2.3.11 Three-Year Municipal Capital Expenditure

The Witzenberg Municipal Service Delivery and Budget Implementation Plan (SDBIP) outlines the municipality's **three-year capital expenditure plan** for the 2025/26, 2026/27, and 2027/28 financial years. Expenditure is aligned to the **municipal IDP's Key Performance Indicators (KPIs)** and associated Strategic Objectives. A detailed list of projects is provided in *Annexure 6*.

Capital Expenditure Allocation

The capital budget has been distributed across four major KPIs as follows:

IDP KPI	R	%
1. Essential Services	R32 511 186	41%
2. Governance	R3 280 000	4%
3. Communal Services	R23 966 639	30%
4. Socio-Economic Support Services	R20 289 000	25%
TOTAL	R80 046 825	100%



KPI 1: Essential Services – R 32 511 186

For essential services (KPI 01), which include Water Services, Sanitation Services, Roads and Stormwater, Transport Management, Electrical Services, Street Lighting, and Solid Waste Management and Collection, Witzenberg has allocated a total of R32,511,186. These funds are earmarked for the provision and maintenance of basic infrastructure, as well as for improving essential services to meet the needs of informal settlements. Key projects include the development of a taxi rank for Ceres/Bella Vista, the provision of toilets in informal settlements, and the upgrading and/or replacement of bulk infrastructure.

KPI 2: Governance – R 3 280 000

For governance (KPI 02), which includes sections such as Human Resources, Administration, Information Technology, Internal Audit and Risk Management, Performance Management, Traffic and Law Enforcement, Building Control, Town Planning, Financial Administration, Income, Supply Chain Management, Integrated Development Planning, Legal and Property Management, and Council, the municipality has allocated R3,280,000. These funds are intended to support institutional transformation and development, ensure financial viability, and maintain and strengthen stakeholder relations. Key projects include upgrades to the traffic department and workshop buildings, vehicle replacements, and the acquisition of furniture and equipment.

KPI 3: Communal Services – R 23 966 639

R23,966,639 was allocated toward communal services (KPI 03), which include Environmental Management, Open Spaces, Air and Noise Pollution, Trading Regulations, Amusement Facilities, Cemeteries, Fencing, Amenities, Sport Facilities, and Parks and Recreation. These funds are aimed at providing and maintaining facilities and environments that enhance residents' quality of life. Key projects include acquiring land for a regional cemetery (Ceres/Bella Vista), upgrading streetlights and community halls (Kliprug and Wolseley), and purchasing equipment for air quality monitoring and firefighting.

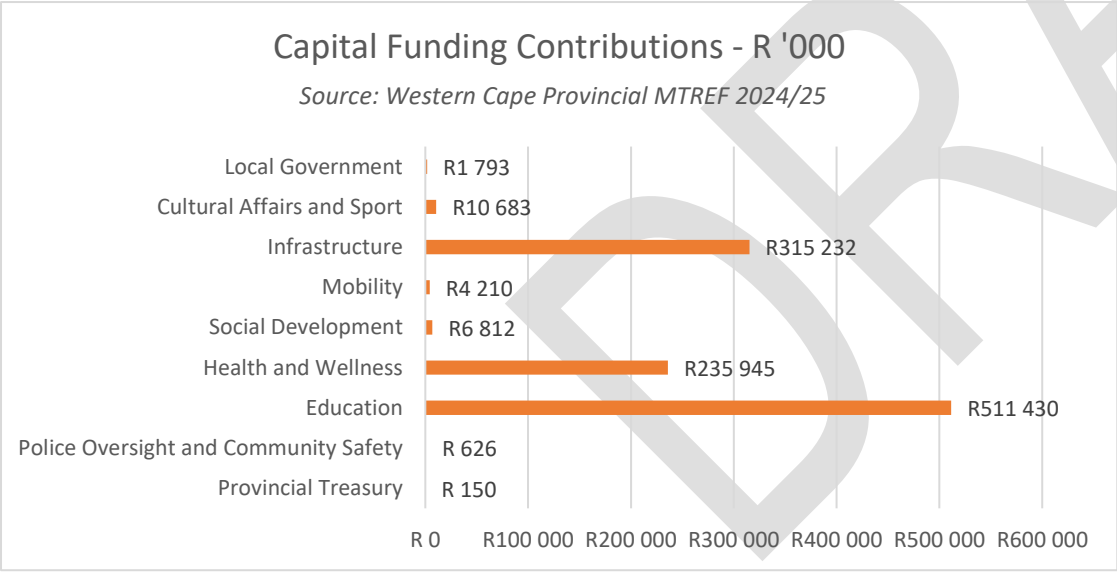
KPI 4: Socio-Economic Support Services – R 20 289 000

The fourth KPI, Socio-Economic Support Services, is a cross-departmental KPI encompassing Social Development, Local Economic Development, Indigent Support, Housing, and Job Creation. This KPI aims at creating an enabling environment that supports the local economy. Key projects include upgrading power stations, rehabilitating Cellier Street, providing infrastructure for informal traders (Op-die-Berg), and upgrading the main roads in Ceres and Tulbagh.

Western Cape Provincial Government MTREF 2024/25

The 2024 Western Cape Provincial Medium-Term Revenue and Expenditure Framework (MTREF) outlines estimated capital funding allocations from various provincial departments for the 2024/2025 financial year. Witzenberg Local Municipality did not receive any capital allocations from the Department of the Premier, the Provincial Parliament, Departments of Environmental Affairs and Development Planning (DEA&DP), Agriculture, and Economic Development and Tourism. In contrast, the Departments of Education, Infrastructure, and Health and Wellness were the primary contributors, collectively accounting for ±98% of the total capital funding directed to Witzenberg through provincial departmental programmes.

Figure 22: Provincial Capital Funding 2024/25



Directives

- Allocate dedicated budget lines, specifically for Human Settlements and Spatial Development Framework (SDF) implementation, as the current absence of funding limits the municipality's ability to manage growth, address informal settlements, and attract development.
- Allocate budget to strategic infrastructure priorities. Prioritise infrastructure projects according to settlement hierarchy, growth potential and optimal return on investment, as set out in the WCIF 2050.
- Invest in detailed housing market studies and urban planning to create a clear, phased development plan that can attract provincial and external funding.
- Dedicate resources to local economic development initiatives and investor confidence to facilitate and address the current perception of Witzenberg being overlooked.
- Support small business development and skills training aligned with the municipality's economic profile.
- Increase budget prioritisation for community services, especially in areas of social welfare, youth development, and sport and recreation programs, which have shown lower expenditure but are important for social development.
- Use social infrastructure investment as a foundation to reduce vulnerability and support sustainable communities.

2.3.12 Human Settlements & Tenure

Housing Backlog

The estimated housing backlog/ waiting list total is 8 603. The backlog per settlement as per waiting list and hectares of land required to provide for tenure opportunities is tabulated per settlement:

Settlement	Waiting list	Land Required
Ceres	4196	62,94
Op-die-Berg	873	13,10
Prince Alfred Hamlet	1227	18,41
Tulbagh	998	14,97
Wolseley	1309	19,64
Total	8 603	**129,05**

Informal settlements

Informal settlement data was provided by both the Department of Infrastructure: Human Settlements and Witzenberg Municipality (January 2025). A comparison between the two datasets revealed significant discrepancies, highlighting the rapid expansion of informal settlements in recent years, likely influenced by both the relative economic stability of the municipality during the COVID-19 pandemic and overall urbanization.

Since the approval of the current MSDF in 2020, the number of structures in the oldest informal settlement at Ceres, Polocross (which includes Mooiblom, Zibonele, Polocross, Nkonjane, Mnandi, Eluxolweni and Amos), has grown from approximately 498 to almost 1 200 structures by 2025, almost three times larger than in 2020. Overall, the number of informal structures recorded has increased from 1 509 in 2020 to 8 475 in 2025, which reflects more than a fivefold increase over five years.

Approximately 83.73 hectares of land across municipal settlements are currently informally occupied, with 30% of this located in Wolseley.

Directives

- Prioritise the urgent development of a comprehensive Human Settlement Plan and Housing Market Study to inform decision-making, coordinate funding applications, and guide spatial investment priorities.
- Undertake a comprehensive informal settlement study to assess the scale, growth dynamics, and service delivery needs of informal settlements, with the aim of developing appropriate management, upgrading, and integration.
- Explore public-private partnerships to unlock underutilised state-owned or strategically located private land for housing.
- Implement an incremental formalisation strategy for land that is informally occupied and suitable to develop, ensuring tenure security and access to basic services.
- Encourage higher-density residential typologies within the existing urban edge to optimise land use and reduce infrastructure costs.
- Integrate social, rental, and gap housing within mixed-income developments to cater to diverse household needs and reduce spatial inequality.
- Use the MSDF and its findings to advocate for increased provincial support, including land release, infrastructure grants, and technical assistance.
- Position Witzenberg as a regional growth node by showcasing its stable economy.
- Establish a live spatial database to track informal settlement growth in real-time, allowing for rapid response and better planning coordination between municipal departments and provincial actors.

Figure 23: Number of Informal Structures

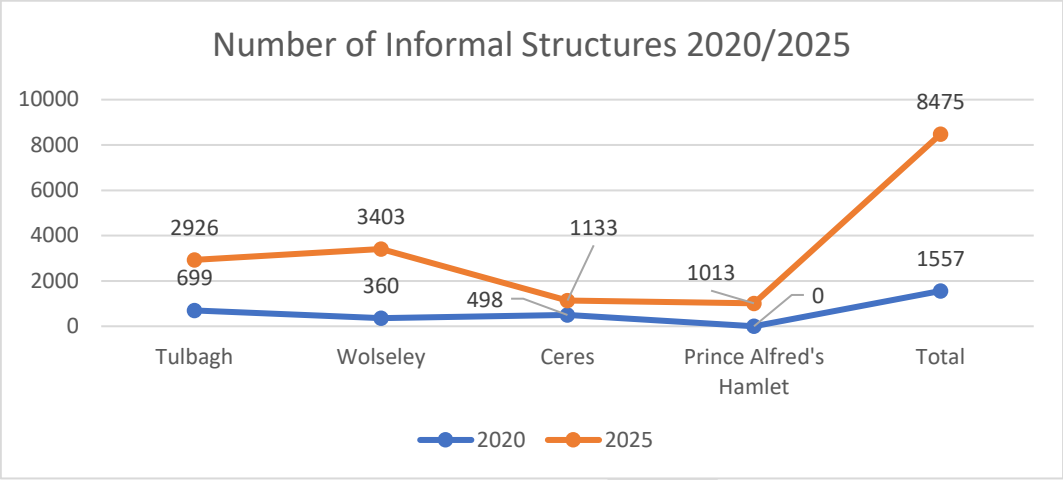
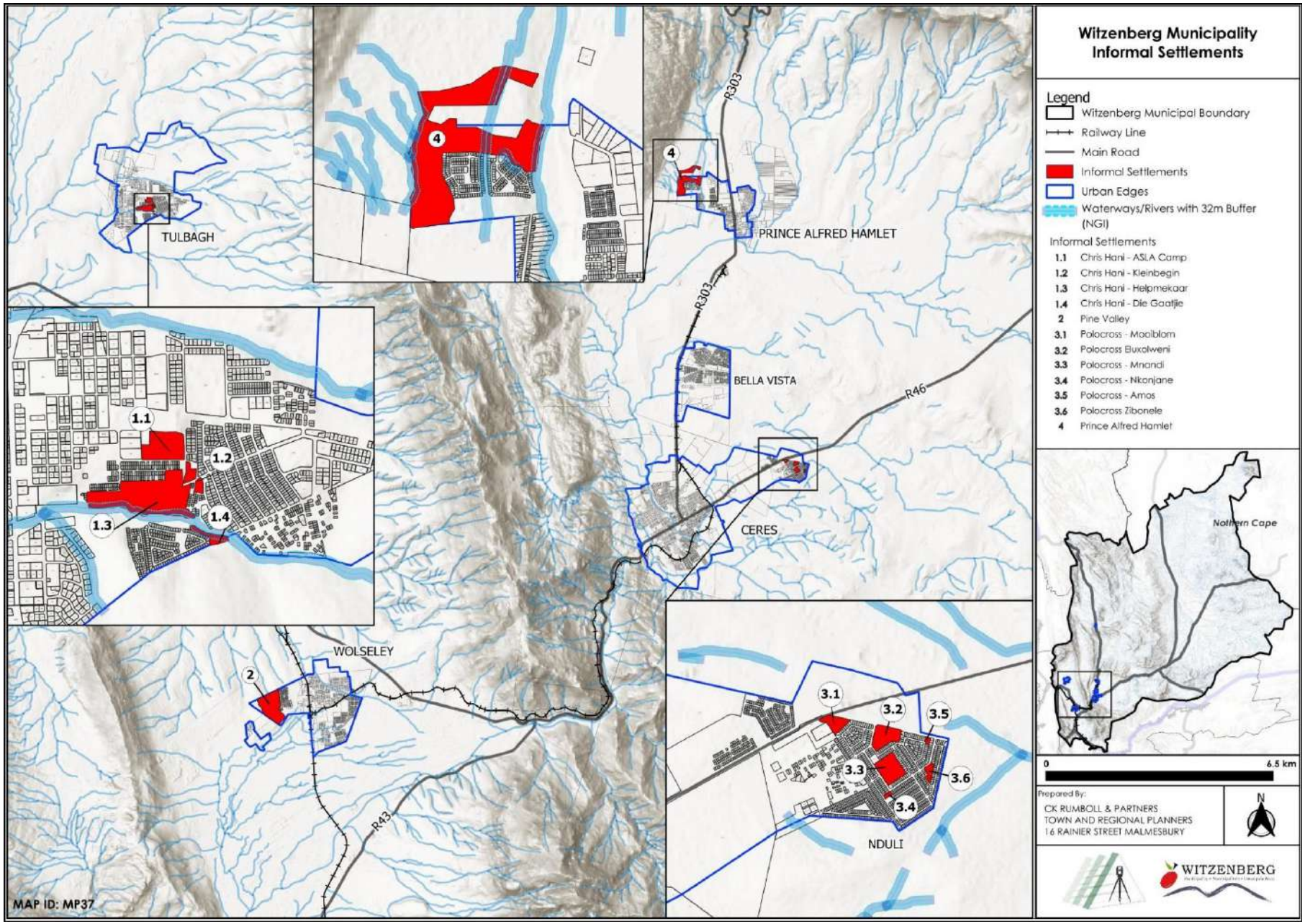


Table 28: Informal Settlements

Settlement	Neighbourhood	Informal Settlement & Precinct Name		Total Size (ha) of Informal Settlement	Date of Establishment	2020 MSDF		2025	
						Structures	Pop	Structures (Jan 2025)	2025 Population
Tulbagh	Tulbagh	Chris Hani	Helpmekaar	7,17	2013	521	1 560	1 402	4 066
	Tulbagh		Aslakamp	2,46				1 265	3 669
	Tulbagh		Die Gaatjie	0,57		48	47	162	470
	Tulbagh		Kleinbegin	0,38	2012	130	390	97	281
Tulbagh Sub-Total				**10,58**		**699**	**1 950**	**2 926**	**8 485**
Wolseley	Wolseley		Zakhele & Pine Valley	43,0	2000	360	1 053	3 403	9 869
Wolseley Sub-Total				**43,0**		**360**	**1 053**	**3 403**	**9 869**
Ceres	Nduli		Mooiblom	1,01	1993	81	243	85	247
			Zibonele	0,38	1997	67	189	95	276
		Polocross	Nkonjane	0,11	1993	350	1 050	18	52
			Mnandi	1,92				575	1 668
			Eluxolweni	1,68				319	925
			Amos	0,12				41	119
Ceres Sub-Total				**5,22**		**498**	**1 482**	**1 133**	**3 286**
Prince Alfred Hamlet (PAH)				24,90		0	0	1 013	2 938
PAH Sub-Total				**24,90**		**0**	**0**	**1 013**	**2 938**
Total				**83,73**		**1 557**	**4 485**	**8 475**	**24 578**

Map 21: Informal Settlements

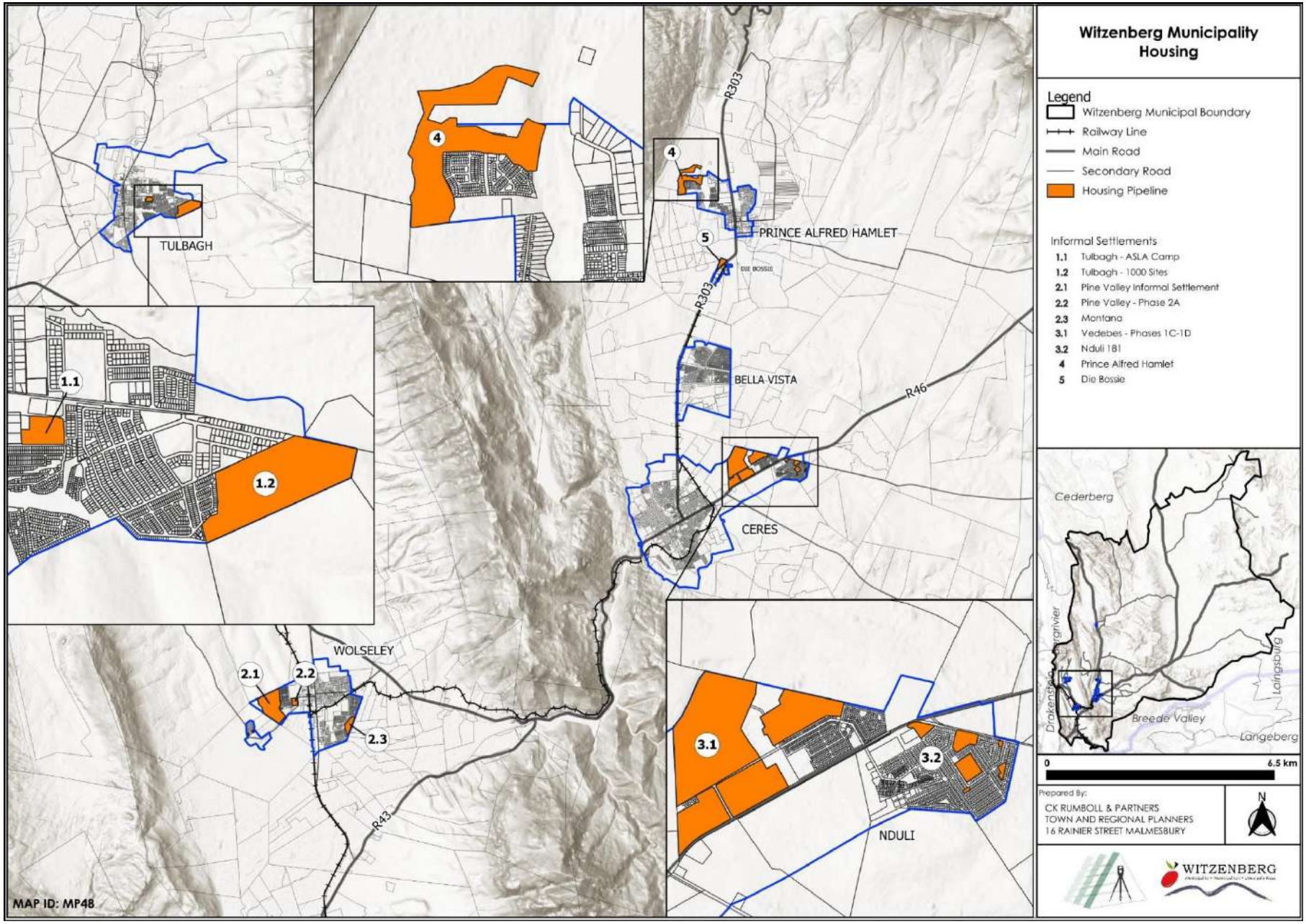


Housing Pipeline

While the approved housing pipeline (Map 22) outlines several projects aimed at addressing current housing demand and need, Witzenberg Municipality continues to face substantial constraints that perpetuate the housing backlog. Key challenges include rapid population growth, inadequate bulk infrastructure, particularly in relation to electricity supply, as detailed in the Built Environment and Bulk Services Provision sections of this report, and the occupation of earmarked sites by informal structures, which has delayed the implementation of several projects. Furthermore, the municipality faces a shortage of suitable and developable land, as large portions of available land are constrained by areas used for intense farming (high-value agricultural land), the presence of agri-processing plants and other noxious industrial uses, as well as land identified as Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs). Despite these limitations in identifying new development areas, the housing pipeline does designate specific areas that are suitable for incremental upgrading interventions (see table below).

Settlement	Project name	Location	Project Detail
Ceres	Nduli 181	- Mooiblom - Eluxolweni - Mnandi - Nkonjane - Amos - Zibonele	- Combination of top structures, serviced sites, in-situ upgrading and provision of basic services. - Project requires the re-allocation of a portion of informal beneficiaries to Phase H (529 serviced sites) in Vredebes. - The re-allocation of structures in R46 road reserve (Mooiblom) is urgent as the road is prioritized for upgrading due to current poor condition but also as a pre-requisite for the further development of Vredebes.
Tulbagh	Tulbagh 427 Housing project (completion of project)	- Kleinbegin - Helpmekaar	- 2013 project was not completed as sites was illegally occupied preventing any further continuation of the project. - Project can only be completed when occupiers has been reallocated.
Wolseley	Pine Valley Informal Settlement	- Pine Valley Informal Settlement	- Limited to no availability of basic services. - Future project likely to include a combination of in-situ upgrades, super blocks and basic services (ABS).
Wolseley	Montana (700)	- Montana	- Long term top structure project to develop portion of land to the east of Montana for qualifying beneficiaries. - Availability of electricity and bulk infrastructure (especially bulk water storage) to be addressed before project can commence.
Prince Alfred Hamlet	Prince Alfred Hamlet Informal Settlement	- Prince Alfred Hamlet Informal Settlement	- No availability of basic services. - Project would likely include a combination of in-situ upgrades, super blocks and basic services (ABS). - In some cases, re-allocation would be required.

Map 22: Housing Pipeline



2.4 Sector Plan Spatial Analysis and Directives

Sector plans aid horizontal alignment of spatial development frameworks of neighbouring municipalities and vertical alignment of district municipal and provincial spatial development frameworks.

Environmental			
Focus	**Invasive Alien Species Strategy (IAS), 2017**	**Air Quality Management Plan, 2019 Review (Draft)**	**Climate Change Needs Assessment and Response Plan for the Witzenberg Municipality**
Goals	- Minimise the impact of invasive alien species on ecosystems and the economy of Witzenberg Municipality (WM). - Enable the WM to comply with legislated requirements. - Provide WM with frameworks and implementation processes for reducing the spread of IAS on municipally owned land. - Build capability in WM to implement IAS control/management, as mandated at the local level. - Raise community awareness about IAS.	- Air quality governance meets requirements to effectively implement the Air Quality Management Plan (AQMP). - Reduce atmospheric emission of harmful pollutants. - Systems and tools are established to effectively implement the AQMP.	Develop approaches to adapt to and mitigate the effects of climate change by: - Identifying climate change risks and vulnerabilities. - Understanding adaptive capacity of municipality. - Building resilience by developing climate change actions. - Integrating climate action into planning.
Foster Compliance	- Comply with requirements of national and provincial regulatory frameworks and programmes, especially the National Environmental Act, No. 107 of 1998 and the National Environmental Management: Biodiversity Act, No. 10 of 2004 (NEM:BA). - If not yet achieved, develop an Invasive Species Monitoring, Control and Eradication (ISMC&E) Plan as required in terms of 2015 SANBI guidelines. - Protect vulnerable and endangered endemic and indigenous fauna and flora by clearing IAS and retaining existing intact ecosystems.	- Required by s.15(2) of the National Environmental Management: Air Quality Act, 39 of 2004. - Ensure that an Air Quality Officer is appointed to develop an AQMP, regulate fuel burning, enforce the air quality by-law, compile an emissions inventory, and report on the implementation of the AQMP each year.	- Integrate climate change adaption into IDP. - Protect and restore natural ecosystems in sensitive (reserve) areas. - Enhance urban resilience through development of green infrastructure. - Strengthen disaster management strategies.

Build Awareness	- Foster linkages between different spheres of government that are carrying out IAS management programmes, to avoid duplication. - If not yet in effect, establish an IAS Task Team through detailing ToRs, as recommended in the IAS Strategy. - Establish Working Groups to develop plans, gather and manage data, manage stakeholder relationships and build community awareness about IAS management. - Treat the IAS Action Plan as a living document and review every five years.	- Establish an air quality forum to ensure communication between different spheres of government and other stakeholders and I&AP. - Establish a compliance monitoring forum in WLM.	- Monitor climate change through appropriate data. - Engage with diverse stakeholders to promote support and collaboration on climate initiatives. Build capacity in municipality and local communities about climate change and adaptive practices. - Partner with NGOs, academic institutions, and the private sector to mobilise resources.
Reduce	- Reduce the adverse ecological, economic and health impacts of IAS, such as loss of ecosystem services. - Monitor and promote early intervention to prevent species from becoming invasive.	- Establish an emissions reduction strategy. - Promote and facilitate the reduction of greenhouse gases. - Reduce ozone-depleting substances and GHG emissions.	- Reduce dependence on fossil fuels by encouraging renewable energy projects. - Manage water resources, especially in agriculture, by modernising infrastructure, conserving water and restoring riparian systems.
Benefit to Community	- Invasive alien management, especially for freshwater ecosystem management is a priority. - Clearing alien vegetation in high rainfall areas, to increase runoff, is an important strategy to ensure adequate water provision for the WM.	Reduction of emissions and management of harmful air pollution has environmental and health benefits, protecting ecosystems from degradation through pollution and reducing harms to respiratory health and, for example, carcinogens.	By capitalizing on existing resources and fostering new partnerships, the municipality can: - Reduce its vulnerability to climate hazards. - Promote sustainable development and economic growth. - Enhance the well-being and resilience of its communities.

Economic		
Focus	**Witzenberg Local Economic Development Strategy, 2025**	**Disaster Risk Management Plan, 2025**
Goals	A comprehensive LED Strategy, intended to guide implementation over a 5-year period. Strategy seeks to provide guidelines to encourage job creation, foster economic growth, improve quality of life and improve the revenue base. - Facilitate growth of SMMEs. - Create an enabling environment for new businesses. - Support the informal economy. - Support and retain existing businesses.	Building resilience by ensuring that a comprehensive, dynamic, integrated risk management strategy is in place to ensure that the municipality and residents are prepared in the event of a disaster or emergency, ensuring that the most vulnerable are looked after, and that responses are needs-driven, affordable and sustainable.
Foster Compliance		Required by the Disaster Management Act, 2002 (Act 57 of 2002), amended 2015. The disaster management plan must be integrated into the IDP and should be considered an annexure to the IDP.
Build Awareness	Attract investment and promote tourism by promoting Witzenberg as an investment and tourism destination.	Integrated, effective response: - In the event of emergencies and disasters, all roleplayers should be able to respond in an integrated, efficient manner. Evidence-based education, training, and public awareness building: - Promote a culture of risk avoidance by capacitating residents and municipal officials through education, training and public awareness programmes, informed by scientific research.
Reduce		Response and Recovery: ensure effective and appropriate disaster recovery by: - Ensuring a uniform approach is in place for disseminating early warnings. - Averting or reducing the potential impact of a disaster or emergency. - Implementing immediate, integrated responses and relief measures around emergency and disaster events. - Implementing reconstruction and recovery measures after an event.
Benefit to Community		Communities should be prepared and resilient, so that all stakeholders can play a role in emergencies and disasters.

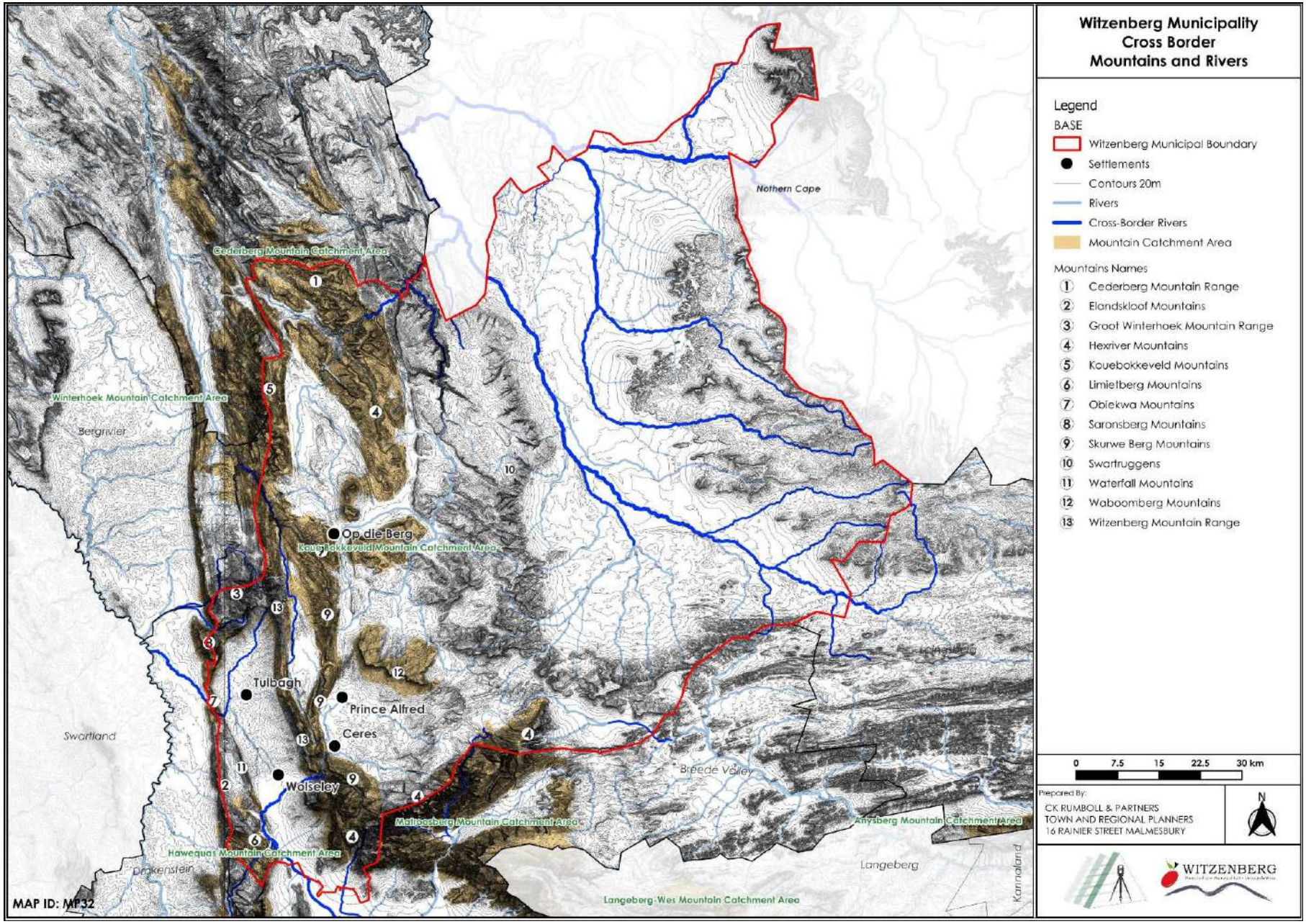
Transport		
Focus	**Witzenberg Roads Master Plan, 2020**	**Witzenberg Local Integrated Transport Plan, 2022**
Goals	Vision: To provide a safe, reliable, effective and efficient road and transport system to serve the public of Witzenberg Municipality. **Goals:** - Integrated spatial planning. - Improve the current road network condition. - Improve the road capacity and plan new roads. - Improve hazardous road locations and road safety. - Improve public transport planning, infrastructure and relations. - Improve non-motorised transport infrastructure. - Plan and improve the freight situation.	Takes into consideration all modes of transportation and infrastructure in the planning and aims to address concerns, gaps and areas of development for the period of implementation of the ITP. (3). In line with the Integrated Development Plan, the ITP seeks to: - Sustainably provide and maintain basic infrastructure. - Support Institutional Transformation and Development. - Create an enabling environment to support local economy.
Foster Compliance	- Ensure provision of services through the expansion, upgrading and maintenance of culverts, bridges, NMT infrastructure and public transport infrastructure. - Provide dropped curbs to facilitate universal access. - Review and maintain road signage. - Provide appropriate overnight facilities for freight trucks.	
Build Awareness	Improve data and planning through implementation of recommended plans and studies: - Micro-simulation modelling of the Ceres CBD. - Witzenberg NMT Plan. - Witzenberg Information Signage Study. - Witzenberg Comprehensive Taxi Rank Survey.	
Reduce	- Reduce road accidents through appropriate road and intersection upgrades. - Improve travel times and safety concerns for NMT users.	
Benefit to Community	Improved road safety, better public transport amenities and improved accessibility.	

Infrastructure			
Focus	**Witzenberg Municipality Sewer Master Plan, 2021**	**Witzenberg Municipality Water Master Plan, 2021**	**Witzenberg Municipality Integrated Waste Management Plan, 2021**
Goals	Development of an accurate model that reflects current sewerage network within the WLM to ensure optimal use of existing capacity and efficient spending for future maintenance and upgrades.	Ensuring an accurate model that reflects current water systems and distribution of potable water within the WLM to ensure optimal use of existing capacity and efficient spending for future maintenance and upgrades.	Moving from current waste management practices, which involve linear processes of collection and disposal in landfill, to more sustainable practice, where waste is avoided and environmental sustainability is upheld.
Foster Compliance	- Continued provision of basic services, as mandate of local government. - WWTP to be assessed for carrying capacity and to ensure that sludge is treated/disposed of legally.	Continued provision of basic services, as mandate of local government.	IWMP are required in terms of National Environmental Management: Waste Act, 2008 (Act 59 of 2008) to: - Enforce by-laws against polluters. - Uphold conditions of landfill licences. - Maintain and upgrade fleet. - Dispose of sewage sludge in an environmentally responsible manner.
Build Awareness	Manage sewer system by: - Establishing a model of the sewer network that accurately reflects the existing system. - Implement detailed water demand analysis based on data in the treasury system.	Manage water system by: - Establishing a model of the water network that accurately reflects the existing system. - Implement detailed water demand analysis based on data in the treasury system.	- Provide formal training to municipal staff on integrated and circular waste management. - Initiate programmes to build community awareness about benefits of correct waste disposal.
Reduce	Minimise waste through: - Optimal use of existing facilities with excess capacity. - Optimisation of the system with regards to capital, maintenance and operational cost.	Minimise waste through: - Optimal use of existing facilities with excess capacity. - Optimisation of the system with regards to capital, maintenance and operational cost.	Reduce waste going to landfill and other environmentally unsustainable waste disposal practices by: - Implementing recycling and hazardous waste programmes, and providing appropriate infrastructure to households. - Providing drop-off facilities in all settlements. - Implementing MRF in Ceres. - Initiating composting programme at PAH Landfill.
Benefit to Community	Effective asset management and future planning will ensure continued provision and expansion of waterborne sewerage systems to all residents of WLM.	Effective asset management and future planning will ensure continued provision of potable water systems to all residents of WLM.	- Implement 'swop-shops' in low-income neighbourhoods. - Manage and reduce pollution and harmful waste disposal through public education and enforcement of laws.

2.5 Spatial Analysis and Neighbouring Municipal Resources

Municipality	Hantam	Karoo Hoogland	Laingsburg	Breede Valley	Drakenstein	Bergrivier	Cederberg
Shared Boundary	North	Northeastern	Southeastern	Southeastern	South	West	Northwestern
Mountain Ranges	Houtkapperskop.	Driekop, Kookfonteinberg, Houthaalkop.	Winkelberg.	Slanghoek, Hex River Mountain.	Obiekwaberge, Ontongskop, Bailey's Peak.	Groot Winterhoek Wilderness.	Rietriviersberg, Grootrivier, Alsfontein, Grootberg, Middelberg, Hexberg, Schoongezicht.
Rivers	None.	None.	Patats.	Breede.	Klein Berg.	Leeu & Olifants.	Groot River.
Conservation & Proclaimed Conservation Areas	Tankwa Karoo National Park.	Vis River West, Riet, Sout, Sak and Renoster Rivers.	Anysberg Nature Reserve and Towerkop Nature Reserve. Buffelspoort Nature Reserve South of Rouxpos. Gamkaspoort and Klein Swartberg Catchment Areas.	None.	Riparian Vegetation and Environmental Corridor.	Groot Winterhoek Wilderness Area and Nature Reserve. Kouebokkeveld Mountain Catchment Area.	None.
Agriculture Homogeneous Agricultural Practices Agricultural Infrastructure	Rooibos Tea Factory in Nieuwoudtville. Renewable Energy Facilities near Loeriesfontein.	Livestock (mainly sheep and goat) production, as well as isolated cases of poultry and nuts.	Livestock Farming, with an emphasis on sheep, mutton, and wool farming.	Butchery, nursery, fresh produce market, dairy, chicken hatchery and kennels.	Urban Agriculture and Small Scale Farming	Intensive Fruit and Berry Farming.	Small Grain and Intensive Agriculture (Pome Fruit and some Vineyards).
Transport Network	R355 into Calvinia.	R354 link into Laingsburg onto the N1, through Breede Valley onto the R46.	N1 link into Breede Valley onto the R46.	R43 Worcester. R46 Touws River.	R44 Gouda via Nuwekloof Pass, R301 Wellington via Bainskloof Pass.	R44/R46 link into Drakenstein through to Porterville.	R303, Middelberg Pass.
Settlement Status	Calvinia serves as the Main Agricultural Service Centre (Between 5 000 and 25 000).	Sutherland is a Remote Village (Between 500 and 5 000).	Laingsburg Is a Village (Between 5 000 and 25 000).	Worcester is a Regional Service Centre (>100 000).	Paarl is a Large Town (Between 100 000 and 350 000).	Piketberg is a Village and Regional Service Centre (Between 10 000 and 25 000).	Clanwilliam is a Village (Between 5 000 and 25 000).
Investment			R355 to Laingsburg N1 to Cape Town.	R46 link to R43 link to N1 (Worcester to Cape Town).			

Map 23: Cross Border: Mountains & Rivers



CHAPTER 3: Land Demand & Supply

To allow for effective and sustainable planning of settlements, SPLUMA requires that the future demand and need for housing and related social and infrastructure services be considered and addressed as part of the SDF. For each settlement, the need (required) and demand for land within the short term (5 years) and long term (15-20 years) timeframes will be considered in the spatial proposals.

3.1 Household Growth Projections

The projected need was established using the Midyear Population Estimates, 2024, as published by the Western Cape Government's Department of Social Development, which sourced its data from StatsSA Mid-year Population Estimates, and projecting the household (hh) growth of Witzenberg Municipality as per the table below up to 2045.

The projections reveal households in the Witzenberg Municipal area have likely increased from 54 716 households in 2023 to 57 147 additional households in 2025 (2 431 additional households). Further projections reveal that households will likely increase from 57 147 in 2025 to a total of 88 291 by 2045, which is an increase of 31 144 or 57% households.

Table 29: Households Growth Projections

Settlement	2023 SEP %	2023 Pop	2023 HH	2025 Pop	Add Pop	Add HH 2025	2030 Pop	Add Pop	Add HH 2030	2035 Pop	Add Pop	Add HH 2035	2045 Pop	Add Pop	Add HH 2045	22 year Add Pop	22 Year Add HH
Ceres	32%	50 777	**17 509**	53 033	2 256	**778**	59 115	6 083	**2 098**	65 911	6 795	**2 343**	81 934	16 023	**5 525**	31 158	**10 744**
Op-die-Berg	3%	4 760	**1 641**	4 972	212	**73**	5 542	570	**197**	6 179	637	**220**	7 681	1 502	**518**	2 921	**1 007**
Prince Alfred Hamlet	7%	11 107	**3 830**	11 601	494	**170**	12 932	1 331	**459**	14 418	1 486	**513**	17 923	3 505	**1 209**	6 816	**2 350**
Wolseley	13%	20 628	**6 019**	21 545	917	**267**	24 016	2 471	**721**	26 776	2 761	**805**	33 286	6 510	**1 899**	12 658	**3 693**
Tulbagh	11%	17 454	**18 603**	18 230	776	**827**	20 321	2 091	**2 229**	22 657	2 336	**2 490**	28 165	5 508	**5 871**	10 710	**11 415**
Non Urban	34%	53 950	**7 113**	56 347	2 397	**316**	62 810	6 463	**852**	70 030	7 220	**952**	87 055	17 025	**2 245**	33 105	**4 365**
Total	100%	158 677	**54 716**	165 727	7 051	**2 431**	184 736	19 009	**6 555**	205 971	21 235	**7 322**	256 044	43 564	**17 267**	90 858	**33 575**

3.2 Tenure and Housing Demand

The housing waiting list totalled about 8 700 for IRDP and 1 803 for GAP in April 2025. The typologies are described below:

Integrated residential development programme (IRDP): Partial subsidy for those earning R3 500 and less per month. The subsidy includes planning and servicing sites and as a second phase, the construction of housing.

Informal settlement upgrading programme (UISP): The programme facilitates the structured in-situ upgrading of informal settlements.

Social housing (SH): Development of affordable rental units for families earning R1 500 - R7 500, which is the upper end of the low-income market.

Individual subsidy (FLISP): Qualifying households acquire an existing house or a vacant serviced residential stand, linked to a house build contract through an approved mortgage loan.

First home finance (GAP): Qualifying households are those in the gap market (do not qualify for a fully subsidised house and do not qualify for mortgage loan from the banks) and earns between R3 501 and R22 000 per month.

Applying household income categories, the subsidy typologies that emerge are listed below and start with the settlement with the highest number of people in need for the specific tenure type:

Table 30: Tenure Type Demand in Witzenberg

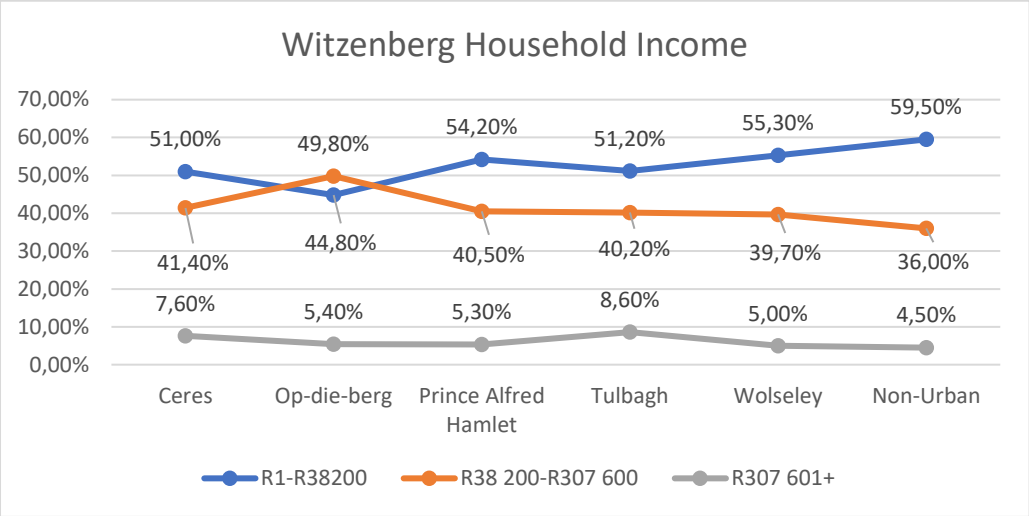
Tenure Type	Settlement
IRDP	Non-Urban (Agri), Ceres, Wolseley, Tulbagh Prince Afred Hamlet & Op-die-Berg
UISP	Ceres, Wolseley, Tulbagh Prince Afred Hamlet
GAP/ FLISP	Ceres, Non-Urban, Wolseley, Tulbagh, Prince Alfred Hamlet & Op-die-Berg.
Social Housing	Ceres, Non-Urban, Wolseley, Tulbagh, Prince Alfred Hamlet

Table 31: Witzenberg Municipality households per income group (Census, 2011)

	Low (No)	Low (%)	Middle (No)	Middle (%)	High (No)	High (%)	Total
Ceres	7 728	51,0%	6 263	41,4%	1 157	7,6%	15 152
Op-die-Berg	571	44,8%	635	49,8%	69	5,4%	1 275
Prince Alfred Hamlet	1 612	54,2%	1 205	40,5%	158	5,3%	2 975
Tulbagh	2 590	51,2%	2 031	40,2%	436	8,6%	5 064
Wolseley	4 763	55,3%	3 418	39,7%	431	5,0%	8 618
Non-Urban	8 837	59,5%	5 338	36,0%	667	4,5%	14 828

The data depicted in the table above indicates that Op-die-Berg is the only settlement where the proportion of middle-income households (49.8%) exceeds that of low-income households (44.8%). The non-urban areas of Witzenberg have the highest concentration of low-income households in the municipality, with 59.6% of the population earning less than R3,500 per month. Tulbagh has the highest proportion of higher-income households compared to other settlements in the municipality and in Wolseley, 39.7% of households fall into the middle-income category, while 55.3% are classified as low-income. This indicates that in terms of the urban areas in Witzenberg, Wolseley has the most significant income disparity between middle- and low-income households.

Figure 24: Household Income



3.3 Bulk Infrastructure Capacity

The availability of bulk infrastructure and services contributes to the economy and future development in settlements within Witzenberg Municipality.

According to the Witzenberg Municipality IDP (2024-2025), the region is supported by an extensive infrastructure network, with 327 km of water pipes and 216.2 km of sewer pipes, featuring varying diameters to accommodate different areas. Only 25% of consumers in Op-die-Berg and Prince Alfred Hamlet are not connected to sewer networks and instead make use of septic tanks. There has been an improvement in the maintenance and repair of the ageing pipe systems, and all bulk infrastructure for planned housing projects has been completed and is operational.

Ceres has sufficient water capacity, and at the current supply, it will be sufficient for the next 20 years, excluding supplementation from the boreholes. Sewage and industrial effluent are collected from consumers via a sewer system and treated at the Ceres wastewater treatment plant. The plant services the areas of Ceres, N'Duli, Bella Vista and Prince Alfred Hamlet, however, only the Prince Alfred Hamlet landfill serves the area. In terms of the provision of electricity, the area is serviced by the Ceres Power Station and Bon Chretien Substation. The electrical network receives its bulk electricity from Eskom via two 11kV bulk metering points at Eskom's Ceres Power Station (northwest of the urban area) and Bon Chretien Substation (northeast of the urban area). Based on the Master Planning and Status reports (MPSR) of the 11KV infrastructure in Ceres, Wolseley and Tulbagh for the period between 2022-2032, Ceres total Maximum Demand based on the Eskom-notified maximum demand (NMD) against the average historic demand is 36,500 over 8 years from January 2010 to March 2018. The cable network is considered adequate to handle a reasonable increase in capacity over the short to medium term.

Wolseley's water supply can be regarded as sufficient, serving as the main storage reservoir. However, the limited storage capacity remains a challenge during periods of severe drought. The bulk supply line from the Tierhokskloof Weir, which had been at risk of failure due to age, is currently in the final stages of an upgrade, which will improve supply reliability. The Wolseley Wastewater Treatment Plant (WWTP) was upgraded in 2014, and the system

includes six booster pump stations. The Wolseley Wastewater Treatment Works (WWTW) requires equipment upgrades based on the recent Green Drop Report 2022. Mechanical and civil upgrades to the plant are planned to ensure that the plant performs at an optimum level and to ensure compliance with national standards. The Wolseley landfill site is licensed for general waste, garden refuse and builders' rubble and has sufficient capacity up to 2026. However, it was forced to close the site after the adjacent informal community burnt down the offices and damaged equipment, and it is not foreseen that the site will be opened again soon. Similar to Ceres, there is an electricity power station that supplies the area (Wolseley Substation); the electrical network receives its bulk from Eskom via a single 11kV bulk metering point at Eskom's Wolseley Substation. Based on the MPSR of the 11kV infrastructure as mentioned above, Wolseley's total Maximum Demand based on the Eskom (NMD), against the average historic demand, was 5,200kVA over 3 years from January 2015 to November 2017.

In terms of Tulbagh, the construction of the Waverenskroon Dam has been completed, providing an additional storage resource for the settlement. The Tulbagh WWTP was upgraded in 2015, and the system includes three booster pump stations. The Tulbagh landfill site has sufficient airspace for 3 months, and a variation to the licence was applied for. If the Waste Variation Licence is not approved, solid waste will have to be transported to either Worcester or Drakenstein at high transport costs. The Tulbagh electrical network receives its bulk electricity from Eskom via one 11kV bulk metering point at Eskom's Tulbagh Substation. Based on the MPSR of the 11kV infrastructure, as mentioned, Tulbagh's total Maximum Demand based on the Eskom (NMD), against the average historic demand, was 4,500kVA over 3 years from January 2015 to November 2017.

Only the above three settlement areas were studied for Grid capacity as outlined in the MPSR. The studies identified the network capacity to accommodate renewable energy technologies in various sections of the networks, both internal and external, without making the grid unstable at any time.

Prince Alfred Hamlet requires a WWTW. Prince Alfred Hamlet landfill site is licensed for builders' rubble and garden refuse only, with the same geo-hydrological issues as the Ceres site. Electricity is supplied by Eskom.

Op-die-Berg has three water sources: a fountain and two boreholes. Due to the quality of the water, only chlorination is required. The absence of a storage dam places the town at risk during periods of severe drought. The wastewater treatment plant serves approximately 75% of the consumers, and the rest are serviced with septic tanks. Therefore, additional capacity is required. The Op-die-Berg landfill site needs to be closed soon due to high operating costs. Electricity is supplied by Eskom.

The following table, as depicted in the 2024-2025 Witzenberg Municipal IDP, illustrates the current service capacities, making use of the traffic light colour code system. The table includes water sources, water storage capacity, water

reticulation capacity (pipes and pumps), wastewater treatment works capacity, sewerage reticulation (pipes and pumps), electricity supply, electricity capacity, storm water distribution and retention, and waste management. Service capacities needing upgrading or additions are indicated.

Key	Green – Sufficient	Red – Insufficient / Exceed Capacity	Orange – Requires upgrade	Upgrading / New additional / Replacement

Town	Water Source	Water Reticulation	Bulk Storage Capacity (Reservoirs)	Bulk Sewer Distribution	WWTW	Access Roads	Storm water	Waste (Transfer = T, Landfill = L)	Electricity Provider	
									Municipal	ESKOM
Ceres								T		
Wolseley								N/A		
Tulbagh								T,		
Prince Alfred Hamlet								L		
Op-die-Berg								L		

3.4 Settlement Function

Determining the functionality of a settlement ensures that the basic needs of the settlement population are met. It supports the development of integrated and suitable human settlements and helps the municipality and other spheres of government make informed investment decisions based on technical data rather than political influence. It furthermore assists in identifying not only current but also future gaps and the needs in terms of service provision, which ultimately allows for better planning and resource allocation.

Overall settlement functionality is determined by using a refined classification of settlements determined by Guidelines For The Provision Of Social Facilities In South African Settlements developed by The Council for Scientific and Industrial Research (CSIR) and is based on their size and type (role they play in the context of the broader municipality and even district).

This assessment involves determining whether a settlement meets the required thresholds for various social facilities, such as the number of clinics, libraries, parks, and other amenities needed relative to its population size. Factors such as population density, community size, levels of mobility, and socio-economic variation are also considered in this evaluation. The process draws on previous and adapted settlement typologies, including the CSIR 2002 and Cities Network 2005 models. While economic and administrative feasibility is taken into account, these considerations play a secondary role in determining whether a settlement is functionally equipped to meet the needs of its residents. The figure below outlines the various CSIR settlement classifications and indicates the corresponding category for each settlement within the Witzenberg Municipality.

Figure 25: CSIR Settlement Classification

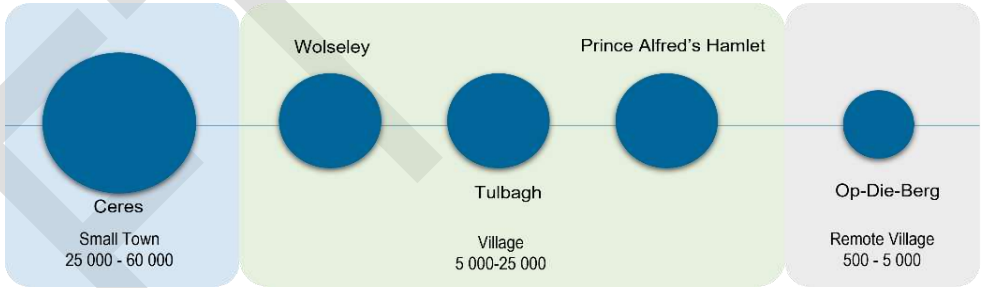


Table 32: CSIR Settlement Classification Categories

	Hierarchy Of Settlements	Catchment Size (No. Of People)	Examples Of Settlement Types
A	Metropolitan cities/regions	> 1 000 000	Johannesburg, eThekwini, Cape Town.
B	Large cities/small	350 000 – 1 000 000	metros Port Elizabeth, Bloemfontein, Pietermaritzburg, Welkom.
C	Large towns/regional service centres	100 000 – 350 000	Nelspruit, Witbank, Krugersdorp, Newcastle, George, Stellenbosch.
D	Small to medium towns/regional service centres	60 000 – 100 000	Ermelo, Harrismith, Mossel Bay, Bethlehem, Bronkhorspruit, Grahamstown.
E	Small towns/isolated regional service centres	25 000 – 60 000	Mount Fletcher, Delareyville, Beaufort West, Graaff-Reinet, Kokstad & **Ceres.**
F	Dense dispersed settlements (Large continuous development	10 000 – 100 000	Ingwavuma, Jozini, Acornhoek.

	with 10+ persons per hectare and up to 10 km2 in extent)		
G	Villages	5 000 – 25 000	Merweville, Stella, **Wolseley, Tulbagh and Prince Alfred Hamlet.**
H	Remote villages (Villages more than 20 km from larger settlements)	500 – 5 000	Prieska, Pofadder, Loxton, Keiskammahoek & **Op-die-Berg.**

3.5 Settlement growth potential study

The Western Cape Growth Potential Study (2018) determined the settlement and socio-economic status of settlements in the Western Cape outside of the Cape Town metropolitan area, along with their growth potential and investment directives.

The findings of the 2018 Growth Potential Study indicates that Witzenberg Municipality showed the most significant improvement in development potential across the province. Between the GPS13 and GPS18, the municipality recorded the largest gain in municipal development performance according to the Jenks scale, improving from a score of 14 to 44, indicating an upward shift from the "very low" to "medium" growth potential category.

In the Institutional theme, Witzenberg had previously recorded the weakest performance in GPS13, with a score 3.25 standard deviations below the mean. However, by GPS18, the municipality had made a significant recovery in this area, performing only slightly below average (0.14 standard deviations below the mean). All municipalities in the Cape Winelands region showed improvements in their Development Potential Z-scores, with Witzenberg again recording the most notable increase, 0.75 standard deviations, although still slightly below the mean at 0.34 standard deviations. The study identifies the growth potential of the Witzenberg municipal area as medium (44) in relation to the Western Cape.

Figure 26: Witzenberg Growth Potential

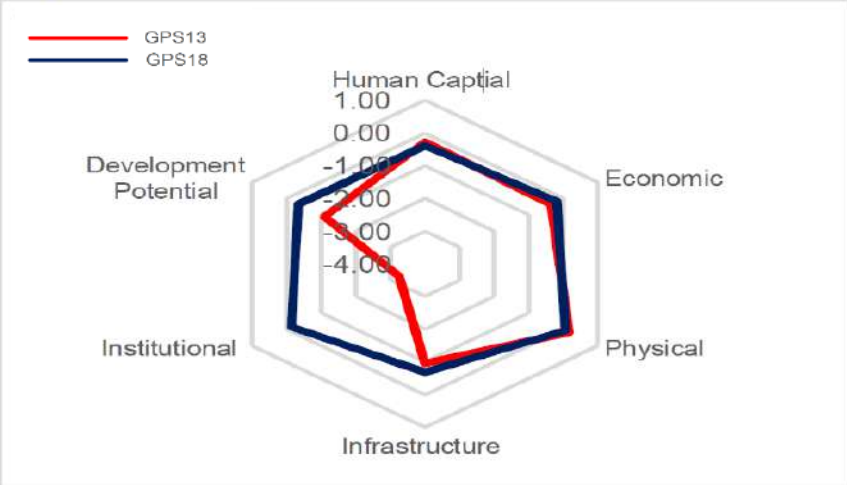


Table 33: Growth Potential Themes

Theme	GPS14	GPS18
Development Potential	Very Low	Medium
Economic	Very Low	Medium
Physical-Natural	Medium	Medium
Infrastructure	Low	Low
Human Capital	Medium	Low
Institutional	Very Low	Medium

3.6 Land Required

The following section outlines the total extent of land required for tenure and housing, industrial and business zoned land and amenities. A comprehensive explanation of the methodology applied, including the assumptions, calculation processes, and data sources utilised, is provided in Annexure 9.

Residential land required:

The table below provides an overview of the total extent of residential land required over a 20-year period. It further outlines the total demand across income categories and for each municipal settlement. The projected household growth, split into Low (subsidised), Medium (taxable) and High-income (taxable) categories, was used to calculate the additional land that needs to be provided for in this SDF cycle. The current waiting list was included in the total land required for the year 2025, in addition to the additional households in 2025.

Households that are fully subsidised earn R3 800 and less per month, and households that are partially subsidised can pay municipal tax. Average erf sizes relative to a particular settlement were applied to calculate the nett land requirements.

Table 34: Land Demand

Key: Sub – households that are fully subsidised earning R3 800 and less per month; Tax – households that are partially subsidised and can pay municipal tax; Low – low income; Mid – middle income; High – high income

Additional Households & Land (ha)	2025						2030					
Settlement	Households			Nett Land (ha)			Households			Nett Land (ha)		
	Sub	Taxable		Sub	Taxable		Sub	Taxable		Sub	Taxable	
	Low	Mid	High	Low	Mid	High	Low	Mid	High	Low	Mid	High
Ceres	397	322	59	5,95	16,10	5,91	1 070	868	159	16,05	43,42	15,94
Op-die-Berg	33	36	4	0,49	1,82	0,39	88	98	11	1,32	4,90	1,06
Prince Alfred Hamlet	92	69	9	1,38	3,45	0,90	249	186	24	3,73	9,29	2,43
Tulbagh	137	108	23	2,05	5,38	2,30	369	290	62	5,54	14,49	6,20
Wolseley	175	125	16	2,62	6,27	1,58	471	338	43	7,07	16,91	4,26
Non Urban	492	298	37	7,38	14,88	3,72	1 326	802	100	19,89	40,12	10,03
Total	1 325	958	148	19,88	47,89	14,81	3 573	2 583	399	53,59	129,13	39,92

Additional Households & Land (ha)	2035						2045					
Settlement	Households			Nett Land (ha)			Households			Nett Land (ha)		
	Sub	Taxable		Sub	Taxable		Sub	Taxable		Sub	Taxable	
	Low	Mid	High	Low	Mid	High	Low	Mid	High	Low	Mid	High
Ceres	1 195	970	178	17,93	48,50	17,81	2 818	2 287	420	42,27	114,37	41,99
Op-die-Berg	98	109	12	1,48	5,47	1,19	232	258	28	3,48	12,90	2,80
Prince Alfred Hamlet	278	208	27	4,17	10,38	2,72	655	490	64	9,83	24,48	6,41
Tulbagh	412	324	69	6,19	16,19	6,93	972	764	163	14,59	38,18	16,33
Wolseley	526	378	48	7,90	18,90	4,76	1 241	891	112	18,62	44,56	11,22
Non Urban	1 481	896	112	22,22	44,81	11,20	3 493	2 113	264	52,40	105,67	26,42
Total	3 991	2 885	446	59,87	144,25	44,60	9 412	6 803	1 052	141,18	340,15	105,17

Additional Households & Land (ha)			Additional 20 Year Total						
Settlement	Waiting list	Nett Land Required (ha)	Households			Nett Land (ha)			Total add. Nett land per settlement incl Wlist
			Sub	Taxable		Sub	Taxable		
			Low	Mid	High	Low	Mid	High	
Ceres	4 196	62,94	5 479	4 448	817	82,19	222,40	81,65	449,19
Op-die-Berg	873	13,1	451	502	54	6,77	25,08	5,44	50,38
Prince Alfred Hamlet	1 227	18,41	1 274	952	125	19,11	47,59	12,46	97,56
Tulbagh	998	14,97	1 891	1 485	318	28,36	74,23	31,76	149,33
Wolseley	1 309	19,64	2 414	1 733	218	36,21	86,64	21,82	164,30
Non Urban	0	0	6 792	4 110	514	101,88	205,48	51,37	358,73
Total	8 603	129,06	18 301	13 229	2 045	274,52	661,43	204,51	1 269,50

Industrial and business land required:

Zoned industrial and business land as well as land for amenities, are required to be prepared for economic growth and to achieved developed economies. The industrial and business zoned land was calculated by making use of a residential to business and industrial ratio. The table below indicates the 5-year projections per category: Business or Industrial and nett land requirements, including the total land required for amenities.

Table 35: Land Requirement according to household growth

Land (ha) requirement according to household growth																
	2025				2030			2035			2045			20 Year Total		
Main Town	Res		Bus	Ind	Res	Bus	Ind	Res	Bus	Ind	Res	Bus	Ind	Res	Bus	Ind
	Waiting List	Add HH (ha)														
Ceres	62,94	27,97	1,09	5,45	75,41	2,94	14,68	84,24	3,28	16,40	198,64	7,74	38,68	386,25	15,04	75,21
Op-die-Berg	13,10	2,70	0,10	0,51	7,28	0,28	1,38	8,13	0,31	1,54	19,18	0,73	3,63	37,29	1,41	7,05
Prince Alfred Hamlet	18,41	5,73	0,24	1,19	15,45	0,64	3,21	17,26	0,72	3,59	40,71	1,69	8,46	79,16	3,29	16,45
Tulbagh	14,97	9,73	0,37	1,87	26,23	1,01	5,05	29,30	1,13	5,64	69,10	2,66	13,30	134,36	5,17	25,85
Wolseley	19,64	10,48	0,44	2,21	28,24	1,19	5,96	31,55	1,33	6,66	74,40	3,14	15,71	144,67	6,11	30,55
Total Urban	129,05	56,61	2,25	11,23	152,61	6,06	30,28	170,49	6,77	33,83	402,02	15,95	79,77	781,72	31,02	155,12
Rural	0,00	25,98	1,16	5,79	70,03	3,12	15,60	78,24	3,49	17,43	158,07	8,22	41,09	358,73	15,98	79,91
Total, whole municipal area		82,58	3,40	17,02	222,65	9,18	45,88	248,72	10,25	51,26	560,08	24,17	120,87	1 140,45	47,00	235,02

Key: Res – Residential; Bus – Business; Ind – Industrial.

Land required for amenities

To determine the total land required for amenities (see Built Environment Analysis) in each settlement, the CSIR Guidelines were applied in conjunction with the estimated population projections determined by the MYPE for the year 2035. The purpose of this analysis is to identify the number and type of amenities that will be required over the next ten years. Each settlement was classified into a specific settlement type based on its projected population, as outlined in the CSIR Guidelines. These guidelines provide normative standards that indicate the number of amenities required per settlement type, as well as the average land required for each amenity. By applying these norms, the total land requirements for various amenity categories were calculated and are presented in the table below. A detailed breakdown of the specific amenities, such as the total number of secondary schools ECD's, clinics, etc, is provided in Annexure 5.

Table 36: Land required for Amenities

Classification	Settlement	2035 Population	Health and Safety (Ha)	Civic (Ha)	Social & Cultural Services (Ha)	Education Facilities (Ha)	Recreation & Sports (Ha)	Cemeteries
Small to medium towns/regional service centres (60 000 – 100 0000	Ceres	65 911	1,50	0,06	0,26	16,52	3,91	1,09
Small towns/isolated regional service centres (25 000 – 60 000)	Wolseley	26 776	2,18	0,00	0,51	7,84	1,37	0,44
Village (5 000-25 000)	Tulbagh	22 657	0,71	0,00	0,22	3,54	2,17	0,37
	Prince Alfred Hamlet	14 418	0,38	0,00	0,15	10,06	0,66	0,24
Remote Village	Op-Die-Berg	6 179	0,00	0,00	0,02	12,46	0,31	0,10
Total (Urban Area)		**135 941**	**4,76**	**0,06**	**1,16**	**50,43**	**8,42**	**0.77**

Ceres, currently classified as a Small Town or Isolated Regional Service Centre, is expected to grow into a Small to Medium Town or Regional Service Centre by 2035. To accommodate this anticipated growth, it is estimated that the settlement will require one additional community healthcare facility resulting in about 1.5ha of additional land required for the provision of adequate health care. For social and cultural facilities, approximately 0.25 hectares will be needed to provide for local markets. The greatest demand for land lies in the provision of educational facilities, with an estimated 16.52 ha required to accommodate 3 new primary schools, 4 secondary schools, 2 ECD resource hubs, and 27 ECD centres (crèches).

Wolseley is currently classified as a Village and is expected to grow into a Small Town or Isolated Regional Service Centre by 2035. In terms of health and safety, 4 additional primary health clinics will be required, for social and cultural services, approximately 0.51 ha and for education, 1 additional primary and secondary school will be required, along with 19 Grade R Classes and 11 ECD's/Small crèche, resulting in a total of 7.84 ha that will be required for the provision of educational facilities. In terms of recreation and parks, approximately 1.07 hectares will be required to ensure sufficient provision of recreational spaces.

Tulbagh, currently classified as a Village, is expected to retain this classification over the next 10 years. Though the settlement will retain its classification, some growth is still expected. As such, 4 additional primary health clinics will be required, resulting in a total of 0.71ha of land required for adequate healthcare provision. For social and cultural facilities, about 0.22 hectares will be required. In terms of education, the existing number of primary schools is expected to remain sufficient; however, one additional secondary school, 17 Grade R classrooms, and nine Early Childhood Development (ECD) centres will be required. This will result in a total land requirement of approximately 3.54 hectares for education-related facilities.

Similar to Tulbagh, Prince Alfred Hamlet is also currently classified as a Village and is expected to retain this classification over the next 10 years. To accommodate future growth, 2 additional primary health clinics of 1.2ha each will be required. For social and cultural facilities, about 0.15 hectares will be required to accommodate 3 local markets and 2 local libraries. In terms of education, the existing number of primary schools is expected to remain sufficient; however, one additional secondary school, 9 Grade R classrooms, and 6 Early Childhood Development (ECD) centres will be required. This will result in a total land requirement of approximately 10.06 ha for education-related facilities.

Op-die-Berg, classified as a Remote Village, is expected to retain this classification. In terms of population growth, however, it is estimated that by 2035 the settlement will require 0.02ha of land to make provision for a local market. In terms of education, an additional 12.48 ha of land will be required in order to provide adequate education facilities. For recreation and parks, about 0.31 hectares will be required to provide sufficient recreational spaces.

The municipality is currently in the process of identifying suitable land for the development of a regional cemetery, with Ceres being a potential location. Rising land prices have presented a significant challenge in securing an appropriate site. In the meantime, the municipality has made budgetary provisions to expand existing cemeteries in all towns during the 2025/26 financial year, and to acquire and develop land for the regional cemetery in Ceres/Bella Vista in 2027/28.

CHAPTER 4: Vision, Mission & Overall Issues

This chapter provides an overview of the overall municipal challenges.

4.1 Strengths, Weaknesses, Opportunities and Threats

The following table provides a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis of the biophysical, social & economic and built environments (as per the Status Quo report).

Strengths	Weaknesses
Settlements • Ceres, Tulbagh, and Wolseley exhibit high to moderate growth potential. • Ceres functions as a strong agri-service and processing hub. • Tulbagh and Wolseley have strong tourism potential. **Natural Resources (Biophysical)** • Regionally significant agricultural sector (apples, pears, small grain, grazing). • Mountain ranges (Witzenberg, Skurweberg, Winterhoek) provide eco-tourism and scenic value. • Rivers and irrigation dams support intensive farming and horticulture. **Economy (Socio-Economic)** • Strong and stable agricultural sector. • Existing agri-processing facilities and established export relationships (USA, EU). • Cultural and heritage assets (Tulbagh heritage town, historic landscapes). **Infrastructure & Accessibility (Built Environment)** • Strong regional road linkages: MR310, R303, R46, and R43. • Rail infrastructure and municipal/provincial road networks. • 224 km of water and 199 km of sewer pipes connect all urban areas. • Municipality's strategic location near Cape Town and Cape Winelands, enhancing logistics and tourism potential.	**Settlements** • Housing backlog and rapid growth of informal settlements. • Shortage of land for residential purposes. • Significant reliance on government grants. • Informal Settlements often located on land with sensitive biodiversity or on land with a high disaster risk. **Natural Resources (Biophysical)** • High exposure to wildfires, floods, and droughts. • Invasive alien vegetation and soil erosion which threaten ecosystems (endemic) and water security. **Economy (Socio-Economic)** • Low economic output despite relatively high employment rates. • Seasonal employment resulting in income instability. • Economy vulnerable to climate change impacts. • Limited skills base due to lack of training and tertiary education. • Youth unemployment and skilled labour out-migration. • Social issues linked to seasonal farm work (e.g., alcohol abuse, unstable housing). **Infrastructure & Services (Built Environment)** • Reliance on Eskom. • Inadequate water storage dams in Wolseley and ODB increasing drought risk. • Ageing bulk infrastructure. • Limited public transport between settlements.

Opportunities	Threats
Natural Resources (Biophysical) • Expansion of renewable energy (solar, wind) beyond the Komsberg REDZ. • Integrated catchment management and clearing IAS to improve water supply. • Eco-tourism opportunities through mountain trails, wine tourism, and heritage tourism. **Economy (Socio-Economic)** • Niche agricultural products (organic, value-added agro-processing). • Skills development through partnerships with TVET colleges and universities. • Partnership with Essen Municipality (Belgium) - waste management programmes. **Infrastructure & Accessibility (Built Environment)** • Investment in a freight depot/logistics hub to strengthen rail freight and reduce road pressure. • Growing recognition of rail's strategic role in freight transport. • Catalytic projects to drive infrastructure expansion and investment. • Expansion of ICT infrastructure for remote work and SMMEs. • Potential for climate-resilient housing using innovative, affordable building methods. • Worcester Regional Landfill development enabling phased waste solutions.	**Natural Resources (Biophysical)** • Erratic rainfall, heatwaves, shifts in micro-climates, and habitat instability. • Drought risks for towns without sufficient water storage • Land degradation reducing long-term agricultural productivity. **Economy (Socio-Economic)** • Economic globalisation and mechanisation reducing demand for unskilled labour. • Displacement of farm workers due to mechanisation and automation. • Global economic shifts affecting export markets. (US Tariffs) • Persistent poverty and inequality may heighten social tensions. **Infrastructure & Services (Built Environment)** • Insufficient and unreliable electricity supply, loadshedding, and Eskom bulk provision limitations. • Budgetary constraints for operations and infrastructure (e.g., fleet, transfer stations). • Delays in critical infrastructure upgrades could cause service disruptions. • Urban sprawl into high-value agricultural and sensitive environmental areas.

4.2 Settlement Transitions

Within settlements, the following transitions are important:

From	To
Built Environment	
Fragmented communities destroying the unique character and quality of life in settlements: ▪ Unsympathetic architecture and structure. ▪ Wide roads and excessive black tar surfaces. ▪ Conflict between pedestrians and motorcars. ▪ Unsympathetic advertising and signage in commercial areas. ▪ Service infrastructure clutter such as cellphone masts, satellite dishes, network and electrical cables. ▪ Lack of continuous open space networks. ▪ Removal of trees to install solar or construction of informal structures. ▪ Absence of Non-Motorized Transport (NMT) and inadequate street furniture and pedestrian walkway provision.	Rejuvenated and growing settlements to be livable and diverse and enabling the population to be economically mobile: ▪ Promote complementing architecture. ▪ Soften main roads in settlements and calm traffic. ▪ Promote pedestrian and cycling pathways (NMT). ▪ Develop a code for where and how to display billboards, guard natural gateways and prohibit signage and advertisements along water side of developments. ▪ Promote underground instead of above ground service reticulation including communication networks. ▪ Protect the agricultural and conservation landscape. ▪ Promote alternative open spaces as part of an Open Space network. ▪ Encourage tree planting and require each land unit being created to plant two trees and prohibit removal of trees of 20 years+. ▪ Prepare for climate change. ▪ Allow topography to inform development.
The prioritisation of industrialisation in Ceres at the expense of broader human and social development and resulting in a decline in the overall quality of life for residents.	A balanced development model that integrates industrial activity with sustainable urban growth, improved living environments, and inclusive economic opportunities.
Settlement urban edges were delineated for 5-years whilst low densities prevailed.	Intensify land uses within settlement edges in accordance with IZS.
All over low density settlement patterns. Fragmentation and isolated precincts constituting settlement development.	Promote rejuvenation and densification of settlements whilst keeping precinct character taking into account: promote infill development, increased floor factor, and potential subdivisions or re-development. Implemented precinct plans.
Vacant land that is developable belonging to the municipality.	Promote development of well-located state land: ▪ Enhance economic mobility and sustainable settlements. ▪ Promote NMT and provide adequate and well-maintained walkways.
Socio Economic	
Good primary and secondary schools, yet only 5.8% (StatsSA) of the population aged 20+ have reached higher education. Though stable, a predominantly low-skilled labour force due to the lack of education and training facilities	Ensure there are accessible opportunities for educational progression, for example FET colleges, skills schools and university satellites. Promote crèches and preschools and provide for safe, multi-disciplinary schools. Provide for skills training. Promote entrepreneurial spaces and skills.
Quality health care remains a continuous need.	Deliver supportive and high-quality community health care across the municipal area.
Biophysical Environment	
Extensive agriculture removes natural vegetation.	Protect agricultural land and promote conservation.
Landscapes determine the status of assets and include Agricultural landscape, Wilderness, Waterways and connectors, Cultural-historical landscape, Connector routes and Corridors and Community facilities and activities.	Enhance landscapes and utilize assets as tourist destinations. Support expansion of conservation initiatives.

4.3 Settlement Challenges

Overall challenges derived from the Status Quo analysis of Witzenberg Local Municipality.

- **Inaccurate Population Data and Poor Planning Alignment** – Census figures do not reflect actual and current population growth, resulting in an underestimation of population numbers. This affects spatial planning accuracy, limits proactive land use planning, and hampers the municipality's ability to secure adequate government funding.
  - Support and strengthen existing localised population and settlement growth monitoring systems and advocate collaboration between Stats SA and provincial departments.
  - Advocate for improved intergovernmental data sharing and alignment to ensure population figures inform land demand, housing projections, and infrastructure planning.

- **Rapid Urbanisation and Informal Settlements** - The municipality faces increasing pressure from in-migration, with people moving into settlements in search of employment and housing. This has led to the exponential growth of informal settlements, placing strain on infrastructure and basic services.
  - Identify and prioritise areas for incremental upgrading of informal settlements within safe, well-located zones.
  - Reserve and pre-plan land parcels for future urban expansion, especially in towns experiencing high in-migration.
  - Promote mixed-use, higher-density developments within urban cores to minimise urban sprawl.
  - Promote collaboration with farm owners to explore sustainable and affordable solutions for the accommodation of seasonal and permanent farmworkers. This may include incentivising the development of on-farm housing through mechanisms such as the lowering of development charges, expedited land use application processes, or targeted infrastructure support where feasible. Such initiatives should ensure compliance with minimum living standards and aim to reduce pressure on town-based housing demand, while supporting the agricultural economy and improving the quality of life for farmworkers.

- **Economic Dependence on Agriculture** - While the agricultural sector provides a stable economic base, it limits resilience. The lack of economic diversification makes the municipality vulnerable to sector-specific shocks and reduces employment options for residents.
  - Designate and promote economic opportunity zones near transport corridors and main towns to attract non-agricultural investment (e.g., agro-processing, logistics, renewable energy).
  - Support the development of multi-purpose rural service nodes that combine light industry, local trading, and services.
  - Encourage land use that enables home-based businesses and informal trading within settlements.

- **Low-Skilled Labour Force and High Dependency on Government Grants -** The majority of the labour force is low-skilled, contributing to widespread underemployment and a large dependency on social grants and subsidised housing. There is a significant gap in mid- to high-skilled labour, limiting innovation and economic diversification.
  - Prioritise spatial planning for education and training facilities (TVET colleges, skills centres, collaboration with Elsenburg).

- Promote land uses that support innovation spaces, incubators, and SMMEs, particularly in tourism and agro-processing.

- **Underinvestment from Government and Private Sector -** Despite strong development potential, the municipality receives limited support and investment from key provincial departments such as Environmental Affairs and Development Planning (DEA&DP), Agriculture, and Economic Development and Tourism. This lack of institutional support hampers local development initiatives.
  - Prepare investment-ready precincts through proactive planning, zoning, and infrastructure readiness to attract public-private partnerships.
  - Align capital expenditure and infrastructure plans with areas of demonstrated growth and potential to leverage provincial and national funding.
  - Clearly identify Catalytic Projects in the MSDF that align with provincial and national development strategies.

- **Unbalanced Land Use and Spatial Conflicts -** Competing land use pressures are evident, such as the interface between noxious agri-processing facilities and adjacent residential areas, creating tensions in settlement planning and environmental management.
  - Introduce buffer zones and transitional land uses between noxious activities and residential areas.
  - Enforce stricter land use management mechanisms through zoning scheme updates and enforcement.
  - Promote agri-industrial clustering in designated zones away from residential settlements.

- **Loss of Productive Agricultural Land –** Witzenberg is characterised by extensive high-potential agricultural land, which underpins its economy and provides the majority of local employment. However, the municipality faces a critical shortage of land within existing urban edges to meet growing housing demand, particularly for the formalisation or relocation of informal settlements. Addressing this need often requires expanding the urban edge, which would come at the cost of productive agricultural land. This presents a complex planning dilemma for the municipality: how to balance the need for housing against the protection of agricultural land and the jobs it sustains.
  - Define and map agricultural protection zones to safeguard key productive areas.
  - Prioritise densification and infill development within existing urban edges to reduce pressure on surrounding farmland.
  - Develop spatial guidelines for responsible urban edge expansion, based on land suitability, infrastructure capacity, and agricultural value.

- **Speculative Land Ownership and Limited Development Activity** - Several property owners have obtained land use rights with no intention to develop. This speculative behaviour inflates land prices and deters genuine investment, leading to stalled development.
  - Introduce phased development incentives for landowners who actively develop within specified timeframes.
  - Encourage selling land where the execution of approvals is stalled.
  - Monitor land with dormant approvals and re-assess zoning/designations as part of a regular land audit process.

- **Physical and Spatial Constraints -** Geographic limitations, such as topographical barriers in Op-die-Berg, and land scarcity in Ceres, restrict expansion and contribute to housing backlogs and service delivery challenges.

- Promote the development of alternative settlements or satellite nodes where physical barriers limit growth (e.g., outside constrained areas in Op-die-Berg and Ceres).
- Conduct a detailed land suitability assessment to guide new housing and service expansion zones.
- Invest in bulk infrastructure upgrades to support densification where land is limited.

4.4 Draft Spatial Vision and Goals

Witzenberg Municipality's draft spatial vision is to become:

"A dynamic, resilient municipality that drives inclusive and diversified economic growth, encourages spatial transformation and creates sustainable, liveable spaces that attract investment, foster innovation and empower future generations."

To achieve the municipal vision, the municipality must:

- Be adaptable to changing trends and needs
- Strengthen the primary economic driver while supporting and stimulating complementary economic drivers.
- Attract investment (commercial, industrial, residential).
- Elevate municipal role at regional, provincial & national levels.
- Retain wealth generated within the municipal boundary.

CHAPTER 5: Settlement Proposals

A compact urban form supports spatial sustainability, one of the cross-cutting planning principles as advocated in SPLUMA and LUPA. Both the general directives and specific settlement proposal that follow in this chapter, enhance the five SPLUMA and LUPA principles to achieve a compact urban form.

5.1 General Settlement Proposals

The table below presents the general spatial proposals and directives applicable to all urban settlements within the Witzenberg Municipal Area. These proposals are categorised according to their thematic focus and are linked to the corresponding spatial goals they address. Each directive aims to promote either the protection, change, or development of the municipal area.

The spatial goals of the Witzenberg Municipality are as follows:

1. **Adaptability to Changing Trends and Needs**
2. **Strengthening Primary Economic Drivers While Supporting Complementary Drivers**
3. **Improving the Quality of Life of Existing Residents While Attracting New Residents Who Can Contribute to the Local Economy**
4. **Attracting Investment (Commercial, Industrial, and Residential)**
5. **Elevating the Municipality's Role at Regional, Provincial, and National Levels**
6. **Enhancing Wealth Retention**

PUBLIC REALM (AMENITIES) AND BEAUTIFICATION			
Sub-Category	**Proposal Code**	**Spatial Goal Number**	**Proposal**
Social Infrastructure and Spaces	**G1**	**3**	Prioritise the provision of social infrastructure to enable safe living environments.
	G2	**3**	Strengthen and encourage community spaces and squares. Public Realm & Open Spaces: - Promote multi-functional recreational areas (e.g., children's play parks, day camping and picnic facilities). - Promote urban-rural linkages and use "soft" land uses such as sports and recreation facilities linked to routes (e.g., hiking, mountain biking, bird watching, wildflower viewing, horse trails, fishing and water sports).
Safety	**G3**	**3**	Promote security of and maintenance of existing police stations.
	G4	**3**	Support provision and manage adequate street lighting.
ICT	**G5**	**1**	Encourage the provision of communication infrastructure (ICT hubs).
	G6	**1**	Guide installation of ICT hubs by means of high level public realm precinct plans including active and passive open spaces and activity nodes and streets.

	G7	**1**	Develop practice note on placement and aesthetics of IT hubs in settlements and cell phone and communication masts in settlements and in rural areas.
Institutional Facilities	**G8**	**3**	Prioritise the provision of and protect and maintain existing sports grounds.
	G9	**3**	Support the establishment of crèches and other education facilities in residential areas subject to space requirements and adequate parking provision.
	G10	**3 & 6**	Prioritise the provision of training centres, creches, schools and aftercare facilities to improve educational levels overall.
Cemeteries	**G11**	**3**	Plan for adequate expansion of cemeteries. Ensure cemetery capacity is monitored to address additional space requirements timeously.
	G12	**3**	Avoid the location of cemeteries: - Within flood plains and determine or consider flood lines. - On unsuitable soil and where the water tables is high.
	G13	**3**	Support securing (fence and control) access to cemeteries and facilitate ongoing maintenance of all cemeteries.
Beautification and Sense of Place	**G14**	**3**	Upgrade the public realm and plant trees and tree lanes, improve sidewalks, provide street furniture, pave and raise intersections and provide facilities for NMT traffic at, but not limited to, settlement centres (CBDs) and heritage destinations.
	G15	**3**	Promote the improvement of the visual character of higher density residential developments, and in particular subsidised housing developments, through the planting of trees along streets & developing functional, enclosed (where required) open space areas.
	G16	**3**	Maintain historic core areas and precincts and support development or rejuvenation of precincts with a fresh or new sense of place with appropriate transition buffers between the old and new.
	G17	**5**	Promote and protect landscape features of settlement surroundings as part of settlement character and as tourist attractions and: - Sensitively landscape or keep gateways natural and plant lanes or clusters of trees to announce settlements. - Restrict signage at town entrances to locational signs only (i.e. signs showing the name of the town or settlement). - Keep signs announcing settlements and development at gateways aesthetically and heritage sensitive. - Protect broader agricultural landscapes and natural features.

MOBILITY AND ACCESS (NMT ROUTES)			
Sub-Category	**Proposal Code**	**Spatial Goal Number**	**Proposal**
Access and Walkability	**G18**	**3**	Provide for and improve walkability and mobility and: - Locate activities (residential, transport, work, recreation, etc.) within walking distance (1 000m/1km), (see spatial proposal maps illustrating a 1km radius from schools). - Promote pedestrian streets, public transport, one-way streets, non-motorised transport. - Connectivity between precincts and to and from areas adjacent to CBD and activity streets and corridors. - Create appropriate road cross-section widths that can provide for vehicle traffic, parking, pedestrian movement, cycling and landscaping. - Protect mobility function of routes and where applicable obtain DOI: Transport Infrastructure Branch approval and develop Arterial Management Plans. - Secure appropriate maintenance and renewal budgets for mobility infrastructure and road networks. - Locate buildings closer, rather than further, from streets to increase pedestrian activity, a sense of enclosure and surveillance. - Provide adequate parking to alleviate traffic problems in CBD's.
NMT Routes	**G19**	**3**	Provide safe NMT routes throughout settlements, along activity streets and between precincts and amenities, improving connectivity in settlements. - Ensure routes are circular and connect different precincts. - Develop and promote multi-mode and multi-use routes. - Provide for cycle routes along activity corridors. - Separate cycling lanes from pedestrian and vehicle lanes. - Implement traffic calming measures to create a more pedestrian-friendly environment. - Protect cycling and pedestrian lanes from unauthorised use by motorised vehicles. - Improve surveillance. - Provide supporting infrastructure (street furniture and ITC hubs) to improve mobility of residents and tourists. - Improve accessibility of NMT routes for the disabled. - Maintain and upgrade road and stormwater infrastructure. - Expand local movement network, including sidewalks, NMT routes and internal roads.
	G20	**1**	Develop a municipal wide open space network and NMT route management master plan.

TRANSPORT INFRASTRUCTURE (RAIL / TRANSPORT / ROAD / FREIGHT)			
Sub-Category	**Proposal Code**	**Spatial Goal Number**	**Proposal**
Rail	**G22**	**2**	Encourage railway transport as alternative public transport system.
	G23	**2**	Lobby use of railway services to enhance industrial precinct along railway line.
Roads	**G24**	**4**	Improve inter-town connectivity.
PLANNING AND DEVELOPMENT			
Sub-Category	**Proposal Code**	**Spatial Goal Number**	**Proposal**
Development Guidelines	**G25**	**2 & 6**	Encourage combined residential and business premises across towns to support small enterprises within appropriate localities.
	G26	**1**	Prioritise the collection of higher-quality municipal data to inform future planning and projections.
	G27	**2**	Provide for clusters of zoned commercial and industrial land to drive economic growth.
	G28	**1**	Promote passive building design to minimise energy, solid waste and water demand and promote use of solar water heaters, PV panels. grey water recycling, and waste separation at source.
	G29	**3**	Arrange housing according to the socio-economic gradient principle, with higher end of the market closest to the main thoroughfare and the lower end of the market closest to the CBD.
	G30	**3**	Support densification through subdivision and infill development.
	G31	**3**	Promote mixed uses as a key component for achieving improved levels of settlement liveability.
	G32	**3**	Promote intensification of land uses and amenities (corridors, nodes and linkages) between settlement precincts and less formal areas.
	G33	**3**	Promote the inclusion of GAP housing schemes as part of subsidised projects so as to cross-subsidise the provision of services.
	G34	**3**	Promote Integration Zones in settlements.
	G35	**2**	Support joint ventures with farming enterprises for the provision of farmworker housing.
	G36	**1**	In liaison with Western Cape Provincial Administration, in terms of WC Circular 27/2022, develop a practice note or by-law and standard operational procedures to deal with unlawful occupation of land.

	G37	**3**	Prioritise upgrading of informal residential areas to site and serviced stands, to address pollution and reduced water quality (CAPEX and Implementation Plan).
	G38	**3**	Design interactive development interfaces along open space networks and waterways. (Developments face open space networks. No rear building side oriented to open space or waterways).
	G39	**5**	Ensure that signage, and colours used on commercial buildings or sites align with the rural agricultural character. Mandate sensitive signage placement along the roadside, on buildings, and in sensitive core areas.
	G40	**5**	Develop guidelines for commercial facades, sensitive advertising signs and information signs to align and enhance local agri-industrial character and historical settings. Avoid advertisements, signage, inscriptions, neon and flashing lighting along river corridors within the settlement footprint. Such guidelines should be aligned with the Policy for the Design and Control of Signs (n.d.).
	G41	**5**	Adhere to no development along slopes steeper than 1:4 (25%).
	G42	**6**	Promote and implement land-use policies that allow recycling and upcycling enterprises to locate near waste transfer stations.
Heritage	**G43**	**5**	Support the development of a comprehensive heritage (Rural and Urban) inventory.
	G44	**5**	Control alterations and demolitions of buildings older than 100 years and promote sensitive development around heritage buildings.
	G45	**3**	Repurpose heritage buildings as amenities promoting sport (skate board parks), arts and culture and education.
	G46	**3**	Consider and protect historic settlement character, historical context and unique sense of place (e.g., spaciousness) whilst supporting sensitive densification by means of infill development and willingness of owners to subdivide.
	G47	**5**	Promoted heritage trails informed by appropriate and sensitive information boards.
	G48	**5**	Promote all heritage assets as tourism attractions in order to protect their significance.
	G49	**5**	Commission (and budget for) the delineation of scenic routes and scenic route overlays in accordance with the Heritage and Scenic Resources: Inventory and Policy Framework.
	G50	**5**	Encourage collaboration between tourism, heritage and aesthetic bodies operating in the municipal boundary.
	G51	**1**	Support and prioritise the implementation of master plans.
INFRASTRUCTURE, SERVICES			
Sub-Category	**Proposal Code**	**Spatial Goal Number**	**Proposal**

Bulk Infrastructure	**G52**	**2**	Ensure adequate bulk infrastructure capacity to support industrial and agri-industrial expansion.
Energy	**G53**	**2**	Prioritise upgrade of electrical network to keep up with population growth and development demands.
	G54	**4**	Promote private-public partnership (PPP) alternative energy facilities.
	G55	**4**	Preferably locate Electric Charging Stations at existing facilities such as filling stations and farm stalls as opposed to developing new sites.
	G56	**4**	Support and encourage installation and use of alternative energy sources e.g., solar and wind for domestic use and bulk generation.
	G57	**3**	Ensure collaboration between River Maintenance Management and Integrated Waste Management to prevent pollution.
Waste	**G58**	**3**	Allocate resources to ensure compliance with waste license and permit conditions and audit report findings.
	G59	**3**	Promote waste management and reduction strategies: - Promote recycle initiatives and provide for recycling facilities of recyclable material and organic waste. - Support implementation of waste awareness programmes and campaigns directed at school going children, youth and families. - Integrate existing waste entrepreneurs into the municipal waste diversion system to avoid potential conflicts and acts of vandalism.
	G60	**5**	Maintain good relations with international waste partnerships.
Water	**G61**	**3**	Develop a range of water demand management strategies for all sectors. - Encourage retrofitting of water demand management technologies in existing buildings and offer an incentive programme. Building Design, Retrofitting Technology. - Encourage reduced household water use whilst managing increased future water demand driven by population growth.
	G62	**3**	Comply with minimum potable (drinking) water phosphate, nitrate and e-coli standards and with effluent quality requirements set out in water use license.
	G63	**3**	Maintain and secure water treatment plants.
	G64	**3**	Upgrade Water Treatment Plants according to population growth.
	G65	**3**	Manage adequate land for future expansion of water storage capacity.
	G66	**3**	Investigate and secure alternative water resources. - Encourage rainwater harvesting and greywater recycling.

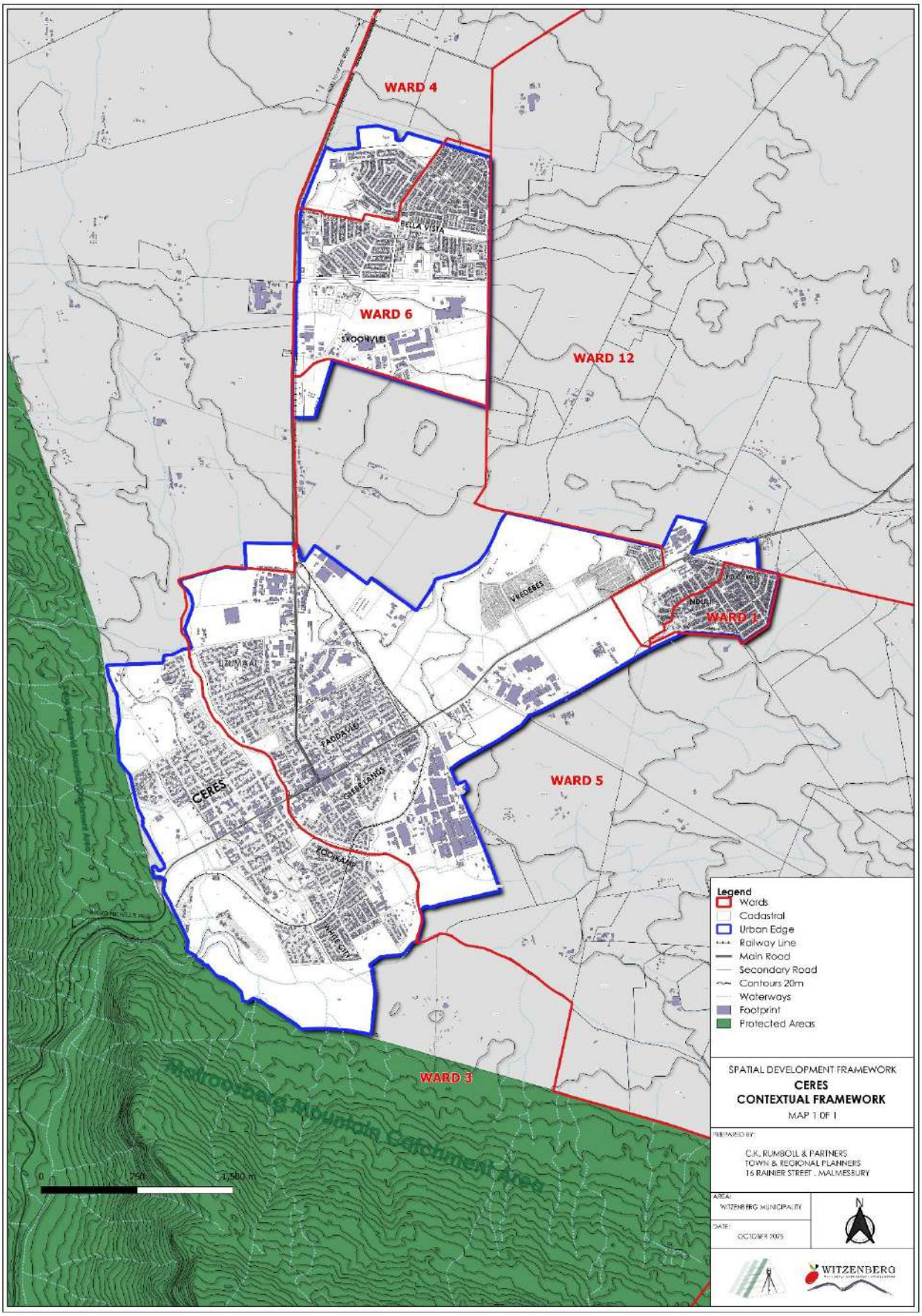
			- Re-use stormwater.
	G67	2	Secure water reallocations where agricultural land with high suitability is impacted by proposed developments.
TOURISM, ECONOMIC DEVELOPMENT AND INDUSTRY			
Sub-Category	**Proposal Code**	**Spatial Goal Number**	**Proposal**
Tourism	**G68**	**2**	Create a comprehensive tourism plan. Emphasize Tulbagh as a heritage anchor, but diversify across Witzenberg.
	G69	**2**	Support tourism development that will increase visitor numbers, increase average spend per visitor, extend visitor stays and expand product offering. - Support the establishment of accommodation facilities for tourists in rural and urban areas. - Support agritourism-based development. - Focus investment on the provision of social facilities & services to support and strengthen tourism. - Promote skills development in agritourism.
	G70	**6**	Support the development of linked tourism routes (heritage, wine, mountain biking, farm stays and leisure) that encourage overnight stays in multiple towns rather than same-day visits.
Economic development through tourism	**G71**	**2**	Provide vulnerable and disadvantaged residents and local entrepreneurs access to integrated and viable tourism spaces to conduct business (arts and crafts, cultural and heritage, local guides and local food). - Permit markets at highly accessible movement network and urban structure locations such as modal interchanges and intersections and along activity streets. - Promote the development of well-located vacant properties earmarked for business. - Improve access to and ownership of commercial and industrial land.
Economic Development	**G72**	**4**	Intensify and enhance Central Business Districts (CBDs) and promote mixed-uses.
	G73	**4 & 6**	Intensify development and renewal along main activity routes, activity streets and at nodes to promote business, small business and/or mixed-use (a combination of commercial, residential and low-impact service industries) and/or residential development and: - Promote development on both sides of activity streets. - Use the within “walking distance” principle to regenerate, revitalise and restructure settlements. - Orientate short sides of blocks to major streets to promote access (penetration). - Locate most frequented activities (higher-order development) and mixed uses in the most central/accessible localities, e.g. industrial, commercial and educational. - Support establishment of house shops along activity streets.

			- Support home occupation and professional services in residential areas. - Support residential infill to achieve social and functional integration.
	G74	**6**	Prioritise multi use of open spaces such as using parking lots as local markets for the selling of locally made crafts and products.
	G75	**2**	Support agricultural service industry and agri-industry related development and diversification including the small and informal business sector.
NATURE & CONSERVATION			
Sub-Category	**Proposal Code**	**Spatial Goal Number**	**Proposal**
Nature	**G76**	**3**	Promote effective management of air quality and prevent air pollution.
Nature	**G77**	**3**	Require implementation of all mitigation and management actions to protect natural resources according to standards, permit requirements and environmental management plans and in particular to sewerage management: - Prohibit effluent discharge into wetlands and/ or waterways. - Encourage replacement of septic tanks. - Adhere to the 300m sewerage work buffer. - Protect and maintain existing waterborne sewerage system. - Provide sewerage treatment plant capacity and reticulation for future demand driven by population growth.
	G78	**3**	Promote the implementation of the Department of Water and Sanitation's River Maintenance Management Programme and plans.
SMALL-SCALE AND URBAN AGRICULTURE			
Sub-Category	**Proposal Code**	**Spatial Goal Number**	**Proposal**
Urban Agriculture	**G79**	**2**	Relax development regulations to promote the agricultural economy.
	G80	**2**	Investigate how agritourism and agriculture can operate harmoniously.
Community Gardens	**G81**	**3**	Promote community gardens across all income groups and facilities to promote food security.
Small-Scale Agriculture	**G82**	**2**	Promote small-scale agriculture at identified sites in each settlement including municipal comanage.

Settlement Development Proposals and Urban Edge Expansions

The following subsection presents development proposals for each settlement. It begins with a situational analysis outlining the settlement's history, sub-regional location, and its role and function within the broader municipal context. This is followed by a description of the settlement's character and layout pattern, as well as an overview of infrastructure and services, including electricity, water and sanitation, stormwater management, roads, human settlements, and land tenure. The subsection also identifies key challenges and potential opportunities for each settlement. Thereafter, settlement-specific development proposals are outlined in text and spatially illustrated on accompanying maps.

5.2 Ceres (Bella Vista & Nduli)



5.2.1 Situational Analysis

5.2.1.1 Settlement History

Ceres Town

Ceres was established in 1849, following the completion of Michell's Pass in 1848, under the supervision of Andrew Bains, and the construction of a hard road through Karoopoort, which enabled wagons to pass through the region. The region was identified as a place to expand colonial agricultural activity, and the name Ceres is derived from the Roman goddess of agriculture. The diamond rush, which resulted from the discovery of diamonds in Kimberley in 1866, brought a substantial number of travellers through the area, with the commonages at Karoopoort serving as important outspan areas (MSDF, 2020: 29).

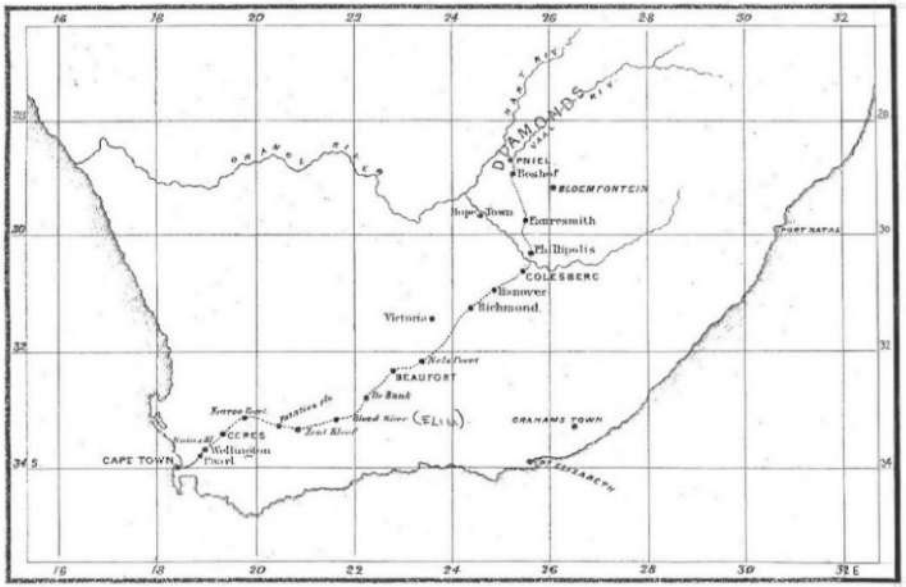
Nduli

Nduli translates to "hill" in isiXhosa, was established during the apartheid era and is located 5km east of Ceres on the R46. Most Black African people living in Ceres at the time were based in Sakkiesbaai, a settlement that was located in an area now known as White City. Sakkiesbaai was established sometime around the 1920s by black workers who were employed by the railways or the divisional council. Residents were forcibly removed from Sakkiesbaai to Nduli in July 1962. At that point in time, the settlement consisted of 16 single men's hostels and 6 family homes.

Bella Vista

Bella Vista is a former "coloured group area", planned and established in the mid-1960s/early 1970s, in terms of the Group Areas Act of 1950. It is located 5km north of the main town of Ceres, on the R303. Plans to demolish and rebuild Rooikamp, a location that people of Khoi, San and slave descent had previously been evicted to in the 1920s, were announced at a public meeting in December 1963. People living in Rooikamp in Ceres were forcibly removed to White City and Bella Vista (Ceres Museum, online).

Figure 27: Map of the route to the diamond fields, (Source: Ceres Museum, online; accessed 09/07/2025)



5.2.1.2 Sub-Regional Location

Ceres, along with the cluster of primary settlements, is located in the south-eastern part of Witzenberg municipality. Ceres is in the Warm Bokkeveld Plains, east of the Skurweberg Mountains, which lie between Wolseley and Ceres, and is accessed via Michell's Pass (R46) from the south. Ceres lies north of the Hex River Mountains, which lie between Ceres and Worcester.

Ceres is located 140km north-east of the metropolitan municipality of Cape Town, which is roughly 2 hours away by motor vehicle. The closest regional centre is Worcester, which is 55km south of Ceres. According to the NSDF, 2022, Worcester is designated as one of eight Regional Development Anchors in the Berg and Breede River areas.

5.2.1.3 Settlement Role and Function

According to the WCPG SDF (2014), Ceres is a regional service centre in the Cape Winelands District and Witzenberg municipality, as it has the highest population as well as provision and diversity of community services and infrastructure in the local municipality. Ceres also falls within the rural development corridor that extends from Swellendam to Tulbagh, including Robertson, Worcester and Wolseley. Ceres serves as the key administrative and commercial centre and is an important node for community services. It plays an especially important role in supporting surrounding agriculture.

Key community services include Ceres Hospital, a large multi-sports complex, the Ceres Traffic Department and Home Affairs. There are several tourist attractions in the town, including the Togryers Museum, Ceres Zipslide Adventures and the Pine Forest Caravan Park. Several agri-industrial businesses operate in the industrial areas, notably Pioneer Foods and Ceres Fruit Juices.

Ceres is made up of the following wards:

Table 37: Ceres Wards

Ward	Towns or Areas
1	Nduli
3	Ceres West
5	Ceres East
6	Bella Vista (including some farms in Warm Bokkeveld)

5.2.1.4 Settlement Character and Layout Pattern

Ceres Town

Ceres is a largely suburban town that sits at the foot of the Hex River Mountains and Skurweberg Mountains. The Dwars River, which is a tributary of the Breede River runs through the town.

Ceres has two main roads running through it, which serve as key structuring elements. The R46 becomes Voortrekker Road in the town and serves as the main road, with high street commercial functions. It runs east-west through Ceres. Vos Street (R303) runs perpendicular to the R46.

The rail line runs through the southern part of town, where the De Meter station is located, it then runs into the industrial area to the east, where the Chretien Railway Station is located, and then runs north, forming a border on

the eastern side of the settlement where Ceres Railway Station is located. The majority of the town is located on a rectilinear grid. This largely corresponds with the old town pattern.

The suburbs of Ceres are the old town of Ceres, which is located north-west of Voortrekker Road. To the south of Voortrekker Road lies Beeskamp and Egoli. Rooikamp and White City are located south of the rail line. There are three industrial areas around the town. The largest sits east of the Dwars River and south of the rail line. Two other smaller industrial areas are located to the north of the town.

Nduli

In 1962, Nduli originally consisted of 16 men's hostels and 6 family homes. The settlement continued to expand over time, and by 1975, Nduli had grown to 15 hostels, 24 houses, 2 halls, a school, a beer hall, and other basic facilities. After the end of apartheid, an informal area, Polocross was established, which now exhibits a combination of informal and upgraded housing (Ceres Museum, online).

Access is from the R46 via Chris Hani Avenue. There are also access points from the eastern Onder-Swaarmoed Road. The original settlement is located on the western side of the settlement, with the denser, heterogenous Polocross area to the south-east.

The area is characterised by a mix of housing typologies, including free-standing houses on small stands, as well as more informal structure typologies, either on the same stand as a brick-and-mortar house, or free-standing. Nduli also has several informal settlements, including: Mooiblom, Zibonele , Nkonjane, Mnandi, Eluxolweni and Amos.

Bella Vista

Bella Vista is divided into four main areas, which are roughly quadrant shaped. The areas were established in the following order, Ou Blok and Nuwe Blok, which make up the western half of the settlement; Ice Cream Blok and Kleinhuisies make up the eastern side of the settlement (Krotz, 2022). The settlement runs on a rectilinear grid, with access from the R303 via Panorama Street, on the southern edge of the settlement and Buiten Street at the northern edge. Vrede Street is an important north-south connector. An industrial area is located south of Bella Vista and Home Affairs is situated west of the settlement, on the other side of the R303.

Houses are located on individual plots, with houses in the older areas often still retaining the original structure built in the 1970s, although there has been noticeable incremental extension, or demolition and rebuild. The area named Kleinhuisies derives its name from the one-bedroom houses that were constructed in this area (Krotz, 2022). The houses in Ice Cream block are of the same typology. In the newer areas in the north, houses are largely in the style of BNG housing.

5.2.2 Settlement Services and Infrastructure Analysis

5.2.2.1 Water

Ceres is primarily supplied by the Koekedouw Dam, which has a total capacity of 17 million m³. The municipality holds an allocation of 10 million m³ from this source, with current consumption estimated at 3.9 million m³ per annum, this allocation is expected to meet demand for the next 20 years, without factoring in additional supply from boreholes. Emergency boreholes are available and can provide up to 20% of the Average Daily Demand (ADD).

The water quality from the Koekedouw Dam is generally good and only requires chlorination before distribution. Storage is provided by two reservoirs with capacities of 3 Ml and 5 Ml, which feed into a distribution network of approximately 114 km. The network is divided into four supply zones, namely Bella Vista, Nduli, the Ceres main supply zone, and the Ceres central PRV zone.

5.2.2.2 Sanitation

Sewage and industrial effluent from consumers is collected via a sewer system and treated at the Ceres Wastewater Treatment Plant. The facility services Ceres, Nduli, Bella Vista, and Prince Alfred Hamlet. The sewer network includes nine booster pump stations, and a portion of the treated effluent is reused for irrigation purposes.

Size (ML/Day)	Technology	Operational Flow (% of design capacity)
8.5	Activated Sludge	82

5.2.2.3 Solid Waste

Black bin household waste is collected at least once a week from formal households. Households living in informal settlements are provided with black and green bags and skips. Skips are used in informal settlements and in all towns for garden refuse and C&D waste storage. There are currently 77 skips (6 m³) placed in the Witzenberg Municipal Area. The number of skips in Ceres and surrounds is as follows:

- Ceres: 17.
- Bella Vista: 14.
- Nduli: 4.

Illegal solid waste dumping, disposal of household waste in skips designated for garden waste disposal and skips being overfull are challenges that face the municipality.

The Ceres landfill site was licenced for closure in 2003, and the waste body has been capped. It has been closed since 1999 due to soil conditions that risk groundwater pollution. Rehabilitation, costing R4.6 million, remains incomplete.

5.2.2.4 Electricity

Ceres is supplied with bulk electricity by means of two 11kV bulk metering points at Eskom's Ceres Power Station, which is northwest of the urban area and Bon Chretien substation to the northeast. The current Notified Maximum Demand (NMD) is 36,5 MVA.

Notwithstanding these bulk electricity issues, the cable network of Ceres is adequate to carry capacity increase over the short to medium term. Illegal electricity connections, especially in informal settlements, most of which are clustered in Nduli, pose risks to revenue and public safety. There is also a general demand for upgrades, modernisation and installation of streetlights.

5.2.2.5 Roads & Stormwater

Major provincial roads around Ceres, Nduli and Bella Vista include:

- MR310 (R303) – which runs north from Ceres, connecting Bella Vista to the surrounding area, the R303 then runs north through Prince Alfred Hamlet, past Op-Die-Berg and on to Citrusdal.
- TR22/2 (R46) – which runs from Tulbagh, joining Wolseley to Ceres via Michell's Pass from the west. Nduli is located on the R46, which runs eastward and joins up with the N1 near Touws River.

The stormwater in Ceres is primarily drained by the Dwars, Titus, Breede, and Koekedouw Rivers and their tributaries, with the Koekedouw River impounded by the Ceres Dam. The town relies on a combination of underground drainage systems, formalised channels, roads, and irrigation channels ("Leislote") to convey stormwater runoff to river outlets.

Several areas prone to inundation and overflow have been identified particularly along key streets such as Gardenia, Starking, Elberta, Barlinka, Retief, Faure, and Vos Street. Maintenance issues are evident, with blocked inlets and illegal dumping causing clogging, erosion, and reduced system performance.

A significant concern is that some developments in Ceres fall within the 1:50 year Koekedouw floodlines, highlighting the need for a detailed flood analysis.

Bella Vista's stormwater drains into two tributaries of the Dwars River, which separate the area into a residential portion and the Schoonvlei industrial area.

In the residential area, the northern catchment drains northwards into a stream with sufficient capacity and good condition, while the southern catchment drains southwards. Runoff from outside the residential area is diverted by a cut-off channel to the west, which has adequate capacity. The area has slopes between 3–10%, with flatter low-lying land south of Boerneef and east of Buren Street (0–3%).

The Schoonvlei industrial area drains into the Dwars River via streams to the north and south. Stormwater infrastructure there is limited but under construction. Flooding has previously occurred along Boerneef Road, and recent upgrades include additional stormwater facilities and a proposed 15,000 m³ attenuation pond on Erf 5075 to mitigate drainage challenges in this flat area.

Existing stormwater reticulation in Bella Vista has insufficient capacity to handle a 1:2-year return interval storm event and requires upgrading. Opportunities for flood attenuation also exist in certain subcatchments.

Three main drainage routes serve Nduli: the northern portion drains via a grass channel into a Slanggat River tributary; the western portion drains towards an earth dam to the south-west; and the eastern portion drains north-east to two channels along Onder-Swaarmoed Road, which cross the R46 by culvert.

The majority of Nduli has very flat slopes (0–3%), with steeper slopes (3–10%) in the south-west. Stormwater infrastructure is limited, and roads function as the primary drainage system. Identified recurring problems include flooding at the outlet in Langabuya Avenue and road inundation in Thembalethu Avenue. Kerb inlets are often blocked by litter and are in only fair condition.

5.2.2.6 Human Settlements and Tenure

Land Required:

The analysis of human settlement demand for Ceres indicates that a total of 449.19 ha of land will be required over the next 5–20 years to provide for residential development across all income groups.

Table 38, provides a breakdown of the projected demand accounting for expected household growth and the municipal waiting list and illustrates the need across income categories, ranging from subsidised housing (indigent/low income) to gap and market-related housing opportunities (taxable).

The table indicates that about 145,13ha of land is required to address the demand for subsidised housing, including the settlement waiting list and the total estimated additional households that will likely fall within the low-income category. This reflects the number of households still dependent on state-subsidised opportunities.

Table 38: Land Required

Additional 20 Year Total					
	Subsidised		Taxable		Total Land Required
	WL	Low	Mid	High	
ha	62,94	82,19	222,4	81,65	449,19
%	14,01%	18,30%	49,51%	18,18%	100%

Informal Settlements:

In addition to the current waiting list and the estimated household growth, existing and the rapid expansion of informal settlements also contribute to the overall housing need. Ceres has 6 identified informal settlements with a combined estimated structure count of 1133 (a significant increase from the 498 structures counted in 2020). Table 39 below illustrates the current informal settlements and the number of structures counted in 2020 and 2025.

Table 39: Ceres Informal Settlements

Informal Settlement Name	Established	2020 MSDF		2025	
		Structures	Pop	Structures (January 2025)	2025 Population
Mooiblom	1993	81	243	85	247
Zibonele	1997	67	189	95	276
Nkonjane	1993	350	1 050	18	52
Mnandi				575	1 668
Eluxolweni				319	925
Amos				41	119
				953	2 764
Total		**498**	**1 482**	**1 133**	**3 286**

Planned Projects:

Projects identified in the housing pipeline for Vredebes include the phased development of Vredebes Phase 1, which comprises 600 serviced sites. To date, Phase 1A (229 top structures) and Phase 1B (150 top structures) have been completed. Phase 1C, involving 110 top structures, is planned for implementation in the 2025/26 financial year. The final component, Phase 1D, will provide a further 111 top structures, but its implementation is dependent on the availability of bulk electricity. The completion of Phase 1 in its entirety remains contingent on securing the necessary bulk infrastructure capacity.

Land Budget:

The land budget addresses the balance between the demand and supply of residential land in Ceres. The municipal housing waiting list, the current housing pipeline, and projected household growth since the 2019 MSDF, with future projections informed by the MYPE (2024–2035) and a 2.2% growth rate for 2035–2045 is used to determine the demand. To determine "supply" side, it accounts for land required to meet the waiting list and projected household growth, drawing from opportunities both within the 2019 urban edge, through infill, repurposing, and allocation of undetermined land, and outside it, where urban edge expansions are guided by strategic settlement roles. Importantly, while mixed-use developments may include residential components, these were excluded from the supply calculations.

The MSDF proposals constitute 96.24ha of residential land. 81.35ha of additional land for residential development is proposed. The land requirements according to the population projection till 2045 amount to 989ha of residential land, resulting in an undersupply of -1 719ha.

Table 40: Wolseley Land Budget

Land	Hectares
Proposal in 2020 Edge	14,89
Expansion Proposals	81,35
Total Provision, 2025 MSDF	96,24
Required, 2023 -2025	31
Required 2025 -2035*	795
Required 2035 - 2045	989
Total Required	1 815
Undersupply	-1 719

5.2.2.7 Settlement Challenges

The following issues pose challenges in Ceres, Nduli and Bella Vista.

- **Ageing and Insufficient Infrastructure:**
  - Ageing water and sewage systems, with capacity and pressure constraints worsened by population growth.
  - Water storage capacity and pressure In Nduli and Bella Vista is inadequate, and the wastewater treatment system is nearing its limit.
  - Electricity demand has already exceeded the Notified Maximum Demand (NMD), with delays in backbone upgrades from Eskom.
  - Many informal households still rely on communal water points and toilets, placing pressure on service delivery.
- **Mobility and Access:**
  - Voortrekker Street (main high street) lacks universal access upgrades. Public transport is dominated by minibus taxis, there is a need for adequate provision of public transport facilities (MBT ranks).
  - Non-motorised transport (NMT) infrastructure is lacking, creating unsafe pedestrian and cyclist conditions in Ceres, Nduli, and Bella Vista.
- **Housing Land Availability:**
  - Limited land for both subsidised and market housing has created an extensive housing waiting list.
  - Seasonal labour migration intensifies demand for housing, contributing to informal settlement growth.
- **Industrial Land Availability:**
  - The Settlement faces pressure to provide sufficient land for industrial development, particularly for agri-processing and other intensive industries that are central to the local economy.
- **Competing Land Demands:**
  - Expansion is restricted by surrounding agricultural land and topography.
  - High competing demands between housing, industrial development, and agriculture limit balanced growth.
  - Urban sprawl (informal settlements) further complicates efficient land use and infrastructure provision.
- **Population Growth and Informality:**
  - Employment opportunities (seasonal work) in agriculture and agri-processing attract an influx of people to Ceres, intensifying the demand for housing. The inability to meet this demand contributes to the growth of informal settlements.
- **Environmental Risk:**
  - Climate change could impact agricultural production, a key source of industry and employment for the residents of Ceres.
- **Economic Disparities:**
  - Over-reliance on agriculture and agri-processing, with limited diversification into other sectors.
  - High socio-economic needs, together with a high rate of low-skilled, seasonal labour, could increase economic inequalities and social tension, if not addressed through skills training and education.
  - Rising crime and drug-related violence undermine safety, well-being, and investor confidence.

5.2.2.8 Settlement Potential

- **Economic Diversification and Investment:**
  - Ceres's role as a Commercial and Regional Hub attracts developer interest in commercial and shopping centres, potentially stimulating broader investment.
  - Expansion of industrial land for agri-processing and intensive industries could strengthen local employment and diversify the economy.
  - Encouraging small business development and support services can reduce reliance on seasonal agricultural labour.
- **Agricultural Support Hub:**
  - Ceres is strategically located to support the agricultural activities of the region. Through continued modernisation and adaptation of agricultural practices, Ceres can continue to support the function, agri-processing and logistics needs of this important economic activity.
  - Participation in the SmartAgri Plan and FruitLook strengthens adaptive capacity.
- **Freight and Logistics:**
  - Ceres is strategically located on the R46 and R303, which connect to the hinterland and ports. Effective management of these routes can enhance the role this settlement plays in ensuring quality logistical support to the agricultural sector.
  - Leveraging **rail infrastructure** for freight can also strengthen logistics for agriculture as well as other industries.
  - Upgrading roads, sidewalks, and NMT infrastructure can enhance **mobility, safety, and accessibility.**
  - Optimising minibus taxi ranks and routes can improve public transport efficiency.
- **Tourism Growth:**
  - The natural beauty of the region, together with the unique climate, presents a key opportunity to grow the tourism sector in this region, especially in the heritage and ecotourism sector.
  - Development of complementary tourism services (accommodation, restaurants, attractions) can create employment and diversify income sources.
- **Greenfields Infill Development:**
  - The areas highlighted for restructuring, settlement integration and infill in the 2020 MSDF are largely Greenfields sites, presenting a unique opportunity to develop in sustainable ways following best practice, with, for instance, effective NMT, green building standards, and clustered, integrated community infrastructure.
- **Infrastructure Upgrades and Service Expansion:**
  - Planned upgrades to water, sewage, and electricity systems provide opportunities to address the housing backlog by enabling planned projects to be completed.
  - Implementation of **renewable energy (solar)** can help meet growing electricity demand and reduce reliance on Eskom.
- **Social and Community Development:**
  - Skills development and training programmes can reduce **economic inequality** and improve local employment opportunities.
  - Investment in public spaces, recreation, and cultural facilities can enhance **quality of life** and social cohesion.
  - Strengthening community policing and social programmes can help **reduce crime and drug-related issues.**

5.2.3 Settlement Proposals

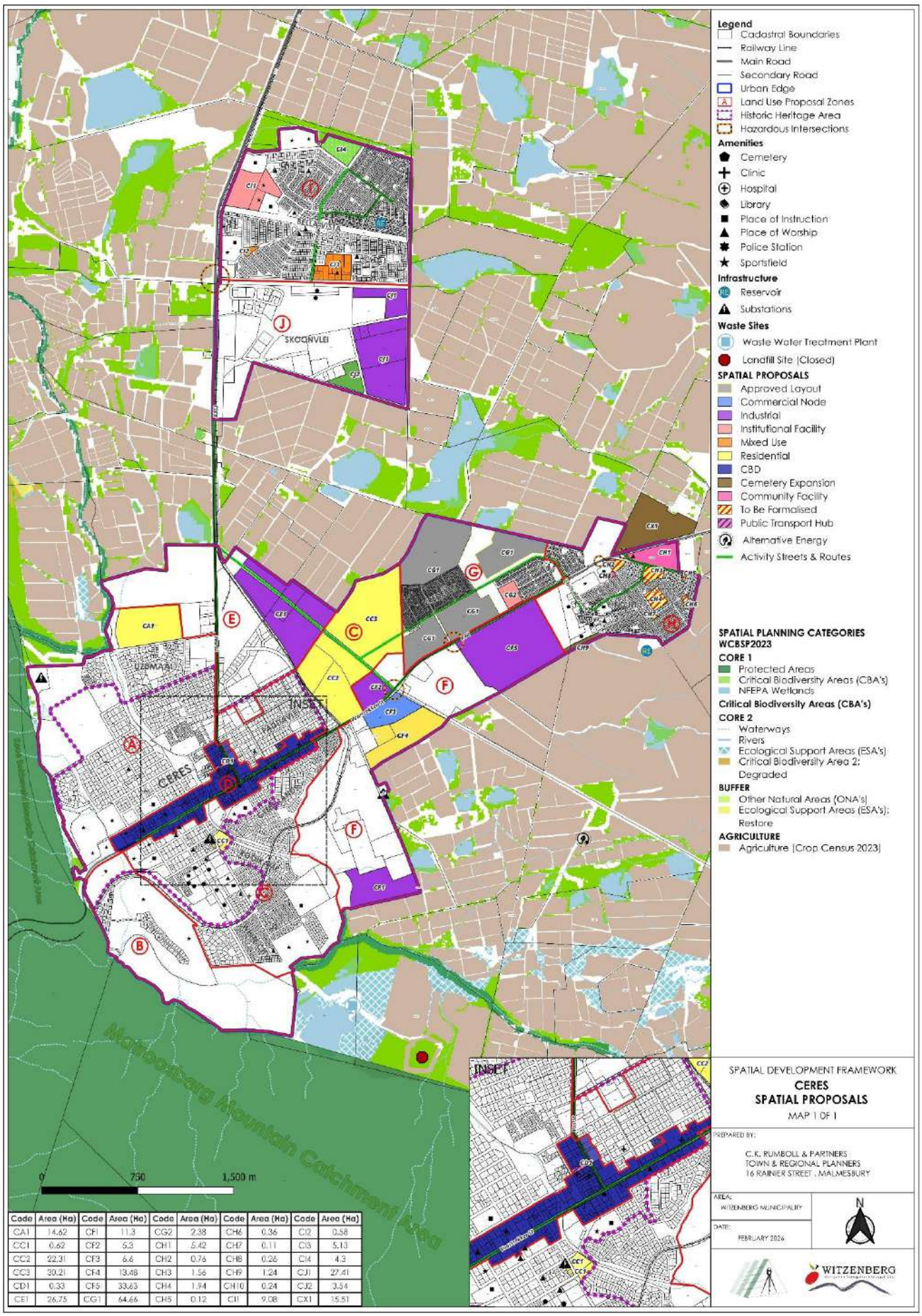
Code	Proposal	Spatial Goal Number
Public Realm (Amenities) and Beautification		
CN1	Implement a Ceres Precinct Plan for public realm upgrades to connect nodes, beautify the area, and improve vehicular, pedestrian and cycling movement.	3
CN2	Encourage the upgrading of public spaces in Bella Vista.	3
CN3	Promote the development of a library for Nduli.	3
CN4	Promote and encourage the development of training and other institutional facilities.	3
CN5	Support the revitalization and redevelopment of derelict buildings for community use.	3
CN6	Support the acquisition of land for the development of a regional cemetery (Ceres Town/Bella Vista).	3
CN7	Support the rehabilitation of Cillier Street.	3
Mobility and Access (NMT Routes)		
CN8	Promote the widening of sidewalks along Voortrekker Street (Ceres Town).	3
CN9	Promote the development of a formal NMT route along Jakaranda Street (Bella Vista).	3
CN10	Promote the formalisation of unsurfaced NMT route along the R46 up to Onder-Swaarmoed Road (Nduli).	3
CN11	Provide street furniture to create rest areas and shade along the NMT adjacent to the R46 and along the R303 (Nduli).	3
CN12	Formalise NMT routes along Eluxolweni Avenue (Nduli).	3
CN13	Promote the extension of the existing bicycle route network.	3
Transport Infrastructure (Rail/Transport/Road/Freight)		
CN14	Promote and support the revitalization and subsequent utilization of existing railway infrastructure for commuting between Wolseley and Ceres.	2
CN15	Initiate talks with PRASA to get clarity on the intended plans for a rail service in Witzenberg. The municipality should lobby for the maintenance of existing facilities for improved and expanded rail services.	5
CN16	Support the implementation of intersection upgrades to improve safety measures.	3
CN17	Support and promote the development of by-pass roads for the use of heavy freight vehicles.	4
CN18	Encourage the development of a Petroport/ truck stop facility outside Ceres to provide space for trucks to overnight, eliminating the need to park illegally within the settlement.	4
CN19	Encourage the conducting of a comprehensive minibus taxi survey to develop appropriate measures for managing and developing taxi ranks and operations, especially of emergent informal ranks.	3
CN20	Encourage the investigation and subsequent creation of a pedestrian crossing on Voortrekker Street at Charlie Hofmeyr High School.	3

Basic Infrastructure, Services and Development		
CN21	Maintain 1:100 Koekedow Flood lines (Ceres and Wolseley).	3
CN22	Promote the rehabilitation of Lovers Lane Bridge.	3
CN23	Support the role of Ceres as main administrative “capital” of the municipality.	5
Tourism, Economic Development and Industry		
CN24	Promote seasonal outdoor activities as tourist attractions such as cherry picking in the summer months and snow during winter.	2
CN25	Promote Ceres as a Local Tourism Agency.	5
CN26	Support the expansion of the Ceres Rail Company (currently only operational between Cape Town and Elgin).	5
CN27	Promote the following streets/sections of streets as activity corridors: Voortrekker Street (R46), Vos Street (R303), Vrede Street, Chris Hani Avenue, Onder-Swaarmoed Street, Jakaranda Street, Magnolia Street and Oleander Street.	4
CN28	Encourage densification and mixed-use development (or redevelopments) in the Central Business District.	3
CN29	Spatially plan for designated accessible, well-serviced areas for hawkers, street traders, and small enterprises to operate legally and safely, supporting local entrepreneurship and livelihoods.	3
CN30	Support nodal agri-related development to enhance agri-processing and agri-value chains.	2
CN31	Combat urban decay of the existing CBD through the undertaking of an urban design study that will assist in providing guidance for targeted investment and intervention measures by the municipality to procure reinvestment in the CBD.	4
Nature and Conservation		
CN32	Protect existing urban green spaces and expand them as climate mitigation assets, such as the Dennebos Caravan Park and Victoria Park Sports Grounds.	3
CN33	Ground-truth and integrate CBAs into the zoning scheme.	5
CN34	Encourage new developments to incorporate green infrastructure (e.g., permeable surfaces, tree planting, green roofs, rain gardens) to manage heat, stormwater, and air quality.	1

5.2.4 Coded Settlement Proposals

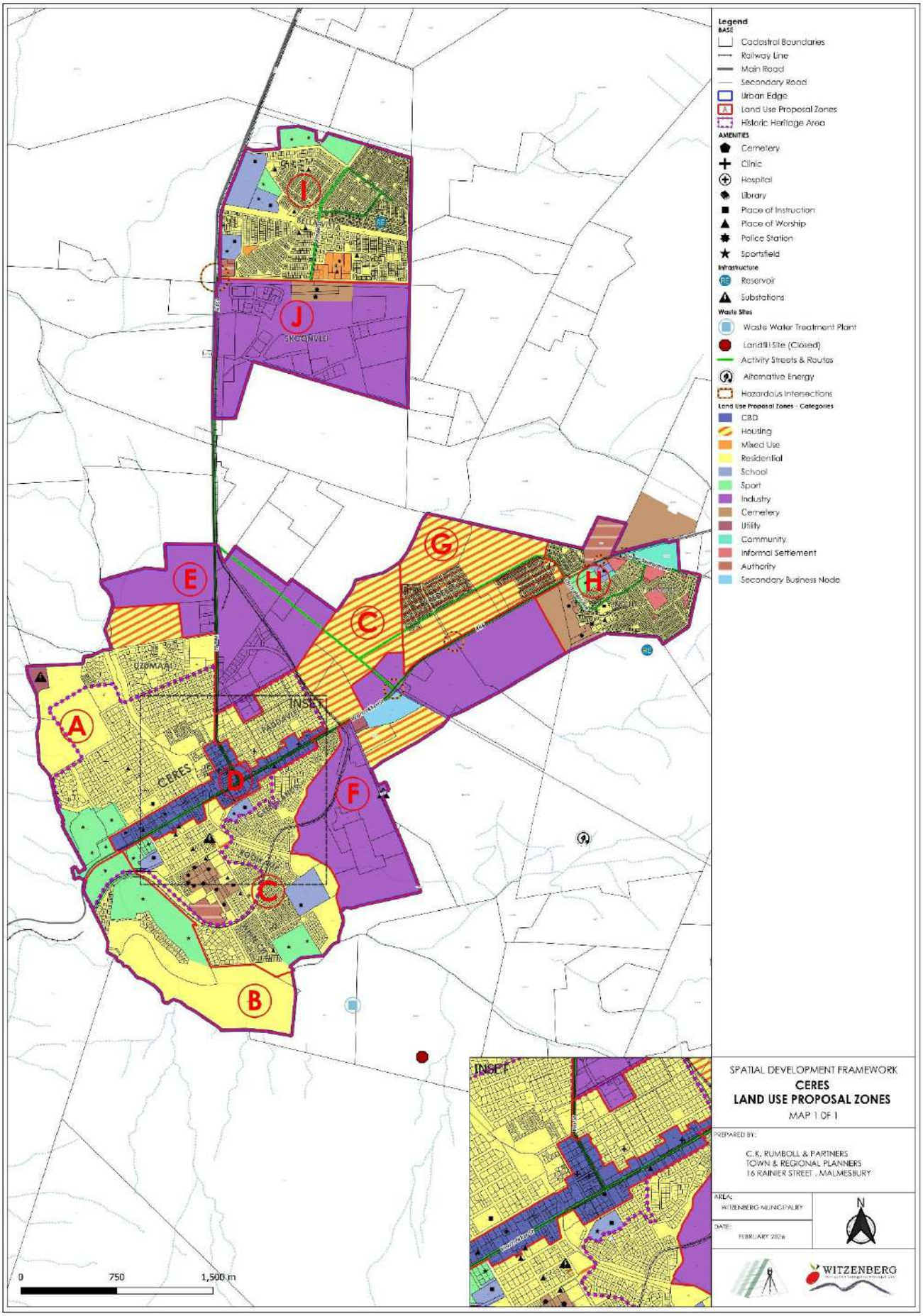
Code	Zone	Use	Proposal	Du/Ha	Area (Ha)	Spatial Goal Number
CA1	A	Residential	Promote medium density residential development similar to the adjacent Uzumaai residential development.	20	14,62	4
CC1	C	Residential	Promote medium density residential development similar to the adjacent Rooikamp residential development.	60	0,62	4
CC2	C	Residential	Promote a mixed density residential development.		22,31	4
CC3	C	Residential	Promote a mixed density residential development transitioning into the Vredebes Residential Development to the east.		30,21	4
CD1	D	Public Transport Hub	Encourage the acquisition of land to develop a formal taxi rank.		0,33	3
CE1	E	Industrial	Promote industrial development		26,75	2
CF1	F	Industrial	Support the expansion of existing industrial use.		11,3	2
CF2	F	Industrial	Promote medium to low intensity industrial developments with a low industrial transitional buffer area toward the adjacent residential expansion proposal to the north and west.		5,3	2
CF3	F	Commercial Node	Promote the development of a commercial node.		6,6	4
CF4	F	Residential	Promote medium density residential development		13,48	4
CF5	F	Industrial	Promote industrial or commercial developments.		33,63	2
CG1	G	Approved Layout	Support and prioritise the completion of the Vredebes housing development.		64,66	3
CG2	G	Institutional Facility	Support the development of an institutional facility.		2,38	3
CH1	H	Community Facility	Support the development of a community facility aligned with the Witzenberg Zoning Scheme By-Law.		5,42	3
CH2	H	To Be Formalised	Prioritize the relocation of informal structures constructed in the road reserve and encourage the formalisation of structures located outside of the road reserve. (Part of the Mooiblom Informal Settlement)		0,76	3
CH3	H	To Be Formalised	Promote the formalisation of existing informal settlements.		1,56	3
CH4	H	To Be Formalised	Promote the formalisation of existing informal settlements.		1,94	3
CH5	H	To Be Formalised	Promote the formalisation of existing informal settlements.		0,12	3
CH6	H	To Be Formalised	Promote the formalisation of existing informal settlements.		0,36	3
CH7	H	To Be Formalised	Promote the formalisation of existing informal settlements.		0,11	3
CH8	H	Community Facility	Encourage the redevelopment of the existing derelict building for use as a community facility.		0,26	3
CH9	H	Cemetery Expansion	Promote the expansion of the Nduli cemetery.		1,24	3
CH10	H	To Be Formalised	Promote the formalisation of existing informal settlements.		0,24	3
CI1	I	Institutional Facility	Promote the expansion of the existing adjacent institutional facility.		9,08	3
CI2	I	Mixed use	Encourage mixed-use such as community and commercial uses.		0,58	4
CI3	I	Mixed Use	Encourage mixed-use development to accommodate uses such as residential, community and commercial use.		5,13	4
CI4	I	Residential	Encourage high density residential development.	60	4,3	4
CJ1	J	Industrial	Promote industrial development		27,41	2
CJ2	J	Open Space	Maintain as open spaces.		3,54	3

5.2.5 Settlement Proposal Map



Code	Area (Ha)	Code	Area (Ha)	Code	Area (Ha)	Code	Area (Ha)	Code	Area (Ha)
CA1	14.62	CF1	11.3	CG2	2.38	CH6	0.36	CI2	0.58
CC1	0.62	CF2	5.3	CH1	5.42	CH7	0.11	CI3	5.13
CC2	22.31	CF3	6.6	CH2	0.76	CH8	0.26	CI4	4.3
CC3	30.21	CF4	13.48	CH3	1.56	CH9	1.24	CJ1	27.41
CD1	0.33	CF5	33.63	CH4	1.94	CH10	0.24	CJ2	3.54
CE1	26.75	CG1	64.66	CH5	0.12	CI1	9.08	CX1	15.51

5.2.6 Land Use Proposal Zones



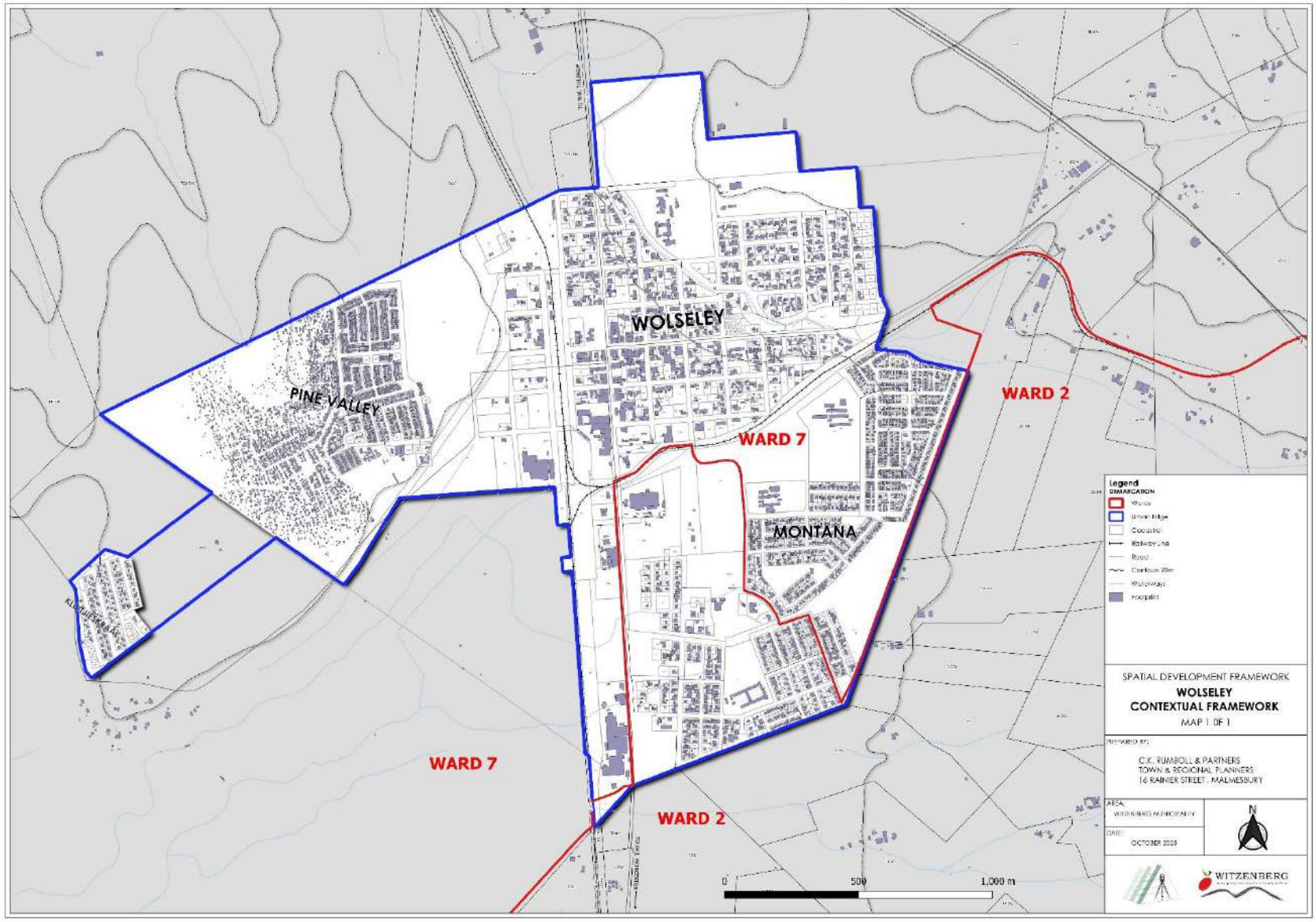
5.2.7 Land Use Zone Proposals

Refer to the land use zone map for Ceres: The urban area of Ceres is divided into ten (10) zones (areas with common features) and the recommended land uses for the different zones are listed in the table below:

CERES LAND USE ZONES		Low Density Residential Uses	Medium Density Residential Uses	High Density Residential Uses	Secondary Educational Uses	Place of Instruction	Professional Uses	Business Uses	Secondary Business Uses	Place of Worship	Institution	Guest houses	Authority	Sport/Recreational Facilities	Industries & Service Trade
A	Zone A has a predominantly low-density residential character with pockets of mixed density residential developments throughout the zone. A portion of Zone A falls within the identified historic core of Ceres. The historic core should continue to be the focus of on-going public place improvement, identification and protection of historic places and assets and sensitive redevelopment and infill.	X	X		X	X	X			X	X	X	X	X	
B	Zone B represents a residential area surrounding the Ceres Golf Course.	X	X	X	X	X	X		X 4		X	X		X	
C	Zone C has a mixed density residential character with supporting social services. A portion of Zone C falls within the identified historic core of Ceres. The historic core should continue to be the focus of on-going public place improvement, identification and protection of historic places and assets and sensitive redevelopment and infill.	X	X	X	X	X	X			X	X	X	X	X	
D	Zone D represents the Central Business District and is located along the main activity corridor through the town where commercial and mixed uses occur. Allow for commercial and other compatible uses to enhance the node. A portion of Zone D falls within the identified historic core of Ceres. The historic core should continue to be the focus of on-going public place improvement, identification and protection of historic places and assets and sensitive redevelopment and infill.	X	X	X	X	X	X	X	X	X	X	X	X	X	X 3
E	Zone E represents an industrial zone located to the north of Ceres with potential identified for expansion.					X	X	X	X	X	X		X	X	X
F	Zone F represents an industrial zone located to the south-eastern side of Ceres with potential identified for expansion south of the area. Support development of identified business and mixed use nodes.					X	X	X	X	X	X		X	X	X
G	Zone G represents an approved high density residential development. Support development of community facility at identified area.		X	X	X	X	X		X 1	X	X	X	X	X	
H	Zone H represents Nduli. Informal residential settlements occur where formalisation is required. Support creation of community facility node at identified area. Allow for supporting social and neighbourhood orientated commercial services.		X	X	X	X	X		X 1	X	X	X	X	X	
I	Zone I represents the mixed density residential area of Bella Vista with supporting	X	X	X	X	X	X	X 5	X 1,5	X	X	X	X	X	

	social services. Support strengthening of community facility node.														
K	Zone J represents the Industrial zone of Bella Vista with the opportunity of future expansion.					**X**	**X**	**X**	**X**	**X**	**X**		**X**	**X**	**X**
(1) Along activity streets/corridors (2) At identified business nodes (3) Only service trade (4) At exisiting node (Clubhouse) (5) At identified mixed use nodes		**Business Uses** e.g. shop, supermarket, restaurant, offices, service station. **Place of Education** e.g. Schools, places of instruction. **Professional Uses** e.g. offices like doctors, dentists, attorneys, architects, engineers and town planners. **Secondary Business Uses** e.g. neighbourhood business uses such as house shops, small offices and home occupation. House taverns only to be allowed along activity streets in residential areas at discretion of the Municipality. **Secondary Educational Uses** e.g. Crèches/daycare. **Medium density residential** – only allowed on erven of 2000m² or larger. *Find description of proposed land uses for development zones in Annexure 4.													

5.3 Wolseley


WOLSELEY
PINE VALLEY
MONTANA
WARD 7
WARD 2
WARD 7
WARD 2
Legend
DEMARCATION
SPATIAL DEVELOPMENT FRAMEWORK
WOLSELEY
CONTEXTUAL FRAMEWORK
MAP 1 OF 1
C.K. RUMBOLL & PARTNERS
TOWN & REGIONAL PLANNERS
16 RAINIER STREET, MALMESBURY
OCTOBER 2025
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500
1,000 m
WITZENBERG

5.3.1 Situational Analysis

5.3.1.1 Settlement History

Wolseley was initially the Ceres Road Station railway junction, which was set up in 1875. After expanding over a number of years, it was renamed in 1910, after a former Major-General Sir Garnet Joseph Wolseley, an influential officer of the British Imperial Army, who briefly served as Governor of Natal around the Anglo-Zulu war in 1879/80, as part of his broader activities on behalf of the British Empire (MDSF, 2020: 30).

5.3.1.2 Sub-Regional Location

Wolseley is located 90 kilometres northeast of Cape Town and 35km northwest of Worcester. It is located 15 kilometres south of Tulbagh in the Land van Waveren Valley, 12 kilometres southwest of Ceres through Michell's Pass. Wolseley is situated between the Waterval mountains to the west and the Skurweberg Mountains to the east.

5.3.1.3 Settlement Role and Function

Wolseley is a secondary service town in the Witzenberg Municipal Area. Wolseley functions as an agricultural support centre and significant place of residence. In the Western Cape SDF, 2014, Wolseley falls within the rural development corridor that extends from Swellendam to Tulbagh, including Robertson, Worcester and Ceres. According to the MSDF 2020, Wolseley is a primary growth centre, with medium socio-economic need and growth potential.

Since the settlement is located on key movement routes, it is an appropriate place for industrial/manufacturing investment. Affordable housing is planned for the western side of the town and infill development is appropriate for future growth of the settlement.

5.3.1.4 Settlement Character and Layout Pattern

Wolseley is established along a north-south axis, made up of Voortrekker Street and the railway line. The railway line runs diagonally north-east through the town towards Ceres. The central area of Wolseley is on Voortrekker Road and concentrated around the historic grid of the town centre.

The centre of Wolseley is primarily characterised by a large square street grid, with free-standing suburban homes set back from the street edge. Property sizes vary in this area, from about 280 – 1500m^2, or more.

Montana is located south of Wolseley town centre and is separated from the centre of town by the railway line and a green space buffer. The grid is largely rectilinear. Houses in this area are located on smaller erven of between 220 – 580m^2, largely made up of low-income housing typologies, which have been adapted and expanded incrementally. Houses are typically set back from the street edge.

Pine Valley is situated in the western part of Wolseley, to the west of the north-south rail line, a stretch of vacant land and Wolseley cemetery. The eastern portion of the area is characterised by free-standing low-income housing on erven of roughly 120m^2 on a rectilinear grid, while the western side of the area is characterised by dense informal housing, some of which is located on a street grid.

Wolseley is in Wards 2 and 7; Ward 7 includes Wolseley town centre, Pine Valley and part of Chris Hani, as well as the surrounding agricultural areas to the north, extending to Tulbagh. Montana and the Wolseley Farms area is in Ward 2 to the south.

5.3.2 Settlement Services and Infrastructure Analysis

5.3.2.1 Water

Wolseley receives its water supply from the Tierkloof Weir, with purification undertaken through pressure filters and chlorination. The Ceres Road Reservoir (680 kl) and the newly constructed 6 Ml Wolseley Reservoir provide storage for the 44 km distribution network, which operates with two pressure zones. The network also includes the 4.5 Ml Stamper Street Reservoir, which has been resealed to prevent water losses, as well as a booster pump station. An additional pump station enables the transfer of irrigation water from the Artois Canal to the reservoir during periods of low flow.

5.3.2.2 Sanitation

The WWTW was upgraded in 2022/23 with the construction of a new chlorine dosing facility. At present, the inlet works at the WWTW are being upgraded at a cost of R14,528,214. However, the scope of the works has been reduced due to funding constraints.

Size (ML/Day)	Technology	Operational Flow (% of design capacity)
3.6	Activated Sludge	25

5.3.2.3 Solid Waste

Wolseley currently generates 4 887 tonnes of waste each year and receives servicing through black and green bin bag provision and general waste collection through pick up and provision of 16 skips.

Illegal solid waste dumping, disposal of household waste in skips intended for garden waste and skips being overfull are challenges that face the municipality.

Wolseley landfill site is currently inoperative, despite having capacity to receive more waste. The landfill closed following civil unrest and vandalism of the site and will not be reopened in the short term. The site requires rehabilitation, at an estimated cost of R28,2m. An informal settlement has been established adjacent to the landfill (within the buffer of the site), posing risks to the community and restricting access to the site.

Strategic management of waste, set out in the IWMP, seeks to improve waste management through public awareness building; and recycling, organic and hazardous waste management practices - programmes that are set to be implemented across the Witzenberg Municipal Area.

There is an option to operate under a regional waste disposal system, with landfill located in Worcester. In the event of its implementation, a transfer station would be established near Wolseley.

The following directives have been provided for improving the waste management in Wolseley:

- Divert organic and hazardous waste into a safe and circular scheme.
- Develop drop-off facilities in each settlement for waste that is not collected, such as builders' rubble, garden refuse and recyclables.

5.3.2.4 Electricity

Wolseley's electrical network is supplied by Eskom by way of a single 11kV bulk metering point, which is located at Wolseley substation. The current Notified Maximum Demand is 5,2 MVA.

The cable capacity for Wolseley is 2,38 MVA and cannot handle the NMD of 5,2 MVA. The 35 mm cables are too small and should be replaced with 70 mm cables. A number of components in the infrastructure supply system do not meet present demands and safety standards and need to be replaced, including oil circuit breakers and outdoor switchgear. Illegal electricity connections, especially in informal settlements, such as the one located in Pine Valley, pose risks to revenue loss and public safety.

5.3.2.5 Transport, Roads & Stormwater

Most roads in the municipality are provincial – providing 1 970km of road network. Major provincial roads around Wolseley include:

- TR22/2 (R46) – which runs from Tulbagh, and runs just north of Wolseley, connecting the settlement to Ceres via Michell's Pass.
- R43 – the R43 splits from the R46, east of Wolseley, and runs south to Worcester.

The municipal roads in Wolseley are mostly made of paved flex and are in good condition, as demonstrated in Table 41 below.

Table 41: Municipal Road Surface Treatment and Extent

Town	Paved Flex (km)	Paved block (km)	Gravel (km)	Total (km)
Wolseley	38.1	0.0	1.8	39.9

The public transport system in the Witzenberg Municipal Area is predominantly supported by the minibus taxi. There is one minibus taxi rank in Wolseley, which has combined loading and holding areas and 5 bays, with adequate capacity. There are currently 5 taxi routes to and from Wolseley, as set out in Table 42 below.

Table 42: Minibus Taxi Routes, Distance and Turnaround Time

Origin Name	Destination Name	Route Distance (Km)	Trip Time (One Way) (min)	Turnaround Time (Cycle Time) (min)
Wolseley	Ceres	17.5	19	38
Wolseley	Wolseley Farms	4	6	12
Wolseley	Artos Station	8.2	9	18
Wolseley	Tulbagh	17.5	18	36
Wolseley	Wellington	64.6	47	94

There is a need to upgrade non-motorized transport infrastructure around Wolseley, by constructing surfaced sidewalks in Hope Street and investigating the possibility of a formal walkway across the open fields in the southern part of Wolseley, into Montana.

5.3.2.6 Human Settlements and Tenure

The analysis of human settlement demand for Wolseley shows that a total of 164.30ha of land will be required over the next 5–20 years to provide for residential development across all income groups.

Table 43, provides a breakdown of the projected demand accounting for expected household growth and the municipal waiting list and illustrates the need across income categories, ranging from subsidised housing (indigent/low income) to gap and market-related housing opportunities (taxable).

The table indicates that 55,85ha of land is required to address the total land required to address housing demand for subsidised housing, including the settlement waiting list and the total estimated additional households that will likely fall within the low-income category. This reflects the number of households still dependent on state-subsidised opportunities.

Land Required:

Land required for the provision of adequate housing across income groups is tabulated below:

Table 43: Land Required

Additional 20 Year Total					
	Subsidised		Taxable		Total Land Required
	WL	Low	Mid	High	
ha	19,64	36,21	86,64	21,82	164,3
%	11,95%	22,04%	52,73%	13,28%	100%

In addition to the current waiting list and the estimated household growth, existing, and the rapid expansion of informal settlements, also contribute to the overall housing need. In 2020 it was estimated that there were about 360 informal structures in Wolseley; this figure has increased significantly to about 3 403 estimated structures in 2025. Table 44 below illustrates the current informal settlements and the number of structures counted in 2020 and 2025.

Table 44: Wolseley Informal Settlements

Informal Settlement & Precinct Name	Zakhele and Pine Valley	
Total Size (ha) of Informal Settlement	43,0	
Date of Establishment	2000	
2020 MSDF	Structures	360
	Population	1 053
2025	Structures (Jan 2025)	3 403
	Population	9 869

Planned Projects:

The Pine Valley Informal Settlement Upgrade, planned from 2026 onwards, targets the upgrading of approximately 3 403 informal structures that currently have limited to no access to basic services, with a combination of in-situ upgrades, super blocks, and the provision of basic services (ABS). Pine Valley 2A is expected to deliver an estimated 120 top structures for qualifying backyard dwellers. In Montana, approximately 700 housing opportunities are planned as part of a long-term top structure project on land to the east of the settlement, subject to the availability of bulk infrastructure, particularly electricity and bulk water storage. In addition, the Kluitjieskraal Development includes the construction of top structures on 10 existing sites.

Land Budget

The land budget addresses the balance between the demand and supply of residential land in Wolseley. The municipal housing waiting list, the current housing pipeline, and projected household growth since the 2019 MSDF, with future projections informed by the MYPE (2024–2035) and a 2.2% growth rate for 2035–2045 is used to determine the demand. To determine "supply" side, account is made of land required to meet the waiting list as well as projected household growth. Projected household growth will be accommodated through opportunities both from within the 2019 urban edge, through infill, repurposing, and allocation of undetermined land, and outside it, where urban edge expansions are guided by strategic settlement roles.

The MSDF proposals constitute 86.85ha of residential land. 9.14ha of additional land for residential development is proposed. The land requirements according to the population projection till 2045 amount to 402ha of residential land, resulting in an undersupply of -677ha.

Table 45: Wolseley Land Budget

Land	Hectares
Proposal in 2020 Edge	77,71
Expansion Proposals	9,14
Total Provision, 2025 MSDF	86,85
Required, 2023 -2025	13
Required 2025 -2035*	323
Required 2035 - 2045	402
Total Required	-651
Undersupply	-677

5.3.2.7 Settlement Challenges

- Aging water and sewage systems require upgrading. Existing issues with capacity and pressure could be further exacerbated by population growth.
- Historical buffer zones of infrastructure and open space that separate different suburbs lead to a fragmented spatial form, rendering spaces disconnected and unsafe for pedestrians.
- Need for enhanced access to Pine Valley for pedestrians and to make crossing the rail line safer for residents.
- Existing informal settlement in Pine Valley is not fully supported by access to a road network and basic networked infrastructure, putting households at risk.

5.3.2.8 Settlement Potential

- Wolseley has strong tourism potential, which can build on existing momentum. The natural beauty surrounding Wolseley is a significant attraction for agritourism and ecotourism, including fruit picking, hiking and bird watching.
- Strong regional road linkages: Proximity to the provincial R46 and R303, which connect to the national N1 is a key advantage for logistics support. The rail connections/infrastructure are also to Wolseley's advantage.
- Additional commercial activity to serve more residents closer to home can be encouraged.

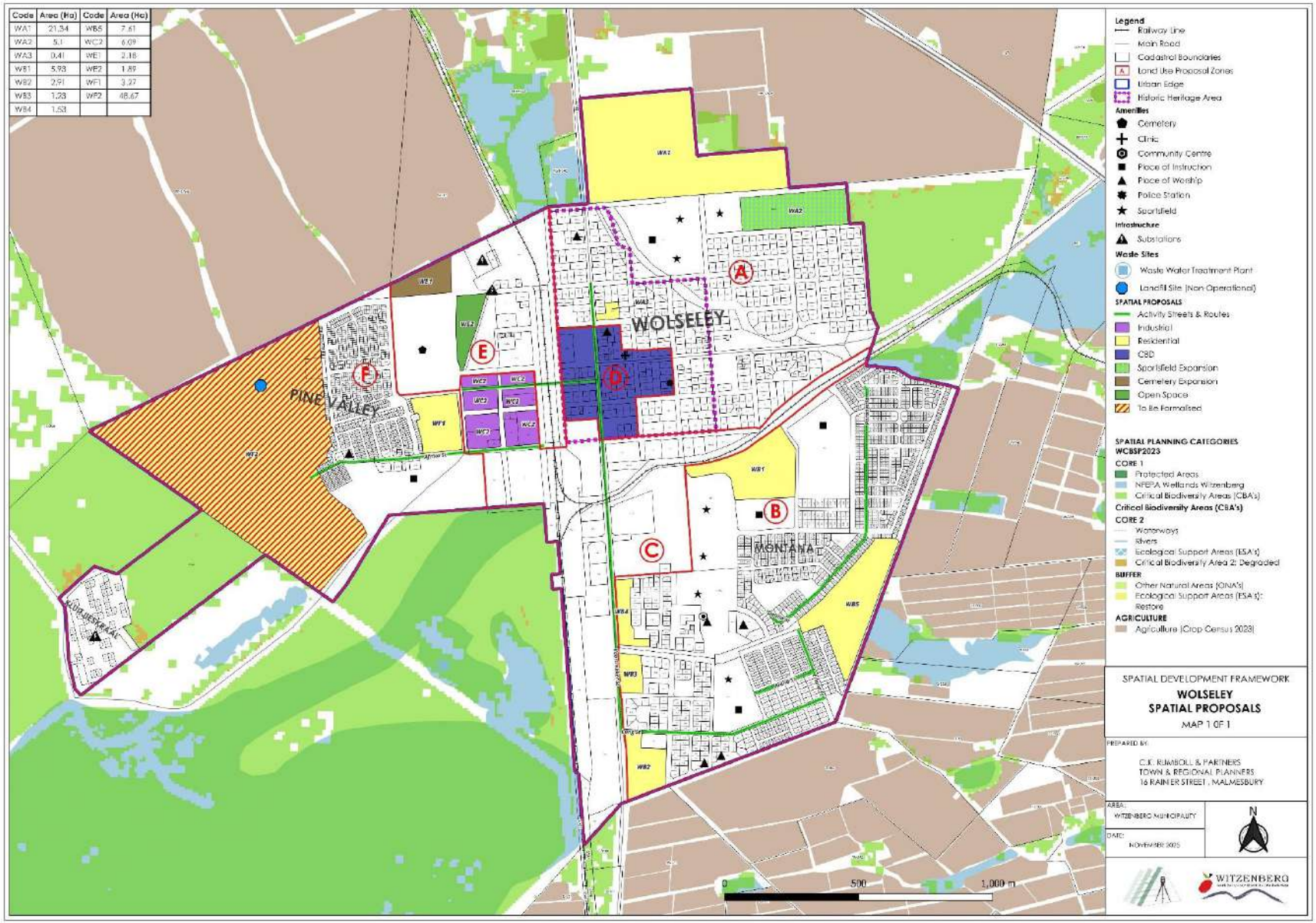
5.3.3 Spatial Proposals

Code	Proposal	Spatial Goal Number
	Public Realm (Amenities) and Beautification	
WN1	Promote the following as activity streets: Voortrekker Street, Afrika Street, Lang Street, Eiland Street, Arend Street, Dahlia Street, Paradys Street.	3
WN2	Promote sensitive densification and a mix of uses in the historic centre of Wolseley.	3
WN3	Investigate viability of implementing a Heritage Conservation Area Overlay Zone for the historic centre of Wolseley.	5
	Mobility and Access (NMT Routes)	
WN4	Upgrade and expand the formal NMT network throughout town, especially focused on improving existing informal desire lines and on class 4 roads.	3
WN5	Improve pedestrian accessibility to Pine Valley and enhance safe crossing of the railway line.	3
WN6	Support the formalisation of walkways with lighting across open fields in the southern part of Wolseley.	3
	Transport Infrastructure (Rail/Transport/Road/Freight)	
WN8	Strengthen trade and mobility corridor along the R46 to Worcester and the Breede River Valley.	5
WN9	Support and promote the conducting of a comprehensive minibus taxi survey to develop appropriate measures for managing and developing taxi ranks and operations, especially of emergent informal ranks.	3
WN10	Lobby for the maintenance of existing facilities for improved and expanded rail services.	5
	Basic Infrastructure, Services and Development	
WN11	Develop Wolseley as the major residential town in Witzenberg.	4
WN12	Allow rezoning of agricultural land north of town for expansion, as cereal production impact is minimal.	4
	Tourism, Economic Development and Industry	
WN13	Encourage light industry, housing, and small-scale factories in mixed-use zones.	2
WN14	Support nodal agri-related development to enhance agri-processing and agri-value chains.	2
	Nature and Conservation	
WN15	Incorporate Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs) into land use planning to prevent fragmentation and maintain ecosystem services.	3
WN16	Delineate high-risk flood, fire and erosion overlay zones (also supports climate resilience and environmental management).	1

5.3.4 Coded Settlement Proposals

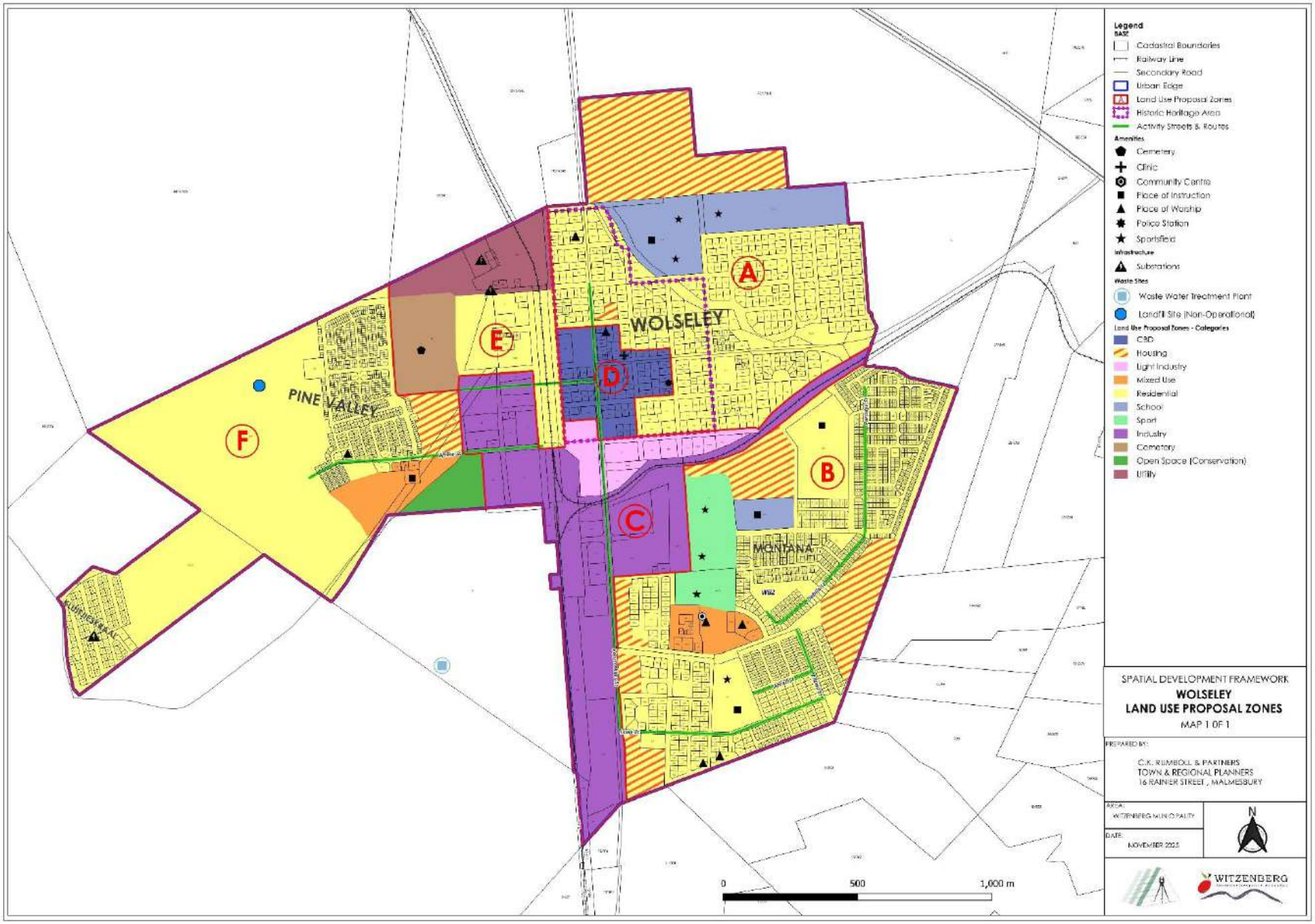
Code	Zone	Use	Proposal	Du/Ha	Area(Ha)	Spatial Goal Number
WA1	A	Residential	Promote mixed-use residential development.		21,34	4
WA2	A	Sports Field Expansion	Support the expansion of existing sports facilities.		5,1	3
WA3	A	Residential	Support medium-density residential development.	20	0,41	4
WB1	B	Residential	Support medium-density residential development.	20	5,93	4
WB2	B	Residential	Support medium-density residential development.	20	2,91	4
WB3	B	Residential	Support low to medium-density residential development.	15-20	1,23	4
WB4	B	Residential	Support low to medium-density residential development.	15-20	1,53	4
WB5	B	Residential	Support medium to high density residential development.	20-60	7,61	4
WC2	C	Industrial	Promote medium to low intensity industrial developments with a low industrial transitional buffer area toward the adjacent residential expansion proposal to the west.		6,09	2
WE1	E	Cemetery Expansion	Promote the expansion of the cemetery.		2,18	3
WE2	E	Open Space	Support and maintain as a public open space.		1,89	3
WF1	F	Residential	Support high density residential development.	60	3,27	4
WF2	F	To Be Formalised	Promote the formalization of existing informal structures.		48,67	3

5.3.5 Settlement Proposal Map



Code	Area (Ha)	Code	Area (Ha)
WA1	21.34	WB5	7.61
WA2	5.1	WC2	6.09
WA3	0.41	WE1	2.18
WB1	5.93	WF2	1.89
WB2	2.91	WF1	3.27
WB3	1.23	WP2	48.67
WB4	1.53		

5.3.6 Land Use Proposal Zones



5.3.7 Land Use Zone Proposals

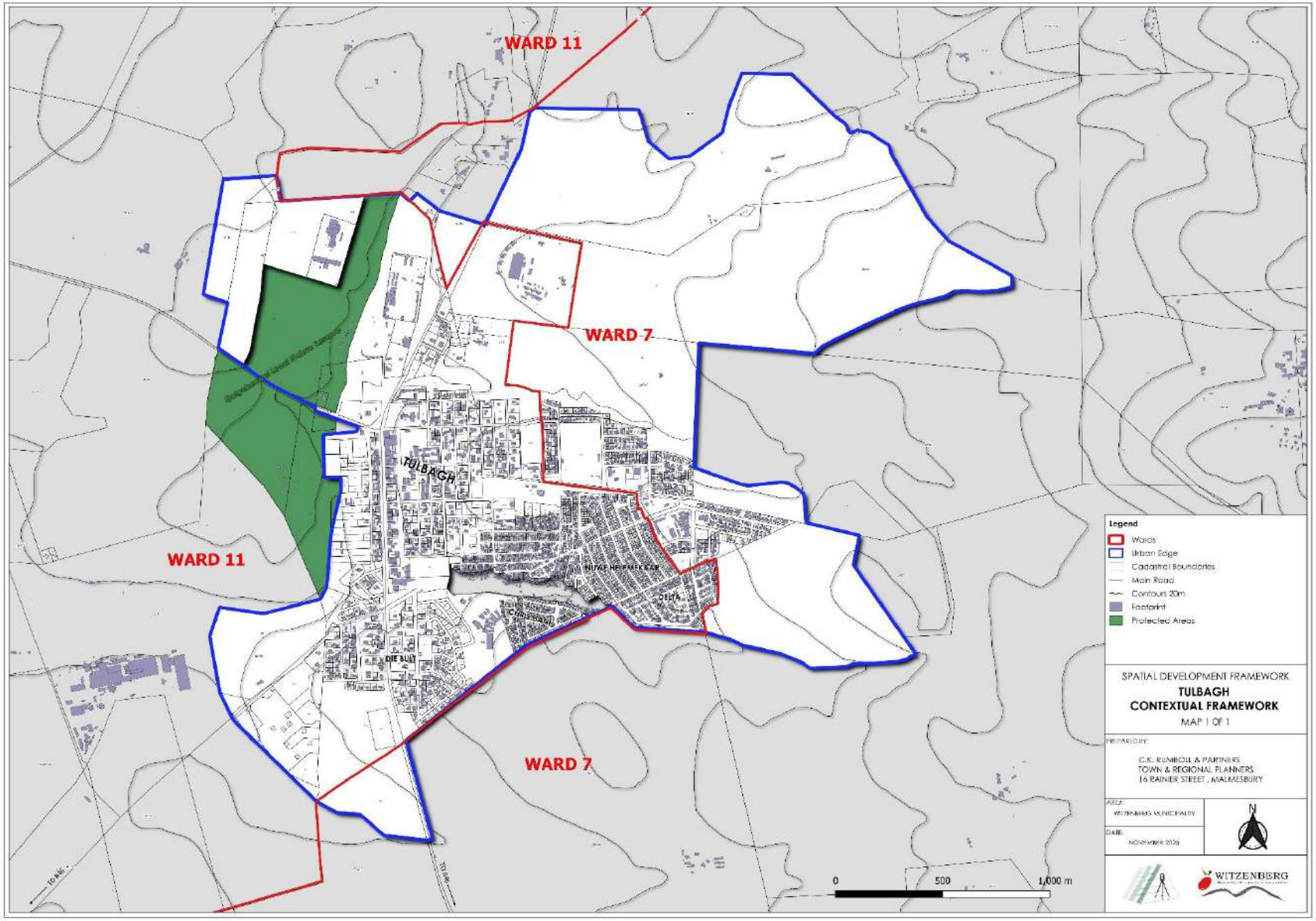
Refer to the land use zone map for Wolseley: The urban area of Wolseley is divided into seven (7) zones (areas with common features) and the recommended land uses for the different zones are listed in the table below:

WOLSELEY LAND USE ZONES		Low Density Residential Uses	Medium Density Residential Uses	High Density Residential Uses	Secondary Educational Uses	Place of Instruction	Professional Services	Business Uses	Secondary Business Uses	Place of Worship	Institution	Guest houses	Authority	Sport/Recreational Facilities	Industries & Service Trade
A	Zone A has a low-density residential character with supporting social services. New development area and sport field expansion identified. A portion of Zone A is located within the historic core, and Wolseley town should be the focus of on-going public space improvement, identification and protection of historic places and assets, and sensitive redevelopment and infill.	X	X	X 4	X	X	X		X 1,4	X	X	X	X	X	
B	Zone B has a mixed density residential character with supportive social services. New development areas identified and earmarked for future development.	X	X	X	X	X	X		X 1,4	X	X	X	X	X	
C	Zone C represents the industrial zone with the opportunity for future expansion.					X	X	X	X	X	X		X	X	X
D	Zone D represents the Central Business District and is located along the main activity corridor through the town where commercial and mixed uses occur. Allow for commercial and other compatible uses to enhance the node. The historic core of Wolseley town should be the focus of on-going public space improvement, identification and protection of historic places and assets, and sensitive redevelopment and infill.	X	X	X	X	X	X	X	X	X	X	X	X	X	X 3
E	Zone E represents a mixed-use development area. Support the expansion of the cemetery.	X	X	X	X	X	X	X	X	X	X	X	X	X	
F	Zone F has a high density residential character. There is a large informal residential settlement where formalisation is required. New development area identified south of cemetery.		X	X	X	X	X	X 1,4	X 1,4	X	X	X	X	X	

(1) Along activity streets/corridors
(2) Flats along activity streets
(3) Only service trade
(4) At proposed future residential development nodes

Business Uses e.g. shop, supermarket, restaurant, offices, service station.
Place of Education e.g. Schools, places of instruction.
Professional Uses e.g. offices like doctors, dentists, attorneys, architects, engineers and town planners.
Secondary Business Uses e.g. neighbourhood business uses such as house shops, small offices and home occupation. House taverns only to be allowed along activity streets in residential areas at discretion of the Municipality.
Secondary Educational Uses e.g. Crèches/daycare.
Medium density residential – only allowed on erven of 2000m² or larger.
*Find description of proposed land uses for development zones in Annexure 4.

5.4 Tulbagh


WARD 11
WARD 7
WARD 11
WARD 7
TULBAGH
Legend
Wards
Urban Edge
Cadastral Boundaries
Main Road
Contours 20m
Footprint
Protected Areas
SPATIAL DEVELOPMENT FRAMEWORK
TULBAGH
CONTEXTUAL FRAMEWORK
MAP 1 OF 1
C.K. RUMBOLL & PARTNERS
TOWN & REGIONAL PLANNERS
16 RAINIER STREET, MALMESBURY
WITZENBERG MUNICIPALITY
NOVEMBER 2024
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WITZENBERG

5.4.1 Situational Analysis

5.4.1.1 Settlement History

According to the MSDF (2012), the Tulbagh valley was known as 'Het Land van Waveren', an Afrikaans name which was given to honour the Waveren family of Amsterdam, which was connected to the mother of Simon van der Stel. Thereafter, the MSDF mentions that farmers began to stream into the well-watered valley after a report relating to the settlement was given by the then Governor.

Figure 28: A panorama of Het Land van Waveren (source: Gordon, Rijksmuseum Collection, accessed 03/09/2025)

According to Augustyn-Clark (2017), the town of Tulbagh is among the oldest towns in South Africa. The establishment of a town can be based on the building of a church, or the establishment of a Drostdy. In this sense, Tulbagh is considered the third-oldest town based on the 1746 establishment of the Roodezandt Church, or the fourth oldest, tied with Graaff-Reinet, based on the 1804 establishment of its Drostdy. The town was named after the Dutch Cape Colony Governor Ryk Tulbagh (Ikin, 2023).

The town underwent substantial reconstruction following the disastrous earthquake of 29 September 1969, which registered 6.4 on the Richter-scale (MSDF 2012). These events rocked the town, causing nine casualties and considerable damage to many of the old buildings. Six months later, a minor earthquake followed, on 14 April 1970.

Figure 29: The Drostdy in state of disrepair after the 1969 earthquake (Source: Strauss, 2022)

Figure 30: A woman demonstrates the level of infrastructure damage caused by the earthquake, by placing her hand in a crack that resulted from the quake (Source: Strauss, 2022)

Figure 29 depicts the aftermath of the earthquake, which left a trail of destruction, and some highly significant buildings in Church Street were destroyed. Whole sections of houses collapsed, many of the soft brick walls burst open, leaving wide cracks and caved-in roofs (Ikin, 2023). The recovery from the earthquake served as impetus to restore and preserve many of the noteworthy heritage buildings on Church Street that form an important component of the tourism industry in Tulbagh today (Strauss, 2022).

5.4.1.2 Sub-Regional Location

Tulbagh is located in the northern settlements area in a valley surrounded by imposing mountain ranges, with the Obiqua Mountains to the west, the Winterhoek Mountains in the north and the Skurweberg Mountains in the east as its natural structuring elements, in the Witzenberg Municipality, Western Cape (MSDF. 2012, 2020).

The settlement was historically accessed via the Roodezand Pass, which made it a key point on the early road out of Cape Town. It is said to have served as the last stop for trekkers before venturing north (Tourism, n.d.). Today, Tulbagh is 90 minutes from Cape Town, firmly located in the Boland Winelands region.

The settlement's position makes Tulbagh an essential location for agri-processing as well as tourism, driven by the town's uniqueness and historic character.

5.4.1.3 Settlement Role and Function

The MSDF (2020) identifies Tulbagh as a secondary service town in Witzenberg Municipality. It functions as an agricultural support hub, with a substantial residential population and tourism sector centred around its historical core. The Tulbagh Magistrate's court serves as the judiciary in this region.

Together with Ceres, it is classified as an emerging agri-processing industry and economic hub given that the Witzenberg IDP (2025/26) maintains Tulbagh's designation as an agricultural service centre.

5.4.1.4 Settlement Character and Layout Pattern

Tulbagh is characterised by its historic Cape Dutch architecture, with many structures dating back to the 18th and 19th centuries (Witzenberg IDP, 2025). The town is largely linear in form, centred on Van der Stel Street, which remains the main corridor of activity. The street's tree-lined footpaths and low-rise buildings contribute to the town's heritage identity. Place character is maintained through street greenery.

Furthermore, Augustyn-Clark (2017) describes Tulbagh's early layout as a 'river-ribbon town', where the first buildings were sited some distance from the river, leaving a fertile alluvial strip between the street and the waterway.

5.4.2 Settlement Services and Infrastructure Analysis

5.4.2.1 Water

Tulbagh's water supply currently relies primarily on the Moordenaarskloof and Tierkloof sources, supplemented by an additional 1,2 million m³/a from the Klein Berg River following the completion of new infrastructure. Although boreholes were drilled adjacent to Nuwekloof Pass, the yields proved insufficient for supplying the town. The Moordenaarskloof resource is shared equally with SAPCO and Kruys Valley, placing further pressure on available capacity. The existing Dorpsdam remains inadequate to meet storage needs, resulting in annual water restrictions. To address these constraints, the Department of Water and Sanitation (DWS) approved funding for the construction of the Waverenskroon Dam, pump station, and rising main, which have now been completed and are fully operational.

5.4.2.2 Sanitation

The Tulbagh Wastewater Treatment Plant was upgraded in 2015. The associated sewer system includes three booster pump stations.

Size (ML/Day)	Technology	Operational Flow (% of design capacity)
2.46	Activated Sludge	73

5.4.2.3 Solid Waste

The Tulbagh landfill has been closed. A variation waste management license was granted in 2016 but has been set aside after a legal process ruled that the landfill is no longer viable for operations. The site needs to be rehabilitated, at a cost of R33m (IDP 2025 – 26). There is currently a drop-off facility in Tulbagh, which receives garden waste, builders' rubble and recyclables. Weekly black bag pick-up for residential and commercial properties is carried out, with skips provided for garden waste.

5.4.2.4 Electricity

Tulbagh's electrical network is supplied via a bulk 11kV metering point from Eskom's Tulbagh Substation. According to the Municipal Planning Support Report (MPSR), the town's maximum demand (NMD) averaged 4,500 kVA between 2015 and 2017. The study also highlighted the capacity for renewable energy integration without compromising grid stability.

According to the 2025/26 IDP, the future growth of Tulbagh will increase the NMD by 4 MVA. Upgrading the backbone infrastructure to increase NMD capacity is a municipal-wide challenge.

5.4.2.5 Transport, Roads & Stormwater

The road network in Tulbagh is predominantly made up of paved flex, with a few gravel roads. The table below provides an overview of the road network.

Table 46: Type and Extent of Road Network in Tulbagh

Paved Flex (km)	Paved block (km)	Gravel (km)	Total (km)
29.3	0.7	3.3	33.4

Tulbagh's road infrastructure includes a bridge in good condition, although a follow-up inspection is pending for the Twee Jonge Gezellen Street Bridge.

Notably, Tulbagh and Prince Alfred Hamlet are the only towns in the municipality with formal stormwater plans. However, existing infrastructure is insufficient during heavy rainfall, leading to infrastructure failure due to flooding and access issues.

There are six minibus taxi routes that operate from Tulbagh. The minibus taxi rank on Van der Stel Street has four available bays. During the observation period for the ITP in 2020, these bays were occupied to capacity and over capacity.

Table 47: Minibus Taxi Routes

Origin Name	Destination Name	Route Distance (Km)	Turnaround Time (Cycle Time) (min)
Tulbagh	Tulbagh Railway Station	6	16
Tulbagh	Wellington	53.1	78
Chris Hani Tulbagh	Tulbagh Railway Station	-	-
Chris Hani Tulbagh	Wolseley	17.5	32
Chris Hani Tulbagh	Worcester	60.3	94
Chris Hani Tulbagh	Wellington Railway Station	51.4	74

Van der Stel street only has one functional sidewalk and is broad, making the street dangerous for pedestrians. There is also an open stormwater channel on Van der Stel Street, which is unsafe for pedestrians. An upgrade to this infrastructure is needed, along with surfaced sidewalks on Steinthal Street, Obiqua Street and Olifant Street. The Tulbagh precinct plan, which is estimated to cost about R7.2 million, also seeks to improve connectivity and accessibility in Tulbagh.

5.4.2.6 Human Settlements and Tenure

Tulbagh has an estimated housing land demand of approximately 149,33 hectares to address the current and projected need across income groups, inclusive of the existing waiting list. Of this demand, 29% relates to subsidised housing requirements, while the remaining 70% is attributed to middle- to higher-income households (private housing).

Land required:

Land required for the provision of adequate housing across income groups is tabulated below:

Additional 20 Year Total					
	Subsidised		Taxable		Total Land Required
	WL	Low	Mid	High	
ha	14,97	28,36	74,23	31,76	149,33
%	10,02%	18,99%	49,71%	21,27%	100,00%

Informal Settlements:

In addition to the current waiting list and the estimated household growth, existing and rapidly expanding informal settlements also contribute to the overall housing need. In 2020 it was estimated that there were about 699 informal structures in Tulbagh; this figure has increased significantly to about 2 926 estimated structures in 2025. The table below illustrates the current informal settlements and the number of structures counted in 2020 and 2025.

Informal Settlement Name	Extent (ha)	Date of Establishment	2020 MSDF		2025	
			Structures	Pop	Structures (January 2025)	2025 Population
Helpmekaar	7,17	2013	521	1 560	1 402	4 066
Aslakamp	2,46				1 265	3 669
Die Gaatjie	0,57		48	47	162	470
Kleinbegin	0,38	2012	130	390	97	281
	10,58		**699**	**1 950**	**2 926**	**8 485**

Planned Projects:

The municipal housing pipeline identifies several projects aimed at addressing the backlog. The Tulbagh 427 Housing Project, initiated in 2013, remains incomplete due to illegal occupation of sites, and can only proceed once the current occupiers have been reallocated (see Project 5). Similarly, the Tulbagh ASLA Camp, located on 10 industrial erven adjacent to the Tulbagh 427 site, is fully occupied by informal structures and is subject to the same reallocation process, with land acquisition currently underway. A major

planned intervention is the Tulbagh New Housing Project (1000 sites), scheduled for 2026–2033 on private farmland to the east of Tulbagh. This integrated township development will require land acquisition, township establishment, environmental authorisation, bulk services provision, and the construction of serviced sites. The estimated cost of bulk services is R60 million, with an additional R70 million required for internal infrastructure. The project's implementation is dependent on the availability of funding and bulk electricity, with planning expected to commence in 2026.

Land Budget:

The land budget addresses the balance between the demand and supply of residential land in Tulbagh. The municipal housing waiting list, the current housing pipeline, and projected household growth since the 2019 MSDF, with future projections informed by the MYPE (2024–2035) and a 2.2% growth rate for 2035–2045 is used to determine the demand. To determine "supply" side, it accounts for land required to meet the waiting list and projected household growth, drawing from opportunities both within the 2019 urban edge, through infill, repurposing, and allocation of undetermined land, and outside it, where urban edge expansions are guided by strategic settlement roles.

The MSDF supplies 332.48ha of residential land of which 62.4ha is proposed as new residential development. The residential land requirements according to the population projection till 2045 amount to 340ha, resulting in an undersupply of -292ha.

Land	Hectares
Proposal in 2020 Edge	270,08
Expansion Proposals	62,4
Total Provision, 2025 MSDF	332,48
Required, 2023 -2025	11
Required 2025 -2035*	273
Required 2035 - 2045	340
Total Required	624
Undersupply	-292

5.4.3 Settlement Challenges

Informal settlement: The informal settlement located in Tulbagh has no basic level of service, the river is polluted which poses a health and environmental threat, and people live in dire conditions.

Waste Management: the reliance on a waste management system that is combined in Ceres, could pose challenges in efficiency and scalability based on the population growth. The completion of the regional waste facility in Worcester in 2026 should address this constraint.

Water Storage Shortage: the 2025/26 IDP indicates that water restrictions are in place in Tulbagh because of inadequate water storage, an issue which is being addressed through the construction of a new storage dam, which is projected to take three years to complete.

Electricity Supply: the current limit on the notified maximum demand for Wtizenberg limits the economic and urban growth potential of Tulbagh.

5.4.3.1 Settlement Potential

This further demonstrates the growth and capacity that the settlement may possess to address its social needs, building on its existing economic strengths and potential industrial capacity.

Moreover, its layout provides an opportunity for green corridors in the north and east, adjacent to communities which could be developed as peri-urban farming areas (Witzenberg SDF 2020).

Economic Growth Potential: Tulbagh shows strong economic growth potential, particularly in agri-processing, skills development, and agritourism. As home to the country's oldest wine co-operative, it has a strategic advantage. Recognised by the CWDSDF (2021) as a secondary regional service centre, the town is expanding post-harvest agri-business services and could attract trade and economic opportunities for both Tulbagh and the wider Witzenberg area.

Tourism Growth Potential: Tulbagh's heritage value, which is already well supported by the existing LTA, has the potential to expand further, with the potential to grow the labour market.

Strengthening Place Identity: The municipal IDP outlines that precinct planning had previously been undertaken to link different nodes. The precinct plan promotes place-making principles such as beautifying the area, increasing mobility access and applying NMT principles (Witzenberg IDP, 2025).

5.4.4 Settlement Proposals

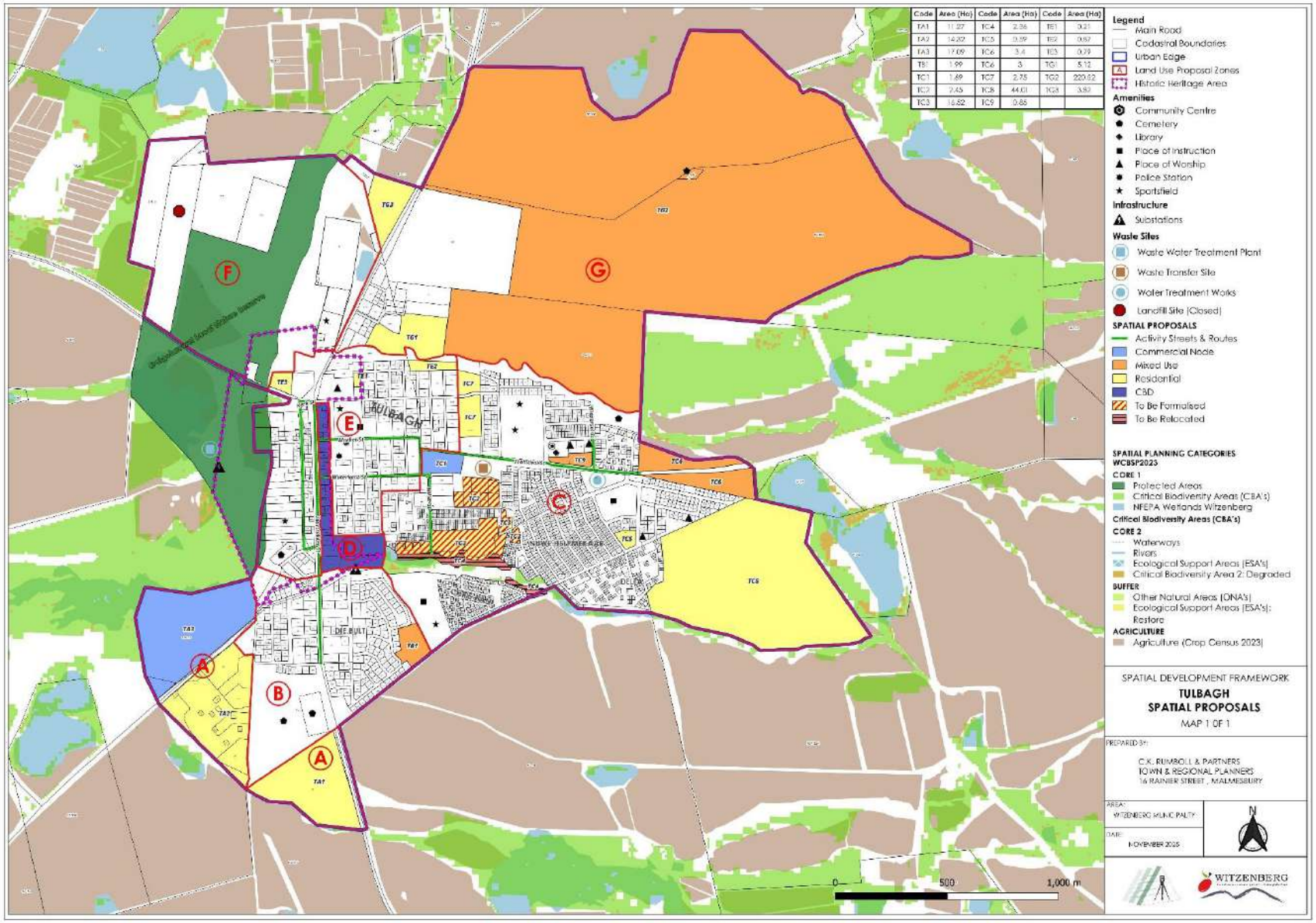
Code	Public Amenities, Heritage & Beautification	Spatial Goal Number
TN1	Implement the Tulbagh Precinct Plan for public realm upgrades to connect nodes, beautify the area, and improve vehicular, pedestrian and cycling movement.	3
TN2	Promote the development of a Heritage Walk linking heritage buildings.	5
TN3	Protect and maintain Church and Van der Stel Streets as heritage and conservation assets.	5
TN4	Promote Van der Stel Street, Waterkant Street, Steinthal Road and Market Street as activity streets.	3
TN5	Improve the pedestrian interface and provide additional parking along Van der Stel Street in a manner that is sensitive to the heritage value of the area.	3
TN6	Adhere to the architectural guidelines as set out in the August 2019 Tulbagh Heritage Survey Report and Inventory.	5
	Mobility and Access (NMT Routes)	
TN7	Enhance public open spaces, cycle paths, and green pedestrian connections through the heritage core.	6
TN8	Upgrade the NMT infrastructure on the western side of Van der Stel Street and expand the formal NMT network throughout town, especially on class 4 collector routes.	3
TN9	Implement traffic calming and pedestrian crossings on Van der Stel Street.	3
TN10	Implement scholar safety measures. Enhance crossings and speed management measures around schools.	3
	Transport Infrastructure (Rail / Transport / Road / Freight)	
T11	Encourage the development of western and eastern bypasses to redirect heavy traffic away from the village core.	4
T12	Promote the redesign of Van Der Stel Street with: - One-way traffic pattern and roundabouts. - Bioswale stormwater system, pedestrian crossings, and tree-lined sidewalks.	3
	Basic Infrastructure, Services and Development	
T13	Upgrade and improve stormwater system.	3
T14	Retain Tulbagh's heritage village character by limiting large-scale or high-rise development, and prioritise the revitalisation and adaptive reuse of existing buildings over new residential or industrial expansion.	5
T15	Promote Tulbagh as a Heritage and Tourism Village by prioritising cultural revitalisation through museums, neo-traditional architecture, and restored facades, while encouraging tourism-focused businesses such as arts, culture, and hospitality, and discouraging general retail expansion.	5
T16	Support nodal agri-related development to enhance agri-processing and agri-value chains.	2

T17	Preserve the northern valley for export fruit and wine agriculture.	2
T18	Promote the following as activity streets: Market Street, Voortrekker Street, Steinthal Road, Waterkant Street, Miller Street, Kiepersol Street, and Church Street.	3
	Nature and Conservation	
T19	Encourage the rehabilitation of the Tulbagh Nature Reserve to meet biodiversity targets.	3
T20	Sustain river rehabilitation programme. Retain the green corridor along the river west of the town.	3
T21	Uphold the Conservation Area Overlay Zone protecting the historic core.	5

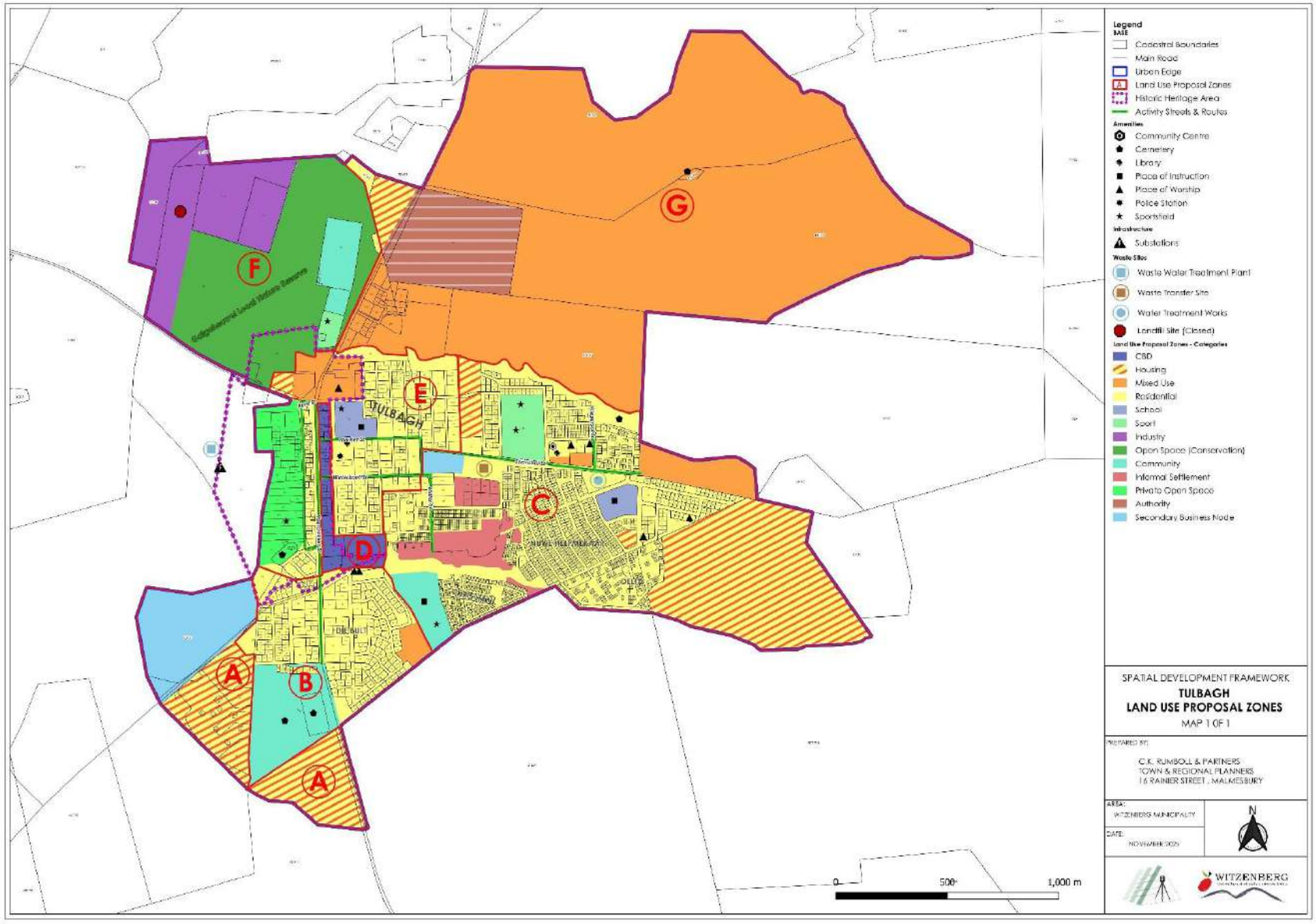
5.4.5 Coded Settlement Proposals

Code	Zone	Use	Description	Du/Ha	Area(Ha)	Spatial Goal Number
TA1	A	Residential	Promote medium to low-density residential development.	15-20	11,27	4
TA2	A	Residential	Promote medium to low-density residential development.	15-20	14,32	4
TA3	A	Commercial Node	Support the development of commercial uses.		17,09	4
TB1	B	Mixed Use	Promote mixed use development including commercial and community-oriented uses.		1,99	4
TC1	C	Commercial Node	Support the development of commercial uses.		1,69	4
TC2	C	To Be Formalised	Promote the formalisation of existing informal structures.		2,45	3
TC3	C	To Be Formalised	Promote the formalisation of existing informal structures.		7,55	3
TC4	C	To Be Relocated	Prioritise the relocation of informal structures located on riverbank / River Floodline.		0,57	3
TC5	C	Residential	Promote and encourage infill residential development.		0,59	4
TC6	C	Mixed Use	Promote mixed use development including commercial and community orientated uses.		6,4	4
TC7	C	Residential	Promote mixed-density residential development as a transitional residential area.		2,75	4
TC8	C	Residential	Promote mixed density residential development.		44,01	4
TC9	C	Mixed Use	Promote mixed use development including residential (GAP), commercial and community orientated uses.		0,85	4
TE1	E	Residential	Encourage low density to medium infill residential development.	15-20	0,21	4
TE2	E	Residential	Encourage low density to medium infill residential development.	15-20	0,87	4
TE3	E	Residential	Encourage low density to medium residential development.	15-20	0,79	4
TG1	G	Residential	Support mixed density infill residential development.		5,12	4
TG2	G	Mixed Use	Promote mixed use development.		220,52	4
TG3	G	Residential	Promote medium to low density residential development.	15-20	3,82	4

5.4.6 Settlement Proposal Map



5.4.7 Land Use Proposal Zones



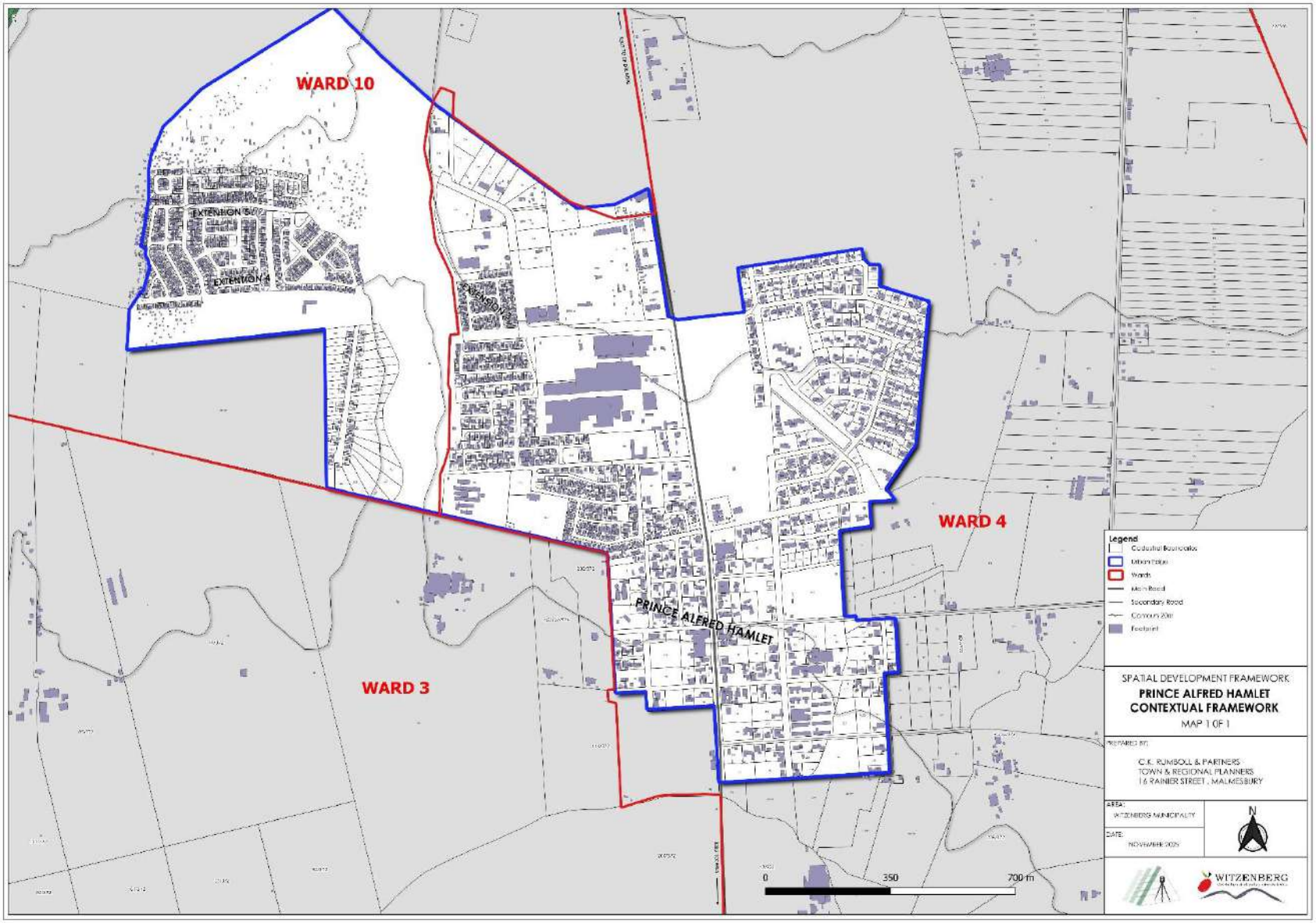
5.4.8 Land Use Zone Proposals

Refer to the land use zone map for Tulbagh: The urban area of Tulbagh has been divided into seven (7) zones (areas with common characteristics) with the relevant development potential relating to specific land uses for every zone.

TULBAGH LAND USE ZONES		Low Density Residential Uses	Medium Density Residential Uses	High Density Residential Uses	Secondary Educational Uses	Place of Instruction	Professional Uses	Business Uses	Secondary Business Uses	Place of Worship	Institution	Guest houses	Authority	Sport/Recreational Facilities	Industries & Service Trade
A	Zone A represents a new development node. Allow for mixed density residential uses.	X	X	X	X		X			X	X	X	X	X	
B	Zone B has low density residential character and encompasses the Tulbagh South Cemetery. Allow for expansion of cemetery. Support mixed use development at identified node.	X	X	X 1,2	X	X	X		X 1,2	X	X	X	X	X	
C	Zone C has a predominantly high-density residential character with supporting social services. Areas identified for formalisation where informal settlements occur with a small area earmarked for relocation. Proposed expansion areas identified for possible residential development with supportive services.		X	X	X	X	X	X 2,3	X 1,2 3	X	X	X	X	X	X 4
D	Zone D represents the Central Business District and is located along the main activity corridor through the town where commercial and mixed uses occur. Allow for commercial and other compatible uses to enhance the node. A portion of the CBD is located within the historic core of the town and is protected and managed as a Conservation Area Overlay Zone in terms of the Zoning Scheme. The 2018 inventory that was completed for the town should be considered when applying for new development or refurbishment within the town center to encourage the maintenance of the unique historic character of the town.	X	X	X	X	X	X	X	X	X	X	X	X	X	X 4
E	Zone E has a low-density residential character with supporting social infrastructure with limited opportunity for infill development. A portion of Zone E is located within the historic core of the town and is protected and managed as a Conservation Area Overlay Zone in terms of the Zoning Scheme. The 2018 inventory that was completed for the town should be considered when applying for new development or refurbishment within the town centre to encourage the maintenance of the unique historic character of the town.	X	X	X 1	X	X	X		X 1	X	X	X	X	X	
F	Zone F represents a portion of the Tulbagh Local Nature Reserve and incorporates the showgrounds, town hall and sports fields.						X				X	X	X	X	X 5
G	Zone G represents a mixed use area with identified new development areas for future residential and mixed use developments.	X	X	X	X	X	X	X 2,3	X 2,3	X	X	X	X	X	

(1) Along activity streets/corridors (2) At identified business or mixed use nodes (3) At proposed future residential development nodes (4) Only service trades (5) At identified industrial node	**Business Uses** e.g. shop, supermarket, restaurant, offices, service station **Place of Education** e.g. schools, places of instruction. **Professional Uses** e.g. offices like doctors, dentists, attorneys, architects, engineers and town planners. **Secondary Business Uses** e.g. neighbourhood business uses such as house shops, small offices and home occupation. House taverns only to be allowed along activity streets in residential areas at discretion of the Municipality. **Secondary Educational Uses** e.g. Crèches/day care. **Medium Density Residential** – only allowed on erven of 2000m² or larger. *Find description of proposed land uses for development zones in Annexure 4.

5.5 Prince Alfred Hamlet



5.5.1 Situational Analysis Settlement History

Prince Alfred Hamlet was established on the farm Wagenboomsrivier. Johannes Cornelis Goosen was a farmer who was born in Klein Drakenstein and came to the Warm Bokkeveld as a young man. Goosen bought the farm Wagenboomsrivier from George Sebastiaan Wolfaardt in March 1851. Ten years later he measured out and sold 90 plots. These plots had water rights, and each owner also received one plot of land to cultivate in the Bakovenrivier to grow and feed their animals (Ceres Museum, online).

While Goosen was subdividing the land, the Duke of Edinburgh, Prince Alfred, visited the Cape Colony. Goosen decided to name the new town after the prince and so the name Prince Alfred Hamlet was established. A Town Council was inaugurated on 8 December 1874 and on 28 December 1910 the town was given the status of Municipality under the Municipality Law of 1882. In 1926 a Town Hall was built and in 1979 the offices next to it were added (Ceres Museum, online).

5.5.1.1 Sub-Regional Location

Prince Alfred Hamlet is situated 10 km north of Ceres along the R303, with the Gydo Pass to the north. It lies east of the Skurweberg Mountains and south-west of the Gydo Mountain range. This area is strategic for intensive agricultural activities because of the favourable weather conditions and abundance of natural resources. The settlement has a dispersed character, which could contribute to further segregation, as such, better spatial integration is needed to support the functionality of the settlement for residents and the broader municipality.

5.5.1.2 Settlement Role and Function

Prince Alfred Hamlet is recognised for its historical value, agricultural base, and growing tourism sector. The Cape Winelands District Spatial Development Framework (2021) identifies it as a secondary regional service centre that plays a support role to Ceres. Additionally, in the National Spatial Development Framework (2022), the town is defined as a rural service centre operating within an eco-resource production region. The Prince Alfred Hamlet Station, which integrates housing and employment functions, is also located in this settlement, enhancing its role as a local economic node.

5.5.1.3 Settlement Character and Layout Pattern

The R303, which runs along a north-south axis, forms the main road of Prince Alfred Hamlet, Voortrekker Street. There is a small commercial node on the main road, as well as a civic node. Du Toit Groente, which has an agri-industrial character is located on the western side of Voortrekker Street.

Residential areas are structured, and the layout reflects a combination of historic core and agriculture. The area to the east of Voortrekker Street is characterised by large suburban plots with houses set back from the street. The residential areas to the west are also set back from the street, on smaller plots, with signs of incremental densification. A residential area, which is accessed via Wabooms Avenue, is located to the west of the Wabooms River, with houses displaying the

characteristics of low-income GAP/RDP housing. Informal settlements have been established on the outskirts of this area.

5.5.2 Settlement Services and Infrastructure Analysis

5.5.2.1 Water

Prince Alfred Hamlet receives its water supply from multiple sources, including the Wabooms River Weir, a natural fountain, three boreholes, and a connection via the agricultural pipeline network from the Koekedouw Dam. Owing to the good quality of the raw water, treatment is limited to chlorination. Storage is provided by four reservoirs with a combined capacity of 2 Ml (4 × 500 kl), which supply the 32 km distribution network operating within a single pressure zone.

5.5.2.2 Sanitation

Prince Alfred Hamlet is on the same sewer network as Ceres, Nduli and Bella Vista and drains to the Ceres wastewater treatment plant. There are three pump stations in Prince Alfred Hamlet that enable the drainage of sewerage into this system.

5.5.2.3 Solid Waste

According to the Integrated Waste Management Plan, 2021, black bin household waste is collected at least once a week to formal households. Households living in informal settlements are provided with black and green bags and skips. Skips are used in informal settlements and in all towns for garden refuse and C&D waste storage. There are currently 77 skips (6 m^3) placed in the Witzenberg Municipal Area. The number of skips in Prince Alfred Hamlet is 12.

According to the IDP (2025/26) the landfill site in Prince Alfred Hamlet is the only operational waste disposal site in Witzenberg. The site is fenced, and access control has been implemented since 2024. These measures have reduced unauthorised access, which was contributing to fires on the site.

5.5.2.4 Electricity

Electricity is supplied by Eskom. However, complete dependency on Eskom may pose a threat, particularly during loadshedding. This is also due to the bulk infrastructure not having the capacity to handle the demand.

5.5.2.5 Transport, Roads & Stormwater

The town's road network, which totals 22.4km, consists largely of paved flex roads, with some gravel roads.

Stormwater:

Two main culverts (Voortrekker Street and Waboom Street) manage stormwater runoff and are currently in average to acceptable condition. Essentially, this limits its potential to develop a well-functioning road network. However, like other functional areas, the area is mentioned as one that will be evaluated in the Roads Master Plan where the vision is "to provide a safe, reliable, effective and efficient road and transport system to serve the public of Witzenberg Municipality" (Witzenberg IDP 2025).

Non-Motorised Transport:

The R303 runs through the town and is called Voortrekker Street. The provision of sidewalks along Voortrekker Street is adequate, although there is no overhead lighting. There are sections of the street network in the town that do not currently have sidewalks.

5.5.2.6 Human Settlements and Tenure

The analysis of human settlement demand for Prince Alfred Hamlet shows that a total of 97.56ha of land will be required over the next 5–20 years to provide for residential development across all income groups.

The table below, provides a breakdown of the projected demand accounting for expected household growth and the municipal waiting list and illustrates the need across income categories, ranging from subsidised housing (indigent/low income) to gap and market-related housing opportunities (taxable).

The table indicates that about 37,52ha of land is required to address the total land required to address housing demand for subsidised housing, including the settlement waiting list and the total estimated additional households that will likely fall within the low-income category. This reflects the number of households still dependent on state-subsidised opportunities.

Land Required:

Additional 20 Year Total					
	Subsidised		Taxable		Total Land Required
	WL	Low	Mid	High	
ha	18,41	19,11	47,59	12,46	97,56
%	18,87%	19,59%	48,78%	12,77%	100%

Informal Settlements:

In addition to the current waiting list and the estimated household growth, existing, and the rapid expansion of informal settlements also contribute to the overall housing need. There are no records of informal structures in Prince Alfred Hamlet in 2020 but 2025 records indicate that there are about 1 013 informal structures in the settlement.

Planned projects:

The municipal housing pipeline identifies several interventions to address the backlog. The Pine Valley Informal Settlement Upgrade, planned from 2026 onwards, targets the upgrading of approximately 3 403 informal structures that currently have limited to no access to basic services, with a combination of in situ upgrades, super blocks, and the provision of basic services (ABS). Pine Valley 2A is expected to deliver an estimated 120 top structures for qualifying backyard dwellers. In Montana, approximately 700 housing opportunities are planned as part of a long-term top structure project on land to the east of the settlement, subject to the availability of bulk infrastructure, particularly electricity and bulk water storage. In addition, the Kluitjieskraal Development includes the construction of top structures on 10 existing sites.

Land Budget:

The land budget addresses the balance between the demand and supply of residential land in Prince Alfred Hamlet. The municipal housing waiting list, the current housing pipeline, and projected household growth since the 2019 MSDF, with future projections informed by the MYPE (2024–2035) and a 2.2% growth

rate for 2035–2045 is used to determine the demand. To determine "supply" side, account is made of land required to meet the waiting list and projected household growth, drawing from opportunities both within the 2019 urban edge, through infill, repurposing, and allocation of undetermined land, and outside it, where urban edge expansions are guided by strategic settlement roles.

The MSDF supplies 21.03ha of residential land of which 18.92ha is proposed as new residential development. The residential land requirements according to the population projection till 2045 amount to 216ha, resulting in an undersupply of - 376ha.

Land	Hectares
Proposal in 2020 Edge	2,11
Expansion Proposals	18,92
Total Provision, 2025 MSDF	21,03
Required, 2023 -2025	7
Required 2025 -2035*	174
Required 2035 - 2045	216
Total Required	397
Undersupply	-376

5.5.2.7 Settlement Challenges

Infrastructure: The town faces increasing infrastructure strain because of population growth and urban expansion. Challenges include capacity constraints in basic service provision, especially in informal areas, and ageing infrastructure.

Waste Management: Prince Alfred Hamlet is the only settlement in Witzenberg municipal area with an operational landfill site. All waste is disposed of in the site, and this creates a health and safety challenge for the relatively small communities.

5.5.2.8 Settlement Potential

Growth Potential through Sensitive Infill: The 2020 MSDF identified Prince Alfred Hamlet as a settlement with significant growth potential in the Witzenberg region. There are numerous strategically located parcels of land within the urban edge of the settlement that remain either undeveloped or underutilised (MSDF 2020). These sites present the opportunity for sensitive infill development, which could contribute to more efficient land use and improved spatial integration.

Small-Scale Farming: The areas to the north of the town and between Kliprug and the historic core present opportunities for small-scale farming and urban gardening (Witzenberg SDF, 2020). According to the CWDSDF (2021), these initiatives may be able to enhance food security, beautify the town, and support local tourism.

Tourism Route: a particular scenic route has been established, which has the potential to boost the tourism sector, namely the R303 from Ceres via Prince Alfred Hamlet and Op-die-Berg to Citrusdal overlooking the Witzenberg Pass (MSDF 2020).

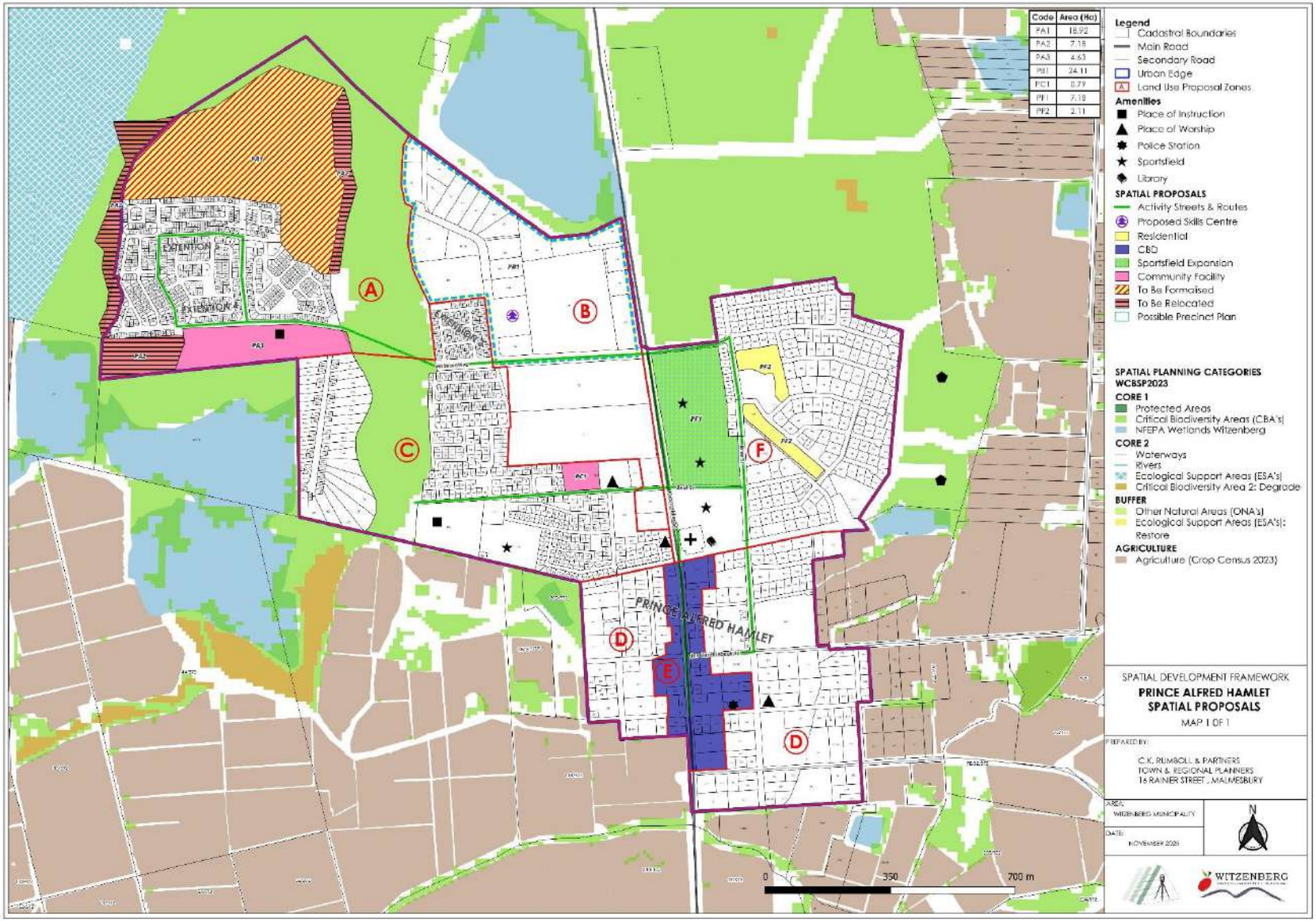
5.5.3 Settlement Proposals

Category	Code	Proposal	Spatial Goal Number
Public Realm (Amenities) and Beautification	PN1	Encourage the investigation of the implementation of a Heritage Conservation Area Overlay Zone for the historic centre of PAH.	3
	PN2	Upgrade and expand street lighting, prioritising high footfall areas.	3
Mobility and Access (NMT Routes)	PN3	Promote the formalisation of NMT and create a link between Ceres and Bella Vista through improved roads and NMT links.	4
	PN4	Support the expansion of the NMT network, e.g., Waboom Avenue.	3
Transport Infrastructure (Rail / Transport / Road / Freight)	PN5	Promote the following streets/sections of streets as activity corridors: Voortrekker Street, Reid Street, Waboom Avenue,	3
	PN6	Investigate the need and viability of connecting Reid Street and Hugo Street.	4
Basic Infrastructure, Services and Development	PN7	Maintain Prince Alfred Hamlet's semi-rural village character by focusing on residential use, improving basic services, and promoting greening without large-scale expansion.	4
	PN8	Promote sensitive and strategic densification on and around sites zoned for business, general residential and community.	1
Tourism, Economic Development and Industry	PN9	Support nodal agri-related development to enhance agri-processing and agri-value chains.	1
	PN10	Promote the following as activity streets: Jan Van Riebeek Street, Waboom Avenue, Reid Street, Voortrekker Street.	6
Nature and Conservation	PN11	Protect valuable agricultural land to the west and south by prioritising development to the north.	3
	PN12	Ground-truth and integrate Critical Biodiversity Areas (CBAs) into the zoning scheme.	3
	PN13	Develop a river maintenance plan by delineating and protecting ecological corridors and buffers in the riparian zone and associated wetlands, and biodiversity hotspots.	3

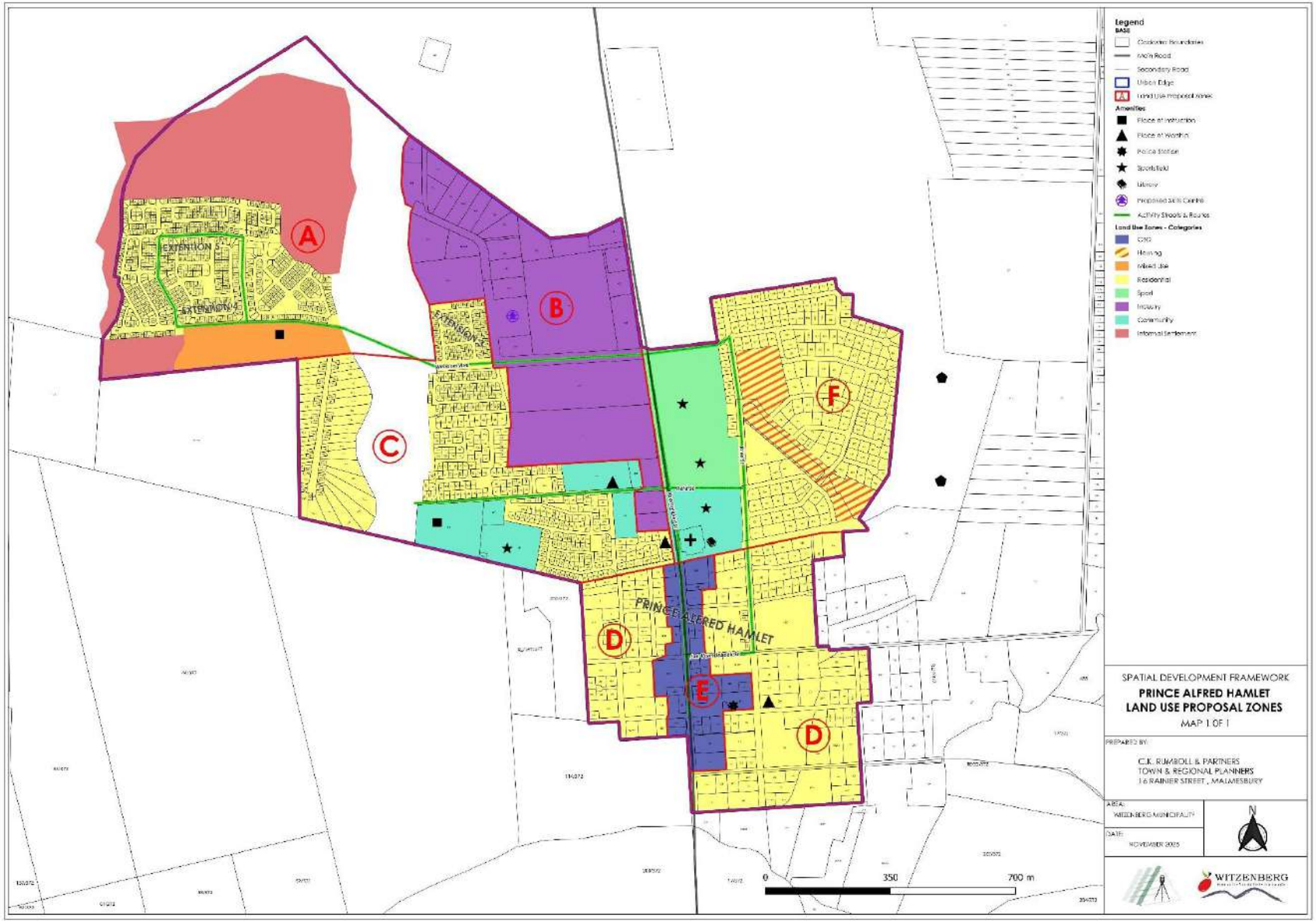
5.5.4 Coded Settlement Proposals

Code	Zone	Use	Proposal	Du/Ha	Area(Ha)	Spatial Goal Number
PA1	A	To Be Formalised	Promote the formalisation of existing informal structures.		18,92	3
PA2	A	To Be Relocated	Prioritise the relocation of existing informal structures.		7,18	3
PA3	A	Community Facility	Support mixed use development including commercial, residential and community uses.		4,63	4
PB1	B	Possible Precinct Plan	Encourage the preparation of a precinct plan to guide the redevelopment of the area, enhance investor appeal, and improve overall safety and public environment.		24,11	4
PC1	C	Community Facility	Promote the development of a community facility.		0,79	3
PF1	F	Sportsfield Expansion	Promote mixed use development including uses such as mixed-density residential, community and commercial uses.		7,18	4
PF2	F	Residential	Promote low to medium density infill residential development.	15	8,56	3

5.5.5 Settlement Proposal Map



5.5.6 Land Use Proposal Zones



5.5.7 Land Use Zone Proposals

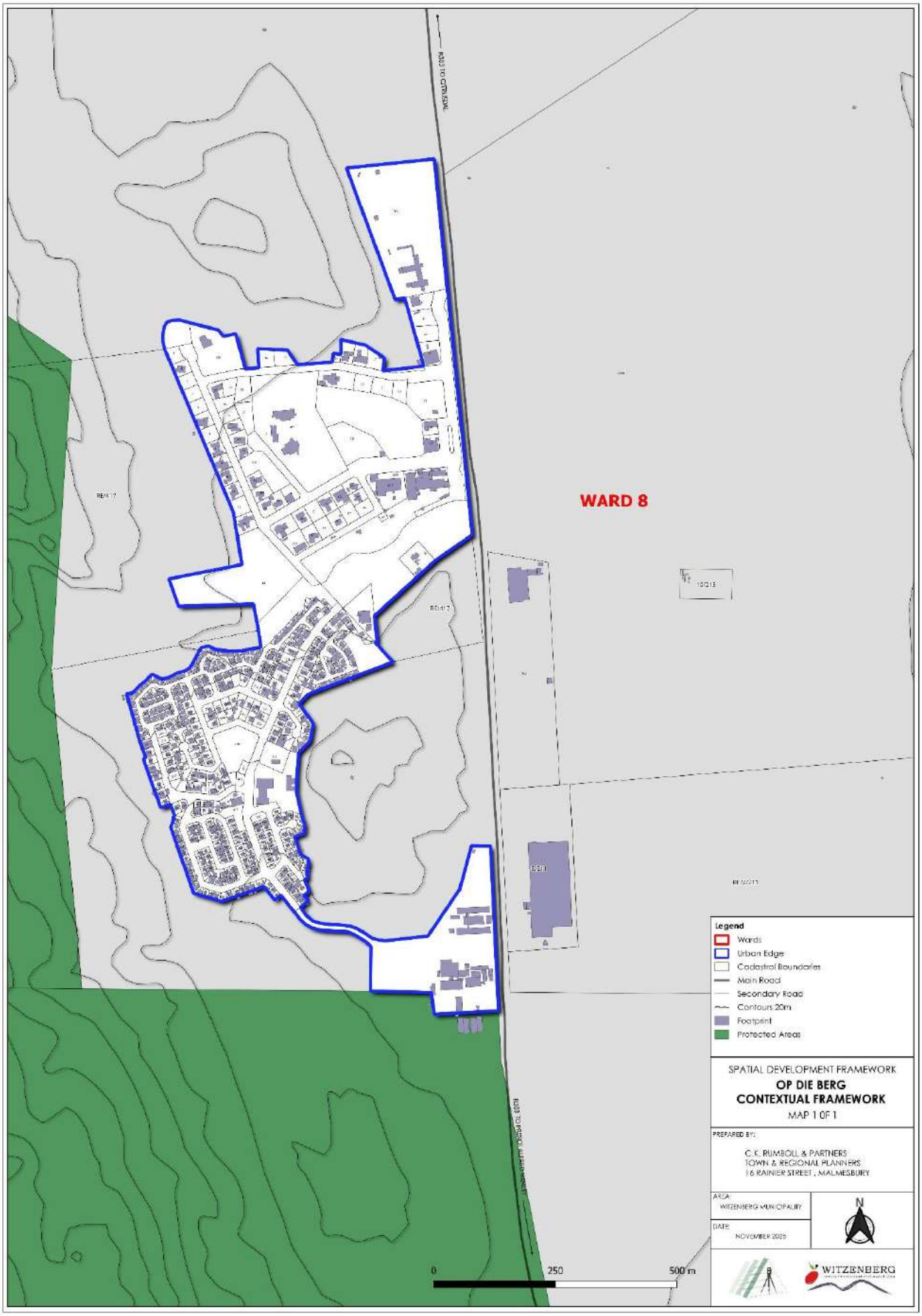
Refer to the land use zone map for Prince Alfred Hamlet: The urban area of Prince Alfred Hamlet has been divided into six (6) zones (areas with common characteristics) with the relevant development potential relating to specific land uses for every zone.

PRINCE ALFRED HAMLET LAND USE ZONES		Low Density Residential Uses	Medium Density Residential Uses	High Density Residential Uses	Secondary Educational Uses	Place of Instruction	Professional Uses	Business Uses	Secondary Business Uses	Place of Worship	Institution	Guest houses	Authority	Sport/Recreational Facilities	Industries & Service Trade
A	Zone A is a high-density residential area with limited supportive social services and commercial uses. Large area identified for formalisation and relocation where informal settlements occur. Allow for limited commercial opportunities and supportive social functions. Support creation of community facility node and mixed-use precinct at identified area.		X	X	X	X	X	X 1,4	X 1,4	X	X	X	X	X	
B	Zone B represents an industrial node with limited opportunity for expansion.					X	X	X	X	X	X		X	X	X
C	Zone C is a medium to high density residential area with supportive social services. Support creation of community facility node at identified area.	X	X	X	X	X	X		X 1	X	X	X	X	X	
D	Zone D is a low to medium density residential area situated adjacent to the identified CBD. Allow supporting institutional services.	X	X	X 2	X	X	X		X 1	X	X	X	X	X	
E	Zone E represents the Central Business District and is located along the main activity corridor through the town where commercial and mixed uses occur. Allow for commercial and other compatible uses to enhance the node.	X	X	X	X	X	X	X	X	X	X	X	X	X	X 3
F	Zone F represents a low-density residential area with opportunities for infill development. Strengthen identified mixed use node.	X	X	X 2	X	X	X		X 1,4	X	X	X	X	X	

(1) Along activity streets/corridors
(2) Flats along activity streets
(3) Only service trades
(4) At identified mixed use nodes

Business Uses e.g. shop, supermarket, restaurant, offices, service station.
Place of Education e.g. Schools, places of instruction.
Professional Uses e.g. offices like doctors, dentists, attorneys, architects, engineers and town planners.
Secondary Business Uses e.g. neighbourhood business uses such as house shops, small offices and home occupation. House taverns only to be allowed along activity streets in residential areas at discretion of the Municipality.
Secondary Educational Uses e.g. crèches/day care.
Medium density residential – only allowed on erven of 2000m² or larger.
*Find description of proposed land uses for development zones in Annexure 4.

5.6 Op-Die-Berg



5.6.1 Situational Analysis

5.6.1.1 Settlement History

Op-Die-Berg was established by the Dutch Reformed Church, for the farming community. Since its inception, the settlement has grown into a small rural service centre with a stable residential community.

Figure 31: Op-Die-Berg Dutch Reformed Church (source: Steenkamp, 2021)

5.6.1.2 Sub-Regional Location

The settlement is located approximately 50 km north of Ceres and its functional areas along the R303, in the Koue Bokkeveld north of the Gydo Mountains and east of the Skurweberg Mountains.

5.6.1.3 Settlement Role and Function

Op-Die-Berg serves as an instrumental rural service centre with a residential focus, providing support to the surrounding agricultural communities. It offers access to basic services for the dispersed rural population and has potential as an eco-tourism node. This agri-hub has a large service catchment with an estimated radius of 120km, which represents roughly 60 farms, 80% of which primarily produce deciduous fruit (Steenkamp, 2021).

5.6.1.4 Settlement Character and Layout Pattern

The character of Op-Die-Berg includes activities that are agriculture-based with some agri-processing related to wine, fruit, vegetables and other products (Witzenberg IDP, 2025). A prominent feature of the town is the Dutch Reformed Church. Op-Die-Berg's environment is deeply rooted in its identity as a farming community, with agriculture playing a central role in shaping both the economy and way of life. The settlement is divided by a stream, which creates a spatial and socioeconomic distinction between the lower-income residential area to the south and the commercial and service core to the north (Witzenberg MSDF, 2012).

5.6.2 Settlement Services and Infrastructure Analysis

5.6.2.1 Water

Op-Die-Berg sources its water from a fountain and two boreholes. Owing to the good quality of the water, treatment is limited to chlorination. Storage is provided by three reservoirs with capacities of 50 kl, 60 kl, and 500 kl, supplying the 6 km distribution network that operates within a single pressure zone. An additional 500 kl reservoir was completed in March 2024 at a cost of R4,334,915. The absence of a storage dam, however, places the town at risk during periods of severe drought.

5.6.2.2 Sanitation

The Op-Die-Berg Wastewater Treatment Plant services approximately 75% of consumers, while the remainder rely on septic tanks. Septic tanks are emptied by the municipality on request.

Size (ML/Day)	Technology	Operational Flow (% of design capacity)
0.308	Activated Sludge	86

5.6.2.3 Solid Waste

The landfill site no longer receives landfill and needs to be rehabilitated, which the IDP (2025/26) indicates is estimated to cost R10,5m. The settlement receives door-to-door black bin collection. The settlement is likely to face challenges around waste management because of its remote location, since waste must be transferred to the regional facility in Worcester that is set to open in January 2026.

5.6.2.4 Electricity

Electricity is supplied by Eskom. However, the complete dependency on Eskom poses a threat, particularly during loadshedding, because the bulk infrastructure does not have the capacity to handle the demand.

5.6.2.5 Transport, Roads and Stormwater

The R303 is a vital thoroughfare that shapes the settlement's layout, connecting Op-Die-Berg and the rest of the settlements in Witzenberg. The road network in town is 6.8km and is a combination of paved and gravel road.

Stormwater Management:

The Houdenbeks River is located to the east of Op-Die-Berg, with two tributaries flowing through the settlement. As a result, all stormwater drains into one of these two streams. Most of the town lies within the 3–10% slope range, while steep mountains border the settlement on the western side.

Very little stormwater infrastructure exists north of the town, close to the Dutch Reformed Church, where the gravel roads act as the only drainage system. Areas around Buitekant Street and Church Street have been subject to flooding in the past. The outlets in Madiba and Waterkant Street have been built with litter traps which causes major blockage of the outlets into the existing stream.

Minibus Taxi Facilities:

There is one minibus taxi route that runs between Op-Die-Berg and Ceres, which is 45,5km long and has a turnaround time of about 80 minutes. The taxi stop in town has three parking bays. At the time of observation for the Integrated Transport Plan in 2020, there were usually 4 or 5 taxis using the stop.

Non-Motorised Transport:

NMT is a common mode of transport in town, especially for school commutes. A section of Church Street, which forms part of the school route, has a sidewalk, however, the whole route does not have a sidewalk. It is recommended to extend the paved sidewalk along Church Street to where the school commuter walkway starts.

Furthermore, improvements in pedestrian pathways are required as there are only 2 bridges, Church Street Pedestrian Bridge, which has not been inspected, and Bergsig Road Pedestrian Bridge, which is in relatively good condition.

5.6.2.6 Human Settlements and Tenure

The analysis of human settlement demand for Op-Die-Berg indicates that a total of 50.38ha of land will be required over the next 5–20 years to provide for residential development across all income groups.

The table below provides a breakdown of the projected demand accounting for expected household growth and the municipal waiting list and illustrates the need across income categories, ranging from subsidised housing (indigent/low income) to gap and market-related housing opportunities (taxable).

The table indicates that 19,87ha of land is required to address the total land required to address housing demand for subsidised housing, including the settlement waiting list and the total estimated additional households that will likely fall within the low-income category. This reflects the number of households still dependent on state-subsidised opportunities.

Land Required:

	Additional 20 Year Total				
	Subsidised		Taxable		Total Land Required
	WL	Low	Mid	High	
ha	13,1	6,77	25,08	5,44	50,38
%	26,00	13,44	49,78	10,80	100,00

Land Budget:

The land budget addresses the balance between the demand and supply of residential land in Op-Die-Berg. The municipal housing waiting list, the current housing pipeline, and projected household growth since the 2019 MSDF, with future projections informed by the MYPE (2024–2035) and a 2.2% growth rate for 2035–2045, are used to determine the demand. To determine “supply” side, account is taken of land required to meet the waiting

list and projected household growth, drawing from opportunities both within the 2019 urban edge, through infill, repurposing, and allocation of undetermined land, and outside it, where urban edge expansions are guided by strategic settlement roles.

MSDF supplies 4.11ha of residential land of which 2.43ha is proposed as new residential development. The residential land requirements according to the population projection till 2045 amount to 216ha, resulting in an undersupply of -376ha.

Land	Hectares
Proposal in 2020 Edge	1,68
Expansion Proposals	2,43
Total Provision, 2025 MSDF	4,11
Required, 2023 -2025	7
Required 2025 -2035*	174
Required 2035 - 2045	216
Total Required	397
Undersupply	-376

5.6.2.7 Settlement Challenges

The main challenge is infrastructure capacity, particularly in terms of energy supply, which is fully dependent on Eskom. There is not sufficient infrastructure to sustain the residing population.

Another challenge is the location: The village is in a remote mountainous area, dependent on agriculture, and is a relative distance from Ceres, which has the most economic activity in the region (Witzenberg SDF, 2020).

The community also faces dire economic disparities. If left unaddressed, the social needs within the community may not be served and could contribute to deepening inequality and social tension.

5.6.2.8 Settlement Potential

Op-Die-Berg has strategic growth potential because of its location in an agriculturally rich area, which supports the cultivation of crops. The settlement could benefit from focused investment in infrastructure, agri-processing, and improved connectivity to larger towns like Ceres.

Education and training are important for developing human capital. Skurweberg Hoërskool, the main school in the town, is recognised for producing a high number of matriculants and for its strong integration of agriculture into its curriculum. Specialised subjects such as Agricultural Technology and Agricultural Management Practices are available, which reflects the community's close engagement with farming. Agricultural education is one pathway for local development. Building on this foundation through targeted after-school/tertiary training and support would be one way to build skills and capacity in this area.

The 2020 MSDF identifies strategic infill sites and areas for mixed-use human settlements, land parcels currently zoned for business, general residential, and community-oriented purposes, which provide potential for targeted densification.

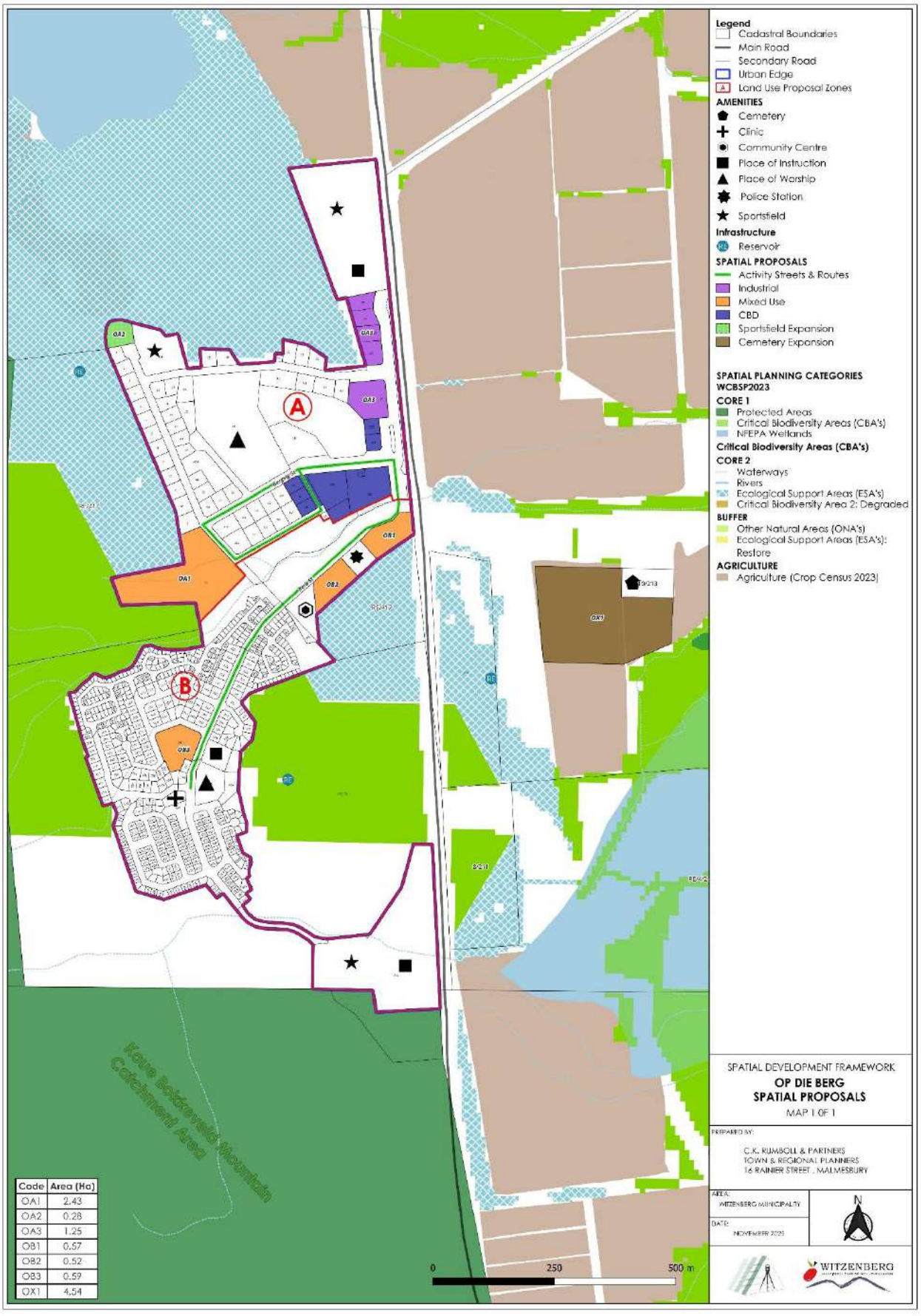
5.6.3 Settlement Proposals

Category	Code	Proposal	Spatial Goal Number
Basic Infrastructure, Services and Development	ON1	Support the existing community with basic services and rural maintenance.	3
	ON2	No residential or retail expansion; focus on maintaining rural integrity.	4
Tourism, Economic Development and Industry	ON3	Support the development of informal trading infrastructure in Op-Die-Berg.	2
Nature and Conservation	ON4	Preserve as a deep rural settlement serving Koue Bokkeveld farms.	6

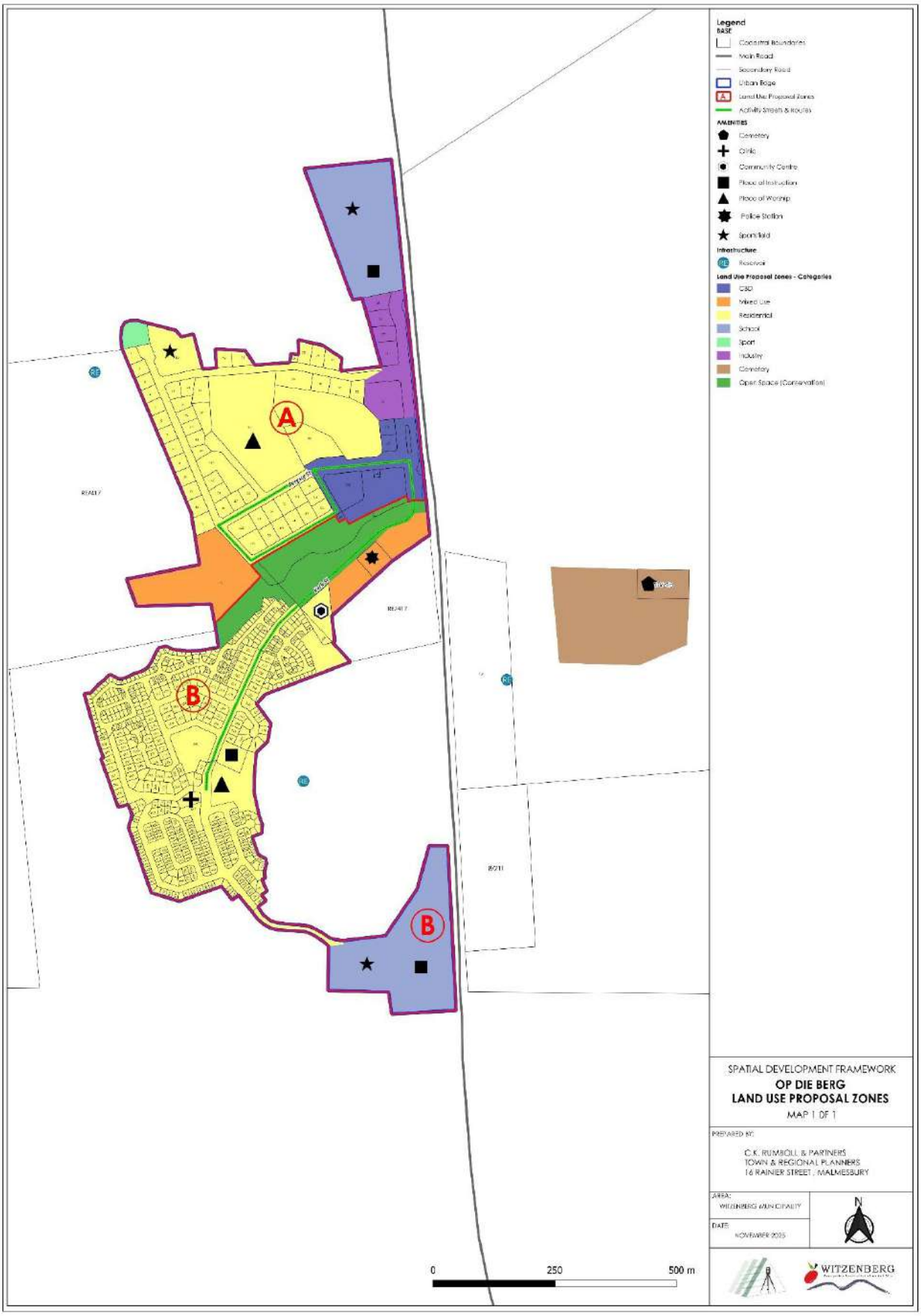
5.6.4 Coded Settlement Proposals

Code	Zone	Use	Description	Area(Ha)	Spatial Goal Number
OA1	A	Mixed Use	Support mixed use development including uses such as mixed density residential, community and/or commercial uses.	2,43	4
OA2	A	Sportsfield Expansion	Support the expansion of sportsfields.	0,28	3
OA3	A	Industrial	Promote low intensity industrial development.	1,25	4
OB1	B	Mixed Use	Support mixed use development including uses such as mixed density residential, community and/or commercial uses.	0,57	4
OB2	B	Mixed Use	Support mixed use development including uses such as mixed density residential, community and/or commercial uses.	0,52	4
OB3	B	Mixed Use	Support mixed use development including uses such as mixed density residential, community and/or commercial uses.	0,59	4
OX1	X	Cemetery Expansion	Support the expansion of the cemetery.	4,54	

5.6.5 Settlement Proposal Map



5.6.6 Land Use Proposal Zones



5.6.7 Land Use Zone Proposals

Refer to the land use zone map for Op-Die-Berg: The urban area of Op-Die-Berg is divided into two zones (areas with common features) and the recommended land uses for the different zones are listed in the table below:

OP-DIE-BERG LAND USE ZONES		Low Density Residential Uses	Medium Density Residential Uses	High Density Residential Uses	Secondary Educational Uses	Place of Instruction	Professional Uses	Business Uses	Secondary Business Uses	Places of Worship	Institution	Guest houses	Authority	Sport/Recreational Facilities	Industries & Service Trade
A	Zone A represents a mixed-use precinct consisting of a low-density residential area, proposed CBD, and industrial node with supporting institutional services. Opportunity for expansion identified to the north-east. Support mixed uses along identified activity streets.	**X**	**X**	**X 4**	**X**	**X**	**X**	**X 1,2**	**X 1,2**	**X**	**X**	**X**	**X**	**X**	**X 3**
B	Zone B is a high-density residential area with relevant supporting uses and infrastructure. Support the expansion of business and other related mixed uses along activity streets and at identified mixed use nodes.	**X**	**X**	**X**	**X**	**X**	**X**	**X 1,2**	**X 1,2**	**X**	**X**	**X**	**X**	**X**	
(1) Along activity streets/corridors (2) At identified business or mixed-use nodes (3) At identified industrial node (4) At identified new development node		**Business Uses** e.g. shop, supermarket, restaurant, offices, service station. **Place of Education** e.g. schools, places of instruction. **Professional Uses** e.g. offices like doctors, dentists, attorneys, architects, engineers and town planners. **Secondary Business Uses** e.g. neighbourhood business uses such as house shops, small offices and home occupation. House taverns only to be allowed along activity streets in residential areas on discretion of the Municipality. **Secondary Educational Uses** e.g. crèches/day care. **Medium density residential** – only allowed on erven of 2000m² or larger. *Find description of proposed land uses for development zones in Annexure 4.												

Description of proposed land uses in the identified Development Zones of Witzenberg towns

Proposed land uses	Description
Low density Residential Uses	Residential densities of up to 15 units per hectare within the Single Residential Zone I & General Residential Zone I* zonings, can be accommodated within these zones.
Medium density Residential Uses	Residential densities of up to 20 to 60 units per hectare within the Single Residential Zones II and General Residential Zones II* can be accommodated within these zones. Only allowed on erven larger than 2000m².
High density Residential Uses	Residential densities of above 60 units per hectare can be accommodated within these zones with proposed zoning General Residential Zone 3*.
Secondary Educational Uses	Allow for educational uses such as Crèches, Aftercare facilities and Day Care Centres and Nursery Schools.
Place of Instruction	Allow for places of education or training at pre-school, schools and post school levels as allowed for as primary use under Community Zone I and consent uses under Business Zones I, II and IV and Community Zone II*: Includes crèche, nursery school, primary school, secondary school, college, university or research institute; Includes ancillary uses like a boarding hostel, sports and recreation centre, tuck shop and a civic facility for the promotion of knowledge to the community including a public library, place of worship, public art gallery, museum and place of instruction in sport.
Professional Use	Means the kind of use which is normally and reasonably associated with professionals such as doctors, dentists, attorneys, architects, engineers and town planners, where services rendered, separate from trading, are one of the distinguishing factors accommodated under Business Zones I to VI*.
Business Uses	Includes business premises with uses like shops, supermarket, restaurant, plant nursery, offices, financial institutions and buildings for similar uses as included under Business Zone I, II, IV, V and VI*.
Secondary Business Uses	Allow for low intensity commercial and mixed uses to provide for the needs of the local neighbourhood in terms of consumer goods and personal services. This includes consent uses like house taverns and house shops. House taverns will only be allowed at the discretion of the Municipality. Other uses include low impact uses under Business Zone III*. These types of uses should be limited and must be able to integrate with surrounding residential areas without negatively impacting these areas.
Place of Worship	Means a church, synagogue, mosque, temple, chapel or other place for practising a faith or religion as allowed for as primary use under Community Zone II or consent use under Business Zones I, II and V, Industrial Zones I and II*. Includes ancillary uses such as a religious leader's dwelling, office, function hall, or place for religious instruction; a wall of remembrance and garden of remembrance, but does not include a funeral parlour, cemetery or crematorium.

Institution	Means a property used as a facility that renders services to the community: This includes a clinic; home for the aged, retired, indigent or handicapped, a frail care facility; a social facility (including a counselling centre, orphanage and rehabilitation centre) that is allowed for as a primary use under Community Zone III and consent uses under Business Zone IV and Community Zones I and II***.** Also includes ancillary accommodation, administrative uses, tuck shop, health care, training and support services and facilities. Does not include a correctional facility.
Guest Houses	Means a dwelling house, second dwelling, double dwelling house or additional dwelling unit that is used for the purpose of supplying lodging and meals to transient guests for compensation, in an establishment that exceeds the restrictions of a bed and breakfast establishment (more than 2 guest rooms or 4 guests), and includes business meetings or training sessions by and for guests on the property for up to 12 persons as allowed for as consent uses under Agricultural Zones I and III, Single Residential Zone I and General Residential Zone I*****. Does not include agricultural workers' accommodation.
Authority	Means a use which is practised by or on behalf of an organ of state and that cannot be classified or defined under other uses in this zoning scheme, and includes a use practised by the national government (including a military centre or installation, police station or correctional facility); the provincial government (including a road station or road camp) and the Municipality (such as treatment works, dumping grounds, transfer stations, reservoirs, electricity substations, public ablution facilities, fire service or a municipal depot with related uses), including limited accommodation for staff who are required to be on standby for emergencies. Uses as allowed under Authority Zone.
Sport/Recreational Facilities	Allow for sport facilities and other related recreational and tourism facilities like show grounds, picnic and camping areas.
Industrial/Service Trade and Industries	Allow for development of industries, service industries and service trade related uses, with the different types of industries considering the context and locality in the urban areas. Allow for certain commercial uses including shops, restaurants, places of assembly, adult entertainment as well as funeral parlours and places of worship that are allowed for under these zones in accordance with the zoning scheme. Service trade: means an enterprise that is primarily involved in the rendering of a service for the local community including the repair of household appliances or the supply of household services that is not likely to be a source of disturbance to surrounding properties; not likely, in the event of fire, to cause extremely rapid combustion, give rise to poisonous fumes or cause explosions; that includes laundry, bakery, dairy depot, mechanical and engineering services, and similar types of uses. Does not include an abattoir, brick-making site, builder's yard, sewage works, service station, open air motor vehicle display or motor repair garage.

***** *The proposed zonings are according to the Witzenberg Municipal Land Use Planning By-law 2019 or as may be amended in future. The proposed zonings only provide an indication of the zonings that can be allowed within the zones. Any land use application within the development zones area will still be subject to other regulations that are applicable to the specific areas and within the zoning scheme.*

CHAPTER 6: Rural & Regional

This chapter provides an integrated overview of the Witzenberg Municipal area including its urban settlements, rural landscapes, and broader regional relationships. It establishes a strategic spatial understanding of the municipality by identifying functional regions derived from predominant environmental, economic, and landscape characteristics. These functional regions form the analytical basis for the development of spatial proposals and risk-prevention directives that support sustainable land-use management, environmental stewardship, and climate-resilient development.

A range of informants was considered in delineating the functional regions, including landscape character, environmental assets, agricultural activities, biodiversity value, tourism dynamics, agri-processing potential, mining activities, renewable-energy opportunities, and altitude. The landscape character assessment draws on the three archetypal categories: Romantic, Cosmic, and Classic as defined by Christian Norberg-Schulz, which collectively help articulate the municipality's "spirit of place" (genius loci). Through the integration of these variables, four distinct functional regions were identified (refer to Section 6.1 below).

Building on the understanding of how each functional region operates, the chapter further outlines municipal-wide spatial proposals and risk-prevention directives. These directives address the stewardship and sustainable use of natural and man-made resources specifically water, land/soil, minerals, ecosystems and vegetation (including fauna), heritage and sense of place, air/wind, solar exposure, and infrastructural connectors. The proposals collectively support three intersecting themes: land-use management, environmental management, and climate-change mitigation and adaptation and are aligned with relevant national and provincial strategies, as well as ongoing and planned investments by public entities.

6.1 Witzenberg Municipal Functional Regions

The following section sets out the spatial logic underpinning the classification of the Witzenberg Municipal area into four distinct regions. Each region reflects a combination of natural systems, economic activities, landscape character, and settlement patterns. By understanding these regions as coherent functional units, planners can better anticipate development pressures, environmental sensitivities, and opportunities for regional differentiation and sustainable growth. This section provides a description of each functional region, supported by a summary table of key informants and an accompanying map. Collectively, these components serve as a foundational reference for the spatial proposals and risk-prevention directives presented in the subsequent section.

TULBAGH VALLEY

Located south of the Groot Winterhoek Mountain Range and west of the Witzenberg Mountain Range, the Tulbagh Valley enfolds the settlements of Tulbagh and Wolseley. Tulbagh is characterised by its rich cultural and historical heritage and scenic landscape, which positions it as a high-potential tourism destination. In contrast, Wolseley functions primarily as an industrial and service-oriented settlement, supporting the intensive agricultural activities of the surrounding region. The valley is known for its diversified agricultural cultivation, including wine grapes, stone and pome fruit, grains, proteas, nectarines, and almonds.

WARM BOKKEVELD

The Warm Bokkeveld functional region is characterised by intensive agricultural production, with a strong focus on pome fruit, grains, oilseeds and lucerne. The region also accommodates significant agri-processing facilities that add value to primary agriculture. Geographically, the valley is defined by the Hex Rivier Mountains to the south, the Witzenberg and Skurweberg ranges to the west, and the Gydo and Waboom Mountains to the north. Access to the area is provided exclusively via mountain passes, including the Gydo Pass, Michell's Pass, Karoo Poort, and Theronsberg Pass. Compared to the higher-lying Kouebokkeveld, the Warm Bokkeveld experiences a relatively warmer climate, supporting intensive and diversified farming practices.

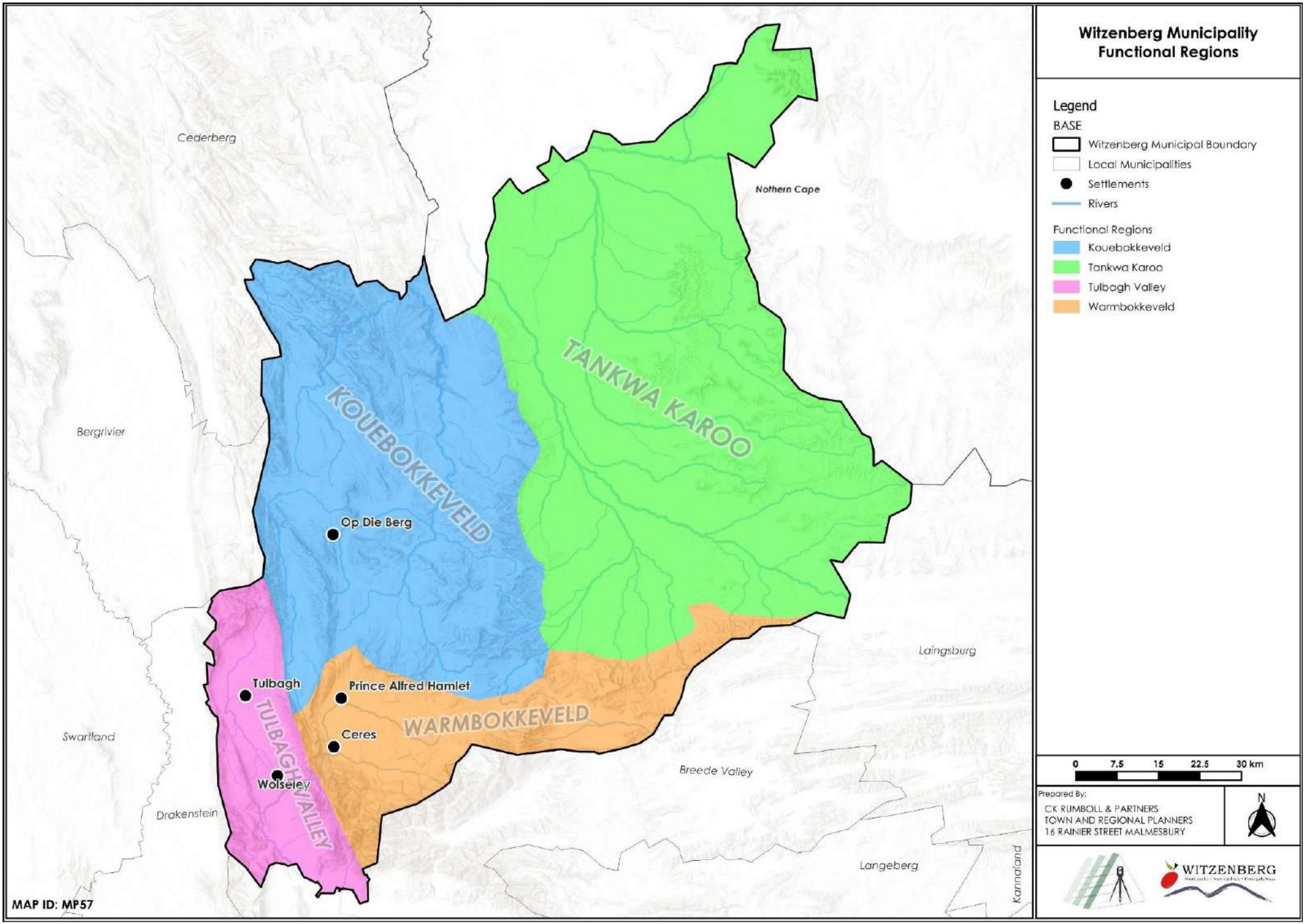
KOUE BOKKEVELD

This functional region is situated north of Ceres, Prince Alfred Hamlet, and the Gydo Pass along the R303 regional route, east of the Groot Winterhoek Mountains, and south of the Middelberg Pass near Citrusdal. The area is distinguished by its intensive agricultural cultivation, primarily focused on pome fruit, grains, lucerne, and rotational fallow systems. Op-Die-Berg is the main service node within the region, supporting surrounding agricultural activities.

TANKWA KAROO

This region is a sparsely populated, arid area characterised by low rainfall, extreme temperature variations, and a predominantly semi-desert landscape. Agricultural activity is limited and generally restricted to small-stock farming

and low-intensity grazing, due to the area's climatic and soil constraints. The region's remoteness and unique ecological character form part of its defining features, with sections of the Tankwa Karoo National Park extending into the area, contributing to conservation, ecotourism, and biodiversity value. Settlement activity is minimal, with scattered farmsteads rather than concentrated nodes, and the area plays a supporting role in terms of ecological services and tourism rather than intensive agricultural or urban functions.


Witzenberg Municipality
Functional Regions
Legend
BASE
Witzenberg Municipal Boundary
Local Municipalities
Settlements
Rivers
Functional Regions
Kouebokkeveld
Tankwa Karoo
Tulbagh Valley
Warmbokkeveld
Cederberg
Nothern Cape
Bergrivier
KOUEBOKKEVELD
TANKWA KAROO
Op Die Berg
Laingsburg
Tulbagh
Prince Alfred Hamlet
TULBAGH VALLEY
WARMBOKKEVELD
Ceres
Swartland
Wolseley
Breede Valley
Drakenstein
Langeberg
Kannaland
0 7.5 15 22.5 30 km
Prepared By:
CK RUMBOLL & PARTNERS
TOWN AND REGIONAL PLANNERS
16 RAINIER STREET MALMESBURY
N
WITZENBERG
MAP ID: MP57

	Tulbagh Valley	Warm Bokkeveld	Koue Bokkeveld	Tankwa Karoo
Altitude (m)	Low (200):	Moderate (500):	High (1000):	Moderate (600):
Agriculture (Primary Economy) - Winter Crop Census 2023	Rich mixed farming including mostly Small Grains, Grapes, Planted Pastures, Stone Fruit, Pome Fruit, Oil Seeds, Berries, Olives, Vegetables, Citrus Fruit, Lupines, Tree Fruit, Flowers, Nuts, Herbs/Essential Oils.	Mixed Farming: Small Grains, Pome Fruit, Stone Fruit, Planted Pastures, Oil, Seeds, Vegetables, Grapes, Lupines, Herbs/Essential Oils, Olives, Berries.	Pome Fruit, Small Grains, Vegetables, Planted Pastures, Stone Fruit, Citrus Fruit, Olives, Grapes, Berries, Nuts, Herbs/Essential Oils.	Limited agriculture. Herbs/Essential Oils, Olives, Stone Fruit, Vegetables.
Mining	Brick Clay.	Stone Aggregate.	None.	Ferricrete and Gravel, Gypsum.
Tourism	High numbers of ecotourism opportunities: Hiking, Wine Tour, Mountain Biking, Restaurants, Fishing, Birding, Camping, Olive/Wine Cellar Tours & Tasting, Farm Stalls.	Moderate number of ecotourism opportunities: Mountain Biking, Hiking, Fishing, Camping, Restaurants, Birding, Olive/Wine Cellar Tours & Tastings, Quad Biking, Farm Stalls, Wine Farm Tours.	Some ecotourism opportunities scattered throughout: Hiking, Mountain Biking, Ecotourism, Fishing, Camping, Birding, Olive/Wine Cellar, Restaurant, Quad Biking.	Limited eco-tourism opportunities scattered throughout the region such as: Hiking, Camping, Mountain Biking, Birding, Restaurants.
Biodiversity - National Vegetation Map (Vegmap 2024 Beta)	Winterhoek Sandstone Fynbos, Breede Shale Fynbos, Breede Shale Renosterveld, Breede Alluvium Fynbos.	Ceres Shale Renosterveld, North Hex Sandstone Fynbos, Kouebokkeveld Shale Fynbos, Matjiesfontein Shale Renosterveld.	Kouebokkeveld Shale Fynbos, Winterhoek Sandstone Fynbos, Ceres Shale Renosterveld, Swartruggens Quartzite Fynbos, Kouebokkeveld Alluvium Fynbos, Cederberg Sandstone Fynbos, Agter-Sederberg Shrubland.	Koedoesberge-Moordenaars Karoo (shrubland), Tanqua Karoo (shrubland), Tanqua Wash Rivier (shrubland).
Agri Industry	Fruit Packers, Cold Storage, Grain Storage, Agri-Processing Plants, Dairies, Piggeries, Chicken Batteries.	Fruit Packers, Grain Storage, Agri-Processing Plants, Dairies, Abattoir, Chicken Batteries.	Agri-processing: Fruit Packers, Cold storage, Grain Storage, Agri-Processing Plants, Piggeries, Dairies.	None.
Renewable energy potential **Wind Speed Mean (m/s)**	Relatively low wind speed. Moderate levels of solar radiation.	Relatively low wind speed. Relatively high levels of solar radiation.	Relatively low wind speed. Relatively high levels of solar radiation.	Relatively low wind speed. Medium to high levels of solar radiation (REDZ).

Hydrology/ Rivers	Boontjies, Bothaspruit, Brakkloof, Bree, Klein Berg (Perennial), Knolvlei, Wabooms, Watervals.	Adamskraal, Bok, Bothaspruit, Bree (Perennial), Donkies, Dwars, Karee, Koekedou (Perennial), Kolkies, Modder, Sand, Skaap, Smalblaar, Spek, Titus, Vals, Valsgat, Witels.	Driedam, Groot (Perennial), Houdenbek, Koekedou (Perennial), Kruis (Perennial), Lang, Leeu (Perennial), Middeldeur (Perennial), Modder, Olifants (Perennial), Riet (Perennial), Sand, Suurvlei (Perennial), Twee, Welgemoed, Winkelhaak.	Adamskraal, Blesmerrie se Spruit, Brak, Doring, Gemsbok, Groot, Jakkalshok, Karee, Koffiewater se Laagte, Kolkies, Muishond, Ongeluks, Renoster, Sandlaagte, Smitswinkel, Tandskoonmaak se Laagte, Tankwa (Perennial).
Landscape character[10]	Romantic	Classical	Classical	Cosmic

Romantic	The romantic landscape is characterized by diversity, irregularity, and emotional resonance. It draws heavily on natural elements that are flexible, mysterious, and less bound by order. Such landscapes evoke a sense of myth, memory, and imagination rather than rational structure. Norberg-Schulz uses the Nordic landscape as an example, noting how it embodies mythological associations with giants, gods, and elemental forces. The romantic landscape is thus subjective, atmospheric, and rooted in natural symbolism, emphasizing emotional experience over spatial clarity.
Cosmic	The cosmic landscape is dominated by universal order and permanence. It conveys an impression of the eternal, unified, and absolute, with natural features that reflect cosmic orientation — earth, sky, and celestial rhythms. In contrast to the diversity of the romantic type, the cosmic landscape emphasizes uniformity, clarity, and an overarching structure that transcends local particularities. It is less about personal interpretation and more about expressing the universal order of existence, aligning human perception with the vastness and regularity of the cosmos.
Classical	The classical landscape represents a synthesis of the romantic and cosmic types, integrated into human life. It is a humanistic landscape that incorporates clear natural elements, meaningful order, and harmonious dwelling space. The classical type emphasizes balance between diversity and order, offering both symbolic richness and spatial clarity. It is neither purely emotional nor purely cosmic, but instead situates human existence within a structured and legible natural environment. In doing so, it creates a measured, articulated, and enduring setting where human life and nature are reconciled.

[10] Landscapes defined by Norberg-Schultz (University of Pretoria 2003)

6.2 Regional and Rural, Environmental Management and Climate Change Proposals

This section translates the spatial understanding of the functional regions into targeted proposals and risk-prevention directives applicable at municipal scale. It outlines interventions aimed at safeguarding critical natural resources, promoting sustainable land-use practices, enhancing climate resilience, and guiding appropriate development across both regional and rural contexts. The directives are organised by thematic resource categories such as water, land/soil, biodiversity, minerals, heritage, renewable energy, and connectivity and set out both new proposals and risk-mitigation directives. Together, these strategies aim to ensure that future development within Witzenberg Municipality aligns with legislative requirements, environmental constraints, regional economic potential, and broader national and provincial planning frameworks.

6.2.1 WATER / HYDROLOGY

6.2.1.1 Proposals

Water Catchment Areas, Water Courses, Highly and Averagely Productive Underground Water Sources.

- Promote and delineate natural open space networks and restore, rehabilitate, maintain and enhance river corridors in accordance with the RMMP:
- Ecotourism: Provide for social amenities (soft sportfields and -courts, and bird hides) connecting rivers and tributaries within settlements to the rural surroundings.
- Conservation: Restore existing and historical connections between wetlands, drainage ports and rivers/streams and groundwater (and directed by groundwater connections); of moderately and largely modified rivers across the municipal area.
- Support effective and fair management of water resources and catchment areas based on social, economic and environmental impact consideration to secure water volumes and quality including guarding against erosion and mitigating drought and flooding impacts;
- Promote cooperative Management of Protected Areas (National Environmental Management: Protected Areas Act);

Tourism, Sport, and Recreation

- Support the provision of day facilities and picnic areas in addition to resorts including camping, caravan parks, and reserves;
- Promote the use of public amenities for activities and events in accordance with relevant by-laws;
- Encourage "Soft" land uses such as outdoor sport and recreation routes including hiking and mountain biking, bird watching, wildflower viewing, horse trails.
- Promote local community access, either as producers or service providers or employees to economic tourism opportunities and provide spaces for either guided or self-explored experiences in arts and crafts, culture, heritage and food.
- Promote environmental justice by ensuring that adverse environmental impacts are not unfairly distributed, especially among vulnerable and disadvantaged individuals and communities. Implement conditions of Environmental Records of Decision (including water sources) according to approved Environmental Management Plans, which outline directives for management and monitoring;

Cemetery, Sanitation, Waste, and Water Storage

- Promote a regional cemetery as a memorial park where a combination of uses such as passive entertainment and passive recreation activities are allowed and conducted.
- No proposals for Sanitation, Waste, and Water Storage.

6.2.1.2 Risk Prevention

Water Catchment Areas, Water Courses, Highly And Averagely Productive Underground Water Sources

Adhere to the following buffers where no development (permanent structure) is allowed, unless authorised by an environmental impact and/or water use assessment, to limit risks and to reduce and prevent pollution and degradation of water resources. Source documents include NEMA, NWA and City of Cape Town:

- 32m wide buffer area along rivers and riverbanks (NEMA, 1998);
- The outer edge of the 1:100-year floodline and/or delineated riparian habitat, whichever is the greatest distance, measured from the middle of the watercourse of a river, natural channel, lake or dam;
- In the absence of a determined 1:100-year floodline or riparian area, the area within 100m from the edge of a watercourse where the edge of the watercourse is the first identifiable annual bank fill flood bench (NWA, 1998);
- A 500m radius from the delineated boundary (extent) of any wetland or pan, or within the 1:50 year flood line. (NWA, 1998);
- Vlei land buffer up to 75m from wetland outer edge (refer to Floodplains and Rivers Corridor Management Policy, City of Cape Town, 2009);
- Low-lying areas where the area is exposed to floods not only caused by rivers, but by groundwater or stormwater collection (prohibit development including Cemeteries, Industrial Areas, Fuel Storage Facilities and Intensive Agricultural Uses).

- Promote and delineate natural open space networks and restore, rehabilitate, maintain and enhance river corridors in accordance with the RMMP.
- Protect and manage ecological infrastructure such as the Klein Berg, Olifants, Houdenbek, Lang, Leeu, Riet, and Winkelhaak Rivers.
  - Investigate all sources of water to supplement existing sources and for future expansion of settlements.
- Promote the undertaking of a comprehensive water sources study to identify and evaluate the most sustainable and feasible options for augmenting additional water sources.
- Establish a continuous groundwater monitoring programme, particularly in catchments with moderate to poor quality (E21, E22, E23, J12), to track salinity levels, seasonal fluctuations, and emerging risks.
- Maintain and update groundwater maps for integration into municipal planning.
- Support water management strategies such as blending high-salinity water with fresher sources, promoting desalination or treatment technologies where feasible, and encouraging water-efficient irrigation practices in agriculture. Protect high-quality catchments (H10, G10, E10, H20) from pollution caused by urban runoff, agricultural chemicals, and industrial activities.

- Implement effective water management systems in line with the Western Cape Ecological Infrastructure Investment Framework, 2021 to ensure the long-term sustainability of local water resources, with specific attention to the Groot Winterhoek Strategic Water Source Area (SWSA).
- Continue efforts under the Ceres River Restoration Programme (CRRP) to improve the ecological integrity of the Dwars, Modder, and Titus Rivers.
- Support the development of comprehensive Maintenance and Management Plans (MMPs) for stormwater and erosion control across the entire Witzenberg Municipality, building on the recently approved MMP for the Dwars, Breede, Witels, and Titus Rivers in Ceres. These plans should cover all major rivers, tributaries, and critical drainage areas, aiming to mitigate erosion, manage stormwater effectively, protect water quality, and ensure the long-term sustainability of the municipality's watercourses and surrounding ecosystems.
- Pollution and Risk Control: Improve pollution control, management and monitoring of effluent generating infrastructure and facilities to prevent pollution of water sources.
  - Divert infrastructure and development that may have significant impact on water sources including intensive agricultural activities, waste management (transfer & recycle) sites, fuel storage facilities, industrial development and mines;
  - Consider developments that may have less impact including residential development and extensive agricultural activities.
- Protect and promote maintenance of and reduce risk within water catchment areas inclusive of wetlands and productive underground water sources;
- Delineate underground water resources and aquifers to guard against overexploitation;
- Avoid development of infrastructure and waste sites (including cemeteries) and caution development of residential, commercial and industrial developments, intensive agriculture and fuel storage and mines in close proximity to important water sources;
- Water as a resource:
  - Potable Water Storage: Add at least 10% additional supply capacity (headroom) when considering the maximum 24-hour demand in the highest (peak) demand month of the year;
  - Subject proposed developments to proper investigation of the impact on water sources and long-term sustainability;
  - Vigorously implement Water Demand Management measures, especially in terms of the following:
    - Increased water efficiency;
    - Frequent monitoring of water supply systems;
    - Conduct regular and adequate system maintenance and repairs.
- Diversify water resources, e.g., surface water and groundwater use and wastewater re-use;

- Plan for, provide and maintain water resources, water storage capacity and networks for settlements and rural areas and expand bulk infrastructure where required.

Waste Management

- Promote and budget for the development of a municipal integrated waste management strategy and secure the funding thereof.
- Secure ongoing use and maintenance of the Ceres Material Recovery Facility (MRF);
- Prioritise the rehabilitation of closed landfill sites such as Ceres (closed since 1999), Op-Die-Berg and Wolseley landfill sites to prevent underground water pollution.
- Secure and manage the ongoing maintenance of the municipality's only operational landfill site (Prince Alfred Hamlet)
- Waste site:
  - Maintain municipal and sub-regional waste facilities;
  - Prioritise compliance with environmental authorisations for operating Municipal waste management facilities.
- Explore cost saving and climate change friendly models in utilising the Worcester Regional Landfill Site.
- Encourage the ongoing long-term waste management twinning agreement with Essen Municipality in Belgium.
- Promote recycling of domestic waste using separation at source, composting of garden waste and re-use of building rubble.
- Support and empower small waste-related businesses and consider integration of waste pickers in the waste management system (particularly reclamation of recyclable material).

Research and Education

- Promote perennial river health projects in the Warm and Kouebokkeveld as well as the Tulbagh Valley catchment areas.
- Develop awareness and a sense of custodianship in the region and facilitate education, training, capacity building, research and information gathering.
- Promote active waste education and awareness strategies. Implement programmes within the community and its schools to emphasise the value of water resources in light of climate change and water scarcity.

Alternative Water Resources

- Support and promote the use of alternative water resources (boreholes and groundwater, water harvesting, desalination) and the reuse of appropriately treated water (stormwater, waste and grey water) to alleviate water shortages that arise during droughts:
  - Secure operational and maintenance costs of alternative water provision based on reliable financial assessments done during the planning thereof.
  - Provide for establishing alternative water resources e.g., water harvesting and collection of precipitation.

Water Quality And Storm Water Management

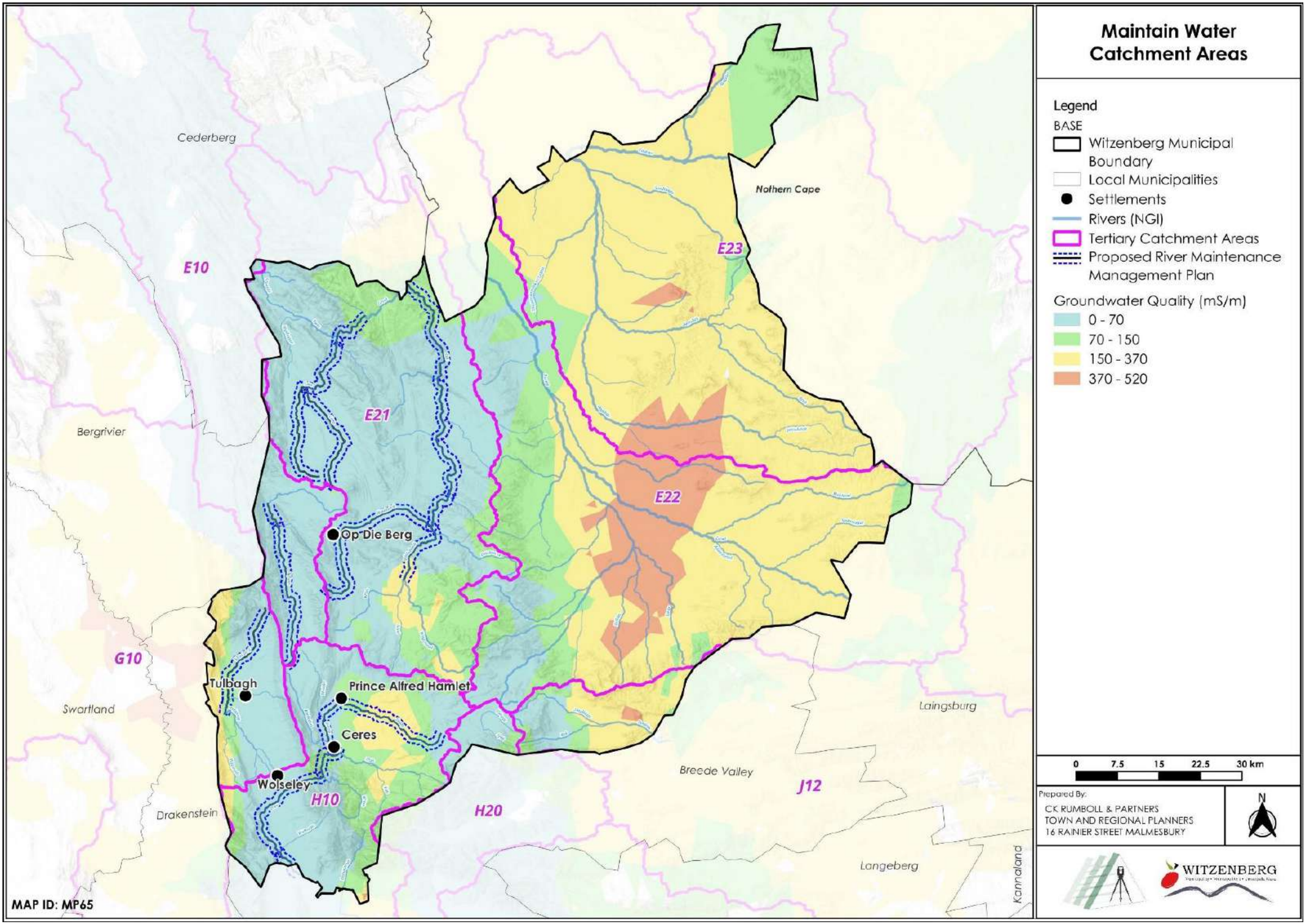
- Promote and support monitoring and management to guarantee water quality;
  - River monitoring must take place according to the guidelines of the Department of Water and Sanitation's River Health Programme for all developments e.g., agri- and fishing industry and mining.
  - Monitoring boreholes must take place on recommendation of specialist assessment in all developments that could lead to possible groundwater pollution, e.g., landfills and commercial developments;
  - Promote stormwater management and treatment to prevent pollution, particularly in rural areas, e.g., areas of intensive farming practices such as cattle housing above underground water sources;
  - Improve stormwater treatment in urban and rural agri- and industrial zones, service stations, and fuel distribution areas and mines;
  - Water quality monitoring is required for all water and stormwater treatment systems;
  - Management, monitoring and evaluation and rehabilitation must be regulated by an integrated Environmental Management Plan.
- Ensure developments in all phases uphold water quality standards and thresholds;
- Monitor supply levels of all water sources, especially surface water resources, and re-evaluate water sources especially where demand is close to the safe 1:20 year yields;
- Require efficient water use in all development proposals;
- Consider all relevant guidelines, policies, and legislation when addressing development impacts on freshwater;
- Promote small sewerage treatment package plants and alternative technologies on farms and in rural settlements.

Environmental Justice and Impact Assessment Requirements

- All proposed settlement and infrastructure developments must have environmental approval or confirmation of applicability of the Environmental Management Act before proceeding, including developments that:
  - Cover an area of 50 m² and more and within 32 m from the banks of a water source;
  - Have an impact on terrestrial and heritage environments, conservation- worthy natural vegetation and offset areas.

Cemetery, Sanitation, Waste, and Water Storage

- Sanitation in rural villages and nodes:
  - Maintain sanitation in rural villages and in rural areas according to prescribed standards;
  - Monitor water quality of all water treatment systems;
  - Renew bulk infrastructure where required.
- No proposals for cemeteries.


Maintain Water Catchment Areas
Legend
BASE
Witzenberg Municipal Boundary
Local Municipalities
Settlements
Rivers (NGI)
Tertiary Catchment Areas
Proposed River Maintenance Management Plan
Groundwater Quality (mS/m)
0 - 70
70 - 150
150 - 370
370 - 520
Cederberg
Nothern Cape
E10
E23
E21
E22
Bergrivier
Op Die Berg
G10
Tulbagh
Prince Alfred Hamlet
Swartland
Laingsburg
Ceres
Breede Valley
J12
Wolseley
H10
H20
Drakenstein
Langeberg
Kannaland
0 7.5 15 22.5 30 km
Prepared By:
CK RUMBOLL & PARTNERS
TOWN AND REGIONAL PLANNERS
16 RAINIER STREET MALMESBURY
N
WITZENBERG
MAP ID: MP65

6.2.2 LAND AND SOIL

6.2.2.1 Proposals

Soil Suitability and Agriculture

- Promote the Western Cape Biodiversity Spatial Plan, Climate Change Needs Assessment and Response Plan for the Witzenberg Municipality Western Cape, and the Invasive Alien Species Strategy to address the cumulative impact of ecological degradation and biodiversity loss and mitigate the impacts of climate change.
- Maintain the SmartAgri plan initiated by the Western Cape Government, prioritising sustainable practices encompassing:
  - Conservation agriculture.
  - Ecological infrastructure restoration.
  - Integrated catchment management.
  - Energy efficiency.
  - Climate-resilient agri-processing.
  - Knowledge systems for climate-smart agricultural extension.
- Promote long-term sustainability of agriculture and agricultural development:
  - Support compliance with environmental and water legislation.
  - Apply standard environmental management principles.
  - Provide for management and monitoring of implementation of Environmental Approvals regulated by an approved Environmental Management Plan. Implement conditions of Environmental Records of Decision (on agricultural land) according to approved Environmental Management Plans, which outline directives for management and monitoring;

Intensive Rural Development Corridors

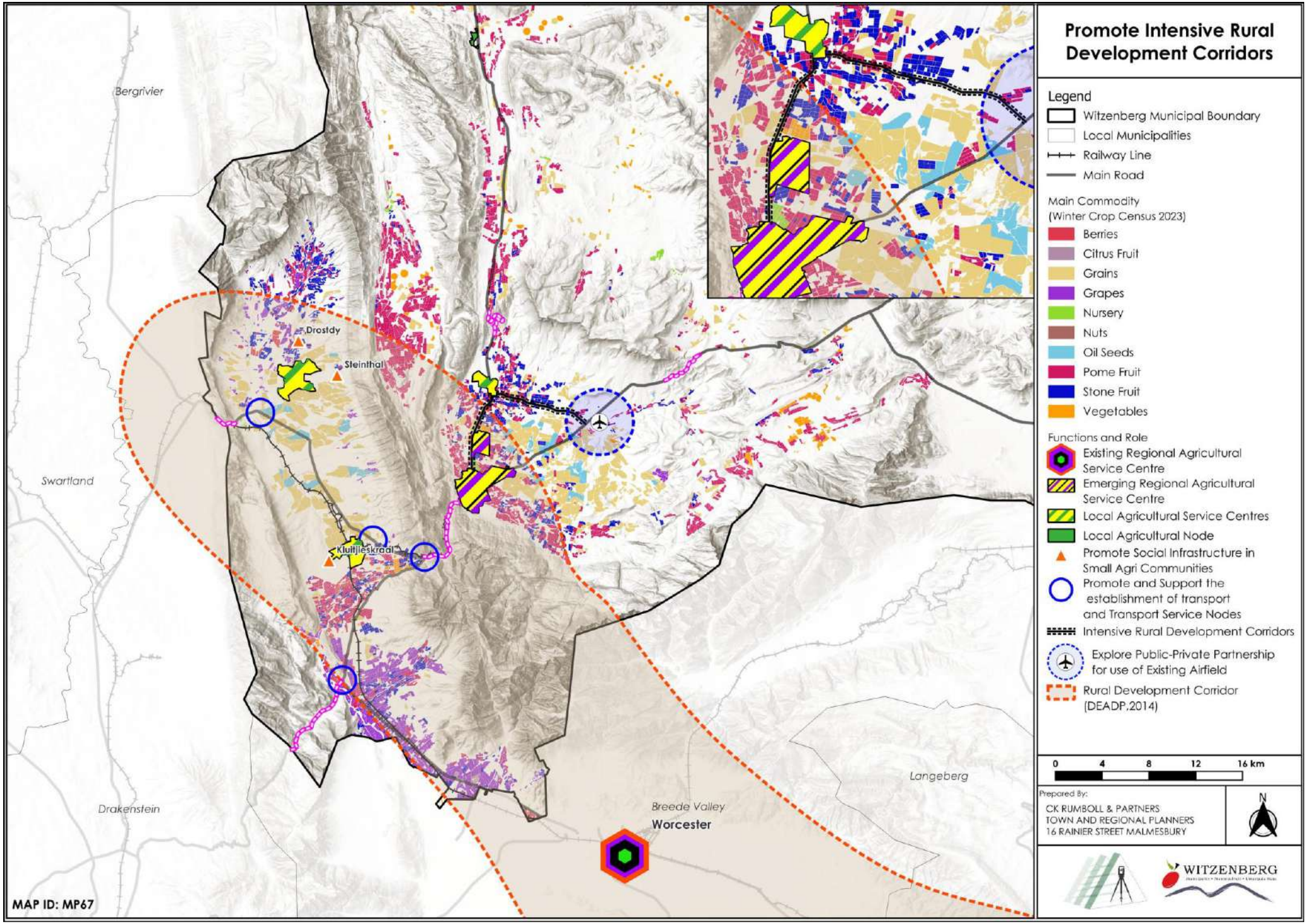
The Intensive Rural Development Corridor (IRDC) is a designated rural development area located along key transport routes, intersections, and agricultural service centres. Its purpose is to guide and support intensive rural development by promoting agricultural production, agri-processing and related economic activities in a sustainable manner. The IRDC enables more effective use of natural resources, supports agriculturally related industries, encourages commercial opportunities on farms, and strengthens the regional agri-park initiative by creating an integrated environment for value-chain development.

The corridor promotes land uses such as intensive agriculture, mixed rural services, tourism facilities, small-scale agri-processing and rural living opportunities, while ensuring that development remains sensitive to environmental quality, agricultural character and rural landscape integrity. It also creates opportunities for coordinated bulk infrastructure provision, enabling long-term sustainable growth.

A detailed overview along with proposed design guidelines for the IRDC, is provided in Annexure 9.

- Promote Ceres as a regional agricultural service centre.
- Promote Tulbagh, Wolseley and Prince Alfred Hamlet as local agricultural service centres.

- Support development of IRDC's, including agricultural industries and big box agricultural buildings (to scale within agricultural context), tourist facilities and farm stalls, landmarks and heritage areas in the rural areas along prominent transport links and at intersections such as:
  - Along the R303 between Ceres and Prince Alfred Hamlet and the R46 to the east of Ceres.
  - Along the R46 between Wolseley and Worcester.
- Strengthen agricultural value chain and support development related to agricultural produce and services along transport networks and tourism routes
  - Distribution facilities (e.g., sheds and cool storage).
  - Agri-related production facilities (e.g., biofuel).
  - Tourism development (protect the food value chain).
  - Agricultural and related industries, including agri-processing (abattoirs processing).
  - Composting.
  - Alternative energy generation.
  - Ancillary services such as repair services.
- Encourage labour intensive processing and manufacturing (for small scale agriculture).
- Support the initiation of commercial activities involving agricultural/farm workers, such as farm stalls and local markets.
- Promote a Witzenberg brand /branded identity for produce from the Witzenberg municipal area.
- Enhance opportunities to establish new markets at local, regional, provincial and national level.
- Promote the cultivation and marketing of agricultural produce (pome fruit, viticulture) and their by-products (agricultural service industries), including researching expansion into new foreign markets.
- Stimulate the growth and diversification of the agricultural sector by combining cultivation with conservation to create new products and markets, such as tourism and by-products.
- Commission the compilation of an area plan for the Ceres, Prince Alfred Hamlet and Airport Triangle.
  - Intensification of agricultural and agricultural related activities should be encouraged in the rural areas along the roads connecting Ceres, Prince Alfred Hamlet and the airport. The purpose of this portion of land, called the agricultural and rural development triangle, is to protect agricultural soils and water allocation.
  - Intensive agricultural cultivation and tourism should be encouraged and supported in the Wolseley to Worcester Agriculture and Tourism Corridor. The corridor ends at the boundary of Witzenberg and does not go all the way to Worcester.
  - Agri-industry is encouraged at the Tulbagh Station. The development should be left to the private sector as the municipality does not provide services in this area.


Promote Intensive Rural Development Corridors
Legend
Witzenberg Municipal Boundary
Local Municipalities
Railway Line
Main Road
Main Commodity
(Winter Crop Census 2023)
Berries
Citrus Fruit
Grains
Grapes
Nursery
Nuts
Oil Seeds
Pome Fruit
Stone Fruit
Vegetables
Functions and Role
Existing Regional Agricultural Service Centre
Emerging Regional Agricultural Service Centre
Local Agricultural Service Centres
Local Agricultural Node
Promote Social Infrastructure in Small Agri Communities
Promote and Support the establishment of transport and Transport Service Nodes
Intensive Rural Development Corridors
Explore Public-Private Partnership for use of Existing Airfield
Rural Development Corridor (DEADP,2014)
0 4 8 12 16 km
Prepared By:
CK RUMBOLL & PARTNERS
TOWN AND REGIONAL PLANNERS
16 RAINIER STREET MALMESBURY
N
WITZENBERG
Bergrivier
Swartland
Drakenstein
Breede Valley
Worcester
Langeberg
Drostdy
Steinthal
Kluitjieskraal
MAP ID: MP67

Land Reform and Food Security

- Protect and promote food security cross spectrum (households to global).
- Promote innovative land reform models with access to land and water and allow for various size farm units and rural living smallholdings.
- Identify areas including municipal and state land, with potential for community gardens and small-scale agriculture.
- Promote the revitalisation of the rural economy to address poverty and improve access to local economy (e.g., fruit & vegetable vendors).
- Provide agricultural workers the opportunity to participate in the rural economy within settlements and rural areas (e.g., farm stalls and local markets) and:
  - Encourage food gardens, community gardens and small-scale agriculture.
  - Encourage the preference for locally produced agricultural products.
  - Promote the production of niche products on farms (value adding) and investigate the production of new agricultural-related and complimentary products (e.g., from fruit processing).
- Re-orientate the existing agricultural model to allow for the creation of agricultural units of various sizes (smallholdings, intensive and extensive agricultural farms, larger residential units) to accommodate intensive cultivation and alternative farming methods.
- Support innovative approaches to food production and encourage diversification.
- Identify locations and provide spaces to establish skills development facilities for agricultural workers to receive training in agriculture, tourism, niche product manufacturing (e.g., biofuel), and business operations / management:
  - Promote a small-scale agricultural forum for informal and small-scale farming areas to deliberate development issues and establish development parameters.
  - Strengthen associations to promote community participation in local development issues and to determine land use/ zoning guidelines.

Landscapes, Historical Areas, Scenic Routes, Public Structured Open Spaces & Networks

- Develop a shade netting practice note.
- Subject proposed large-scale facilities (tourism and big box) larger than 2000m³ to environmental assessment and ensure environmental approval is obtained before development takes place. (And manage and monitor as per EMPr).
- Specify guidelines for fences, allowing wire or steel palisade structures up to 2.1 meters in height, with limitations on masonry walls and brick piers to preserve visual aesthetics.

Public Utilities

- Promote communication corridors and zones:
  - Improve communication networks.
  - Promote access to information & technology.
  - Prioritise expanding internet infrastructure (ADSL and fibre) to low-income and rural areas.

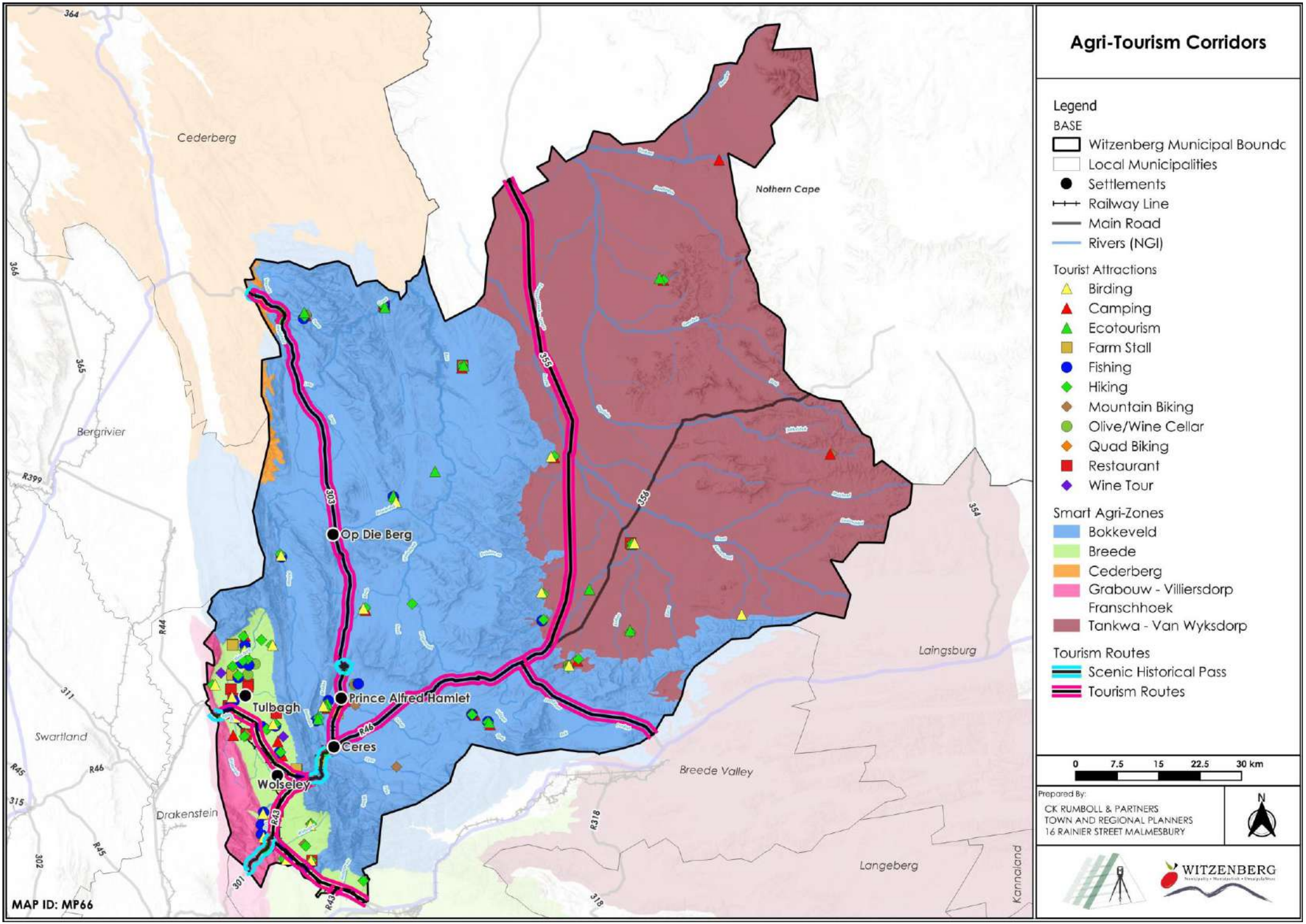
- Advocate for the establishment and careful placement of communication network facilities, data centres, and telecommunication towers in rural areas and on agricultural land, considering environmental and community sensitivities.
- Provide for adequate bulk infrastructure and space to establish bulk infrastructure.

Tourism

- Support Witzenberg cultivation routes (pome fruit, viticulture) and the development of related infrastructure, facilities and accommodation.
- Provide for and capitalise on recreation and sports events as commercial opportunities on land, water and air e.g., adventure and outdoor tourism, farm stays, fruit and wine tours, heritage and cultural experiences.
- Support proposed and current cross-border tourism routes, scenic historical passes, and destinations, ensuring the preservation of landscapes, sightlines and viewing points:
  - Tourism routes:
    - R43 from Worcester to Wolseley and Ceres.
    - Voortrekker Street between the R43 and Voortrekker Street intersection till Wolseley.
    - R46 between Ceres, Wolesley and Tulbagh.
    - R303 from Ceres via Prince Alfred Hamlet and Op-Die-Berg to Citrusdal.
    - R355 from Karoo Poort to Calvinia (gravel road).
  - Scenic Historical Passes:
    - Roodezandt Pass/Oudekloof Pass, Nuwekloof, Witzenberg Pass, Michell's Pass, Gydo Pass, Karoo Poort.
- Provide for and capitalise on recreation and sports events as commercial opportunities on land, water and air e.g., adventure and outdoor tourism, farm stays, fruit and wine tours, heritage and cultural experiences.
- Promote events/ festivals and support snow, fruit and wine tourism.
- Promote resorts (camping, caravan parks, and game reserves) and support facility and infrastructure development for festivals, events and celebrations. Provide for tourism infrastructure (roads and services), whilst complying with environmental impact requirements and assessment considerations.
- Encourage film industry uses (business tourism) and industrial tourism.

Advertisements, Signage and Lighting

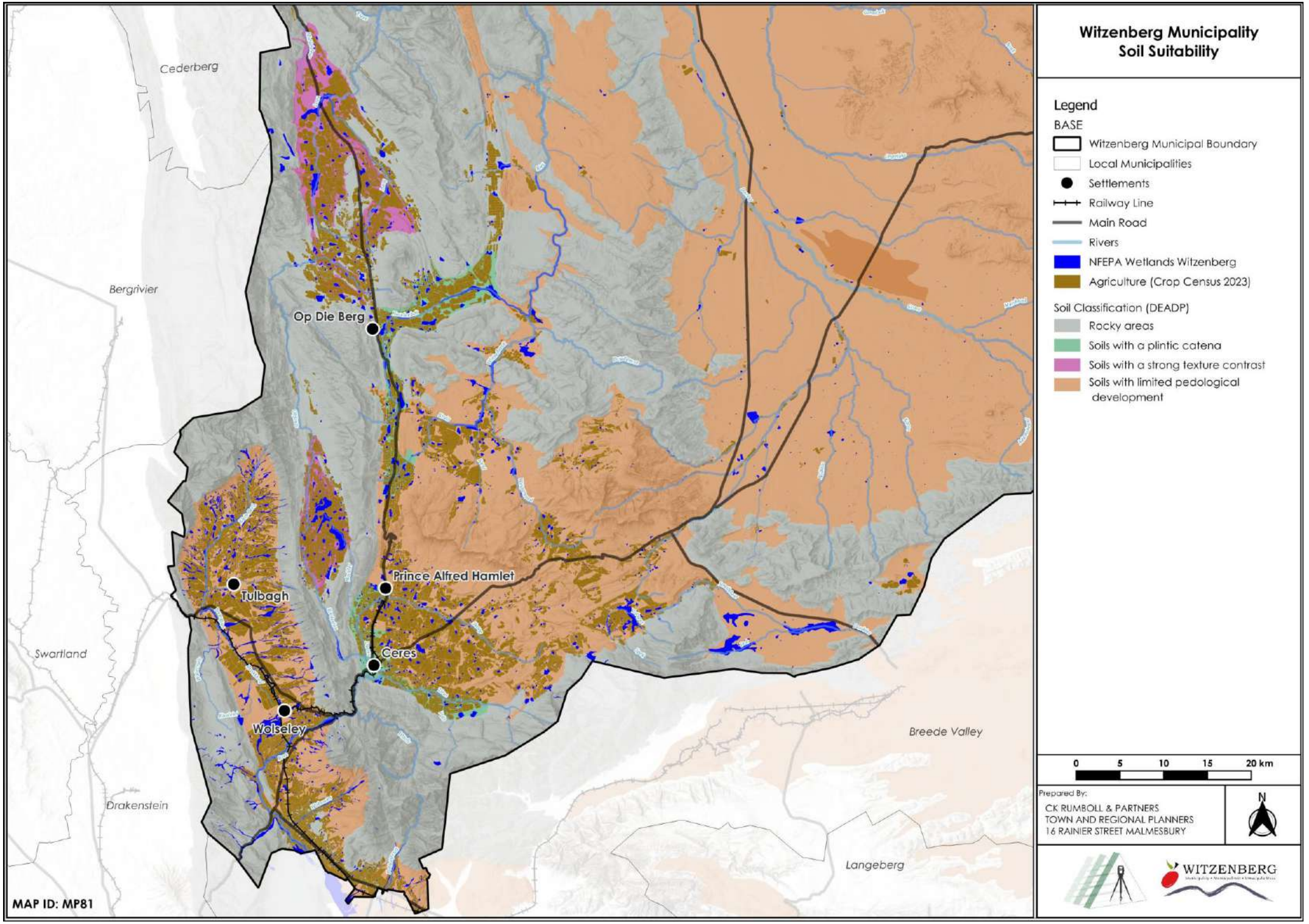
- Encourage tourism-related activities on farms and along waterways such as farm stays; leisure accommodation and resort development; agri-processing; tastings of local produce and food; restaurants; farm stalls; private nature reserves.


Agri-Tourism Corridors
Legend
BASE
Witzenberg Municipal Boundc
Local Municipalities
Settlements
Railway Line
Main Road
Rivers (NGI)
Tourist Attractions
Birding
Camping
Ecotourism
Farm Stall
Fishing
Hiking
Mountain Biking
Olive/Wine Cellar
Quad Biking
Restaurant
Wine Tour
Smart Agri-Zones
Bokkeveld
Breede
Cederberg
Grabouw - Villiersdorp
Franschhoek
Tankwa - Van Wyksdorp
Tourism Routes
Scenic Historical Pass
Tourism Routes
0 7.5 15 22.5 30 km
Prepared By:
CK RUMBOLL & PARTNERS
TOWN AND REGIONAL PLANNERS
16 RAINIER STREET MALMESBURY
N
WITZENBERG
Cederberg
Nothern Cape
Bergrivier
Swartland
Drakenstein
Laingsburg
Breede Valley
Langeberg
Kannaland
Op Die Berg
Prince Alfred Hamlet
Tulbagh
Ceres
Wolseley
MAP ID: MP66

6.2.2.2 Risk Prevention

Soil Suitability and Agriculture

- Conserve and preserve high-potential agricultural land:
  - Ensure no cultivation of virgin land takes place without the written consent from the Department of Agriculture.
  - Ensure no land with a slope of more than 20% will be cultivated without the written consent of the Department of Agriculture.
  - Avoid any land use and protect vegetation in a marsh, water sponge or in a floodplain.
  - Prohibit any development that will contradict or may have a significant impact on the cultivation of land with high and significant (medium-high) agricultural potential, whilst allowing for development that will have limited or no significant impact on agricultural areas with medium potential. (See Western Cape Land Use Planning Guidelines - Rural Areas as broad framework).
  - Delineate and protect intensive and extensive agricultural productive land, after consideration of social, economic and environmental impacts, to support effective and fair management of water resources and catchment areas.
- Maintain firebreaks around farms to mitigate the risk of wildfires.
- Protect agricultural cultivation across municipal borders to maintain homogeneous agricultural areas and to promote food security. This includes:
  - Pome fruit in the area north and south of Ceres.
  - Mixed farming including small grain cultivation and conservation in the area in the easternmost part of the valley formed by the Skurweberg Mountains.
  - Grape cultivation and pome fruit in the valley north of Tulbagh and south of Wolseley.
  - Mixed farming including small grain cultivation and conservation in the area surrounding between Tulbagh Wolseley.
- Protect sensitive natural and agricultural environments particularly agricultural land with high soil potential from inappropriate and opportunistic development as agriculture is significant within the municipal context.
- Effectively manage both water and wind erosion through conservation agriculture methods, including planting perennial legumes and implementing contour line management.
- Support ongoing research into the impact of climate change on current crop production and sustainable cultivation methods (Western Cape Agricultural Sector Climate Change Framework and Implementation Plan).
- Implement erosion control measures such as tree planting and sustainable farming to prevent soil degradation in areas such as Tulbagh and Op-Die-Berg which have shallow rocky soils.
- Prevent wetlands from long-term erosion in Wolseley by managing stormwater runoff. Prioritise the protection of soils with greater depths.


Witzenberg Municipality
Soil Suitability
Legend
BASE
Witzenberg Municipal Boundary
Local Municipalities
Settlements
Railway Line
Main Road
Rivers
NFEPA Wetlands Witzenberg
Agriculture (Crop Census 2023)
Soil Classification (DEADP)
Rocky areas
Soils with a plintic catena
Soils with a strong texture contrast
Soils with limited pedological development
Cederberg
Bergrivier
Swartland
Drakenstein
Breede Valley
Langeberg
Op Die Berg
Prince Alfred Hamlet
Tulbagh
Ceres
Wolseley
0 5 10 15 20 km
Prepared By:
CK RUMBOLL & PARTNERS
TOWN AND REGIONAL PLANNERS
16 RAINIER STREET MALMESBURY
N
WITZENBERG
MAP ID: MP81

Landscapes, Historical Areas, Scenic Routes, Public Structured Open Spaces & Networks

Netting, tunnels and agricultural and public utilities:

- Ensure mitigation of adverse effects of the placement of:
  - Polytunnels and Agricultural shade netting.
  - Agricultural activities and industries exceeding 2000 m², (implement mitigating measures such as repositioning or screening after careful consideration of potential visual, aesthetic, scenic, cultural and spiritual (visual defined as per PGWC guidelines) impacts).
- Require decommissioning of polytunnels and agricultural shade netting.
- Encourage repurposing rather than demolition of agri-industrial buildings, so that conversions address concerns about activity intensity and adverse impacts on the surrounding character and cultural amenity.

Tourism

- Protect natural environment and surroundings and carefully consider development along freight routes.
- Ensure ecotourism and tourism-related development do not negatively impact the receiving environment and carefully consider the mass, and scale of such proposed developments.

Advertisements, Signage and Lighting

- Develop a practice note on placement and aesthetics of cell phone and communication masts to counter visual impact of infrastructure.
- Protect natural landscapes and establish development lines around mountains and koppies. Ensure preservation of marshes, water sponges, and floodplains.

6.2.3 MINERAL RESOURCES

6.2.3.1 Proposals

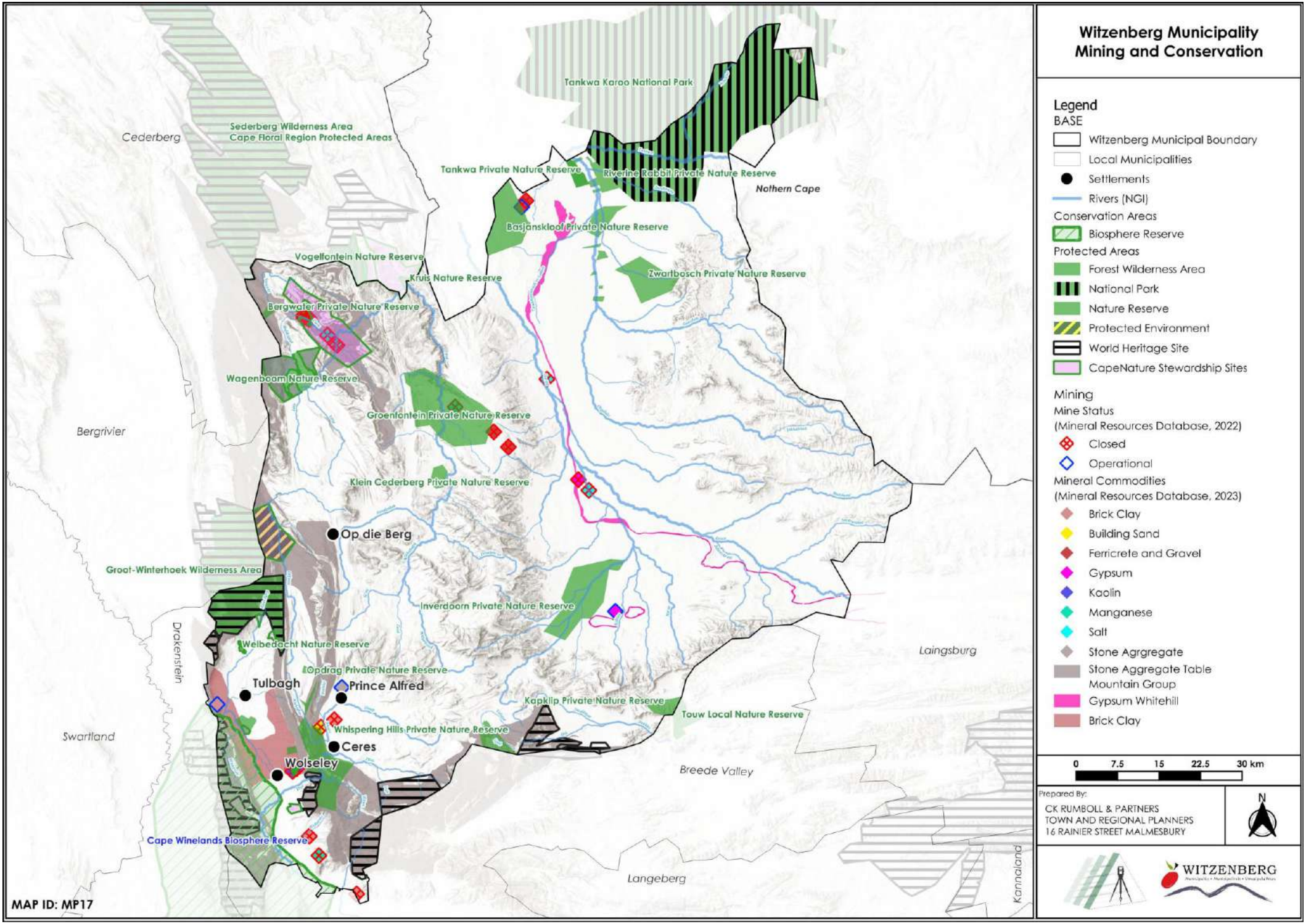
Minerals

- Support land use changes for mining viable volumes of natural resources which align with sustainability and environmental norms. Ensure mitigation of impacts, effective rehabilitation and utilisation of alternative transportation methods;
- Encourage the development of mining-related industries, mineral beneficiation and support services at long lifespan mines to maximise economic benefits and create labour intensive employment opportunities;
- Promote sustainable mining management of potential cumulative impacts on the landscape (sensitive environments: visual, agricultural resources, natural, cultural).

6.2.3.2 Risk Prevention

Dust, Colouration, Visual Impact and Water Quality

- Ensure mining EMPrs limit ecological (dust, water quality) and aesthetic damage (visual intrusion and coloration):
  - Pursue and ensure continuous rehabilitation and/ or repurposing of exploration activities or mines during and after operations as per EMPr;
  - Monitor adherence to EMPr and application of mitigation measures;
  - Develop land use directives in the absence of an EMPr to rehabilitate or repurpose ceased mines;
  - Mitigate and manage co-existence of conflicting uses, e.g., long-term sand mining (30 years+) and conservation.
- Align mining activities, as illustrated in the Mining & Conservation Map, with spatial planning, land use and environmental norms and parameters:
  - Assess cost-benefit ratios locally, nationally, and internationally to inform decision-making when mining in sensitive areas is considered;
  - Mandate adherence to sustainable environmental standards to minimise economic, environmental and social impacts;
  - Prevent high visual impact, short & long term and cumulative impacts on scenic landscapes and conservation-worthy resources;
  - Develop guidelines and detailed Area Plans to avoid sensitive landscapes and to prohibit mining working against tourism;
  - Require rehabilitation and repurposing;
  - Mitigate existing impacts, e.g., use alternative transport of mined resources;
  - Avoid official conservation areas.
- Ensure mines provide for adequate storage of overburden to limit and mitigate potential impact of mine dumps (heaps) on rural landscape.
- Avoid contamination of water sources (the cumulative impact of contamination and water scarcity is highly likely to change the landscape character in the long-term).
- Caution and mitigate dust generation leading to landscape discoloration.
- Prohibit mining that conflicts with conservation of resources of international importance.
- Caution mining activities which are not viable (all types, but sand mining specifically) and/or are conflicting with and counterproductive to the character and value of the landscape of the entire Municipal area.


Witzenberg Municipality
Mining and Conservation
Legend
BASE
Witzenberg Municipal Boundary
Local Municipalities
Settlements
Rivers (NGI)
Conservation Areas
Biosphere Reserve
Protected Areas
Forest Wilderness Area
National Park
Nature Reserve
Protected Environment
World Heritage Site
CapeNature Stewardship Sites
Mining
Mine Status
(Mineral Resources Database, 2022)
Closed
Operational
Mineral Commodities
(Mineral Resources Database, 2023)
Brick Clay
Building Sand
Ferricrete and Gravel
Gypsum
Kaolin
Manganese
Salt
Stone Agrgregate
Stone Aggregate Table Mountain Group
Gypsum Whitehill
Brick Clay
0 7.5 15 22.5 30 km
Prepared By:
CK RUMBOLL & PARTNERS
TOWN AND REGIONAL PLANNERS
16 RAINIER STREET MALMESBURY
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WITZENBERG
Tankwa Karoo National Park
Cederberg
Sederberg Wilderness Area
Cape Floral Region Protected Areas
Tankwa Private Nature Reserve
Riverine Rabbit Private Nature Reserve
Nothern Cape
Basjanskloof Private Nature Reserve
Vogelfontein Nature Reserve
Kruis Nature Reserve
Zwartbosch Private Nature Reserve
Bergwater Private Nature Reserve
Wagenboom Nature Reserve
Groenfontein Private Nature Reserve
Bergrivier
Klein Cederberg Private Nature Reserve
Op die Berg
Groot-Winterhoek Wilderness Area
Inverdoorn Private Nature Reserve
Drakenstein
Welbedacht Nature Reserve
Laingsburg
Opdrag Private Nature Reserve
Tulbagh
Prince Alfred
Kapklip Private Nature Reserve
Touw Local Nature Reserve
Whispering Hills Private Nature Reserve
Swartland
Ceres
Wolseley
Breede Valley
Cape Winelands Biosphere Reserve
Langeberg
Kannaland
MAP ID: MP17

6.2.4 Vegetation, Fauna, Ecosystems

6.2.4.1 Proposals

Natural Environment and Ecosystems

- Promote the establishment of cross-border initiatives (important conservation corridors) such as the Greater Cederberg Biodiversity Corridor (including linking the natural environment to the larger network of reserves and conservation areas in the Witzenberg Bay Municipal area and beyond).
- Support the compilation and implementation of a Witzenberg Municipal Environmental Management Framework.
- Promote the establishment and formalisation of ecological corridors and conservancies to facilitate connectivity between different habitat areas, allowing for the movement of wildlife and to protect natural habitat areas.
- Promote the mountains as important conservation corridors across municipal boundaries (including linking the natural environment to the larger network of reserves and conservation areas in Witzenberg Municipal area).
- Establish buffer zones in urban, rural and agricultural areas as part of Open Space and Conservation Network.

6.2.4.2 Risk Prevention

Natural Environment and Ecosystems:

- Protect natural assets, ecosystems and resources.
- Preserve the critical natural capital within Witzenberg, as it provides for continuous income from ecosystem advantages such as biological diversity, mineral resources and clean air and water (including biodiversity, topography, soils and water resources, geology, hydrology):
  - Promote its natural heritage value and use serving the public interest;
  - Pursue threatened fauna and flora species targets;
  - Promote the establishment of wildflower and nature reserves;
  - Target the inclusion of remnants of natural vegetation, in front of setback lines, behind development lines and within buffers along the lower reaches of mountains to restore ecological services. Where such remnants occur outside these lines and buffers, extend the conservation area;

- Manage conservation areas in accordance with national norms and standards to ensure their long-term viability;
- Limit internal fences to create natural corridors and areas.

Spatial Planning Categories:

- Promote application of spatial planning categories, and facilitate objective decisions in development applications that require protection of ecosystems and:
  - Core Areas: Nature reserves;
  - Buffer Areas along mountain ranges and Biospheres;

Impact on Landscapes:

- Limit the impact of development and urban growth on significant landscape features by:
  - Delineating development lines for settlements such as Ceres, Prince Alfred Hamlet and Op-Die-Berg which are located along mountains and hills;
  - Ensuring no land with a slope of more than 20% will be cultivated;
  - Limiting development that:
    - Involves the clearance of 300m² or more of indigenous vegetation in areas that meet the criteria specified in the 2021 EIA Listing Notice 3, Activity 12. These include:
      - Areas within critically endangered or endangered ecosystems listed under section 52 of the National Environmental Management: Biodiversity Act (NEMBA) or identified as critically endangered in the National Spatial Biodiversity Assessment;
      - Critical biodiversity areas identified in bioregional plans;
      - Land zoned for open space, conservation, or equivalent purposes;
      - Land designated for protection or conservation in an Environmental Management Framework or a Spatial Development Framework adopted by the MEC or Minister.
  - Limit the impact of development and urban growth on significant landscape features in accordance with NEMA EIA regulations and WCBSP guidelines.
    - In settlements: On buildings or sites that have cultural or historical value or the demolition of such resources;
    - Landscapes: Uncontrolled, unsightly development;
    - Historical areas: Uncontrolled, unsightly development;
    - Scenic routes: Uncontrolled, unsightly development e.g., wind farms;
    - Structured open space & networks: Commercial, industrial or residential developments;
    - Conservation areas: Critical Biodiversity Areas, any development not focused on ecotourism;
    - Critical Biodiversity Areas 2 (Rehabitable & irreplaceable areas) and Critical Ecological Support Areas and Other Ecological Support Areas: Developments that are not closely focused on

ecotourism. Limited development after an Environmental Impact Assessment has determined guidelines, could be considered;

- Other natural vegetation areas: Uncontrolled and non-compliant development: Residential, commercial and industrial developments could be considered.

- Issue development and no-development instructions according to the SPCs;
- Encourage development that has no significant impact:
  - In settlements: Restoration of buildings for offices, guest houses, etc.;
  - Landscapes: Limited, low-density development that is not visually intrusive and adds value to the environment;
  - Historical areas: Limited, high-density development that is not visually noticeable and adds value to the environment;
  - Scenic routes: Limited, low-density development that is not visually intrusive;
  - Structured open space & networks: Limited development.

6.2.5 Nature Reserves and Conservancies

6.2.5.1 Proposals

Co-management and Effective Governance:

- Secure financing;
- Ensure adequate resources and capacity;
- Collaborate with local communities and conservation organisations, such as the WWF and CapeNature, to achieve shared conservation goals;
- Encourage private sector involvement which is crucial in biodiversity conservation, as evidenced by the successful reintroduction of rare species;
- Showcase, through the establishment of genetic diverse populations, effective co-management between reserves and conservation authorities.

Public Awareness:

- Make visitors aware to use established routes;
- Work to increase public awareness about the significance of conserving biodiversity and the resultant wilderness character through various educational initiatives;
- Through collaborative efforts with local communities and tourism agencies, promote awareness of the reserves' ecological significance;
- Celebrate events like World Wildlife Day and Earth Hour to raise awareness of environmental issues and the importance of sustainable practices.

Economic Benefits and Ecotourism:

- Provide opportunities for ecotourism and outdoor recreation, which contribute to the local economy through tourism-related activities and services;
- Promote self-drive and guided routes within reserves, including opportunities for guided drives and overnight stays, to foster appreciation of biodiversity and wilderness while contributing to local economic development and supporting ongoing conservation efforts;
- Attract visitors from both local and international markets to reserves offering a unique wildlife experience;
- Encourage accommodation options which cater to various preferences, from luxury lodges to camping experiences, supporting a range of tourism interests.

Directives:

- Encourage the removal of invasive alien woody plant species and effective fire management;
- Advocate for the management of large game species in accordance with policies to maintain ecological balance and prevent encroachment;
- Ensure any development plans prioritise conservation and sustainable land management, and avoid activities that could degrade natural habitats or disrupt or impact ecosystems;
- Encourage continued collaboration with local communities and conservation organisations to ensure that development efforts align with conservation objectives and benefit present and future generations;
- Carefully plan expansion of infrastructure to avoid disrupting wildlife habitats and pristine wilderness areas;
- Emphasise sustainable tourism practices to prevent overexploitation of natural resources and ensure the long-term viability of reserves;
- Sensitively promote alternative energy where compatible with conservation.

6.2.5.2 Risk Prevention

Conservation of Biodiversity and Wilderness Character:

- Prioritise sustainability in farming and wine production; aim to maintain ecological balance and conserve natural resources.
- Promote intervention farming practices and environmental education initiatives that contribute to the preservation of natural habitats and biodiversity.

Research and Monitoring:

- Maintain ecosystem health and functioning;
- Increase records of scarce species;
- Inform conservation targets and management actions, through vegetation studies conducted to understand and classify vegetation units;
- Continue to demonstrate a commitment to research and conservation through ongoing monitoring of wildlife populations. The presence of healthy populations of reintroduced species indicates successful conservation practices and long-term monitoring strategies.

Economic Benefits and Ecotourism:

- Through sustainable farming practices and conservation efforts, contribute to the preservation of natural ecosystems, and support ecotourism and recreational activities like hiking and birdwatching;
- When considering ecotourism and tourism-related land uses in sensitive environments, the Municipality must carefully evaluate the type, mass, and scale of proposed developments to ensure they do not negatively impact the receiving environment.

Development that Should Not Occur:

- Farming;
- Any urban type of development;
- Exploitation of important species (Fauna and Flora);
- Preserve biodiversity and wilderness character which is essential across all reserves, with careful consideration given to any development that may harm these aspects;
- Mining.

6.2.5.3 Tankwa Karoo National Park

Management Priority	Priority Focus Area
Tankwa Karoo National Park	• The Tankwa Karoo National Park is home to a variety of wildlife and plant species. Small mammal species including duiker, steenbok, porcupine and blackbacked jackal live in the park. Gemsbok, springbok and eland have been reintroduced; • The park hosts significant birdlife, with 188 species recorded, at least 18 of which are endemic to the Karoo; • The flora includes the Succulent Karoo biome, with approximately 6 400 plant species of which 40% are endemic; • The Succulent Karoo is particularly notable because it is a world biodiversity hotspot that is home to the largest concentration of succulent plant species, globally.
Conservation of biodiversity and wilderness character	• The park is dedicated to conserving the biodiverse Succulent Karoo Biome and is one of very few arid biodiversity hotspots worldwide, making it a site of global significance; • The park's diverse landscapes, which are delineated by the Roggeveld Escarpment in the east, Cederberg in the west and Klein Roggeveld Mountains in the south, help maintain its wilderness character, offering a natural habitat for a variety of species; • The park is still under development, while the park currently includes about 146,373 ha of land, there are ongoing efforts to consolidate land into the conservation area.
Co-management and effective governance	• The Tankwa Karoo National Park is managed by South African National Parks (SANParks), which ensures effective governance and integration with national conservation strategies; • The Gannaga Lodge is a privately owned lodge, and there is another portion of land that is privately owned within the park, which requires collaboration with these stakeholders to enhance conservation efforts and outcomes; • The Western Cape Biodiversity Plan 2023 emphasises the need for strict controls on land use, particularly regarding agricultural expansion and the introduction of invasive species. Ongoing monitoring and community engagement are vital to ensure sustainable practices that benefit both conservation efforts and local livelihoods.
Research and monitoring	• Research at the park focuses on monitoring bird migration patterns, plant species diversity, and the overall health of its ecosystems; • This includes reintroduction of large mammals and evaluating the effectiveness of conservation measures to protect both flora and fauna.
Economic benefits and ecotourism	• The park attracts ecotourists who come for 4x4, bird and game watching, mountain biking, stargazing, and enjoying the scenic beauty of the area, contributing to the local and regional economy; • Facilities such as 4x4 trails, campsites, cottages, and viewpoints enable visitors to experience this reserve in an immersive way, promoting environmental awareness, which supports ecotourism initiatives; • Gannaga Lodge, has a conference venue, guest house, restaurant and licensed bar;

	• There are limited facilities in the park, meaning that Ceres is one of the last places where visitors can refuel and pick up groceries, making it an important link to the park. The Ceres Tourism Bureau can also play a role in supporting the park by providing maps and information to visitors on its website and at the local office.
Public awareness	• The park is still under development and visitors are advised to reach out to the park regarding availability of accommodation; • These efforts help foster a deeper understanding of environmental conservation and encourage responsible tourism.

6.2.5.4 Limietberg Reserve and Waterval Private Nature Reserve

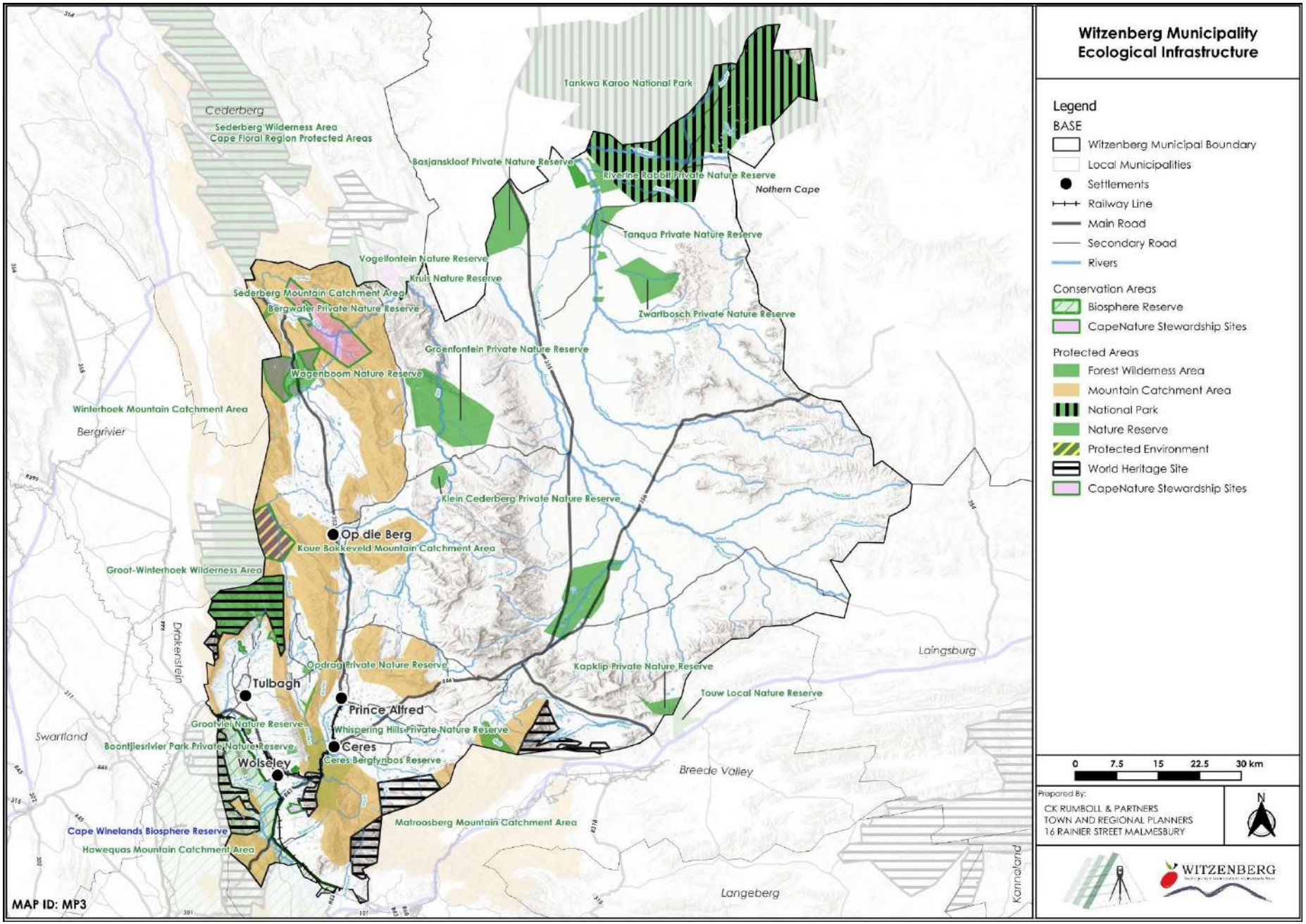
Management Priority	Priority Focus Area
Limietberg Reserve and Waterval Private Nature Reserve	• The Cape Nature Limietberg Reserve is an area of 100 000 ha that extends between Franschhoek, Drakenstein, and Witzenberg towards the Voelvlei Dam. It forms part of the larger Cape Winelands Biosphere Reserve which is an extensive reserve, covering 322 030 ha of the Western Cape, partially located in the Witzenberg Municipality, and in the Boland Mountains near Wolseley. The Cape Winelands Biosphere Reserve was formally designated by UNESCO in 2007 in accordance with the global Man and the Biosphere (MAB) Programme; • Waterval Private Nature Reserve is located in the mountains near Tulbagh; • These reserves' unique features include the high mountain peaks, river systems with waterfalls, fynbos ecosystems, and historical significance because of the historical passes.
Conservation of biodiversity and wilderness character	• The Limietberg reserve supports a variety of wildlife including small antelope, baboon, caracal and leopard. Endemic birds such as the Cape sugarbird and the protea canary, as well as the black eagle, can also be found here; • The flora consists of two main vegetation types: Hawequas Sandstone Fynbos and Swartland Alluvium Fynbos; • Alien trees, including black wattle, hakea and pine, have invaded sections of the reserve; • Limietberg Nature Reserve is important for conserving fynbos ecosystems. It protects diverse plant and animal species and maintains the wilderness character of the Cape Winelands region. The reserve's preservation efforts include managing invasive species and safeguarding the unique vegetation types and wildlife habitats. The natural environment is relatively undisturbed, contributing to its value as a conservation area.
Co-management and effective governance	• The Limietberg reserve is managed by CapeNature. Effective governance ensures that conservation efforts are aligned with regional and national policies. The reserve's management includes monitoring environmental changes and addressing challenges such as invasive species and visitor impact; • The Waterval Nature Reserve is privately owned; • The Western Cape Biodiversity Plan 2023 emphasises the need for strict controls on land use, particularly regarding agricultural expansion and the introduction of invasive species. Ongoing monitoring and community engagement are vital to ensure sustainable practices that benefit both conservation efforts and local livelihoods.

Research and monitoring	• Research at Limietberg focuses on understanding the local fauna, flora, and geological features. This includes monitoring bird species, plant communities, and the impact of invasive species; • Waterval Nature Reserve is working with Intaba Environmental Services to restore the riparian system by clearing alien species, removing degradation factors on the stream and reintroducing indigenous area-specific plant species. Research efforts are also being undertaken at Waterval Nature Reserve with CapeNature, SANBI and the Millenium Seed Bank to monitor rare plant species located in this reserve, including *Sorocephalus imbricatus* including efforts at hand pollination and seed banking.
Economic benefits and ecotourism	• The majority of tourist attractions in Limietberg are in Drakenstein. Attractions include the Tweede Tol campsite and picnic area, which has 25 campsites, with associated facilities, day hiking trails, river rafting and kayaking. Nevertheless, the reserve extends into Witzenberg and collaboration with CapeNature is essential to maintaining the pristine natural environment. The reserve's natural beauty contributes to its appeal as an ecotourism destination; • Waterval Nature Reserve offers conferencing, team building and wedding venue facilities.
Public awareness	• Public awareness is promoted through the reserve's facilities and webpages.

6.2.5.5 Groot Winterhoek Complex

Management Priority	Priority Focus Area
Groot Winterhoek Wilderness Area	• The Groot Winterhoek Complex is a CapeNature reserve situated in the Winterhoek mountains north of Tulbagh and is primarily located in the Bergrivier municipal area. It covers an area of 27 330ha; • The area is known for its rugged landscape and is important for protecting mountain fynbos and wildlife. It is also one of twenty-two strategic water source areas of national importance and is a World Heritage Site; • The area also has heritage value, as it includes San and Khoi rock art, which vary between 300 and 6000 years old. There are also remnants of tracks used by early settlers that are still visible.
Conservation of biodiversity and wilderness character	• The complex supports a diverse array of wildlife, including klipspringers, grey rhebok and grysbok which are common and easy to spot. Leopard, caracal, wild cat, mongoose, genet and other predators are harder to more elusive; • The vegetation is primarily Winterhoek Sandstone Fynbos. This includes a range of rare, threatened and endemic species, for instance the Sorocephalus scabridus - a member of the protea family. A large variety of red disas flower abundantly along the streams near the reserve office in January and February. Many erica species flower year-round.
Co-management and effective governance	• The Groot Winterhoek Complex is a CapeNature reserve. Effective governance involves collaboration with local authorities to align conservation strategies with regional policies; • While the majority of facilities are located outside of Witzenberg, cross-boundary collaboration is important for the continued preservation and maintenance of this reserve;

	• The Western Cape Biodiversity Spatial Plan 2023 emphasises the need for strict controls on land use, particularly regarding agricultural expansion and the introduction of invasive species. Ongoing monitoring and community engagement are vital to ensure sustainable practices that benefit both conservation efforts and local livelihoods.
Research and monitoring	• Research initiatives focus on understanding the unique flora and fauna of the reserve, monitoring species diversity, and evaluating the impacts of environmental changes. This includes tracking populations of key species and assessing habitat health.
Economic benefits and ecotourism	• Groot Winterhoek has four basic hiker huts at De Tronk which are equipped with bunk beds and mattresses only. Located at the edge of the wilderness area, these huts can only be reached via a 3.5-hour hike. Hikers may also overnight anywhere in the reserve or wilderness area. • Educo Africa is an experiential learning NGO that operates from Bosdorp and runs a base camp and environmental sustainability learning centre here.
Public awareness	• Public awareness is promoted through the reserve's facilities and webpages, as well as the ongoing efforts of Educo Africa.


Witzenberg Municipality
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Witzenberg Municipal Boundary
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Main Road
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Wagenboom Nature Reserve
Winterhoek Mountain Catchment Area
Bergrivier
Klein Cederberg Private Nature Reserve
Op die Berg
Koue Bokkeveld Mountain Catchment Area
Groot-Winterhoek Wilderness Area
Drakenstein
Laingsburg
Opdrag Private Nature Reserve
Kapklip Private Nature Reserve
Tulbagh
Prince Alfred
Touw Local Nature Reserve
Grootvlei Nature Reserve
Whispering Hills Private Nature Reserve
Swartland
Boontjiesrivier Park Private Nature Reserve
Ceres
Wolseley
Ceres Bergfynbos Reserve
Breede Valley
Matroosberg Mountain Catchment Area
Cape Winelands Biosphere Reserve
Hawequas Mountain Catchment Area
Kannaland
Langeberg
MAP ID: MP3
0 7.5 15 22.5 30 km
Prepared By:
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TOWN AND REGIONAL PLANNERS
16 RAINIER STREET MALMESBURY
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WITZENBERG

6.2.6 Heritage & Sense of Place

6.2.6.1 Proposals

Heritage Management:

- Support the integration of heritage management and planning functions as per National Heritage Resources Act, Act 25 of 1999 (NHRA) and:
  - Update the urban and rural heritage inventory, inclusive of heritage resources (buildings and structures, archaeology), landscapes and prominent natural features, in areas of jurisdiction (Sections 30 (5) and 31) and heritage overlay zones (special heritage areas). Inventory to be submitted to the relevant provincial heritage authority for formalisation;
  - Protect cultural resources creating Witzenberg's sense of place, and forming the basis of tourism;
  - Grade heritage resources to ensure the effective management and preservation thereof. (Grading has to be overseen by the Provincial Heritage Authority);
  - Establish a formal heritage entity (Heritage Asset Management Forum) to manage graded heritage resources per respective settlements and jointly manage heritage resources in the rural areas.
  - Ensure representation of registered cultural groups, members of the public and field experts on a Heritage Asset Management Forum as required.

Scenic and Heritage Routes:

- Promote scenic and heritage routes and explore alternative and more effective utilisation of conservation areas and heritage resources to create opportunities for alternative income generation on farms, such as hosting festivals;
- Establish a conservation route along the R355, the gravel road from Karoo Poort to Calvinia and along historic mountain passes such as Roodezandt Pass/ Oudekloof Pass, Nuwekloof Pass, Witzenberg Pass, Michell's Pass, Gydo Pass, Karoo Poort, including the Hottentotskloof Pass and Theronsberg Pass).

Gateways and Signage:

- Develop understated, unique and where possible natural gateways to settlements;
- Avoid gateways and gateway precincts becoming advertising spaces;
- Promote improved roadside signage and understated entrance gates in sensitive landscapes;
- Promote information boards as part of the preservation of cultural and heritage resources;
- Utilise heritage sites for recreation and tourism and develop tourism infrastructure sensitive to natural and historical landscapes.

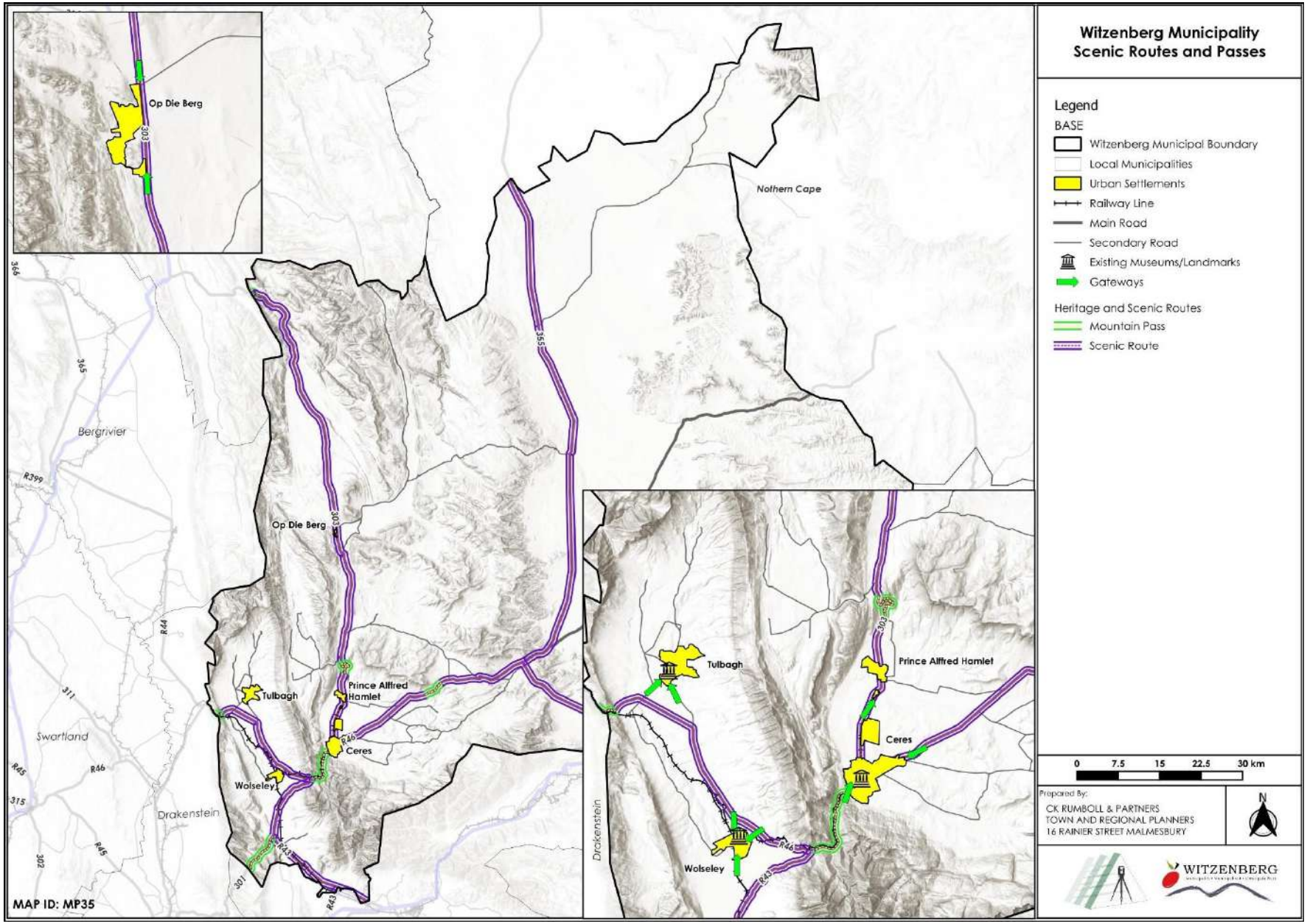
Celebrating Heritage Resources:

- Promote conservation of natural, cultivated and domestic landscapes, and heritage resources within the municipal area, safeguarding features like heritage elements, old farmsteads, and mature trees. Also, highlight socio-economic resources like biomes, wildflowers, historical & cultural heritage, and agricultural areas such as Ceres, Tulbagh and Wolseley.

- Map heritage landscapes, zones in settlements, significant farmyards and any other heritage resources in rural areas to guide appropriate development;
- Develop information points or centres marking heritage routes in settlements;
- Formally give notice of local heritage areas in settlements and rural areas;
- Manage, rehabilitate and preserve cultural and historical landscapes, graves, monuments, etc., described by the National Heritage Resources Act;
- Improve and rehabilitate: Restore buildings and sites that have heritage value;
- Integrate ecological processes and community needs to ensure sustainable resource use in mountainous and riverine areas, guided by bioregional planning principles;
- Support local home-based tourism initiatives;
- Ensure that the amenity capacity of the biophysical environment is not exceeded;
- Implement economic incentives (for conservation) to stimulate growth (tax rebates);
- Attract more retirees and working people (for whom remote working is an option due to improved technology and connectivity) who want to live in a more tranquil rural environment to settle in Witzenberg municipal area (broadened taxes basis);
- Support the establishment and maintenance of existing cultural centres / museums, providing spaces for cultural expression and education to broaden the tourism experiences offered in the municipal area.
- Support the maintenance and preservation of the historic core in urban settlements. (See individual settlement proposal maps in Chapter 5 of this document)

Creating Heritage:

- Protect heritage resources , while also creating areas with a fresh or new sense of place through urban design and rejuvenation;
- Promote the planting of trees by all households and protect mature trees (20 years and older);
- Promote evolving heritage sites as tourism destinations, including cultural and landscape routes, to celebrate and preserve local history and traditions.


Witzenberg Municipality
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WITZENBERG
MAP ID: MP35

6.2.6.2 Prevention of Risks

Sense of Place and Landscapes:

Preserve and promote the different characters of the Witzenberg municipal area, inclusive of the unique agricultural (vinyards and fruit tree orchards), heritage and natural environment and landscape:

- Develop design parameters to protect settlement patterns and rural landscapes.;
- Conserve historical town centres often determined by the location of drinking water and a church and grid layout pattern;
- Protect unique character of settlement and within settlements:
  - Protect critical biodiversity areas, ecological corridors and ecosystems;
  - Protect unique natural and manmade landscape features (vineyards and fruit tree orchards) and structures;
  - Protect scenic routes.
  - Protect heritage features and landscapes and create future heritage landscapes.
- Include and active consult minority cultural groups during relevant stages of development projects involving cultural heritage;
- Promote the management, monitoring and maintenance of cultural heritage sites, as set out in their Environmental Management Plans.
- Retain and preserve conservation areas designated as biodiversity priority areas as indicated in the Spatial Development Framework;
- Ensure all monitoring, maintenance and management aspects are set out in a biodiversity environmental management plan, to be drawn up for priority areas.

Promote Guidelines for Rural Areas:

- Maintain existing nodes and a meaningful settlement hierarchy in the Western Cape;
- Promote smart growth by curbing urban sprawl and prioritising infill and densification of existing urban areas;
- Prevent urban development encroachment into agricultural areas, scenic landscapes and biodiversity priority areas;
- Provide housing opportunities and agri-villages or agri-precincts for rural dwellers in existing settlements (in partnership with agri workers and farmers) or ensure security of tenure for agricultural workers or ensure their enrolment on the waiting lists.

6.2.7 Air, Wind, Sun and Land

The establishment of commercial renewable energy structures (e.g., photovoltaic, wind turbines) are deemed to be linked to place-specific characteristics and desirability factors not restricted to the confines of an urban edge and can occur in the rural hinterland subject to the desirability evaluation of a relevant land use application and compliance with conditions as per approvals and EMPR. The MSDF therefore refrains from identifying specific localities for such uses.

6.2.7.1 Proposal

Alternative Energy

- Promote alternative energy generation facilities (wind, solar and hydrogen), in accordance with the Renewable Energy Development Zone and informed by specialist studies.

6.2.7.2 Prevention of Risk

Alternative Energy

- Encourage renewable energy development, with specific recognition of the Kromsberg Renewable Energy Development Zone (REDZ) as a strategic focus area for wind energy, while also considering site-specific proposals elsewhere in the Witzenberg municipal area where appropriate, to reduce reliance on fossil fuels and mitigate climate change impacts.

Water

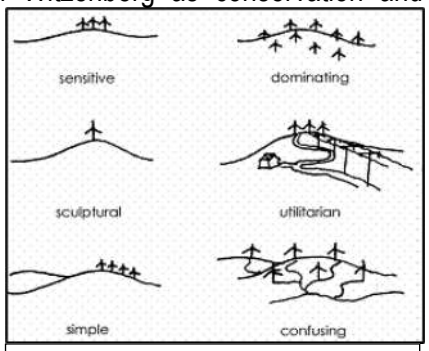
- Implement measures to protect surface and groundwater by:
  - Road design;
  - Treating runoff from roads;
  - Introducing surfaces and disturbances to reduce sedimentation and prevent erosion.

Land

- Prohibit potential erosion originating from road construction by using appropriate soils and re-vegetate barren areas created by road works;
- Conduct a comprehensive vegetation assessment if the proposed development site is not in an agriculturally disturbed area. The assessment should evaluate the location, extent and condition of:
  - Disturbed or alien vegetation;
  - Any natural vegetation;
  - Indigenous and endemic species;
  - Rare and threatened species.
- Consider the following for terrain suitability:
  - Slopes by gradient classes;
  - Presence of rocky areas;
  - Soil type and permeability;
  - Natural watercourses and areas with high water tables, rainfall data;
  - Vegetation.

Wind

The natural landscape contributes significantly to the cultural integrity and future heritage of the environment of Witzenberg as conservation and ecotourism destination.



Location options for wind turbines

- Consider wind turbine placement on slopes given impact on:
  - Wind potential – slopes, up to a certain gradient, orientated towards prevailing wind directions, tend to augment average wind speed.
  - Solar radiation – slopes influence placement and various technologies require different placement direction.
  - Visibility – wind and solar farms on slopes have increased visibility.
  - Road layout and design – slopes to be considered in road layout to reduce erosion potential, of road runoff, rockfall and landslide potential.
  - Tower foundation/ pedestal design – need to consider falls across the platforms.
  - Soil stabilisation – steep road verges and cuts require re-vegetation to reduce erosion from runoff.

Air Quality:

Manage and monitor air quality:

- Promote and encourage efforts to reduce air pollutants and GHG emissions;
- Enhance enforcement and management of air quality compliance. Increase awareness regarding air quality management. Upgrade existing air quality management tools;
- Invest in adequate human and financial resources to ensure effective implementation and management of air quality;
- Integrate Climate Change and Air Quality Management;
- Pollution Sources:

Where information is available or where emission factors can be applied to quantify emissions, an emissions inventory for air pollution sources has been compiled. (See SANS 1929: 2005 - Ambient Air Quality - Limits for common pollutants and National Environmental Management: Air Quality Act 39 of 2004). According to the Air Quality Management Plan, air pollution sources in Witzenberg include:

- Industrial emissions.
- Motor vehicles.
- Residential fuel burning.
- Agricultural emissions.
- Biomass burning.
- Pesticide use.

- Agricultural activities - although not quantified, agricultural activities are a contributor to ambient particulate concentrations. Since agriculture is a dominant land use within Witzenberg, pollution from agricultural activities and pesticide use should be monitored and mitigated;
- Activities such as:

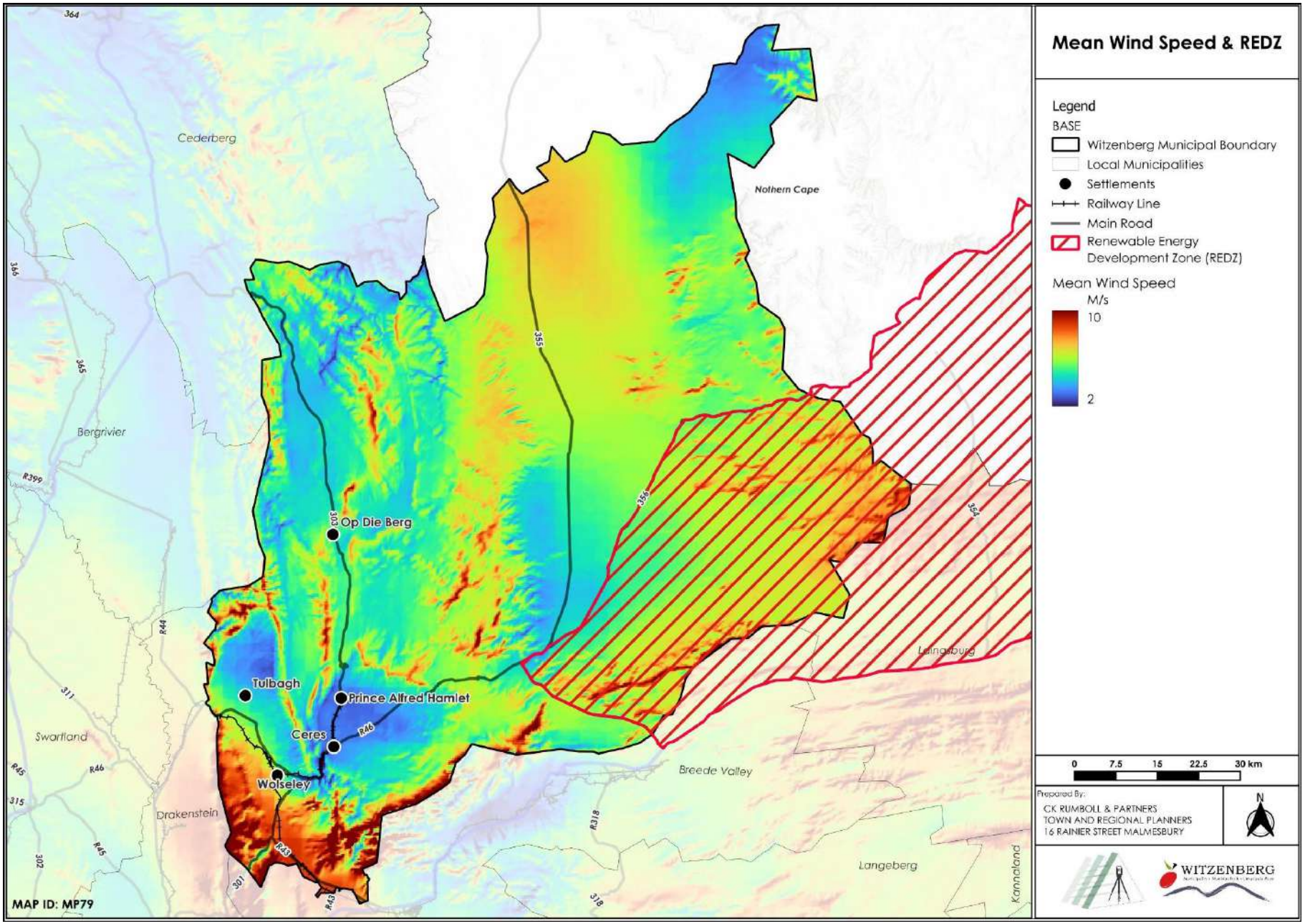
  - Water quality.
  - Waste loading and unloading.
  - Resource loading and unloading.
  - Exposed screening plants.
  - Waste dumps.
  - Stock yards.
  - Exposed pit surfaces.
  - Transport roads and haul roads.
- Biomass burning (veld fires) - also not quantified, owing to the irregular and seasonal nature of this source;
- Vehicle and generator tailpipe emissions - from petrol and diesel vehicles along major roads and generators (to generate energy during loadshedding) but this is not considered to be a significant air pollution source (Particulate and gaseous emissions).

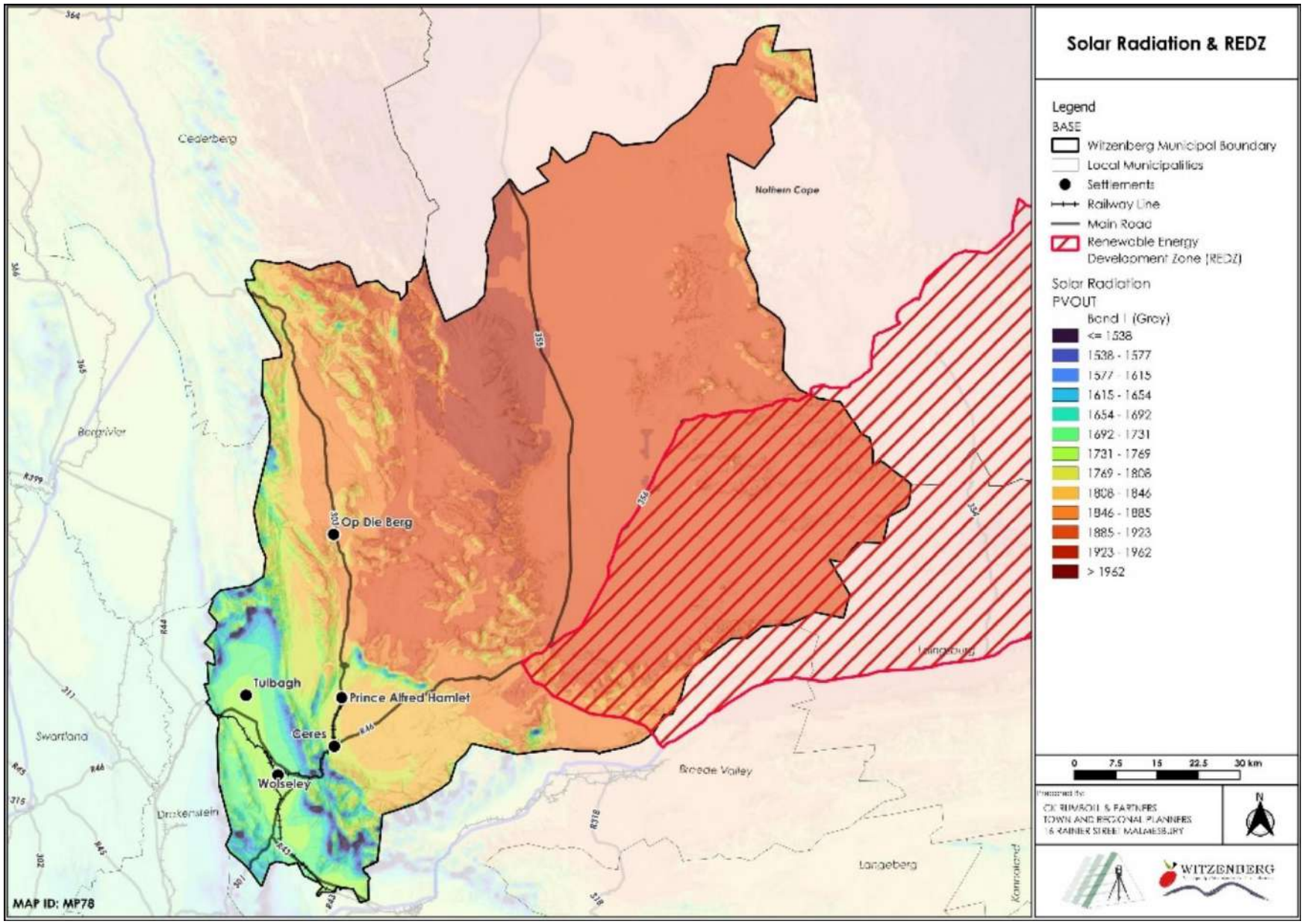
Manage (avoid, mitigate or reduce) air pollution:

- Ensure that air pollution is avoided, or where it cannot be altogether avoided, mitigated or minimised in accordance with the Witzenberg Municipality Draft Air Quality Plan, 2019, or any other related laws;
- Develop an Air Quality By-Law for the Witzenberg Municipality;
- Maintain implementation of Air Quality Management Plan (AQMP) and measures to mitigate potential air pollution sources in the Witzenberg municipal area;
- All monitoring and management aspects as set out in the Witzenberg Municipality Draft Air Quality Plan, 2019, to be drawn up for priority areas to serve as informant of future development in close proximity and guided by an environmental impact study:
  - Utilities (sewerage, waste);
  - Monitor implementation of mitigation measures to prevent increased air pollution episodes that contribute to climate change. Measures to address climate change include:
    - Increasing the number of monitoring stations in the Western Cape.
    - Effective dissemination of air quality information.
    - Introducing cleaner fuel programmes for households and transport.
    - Witzenberg Municipality to refine priority pollutants list according to its by-laws.
- Ensure that buffer zones between proposed residential expansion areas are significantly increased to prevent developments near areas that face air quality challenges. Such as in Ceres and Prince Alfred Hamlet.
- Support and facilitate the undertaking of a detailed pollution dispersion study, for future housing and small scale agricultural developments near industrial zones, wastewater treatment plants (WWTPs), and landfill sites. This study should incorporate an assessment of noise, dust, odour, predominant wind patterns and seasonal shifts to pinpoint areas more vulnerable to pollutant exposure and could be, where applicable, part of the Environmental Impact Assessment (EIA) process;
- Develop an Emission Inventory for the Witzenberg Municipality to address the increase in air pollution and resulting greenhouse gas (GHG) emissions, which significantly impact climate change;
- Conduct a comprehensive health risk assessment to evaluate the cumulative impacts of pollutants, including pesticide usage, on local communities.

Prevention and reduction measures:

- Prepare for wildfires in conservation areas and delineate firebreak buffers around towns such as Ceres, Op-Die-Berg, Prince Alfred Hamlet, and Wolseley.
- Promote the incorporation of trees and plants that enhance air quality in all development projects. Advocate for mitigation measures to address dust, discoloration, and visual impacts associated with agricultural and agri-processing activities.
- Adopt climate change mitigations to reduce GHG emissions. This is done to build a sustainable low carbon economy including but not limited to: a reduction in need for transport fuels, compact settlement planning, a reduction in energy use and a switch to renewable energy.


Mean Wind Speed & REDZ
Legend
BASE
Witzenberg Municipal Boundary
Local Municipalities
Settlements
Railway Line
Main Road
Renewable Energy Development Zone (REDZ)
Mean Wind Speed
M/s
10
2
Cederberg
Northern Cape
Bergrivier
Op Die Berg
Tulbagh
Prince Alfred Hamlet
Ceres
Wolseley
Swartland
Drakenstein
Breede Valley
Langeberg
Kannaland
Laingsburg
0 7.5 15 22.5 30 km
Prepared By:
CK RUMBOLL & PARTNERS
TOWN AND REGIONAL PLANNERS
16 RAINIER STREET MALMESBURY
WITZENBERG
MAP ID: MP79


Solar Radiation & REDZ
Legend
BASE
Witzenberg Municipal Boundary
Local Municipalities
Settlements
Railway Line
Main Road
Renewable Energy Development Zone (REDZ)
Solar Radiation
PVOUT
Band 1 (Grey)
<= 1538
1538 - 1577
1577 - 1615
1615 - 1654
1654 - 1692
1692 - 1731
1731 - 1769
1769 - 1808
1808 - 1846
1846 - 1885
1885 - 1923
1923 - 1962
> 1962
0 7.5 15 22.5 30 km
Cederberg
Northern Cape
Bergrivier
Op Die Berg
Tulbagh
Prince Alfred Hamlet
Ceres
Wolseley
Swartland
Drakenstein
Breede Valley
Langeberg
Witzenberg
MAP ID: MP78

6.2.8 Connectors

6.2.8.1 Proposals

See Annexure 10 for directives of the Department of Infrastructure (DOI) Transport Infrastructure Branch.

Mobility, Transport Networks & Economic Links:

Roads as connectors:

- Functionally (easy access): Integrate rural and urban areas as connector roads within Witzenberg Municipal area to link with:
  - Western Cape region;
  - Northern Cape and Namibia;
  - Karoo and Southern Cape.
- Maintain existing important freight and scenic routes, across the region;
- Support the enhancement of the following freight routes:
  - R44 / R46 loop via:
    - Somerset West – Klapmuts – Wellington – Tulbagh – Ceres – Touws River and;
    - Provide opportunities for freight and distribution related industries along the route;
  - R60 linking Worcester (N1) – Robertson – Ashton – Swellendam (N2);
  - R43 – linking Wolseley – Worcester

Transport nodes:

Promote and support the establishment of transport and transport service nodes along key provincial and national roads and at their intersections, such as the R43, R46, R303 and R355:

- Require the development of the intersections as nodes to be aligned with the requirements of DOI Transport Infrastructure Branch;
- Adhere to SANRAL and Department of Transport and Public Works' criteria such as distance between nodes and visibility where applicable;
- Develop new transport infrastructure (farm stalls or convenience shops) sensitively within the agricultural and conservation landscape to support economic activity and seamlessly integrate and harmonise into the environment;
- Enhance mobility between rural and urban areas;
- Focus node development along routes on:
  - Tourism and mobility;
  - Agricultural support services;
  - Freight distribution;
  - Enhancing service stations.
- Should an Arterial Management Plan be required for the development of nodes, it is subject to approval by the DTPW Roads Branch, to preserve the mobility function of routes.
- Provide access along Proclaimed Provincial and National Roads in accordance with the WCG DTPW Access Management Guidelines (2020) and SANRAL policies.
- Ensure visibility of node development to safeguard intersection nodes:

Transport Modes and Mobility:

Promote improved mobility in rural areas:

- Provide for upgrading of pedestrian routes and adequate lighting;

- Where freight routes intersect with settlements, locate pedestrian and NMT routes away from freight route;
- Along freight routes outside settlement, locate pedestrian and NMT routes at a safe distance or away from freight route;
- Identify and provide for safe/all-weather bus/taxi stops along main transport network to serve the rural community.

Public Transport, motorised:

Investigate the feasibility and reliability of a public transport service:

- Along the R303 – Between Ceres, Bella Vista & Prince Alfred Hamlet.
- Along the R46 – Between Ceres and Nduli.
- Along the R46 – Between Wolseley and Worcester.

Rail:

Encourage the use of rail as an alternative mode of transport, particularly for freight (agriculture and mining):

- Introduce passenger rail services for commuters and tourists in Cape Winelands District (Tulbagh, Wolseley and Ceres) (inter-municipal route);
- Support the implementation of special train trips along the Tulbagh, Wolseley, Ceres route);

Air:

Investigate a potential public / private partnership in terms of utilising existing airstrips as a tourist amenity.

Functional Nodes and Nodal Support

- Prioritise infrastructure investment in Ceres to reinforce its role as the primary service centre and administrative head of the municipal area.
- Prioritise social amenities in and around Tulbagh and Wolseley to strengthen their capacity as secondary service centres/small service towns supporting surrounding rural communities, including Tulbagh Road, Waterval, Drosdy, and Steinthal.
- Prioritise targeted infrastructure upgrading, economic development initiatives, and expansion of light-industrial capacity in Wolseley to optimise the town's strategic connectivity to the regional service centre in Worcester via the R43 and the rail corridor.
- Maintain and promote inter-settlement linkages between Worcester, Ceres, Wolseley, Tulbagh, and rural villages to ensure an integrated and functional regional settlement network.

Social amenities:

Well-distributed regional amenities such as clinics, public transport facilities, community services, i.e courts and tersiary institutions, and commercial nodes serve as shared points of access, interaction, and service delivery across a wider municipal area. They create functional linkages between settlements by drawing people in for daily needs, employment, and social activities. These shared destinations strengthen movement patterns, support economic integration, and enhance social cohesion by ensuring that residents of different settlements interact within common spaces.

- Provide social amenities in accordance with CSIR standards to enhance the well-being of residents.

Access to education:

- Promote access for agri workers and rural dwellers to education and development programmes;
- Provide for and support development of early childhood education facilities and opportunities on farms and rural areas;
- Establish a skills training facility and short-term accommodation in Ceres and/ or Wolseley.

Repurposing of railway infrastructure and stations:

- Promote the renewal, upgrading, and redevelopment of existing station buildings at:
  - Tulbagh and sidings;
  - Additionally, improve siding infrastructure including storage facilities.

Mobile social services:

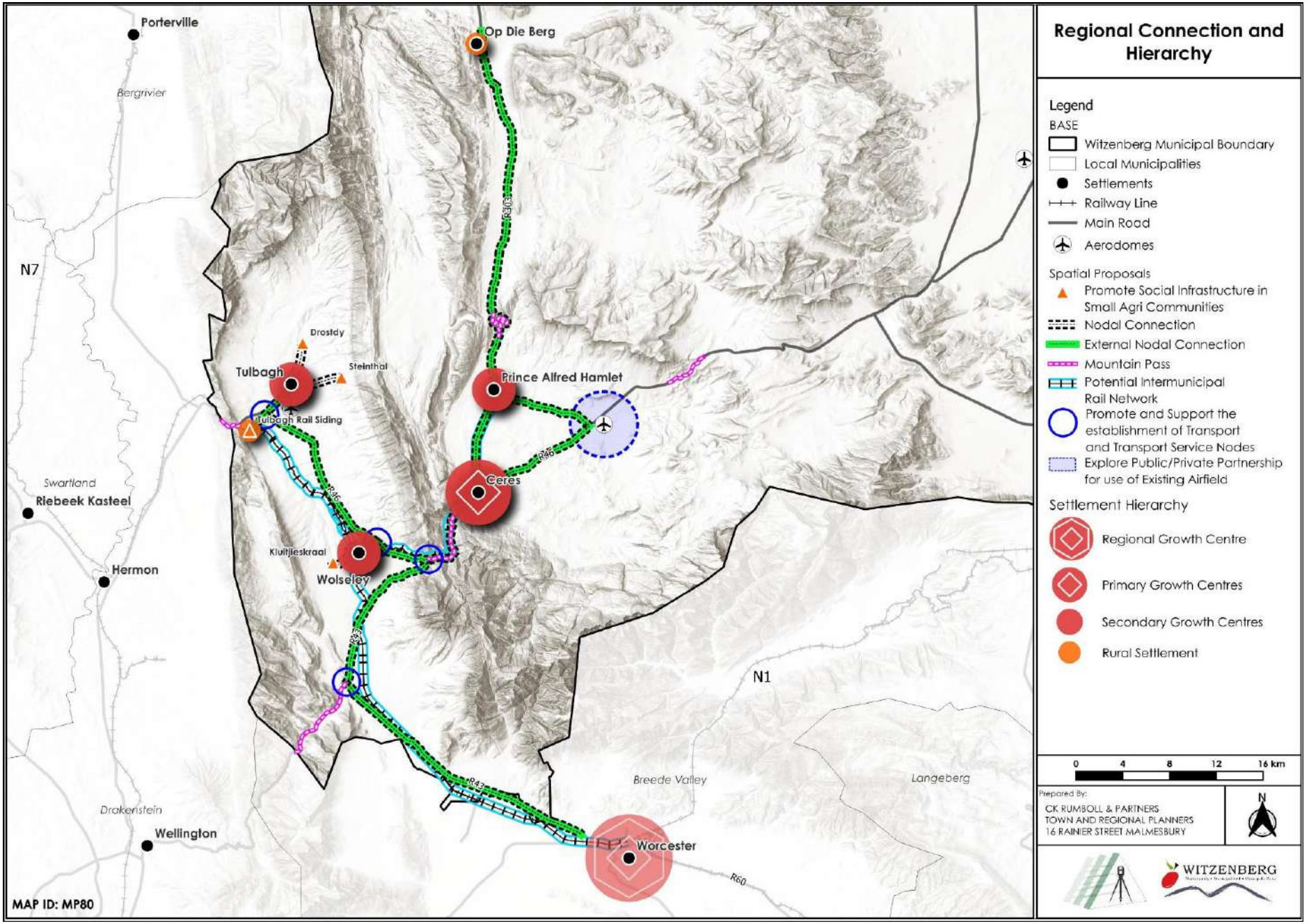
- Provide for mobile social services in rural areas and prevent deterioration in the Human Development Index, including:
  - Mobile clinics;
  - Early childhood education facilities;
  - Mobile libraries;
  - Firefighting;
  - Ambulance service;
  - Busses and taxis;
  - Law enforcement.
- Develop a practice note or by-laws for migration and settlement growth initiated by migrants securing tenure;
- Develop a practice note for small scale agriculture.

Rural public open spaces:

- Promote the identification and formalisation of public open spaces along specific water courses in rural areas;
- Enhance public areas or spaces through promoting urban design and landscaping.

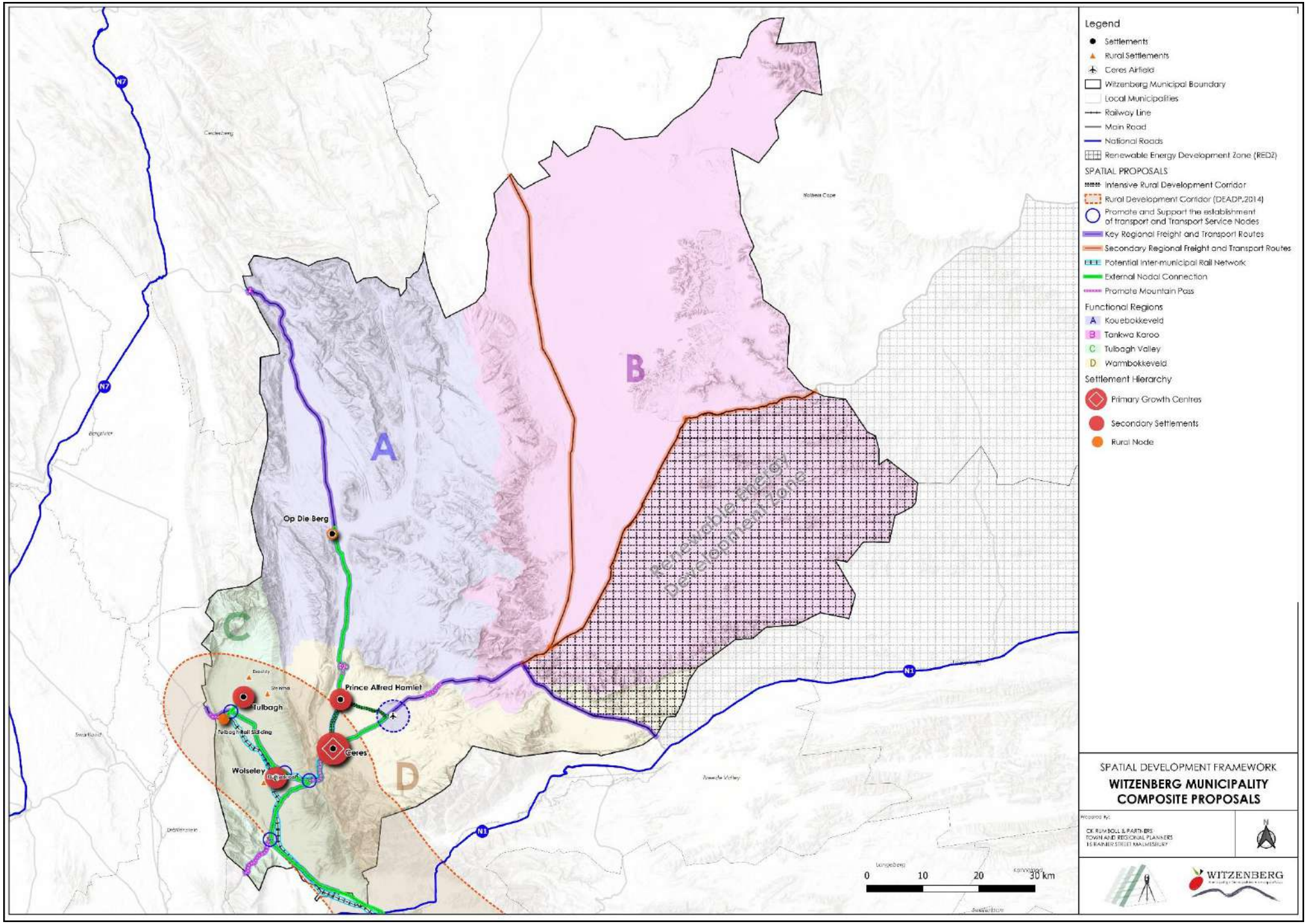
Strategic rural sites:

- Identify strategic rural sites to provide for consolidated, centralised social and sport infrastructure in highly accessible nodes, e.g., sport complexes combined with community facilities.


Regional Connection and Hierarchy
Legend
BASE
Witzenberg Municipal Boundary
Local Municipalities
Settlements
Railway Line
Main Road
Aerodomes
Spatial Proposals
Promote Social Infrastructure in Small Agri Communities
Nodal Connection
External Nodal Connection
Mountain Pass
Potential Intermunicipal Rail Network
Promote and Support the establishment of Transport and Transport Service Nodes
Explore Public/Private Partnership for use of Existing Airfield
Settlement Hierarchy
Regional Growth Centre
Primary Growth Centres
Secondary Growth Centres
Rural Settlement
0 4 8 12 16 km
Prepared By:
CK RUMBOLL & PARTNERS
TOWN AND REGIONAL PLANNERS
16 RAINIER STREET MALMESBURY
N
WITZENBERG
Porterville
Bergrivier
Op Die Berg
N7
Drostdy
Steinthal
Tulbagh
Tulbagh Rail Siding
Prince Alfred Hamlet
Ceres
Swartland
Riebeek Kasteel
Kluitjieskraal
Wolseley
Hermon
N1
Breede Valley
Langeberg
Drakenstein
Wellington
Worcester
R303
R46
R43
R60
MAP ID: MP80

6.3 Composite Map

The composite map below illustrates all rural and regional proposals and risk-prevention directives outlined in this chapter. Collectively, these proposals and risk-prevention directives provide the spatial mechanisms required to ensure Witzenberg's long-term spatial vision of becoming a dynamic, resilient municipality that drives inclusive and diversified economic growth, encourages spatial transformation and creates sustainable, liveable spaces that attract investment, foster innovation and empower future generations. The identified and mapped proposals and directives enable the municipality to be adaptable to changing trends and needs, strengthen the primary economic driver while supporting and stimulating complementary economic drivers, attract investment (commercial, industrial, residential), elevate municipal role at regional, provincial & national levels and retain wealth generated within the municipal boundary.


Legend
Settlements
Rural Settlements
Ceres Airfield
Witzenberg Municipal Boundary
Local Municipalities
Railway Line
Main Road
National Roads
Renewable Energy Development Zone (REDZ)
SPATIAL PROPOSALS
Intensive Rural Development Corridor
Rural Development Corridor (DEADP,2014)
Promote and Support the establishment of transport and Transport Service Nodes
Key Regional Freight and Transport Routes
Secondary Regional Freight and Transport Routes
Potential Inter-municipal Rail Network
External Nodal Connection
Promote Mountain Pass
Functional Regions
A Koue bokkeveld
B Tankwa Karoo
C Tulbagh Valley
D Warmbokkeveld
Settlement Hierarchy
Primary Growth Centres
Secondary Settlements
Rural Node
A
B
C
D
Renewable Energy Development Zone
Op Die Berg
Prince Alfred Hamlet
Tulbagh
Tulbagh Rail Siding
Ceres
Wolseley
Bella Rosa
N7
N1
0
10
20
30 km
SPATIAL DEVELOPMENT FRAMEWORK
WITZENBERG MUNICIPALITY
COMPOSITE PROPOSALS
Prepared by:
CK RUMBOLL & PARTNERS
TOWN AND REGIONAL PLANNERS
15 RAINER STREET MALMESBURY
WITZENBERG

CHAPTER 7: Capital Expenditure Framework

7.1 Introduction And Background

A Capital Expenditure Framework (CEF) for Witzenberg Municipality (WM) is required by Section 21(n) of SPLUMA, which requires an MSDF to include a CEF for the municipality's development programmes, depicted spatially. Illustrated in Figure 32 below, the intention is to create a 10-year prioritised programme of capital infrastructure that links the spatial planning strategy, infrastructure plans, as well as the broader capital-based project needs of the municipality within the available capital budget.

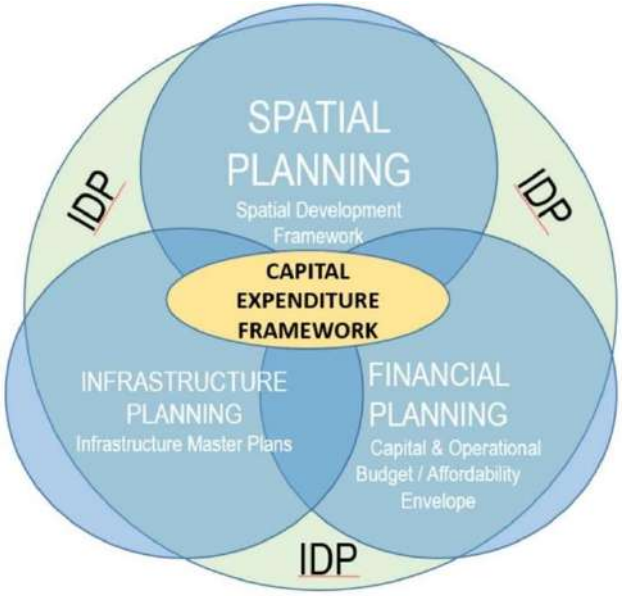


Figure 32: The Capital Expenditure Framework as the meeting point between Spatial Planning, Infrastructure Planning & Financial Planning

The importance of including financial planning is to ensure that a consolidated and prioritized programme of project needs, is affordable and that strategies to address affordability constraints are identified and, where possible, addressed. This CEF therefore engages with WM's financial parameters to determine a prioritised capital expenditure programme. Figure 33 below illustrates this concept that, invariably, the level of need for infrastructure investment within South African municipalities is usually greater than what can be afforded.

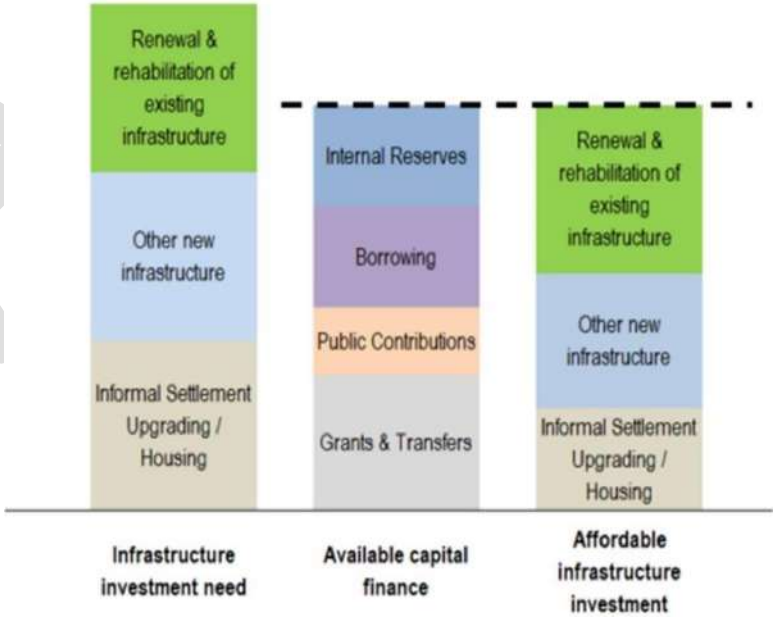


Figure 33: The Capital Expenditure Framework assists in determining what is affordable, within the 'affordability envelope' that is set out in the Long-Term Financial Plan

7.2 Governance And Institutional Consideration

The ideal relationship between the MSDF, infrastructure master plans, IDP, and municipal budgets from a built environment perspective is shown in Figure 34.

Ideally, the infrastructure and built environment programmes articulated in the 5-year IDP should align with the spatial objectives of the MSDF. However, a contributing factor to the lack of integration and spatial transformation is that strategic policy seldom leads the implementation agenda. Rather, implementation, and more specifically budget spending, tends to focus on the short-term which is further entrenched in the 5-year programme of the "term of office" political structure (contained in the IDP) and the 3- year budget cycles (contained in the MTREF). The CEF seeks to ensure a strategy-led approach to project identification, budgeting and implementation.

It's worth disclaiming that WM's councillors and officials, pending the needs and risks that arise, will likely make annual changes to the CEF's prioritised capital portfolio of projects. Nonetheless, the goal of this CEF remains to put WM in a better position to do 3-10-year project prioritisation, budgeting and to ensure that the most strategy-aligned projects are implemented. The CEF is therefore an iterative tool that will assist the municipality and other spheres of government in prioritizing needs (projects), based on municipal spatial strategy, and developing accountable and defendable budgets.

It is critical that the CEF is co-owned by all departments within the municipality. This is expected to be the case since the capital portfolio of projects emanate from the sector plans and needs of the municipality. WM officials, and specifically the town planning, infrastructure services and finance office will therefore need to be trained to keep the capital project portfolio updated and scored in line with WM's changing needs and priorities.

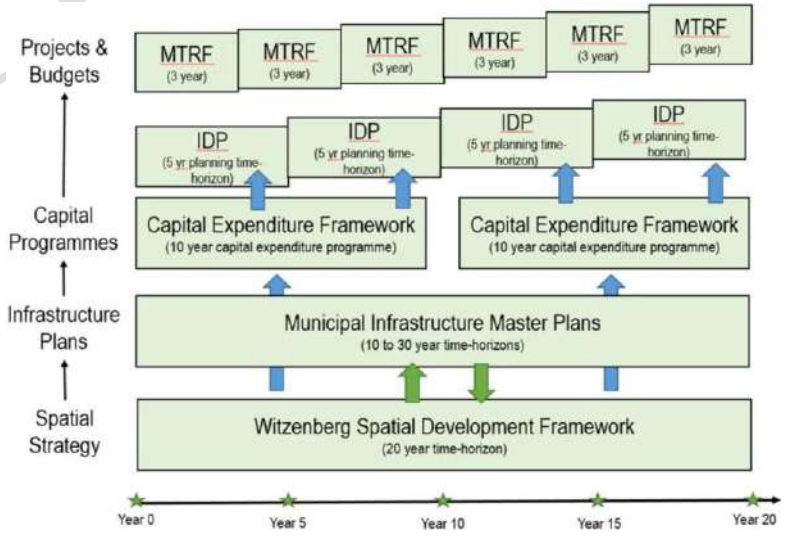


Figure 34 Articulating the ideal relationship between municipal planning tools from a built environment perspective

7.3 Methodology

COGTA's "Guide to Preparing a CEF" highlights three key components of a CEF:

- Spatial Alignment - seeks to understand the spatial agenda that directs the capital expenditure requirements that inform the CEF. The SDF with its spatial vision, has to address issues of lack of integration, inaccessibility and inequality, and to translate spatial transformation (a more sustainable urban form) and urban functionality (keep the lights on) into capital programmes.
- Technical Assessment - intended to develop a longer-term perspective (longer than 5 years but at least 10 years) to estimate and project the demand for new and current services and the necessary infrastructure to provide such services.
- Financial Alignment - intended to develop a longer-term perspective (longer than 3 years but at least 10 years) to estimate and project the potential revenue of the municipality and link that with the cost of running the municipality and to determine its potential to generate reserves as an entity (municipality) to increase its financial credibility and in so doing improving its borrowing capacity.

The COGTA guide was developed for the purposes of the Integrated Urban Development Grant, which is specifically allocated to Intermediate Cities with Integrated Urban Development Frameworks. WM is not categorised as an Intermediate City and is not required to prepare an IUDF. For this reason and to develop a more practical CEF, certain adaptations to the guide have been made. This method is shown in Figure 3.1 on the following page and includes 3 main parts and 5 phases. A high-level overview of each part is provided below. Each 'Main Part' is accompanied by a separate database where information was recorded and then cross-analysed.

7.3.1 PART A: Infrastructure Demand Determination

Part A is made up of Phases 1, 2a & 2b, which are interdependent, and whose purpose is to determine the infrastructure demand that the MSDF will generate over a 10-year period.

Phase 1 involves –

- reflecting on WM's infrastructure status, risks, and economic informants;
- and then recording all of these infrastructure investment projects from various sources (the IDP, tabled budget documents, infrastructure master plans, municipal sector plans, MIG capital investment programme, and WM 5-year capital plan 2020, and the MSDF itself) into a single consolidated infrastructure portfolio of projects.

The output of Phase 1 is a consolidated master source Excel database of current and potential infrastructure and capital investments for the entire municipality, identifying new, upgrade, renewal, maintenance, and planning investments needed in the municipality. The master database consists of

infrastructure projects (water, waste, roads, sanitation, etc.) and planning projects (such as new engineering master plans), which have cost implications for the budget. These projects are, as far as possible, geo-located, to determine how they align with the spatial strategy in the Witzenberg SDF.

Phase 2a develops –

- a socio-economic and spatial profile of the local municipal area, highlighting the features that will impact long-term growth within the municipality.
- The aim is to develop a socio-economic and spatial profile of each of the functional areas of the municipality, determine the population and household growth trends per functional area over a 10-year period, and translate this into the anticipated yields and land required across land uses to meet this demand.

The aim of Phase 2b –

- based on the land yield demand (from phase 2a), determine what land needs to be acquired to accommodate the future growth, what infrastructure investments are required over a 10-year period,
- and to determine the bulk infrastructure demand per service type over a 10-year period. The outputs of Phase 2b are based upon the Western Cape Government's Development Contributions (DC) calculator. The projects generated in phase 2b are then cross-checked with projects in the consolidated database (from phase 1) that may already cater for the future need. The MSDF projects are then included within the broader project needs and wants.

7.3.2 PART B: Affordability and Funding Envelope

The aim of Part B (Phase 3 being the only phase in this part) –

- is to ascertain the forecast of municipal revenue and expenses over a 10-year period and;
- the forecast of the capital available for infrastructure investment for WM (known as the "affordability envelope"). It involves reflecting on WM's long-term financial plan to determine the available capital budget, which would be used to fund the projects.

WM's Long Term Financial Plan (LTFP) projects the municipality's revenue & expenses between 2016 and 2025. The LTFP is also outdated and does not consider the 2020 economic recession caused by COVID-19 and the associated lockdown measures. As a result of this, data from the audited Annual Financial Statements were used to project revenue and expenses using conservative growth assumptions. From this, an affordability envelope (budget available for capital expenditure) was extracted. It must be noted that this part uses several assumptions. Changes in these assumptions can and will significantly alter the amount available for capital expenditure.

7.3.3 PART C: Project Prioritisation and 10-year Capital Expenditure Programme

The aim of Part C (made up of Phase 4 and Phase 5) is to apply a capital portfolio project prioritization tool, based on the spatial, financial, and engineering imperatives of the municipality, which will be used to score and rank the unfunded portfolio of infrastructure projects. When the tool is applied, a prioritized list of infrastructure projects is identified (based on scoring). Using the prioritized list of infrastructure projects, together with the defined funding envelope from phase 3, the prioritized infrastructure projects are fitted within the 10-year funding envelope. Here, one identifies which projects fall within the affordability envelope and which do not, considering interdependencies and sequencing considerations of infrastructure investments needed. These projects are then tailored or phased in the form of a proposed Capital Expenditure Programme within the defined capital expenditure envelope from phase 3.

The criteria for the prioritisation tool are not set in stone and can be refined as and when required, to reflect municipal strategy, as they have a material and direct impact on which projects are prioritized. Currently, the provincial prioritization tool is used.

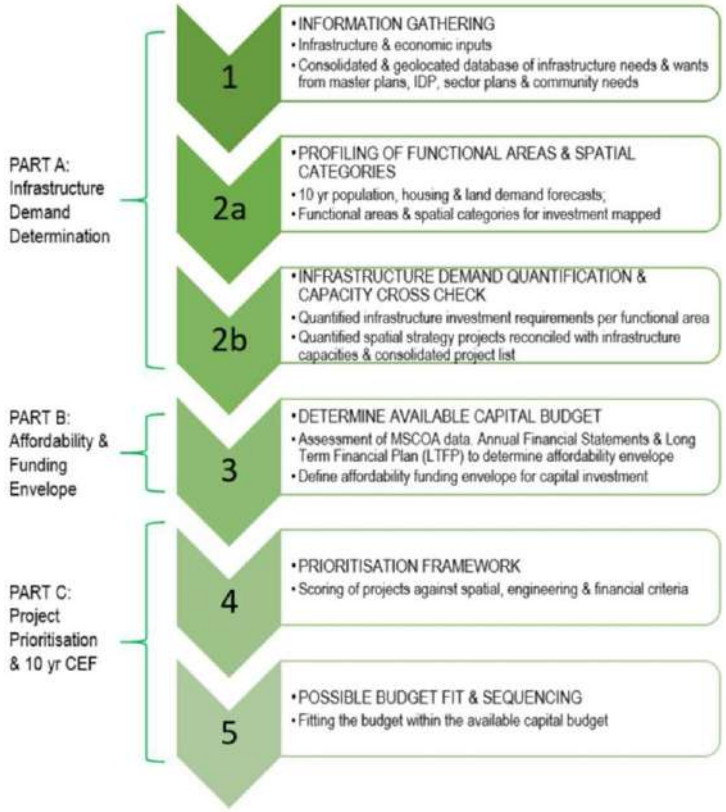


Figure 35: CEF Methodology

7.4 Part A: Infrastructure Demand Determination

7.4.1 Phase 1: Information Gathering & Infrastructure Status

An overview of the infrastructure informants for the towns of Ceres (Including Bella Vista & Nduli), Tulbagh, Wolseley, Prince Alfred's Hamlet & Op-Die-Berg is shown in Figures 4.1 to 4.5 on the following pages. Spatial data from the 2025 Witzenberg SDF shows the infrastructure informants for each of the towns. Information was also sourced from the updated and approved amended IDP.

In summary, the continuous influx of job seekers with the accompanying result of illegal land invasions and growth in informal settlements and backyard populations, places an enormous burden on the municipality's ability to provide basic services and threatens financial viability. This is further aggravated by the inability of Eskom to upgrade the bulk supplying electrical infrastructure, which has halted and deterred all new developments and economic investments. The situation suppresses initiatives to attract new investments and stimulate growth to increase income and overall economic development to counter the growth in the poor population. Below is a summary of the main engineering and infrastructure asset issues across the municipality.

In terms of water and specifically the lack of water sources and bulk water storage in the towns of Wolseley, Prince Alfred's Hamlet and Op-Die-Berg is a significant concern and risk, which not only prevents future growth but can also lead to water disruptions or complete system failure ("day zero") in severe drought situations. Construction has been completed to provide an additional 1,2 x 106 m3/a from the Klein Berg River serving Tulbagh.

In terms of wastewater, Waste Water Treatment Works (WWTW) are operational in all towns apart from Prince Alfred's Hamlet, where sewerage generated is pumped to the Ceres WWTW. No major under capacity currently exists with the Wolseley WWTW, in the process of being upgraded. Major wastewater concerns relate to informal settlements where existing infrastructure is under-capacitated due to high population and densities, leading to periodic sewage blockages and spills.

In terms of solid waste management and landfill capacity, the major issues refer to capacity and licensing of existing landfill sites. Currently, only the landfill site at Prince Alfred's Hamlet is operational, excepting waste from all other towns, but are plagued with illegal recycling and the periodic outbreak of fires. A hollow-core concrete fence with a lockable gate was installed in 2024. The Material Recovery Facility constructed at Ceres in 2022 is being operated at a low capacity and operations should increase to minimise solid waste dumping.

Landfill sites at Ceres, Wolseley, Tulbagh & Op-Die-Berg, although not operational, have not been closed and rehabilitated officially. The annual budgeted provision for rehabilitation is significant and places a burden on the operational budget.

There are 22 km or 10% of the municipal road network is in a poor or very poor condition with towns of Tulbagh, Op-Die-Berg & Prince Alfred's Hamlet most affected. The condition of the road surface indicated that 66% of the surfacing is in good or very good condition. The corresponding value for road structure is 79%. If road surface conditions deteriorate too much, the road structure will be adversely affected. The annual maintenance budget remains significantly below the recognised asset maintenance norm of 2,5%, which will result in a worsening condition over the CEF period.

Precinct planning was previously done in Ceres and Tulbagh. A variety of projects were proposed to connect nodes with the general beautification of the area, improve vehicular, pedestrian, and cycle movements. New spatial plans from the 2020 SDF were used to assess new roads to be developed. Various new bridge connections were also identified in Ceres and Tulbagh. The six intersections that previously exceeded LOS D were further analysed at a 3.7% traffic growth over the next 5 years. A proposal is made in terms of the upgrading of these intersections. An additional two intersections in Nduli, which did not exceed the LOS D, were also analysed with a growth of 3.7% over the next 5 years, as these intersections are expected to see a rapid growth in traffic volumes upon completion of the Vredebes development.

The existing storm water infrastructure within Witzenberg is made up of 68.6 km of reticulation and 35.6 km of open channel. The condition of the stormwater infrastructure was assessed based on blockage and structural integrity. 92% were found to be less than 25% blocked, 3% were found be partially blocked, and 5% were full of material (litter or debris). 46% of the structures were in good condition, 39% were found to be in fair condition, and 15% were found to be in poor (damaged or broken) condition. For the study area, 28% of the Witzenberg PCSWMM model (existing minor system) requires new storm water infrastructure (upgrades, replacements, and additional storm water systems). Pipe replacement and new minor systems for resolving the problem areas are proposed in this report, together with preliminary cost estimates.

The hydrological analyses have indicated that the future developments require the inclusion of detention facilities in the modelling in order to reduce the estimated post-development flood peaks to the pre-development flood peaks.

In terms of electricity, all erven within the boundaries of Witzenberg Municipality have access to electricity. ESKOM supplies electricity to Op-

die-Berg, Prince Alfred Hamlet and the rural areas. The municipality has a license to distribute electricity to all other developed areas. All qualifying and identified indigent households receive free basic water and electricity as per national government policy. However, servicing informal settlements with electricity is a continuous struggle. The Electricity Master Plan for Ceres, Wolseley and Tulbagh was updated during the 2022/23 financial year with MER funding from the Western Cape Government. It also included a condition assessment of the major network components, information that will be considered critical when determining future budget requirements.

Classifying Infrastructure

Classification differentiates between engineering infrastructure and social infrastructure. Engineering infrastructure includes water supply, sanitation, electricity, solid waste, roads and public transport. Social infrastructure includes community halls, sporting facilities, fire stations and so on and is largely buildings or built public spaces.

Another important classification depends on the way in which the infrastructure is provided and accessed. Plot-based services include water supply, sanitation, electricity and solid waste (the trading services), while publicly accessed services include roads, public transport and the other social infrastructure services mentioned above. Demand for plot/stand/erven-based infrastructure is driven, as the name suggests, by the number of plots/stands/erven provided with these services; while demand for publicly accessed services is driven by population size or number of households.

Another important classification of infrastructure is used within a particular service, most notably water supply and sanitation. This classification is between bulk infrastructure and distribution infrastructure (which includes connector (or link) infrastructure and internal infrastructure).

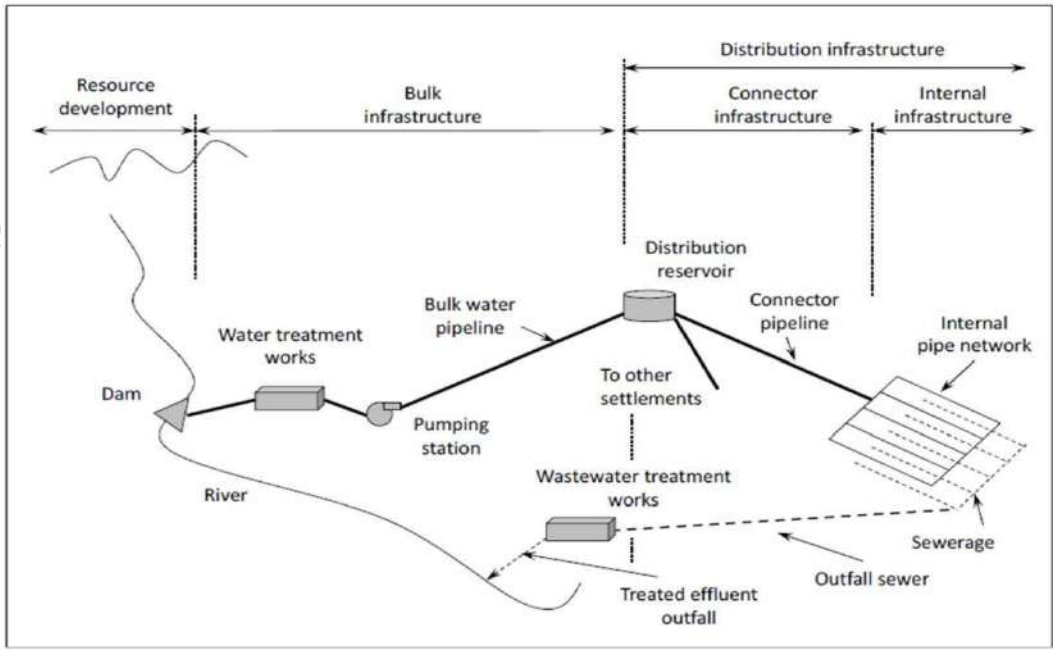
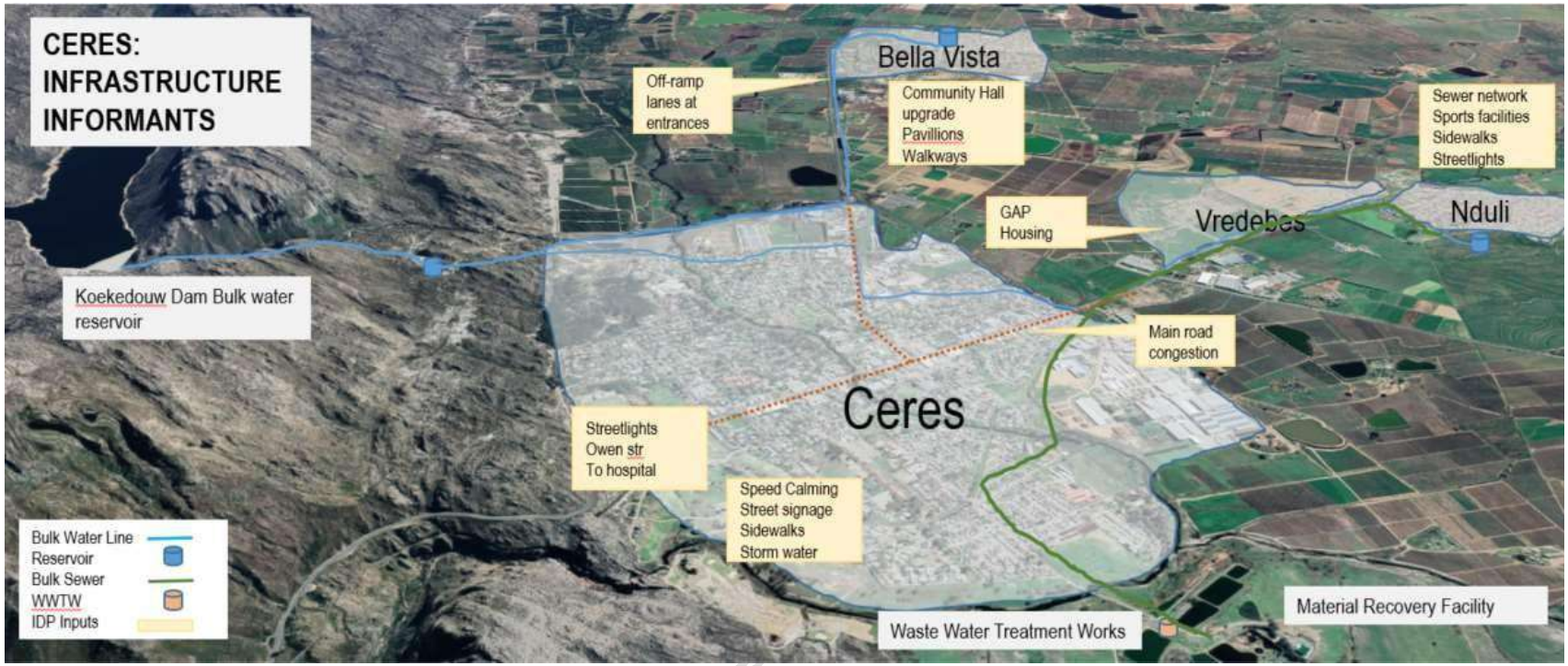


Figure 36: Classifying Infrastructure

COMMUNITY IDP AND WARD COMMITTEE INPUTS: 2025/26						
Towns	**Renewal & Rehabilitation of Existing Infrastructure**		**New Infrastructure**		**Settlements**	
	Engineering Infrastructure	**Social Infrastructure**	**Engineering Infrastructure**	**Social Infrastructure**	**Informal Settlements**	**Top Structures & Serviced Sites**
Ceres	Upgrading of street lighting (including Owen Street, walkways, and areas where lights are outdated or obstructed by trees)	Lyell Street library to be upgraded and modernized	Development of pedestrian walkways and sidewalks (Owen Street, hospital route, Egoli–Albert Crescent, nature reserve routes	Playgrounds - northeastern part of Rooikamp	Homelessness is increasing and becoming unmanageable	Gap housing developments required
	Stormwater network problems	Establishment of CPFs and increased SAPS patrols	Installation of the mainmast and solar emergency lighting	Recreational facilities comparable to neighbouring municipalities		Improved inspection and regulation of shops used as accommodation
	The railway line requires regular cleaning and improved fencing	Gambling occurring on street corners; enforcement required	Provision of bus shelters for scholars on outer rural roads	Conversion of some playparks to gym parks		
	Sidewalks to be tarred or paved	Bathroom facilities are required at cemeteries		Community "Clean Green" programmes		
	Traffic congestion on main roads, particularly over weekends					
	Speed-calming measures and improved street signage are required					
	Weekends the Town Main Roads have too much traffic					
	Heavy vehicles to be restricted to main routes					
Nduli	Upgrading of older streetlights	Library services should be restored	Water resources for small farmers	Development of sports facilities	Informal housing is getting out of control	Development of vacant land/property
	Provide street/security lights in unsafe areas	More secure fencing at public facilities	JOJO tank subsidies for small farmers	Mini CBD to be developed in N'duli	More ablution facilities (Chris Hani area & ASLA Camp)	Gap housing developments
	The sewer network needs to be improved	Better dialogue with the youth	Safe "walkway" / bridge between N'duli and Vredebes	Implementation of recycling projects/programmes		
	Electrical theft needs to be clamped down on	Sports grounds to be restored/upgraded				
	Skips programme needs to be sustained					
Bella Vista & Port Alfred Hamlet	Better controlled refuse removal in Phases areas	Upgrade of Bella Vista Community Hall	Land availability required for small-scale farmers	Community hall required for Phases 3, 4 and 5	Backyard dwellers increasing; housing needed	Availability of church sites
	Clamp down on illegal dumping of refuse	Bella Vista Clinic too small	Walkway needed around Jakaranda, Vrede Street, and Mooi Uitsig School Walkway required from Mooi Uitsig School to Vrede Street	Sports facilities required for Phases 3, 4 and 5		Gap housing developments
	Clamp down on illegal dumping of refuse Sewer network problems at the graveyard	Upgrade and better utilisation of existing sports grounds (including the need for pavilions)		Development of a youth centre at one of the municipal facilities		
	Not all dwellings are connected to the main sewer line			Business hub / mini-CBD proposed for Kliprug area & Bella Vista		
	Ongoing speed control programmes Off-ramp lanes required at Bella Vista entrances			More electrical selling points required, including at the Thusong Centre		
	Vandalisation of municipal property			Xhosa medium school required for Prince Alfred Hamlet area		
				Bus and taxi shelters required for scholars		
				Thuso ng Centre to be open on Saturdays from 09:00 to 12:00		

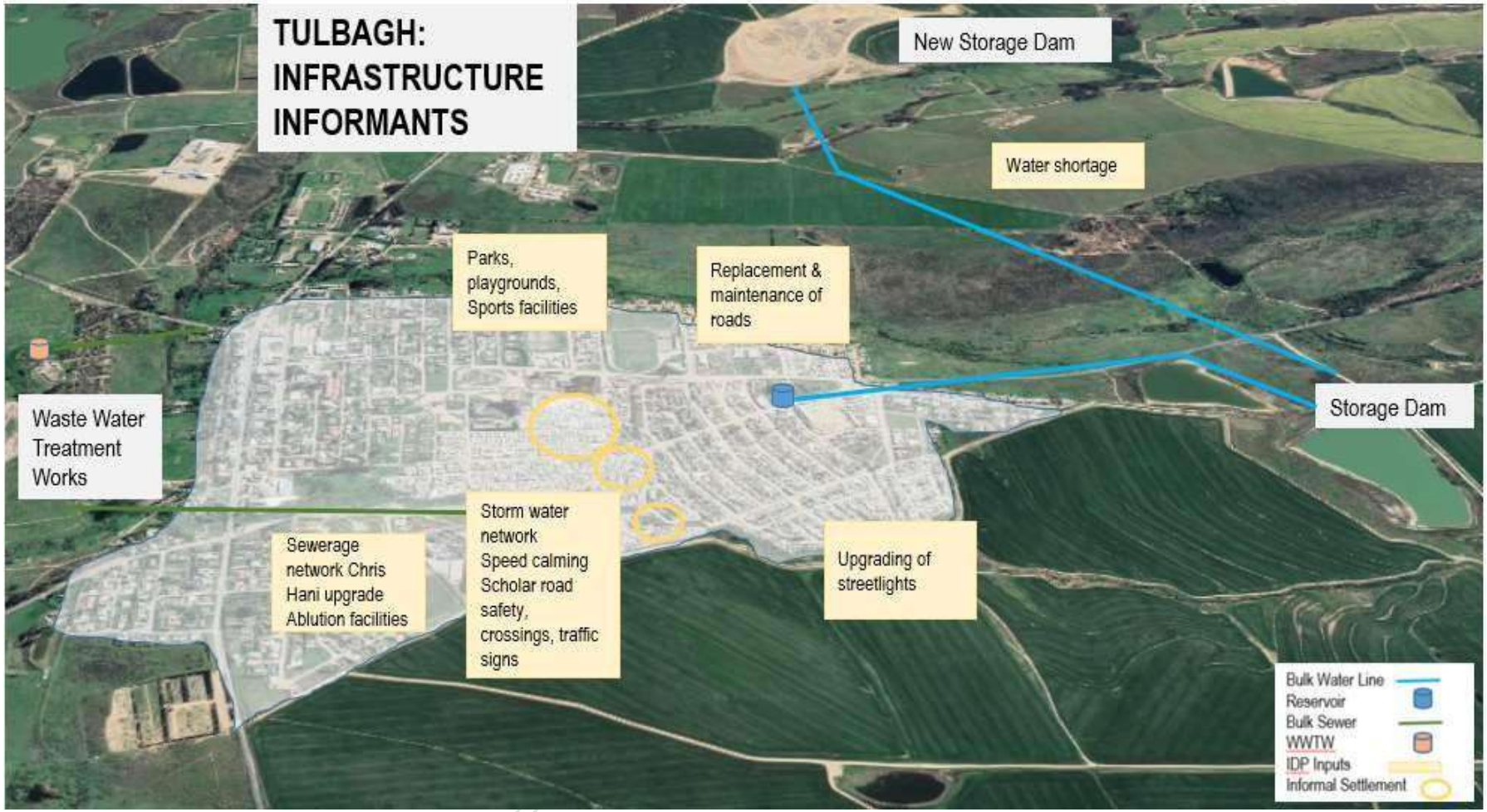
COMMUNITY IDP AND WARD COMMITTEE INPUTS: 2022/23						
Towns	Renewal & Rehabilitation of Existing Infrastructure		New Infrastructure		Settlements	
	Engineering Infrastructure	Social Infrastructure	Engineering Infrastructure	Social Infrastructure	Informal Settlements	Top Structures & Serviced Sites
Wolseley	Bathroom facilities in the graveyard areas	Pine Valley library	Wolseley requires a fire station	Job creation programmes	Bathroom facilities at informal settlements	RDP houses are being sold to foreigners
	Secure fencing at the graveyard	Mobile library service for the Breederivier area	The piece of land between Kluitjieskraal and Pine Valley is to be developed or made available for development (e.g., food gardens, small-scale farming)	More tourism programmes to be rolled out	Back-yard dwellers still a problem; housing needed	Foreigners' activities (illegal) still a problem
				Training programmes needed for people in the Breederivier farming area		
				Skills development programmes in the agricultural sector		
	The water canal in Wolseley is still a safety concern	Neighbourhood watches in all areas		Building a playpark in Kluitjieskraal and Pine Valley	Substance abuse is escalating, particularly among scholars	Communal and church plots at Kluitjieskraal
	Taxi rank placements to be investigated	Public bathroom facilities in the CBD		ECD centres to be formalised	Illegal shebeens and off-sales	
	Drop-off and pick-up points at Die Bossie as you enter Wolseley	Pine Valley swimming pool			Homeless shelter required	
Op-Die-Berg	Ambulance services remain a problem	SAPS services to be intensified	Fire station required for Op-die-Berg and the surrounding areas	Clinic required for the Agter Witzenberg area	Illegal shebeens need to be closed	Business development support programmes required
	Bus and taxi shelters along main routes are required	The bridge in Phase 5 is to be repaired	Speed calming still a problem	E-Centres Required	Illegal house shops need to be regulated	River rehabilitation programme to be sustained
	Speed calming remains a problem	Tarring of CBD open spaces and sidewalks	Streets that need tarring: Grond, Bokveld Street, etc.	Promotion of tourism/ecotourism in the area	Illegal hawkers to be marked/numbered	More municipal services to be rendered at Op-die-Berg offices
	Sports grounds require secure fencing	Subsidised water storage tanks are required for all houses	No pavement curbs along main CBD routes	Swimming pool required for Op-die-Berg		Servicing of unserved erven
	Playgrounds and parks considered unsafe Streets requiring tarring (including Grond, Bokveld Street, etc.)		Spotlights floodlights needed at the walkway - foot bridge	Christmas and holiday lights to be budgeted for Op-die-Berg		
	Spotlights / floodlights required at the walkway over the footbridge					

COMMUNITY IDP AND WARD COMMITTEE INPUTS: 2022/23						
Towns	Renewal & Rehabilitation of Existing Infrastructure		New Infrastructure		Settlements	
	Engineering Infrastructure	Social Infrastructure	Engineering Infrastructure	Social Infrastructure	Informal Settlements	Top Structures & Serviced Sites
Tulbagh	Replacement and maintenance of roads	Parks and playgrounds to be upgraded	Water shortage is a problem during the summer months	Small-scale farmers need land for their animals	Informal housing is getting out of control	Gap housing developments
	Upgrading of street lights			Animal control must be intensified	More ablution facilities - Chris Hani area, and ASLA Camp	Development of vacant land/property
	The stormwater network is maintained regularly			Development of Sports Facilities		
	The sewerage network in Chris Hani is maintained regularly					
	Speed calming					
	Scholar road safety, school road/street crossings, traffic signage					
Colour Code	Electricity	Roads & Storm Water	Sewerage	Water	Solid Waste & Public CBD facilities	
	Libraries	Sports fields & Parks	Community Halls	Cemeteries		

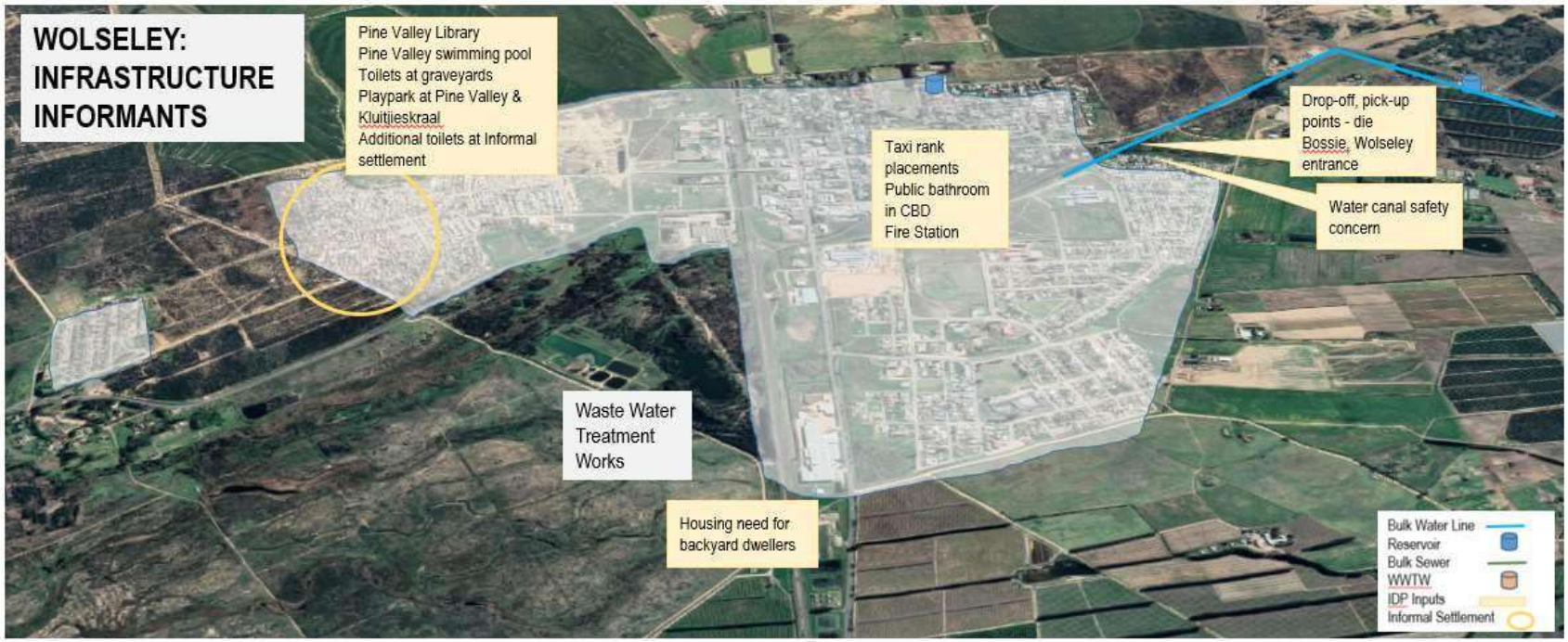


Extracts from the Draft Amended Witzenberg IDP 2024/25		

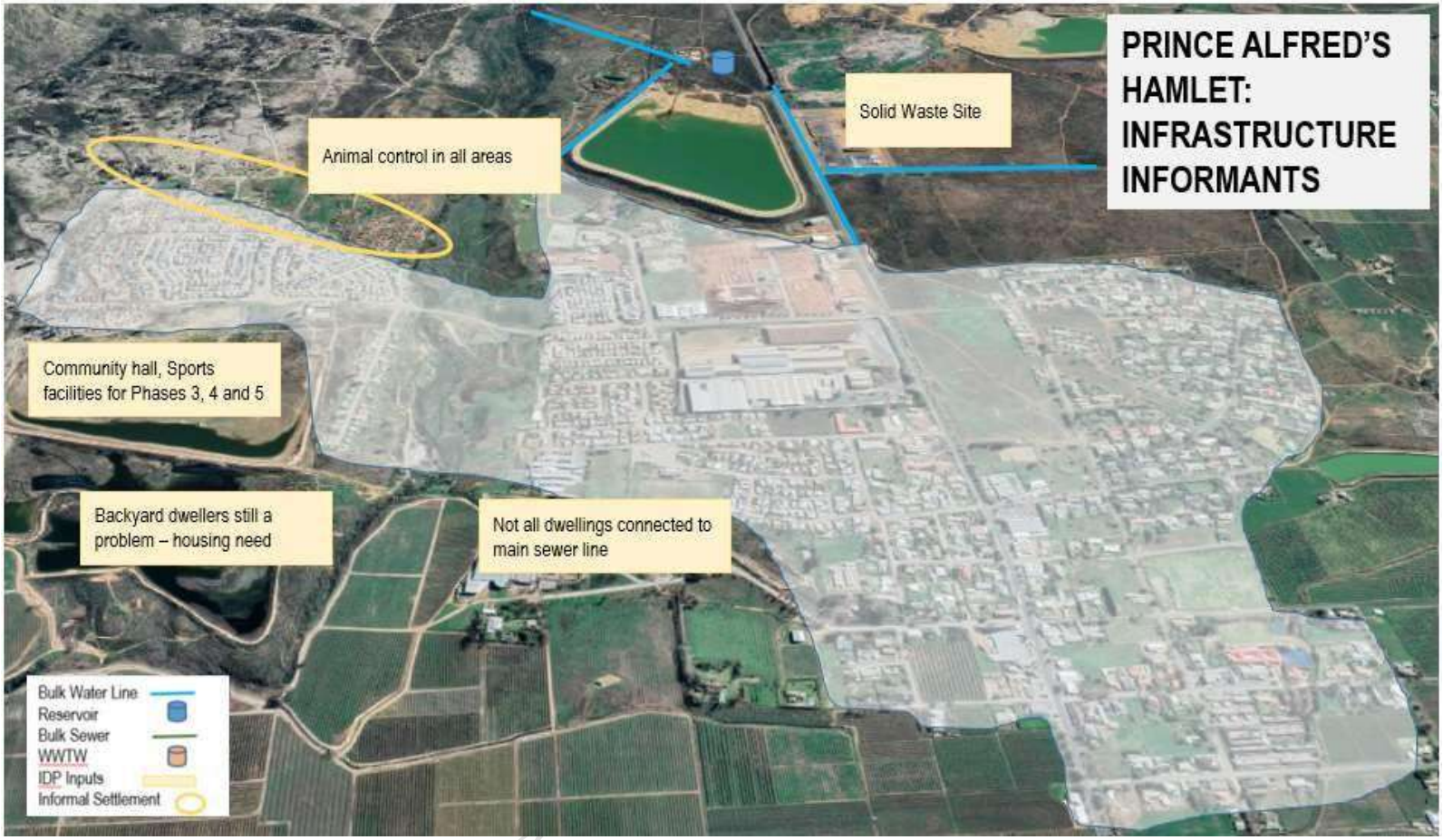
• Bulk electricity supply Eskom
• Regional cemetery
• Nduli informal settlements
  - Provision of basic services
  - Capacity of networks
  - De-canting
  - Provision of serviced sites
	• Skoonvlei industrial area – servicing of erven
	• Vredebes
	  - Incremental housing
	  - Sportsground development
	  - Business development & taxi rank
	  - Development of a school
	• Electrical network – switchgear
	• Water- & Sanitation network
		• Van Breda bridge
		• Upgrade/resealing of roads
		• Water/Sanitation – pipe replacement
		• Drop-off sites – BV & Nduli
		• Nduli Library
		• Nduli Police Station



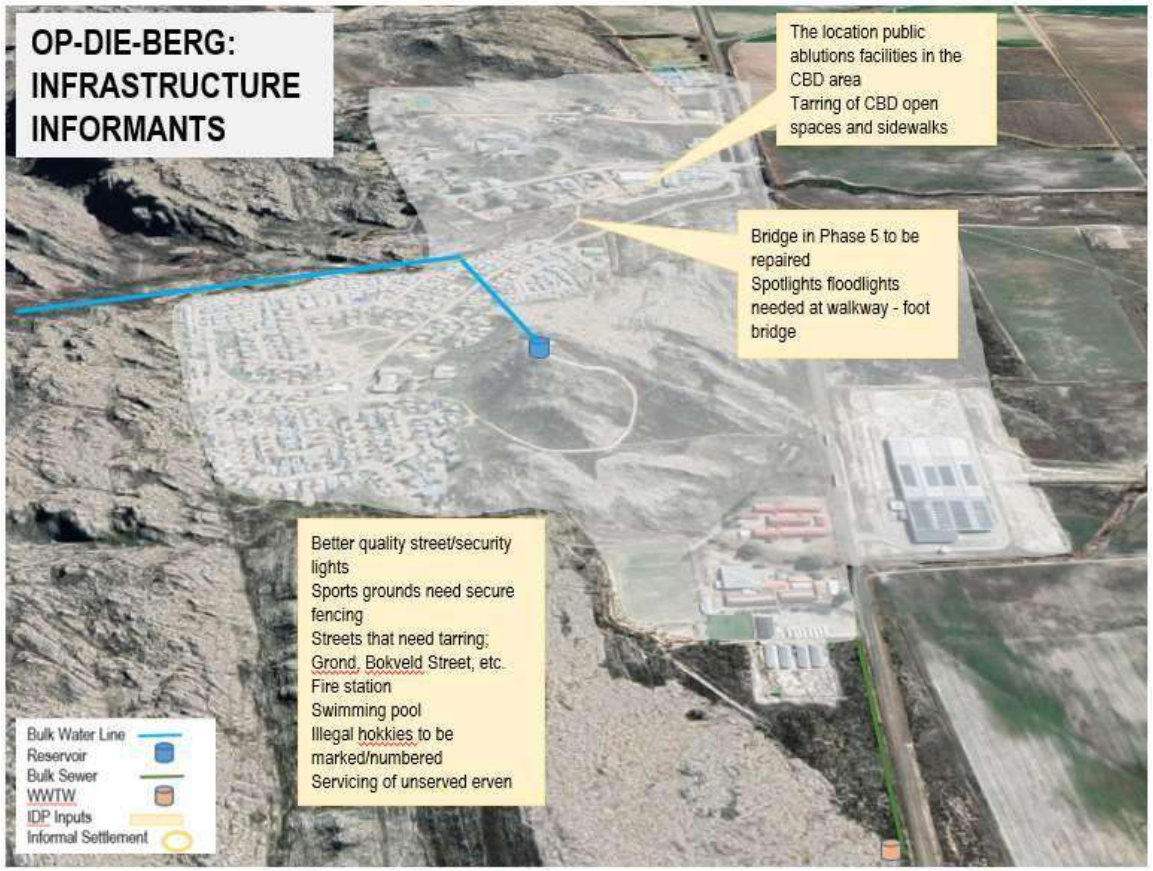
Extracts from the Draft Amended Witzenberg IDP 2024/25		
• Water shortage & storage • Informal settlements - Provision of basic services - New developments (Relocation and Upgrading)	• Upgrade of roads • Services/roads area north of Steinthal road	• Upgrade sports facilities



Extracts from the Draft Amended Witzenberg IDP 2024/25	
• Informal settlements - Provision of basic services - De-canting / Relocating - New developments / Upgrading	• Upgrade of roads • Upgrade WWTW



Extracts from the Draft Amended Witzenberg IDP 2024/25	
• Informal settlements - Provision of basic services - De-canting / Relocating - New developments / Upgrading	• Solid Waste Landfill Site • Erven is connected to the sewer network



Extracts from the Draft Amended Witzenberg IDP 2024/25		
• New sports facilities • Extend the cemetery	• New reservoir • Erven is connected to the sewer network	• Upgrade gravel roads

7.4.2 Phase 2a: Functional Area and Spatial Category for Investment Planning, Profiling & Demand Quantification

The purpose of this section is to:

- Determine the population and household growth trends per functional area based on a ten-year horizon for the local municipal area, and to
- Determine the anticipated land required across land uses to meet this demand.
- Refine the spatial strategy.

7.4.2.1 Phase 2a: Future Housing & Social Facility Demand

According to the MYPE 2024, the population of the Witzenberg Municipality was estimated at almost 150,000 in 2020. The MYPE further projects that the population has now (2025) increased to 165,727, reflecting a total growth of approximately 11.7% over the five-year period.

Population growth for each settlement is difficult to determine as only figures from the 2011 Census are available. The growth rate also differs significantly between settlements and is mainly influenced by the following factors:

Economic growth, such as in the agricultural and secondary sectors such as packaging and processing.

- Implementation of subsidised housing projects.
- Vacant land occupied through land invasions and illegal settlements.
- Backyard dwellers.

While the population growth is estimated at an annual growth rate of 2, 2 % as per the 2024 Socio-Economic Profile published by the Western Cape Provincial Government. The municipality has expressed concerns regarding undercounting during the national census. Other factors that affect population statistics, such as the rapid growth of informal settlements, which are not included in figures published by StatsSA and MYPE, contribute to the inaccuracy of population figures. The absence of credible data in terms of population figures bears implications for the provisioning of municipal services and the requisite infrastructure.

The above factors influence the expected growth of different settlements as indicated below:

- Ceres – growth is mainly absorbed through backyard dwellings, which are usually occupied by family members.
- Bella Vista – Backyard dwellings are occupied by family members, but renting of backyard dwellings to migrant job seekers is on the increase.

- Nduli - Backyard dwellings are occupied by family members but also rented out to migrant job seekers. The informal settlements are basically saturated with limited space available for expansion.
- Vredebes – Increase in backyard dwellings occupied by family members as well as renting of backyard dwellings to migrant job seekers are on the increase.
- Prince Alfred's Hamlet – Major land invasions by migrant job seekers and back yarders due to vacant land. High backyard occupation.
- Op-Die-Berg - Backyard dwellings are occupied by family members but also rented out to migrant job seekers.
- Wolseley – Major land invasions by migrant job seekers and back yarders due to vacant land. High backyard occupation.
- Tulbagh - Backyard dwellings are occupied by family members but also rented out to migrant job seekers. The informal settlements are basically saturated with limited space available for expansion.
- Due to the easy access to vacant yet not suitable land, it is expected that the growth rate for towns such as Wolseley and Prince Alfred's Hamlet will increase over the next few years if effective controls are not implemented. Areas such as Nduli and Tulbagh will still have a moderate growth to a point where informal settlements and backyards are fully capacitated.
- Ceres, Bella Vista & Op-Die-Berg are expected to have a normal, natural growth which would mainly be absorbed by available backyard, subdivision and other options.

The expected population growth for the different settlements is indicated in the table below:

Settlement	2023	2025	2030	2035	2040	2045
Ceres	50 777	53 033	59 115	65 911	73 487	81 934
Op-die-Berg	4 760	4 972	5 542	6 179	6 889	7 681
Prince Alfred Hamlet	11 107	11 601	12 932	14 418	16 075	17 923
Tulbagh	17 454	18 230	20 321	22 657	25 261	28 165
Non-Urban	53 950	56 347	62 810	70 030	78 080	87 055
Wolseley	20 628	21 545	24 016	26 776	29 854	33 286
Total	**158 677**	**165 727**	**184 736**	**205 971**	**229 647**	**256 044**

While some of the informal households were included in the 2011 census, a large portion of the current informal settlement population was. The calculated total of informal households was 8662. Excluding the households included in the 2011 census, 7 348 households should be added to the MYPE 2024 figures.

Year	Informal Settlement Population	Estimated Households
2025	22 043	7348
2030	24 577	8192
2035	27 402	9134
2040	30 441	10184
2045	31 911	10637

It is estimated that nearly 7 348 households and 22 043 people migrated to Witzenberg, settling in Ceres, Tulbagh, Wolseley and Prince Alfred Hamlet. Over the 20-year planning period, should these figures be considered, 10 637 households and 31 911 people should be added to the MYPE 2024 estimates of 30 105 households and 256 044 people: A 12% increase in population and a 35% increase in households.

To further determine the need for settlement growth, the following table provides a view of the proportion between existing (the number of water accounts is used) and demand. The demand is made up of a number of informal structures in informal settlements as well as the number of applications on the WM housing database waiting list. It should be noted that the waiting list will include households living in informal settlements. It is, however, the experience that the majority of applicants on the waiting list reside as backyard dwellers and farm dwellers in non-urban areas.

Town			Nr of accounts				
	Housing Waiting List	Informal Households	Water	Sanitation	Electricity Pre-Paid	Electricity Conventional	Refuse
Nduli	4196	1133	1492	1503	2522	10	1491
Ceres			2549	2719	3305	1470	3166
Bella Vista			2579	2599	2328	188	2590
Hamlet	1227	1200	1326	1373	Eskom	Eskom	1365
ODB	873	0	533	479	Eskom	Eskom	522
Tulbagh	998	2926	1819	1864	2061	194	1894
Wolseley	1309	3403	2542	2612	2520	250	2631
TOTALS	8603	8662	12840	13149	12736	2112	13659

Land budget

While the MSDF proposals provided for approximately 545ha of residential land, more land will be required to accommodate the estimated population and household growth by 2030, totalling an estimated 1 630ha of land required to accommodate security of tenure.

- Population figures amended to include influx, require confirmation, and were not considered during the writing of the CEF.
- Unavailability of land and subsequent insufficient SDF Land budget to accommodate population growth requires a long-term strategy to deal with densification & densities (intensification) & the provision of services.

In the case of Tulbagh, for example, the services infrastructure (Waste Water Treatment Works, Water Storage & Treatment, Bulk Electricity) needs to double in capacity to provide for future demand.

The Witzenberg housing pipeline at this stage only provide for the construction of incremental housing in Phase H, Vredebes (awaiting policy amendments from national government) and the decanting of Nduli informal settlement with households moving to Phase H. Apart from the National Government policy amendments on incremental housing, the large numbers of foreigners residing in the Nduli informal settlement, obstruct the further implementing of the housing pipeline.

The need for new social facilities in the future can be determined from the estimated population growth for each settlement/town.

	Cer	BV	Vrbes	Wols	Tulb	ODB	PAH
Creches			X	X	X		X
Primary School			X	X			X
Secondary School			X	X			X
Sports Facilities			X	X	X	X	X
Community Halls			X				
Cemeteries	X	X	X		X	X	X
Parks & Open Spaces			X	X	X		X

The above table also includes new facilities where a backlog exists (Op-Die- Berg sport facilities), but excludes upgrading of existing facilities.

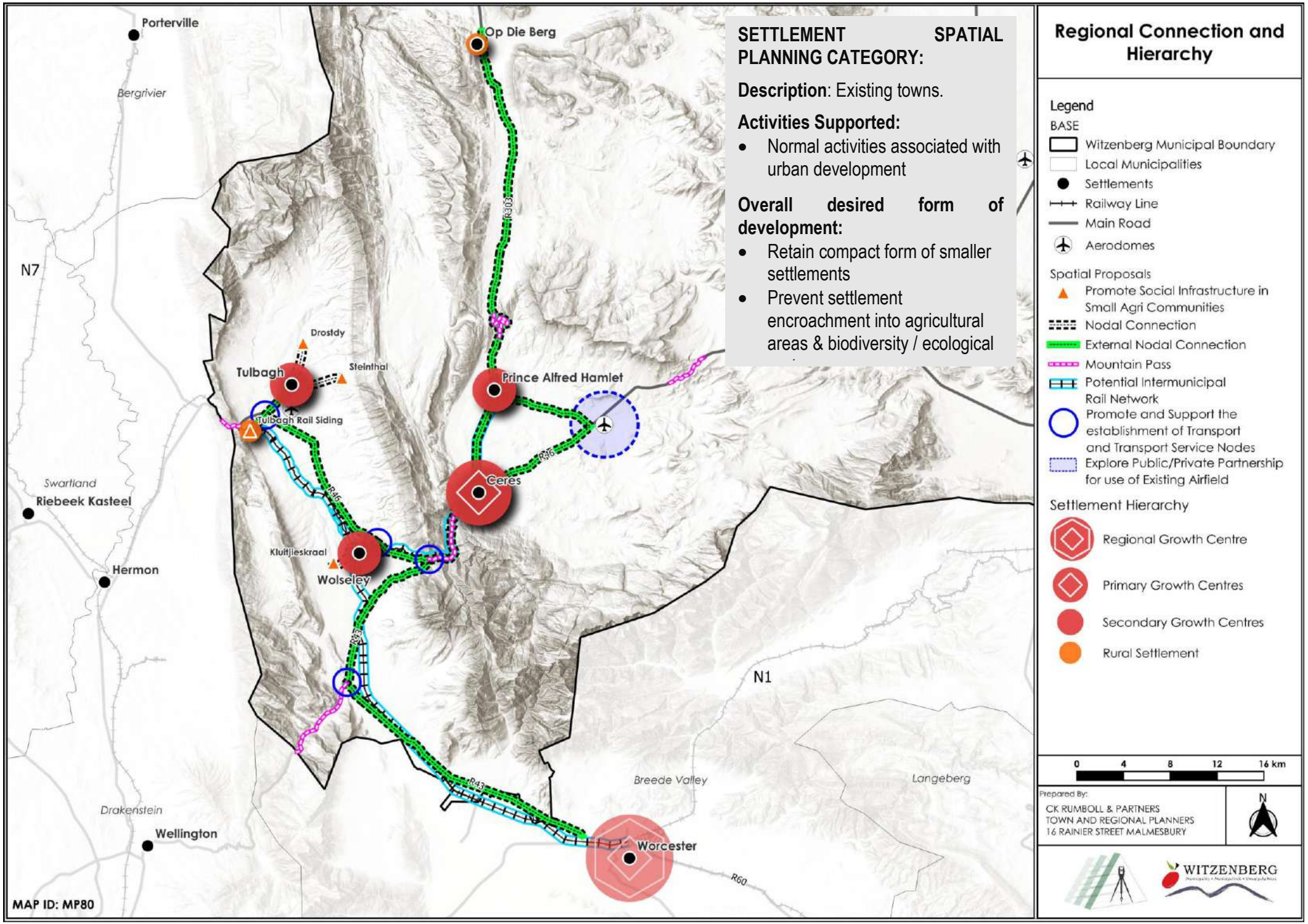
These facilities (excluding schools) are included in the consolidated portfolio of projects.

Functional Areas are areas of similar characteristics, service levels, and have similar service requirements, such as low-density established suburbs, industrial areas, high-density informal areas, or central business districts. These areas usually correspond to an area sharing the same engineering and utility service requirements and levels of service (or have similar upgrading needs). The demarcation of Functional Areas takes the lead from the spatial articulation of the engineering or infrastructure master plans, which sets the drainage areas and parameters for existing or future infrastructure needs. There are also instances where a Functional Area will correspond to an enumeration area used in representing the latest census data. Spatial Categories for investment planning, on the other hand, are different spatial areas that will have distinct investment needs and desired outcomes, in line with the spatial logic set out in the MSDF proposals

chapter. These areas will have different infrastructure planning requirements and spatial planning intent, and hence will require different infrastructure investment approaches or strategies.

At the broadest level of municipal planning, desired land use patterns are reflected in the delineation of landscape-wide or municipal-wide Spatial Planning Categories (SPCs), namely Core, Buffer, Agriculture and Settlement categories. The definition of SPCs is based on the Western Cape Biodiversity Spatial Plan, 2023 (WCBSP), which delineates the Western Cape's biodiversity network.

The settlement category is the focus of functional areas in the CEF. Together with the industry and mining category, representing linear infrastructure (roads), it represents the capital investment options. Settlements are classified according to a hierarchical structure. The following maps indicate the hierarchy of settlements in Witzenberg, followed by a map indicating the priority development routes.



SETTLEMENT SPATIAL PLANNING CATEGORY:

Description: Existing towns.

Activities Supported:

- Normal activities associated with urban development

Overall desired form of development:

- Retain compact form of smaller settlements
- Prevent settlement encroachment into agricultural areas & biodiversity / ecological

Regional Connection and Hierarchy

Legend

BASE

- Witzenberg Municipal Boundary
- Local Municipalities
- Settlements
- Railway Line
- Main Road
- Aerodomes

Spatial Proposals

- Promote Social Infrastructure in Small Agri Communities
- Nodal Connection
- External Nodal Connection
- Mountain Pass
- Potential Intermunicipal Rail Network
- Promote and Support the establishment of Transport and Transport Service Nodes
- Explore Public/Private Partnership for use of Existing Airfield

Settlement Hierarchy

- Regional Growth Centre
- Primary Growth Centres
- Secondary Growth Centres
- Rural Settlement

0 4 8 12 16 km

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TOWN AND REGIONAL PLANNERS
16 RAINIER STREET MALMESBURY

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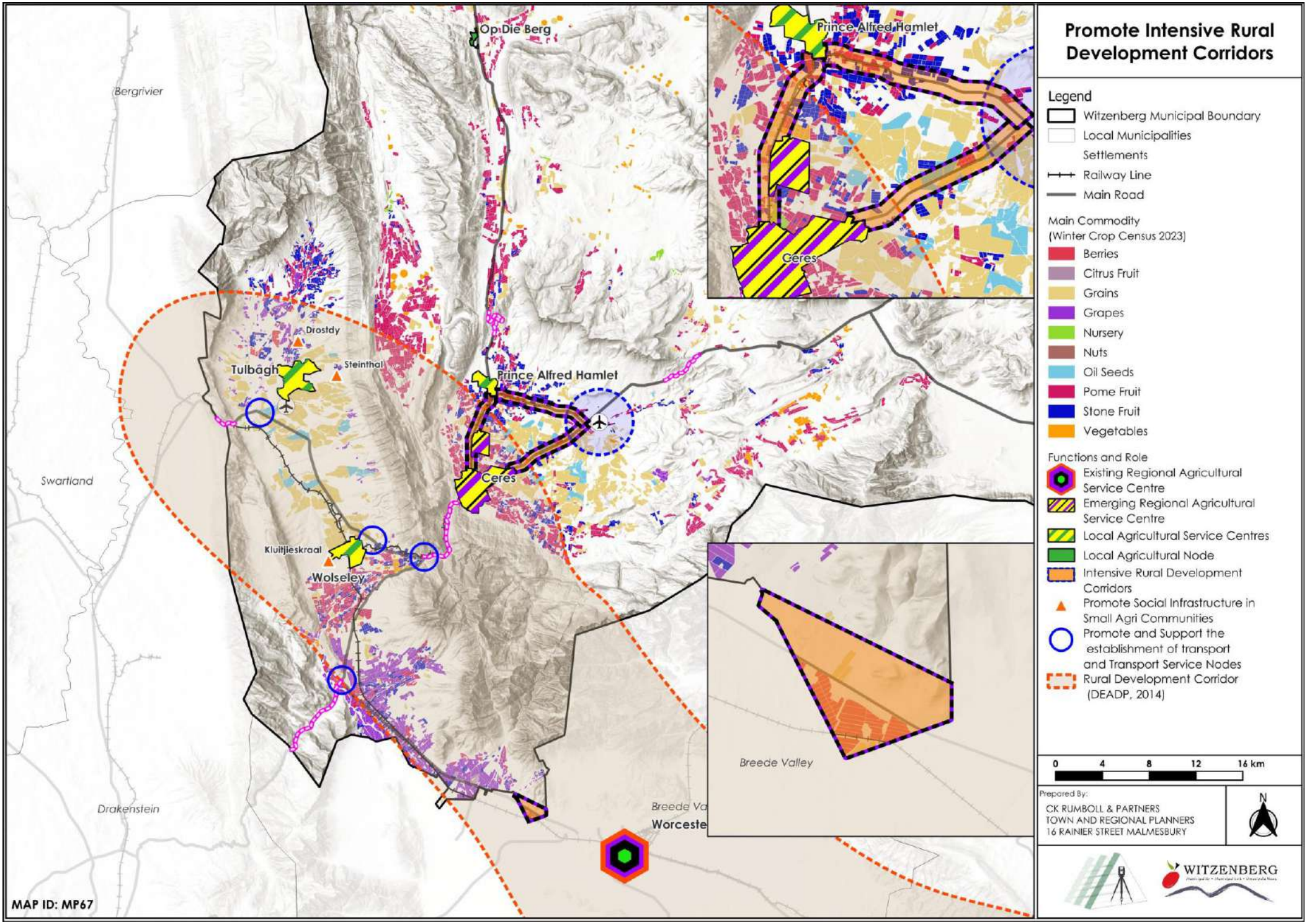
WITZENBERG



Promote Intensive Rural Development Corridors

Legend

- Witzenberg Municipal Boundary
- Local Municipalities
- Settlements
- Railway Line
- Main Road

Main Commodity
(Winter Crop Census 2023)

- Berries
- Citrus Fruit
- Grains
- Grapes
- Nursery
- Nuts
- Oil Seeds
- Pome Fruit
- Stone Fruit
- Vegetables

Functions and Role

- Existing Regional Agricultural Service Centre
- Emerging Regional Agricultural Service Centre
- Local Agricultural Service Centres
- Local Agricultural Node
- Intensive Rural Development Corridors
- Promote Social Infrastructure in Small Agri Communities
- Promote and Support the establishment of transport and Transport Service Nodes
- Rural Development Corridor (DEADP, 2014)

0 4 8 12 16 km

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TOWN AND REGIONAL PLANNERS
16 RAINIER STREET MALMESBURY

N

WITZENBERG

7.4.2.2 Functional Areas at the Municipal –wide Scale

As shown in Figure 39, the highest investment priority in the Municipality is Ceres Town, which includes Bella Vista & Nduli, which is a primary investment node. Investments made in Ceres Town will have the greatest multiplier effect and impact on the greatest number of people. The town occupies a high order in terms of services, facilities and employment opportunities and has the largest population size and economic growth potential within the municipality.

Wolseley and Tulbagh are identified as secondary growth centres for economic development purposes. Tulbagh, as a tourism destination due to its historic significance and Wolseley as an industry and agri-industrial hub, due to its location on major road and rail networks.

Tulbagh, Prince Alfred's Hamlet and Op-Die-Berg are secondary settlements (consolidation nodes), meaning infrastructure renewal and maintenance are the priorities, and limited expansion should be allowed because this places financial strain on the municipality to supply further services without commensurate economic development.

The primary routes for intergovernmental investment focus are the R46 (Wolseley & Ceres) as a linkage between west coast, N1 Worcester and N1 North. The north-south railway line passes through Wolseley and provide major opportunity for economic development.

7.4.2.3 Functional Areas at the Settlement Scale

The following sections set out the conceptual proposals for each settlement's future growth, as well as the spatial framework for future priorities.

Functional areas typically need to accommodate infrastructure service catchments, i.e., water treatment works, which provide additional capacity to the functional region as a whole or vice versa if the facility is constrained. However, the town scale functional areas used in this CEF are based largely on the urban edges. If a project falls outside of this edge, it is still recorded within the consolidated project database, whose projects emanate from the master and sector plans.

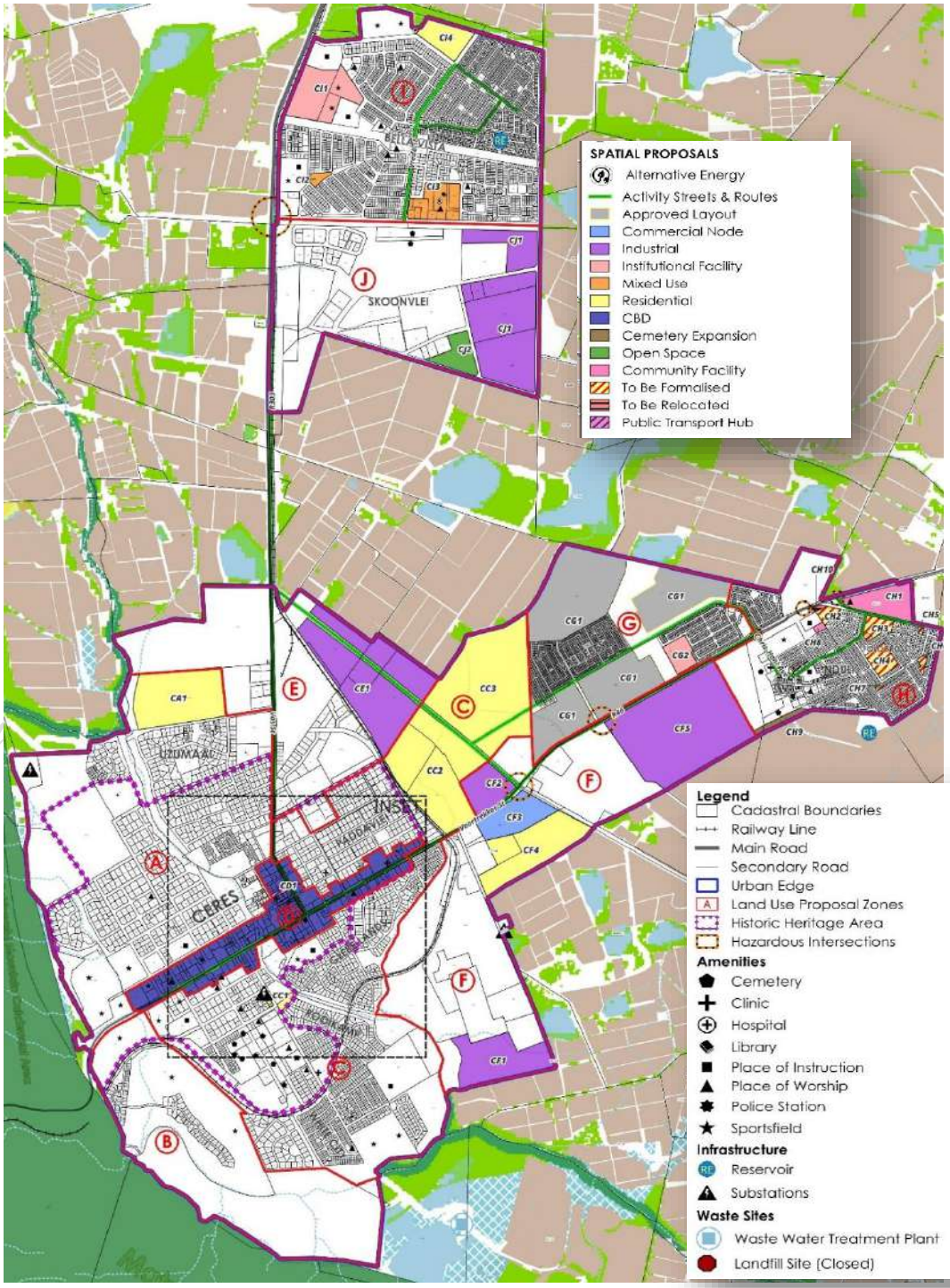
Functional Area 1 = Ceres (including Bella Vista and eNduli)

Ceres remains the most significant settlement in Witzenberg Municipality and functions as a centre of governance and administration, higher order community/ social facilities, commercial, financial, and cooperative services, commercial, financial, and a major agricultural support centre and a significant place of residence. eNduli and Bella Vista primarily function as a residential area with supporting social infrastructure.

The functional area is expected to retain and grow its share of half of the urban population in Witzenberg Municipality. This functional area is a key focus area for accommodating future development – both housing, industrial activity, and associated uses.

Major new infrastructure investment

Map Code	Description
CA1, CC2, CC3, CC1, CF4 and CI5	Promote residential development (including Infill)
CD1	Acquisition of land to develop a formal taxi rank
CF1, CE1, CF2, CF5, CJ1	Expansion of industrial facilities (PFA 3)
CG1 and CG2	Vredebes Housing Development
CF3	Development of a new commercial node.
CH2, CH3, CH4,CH5, CH6 and CH10 (PFA 2)	Formalisation / Relocation of informal structures (settlements)
CH8, CH1and CI1	Development of social facilities
CI2 and CI3	Development of mixed-use, including commercial and community/social facilities (PFA 3)



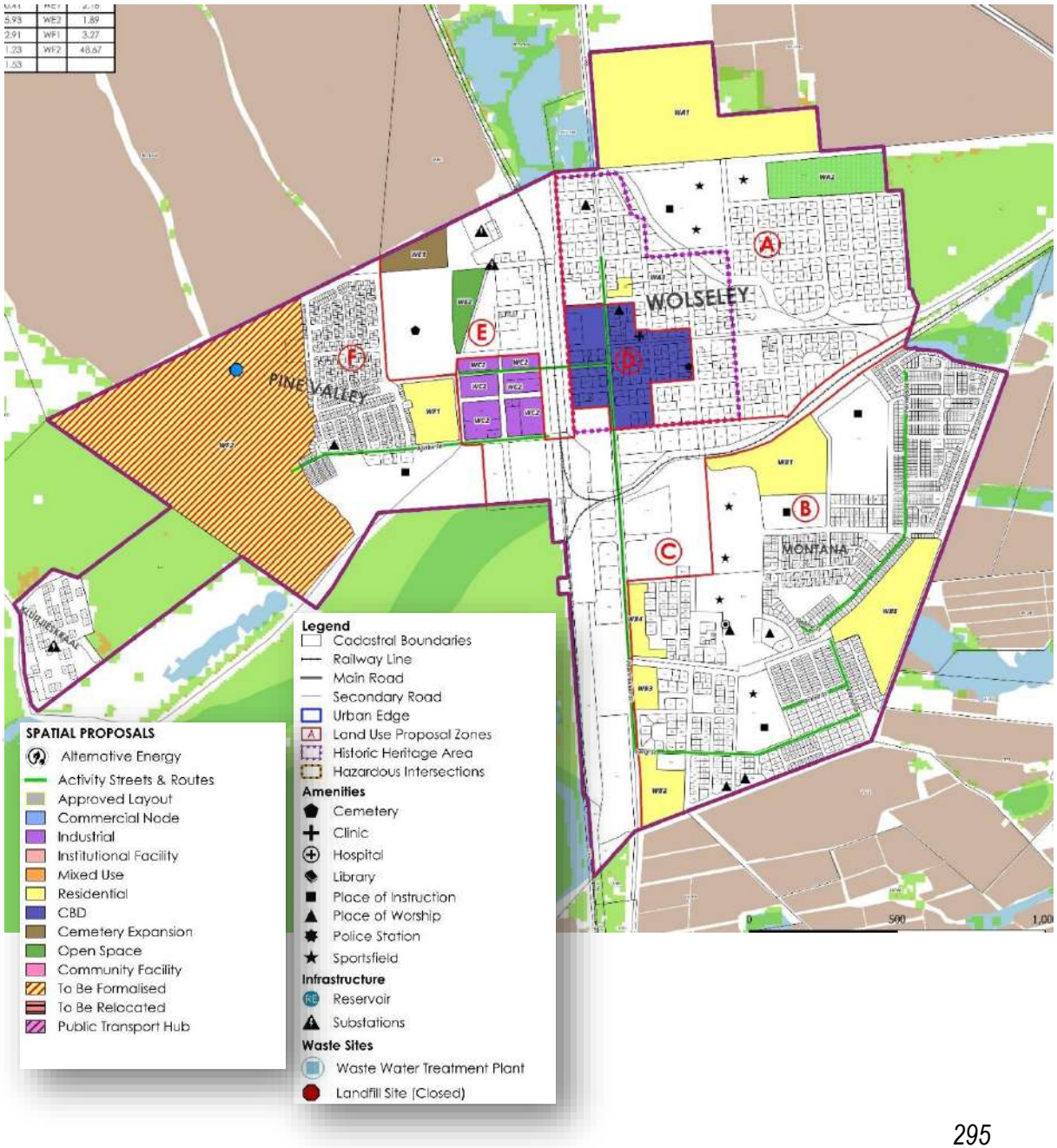
Functional Area 3 = Wolseley

Wolseley remains as a secondary service town in Witzenberg Municipality, an agricultural support centre and significant place of residence for a sizable portion of the urban population. Given a favourable location on key movement routes, Wolseley is well- placed for further industrial/ manufacturing development. While further affordable housing is envisaged towards the west to accommodate known and expected demand, there is a significant opportunity for infill residential and mixed-use development closer to the centre of town.

The settlement is expected to retain and grow its share of half of the urban population in Witzenberg Municipality. The key focus area for accommodating future development is both housing, industrial activity, and associated uses.

Major new infrastructure investment

Map Code	Description
WA1, WF1, WA3, WB1, WB2, WB3 WB4, WB5	Residential development (including infill and new development) (PFA 1, 2 &3)
WE1	Expansion of the cemetery
WC2	Industrial development
WA2	Expansion of the sports field
WF2	Relocation and/or upgrading of informal settlements/structures

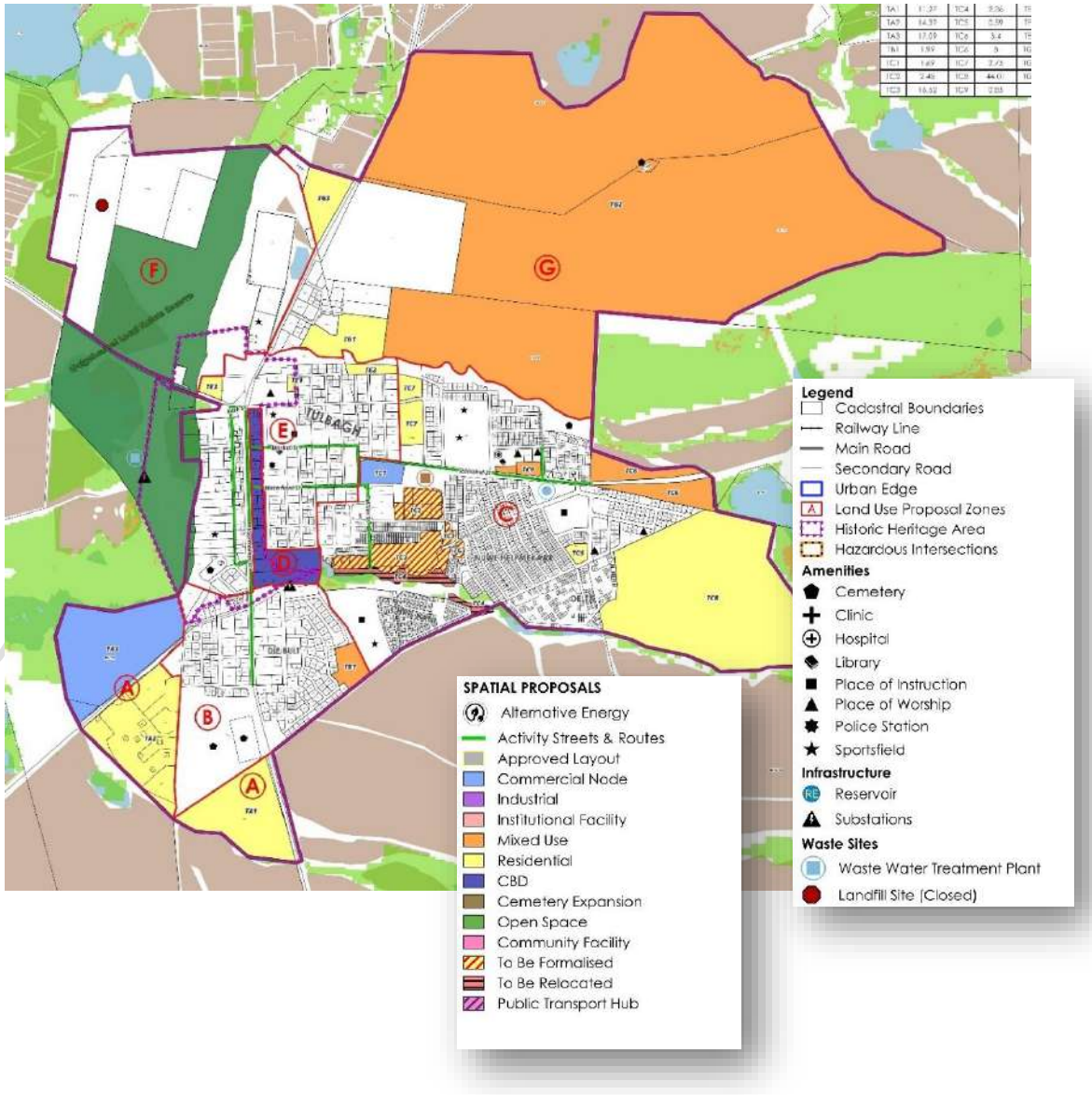


Functional Area 4 = Tulbagh

Tulbagh is a secondary service town in Witzenberg Municipality, an agricultural support centre and significant place of residence for a sizable portion of the urban population. The town also contains a very significant historic precinct and is a centre for tourism. Over the past years, the Municipality's focus has been on infill housing and informal settlement upgrade – with associated social facilities – in the centre of town.

The area envisaged for concerted, priority Intervention is situated north of the river and the town's current built edge. Opportunity for further housing and mixed-use development exists, with due consideration to making a positive edge to built development and a sensitive river edge. It is not foreseen that the private developments to the north (Waverenskroon) and to the south-west will commence within the 10- year planning period.

The area set aside for mixed-use development south-east of town. As most of the land within the current urban area has been set aside for projects associated with the Housing Pipeline, it has been suggested that future residential expansion be directed in an easterly direction. The identified portions of land are situated in a visually unobtrusive location, in an area devoid of any biological considerations. It is therefore proposed, as a first step, that the municipality secure the relevant portion of land and that any future integrated housing programme be directed to this portion of land together with the associated social and recreational infrastructure to ensure the creation of a sustainable human settlement.



Major new infrastructure investment

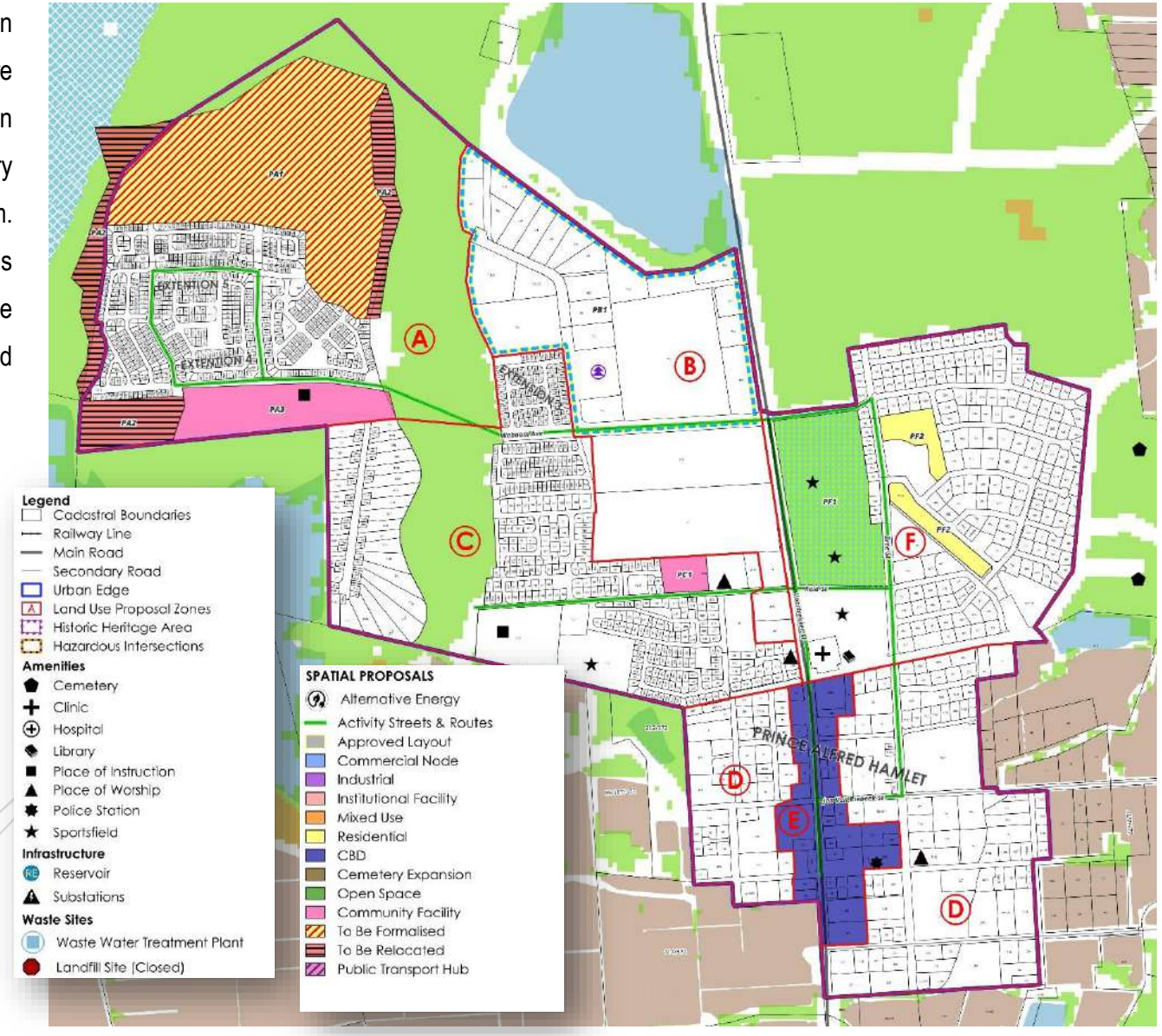
Map Code	Description
TA1, TA2, TC5, TC8, TC7, TE3, TE1, TE2, TG1, TG5, TC8 & TG3	Residential development (including infill and new development)
TA3 and TC1	Commercial development
TC3	Upgrade of informal settlement
TC4	Relocation of informal structures
TB1, TC6 & TC9	Mixed-use development including residential, community / social / institutional facilities.

Functional Area 5 = Prince Alfred's Hamlet

Prince Alfred Hamlet is a secondary service town in Witzenberg Municipality, an agricultural support centre and significant place of residence for a sizable portion of the urban population. The town also contains a very significant historic precinct and is a centre for tourism. Situated in an area of intensive agriculture as well as valuable natural vegetation (particularly the commonage). The town is regarded as having limited potential for growth and job creation.

Major new infrastructure investment

Map Code	Description
PF2	Residential Development
PA3 & PC1	Development of community facilities
PF1	Expansion of the sports field
PA1	Upgrading of the informal settlement
PA2	Relocation of informal structures



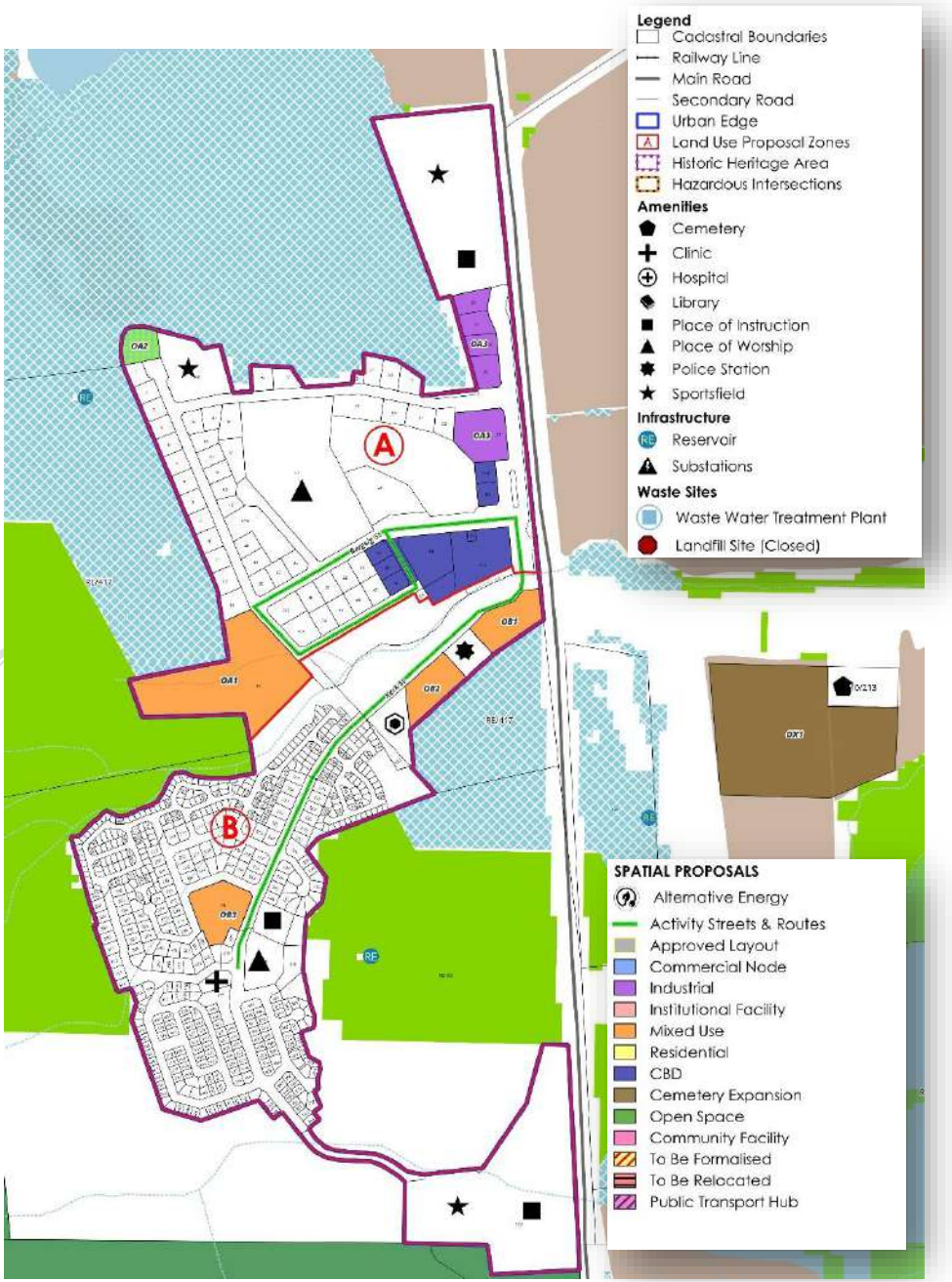
Functional Area 6 = Op-Die-Berg

Op-Die-Berg is a small settlement with limited facilities surrounded by an agricultural community. The settlement is not envisaged to accommodate significant growth. Focus in this functional area will be on retaining a compact settlement form, on-going settlement upgrade in infill development, and maintenance of a strong historic and tourism component.

In addition to the identified strategic infill and mixed-use human settlement sites, the areas zoned for business, general residential, and community land uses allow for densification through mechanisms such as additional dwellings and should be encouraged strategically along activity routes and in settlement centres.

Major new infrastructure investment

Map Code	Description
OA1, OB3, OB2 and OB1	Mixed-use development, including residential, commercial, and community uses.
OA3	Industrial Development
OA2	Sports field expansion
OX1	Cemetery expansion



7.4.3 Phase 2b: Land Yield and Infrastructure Demand Yield

The purpose of this phase is to, determine what land needs to be acquired and developed to accommodate the future land demand and development as shown in the MSDF; to determine the infrastructure investment requirements over a 10-year period; and to determine the bulk infrastructure demand per service type (water, sanitation, roads, storm water, solid waste and electricity over a 10-year period.

It should be noted that major growth in informal settlements occurred since 2019. Other aspects, such as the indirect influence of the Covid pandemic and the inability of Eskom to upgrade the electrical bulk supply infrastructure, have had a significant influence on the strategies proposed.

Due to the rapid growth of informal settlements, attention was paid to the land infill strategy for areas such as Wolseley, Tulbagh and Prince Alfred's Hamlet in the 2025 MSDF. The unavailability of land and subsequent insufficient SDF Land budget to accommodate population growth requires a long-term strategy to deal with densification & densities & the provision of services.

The decline in the overall economic situation also has the result that it not expected that private developments in Tulbagh (Waverenskroon & Digby) will proceed within the next ten years. The Mazoe private development in Ceres was also replaced with agricultural developments. The municipality has reached its Notified Maximum Demand in terms of electricity due to the lack of capacity on Eskom infrastructure, which has basically prevented the approval of new developments.

Developments that are expected to have major future infrastructure loadings and cost implications (for municipal utility services such as water, sanitation, roads, stormwater, solid waste, and electricity) per site and per functional area are listed below:

7.4.3.1 Tulbagh (TC8) (Erven 187/2 & 224/7)

The informal settlement has reached capacity, with no suitable public land available; new private land has to be acquired. The informal settlement has grown on an existing housing project, which was implemented in 2012. Grievances from the local community regarding the allocation of houses to beneficiaries led to the illegal occupation of the area, resulting in the delay of the project from proceeding. Illegal occupation continued to the point that the area is overcrowded and underserved, resulting in continuous breakages and sewer spills. The solution would be to obtain private land to the south-east of Tulbagh, included in the urban edge. The 27ha to be developed can accommodate approximately 1000 serviced sites with the relevant provision for social infrastructure and services. An additional ±17ha was added to the site and can accommodate ±630 service sites. Apart from the internal services, major upgrades to the bulk networks, pump stations, WWTW and WTW are required. The placement of a portion of the informal

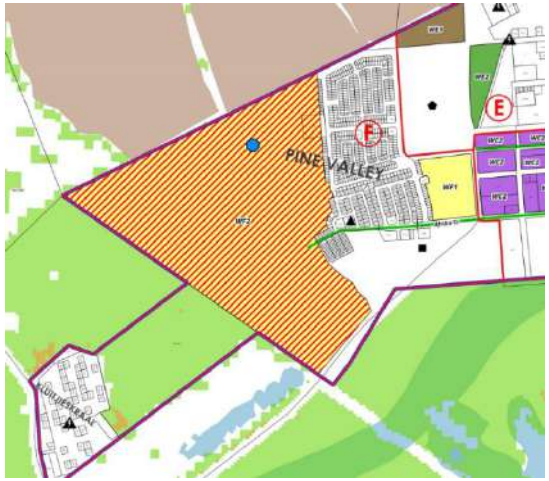
settlement households in this development would allow for the continuation and completion of the housing project.

7.4.3.2 Wolseley (WF2) (Remainder Erf1)

The area to the west of Wolseley, known as Zakhele, located in the suburb of Pine Valley, has been illegally occupied in recent years, with approximately 3 403 structures erected on the piece of municipal land, which also includes a portion of a rehabilitated landfill site.

While the extensive size of the area and the high number of informal structures make it challenging, from a feasibility perspective, to develop fully serviced sites within the 10-year planning period, the implementation and provision of bulk services remain a priority. Once bulk services have been implemented, the development of serviced sites can be prioritised and, where feasible, addressed within the 10-year planning horizon.

It should also be noted that a significant portion of occupiers are deemed to be non-South Africans who would not qualify as beneficiaries of a serviced site project. The in-situ upgrade, de-canting and provision of basic access roads and communal facilities (water/sanitation) would be more feasible with less impact on bulk infrastructure and services. To achieve the general norm of 50 households per toilet, at least approximately 70 communal water and sanitation facilities need to be placed throughout the area to ensure access within 200m. The upgrade will further entail the construction of basic access roads, storm water and high mast lighting. Further earthworks are required on the edge of the development to prevent and discourage further expansion.



7.4.3.3 Prince Alfred's Hamlet (PA1 & PA2) (Remainder Erf 1)

Illegal occupation of municipal land to the north-west of Prince Alfred's Hamlet, adjacent to Phases 4, 5 and 6 housing developments, has resulted in the erection of approximately 1013 structures. The area is part of the municipal commonage and classified as a critical biodiversity zone. Small-scale farmers also occupy a portion and require on or off-site formalisation.

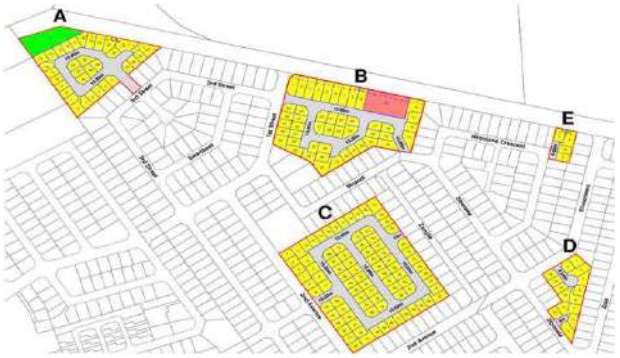
Due to the location on the periphery of town, and encroaching on the critical biodiversity zone and flood plain, it would not be feasible to develop serviced sites within the 10-year planning period. It should also be noted that a significant portion of occupiers are deemed to be non-South Africans who would not qualify as beneficiaries of a serviced site project. The in-situ upgrade, de-canting and provision of basic access roads and communal facilities (water/sanitation) would be more feasible with less impact on bulk infrastructure and services. To achieve the general norm of 50 households per toilet, at least approximately 20 communal water and sanitation facilities need to be placed throughout the area to ensure access within 200m. The upgrade will further entail the construction of basic access roads, storm water and high mast lighting. Further earthworks are required on the edge of the development to prevent and discourage further expansion. Given the unsuitable surroundings of the settlement, the formalisation of the informal settlement may require relocation to other settlements within the municipal boundary.

7.4.3.4 Ceres, Nduli (various portions of informal settlements)

The Nduli informal settlement consists basically of the following 4 areas:

Area Name	Nr of structures	Nr of sites to be developed
A. Mooiblom	85	33
B. Eluxolweni	319	47
C. Mnandi	575	88
D. Zibonele	95	15

The areas of Mooiblom and Eluxolweni have been prioritised for decanting and relocating to the completed Phase H 529 serviced sites in the adjacent Vredebes housing development. Both of these areas will then be developed with the number of sites and top structures as indicated in the above table for allocation to qualifying beneficiaries. The project is being stalled due to a possible policy change regarding incremental housing to be erected in Phase H. It should also be noted that a significant portion of occupiers are deemed to be non-South Africans who would not qualify as beneficiaries to a serviced site project.



The existing sewer network servicing the informal settlements is under severe pressure due to insufficient capacity, leading to periodic sewer spillages.

7.4.3.5 Ceres Skoonvlei Industrial Erven (Remainder of Erf 2622)

The municipality intends to develop and make available small light business/industrial erven in the Skoonvlei Agri hub to potential qualifying previously disadvantaged individuals and/or enterprises. Upgrading of the Skoonvlei industrial area as an identified Agri-hub under the national Agri Park initiative was mainly funded by the Department of Rural Development and Land Reform over the past couple of years. Although the upgrading has unlocked various infrastructure investments by large commercial companies in the form of fruit packaging and cold storage facilities, support for smaller- and especially previously disadvantaged enterprises has not materialised.

Council has decided to develop a portion of Skoonvlei in smaller and more affordable plots for the smaller and upcoming enterprises that struggle to obtain land for business development. The development of an economic hub with containers was completed and is in the process of being allocated.

The 2nd stage is the development of 9 industrial plots with sizes between 1700m² and 8500m², of which the subdivision was completed. At least 6 of these plots will be allocated to qualifying previously disadvantaged and upcoming entrepreneurs at a subsidised cost. It is the intent to sell the other 3 plots at commercial value to cross-subsidize the cost of infrastructure for the development.

7.4.3.6 Cost Implication

The table below provides a breakdown of the development cost implications of all land per functional area as indicated above.

Functional Area: Tulbagh			
Priority Investment Area	**Project**	**Breakdown**	**Estimated Cost**
Erven 187/2 & 224/7	Serviced sites	1 630 x R 55 000	R 90m
	Toilets (including extended network)	1 630 x R 22 000	R 36m
	Internal Bus Routes		R 7, 5m
	Connector & upgrade Steinthal Rd		R 40m
	Bulk sewer network & pump station upgrades		R 4,5m
	Wastewater Treatment Works upgrade		R9 8m
	Bulk water network		R 3, 5m
	Water Treatment Works upgrade		R 2, 5m
	Electrical network	100 x R13 000	R13m
	Internal streetlights		R 3,2m
	Streetlights Steinthal rd.		R 0.5
TOTAL (estimated)(Exclude land sale)			**R 180m**

Functional Area: Wolseley			
Priority Investment Area	**Project**	**Breakdown**	**Estimated Cost**
Remainder Erf 1	Communal toilets with water points	50 x R 22 000	R 1,1m
	Water & sewer network		R 12m
	Basic roads & storm water		R 5,5m
	High mast lighting		R2,8m
	Earthworks		R1,5m
TOTAL (estimated)			**R 19,9m**

Functional Area: Prince Alfred's Hamlet			
Priority Investment Area	**Project**	**Breakdown**	**Estimated Cost**
Remainder Erf 1	Communal toilets with water points	10 x R 22 000	R 0,3m
	Water & sewer network		R 1,2m
	Basic roads & storm water		R 1,5m
	High mast lighting		R 1,8m
	Earthworks		R 1, 5m
TOTAL (estimated)			**R 6,3m**

Functional Area: Ceres (Including Bella Vista & eNduli)			
Priority Investment Area:	**Project**	**Breakdown**	**Estimated Cost**
Mooiblom, Eluxolweni	Serviced sites	80 x R 55 000	R 4,4m
	Top Structures	80 x R 125 000	R 10m
	Electrical network	80 x R 13 000	R 1m
	Internal streetlights		R 0,5m
	Sewer network upgrade		R 25 m
SUB TOTAL (estimated)			**R 40,9m**
Ceres, Skoonvlei Industrial Area	Upgrading of Bankstr & portion of Meulstr		R 16,4m
	Water & Sewer network/connections		R 2,1m
	Electrical network & streetlights		R 5.6m
SUB TOTAL (estimated)			**R 24,1m**
TOTAL (estimated)			**R 65 m**

7.4.4 Phase 2c: Spatial Strategy Projects for Prioritization

The previous section has shown the total cost of developing prioritised vacant land in the municipality. The development of prioritised vacant land parcels established a 10-year pipeline. As a result, several development proposals included in the MSDF are not expected to be implemented within the 10 years.

The prioritization criteria follow;

Land parcels, where development:

- Improve access to basic services.
- Address health & social well-being risks resulting in improved living conditions.
- Improve local economy.
- Can continue in the short and medium term. The development timeframes are determined by:
    - Ownership, availability of bulk services, zoning, environmental authorization, etc.
    - Availability of grant funding – these projects will be funded by grant funding such as Human Settlements, MIG & INEP. The approval of project implementation plans and budgets by the relevant provincial and national departments.

As the proposed prioritized projects are determined by provincial and national approval of implementation plans and budgets, the priorities may change. The prioritized projects for the 2024 CEF and the 2025 are:

- Ceres, Nduli 2024/25
- Wolseley, Pine Valley 2025/26
- Prince Alfred's Hamlet 2026/27
- Ceres, Skoonvlei 2026/27
- Tulbagh2027/28 – 2031/32

Refined MSDF and CEF strategy

- 2024 CEF 2024 including its capital expenditure program, served as the basis of 2025 CEF.
- 3rd revision 2025-2026 of 2022-2027 IDP budget was included in 2024 CEF capital expenditure program.
- Population figures amended to include influx, require confirmation, and were not considered:

It is estimated that nearly 5 348 households and 22 043 people migrated to Witzenberg, settling in Ceres, Tulbagh, Wolseley and Prince Alfred Hamlet. Over the 20-year planning period, should these figures be considered, 10 637 households and 31 911 people should be added to the MYPE 2024 estimates of 30 105 households and 256 044 people: A 12% increase in population and a 35% increase in households.

- Unavailability of land and subsequent insufficient SDF Land budget to accommodate population growth requires a long-term strategy to deal with densification & densities (intensification) & the provision of services.
- Protecting and growing the economy is core to an SDF. As agriculture and tourism are the drivers of the Witzenberg economy, infrastructure, water quality and settlement character (living surroundings) are key.
- The Witzenberg SDF and CEF premise the following strategy.
    - Firstly, address infrastructure needs.
    - Secondly, formalize (relocate, incrementally develop and upgrade) informal settlements.
    - Thirdly,
        - Implement a densification and intensification strategy.
        - Develop the economy.

The 2025 -2030 MSDF will focus on the first and second priorities, whilst the third priority will become the priority once the MSDF is revised in five years. In the meantime, the private sector will be encouraged to attend to the third priority.

For ease of reference, all development sites were labelled with the first or first few letters of the settlement name, followed by the letter of the land use zone they are located in. Sites were prioritised for the purposes of phasing future growth and priority sites (if any) were set out per functional area. Priority sites and the related land parcels will be prioritised in terms of all development phases (planning, budgeting and implementation).

Investment (or spatial) categories

Investment (or spatial) categories guide investment planning within Witzenberg. The following section details these investment (or spatial) categories as well as identifies development sites as it pertains to the Witzenberg Municipal settlements

Investment (or spatial) categories include:

- Priority Investment Areas at municipal and settlement scale
- Upgrading Area
- Consolidation Area
- Long-term development Area (10 - 20 years)
- Densification Area
- Intensification Area

(Refer to Maps titled “Promote Intensive Rural Development Corridor and Regional Infrastructure and Hierarchy and boxed text)

Priority Investment Areas at the municipal-wide scale

Priority Investment Areas at the municipal-wide scale refer to towns in Witzenberg that are:

- An investment priority within the regional context;
- Having economic growth potential within the region
- Generally occupying a high order in terms of the services, facilities and employment opportunities that are on offer;
- Generally, having the largest population size and the greatest social need;

Generally, investments made in these settlements will have the greatest multiplier effect and impact on the greatest number of people.

Priority investment areas at the municipal scale for Witzenberg Municipality include:

- Ceres Industrial Areas (CE1, CF1, CF2, CF5) subsidised and single residential areas (CF4, CC2, CA1), CBD;
- Tulbagh Commercial and Tourism destination area (TA3), CBD & Tourism Zone including water erven, Industrial, transport & freight Node (Train Station) facilitating R64 and R303/N1 connections, Subsidised residential areas (TC3, TC4, TC8) and residential development (TG 1 & TG3).

Priority Investment Areas at the settlement scale

Priority Investment Areas at the settlement scale include

- Principal transport & activity corridors;
- CBD,
- Secondary nodes and priority public transport-oriented development nodes connected by the corridors;
- Restructuring zone which seeks to reinforce the centre.

These areas must be the focus for getting the basics right as well as adding value through new investment to facilitate social inclusion, attract economic activity and private sector & household investment.

- There is scope for residential, commercial, and industrial growth within this zone.

These areas and the priority nodes should specifically be the focus of any municipal investment incentives, including expedited land use development procedures and/or relaxation of development controls, such as parking requirements. This should be done in a way that creates a public realm and streetscape that must be kept intact and enhances the integrity of the Witzenberg and Cape Winelands identity and attractiveness.

The Witzenberg Municipality is dedicated to maintaining, strengthening and intensifying CBDs of Wittenberg's settlements as their primary economic activity centres. Incentives for private investment in the upgrading and redevelopment of the CBD's buildings, in line with the historic character of the settlements, will be supported and promoted. Key spatial actions related to the CBD are to:

- Continue to resist the trend of "dispersed" business development in the CBD, specifically the spread of business development into surrounding residential areas;
- Retain office activities in the CBD;

- Support residential densification along key CBD routes;
- Implement public space upgrades to ensure a vibrant, integrated, and safe pedestrian environment;
- Promote high-quality urban design to reduce crime and improve the overall appeal of the CBD and confidence for private sector investment.

Settlements with several priority nodes were advanced as priority areas at the settlement scale.

Priority investment areas at the settlement scale for Witzenberg Municipality include

- Wolseley, Industrial Areas (WC2) Upgrading informal areas (WF2), subsidised (WB 5, 4, 3, 2 & WB1) and retirement residential areas (WA1), CBD
- Prince Alfred Hamlet, community facility precinct (PA3, PC1), Upgrading informal areas (PA1) & removal of informal area (PA2). Lack of land for small-scale agriculture

Upgrading Areas at the municipal-wide scale

Upgrading areas at the municipal-wide scale are settlements that still:

- Have considerable populations, services and some job opportunities, but they are not seen as primary service centres at the municipal scale and beyond;
- are generally major rural settlements that play a role in the economy of the region, but also have pressing social needs;
- Further significant expansion of these areas is not advised.

Ceres and Wolseley are identified as being upgrading areas at the municipal scale.

Upgrading Areas at the settlement scale

Upgrading areas at the settlement scale primarily focused on informal settlements and marginalised rural settlements and areas that require upgrading and improvement to bring them to an acceptable standard of performance as residential settlements.

Tulbagh and Prince Alfred Hamlet have been identified as being upgraded at the settlement scale.

Consolidation areas at the settlement and municipal-wide scale

Consolidation areas at the settlement and municipal-wide scale form the balance of the settlement footprint. In these areas, the focus is to ensure the provision and maintenance of services so that the areas may perform well within their current functions with no further expansion or growth of these areas, as far as possible.

Consolidation areas for Witzenberg Municipality include:

Op-die-Berg has been identified as a consolidation area. Any growth in these settlements will be dependent on private sector investment.

Long-term (speculative) development area:

Long term (speculative) development area is applicable only at the settlement scale and is an area identified as the desired location for long

term growth, first with the understanding that residential, commercial, and business opportunities in Priority Development Areas are taken up, before allowing development in Long-term or Speculative Development Areas. Speculative development may occur only in 10 to 20 years (i.e., after 2030).

Both Ceres and Wolseley have long-term (speculative) (10 – 20-year and beyond) development proposals. The Wolseley station node is also a long-term private investment opportunity.

Densification encouragement areas:

Densification encouragement areas are generally well-established residential areas that are extremely low density (with erf sizes ranging from 500 to 2000m² - translating to a net dwelling unit density of between 5 to 20 dwelling units per hectare) that could accommodate densification in the form of subdivisions to accommodate one or two additional houses, as well as accommodating 'granny flats. The intention here is to double the density of the neighbourhood over the long term and to allow the infrastructure systems to be utilised more effectively. This densification should not drastically alter the nature or feel of these neighbourhoods. It should be noted that the current zoning scheme bylaw already provides for second dwellings as a consent use. Densification encouragement areas include all the single residential areas and activity streets in all settlements.

The following table provides a summary of the investment classes per settlement:

Settlement	CERES	TULBAGH	WOLSELEY	PAH	OP DIE BERG
Hierarchy	Regional	Municipal	Municipal	Settlement	Settlement
Growth Hierarchy	Primary Growth Centre	Secondary Growth Centre	Secondary Growth Centre	Secondary Growth Centre	Rural Settlement
Priority Investment Areas & Types	**Municipal/Regional**	**Municipal/Regional**	**Municipal**	**Settlement**	
	Residential Development (Agri Village) -CC2	Residential TC 8	Industrial (WC2)		
	Vredebes Residential Subsidized & School CG1 & CG2	Commercial / Tourism TA3			
	Taxi Rank CD1				
	Rural Corridor (IRDC)			Rural Corridor (IRDC)	
Upgrading Area	Nduli Incremental CH2, CH3, CH4, CH5, CH6, CH7	Incremental TC2 & TC3	Incremental WF2	Incremental PA1	
	Mooiblom Relocation CH10	Relocation TC4	Relocation WF2	Relocate informal structures PA2	
Consolidation Area				Relocate small farmers PA2	
Long term development Area (10 - 20 year)	Regional Cemetery		Retirement Village WA1		
Densification Area		Large plot character		Large plot character	Large plot character
Intensification Area	CBD	CBD	CBD	CBD	
	Activity Streets	Activity Streets	Activity Streets	Activity Streets	Activity Streets

7.4.5 Part A Output 1: A Consolidated Project Database

As described in the methodology, the primary output of Part A is a consolidated master database of infrastructure investments or projects (which can be spatially depicted) for the entire municipality. These projects have been drawn from Phase 1, 2a and 2b. The Database also includes projects included in the draft and tabled 2023/24 budget for the MTREF, 5-year capital plan as included in the IDP, new and upgrading projects as prioritised in the various sectoral plans, community inputs and projects presented at the IDP institutional analysis, 2023 and CEF 2024/2025 – 2034/2035 for planning purposes.

The following table shows WM's sector plans and status.

Sector Plan	Status	Adopted Date
Integrated Development Plan, 3rd review 2025-2026 (2022-2027),	Adopted	May 2025
Spatial Development Framework	Draft 1	2025
Local Economic Development Plan 2025 -2030	Adopted	2025
Long Term Financial Plan	Adopted	2016
Capital Expenditure Framework: 2025/2025 – 2034/2035	Planning	2024
Disaster Management Plan	Adopted	2021
Water Services Development Plan	Adopted	2024
Air Quality Management, 2nd Generation	Adopted	2024
Integrated Transport and Roads Plan	Adopted	2020
Electricity / Energy Master Plan	Adopted	2023
Housing Pipeline	Adopted	August 2025
Human Settlement Plan	Draft	
Integrated Waste Management Plan	Adopted	2021

As explained in Chapter 1 under Methodology, projects are categorised according to renewal/rehabilitation, new, and projects linked to settlement developments. These are further categorised between infrastructure and social projects.

See attached Annexure 11 for a consolidated list of projects

7.5 Part B: The affordability Envelope

7.5.1 Phase 3: Projected Revenue Expenses

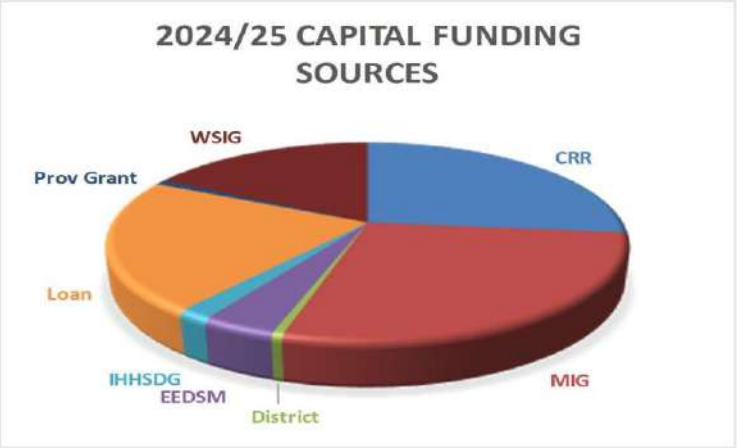
WM's Long-Term Financial Plan (LTFP) was developed in 2016. The LTFP projected revenue and expenses between 2017 and 2026; however, it is now outdated due to the economic effects of the COVID-19 pandemic and associated recession in 2020. WM is experiencing some of the lowest payment rates on record, although slightly improved since 2020/21, meaning there's less money for operations than pre-2020. From a financial perspective, stringent financial management is being implemented, including monitoring financial targets, implementing expenditure reductions, monitoring debt levels, revenue and debt collection targets, gearing ratios, cost coverages, and liquidity requirements.

For this CEF, a growth model was used to determine the movement (growth or decline) of CRR (Capital Replacement Reserve) to determine available own funding over the ten-year period. It is critical to note that these projections should not replace the full quantum or work that an updated LTFP would provide, and are underpinned by several assumptions (growth rates) that, if changed, significantly change the projected revenues and expenses of the municipality and hence change the available capital budget.

Apart from the *CRR fund*, it is only the *Municipal Infrastructure Grant (MIG)* that *is an annual allocation within which approved projects are prioritised*. *All other grants*, which will be sourced to fund the CEF, *are allocated and approved on an ad hoc project-based principle*, determined by the *relevant departments' available funding* for the grant. The *latter does not assure when projects could be funded and budgeted for and these projects will have to be adjusted as and when funding becomes available*.

The funding for the draft 2024/25 Capital Budget is sourced from various grants as shown in the table below:

Funding Sources	Budget 2024/2025	Budget 2025/2026	Budget 2026/2027
CRR	R20 359 174	R17 500 000	R17 500 000
MIG	R21 417 391	R30 000 000	R30 000 000
District	R434 783		
EEDSM	R3 043 478		
IHHSDG	R1 332 174	R2 147 000	
Loan	R16 517 686	R40 000 000	R0
Prov Grant	R608 696	R114 990 750	
WSIG	R13 043 478		



- 02024 CEF 2024, including its capital expenditure plan, served as the basis of 2025 CEF.
- 3rd revision 2025-2026 of 2022-2027 IDP budget was included in 2024 CEF capital expenditure plan.

The detailed Long-Term Capital Budget: 2025/26 – 2024/35, illustrate the budget priorities and funding sources annually. The outer years are indicative and for planning purposes:

Funding Source	Est Project Cost	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/2035
Belgium	R300 000	R300 000									
CRR	R332 208 556	R35 964 000	R22 349 600	R31 205 956	R29 000 000	R36 800 000	R35 770 000	R34 675 000	R39 540 000	R37 600 000	R29 304 000
EEDSM	R7 492 174	R3 478 261		R4 013 913							
Human Settlements	R104 147 828	R13 419 132	R13 728 696				R77 000 000				
INEP	R14 634 782	R573 913	R518 261	R542 608			R13 000 000				
Loan	R15 000 000	R15 000 000									
MIG	R257 012 218	R27 560 578	R44 004 527	R42 807 896	R23 986 957	R20 000 000	R57 053 129	R20 599 131			R21 000 000
Paardekraal	R1 739 130	R1 739 130									
Prov Grant	R16 513 565	R2 201 739	R9 644 348	R2 963 478		R750 000		R954 000			
No Funding Source	R1 115 000	R185 000	R50 000	R180 000	R180 000	R250 000	R270 000				
Total	**R750 163 253**	**R100 421 753**	**R90 295 432**	**R81 713 851**	**R53 166 957**	**R57 800 000**	**R183 093 129**	**R56 228 131**	**R39 540 000**	**R37 600 000**	**R50 304 000**

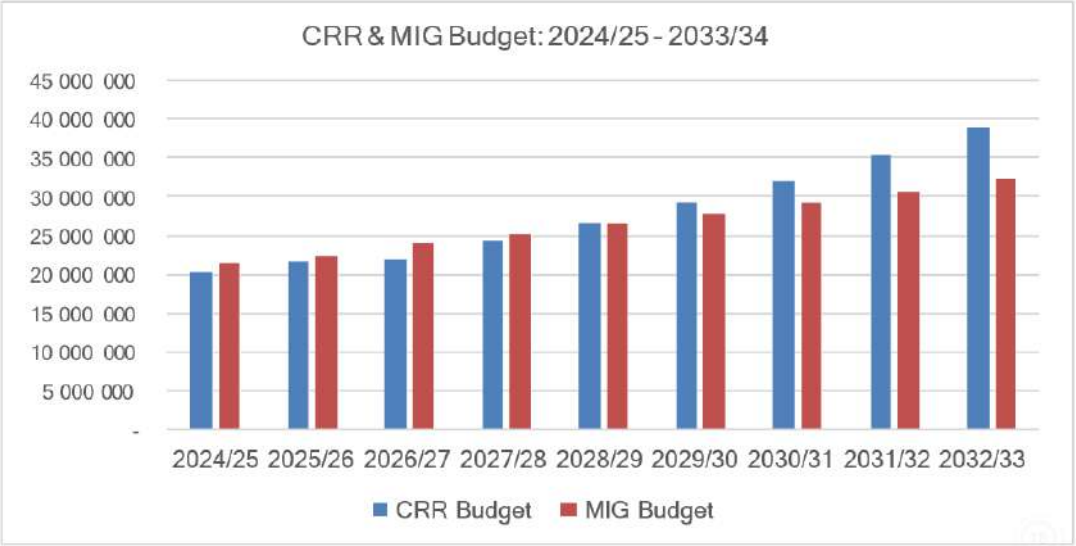
The Planned and Funded Provincial Infrastructure Projects & Programmes in the Witzenberg Municipality for the MTEF period 2025/26 – 2027/28 are added to demonstrate the total capital investment by government and secured partners.

Funding Source	Est Project Cost	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/2035
Equitable Share (Provincial)	R328 144 000	R65 409 000	R99 140 000	R163 595 000							
Health Facility Revitalisation Grant (Provincial)	R58 068 000	R26 573 000	R23 509 000	R7 986 000							
Informal Settlements Upgrading Partnership Grant (Provincial)	R2 147 000	R2 147 000	R0	R0							
Provincial Roads Maintenance Grant (Provincial)	R158 740 750	R114 990 750	R43 750 000	R0							
Total	**R547 099 750**	**R209 119 750**	**R166 399 000**	**R171 581 000**	**R0**	**R0**	**R0**	**R0**	**R0**	**R0**	
Grand Total	**R1 297 263 003**	**R309 541 503**	**R256 694 432**	**R253 294 851**	**R53 166 957**	**R57 800 000**	**R183 093 129**	**R56 228 131**	**R39 540 000**	**R37 600 000**	**R50 304 000**

7.5.2 CRR & MIG Funding Availability

The table below lists the expected available funding over the 10-year period from the CRR and MIG Grant.

Financial Year	CRR Budget	MIG Budget
2024/25	20 359 174	21417391
2025/26	21 720 000	22 355 652
2026/27	22 000 000	24 102 609
2027/28	24 151 600	26 251 462
2028/29	26 566 760	27 564 035
2029/30	29 223 436	28 942 237
2030/31	32 145 780	30 389 349
2031/32	35 360 358	31 908 816
2032/33	38 896 393	33 504 257
2033/3/	42 871 776	33 914 791
TOTAL	293 668 712	273 931 481



The detailed Long-Term Secured Funding Source Budget: 2025/26 – 2024/35, illustrates the preliminary affordability. The outer years are indicative and for planning purposes. *All other grants*, being a*llocated and approved on an ad hoc project-based principle, do not assure when funding becomes available*.

Every effort will be made to secure the funding within a five-or ten-year cycle. The CEF will therefore be amended regularly but bound to the medium- and longer-term timeframes.

The Long-Term Capital Budget for Secure Funding: 2025/26 – 2034/35 illustrates the shortfall between the priority projects planned and secured funds for CRR and MIG funds and loans.

Budget (Costing)

Funding Source	Sum of Est Project Cost	Sum of 2025/26	Sum of 2026/27	Sum of 2027/28	Sum of 2028/29	Sum of 2029/30	Sum of 2030/31	Sum of 2031/32	Sum of 2032/33	Sum of 2033/34	Sum of 2034/35
CRR	R332 208 556	R35 964 000	R22 349 600	R31 205 956	R29 000 000	R36 800 000	R35 770 000	R34 675 000	R39 540 000	R37 600 000	R29 304 000
Loan	R15 000 000	R15 000 000									
MIG	R257 012 218	R27 560 578	R44 004 527	R42 807 896	R23 986 957	R20 000 000	R57 053 129	R20 599 131			R21 000 000
Grand Total	**R604 220 774**	**R78 524 578**	**R66 354 127**	**R74 013 852**	**R52 986 957**	**R56 800 000**	**R92 823 129**	**R55 274 131**	**R39 540 000**	**R37 600 000**	**R50 304 000**

Funding

Funds	Sum of Funding	Sum of 2025/26	Sum of 2026/27	Sum of 2027/28	Sum of 2028/29	Sum of 2029/30	Sum of 2030/31	Sum of 2031/32	Sum of 2032/33	Sum of 2033/34	Sum of 2034/35
CRR	**R175 000 000**	R17 500 000	R17 500 000	R17 500 000	R17 500 000	R17 500 000	R17 500 000	R17 500 000	R17 500 000	R17 500 000	R17 500 000
Loan 1	**R20 000 000**	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000
Loan 2	**R20 000 000**	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000
MIG	**R300 000 000**	R30 000 000	R30 000 000	R30 000 000	R30 000 000	R30 000 000	R30 000 000	R30 000 000	R30 000 000	R30 000 000	R30 000 000
Total	**R515 000 000**	R51 500 000	R51 500 000	R51 500 000	R51 500 000	R51 500 000	R51 500 000	R51 500 000	R51 500 000	R51 500 000	R51 500 000
Budget Fit (CRR)	**53%**	**49%**	**78%**	**56%**	**60%**	**48%**	**49%**	**50%**	**44%**	**47%**	**60%**
Budget Fit (Loans)	**267%**	**27%**									
Budget Fit (MIG)	**117%**	**109%**	**68%**	**70%**	**125%**	**150%**	**53%**	**146%**			**143%**
Budget Fit Total	**85%**	**66%**	**78%**	**70%**	**97%**	**91%**	**55%**	**93%**	**130%**	**137%**	**102%**

Note: Budget Fit expresses the Funds as a percentage of the Budget.

7.6 Part C: Project Prioritisation and 10 Year Capital Expenditure

Part C brings together Parts A and B in the form of a prioritized portfolio of infrastructure projects within the projected capital envelope from 2024 to 2031. To reiterate, this timeframe is chosen because the current MTEF budget is already considered prioritised. **(See Annexure 12)**

7.6.1 Phase 4: Applying Prioritization & Developing a Prioritized Portfolio of Infrastructure Projects

Phase 4 sets out the prioritization against which the 'unfunded' projects are assessed. WM does not currently make use of a prioritization "tool". Projects are, however, prioritized, making use of the following criteria:

- Constitutional and legislative conditions.
- Achievement of Municipal Strategic Objectives.
- Inter-related projects (usually housing projects where bulk services are required).
- Feasibility of projects.
- Prioritization as per sectoral plans.
- Preventing increased maintenance costs.

These criteria are not fixed and can be adjusted as the situation dictates.

This is the first iteration of the WM CEF, and it is possible that some capital projects may not have been included in the consolidated project database, while others may be duplicated, although extensive effort went into scoring all sector and master plans for project identification, and a check for project duplication was done. However, this CEF methodology is iterative, and the tools provided can be used to refine and improve the identification of strategy-aligned and affordable projects.

Multiple methods of prioritizing a limited capital budget exist, and ideally, this should be done as a strategic prioritisation process by the municipality's strategic planners, urban planners, engineers, finance office, and municipal council once phases 1 to 3 of the CEF method are concluded. Critical, however, is that the project list is informed by reliable data on infrastructure demand and capacity. Attempts were made in this CEF to cross-check housing growth figures with infrastructure capacities to determine an ideal sequencing of infrastructure projects listed in the database; however, some infrastructure master plans are outdated and there is insufficient and unreliable data on available bulk capacity for various services such as water and wastewater. For this reason, it was not possible to perfectly sequence projects, and a further sequencing revision is needed once completed master plans have been developed, and phase 1 database is completed. Notwithstanding this, the vacant infill strategy database provides a comprehensive understanding of unit loadings and cost implications per site, which can be used to cross-check with available bulk capacity (once determined). Therefore, only in the next iteration of this CEF can an ideal sequencing of projects be achieved.

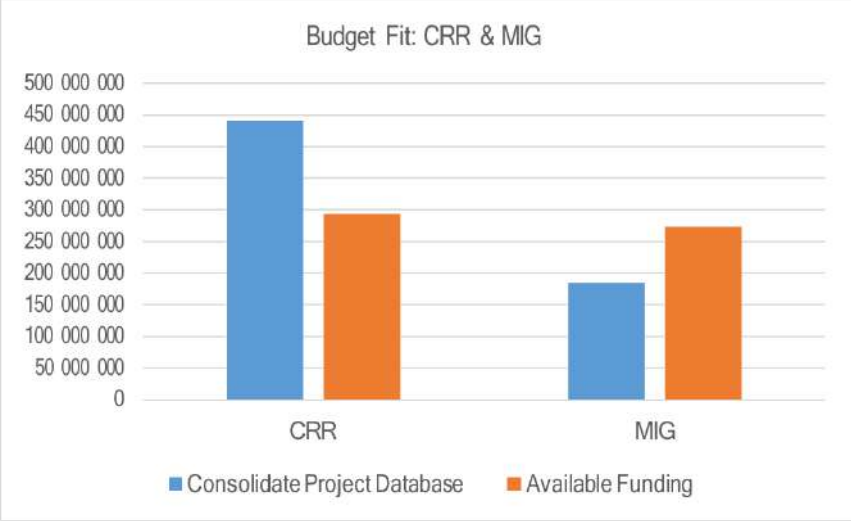
See attached Annexure 12 and 13, the 10 Year capital expenditure budget and a list of Priority Projects

7.6.2 Phase 5: Budget Fit and Sequencing

The total capital budget from the Consolidated Project Database amounts to just over R 1 billion for the 10-year period. To determine a budget fit, it is, however, essential to identify sources from which these listed projects will be funded, as determined by the applicable grant conditions and scope.

The table below summarises the budget fit for each of the applicable grants:

Funding Source	Consolidate Project Database	Funding Source
CRR	440 600 000	CRR
MIG	185 600 000	MIG
Energy Resilience Fund	253 000 000	Ad Hoc application
Prov Grant	28 700 000	
WSIG	22 000 000	
Human Settlements	117 600 000	
INEP	14 000 000	
Rural Dev	25 000 000	



Priority projects require a total of just over one billion over a period of ten years: 2025/2026 to 2035/2036.

Affordability would be driven by the secure and available funds listed below:

Authority/ Institution	Fund	Amount in R' million	Secured funding type
Witzenberg Municipality	Capital Replacement Reserve (CRR)	R15 – R20	Rehabilitation and upgrading of existing infrastructure (mostly roads)
National Government	Municipal Infrastructure grant (MIG)	R25 – 35	Informal Settlement upgrades
Department of Infrastructure: Human settlements	Pipeline	Applications to be made	Subsidzed housing
Bank Loan	Loan 1	R20	Electrical Infrastructure Upgrade
Bank Loan	Loan 2	R20	Electrical Infrastructure Upgrade

The above table indicates that there will be an unfunded portion of CRR-funded projects to the amount of R 146 931 288. There is, however, an underfunded amount of R 88 331 481 for MIG-funded projects. Overall, 16% of the funds are secured, translating to less than half of the prioritised projects being implemented in the five-year planning cycle.

The following table contains the proposed, Prioritized and Sequenced 10-year Capital Portfolio.

Note that various CRR-funded projects, such as vehicle replacement and institutionally related projects, are not included.

7.7 Findings and Recommendations of the CEF

Many municipalities lack a framework for project recording and prioritizing in connection to the budget, and the IDP has noticeably evolved into a location where projects from all sector plans are documented. There is a need to address the fact that many sector plans lack the detailed articulation of projects and the provision of life cycle costs.

Together with projects from other sector plans, this CEF has helped to translate the MSDF's spatial strategy into actual projects and finances. To guarantee that the most beneficial CEF- prioritized project list can be established, the municipality must regularly review its infrastructure master plans and ensure that they relate to the MSDF and CEF.

The CEF can be used repeatedly to help the municipality and other levels of government identify and prioritize needs.

Recommendations

- Infrastructure sector plans should be reviewed to align with the MSDF & CEF.
- The revision of the MSDF, Financial Plan & Sectoral Plans should be an integrated effort involving all relevant departments, such as service delivery departments, IDP, Planning and Finance.
- The prioritization model should be refined.
- The MSDF – CEF Strategy should be adopted.

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ANNEXURES

ANNEXURE 01 - DEADP Practice note on MSDF's

Steps in the process of compiling a Municipal Spatial Development Framework (MSDF) as set out by the Department of Environmental Affairs and Development Planning's Practice Note on MSDF "adoption" vs "Review" vs "Amendment".

STEP	STEPS TO BE UNDERTAKEN	UNDERPINNING LEGISLATION
1	The Council must decide whether or not to establish an Intergovernmental Steering Committee (ISC)	LUPA – Section 11 (a) and (b) and the Relevant Bylaw on Municipal Planning, Chapter 2, Section 5
2	Notice of the proposal to compile an MSDF must be published in two of the official languages of the Province, most spoken in the area, in two newspapers circulating in the area. The notices must indicate: The Municipal intention to compile an MSDF The process to be followed for the compilation of the MSDF	Relevant Bylaw on Municipal Planning, Chapter 2 Section 3 (2) (a) (i)(ii)
3	The Municipality must inform the Provincial Minister in writing of the intention to compile the MSDF, indicate whether or not the ISC process will be under- taken and the process to be followed in the compilation	Relevant Bylaw on Municipal Planning Chapter 2 Section 3(2)(b) (i-iii)
4	Register relevant stakeholders who may be invited to comment on the draft MSDF	Relevant Bylaw on Municipal Planning Chapter 2 Section 3(2)(c)
5	The Municipality must establish a project committee. The project committee should consist of: the Municipal Manager (or a municipal employee designated by the Municipal Manager) Municipal employees appointed by the Municipal Manager from at least the following municipal departments – IDP, Spatial Planning, Engineering, LED and Housing	Relevant Bylaw on Municipal Planning Chapter 2 Section 4(1) and (2)
If the decision above was to establish an Intergovernmental Steering Committee (ISC):		

6	The Municipality must invite, in writing, written nominations for representatives to serve on the IGSC from the following persons or organs of state: The head of the provincial department responsible for land use planning; The head of the provincial department responsible for environmental affairs Other relevant organs of state	Relevant Bylaw on Municipal Planning Chapter 2 Section 5
7	The project committee should compile a draft status quo report setting out an assessment of the existing levels of development and development chal- lenges and submit it to the ISC for comment	Relevant Bylaw on Municipal Planning Chapter 2 Section 6(1)
8	The project committee must consider the comments of the ISC, finalise the status quo report and submit it the Council for adoption	Relevant Bylaw on Municipal Planning Chapter 2 Section 6(2)
9	The project committee must compile a first draft of the municipal spatial development framework and submit it to the ISC for comment	Relevant Bylaw on Municipal Planning Chapter 2 Section 6(3)
10	After considering the comments of the ISC, the project committee must finalise the first draft of the municipal SDF and submit it to Council to approve the publication thereof for public comment in accordance with the process adopted in terms of section 28 and 29 of the MSA A municipality must give the local community at least 21 days to comment on the final draft of the MSDF This time period can run concurrently with the 60 days referred to in SPLUMA (see step 12 below)	Relevant Bylaw on Municipal Planning Chapter 2 Section 6(4) MSA Regulations Chapter 4 Section 15(3)
11	The Municipal Council must give notice of the proposed municipal spatial development framework in the Gazette and the media	SPLUMA - Section 20(3)(a)
12	The public / local community must be invited to submit written comment on the proposed MSDF within 60 days of the publication thereof	SPLUMA – Section 20(3)
13	The District Municipality must be consulted and given an opportunity to comment in writing.	MSA Regulations Chapter 2 Section 3(6)
14	After consideration of the comments and representations received through the public participation process, the project committee must compile a final	Relevant Bylaw on Municipal Planning Chapter 2 Section 6(5)

	draft of the MSDF and submit it to the ISC for comment	
15	After considering the comments of the ISC, the project committee must finalise the final draft of the MSDF and submit it to Council for adoption.	Relevant Bylaw on Municipal Planning Chapter 2 Section 6(6)
If the decision was not to establish an ISC:		
16	If the Municipality has decided not to establish an ISC, then the project committee must draft a status quo report setting out an assessment of the existing levels of development and development challenges in the municipal area and submit it to the Council for adoption.	Relevant Bylaw on Municipal Planning Chapter 2 Section 7(1)(a)
17	Once the status quo report has been adopted, the first draft of the municipal SDF should be prepared by the project committee and submitted to Council for approval for it to be published for public comment. Once approval is granted, the draft SDF must be submitted to the Provincial Minister for written comment.	Relevant Bylaw on Municipal Planning Chapter 2 Section 7(1)(b) and (c) LUPA – Section 13
18	The Council must give notice of the draft MSDF in the Gazette and the media	SPLUMA – Section 20 (3)
19	The Council must invite the public to submit written representations on the draft SDF to the Council within 60 days after the publication of the notice. In addition, any organs of state or other role players must be identified and consulted on the proposed MSDF. All representations received must be consid- ered.	SPLUMA – Section 20 (3) MSA, Section 29(1)(b)(iii)
20	The Provincial Minister must submit written comment to the Municipality within 60 days (The period can be extended if the municipality agrees) The municipality may not adopt its MSDF, until comment has been received from the Provincial Minister or 60 days have passed.	LUPA – Section 13 (2) LUPA – Section 13 (1) (b)
21	A municipality must give the local community at least 21 days to comment on the final draft of the MSDF This time period can run concurrently with the 60 days referred to in both SPLUMA and LUPA (see steps 19 and 20 above)	MSA Regulations Chapter 4 Section 15(3)
22	The project committee must consider the input received from the public and the Provincial Minister, make any amendments that are required and prepare the final draft of the	Relevant Bylaw on Municipal Planning Chapter 2 Section 7(1)(d)

	municipal SDF for the adoption of Council	
23	If the final draft of the MSDF is materially different from what was published, the Municipality must follow a further consultation and public participation process before the MSDF is adopted by Council	Relevant Bylaw on Municipal Planning, Chapter 2, Sections 6(7) and 7(2)
24	Once adopted by the Council, a notice of this adoption must appear in the media and the Provincial Gazette, within 14 days of the date of adoption.	SPLUMA Section 20(1) Relevant Bylaw on Municipal Planning, Chapter 2, Sections 6(9) and 7(3)
25	Once adopted, the Municipal Manager must submit a copy of the MSDF as adopted by the Council to the MEC for Local Government, within 10 days of the adoption. This submission must include: a summary of the public participation process a statement that the process set out in Section 29(1) of the MSA has been complied with a copy of the relevant Districts Framework for Integrated Development Planning (See Section 27 of the MSA)	MSA Section 32 (1)
26	The Municipal Manager must also within 10 days of the adoption of the MSDF, submit: a written notice of the decision to adopt or amend a municipal spatial development framework, the adopted or amended MSDF a report setting out the response of the municipality to the comments of the ISC to the Provincial Minister.	LUPA Section 14 (a) – (c)
27	Within 30 days from the date of receipt of the adopted MSDF, the MEC for Local Government must determine if: the drafting process and content of the MSDF complies with the MSA whether the MSDF is in line with any development plans and strategies of other affected municipalities or organs of state the public participation process outlined in Section 29 of the MSA has been complied with	MSA Section 32(2)

28	Should the adopted MSDF not comply with the above, the MEC for Local Government should request the relevant municipal council to amend the MSDF	MSA Section 32 (2)
29	The Municipal Council must consider the MEC's request to amend the MSDF, and within 30 days of receiving the MEC's request, the Council must consider: If it agrees with the proposals to adjust the MSDF in accordance with the MEC's request. Object to the MEC's request and furnish the MEC with reasons in writing why it disagrees	MSA Section 32(3)
30	If the Municipality objects to the MEC's request, the MEC may refer the municipality's objection to an ad hoc committee (see Section 33 of the MSA). The MEC must refer an objection to the ad hoc committee within 21 days of receiving the objection.	MSA Section 32 (4)
31	See Section 33 of the MSA which deals with the Ad Hoc Committee process	
32	Also note Section 22(3) of the SPLUMA which states that where a PSDF is inconsistent with a MSDF, the Premier must in accordance with the Intergovernmental Relations Framework Act, take the neces- sary steps to support the revision of those spatial development frameworks in order to ensure consistency between the two	

* Please note:

1. That the Section numbers referred to in the "Relevant Bylaw on Municipal Planning" relates to the numbering in the LUPA Proposed Standard Draft By-Law, which may be different from the corresponding numbers in your own Municipal Planning By-law.
2. That in those instances where only the Standard Draft By-Law is referred to, it is not necessary for a District Municipality to undertake this step.

ANNEXURE 02 - Key Legislation, Policies and Frameworks

1 National Legislation & Policy

1.1 Spatial Planning and Land Use Management Act

SPLUMA, short for the Spatial Planning and Land Use Management Act, was introduced in 2013 to bring order, fairness, and efficiency to the way land is planned and managed in South Africa. Before this, planning laws were fragmented and inconsistent, often reinforcing past inequalities. SPLUMA changes by ensuring that all municipalities follow the same set of rules, making land use planning more predictable and transparent. One of its key requirements is that every level of government must create a Spatial Development Framework (SDF), a roadmap that lays out the long-term vision for how land should be used and developed. These frameworks help guide decisions on infrastructure, economic growth, and environmental management, while also making sure that different government sectors work together.

Although SDFs do not dictate every detail of land use, they provide a structured approach to managing growth and change. They include Local Spatial Development Frameworks (LSDFs) or Precinct Plans, which focus on specific areas within a municipality and help turn broad strategies into real projects on the ground. SPLUMA also ensures that zoning regulations and land use management systems are clear and enforceable, preventing unplanned development and ensuring that land is used efficiently and sustainably.

At its core, SPLUMA is built on five key development principles:

- **Spatial Justice** – Redressing past spatial inequalities and ensuring fair access to land, services, and opportunities.
- **Spatial Sustainability** – Encouraging compact, resource-efficient, and environmentally responsible development while protecting valuable land.
- **Efficiency** – Making the best use of space, infrastructure, and resources while reducing unnecessary costs and travel distances.
- **Spatial Resilience** – Helping communities, especially vulnerable ones, withstand and recover from economic or environmental shocks.
- **Good Administration** – Promoting transparent, integrated, and well-coordinated planning across all levels of government.

SPLUMA also recognizes real-world challenges like rapid urbanization, ageing infrastructure, and tight municipal budgets. It pushes for smarter, more integrated planning that helps cities and towns grow in a way that is sustainable, inclusive, and well-coordinated. By guiding development in a way that balances economic growth, social needs, and environmental

protection, SPLUMA helps ensure that South Africa's cities and rural areas are better places to live and work for the present generation and in the future.

Implications for the Witzenberg Municipality include:

- Compact and integrated urban areas that are vibrant and support a mix of opportunities whilst optimizing the use of existing resources and infrastructure should be encouraged.
- Environmentally sensitive conservation areas should be identified for preservation and urban development effectively managed in rural areas.
- Emphasize the creation of integrated settlements, especially regarding poorer communities and their proximity to services and employment.
- Create compact urban environments to reduce expenditure on infrastructure and support public transport.

1.2 National Development Plan

The National Development Plan 2030 (NDP) provides a broader national vision that guides South Africa's development. It sees government as a catalyst for growth, creating the right conditions for people to thrive whether through better infrastructure, skills development, or business-friendly policies. The NDP promotes an entrepreneurial and innovative economy through renewable energy initiatives to reduce poverty and inequality by 2030. Together, the NDP, PSDF, and other provincial policies work to create a future where economic opportunity, social justice, and environmental sustainability go hand in hand, shaping a more resilient and thriving Western Cape for generations to come.

NDP key objectives:

- Revitalizing Rural Economies by creating over 600,000 new jobs in agriculture, agro-processing, and related fields by 2030.
- Improve roads, water, electricity, and services to support rural businesses and communities.
- Ensure secure land rights, especially for women farmers, with fair financing options.
- Support small farmers and rural entrepreneurs, while holding mining companies accountable for social investment.
- Caring for the Environment through reducing pollution and acting against climate change to protect future generations.
- Improving Education and Skills by strengthening early childhood education to give every child a strong start.
- Encourage youth involvement in community development and safety initiatives.
- Better Healthcare for all by ensuring equal access to quality healthcare, regardless of income.
- Support struggling areas, especially agricultural districts, with targeted job programmes.

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

A total of seven central challenges were identified:

1. Economic Exclusion in Rural Areas - Over one-third of South Africans live in former "homelands" and remain economically marginalized.
2. Many rural communities lack infrastructure, job opportunities, and access to markets.
3. Urban-Rural Divide and Poor Infrastructure - Spatial misalignment and poor planning make it difficult for people in rural areas to access economic opportunities.
4. Environmental Pressures and Climate Change - The need to grow the economy often conflicts with protecting natural resources.
5. Limited Access to Quality Education and Skills Development - Poor education systems limit employment prospects and keep people in poverty.
6. Healthcare Inequality - Many South Africans struggle to access quality healthcare, especially in lower-income areas.
7. Unemployment and Limited Job Growth - A lack of job opportunities, especially in rural areas, leads to poverty and migration to cities.

New industries and skills development are needed to create sustainable employment.

Recommendations / implications set out in *Chapter 8: Transforming Human Settlements and the National Space Economy* of relevance to the Witzenberg include:

- Upgrading of all informal settlements on suitable well-located land.
- Increasing urban densities to support public transport and reduce sprawl.
- Promoting mixed housing strategies and compact urban development near services and livelihood opportunities.
- Investing in public transport infrastructure and systems (with a special focus on commuter rail) to ensure more affordable, safe, reliable, and coordinated public transport.
- Furthermore, given the fact that tourism (local and international) is expected to increase, the Municipality should prepare a comprehensive strategy to assist in its marketing.
- The design / spatial planning of the settlements needs to consider that people will tend to travel less and will need to plan to consider the effects of climate change. This can be addressed by reducing the spread-out nature of towns and making them more environmentally sustainable and economically efficient.

1.3 National Spatial Development Framework (NSDF)

The National Spatial Development Framework (NSDF) is a long-term strategic spatial plan that sets the direction for South Africa's development towards 2050.

- ➢ It indicates the country's primary national spatial development policy, shaping the way land, infrastructure, and resources are planned and invested across all levels of government.
- ➢ Aims to create a more integrated, inclusive, and sustainable spatial future, breaking away from the fragmented and unequal patterns inherited from the past.
- ➢ Provides a visual representation of the country's desired spatial development pattern, along with a set of national spatial directives to guide infrastructure investment and development spending.

It identifies key strategic spatial areas where targeted investment in both public and private can drive meaningful transformation. This approach ensures that growth is coordinated, and sustainable, and benefits all South Africans, whether they live in urban centres or rural regions.

The framework is driven by a National Transformation Logic with a distinct spatial dimension. While there is a strong focus on the development of urban regions like Gauteng, eThekwini, and Cape Town, the NSDF also prioritizes the growth and resilience of rural regions. It promotes the creation of productive, functional rural areas that are well-connected and equipped with essential services such as clinics, police stations, schools, cultural hubs, sports facilities, and modern communication networks. These rural service centres will act as anchors, ensuring that people in remote areas have access to opportunities and resources.

To achieve its vision, the NSDF is structured around five key spatial frames:

- Urban Regions, Clusters, and Development Corridors – Driving national transformation and economic growth by focusing development on key urban hubs and corridors.
- Productive Rural Regions and Regional Development Anchors – Strengthening rural economies, ensuring food security, and improving quality of life through well-planned rural service anchors.
- National Ecological Infrastructure System – Protecting and sustainably managing natural resources, particularly water, to secure the country's environmental future.
- National Connectivity and Economic Infrastructure Networks – Expanding and maintaining transport, trade, and communication networks to support national, regional, and local economic development.
- National Social Service and Settlement Infrastructure Network – Ensuring that all South Africans have access to quality services in well-connected urban and rural nodes.

The NSDF provides a strategic roadmap for South Africa's spatial future, balancing economic growth, environmental sustainability, and social equity. It envisions a more integrated, inclusive, and competitive national space economy, ensuring that all South Africans, regardless of location, benefit from a well-planned and resilient built environment.

The following implications for Witzenberg Municipality were identified:

- The implications of climate change need to be considered not only from a disaster management perspective but also from its impact on infrastructure provision, such as buildings, agriculture, and the natural environment.
- The design / spatial planning of the settlements needs to consider that people will tend to travel less and will need to plan considering the effects of climate change. This can be addressed by reducing the spread-out nature of towns and making them more environmentally sustainable and economically efficient.

1.4 National Biodiversity Strategy and Action Plan 2015-2025

The National Biodiversity Strategy and Action Plan (NBSAP) outlines a framework and action plan for conserving and sustainably using South Africa's biological diversity, ensuring the equitable sharing of benefits derived from it.

The vision emphasizes conserving, managing and sustainably using biodiversity to ensure equitable benefits to the people of South Africa, now and in the future.

The strategic objectives of the NBSAP can be summarized as follows:

- Enhancing Biodiversity's Contribution to Economic Development: Managing biodiversity assets and ecological infrastructure guarantees the long-term sustainability of agriculture, tourism, and natural resource-based industries.
- Investing in Ecological Infrastructure for Climate Resilience: Strategic investments in ecological infrastructure bolster resilience against climate change and land degradation, ensuring ongoing economic and social benefits.
- Mainstreaming Biodiversity in Development Planning: Biodiversity considerations are incorporated into land-use planning, municipal policies, and economic strategies to mitigate the effects of increasing

development demands while securing long-term ecological sustainability.

- Mobilizing Communities and Stakeholders for Sustainable Practices: Local communities, farmers, businesses, and conservation organizations participate in biodiversity-friendly land-use practices, ensuring the sustainable use of natural resources.
- Strengthening Knowledge, Research, and Innovation: Scientific research, Indigenous knowledge, and citizen science play a pivotal role in informing decision-making, promoting sustainable land-use practices, and enhancing ecological and economic resilience.

Based on the set objectives the Western Cape Biodiversity Spatial Plan 2023 prioritizes conservation actions by setting quantitative biodiversity thresholds. It aims to protect biodiversity patterns, including key species and habitats, while maintaining ecological and evolutionary processes necessary for long-term biodiversity conservation.

This relates mostly to the strategic objective of enhancing biodiversity's contribution to economic development because it involves managing biodiversity assets and ecological infrastructure to ensure long-term sustainability. This aligns with the focuss on maintaining ecological and evolutionary processes and conserving biodiversity patterns.

Secondly by strengthening knowledge, research, and innovation through setting quantitative biodiversity thresholds and identifying representative biodiversity patterns which implies the use of scientific research, monitoring, and data collection as the core aspects of this objective.

1.5 National Environmental Management Act

The National Environmental Management Act (NEMA) (Act 107 of 1998) provides a framework for the management and protection of South Africa's environment. Similar to the Spatial Planning and Land Use Management Act (SPLUMA), NEMA establishes overarching principles that guide environmental legislation, and all activities related to environmental management. It places significant emphasis on environmental sustainability, resilience to climate change, and the wise use of natural resources, recognizing their critical role in both current and future socio-economic well-being.

In the context of municipal and spatial planning, NEMA requires municipalities to integrate environmental considerations into their planning and decision-making processes. This includes assessing potential environmental impacts of proposed developments and taking steps to mitigate or prevent negative consequences. The Act also enables the development of Environmental Management Frameworks (EMFs) to guide sustainable land use and development within municipal areas.

Overall, NEMA promotes sustainable development and the protection of natural resources through a collaborative and integrated approach to planning at national, provincial, and municipal levels. Its principles are intended to be applied alongside SPLUMA's development principles, ensuring a coordinated and balanced approach to land use and environmental management that supports both economic growth and ecological integrity.

By law each local authority is compelled to manage air quality in its own jurisdiction. The National Environmental Management: Air Quality Act, 2004 (Act no. 39 of 2004) gives direction and is to be enforced as a legislative tool. The purpose of the Act is to protect the environment and enhance the quality of air, to prevent air pollution and ecological degradation, to secure ecologically sustainable development and to promote economic and social development and to secure an environment that is not harmful to the health and well-being of people.

NEMA spatial principles are:

- Environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged people.
- Development must be socially, environmentally, and economically sustainable. Sustainable development requires the consideration of all relevant factors, including that:
    - Disturbance of ecosystems and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimized and remedied.
    - Pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimized and remedied.
    - The use and exploitation of non-renewable natural resources is responsible and equitable and considers the consequences of the depletion of the resource.
    - That the development, use, and exploitation of renewable resources and the ecosystems of which they are part, does not exceed the level beyond which their integrity is jeopardized.
    - Waste is avoided, or where it cannot be altogether avoided, minimized, and re-used or recycled where possible and otherwise disposed of responsibly.
    - A risk-averse and cautious approach is applied, which considers the limits of current knowledge about the consequences of decisions and actions.

- Decisions are taken openly and transparently, and access to information is provided under the law.

1.6 National Climate Change Adaptation Strategy, 2019

The National Climate Change Adaptation Strategy (NCCAS) serves as South Africa's framework for enhancing climate resilience and adaptive capacity across all levels of society. Approved in 2019, it aligns with the country's obligations under the Paris Agreement and integrates climate adaptation into national development planning. The NCCAS builds upon South Africa's National Climate Change Response Policy (NCCRP), the National Development Plan (NDP), the National Strategy for Sustainable Development (NSSD), as well as various sectoral, provincial, and municipal adaptation plans.

The strategy provides a unified vision for climate adaptation, ensuring that national objectives guide resource allocation, policy decisions, and sectoral responses. It defines South Africa's vulnerabilities; outlines a plan to mitigate risks and identifies opportunities for resilience-building. The NCCAS emphasizes that adaptation and mitigation actions often intersect, reinforcing or, at times, conflict with each other. It recognizes that while greenhouse gas mitigation is addressed in separate policies, adaptation remains a critical component of sustainable development.

Given the various species that grow in the area and the impact of climate change, the protection for riverine corridors, south-facing slopes, and topographically diverse areas that provide vital refuges for species, contribute to maintaining micro-climates, and offer climate resilience. This is by regulating temperature and moisture levels. (Areas such as kloofs and hills that offer connectivity for species migration and temperature/moisture refuges.)

To incorporate climate resilience, Witzenberg Municipality supports the development of renewable energy within the identified Komsberg Renewable Energy Development Zone (REDZ). As part of the REDZ, the municipality encourages large scale wind (East and West) energy projects within this boundary, where the environmental authorization process is streamlined. Proposals outside the REDZ will be considered on a case-by-case basis, subject to compliance with environmental and spatial criteria.

A key focus is the integration of adaptation responses into development planning to enhance resilience in critical sectors such as agriculture, water, health, and biodiversity.

To achieve its vision, the NCCAS is structured around four strategic objectives:

- **Objective 1**: Building climate resilience and adaptive capacity to reduce climate risks and vulnerabilities.

- **Objective 2**: Integrating climate adaptation into policy, planning, and implementation across all sectors.
- **Objective 3**: Strengthening understanding of climate change impacts, and enhancing response capacity.
- **Objective 4**: Ensuring sufficient resources, governance frameworks, and systems for adaptation implementation.

Supporting these objectives, some strategic interventions outline specific actions to strengthen South Africa's adaptive capacity:

- **Intervention 1**: Reducing human, economic, and ecological vulnerabilities while enhancing resilience, particularly in agricultural and rural communities.
- **Intervention 2:** Developing a coordinated climate services system to provide targeted climate data for sectors like farming, water management, and disaster response.
- **Intervention 3**: Establishing a vulnerability and resilience framework that integrates biophysical and socio-economic factors, addressing risks such as droughts and extreme weather events.
- **Intervention 4**: Mainstreaming adaptation into sectoral planning and development initiatives, ensuring that municipal policies incorporate climate resilience.
- **Intervention 5**: Promoting research, technology development, and knowledge-sharing to support climate-smart agriculture, water conservation, and sustainable land use.
- **Intervention 6**: Strengthening capacity-building and public awareness of climate adaptation, with a focus on local communities, businesses, and municipal governance structures.

However, from an agricultural outlook, to enable climate change adaptation, the institutionalisation of the SmartAgri Plan and climate change within Western Cape Department of Agriculture (WC-DOA) means a strong foundation has been set from which refinement and acceleration of implementation of SmartAgri can proceed.

1.7 National Infrastructure Plan

The National Infrastructure Plan 2050 (NIP 2050), prepared by Infrastructure South Africa (ISA), aligns with the NDP's vision of inclusive growth. NIP 2050 sets out a strategic plan that addresses key infrastructure delivery challenges, and institutional blockages, and aims to build stronger institutions for long-term success. The plan focuses on four critical infrastructure sectors: energy, freight transport, water, and digital communications, which form the foundation for South Africa's infrastructure development.

NIP 2050 is divided into six sections, starting with the four mission-critical infrastructure areas. It then covers regional infrastructure, financing, institutional strengthening, rebuilding the civil construction sector, and monitoring progress. Each section includes a vision, an assessment of current conditions, essential success factors, and actionable steps to achieve the vision. NIP 2050 emphasizes short-term corrective actions while focusing on long-term sustainability.

Key priorities of NIP 2050 include:

1. **Knowledge and Innovation Services**: Enhancing capabilities in planning, monitoring, budgeting, project management, and sector-specific innovation to improve infrastructure quality and delivery.
2. **Public-Private Cooperation**: Stimulating competition in infrastructure delivery through partnerships where appropriate.
3. **Spatial Transformation**: Promoting inclusive development in line with the National Spatial Development Framework (NSDF).
4. **Blended and Green Finance**: Utilizing innovative financing solutions to support infrastructure projects.
5. **Capacity Building**: Strengthening executive management and technical capabilities within the state and its entities for stable, confident delivery.
6. **Industrial Development and Localization**: Fostering the growth of local industries, particularly through the establishment of Special Economic Zones and stimulating the civil construction sector.
7. **Efficient Delivery**: Ensuring safe, secure, and ethical infrastructure delivery processes.
8. **Regional Infrastructure**: Expanding South Africa's role in the broader African infrastructure development agenda.

1.8 The National Transport Master Plan 2005-2050

The National Transport Master Plan (NATMAP) Vision focuses on developing an integrated, smart, and efficient transport system to enhance economic

vitality, sustainable growth, public health, social inclusion, and environmental conservation. It aligns with recent policies, legislation, and planning frameworks. NATMAP 2050 is a long-term policy document developed by the South African government to guide the country's transportation system over 25 years, to create a safe and efficient system that promotes public transport, reduces private vehicle dependence, and improves transport access for disadvantaged communities.

Key implementation actions for the Western Cape include:

- Developing a Regional Rapid Transit system: A system connecting major economic and residential areas with dedicated bus lanes, stations, and integration with rail and minibus taxis.
- Promoting cycling and walking: Encouraging active transport modes through improved infrastructure and awareness campaigns to reduce congestion and improve health.
- Upgrading existing road infrastructure: Expanding key roads, adding interchanges, and implementing intelligent transportation systems to ease congestion and improve traffic flow.
- Investing in public transport services: Expanding bus, train, and minibus taxi services, particularly in underserved areas, to improve access to transport.

NATMAP aims to provide a cohesive framework for transport development at national, provincial, and local levels, contributing to sustainable development and a better quality of life for South Africans.

The following implications in terms of Witzenberg Municipality include:

In the case of Witzenberg the quality of roads will be used to transport fresh produce, the fact that heavy vehicles en route between the N1 and the West Coast and other parts of the Western Cape pass through the town of Ceres (on Main Road) has been noted as a concern. Therefore, the introduction of a weighbridge in the area has been put forward as a solution to at least discourage heavy vehicles who try to avoid weighbridges on the N1 to use this route.

1.9 Integrated Urban Development Framework

The Integrated Urban Development Framework (IUDF), approved by the National Cabinet in 2016, aims to steer urban growth towards a sustainable growth model of compact, connected and coordinated cities and towns. Fueled by the NDP's vision for South African urban spaces, the IUDF aims to guide the development of inclusive, resilient, and liveable urban settlements. In support of the NDP's vision for spatial transportation, four overall strategic goals have been introduced in focusing on integrated development within urban spaces:

Spatial integration- To forge new spatial forms in settlements, transport, social and economic areas.	**Inclusion and Access-** To ensure that people have access to social and economic services, opportunities, and choices.
Growth- To harness urban dynamism for inclusive, sustainable economic growth and development.	**Governance-** To enhance the capacity of the state and its citizens to work together to achieve spatial and social integration.

These strategic goals inform nine policy levers, premised on the understanding that integrated urban planning forms the basis for achieving integrated urban development. Transport needs to inform targeted investments, specifically integrated into human settlements, underpinned by integrated infrastructure network systems and efficient land governance. The IUDF states that, taken all together, these levers can trigger economic diversification, inclusion and empowered communities if supported by effective governance and financial reform.

1.10 Municipal Systems Act

The Municipal Systems Act (MSA), Act 32 of 2000, establishes the legal framework for how municipalities are governed and how they should operate. It sets out requirements for integrated development planning, financial management, performance management, and stakeholder engagement, among other aspects of municipal governance. A key provision of the MSA is the requirement for municipalities to develop Integrated Development Plans (IDPs), which outline their development objectives, strategies, and plans for service delivery. These IDPs must be formulated through a consultative process involving various stakeholders, including the public, ensuring that local development is inclusive and responsive to community needs.

Overall, the MSA has a significant impact on municipal planning by mandating integrated planning processes, stakeholder engagement, and the development of spatial frameworks that guide resource allocation and development decisions. It reinforces the importance of spatially informed, collaborative, and forward-thinking municipal governance that aligns local priorities with national and provincial development goals.

1.11 Local Government Municipal Planning and Performance Management Regulations

The Local Government Municipal Planning and Performance Management Regulations provide regulations for the development of integrated development plans (IDPs) and performance management systems (PMSs) by municipalities in South Africa. The regulations set out requirements for the content and structure of IDPs, which must align with national, provincial, and local development priorities. The IDPs must also be developed through a

participatory process that involves stakeholders, including community members. The regulations also require municipalities to establish PMSs that monitor and evaluate the implementation of their IDPs and other plans. The PMSs must include performance indicators, targets, and regular reporting to stakeholders. The regulations further require municipalities to establish ward committees, which are forums for community participation in local government decision-making. The ward committees must be involved in the development and review of IDPs and other municipal plans.

Chapter 2 Section 2 (4) of the LG: MP&PM regulations, published in terms of the Municipal Systems Act, 2000 (Act 32 of 2000) outlines that:

A spatial development framework reflected in a municipality's integrated development plan must:

A. Give effect to the principles contained in Chapter 1 of the Development Facilitation Act, 1995 (Act No. 67 of 1995).
B. Set out objectives that reflect the desired spatial form of the municipality.
C. Contain strategies and policies regarding the manner in which to achieve the objectives referred to in paragraph (b), which strategies and policies must-
    (i) indicate desired patterns of land use within the municipality;
    (ii) address the spatial reconstruction of the municipality;
    (iii) provide strategic guidance in respect of the location and nature of development within the municipality.
D. Set out basic guidelines for a land use management system in the municipality.
E. Set out a capital investment framework for the municipality's development programs.
F. Contain a strategic assessment of the environmental impact of the spatial development framework;'
G. Identify programmes and projects for the development of land within the municipality.
H. Align with the spatial development frameworks reflected in the integrated development plans of neighboring municipalities; and
I. Provide a visual representation of the desired spatial form of the municipality, which representation must -
    (i). indicate where public and private land development and infrastructure investment should take place;
    (ii). indicate desired or undesired utilization of space in a particular area;
    (iii). identify areas where strategic intervention is required;
    (iv). indicate areas where priority spending is required.
    (v). may delineate the urban edge.

2 Provincial Legislation & Policy

2.1 Western Cape Land Use Planning Act, Act 3 of 2014

The Western Cape Land Use Planning Act (LUPA) serves as the primary legislative instrument governing land use planning and development management within the province. It consolidates various pieces of legislation to create a cohesive and standardized approach to spatial planning, applying across provincial, regional, urban, and rural development. The Act provides the legal framework for municipal planning, land use regulation, and development coordination, ensuring that municipal spatial development frameworks (SDFs) align with provincial objectives. The act establishes provincial spatial development frameworks and sets minimum standards to ensure efficient coordination of these frameworks. It also sets minimum norms and standards for effective municipal development management and regulates provincial development management. Additionally, the act addresses the impact of land development on agriculture, outlines key land use planning principles, repeals outdated laws, and covers other related matters.

2.2 Western Cape Provincial Spatial Development Framework (2014)

The Provincial Spatial Development Framework (PSDF) is shaped by the National Development Plan (NDP) and OneCape 2040 vision, focusing on three key themes: natural resources, the space economy, and human settlements, all underpinned by strong spatial governance. At its core, the PSDF aims to create a more inclusive, sustainable, and resilient Western Cape, where people have better access to economic opportunities, social services, and a well-balanced living environment. By guiding where and how public investment happens, the framework ensures that development supports the province's long-term growth and improves the quality of life for all communities.

A major focus of the PSDF is spatial transformation, recognizing that the demographics, socio-economic conditions, and economic landscape of the Western Cape are constantly evolving. With urbanization on the rise and economic opportunities often concentrated in certain areas, the PSDF seeks to bridge these divides by promoting equitable access to land, housing, and jobs. It also considers the state of the provincial economy, ensuring that spatial planning supports industries, businesses, and entrepreneurs to drive sustainable economic growth. At the same time, it acknowledges the fragile balance between development and environmental resilience, prioritizing the protection of natural resources, climate adaptation, and the sustainability of both urban and rural settlements.

The goal of the PSDF is to:

- Address the lingering spatial inequalities caused by apartheid-era planning, which continue to limit access to jobs, skills, education, housing, and essential services.
- Support sustainable economic growth by directing development to areas with the greatest potential for job creation and investment.
- Enhance resilience in both natural and built environments, ensuring that future growth does not compromise environmental sustainability.

The PSDF identifies various spatial challenges:

The province faces challenges that affect communities and the economy. The legacy of apartheid-era spatial planning has left unequal and inefficient settlement patterns, which make it difficult for communities to access jobs and services. Furthermore, high unemployment, a lack of skills and ongoing socio-economic exclusion make it difficult for the communities to thrive. Crime, violence and social unrest add to these struggles which then creates uncertainty within the economy.

To address these challenges, the PSDF focuses on:

- Fostering economic growth in partnership with the private sector, NGOs, and community-based organisations.
- Using infrastructure investment as a tool to drive urban and rural spatial transformation.
- Improving oversight and governance to ensure responsible and sustainable land use.

To address these issues, the Provincial Spatial Development Framework (PSDF) aims to restructure urban and rural landscapes to create socio-economic opportunities for all, especially those historically marginalized.

Amendment of Chapter 4: Implementing the provincial Spatial Agenda that was done in 2020. This amendment aims to provide a clear indication of how the provincial spatial development agenda set out in the PSDF will be implemented going forward, building on progress that has been made, and shifting emphasis where needed.

The amendment focuses on several key areas: governance, growth, economy, infrastructure, transport, and the environment. It outlines strategic interventions and priorities for regional development, with a significant emphasis on spatial planning, sustainable development, and addressing regional disparities.

To implement the PSDF, regional spatial implementation frameworks (RSIFs) have been developed for priority regions over the past five years. These RSIFs are regional plans that provide long-term strategic direction and coordination for growth, spatial development, land use management, and conservation in these areas. They aim to spatially inform and align the

medium to long-term capital investment programmes of government spheres and state-owned enterprises (SOEs) operating in the regions. By focusing on environmental aspects, space economy, and human settlements that cross local authority boundaries, the RSIFs complement municipal planning. Additionally, they address transversal regional interventions, including the delivery of regional infrastructure and management considerations.

The following summary pertains to the Witzenberg Municipality as part of the Regional Spatial Implementation Framework:

A strategic land reform approach is essential to unlocking opportunities within Witzenberg Local Municipality and the Greater Cape Winelands District. The focus is encouraging cooperative farming initiatives that empower local farmers, create a more competitive and inclusive economy, and help tackle poverty and food insecurity. Ensuring that land reform is not just about ownership but also about productivity and sustainability; this furthermore can foster long-term economic growth that benefits everyone.

Strengthening Food Security: Land reform can help communities grow their food by shifting ownership patterns and encouraging local food production. This reduces dependence on external suppliers and also diversifies agricultural production which strengthens Witzenberg Municipality's resilience to climate challenges and poverty.

Small-scale farmers, emerging entrepreneurs, and farmworkers often struggle to compete in an industry dominated by large agribusinesses. Encouraging collaborative farming models where farmers share resources, knowledge, and skills can create stronger, more competitive local enterprises. This approach also ensures fair trade and economic participation, particularly for historically disadvantaged communities.

Strategic Interventions

To make land reform and agricultural transformation a reality, the following key actions need to be prioritized:

- Improving Rural Infrastructure and Connectivity: Better roads, irrigation systems, and storage facilities will help farmers get their products to market more efficiently and reduce post-harvest losses.
- Building Skills and Capacity: Training in modern agricultural techniques, agribusiness management, and climate-smart farming will ensure that farmers are equipped to succeed.
- Expanding Financial and Technical Support: Farmers need access to grants, loans, and mentorship programmes to help them start and grow their businesses.
- Adapting to Climate Change: Water scarcity and extreme weather pose serious risks to agriculture. Promoting water-wise farming, soil conservation, and renewable energy solutions.

2.3 Department of Infrastructure Strategic Plan

The Witzenberg Local Municipality plays a critical role in advancing sustainable land reform and agricultural transformation within the Greater Cape Winelands District. A strategic and inclusive approach to land reform is essential to unlocking economic opportunities, promoting cooperative farming initiatives, and addressing poverty and food insecurity. This vision prioritizes not only land ownership but also long-term productivity, sustainability, and resilience against climate change. Strengthening rural infrastructure, expanding financial and technical support for emerging farmers, and fostering collaboration among stakeholders will be key to ensuring that land reform translates into meaningful economic growth and food security.

At the core of this strategy is the recognition that well-planned infrastructure investments are vital to enabling agricultural transformation and rural development. Improved roads, irrigation systems, and market access will enhance the competitiveness of small-scale farmers and cooperatives, fostering a more inclusive local economy. Additionally, investments in climate-adaptive solutions such as water-wise farming techniques and renewable energy will strengthen Witzenberg's resilience against environmental challenges.

Over the next five-year strategic planning period, the Department will align its programmes and strategies and institutionalize the principles of the OneCape 2040 Vision and Provincial Strategic Plan 2019–2024, the Western Cape Recovery Plan, the Provincial Spatial Development Framework (PSDF), the Growth4Jobs strategic imperative, and the Western Cape Infrastructure Framework 2050 (WCIF).

This suite of policies and frameworks seeks to transform the development paradigms of the past radically, target investment sustainably across the province, and foster partnerships with the private sector to help achieve government objectives.

2.4 Provincial Strategic Plan 2025–2030

The PSP's vision is to be "a government that people trust". The Western Cape Government (WCG) devised five Vision-Inspired Priorities (VIPs) for the 5-year strategic planning period to give effect to its Vision and Plan of Action. The vision and VIPs are depicted in the table below:

Vision-Inspired Priority	Focus areas
Safe and Cohesive Communities	Enhancing capacity and effectiveness of policing and law enforcement. − Strengthen youth-at-risk referral pathways and child-and-family-centred initiatives to reduce violence. − Increase social cohesion and safety of public spaces.

Growth and Jobs	Increasing investment. − Building and maintaining infrastructure. − Growing the economy through export growth. − Creating opportunities for job creation through skills development. Creating an enabling environment for economic growth through resource resilience.
Empowering People	Children and Families, Education and Learning, Youth and Skills Health and Wellness
Mobility and Spatial Transformation	Create better linkage between places through safe, efficient and affordable public transport. − Inclusive places of opportunity. − More opportunities for people to live in better locations. − Improving the places where people live.
Innovation and Culture	Citizen-centric culture Innovation for Impact Integrated service delivery Governance transformation Talent and staff development

The following implications are relevant for Witzenberg municipality

- Regional economy- It should be maintained and sustained by expanding agricultural assets in Witzenberg.
- Strengthening the agricultural sector—It should be strengthened through strategic investment and policies that enhance its resilience and productivity.
- Diversity—Farmers should earn a diverse income, which will support the economy rather than compromise it, particularly farming areas and landscapes.
- Fostering agri-tourism and agri-industries — This creates additional economic opportunities for communities.
- Enhance access to agriculture—Small-scale entrepreneurs and emerging farmers should be allowed to participate actively in a more inclusive and competitive agricultural sector.

2.5 Western Cape Land Use Planning Guidelines Rural Areas March 2019

Witzenberg's rural landscapes are more than just open spaces—they are the foundation of the local economy, a source of livelihood for many, and a reflection of the region's unique heritage. As agriculture remains the backbone of this economy, it is essential to support its growth while ensuring that development does not compromise the very land that sustains it. The challenge lies in finding the right balance: maintaining productive farmlands, enabling new opportunities for small-scale farmers, and diversifying income streams without undermining the integrity of these rural areas.

The Western Cape Land Use Planning Guidelines for Rural Areas (March 2019) provide a framework to achieve this balance. These guidelines ensure that growth and development in Witzenberg and across the province align

with principles of sustainability, conservation, and responsible land use. By protecting natural resources, supporting agricultural viability, and fostering inclusive rural economies, the guidelines help shape a future where economic progress and environmental stewardship go hand in hand.

Through thoughtful planning and collaboration with local communities, Witzenberg can harness its agricultural strengths while creating new opportunities for emerging farmers and entrepreneurs. This approach not only secures the long-term sustainability of the region but also ensures that future generations can continue to benefit from its rich rural character and agricultural potential.

Objectives of the Rural Areas Guideline

Forming part of the roll-out of the PSDF, the objectives of the Rural Areas Guideline are to:

- Promote sustainable development in appropriate rural locations throughout the Western Cape, and ensure the inclusive growth of the rural economy;
- Safeguard priority biodiversity areas and the functionality of the Province's life supporting ecological infrastructure and ecosystem services (e.g., environmental goods and services);
- Maintain the integrity, authenticity and accessibility of the Western Cape's significant farming, ecological, coastal, cultural and scenic rural landscapes, and natural resources;
- Assist Western Cape municipalities to plan and manage their rural areas more effectively, and to inform the principles of their zoning schemes and spatial development frameworks in a proactive manner;
- Provide clarity to all role players and partners (public and private) on the type of development that is appropriate beyond the current built-up areas, suitable locations where it could take place, and the desirable form and scale of such development;
- Be viewed as a gender mainstreaming tool which will move the Western Cape further along the trajectory towards the achievement of equality, particularly the youth and gender equality imperatives in rural land use planning.

The following implications were identified in terms of Witzenberg Municipality:

- A specialist study reaffirmed that the Western Cape's cultural and scenic landscapes are significant assets underpinning the rural-space economy. As part of the Cape Winelands District, Witzenberg falls within this broader context, with its rural landscapes of scenic and cultural importance facing increasing pressure from urban development.

- These findings align with the three key spatial themes: Resources (landscape and scenic assets), Space Economy (rural-space economy), and Settlements (informality, housing, inclusion, and the land market).

2.6 Western Cape Inclusionary Housing Policy Framework

The specific enabling legislation for the introduction of this Policy Framework is to be found in the Constitution:

Section 125(2) The Premier exercises the executive authority, together with the other members of the Executive Council, by-

"(d) Developing and implementing provincial policy".

This Policy Framework is therefore primarily aimed at encouraging and supporting the development of municipal inclusionary housing policy and its application in an informed, fair and consistent manner. Taking cognisance of the limitations of municipal capacity, and efficiencies to be gained from peer learning, the WCG will further explore tools, systems and best practice to support the adoption and implementation of such municipal policies in a consistent way across the province without impeding on necessary adaptations to ensure local relevance and the municipal planning mandate.

The Western Cape Inclusionary Housing Policy Framework is underpinned by constitutional mandates that empower provincial governments to develop policies and provide guidance to municipalities. The authority to implement this framework is derived from Section 125(2)(d) of the Constitution, which mandates the Premier and the Executive Council by: *"(d) Developing and implementing provincial policy".*

In doing so, the Western Cape Government is providing support and guidance to local governments in line with Sections 154(1) and 155(6) and (7) of the Constitution. Section 155(7) of the Constitution provides that provincial governments *"have the legislative and executive authority to see to the effective performance by municipalities of their functions in respect of matters listed in Schedules 4 and 5, by regulating the exercise by municipalities of their executive authority referred to in section 156 (1)*". It is on this authority that the provincial government regulates, through the Land Use Planning Act, 2014 (Act 3 of 2014) ("LUPA"), how municipalities exercise municipal planning, and provide guidelines on land use management in terms of inclusionary housing.

In addition, it is the duty of provincial government in terms of Section 154(1) of the Constitution, to, by legislative and other measures "*support and strengthen the capacity of municipalities to manage their own affairs, to exercise their powers and to perform their functions*", Furthermore, Section 155(6) of the Constitution imposes a duty on Provincial Government "*to provide for the monitoring and support of local government in the province"* (Section 155(6)(a)) and to "*promote the development of local government*

capacity to enable municipalities to perform their functions and manage their own affairs" (Section 156(6)(b)).

The expectation of national or provincial inclusionary housing policy is presented in Section 21(i) of the SPLUMA. A Policy Framework approach is being taken because "inclusionary housing must be understood as a planning and land use regulation tool governed by land use regulatory powers" (Development Action Group, 2020) and these powers sit, primarily, at the municipal level. Also, the nature of considerations that input into the development of an inclusionary housing policy ideally require local-level research, feasibility analysis and determination (discussed in section 1.14 of this Policy Framework).

While inclusionary housing policies are often associated with urban development, they are closely aligned with strategic land reform objectives in rural areas. In Witzenberg and the broader Cape Winelands District, equitable land access, sustainable agricultural development, and economic inclusion are critical to ensuring a more competitive and resilient rural economy.

Key interventions that reflect the principles of both land reform and inclusionary development include:

- Expanding Access to Land – Strengthening land tenure security for emerging farmers and historically disadvantaged groups aligns with the inclusionary development principles outlined in SPLUMA and LUPA.
- Strengthening Local Livelihoods – Land reform initiatives, such as cooperative farming models, promote economic participation and resilience, just as inclusionary housing aims to create more equitable access to housing and land in urban areas.
- Enhancing Municipal Capacity – Just as municipalities require support to implement inclusionary housing policies, land reform efforts depend on institutional capacity-building to ensure sustainable agricultural and economic development.

The following implications were identified for Witzenberg Municipality:
The implementation of housing programmes, such as RDP and FLISP, should be a key component of Witzenberg's broader strategy to support the poor and vulnerable through targeted policy and development initiatives. However, one of the greatest challenges facing the municipality is the rapid growth of informality, marked by the expansion of informal settlements and the increasing number of households living in makeshift backyard shelters.

To address these challenges, Witzenberg must focus on incremental, integrated, and sustainable human settlement development, ensuring that housing solutions are accessible, well-located, and linked to economic opportunities.

Key elements for successful urban restructuring include:

- Higher-density housing developments in well-located areas to optimize land use and improve spatial efficiency.
- Major improvements in public transport to connect historically fragmented areas, ensuring that residents have better access to jobs, education, and services.
- Increased employment opportunities within townships and informal settlements to foster local economic growth and reduce the need for long-distance commuting.

3 District Legislation

3.1 Integrated Development Planning District Framework (IDP) 2022/23 – 2026/27 - Adopted 26 May 2022

The Cape Winelands District Municipality (CWDM) operates under the credo: "A unified Cape Winelands of excellence for sustainable development." This vision is reflected in its strategic goals, which include promoting social and economic development across all communities, particularly through empowering the poor, supporting sustainable infrastructure and transport systems, and delivering efficient financial and strategic support services.

Aligned with the National Development Plan and the 2022 State of the Province Address, CWDM's Integrated Development Plan (IDP) aims to move beyond the COVID-19 crisis and address economic stagnation and unemployment. Central to this effort is a focus on job creation, economic growth, public safety, infrastructure renewal, poverty alleviation, and overall community wellness. These goals will be pursued through innovation, intergovernmental collaboration, and coordinated frameworks such as the Joint District Management Approach (JDMA) and the Whole of Society Approach (WOSA).

Key priorities identified in the district IDP include:

- Developing a regional landfill site for improved waste management;
- Ensuring stability in environmental health services;

- Supporting tourism recovery and local economic development;
- Addressing socio-economic challenges like youth unemployment, substance abuse, gender-based violence, and crime;
- Maintaining rural gravel roads to improve accessibility and service delivery.

District IDP Vision Mission and core values

Vision
A unified Cape Winelands of excellence for sustainable development
Mission
Working together towards effective, efficient and economically sustainable development
Core Values
• Commitment to the development of people • Integrity in the performing of our duty • Transparency for our action • Regular consultation with customers on the quality of service • Efficient spending and responsible utilisation of municipal assets • Celebrating Diversity

CWDM IDP Objectives

1	Provide sustainable strategic financial management and support services
	- The municipality aims to create sustainable sources of funding and management thereof, ensuring long-term financial viability. - Resources are efficiently used to maximise contributions to LED and support services.
2	Foster good governance processes as prescribed by legislation and best practice
	- A foundation for effective governance that promotes political and administrative stability, the mitigation of identified risks, an improved ethical culture and functional oversight, has been established and is adhered to.
3	Provide sustainable infrastructure services and transport planning services that enable social and economic opportunities
	- Infrastructure services and resources are financially supported and measured. - Municipal infrastructure and transport planning systems are developed in a resilient and well-functioning manner as to result in longevity, and a safe and secure communal environment facilitating socio- economic opportunities
4	Monitor and promote a clean, healthy and safe living environment whilst providing emergency response services for all residents throughout the district
	- All residents have equal access to basic service delivery. - Resources, including stable infrastructure, technological and spatial resources, as well as the promotion of water services, are efficiently utilized to ensure the long-term well-being and unity of the community.

	- Disaster response plans are well-established and regularly tested, enabling an improved response to incidents, which creates stronger relationships within the district and a well-coordinated disaster management centre. - A well-coordinated fire services division, establishing a fire safe environment for all. - The provision of municipal health services and air quality management.
5	Establish a skilled workforce and performance orientated administration to promote the growth and development of the organisation
	- A capable and knowledgeable workforce that positively contributes and successfully provides high-quality services to the community, and becomes enablers of development. Consequence/ development management and a performance management system embedded into the functioning of the municipality in order to promote optimal performance.
6	Facilitate partnerships that cultivate economic growth and development throughout the district
	- Achieving an enabled environment by creating inclusive and equitable economies, and developmental growth through the economic benefits generated from niche markets, innovation, and partnerships.

Horizontal alignment with District and Local Municipalities

	Cape Winelands	**Witzenberg**
Vision	A Unified Cape Winelands of excellence for sustainable development.	A Municipality that cares for its community, creating growth and opportunities.
Mission	Working together towards effective, efficient and economically sustainable development	Improving the quality of life of community by: - Providing and maintaining affordable services. - Promoting Social and Economic Development; - The effective and efficient use of available resources; and - Effective Stakeholder and Community participation
Objectives	- Sustainable strategic financial management & support services - Good governance processes Sustainable infrastructure services and transport planning services - Healthy and safe living environment - A skilled workforce - Partnerships that cultivate economic growth and development	- Essential Services - Governance - Communal Services - Socio-Economic Support Services

3.2 Cape Winelands Regional Socio-Economic Strategy 2019

The purpose of this document is to outline the development and rationale of a comprehensive Local Economic Development (LED) Strategy, grounded in South Africa's post-1994 shift toward developmental local government. It aims to provide a clear framework for municipalities to fulfil their constitutional mandate to promote social and economic development at the local level.

The key objectives of the document are:

- To improve the economic well-being of communities through initiatives that support job creation, job retention, and tax base enhancement.
- To align local economic efforts with broader national and provincial development policies.
- To promote inclusive and sustainable economic growth that enhances quality of life and supports equitable income distribution.
- To develop informed, locally driven responses to economic challenges using coordinated stakeholder input.
- To create a unified and coherent strategy that integrates the skills and resources of all relevant stakeholders in order to achieve sustainable local economic development.

Key issues identified for ongoing socio-economic development:

- Employment creation, training and skills development and working together in industry.
- Role of the private sector in employment creation and training and improving relationship between private and public sector.
- Stakeholders most frequently listed the improvement of roads and parking as an infrastructural need in the Winelands District.
- Importance of developing new and innovative tourism products.
- Improving visitors perception of the district through marketing, and creating clean and safe environment.
- Skills development and additional information centres in townships being cited as the greatest resource needs in the tourism sector in the Cape Winelands District.
- Better public transport, followed by more guided tours/tourist guides.
- Lack of skills training and investment as tools to promote out-of-season tourism.

Strategic Goals of the Strategy

Goal	Detail
Working towards building safe, healthy, active and productive communities together.	
Growing and thriving entrepreneurship and innovation.	
Investment attraction, retention and opportunities.	Investment Attraction, Business Retention and Expansion, Investment Opportunities, Creating Competitiveness
Environmental protection that promotes sustainable development and economic growth.	Environmental Sustainability, Diversifying the rural economy, Improving access to opportunities for rural communities, Culture, diversity and rural laces

4 Municipal Legislation

4.1 Witzenberg Integrated Development Plan, 2012-2017

The municipal IDP identifies the municipal vision as a being a ” Municipality that cares for its community, creating growth and opportunities.”

The IDP highlights the mission being “The Witzenberg Municipality is committed to improve the quality of life of its community by:

- Providing & maintaining affordable services
- Promoting Social & Economic Development
- The effective & efficient use of resources
- Effective stakeholder & community participation.

Municipal KPA		Pre-determined Objectives	
1	Essential Services	1,1	Sustainable provision & maintenance of basic infrastructure
		1,2	Provide for the needs of informal settlements through improved services
2	Governance	2,1	Support Institutional Transformation & Development
		2,2	Ensure financial viability.
		2,3	To maintain and strengthen relations with international & inter-governmental partners as well as the local community through the creation of participative structures.
3	Communal Services	3,1	Provide & maintain facilities that make citizens feel at home.
4	Socio-Economic Support Services	4,1	Support the poor & vulnerable through programmes & policy.

4.2 Witzenberg Municipal Spatial Development Framework 2020

Key Focus Areas of the MSDF 2020

The MSDF outlines five key focus areas to guide development in Witzenberg, emphasizing environmental integrity, infrastructure availability, agricultural cultivation, community access to amenities and natural resources, and settlement development opportunities. Whilst development needs were balanced with sustainability, the following principles served as departure:

- Protects the natural environment and ecosystem services.
- Expands regional infrastructure to support economic development.
- Maintains and grows agricultural assets, protecting high-value land.
- Enhances access to unique landscapes and promotes spatial justice.
- Manages settlements for efficient infrastructure and sustainable growth.

Status Quo, Challenges, and Opportunities

The Witzenberg Municipality faced various challenges and opportunities in spatial planning as presented by historical, regional, biophysical, socio-economic, built environment, and institutional contexts. These contexts shaped the status in 2020 and future direction of development in the area.

- Its history highlighted the evolution of settlements and infrastructure in Witzenberg, with significant agricultural roots.
- The regional context emphasized Witzenberg's role in the Cape Winelands District, contributing 11.7% to provincial GDPR and 14.2% to employment.
- Its biophysical context posed challenges including biodiversity loss, drought risks, and the need for sustainable land use practices.
- Socio-economically high unemployment rates, a growing population, and the need for improved access to services and opportunities were experienced.
- The built environment revealed inadequate infrastructure, housing shortages, and the need for better integration of settlements.
- Municipal and institutional challenges included limited financial resources and human capacity for effective planning and management.

Vision and Concept for Witzenberg

The vision for Witzenberg Municipality aimed to manage spatial development while safeguarding natural, agricultural, and cultural assets, ultimately enhancing livelihood opportunities for all citizens. Key considerations included environmental integrity, infrastructure maintenance, agricultural support, cultural preservation, and efficient settlement management.

- The vision emphasized a caring municipality that fosters growth and opportunities for its community.

- Key considerations focused on protecting natural resources, expanding infrastructure, supporting agriculture, enhancing cultural identity, and ensuring efficient settlement patterns.
- The conceptual approach included maintaining biodiversity, strengthening regional infrastructure, protecting agricultural land, and promoting integrated communities.

Settlement Hierarchy and Categorization

- Ceres: Major regional service centre with a population of approximately 10,412.
- Wolseley, Tulbagh, and Prince Alfred Hamlet: Small service towns with populations ranging from 1,528 to 8,969.
- Op-die-Berg: A rural settlement with a population of 1,530, serving as a small service centre.

Growth Potential and Socioeconomic Needs

- Ceres: Identified as having the best growth potential and highest socioeconomic need.
- Prince Alfred Hamlet: Recognized for medium growth potential.
- Op-die-Berg, Tulbagh, and Wolseley: Classified as having low growth potential and socioeconomic needs.

Plans and Settlement Proposals for Development

	Proposal	Prioritisation Level
Ceres	- Agri-industrial activity between Ceres, Bella Vista, Vredebes, and Nduli. - upgrading informal settlements and providing housing for lower-income groups - Urban edge changes were not deemed necessary outside the identified growth area.	**High** - PFA1 – Strategic Restructuring and Integration Precinct Plan focus Area - PFA2 – Public Investment Area for Infill , Informal Upgrading and POS. - PFA3 – Public Investment Area for Social Services and POS
Wolseley	- Infill residential and mixed-use development was encouraged closer to the town centre. - No urban edge changes were proposed, maintaining the 2012 MSDF urban edge.	**High** - PFA1 – Strategic Restructuring, Recreational Community-oriented Integration Zone Precinct Plan with Food Gardens - PFA2 – Public Investment Area for Informal Upgrading - PFA3 – Strategic Restructuring and Integration Zone Precinct Plan with infill development.
Tulbagh	- The Waverenskroon lifestyle estate development was under consideration, with a focus on worker housing. - No urban edge changes were proposed, maintaining the 2012 MSDF urban edge.	**High** - PFA1 – Strategic Area for Mixed Use Precinct Plan with Infill and community facilities. - PFA2 – Mixed Use Recreational Community orientated Precinct Plan

Prince Alfred	Areas for peri-urban farming opportunities were identified to support small-scale farming. No urban edge changes were proposed, retaining the 2012 MSDF urban edge.	**Medium** PFA1 – Strategic Area for Mixed Use opportunities
Op-die-Berg	The settlement aimed to retain a compact form and focus on infill development. No urban edge changes were proposed, maintaining the 2012 MSDF urban edge.	**Medium** PFA1 – Strategic Area for Mixed Use opportunities for new gateway (R303)

Landscape-wide Spatial Planning Categories

- Core Areas must be maintained in a natural state to sustain biodiversity; human impact is restricted.
- Support conservation and sustainable agriculture; development is allowed under strict guidelines.
- Focus on intensive agricultural use; additional dwelling units are permitted under specific conditions.
- Settlement Areas: Existing towns and villages that support economic and social functions; new developments must prevent encroachment into sensitive areas.

Managing Specific Activities in Rural Areas

- Development should not compromise existing farming activities or lead to urban sprawl.
- Specific activities like conservation, agriculture, and tourism are regulated to align with environmental and economic goals.
- Community facilities should be located within existing settlements to enhance accessibility and service delivery.

Renewable Energy Development Guidelines

- The draft MSDF currently restricted renewable energy developments to REDZs, which some stakeholders argue is too rigid.
- Proposals for renewable energy projects outside REDZs should be assessed on a case-by-case basis.
- The MSDF must comply with REDZ provisions while allowing for project-specific evaluations.

Map: 1 MSDF 2020 Composite Map

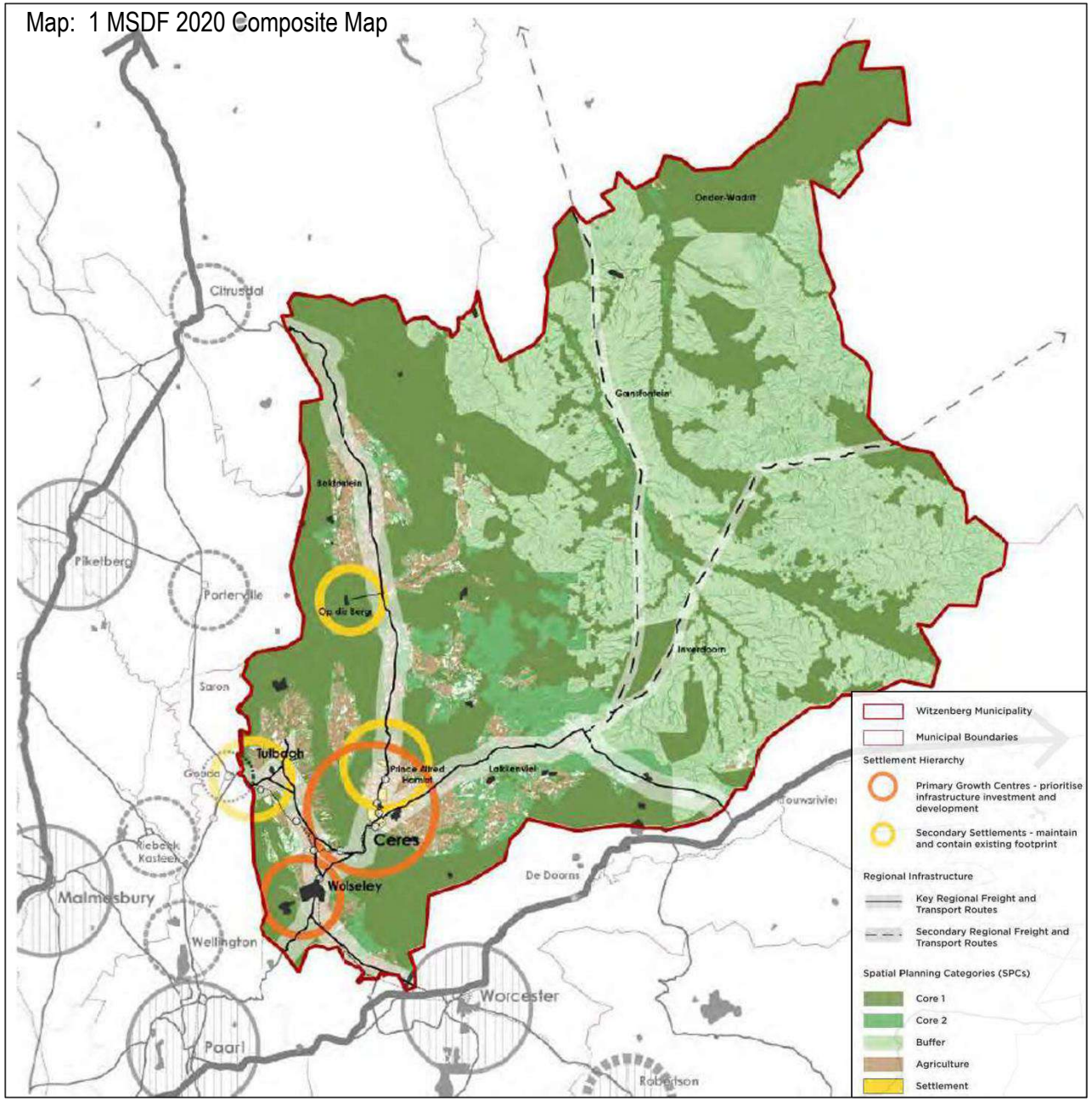

Table 1 CBA & ESA Map Categories, recommended corresponding Spatial Planning Category

Map Category (SPCs)	DEFINITION	DESIRED MANAGEMENT OBJECTIVE	SUB-CATEGORY
Protected Area (Core 1)	Areas that are proclaimed as protected under national or provincial legislation.	Must be kept in a natural state, with a management plan focused on maintaining or improving the state of biodiversity. A benchmark for biodiversity.	n/a
Critical Biodiversity Area 1 – CBA 1 (Core 1)	Areas in a natural condition that are required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure.	Maintain in a natural or near-natural state, with no further loss of habitat. Degraded areas should be rehabilitated. Only low-impact, biodiversity-sensitive land uses are appropriate.	CBA: River CBA: Estuary CBA: Wetland CBA: Forest CBA: Terrestrial
Critical Biodiversity Area 2 – CBA 2 (Core 2)	Areas in a degraded or secondary condition that are required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure.	Maintain in a functional, natural or near-natural state, with no further loss of natural habitat. These areas should be rehabilitated.	CBA: Degraded
Ecological Support Area 1 – ESA 1 (Core 2)	Areas that are not essential for meeting biodiversity targets, but that play an important role in supporting the functioning of PAs or CBAs, and are often vital for delivering ecosystem services.	Maintain in a functional, near-natural state. Some habitat loss is acceptable, provided the underlying biodiversity objectives and ecological functioning are not compromised.	ESA: Foredune ESA: Forest ESA: Climate Adaptation Corridor ESA: Coastal Resource Protection ESA: Endangered Ecosystem ESA: River ESA: Estuary ESA: Wetland ESA: Watercourse Protection ESA: Water Source Protection ESA: Water Recharge Protection
Ecological Support Area 2 – ESA 2 (Buffer 2)	Areas that are not essential for meeting biodiversity targets, but that play an important role in supporting the functioning of PAs or CBAs, and are often vital for delivering ecosystem services.	Restore and manage to minimize impact on ecological infrastructure, especially soil and water-related services.	ESA: Restore from NNR
ONA: Natural to Near-Natural (Buffer 1 & 2)	Areas that have not been identified as a priority in the current systematic biodiversity plan, but retain most of their natural character and perform a range of biodiversity and ecological infrastructure functions. Although they have not been prioritised for biodiversity, they are still an important part of the natural ecosystem.	Minimise habitat and species loss and ensure ecosystem functionality through strategic landscape planning. Offers flexibility in permissible land uses, but some authorisation may still be required for high-impact land uses.	ONA: Natural to Near-Natural Degraded
No Natural Remaining (Intensive Agriculture Settlements, Industry, Mining)	Areas that have been modified by human activity to the extent that they are no longer natural, and do not contribute to biodiversity targets. These areas may still provide limited biodiversity and ecological infrastructure functions, even if they are never prioritised for conservation action.	Manage in a biodiversity-sensitive manner, aiming to maximise ecological functionality. Offers the most flexibility regarding potential land uses, but some authorisation may still be required for high-impact land uses.	No Natural Remaining

Table 2 Biodiversity Priority Areas, Categories, and Land-use Zones with Desired Management Objectives

Yes Permissible land uses that are unlikely to compromise the biodiversity objective				**Restricted** Land uses that may compromise the biodiversity objective and are only permissible under certain conditions					**No** Land uses that will compromise the biodiversity objective and are not permissible		
Map and Land use Categories		Protected Area	Critical Biodiversity Area 1	Critical Biodiversity Area 2	Ecological Support Area 1: Terrestrial	Ecological Support Area 1: Aquatic	Ecological Support Area 2	Ecological Support Area: Species Specific Overlay	ONA: Natural to Near Natural	ONA: Degraded	No Natural Remaining
Conservation	Proclaimed Protected Areas	Land use within proclaimed protected areas is subject to a management plan drawn up for that specific protected area.	Yes	Yes	Yes	Yes	Yes	Restricted	Yes	Restricted	Restricted
	Conservation Areas		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Restricted	Restricted
Agriculture	Intensive Agriculture		No	No	No	No	No	Restricted	Restricted	Restricted	Yes
	Extensive Agriculture		Restricted	Restricted	Restricted	Restricted	Restricted	Restricted	Yes	Yes	Yes
Tourism and Recreational	Low Impact Facilities		No	Restricted	Restricted	Restricted	Restricted	Restricted	Restricted	Yes	Yes
	High Impact Facilities		No	No	No	No	No	No	Restricted	Restricted	Yes
Rural Accommodation	Agri-worker Accommodation		No	No	No	No	No	Restricted	Restricted	Restricted	Yes
	Smallholdings		No	No	No	No	Restricted	Restricted	Restricted	Yes	Yes
Urban	Existing settlements and urban expansion		No	No	No	No	No	Restricted	Restricted	Restricted	Yes
	Community Facilities and Institutions		No	No	No	ANo	No	Restricted	Restricted	Restricted	Yes

OPTION	LEVEL 1 CONSERVATION AREA	LEVEL 2 BIODIVERSITY AGREEMENTS	LEVEL 2 PROTECTED ENVIRONMENT	LEVEL 3 NATURE RESERVES
Which option applies to your land?	• Any natural land is suitable. • If rare or endangered habitats, rather progress to higher level of conservation security. • Can use this as a stepping stone to more security later on in process.	• Suitable for any conservation-worthy land. • Focuses on improving the management of specific biodiversity features or elements	• Useful to pursue where large landscapes require some form of conservation management, but where it is unnecessary or unsuitable to restrict other forms of extractive land use. • Multiple properties, buffers to statutory Protected Areas.	• Priority areas adjacent to statutory reserves or sufficiently large to be self-contained ecosystems. • Containing critically important species, habitats and self-contained sites.
Legal status/ duration	• Flexible option with no defined period of commitment. • Registration document with the conservation agency.	• Has legal status by virtue of a legal contract between the landowner and the conservation agency. • Minimum period of 10 years suggested but may be longer or in perpetuity.	• Legal declaration under the Protected Area Act. • The duration for Protected Environments declared for other purposes is not prescribed.	• Minimum of 30 years, but preferably in perpetuity.
Qualifying criteria?	• Any landowner (s) willing to conserve the natural systems on their land.	• Site must have been assessed to the standard of the provincial agency and found to contain biodiversity features identified as important or a priority for the province.	• The landowner must be willing to submit to the declaration of the area as a Protected Environment, and to manage (or have managed) the site according to the norms and standards laid down for a Protected Area, but with fewer restrictions than a nature reserve.	• The site must contain significant biodiversity and/or process value to receive this status. • The landowner must consent to the declaration of the area as a nature reserve, and to manage (or have managed) the site according to the norms and standards laid down for nature reserves.
Possible land use limitations	• Very few, but the area needs to maintain its natural character & there has to be an Alien Invasive Plant clearing plan in place.	• Land must be managed in a way that will support natural processes.	• There is no limitation on activities other than those specifically listed in the gazetting notice of the establishment of the Protected Environment.	• Land use rights must be consistent with the provisions of the Protected Areas Legislation. • Access and resident rights are unrestricted. • Owners retain title.
Benefits to the land-owners	• Advice and support through basic extension services. • Guidance with management plans and farm maps.	• Specific agreements for fire, alien species, plant and animal management. • Advanced extension services (e.g. alien clearing planning).	• Advanced extension services (e.g. alien clearing planning). • Regulate the use of the landscape through co-operation between various landowners.	• Substantial assistance with habitat management • Increased recognition and marketing exposure. • Conservation authorities will be able to lobby on your behalf for incentives.

ANNEXURE 04 - Key sources and limitations of the Socio-Economic Environment Analysis

Understanding the importance of an accurate Socio-Economic Analysis, a concerted effort was made to provide the most accurate and contextually relevant analysis of the socio-economic environment for Witzenberg Municipality. This, however, proved challenging due to the unavailability of recent, settlement-specific data and the reliance on partially outdated sources. The most current datasets listed below**,** offer valuable insights at the municipal level but lack disaggregated information for individual settlements. To compensate for these limitations, data from various sources were incorporated, based on the assumption that proportional growth patterns across settlements have remained relatively stable over time.

Three primary data sources were used to compile this analysis. Each source consulted carries inherent limitations, yet together they contribute toward forming a reasonably coherent and credible understanding of population dynamics and demographic trends across the municipality.

- **MYPE 2024**[1], produced by National Treasury, can be considered to be the most reliable source currently available. However, it only
- provides municipal-level population estimates, with projections limited to the year 2030 and no breakdown per settlement.
- **Stats SA (2011 Census)**[2], while outdated, offers comprehensive baseline data. It was used cautiously under the assumption that relative growth rates and other statistics have remained proportionally consistent since the last census.
- **SEP 2023**[3], although relatively recent, has not been updated in the past year and lacks specific data for certain settlements. Nonetheless, it includes estimated population growth percentages and broader municipal trends.
- Statistical Observations from inhabitants (including municipal officials)

Together, these sources were used and correlated to derive the most reasonable demographic and socio-economic profile possible under current data constraints

1 Municipal Population Estimates (MYPE) 2024 – The Department of Environmental Affairs and Development Planning (DEADP)

2 Stats SA 2011 (https://www.statssa.gov.za/) – National Government

3 Municipal Socio-Economic Profile (SEP) 2023 - Western Cape Government:

ANNEXURE 05 - Detailed Required Amenities

Settlement Type	D Small to medium towns/regional service centres				E Small towns/isolated regional service centres				G Village						H Remote Village			
Settlement		Ceres				Wolseley				Tulbagh			PAH			ODB		
2035 Population		65 911				26 776				22 657			14 418			6 179		
	NORM	Ha norm	Nr of Facilities Required	Total Ha Required	NORM	HA Norm	Nr of Facilities Required	Total HA Required	NORM	Ha Norm	Nr of Facilities Required	Total HA Required	Nr of Facilities Required	Total HA Required	NORM	HA Norm	Nr of Facilities Required	Total HA Required
Health Care																		
Community Health Centre	60 000-140 000	**1,5**	1	2	60000	**2**	0	0	NR	**NR**	0	0	0	0	NR	**NR**	0	0
Primary Health Clinic	24 000 - 70 0000	**1**	-1	0	24 000 - 70 0000	**1**	4	2	5 000 - 7 000	**0**	4	1	2	0	5 000 - 7 000	**0,2**	0	0
Public Services (Cultural & Social																		
Community Performing Arts Centre	50 000	**0,1**	0	0	50000	**0**	0	0	NR	**NR**	0	0	0	0	NR	**NR**	0	0
Local Library	20 000	**0,1**	-1	0	20000	**0**	0	0	5000	**0**	3	0	2	0	V	**0,1**	0	0
Community Hall – medium/small (fringe areas) (24km)	10 000 - 15 000 (15km)	**0,1**	0	0	10 000 - 15 000 (15km)	**0**	2	0	10 000 - 15 000	**0**	-1	0	0	0	NR	**0,2**	0	0
Local Market	5 000	**0,02**	13	0	5000	**0**	5	0	5000	**0**	5	0	3	0	5000	**0,02**	1	0,02
Civic																		
Home Affairs – medium office	N/R	**0,1**	0	0	NR	**NR**	0	0	NR	**NR**	0	0	0	0	NR	**NR**	0	0
Home Affairs – small office	40 000	**0,1**	1	0	40000		1	0	NR	**NR**	0	0	0	0	NR	**NR**	0	0
Thusong Centre (community-based "onestop" development centres)	1 Per Local Mun	**0,1**	0	0	1 Per Mun	**NR**	0	0	NR	**NR**	0	0	0	0	NR	**NR**	0	0
Education																		

Further Education and Training	V	**0,1**	1	1,00	V	**NR**	0	0,00	NR	**NR**	0	0,00	0	0,00	NR	**NR**	0	0,00
Secondary School	12 500 (5km)	**4,0**	1	4,00	12 500 (5km)	**4,0**	1	4,00	12500	**4,0**	1	3,25	1	4,00	2500	**2,6**	1	2,60
Primary School (Inclu intermediate school & Private)	7 000 (5km)	**3,5**	3	10,50	7 000 (5km)	**3,5**	1	3,50	7000	**3,5**	0	0,00	0	0,00	1000	**1,9**	5	9,84
Grade R Class at Primary School	1 000	**0,006**	46	0,28	1000	**0,006**	19	0,11	1000	**0,006**	17	0,10	9	0,06	1000	**0,01**	4	0,02
ECD Resource Hub and Care Centre	20000 (5km)	**0,1**	2	0,20	20000 (5km)	**0,10**	0	0,00	NR	**NR**	0	0,00	0	0,00	NR	**NR**	0	0,00
Small Crèche / Early Childhood Development Centre	3 000	**0,02**	27	0,55	2 400- 3 000	**0,02**	11	0,22	2 400 - 3 000	**0,02**	9	0,19	6	6,01	V	**V**	0	0,00
Recreation Facilities																		
Local/Neighbourhood Park (includes play equipment for children)	60 000	**0,08**	1	0	NR	**0**	13	1	0,5ha/1 000 people	**0**	11	1	7	1	1000	**0,1**	6	0,31
Grassed Surface (2 football fields equivalent) with or without	15 000	**1**	2	2	15000	**1**	0	0	15000	**1**	-1	0	-3	0	NR	**NR**	0	0
Sports Complex (grouping of fields and / or sports complexes)	60 000 (10km)	**1,5**	-1	0	60 000 (10km)	**NR**	0	0	NR	**NR**	0	0	0	0	NR	**NR**	0	0
Cricket Oval	60 000 (10km)	**0,1**	-1	0	60000	**2**	-1	0	NR	**2**	0	0	0	0	NR	**NR**	0	0
Athletics/Cricket Stadium (grassed field/ athletics track stands 3000/ seats)	60 000 (10km)	**0,1**	-2	0	60000	**1**	-3	0	NR	**NR**	0	0	0	0	NR	**NR**	0	0
Combi-court surface (x2)	15 000 (3km)	**1**	-7	0	15000	**1**	-2	0	15000	**0**	-3	0	-2	0	NR	**NR**	0	0
Combi-court surface (x4)	60 000 (10km)	**1**	1	1	60000	**1**	0	0	NR	**NR**	0	0	0	0	NR	**NR**	0	0
Swimming Pool	10 000	**0,18**	5	1	10000	**0**	2	0	10000	**0**	1	1	0	0	NR	**NR**	0	0

ANNEXURE 06 - List of Funded Provincial Infrastructure Investment Projects and Programmes in the Municipality for the

Sector	Nature of Investment	Project no	Project Name	Funding	Lat	Long	Delivery mechanism	Total Project Cost	Previous Years Expenditure	MTEF 1 2025/26	MTEF 2 2026/27	MTEF 3 2027/28	MTEF Total (Rand)
Environmental Affairs	Upgrading and Additions	25-26 Boland hiking	Boland Mountain Complex	Equitable Share	-33	19	Individual Project	900000	0	900000	0	0	900000
Environmental Affairs	Upgrading and Additions	25-26 Wolwe Ablution	Wolwekloof Upgrade	Equitable Share	-33	19	Individual Project	5000000	0	5000000	0	0	5000000
Health	Rehabilitation, Renovations & Refurbishment	HCI810020	Ceres - Ceres CDC - Enabling work and rehabilitation	Health Facility Revitalisation Grant	-33	19	Individual Project	38800000	4938332	20597000	4000	0	20601000
Health	Rehabilitation, Renovations & Refurbishment	CI830120	Ceres - Ceres Hospital - Hospital and nurses home repairs and renovation	Health Facility Revitalisation Grant	-33	19	Individual Project	41091000	4716352	2629000	11856000	7986000	22471000
Health	Upgrading and Additions	CI830114	Ceres - Ceres Hospital - New Acute Psychiatric Ward	Health Facility Revitalisation Grant	-33	19	Individual Project	6441000	5759259	1000	0	0	1000
Human Settlements	Infrastructure Transfers - Capital	ISUPG Tulbagh (500)	Tulbagh (500)	Informal Settlements Upgrading Partnership Grant	-33	19	Individual Project	4400000	0	1147000	0	0	1147000
Human Settlements	Infrastructure Transfers - Capital	tulbagh ibs - chris hani & die gaatjie - isupg	tulbagh ibs - chris hani & die gaatjie - isupg	Informal Settlements Upgrading Partnership Grant	-33	19	Individual Project	5000000	0	1000000	0	0	1000000
Transport	Maintenance and Repairs	RRM CW DM	Routine Maintenance CW DM	Equitable Share	-33	20	Packaged with Sub-Contracts	700000000	486261000	0	89140000	93595000	182735000
Transport	Rehabilitation, Renovations & Refurbishment	C1216	C1216 Reseal/rehab Ceres-Opdie Berg-Citrusdal	Equitable Share	-33	19	Individual Project	115489000	19924000	59509000	10000000	0	69509000
Transport	Rehabilitation, Renovations & Refurbishment	C1116.1 PRMG	C1116.1 Reseal Wolseley - Ceres - Touwsrivier 86km	Provincial Roads Maintenance Grant	-33	19	Individual Project	144520000	82920000	14500000	3750000	0	18250000

Transport	Rehabilitation, Renovations & Refurbishment	C1216 PRMG	C1216 Reseal/rehab Ceres-Opdie Berg-Citrusdal	Provincial Roads Maintenance Grant	-33	19	Individual Project	542654859	194694000	100490750	40000000	0	140490750
Transport	Upgrading and Additions	C1116	C1116 Reseal Wolseley - Ceres - Touwsrivier Wolseley Ceres	Equitable Share	-33	19	Individual Project	127000000	0	0	0	70000000	70000000
TOTAL								**1749839859**	**800068457**	**209119750**	**166399000**	**171581000**	**547099750**

Budgeted National and Provincial Allocations (R'000)

Source	**Department**	**Transfer Description**	**2023/24**	**2024/25**	**2025/26**
National	National Treasury	Equitable Share	135729	149825	166319
National	Cooperative Governance	Municipal Infrastructure Grant	26051	27072	28136
WCG	Department of Infrastructure	Financial assistance for maintenance and construction of transport infrastructure.	23130	1375	1400
WCG	Cultural Affairs and Sport	Library service: Replacement funding for most vulnerable B3 Municipalities.	6406	6295	6571
WCG	Department of Infrastructure	Title-Deeds Restoration	5600	2384	5280
WCG	Mineral Resources and Energy	Integrated National Electrification Programme (Municipal) Grant	3900	1000	1000
WCG	Public works and infrastructure	Expanded Public Works Programme Integrated Grant for Municipalities	3439	0	0
National	Culture Affairs and Sport	Community Library services Grant	3367	3498	3655
National	National Treasury	Local Government Financial Management Grant	1550	1550	1688
WCG	Local Government	Fire Services Capacity Building Grant	985	0	0
National	Cultural Affairs and Sport	Development of Sports and Recreation Facilities	423	0	0

WCG	Department of Infrastructure	Municipal accreditation and capacity building grant	245	249	249
WCG	DEADP	Regional Socio-Economic Projects (RSEP) Programme Municipal Projects	200	0	0
WCG	Provincial Treasury	Western Cape Financial Management Capacity Grant	150	0	0
WCG	Local Government	Community Development Worker Operational Support Grant	1320	132	132
WCG	Local Government	Thusong Service Centres Grant (Sustainability: Operational Grant)	0	150	145
			211307	193589	214575

ANNEXURE 07 - Additional IAS in WLM

No.	Genus	Species	Common Name	NEM:BA category
1	*Acacia*	*baileyana*	Baileys Wattle	3
2	*Acacia*	*cyclops*	Red Eye	2
3	*Acacia*	*dealbata*	Silver Wattle	1b
4	*Acacia*	*elata*	Peppertree Wattle	1b
5	*Acacia*	*implexa*	Screw - pod wattle	1a
6	*Acacia*	*longifolia*	Long-leafed Wattle	1b
7	*Acacia*	*mearnsii*	Black Wattle	2
8	*Acacia*	*melanoxylon*	Blackwood	2
9	*Acacia*	*saligna*	Port Jackson Willow	1b
10	*Agave*	*americana*	American Agave	
11	*Agave*	*sisalana*	Sisal	
12	*Arundo*	*donax*	Giant Spanish Reed	1b
13	*Atriplex*	*nummularia*	Old Man Saltbush	2
14	*Caesalpinia*	*decapetala*	Mauritius Thorn	
15	*Cereus*	*jamacaru (C. peruvianus)*	Queen-of-the-Night	1b
16	*Cestrum*	*aurantiacum*	Yellow or Orange Cestrum	
17	*Cestrum*	*laevigatum*	Ink Berry	1b
18	*Cestrum*	*parqui*	Chilean Cestrum	
19	*Chromolaena*	*odorata*	Paraffin/Triffid Weed	1a
20	*Eucalyptus*	*camaldulensis*	River Red Gum	2
21	*Eucalyptus*	*cladocalyx*	Sugar Gum	2
22	*Eucalyptus*	*conferruminata*	Bald Island Marlock	2
23	*Eucalyptus*	*diversicolor*	Karri	2
24	*Eucalyptus*	*grandis*	Saligna Gum	2
25	*Eucalyptus*	*lehmanii*	Spider Gum	
26	*Eucalyptus*	*macarthurii*	Woollybutt gum	2
27	*Eucalyptus*	*maculata*	Spotted Gum	
28	*Eucalyptus*	*paniculata*	Grey Ironbark	
29	*Eucalyptus*	*sideroxylon*	Black Ironbark	
30	*Eucalyptus*	*smithii*	Blackbutt Peppermint	
31	*Eucalyptus*	*tereticornis*	Forest Red Gum	2

ANNEXURE 08 - Areas identified for incremental upgrading

Areas identified for incremental upgrading have been tabulated below, along with their associated projects in accordance with the approved housing pipeline.

Settlement	Project name	Location	Project Detail
Ceres	Nduli 181	- Mooiblom - Eluxolweni - Mnandi - Nkonjane - Amos - Zibonele	- Combination of top structures, serviced sites, in-situ upgrading and provision of basic services. - Project requires the re-allocation of a portion of informal beneficiaries to Phase H (529 serviced sites) in Vredebes. - The re-allocation of structures in R46 road reserve (Mooiblom) is urgent as the road is prioritized for upgrading due to current poor condition but also as a pre-requisite for the further development of Vredebes.
Tulbagh	Tulbagh 427 Housing project (completion of project)	- Kleinbegin - Helpmekaar	- 2013 project was not completed as sites was illegally occupied preventing any further continuation of the project. - Project can only be completed when occupiers has been reallocated
Wolseley	Pine Valley Informal Settlement	- Pine Valley Informal Settlement	- Limited to no availability of basic services. - Future project likely to include a combination of in-situ upgrades, super blocks and basic services (ABS).
Wolseley	Montana (700)	- Montana	- Long term top structure project consisting of development of portion of land to the east of Montana for qualifying beneficiaries. - Availability of electricity and bulk infrastructure (especially bulk water storage) to be addressed before project can commence.
Prince Alfred's Hamlet	Prince Alfred's Hamlet Informal Settlement	- Prince Alfred's Hamlet Informal Settlement	- No availability of basic services. - Project would likely include a combination of in-situ upgrades, super blocks and basic services (ABS). - In some cases, re-allocation would be required.

ANNEXURE 09 – Intensive Rural Development Corridors

An Intensive Rural Development Corridor (IRDC) is a designated development area or precinct located along or in proximity of prominent transport links and at intersections, regional, emerging regional and local agricultural service centres and rural settlements. intended to guide and support intensive rural development activities. The purpose of the IRDC is to promote agricultural production through the intensification of land use and rural activities that will result in the effective and sustainable utilisation of natural resources such as land and water, with improved economic outcomes. The IRDC is therefore aimed at mobilising and expanding access to rural resources while accommodating the sustainable growth and management of this unique area.

The intention of the IRDC is to support and allow intensive agriculture, agriculturally related industries and commercial opportunities, exhibition centres, and the internal densification of agricultural units in order to stimulate growth and economic development along the corridor. The corridor also supports the development of commercial infrastructure on farms within the IRDC area. In addition, the IRDC aligns with the broader strategic direction of the Provincial Spatial Development Framework and the Municipal Integrated Development Plan, which emphasise strengthening the regional agri-park initiative. By creating an integrated spatial environment for agri-processing, value-chain development and agri-business support services, the IRDC contributes to the long-term functionality and growth of the agri-park system within the wider rural landscape.

To achieve its purpose, the IRDC promotes specific land uses such as intensive agricultural and agricultural-related production and processing, mixed uses accommodating service industries, transport services, tourism-related facilities, rural living opportunities on smaller agricultural units, and small-scale agri-processing on farms. The IRDC aims to ensure a responsible and sustainable rural development pattern that protects the essence, integrity, and character of the rural area.

Implementation of the IRDC should therefore be undertaken with sensitivity towards space, agricultural uses, natural resources, and the natural beauty of the environment. New planned developments within the corridor will also assist the municipality in creating opportunities for the provision of bulk service infrastructure, which will reduce environmental impact and enable more sustainable development within this unique rural landscape.

The following design guidelines should inform development within the IRDC:

- Landscape and Environmental Sensitivity
  - Maintain the visual quality and natural beauty of the rural environment
  - Integrate buildings, infrastructure and land uses into the landscape by using natural topography, vegetation and existing farm patterns.
  - Avoid development on visually prominent ridgelines, sensitive ecological areas and high-value agricultural land where possible.
- Agricultural Support and Intensification

- Prioritise land uses that directly support agricultural production, agri-processing and rural enterprise development.
- Encourage clustering of agricultural support facilities to enhance efficiency and reduce infrastructure demand.
- Allow internal densification of agricultural units only where it improves productivity and does not conflict with core agricultural operations.
- Reinforce the regional agri-park initiative by enabling facilities, infrastructure and land uses that support agri-processing, storage, training, logistics and other value-chain functions required for the agri-park model.

- Built Form and Rural Character
  - Ensure that new built structures contribute to the rural character, using simple, functional and context-appropriate forms.
  - Limit building heights and bulk to maintain openness and avoid dominating the rural landscape.
  - Use materials and colours that blend with the surrounding environment.
- Infrastructure and Servicing
  - Align new developments with the municipality's plans for bulk infrastructure provision to promote long-term sustainability.
  - Support shared infrastructure solutions (e.g., shared access roads, water systems, and energy solutions) where feasible.
  - Apply water-wise and resource-efficient design principles to minimise pressure on natural resources.
  - Facilitate efficient linkages between primary producers, agri-processing facilities and distribution networks to strengthen the operational integration of the agri-park system.
- Mobility and Access
  - Maintain and enhance safe, efficient rural mobility networks for agricultural transport, workers and service providers.
  - Ensure that access points to the corridor are safe and do not compromise agricultural activities or rural character.
- Socio-Economic Integration
  - Support land uses that create economic opportunities for rural communities, including tourism, service industries and small-scale agri-processing.
  - Promote mixed uses where appropriate to strengthen rural livelihoods while maintaining the agricultural focus of the corridor.

ANNEXURE 10 - Directives of the Department of Infrastructure (DOI) Transport Infrastructure Branch

DOI Transport Infrastructure Branch approval is required for land use change and developments adjacent to the Proclaimed Provincial Road Network.

Open Space Systems

Proposals for occasional activities at modal interchanges and intersections, accommodating a variety of users in and uses along major vehicular and public transport routes, appropriate road cross-section widths (provide for vehicle traffic, parking, pedestrian movement, cycling and landscaping) and open space systems.

Opportunities to promote Agri-industries and Processing, Land Reform and Agritourism including development of tourism and recreational routes and destinations, activities or establishment of farm stalls and accommodation facilities.

Development of Tourism routes and destinations to be undertaken in collaboration with and to the approval of the Regional Tourism Liaison Committee (RTLC) and DOI Transport Infrastructure Branch.

Tourism and Agritourism: Provision of farm stall accesses and tourism view or interest points to be provided subject to DOI Transport Infrastructure Branch approval where access is obtained from the Proclaimed Provincial Road network.

Tourism and Agritourism: Settlements and Rural Settlements and Sense of Place

Landscape/Develop:

- Promote improved roadside signage and buildings in sensitive landscapes;
- Develop understated, unique gateways/entry point features to settlements;
- Develop support infrastructure and spaces for festivals, events and celebrations;
- Promote scenic and heritage routes and the development of special management guidelines.

All proposals adjacent to or within the road reserve or the Proclaimed Provincial Road Network are subject to DOI Transport Infrastructure Branch approval.

All measures along the Proclaimed Provincial Road Network are subject to DOI Transport Infrastructure Branch approval.

DOI Transport Infrastructure Branch, Sub-directorate Road Use Management decision (approval) is required, and it will need to be consulted about any impact (direct or indirect) on or adjacent to the Proclaimed Provincial Road Network assets including:

a) Corridor development including but not limited to scenic, tourism, freight, etc. Consider applicable Arterial Management Plans where these exist or where warranted. Arterial Management Plans are to be developed or approved by the DOI Transport Infrastructure Branch;

b) Activity Streets;

c) Node Development/ Access Provision;

d) Identification of scenic routes and/or rural areas and any Scenic Drive (or similar) Policy to promote the Cultural Landscape and sense of place;

e) Outdoor Advertising (adjacent to, and within the road reserve of the Proclaimed Provincial Road Network) and development of related Policy are subject to DOI Transport Infrastructure Branch approval;

f) Traffic Calming as the Proclaimed Provincial Road Network serves a vital mobility function, providing connections between provincial towns and settlements and for the movement of citizens and goods, and in so doing, supports economic activity in the Western Cape;

g) Public Transport proposed projects and new links;

h) Renewal Energy Generation: Wind and Solar Farm Sites;

i) Location of bulk utilities sites to provide key bulk infrastructure needs;

j) Land use changes;

k) Any intensification including sensitive infill or redevelop of major arterial axes (develop both sides of activity streets and corridors to concentrate activities);

l) Expansion of biospheres and nature reserves where there are roads and infrastructure present;

m) Project Implementation: Implementation timing and funding of DOI led projects is to be determined by DOI Transport Infrastructure Branch in accordance with the relevant Provincial Budget, commonly referred to as Vote 10. This includes maintenance, upgrade and new construction works as applicable;

n) Road Authority Boundaries/Urban Edge: Amendment to the urban edge has an impact on road authority boundaries. Any amendments made to formal, agreed upon, urban edge boundaries need to be made in consultation with the relevant Road Authority/authorities; o) Proposals for occasional activities at modal interchanges and intersections, accommodating a variety of users in and uses along major vehicular and public transport routes, appropriate road cross sections widths (provide for vehicle traffic, parking, pedestrian movement, cycling and landscaping) and open space systems;

p) Development of intersections as nodes;

q) Opportunities to promote Agri-industries and Processing, Land Reform and Agritourism including development of tourism and recreational routes and destinations, activities or establishment of farm stalls and accommodation facilities. Development of Tourism routes and destinations to be undertaken in collaboration with and to the approval of the Regional Tourism Liaison Committee (RTLC);

r) Tourism and Agritourism: Provision of farm stall accesses and tourism view or interest points where access is obtained from the Proclaimed Provincial Road network;

s) Tourism and Agritourism: Settlements and Rural Settlements and Sense of Place;

t) Landscape: improved roadside signage and building placement in sensitive landscapes, understated, unique gateways/entry point features to settlements, support infrastructure and spaces

- for festivals, events and celebrations and scenic and heritage routes and the development of special management guidelines.

Roads Master Plans: The Municipality is responsible for the development of a Municipal Roads Master Plan. The DOI Transport Infrastructure Branch is to be consulted where proposals impact (directly or indirectly) the Proclaimed Provincial Road Network.

Provision of access to and from the Proclaimed Provincial Road Network is to be assessed and provided in accordance with the WCG DTPW (now DOI) Access Management Guidelines (2020). Property Developments need to be undertaken with due consideration not only of the provision of direct access and egress, but also the impact on the surrounding road network.

Provision of farm stall accesses and tourism view or interest points where access is obtained from the Proclaimed Provincial Road network.

Annexure 11: Consolidated List of Projects

Project ID	Project Name	Project Source	Municipal Department	MSCOA Function (asset class) Refine asset classes	Funding Source	Project_type: New, Upgrade, Rehabilitate, Maintenance, Equipment or Plan?	Basic Service? (Yes / No)	Total Project Value Budgeted	Town or Area	Asset Type	Asset Sub Type	Action	Sub-Action
1	MV Substation Equipment	IDP 2025-2026	Technical	Electricity Administration	CRR	Equipment	Yes	14 730 000,00	Municipal Wide	Electrical Infrastructure	MV Networks	No Selection	
2	Upgrade of LV Network Cables	IDP 2025-2026	Technical	Electricity Administration	CRR	Upgrade	Yes	4 600 000,00	Municipal Wide	Electrical Infrastructure	LV Networks	Existing	Upgrade
3	MV Network Equipment	IDP 2025-2026	Technical	Electricity Administration	CRR	Equipment	No	10 600 000,00	Municipal Wide	Electrical Infrastructure	MV Networks	No Selection	
4	Upgrade of MV Cables	IDP 2025-2026	Technical	Electricity Administration	CRR	Upgrade	Yes	14 600 000,00	Municipal Wide	Electrical Infrastructure	MV Networks	Existing	Upgrade
5	Electrical Network Refurbishment	IDP 2025-2026	Technical	Electricity Administration	CRR	Rehabilitate	Yes	10 500 000,00	Municipal Wide	Electrical Infrastructure	MV Networks	Existing	Renewal
6	Equipment	IDP 2025-2026	Technical	Electricity Administration	CRR	Equipment	No	2 200 000,00	Municipal Wide	Machinery and Equipment	Machinery and Equipment	No Selection	
7	Fencing Tulbagh depot	IDP 2023-2024	Technical	Electricity Administration	CRR	Upgrade	No	2 000 000,00	Tulbagh	Machinery and Equipment	Machinery and Equipment	Existing	Upgrade
8	Switchgear	CEF 2024-2034	Technical	Electricity Administration	Energy Resilient Fund	New	Yes	608 696,00	Municipal Wide	Electrical Infrastructure	MV Switching Station	New	
9	Renewal	CEF 2024-2034	Technical	Electricity Administration	Energy Resilient Fund	Rehabilitate	Yes	-	Municipal Wide	Electrical Infrastructure	Unspecified	Existing	Renewal
10	Upgrade Power Station, Ceres	CEF 2024-2034	Technical	Electricity Administration	Loan	Upgrade	Yes	31 517 686,00	Ceres	Electrical Infrastructure	HV Substations	Existing	Upgrade
11	Streetlights	IDP 2025-2026	Technical	Electricity Administration	EEDSM	Upgrade	No	10 535 652,00	Municipal Wide	Electrical Infrastructure	LV Networks	Existing	Upgrade
12	Streetlights	IDP 2025-2026	Technical	Electricity Administration	CRR	Upgrade	No	1 510 000,00	Municipal Wide	Electrical Infrastructure	LV Networks	Existing	Upgrade
13	Network streets	IDP 2024-2025	Technical	Roads	CRR	Rehabilitate	No	59 000 000,00	Municipal Wide	Road Infrastructure	Roads	Existing	Renewal
14	Network streets Tulbagh	CEF 2024-2034	Technical	Roads	CRR	Rehabilitate	No	-	Tulbagh	Road Infrastructure	Roads	Existing	Renewal
15	Equipment	IDP 2023-2024	Technical	Roads	CRR	Equipment	No	800 000,00	Municipal Wide	Machinery and Equipment	Machinery and Equipment	No Selection	
16	NMT Sidewalks	IDP 2023-2024	Technical	Roads	CRR	New	No	675 000,00	Municipal Wide	Road Infrastructure	Road Structures	New	
17	NMT Sidewalks	CEF 2024-2034	Technical	Roads	District	New	No	434 783,00	Municipal Wide	Road Infrastructure	Road Structures	New	
18	Traffic Calming	IDP 2023-2024	Technical	Roads	CRR	New	No	1 010 000,00	Municipal Wide	Road Infrastructure	Road Structures	New	
19	Road maintenance & upgrade	IDP 2023-2024	Technical	Roads	MIG	Upgrade	No	42 852 260,00	Municipal Wide	Road Infrastructure	Roads	Existing	Upgrade
20	Van Breda Bridge	IDP 2023-2024	Technical	Roads	Prov Grant	Upgrade	No	20 113 043,48	Ceres	Road Infrastructure	Road Structures	Existing	Upgrade
21	Van Breda Bridge	IDP 2023-2024	Technical	Roads	CRR	Upgrade	No	4 400 000,00	Ceres	Road Infrastructure	Road Structures	Existing	Upgrade
22	Rehab Cilliersrt, Ceres	IDP 2024-2025	Technical	Roads	CRR	Rehabilitate	No	5 000 000,00	Ceres	Road Infrastructure	Roads	Existing	Renewal
23	Tulbagh Rossouwstr	IDP 2023-2024	Technical	Roads	MIG	Rehabilitate	No	-	Tulbagh	Road Infrastructure	Roads	Existing	Renewal
24	Rehab Loverslane Bridge, Ceres	IDP 2024-2025	Technical	Roads	CRR	Rehabilitate	No	3 500 000,00	Ceres	Road Infrastructure	Road Structures	Existing	Renewal
25	Wolseley Rehabilitation of Roads	IDP 2025-2026	Technical	Roads	MIG	Rehabilitate	No	17 105 161,00	Wolseley	Road Infrastructure	Roads	Existing	Renewal
26	Wolseley Rehabilitation of Roads	CEF 2024-2034	Technical	Roads	CRR	Rehabilitate	No	1 900 000,00	Wolseley	Road Infrastructure	Roads	Existing	Renewal
27	Tulbagh NE	CEF 2024-2034	Technical	Roads	MIG	Rehabilitate	No	-	Tulbagh	Road Infrastructure	Roads	Existing	Renewal
28	Main Roads Ceres	IDP 2025-2026	Technical	Roads	Prov Grant	Rehabilitate	No	6 303 913,00	Ceres	Road Infrastructure	Roads	Existing	Renewal
29	Main Roads Tulbagh	IDP 2025-2026	Technical	Roads	Prov Grant	Rehabilitate	No	6 303 913,00	Tulbagh	Road Infrastructure	Roads	Existing	Renewal
30	Workshop building upgrade	IDP 2023-2024	Technical	Fleet	CRR	Upgrade	No	600 000,00	Municipal Wide	Operational Buildings	Workshops	Existing	Upgrade
31	Upgrades	IDP 2023-2024	Technical	Stormwater	CRR	Upgrade	Yes	3 700 000,00	Municipal Wide	Stormwater Infrastructure	Stormwater Conveyance	Existing	Upgrade
32	Aerator replacement programme	IDP 2023-2024	Technical	Sewerage	CRR	Rehabilitate	Yes	4 800 000,00	Municipal Wide	Sanitation Infrastructure	Waste Water Treatment Works	Existing	Renewal
33	Refurbishment WWTW	IDP 2023-2024	Technical	Sewerage	CRR	Rehabilitate	Yes	6 750 000,00	Municipal Wide	Sanitation Infrastructure	Waste Water Treatment Works	Existing	Renewal
34	Sewer Pumps-replacement	IDP 2023-2024	Technical	Sewerage	CRR	Rehabilitate	Yes	2 300 000,00	Municipal Wide	Sanitation Infrastructure	Reticulation	Existing	Renewal
35	Sewer Network Replacement	IDP 2023-2024	Technical	Sewerage	CRR	Rehabilitate	Yes	14 600 000,00	Municipal Wide	Sanitation Infrastructure	Reticulation	Existing	Renewal
36	Security upgrades	IDP 2023-2024	Technical	Sewerage	CRR	Upgrade	No	3 000 000,00	Municipal Wide	Sanitation Infrastructure	Waste Water Treatment Works	Existing	Upgrade
37	Upgrade WWTW Wolseley	CEF 2024-2034	Technical	Sewerage	WSIG	Upgrade	Yes	13 043 478,00	Wolseley	Sanitation Infrastructure	Waste Water Treatment Works	Existing	Upgrade
38	Upgrade WWTW Wolseley (Own Contribution)	CEF 2024-2034	Technical	Sewerage	CRR	Upgrade	Yes	8 500 000,00	Wolseley	Sanitation Infrastructure	Waste Water Treatment Works	Existing	Upgrade
39	Shandstr Tulb	CEF 2024-2034	Technical	Sewerage	MIG	Upgrade	Yes	3 000 000,00	Tulbagh	Sanitation Infrastructure	Reticulation	Existing	Upgrade
40	Security upgrades	IDP 2023-2024	Technical	Water Distribution	CRR	Upgrade	No	3 050 000,00	Municipal Wide	Water Supply Infrastructure	Water Treatment Works	Existing	Upgrade
41	Infrastructure Management System	IDP 2023-2024	Technical	Water Distribution	CRR	Rehabilitate	No	1 200 000,00	Municipal Wide	Licenses and Rights	Computer Software and Applications	Existing	Renewal
42	Plant & Equipment	IDP 2023-2024	Technical	Water Distribution	CRR	Equipment	No	300 000,00	Municipal Wide	Machinery and Equipment	Machinery and Equipment	No Selection	
43	Pipe replacements	IDP 2023-2024	Technical	Water Distribution	CRR	Rehabilitate	Yes	16 350 000,00	Municipal Wide	Water Supply Infrastructure	Distribution	Existing	Renewal
44	Bella Vistabulk supply	Water MP 2021	Technical	Water Distribution	CRR	New	Yes	-	Ceres	Water Supply Infrastructure	Bulk Mains	New	
45	Wolseley Tierhokskloof	IDP 2025-2026	Technical	Water Distribution	MIG	Upgrade	Yes	21 712 251,00	Wolseley	Water Supply Infrastructure	Bulk Mains	Existing	Upgrade
46	Wolseley Tierhokskloof	IDP 2025-2026	Technical	Water Distribution	CRR	Upgrade	Yes	6 233 522,00	Wolseley	Water Supply Infrastructure	Bulk Mains	Existing	Upgrade
47	Grey water system	IDP 2023-2024	Technical	Water Distribution	CRR	New	No	1 500 000,00	Municipal Wide	Water Supply Infrastructure	Reticulation	New	
48	Existing main Voortrekker Street Ceres	SDF 2020	Technical	Water Distribution	CRR	Upgrade	Yes	6 300 000,00	Ceres	Water Supply Infrastructure	Bulk Mains	Existing	Upgrade
49	Nduli bulk supply R46	IDP 2025-2026	Technical	Water Distribution	CRR	Upgrade	Yes	1 752 174,00	Ceres	Water Supply Infrastructure	Bulk Mains	Existing	Upgrade
50	Nduli bulk supply R46	IDP 2023-2024	Technical	Water Distribution	MIG	Upgrade	Yes	9 416 451,00	Ceres	Water Supply Infrastructure	Bulk Mains	Existing	Upgrade
51	Irrigation equipment	IDP 2023-2024	Community	Community Parks	CRR	Equipment	No	1 100 000,00	Municipal Wide	Machinery and Equipment	Machinery and Equipment	No Selection	
52	Equipment	IDP 2023-2024	Community	Community Parks	CRR	Equipment	No	850 000,00	Municipal Wide	Machinery and Equipment	Machinery and Equipment	No Selection	
53	Landscaping	IDP 2023-2024	Community	Community Parks	CRR	Upgrade	No	1 900 000,00	Municipal Wide	Community Facilities	Parks	Existing	Upgrade
54	Brushcutters	IDP 2025-2026	Community	Community Parks	CRR	Equipment	No	380 000,00	Municipal Wide	Machinery and Equipment	Machinery and Equipment	No Selection	
55	Chainsaws	IDP 2025-2026	Community	Community Parks	CRR	Equipment	No	420 000,00	Municipal Wide	Machinery and Equipment	Machinery and Equipment	No Selection	
56	Expansion	IDP 2023-2024	Community	Cemeteries	CRR	Upgrade	No	900 000,00	Municipal Wide	Community Facilities	Cemeteries/Crematoria	Existing	Upgrade
57	Nduli repair	IDP 2023-2024	Community	Swimming Pools	CRR	Rehabilitate	No	4 530 000,00	Ceres	Community Facilities	Outdoor Facilities	Existing	Renewal
58	Repair & upgrade	CEF 2024-2034	Community	Swimming Pools	CRR	Rehabilitate	No	3 000 000,00	Municipal Wide	Community Facilities	Outdoor Facilities	Existing	Renewal
59	Pine Forest upgrades	CEF 2024-2034	Community	Resorts	CRR	Upgrade	No	3 400 000,00	Municipal Wide	Community Facilities	Outdoor Facilities	Existing	Upgrade

60	**Kliprug changerooms**	CEF 2024-2034	Community	Sport Grounds & Stadiums	CRR	New	No	2 500 000,00	Prince Alfred Hamlet	Sports and Recreation Facilities	Indoor Facilities	New	
61	**Resurfacing courts**	IDP 2023-2024	Community	Sport Grounds & Stadiums	CRR	Rehabilitate	No	2 800 000,00	Municipal Wide	Sports and Recreation Facilities	Outdoor Facilities	Existing	Renewal
62	**General upgrades**	CEF 2024-2034	Community	Sport Grounds & Stadiums	CRR	Upgrade	No	4 550 000,00	Municipal Wide	Sports and Recreation Facilities	Outdoor Facilities	Existing	Upgrade
63	**Tulbagh sports facilities upgrade**	IDP 2023-2024	Community	Sport Grounds & Stadiums	MIG	Upgrade	No	4 301 550,00	Tulbagh	Sports and Recreation Facilities	Outdoor Facilities	Existing	Upgrade
64	**Sports Facilities Upgrade Tulbagh**	IDP 2025-2026	Community	Sport Grounds & Stadiums	CRR	Upgrade	No	700 000,00	Tulbagh	Sports and Recreation Facilities	Outdoor Facilities	Existing	Upgrade
65	**Wolseley sports facilities upgrade**	CEF 2024-2034	Community	Sport Grounds & Stadiums	MIG	Upgrade	No	4 779 504,00	Wolseley	Sports and Recreation Facilities	Outdoor Facilities	Existing	Upgrade
66	**Specific Projects**	CEF 2024-2034	Community	Sport Grounds & Stadiums	Prov Grant	New	No	2 127 000,00	Municipal Wide	Sports and Recreation Facilities	Outdoor Facilities	New	
67	**Sportsground Development & Upgrading**	IDP 2025-2026	Community	Sport Grounds & Stadiums	CRR	Upgrade	No	200 000,00	Municipal Wide	Sports and Recreation Facilities	Outdoor Facilities	Existing	Upgrade
68	**Upgrade of sports facilities**	IDP 2025-2026	Community	Recreational Land	Prov Grant	Upgrade	No	832 174,00	Municipal Wide	Sports and Recreation Facilities	Outdoor Facilities	Existing	Upgrade
69	**Upgrade of Busy Bee building Tulbagh**	CEF 2024-2034	Community	LED	CRR	Upgrade	No	300 000,00	Tulbagh	Community Facilities	Markets	Existing	Upgrade
70	**Replace asbestos roof Kliprug Community hall_PAH**	IDP 2025-2026	Community	Community Halls	CRR	Rehabilitate	No	2 100 000,00	Prince Alfred Hamlet	Community Facilities	Halls	Existing	Renewal
71	**Replace vinyl flooring Montana Comm hall_Wolseley**	IDP 2025-2026	Community	Community Halls	CRR	Rehabilitate	No	520 000,00	Wolseley	Community Facilities	Halls	Existing	Renewal
72	**Council Chambers Furniture**	CEF 2024-2034	Corporate	Director: Corporate	CRR	Equipment	No	500 000,00	Municipal Wide	Furniture and Office Equipment	Furniture and Office Equipment	No Selection	
73	**Access Control**	IDP 2025-2026	Corporate	Marketing & Communication	CRR	Equipment	No	450 000,00	Municipal Wide	Furniture and Office Equipment	Furniture and Office Equipment	No Selection	
74	**Traffic Department**	IDP 2025-2026	Corporate	Traffic	CRR	Upgrade	No	1 350 000,00	Municipal Wide	Operational Buildings	Municipal Offices	Existing	Upgrade
75	**IT Upgrades**	CEF 2024-2034	Corporate	Information Technology	CRR	Upgrade	No	3 450 000,00	Municipal Wide	Computer Equipment	Computer Equipment	Existing	Upgrade
76	**Camera Equipment**	IDP 2025-2026	Corporate	Marketing & Communication	CRR	Equipment	No	65 000,00	Municipal Wide	Computer Equipment	Computer Equipment	No Selection	
77	**Transfer stations / Drop-offs**	IDP 2023-2024	Technical	Solid Waste	CRR	New	Yes	14 900 000,00	Municipal Wide	Solid Waste Infrastructure	Waste Transfer Stations	New	
78	**New waste vehicles**	IDP 2023-2024	Technical	Solid Waste	MIG	New	Yes	5 047 826,00	Municipal Wide	Transport Assets	Transport Assets	New	
79	**Bulk waste container bins**	IDP 2025-2026	Technical	Solid Waste	CRR	New	Yes	2 170 556,00	Municipal Wide	Solid Waste Infrastructure	Machinery and Equipment	New	
80	**Fencing Landfill site**	IDP 2023-2024	Technical	Solid Waste	CRR	Rehabilitate	No	3 000 000,00	Municipal Wide	Solid Waste Infrastructure	Landfill Sites	Existing	Renewal
81	**Op-Die-Berg Reservoir**	IDP 2023-2024	Technical	Water Distribution	MIG	New	Yes	2 680 669,00	Op-die-Berg	Water Supply Infrastructure	Reservoirs	New	
82	**Tulbagh Reservoir**	IDP 2023-2024	Technical	Water Distribution	MIG	New	Yes	24 417 159,00	Tulbagh	Water Supply Infrastructure	Reservoirs	New	
83	**Tulbagh Reservoir**	IDP 2025-2026	Technical	Water Distribution	CRR	New	Yes	2 200 000,00	Tulbagh	Water Supply Infrastructure	Reservoirs	New	
84	**Vredebes Bulk internal water pipeline**	IDP 2023-2024	Technical	Water Distribution	MIG	New	Yes	907 372,17	Ceres	Water Supply Infrastructure	Bulk Mains	New	
85	**Op-Die-Berg**	Sewer MP 2021	Technical	Sewerage	CRR	New	Yes	7 800 000,00	Op-die-Berg	Sanitation Infrastructure	Reticulation	New	
86	**Prince Alfred's Hamlet**	Sewer MP 2021	Technical	Sewerage	CRR	New	Yes	30 000 000,00	Prince Alfred Hamlet	Sanitation Infrastructure	Reticulation	New	
87	**Grey water system**	CEF 2024-2034	Technical	Sewerage	CRR	New	No	3 000 000,00	Municipal Wide	Sanitation Infrastructure	Reticulation	New	
88	**Equipment**	IDP 2023-2024	Technical	Fleet		Equipment	No	100 000,00	Municipal Wide	Machinery and Equipment	Machinery and Equipment	No Selection	
89	**Vehicle new & replacement**	IDP 2023-2024	Technical	Fleet	CRR	Rehabilitate	No	11 300 000,00	Municipal Wide	Transport Assets	Transport Assets	Existing	Renewal
90	**Vehicle new & replacement**	IDP 2023-2024	Technical	Fleet	Belgium	Rehabilitate	No	300 000,00	Municipal Wide	Transport Assets	Transport Assets	Existing	Renewal
91	**Pavement upgrading**	IDP 2023-2024	Technical	Roads	CWDM	Upgrade	No	434 783,00	Municipal Wide	Road Infrastructure	Road Structures	Existing	Upgrade
92	**Skoonvlei industrial**	CEF 2024-2034	Technical	Roads	CRR	New	No	16 400 000,00	Ceres	Road Infrastructure	Roads	New	
93	**Skoonvlei industrial**	CEF 2024-2034	Technical	Sewerage	CRR	New	Yes	2 100 000,00	Ceres	Sanitation Infrastructure	Reticulation	New	
94	**Skoonvlei industrial**	CEF 2024-2034	Technical	Electricity Administration	CRR	New	Yes	5 600 000,00	Ceres	Electrical Infrastructure	LV Networks	New	
95	**New Regional Cemetery**	CEF 2024-2034	Community	Cemeteries	MIG	New	No	15 800 000,00	Municipal Wide	Community Facilities	Cemeteries/Crematoria	New	
96	**Fire fighting Equipment**	IDP 2023-2024	Community	Fire Fighting & Protection	CRR	Equipment	No	950 000,00	Municipal Wide	Machinery and Equipment	Machinery and Equipment	No Selection	
97	**Rescue Equipment**	IDP 2023-2024	Community	Fire Fighting & Protection	Prov Grant	Equipment	No	1 726 087,00	Municipal Wide	Machinery and Equipment	Machinery and Equipment	No Selection	
98	**Nduli Library 1**	IDP 2023-2024	Community	Libraries	Paardekraal	New	No	4 739 130,00	Ceres	Community Facilities	Libraries	New	
99	**Nduli Library 2**	IDP 2025-2026	Community	Libraries	CRR	New	No	1 000 000,00	Ceres	Community Facilities	Libraries	New	
100	**Nduli Library 3**	IDP 2025-2026	Community	Libraries	MIG	New	No	8 925 959,00	Ceres	Community Facilities	Libraries	New	
101	**Equipment**	CEF 2024-2034	Community	Libraries	CRR	Equipment	No	940 000,00	Municipal Wide	Furniture and Office Equipment	Furniture and Office Equipment	No Selection	
102	**Vredebes new**	IDP 2023-2024	Community	Sport Grounds & Stadiums	MIG	New	No	28 000 000,00	Ceres	Sports and Recreation Facilities	Outdoor Facilities	New	
103	**Op-Die-Berg new**	CEF 2024-2034	Community	Sport Grounds & Stadiums	MIG	New	No	12 000 000,00	Op-die-Berg	Sports and Recreation Facilities	Outdoor Facilities	New	
104	**Lyellstr, Ceres**	IDP 2023-2024	Community	Sport Grounds & Stadiums	MIG	Upgrade	No	434 783,00	Ceres	Sports and Recreation Facilities	Outdoor Facilities	Existing	Upgrade
105	**Tulbagh taxi rank**	CEF 2024-2034	Technical	Roads	Prov Grant	Rehabilitate	No	173 913,04	Tulbagh	Road Infrastructure	Road Structures	Existing	Renewal
106	**Ceres Bella Vista Taxi Rank**	IDP 2025-2026	Technical	Roads	MIG	New	No	17 391 304,00	Municipal Wide	Roads Infrastructure	Road Structures	New	
107	**Ceres Bella Vista Taxi Rank**	IDP 2025-2026	Technical	Roads	CRR	New	No	9 700 000,00	Municipal Wide	Roads Infrastructure	Road Structures	New	
108	**Furniture & Equipment**	IDP 2023-2024	Finance	Director: Finance	CRR	Equipment	No	330 000,00	Municipal Wide	Furniture and Office Equipment	Furniture and Office Equipment	No Selection	
109	**Furniture & Equipment**	IDP 2025-2026	Technical	Director: Technical	CRR	Equipment	No	200 000,00	Municipal Wide	Furniture and Office Equipment	Furniture and Office Equipment	No Selection	
110	**Furniture & Equipment**	IDP 2025-2026	Technical	Municipal Manager	CRR	Equipment	No	200 000,00	Municipal Wide	Furniture and Office Equipment	Furniture and Office Equipment	No Selection	
111	**Furniture & Equipment**	IDP 2025-2026	Community	Director: Community	CRR	Equipment	No	200 000,00	Municipal Wide	Furniture and Office Equipment	Furniture and Office Equipment	No Selection	
112	**Youth recreational infrastructure (BV, Vredebes, Tulbagh, Wolseley, ODB)**	CEF 2024-2034	Community	Social		New	No	360 000,00	Municipal Wide	Community Facilities	Centres	New	
113	**Office equipment**	IDP 2023-2024	Corporate	Director: Corporate	CRR	Equipment	No	390 000,00	Municipal Wide	Furniture and Office Equipment	Furniture and Office Equipment	No Selection	
114	**Wolseley hawker stands roofing**	IDP 2023-2024	Community	LED	CWDM	Upgrade	No	86 957,00	Wolseley	Community Facilities	Markets	Existing	Upgrade
115	**Informal trader infrastructure (ODB, Vredebes/Nduli)**	CEF 2024-2034	Community	LED		New	No	705 000,00	Municipal Wide	Machinery and Equipment	Markets	New	
116	**Business Hubs & extension (Tulbagh, PAH & Wolseley)**	CEF 2024-2034	Community	LED	CRR	Upgrade	No	6 260 000,00	Municipal Wide	Community Facilities	Markets	Existing	Upgrade
117	**Installation of solar panels for Gate motors at Skoonvlei Business Hub_Bella Vista**	IDP 2025-2026	Community	LED	CRR	New	No	30 000,00	Ceres	Machinery & Equipment	Machinery & Equipment	New	
118	**Office furniture (office chairs)_Ceres**	IDP 2025-2026	Community	LED	CRR	Equipment	No	28 000,00	Ceres	Furniture & Office Equipment	Furniture & Office Equipment	No Selection	
119	**Air quality equipment_all**	IDP 2025-2026	Community	Environmental Management	CRR	Equipment	No	440 000,00	Municipal Wide	Machinery & Equipment	Machinery & Equipment	No Selection	
120	**Communal Toilets**	IDP 2025-2026	Technical	Sewerage	Prov Grant	New	Yes	500 000,00	Municipal Wide	Sanitation Infrastructure	Toilets	New	
121	**Wolseley informal**	CEF 2024-2034	Community	Housing	Human Settlements	New	Yes	12 500 000,00	Wolseley	Housing	Housing	New	

122	**PAH informal**	CEF 2024-2034	Community	Housing	Human Settlements	New	Yes	6 300 000,00	Prince Alfred Hamlet	Housing	Housing	New	
123	**Fencing (Flats**	IDP 2023-2024	Community	Housing	CRR	New	No	500 000,00	Municipal Wide	Housing	Housing	New	
124	**Vredebes Phase H Electrical**	CEF 2024-2034	Community	Housing	INEP	New	Yes	3 391 304,00	Ceres	Electrical Infrastructure	LV Networks	New	
125	**Vredebes Access Collector**	CEF 2024-2034	Community	Housing	CRR	New	No	436 187,00	Ceres	Road Infrastructure	Roads	New	
126	**Tulbagh (1000) serviced sites & toilets**	CEF 2024-2034	Community	Housing	Human Settlements	New	Yes	77 000 000,00	Tulbagh	Housing	Housing	New	
127	**Tulbagh (1000) busroutes, connector, Steinthal Rd**	CEF 2024-2034	Community	Housing	MIG	New	No	20 000 000,00	Tulbagh	Road Infrastructure	Roads	New	
128	**Tulbagh (1000) bulk sewer & WWTW**	CEF 2024-2034	Community	Housing	MIG	New	Yes	19 348 211,00	Tulbagh	Sanitation Infrastructure	Waste Water Treatment Works	New	
129	**Tulbagh (1000) bulk water & WTW**	CEF 2024-2034	Community	Housing	MIG	New	Yes	6 000 000,00	Tulbagh	Water Supply Infrastructure	Water Treatment Works	New	
130	**Tulbagh (1000) electrical network**	CEF 2024-2034	Community	Housing	INEP	New	Yes	13 000 000,00	Tulbagh	Electrical Infrastructure	LV Networks	New	
131	**Tulbagh (1000) streetlights**	CEF 2024-2034	Community	Housing	MIG	New	No	37 000 000,00	Tulbagh	Electrical Infrastructure	LV Networks	New	
132	**Ceres Nduli serviced sites**	CEF 2024-2034	Community	Housing	Human Settlements	New	Yes	9 680 002,00	Ceres	Housing	Housing	New	
133	**Ceres Nduli top structures**	CEF 2024-2034	Community	Housing	Human Settlements	New	No	-	Ceres	Housing	Housing	New	
134	**Ceres Nduli electrical**	CEF 2024-2034	Community	Housing	INEP	New	Yes	2 504 347,00	Ceres	Electrical Infrastructure	LV Networks	New	
135	**Ceres Nduli streetlights**	CEF 2024-2034	Community	Housing	MIG	New	No	-	Ceres	Electrical Infrastructure	LV Networks	New	
136	**Ceres Nduli bulk sewer**	CEF 2024-2034	Community	Housing	Rural Dev	New	Yes	25 000 000,00	Ceres	Sanitation Infrastructure	Reticulation	New	

Annexure 12: 10 Year capital expenditure budget

Witzenberg Capital Expenditure Framework 2025 - 2035							MTREF Period									
Category	Sub-Category	Department	Programme / Project	Town	Est Project Cost	Funding Source	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Electricity	MV Substation Equipment	Municipal Wide	14 230 000	CRR	1 630 000	1 400 000	1 400 000	1 400 000	1 400 000	1 400 000	1 400 000	1 400 000	1 400 000	1 400 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Electricity	Upgrade of LV Network Cables	Municipal Wide	4 100 000	CRR	500 000	400 000	400 000	400 000	400 000	400 000	400 000	400 000	400 000	400 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Electricity	MV Network Equipment	Municipal Wide	10 000 000	CRR	1 000 000	1 000 000	1 000 000	1 000 000	1 000 000	1 000 000	1 000 000	1 000 000	1 000 000	1 000 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Electricity	Upgrade of MV Cables	Municipal Wide	14 100 000	CRR	1 500 000	1 400 000	1 400 000	1 400 000	1 400 000	1 400 000	1 400 000	1 400 000	1 400 000	1 400 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Electricity	Electrical Network Refurbishment	Municipal Wide	10 000 000	CRR	1 000 000	1 000 000	1 000 000	1 000 000	1 000 000	1 000 000	1 000 000	1 000 000	1 000 000	1 000 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Electricity	Equipment	Municipal Wide	2 050 000	CRR	250 000	200 000	200 000	200 000	200 000	200 000	200 000	200 000	200 000	200 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Electricity	Upgrade Power Station, Ceres	Ceres	15 000 000	Loan	15 000 000									
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Electricity	Streetlights	Municipal Wide	7 492 174	EEDSM	3 478 261		4 013 913							
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Electricity	Streetlights	Municipal Wide	1 460 000	CRR	210 000	100 000	100 000	150 000	150 000	150 000	150 000	150 000	150 000	150 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Roads	Network streets	Municipal Wide	54 000 000	CRR	6 000 000	8 000 000	5 000 000	5 000 000	5 000 000	5 000 000	5 000 000	5 000 000	5 000 000	5 000 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Roads	Equipment	Municipal Wide	750 000	CRR			150 000	150 000		150 000		150 000		150 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Roads	NMT Sidewalks	Municipal Wide	625 000	CRR			100 000		150 000		175 000		200 000	
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Roads	Traffic Calming	Municipal Wide	810 000	CRR	50 000		0	150 000		170 000		240 000		200 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Roads	Road maintenance & upgrade	Municipal Wide	42 852 260	MIG						9 053 129	12 799 131			21 000 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Roads	Rehab Cillierstr, Ceres	Ceres	5 000 000	CRR	5 000 000									
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Roads	Rehab Loverslane Bridge, Ceres	Ceres	3 500 000	CRR			3 500 000							
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Roads	Wolseley Rehabilitation of Roads	Wolseley	15 354 064	MIG	0	6 741 820	8 612 244							
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Roads	Wolseley Rehabilitation of Roads	Wolseley	1 900 000	CRR	1 000 000	900 000								
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Roads	Main Roads Ceres	Ceres	6 303 913	Prov Grant		4 822 174	1 481 739							
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Roads	Main Roads Tulbagh	Tulbagh	6 303 913	Prov Grant		4 822 174	1 481 739							
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Fleet	Workshop building upgrade	Municipal Wide	300 000	CRR	300 000									
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Storm water	Upgrades	Municipal Wide	3 250 000	CRR			500 000	500 000	450 000		450 000	450 000	450 000	450 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Sewerage	Aerator replacement programme	Municipal Wide	4 300 000	CRR	400 000	200 000	200 000	500 000	500 000	500 000	500 000	500 000	500 000	500 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Sewerage	Refurbishment WWTW	Municipal Wide	6 000 000	CRR			750 000	750 000	750 000	750 000	750 000	750 000	750 000	750 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Sewerage	Sewer Pumps-replacement	Municipal Wide	2 050 000	CRR	100 000	100 000	100 000	250 000	250 000	250 000	250 000	250 000	250 000	250 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Sewerage	Sewer Network Replacement	Municipal Wide	13 750 000	CRR	1 000 000		0	750 000	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Sewerage	Security upgrades	Municipal Wide	2 400 000	CRR			600 000	600 000		300 000		300 000	300 000	300 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Sewerage	Upgrade WWTW Wolseley (Own Contribution)	Wolseley	8 500 000	CRR			4 000 000	2 000 000	2 500 000					
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Sewerage	Shandstr Tulb	Tulbagh	3 000 000	MIG			3 000 000							
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Water	Security upgrades	Municipal Wide	2 550 000	CRR	500 000	200 000	0	500 000	450 000		450 000			450 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Water	Infrastructure Management System	Municipal Wide	1 000 000	CRR			200 000	200 000		200 000		200 000		200 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Water	Plant & Equipment	Municipal Wide	250 000	CRR			50 000	50 000		50 000		50 000		50 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Water	Pipe replacements	Municipal Wide	15 500 000	CRR	1 000 000	1 000 000	0	1 500 000	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Water	Wolseley Tierhokskloof	Wolseley	723 503	MIG	723 503									
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Water	Wolseley Tierhokskloof	Wolseley	700 000	CRR	700 000									
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Water	Grey water system	Municipal Wide	1 500 000	CRR				1 500 000						
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Water	Existing main Voortrekker Street Ceres	Ceres	6 300 000	CRR					3 300 000	3 000 000				
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Water	Nduli bulk supply R46	Ceres	1 500 000	CRR	1 500 000									
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Water	Nduli bulk supply R46	Ceres	6 755 582	MIG	3 268 625			3 486 957						
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Parks	Irrigation equipment	Municipal Wide	1 100 000	CRR	200 000		100 000	100 000	300 000		100 000		300 000	
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Parks	Equipment	Municipal Wide	850 000	CRR	300 000	200 000	0	50 000	50 000	50 000	50 000	50 000	50 000	50 000
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Parks	Landscaping	Municipal Wide	1 900 000	CRR	200 000		0	100 000		100 000		500 000	500 000	500 000
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Parks	Brushcutters	Municipal Wide	380 000	CRR	110 000	120 000	150 000							
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Parks	Chainsaws	Municipal Wide	420 000	CRR	130 000	140 000	150 000							
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Cemeteries	Expansion	Municipal Wide	800 000	CRR	100 000		0			300 000		200 000		200 000
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Swimming Pools	Nduli repair	Ceres	4 530 000	CRR	30 000				4 500 000					
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Swimming Pools	Repair & upgrade	Municipal Wide	3 000 000	CRR				500 000		1 000 000		500 000	500 000	500 000
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Resorts	Pine Forest upgrades	Municipal Wide	2 950 000	CRR			200 000			650 000		700 000	700 000	700 000
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Sport facilities	Kliprug changerooms	Prince Alfred Hamlet	2 500 000	CRR			2 500 000							
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Sport facilities	Resurfacing courts	Municipal Wide	2 800 000	CRR				250 000	500 000		250 000	600 000	600 000	600 000
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Sport facilities	General upgrades	Municipal Wide	4 550 000	CRR	200 000			250 000		800 000		1 100 000	1 100 000	1 100 000
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Sport facilities	Tulbagh sports facilities upgrade	Tulbagh	4 301 550	MIG	4 301 550									
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Sport facilities	Sports Facilities Upgrade Tulbagh	Tulbagh	700 000	CRR	700 000									
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Sport facilities	Wolseley sports facilities upgrade	Wolseley	4 779 504	MIG	4 779 504									
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Sport facilities	Specific Projects	Municipal Wide	1 704 000	Prov Grant					750 000		954 000			
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Sport facilities	Sportsground Development & Upgrading	Municipal Wide	200 000	CRR	200 000									
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Sport facilities	Upgrade of sports facilities	Municipal Wide	832 174	Prov Grant	832 174									
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Community Halls	Replace asbestos roof Kliprug Community hall_PAH	Prince Alfred Hamlet	2 100 000	CRR			2 100 000							
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Community Halls	Replace vinyl flooring Montana Comm hall_Wolseley	Wolseley	520 000	CRR		520 000								
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Corporate	Council Chambers Furniture	Municipal Wide	500 000	CRR	500 000									
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Corporate	Access Control	Municipal Wide	350 000	CRR	100 000	250 000								
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Corporate	Traffic Department	Municipal Wide	300 000	CRR	300 000									
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Corporate	IT Upgrades	Municipal Wide	3 050 000	CRR	300 000	300 000	0	350 000	350 000	350 000	350 000	350 000	350 000	350 000
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Corporate	Camera Equipment	Municipal Wide	65 000	CRR	30 000	35 000								
New Infrastructure	Engineering Infrastructure	Solid Waste	Transfer stations / Drop-offs	Municipal Wide	8 900 000	CRR			2 000 000	4 000 000	2 900 000					
New Infrastructure	Engineering Infrastructure	Solid Waste	Bulk waste container bins	Municipal Wide	2 070 556	CRR	1 000 000	434 600	235 956	100 000		100 000		100 000		100 000
New Infrastructure	Engineering Infrastructure	Water	Tulbagh Reservoir	Tulbagh	14 780 281	MIG	5 189 058	9 591 223								
New Infrastructure	Engineering Infrastructure	Solid Waste	Tulbagh Reservoir	Tulbagh	2 200 000	CRR		2 200 000								
New Infrastructure	Engineering Infrastructure	Sewer network	Op-Die-Berg	Op-die-Berg	7 800 000	CRR						4 500 000	3 300 000			
New Infrastructure	Engineering Infrastructure	Sewer network	Prince Alfred's Hamlet	Prince Alfred Hamlet	30 000 000	CRR								15 000 000	15 000 000	
New Infrastructure	Engineering Infrastructure	Sewer network	Grey water system	Municipal Wide	3 000 000	CRR							1 500 000		1 500 000	
New Infrastructure	Engineering Infrastructure	Fleet	Equipment	Municipal Wide	50 000			50 000								
New Infrastructure	Engineering Infrastructure	Fleet	Vehicle new & replacement	Municipal Wide	8 300 000	CRR	1 300 000	2 000 000	0	3 000 000						2 000 000
New Infrastructure	Engineering Infrastructure	Fleet	Vehicle new & replacement	Municipal Wide	300 000	Belgium	300 000									
New Infrastructure	Engineering Infrastructure	Roads	Skoonvlei industrial	Ceres	16 400 000	CRR					3 000 000	8 000 000	2 400 000	3 000 000		
New Infrastructure	Engineering Infrastructure	Sanitation	Skoonvlei industrial	Ceres	2 100 000	CRR							2 100 000			
New Infrastructure	Engineering Infrastructure	Electrical	Skoonvlei industrial	Ceres	5 600 000	CRR							5 600 000			

Key
Not in IDP 2025
Project is Completed
Values are the same as in IDP
Added values from IDP
New projects fron IDP

Category	Sub-Category	Department	Programme / Project	Town	Est Project Cost	Funding Source	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35
New Infrastructure	Social Infrastructure	Cemeteries	New Regional Cemetery	Municipal Wide	15 800 000	MIG			8 000 000				7 800 000			
New Infrastructure	Social Infrastructure	Fire & Rescue	Fire fighting Equipment	Municipal Wide	600 000	CRR	150 000		150 000	150 000						150 000
New Infrastructure	Social Infrastructure	Fire & Rescue	Rescue Equipment	Municipal Wide	869 565	Prov Grant	869 565									
New Infrastructure	Social Infrastructure	Libraries	Nduli Library 1	Ceres	1 739 130	Paardekraal	1 739 130									
New Infrastructure	Social Infrastructure	Libraries	Nduli Library 2	Ceres	1 000 000	CRR	1 000 000									
New Infrastructure	Social Infrastructure	Libraries	Nduli Library 3	Ceres	8 925 959	MIG	8 925 959									
New Infrastructure	Social Infrastructure	Libraries	Equipment	Municipal Wide	840 000	CRR	200 000		220 000	200 000						220 000
New Infrastructure	Social Infrastructure	Sport facilities	Vredebes new	Ceres	28 000 000	MIG			12 000 000	12 000 000		4 000 000				
New Infrastructure	Social Infrastructure	Sport facilities	Op-Die-Berg new	Op-die-Berg	12 000 000	MIG			2 500 000	2 500 000		7 000 000				
New Infrastructure	Social Infrastructure	Sport facilities	Ceres Bella Vista Taxi Rank	Ceres	17 391 304	MIG		8 695 652	8 695 652							
New Infrastructure	Social Infrastructure	Sport facilities	Ceres Bella Vista Taxi Rank	Ceres	9 700 000	CRR	4 700 000		2 500 000							2 500 000
New Infrastructure	Social Infrastructure	Finance	Furniture & Equipment	Municipal Wide	200 000	CRR	50 000	50 000	50 000							50 000
New Infrastructure	Social Infrastructure	Director: Tech	Furniture & Equipment	Municipal Wide	200 000	CRR	50 000	50 000	50 000							50 000
New Infrastructure	Social Infrastructure	Municipal Manager	Furniture & Equipment	Municipal Wide	200 000	CRR	50 000	50 000	50 000							50 000
New Infrastructure	Social Infrastructure	Director: Comm	Furniture & Equipment	Municipal Wide	200 000	CRR	50 000	50 000	50 000							50 000
New Infrastructure	Social Infrastructure	Social	Youth recreational infrastructure (BV, Vredebes, Tulbagh, Wolseley, ODB)	Municipal Wide	360 000				180 000	180 000						
New Infrastructure	Social Infrastructure	Corporate	Office equipment	Municipal Wide	200 000	CRR	50 000	50 000	50 000							50 000
New Infrastructure	Social Infrastructure	LED	Informal trader infrastructure (ODB, Vredebes/Nduli)	Municipal Wide	705 000		185 000				250 000	270 000				
New Infrastructure	Social Infrastructure	LED	Business Hubs & extension (Tulbagh, PAH & Wolseley)	Municipal Wide	6 260 000	CRR	60 000				2 300 000		1 900 000			2 000 000
New Infrastructure	Social Infrastructure	LED	Installation of solar panels for Gate motors at Skoonvlei Business Hub_Bella Vista	Ceres	30 000	CRR	30 000									
New Infrastructure	Social Infrastructure	LED	Office furniture (office chairs) _Ceres	Ceres	28 000	CRR	14 000									14 000
New Infrastructure	Social Infrastructure	Environmental Management	Air quality equipment_all	Municipal Wide	440 000	CRR	220 000									220 000
Informal Settlement Upgrading / Housing	Informal Settlements	Sewerage	Communal Toilets	Municipal Wide	500 000	Prov Grant	500 000									
Informal Settlement Upgrading / Housing	Informal Settlements	Housing	Wolseley informal	Wolseley	12 500 000	Human Settlements		12 500 000								
Informal Settlement Upgrading / Housing	Informal Settlements	Housing	PAH informal	Prince Alfred Hamlet	6 300 000	Human Settlements	6 300 000									
Informal Settlement Upgrading / Housing	Informal Settlements	Housing	Tulbagh (1000) serviced sites & toilets	Tulbagh	77 000 000	Human Settlements						77 000 000				
Informal Settlement Upgrading / Housing	Informal Settlements	Housing	Tulbagh (1000) busroutes, connector, Steinthal Rd	Tulbagh	20 000 000	MIG					20 000 000					
Informal Settlement Upgrading / Housing	Informal Settlements	Housing	Tulbagh (1000) bulk sewer & WWTW	Tulbagh	19 348 211	MIG	372 379	18 975 832								
Informal Settlement Upgrading / Housing	Informal Settlements	Housing	Tulbagh (1000) bulk water & WTW	Tulbagh	6 000 000	MIG				6 000 000						
Informal Settlement Upgrading / Housing	Informal Settlements	Housing	Tulbagh (1000) electrical network	Tulbagh	13 000 000	INEP						13 000 000				
Informal Settlement Upgrading / Housing	Informal Settlements	Housing	Tulbagh (1000) streetlights	Tulbagh	37 000 000	MIG						37 000 000				
Informal Settlement Upgrading / Housing	Informal Settlements	Housing	Ceres Nduli serviced sites	Ceres	8 347 828	Human Settlements	7 119 132	1 228 696								
Informal Settlement Upgrading / Housing	Informal Settlements	Housing	Ceres Nduli electrical	Ceres	1 634 782	INEP	573 913	518 261	542 608							
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Environmental Affairs	Boland Mountain Complex		900 000	Equitable Share (Provi	900 000	0	0							
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Environmental Affairs	Wolwekloof Upgrade		5 000 000	Equitable Share (Provi	5 000 000	0	0							
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Health	Ceres - Ceres CDC - Enabling work and rehabilitation	Ceres	20 601 000	Health Facility Revitali	20 597 000	4 000	0							
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Health	Ceres - Ceres Hospital - Hospital and nurses home repairs and renovation	Ceres	22 471 000	Health Facility Revitali	2 629 000	11 856 000	7 986 000							
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Health	Ceres - Ceres Hospital - New Acute Psychiatric Ward	Ceres	1 000	Health Facility Revitali	1 000	0	0							
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Health	Ceres - Ceres CDC - HT - Enabling work for Hospital OPD	Ceres	2 750 000	Health Facility Revitali	881 000	1 869 000	0							
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Health	Ceres - Ceres Hospital - HT - Hospital and Nurses Home Repairs and Renovation	Ceres	1 934 000	Health Facility Revitali	0	1 934 000	0							
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Health	Ceres - Ceres CDC - HT - Enabling work and rehabilitation	Ceres	9 886 000	Health Facility Revitali	2 040 000	7 846 000	0							
Renewal & rehabilitation of existing infrastructure	Social Infrastructure	Health	Ceres - Bella Vista Clinic - HT - General maintenance (Alpha)	Ceres	425 000	Health Facility Revitali	425 000	0	0							
Informal Settlement Upgrading / Housing	Informal Settlements	Human Settlements	Tulbagh (500)	Tulbagh	1 147 000	Informal Settlements U	1 147 000	0	0							
Informal Settlement Upgrading / Housing	Informal Settlements	Human Settlements	tulbagh ibs - chris hani & die gaatjie - isupg	Tulbagh	1 000 000	Informal Settlements U	1 000 000	0	0							
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Transport	Routine Maintenance CWDM	Municipal Wide	182 735 000	Equitable Share (Provi	0	89 140 000	93 595 000							
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Transport	C1216 Reseal/rehab Ceres-Op die Berg-Citrusdal		69 509 000	Equitable Share (Provi	59 509 000	10 000 000	0							
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Transport	C1116.1 Reseal Wolseley - Ceres - Touwsrivier 86km		18 250 000	Provincial Roads Main	14 500 000	3 750 000	0							
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Transport	C1216 Reseal/rehab Ceres-Op die Berg-Citrusdal		140 490 750	Provincial Roads Main	100 490 750	40 000 000	0							
Renewal & rehabilitation of existing infrastructure	Engineering Infrastructure	Transport	C1116 Reseal Wolseley - Ceres - Touwsrivier Wolseley Ceres		70 000 000	Equitable Share (Provi	0	0	70 000 000							
				Total Cost	**1 297 263 003**		**309 541 503**	**256 694 432**	**253 294 851**	**53 166 957**	**57 800 000**	**183 093 129**	**56 228 131**	**39 540 000**	**37 600 000**	**50 304 000**

Annexure 13: Priority Projects

The following table RANKS all of the Capital Porjects according to the 13 prioritisation criteria agreed to within the municipality, through Phase 4, from 100% (for projects that are most aligned to municipal strategy) to 0% (for projects that are least aligned to criteria).								FINAL SCORE	
Project ID	**Project Name**	**Project Source**	**Municipal Department**	**MSCOA Function (asset class)**	**Funding Source**	**Total Project Value**	**Town or Area**	**Functional Area (as per CEF map from MSDF)**	**COMPOSITE SCORE**	**COMPOSITE PERCENTAGE**
134	Ceres Nduli electrical	CEF 2024-2034	Community	Housing	INEP	R2 504 347,00	Ceres	Nduli	39	93%
128	Tulbagh (1000) bulk sewer & WWTW	CEF 2024-2034	Community	Housing	MIG	R19 348 211,00	Tulbagh		38	90%
132	Ceres Nduli serviced sites	CEF 2024-2034	Community	Housing	Human Settlements	R9 680 002,00	Ceres	Nduli	38	90%
124	Vredebes Phase H Electrical	CEF 2024-2034	Community	Housing	INEP	R3 391 304,00	Ceres	Vredebes	37	88%
125	Vredebes Access Collector	CEF 2024-2034	Community	Housing	CRR	R436 187,00	Ceres	Vredebes	36	86%
136	Ceres Nduli bulk sewer	CEF 2024-2034	Community	Housing	Rural Dev	R25 000 000,00	Ceres	Nduli	36	86%
82	Tulbagh Reservoir	IDP 2023-2024	Technical	Water Distribution	MIG	R24 417 159,00	Tulbagh		34	81%
121	Wolseley informal	CEF 2024-2034	Community	Housing	Human Settlements	R12 500 000,00	Wolseley		34	81%
127	Tulbagh (1000) busroutes, connector, Steinthal Rd	CEF 2024-2034	Community	Housing	MIG	R20 000 000,00	Tulbagh		34	81%
129	Tulbagh (1000) bulk water & WTW	CEF 2024-2034	Community	Housing	MIG	R6 000 000,00	Tulbagh		34	81%
10	Upgrade Power Station, Ceres	CEF 2024-2034	Technical	Electricity Administration	Loan	R31 517 686,00	Ceres		33	79%
50	Nduli bulk supply R46	IDP 2023-2024	Technical	Water Distribution	MIG	R9 416 451,00	Ceres	Nduli	33	79%
130	Tulbagh (1000) electrical network	CEF 2024-2034	Community	Housing	INEP	R13 000 000,00	Tulbagh		33	79%
49	Nduli bulk supply R46	IDP 2025-2026	Technical	Water Distribution	CRR	R1 752 174,00	Ceres	Nduli	32	76%
122	PAH informal	CEF 2024-2034	Community	Housing	Human Settlements	R6 300 000,00	Prince Alfred Hamlet		32	76%
122	PAH informal	CEF 2024-2034	Community	Housing	Human Settlements	R6 300 000,00	Prince Alfred Hamlet		32	76%
123	Fencing (Flats	IDP 2023-2024	Community	Housing	CRR	R500 000,00	Municipal Wide		32	76%
126	Tulbagh (1000) serviced sites & toilets	CEF 2024-2034	Community	Housing	Human Settlements	R77 000 000,00	Tulbagh		32	76%
131	Tulbagh (1000) streetlights	CEF 2024-2034	Community	Housing	MIG	R37 000 000,00	Tulbagh		32	76%
37	Upgrade WWTW Wolseley	CEF 2024-2034	Technical	Sewerage	WSIG	R13 043 478,00	Wolseley		31	74%
38	Upgrade WWTW Wolseley (Own Contribution)	CEF 2024-2034	Technical	Sewerage	CRR	R8 500 000,00	Wolseley		31	74%
45	Wolseley Tierhokskloof	IDP 2025-2026	Technical	Water Distribution	MIG	R21 712 251,00	Wolseley	Tierhokskloof	31	74%
46	Wolseley Tierhokskloof	IDP 2025-2026	Technical	Water Distribution	CRR	R6 233 522,00	Wolseley	Tierhokskloof	31	74%
83	Tulbagh Reservoir	IDP 2025-2026	Technical	Water Distribution	CRR	R2 200 000,00	Tulbagh		31	74%
133	Ceres Nduli top structures	CEF 2024-2034	Community	Housing	Human Settlements	R0,00	Ceres	Nduli	31	74%
135	Ceres Nduli streetlights	CEF 2024-2034	Community	Housing	MIG	R0,00	Ceres	Nduli	31	74%
31	Upgrades	IDP 2023-2024	Technical	Stormwater	CRR	R3 250 000,00	Municipal Wide		29	69%
32	Aerator replacement programme	IDP 2023-2024	Technical	Sewerage	CRR	R4 300 000,00	Municipal Wide		29	69%
33	Refurbishment WWTW	IDP 2023-2024	Technical	Sewerage	CRR	R6 000 000,00	Municipal Wide		29	69%
34	Sewer Pumps-replacement	IDP 2023-2024	Technical	Sewerage	CRR	R2 050 000,00	Municipal Wide		29	69%
77	Transfer stations / Drop-offs	IDP 2023-2024	Technical	Solid Waste	CRR	R14 900 000,00	Municipal Wide		29	69%
2	Upgrade of LV Network Cables	IDP 2025-2026	Technical	Electricity Administration	CRR	R4 200 000,00	Municipal Wide		28	67%
4	Upgrade of MV Cables	IDP 2025-2026	Technical	Electricity Administration	CRR	R13 200 000,00	Municipal Wide		28	67%
5	Electrical Network Refurbishment	IDP 2025-2026	Technical	Electricity Administration	CRR	R9 500 000,00	Municipal Wide		28	67%
13	Network streets	IDP 2024-2025	Technical	Roads	CRR	R54 000 000,00	Municipal Wide		28	67%
16	NMT Sidewalks	IDP 2023-2024	Technical	Roads	CRR	R675 000,00	Municipal Wide		28	67%
16	NMT Sidewalks	IDP 2023-2024	Technical	Roads	CRR	R675 000,00	Municipal Wide		28	67%
16	NMT Sidewalks	IDP 2023-2024	Technical	Roads	CRR	R675 000,00	Municipal Wide		28	67%
16	NMT Sidewalks	IDP 2023-2024	Technical	Roads	CRR	R675 000,00	Municipal Wide		28	67%
35	Sewer Network Replacement	IDP 2023-2024	Technical	Sewerage	CRR	R12 600 000,00	Municipal Wide		28	67%
41	Infrastructure Management System	IDP 2023-2024	Technical	Water Distribution	CRR	R1 000 000,00	Municipal Wide		28	67%
43	Pipe replacements	IDP 2023-2024	Technical	Water Distribution	CRR	R14 350 000,00	Municipal Wide		28	67%
79	Bulk waste container bins	IDP 2025-2026	Technical	Solid Waste	CRR	R2 070 556,00	Municipal Wide		28	67%
1	MV Substation Equipment	IDP 2025-2026	Technical	Electricity Administration	CRR	R13 330 000,00	Municipal Wide		27	64%
3	MV Network Equipment	IDP 2025-2026	Technical	Electricity Administration	CRR	R9 600 000,00	Municipal Wide		27	64%
6	Equipment	IDP 2025-2026	Technical	Electricity Administration	CRR	R2 000 000,00	Municipal Wide		27	64%
25	Wolseley Rehabilitation of Roads	IDP 2025-2026	Technical	Roads	MIG	R17 105 161,00	Wolseley		27	64%
26	Wolseley Rehabilitation of Roads	CEF 2024-2034	Technical	Roads	CRR	R1 900 000,00	Wolseley		27	64%
42	Plant & Equipment	IDP 2023-2024	Technical	Water Distribution	CRR	R250 000,00	Municipal Wide		27	64%
84	Vredebes Bulk internal water pipeline	IDP 2023-2024	Technical	Water Distribution	MIG	R907 372,17	Ceres	Vredebes	27	64%
12	Streetlights	IDP 2025-2026	Technical	Electricity Administration	CRR	R1 360 000,00	Municipal Wide		26	62%
12	Streetlights	IDP 2025-2026	Technical	Electricity Administration	CRR	R1 360 000,00	Municipal Wide		26	62%
18	Traffic Calming	IDP 2023-2024	Technical	Roads	CRR	R810 000,00	Municipal Wide		26	62%
22	Rehab Cillierstr, Ceres	IDP 2024-2025	Technical	Roads	CRR	R5 000 000,00	Ceres		26	62%
23	Tulbagh Rossouwstr	IDP 2023-2024	Technical	Roads	MIG	R0,00	Tulbagh		26	62%
36	Security upgrades	IDP 2023-2024	Technical	Sewerage	CRR	R2 700 000,00	Municipal Wide		26	62%
39	Shandstr Tulb	CEF 2024-2034	Technical	Sewerage	MIG	R3 000 000,00	Tulbagh		26	62%
40	Security upgrades	IDP 2023-2024	Technical	Water Distribution	CRR	R2 600 000,00	Municipal Wide		26	62%
120	Communal Toilets	IDP 2025-2026	Technical	Sewerage	Prov Grant	R500 000,00	Municipal Wide		26	62%
120	Communal Toilets	IDP 2025-2026	Technical	Sewerage	Prov Grant	R500 000,00	Municipal Wide		26	62%
120	Communal Toilets	IDP 2025-2026	Technical	Sewerage	Prov Grant	R500 000,00	Municipal Wide		26	62%
8	Switchgear	CEF 2024-2034	Technical	Electricity Administration	Energy Resilient Fund	R608 696,00	Municipal Wide		25	60%
11	Streetlights	IDP 2025-2026	Technical	Electricity Administration	EEDSM	R10 535 652,00	Municipal Wide		25	60%
11	Streetlights	IDP 2025-2026	Technical	Electricity Administration	EEDSM	R10 535 652,00	Municipal Wide		25	60%
15	Equipment	IDP 2023-2024	Technical	Roads	CRR	R650 000,00	Municipal Wide		25	60%
17	NMT Sidewalks	CEF 2024-2034	Technical	Roads	District	R434 783,00	Municipal Wide		25	60%
17	NMT Sidewalks	CEF 2024-2034	Technical	Roads	District	R434 783,00	Municipal Wide		25	60%
17	NMT Sidewalks	CEF 2024-2034	Technical	Roads	District	R434 783,00	Municipal Wide		25	60%
17	NMT Sidewalks	CEF 2024-2034	Technical	Roads	District	R434 783,00	Municipal Wide		25	60%
20	Van Breda Bridge	IDP 2023-2024	Technical	Roads	Prov Grant	R20 113 043,48	Ceres		25	60%
21	Van Breda Bridge	IDP 2023-2024	Technical	Roads	CRR	R4 400 000,00	Ceres		25	60%
24	Rehab Loverslane Bridge, Ceres	IDP 2024-2025	Technical	Roads	CRR	R3 500 000,00	Ceres		25	60%
48	Existing main Voortrekker Street Ceres	SDF 2020	Technical	Water Distribution	CRR	R6 300 000,00	Ceres		25	60%
78	New waste vehicles	IDP 2023-2024	Technical	Solid Waste	MIG	R5 047 826,00	Municipal Wide		25	60%
80	Fencing Landfill site	IDP 2023-2024	Technical	Solid Waste	CRR	R3 000 000,00	Municipal Wide		25	60%
86	Prince Alfred's Hamlet	Sewer MP 2021	Technical	Sewerage	CRR	R30 000 000,00	Prince Alfred Hamlet		25	60%
92	Skoonvlei industrial	CEF 2024-2034	Technical	Roads	CRR	R16 400 000,00	Ceres	Bella Vista	24	57%
105	Tulbagh taxi rank	CEF 2024-2034	Technical	Roads	Prov Grant	R173 913,04	Tulbagh		24	57%
7	Fencing Tulbagh depot	IDP 2023-2024	Technical	Electricity Administration	CRR	R2 000 000,00	Tulbagh		23	55%

75	IT Upgrades	CEF 2024-2034	Corporate	Information Technology	CRR	R3 100 000,00	Municipal Wide		23	55%
91	Pavement upgrading	IDP 2023-2024	Technical	Roads	CWDM	R434 783,00	Municipal Wide		23	55%
27	Tulbagh NE	CEF 2024-2034	Technical	Roads	MIG	R0,00	Tulbagh		22	52%
28	Main Roads Ceres	IDP 2025-2026	Technical	Roads	Prov Grant	R6 303 913,00	Ceres		22	52%
29	Main Roads Tulbagh	IDP 2025-2026	Technical	Roads	Prov Grant	R6 303 913,00	Tulbagh		22	52%
81	Op-Die-Berg Reservoir	IDP 2023-2024	Technical	Water Distribution	MIG	R2 680 669,00	Op-die-Berg		22	52%
81	Op-Die-Berg Reservoir	IDP 2023-2024	Technical	Water Distribution	MIG	R2 680 669,00	Op-die-Berg		22	52%
93	Skoonvlei industrial	CEF 2024-2034	Technical	Sewerage	CRR	R2 100 000,00	Ceres	Bella Vista	22	52%
94	Skoonvlei industrial	CEF 2024-2034	Technical	Electricity Administration	CRR	R5 600 000,00	Ceres	Bella Vista	22	52%
116	Business Hubs & extension (Tulbagh, PAH & Wolseley)	CEF 2024-2034	Community	LED	CRR	R4 260 000,00	Municipal Wide		22	52%
14	Network streets Tulbagh	CEF 2024-2034	Technical	Roads	CRR	R0,00	Tulbagh		21	50%
19	Road maintenance & upgrade	IDP 2023-2024	Technical	Roads	MIG	R21 852 260,00	Municipal Wide		21	50%
44	Bella Vistabulk supply	Water MP 2021	Technical	Water Distribution	CRR	R0,00	Ceres	Bella Vista	21	50%
44	Bella Vistabulk supply	Water MP 2021	Technical	Water Distribution	CRR	R0,00	Ceres	Bella Vista	21	50%
47	Grey water system	IDP 2023-2024	Technical	Water Distribution	CRR	R1 500 000,00	Municipal Wide		21	50%
69	Upgrade of Busy Bee building Tulbagh	CEF 2024-2034	Community	LED	CRR	R300 000,00	Tulbagh		20	48%
87	Grey water system	CEF 2024-2034	Technical	Sewerage	CRR	R3 000 000,00	Municipal Wide		20	48%
107	Ceres Bella Vista Taxi Rank	IDP 2025-2026	Technical	Roads	CRR	R7 200 000,00	Ceres	Bella Vista	20	48%
115	Informal trader infrastructure (ODB, Vredebes/Nduli)	CEF 2024-2034	Community	LED		R705 000,00	Municipal Wide		20	48%
114	Wolseley hawker stands roofing	IDP 2023-2024	Community	LED	CWDM	R86 957,00	Wolseley		19	45%
59	Pine Forest upgrades	CEF 2024-2034	Community	Resorts	CRR	R2 700 000,00	Municipal Wide		18	43%
85	Op-Die-Berg	Sewer MP 2021	Technical	Sewerage	CRR	R7 800 000,00	Op-die-Berg		18	43%
85	Op-Die-Berg	Sewer MP 2021	Technical	Sewerage	CRR	R7 800 000,00	Op-die-Berg		18	43%
117	Installation of solar panels for Gate motors at Skoonvlei Business Hub_Bella Vista	IDP 2025-2026	Community	LED	CRR	R30 000,00	Ceres	Bella Vista	18	43%
9	Renewal	CEF 2024-2034	Technical	Electricity Administration	Energy Resilient Fund	R0,00	Municipal Wide		17	40%
89	Vehicle new & replacement	IDP 2023-2024	Technical	Fleet	CRR	R9 300 000,00	Municipal Wide		17	40%
106	Ceres Bella Vista Taxi Rank	IDP 2025-2026	Technical	Roads	MIG	R17 391 304,00	Ceres	Bella Vista	17	40%
51	Irrigation equipment	IDP 2023-2024	Community	Community Parks	CRR	R1 100 000,00	Municipal Wide		16	38%
52	Equipment	IDP 2023-2024	Community	Community Parks	CRR	R800 000,00	Municipal Wide		16	38%
53	Landscaping	IDP 2023-2024	Community	Community Parks	CRR	R1 400 000,00	Municipal Wide		16	38%
57	Nduli repair	IDP 2023-2024	Community	Swimming Pools	CRR	R4 530 000,00	Ceres	Nduli	16	38%
96	Fire fighting Equipment	IDP 2023-2024	Community	Fire Fighting & Protection	CRR	R800 000,00	Municipal Wide		16	38%
101	Equipment	CEF 2024-2034	Community	Libraries	CRR	R720 000,00	Municipal Wide		16	38%
108	Furniture & Equipment	IDP 2023-2024	Finance	Director: Finance	CRR	R280 000,00	Municipal Wide		16	38%
56	Expansion	IDP 2023-2024	Community	Cemeteries	CRR	R700 000,00	Municipal Wide		15	36%
56	Expansion	IDP 2023-2024	Community	Cemeteries	CRR	R700 000,00	Municipal Wide		15	36%
56	Expansion	IDP 2023-2024	Community	Cemeteries	CRR	R700 000,00	Municipal Wide		15	36%
62	General upgrades	CEF 2024-2034	Community	Sport Grounds & Stadiums	CRR	R3 450 000,00	Municipal Wide		15	36%
63	Tulbagh sports facilities upgrade	IDP 2023-2024	Community	Sport Grounds & Stadiums	MIG	R4 301 550,00	Tulbagh		15	36%
66	Specific Projects	CEF 2024-2034	Community	Sport Grounds & Stadiums	Prov Grant	R2 127 000,00	Municipal Wide		15	36%
98	Nduli Library 1	IDP 2023-2024	Community	Libraries	Paardekraal	R4 739 130,00	Ceres	Nduli	15	36%
102	Vredebes new	IDP 2023-2024	Community	Sport Grounds & Stadiums	MIG	R28 000 000,00	Ceres	Vredebes	15	36%
102	Vredebes new	IDP 2023-2024	Community	Sport Grounds & Stadiums	MIG	R28 000 000,00	Ceres	Vredebes	15	36%
104	Lyellstr, Ceres	IDP 2023-2024	Community	Sport Grounds & Stadiums	MIG	R434 783,00	Ceres		15	36%
112	Youth recreational infrastructure (BV, Vredebes, Tulbagh, Wolseley, ODB)	CEF 2024-2034	Community	Social		R360 000,00	Municipal Wide		15	36%
30	Workshop building upgrade	IDP 2023-2024	Technical	Fleet	CRR	R600 000,00	Municipal Wide		14	33%
65	Wolseley sports facilities upgrade	CEF 2024-2034	Community	Sport Grounds & Stadiums	MIG	R4 779 504,00	Wolseley		14	33%
73	Access Control	IDP 2025-2026	Corporate	Marketing & Communication	CRR	R450 000,00	Municipal Wide		14	33%
90	Vehicle new & replacement	IDP 2023-2024	Technical	Fleet	Belgium	R300 000,00	Municipal Wide		14	33%
95	New Regional Cemetery	CEF 2024-2034	Community	Cemeteries	MIG	R15 800 000,00	Municipal Wide		14	33%
113	Office equipment	IDP 2023-2024	Corporate	Director: Corporate	CRR	R340 000,00	Municipal Wide		14	33%
118	Office furniture (office chairs)_Ceres	IDP 2025-2026	Community	LED	CRR	R14 000,00	Ceres		14	33%
54	Brushcutters	IDP 2025-2026	Community	Community Parks	CRR	R380 000,00	Municipal Wide		13	31%
55	Chainsaws	IDP 2025-2026	Community	Community Parks	CRR	R420 000,00	Municipal Wide		13	31%
58	Repair & upgrade	CEF 2024-2034	Community	Swimming Pools	CRR	R2 500 000,00	Municipal Wide		13	31%
60	Kliprug changerooms	CEF 2024-2034	Community	Sport Grounds & Stadiums	CRR	R2 500 000,00	Prince Alfred Hamlet	Kliprug	13	31%
64	Sports Facilities Upgrade Tulbagh	IDP 2025-2026	Community	Sport Grounds & Stadiums	CRR	R700 000,00	Tulbagh		13	31%
67	Sportsground Development & Upgrading	IDP 2025-2026	Community	Sport Grounds & Stadiums	CRR	R200 000,00	Municipal Wide		13	31%
68	Upgrade of sports facilities	IDP 2025-2026	Community	Recreational Land	Prov Grant	R832 174,00	Municipal Wide		13	31%
74	Traffic Department	IDP 2025-2026	Corporate	Traffic	CRR	R1 350 000,00	Municipal Wide		13	31%
88	Equipment	IDP 2023-2024	Technical	Fleet		R100 000,00	Municipal Wide		13	31%
97	Rescue Equipment	IDP 2023-2024	Community	Fire Fighting & Protection	Prov Grant	R1 726 087,00	Municipal Wide		13	31%
99	Nduli Library 2	IDP 2025-2026	Community	Libraries	CRR	R1 000 000,00	Ceres	Nduli	13	31%
100	Nduli Library 3	IDP 2025-2026	Community	Libraries	MIG	R8 925 959,00	Ceres	Nduli	13	31%
103	Op-Die-Berg new	CEF 2024-2034	Community	Sport Grounds & Stadiums	MIG	R12 000 000,00	Op-die-Berg		13	31%
61	Resurfacing courts	IDP 2023-2024	Community	Sport Grounds & Stadiums	CRR	R2 200 000,00	Municipal Wide		12	29%
70	Replace asbestos roof Kliprug Community hall_PAH	IDP 2025-2026	Community	Community Halls	CRR	R2 100 000,00	Prince Alfred Hamlet		12	29%
71	Replace vinyl flooring Montana Comm hall_Wolseley	IDP 2025-2026	Community	Community Halls	CRR	R520 000,00	Wolseley		12	29%
72	Council Chambers Furniture	CEF 2024-2034	Corporate	Director: Corporate	CRR	R500 000,00	Municipal Wide		11	26%
76	Camera Equipment	IDP 2025-2026	Corporate	Marketing & Communication	CRR	R65 000,00	Municipal Wide		11	26%
109	Furniture & Equipment	IDP 2025-2026	Technical	Director: Technical	CRR	R150 000,00	Municipal Wide		11	26%
110	Furniture & Equipment	IDP 2025-2026	Technical	Municipal Manager	CRR	R150 000,00	Municipal Wide		11	26%
111	Furniture & Equipment	IDP 2025-2026	Community	Director: Community	CRR	R150 000,00	Municipal Wide		11	26%
119	Air quality equipment_all	IDP 2025-2026	Community	Environmental Management	CRR	R220 000,00	Municipal Wide		10	24%

Annexure 14: Capital Expenditure Programme Summary per Funding Source

Budget Summary per Funding Source

Funding Source	Sum of Est Project Cost	Sum of 2025/26	Sum of 2026/27	Sum of 2027/28	Sum of 2028/29	Sum of 2029/30	Sum of 2030/31	Sum of 2031/32	Sum of 2032/33	Sum of 2033/34	Sum of 2034/35
Belgium	R300 000	R300 000									
CRR	R332 208 556	R35 964 000	R22 349 600	R31 205 956	R29 000 000	R36 800 000	R35 770 000	R34 675 000	R39 540 000	R37 600 000	R29 304 000
EEDSM	R7 492 174	R3 478 261		R4 013 913							
Human Settlements	R104 147 828	R13 419 132	R13 728 696				R77 000 000				
INEP	R14 634 782	R573 913	R518 261	R542 608			R13 000 000				
Loan	R15 000 000	R15 000 000									
MIG	R257 012 218	R27 560 578	R44 004 527	R42 807 896	R23 986 957	R20 000 000	R57 053 129	R20 599 131			R21 000 000
Paardekraal	R1 739 130	R1 739 130									
Prov Grant	R16 513 565	R2 201 739	R9 644 348	R2 963 478		R750 000		R954 000			
Equitable Share (Provincial)	R328 144 000	R65 409 000	R99 140 000	R163 595 000							
Health Facility Revitalisation Grant (Provincial)	R58 068 000	R26 573 000	R23 509 000	R7 986 000							
Informal Settlements Upgrading Partnership Grant (Provincial)	R2 147 000	R2 147 000	R0	R0							
Provincial Roads Maintenance Grant (Provincial)	R158 740 750	R114 990 750	R43 750 000	R0							
No Funding Source	R1 115 000	R185 000	R50 000	R180 000	R180 000	R250 000	R270 000				
Grand Total	**R1 297 263 003**	**R309 541 503**	**R256 694 432**	**R253 294 851**	**R53 166 957**	**R57 800 000**	**R183 093 129**	**R56 228 131**	**R39 540 000**	**R37 600 000**	**R50 304 000**

Budget Summary for CRR, MIG & Loan

Funding Source	Sum of Est Project Cost	Sum of 2025/26	Sum of 2026/27	Sum of 2027/28	Sum of 2028/29	Sum of 2029/30	Sum of 2030/31	Sum of 2031/32	Sum of 2032/33	Sum of 2033/34	Sum of 2034/35
CRR	R332 208 556	R35 964 000	R22 349 600	R31 205 956	R29 000 000	R36 800 000	R35 770 000	R34 675 000	R39 540 000	R37 600 000	R29 304 000
Loan	R15 000 000	R15 000 000									
MIG	R257 012 218	R27 560 578	R44 004 527	R42 807 896	R23 986 957	R20 000 000	R57 053 129	R20 599 131			R21 000 000
Grand Total	R604 220 774	R78 524 578	R66 354 127	R74 013 852	R52 986 957	R56 800 000	R92 823 129	R55 274 131	R39 540 000	R37 600 000	R50 304 000

Expected Funding

Funds	Sum of Funding	Sum of 2025/26	Sum of 2026/27	Sum of 2027/28	Sum of 2028/29	Sum of 2029/30	Sum of 2030/31	Sum of 2031/32	Sum of 2032/33	Sum of 2033/34	Sum of 2034/35
CRR	**R175 000 000**	R17 500 000	R17 500 000	R17 500 000	R17 500 000	R17 500 000	R17 500 000	R17 500 000	R17 500 000	R17 500 000	R17 500 000
Loan 1	**R20 000 000**	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000
Loan 2	**R20 000 000**	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000	R2 000 000
MIG	**R300 000 000**	R30 000 000	R30 000 000	R30 000 000	R30 000 000	R30 000 000	R30 000 000	R30 000 000	R30 000 000	R30 000 000	R30 000 000
Total	**R515 000 000**	R51 500 000	R51 500 000	R51 500 000	R51 500 000	R51 500 000	R51 500 000	R51 500 000	R51 500 000	R51 500 000	R51 500 000
Budget Fit (CRR)	**53%**	**49%**	**78%**	**56%**	**60%**	**48%**	**49%**	**50%**	**44%**	**47%**	**60%**
Budget Fit (Loans)	**267%**	**27%**									
Budget Fit (MIG)	**117%**	**109%**	**68%**	**70%**	**125%**	**150%**	**53%**	**146%**			**143%**
Budget Fit Total	**85%**	**66%**	**78%**	**70%**	**97%**	**91%**	**55%**	**93%**	**130%**	**137%**	**102%**

Budget Summary per Funding Source

Funding Source	Sum of Est Project Cost	Sum of 2025/26	Sum of 2026/27	Sum of 2027/28	Sum of 2028/29	Sum of 2029/30	Sum of 2030/31	Sum of 2031/32	Sum of 2032/33	Sum of 2033/34	Sum of 2034/35
Belgium	R300 000	R300 000									
CRR	R332 208 556	R35 964 000	R22 349 600	R31 205 956	R29 000 000	R36 800 000	R35 770 000	R34 675 000	R39 540 000	R37 600 000	R29 304 000
EEDSM	R7 492 174	R3 478 261		R4 013 913							
Human Settlements	R104 147 828	R13 419 132	R13 728 696				R77 000 000				
INEP	R14 634 782	R573 913	R518 261	R542 608			R13 000 000				
Loan	R15 000 000	R15 000 000									
MIG	R257 012 218	R27 560 578	R44 004 527	R42 807 896	R23 986 957	R20 000 000	R57 053 129	R20 599 131			R21 000 000
Paardekraal	R1 739 130	R1 739 130									
Prov Grant	R16 513 565	R2 201 739	R9 644 348	R2 963 478		R750 000		R954 000			
No Funding Source	R1 115 000	R185 000	R50 000	R180 000	R180 000	R250 000	R270 000				
Total	**R750 163 253**	**R100 421 753**	**R90 295 432**	**R81 713 851**	**R53 166 957**	**R57 800 000**	**R183 093 129**	**R56 228 131**	**R39 540 000**	**R37 600 000**	**R50 304 000**
Equitable Share (Provincial)	R328 144 000	R65 409 000	R99 140 000	R163 595 000							
Health Facility Revitalisation Grant (Provincial)	R58 068 000	R26 573 000	R23 509 000	R7 986 000							
Informal Settlements Upgrading Partnership Grant (Provincial)	R2 147 000	R2 147 000	R0	R0							
Provincial Roads Maintenance Grant (Provincial)	R158 740 750	R114 990 750	R43 750 000	R0							
Total Provincial	**R547 099 750**	**R209 119 750**	**R166 399 000**	**R171 581 000**							
Grand Total	**R1 297 263 003**	**R309 541 503**	**R256 694 432**	**R253 294 851**	**R53 166 957**	**R57 800 000**	**R183 093 129**	**R56 228 131**	**R39 540 000**	**R37 600 000**	**R50 304 000**

Annexure 15: Capital Expenditure Programme Summary per Category

Budget Summary per Funding Source and Category

Row Labels	Sum of Est Project Cost	Sum of 2025/26	Sum of 2026/27	Sum of 2027/28	Sum of 2028/29	Sum of 2029/30	Sum of 2030/31	Sum of 2031/32	Sum of 2032/33	Sum of 2033/34
Belgium	**R300 000**	**R300 000**								
New Infrastructure	R300 000	R300 000								
CRR	**R332 208 556**	**R35 964 000**	**R22 349 600**	**R31 205 956**	**R29 000 000**	**R36 800 000**	**R35 770 000**	**R34 675 000**	**R39 540 000**	**R37 600 000**
New Infrastructure	R106 268 556	R8 924 000	R4 884 600	R5 355 956	R7 450 000	R8 200 000	R12 600 000	R16 800 000	R18 100 000	R16 500 000
Renewal & rehabilitation of existing infrastructure	R225 940 000	R27 040 000	R17 465 000	R25 850 000	R21 550 000	R28 600 000	R23 170 000	R17 875 000	R21 440 000	R21 100 000
EEDSM	**R7 492 174**	**R3 478 261**		**R4 013 913**						
Renewal & rehabilitation of existing infrastructure	R7 492 174	R3 478 261		R4 013 913						
Human Settlements	**R104 147 828**	**R13 419 132**	**R13 728 696**				**R77 000 000**			
Informal Settlement Upgrading / Housing	R104 147 828	R13 419 132	R13 728 696				R77 000 000			
INEP	**R14 634 782**	**R573 913**	**R518 261**	**R542 608**			**R13 000 000**			
Informal Settlement Upgrading / Housing	R14 634 782	R573 913	R518 261	R542 608			R13 000 000			
Loan	**R15 000 000**	**R15 000 000**								
Renewal & rehabilitation of existing infrastructure	R15 000 000	R15 000 000								
MIG	**R257 012 218**	**R27 560 578**	**R44 004 527**	**R42 807 896**	**R23 986 957**	**R20 000 000**	**R57 053 129**	**R20 599 131**		
Informal Settlement Upgrading / Housing	R82 348 211	R372 379	R18 975 832		R6 000 000	R20 000 000	R37 000 000			
New Infrastructure	R96 897 544	R14 115 017	R18 286 875	R31 195 652	R14 500 000		R11 000 000	R7 800 000		
Renewal & rehabilitation of existing infrastructure	R77 766 463	R13 073 182	R6 741 820	R11 612 244	R3 486 957		R9 053 129	R12 799 131		
Paardekraal	**R1 739 130**	**R1 739 130**								
New Infrastructure	R1 739 130	R1 739 130								
Prov Grant	**R16 513 565**	**R2 201 739**	**R9 644 348**	**R2 963 478**		**R750 000**		**R954 000**		
Informal Settlement Upgrading / Housing	R500 000	R500 000								
New Infrastructure	R869 565	R869 565								
Renewal & rehabilitation of existing infrastructure	R15 144 000	R832 174	R9 644 348	R2 963 478		R750 000		R954 000		
Equitable Share (Provincial)	**R328 144 000**	**R65 409 000**	**R99 140 000**	**R163 595 000**						
Renewal & rehabilitation of existing infrastructure	R328 144 000	R65 409 000	R99 140 000	R163 595 000						
Health Facility Revitalisation Grant (Provincial)	**R58 068 000**	**R26 573 000**	**R23 509 000**	**R7 986 000**						
Renewal & rehabilitation of existing infrastructure	R58 068 000	R26 573 000	R23 509 000	R7 986 000						
Informal Settlements Upgrading Partnership Grant (Provincial)	**R2 147 000**	**R2 147 000**	**R0**	**R0**						
Informal Settlement Upgrading / Housing	R2 147 000	R2 147 000	R0	R0						
Provincial Roads Maintenance Grant (Provincial)	**R158 740 750**	**R114 990 750**	**R43 750 000**	**R0**						
Renewal & rehabilitation of existing infrastructure	R158 740 750	R114 990 750	R43 750 000	R0						
No Funding Source	**R1 115 000**	**R185 000**	**R50 000**	**R180 000**	**R180 000**	**R250 000**	**R270 000**			
New Infrastructure	R1 115 000	R185 000	R50 000	R180 000	R180 000	R250 000	R270 000			
Grand Total	**R1 297 263 003**	**R309 541 503**	**R256 694 432**	**R253 294 851**	**R53 166 957**	**R57 800 000**	**R183 093 129**	**R56 228 131**	**R39 540 000**	**R37 600 000**

Annexure 16: Capital Expenditure Programme Summary per Settlement

Budget Summary per Settlement

Settlement and Funding Source	Sum of Est Project Cost	Sum of 2025/26	Sum of 2026/27	Sum of 2027/28	Sum of 2028/29	Sum of 2029/30	Sum of 2030/31	Sum of 2031/32	Sum of 2032/33	Sum of 2033/34	Sum of 2034/35
Ceres	**R207 854 498**	**R75 473 759**	**R38 773 783**	**R36 705 999**	**R15 486 957**	**R10 800 000**	**R15 000 000**	**R10 100 000**	**R3 000 000**		**R2 514 000**
CRR	R55 688 000	R12 274 000		R6 000 000		R10 800 000	R11 000 000	R10 100 000	R3 000 000		R2 514 000
Human Settlements	R8 347 828	R7 119 132	R1 228 696								
INEP	R1 634 782	R573 913	R518 261	R542 608							
Loan	R15 000 000	R15 000 000									
MIG	R61 072 845	R12 194 584	R8 695 652	R20 695 652	R15 486 957		R4 000 000				
Paardekraal	R1 739 130	R1 739 130									
Prov Grant	R6 303 913		R4 822 174	R1 481 739							
Health Facility Revitalisation Grant (Provincial)	R58 068 000	R26 573 000	R23 509 000	R7 986 000							
Municipal Wide	**R473 800 729**	**R27 455 000**	**R107 919 600**	**R122 394 869**	**R27 180 000**	**R24 500 000**	**R29 593 129**	**R42 828 131**	**R21 540 000**	**R22 600 000**	**R47 790 000**
Belgium	R300 000	R300 000									
CRR	R219 600 556	R21 290 000	R18 729 600	R16 605 956	R27 000 000	R23 500 000	R20 270 000	R21 275 000	R21 540 000	R22 600 000	R26 790 000
EEDSM	R7 492 174	R3 478 261		R4 013 913							
MIG	R58 652 260			R8 000 000			R9 053 129	R20 599 131			R21 000 000
Prov Grant	R3 905 739	R2 201 739				R750 000		R954 000			
Equitable Share (Provincial)	R182 735 000	R0	R89 140 000	R93 595 000							
No Funding Source	R1 115 000	R185 000	R50 000	R180 000	R180 000	R250 000	R270 000				
Op-die-Berg	**R19 800 000**			**R2 500 000**	**R2 500 000**		**R11 500 000**	**R3 300 000**			
CRR	R7 800 000						R4 500 000	R3 300 000			
MIG	R12 000 000			R2 500 000	R2 500 000		R7 000 000				
Prince Alfred Hamlet	**R40 900 000**	**R6 300 000**		**R4 600 000**					**R15 000 000**	**R15 000 000**	
CRR	R34 600 000			R4 600 000					R15 000 000	R15 000 000	
Human Settlements	R6 300 000	R6 300 000									
Tulbagh	**R205 780 955**	**R12 709 987**	**R35 589 229**	**R4 481 739**	**R6 000 000**	**R20 000 000**	**R127 000 000**				
CRR	R2 900 000	R700 000	R2 200 000								
Human Settlements	R77 000 000						R77 000 000				
INEP	R13 000 000						R13 000 000				
MIG	R104 430 042	R9 862 987	R28 567 055	R3 000 000	R6 000 000	R20 000 000	R37 000 000				
Prov Grant	R6 303 913		R4 822 174	R1 481 739							
Informal Settlements Upgrading Partnership Grant (Provincial)	R2 147 000	R2 147 000	R0	R0							
Wolseley	**R44 977 071**	**R7 203 007**	**R20 661 820**	**R12 612 244**	**R2 000 000**	**R2 500 000**					
CRR	R11 620 000	R1 700 000	R1 420 000	R4 000 000	R2 000 000	R2 500 000					
Human Settlements	R12 500 000		R12 500 000								
MIG	R20 857 071	R5 503 007	R6 741 820	R8 612 244							
(blank)	**R304 149 750**	**R180 399 750**	**R53 750 000**	**R70 000 000**							
Equitable Share (Provincial)	R145 409 000	R65 409 000	R10 000 000	R70 000 000							
Provincial Roads Maintenance Grant (Provincial)	R158 740 750	R114 990 750	R43 750 000	R0							
Grand Total	**R1 297 263 003**	**R309 541 503**	**R256 694 432**	**R253 294 851**	**R53 166 957**	**R57 800 000**	**R183 093 129**	**R56 228 131**	**R39 540 000**	**R37 600 000**	**R50 304 000**