C 3893/10/2026
MC A/6961/10/2026

9.A.23 [DP]: FINAL R59 CORRIDOR STRATEGIC DEVELOPMENT PLAN AND URBAN DESIGN FRAMEWORK REVIEW

TM/16/09/2026

COMPETENCY: COUNCIL

IT WAS UNANIMOUSLY RESOLVED:

That the Final R59 Corridor Strategic Development Plan and Urban Design Framework Review, distributed under separate cover, be adopted.

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R59 CORRIDOR

STRATEGIC DEVELOPMENT PLAN AND URBAN DESIGN FRAMEWORK

Final

September 2026

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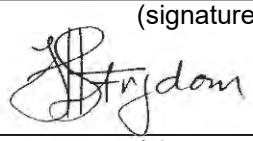
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Department:
Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

Document Control Sheet

Project	R59 Corridor: Strategic Development Plan and Urban Design Framework – Final Development Framework and Implementation Framework Report	**Ref**	222817

Report Status	Final Development Framework and Implementation Framework Report
Submission Date	7 September 2026
Client	**Department: Land Reform and Rural Development** Private Bag x9 Hatfield 0028
Consultant/ Application	**Plan Associates Development Planners (Pty) Ltd** PostNet Suite 211, Private Bag x15 Menlo Park 0102

Prepared by	Herman Strydom	Professional Town Planner A/2027/2015 (SACPLAN)	(signature) 
Approved by	Wandisa Ndevu	Professional Town Planner SPLUM: Gauteng	(signature)

Record of Revision

Version no.	Status	Description	Date
1	Draft	Draft Situational Analysis	06 March 2026
2	Final	Situational Analysis	02 April 2026
3	Draft	Draft Development Framework and Implementation Framework	06 May 2026
4	Final	Development Framework and Implementation Framework	20 May 2026
5	Final	Development Framework and Implementation Framework v2	02 June 2026
6	Final Draft for 60-Day Public Consultation	Development Framework and Implementation Framework v3	19 June 2026

7	Final	Development Framework and Implementation Framework v4 – Comments Incorporated	7 September 2026

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LIST OF ABBREVIATIONS

AH	Agricultural Holding
BRT	Bus Rapid Transit
CAPEX	Capital Investment
CBA	Critical Biodiversity Area
CBD	Central Business District
CEF	Capital Expenditure Framework
CEM	Socio-Economic Measure
C-Plan	Conservation Plan
DM	District Municipality
EGIP	Embedded Generation Investment Programme
ESA	Ecological Support Area
FLISP	Finance Linked Individual Subsidy Programme
GCR	Gauteng City-Region
GGT2030	Growing Gauteng Together 2030
GSDF	Gauteng Spatial Development Framework
GVA	Gross Value Added
ICT	Information and Communications Technology
IPAP	Industrial Policy Action Plan
LED	Local Economic Development
LM	Local Municipality
LMSDF	Local Municipality Spatial Development Framework
LUB	Land Use Budget
MLM	Midvaal Local Municipality
MPCC	Multi-Purpose Community Centre
MTDF	Medium-Term Development Framework
MTDP	Medium-Term Development Plan
MTSF	Medium-Term Strategic Framework
NDP	National Development Plan
NIDP	National Infrastructure Development Plan
NIP	National Infrastructure Plan
NMT	Non-Motorised Transport
OPEX	Operational Expenditure
PAA	Protected Agricultural Area
PPP	Public-Private Partnership
PSC	Project Steering Committee

PTC	Project Technical Committee
RW	Rand Water
SDA	Strategic Development Area
SDF	Spatial Development Framework
SIC	Standard Industrial Classification
SIP	Strategic Integrated Project
SMME	Small, Medium, and Micro Enterprises
TOD	Transit-Oriented Development
UDB	Urban Development Boundary
WWTP	Wastewater Treatment Plant

1 INTRODUCTION

1.1 Background

The R59 Corridor is a strategically important development area within the Midvaal Local Municipality (LM) and the Sedibeng District in the Gauteng Province and is undergoing rapid transformation. The existing R59 Corridor Strategic Development Plan, last reviewed in 2010, no longer reflects the current spatial, economic, environmental, and infrastructural conditions. Since then, several planning instruments, including the LMSDF, Precinct Plans, and Nodal Reviews, have been prepared in and around the study area, contributing to alignment challenges.

There is an urgent need to review and update the Strategic Development Plan and Urban Design Framework to ensure alignment with the current Integrated Development Plan, relevant national and provincial planning legislation, and emerging development pressures. The revised plan should address fragmented land use, infrastructure constraints, rural urban integration, housing demand, and environmental sustainability, while providing a clear spatial vision to support inclusive economic growth and coordinated investment.

The updated plan should also serve as a practical tool for municipal decision making by guiding the assessment of land development applications and ensuring alignment with the municipality's long term spatial vision and strategic priorities. Furthermore, the plan should be data driven, participatory, and implementation focused, incorporating spatial and financial modelling to support prioritisation and budgeting through the Capital Expenditure Framework, while safeguarding environmental assets and enabling inclusive stakeholder engagement.

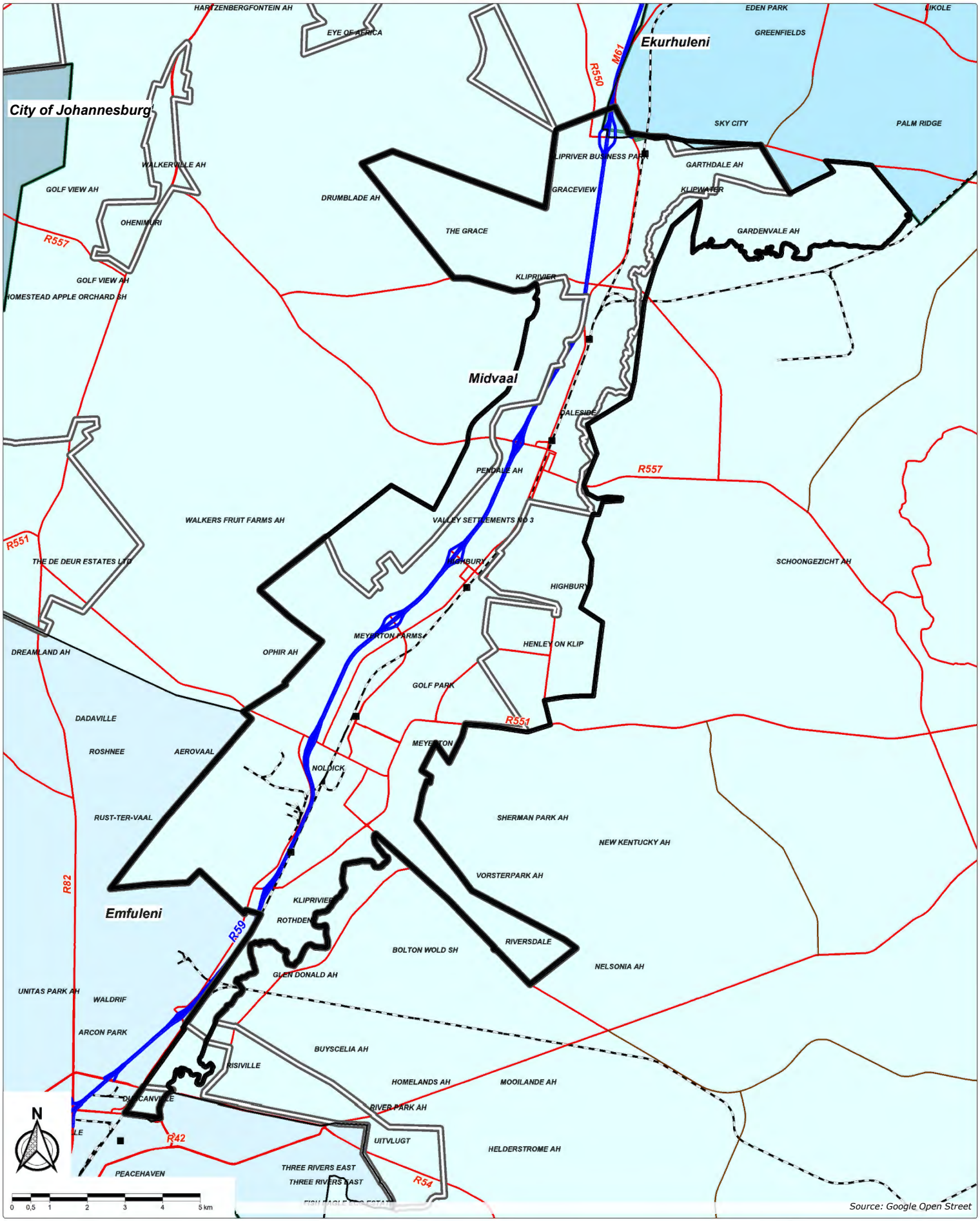
1.2 Study Area

Figure 1 represents the Study Area of the R59 Corridor Strategic Development Plan.

The R59 is a key north–south movement route within the Midvaal LM, linking the southern parts of Gauteng with the Greater Johannesburg metropolitan area and the Free State. Locally, the route functions as both a regional connector and a local access corridor, supporting commuter movement, freight transport, and access to surrounding rural, agricultural, and industrial areas. The R59 also plays a structuring role in shaping development patterns, with economic activities and service uses tending to locate along or near the corridor due to its accessibility. As such, the route functions as a strategic spine that influences land use decisions, development pressure, and infrastructure demand, while forming an interface between urban, peri-urban, and rural environments.

The study area is located in the north-western parts of the Midvaal LM and follows the R59 in a north–south direction. It extends from the vicinity of the Heineken Sedibeng Brewery in the north, through Graceview, Klipriver, Witkop, Pendale Agricultural Holdings, and Meyerton Farms, and further south towards Duncanville. The corridor includes Henley-on-Klip, Meyerton, Sicelo and Riversdale. This stretch of the corridor includes a mix of industrial, agricultural, peri-urban, and residential land uses, reflecting the varied character of development along the R59.

Study Area



Study Area
Urban Development Boundary
Municipal Boundary
District Boundary

Midvaal LM
City of Ekhurhuleni LM
Emfuleni LM
City of Johannesburg LM

National Road
Main Road
Secondary Road
Railway
Railway Station

R59 Development Corridor

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Figure 1

1.3 Study Objectives

The key objective of the project is to review the R59 Corridor Strategic Development Plan (2010) and Urban Design Framework with the following objectives:

- To guide and strengthen the alignment and integration of cross-sectoral policies, programmes, and projects.
- To clearly communicate the desired spatial form and development intent for the R59 Corridor to the public and all interested stakeholders.
- To identify the planning, environmental, infrastructure, and institutional issues that informed the proposals in the final document, and to provide stakeholders with opportunities to participate throughout the formulation process.
- To spatially reflect the needs and priorities identified in the Integrated Development Plan, while highlighting issues specific to the municipalities within the study area.
- To address rural development challenges, including integration with urban areas, the provision of social and economic amenities, infrastructure delivery, and meaningful participation through public engagement processes.
- To provide long-term strategic mechanisms to:
    - Identify areas with potential for economic opportunities, particularly for industrial, commercial, and agricultural activities.
    - Identify infrastructure requirements and service constraints and propose practical solutions to address these limitations.
    - Accommodate growing housing needs through a range of housing typologies and programmes, including Gap Housing, social housing, and FLISP.
    - Protect the natural environment, including conservation corridors, green wedges, hydrological systems, and biodiversity areas.
- To be data- and systems-driven by incorporating spatial and financial modelling that supports project prioritisation and budgeting through the Capital Expenditure Framework (CEF). Clear linkages are required to enable integration between spatial planning, infrastructure planning, and financial planning.

1.4 Project Methodology

The project will be approached and executed in six phases, as depicted on ***Diagram 1*** and discussed below.

- **Phase 1** of the project comprised the Inception, which included the submission of an Inception Report and an Inception Presentation to the Project Steering Committee (PTC).
- **Phase 2** comprised of a detailed analysis of the study area which culminated in into the Situational Analysis.
- **Phase 3** comprised the compilation of the Draft Strategic Development Plan and Urban Design Framework which includes the Spatial Plan and Strategy addressing: Land Use Administration, Transport and Mobility, Economic Development, Natural Environment, and Infrastructure. This Phase 3 Report was presented at the Project Technical Committee (PTC) and PSC and served before Midvaal LM Council which approved the prescribed 60-day commentary period (Phase 4).
- **Phase 4** consisted of the Legislated Stakeholder Engagement Process which consisted of public notices inviting the public to provide comments on the Draft Plan for a period of 60 days. The commenting period closed on 31 August 2026. A separate detailed stakeholder engagement report has been prepared.
- **Phase 5 (current phase)** comprise the finalisation of the Strategic Development Plan and Urban Design Framework based on inputs received in Phase 4, as well as the finalisation of the Project Implementation Plan, which includes the priority of each project, the expected timeframes, the agent or department responsible for implementing the project as well as an estimated budget.
- **Phase 6** will comprise the Project Close-Out which will include the submission of a Close-Out report and a Final Presentation to the Project Steering Committee.

R59 Corridor Plan: Project Methodology

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01 PROJECT INCEPTION

- Inception Meeting
- Inception Report

02 DATA COLLECTION & STATUS QUO

- Phase 2.1: Situational Analysis
  - Existing Spatial Plans
  - Transportation
  - Economic
  - Environment
  - Built Environment
  - Current Development Initiatives
- Phase 2.2: Synthesis
  - Policy Implications
  - Spatial Implications
  - Socio-Economic Drivers
  - Strengths and Weaknesses
- Phase 2.3: Consultation

03 DRAFT R59 DEVELOPMENT PLAN

- Development Objectives
- Development Concept
- Development Strategies
  - Land Use Administration
  - Transport and Mobility
  - Economic Development
  - Environment
  - Infrastructure
- Phase 3.1: Urban Design Framework
- Phase 3.2: Composite Strategic Development Framework
- Phase 3.3: Implementation Framework

Timeline

01 PROJECT INCEPTION
Nov '25 – Jan '26 ✓

Current Phase

02 DATA COLLECTION
Mid-Feb '26

03 DRAFT PLAN
Mid-Feb – End April '26

04 PUBLIC PARTICIPATION
Mid-April – End July '26

05 FINAL PLAN & IMPLEMENTATION FRAMEWORK
Aug – Mid Sept '26

06 CLOSE OUT
Mid-Sept – Mid-Dec '26

04 CONSULTATION (60-DAYS PUBLIC PARTICIPATION)

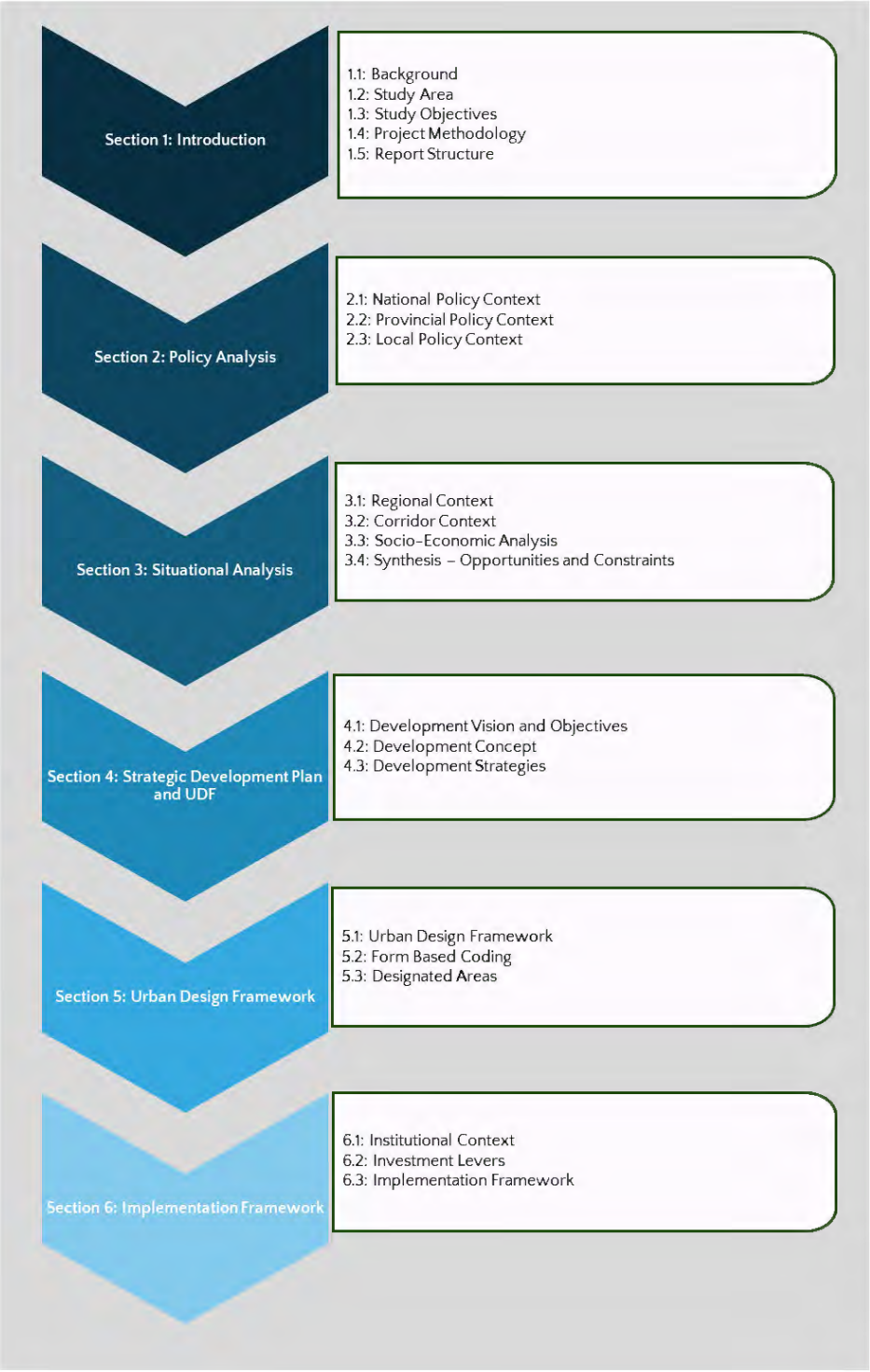
05 FINAL R59 CORRIDOR STRATEGIC DEVELOPMENT PLAN AND URBAN DESIGN FRAMEWORK AND IMPLEMENTATION PLAN

06 CLOSE OUT REPORT AND RETENTION

1.5 Report Structure

The report structure is summarised in ***Diagram 2*** below.

Diagram 2: Report Structure



2 POLICY CONTEXT

2.1 National Context

2.1.1 Medium Term Development Plan (MTDP), 2024-2029

The MTDP identifies structural economic, spatial, and institutional constraints that are directly relevant to the future development and management of strategic corridors such as the R59. The Plan confirms that economic performance continues to be constrained by inefficient spatial patterns, underinvestment in infrastructure, and weak coordination between spatial planning, infrastructure delivery, and economic development. These challenges are particularly evident along major transport corridors that span urban, peri-urban, and rural areas, where development pressures are increasing without sufficient spatial coordination.

A key finding of the MTDP is that spatial inequality remains a major barrier to inclusive growth and job creation, with many households and economic activities located far from opportunities and services. The Plan therefore emphasises targeted spatial interventions that focus public and private investment in well-located areas, supported by integrated transport and infrastructure systems. In this context, the R59 Corridor is identified as a critical spatial asset with the potential to function as a structured development spine, linking economic nodes, supporting industrial and logistics activity, and improving access between residential areas, employment opportunities, and regional markets.

The MTDP further highlights logistics inefficiencies and underperforming transport infrastructure as binding constraints on economic growth. Government-led reforms in the transport and logistics sector prioritise improved regulation, private sector participation, and infrastructure investment across road, rail, and freight systems. These reforms reinforce the strategic role of the R59 Corridor in enhancing regional competitiveness, supporting industrial development, and improving the movement of goods and people within Gauteng and beyond.

The Plan also emphasises the need to spatialise national priorities through alignment with the National Spatial Development Framework, supported by geospatial planning, coordinated budgeting, and institutional collaboration across spheres of government. This underscores the importance of corridor-level frameworks that translate national policy into clear spatial guidance for land use management, infrastructure investment, and development decision-making at a local level.

Finally, the MTDP recognises that fragmented planning systems and limited local government capacity undermine effective implementation. Strengthening institutional coordination, improving planning capability, and aligning spatial planning with capital investment frameworks are identified as key enablers. For the R59 Corridor, this confirms the need for an updated, implementation-focused Strategic Development Plan and Urban Design Framework to guide development approvals, prioritise infrastructure investment, and support coordinated corridor development in line with national growth and spatial transformation objectives.

2.1.2 Industrial Policy Action Plan (IPAP), 2014-2015

The IPAP identifies industrialisation, particularly manufacturing-led growth, as a key driver of South Africa's development. The Plan highlights structural weaknesses in the economy, including dependence on primary commodities, limited value addition, fragmented production systems, and persistent infrastructure and logistics constraints. These challenges are directly relevant to the planning and management of strategic development corridors, which play a central role in supporting industrial activity, improving logistics efficiency, and facilitating access to markets.

A key finding of the IPAP is that manufacturing offers strong economic and employment multipliers due to its extensive forward and backward linkages across the economy. Industrial development is most effective where production activities are spatially concentrated, well connected to transport infrastructure, and supported by coordinated public investment. This underscores the importance of structured industrial and logistics corridors in supporting industrial clustering and value chain development.

The IPAP identifies logistics inefficiencies and high transport costs as binding constraints on industrial competitiveness, particularly for value-added and tradable goods. Infrastructure bottlenecks, high road and port costs, and energy constraints are cited as major impediments to export growth and domestic industrial expansion. The Plan therefore emphasises the need for improved transport systems and better alignment between industrial development initiatives and infrastructure investment to unlock industrial growth.

The Plan further notes that spatial and institutional fragmentation undermines the effective implementation of industrial policy. Weak coordination between spheres of government and misalignment between spatial planning, infrastructure provision, and industrial investment reduce the impact of industrial interventions. The IPAP highlights the importance of stronger spatial planning frameworks to guide industrial location, support clustering, and integrate land use planning with infrastructure and capital investment processes.

In addition, the IPAP emphasises regional integration and the expansion of manufactured exports into African markets as strategic priorities. Increased trade within the Southern African Development Community and the broader African continent is identified as a key opportunity, reinforcing the role of development corridors in facilitating trade, supporting export-oriented industries, and strengthening regional value chains.

Finally, the IPAP recognises that sustained industrial development requires long-term planning certainty, coordinated investment, and targeted support for productive sectors. The Plan supports place-based industrial strategies that reduce infrastructure constraints and align planning, financing, and investment instruments. In this context, strategic corridors such as the R59 provide an important spatial platform for translating national industrial policy objectives into coordinated, location-specific development outcomes.

2.1.3 National Infrastructure Development Plan (NIDP), 2050

The National Infrastructure Development Plan 2050 (NIDP 2050) identifies public infrastructure investment as a critical foundation for inclusive economic growth, spatial transformation, and improved competitiveness. The Plan confirms that infrastructure delivery has been insufficient to support national development objectives, with institutional weaknesses, fragmented planning, and underinvestment constraining economic performance. Addressing these constraints requires coordinated, long-term infrastructure planning focused on key network systems that underpin economic activity, including energy, freight transport, water, and digital communications.

A key finding of the NIDP 2050 is that transport and energy infrastructure account for the majority of infrastructure investment needs, reflecting their role as enablers of economic growth and spatial integration. Freight transport infrastructure is identified as essential for supporting industrial development, trade, and regional connectivity. The Plan emphasises the prioritisation of dominant freight corridors, improved logistics efficiency, and the integration of road, rail, ports, and intermodal facilities to reduce costs and enhance competitiveness. This has direct relevance for strategic development corridors such as the R59, which function as key movement routes linking industrial areas, logistics activities, and economic nodes.

The NIDP 2050 highlights the need to align infrastructure investment with spatial transformation objectives in line with the National Spatial Development Framework. Infrastructure is positioned as a catalyst for restructuring fragmented spatial patterns by concentrating investment in well-located areas that can support inclusive development, economic clustering, and improved access to opportunities. Corridor-based development is therefore reinforced as a mechanism to guide coordinated infrastructure provision, land use planning, and investment decision-making.

The Plan also identifies weak institutional capacity and poor coordination as major constraints on effective infrastructure delivery. Strengthening planning, procurement, and delivery capability within the state is prioritised, together with improved cooperation between the public and private sectors. The NIDP 2050 emphasises the need for integrated planning systems that link spatial planning, infrastructure programming, and capital budgeting, supported by robust data, monitoring, and evaluation frameworks.

In addition, the NIDP 2050 recognises the importance of regional integration and the development of transport corridors that support trade within South Africa and across the African continent. Enhanced regional road, rail, and port networks are identified as enablers of industrialisation and export growth, reinforcing the role of major transport corridors in facilitating the movement of goods and people.

Overall, the NIDP 2050 supports an infrastructure-led approach that prioritises strategic corridors as platforms for coordinated investment, spatial restructuring, and economic growth. For the R59 Corridor, this underscores the importance of an updated, implementation-focused framework that aligns land use planning with infrastructure priorities and supports the efficient functioning of the corridor within the national and regional infrastructure network.

2.1.4 National Policy Implications for the R59 Corridor

National policy frameworks consistently identify strategic transport corridors as critical spatial platforms for economic growth, spatial restructuring, and coordinated infrastructure investment. In this context, the R59 Corridor is reinforced as an important national and regional movement route with development potential that must be managed in a structured and integrated manner.

Key national policy implications for the R59 Corridor include:

- Strategic corridors should support manufacturing, logistics, and value-adding economic activity, given their role in linking production areas to markets and trade routes.
- Infrastructure investment must be spatially targeted and coordinated, with transport, freight, and bulk infrastructure aligned to support economic nodes and reduce inefficiencies along key corridors.
- Development corridors should contribute to spatial transformation by improving access to economic opportunities and reducing the separation between residential areas and employment locations.
- Corridor planning must inform and guide land use management and development decision-making, ensuring that development proposals align with long-term spatial and economic objectives.
- Improved institutional coordination across spheres of government is required to align spatial planning, infrastructure delivery, and capital budgeting at corridor level.
- National policy supports implementation-focused frameworks that translate high-level policy objectives into location-specific guidance for development approvals and infrastructure prioritisation.

Overall, national policy positions the R59 Corridor as a strategic development asset that should function as a structured economic and movement spine, supporting coordinated growth, infrastructure efficiency, and spatial integration in line with national development priorities.

2.2 Provincial Context

2.2.1 Growing Gauteng Together, 2030

The GGT2030 Plan sets out a long-term provincial vision for an integrated, inclusive, and competitive Gauteng City Region, with economic growth, infrastructure investment, and spatial transformation identified as key priorities.

The Plan recognises that Gauteng's economic performance is constrained by persistent spatial inequality, fragmented settlement patterns, and the separation of residential areas from employment opportunities. Addressing these challenges requires targeted spatial interventions that integrate land use, transport, infrastructure, and economic development.

A central finding of GGT2030 is that corridor-based development is essential to restructuring the provincial spatial economy. The Plan identifies five developmental corridors intended to function as engines of economic growth, employment creation, and spatial integration. These corridors are intended to concentrate investment, support labour-absorbing economic activities, and strengthen linkages between economic nodes and residential areas. Within this framework, the Southern Corridor, which includes the Midvaal Local Municipality, is recognised as an important area for industrial, logistics, agro-processing, and transport-related development.

The Plan highlights the need to address historic spatial distortions that continue to locate large portions of the population far from economic opportunities. Long travel distances, limited access to public transport, and limited local economic activity are identified as constraints to inclusive growth. GGT2030 therefore emphasises strengthening transport infrastructure and improving road and public transport networks to enhance mobility, reduce travel costs, and improve access to employment. These findings reinforce the strategic role of major transport routes such as the R59 in improving regional connectivity within the southern Gauteng City Region.

Infrastructure investment is identified as a key driver of economic inclusion and job creation. The Plan places emphasis on coordinated investment in transport, freight and logistics systems, and industrial infrastructure within identified corridors. Infrastructure is positioned not only as a service delivery requirement, but as a catalyst for unlocking economic potential, supporting industrial clustering, and strengthening linkages between established industries and emerging economic activities.

Overall, the GGT2030 Plan confirms corridor-led development as a core mechanism for achieving spatial transformation, inclusive economic growth, and infrastructure-led development in Gauteng. For the R59 Corridor within the Midvaal Local Municipality, this reinforces the need for a clear, aligned corridor framework that supports economic activity, improves transport connectivity, and guides coordinated land use and infrastructure investment in line with provincial development priorities.

2.2.2 Gauteng Spatial Development Framework (GSDF), 2030

The GSDF provides the overarching spatial framework for directing and coordinating development, infrastructure investment, and land use management across the province. The Framework seeks to address persistent spatial inefficiencies, economic fragmentation, and unsustainable settlement patterns that undermine inclusive growth and access to opportunity. Central to the GSDF is the objective of spatial transformation through a more compact, connected, and integrated provincial spatial structure.

A key focus of the GSDF is the restructuring of Gauteng's spatial economy through a balanced polycentric model that shifts development away from dispersed, peripheral growth. Within this approach, the Framework emphasises the role of regional nodes and development corridors as structuring elements that concentrate investment and guide growth. Development corridors are intended to:

- link urban centres with surrounding hinterlands
- support economic networks and productive activity
- improve regional accessibility and mobility

The GSDF identifies connectivity and mobility as fundamental drivers of spatial form and economic performance. The provincial road network, freight routes, and logistics systems are recognised as essential components of Gauteng's spatial economy, enabling the efficient movement of goods, services, and people across the city region. Strengthening key movement corridors is therefore necessary to support:

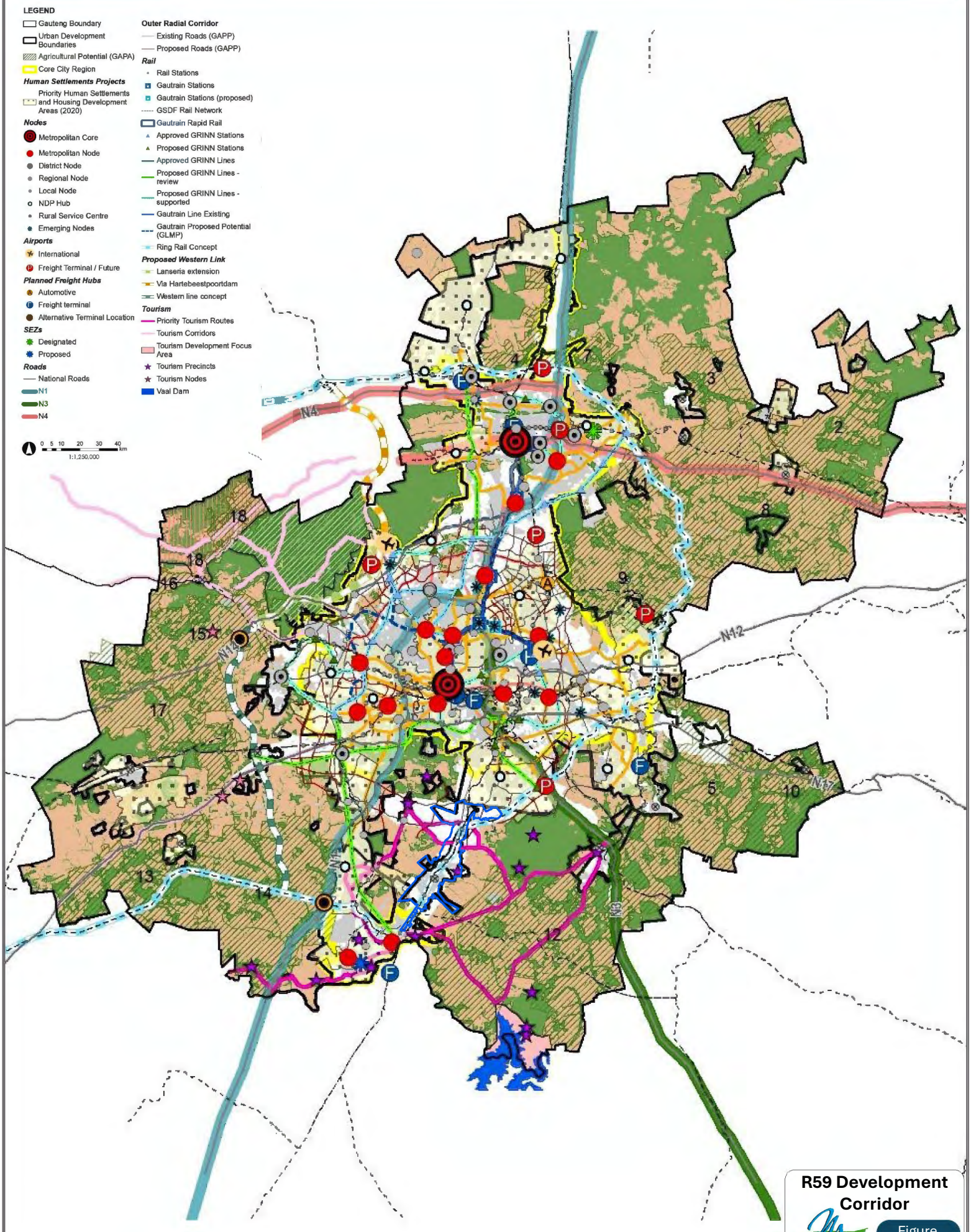
- industrial and logistics activity
- access to employment opportunities
- functional integration between urban and rural areas

The Framework further places emphasis on reinforcing economic networks and supporting productive hinterlands. Rural and peri-urban areas are recognised as contributors to the provincial economy through agriculture, mining, logistics, and related value chains. Improved integration between urban economies and surrounding rural areas is promoted, supported by transport corridors that facilitate economic linkages, market access, and service delivery. This approach is particularly relevant to municipalities such as Midvaal that form part of Gauteng's productive hinterland.

Environmental sustainability and resource protection are identified as key considerations in spatial decision-making. The GSDF highlights the need to manage development pressures within ecologically sensitive areas, protect agricultural land of high potential, and align development with environmental management frameworks.

Overall, the GSDF 2030 confirms corridor-led development as a central mechanism for spatial restructuring, economic integration, and coordinated infrastructure investment. For the R59 Corridor within the Midvaal Local Municipality, the Framework supports its role as a strategic movement and development spine that links economic activity, supports logistics and productive land uses, and guides land use and infrastructure decisions in alignment with provincial spatial objectives. ***Figure 2*** represents the GSDF composite map.

Gauteng Spatial Development Framework, 2030



R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 2

2.2.3 GCR Climate Change Response Strategy and Action Plan, 2021

The Gauteng City Region Over-Arching Climate Change Response Strategy and Action Plan (2020) provides a consolidated provincial response to the growing risks posed by climate change, recognising Gauteng's role as South Africa's economic hub and a significant contributor to national greenhouse gas emissions. The Strategy confirms that climate change presents both a risk to economic and social systems and an opportunity to transition towards a more resilient, low-carbon development path that supports economic growth and improved quality of life.

Climate projections for Gauteng indicate a warmer climate with longer dry spells, higher temperatures, and more intense rainfall events, increasing the risk of flooding, erosion, and pressure on infrastructure systems. These impacts are expected to place growing strain on transport networks, stormwater infrastructure, agricultural practices, water security, and human settlements, particularly in highly urbanised and peri-urban areas. The Strategy emphasises that failure to respond adequately will compromise economic productivity, infrastructure resilience, and social well-being across the Gauteng City Region.

A central feature of the Strategy is the identification of four overarching climate change response outcomes, which collectively guide planning and implementation:

- resilient ecosystems and safeguarded natural resources,
- improved quality of life and reduced vulnerability,
- strengthened disaster risk reduction and management, and
- a transition towards a low-carbon and green economy.

To give effect to these outcomes, the Strategy identifies eleven response programmes that structure climate change interventions across sectors, including transport, energy supply, human settlements, agriculture and agro-processing, disaster risk management, water security, and industry. The transport response programme specifically recognises the need to reduce emissions, improve efficiency, and strengthen public and mass transit systems, while supporting spatial planning approaches that reduce travel distances and dependence on private vehicles.

Overall, the Strategy confirms that climate-resilient, low-carbon development must be embedded within spatial planning and infrastructure decision-making at corridor level. For the R59 Corridor within Midvaal LM, this underscores the importance of integrating climate resilience considerations into corridor planning, infrastructure investment, land use management, and long-term development frameworks in line with provincial climate change response objectives.

2.2.4 Provincial Policy Implications for the R59 Corridor

Provincial policy frameworks emphasise corridor-led development as a central mechanism for achieving spatial transformation, economic inclusion, and infrastructure-led growth within the Gauteng City Region. The R59 Corridor, located within the Southern Corridor and traversing Midvaal LM, is therefore positioned as an important provincial development and connectivity route.

Key provincial policy implications for the R59 Corridor include:

- Development corridors are intended to function as economic growth engines, concentrating investment, supporting labour-absorbing industries, and strengthening regional economic networks.
- The R59 Corridor plays a role in linking urban centres, peri-urban areas, and productive rural hinterlands, supporting agriculture, logistics, industrial activity, and related value chains.
- Strengthening mobility and connectivity along major transport routes is essential to reducing travel distances, improving access to employment, and enhancing regional integration within southern Gauteng.
- Provincial policy emphasises the alignment of municipal SDFs, IDPs, and infrastructure programmes with identified corridors to ensure focused and coordinated implementation.
- Corridor development must balance economic growth with environmental sustainability, including the protection of agricultural land, ecological systems, and climate-resilient infrastructure.
- Climate change policy requires that corridor planning incorporate resilience, risk management, and low-carbon development principles, particularly in relation to transport infrastructure and land use patterns.

Collectively, provincial policy confirms the need for a clear, aligned, and implementation-oriented framework for the R59 Corridor that supports economic development, improves regional connectivity, and guides land use and infrastructure investment in line with Gauteng's long-term spatial and climate objectives.

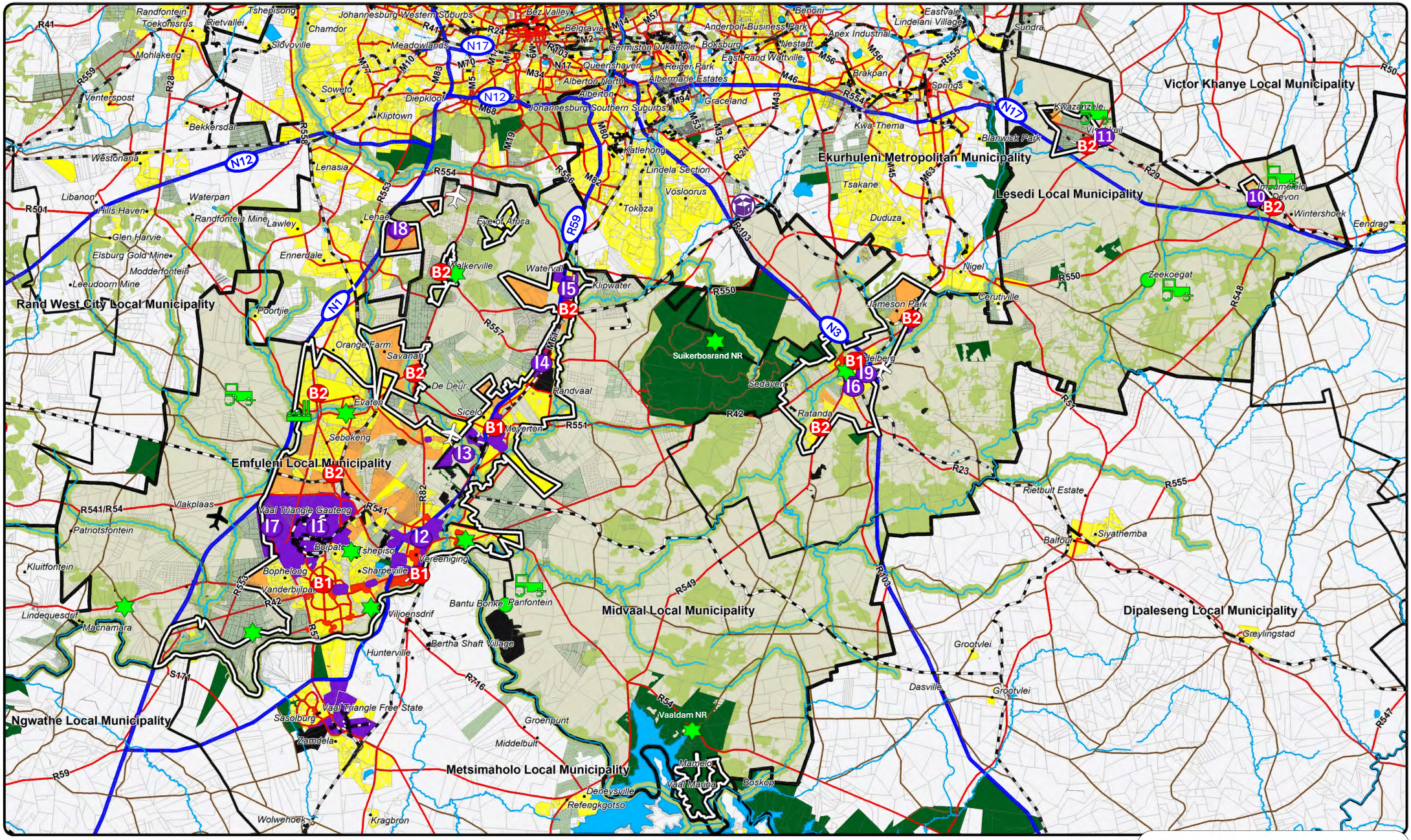
2.3 District Context

2.3.1 Sedibeng District Spatial Development Framework, 2019

Figure 3 illustrates the Sedibeng District Spatial Development Framework, 2019. The District SDF contains 12 Development Principles and Principles 3, 4 and 7 are strategically applicable to the R59 Corridor as outlined in ***Table 1*** below.

Table 1: Development Principles

Principle / Strategic Directive	Applicability to the R59 Corridor
Principle 3: Enhancement of four Strategic Development Corridors supplemented by an extensive local transport network providing linkages between urban and rural nodes.	This principle is directly applicable to the R59 Corridor, as the Sedibeng SDF explicitly identifies the importance of the R59 corridor in linking Johannesburg, Ekurhuleni, Meyerton and Vereeniging. The SDF further records that strategic development is mainly focused on future development along the R59 corridor. In this context, the principle supports the continued recognition of the R59 as a strategic development corridor that must strengthen regional accessibility, improve linkages between urban and rural areas, and structure development in an integrated rather than fragmented manner.
Principle 4: Consolidation of the urban structure of the District around the nodal points by way of infill development and densification in identified Priority Housing Development Areas (PHDAs).	This principle is applicable to the R59 Corridor in that the Sedibeng SDF supports the densification of existing urban areas and notes that areas of strategic development are mainly focusing on future development along the R59 corridor, while also identifying densification of existing urban areas and emerging areas such as Riversdale as a key priority for the municipality. For the R59 Corridor, this means that urban growth should be consolidated through infill development and densification in existing settlements and appropriate nodal locations associated with the corridor, rather than through dispersed or ribbon development along the route.
Principle 7: Concentrate industrial and agro-processing activities at the higher order nodes or along the major development corridors in the District where infrastructure is available.	This principle is highly applicable to the R59 Corridor because the Sedibeng SDF states that industrial/commercial areas have developed adjacent to the R59 route in the northern part of Midvaal, taking advantage of accessibility, low land costs and proximity to the Johannesburg, Tshwane and Ekurhuleni Metropolitan areas. The SDF also identifies future development along the R59 corridor as a strategic focus area. In this context, Principle 7 supports the concentration of industrial and agro-processing activities along the R59 where infrastructure is available and where such activities can benefit from the corridor's regional accessibility.



SEDIBENG DISTRICT MUNICIPALITY SDF – COMPOSITE

- Urban Footprint
- Agricultural Holdings
- Agriculture
- Nature Reserve
- Open Space System
- Dams
- Primary Node
- Secondary Node
- Rural Node
- Priority Housing Development Areas
- Business Areas
- Industrial Areas
- Mining Areas
- Agri Hub
- Proposed Rural Intervention Area
- National Roads
- Main Roads
- Other Roads
- Railways
- Railway Station
- Proposed Airport
- Airfield
- Proposed Freight Hub
- Tourism Precinct
- Urban Development Boundary

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 3

2.3.2 Sedibeng One Plan

The Sedibeng One Plan contains the following Vision:

"Fostering Sedibeng as an accessible economic development region."

The vision is informed by the economic potential of the district, the availability of infrastructure, and the role of accessible development in attracting private investment and creating employment opportunities.is framed as a long-term intergovernmental planning instrument. The One Plan is intended to coordinate high-impact initiatives that address current district challenges and unlock future economic development, while also strengthening integrated planning, delivery coordination and implementation monitoring across spheres of government

The One Plan further sets out a number of strategic directions that have direct applicability to the R59 Corridor. These include improving overall economic performance, promoting economic diversification and value addition, leveraging comparative advantages, providing additional bulk infrastructure capacity for future public and private development, implementing integrated infrastructure delivery projects, and strengthening spatial integration to optimise land use and connectivity.

The One Plan contains a specific long-term project for R59 Corridor Development in Midvaal. The project is described as aiming to transform the route into a major connecting freeway and economic gateway, linking metropolitan and local Gauteng municipalities with Sasolburg in the Free State. The project is classified as a Major project under the pillar of Spatial Restructuring, with Midvaal Local Municipality identified as the implementing agent.

2.4 Local Context

2.4.1 Midvaal Spatial Development Framework, 2022-2027

The Midvaal Spatial Development Framework (SDF), 2014 was reviewed in 2021 and completed in 2022, which is shown in ***Figure 4***.

Table 2 below outlines the 11 Development Drivers and Spatial Proposals contained in the SDF and outlines their Impact/Implications on the R59 Corridor Strategic Development Plan.

Spatial Development Framework

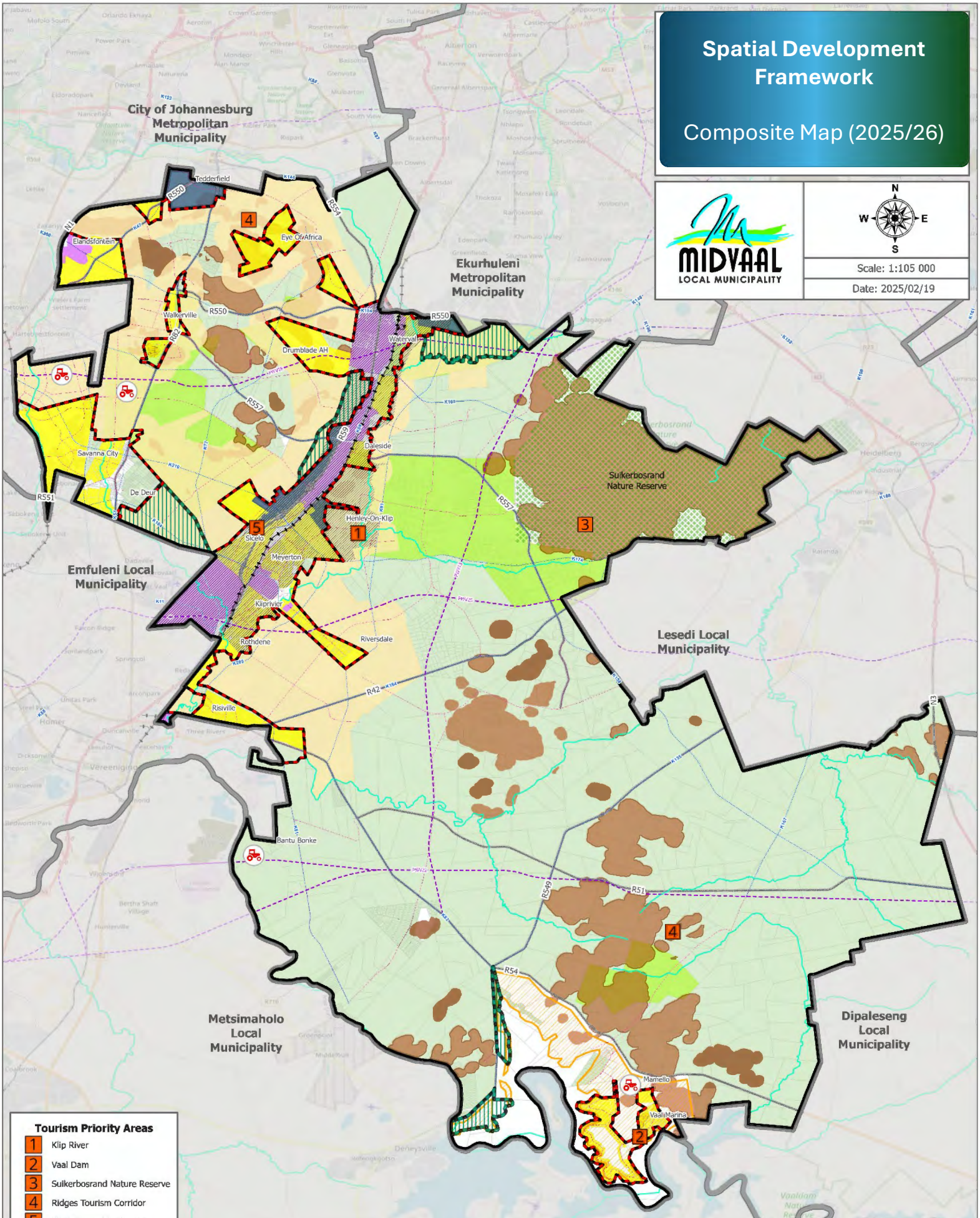
Composite Map (2025/26)

MIDVAAL LOCAL MUNICIPALITY

N W E S

Scale: 1:105 000

Date: 2025/02/19



Tourism Priority Areas

1. Klip River
2. Vaal Dam
3. Suikerbosrand Nature Reserve
4. Ridges Tourism Corridor
5. Sicelo Township Tourism

- Agri-Hub
- Proposed Class 1 Road (Gautrans)
- Proposed Class 2 Road (Gautrans)
- Proposed Class 3 Road (Midvaal)
- Major Roads (Existing)
- Railway
- Rivers
- Municipal Boundary
- Urban Development Boundary
- Urban Expansion Areas Subject to Conditions
- Subject to Precinct Plan Approval
- Cadastre
- R59 Corridor Functional Area
- Industrial / Commercial
- Residential
- Urban-Rural Cross Over Zone
- Tourism
- Farms
- Suikerbosrand Nature Reserve
- Conservancies
- Ridges

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 4

Table 2: Spatial Proposals

Development drivers	Spatial proposal	R59 Impacts/Implications
1: Strive towards consolidated compact urban areas	Maintain the Urban Development Boundary (UDB) and manage urban-rural cross-over zones to promote compact urban development, support the integrity of rural residential areas, protect high potential agricultural land, and conserve critical biodiversity areas and valuable ecosystems.	The consolidation of compact urban areas supports the role of the R59 as a structured movement and development spine by limiting dispersed development along the corridor. This approach reinforces nodal development and helps manage development pressure along the R59 by directing growth to appropriate urban areas while protecting surrounding rural and environmentally sensitive land.
2: Pursue alternative clean energy and reduce the cost to industrial and commercial consumers	To tackle the shortage of energy by partnering with renewable energy service providers and participate in initiatives to generate local power, aid economic diversification along the R59 Corridor, industrial and commercial zones and the urban nodes through public- private partnerships.	This driver has indirect relevance to the R59 Corridor, particularly where commercial, industrial, and logistics activities are located along or near the route. Opportunities for alternative energy generation may support energy resilience and operational efficiency of corridor-related economic activities, but this driver does not directly influence the spatial structuring of the R59.
3: Implement and manage corridor and spine development initiatives	Plan, design, and facilitate development along the R59 Corridor, the R82 mobility spine and secondary east-west spines by means of appropriate developments and responsive township layouts in line with the spatial vision and relevant precinct plan proposals.	This driver is directly applicable to the R59 Corridor. The R59 is identified as a key north–south movement route and development spine within Midvaal, and corridor management initiatives support its role as a structured development axis. This reinforces the need for coordinated land use management, appropriate access control, and alignment of development proposals along the corridor with broader spatial planning objectives.
4: Encourage agricultural production and processing	Protect all land earmarked for agriculture in order to facilitate and enhance agricultural production. Support innovative small-scale farming in agricultural areas and cross-over zones, and support agri-processing in cross-over zones and in corridors and spines.	The R59 traverses areas of agricultural activity and cross-over zones within Midvaal. Protecting agricultural land while supporting agri-processing activities has relevance for the corridor where such uses are appropriately located and accessed. The R59 provides regional connectivity that may support the movement of agricultural goods, but care is required to prevent fragmentation of agricultural land and inappropriate non-agricultural development along the corridor.
5: Stimulate tourism	Protect tourism resources, heritage assets, and unique precincts by stimulating relevant tourism-related activities and appropriate developments in the ridges, in unique precincts, around Bass Lake, in Suikerbosrand Nature Reserve, and along the Vaal Dam.	The R59 provides regional access to tourism destinations, rural landscapes, and heritage assets within and beyond Midvaal. While the corridor may support tourism-related movement and visibility, tourism development along the R59 should remain location-specific and context-sensitive, with limited direct impact

Development drivers	Spatial proposal	R59 Impacts/Implications
		on the overall spatial structuring of the corridor.
6: Foster walkable nodes and transit orientated development (TODs)	Promote transit-oriented development (TODs) and the creation of compact, walkable, pedestrian-oriented, mixed-use communities centred around all public transit facilities (train stations, taxi ranks, rapid bus systems). Facilitate the development of walkable urban nodes, rather than suburban shopping centres for reduced dependence on a car for mobility and survival.	The applicability of transit-oriented development principles along the R59 is limited due to its function as a regional movement route rather than a high-frequency public transport corridor. TOD principles may be relevant at specific nodes or intersections where public transport facilities and higher-intensity mixed-use development are appropriate but are not broadly applicable along the full length of the R59.
7: Ensure connectivity by means of a considered movement network	Capitalise on existing regional links to promote development and utilise the internal movement network to support public transport networks and services. For enhanced continuity, prioritise strategic roads identified in the SDF and consider alignment of proposed roads carefully to prevent further fragmentation of precincts, and unnecessary sterilisation of potential land for development.	This driver is directly relevant to the R59 Corridor, which functions as a key regional movement route within Midvaal. The R59 supports north–south connectivity and links to the broader regional road network. Corridor planning should therefore reinforce its strategic role while managing access points and avoiding ad hoc road connections that could compromise mobility, fragment precincts, or sterilise land along the corridor.
8: Support quality human settlement development	Promote integrated human settlements through varying housing typologies, income models and densification, and prioritise the expansion of the gap market. Plan and implement for the integration of social facilities and commercial activities as integral part of any housing development.	The relevance of this driver to the R59 Corridor is indirect and location specific. While the R59 provides regional accessibility, large sections of the corridor traverse rural and agricultural areas where intensive human settlement development may not be appropriate. Human settlement initiatives should therefore be focused on existing nodes and urban areas with appropriate access and services, rather than encouraging linear or dispersed residential development along the corridor.
9: Prioritise environmental management	Protect and manage the natural environment by administering the UDB to ensure an equilibrium between agriculture, tourism, industrial, and urbanisation activities.	Environmental management is highly relevant to the R59 Corridor, particularly where the route interfaces with agricultural land, sensitive ecological areas, and rural landscapes. Corridor development must be carefully managed to balance movement and economic functions with environmental protection.
10: Streamline targeted engineering infrastructure investment	Prioritise short to medium term upgrading of engineering services in priority strategic development areas (SDAs) and ensure that engineering services are available before township establishment processes are finalised.	This driver has indirect relevance to the R59 Corridor. Infrastructure investment decisions within strategic development areas may influence the scale and location of development along or near the corridor. However, the availability of engineering services should not be interpreted as justification for linear development along the R59, and infrastructure provision should remain

Development drivers	Spatial proposal	R59 Impacts/Implications
		aligned with identified nodes and priority areas rather than the corridor as a whole.
11: Implement local area plans (precinct plans)	Undertake precinct plans to give effect to the intentions of the broader strategic direction in the SDF and make proposals on a detailed level. Proposals should not only be focused on land use and transport but should also provide practical spatial proposals and urban design guidelines to ensure appropriate spatial form in support of design principles, such as walkability.	This driver is directly applicable to the R59 Corridor. Precinct planning provides an appropriate mechanism to guide development at key nodes, intersections, and activity areas along the corridor, ensuring that land use, movement, and urban design proposals respond to local context. Precinct plans can assist in managing development pressure along the R59 and translating high-level corridor objectives into detailed, site-specific guidance.

2.4.2 Midvaal LED Strategy, 2022

The Midvaal LM Local Economic Development (LED) Strategy was compiled in 2022 and is based on the competitive and comparative advantage of the local municipality, as well as the strengths and opportunities identified within the different economic sectors.

In an effort to capitalise on the unique advantages of the area, as well as to intensify the local community benefit and enhance the competitiveness of the municipality, the strengths and opportunities were grouped into *Strategic Thrusts*. Thrusts are defined as "planned actions aimed at creating impetus and critical mass in the local economic environment in order to generate momentum in the economy".

Table 2 outlines these Thrusts, their associated Development Programmes as well as their Impact/Implications for the review of the R59 Corridor Development Plan.

Midvaal LED Thrusts and Implications (***Table 3***).

Table 3: Midvaal LED Thrusts and Implications

LED Thrusts	LED Programmes	Implications/Impacts for the R59 Corridor Development Plan
1: Agriculture Development, Support & Value-adding	Sustainable and diversified agricultural development Emerging farmer support and skills development Agro-processing and niche produce development Market development and creating an enabling environment	The R59 functions as a key regional mobility and freight route linking agricultural production areas with processing facilities and consumer markets. Its role is to support the efficient movement of agricultural inputs, products and labour, while facilitating access to agro-processing, logistics and distribution activities at appropriate rural nodes. The corridor should support agricultural value chains, market access and investment in productive rural land without compromising the agricultural resource base.

2: Tourism & Green-economy Development & Promotion	Tourism industry growth and development Tourism marketing, promotion and awareness Green-economy and eco-tourism development and promotion	The R59 supports tourism and green-economy initiatives primarily as a regional access and connectivity route. The corridor can improve access to tourism attractions, eco-tourism destinations, conservation areas and recreational facilities while supporting associated hospitality and service industries. Its role is to facilitate visitor movement and enhance destination accessibility rather than to serve as a tourism destination in itself. Development associated with the corridor should protect environmental assets and reinforce the rural landscape character that underpins tourism potential.
3: Business Development, Support & Promotion	Business support and capacitation, and Entrepreneurial Development SMME development and Integration of the informal economy Promotion of Industrial, Trade and Construction activities Marketing and Information Technology Platforms	The R59 provides strategic regional accessibility that can support business development, SMME growth and industrial investment at identified nodes and development areas. Its mobility function facilitates access to markets, labour, services and suppliers, while supporting commercial and logistics activities that rely on efficient transport connections. Corridor-related development should be focused within established business nodes and service centres rather than in a dispersed linear pattern, thereby maintaining transport efficiency and reinforcing investment opportunities at strategic locations.
4: Township & Informal Economy Revitalisation	Provision of an Adequate Regulatory and Policy Environment Economic Infrastructure Business Skills Development and Entrepreneurship Provision of market support and business linkages through partnerships and collaboration	The R59 can support township and informal economy development at strategic nodes and settlements located along or connected to the corridor. Its role is not to accommodate linear informal trading activities along the route, but rather to improve accessibility to township enterprise zones, local business nodes and rural service centres where enterprise development, skills support, informal trade formalisation and SMME growth can be promoted. The corridor should facilitate access to markets, employment opportunities and supporting infrastructure, while encouraging the development of well-planned economic nodes linked to surrounding communities and transport networks
5: Business Retention and Investment Attraction	Existing Business Retention and Expansion New Business and Investment Attraction	The R59 supports business retention and investment attraction by providing reliable regional connectivity between economic nodes, markets and investment destinations. Its value lies in maintaining efficient access, improving freight mobility and enhancing investor confidence through predictable movement patterns and accessibility. Development opportunities should be directed towards strategically located nodes and investment areas linked to the corridor, while ensuring that the route continues to perform its primary mobility and freight movement function.

2.4.3 R59 Corridor Development Framework, 2011

2.4.3.1 Overview

The R59 Corridor Strategic Development Plan (2011) establishes a clear spatial development framework aimed at structuring and guiding development along the corridor through a defined nodal hierarchy, differentiated land use clusters, and a phased implementation approach. Rather than promoting uniform development along the entire corridor, the plan directs investment and growth to specific nodes and sub-areas, supported by mobility infrastructure and environmental protection measures. This section reviews the key proposals of the existing plan, with specific reference to the identified nodes, their intended functions, the spatial distribution of development proposals, and areas subject to development constraints or limited development potential.

2.4.3.2 Identified Nodes and their Intended Functions

The plan identifies three primary development nodes along the R59 Corridor, intended to serve as focal points for investment, land use intensification and infrastructure provision as shown in ***Table 4***.

Investment, incentives and infrastructure upgrades are to be prioritised within these nodes, with development expected to expand incrementally outward from them over time.

Table 4: R59 Corridor Nodes and their Functions

Node	Proposed Uses
Nampak/ Everite/ Klipriver (northern node)	This node is identified as a gateway into the corridor and is earmarked for light industrial, warehousing, office and commercial uses. Strong emphasis is placed on urban design quality and aesthetic control to reinforce its gateway function. Heavy and noxious industries are explicitly excluded from this node. The Klipriver Industrial Park is identified as a flagship catalytic project intended to establish the development character of the corridor from the north.
Daleside/ Witkop and Henley-on-Klip (central node)	This central node is proposed as a mixed economic and residential area, accommodating manufacturing, industrial and service industries supporting agriculture, with associated residential and hospitality uses around Henley-on-Klip. The node plays a transitional role between the northern and southern nodes and supports a range of development typologies, including transit-oriented residential development around railway stations.
Meyerton and Surrounds (Southern Node)	Identified as the primary node along the corridor, Meyerton is intended to accommodate a broad mix of land uses, including heavy and large-scale industrial development, commercial and retail activities, business uses, and urban residential development. The plan places strong emphasis on CBD revitalisation, industrial consolidation, and residential densification in proximity to public transport infrastructure.

2.4.3.3 Spatial Development Proposals and Key Interventions

The R59 freeway is identified as the primary mobility spine, supported by parallel activity streets (K89 to the east and a proposed future route to the west). Development is to be structured around access interchanges and railway stations, with a strong emphasis on Transit Oriented Development (TOD), including higher-density residential and mixed-use development within walking distance of stations.

Inter-modal facilities and improved east-west connectivity across the freeway are key components of the framework.

2.4.3.4 Sub-Area Development Proposals

Northern Corridor (Klip River / Nampak Area):

- Short-term development is supported on both sides of the freeway where bulk services are available.
- Development is limited to light industrial and commercial uses, with agricultural land north of the node retained to protect aquifers and prime agricultural land.
- Environmentally sensitive open space areas in the south-eastern portion of this sub-area are identified for protection.

Daleside / Witkop Area:

- Land between the R59 and the Klip River is earmarked primarily for industrial and commercial uses, with buffers required along the river.
- Specific areas adjacent to railway stations are proposed for future residential TOD development.
- Portions of undeveloped industrial land are identified for potential deproclamation and conversion to residential use if industrial development does not materialise within a defined timeframe.

Henley-on-Klip and Surrounds:

- Henley-on-Klip is earmarked for urban residential development while retaining its rural character.
- Infill and densification are encouraged, subject to infrastructure capacity constraints.
- Hospitality and tourism-related uses are supported, particularly around Bass Lake and Glen Douglas.
- Agricultural land between Henley-on-Klip and Meyerton is reserved to prevent premature urban sprawl and to maintain separation between settlements.

Meyerton Area:

- Significant residential infill and densification are proposed west of the freeway, including areas currently impacted by informal settlements.
- Mixed-use development between the R59 and Meyer Street is promoted to support public transport usage.
- The Meyerton CBD is earmarked for revitalisation, while industrial areas south of the CBD are targeted for consolidation and infill development.

Southern Industrial Area:

- Heavy and noxious industries are confined to the Samancor, Meydustria and Noldick areas to protect the remainder of the corridor.
- Residential densification is promoted in Kookrus and Riversdale, subject to infrastructure availability, with rural residential and agricultural uses retained along the Klip River.

2.4.3.5 Development Constraints and Areas Unsuitable for Intensive Development

Environmental Constraints:

- The Klip River is designated as the primary open space system and must be protected from industrial pollution.
- Agricultural and residential uses are preferred along the river to safeguard water quality and ecological function.

Geotechnical Constraints:

- Large portions of the Daleside area are underlain by dolomite, requiring detailed geotechnical investigations and imposing limitations on density, coverage and service levels.

Agricultural Protection:

- Several areas, particularly north of the corridor and between Henley-on-Klip and Meyerton, are reserved for agricultural use to protect prime land, aquifers and to manage the spatial expansion of urban development.

Infrastructure and Phasing Constraints:

- Development west of the R59 is generally deferred to the medium and long term, pending sufficient development east of the freeway and the availability of bulk infrastructure.
- Certain road upgrades and crossings are identified as prerequisites for unlocking development potential.

2.4.3.6 East–West Development Logic of the Plan

The Plan does not prescribe a rigid spatial rule whereby development is permitted only east of the R59 freeway while land west of the freeway is excluded from development. Instead, the plan establishes a phased and prioritised development framework in which development on both sides of the freeway is envisaged over time, subject to sequencing, infrastructure availability and spatial structuring principles. Development west of the freeway is therefore not prohibited but is generally deferred to the medium and longer term to allow for incremental infrastructure expansion and to prevent premature and fragmented development.

Instances where the plan does make provision for development west of the R59, particularly around access interchanges and established nodes, include:

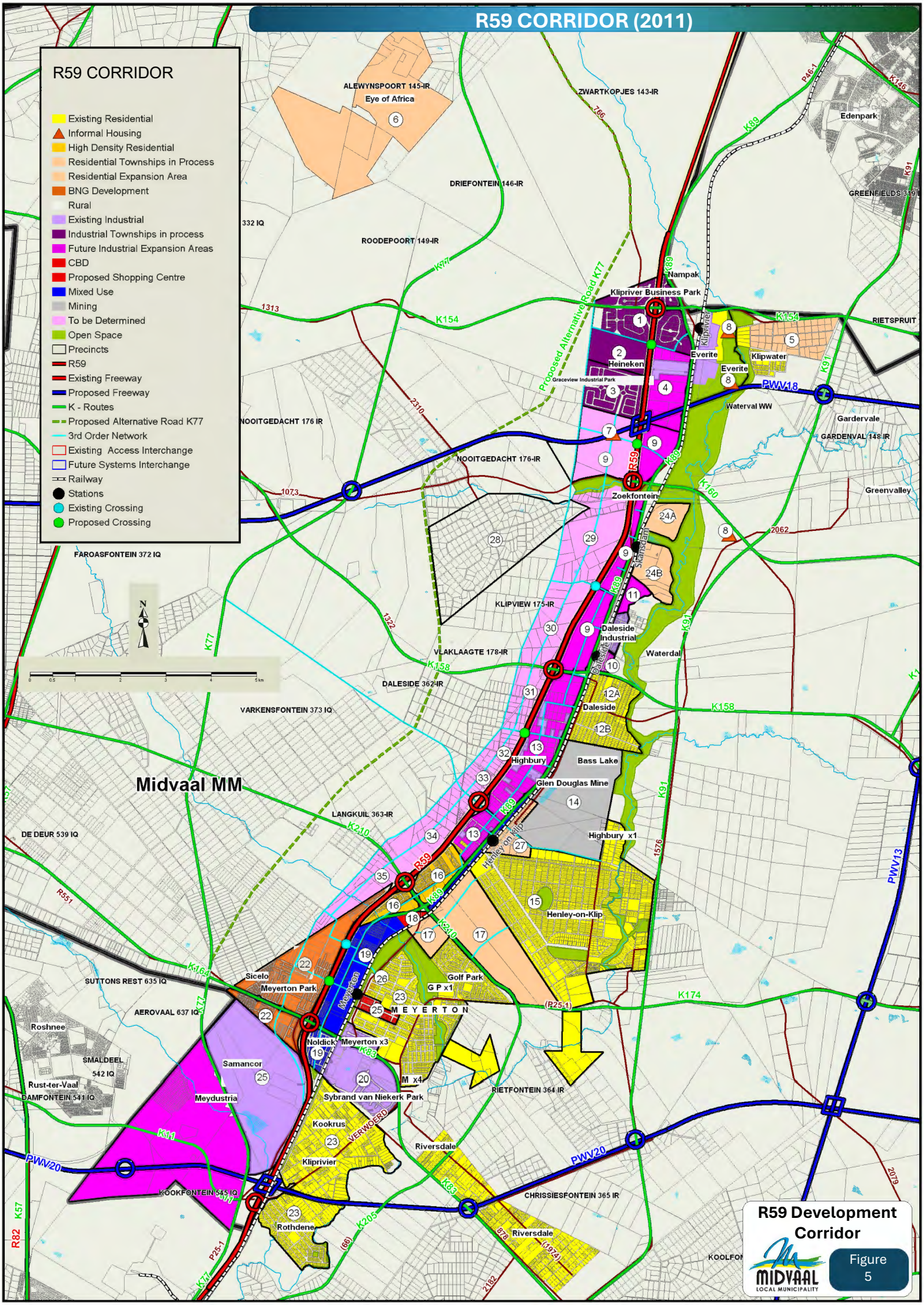
- K154 / R59 Interchange (Northern Corridor – Klip River / Nampak Node): The plan supports short-term development both east and west of the freeway in the Klip River / Nampak area. This is linked to the availability of existing and planned bulk services and the establishment of the Klip River Industrial Park as a flagship project.
- Interchanges within the Central Corridor: In this central section, the plan states that all areas adjacent to access interchanges may be considered for development, even in the short term. This applies specifically to:
  - land parcels west of the R59 adjacent to the existing interchanges north and south of Daleside, and
  - areas where access can be provided without prematurely opening up the broader western corridor.
- K158 / R59 Interchange and adjacent Interchanges (Henley-on-Klip / Central Node): West of the R59 between K158 and K210, individual development applications may be considered in the short term if they are located around the three access interchanges identified in this sub-area. The remainder of the western strip is explicitly deferred to the medium and long term, reinforcing that interchange proximity and engineering services availability are the determining factor for early development.
- Meyer Street (K210) Interchange/ Meyerton Node: West of the R59 in the Meyerton area, development is not only permitted but actively encouraged in the short to medium term. This includes residential infill and densification west of the freeway, supported by the Meyer Street interchange and additional proposed crossings to enhance east–west connectivity.

While development west of the R59 is supported in principle, the plan subjects such development to a number of explicit conditions and qualifiers, including the following:

- **Phased Sequencing:** Development west of the R59 is generally deferred until development east of the freeway has reached an advanced stage, to ensure efficient use of bulk infrastructure and manage servicing costs.
- **Infrastructure Availability:** Development is conditional on the availability and capacity of bulk services.

- **Nodal and Interchange Focus:** Short-term development west of the freeway is primarily supported in proximity to designated nodes and access interchanges, where development is integrated into the corridor structure.
- **Environmental and Agricultural Protection:** Environmentally sensitive areas as well as prime agricultural land, are to be protected, with agricultural, rural residential or low intensity uses preferred in these areas.
- **Geotechnical Constraints:** Development in dolomitic areas is subject to detailed geotechnical investigations.
- **Road Network Implementation:** Development west of the R59 is dependent on the implementation of the planned secondary and tertiary road network, including parallel activity streets and east–west crossings.

Figure 5 depicts the Corridor Development Plan (2011). Areas indicated as "*to be determined*" highlight locations where the 2011 plan did not prescribe a definitive development outcome, and the current revision of the R59 Corridor Plan seeks to provide greater clarity and spatial direction for these areas.


R59 CORRIDOR (2011)
R59 CORRIDOR
Existing Residential
Informal Housing
High Density Residential
Residential Townships in Process
Residential Expansion Area
BNG Development
Rural
Existing Industrial
Industrial Townships in process
Future Industrial Expansion Areas
CBD
Proposed Shopping Centre
Mixed Use
Mining
To be Determined
Open Space
Precincts
R59
Existing Freeway
Proposed Freeway
K - Routes
Proposed Alternative Road K77
3rd Order Network
Existing Access Interchange
Future Systems Interchange
Railway
Stations
Existing Crossing
Proposed Crossing
ALEWYNSPOORT 145-IR
Eye of Africa
ZWARTKOPJES 143-IR
DRIEFONTEIN 146-IR
ROODEPOORT 149-IR
NOOITGEDACHT 176 IR
NOOITGEDACHT 176-IR
KLIPVIEW 175-IR
VLAKLAAGTE 178-IR
DALESIDE 362-IR
VARKENSFONTEIN 373 IQ
FARROASFONTEIN 372 IQ
DE DEUR 539 IQ
SUTTONS REST 635 IQ
AEROVAAL 637 IQ
SMALDEEL 542 IQ
DAMFONTEIN 541 IQ
KOOKFONTEIN 545 IQ
LANGKUIL 363-IR
RIETFONTEIN 364 IR
CHRISSIESFONTEIN 365 IR
Midvaal MM
Edenpark
GREENFIELDS 349 I
RIETSPRUIT
Nampak
Klipriver Business Park
Proposed Alternative Road K77
Graceview Industrial Park
Heineken
Everite
Everite
Klipwater
Waterval WW
Gardervale
GARDENVAL 148 IR
Greenvalley
Zoekfontein
Skansdam
Daleside Industrial
Waterdal
Daleside
Highbury
Bass Lake
Glen Douglas Mine
Highbury x1
Henley-on-Klip
Henley-on-Klip
Sicelo
Meyerton Park
Golf Park
G P x1
M E Y E R T O N
Meyerton
Noldick
Meyerton x3
M x4
Samancor
Meydustria
Sybrand van Niekerk Park
Kookrus
VERWOERD
Kliprivier
Riversdale
Riversdale
Rothdene
Roshnee
Rust-ter-Vaal
Henley-on-Klip
Daleside
Klipriver
R59 Development Corridor
MIDVAAL LOCAL MUNICIPALITY
Figure 5

2.4.4 Midvaal Nodal Policy Review, 2021

The Midvaal Nodal Policy Review was undertaken to reassess and update the municipality's nodal structure in response to changing development trends, new precinct plans, and the adoption of updated spatial and land use planning instruments. The review confirms that development within Midvaal LM is highly concentrated along the R59 and R82 corridors, with these routes functioning as the primary structuring elements of the municipal spatial framework.

The R59, in particular, is identified as a key north–south development corridor linking the Johannesburg metropolitan area to the Vaal Triangle industrial complex, and plays a central role in shaping settlement patterns, economic activity, and infrastructure investment.

The policy highlights that Midvaal functions as a hinterland between major urban and industrial centres to the north and south. As a result, the municipality's settlement pattern is fragmented and dispersed, which is inefficient and costly to service.

The nodal approach is therefore used as a spatial targeting mechanism to:

consolidate development,
focus public and private investment,
protect high-potential agricultural land, and
improve long-term sustainability.
The policy explicitly states that future development should be consolidated around identified nodes, rather than dispersed along the corridor.

In terms of settlement hierarchy, the policy identifies Meyerton and its surrounding settlements as the Primary Urban Node, with the entire node centred on the R59. This node includes Meyerton CBD, Sicelo, Golf Park, Rothdene, Kookrus and Riversdale, and contains the highest concentration of residential, commercial, industrial and community facilities in the municipality. The R59 provides the primary mobility spine supporting this concentration of activity and functions as the main linkage between these settlements.

A series of Secondary Urban Nodes are located along the R59, described in the policy as forming a "beads on a string" pattern along the corridor. These include:

- Waterval / Klip River Node at the northern end of the corridor;
- Daleside Node along the central section of the R59;
- Henley-on-Klip Node further south along the corridor; and
- Risiville Node at the southern end, which functionally links into the broader Drie Riviere settlement cluster in Emfuleni Local Municipality.

These secondary nodes are intended to function as service centres for surrounding residential and rural areas, with land uses focused on neighbourhood-scale retail, community facilities, medium-density residential development, and local employment opportunities. The policy emphasises that these nodes should be strengthened and structured to avoid linear, ad hoc development along the R59.

The nodal policy further introduces a Business Node Hierarchy, distinguishing between Central Business Districts and Neighbourhood Nodes. Within the R59 Corridor, Meyerton CBD is identified as the only Central Business District, while the other nodes along the corridor function as neighbourhood-scale business nodes. These business nodes are intended to promote mixed-use development, pedestrian-friendly environments, and integration with public transport routes aligned to the R59.

Transit-oriented development and walkability are recurring themes throughout the policy, particularly in relation to nodes located along major transport routes such as the R59. The policy identifies the need to locate higher-density residential and mixed-use development within walking distance of public transport facilities, taxi routes and rail infrastructure, and to improve pedestrian connections within and between nodes.

In conclusion, the Midvaal Nodal Policy Review confirms the R59 Corridor as the municipality's most important spatial structuring element, with a clearly defined hierarchy of nodes aligned along it. The policy provides a detailed spatial framework for consolidating development at specific nodal locations rather than allowing uncontrolled ribbon development along the corridor. These findings provide a strong spatial foundation for the review of the R59 Corridor Strategic Development Plan, while also highlighting the need to reassess nodal roles, boundaries, and development intensity in light of more recent development pressures and infrastructure constraints.

2.4.5 Precinct Plans

2.4.5.1 Waterval

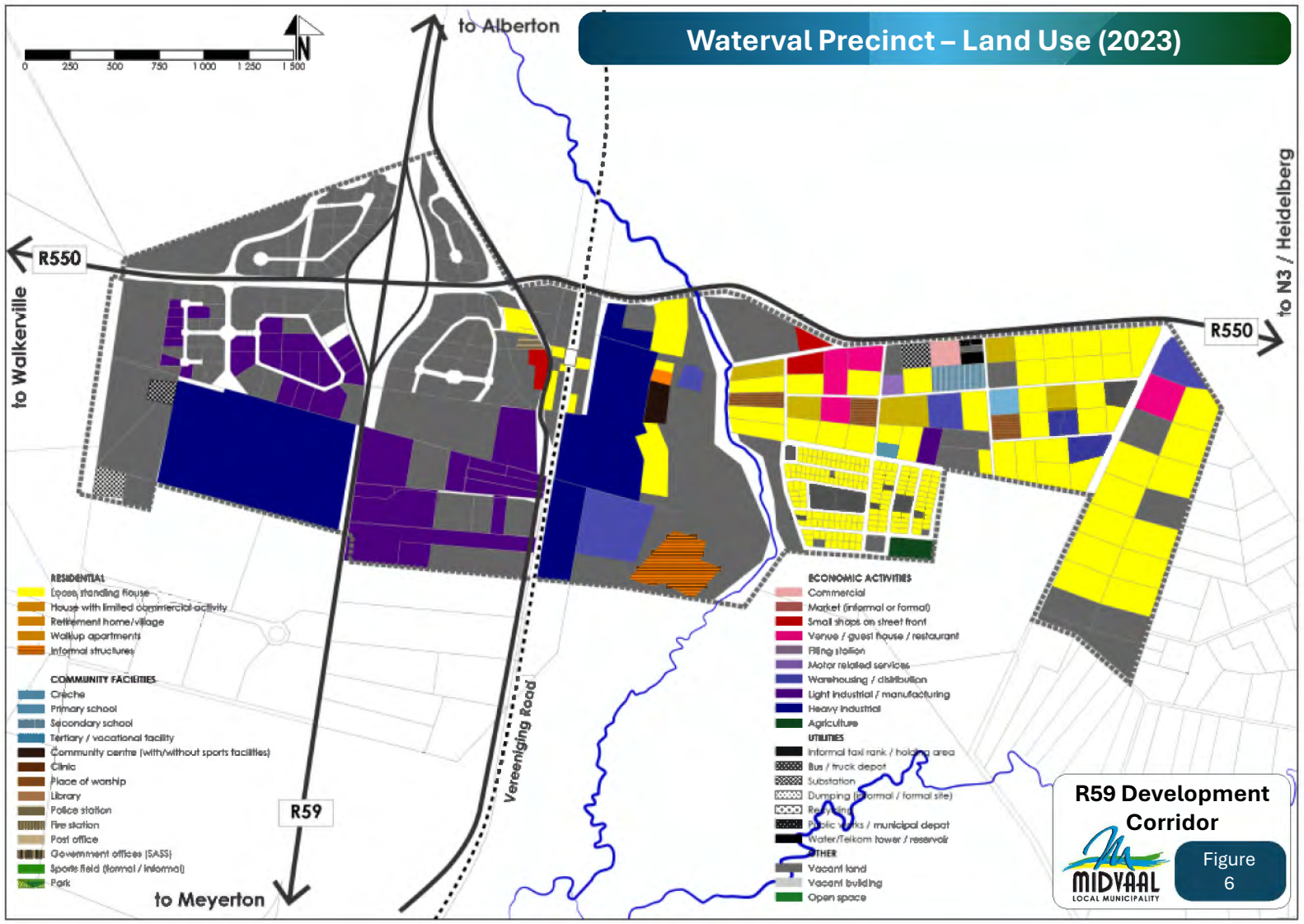
The Waterval Land Use Plan and Precinct Plan is shown in ***Figures 6*** *and* ***7*** respectively and discussed below.

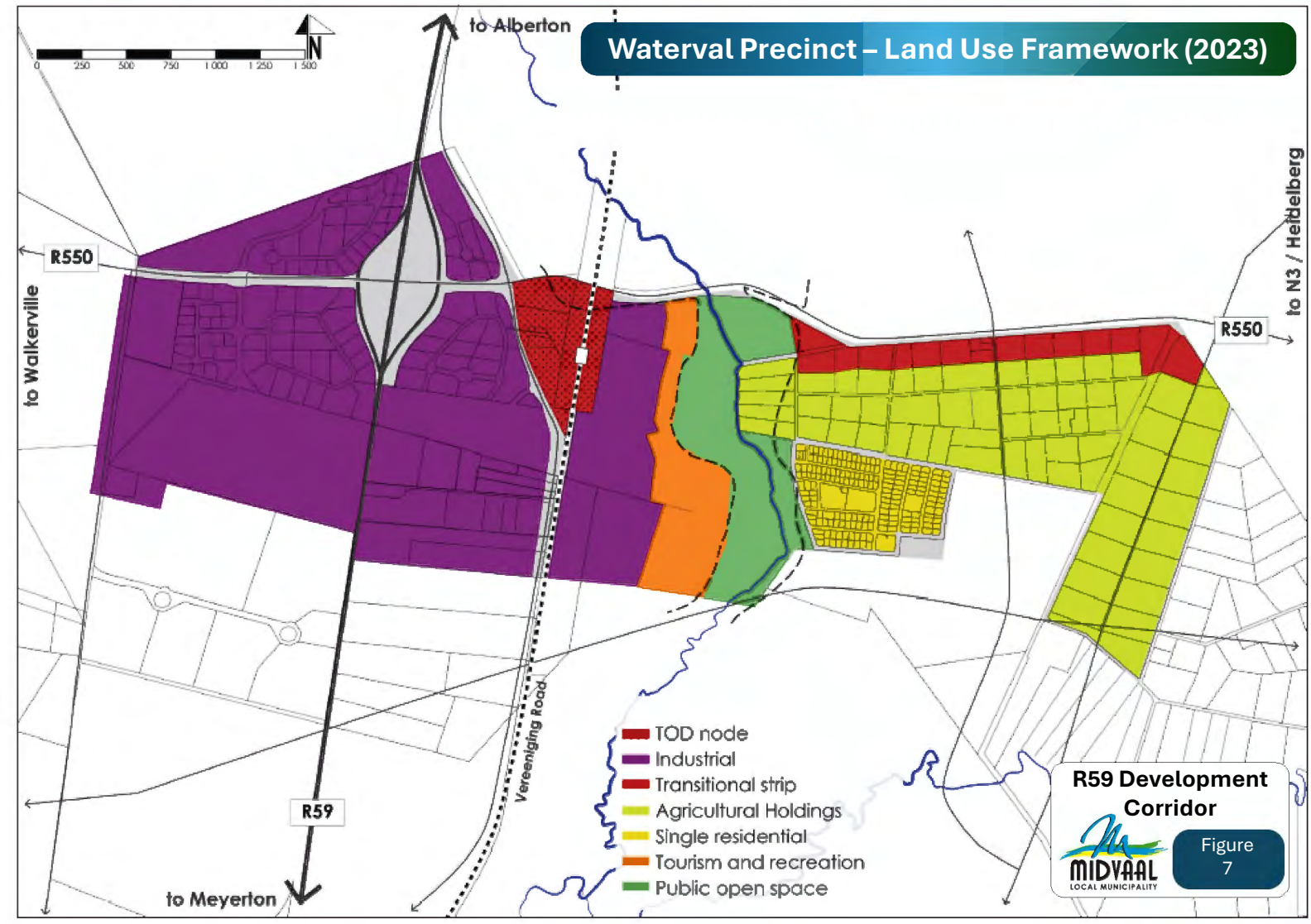
The precinct occupies a strategic gateway position along the R59, forming part of the broader north–south corridor linking Gauteng's metropolitan areas with the Vaal Triangle. The precinct includes industrial areas west of the R59, agricultural holdings and smallholdings to the east, and surrounding residential and informal settlement areas.

The plan confirms the R59 as the primary structuring element of the precinct, shaping land use patterns and access. Industrial and employment-generating uses are concentrated west of the R59, anchored by major manufacturing facilities such as the Heineken Sedibeng Brewery and the Everite plant, while the eastern side of the corridor retains a more rural and agricultural character. The R59, rail line and Klip River collectively act as significant barriers, resulting in limited east–west connectivity within the precinct.

Waterval is identified as a secondary node along the R59 Corridor, functioning primarily as a local service and employment node. The plan reinforces earlier corridor planning principles, including the "beads-on-a-string" concept, and positions Waterval as a gateway node at the northern end of the Midvaal portion of the corridor. Development proposals seek to reinforce industrial uses along the R59 while protecting agricultural land and environmentally sensitive areas, particularly along the Klip River and within conservancy areas.

Movement analysis highlights the R59/R550 interchange as the main access point to the precinct, with increasing congestion linked to surrounding development pressures. Public transport is present but limited, with private vehicles remaining the dominant mode of travel. Pedestrian movement is constrained by inadequate infrastructure, particularly along and across major roads.


Waterval Precinct – Land Use (2023)
to Alberton
to Walkerville
to N3 / Heidelberg
R550
R550
R59
Vereeniging Road
to Meyerton
RESIDENTIAL
Loose standing House
House with limited commercial activity
Retirement home/village
Walkup apartments
Informal structures
COMMUNITY FACILITIES
Creche
Primary school
Secondary school
Tertiary / vocational facility
Community centre (with/without sports facilities)
Clinic
Place of worship
Library
Police station
Fire station
Post office
Government offices (SASS)
Sports field (formal / informal)
Park
ECONOMIC ACTIVITIES
Commercial
Market (informal or formal)
Small shops on street front
Venue / guest house / restaurant
Filling station
Motor related services
Warehousing / distribution
Light industrial / manufacturing
Heavy industrial
Agriculture
UTILITIES
Informal taxi rank / holding area
Bus / truck depot
Substation
Dumping (informal / formal site)
Public works / municipal depot
Water/Telkom tower / reservoir
OTHER
Vacant land
Vacant building
Open space
R59 Development Corridor
MIDVAAL LOCAL MUNICIPALITY
Figure 6


Waterval Precinct – Land Use Framework (2023)
to Alberton
to Walkerville
to N3 / Heidelberg
R550
R550
R59
Vereeniging Road
to Meyerton
TOD node
Industrial
Transitional strip
Agricultural Holdings
Single residential
Tourism and recreation
Public open space
R59 Development Corridor
MIDVAAL LOCAL MUNICIPALITY
Figure 7

Public engagement highlighted strong concern about uncontrolled development pressure along the R59 and R550, particularly the loss of agricultural land and the spread of incompatible land uses. Participants raised objections to illegal land uses on agricultural properties, including informal industrial and commercial activities, and expressed frustration with weak enforcement of zoning controls.

Traffic congestion, heavy vehicle movement and road safety, especially at the R59/R550 interchange, were identified as major concerns.

Environmental issues raised included pollution of the Klip River, flood risks, and the need to protect biodiversity and conservancy areas. Safety concerns related to pedestrian movement along major roads were also repeatedly highlighted.

2.4.5.2 Henley-on-Klip

The Henley-on-Klip Land Use Plan and Precinct Plan are shown in ***Figures 8*** *and* ***9*** respectively and discussed below.

The precinct includes the residential settlement, the R59/Henley Drive interchange, the railway station, and surrounding agricultural land. The inclusion of the interchange reflects the role of the R59 as a gateway to the settlement and a key influence on access and development pressure.

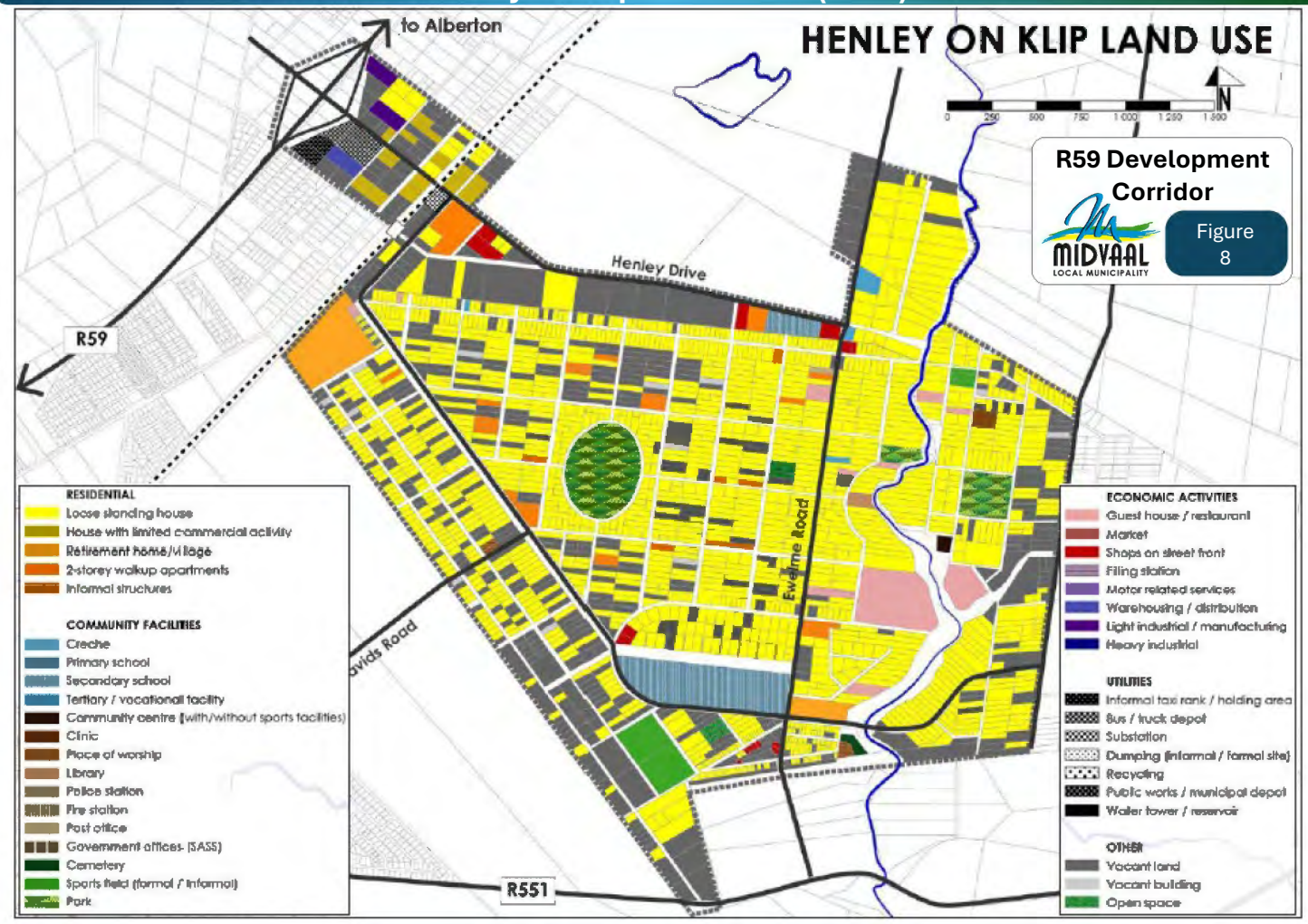
The plan confirms the R59 as the primary regional access route, while noting that the precinct remains outside the Urban Development Boundary and retains a strong rural village character. Henley-on-Klip is identified as a neighbourhood node within a secondary urban node along the broader R59 Corridor, with a development role focused on low-intensity residential, limited local services, and tourism-related activities. Development pressure associated with proximity to the R59 is to be carefully managed to protect heritage assets, environmental systems such as the Klip River, and the overall character of the settlement.

The precinct plan acknowledges earlier R59 corridor planning which identifies Henley-on-Klip as part of the central corridor area but emphasises that development must respond to local constraints including dolomitic conditions, flood risk, infrastructure limitations, and strong community preference for limited change. Traffic analysis identifies the R59/Henley Drive interchange as the primary access point, while noting negative impacts from heavy vehicles accessing the landfill site via residential streets, reinforcing the need to protect the R59's regional movement function.

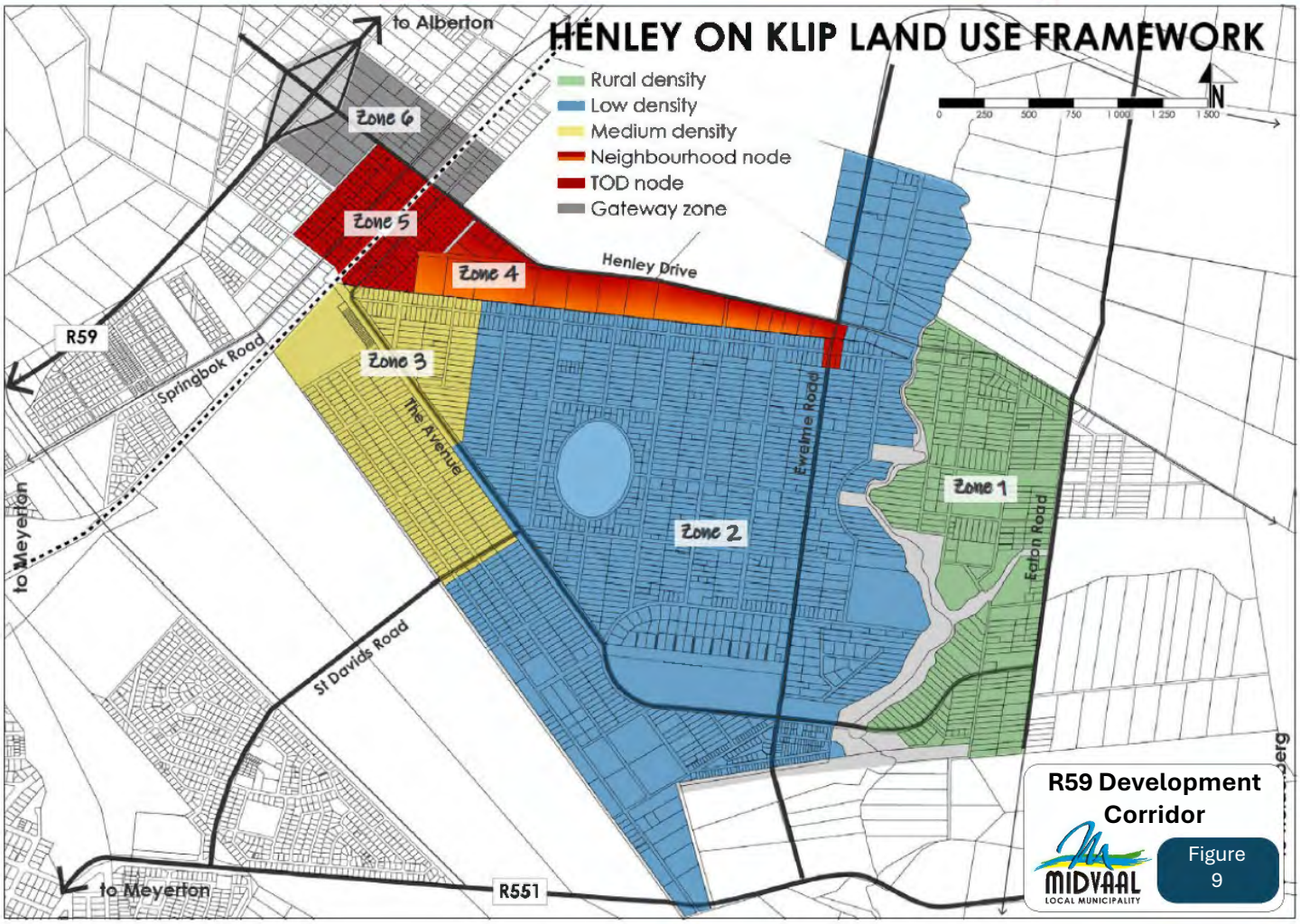
Overall, the plan positions Henley on Klip as a sensitive residential and tourism-oriented node along the R59, where development should be incremental and carefully guided.

Public engagement highlighted strong support for maintaining Henley-on-Klip's rural character, heritage, and quality of life, with many residents expressing a preference for limited change.

Henley on Klip – Land Use (2023)



Henley on Klip – Precinct Plan (2023)



2.4.5.3 Pendale and Valley Settlements

The Pendale Valley Land Use Plan and Precinct Plan is shown in ***Figures 10*** *and* ***11*** respectively and discussed below.

The study area extends from the R59 westwards and is bounded by the R557 (Randvaal Road) to the north and Valley Settlement to the south. The precinct occupies a strategically located section of the R59 development corridor, positioned between the Meyerton Primary Urban Node and the Henley-on-Klip Secondary Urban Node

The plan confirms the R59 as the primary north–south mobility spine structuring the area, with three strategic intersections providing access into the precinct, namely Randvaal Road (R557), Henley Drive and Meyer Street. Development pressure is strongest adjacent to the R59, where commercial and industrial land uses have incrementally established due to high visibility and accessibility. The precinct forms part of the Midvaal Industrial Strip, with non-agricultural uses predominantly located within the Urban Development Boundary along the R59 frontage

The precinct is influenced by multiple spatial structuring elements, including the Urban Development Boundary, proposed urban expansion areas west of the R59, and the identification of a proposed Class 3 road intended to unlock development potential and improve internal connectivity. The plan notes that significant portions of the area consist of agricultural holdings and farm portions, with restrictive title conditions limiting subdivision and non-agricultural land uses. As a result, development is to be carefully managed to balance agricultural protection with emerging economic activity along the corridor

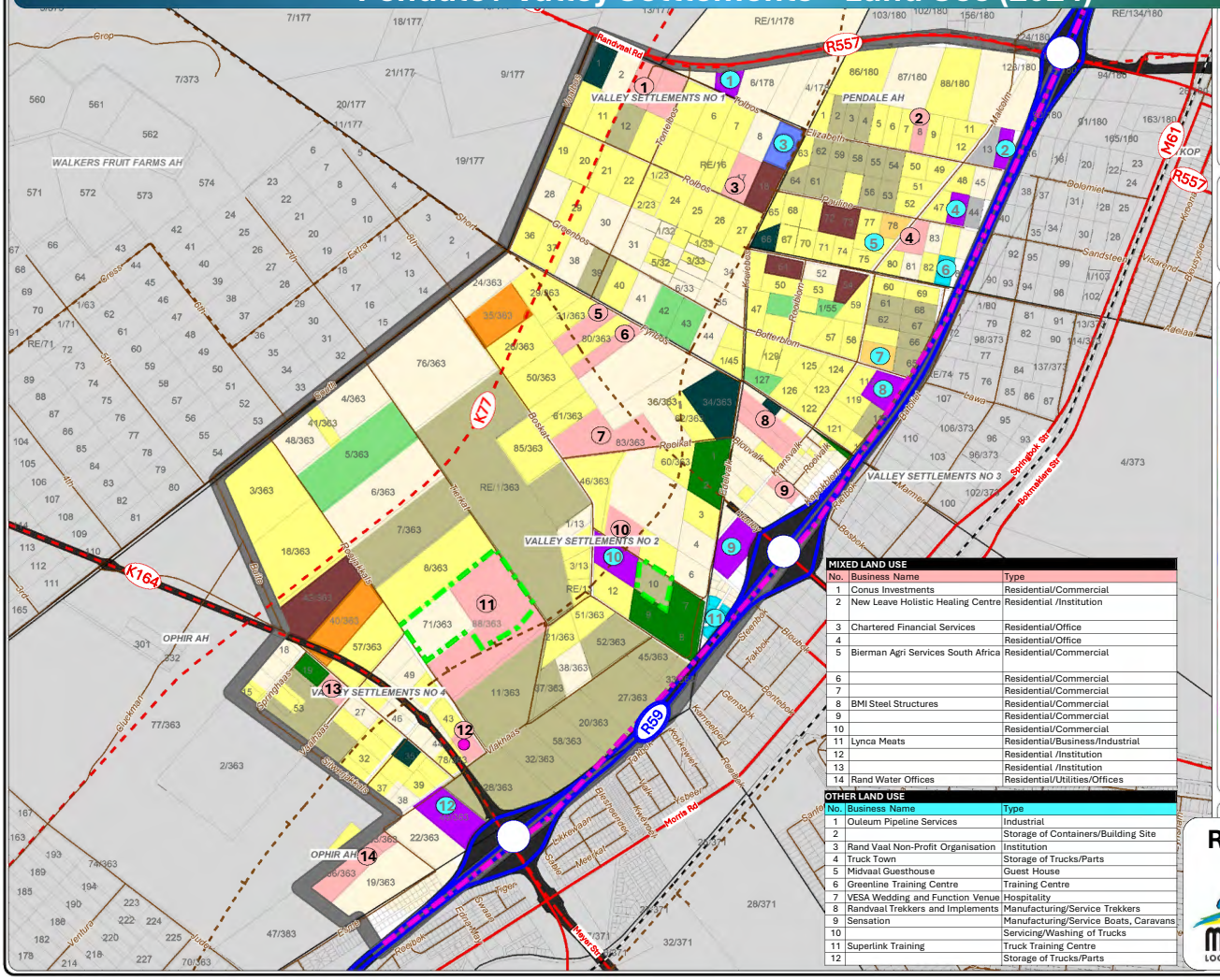
Land use analysis confirms that agriculture and agricultural industries remain dominant within the precinct, while commercial and industrial activities are clustered along the R59, particularly near the identified intersections. These uses include truck yards, equipment sales, workshops, and logistics-related activities. The plan identifies that development within the R59 corridor has increased incrementally between 2010 and 2022, with small to medium-sized properties near interchange areas almost fully developed, while larger properties remain vacant or underutilised

Overall, the precinct plan positions the Pendale and Valley Settlements area as a transition zone along the R59 corridor, where agricultural land, rural residential uses and corridor-related economic activities coexist.

Public engagement undertaken during the precinct planning process highlighted a wide range of views, reflecting the diverse character of the area and differing expectations for its future. Key concerns raised by the public included:

- Loss of agricultural land and pressure for non-agricultural land uses along the R59.
- Illegal or inappropriate land uses on agricultural holdings, including small-scale industrial and transport-related activities.
- Traffic impacts, heavy vehicle movement and road safety concerns, particularly near R59 intersections.
- Limited availability of municipal services, especially water, sanitation and stormwater infrastructure.
- Environmental concerns related to noise, pollution and compatibility between land uses.

Pendale / Valley Settlements – Land Use (2024)



MIXED LAND USE

No.	Business Name	Type
1	Conus Investments	Residential/Commercial
2	New Leave Holistic Healing Centre	Residential /Institution
3	Chartered Financial Services	Residential/Office
4		Residential/Office
5	Bierman Agri Services South Africa	Residential/Commercial
6		Residential/Commercial
7		Residential/Commercial
8	BMI Steel Structures	Residential/Commercial
9		Residential/Commercial
10		Residential/Commercial
11	Lynca Meats	Residential/Business/Industrial
12		Residential /Institution
13		Residential /Institution
14	Rand Water Offices	Residential/Utilities/Offices

OTHER LAND USE

No.	Business Name	Type
1	Ouleum Pipeline Services	Industrial
2		Storage of Containers/Building Site
3	Rand Vaal Non-Profit Organisation	Institution
4	Truck Town	Storage of Trucks/Parts
5	Midvaal Guesthouse	Guest House
6	Greenline Training Centre	Training Centre
7	VESA Wedding and Function Venue	Hospitality
8	Randvaal Trekkers and Implements	Manufacturing/Service Trekkers
9	Sensation	Manufacturing/Service Boats, Caravans
10		Servicing/Washing of Trucks
11	Superlink Training	Truck Training Centre
12		Storage of Trucks/Parts

MIDVAAL LOCAL MUNICIPALITY

PENDALE / VALLEY SETTLEMENTS

Land Use

- Precinct Boundary
- Agriculture
- Horticulture
- Mixed Use
- Commercial / Industrial
- Educational / Institutional
- Hospitality
- Residential
- Rural Living and Equine
- Temporary Residential / Rooms
- Sports and Recreation / Open Space
- Utilities
- Vacant
- Under Construction
- R59
- Intersections
- Main Roads
- Other Roads
- Proposed Class 2 Roads
- Proposed Class 3 Roads
- Road Reserve
- Railway
- Noise Source 1 (Kennels)
- Noise Source 2 (R59)
- Environmental Risk

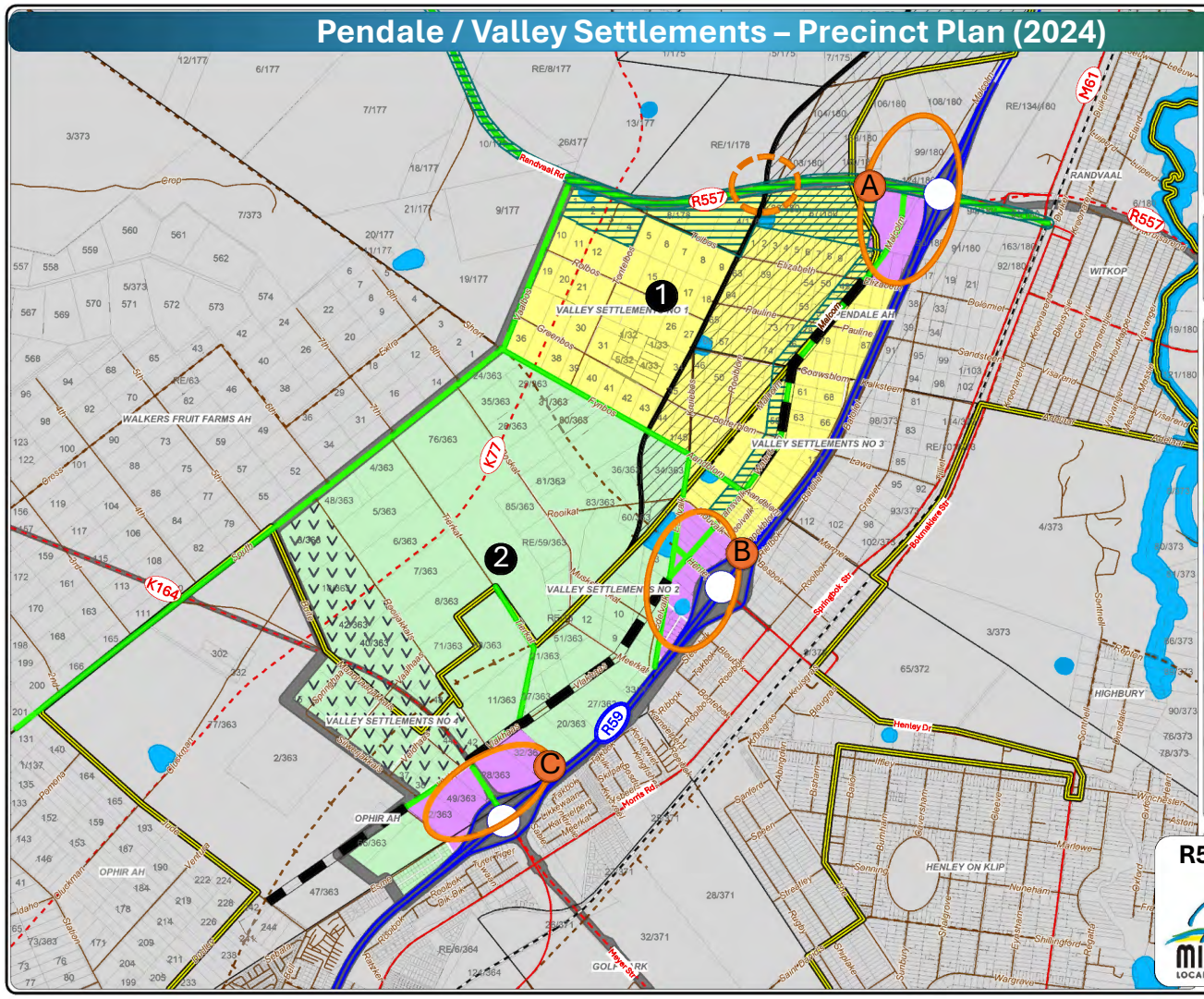
N

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 10

Pendale / Valley Settlements – Precinct Plan (2024)



MIDVAAL LOCAL MUNICIPALITY

PENDALE / VALLEY SETTLEMENTS

Precinct Plan

- Precinct Boundary
- Urban Development Boundary
- Proposed Urban Expansion
- Industrial / Commercial
- Rural Living and Tourism
- Agriculture and Open Space
- Intensive Agricultural Uses
- Tourism Corridor / Activities
- Activity Nodes
- Future Activity Node
- Activity Streets
- Proposed New Link
- Water-bodies and Rivers
- R59
- Intersections
- Main Roads
- Other Roads
- Proposed Class 2 Roads
- Proposed Class 3 Roads
- Road Reserve
- Railway

Precincts:

- Rural Living and Tourism
- Agriculture and Open Space

Activity Nodes:

- Randvaal Road (R557) Interchange
- Henley Drive Interchange
- Meyer Street Interchange

N

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 11

2.4.5.4 Meyerton CBD

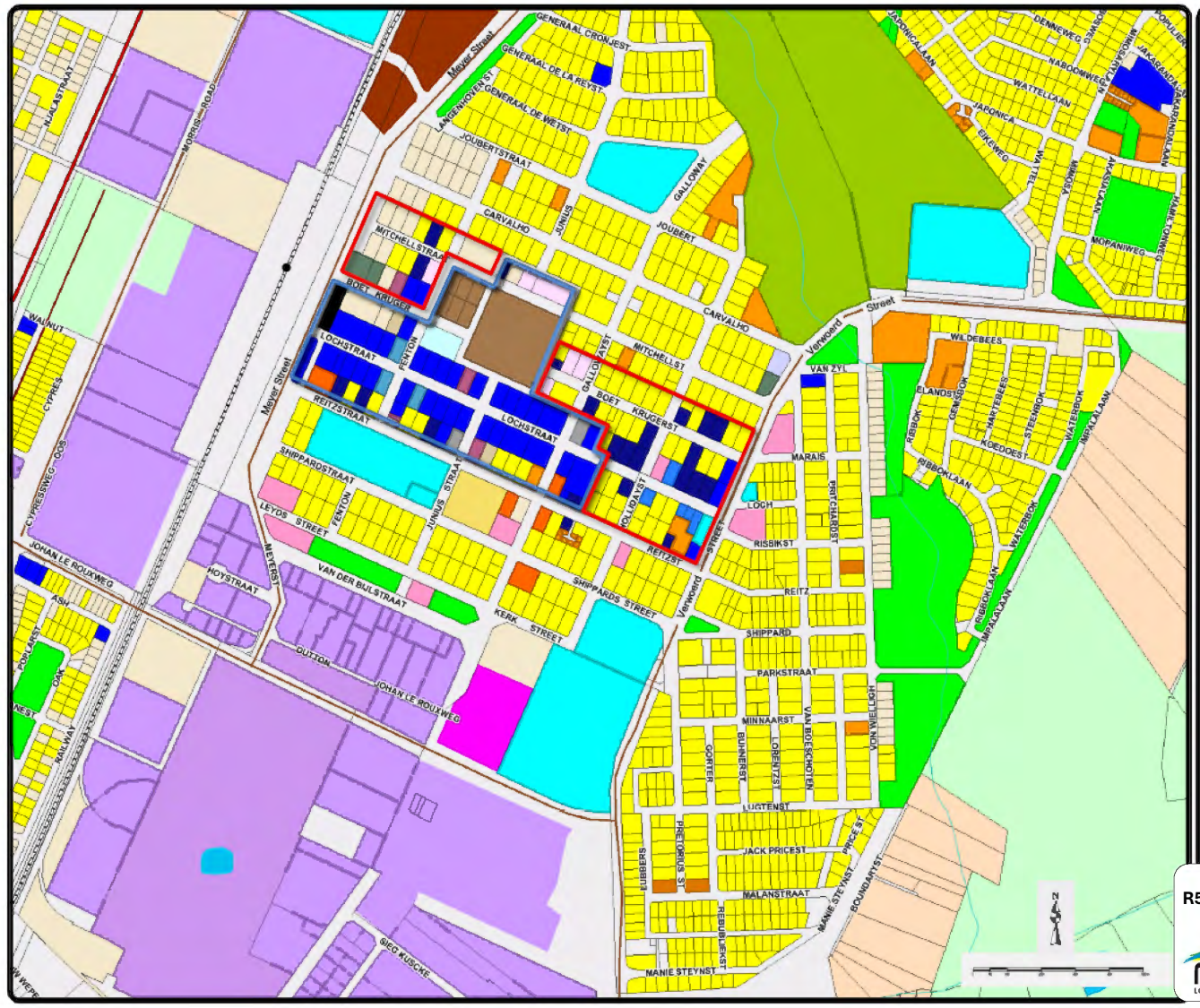
The Meyerton CBD Land Use Plan and Precinct Plan is shown in ***Figures 12*** *and* ***13*** respectively and discussed below.

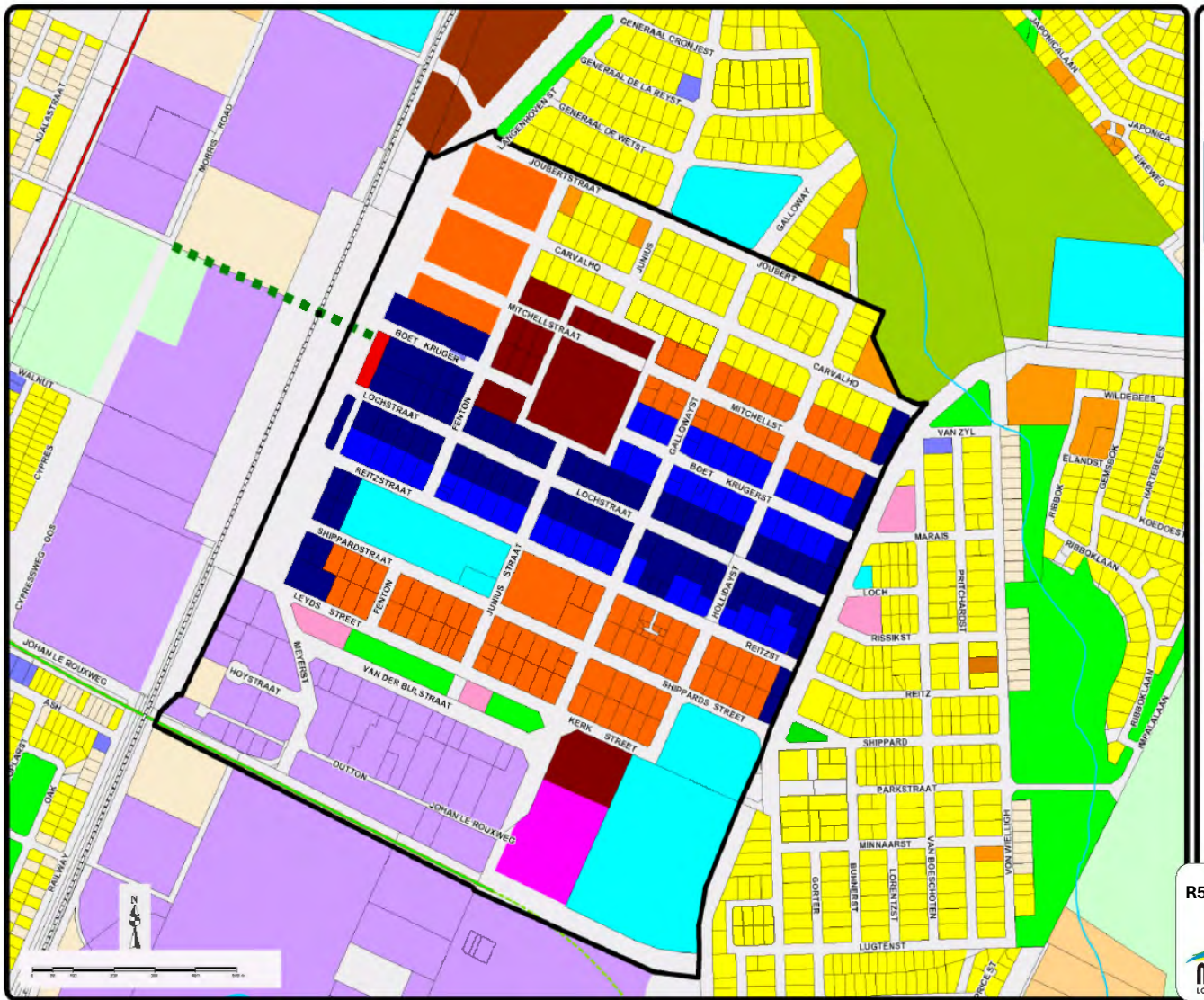
The Midvaal CBD Precinct Plan focuses on the Meyerton CBD as the primary Core Area of the municipality, located within the R59 Development Corridor, and aims to guide future land use, intensification and movement patterns while protecting surrounding residential areas. Prominent findings include:

- The Meyerton CBD is identified as the only Central Business District in Midvaal, serving the entire municipality.
- It forms part of the linear urban structure east of the R59 and railway line, with strong regional accessibility.
- The CBD is surrounded by established residential areas, industrial areas to the south, agricultural holdings to the west, and key community facilities including schools and an old age home.
- Existing development patterns include a clearly defined business core exists along Loch Street between Meyer Street and Galloway Street.
- Institutional uses form a strong civic precinct.
- Office uses have increasingly expanded eastwards along Loch and Kruger Streets, indicating pressure for additional office space.
- Public transport are concentrated at the western edge of the CBD.
- The CBD has very low vacancy rates and a higher-than-average proportion of overnight accommodation compared to other Gauteng CBDs.
- The CBD is one of the few areas in Midvaal where bulk engineering services are generally sufficient to support additional development.

Key development proposals of the plan include:

- Expansion of the CBD core eastwards along Loch Street up to Verwoerd Drive (R551) to complete the activity spine.
- Business rights proposed along Loch Street, Meyer Street and Verwoerd Drive to maximise economic potential along major routes.
- Introduction of mixed-use development with retail at ground floor and offices or residential uses above.
- Allowance for building heights up to four storeys within the CBD.
- Strengthening of support areas north and south of the CBD for office and higher-density residential development.
- Targeted residential densification around the CBD to improve viability and reinforce walkability.
- Retention and strengthening of the institutional precinct as the civic heart of Midvaal.
- Reinforcement of Loch Street as a pedestrian-oriented activity street.
- Improved linkage between the CBD and Sicelo across the R59 and railway line.


MIDVAAL LOCAL MUNICIPALITY
Meyerton CBD Land Use (2011)
Residentail
Medium Density Residential
Flats
Rural Residential
Old Age Home
Business
Mixed Use in House
Office in House
Banks
Educational
Medical
Religion
Filling Station
Hardware
Fire Station
Industrial
Telkom
Motor Industry
Parking
Taxi Rank
Municipal / Government
Cemetery
Storage
Agriculture
Regional Open Space
Golf Course
Vacant
Existing Freeway
Railway
Meyerton Station
Core Area
R59 Development Corridor
MIDVAAL LOCAL MUNICIPALITY
Figure 12


MIDVAAL LOCAL MUNICIPALITY
Meyerton CBD Precinct Plan (2011)
Residentail
Residential 4
Medium Density Residential
Business 1 (Core Area)
Business 4 / Residential 4
Educational
Institutional / Municipal
Religion
Fire Station
Industrial
Taxi Rank
Cemetery
Public Open Space
Golf Course
Vacant
Existing Freeway
Class 2 Roads
Railway
Meyerton Station
CBD Precinct Boundary
R59 Development Corridor
MIDVAAL LOCAL MUNICIPALITY
Figure 13

2.4.5.5 Sicelo Precinct Plan

The Sicelo Land Use Plan and Precinct Plan is shown in ***Figures 14*** *and* ***15*** respectively and discussed below.

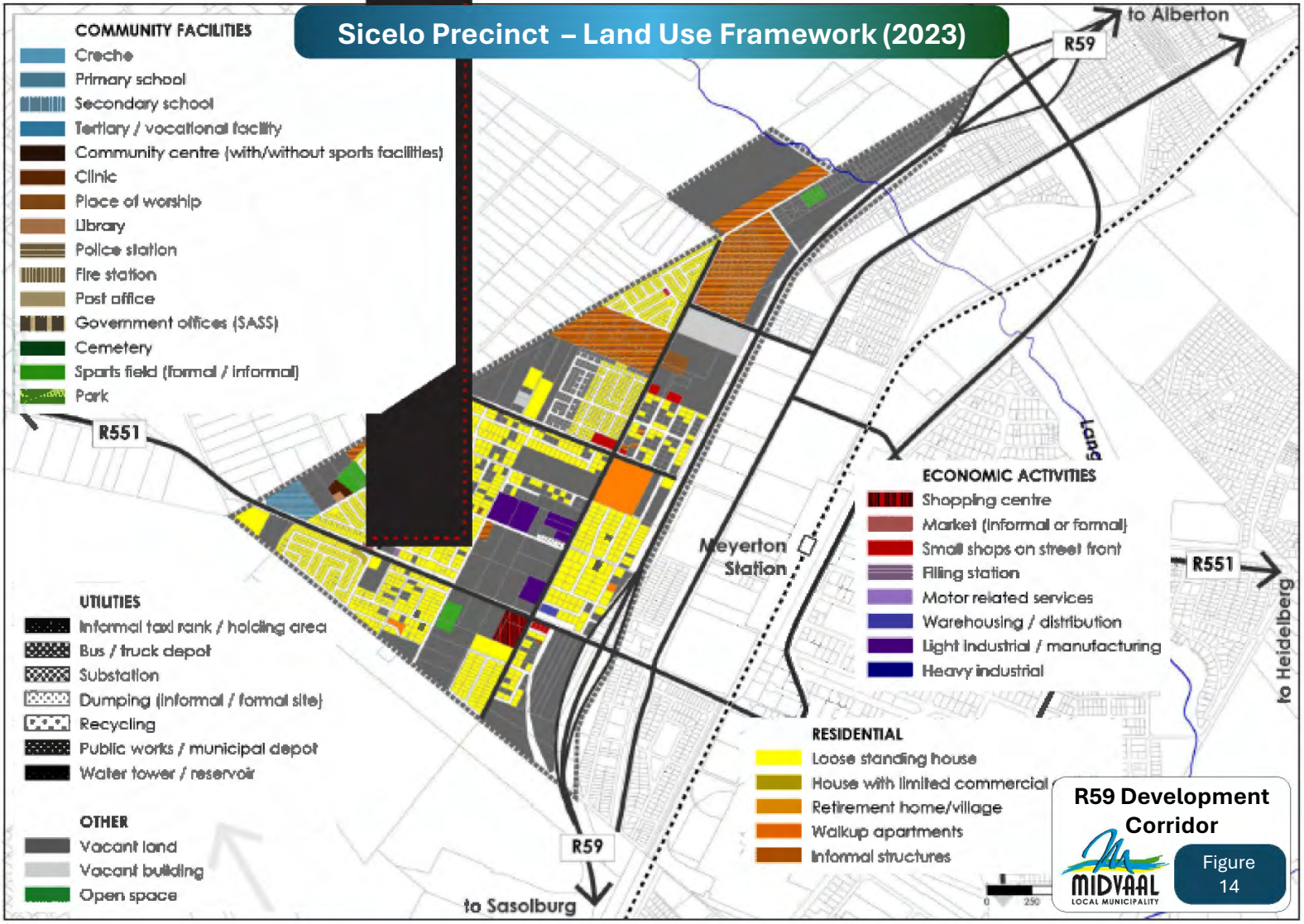
The Sicelo Precinct is located immediately west of the R59, forming part of the broader Meyerton urban area. The R59 defines the eastern edge of the precinct and acts as a major regional route, but also as a physical and functional barrier between Sicelo and the Meyerton CBD, limiting pedestrian and local connectivity. While Sicelo benefits from proximity to the corridor and a nearby interchange, internal access to the R59 is indirect and local movement is constrained by the highway and the railway line running parallel to it.

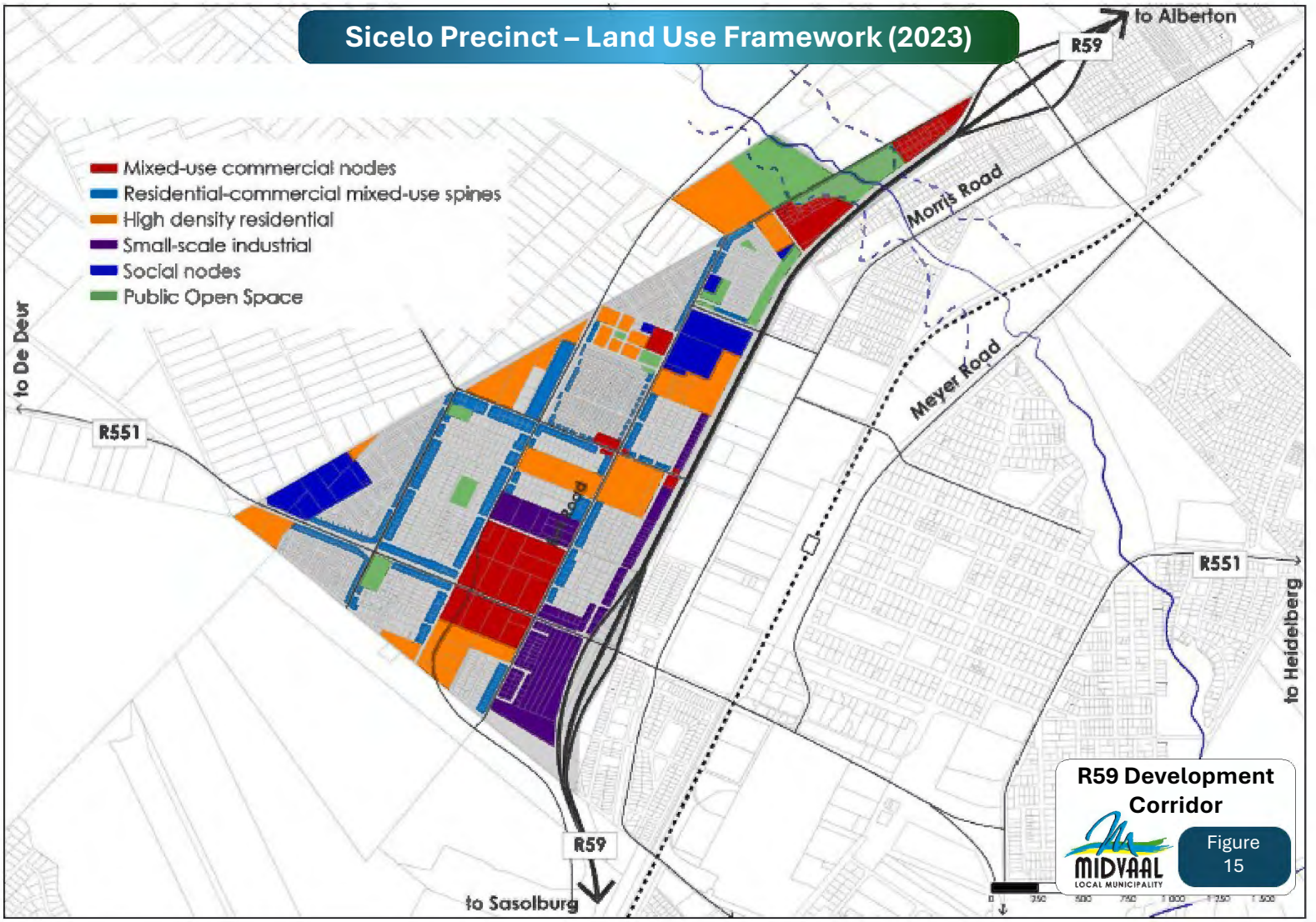
The precinct is predominantly residential in nature, with a mix of formal housing, informal settlements, walk-up apartments, and limited low-intensity commercial and industrial uses. Large portions of vacant land remain within the precinct. The plan identifies poor internal connectivity, limited land-use diversity, and weak linkages to surrounding economic opportunities as key structural challenges, particularly in relation to the R59 corridor and Meyerton CBD.

Key development proposals include:

- Strengthening east–west connectivity across the R59 and railway line, including support for a pedestrian bridge linking Sicelo to Meyerton CBD.
- Increasing density and land-use diversity in areas with good access to movement routes, while supporting walkability and public transport use.
- Consolidating economic activity near the R59 interchange and along primary internal routes, with support for informal trade and small-scale enterprises.
- Implementing reblocking of informal settlements to improve service provision, housing quality, and spatial structure.
- Reinforcing a pedestrian-focused urban environment, particularly along Bell Road and Gourlay Street.
- Public engagement, while limited in response numbers, highlighted several consistent community concerns and priorities:
- Strong support for improved pedestrian safety and connectivity, especially across the R59.
- Concerns around housing shortages, unemployment, and lack of economic opportunities.
- Poor quality of public spaces, illegal dumping, and infrastructure maintenance issues.
- Support for projects that improve public spaces, support informal trade, and enhance the overall identity of Sicelo.

Overall, the Sicelo Precinct Plan positions the area as an important southern component of the R59 corridor, with clear potential to benefit from improved integration with Meyerton and the regional movement network. The plan provides a detailed spatial framework that remains relevant, but its implementation is critical to addressing long-standing connectivity, socio-economic, and environmental challenges along this section of the corridor.


Sicelo Precinct – Land Use Framework (2023)
COMMUNITY FACILITIES
Creche
Primary school
Secondary school
Tertiary / vocational facility
Community centre (with/without sports facilities)
Clinic
Place of worship
Library
Police station
Fire station
Post office
Government offices (SASS)
Cemetery
Sports field (formal / informal)
Park
UTILITIES
Informal taxi rank / holding area
Bus / truck depot
Substation
Dumping (informal / formal site)
Recycling
Public works / municipal depot
Water tower / reservoir
OTHER
Vacant land
Vacant building
Open space
ECONOMIC ACTIVITIES
Shopping centre
Market (informal or formal)
Small shops on street front
Filling station
Motor related services
Warehousing / distribution
Light industrial / manufacturing
Heavy industrial
RESIDENTIAL
Loose standing house
House with limited commercial
Retirement home/village
Walkup apartments
Informal structures
R59
to Alberton
R551
Meyerton Station
to Heidelberg
to Sasolburg
R59 Development Corridor
MIDVAAL LOCAL MUNICIPALITY
Figure 14


Sicelo Precinct – Land Use Framework (2023)
Mixed-use commercial nodes
Residential-commercial mixed-use spines
High density residential
Small-scale industrial
Social nodes
Public Open Space
R59
to Alberton
Morris Road
Meyer Road
R551
to De Deur
to Heidelberg
to Sasolburg
R59 Development Corridor
MIDVAAL LOCAL MUNICIPALITY
Figure 15

3 SITUATIONAL ANALYSIS

3.1 Regional Context

Figure 16 illustrates the regional context of the R59 Corridor Study Area within southern Gauteng, showing the corridor's strategic location between the City of Johannesburg and the Ekurhuleni Metropolitan Municipality and its role in linking Vereeniging and the wider Sedibeng region to the metropolitan core. The R59 functions as a primary north–south regional movement spine that supports commuter movement, freight transport and economic interaction across municipal boundaries, positioning the study area at a key interface between metropolitan, peri-urban and rural systems.

Figure 15 further highlights the contrasting land use contexts surrounding the corridor, with urban settlements such as Savanna City, Evaton and southern Vereeniging located to the west, expanding metropolitan areas including Palm Ridge and Sky City to the north within Ekurhuleni, and the rural hinterland of Midvaal to the east characterised by agricultural land uses and tourism assets such as the Suikerbosrand Nature Reserve. This spatial setting underscores the importance of managing the R59 as a strategic corridor where urban growth pressures, agricultural production and environmental resources converge.

3.1.1 Regional Natural Environment

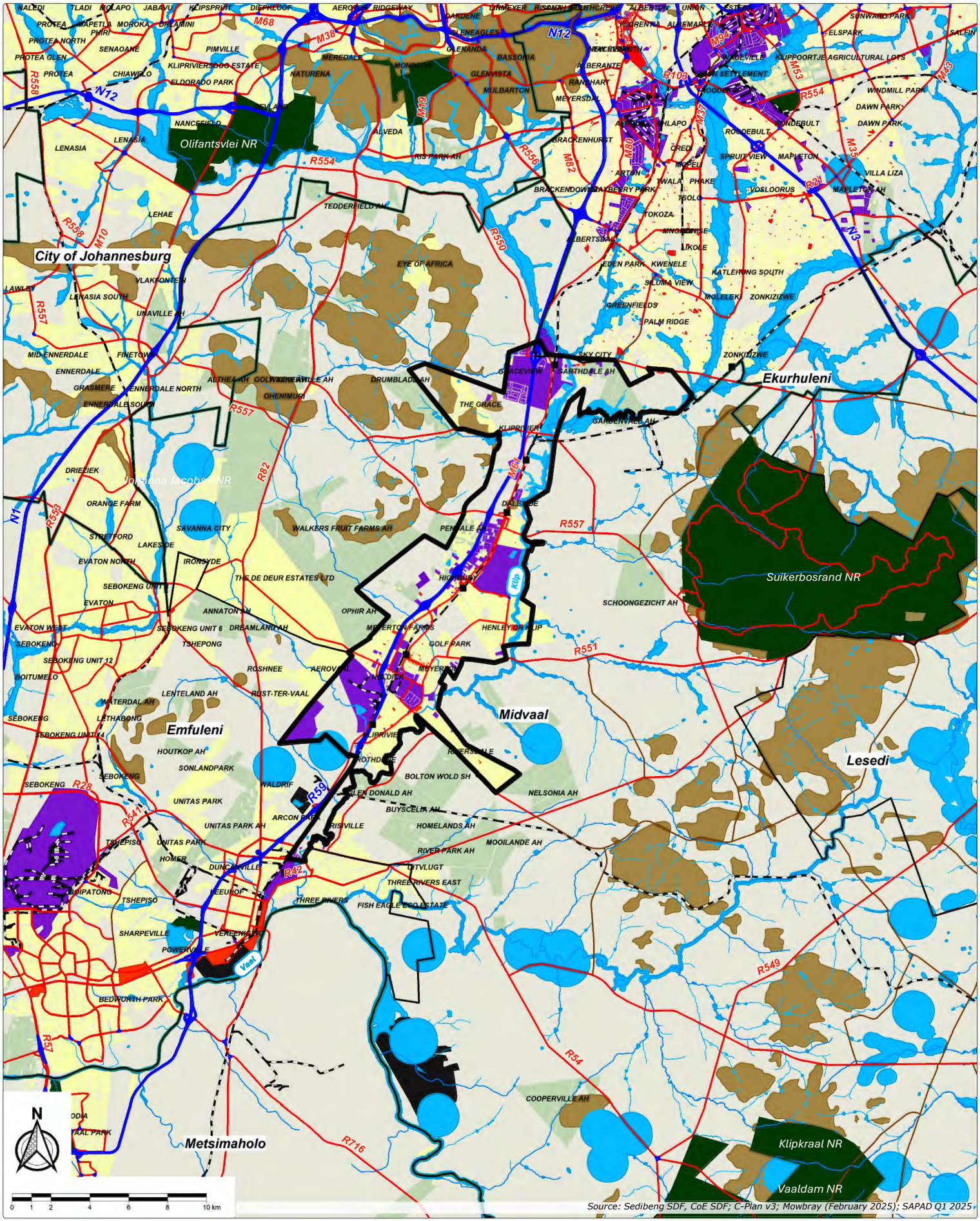
Figure 17 illustrates the regional natural environment of the R59 Corridor Study Area within the broader Vaal River catchment. The topography of the area generally slopes southwards towards the Vaal River, with surface water systems structured around the convergence of three rivers into the Klip River, which drains southwards into the Vaal. The south-eastern and southern parts of the study area are characterised by a network of smaller tributaries and drainage lines feeding into the Klip River, forming important riparian corridors and flood-sensitive areas that influence land use suitability and development constraints.

The figure further highlights the presence of significant natural and ecological features within the broader regional landscape. The north-western areas contain a series of ridges and elevated landforms associated with important and irreplaceable natural areas, contributing to regional ecological connectivity, biodiversity value and landscape character. To the east of the study area, the Suikerbosrand Nature Reserve is located as a formally protected conservation area of regional significance, forming part of Gauteng's critical biodiversity network and reinforcing environmental sensitivity along the eastern edge of the corridor.

Figure 17 illustrates the inferred dolomitic land layer as provided by the Council for Geoscience (CGS), South Africa. The "Dolomitic Land (Inferred)" classification indicates that, based on existing large-scale regional geological mapping, the area is considered highly likely to be underlain by dolomite bedrock or its weathering products within 100 m of the ground surface. However, the presence and extent of dolomite have not yet been conclusively confirmed through site-specific geotechnical investigations or drilling.

The geotechnical conditions depicted in Figure 17 indicate that the central portion of the study area, including the Pendale area and sections along the Klip River, falls within an inferred dolomitic zone. The presence of dolomitic geology introduces potential constraints related to ground stability, stormwater management, infrastructure development, and land-use intensity. Similar inferred dolomitic conditions occur in the south-western parts of the study area, particularly in the vicinity of Aerovaal and Sicelo, where future development may require detailed geotechnical assessment to determine the extent of dolomite-related risks and appropriate mitigation measures.

Regional Context



Study Area
Municipal Boundary
District Boundary

Extensive Agriculture
Agricultural Holding
Urban Footprint
Business Area
Industrial Area

Mining Area
Protected Area
Ridge
Dam / Pan / Wetland
River

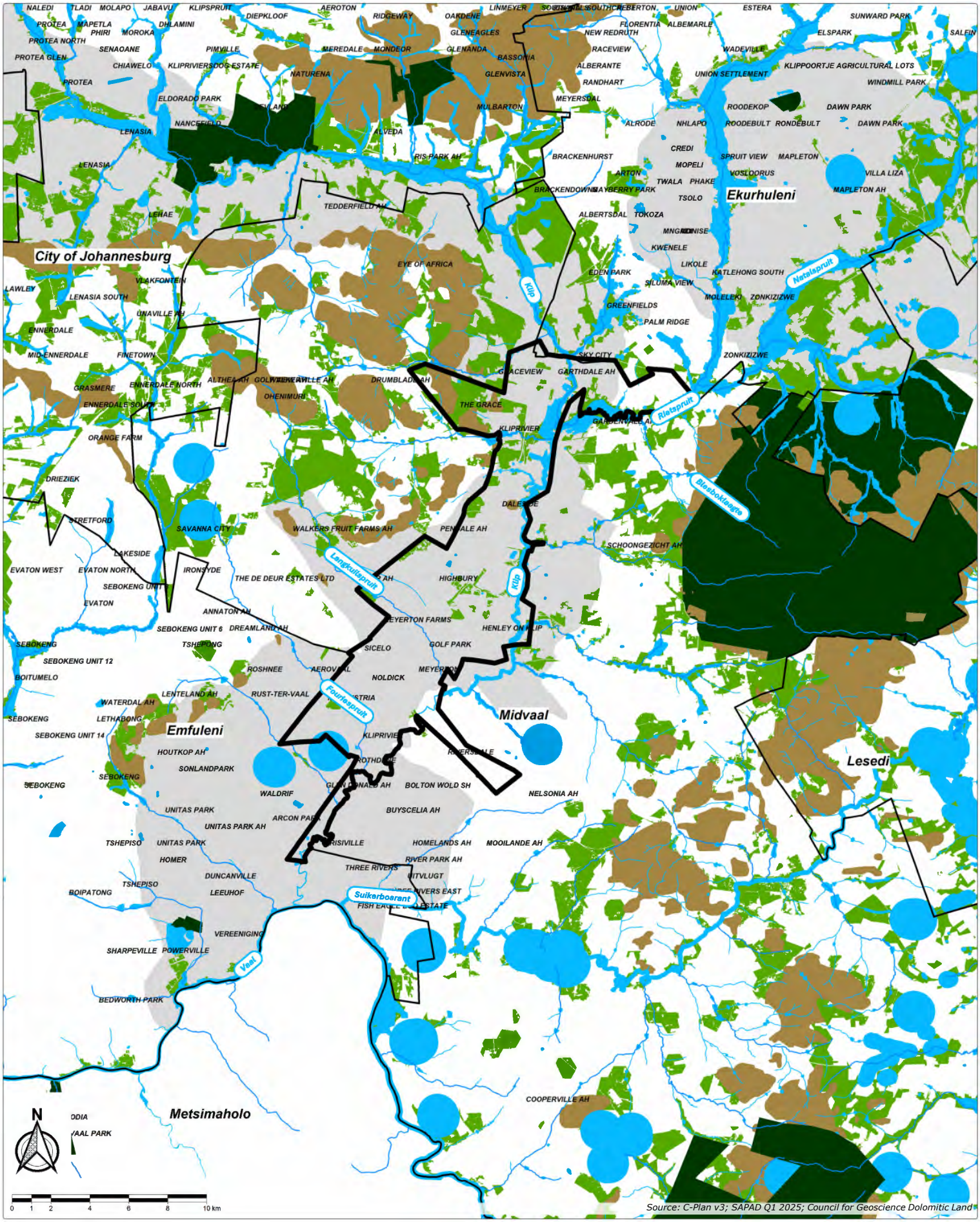
National Road
Main Road
Secondary Road
Railway
Railway Station

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 16

Regional Natural Environment



Source: C-Plan v3; SAPAD Q1 2025; Council for Geoscience Dolomitic Land

Study Area
Municipal Boundary
District Boundary

Important/Irreplaceable Area
Protected Area
Ridge
Dolomitic Land Inferred
Dam / Pan / Wetland

River

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 17

3.1.2 Regional Movement Network

Figure 18 illustrates the regional movement network within which the R59 Corridor Study Area is located. At a strategic scale, the R59, in conjunction with the N1, provides the primary north–south regional linkage through southern Gauteng, connecting the Gauteng metropolitan core with the Sedibeng District, the Vaal Triangle and the Free State. Further east, the N3 forms a parallel north–south route providing direct linkage to KwaZulu-Natal and Durban Port, reinforcing the role of the southern Gauteng region within national freight and logistics networks.

The north–south movement system is complemented by the R82, which is located between the N1 and the R59 and functions as an alternative regional route supporting inter-municipal connectivity and travel choice. Within the immediate context of the study area, the M61 (Old Vereeniging Road) runs parallel to the R59 and provides an important secondary route that supports local and regional traffic movement while also accommodating corridor-related development activity.

East–west connectivity across the study area is provided by a series of continuous regional routes that link the R59 to surrounding urban and rural areas. The R550 plays a key role in this network, linking the southern parts of Johannesburg through the Klipriver Node, continuing eastwards to connect with the N3 and further east towards Nigel. The R557 also traverses the study area as an important east–west route, complemented by the R551, which together strengthen transversal connectivity between settlements, economic nodes and regional transport corridors.

Access to the R59 within the study area is provided by a series of seven interchanges, which facilitate regional and local movement to and from adjacent urban, industrial and rural areas. An eighth interchange, located outside of the study area, provides additional connectivity via the M61. In addition to the road network, the railway line runs parallel to the R59, reinforcing the corridor's regional movement function, with a railway station located at Meyerton, supporting passenger movement and providing potential for multimodal integration within the broader corridor context.

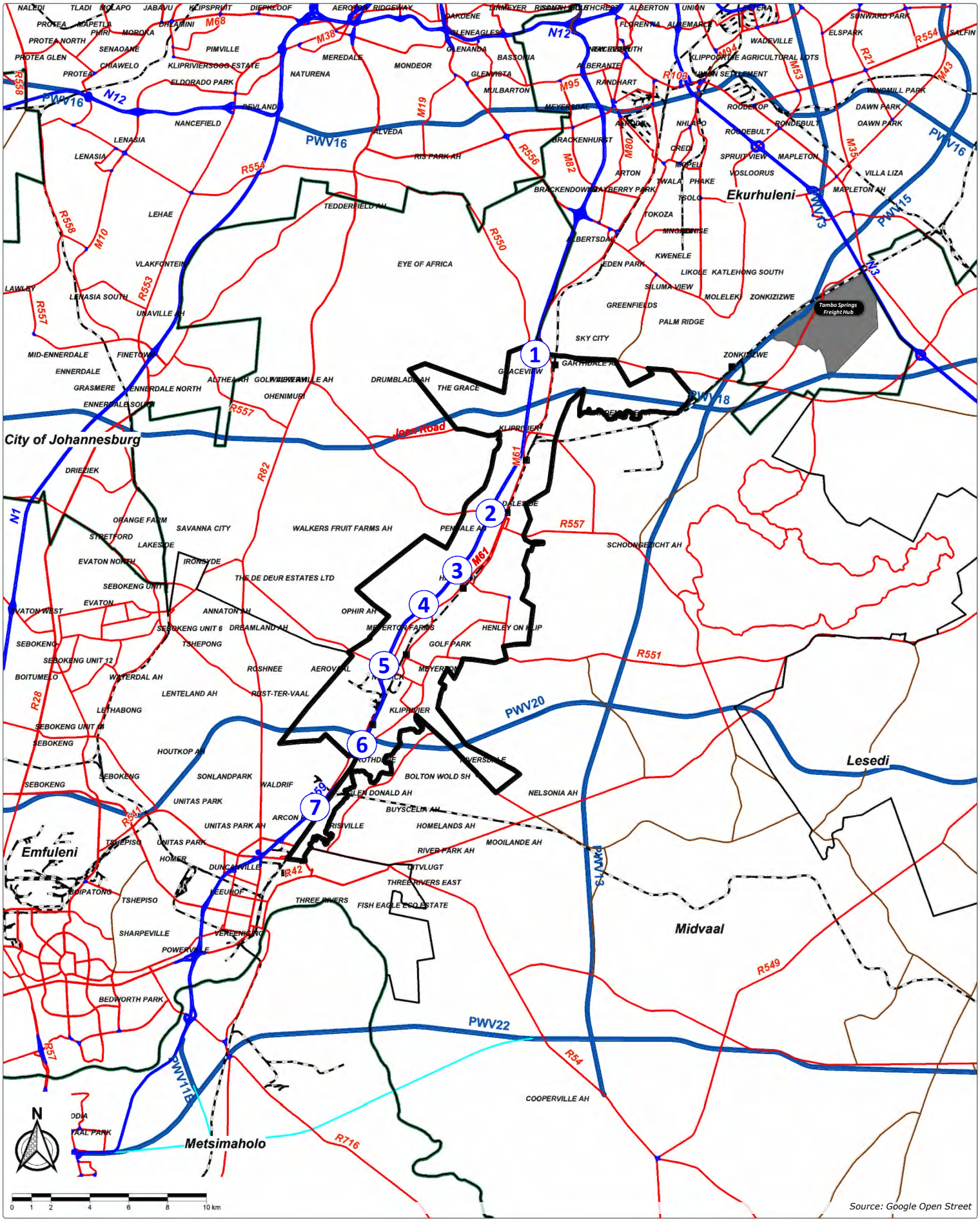
The railway line that traverses through the area forms part of the Gauteng Rail Freights Outer Ring. The Rail Freight Outer Ring supports the proposed Tambo Springs Freight Hub which is situated north-east of the study area.

The Tambo Springs Freight Hub is intended to supplement the existing City Deep Container Depot/Inland Port located to the north-west in the City of Joburg. (See ***Figure 19***).

The vision for the Tambo Springs Freight Hub is to create a self-sustainable environment which minimises the travel distance to the workplace, while incorporating the following commercial, institutional and recreational uses:

- **Industrial Business Park:**
  - Office – Value Added Logistics
  - Manufacturing – Warehousing
- **Next Generation Inland Port:**
  - Logistics
  - Infrastructure
- **Residential – Urban Village**
- **Recreation and Green Space**

Regional Movement Network



Study Area
Municipal Boundary
District Boundary

National Road
PWV Route
Existing Interchange
Main Road
Secondary Road

Railway
Railway Station
Tambo Springs Freight Hub

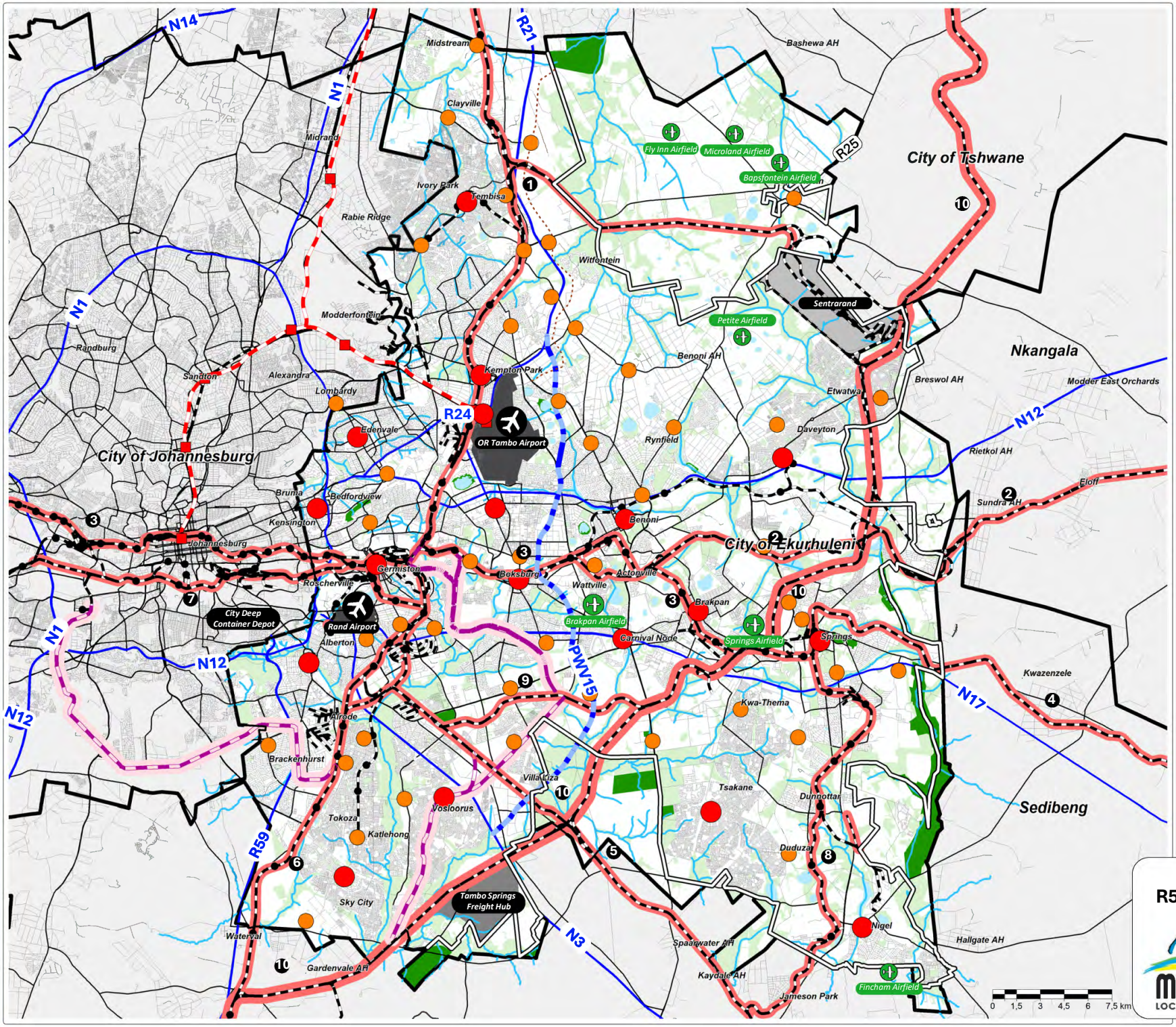
R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 18

CITY OF EKURHULENI MSDF 2023

AIRPORTS AND FREIGHT RAIL NETWORK



LEGEND

- Cadastral
- District Municipal Boundaries
- Urban Development Boundary
- Protected Areas
- Primary Open Space
- Dams / Rivers
- Primary Nodes
- Secondary Nodes
- Class 1 Roads
- PWV 15 Freight Link
- Class 2 Roads
- Railway Network
- Proposed Rail Network
- Gauteng Rail Freight Outer Ring
- Freight Rail Services
- Proposed Freight Extensions
- Sentrarand Intermodal Terminal
- Tambo Springs Freight / Logistics Hub / Inland Port
- Airport
- Airport Footprint
- Airfield

1. Germiston – Beit Bridge
2. Apex – Witbank
3. Krugersdorp – Springs
4. Springs – Secunda / Richards Bay
5. Germiston – Durban
6. Union – Cape Town
7. Rand Minerals / City Deep
8. Springs - Kaydale
9. Springs – Rooikop
10. GCR Rail Freight Outer Ring

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 18.3.3

3.2 Corridor Context

3.2.1 Institutional Environment

3.2.1.1 Ward Boundaries

Figure 20 illustrates the institutional context of the R59 Corridor Study Area, indicating that the corridor traverses a total of ten municipal wards, which highlights the complexity of the governance and decision-making environment within which the corridor is located. This multi ward context underscores the strategic importance of the R59 as a shared regional asset and reinforces the need for coordinated planning, inter departmental alignment and the active involvement of multiple ward councillors, communities and stakeholders to ensure that corridor planning and implementation are inclusive, consistent and responsive to both local and corridor wide priorities.

3.2.1.2 Cadastral Structure

Figure 21 illustrates the cadastral structure of the R59 Corridor Study Area, which comprises a combination of farm portions, Agricultural Holdings (AH) and erven within proclaimed townships. The cadastral pattern reflects the historical subdivision of land within the area and contributes to a generally fine-grained property structure, with limited availability of large, consolidated land parcels. This finer grain is particularly evident within the agricultural holding areas and farm portions and results in a higher number of individual property owners compared to areas dominated by larger farm portions.

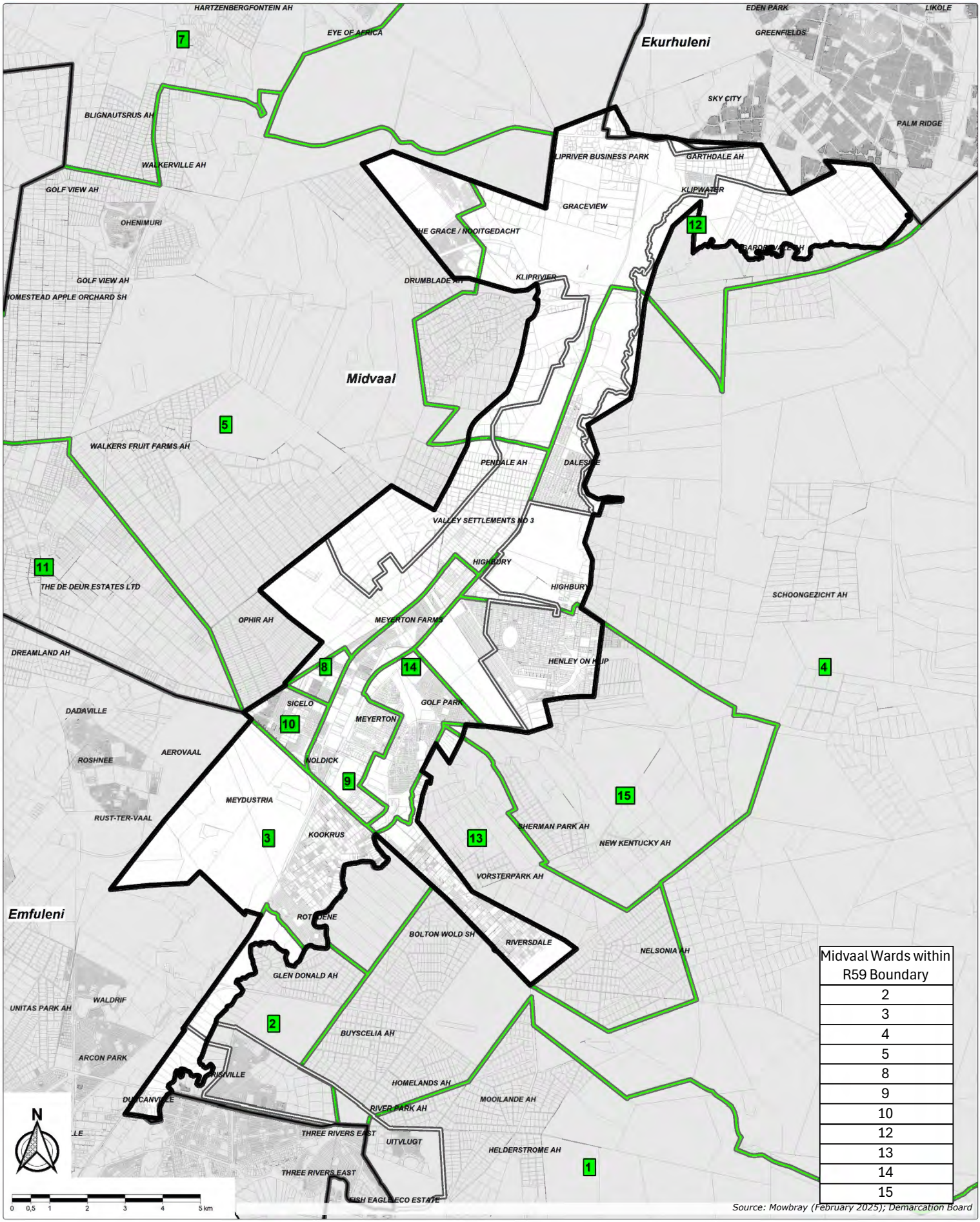
Most township areas within the study area are located inside the Urban Development Boundary, with the exception of a portion of Henley-on-Klip, where township erven extend beyond the urban development boundary. This area has been specifically addressed in the Henley-on-Klip Precinct Plan, which designates land outside the urban development boundary as Zone 1 (Rural Density) and Zone 2 (Low Density), reflecting the area's rural character, environmental sensitivity and infrastructure constraints.

A substantial portion of the study area consists of Agricultural Holdings, which were created in terms of the Agricultural Holdings Act of 1919. The Act defined agricultural holdings as follows:

(*"Agricultural Holding shall mean a portion of land not less than 8,565 square meters in extent used solely or mainly for the purposes of agriculture or horticulture or for breeding or keeping domestic animals, poultry or bees"*).

At the time of their creation, Certificates of Registered Title were issued with a range of restrictive title conditions intended to regulate land use, subdivision and development. These restrictive conditions remain legally binding and must be read together with applicable legislation, including the municipal Land Use Scheme, the Spatial Planning and Land Use Management Act, and environmental legislation such as the National Environmental Management Act.

INSTITUTIONAL



Midvaal Wards within R59 Boundary
2
3
4
5
8
9
10
12
13
14
15

Source: Mowbray (February 2025); Demarcation Board

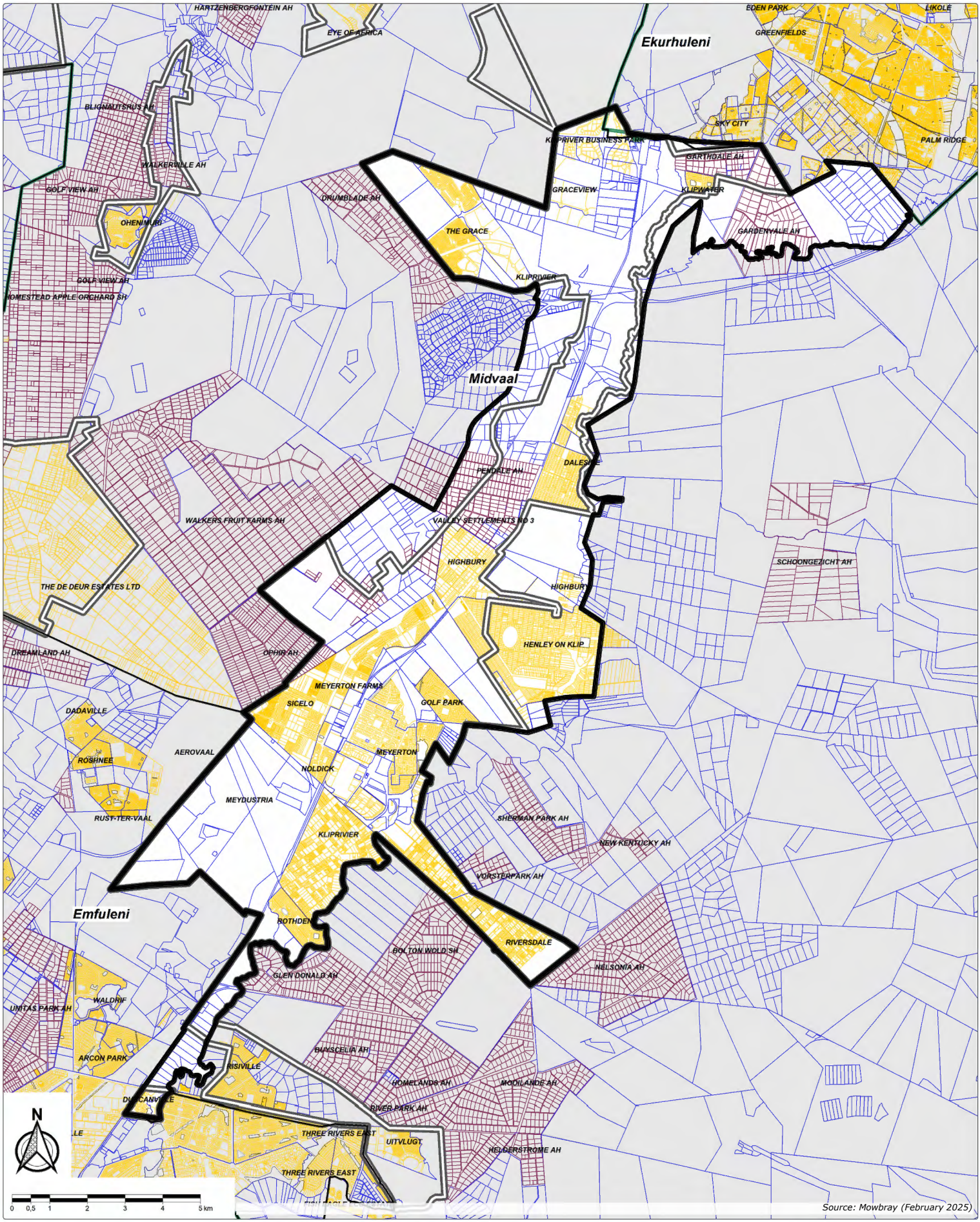
Study Area
Urban Development Boundary
Municipal Boundary
District Boundary
Cadastral
Midvaal Ward Boundary 2021

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 20

Cadastral Structure



Study Area
Urban Development Boundary
Municipal Boundary
District Boundary
Erf
Holding
Park
Farm Portion
Parent Farm

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 21

3.2.1.3 Land Ownership

Figure 22 illustrates the land ownership configuration for the R59 study area, and the following can be noted.

- The majority of the properties are privately-owned with dispersed public-owned land.
- Public-owned land is a combination of land-owned by any sphere of government (local, provincial, national and parastatal).
- The following four large pockets of vacant public-owned land is located in the area:
  - The small-scale diagrams of the unproclaimed various portions of the farm Nooitgedacht (previously The Grace) township (1+2);
  - Portions 28 and 32 of the farm Klipriversval 371 IR located between Henly-on-Klip and the golf course (3);
  - Portion 77 of the farm Langkuil 363 IR where a pending township application has been submitted (4).
- The majority of the remained of government-owned land represent the various public open spaces, road and rail reserves and land for infrastructure related activities.

3.2.2 Biophysical Environment

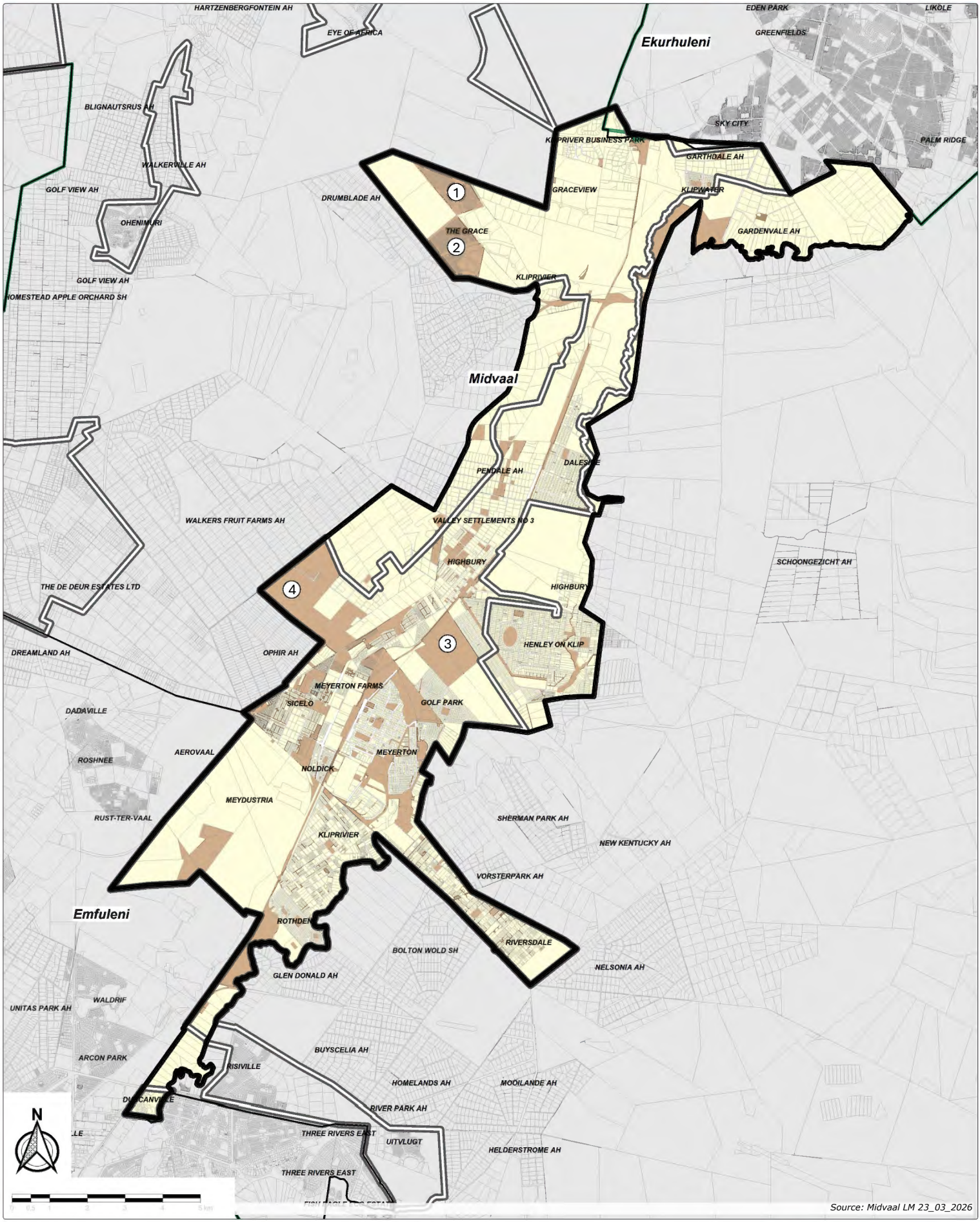
3.2.2.1 Topography and Drainage

Figure 23 illustrates the topography and drainage characteristics of the Study Area. The dominant hydrological feature is the Klip River, which traverses the study area and drains in a generally southerly direction towards the Vaal River, forming part of the larger Vaal River catchment system. The Klip River is fed from the north by the Blesboklaagte Stream and Rietspruit, which converge upstream and contribute to the river's regional drainage function. The Langkuilspruit is another hydrological feature that emanates from the west and flows into the Klip River. The spruit runs past Sicelo and through Meyerton farms and flooding is experienced during rainy season.

As reflected in *Figure 23*, the Klip River forms the eastern boundary of the study area and operates as a primary structuring element within the landscape. The river and its associated floodplains and riparian corridors influence land use suitability, infrastructure placement and environmental constraints along the corridor.

Topographically, the study area exhibits varied terrain. The north-western sections are characterised by hills and ridges, which introduce changes in elevation and localised drainage patterns. The area around the various portions of the Farm Nooitgedacht (previously The Grace) contains Class 1 and 2 ridges in terms of the Gauteng Ridges Guideline v8.1 and Class 1 ridges carry an additional 200 m buffer area. In contrast, the central, eastern and southern portions of the study area display a relatively flat to gently undulating topography, particularly in areas adjacent to the Klip River and within the agricultural and urban settlement areas. This flatter terrain generally supports development and infrastructure provision, while also increasing sensitivity to flooding and drainage management requirements along the main river system and its tributaries.

Ownership



Study Area
Urban Development Boundary
Cadastral
Municipal Boundary
District Boundary

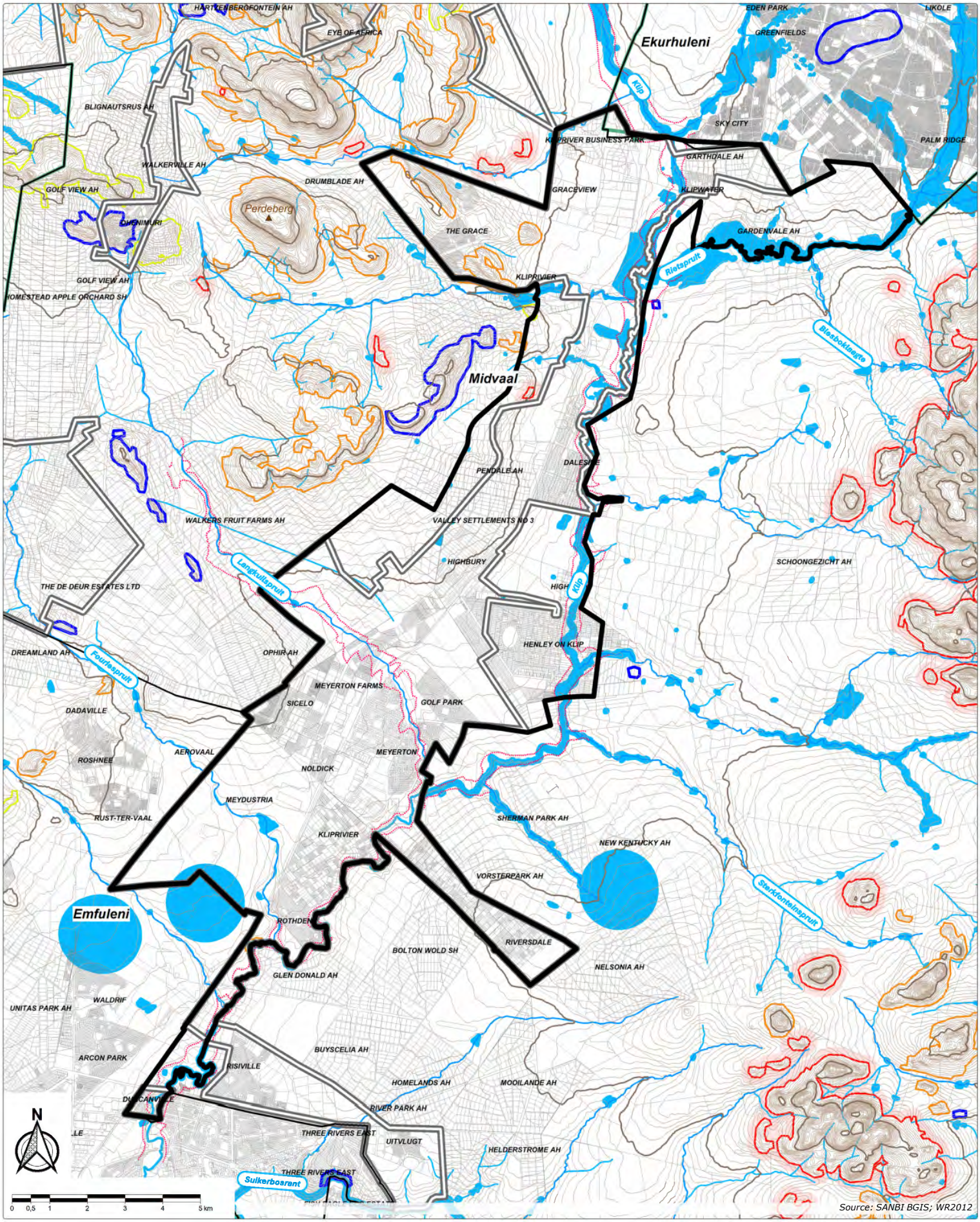
Public
Private

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 22

Topography and Drainage



Study Area
Urban Development Boundary
Cadastral
Municipal Boundary
District Boundary

Dam / Pan / Wetland
River
1 in 100 Flood Line
5m / 20m Contours
100m / 500m Contours

Class 1 Ridge
Class 1 Ridge 200m Buffer
Class 2 Ridge
Class 3 Ridge
Class 4 Ridge

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 23

3.2.2.3 Environmental Features

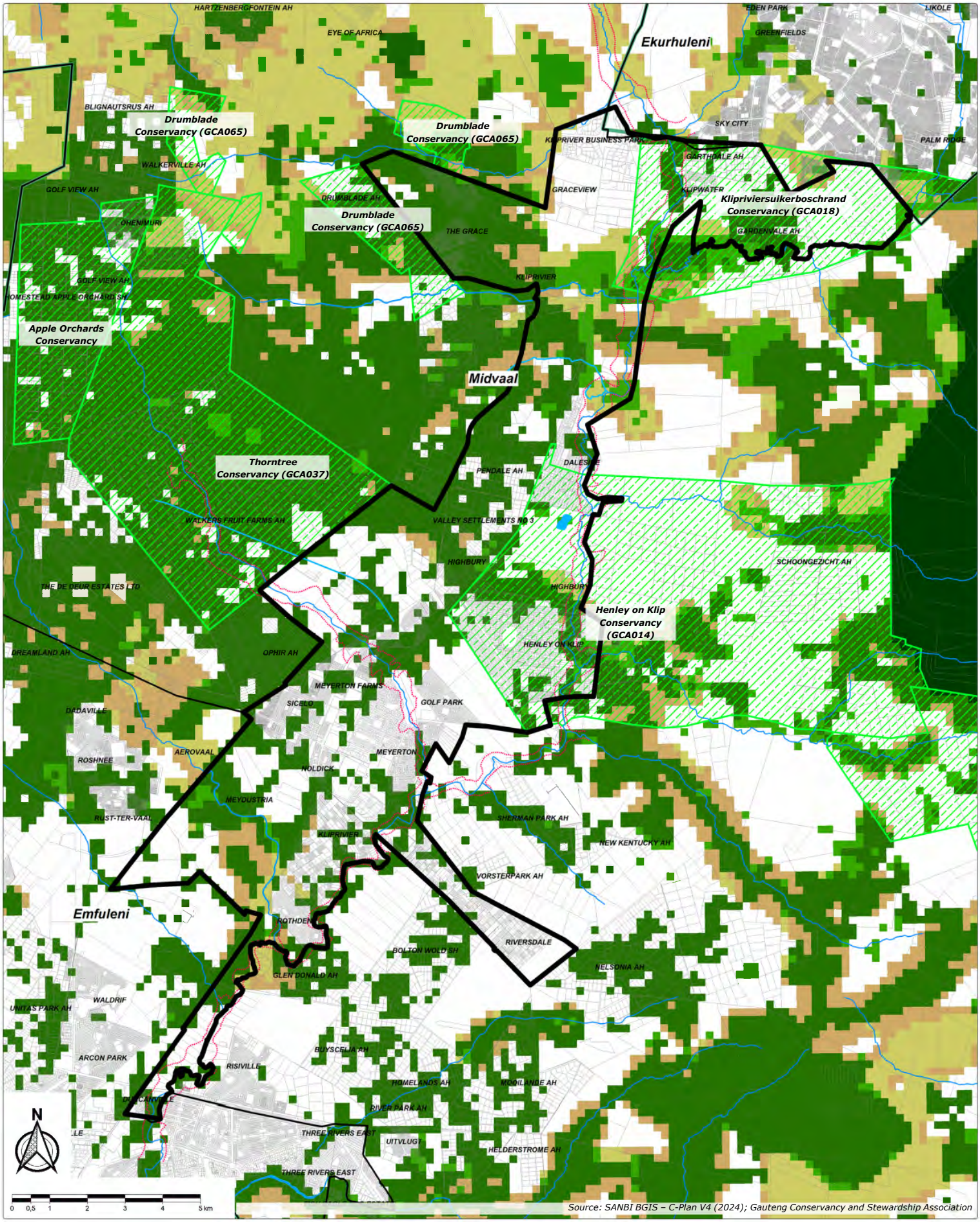
Figure 24 illustrates the environmental features of the R59 Corridor Study Area based on the Gauteng Conservation Plan (C-Plan) Version 4. The environmental structure of the corridor is shaped by an interconnected system of rivers, drainage lines, wetlands, riparian areas, biodiversity priority areas, ridges, agricultural landscapes and conservation-related land. Together these features support ecological functioning, biodiversity conservation, landscape character and environmental connectivity across the corridor and therefore represent an important consideration for future spatial planning and development. The broader environmental context is further influenced by several registered conservancies, particularly within the northern portions of the corridor around Garthdale, the areas north and south of the former Grace area, and Henley on Klip.

The north-western portions of the study area contain Critical Biodiversity Areas (CBA 1 and CBA 2) and Ecological Support Areas (ESAs), indicating the presence of regionally important ecological systems and biodiversity assets that contribute to the ecological network of the Gauteng City Region. The CBA and ESA areas associated with portions of Nooitgedacht and the area previously known as The Grace correspond broadly with ridge systems described in the preceding section on topography and drainage. These ridges, together with adjacent natural and semi-natural landscapes, perform an important ecological support function by maintaining habitat connectivity, ecological processes and landscape resilience.

The Klip River forms the principal natural feature within the corridor and functions as a major ecological corridor linking environmental systems across municipal boundaries. Associated riverine habitats, floodplains, wetlands and riparian areas support biodiversity movement, hydrological processes and ecosystem services. The Langkuilspruit and several smaller drainage systems further contribute to this network and create secondary ecological corridors that connect to the Klip River system. Environmentally sensitive areas identified along these watercourses are associated primarily with drainage lines, wetland systems, flood-prone areas and riparian vegetation. These areas perform an important role in sustaining ecological functioning and environmental quality throughout the corridor.

Environmental sensitivity within the corridor is further reinforced by the presence of Critical Biodiversity Areas, Ecological Support Areas and protected or conservation-related landscapes. In addition to the protected status of the Suikerbosrand Nature Reserve to the east of the corridor, several privately managed conservation initiatives contribute to the broader ecological network and environmental character of the area. The relationship between these conservation areas and the river systems, ridges and open-space network strengthens ecological connectivity across the corridor and supports the conservation objectives reflected in provincial biodiversity planning.

Environment – C-Plan V4 and Conservancies



Source: SANBI BGIS – C-Plan V4 (2024); Gauteng Conservancy and Stewardship Association

- Study Area
- Cadastral
- Municipal Boundary
- District Boundary
- Critical Biodiversity Area 1
- Critical Biodiversity Area 2
- Ecological Support Area 1
- Ecological Support Area 2
- Protected Area
- Conservancies
- Dam / Pan / Wetland
- River
- 1 in 100 Flood Line

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 24

A key conservation feature affecting the northern section of the corridor is the Klipriver-Suikerboschrand Conservancy, a registered conservancy extending southwards from the municipal boundary between Ekurhuleni and Midvaal towards the Suikerbosrand area. The conservancy functions as a voluntary conservation partnership through which landowners cooperate to manage natural resources and protect environmental qualities without necessarily changing existing land-use rights. The conservancy contributes to the broader conservation estate of Gauteng and forms part of the biodiversity stewardship network recognised by the Gauteng Department of Agriculture and Rural Development.

The Klipriver-Suikerboschrand Conservancy is particularly relevant to the R59 Corridor as it overlaps large portions of the Garthdale and Gardenvale Agricultural Holdings and extends across areas immediately south of the Ekurhuleni municipal boundary. The conservancy therefore directly influences the environmental character and development context of the Garthdale area and the land surrounding the former Grace area, where significant development pressure exists as a consequence of urban expansion to the north. Although the Gauteng Conservation Plan does not identify extensive Critical Biodiversity Areas across all of the agricultural holdings themselves, the conservancy contributes to the maintenance of a connected rural and open-space landscape adjoining the Klip River system and neighbouring biodiversity priority areas.

Within the Garthdale and Gardenvale areas, the conservancy relationship is particularly significant from a landscape and ecological connectivity perspective. The agricultural holdings form part of a larger open-space system containing natural grassland remnants, drainage features, agricultural land and undeveloped areas that provide ecological linkages between the Klip River corridor, adjacent biodiversity areas and the broader Suikerbosrand conservation landscape. The conservancy also contributes to the distinctive rural environmental character of these areas, which remains an important component of local identity despite the presence of land-use change and increasing development pressure.

The environmental significance of the former Grace area derives primarily from the combination of ridge systems, associated CBA and ESA designations, open-space networks and ecological linkages extending towards surrounding conservation landscapes. These environmental features contribute to biodiversity connectivity and create environmental constraints that should be considered when evaluating future land-use change, infrastructure provision and settlement expansion. The ecological role of these areas extends beyond site-specific biodiversity value and includes their contribution to landscape-scale environmental functioning.

Further south, the environmental character of the corridor in and around Henley on Klip is strongly influenced by the Klip River system, associated wetlands, floodplain environments, open-space networks and conservation-related landscapes. These features create a distinctive environmental

setting and contribute to the ecological integrity of the broader corridor. The relationship between natural river corridors, open-space systems and surrounding rural and low-density settlement areas assists in maintaining ecological connectivity and supports the environmental quality and sense of place for which the area is known.

Collectively, the rivers, wetlands, riparian areas, ridges, Critical Biodiversity Areas, Ecological Support Areas, conservancies and associated open-space systems establish the primary environmental structure of the R59 Corridor. These environmental assets not only perform important ecological functions but also contribute significantly to the rural character, landscape quality and environmental identity of areas such as Garthdale, the former Grace area and Henley on Klip. Future growth and development within the corridor should therefore recognise the role of these environmental systems in maintaining ecological connectivity, protecting riverine and wetland environments, preserving important open-space linkages and avoiding unnecessary fragmentation of natural and semi-natural landscapes. Environmental sensitivities associated with these features may influence the location, form, density and intensity of future development and should be considered as part of detailed planning and environmental assessment processes.

It should also be noted that portions of the corridor have been disturbed or transformed through historical agricultural activities, urban development, infrastructure provision and other land-use changes. Consequently, the current ecological condition of individual sites may differ from that indicated by regional environmental datasets. Site-specific investigations and ground-truthing will therefore be required where development is proposed in environmentally sensitive areas to verify environmental conditions, determine ecological significance and inform appropriate planning responses

3.2.2.3 Land Capability

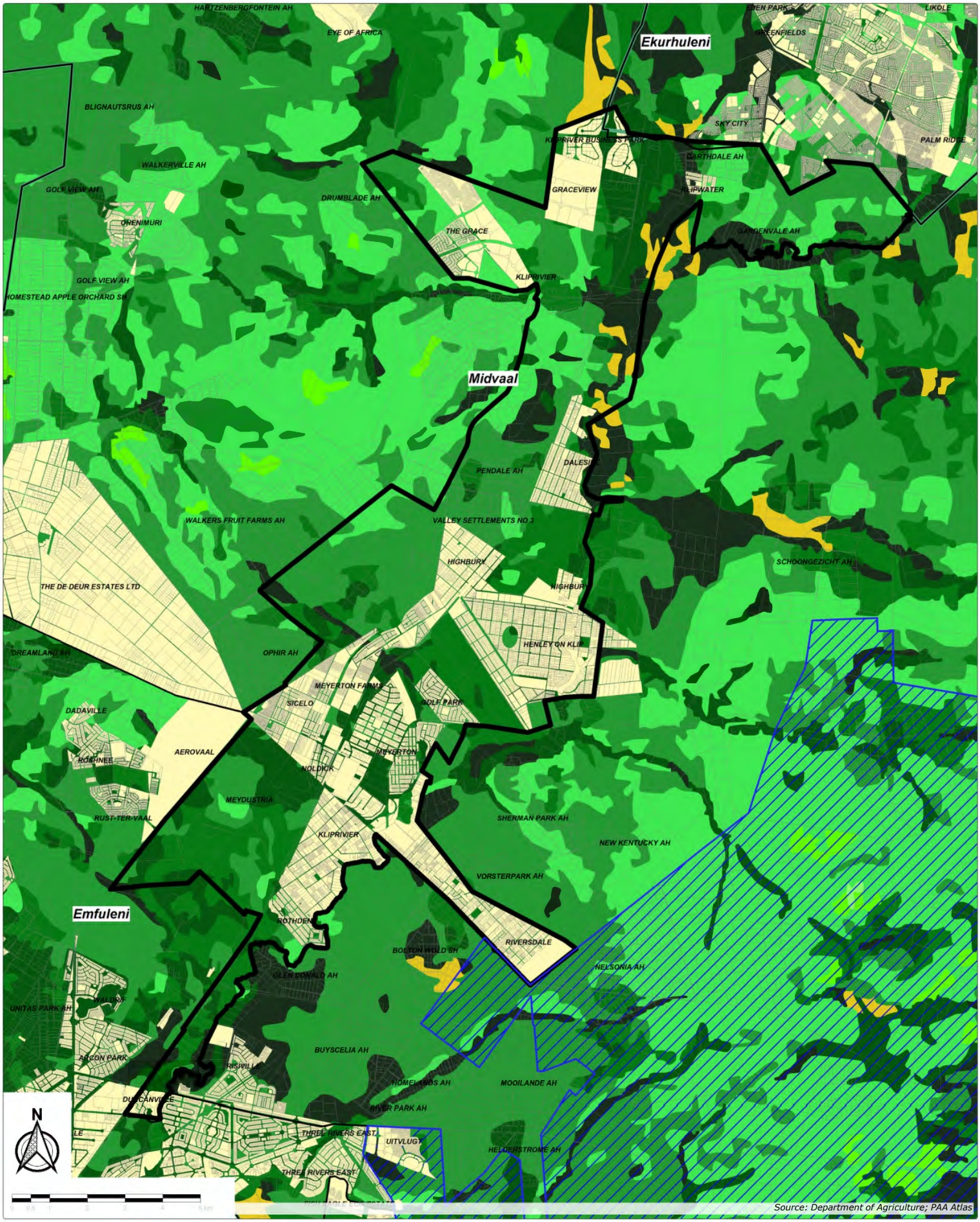
Figure 25 illustrates the land capability classification of the R59 Corridor Study Area. The assessment indicates that the majority of the study area falls within the moderate high to high land capability categories, reflecting generally favourable soil and land conditions for agricultural use. These areas have the potential to support productive agricultural activities, subject to appropriate land management, water availability and environmental and geotechnical constraints.

While the land capability results indicate strong agricultural potential, the cadastral structure of the study area is predominantly fine grained, comprising agricultural holdings and subdivided farm portions. This limits the availability of large, consolidated land parcels and may therefore constrain the feasibility of large-scale commercial farming operations. However, the area is well known for the production of vegetables and fruit, which are agricultural activities that can be commercially viable on smaller land parcels and are well suited to the existing landholding pattern.

It should further be noted that Protected Agricultural Areas (PAAs) are located outside of the study area to the south-east, where larger, more consolidated tracts of land occur. These protected areas play a complementary role within the broader regional agricultural system, while the study area itself is better positioned to support smaller scale, intensive agricultural activities aligned with its cadastral structure.

Proclaimed urban areas (townships) have been excluded from the land capability analysis, as these areas are already committed to urban development and are not suited to conventional commercial agriculture. While urban agriculture may occur within these areas, its commercial viability is generally limited due to factors such as high-water costs and competition with urban land uses. As such, the land capability assessment primarily informs agricultural potential within the non-urban portions of the study area.

Land Capability



Source: Department of Agriculture; PAA Atlas

Study Area
Erven
Holdings
Municipal Boundary
District Boundary

Land Capability:
Low - Moderate
Moderate
Moderate – High
High
High – Very High

Protected Agricultural Areas

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 25

3.2.2.4 Pollution Concerns: Air Quality

The R59 Corridor is already subject to elevated air quality pressures due to its function as a major regional route carrying high volumes of commuter traffic and freight vehicles. Vehicle emissions associated with sustained traffic flow and heavy-duty transport represent a key source of air pollution within the study area. These transport related impacts are intensified by the presence of interchanges, crossings and industrial access points, where vehicle idling, acceleration and deceleration occur more frequently.

The corridor is further influenced by a diverse range of industrial and manufacturing activities, including steel production, metal works, boat manufacturing, breweries and paper manufacturing facilities. Development corridors inherently concentrate transport infrastructure, economic activity and supporting land uses, which increases the potential for cumulative air quality impacts if growth is not carefully managed. In this context, pollution risks arise from the combined effects of traffic emissions, industrial operations, freight movement, commercial activity and construction related dust and emissions, rather than from isolated sources.

This section does not provide quantified pollution levels, as detailed air quality assessments require specialist measurement and modelling, such as dispersion modelling, monitoring data and source specific emission analysis. Instead, the purpose of this section is to highlight the importance of recognising existing and potential air quality concerns as part of the corridor's baseline conditions. Acknowledging these risks is essential to inform future planning, land use management, infrastructure design and the need for more detailed environmental investigations as development along the R59 Corridor progresses. (Refer to ***Info Box 1***).

Info Box 1: Air Quality

Air quality is closely linked to corridor development due to the concentration of movement, infrastructure, and economic activity. Key considerations include:

- Transport and freight emissions are a primary source of air pollution along corridors, particularly where traffic volumes are high or congestion occurs.
- Industrial, logistics, construction, and household fuel use can contribute to localised air quality impacts.
- Dispersed settlement patterns and long travel distances increase reliance on private vehicles, intensifying emissions.
- Poor air quality poses risks to human health, particularly for sensitive land uses located near major roads or emission sources.
- Air pollution is cumulative and spatially concentrated, with impacts increasing over time if not considered in planning decisions.
- Air quality outcomes are strongly influenced by land use patterns, transport systems, and development intensity.

3.2.2.5 Climate and Climate Change Vulnerability

Midvaal Local Municipality experiences a temperate Highveld climate, typical of southern Gauteng, with warm summers, cool to cold winters, and rainfall concentrated in the summer months. Climatic conditions are influenced by the municipality's altitude, open rural landscape, and its location between the Gauteng urban core and the Free State interior.

Climate Change Trends

Observed and projected climate trends for southern Gauteng indicate:

- Increasing average temperatures, particularly higher summer maximums;
- More intense rainfall events, increasing pressure on stormwater and drainage systems;
- Longer dry periods between rainfall events, affecting water availability and land-based activities.

Implications for the R59 Corridor

Climatic conditions in Midvaal have direct implications for development and infrastructure along the R59 Corridor, including:

- increased flood and runoff risk at river crossings and low-lying sections of the corridor;
- heat-related deterioration of road surfaces and infrastructure;
- greater exposure of agricultural and open land uses to climate variability; and
- the need for climate-resilient stormwater, drainage, and road design measures in future development and upgrade projects.

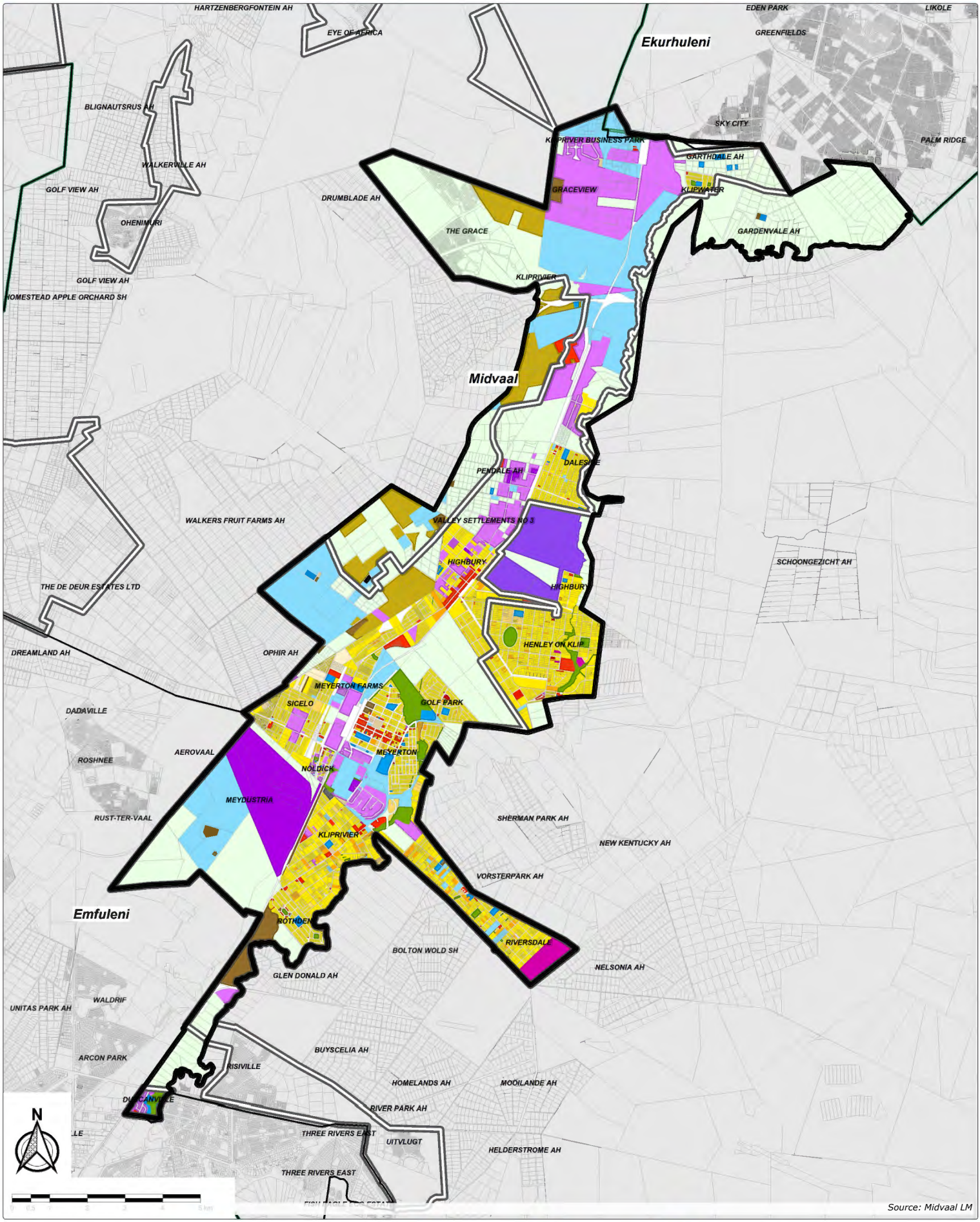
3.2.3 Built Environment

3.2.3.1 Zoning

Figure 26 illustrates the existing zoning pattern within the R59 Corridor Study Area and provides an overview of how land uses have been allocated and developed over time. The zoning structure reflects the corridor's role as a regional movement and economic spine, with a concentration of industrial, commercial, residential and agricultural zones distributed according to accessibility, settlement patterns and historic development trends.

The Graceview–Klipriver business node is clearly defined in the figure and is predominantly zoned for industrial and commercial purposes, reinforcing its function as an established employment and economic activity area along the corridor. Similarly, land adjacent to the R59 from the Klipriver area extending southwards is largely zoned for industrial use, reflecting the strategic relationship between industrial activities and access to the regional road network. These industrially zoned areas form a continuous band along key sections of the corridor where access and logistics efficiency are prioritised.

Zoning



Study Area
Urban Development Boundary
Cadastral
A Allotment
Agriculture

Residential 1
Residential 2
Residential 3
Rural Residential
Transitional Residential

Business 1
Business 2
Commercial
Industrial 1
Industrial 2

Mining
Cemetery
Institutional
Municipal Use
Recreation

Open Space
Transport
Utilities
Split Zoning

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 26

In contrast, much of the Gardenvale and Garthdale Agricultural Holdings (AH) area remains zoned for agricultural use, indicating limited formal land use transition despite increasing development pressure within the broader corridor context. These agriculturally zoned areas retain a more rural land use character and highlight portions of the study area where development has either not yet occurred or has been constrained through planning controls.

The established residential settlements of Witkop, Henley on Klip, Meyerton and Rothdene are predominantly zoned for residential purposes, as illustrated in *Figure 24*. The residential structure is clearly differentiated from adjacent industrial and agricultural zones, reflecting historic settlement patterns and land use separation. Within this residential framework, the Meyerton Central Business District (CBD) is distinctly visible, with a concentrated cluster of business and commercial zonings along Loch Street, confirming its role as a local commercial and service centre.

Overall, the zoning map provides a clear spatial representation of where industrial zonings have been applied, residential areas developed, and agricultural zones retained across the study area. This distribution highlights the functional relationship between the R59 corridor, economic activity, settlement areas and remaining agricultural land, and forms an important baseline for understanding development pressures, land use transitions and future planning considerations along the corridor.

3.2.3.2 Movement Network

Existing Network:

The existing movement network is shown in ***Figure 27***. The main modes in the study area are rail and road-based transport. The exiting railway lines runs parallel to the R59 and is mainly used for transporting freight. The railway line has the following 6 railway stations within the study area:

- Klipriver Station;
- Skansdam Station;
- Daleside Station;
- Henley-on-Klip Station;
- Meyerton Station; and
- Kookrus Station.

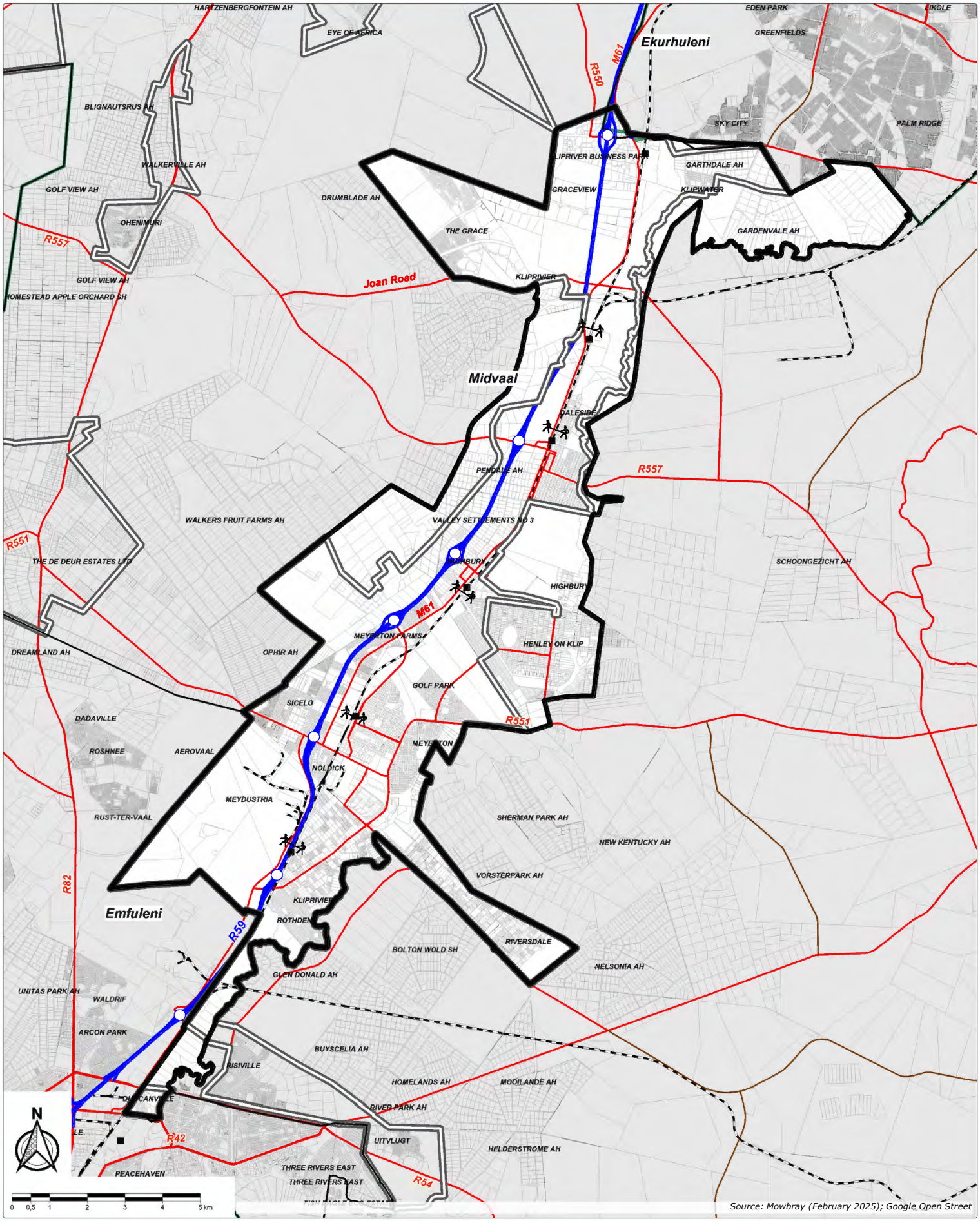
The following high order roads are within the study area:

- R59 freeway;
- M61;
- R550;
- Joan Road;
- R557; and
- R551.

The section of the R59 in the study has the following 6 interchanges:

- R59 and R550;
- R59 and R557;
- R59 and Henley Drive;
- R59 and Meyer Road;
- R59 and R551; and
- R59 and Pierneef Boulevard.

Existing Movement Network



Study Area
Urban Development Boundary
Cadastral
A Allotment

National Road
Interchange
Main Road
Secondary Road

Railway
Railway Station
Pedestrian Crossing

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 27

The existing railway and road network provides sufficient access points (interchanges and railway stations) for the study area to be well connected to the national transport network.

The current traffic volumes for the main roads within the study area is shown in ***Table 5***. The traffic volumes were counted in the year 2024 by the Gauteng Department of Roads and Transport.

Table 5: Traffic Volumes on Main Roads

Road	Average Daily Traffic	Average Daily Truck Traffic	Percentage Heavy Vehicles
R59	37,000 to 42,000	6,100 to 6,200	14% to 17%
M61	3,000 to 8,400	550 to 650	7% to 20%
R550	16,300	1,150	7%
Joan Road	1,700	105	6%
R557	6,050	970	16%
Meyer Road	3,580	650	18%
R551	13,050	1,300	10%

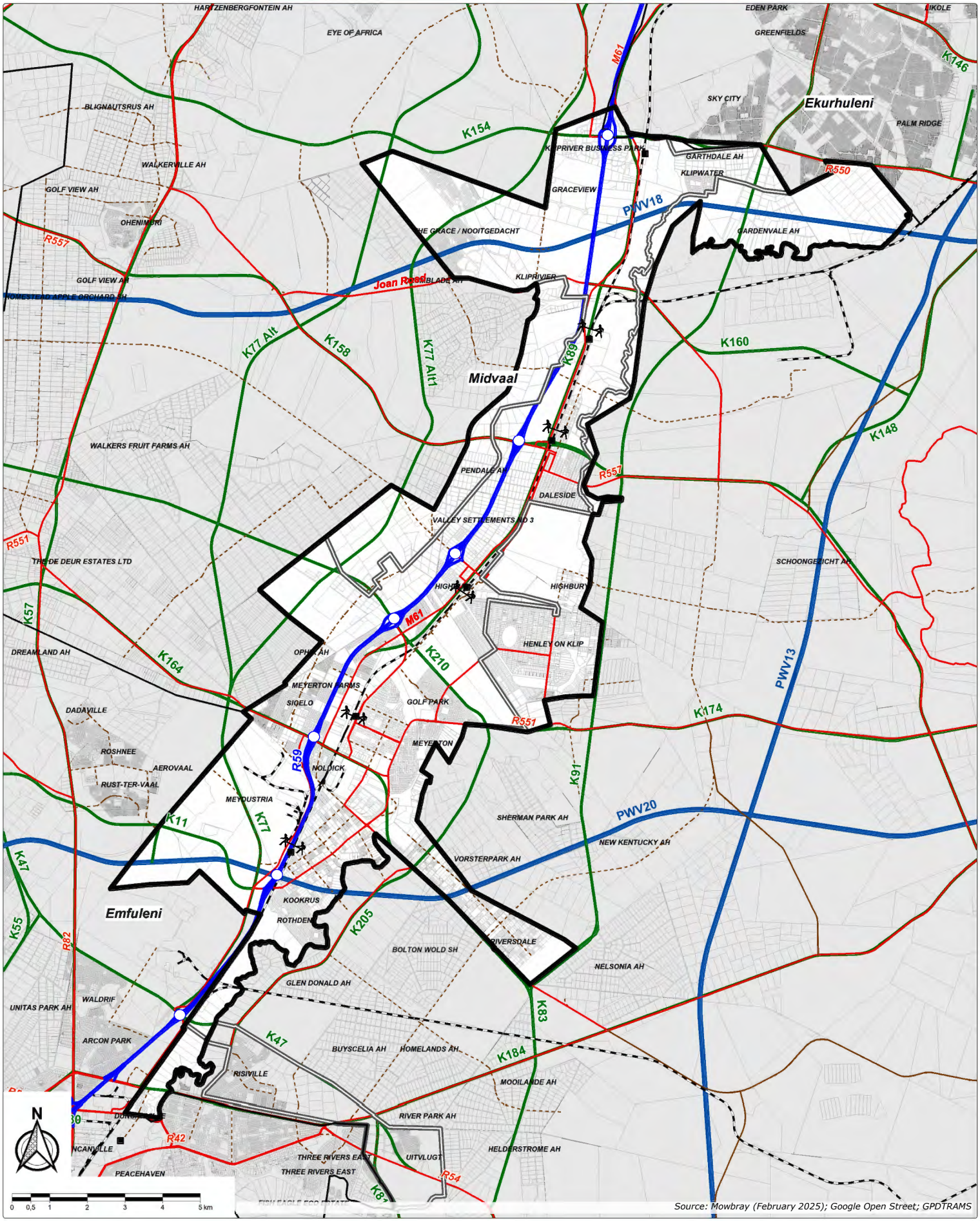
Source: Gauteng RAMS Geo-spatial Decision Support System

Planned Network:

The planned K and PWV routes are shown in ***Figure28***. The following K and PWV routes are within the study area:

- K154 (R550);
- K158 (R557);
- PWV18;
- PWV20;
- K201;
- K164 (R551);
- K89 (M61);
- K11;
- K77;
- K59; and
- K91.

Planned Movement Network



Source: Mowbray (February 2025); Google Open Street; GPDTRAMS

- Study Area
- Urban Development Boundary
- Cadastral
- Allotment
- National Road
- Proposed PWV Road
- Interchange
- Main Road
- Proposed K-Route
- Secondary Road
- Proposed Class 3
- Railway
- Railway Station
- Pedestrian Crossing

R59 Development Corridor

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Figure 28

Access Spacing:

The following access / intersection spacing requirements should be applied on the mobility routes within the road network:

- Class 1 – Freeway – Interchange Spacing 1.6 km to 3.6 km;
- Class 2 – Major Arterial – Intersection Spacing – 800 m (+- 15%); and
- Class 3 – Minor Arterial – Intersection Spacing - 600 m (+-20%).

Movement Challenges:

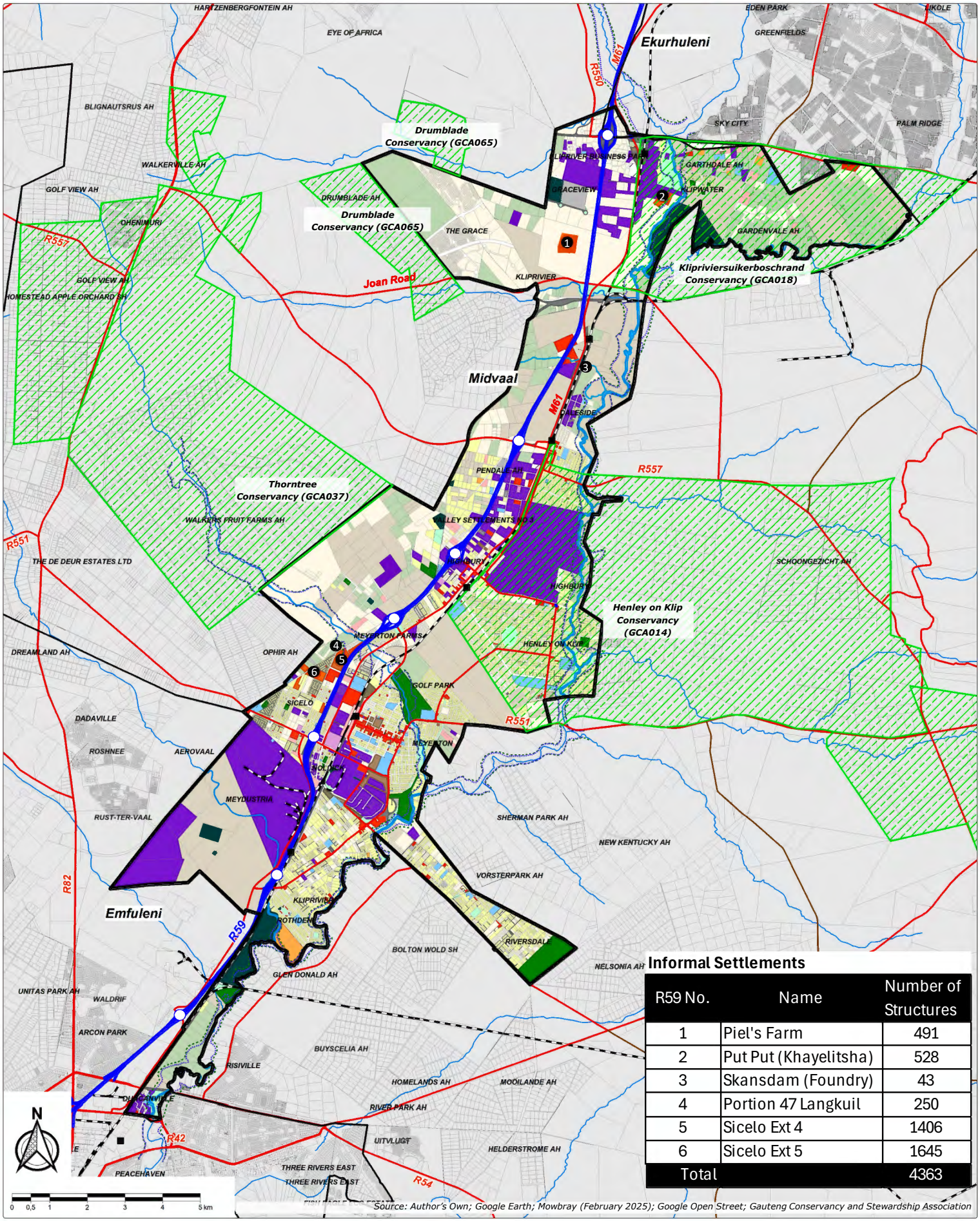
The following movement challenges have been identified with in the study area:

- Residential expansion in Sky City and Palm Ridge towards Midvaal Local Municipality has significantly increased traffic volumes on the R550 corridor. As the main route linking these areas to the R59, the R550 is operating beyond its capacity, causing congestion and an elevated risk of road accidents.
- The M61, which runs parallel to the R59, is facing increased development pressure. Access spacing requirements set by the Gauteng Department of Roads and Transport are limiting the approval of new access points, resulting in challenges for rezoning and township establishment applications. An access management plan is required for the M61 within the study area to rationalise access points, ensure compliance with provincial standards, and provide a coordinated framework to support safe and orderly development.
- The railway line traversing the study area, parallel to the R59, acts as a barrier to vehicular and pedestrian movement. This has led to the use of multiple illegal rail crossings by the community, creating a significant safety concern.
- There is no formal pedestrian link or pedestrian bridge over the R59. Although Station Road is intended to connect Sicelo with the Meyerton CBD and a pedestrian crossing exists at the railway line, pedestrians continue to cross the R59 illegally and unsafely due to the missing pedestrian facility.

3.2.3.3 Land Use and Spatial Structure

Figure 29 illustrates the existing land use pattern and spatial structure of the R59 Corridor Study Area. It is important to note that the land use configuration differs from the zoning pattern presented in the previous section, as zoning rights do not necessarily translate directly into developed land uses. The figure therefore reflects the actual spatial distribution of land uses on the ground and highlights the evolving structure of industrial, residential, rural and undeveloped areas along the corridor.

Land Use and Spatial Structure



Informal Settlements

R59 No.	Name	Number of Structures
1	Piel's Farm	491
2	Put Put (Khayelitsha)	528
3	Skansdam (Foundry)	43
4	Portion 47 Langkuil	250
5	Sicelo Ext 4	1406
6	Sicelo Ext 5	1645
Total		4363

Source: Author's Own; Google Earth; Mowbray (February 2025); Google Open Street; Gauteng Conservancy and Stewardship Association

- Study Area
- Municipal Boundary
- Agriculture
- Residential
- Rural Residential
- Informal Residential
- Tourism Accommodation
- Institutional
- Municipal/Government
- Utilities
- Business
- Mixed Use
- Industrial/Commercial/Mining
- Transportation (stop, rank etc.)
- Historical Landmark
- Vacant (partially vacant, vacant building, dilapidated building etc.)
- Sports Recreation
- Open Space
- Conservancy
- River/River Buffer
- 1 in 50 Flood Line
- 1 in 100 Flood Line
- National Road/Interchange
- Main Rd — Secondary Rd
- Railway/Railway Station

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 29

In the northern portion of the study area, land use is characterised by a mix of industrial activities and rural residential uses, particularly within the Graceview–Klipriver business park and the Gardenvale and Garthdale Agricultural Holdings (AH) area. A key spatial characteristic in this area is that industrial activities at Graceview–Klipriver are located on both sides of the R59, reinforcing the corridor's function as an industrial movement and logistics spine. The previously The Grace Township (now various portions of the farm Nooitgedacht) is also situated within this northern section; however, despite being formally established, none of the township erven have been developed, and the area remains largely vacant. Four informal settlements are located in and around the Klipriver Business Park, namely: Put Put (Keylitsha), Piel's Farm, Boitumelo and Skansdam Foundary. Further south, industrial development intensifies around Daleside and Pendale AH, primarily on the eastern side of the R59. These industrial activities have been developed in line with the provisions of the 2011 R59 Corridor Plan, which directed industrial growth to locations with appropriate access and supporting infrastructure. On the western side of the R59, industrial land uses are more limited and are generally clustered at existing intersections, reflecting access management considerations and a more controlled industrial footprint.

Additional concentrations of industrial land use are evident south of the Meyerton CBD within Sybrand van Niekerk Park and further south-west of the R59 at the SA Steel Mills, both of which function as significant employment and economic nodes within the broader corridor structure.

Sicelo Township is located directly west of the Meyerton CBD and still reflects the impact of apartheid spatial planning. The township is the largest low-income settlement in Midvaal and also contains the largest informal settlement of the municipality.

The location of the various informal settlements is outlined on Figure 27.

Overall, *Figure 27* demonstrates a spatial structure that is strongly influenced by the R59 as a regional movement corridor, with industrial land uses concentrated along and east of the route, residential settlements located in defined nodes and townships, and rural or undeveloped land remaining in portions of the study area. This land use pattern reflects both historic planning decisions and more recent corridor-based development frameworks, and provides an essential baseline for understanding future growth, land use transitions and spatial integration opportunities along the R59 Corridor.

Figure 30 illustrates the spatial distribution of land use applications within the study area, including rezonings, township establishments and properties that are subject to multiple development applications. The pattern of applications reflects sustained development interest within the R59 Corridor and demonstrates continued land use change in response to market demand and strategic growth opportunities. The distribution of applications also suggests a general alignment between proposed development initiatives and the prevailing land use management framework.

The figure indicates that the majority of development applications are concentrated on the eastern side of the R59 corridor, with comparatively fewer applications occurring west of the corridor. This trend reinforces the emerging spatial structure of the study area, where development pressure, industrial expansion and land use intensification are more evident to the east of the R59. In contrast,

development activity on the western side remains comparatively constrained by environmental considerations, agricultural land uses and infrastructure-related limitations.

In addition to the identified land use applications, Environmental Authorisation has been granted for the proposed Springfield Colliery and Redan Siding development located within the south-western portion of the broader study area. The approved mining right area affects portions of the farms Kookfontein 545 IQ, Damfontein 541 IQ, Smaldeel 542 IQ, Waldrift 599 IQ and Vlakfontein 546 IQ. The proposed development comprises a combination of open-cast mining pits, associated mining infrastructure, haul roads, processing facilities, access roads and other supporting infrastructure.

Figure 30 further illustrates the approved mining application area (shown in purple) together with the estimated mining footprint. The majority of the anticipated mining activities are located within the jurisdiction of the Emfuleni Local Municipality. However, portions of the associated infrastructure and supporting activities extend into the R59 Corridor study area and fall within the jurisdiction of the Midvaal Local Municipality.

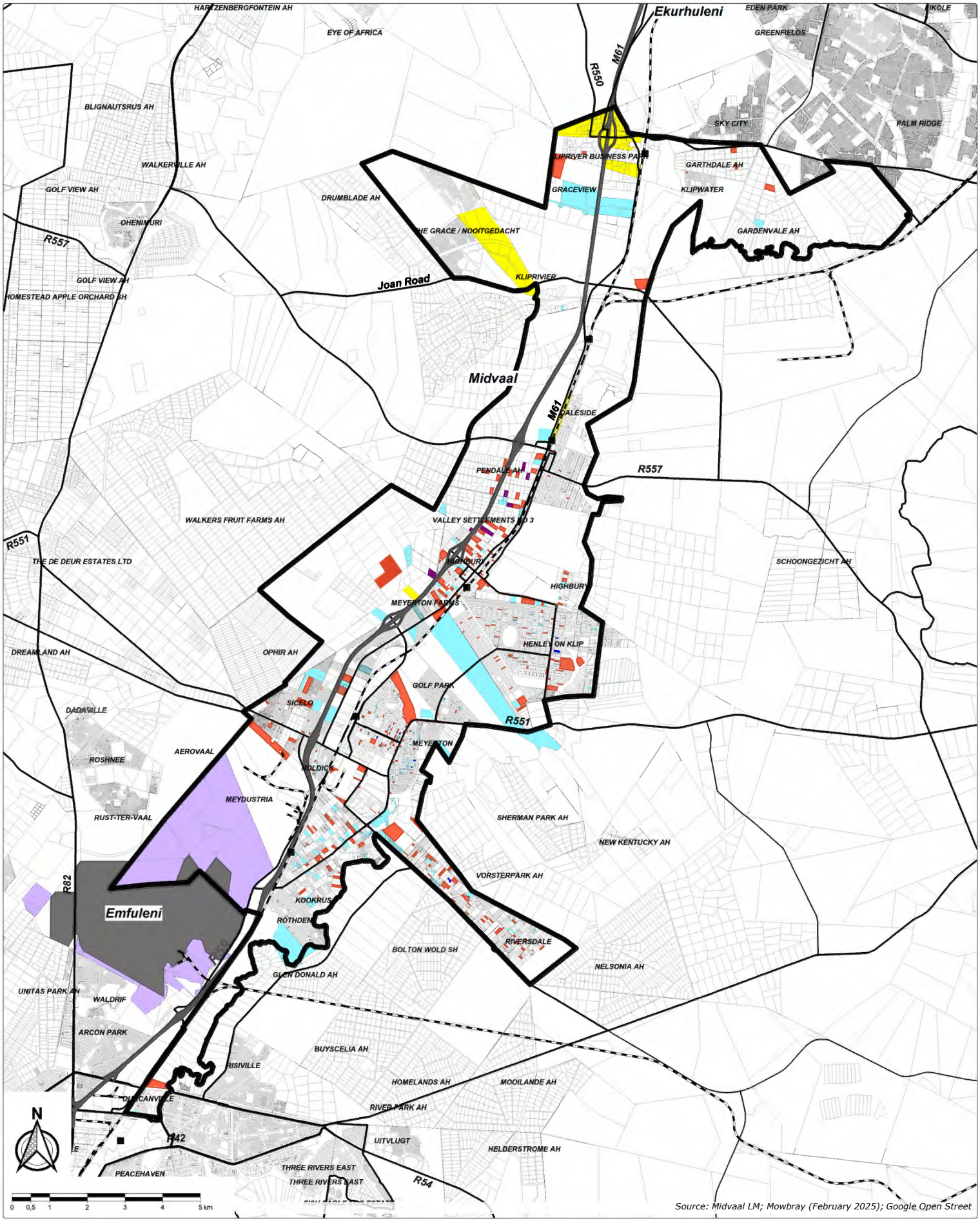
The proposed mining operation represents a significant long-term land use commitment and has the potential to influence the future spatial structure of the south-western portion of the corridor. While the primary mining footprint is situated outside the study area, the cross-boundary nature of the development highlights the importance of inter-municipal coordination and the ongoing management of cumulative impacts on surrounding land uses, infrastructure networks and environmental resources. The presence of the mine may also influence future development opportunities, land use compatibility and infrastructure planning within adjacent areas of the corridor.

The development, operation and eventual closure of the Springfield Colliery and associated infrastructure will be required to comply with the conditions of the approved Environmental Authorisation and all applicable legislative and regulatory requirements. Particular attention will need to be given to environmental management, water resource protection, rehabilitation obligations, transportation impacts, biodiversity conservation and the management of interfaces between mining activities and surrounding land uses. The mine will therefore need to operate in accordance with the provisions of the National Environmental Management Act, 1998 (Act 107 of 1998), the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002), the National Water Act, 1998 (Act 36 of 1998) and other applicable sector legislation.

In addition, any mining-related infrastructure, ancillary land uses or future development proposals associated with the operation will be required to comply with the applicable provisions of the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) (SPLUMA), the Midvaal Local Municipality Land Use Scheme, and all relevant municipal planning by-laws and land use management requirements. Where required, the necessary land use and development approvals must be obtained from the relevant authority prior to the commencement of activities, and the operation of the mine and associated infrastructure must remain consistent with approved land use rights, conditions of approval and the broader spatial planning objectives applicable to the area.

From a spatial planning perspective, the approved mining area should be recognised as a significant land use component within the south-western portion of the study area, with future development proposals in the vicinity being assessed in consideration of the operational requirements of the mine, associated environmental constraints, compatibility of adjacent land uses and long-term rehabilitation obligations.

Spatial Distribution of Land-Use Applications (2014-2025)



Source: Midvaal LM; Mowbray (February 2025); Google Open Street

Study Area
Cadastral
A Allotment

Rezoning
RoR and Rezoning
Township Establishment
Excision
More than 1 App Type

Mining Right Area Application
Estimated Mining Footprint

R59 Development Corridor

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Figure 30

3.2.3.4 Community Facilities

Figure 31 illustrates the spatial distribution of existing community facilities within the R59 Corridor study area. Community facilities are primarily concentrated within the Meyerton urban area, reflecting its role as the principal service centre and highest-order node within the corridor. A secondary concentration of facilities is evident within Sicelo, which accommodates a significant proportion of the study area's residential population and associated social infrastructure requirements.

Outside of Meyerton and Sicelo, community facilities are distributed throughout the remainder of the corridor in association with established residential areas and settlement clusters. The dispersed pattern of facilities provides a degree of accessibility across the corridor; however, the level of provision varies considerably between different settlements, resulting in unequal access to certain social, educational, healthcare and recreational services.

The assessment of existing community facility provision, as summarised in **Table 6**, indicates that several facility categories are currently operating below the desired level of provision. Notable shortfalls are evident in educational facilities, particularly primary and secondary schools, as well as training colleges. Deficiencies are also recorded in healthcare facilities, including primary health clinics and higher-order health facilities. In addition, shortages are evident in relation to community halls, post offices, welfare facilities and sports infrastructure.

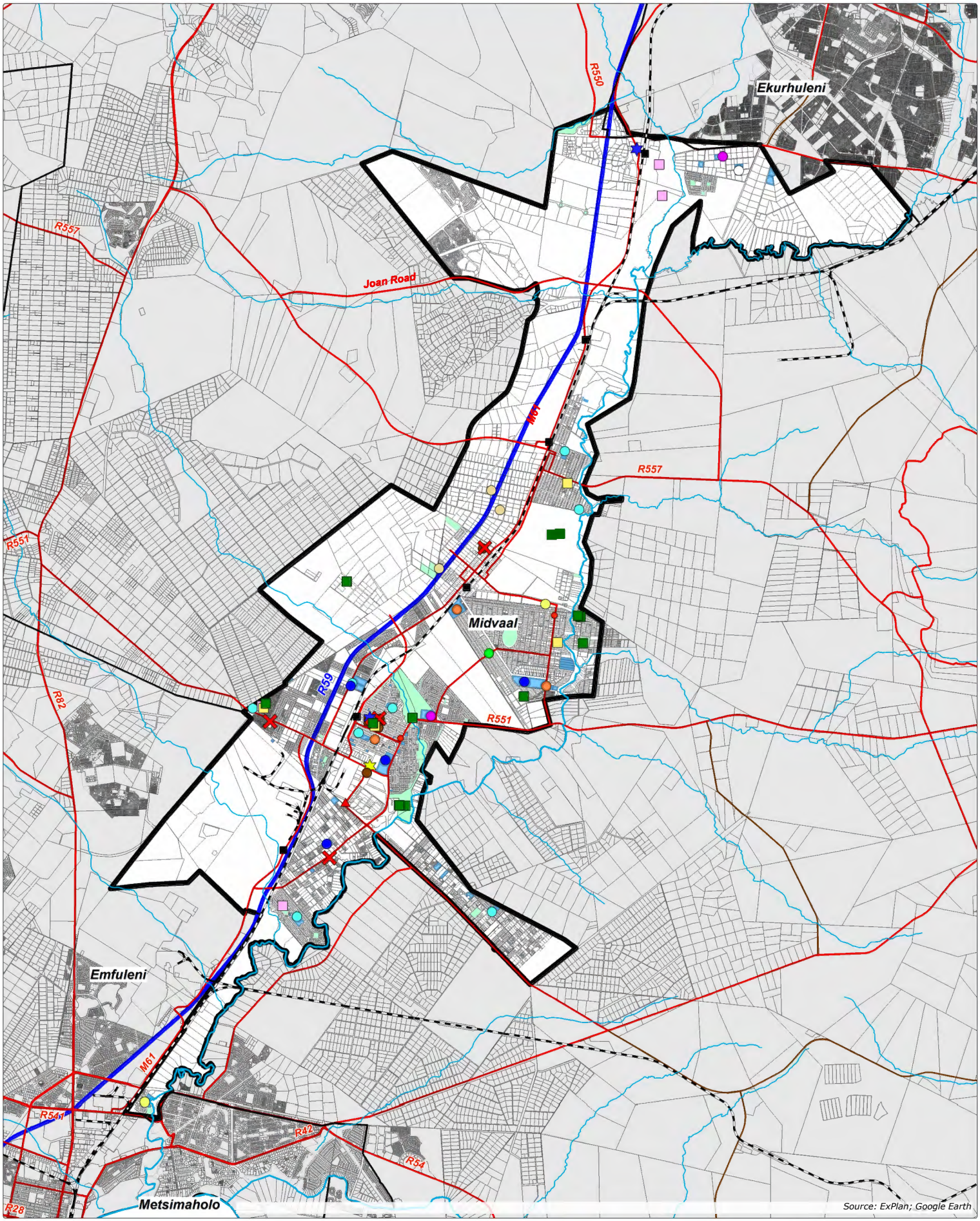
Table 6: Current Community Facilities

Table : R-59: Current Community Facility Need: 2026

Facilities	2026				
	Requirement			CF Provided	Shortfall
	number	ha	%	number	number
Number of Units	18208	1052	69%		
Population	55392		3		
Nett residential Density	17				
Education		44	3%		
Small Crèche	23	0		Detail not available	
ECD Resource Hub and Care Centre	3	0		-	(3)
Primary (including Grade R)/Intermediate	8	22		9	1
Secondary/Combined	4	21		7	3
Training Colleges	0,1	0		3	3
Tertiary Education	0,1	0		-	(0)
Special Education	1	5		2	1
Health Services		2	0%		
Primary Health Clinic	2	0		4	2
Community Health Centre/Hospital	1	1		-	(1)
Hospice and Health Centre	1	1		-	(1)
Safety and Security		1	0%		
Police	1	1		2	1
Fire Station	1	0,3		1	0
Social /Cultural/Civic		8	0%		
Local Library	3	0		4	1
Performing Arts Centre	1	1		-	(1)
SASSA Pay point/Home Affairs/Thusong Centre	1	0		-	(1)
Solid Waste Disposal Site	-	-		1	1
Municipal Office/Civic Centre	1	1		5	4
Magistrate's Court	1	1		1	-
Welfare Facilities/Charitable Institution	1	0,6		-	(1)
Old Age Home/Frail Care	1	1,1		3	2
Children's Home/Orphanage	1	0,6		1	
Worship Centre	18	2,8		Detail not available	
Post Office/ICT Access Point	6	0		3	(3)
Community Hall (large)	1	0		4	3
Sports and Recreation		28	2%		
Sports Facilities (ha)		17		8	(9)
Urban Parks (ha)		11		54	43

Conversely, the study area benefits from a relatively strong provision of civic and administrative facilities, including municipal offices, libraries and urban parks. The substantial concentration of community facilities within Meyerton reinforces the town's function as the primary service node within the study area, while facilities within Sicelo provide an important local service function for surrounding communities.

Existing Community Facilities



Source: ExPlan; Google Earth

- Study Area
- Municipal Boundary
- Cadastral
- National Road
- Main Road
- Secondary Road
- Railway/Railway Station
- Institutional/Educational
- Primary School
- Combined School
- Intermediate School
- Secondary School
- Special Needs School
- Other School
- Other College/Training
- Municipal/Government Office
- Retirement Village/Eco Estate
- Community Hall
- Library
- Postal Service
- Clinic
- Fire Station
- Police Station
- Sport/Recreation
- Court
- Landfill
- Park
- River

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 31

3.2.3.5 Industrial Land Use

The R59 Corridor is characterised by prolonged and continuous industrial development since the initial formulation of the Corridor Framework in 2010.

A detailed land use survey (see ***Info Text Box 2***) was undertaken for the area comparing the land uses in 2010 with 2025. The industrial land uses were further classified in terms of the Standard Industrial Classification (SIC) as outlined by STATSSA. The study area was divided into the following 6 clusters

- Garthdale
- Klipriver Business, Klipriver Industrial Park and Everite Industrial Area
- Daleside
- Pendale, Highbury
- Meyerton, Sybrand van Niekerk
- Duncanville

Info Box 2: Methodology: Survey of Industrial Enterprises

- Identify all occupied Industrial/Commercial Zoned land, as well as other land with industrial/commercial activities.
- Identification was done by using Google Earth, Streetview, Google Maps and a Physical Land Use Survey.
- Identification was only done on a property/erf base. No surveys were conducted inside buildings for instance within an Industrial Park.
- Capturing of Industry Name and Main Activity.
- Classification was done based on interpretation of company description on website, any other available/visible information.
- Standard Industrial Classification of STATSSA was used for classification of industries.

Table 7 outlines the SIC categories and how the use has been clustered in the report and maps.

Table 7: Main Categories

SIC Division	Description
38	Logistics/Transport, Warehousing, Wholesale, Waste Collection/Remediation, Rental/Leasing of Machinery, Motor Vehicle Repair, Scrapyards
39	
45	
46	
49	
52	
77	
24	Metals, Metal Products Machinery & Equipment
25	
28	
32	Other manufacturing*
19	Petroleum Products, Chemicals Rubber and Plastic
20	
22	
23	Other Non-Metal Industries
29	Motor Vehicles, Trailers, Semi Trailers & Transport Equipment
30	
33	Repair and installation of machinery and equipment
10	Food, Beverages & Tabacco
11	

SIC Division	Description
41	Construction
43	
16	Wood and paper; publising and printing
17	
18	
27	Manufacture of electrical equipment
31	Manufacture of furniture
35	Electricity, gas, steam and air conditioning supply
71	Architectural and engineering activities; technical testing and analysis
73	Advertising and market research

Source: Standard Industrial Classification (Seventh Edition), Oct 2012, Report No. 09-90-02, STATSSA

Garthdale:

The Garthdale area is characterised by agriculture and rural residential related uses with a cluster of industrial/commercial related uses in the north-western section. The properties are developed with industrial uses and 72% of the uses are transport and warehousing in support of transport. The uses are aligned to land uses of owners striving to utilise their properties to generate an income. Various properties are also utilised for mixed use. The majority of the uses are non-conforming uses according to the Land Use Scheme which may be a symptom of the development pressure from ever expanding City.

Figure 32 illustrates the net development effect between 2010 and 2025 which land use activities are new (post 2010) and which use expanded between 2010 and 2025. (See ***Annexure B1*** for Garthdale).

Klipriver Business, Klipriver Industrial Park and Everite Industrial Area:

The Klipriver Industrial is located either side of the R59 and is characterised by large footprint industries consisting of Heineken, Everite, BS Steel and Soufflet Malt (under construction).

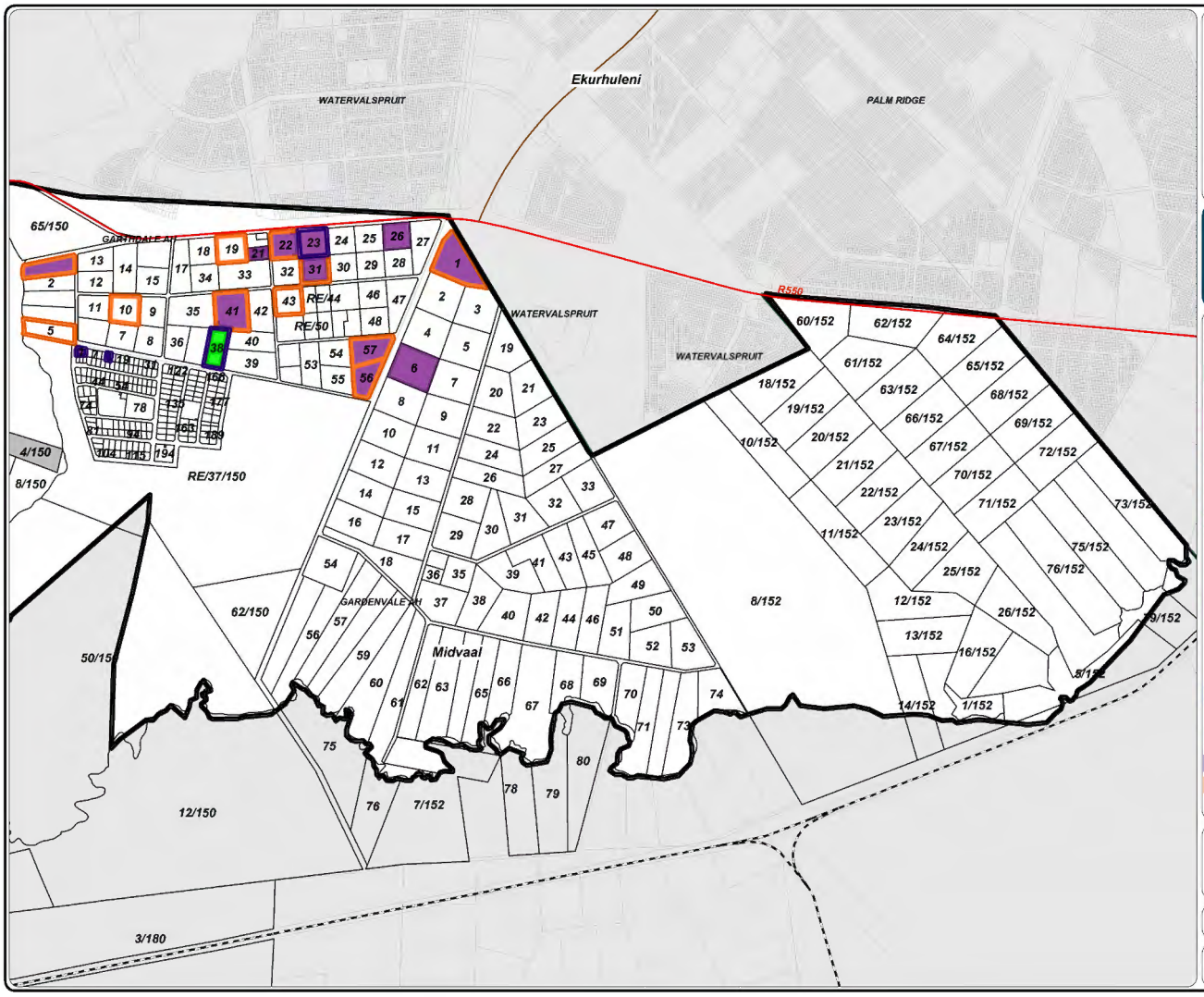
The area has 45 developed properties with 36 industries and covers 259 ha. The manufactures of other non-metal mineral products (33%) and manufacturing of beverages (24%) make up more than 50% of the total developed area.

Figure 33 illustrates the development trend in the area, and it can clearly be noted that most of the sites north of the Heineken Brewery are new and the majority of the existing industries (pre-2010) expanded further. (***Annexure B2*** provides more detail on the Klipriver area).

Daleside:

The Daleside area is characterised by small erven in comparison with the Klipriver area and is fully developed with industrial uses and as small remnant of residential buildings. The area consists of 57 developed properties with 41 industries. The industries is mostly characterised by manufacturing of metals, metal products, machinery and equipment and several food related industries.

Figure 34 illustrates the development trend pre-2010 and 2010-2025 and it can be noted that 8 properties were developed post-2010 with Rust Oleum and Meze Foods being the largest. A number of industries also expanded poist-20109. The properties south of Daleside along Kroonarend Road are still undeveloped. (***Annexure B3*** provides more detail on the Daleside area).



MIDVAAL LOCAL MUNICIPALITY

R59 CORRIDOR DEVELOPMENT BOUNDARY

Garthdale New Industries and Expansion of Existing Industries

- R59 Study Area
- Municipal Boundary
- District Boundary

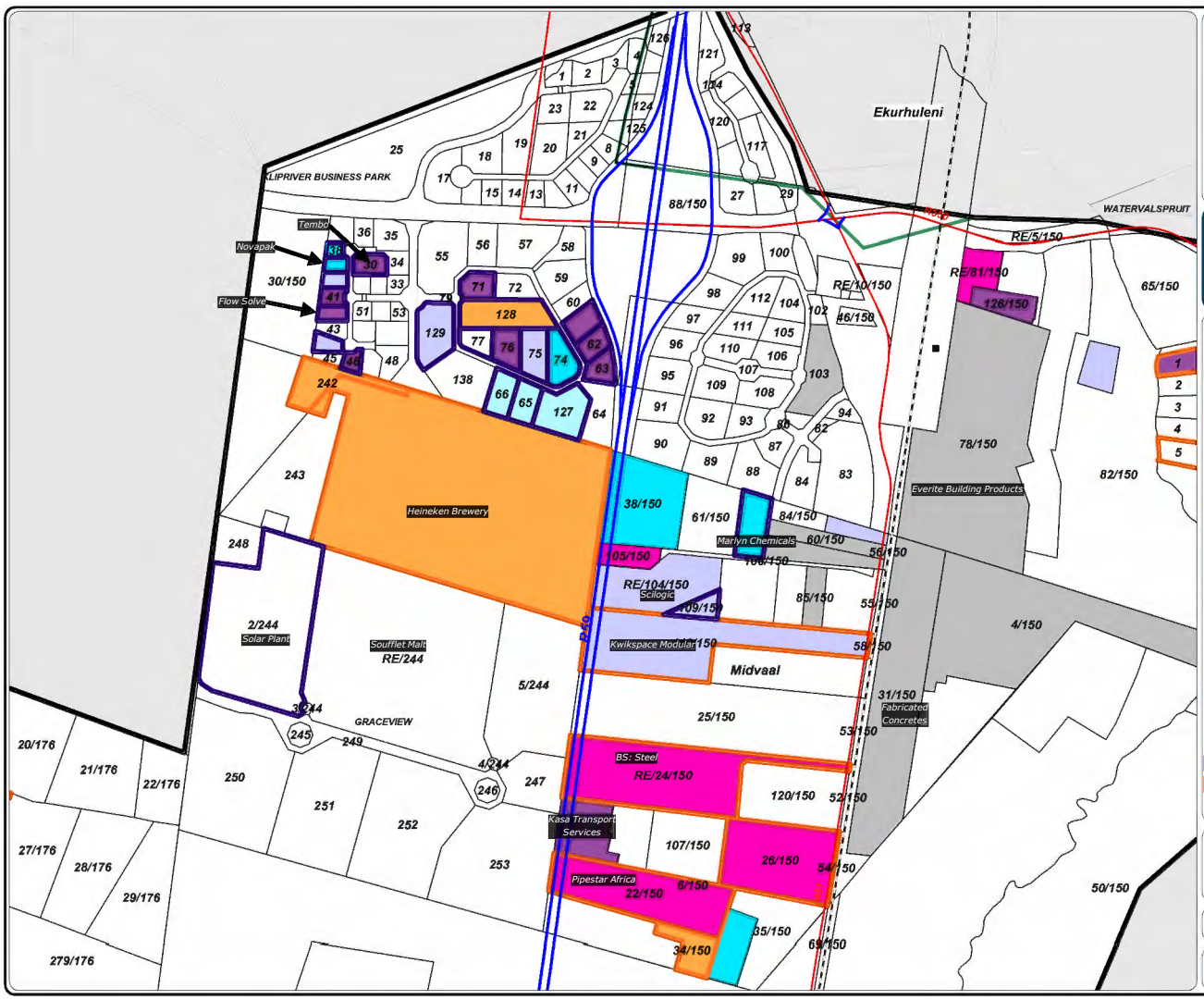
Industrial Classifications

- Metals, Metal Products Machinery & Equipment
- Petroleum Products, Chemicals Rubber and Plastic
- Food, Beverages & Tabacco
- Repair and installation of machinery and equipment
- Motor Vehicles, Trailers, Semi Trailers & Transport Equipment
- Logistics/Transport, Warehousing, Wholesale, Waste Collection/Remediation, Rental/Leasing of Machinery, Motor Vehicle Repair, Scrapyards
- Other Manufacturing*
- Other Non-Metal Industries
- Remainder of Industries
- New (2010-2025)
- Expansion (2010-2025)

N

0 75 150 300 450 600 750 m

Figure 32



MIDVAAL LOCAL MUNICIPALITY

R59 CORRIDOR DEVELOPMENT BOUNDARY

Klipriver Park New Industries and Expansion of Existing Industries

- R59 Study Area
- Municipal Boundary
- District Boundary

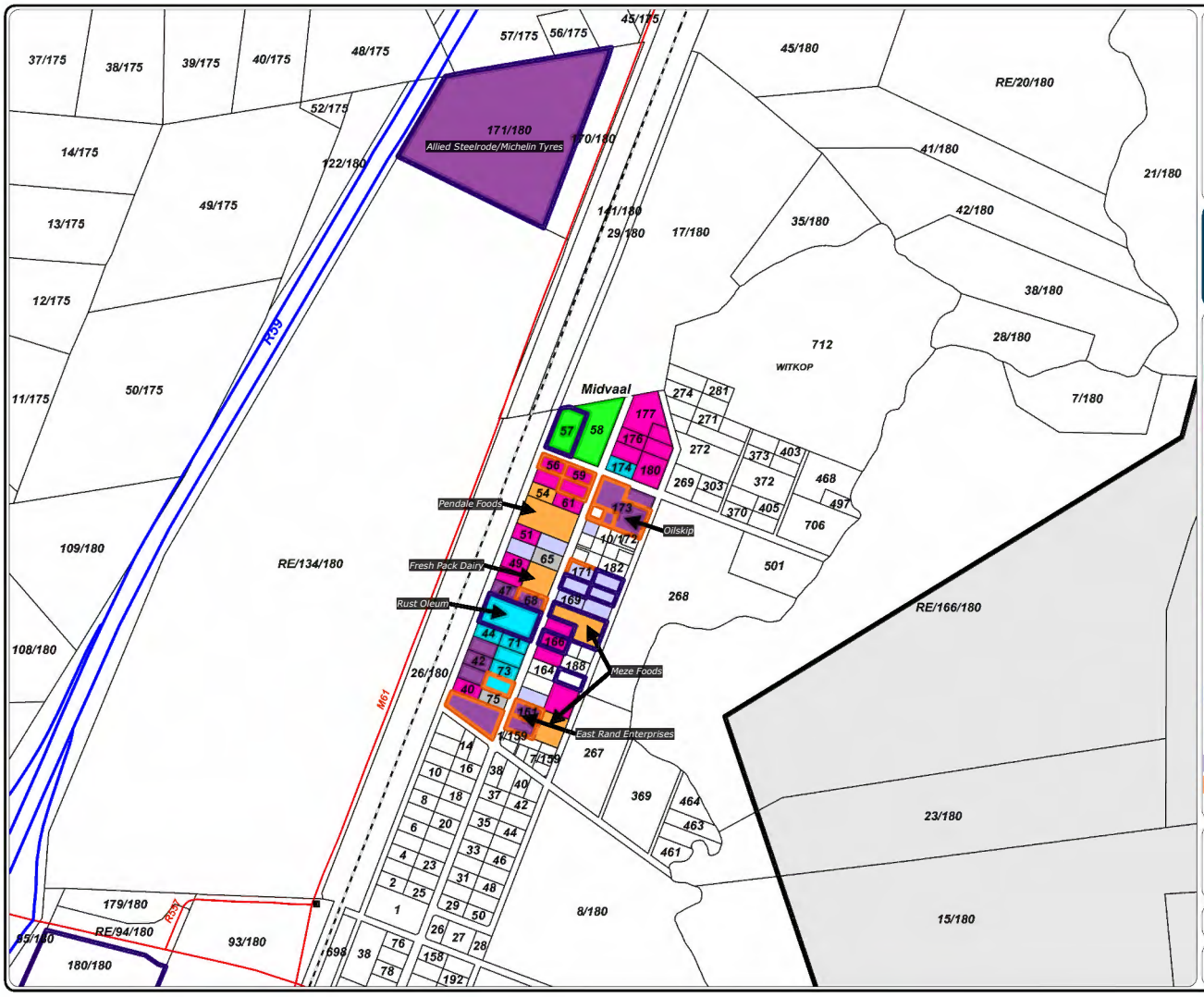
Industrial Classifications

- Metals, Metal Products Machinery & Equipment
- Petroleum Products, Chemicals Rubber and Plastic
- Food, Beverages & Tabacco
- Repair and installation of machinery and equipment
- Motor Vehicles, Trailers, Semi Trailers & Transport Equipment
- Logistics/Transport, Warehousing, Wholesale, Waste Collection/Remediation, Rental/Leasing of Machinery, Motor Vehicle Repair, Scrapyards
- Other Manufacturing*
- Other Non-Metal Industries
- Remainder of Industries
- New (2010-2025)
- Expansion (2010-2025)

N

0 60 120 240 360 480 600 m

Figure 33



MIDVAAL LOCAL MUNICIPALITY

R59 CORRIDOR DEVELOPMENT BOUNDARY

Daleside New Industries and Expansion of Existing Industries

- R59 Study Area
- Municipal Boundary
- District Boundary

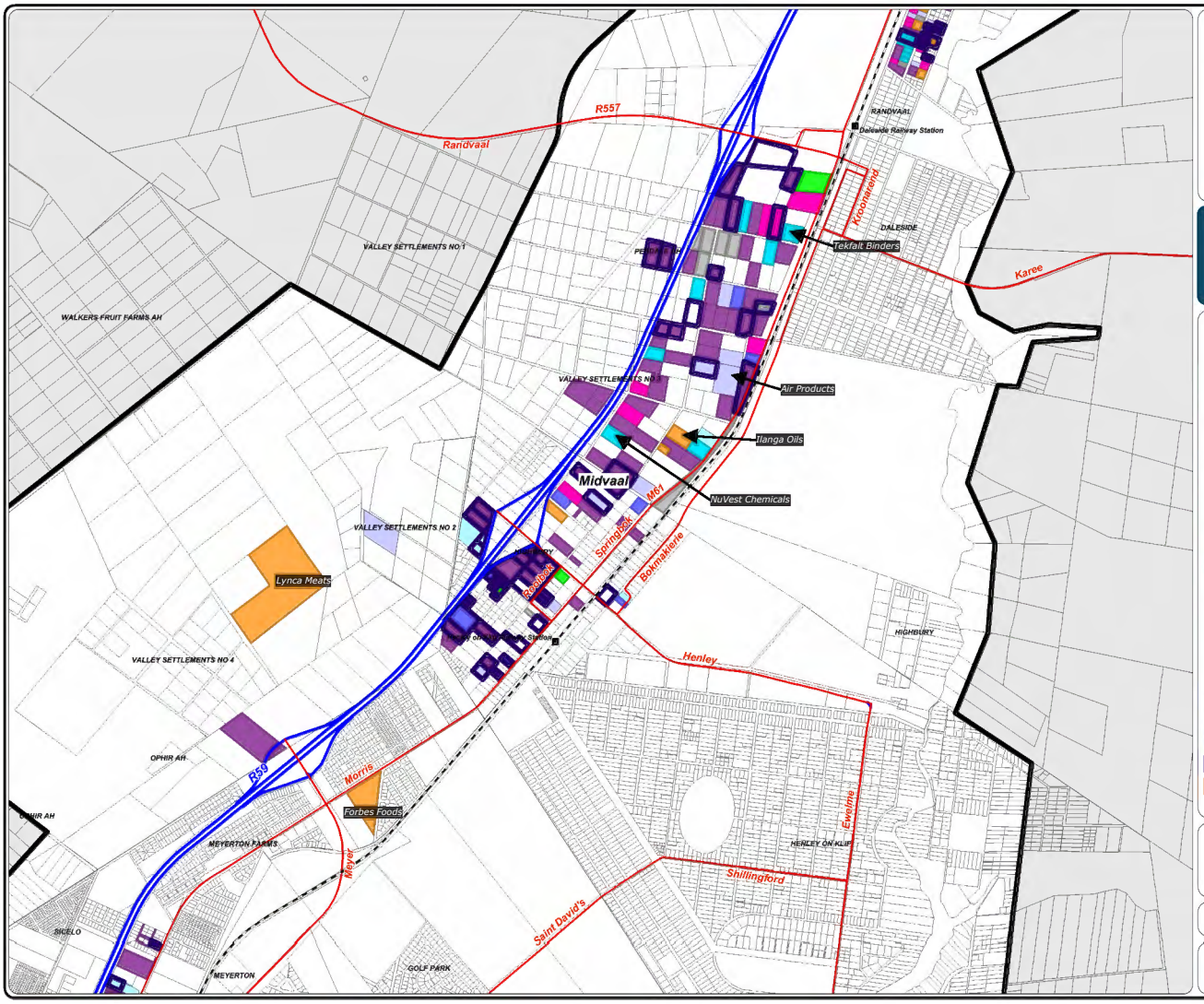
Industrial Classifications

- Metals, Metal Products Machinery & Equipment
- Petroleum Products, Chemicals Rubber and Plastic
- Food, Beverages & Tabacco
- Repair and installation of machinery and equipment
- Motor Vehicles, Trailers, Semi Trailers & Transport Equipment
- Logistics/Transport, Warehousing, Wholesale, Waste Collection/Remediation, Rental/Leasing of Machinery, Motor Vehicle Repair, Scrapyards
- Other Manufacturing*
- Other Non-Metal Industries
- Remainder of Industries
- New (2010-2025)
- Expansion (2010-2025)

N

0 30 60 120 180 240 300 m

Figure 34



MIDVAAL LOCAL MUNICIPALITY

R59 CORRIDOR DEVELOPMENT BOUNDARY

Pendale/Highbury New Industries and Expansion of Existing Industries

- R59 Study Area
- Municipal Boundary
- District Boundary

Industrial Classifications

- Metals, Metal Products Machinery & Equipment
- Petroleum Products, Chemicals Rubber and Plastic
- Food, Beverages & Tabacco
- Repair and installation of machinery and equipment
- Motor Vehicles, Trailers, Semi Trailers & Transport Equipment
- Logistics/Transport, Warehousing, Wholesale, Waste Collection/Remediation, Rental/Leasing of Machinery, Motor Vehicle Repair, Scrapyards
- Other Manufacturing*
- Other Non-Metal Industries
- Remainder of Industries
- New (2010-2025)
- Expansion (2010-2025)

N

0 0,1 0,4 0,6 0,8 1 km

Figure 35

Pendale/Highbury:

The Pendale/Highbury is a very well-developed industrial area surrounded by residential uses to the north-east (Daleside residential) and south-east (Henley-on-Klip) with the two residential area split by the Afrimat Glen Douglas Dolomite Mine. The Pendale AH/Valley Settlements west of the R59 is characterised by low intensity residential/agriculture related uses. The majority of the industrial uses are located between the R59 and the M61/Springbok Road. Stretching from R557 past the Henley Drive offramp from the R59. The industrial uses are mostly characterised by Transport Related activities/logistics and wholesale, capitalising on the existing offramps and the mobility offered by the R59.

Figure 35 illustrates the development trend, and it can be noted that a large number of industries developed post-2010 and existing industries expanded. (See ***Annexure B4*** for more details on Pendale/Highbury)

Meyerton, Sybrand van Niekerk, Sicelo:

Meyerton, Sicelo and Sybrand van Niekerk are the original townships of the area and is characterised by a variety of land uses namely:

- Meyerton CBD
- Sybrand van Niekerk industrial
- Sicelo township
- Meyerton and Klipriver residential areas
- Meydustria (SA Steel Mills)

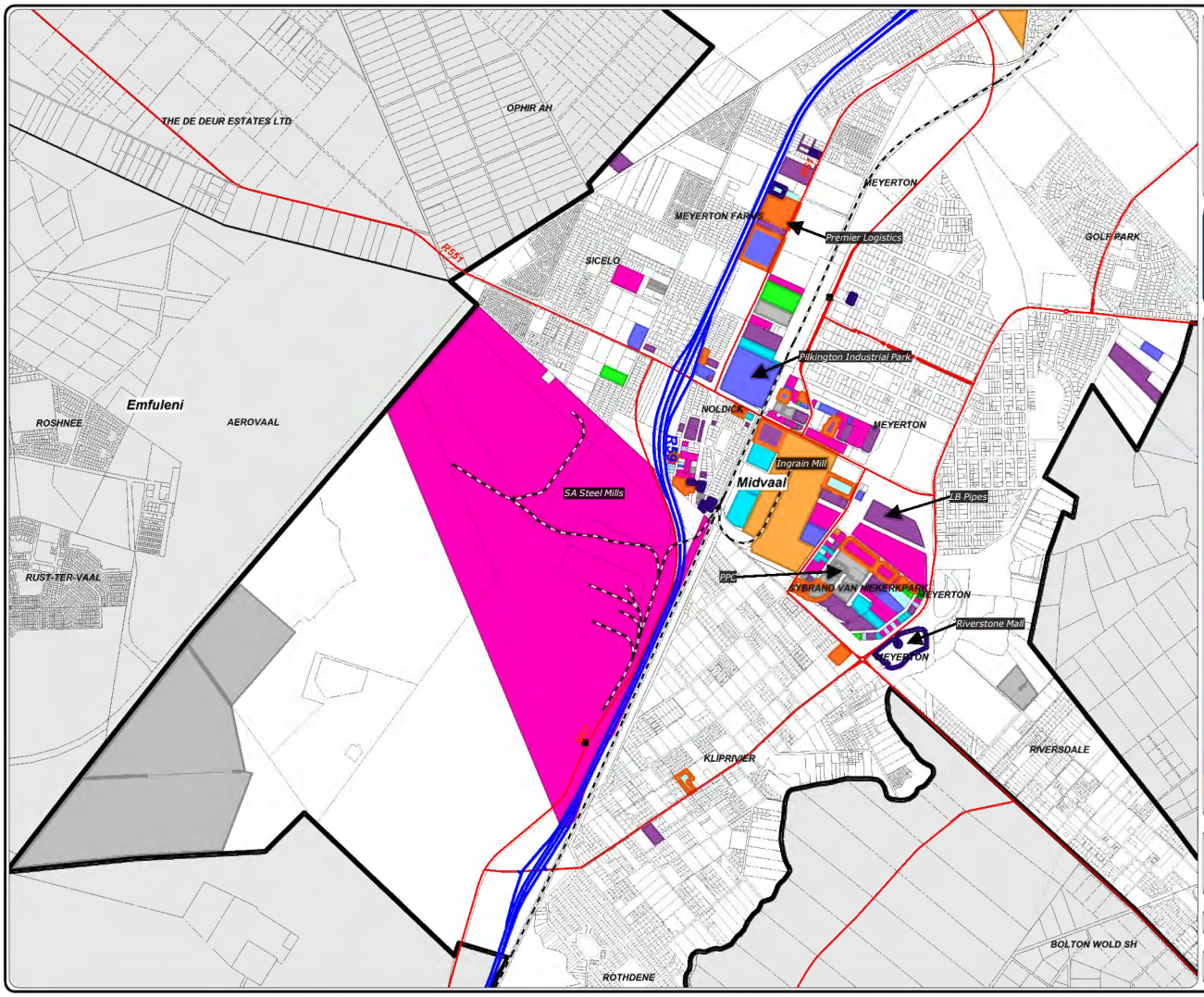
The cluster holds the largest number of industries (152) and developed properties (263) which cover 968 ha. The largest industrial developed footprint is for the manufacture of basic metals; however, the smelters are not correctly operational.

Figure 36 illustrates the development trend for the area and a limited number of new industries developed within the area with the Riverstone Mall being the largest new development. The lack of new or expansion of industries may be attributed to the developed state of the area. (See ***Annexure B5*** for more details).

Duncanville:

Duncanville is the most southern section of the study area and also the border between Midvaal and Emfuleni. The area is characterised by medium sized industrial properties, with 61 developed properties, 39 industries and covers 20 ha. The area has a wide variety of vibrant industrial activities.

Figure 37 illustrates the development trend, and a limited number of new developments have taken place with a few existing industries expanding post-2010. (See ***Annexure B6*** for more information on Duncanville).



MIDVAAL LOCAL MUNICIPALITY

R59 CORRIDOR DEVELOPMENT BOUNDARY

Meyerton/ Sybrand van Niekerk New Industries and Expansion of Existing Industries

- R59 Study Area
- Municipal Boundary
- District Boundary

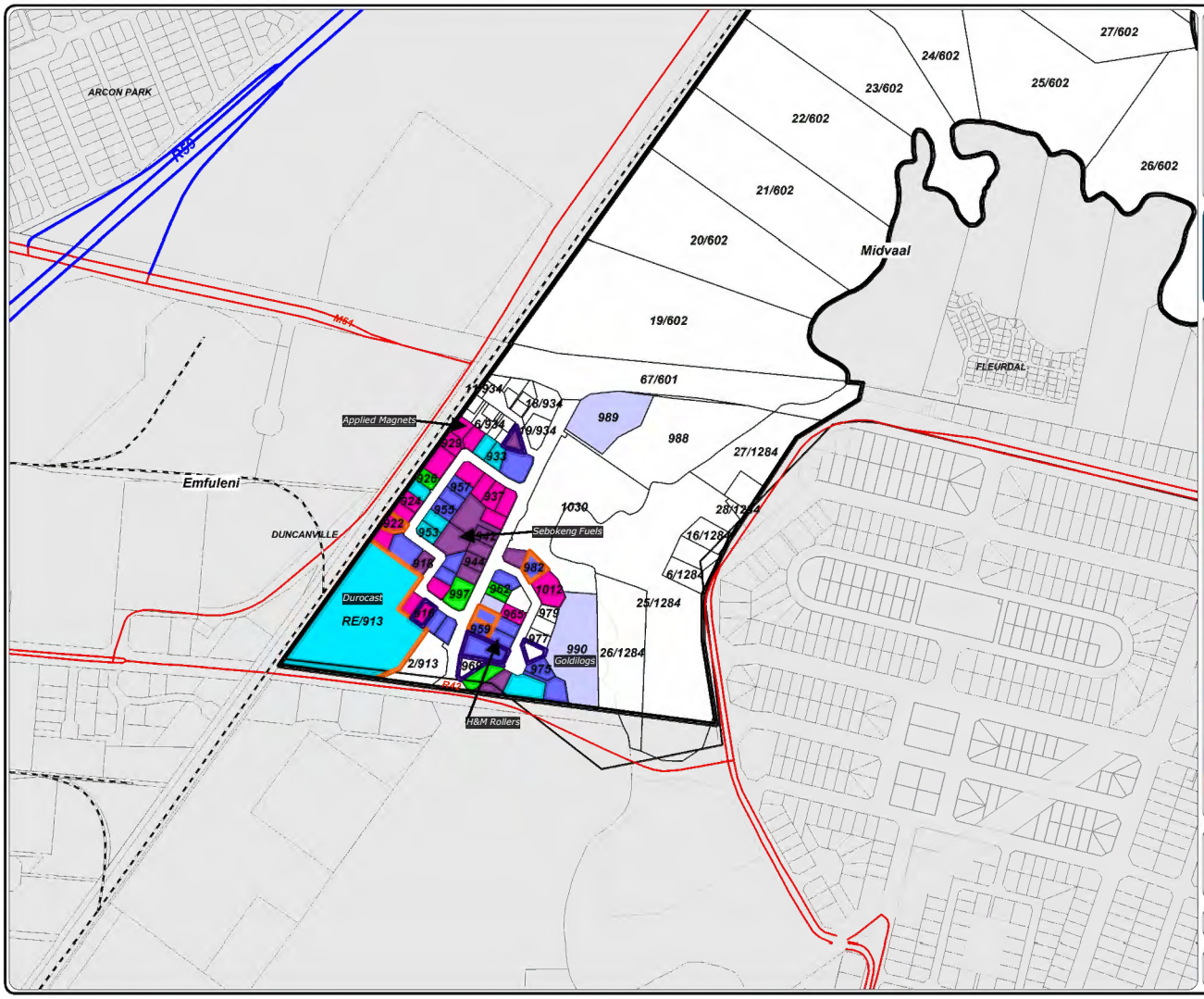
Industrial Classifications

- Metals, Metal Products Machinery & Equipment
- Petroleum Products, Chemicals Rubber and Plastic
- Food, Beverages & Tabacco
- Repair and installation of machinery and equipment
- Motor Vehicles, Trailers, Semi Trailers & Transport Equipment
- Logistics/Transport, Warehousing, Wholesale, Waste Collection/Remediation, Rental/Leasing of Machinery, Motor Vehicle Repair, Scrapyards
- Other Manufacturing*
- Other Non-Metal Industries
- Remainder of Industries
- New (2010-2025)
- Expansion (2010-2025)

N

0 0,1 0,4 0,6 0,8 1 km

Figure 36



MIDVAAL LOCAL MUNICIPALITY

R59 CORRIDOR DEVELOPMENT BOUNDARY

Duncanville New Industries and Expansion of Existing Industries

- R59 Study Area
- Municipal Boundary
- District Boundary

Industrial Classifications

- Metals, Metal Products Machinery & Equipment
- Petroleum Products, Chemicals Rubber and Plastic
- Food, Beverages & Tabacco
- Repair and installation of machinery and equipment
- Motor Vehicles, Trailers, Semi Trailers & Transport Equipment
- Logistics/Transport, Warehousing, Wholesale, Waste Collection/Remediation, Rental/Leasing of Machinery, Motor Vehicle Repair, Scrapyards
- Other Manufacturing*
- Other Non-Metal Industries
- Remainder of Industries
- New (2010-2025)
- Expansion (2010-2025)

N

0 30 60 120 180 240 300 m

Figure 37

3.2.3.6 Synthesis

Table 8 and ***Diagram 3*** provide an overall synthesis of the industrial development within the study area. The area has 571 industrial developed properties that represent 383 industries and covers 1,856 ha.

The Meyerton/Sybrand van Niekerk Cluster has the most industries and covers the largest area (Diagram 3) followed by the Pendale area.

Table 9 illustrates SIC if clustered according to land use activities and the following can be noted:

- Commercial Land representing 7 SIC categories make up 33% of the industries within the R59 Corridor.
- The SIC categories for metals, metal products, machinery and equipment under Industrial/Manufacturing land use make up 21% of all the industries combined and is the 2nd ranked industry.
- Petroleum products, chemicals, rubber and other non-metal industries make up 14% of the industries and is rated 4th and 5th respectively.

Figure 38 provides a spatial representation of the scale and extent of the industrial uses within the study area.

Table 8: Industrial Survey – Industrial Entities per Geographic Area

Geographical Area	Number of Properties	%	No. of Industries	%	Area (ha)	%	Average Area per Property (ha)
Garthdale	14	2%	14	4%	31	2%	2,2
Klipriver Business Park / Industrial Park	45	8%	36	9%	259	17%	5,7
Daleside	57	10%	41	11%	33	2%	0,6
Pendale	130	23%	100	26%	236	15%	1,8
Meyerton Farm/Sybrand van Niekerk	263	46%	152	40%	968	62%	3,7
Duncanville	61	11%	39	10%	20	1%	0,3
Other Areas	1	0%	1	0%	9	1%	8,8
Grand Total	**571**	**100%**	**383**	**100%**	**1 556**	**100%**	**2,7**

Source: Plan Associates Industrial Land Use Survey, January 2026, Google Earth, 2025

Diagram 3: R59 Industrial Entities per Geographical Area

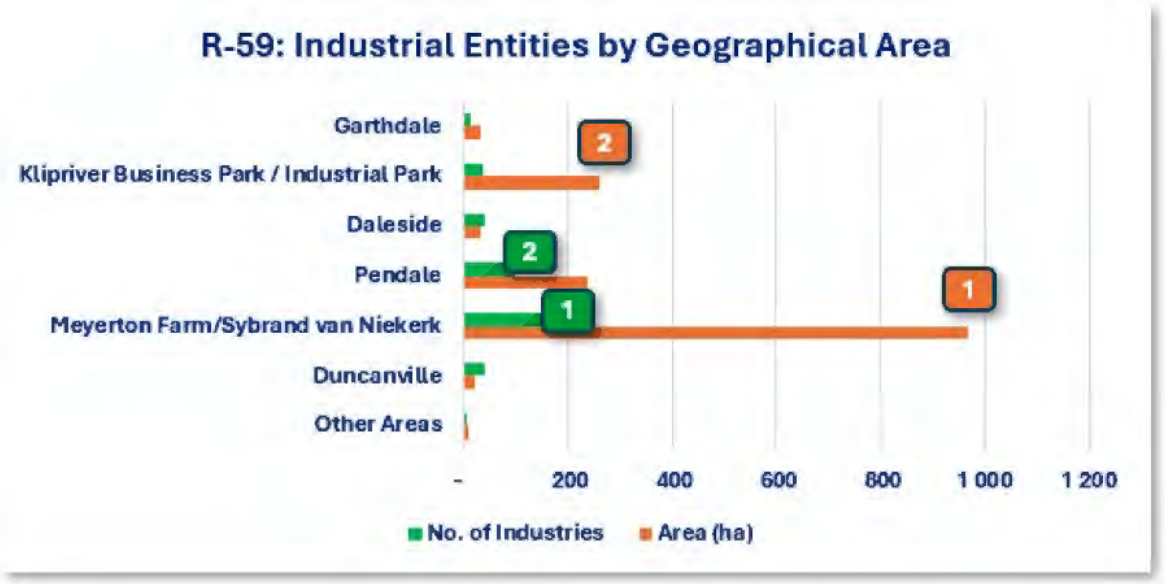
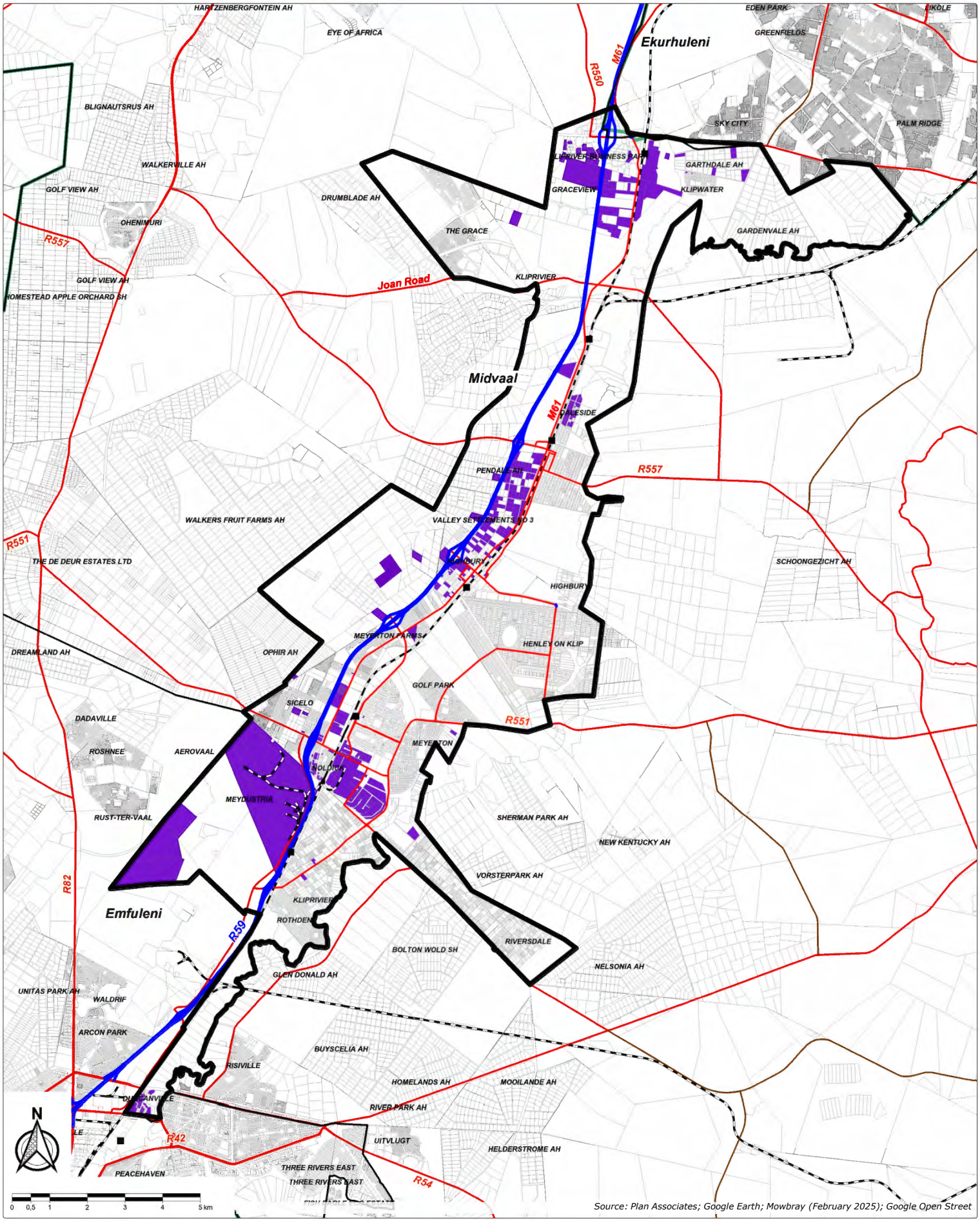


Table 9: Industrial Survey – Entities per Division: Ranked according to Number of Industries

Land Use	SIC Division	Description	Number of Properties	%	Number of Industries	%	Area (ha)	%	Number of Industries: Combined %	Number of Industries: Ranking
Commercial	38	Logistics/Transport, Warehousing, Wholesale, Waste Collection/Remediation, Rental/Leasing of Machinery, Motor Vehicle Repair, Scrapyards	12	2%	9	2%	14	1%	33%	1
	39		4	1%	2	1%	4	0%		
	45		24	4%	16	4%	37	2%		
	46		33	6%	23	6%	27	2%		
	49		82	14%	34	9%	69	4%		
	52		52	9%	40	10%	76	5%		
	77		6	1%	4	1%	2	0%		
Industrial/Manufacturing	24	Metals, Metal Products Machinery & Equipment	15	3%	7	2%	543	35%	21%	2
	25		75	13%	56	15%	56	4%		
	28		22	4%	18	5%	18	1%		
	32	Other manufacturing*	45	8%	36	9%	47	3%	9%	3
	19	Petroleum Products, Chemicals Rubber and Plastic	6	1%	3	1%	4	0%	8%	4
	20		25	4%	17	4%	38	2%		
	22		10	2%	10	3%	13	1%		
	23	Other Non-Metal Industries	48	8%	24	6%	345	22%	6%	5
	29	Motor Vehicles, Trailers, Semi Trailers & Transport Equipment	20	4%	16	4%	15	1%	5%	6
	30		5	1%	3	1%	5	0%		
	33	Repair and installation of machinery and equipment	23	4%	17	4%	19	1%	4%	7
	10	Food, Beverages & Tabacco	18	3%	12	3%	94	6%	4%	8
	11		3	1%	2	1%	65	4%		
	41	Construction	7	1%	6	2%	4	0%	3%	9
	43		6	1%	6	2%	5	0%		
	16	Wood and paper; publising and printing	8	1%	7	2%	11	1%	3%	10
	17		1	0%	1	0%	2	0%		
	18		2	0%	2	1%	2	0%		
Industrial/Manufacturing (2% or less)	27	Manufacture of electrical equipment	6	1%	4	1%	24	2%	1%	11
	31	Manufacture of furniture	2	0%	2	1%	5	0%	1%	12
	35	Electricity, gas, steam and air conditioning supply	3	1%	2	1%	6	0%	1%	13
	71	Architectural and engineering activities; technical testing and analysis	2	0%	2	1%	1	0%	1%	14
	73	Advertising and market research	6	1%	2	1%	7	0%	1%	15
	Total		571	100%	383	100%	1 556	85%	100%	

* Industries grouped together if type of industry was not clear

R59 Industrial Land Use



Source: Plan Associates; Google Earth; Mowbray (February 2025); Google Open Street

Study Area
Cadastral
A Allotment

Industrial/Commercial
Industrial Park

National Road
Main Road
Secondary Road
Railway
Railway Station

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 38

3.2.4 Economic

The R59 Corridor forms part of the broader Midvaal Local Economy, which is the second largest contributor to the Sedibeng District Economy, accounting for approximately 15.3% of the district's Gross Value Added (GVA) (***Diagram 4***). As illustrated in ***Diagram 5*** and detailed in Table 2.1, the Midvaal economy is one of only two local economies in the district that has increased its proportional contribution since 2014. The spatial distribution of economic output across the Sedibeng District and the R59 Corridor Study Area is illustrated in ***Figures 39*** and **40**, which demonstrate a clear alignment between economic activity and the R59 corridor as a regional movement and logistics spine.

The local economy is characterised by a strong combination of both the secondary and tertiary sectors. While the tertiary sector contributes the largest share overall, the secondary sector - particularly manufacturing - remains a critical driver of economic activity (see ***Diagram 6***).

The agriculture (0.5%), mining (0.9%), manufacturing (4.0%), wholesale and trade (1.2%), transport (0.2%), government (0.6%) and community services (0.8%) sectors have increased their proportional contribution to the Local economy since 2014.

Diagram 4: Economy Size and Contribution

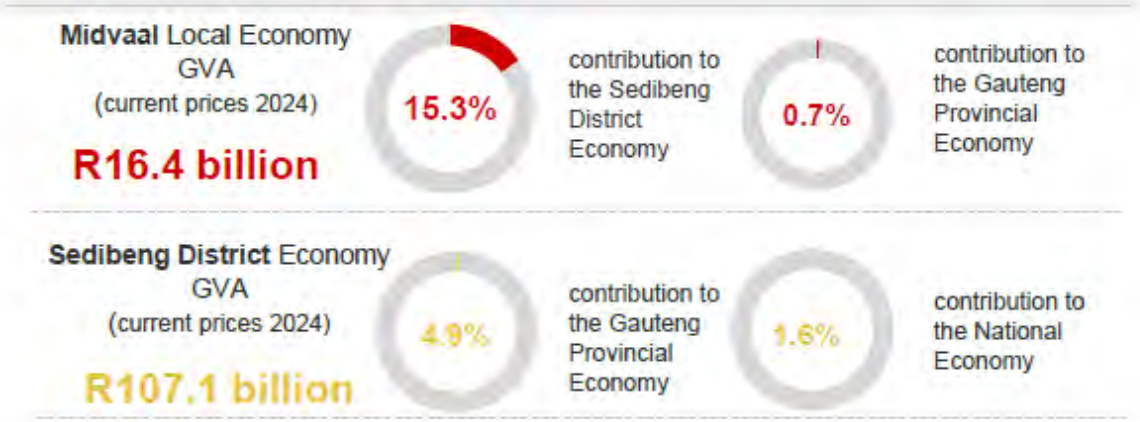


Diagram 5: Comparative Economy Size and Contribution Analysis



Diagram 6: Economy Structure

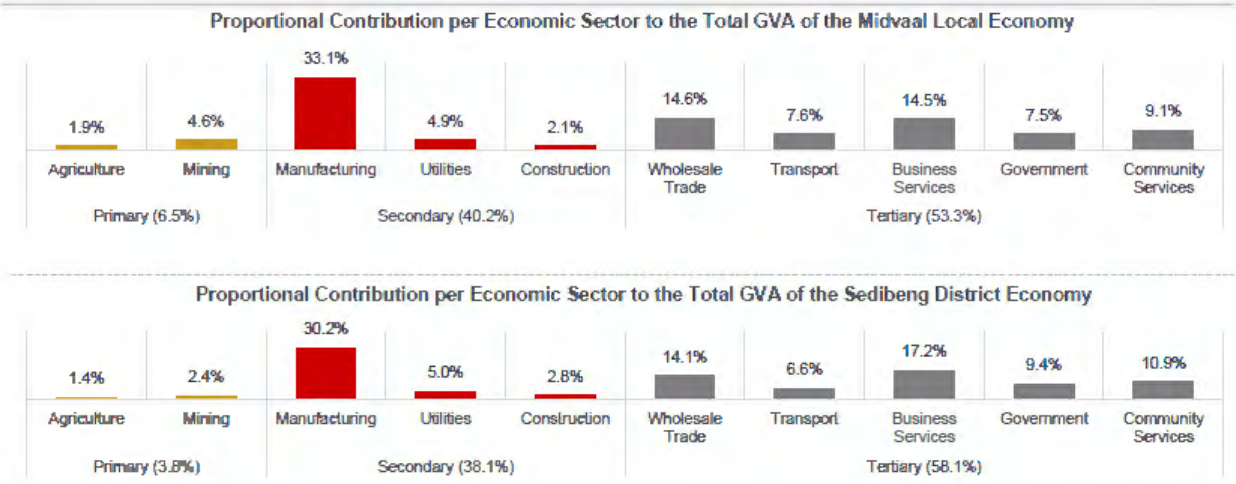


Figure 39: Distribution of Economic Output in the Sedibeng District Economy

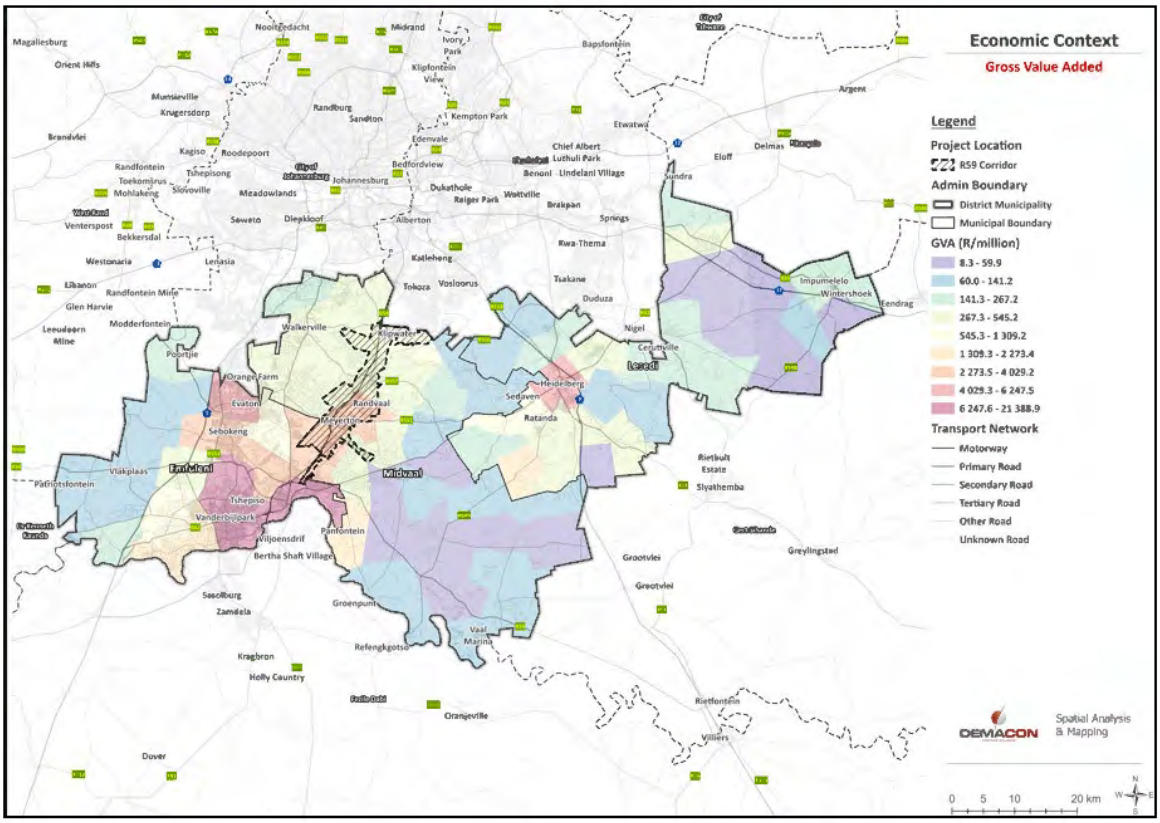
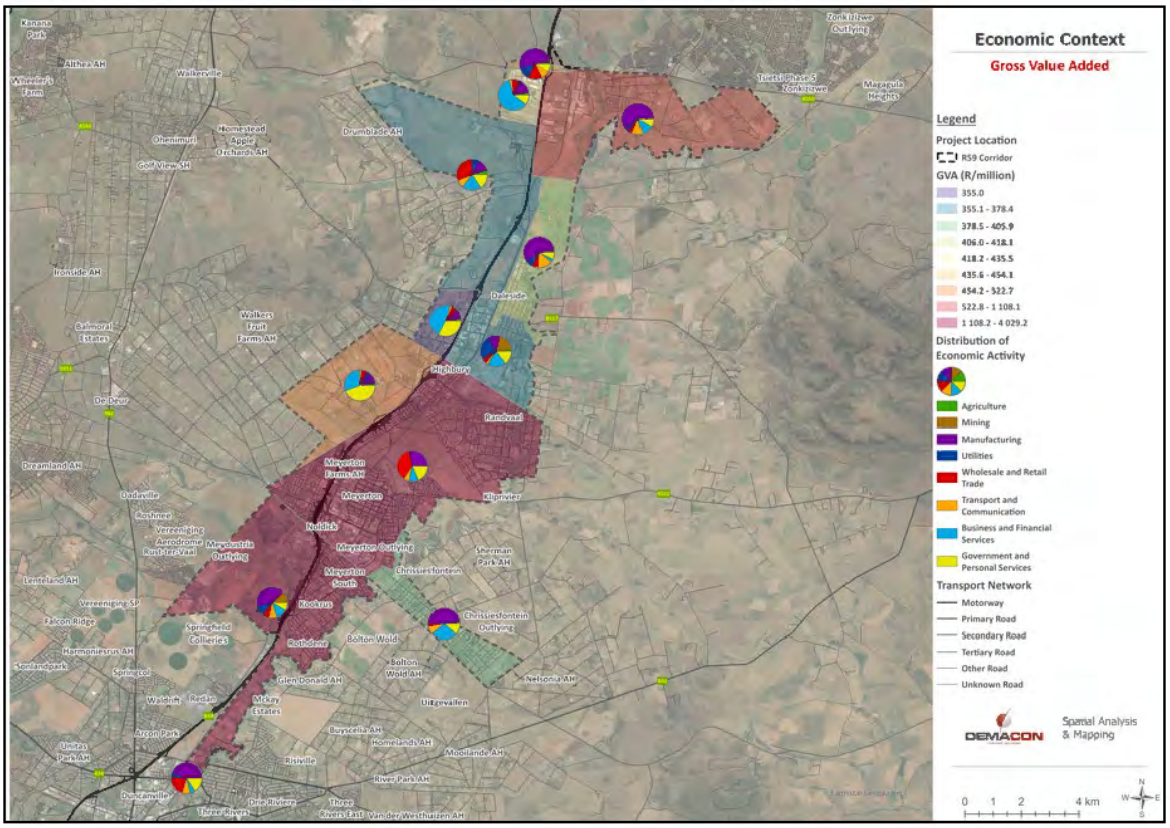


Figure 40: Distribution of Economic Output in the R59 Corridor Study Area Boundary Economy

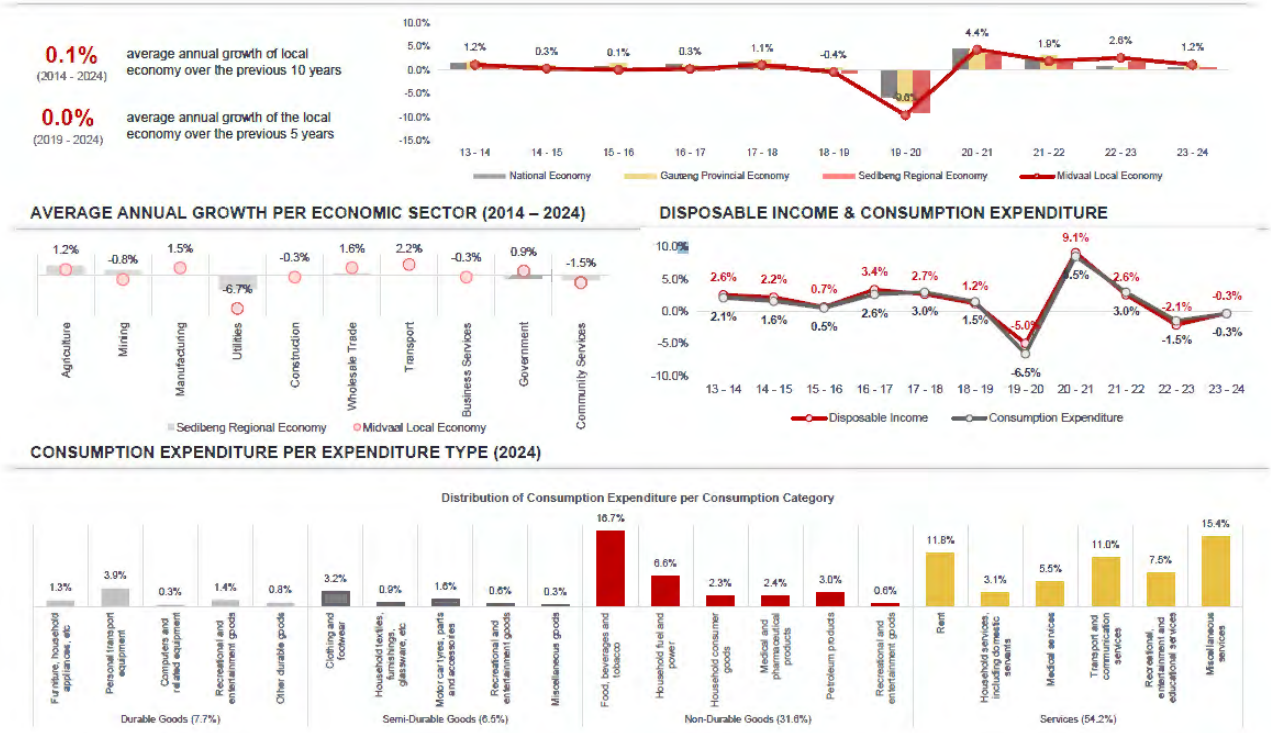


The economic structure of the Midvaal Local Economy and the R59 Corridor is characterised by a strong combination of secondary and tertiary sectors. Manufacturing remains a central driver of economic output, contributing approximately 33.1% of total local GVA, followed by wholesale and retail trade (14.6%) and business services (14.5%), as illustrated in the sectoral contribution charts (*Diagrams 3* and *4*). Although the tertiary sector contributes the largest overall share, the continued dominance of the secondary sector underscores the corridor's importance as an industrial and production-oriented environment. Comparative sectoral contributions for the Midvaal Local Economy, Sedibeng District and the national economy are illustrated in *Diagram 5* and proportional distribution figures.

Diagram 7 illustrates the economic growth and household consumption expenditure which is discussed below.

Economic growth trends indicate that the local economy has experienced weak but relatively stable growth, broadly reflecting district and national patterns. As shown in *Diagram 6*, the Midvaal Local Economy recorded an average annual growth rate of approximately 0.1% over the ten-year period (2014–2024) and 0.0% over the five-year period (2019–2024). Household consumption expenditure and disposable income trends indicate moderate increases in household spending, with consumption expenditure growing marginally faster than disposable income. This trend suggests increasing household vulnerability to inflationary pressures. Expenditure towards services makes up 54.2% of the total consumption expenditure.

Diagram 7: Economy Growth



Diagrams 8 and ***9*** illustrate the labour force participation and is discussed below.

Labour market indicators show relatively strong participation levels within the local economy. Approximately 84.1% of the potential labour force in the Midvaal Local Economy participates in economic activity, exceeding both district and national averages. Formal employment accounts for approximately 73.9% of all jobs, while informal employment has declined over the past decade. Employment growth has been concentrated in semi-skilled and low skilled occupational categories, reinforcing the importance of labour absorbing sectors along the R59 Corridor. The three largest employment contributors in Midvaal consist of Community Services (19%), Wholesale Trade (25.6%) and Manufacturing (19.7%).

Diagram 8: Labour Force Participation Rate

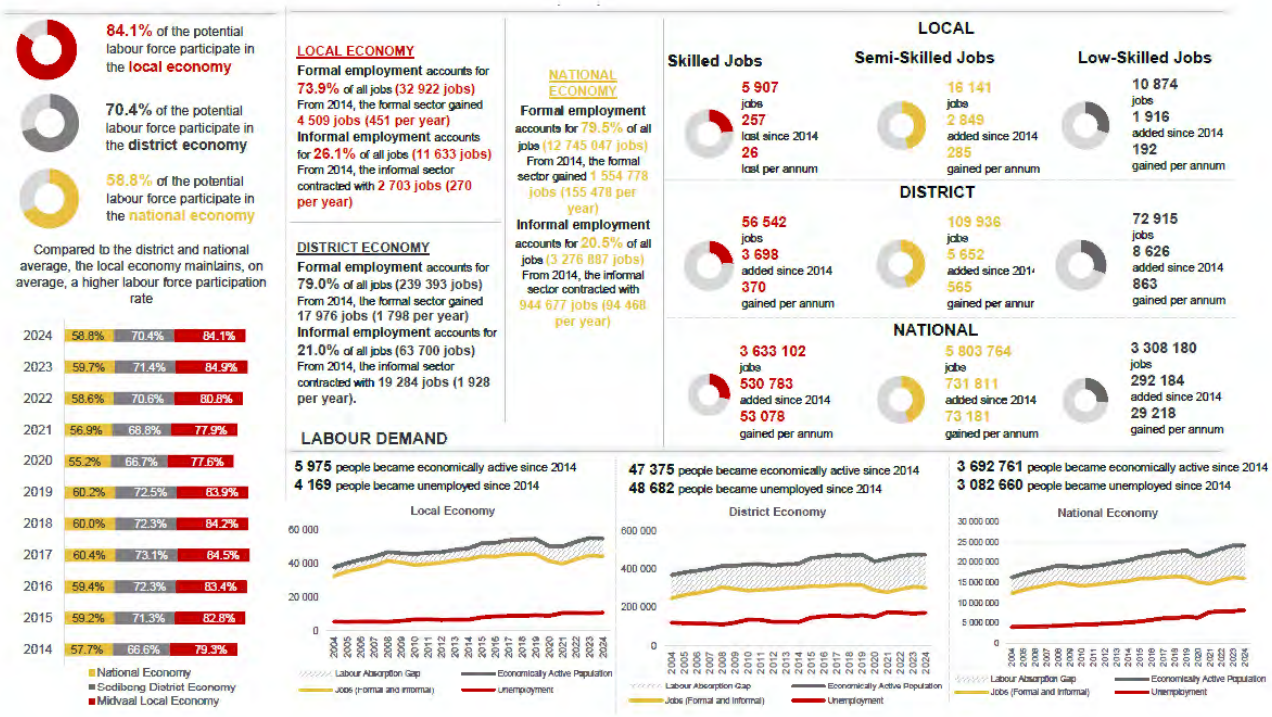
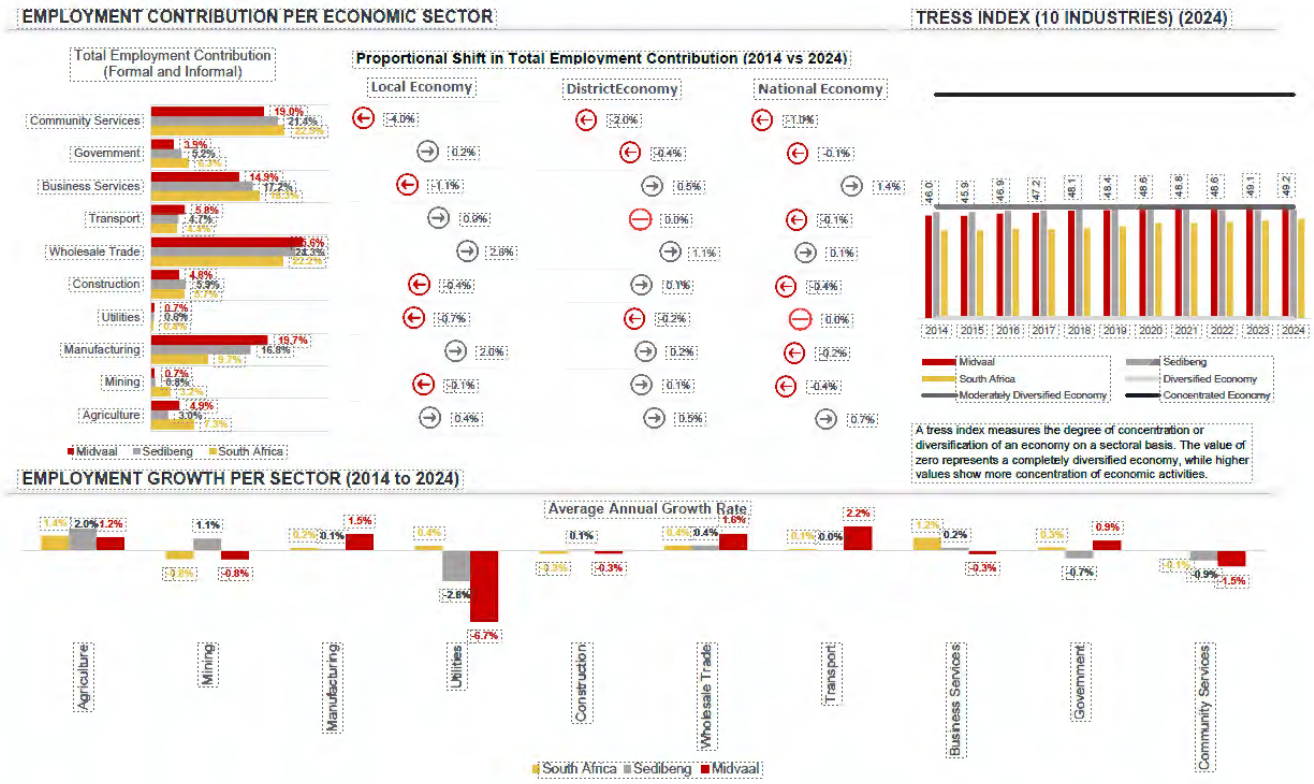


Diagram 9: Labour Force Structure



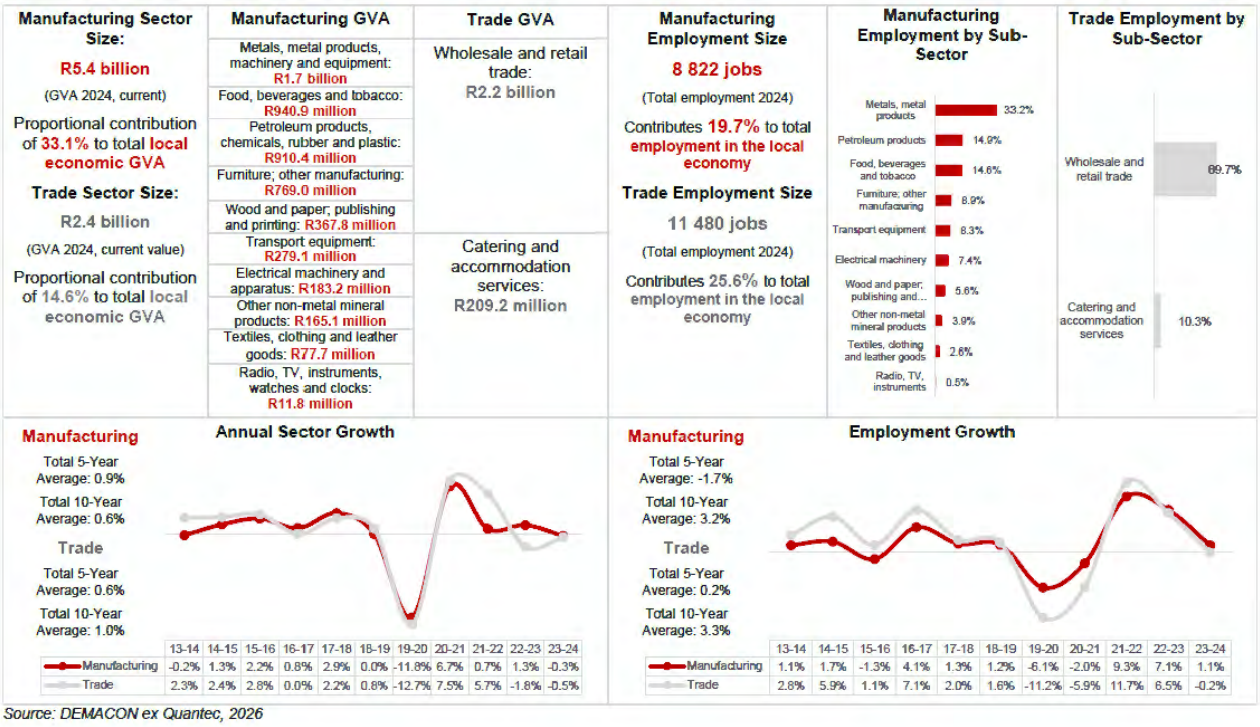
Diagrams 10 and ***11*** outlines the key manufacturing indicators, key business and community service indicators, and the most prominent features are outlined below.

The manufacturing sector is R5.4 billion and is a propositional contribution of 33.1% of the total economic GVA and translates to 8,822 jobs.

The COVID pandemic impact can clearly be noted from the diagrams, and the growth has increased since then.

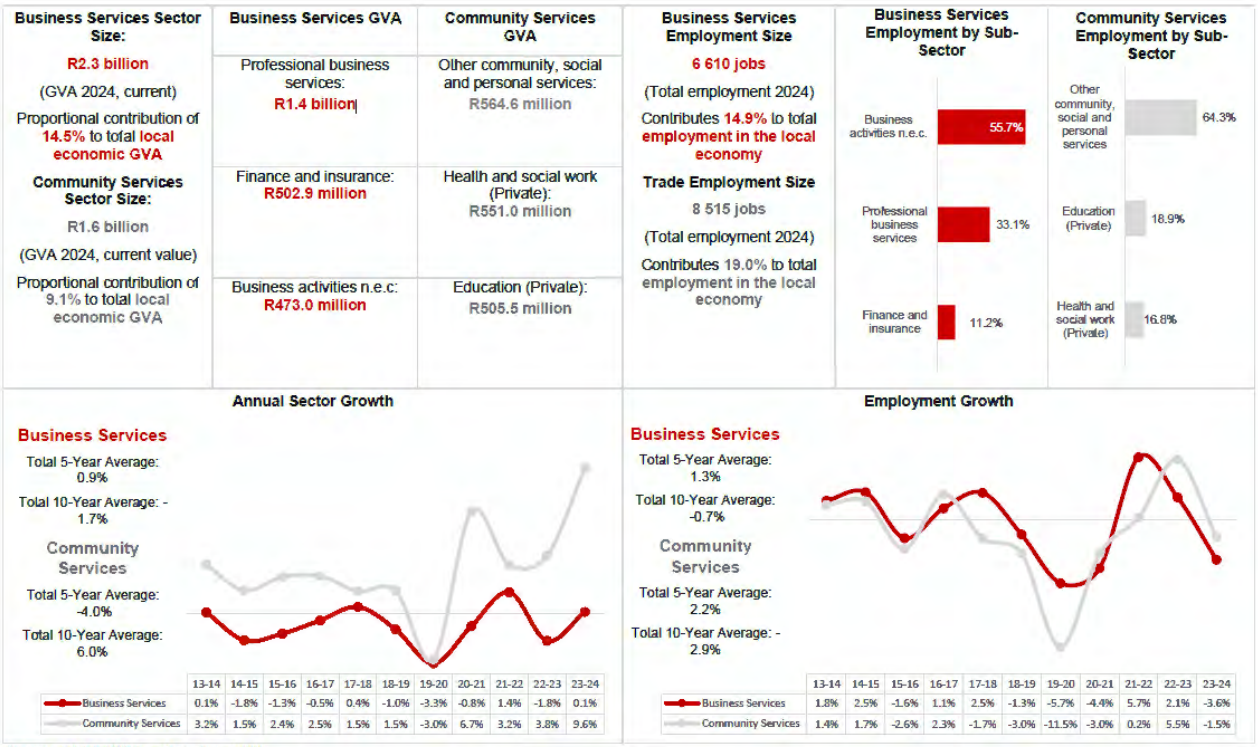
The Business Services Sector is R2.3 billion and has a 14.5% of GVA and Accommodates 6,610 jobs. The Community Services Sector is R1.6 billion and contributes 8,515 employment opportunities.

Diagram 10: Key Manufacturing and Trade Indicators: Sector Size and Employment



Source: DEMACON ex Quantec, 2026

Diagram 11: Key Business and Community Services Indicators: Sector Size and Employment



Source: DEMACON ex Quantec, 2026

The R59 has several established industrial areas— including Klipriver, Daleside, Pendale, Meyerton Park, Sybrand van Niekerk Park and Meydustria—hosting a concentration of manufacturing, logistics, warehousing and heavy industrial activities. The spatial concentration of these nodes along and adjacent to the R59 confirms the corridor's role as a key industrial and logistics axis within the local and regional economy. ***Table 10*** provides a summary of key industrial and business areas in each node.

Table 10: Industrial Node Related Business

Industrial Node	Klipriver Business Park	Klipriver Industrial Node	Daleside Industria Node	Pendale, Japie Greyling & Highbury Industrial Node	Meyerton Park Industrial Node	Sybrand van Niekerk	Meydustria Industrial Node
Key Businesses	❖ Heineken Brewery - Manufacturing and Production Plant ❖ Novopak - Corporate offices ❖ Flosolve (a division of Hudaco Group) - Mining equipment suppliers ❖ Tembo Heavy Lift and Transport - Industrial equipment suppliers ❖ Iveco Midvaal - Truck dealer ❖ FAW Trucks Midvaal - Truck dealer	❖ hScilogic - Pharmaceutical and chemical manufacturer ❖ Marlyn Chemicals - Chemical wholesaler ❖ Kwikspace Modular Buildings - Corporate offices ❖ Fabricated Concrete - Concrete Factory ❖ Everite Building Products - Manufacturer ❖ KASA Trucking - Transportation services	❖ Allied Steelrode - Steel distributor ❖ ASSM - Mining suppliers ❖ Bovu Pumps - Industrial equipment supplier ❖ Fresh Pack Dairy - Diary manufacturer & processing ❖ Chemlink SA - Packaging company ❖ Rust-Oleum Africa - Manufacturer ❖ Bovu Fluid Holdings - Corporate office	❖ Tekfalt Binders - Asphalt mixing plant ❖ Nyati SA - Chemical wholesaler ❖ Air Products Midvaal - Industrial gas supplier ❖ NuVest Group of Companies - Chemical wholesaler ❖ Cleveland Silica - Sand & gravel supplier	❖ Bellow & Bus - Corporate office ❖ Vest - Manufacturer ❖ Premier Logistics - Logistics service ❖ MG Castings Supplies & Engineering - Manufacturer ❖ Zuiderwint Mechanization - Agricultural machinery manufacturer ❖ Palesa Pads - Manufacturer	❖ African Pegmatite - Manufacturing ❖ Ingrain Meyerton Mill - Manufacturer ❖ PPC Meyerton Mill - Manufacturer ❖ Steeledale Mesh - Manufacturer ❖ Carboline - Manufacturer	❖ R59 wholesale Disel Depot - Disel fuel supplier ❖ SA Steel Mills - Steel distributor ❖ Pro Roof - Steel fabricator ❖ DMS Powders - Business Park

The Location Quotient (LQ) analysis, presented in ***Diagram 12*** and ***Table 11***, indicates that agriculture and mining are highly specialised within the Midvaal Local Economy, suggesting export-oriented activity that serves markets beyond municipal boundaries. Manufacturing, trade and transport sectors display medium levels of specialisation, reflecting a relatively diversified economic structure. The Economic Base Analysis in ***Table 12*** further identifies agriculture, mining, trade, and transport and storage as key basic sectors, generating multiplier effects across the local economy and reinforcing the corridor's regional economic significance.

Diagram 12: Midvaal Local Economy – Location Quotient (2019 vs. 2024)

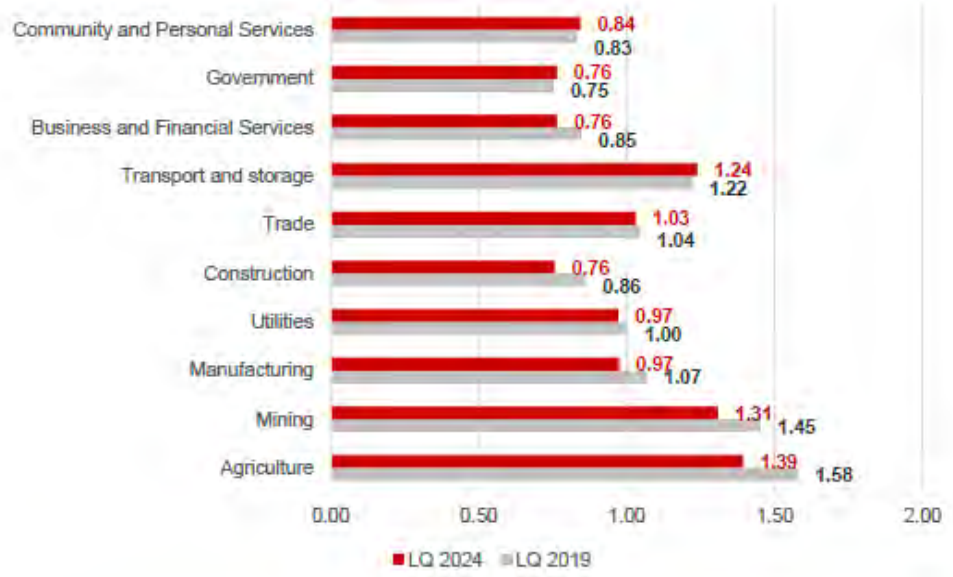


Table 11: Location Quotients of the Midvaal Local Economy (2024)

Economic Sector	2024 LQ	Classification
Agriculture	**1.39**	**High**
Agriculture	1.42	High
Forestry	0.63	Medium
Fishing	0.00	Low
Mining	1.31	High
Coal	0.00	Low
Gold	0.00	Low
Metals	3.19	High
Other mining and quarrying	0.34	Low
Manufacturing	**0.97**	**Medium**
Food, beverages and tobacco	1.13	High
Textiles, clothing and leather products	0.71	Medium
Wood and paper, publishing and printing	0.96	Medium
Petroleum products, chemicals, rubber and plastic	0.58	Low
Other non-metal mineral products	1.68	High
Metals, metal products, machinery and equipment	1.00	Medium
Electrical machinery and apparatus	1.32	High
Radio, TV, instruments, watches and clocks	1.08	High
Transport equipment	1.17	High
Furniture, other manufacture	1.72	High
Utilities	**0.97**	**Medium**
Electricity and gas	0.97	High
Water	0.76	Medium
Construction	**0.76**	**Medium**
Construction	1.03	Medium
Trade	**1.03**	**Medium**
Wholesale and retail trade	1.01	Medium
Catering and accommodation services	1.01	Medium
Transport and Storage	**1.24**	**Medium**
Transport and storage	1.24	Medium
Communication	0.76	Medium

Economic Sector	2024 LQ	Classification
Business and Financial Services	**0.76**	**Medium**
Finance and Insurance	0.80	Medium
Business Services	0.83	Medium
Government	**0.76**	**Medium**
National and Provincial Government	0.73	Low
Local Government	0.84	Medium
Community and Personal Services	**0.84**	**Medium**
Education (Private)	0.68	Low
Health and social work (Private)	0.90	Medium
Other community, social and personal services	0.95	Medium

Source: DEMACON Calculations, 2026

Table 12: Midvaal Local Economy Base Analysis

Sector	Classification	BM Multiplier
Agriculture	**Basic sector**	**3.55**
Agriculture	Basic sector	3.38
Forestry	Non-basic sector	
Fishing	Non-basic sector	
Mining	**Basic sector**	**4.24**
Coal	Non-basic sector	
Gold	Non-basic sector	
Metals	Basic sector	1.46
Other mining and quarrying	Non-basic sector	
Manufacturing	**Non-basic sector**	
Food, beverages and tobacco	Basic sector	8.74
Textiles, clothing and leather products	Non-basic sector	
Wood and paper, publishing and printing	Non-basic sector	
Petroleum products, chemicals, rubber and plastic	Non-basic sector	
Other non-metal mineral products	Basic sector	2.48
Metals, metal products, machinery and equipment	Basic sector	969.35
Electrical machinery and apparatus	Basic sector	4.08
Radio, TV, instruments, watches and clocks	Basic sector	13.90
Transport equipment	Basic sector	7.00
Furniture, other manufacturing	Basic sector	2.39
Utilities	**Non-basic sector**	
Electricity and gas	Non-basic sector	
Water	Non-basic sector	
Construction	**Non-basic sector**	
Trade	**Basic sector**	**35.88**
Wholesale and retail trade	Basic sector	89.28
Catering and accommodation services	Basic sector	89.28
Transport and Storage	**Basic sector**	**5.19**
Transport and storage	Basic sector	5.19
Communication	Non-basic sector	
Business and Financial Services	**Non-basic sector**	
Finance and Insurance	Non-basic sector	

Sector	Classification	BM Multiplier
Business Services	Non-basic sector	
Government	**Non-basic sector**	
National and Provincial Government	Non-basic sector	
Local Government	Non-basic sector	
Community and Personal Services	**Non-basic sector**	
Education (Private)	Non-basic sector	
Health and social work (Private)	Non-basic sector	
Other community, social and personal services	Non-basic sector	

Source: DEMACON Calculations, 2026

The Shift Share Analysis presented in ***Table 13*** indicates a net gain of approximately R1.3 billion in GVA for the Midvaal Local Economy between 2019 and 2024. While the District Growth Effect suggests underperformance relative to district averages, the positive Industry Mix and Regional Competitive Effects demonstrate that the local economy benefits from both its sectoral structure and competitive positioning. These findings are reinforced by the Carvalho Classification results (***Tables 14*** *and* ***15***), which identify sectors such as transport and storage, government services, agriculture and community services as accelerating or promising.

Table 13: Midvaal Local Economy Shift Share Analysis

Economic Sector	GVA 2019	Share of GVA				GVA 2024
		District Effect	Industrial Effect	Regional Effect	Total	
Agriculture	**506**	**22**	**-1.8**	**-30.0**	**-9**	**496**
Agriculture	501	22	-1.9	-29.6	-9	492
Forestry	5	0	0.3	-0.6	0	5
Fishing	0	0	0.0	0.0	0	0
Mining	**806**	**36**	**332.0**	**-43.8**	**324**	**1,130**
Coal	0	0	0.0	0.0	0	0
Gold	0	0	0.0	0.0	0	0
Metals	649	29	346.8	-74.5	301	950
Other mining and quarrying	157	7	54.9	-39.0	23	180
Manufacturing	**1,895**	**84**	**-240.6**	**-42.9**	**-199**	**1,696**
Food, beverages and tobacco	1,370	61	-258.7	-54.4	-252	1,118
Textiles, clothing and leather products	42	2	-11.1	-.01	-9	32
Textiles	65	3	-13.1	1.1	-9	56
Wearing apparel	81	4	-1.9	4.3	6	87
Leather and leather products	3	0	-0.4	0.5	0	3
Footwear	639	28	-84.6	5.0	-51	587
Wood and paper, publishing and printing	88	4	-11.7	-2.3	-10	78
Wood and wood products	440	20	-29.6	8.8	-1	439
Paper and paper products	110	5	-35.9	-8.9	-40	70
Printing, recorded media	2,238	100	-766.6	3.1	-364	1,874
Petroleum products, chemicals, rubber and plastic	702	31	-105.0	-55.4	-129	573
Coke, petroleum products and nuclear fuel	647	29	-200.9	49.3	-123	525
Basic chemicals	468	21	-113.5	36.8	-56	413

Economic Sector	GVA 2019	Share of GVA				GVA 2024
		District Effect	Industrial Effect	Regional Effect	Total	
Other chemical products	106	5	-24.4	0.8	-19	87
Rubber products	314	14	-56.4	5.2	-37	277
Plastic products	438	19	-110.0	-26.4	-117	321
Other non-metal mineral products	95	4	1.8	0.3	6	102
Glass and glass products	342	15	-100.8	-37.7	-123	219
Non-metallic mineral products	3,967	176	-1,613.8	353.5	-1,084	2,883
Metals, metal products, machinery and equipment	1,841	82	-879.6	257.9	-540	1,302
Basic iron and steel products; casting of metal	646	29	-272.7	-2.2	-246	400
Non-ferrous metal products	412	18	-116.6	24.5	-74	339
Structural metal products	585	26	-194.9	24.5	-74	339
Other fabricated metal products	483	21	-130.4	12.5	-96	386
Machinery and equipment	424	19	-76.0	11.9	-45	379
Electrical machinery and apparatus	424	19	-76.0	11.9	-45	379
Electrical machinery	86	4	-20.1	-8.1	-24	62
Radio, TV, instruments, watches and clocks	71	3	-10.6	-11.2	-19	52
Radio, television and communication apparatus	15	1	-5.9	-0.6	-6	10
Professional equipment	894	40	-97.9	-12.7	-71	823
Transport equipment	739	33	-63.8	-2.6	-34	706
Motor vehicles, parts and accessories	155	7	-47.8	3.7	-37	118
Other transport equipment	1,537	68	-383.4	21.8	-293	1,244
Furniture, other manufacturing	80	4	1.2	5.5	10	90
Furniture	1,458	65	-381.6	13.2	-303	1,154
Other manufacturing groups	1,147	51	-297.6	-148.8	-395	752
Utilities	**629**	**28**	**-131.1**	**19.8**	**-83**	**546**
Electricity and gas	518	23	-190.7	-144.4	-312	206
Water	977	43	-323.7	-42.8	-323	654
Construction	**977**	**43**	**-323.7**	**-42.8**	**-323**	**654**
Construction	2,301	102	-280.6	111.1	-67	2,234
Trade	**2,301**	**102**	**-280.6**	**111.1**	**-67**	**2,234**
Wholesale and retail trade	273	12	233.7	20.1	266	539
Catering and accommodation services	273	12	233.7	20.1	266	539
Transport and Storage	**1,442**	**64**	**1,315.6**	**234.7**	**1,614**	**3,057**
Transport and storage	1,442	64	1,315.6	234.7	1,614	3,057
Communication	487	22	-8.7	-17.7	-5	482
Business and Financial Services	**487**	**22**	**-8.7**	**-17.7**	**-5**	**482**
Finance and Insurance	681	30	-62.1	-59.5	-91	590
Finance and Insurance	681	30	-62.1	-59.5	-91	590
Business Services	2,567	114	-251.4	-224.2	-361	2,205
Professional business services	1,961	87	-172.4	-230.6	-316	1,645
Business activities n.e.c.	606	27	-80.3	7.7	-46	561
Government	**1,223**	**54**	**-198.3**	**91.3**	**-53**	**1,170**
National and Provincial Government	877	39	-199.5	56.5	-104	773
Local Government	346	15	10.3	25.7	51	397
Community and Personal Services	**1,350**	**60**	**-24.8**	**116.4**	**152**	**1,502**
Education (Private)	347	15	1.1	36.7	53	400
Health and social work (Private)	485	22	-9.7	70.4	82	568
Other community, social and personal services	518	23	-19.9	12.9	16	534

Economic Sector	GVA 2019	Share of GVA				GVA 2024
		District Effect	Industrial Effect	Regional Effect	Total	
Midvaal Local Economy	**11,615**	**517**	**438**	**396**	**1,351**	**12,966**

Source: DEMACON Calculations, 2026

Table 14: Midvaal Local Economy Carvalho Classification

Economic Sector	District Relative Growth	Local Relative Growth	Classification
Agriculture	**Leading**	**Lagging**	**Promising**
Agriculture	Leading	Lagging	Promising
Forestry	Leading	Lagging	Driving
Fishing	Leading	Lagging	Moderate
Mining	**Leading**	**Lagging**	**Modest**
Coal	Lagging	Leading	Moderate
Gold	Lagging	Leading	Modest
Metals	Leading	Lagging	Modest
Other mining and quarrying	Leading	Lagging	Promising
Manufacturing	**Lagging**	**Lagging**	**Transitional**
Food, beverages and tobacco	Lagging	Lagging	Evolving
Textiles, clothing and leather products	Lagging	Lagging	Marginal
Wood and paper, publishing and printing	Lagging	Lagging	Moderate
Petroleum products, chemicals, rubber and plastic	Lagging	Lagging	Moderate
Other non-metal mineral products	Leading	Leading	Marginal
Metals, metal products, machinery and equipment	Lagging	Leading	Moderate
Electrical machinery and apparatus	Lagging	Lagging	Moderate
Radio, TV, instruments, watches and clocks	Lagging	Lagging	Modest
Transport equipment	Lagging	Lagging	Marginal
Furniture, other manufacture	Leading	Leading	Accelerating
Utilities	**Lagging**	**Leading**	**Transitional**
Electricity and gas	Lagging	Lagging	Evolving
Water	Lagging	Lagging	Modest
Construction	**Lagging**	**Lagging**	**Transitional**
Trade	**Lagging**	**Leading**	**Transitional**
Wholesale and retail trade	Leading	Leading	Transitional
Catering and accommodation services	Leading	Leading	Transitional
Transport and Storage	**Leading**	**Leading**	**Accelerating**
Transport and storage	Leading	Leading	Transitional
Communication	Leading	Lagging	Marginal
Business and Financial Services	**Leading**	**Lagging**	**Rising**
Finance and Insurance	Lagging	Lagging	Marginal
Business Services	Lagging	Lagging	Marginal
Professional Business services	Lagging	Lagging	Rising
Business activities n.e.c.	Lagging	Lagging	Rising
Government	**Lagging**	**Leading**	**Accelerating**
National and Provincial Government	Lagging	Leading	Accelerating
Local Government	Lagging	Leading	Transitional
Community and Personal Services	**Leading**	**Leading**	**Promising**
Education (Private)	Leading	Leading	Accelerating
Health and social work (Private)	Leading	Leading	Yielding
Other community, social and personal services	Leading	Leading	Transitional

Source: DEMACON Calculations, 2026

Table 15: Interpretation of the Carvalho Classification for Midvaal Local Economy

Classification Definition	Primary Sectors	Secondary Sectors
Accelerating Community is neither highly specialised nor under-specialised in this sector, which is growing at the aggregate economy level and growing at an even higher rate locally	❖ Transport ❖ Government ❖ Personal Services	❖ Furniture, other manufacturing ❖ Transport and storage ❖ Business activities n.e.c.
Driving Community is highly specialised in this sector, which is growing regionally and growing at an even higher rate locally	❖ None	❖ Forestry ❖ Other community, social and personal services
Evolving High local specialisation in a sector which grew at a regional level at a slower rate than overall growth, local growth exceeded regional growth in this sector	❖ None	❖ Food, beverages and tobacco ❖ Electricity and gas
Marginal Industries that are underrepresented in the community	❖ None	❖ Textiles, clothing and leather products ❖ Textiles ❖ Wearing apparel ❖ Paper and paper products ❖ Coke, petroleum products and nuclear fuel ❖ Other non-metal mineral products ❖ Non-metallic mineral products ❖ Transport equipment ❖ Motor vehicles, parts and accessories ❖ Communication ❖ Finance and insurance ❖ Finance and insurance
Moderate Relatively underrepresented in a sector which grew at a regional level, local growth was slower than regional growth in this sector	❖ None	❖ Fishing ❖ Coal ❖ Beverages and tobacco ❖ Leather and leather products ❖ Footwear ❖ Wood and paper, publishing and printing ❖ Wood and wood products ❖ Printing, recorded media ❖ Petroleum products, chemicals, rubber and plastic ❖ Basic chemicals ❖ Rubber products ❖ Glass and glass products ❖ Metals, metal products, machinery and equipment ❖ Basic iron and steel products; casting of metal

Classification Definition	Primary Sectors	Secondary Sectors
		❖ Non-ferrous metal products ❖ Machinery and equipment ❖ Electrical machinery and apparatus ❖ Electrical machinery ❖ Professional equipment ❖ Other transport equipment
Promising High local specialisation in a sector which grew at a regional level, local growth was slower than regional growth in this sector	❖ Agriculture	❖ Other mining and quarrying ❖ Food ❖ Local government
Rising A relatively low proportion of local productivity, but will likely increase due to growth in this sector, which is growing on an aggregate economic level and growing at an even higher rate locally	❖ Business and Financial Services	❖ Other chemical products ❖ Business Services ❖ Professional business services
Transitional Average specialisation in a sector which grew at an aggregate economy level at a slower rate than overall growth, local growth exceeded aggregate economic growth in this sector	❖ Manufacturing ❖ Utilities ❖ Construction ❖ Trade	❖ Wholesale and retail trade ❖ Catering and accommodation services ❖ National and Provincial government ❖ Health and social work (Private)
Yielding Average specialisation in a sector which grew at an aggregate economic level, local growth was slower than aggregate economic growth in this sector	❖ None	❖ Education (Private)
Modest Relatively low specialisation in a sector which grew at an aggregate economic level; local growth was slower than aggregate economic growth in this sector	❖ Mining	❖ Gold ❖ Metals ❖ Plastic products ❖ Structural metal products ❖ Other fabricated metal products ❖ Radio, TV, instruments, watches and clocks ❖ Radio, television and communication apparatus ❖ Water

Source: DEMACON Calculations, 2026

Industry targeting outcomes identify transport and storage, government services and community and personal services as current strengths within the local economy, while agriculture, mining and business and financial services are identified as high priority retention sectors. These sectors benefit from locational advantages along the R59 Corridor and play a strategic role in supporting a diversified and resilient economic base. (See ***Table 16***).

Table 16: Midvaal Local Economy Targeting Classification

Sector	Classification
Agriculture	**High priority retention target**
Agriculture	High priority retention target
Forestry	Current strength
Fishing	Prospects limited by weak base and external trends
Mining	**High priority retention target**
Coal	Prospects limited by weak base and external trends
Gold	Prospects limited by weak base and external trends
Metals	High priority retention target
Other mining and quarrying	High priority retention target
Manufacturing	**Prospects limited by external trends**
Food, beverages and tobacco	Prospects limited by external trends
Textiles, clothing and leather products	Prospects limited overall
Wood and paper, publishing and printing	Prospects limited by external trends
Petroleum products, chemicals, rubber and plastic	Prospects limited overall
Other non-metal mineral products	Current Strength
Metals, metal products, machinery and equipment	Prospects limited by external trends
Electrical machinery and apparatus	Prospects limited by external trends
Radio, TV, instruments, watches and clocks	Prospects limited by external trends and declining competitiveness
Transport equipment	Prospects limited by external trends and declining competitiveness
Furniture, other manufacturing	Current Strength
Utilities	**Prospects limited by external trends**
Electricity and gas	Prospects limited by external trends
Water	Prospects limited by external trends and declining competitiveness
Construction	**Prospects limited by external trends**
Trade	**Prospects limited by external trends**
Wholesale and retail trade	Prospects limited by external trends
Catering and accommodation services	Current strength
Transport and Storage	**Current strength**
Transport and storage	Current strength
Communication	High priority retention target
Business and Financial Services	**High priority retention target**
Finance and Insurance	Prospects limited by external trends and declining competitiveness
Business Services	Prospects limited by external trends and declining competitiveness
Government	**Current strength**
National and Provincial Government	Prospects limited by external trends
Local Government	High priority retention target
Community and Personal Services	**Current strength**
Education (Private)	High priority retention target
Health and social work (Private)	Prospects limited by external trends
Other community, social and personal services	Current strength

3.2.5 Midvaal LM Sector Targeting Classification

Diagram 13 depicts the sector targeting model for the Midvaal LM.

Economic sectors are classified based on their growth performance relative to provincial trends and their level of local competitiveness.

Sectors located in the left-hand quadrants have limited growth prospects, as they operate within industries that are declining in the broader economy.

Sectors in the lower right quadrant are growing at a provincial level but underperforming locally. Larger sectors in this quadrant are identified as retention targets, as they remain important but are losing local market share. Smaller sectors in this quadrant are considered to have limited prospects. Sectors in the upper right quadrant are growing both provincially and locally and represent the current and emerging strengths of the local economy.

Larger circles indicate established strengths, while smaller circles indicate emerging strengths. From a business perspective, these sectors are increasing market share within an expanding market.

Based on the analysis, the following current strengths have been identified:

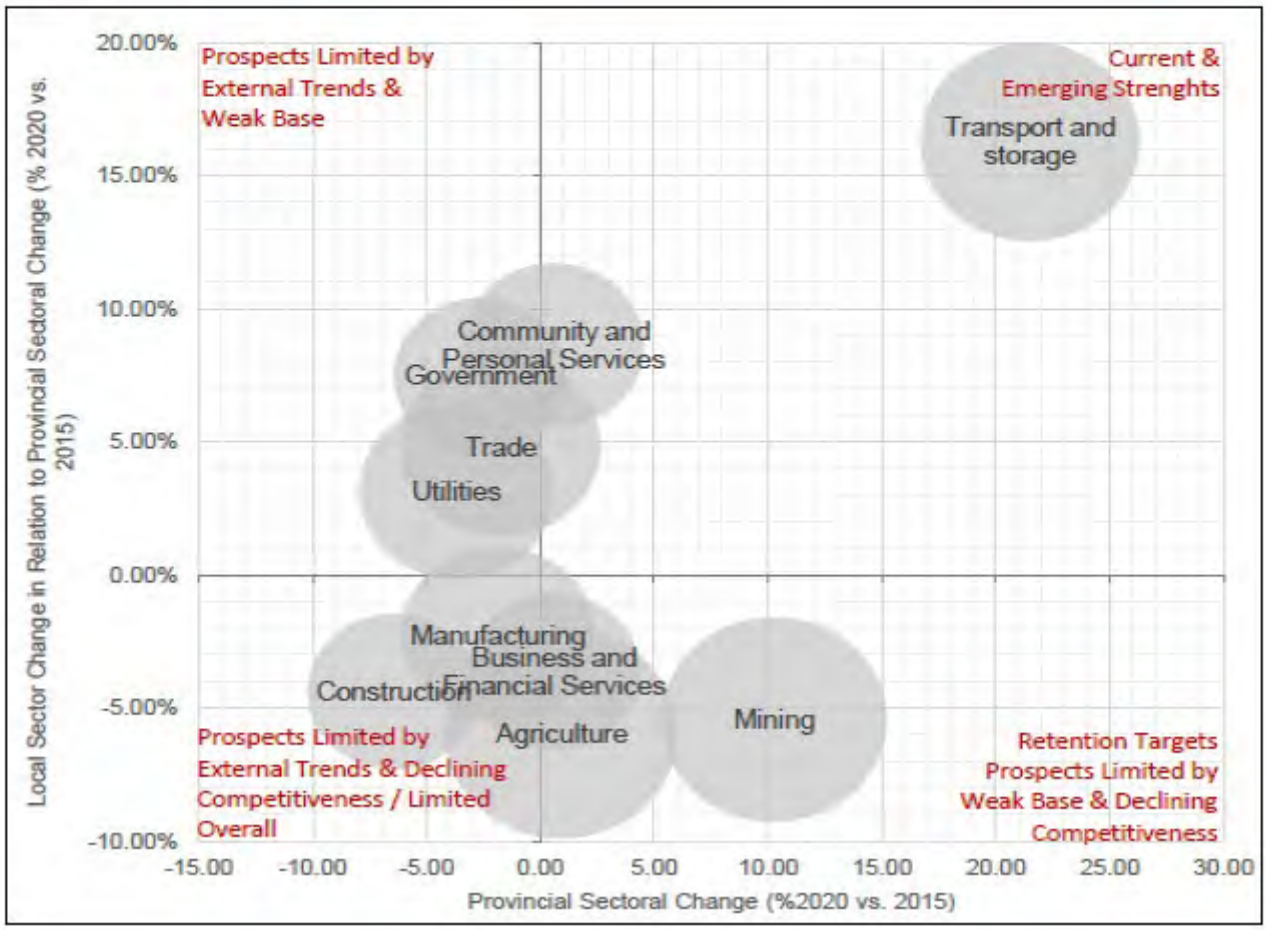
- Transport and storage
- Government services
- Community and personal services

The following sectors are identified as high-priority retention target sectors, requiring focused support to maintain competitiveness:

- Agriculture
- Mining
- Business and financial services.

Overall, the economic analysis confirms that the R59 Corridor functions as a **strategic economic spine** within the Midvaal Local Municipality. The economy is characterised by strong industrial foundations, logistics driven activity and sectoral diversity, albeit within a broader context of modest growth.

Diagram 13: Midvaal Local Economy Sector Targeting Classification



3.2.6 Engineering Services

3.2.6.1 Water

The water supply system and capacity of the study area is discussed below.

Water Distribution Zone

The water distribution zones of the study area are shown in ***Figure 41*** and listed below:

- RW2940 Direct / Klipwater Water Tower: (RW2940)
- Klipriver Reservoir: (RW5629)
- Randvaal Reservoir: (RW2853)
- Meyerton Reservoir: (RW2279)
- RW4164 / RW4369 Direct: (RW4164, RW4369)
- RW2279 Direct: (RW2279)
- Duncanville Direct: (Vereeniging Connection 4)

The existing distribution network aligns to the development footprint on the ground. The Garthdale/Gardenvale AH area and eastern section towards Witkop does not have a formal distribution network. The western section from Klipriver Business Park to Pendale only has formal services at the Joan Road interchange.

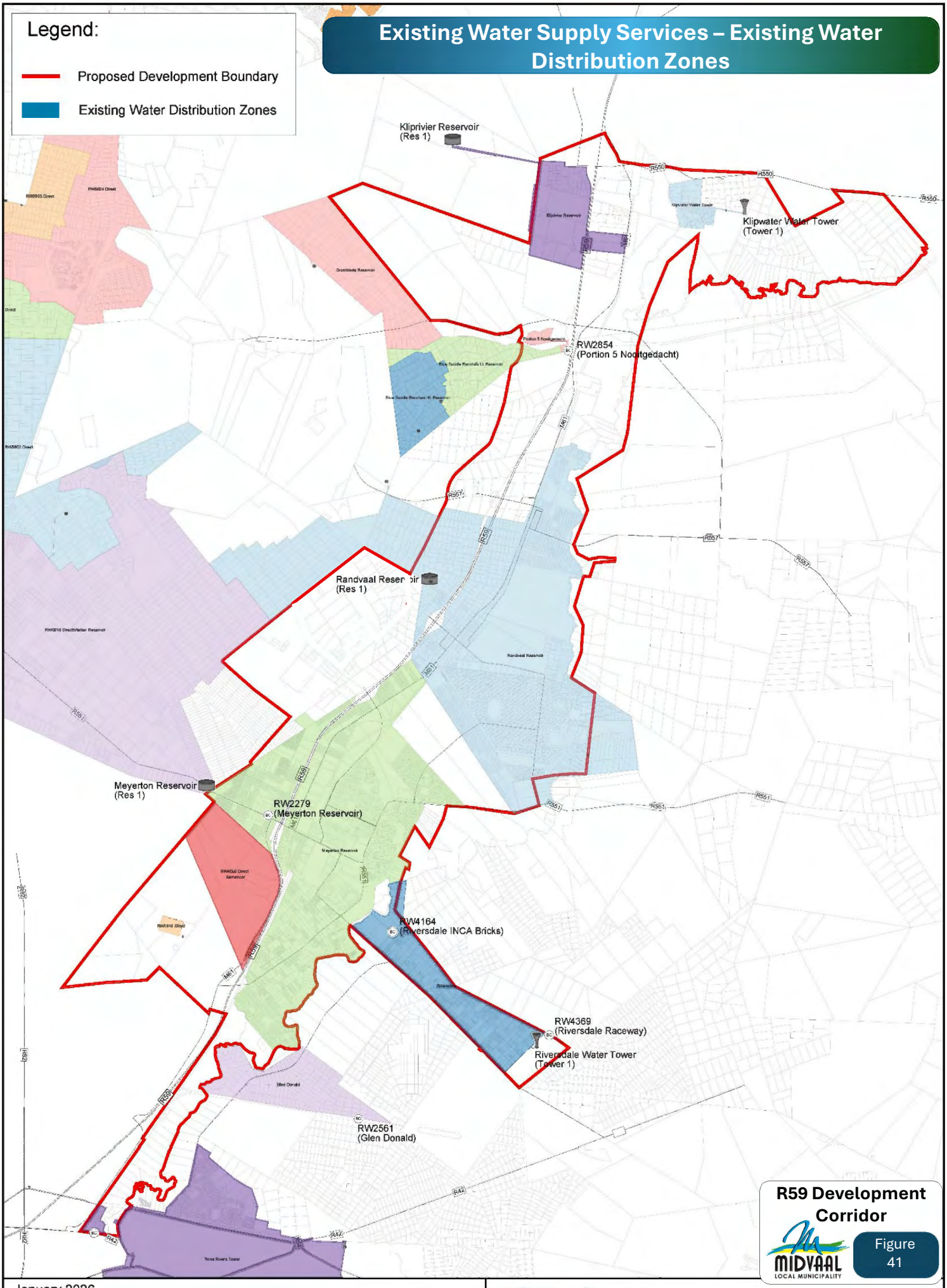
Certain changes to the water distribution zone boundaries are proposed between the current and the potential future water supply scenario. These will affect the future distribution zones and therefore where certain areas within the study area are supplied from in future.

Reservoir and Tower Capacities

The existing water supply services are shown in ***Figure 42*** and discussed below.

According to MLM's modelling guidelines, a minimum of 36 h x AADD and 4 h x AADD is required as reservoir and tower storage capacity respectively.

Existing Water Supply Services – Existing Water Distribution Zones



R59 Development Corridor

Figure 41

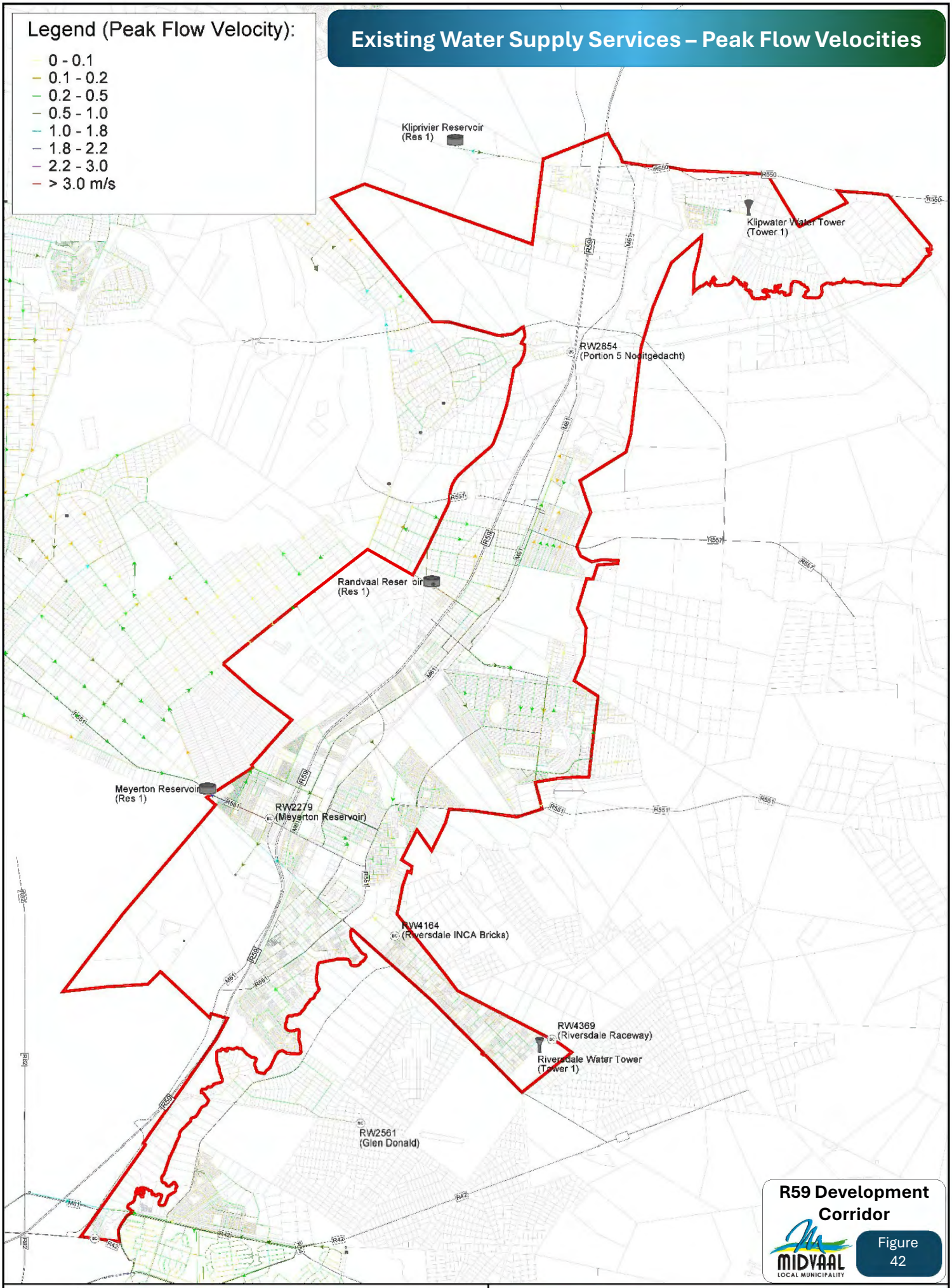
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Water Status Quo Capacity Investigation
R59 Corridor - Midvaal

GLS Infrastructure planning

Location and layout of existing water distribution zones

Existing Water Supply Services – Peak Flow Velocities



R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 42

January 2026

Water Status Quo Capacity Investigation
R59 Corridor - Midvaal

GLS Infrastructure planning

Location and layout of existing water supply services showing peak flow velocities

Table 17 shows the existing demand, storage capacity and resulting emergency storage time for each source. The Klipwater Tower and Klipriver Reservoir currently do not have the required 36h storage, while Randvaal and Meyerton Reservoirs have more than 36h.

Table 17: Water Demand Storage Capacity

Name	AADD (kL/d)	Capacity (kL)	Hours
RW2940 Direct / Klipwater Water Tower	249	200	19.3
Klipriver Reservoir	9 428	10 000	25.5
Randvaal Reservoir	3 232	8 200	60.9
Meyerton Reservoir	7 968	20 000	60.2
RW4164 / RW4369 Direct	1 005	NA	NA
RW2279 Direct	9 287	NA	NA
Duncanville Direct	90	NA	NA

Existing Bulk Pipe Capacities

Figure 43 shows the flow velocities of water in the study area.

Very few of the existing affected main feeder lines supplying the study area are currently experiencing flow velocities exceeding the maximum allowable flow velocity of 2.0 m/s.

These are all pipes located directly downstream of the Rand Water meters or reservoirs.

Existing Water Network and Residual Network Pressures

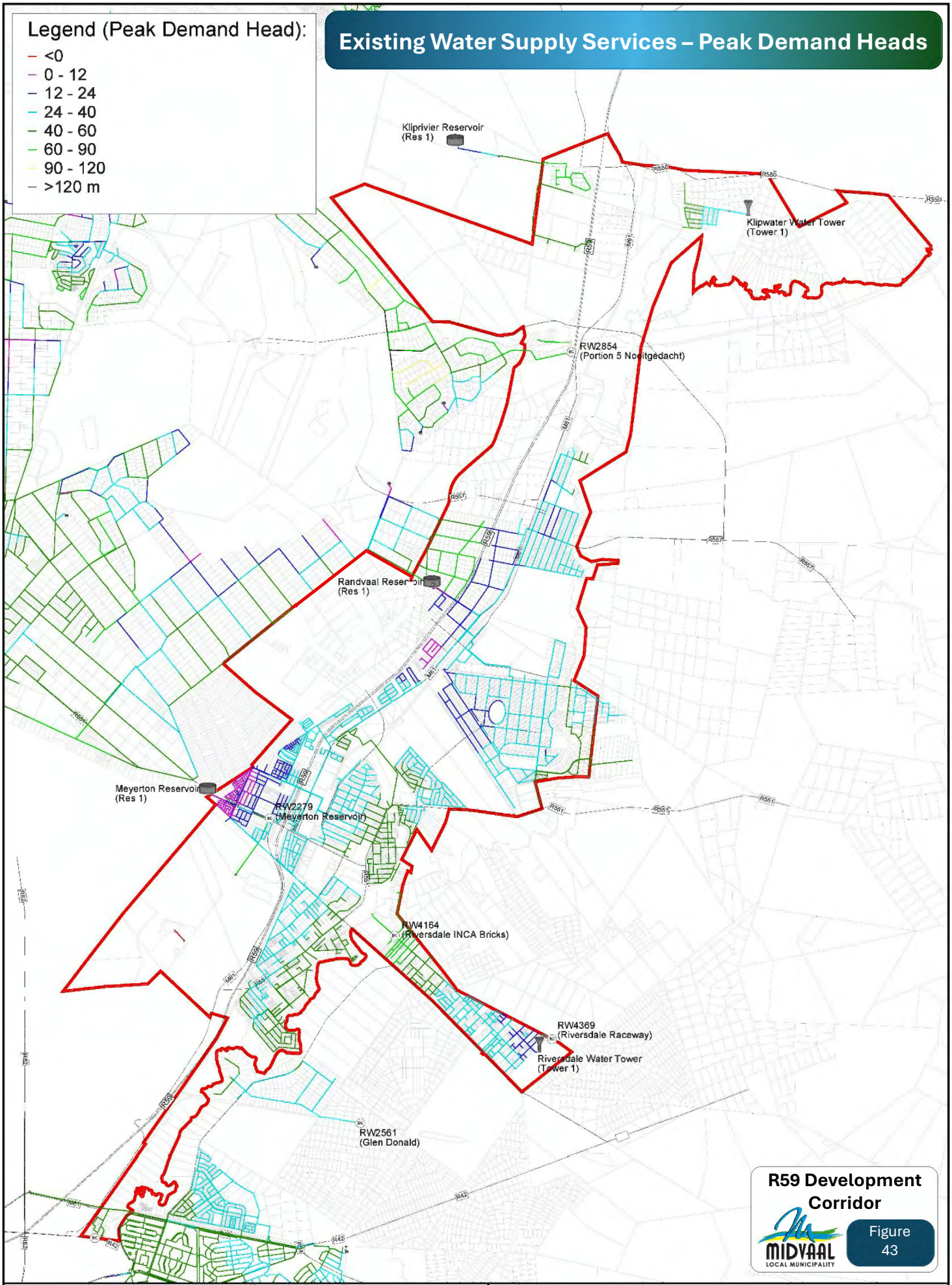
Some areas are currently experiencing peak demand heads below 24 m, including:

- Riversdale (East)
- Meyerton Park
- Henley-on-Klip (West)
- Highbury
- Pendale AH
- Daleside

Summary

- The study area includes stands currently supplied from various bulk infrastructure and bulk meters.
- The Klipriver reservoir is the only bulk storage with existing insufficient storage capacity.
- The majority of the bulk pipes currently experience peak flow velocities under 2 m/s.
- Some areas are experiencing peak demand heads below 24 m.

Existing Water Supply Services – Peak Demand Heads



R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 43

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Water Status Quo Capacity Investigation
R59 Corridor - Midvaal

GLS Infrastructure planning

Location and layout of existing water supply services showing peak demand heads

3.2.6.2 Sewer

The sewer system and capacity of the study area is discussed below.

Drainage Areas

The sewer drainage areas of the study area are shown on ***Figure 44*** and discussed below.

Certain changes to the sewer drainage area boundaries are proposed between the current and potential future drainage scenario in the master plan, with direct implications on the existing development. These will affect the future drainage zones but will not change where areas within the study area are supplied from in future.

The wastewater treatment works serving the study area are shown in ***Table 18***.

Table 18: Study Area Wastewater Treatment Works

Pump Station Name	Upstream Sewage Flow (kL/d)	Minimum Inflow (L/s)	Maximum Inflow (L/s)
Waterval WWTP	9 772.69	52.52	127.19
Meyerton WWTP	13 333.40	108.36	178.65
Leeuwkuil WWTP*	178.88	1.45	2.91

*Note: The capacities of these WWTPs are unknown. *Leeuwkuil WWTP values only includes inflow from Midvaal and not Emfuleni.*

It can be noted from Figure 34 that Sicelo and a small section of Klipriver Business Park are the only areas west of the R59 that has waterborne sewerage that drain to treatment plants.

Sewage pump station capacities

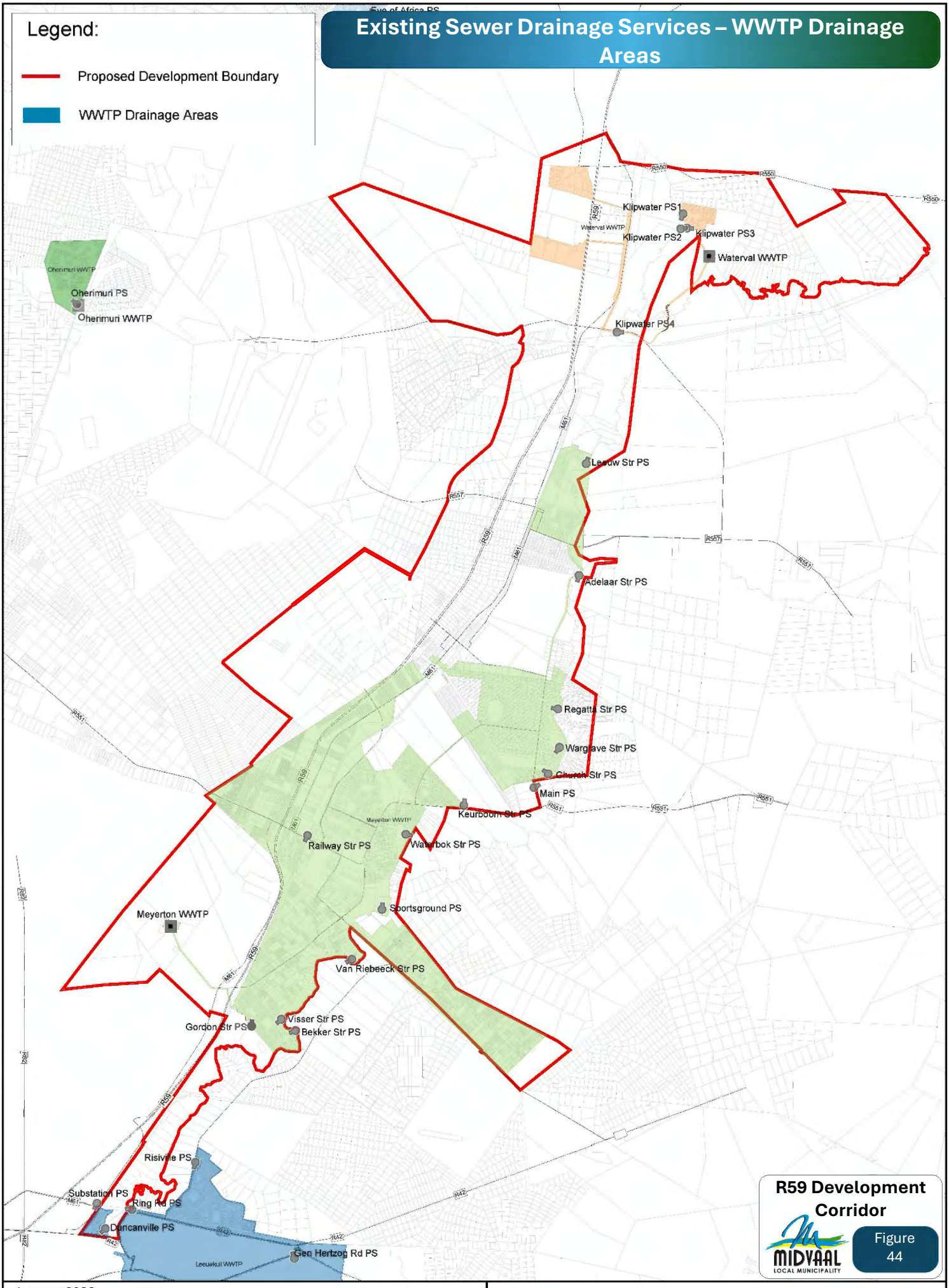
The sewage pump station drainage areas are shown in ***Figure 45*** and briefly discussed below.

The capacities of these pump stations are unknown, but the theoretical minimum pumping capacity required to accommodate the existing inflow can be calculated as follows:

- Required Pumping Capacity = Max Inflow / 0.7.

Several existing municipal sewage pump stations are affected by the study area, as shown on ***Table 19***.

Existing Sewer Drainage Services – WWTP Drainage Areas



R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 44

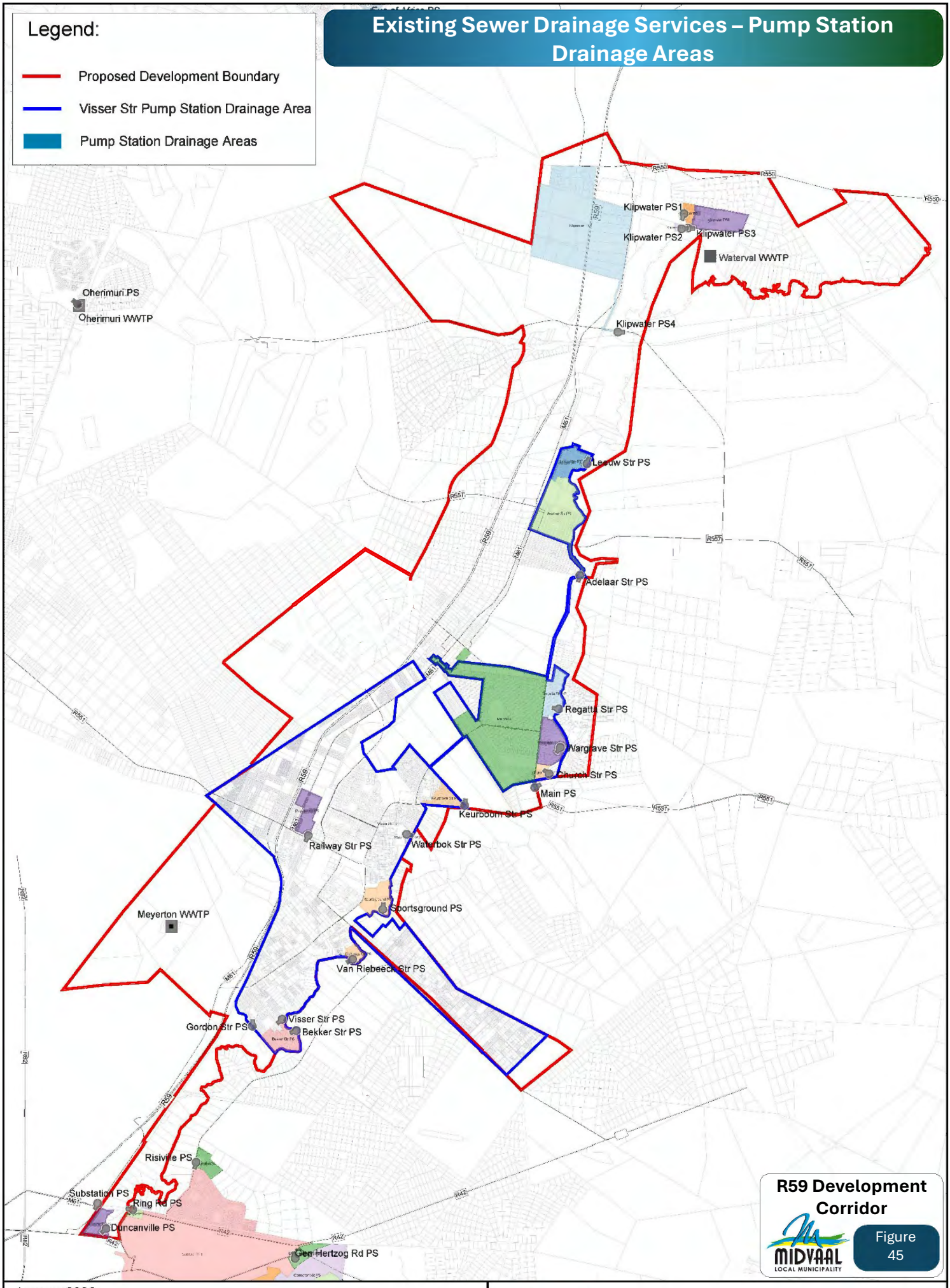
January 2026

Water Status Quo Capacity Investigation
R59 Corridor - Midvaal

GLS Infrastructure planning

Location and layout of existing WWTP drainage areas

Existing Sewer Drainage Services – Pump Station Drainage Areas



R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 45

January 2026

Sewer Status Quo Capacity Investigation
R59 Corridor - Midvaal

GLS Infrastructure planning

Location and layout of existing Pump Station drainage areas

Table 19: Sewer Study Sewage Area Pump Stations

Pump Station Name	Upstream Sewage Flow (kL/d)	Minimum Inflow (L/s)	Maximum Inflow (L/s)	Required Capacity (L/s)
Klipwater PS1	54.81	0.32	0.93	1.32
Klipwater PS2	0.00	0.00	0.00	0.00
Klipwater PS3	691.23	7.53	8.45	12.07
Klipwater PS4	6542.98	46.53	121.20	173.14
Visser Str PS	12 511.65	108.36	178.66	255.22
Leeuw Str PS	119.98	0.83	1.87	2.67
Adelaar Str PS	862.59	8.07	12.21	17.44
Main PS	4 805.97	50.07	62.21	88.87
Regatta Str PS	108.71	0.55	2.15	3.07
Wargrave Str PS	136.70	0.76	2.65	3.79
Church Str PS	67.38	0.41	1.14	1.63
Keurboom Str PS	123.99	0.73	2.07	2.96
Waterbok Str PS	6.51	0.04	0.12	0.16
Railway Str PS	12.34	0.11	0.18	0.26
Sportsground PS	0.00	0.00	0.00	0.00
Van Riebeeck Str PS	20.78	0.13	0.34	0.48
Bekker Str PS	158.09	0.95	2.65	3.79
Duncanville PS	97.94	0.73	1.64	2.34

Existing Main Outfall Sewers

Some existing bulk outfall sewers located downstream of the study area are currently experiencing levels of spare capacity below the minimum requirement of 30%.

Existing Sewer System and Network Pipe Capacities

Some of the existing network/collector sewers located downstream of the study area are currently experiencing levels of spare capacity below the minimum requirement of 30%.

Summary

- The study area currently drains to the Waterval, Meyerton and Leeuwkuil Wastewater Treatment Plants.
- The capacities of the WWTPs and Pump Stations are unknown, however the maximum inflow for each is shown to be used to indicate if additional capacity is available.
- Some existing affected bulk outfall sewers and existing affected network/collector sewers located downstream of the study area are currently experiencing levels of spare capacity below the minimum requirement of 30%.

3.2.6.3 Electricity

The ***Electricity Master Plan (2021)*** prepared for Midvaal LM provides a long-term strategic overview of the municipality's electricity supply, network condition, and future requirements over a 20-year planning horizon. The main findings are discussed below.

Midvaal LM does not generate electricity and is fully dependent on bulk electricity supplied by Eskom, which is distributed through the municipal electricity network within the municipal distribution licence area.

Electricity is supplied to the municipality via seven Points of Utility Connection operating primarily at 88 kV and 11 kV. The Meyerton area is identified as the largest electricity load centre in the municipality in terms of demand, area served, and revenue contribution.

Approximately 79% of households in Midvaal currently have access to electricity, leaving around 21% of households without access, which is below provincial and national averages.

Electrification backlogs are most evident in informal settlement areas, particularly Sicelo, where settlement patterns and tenure arrangements complicate infrastructure provision. Savanna City is also identified as an area where future electrification backlogs may arise as development extensions proceed, due to current bulk capacity constraints, although bulk upgrades are planned.

The Electricity Master Plan highlights challenges related to the condition and reliability of the electricity network, including maintenance backlogs and historical under-investment. These challenges have contributed to service interruptions and customer complaints, with electricity identified as one of the most frequently reported service delivery issues within the municipality.

As a result, network reliability and capacity remain key concerns, particularly in areas experiencing growth and development pressure.

The Electricity Master Plan notes that urban development within Midvaal is predominantly consolidated along the R59 and R82 routes, with the R59 recognised as a key development corridor.

3.2.6.4 Roads and Stormwater

The ***Midvaal Roads and Stormwater Master Plan (2024)*** was prepared to assess the current condition of road and stormwater infrastructure across Midvaal LM, determine future demand, and identify priority projects to guide investment and implementation. The study covers both urban and rural areas within the municipality and is intended to function as a sector plan aligned with the Integrated Development Plan (IDP). The findings of the Master Plan are discussed below.

The Midvaal LM has an extensive road network of approximately 1,210 km, comprising urban and rural surfaced and gravel roads. The R59 and R82 are identified as the main transport corridors within the municipality, with the R59 specifically earmarked as a development corridor linking City Deep and OR Tambo International Airport in the north to the Vereeniging–Vanderbijlpark complex in the south.

Provincial roads, including the R59, are generally in good to excellent condition and provide key mobility and freight distribution functions.

Municipal roads are generally in good condition, but varying levels of deterioration were observed, particularly where maintenance has been inconsistent or where stormwater management is inadequate.

Gravel roads, especially in rural areas, are vulnerable to deterioration due to limited stormwater infrastructure and steep gradients.

Stormwater Infrastructure Status Quo

- Urban areas generally function within an urban dual stormwater system, with kerbed roads supported by pipes, kerb inlets, and concrete or stone-lined channels.
- Rural areas typically have limited or no formal stormwater infrastructure, with emphasis placed on river crossings through culverts and low-level bridges.
- The condition of stormwater infrastructure ranges from good to poor, with many components showing signs of ageing and insufficient maintenance.

Common issues identified include:

- Blocked or undersized kerb inlets and culverts.
- Inadequate drainage at local low points.
- Ponding of water on road surfaces during storm events.
- Stormwater channels blocked by debris and vegetation.
- Several areas were classified as critical or life-threatening, particularly where flooding affects residential properties or road users.

Flood Risk and Environmental Context

- The municipality is drained by several perennial river systems, including the Vaal, Klip and Suikerbosrand Rivers, with development in some areas occurring close to floodlines.
- In rural settlements near major rivers, roads and houses are often located within flood-prone areas, increasing the risk of damage, service disruption, and potential loss of life.
- Floodline determination and modelling form a key component of the master plan to guide future planning and infrastructure placement.

Data and Institutional Constraints

- Limited as-built information and GIS data were available for existing stormwater infrastructure, requiring the development of an expanded GIS database through site inspections.
- The lack of comprehensive records constrains effective maintenance planning, asset management, and prioritisation.
- The Master Plan highlights the need for improved integration between roads, stormwater, spatial planning, and financial planning functions within the municipality.

The Roads and Stormwater Master Plan confirms that while key provincial routes such as the R59 perform an important strategic role and are generally well maintained, local road and stormwater infrastructure faces challenges related to ageing assets, maintenance backlogs, flood risk, and data limitations. The plan establishes a clear baseline of existing conditions and identifies priority areas for intervention, forming a critical foundation for future corridor development, infrastructure upgrading, and coordinated spatial planning initiatives within Midvaal LM.

3.3 Socio-Economic Analysis

A detailed *Economic Study* was undertaken for the study area, and the findings of the study are discussed below.

3.3.1 Regional Population

Diagram 14 shows a summary of the Regional Population figures up to 2025.

The Sedibeng DM population comprised of 7% (1,2 Mil people) of the total Gauteng Province population of 16,1 Mil people in 2025.

In the DM, Midvaal LM contributed to 10% of the population while Emfuleni LM was by far the highest at a 78% contribution and Lesedi LM with a 12% contribution.

There was a total growth rate of 7% in the Sedibeng DM and 10% in the Midvaal LM between 2001 and 2025.

3.3.2 Midvaal LM and Study Area Population and Dwelling Units

Diagram 15 shows a summary of the Midvaal LM and Study Area Population and Dwelling Units figures up to 2026.

In the Midvaal LM there is an estimated population of 118,581 people and 38,979 dwelling units in 2026.

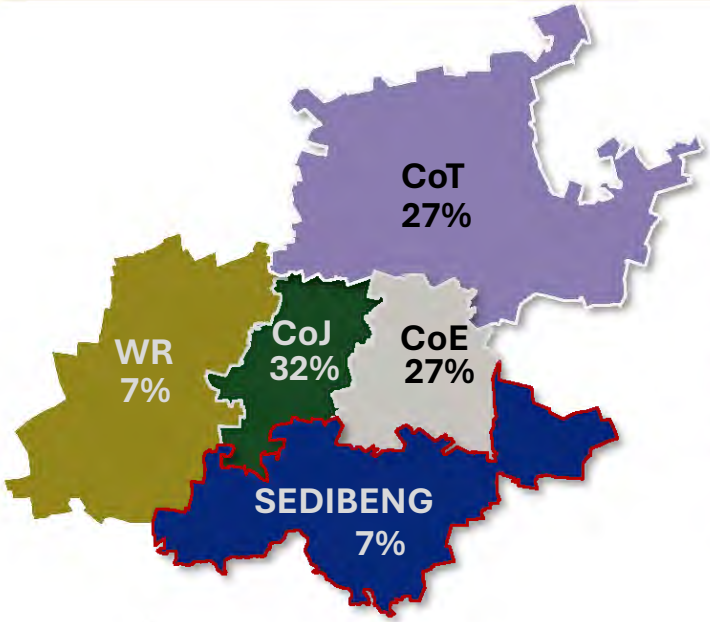
With regards to the study area, there is an estimated population of 52,947 people (45% of the total Midvaal LM population) and 17,086 dwelling units.

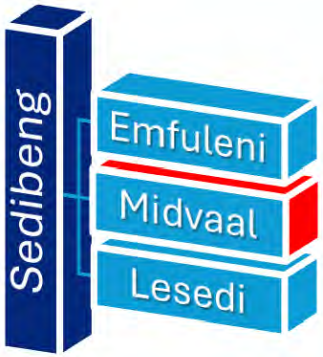
In the Midvaal LM there was a total incremental population growth of 6,327 people and 2,515 dwelling units in the period from 2022 up to 2026, which translates to 1,582 people and 629 households per annum.

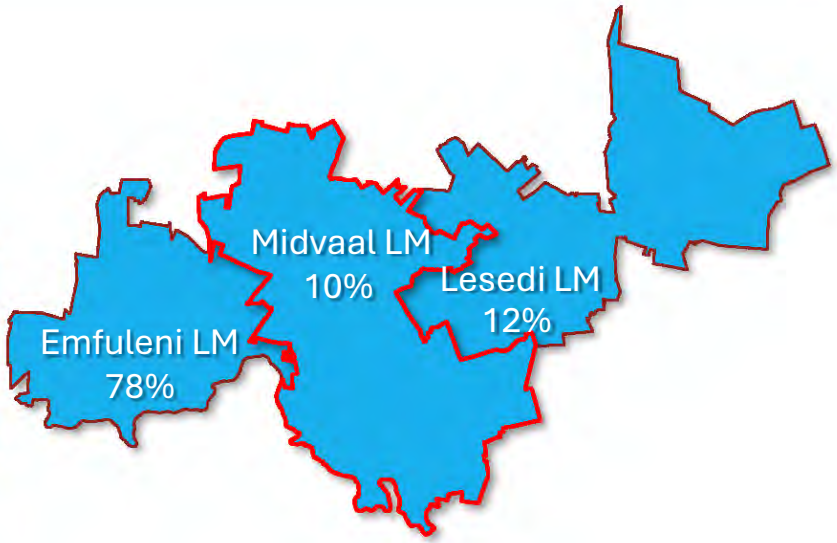
R59-Corridor: Regional Population

Gauteng Population 2025: 16,1 mil

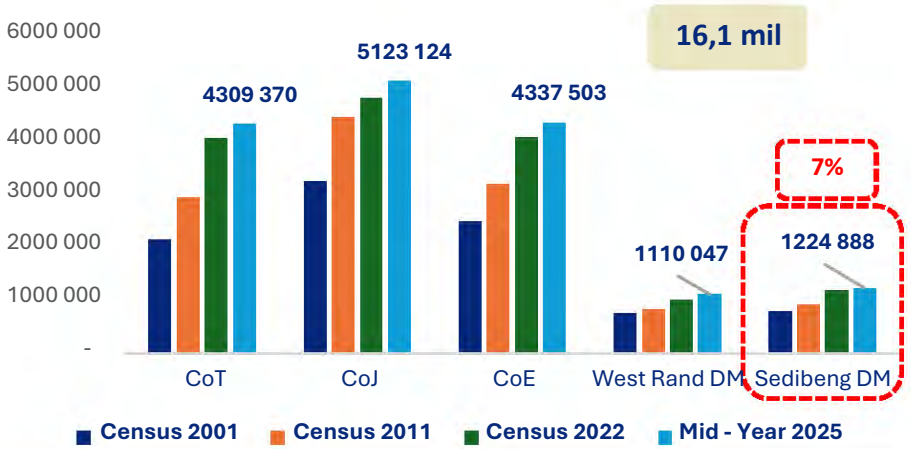
Sedibeng DM Population 2025: 1,2 mil



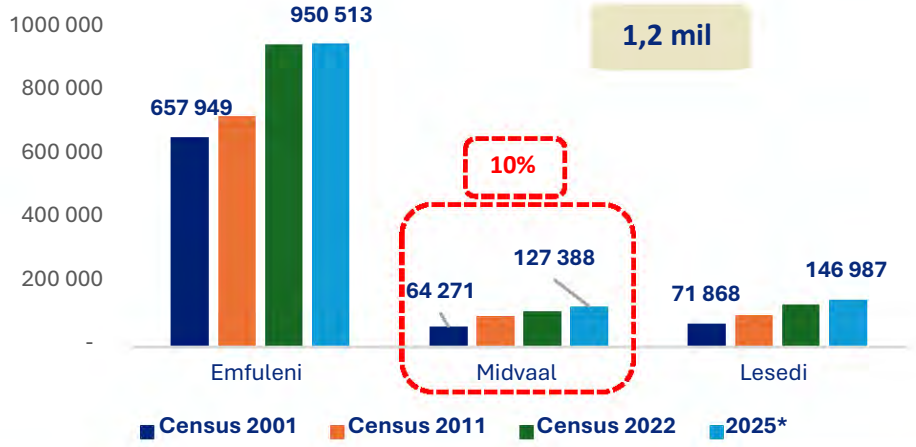




Gauteng: Historic and Current Population



Sedibeng DM Population per LM, 2025



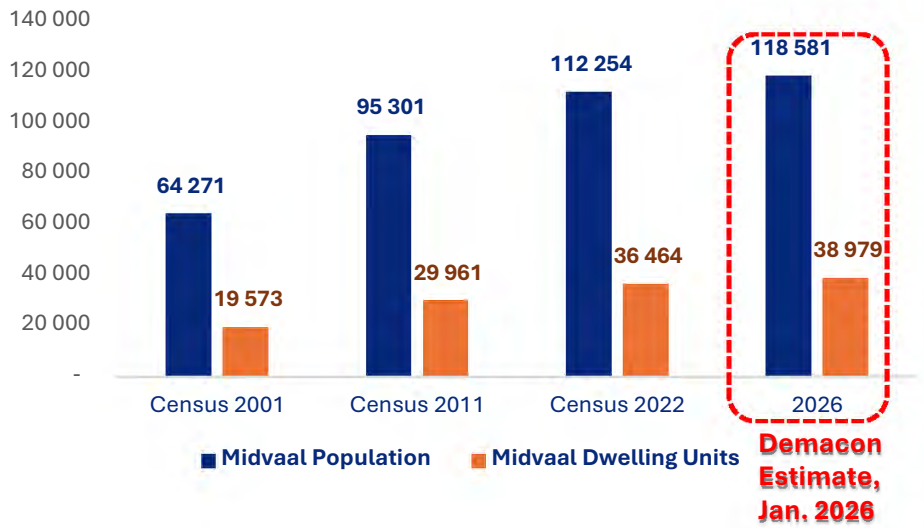
Source : STATSA Community Profile, 2026, Mid-Year 2025 Population Estimate, Report P03022025

Diagram 14

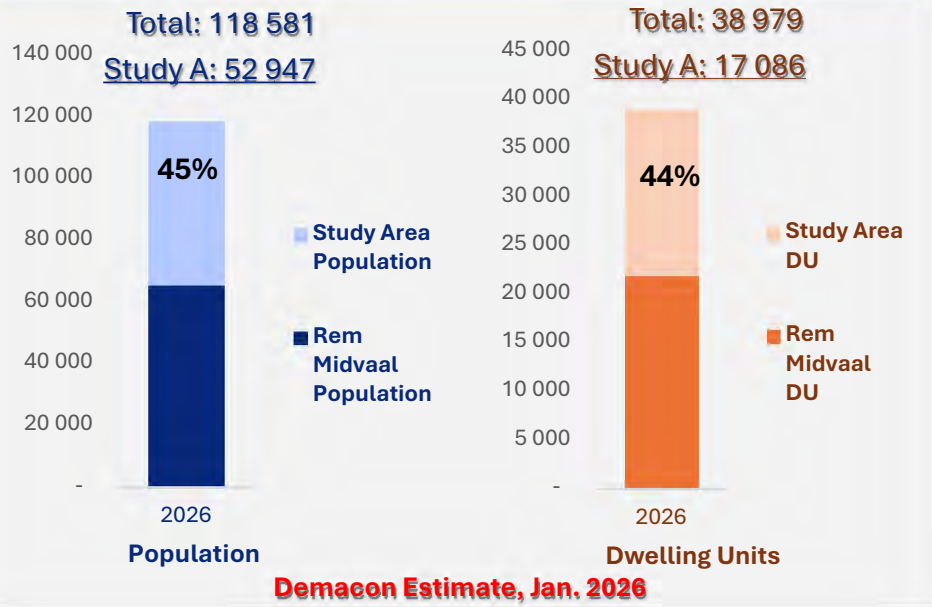
Midvaal LM: Population and Dwelling Units (2026)

Midvaal LM, 2026

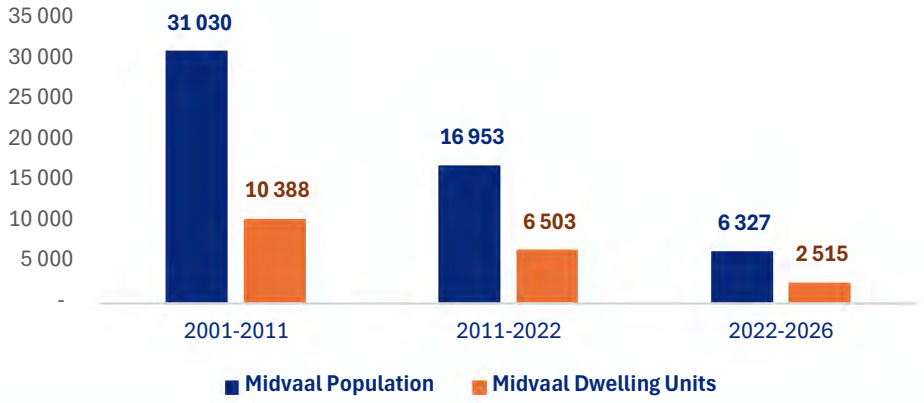
Midvaal LM:Population and Dwelling Units



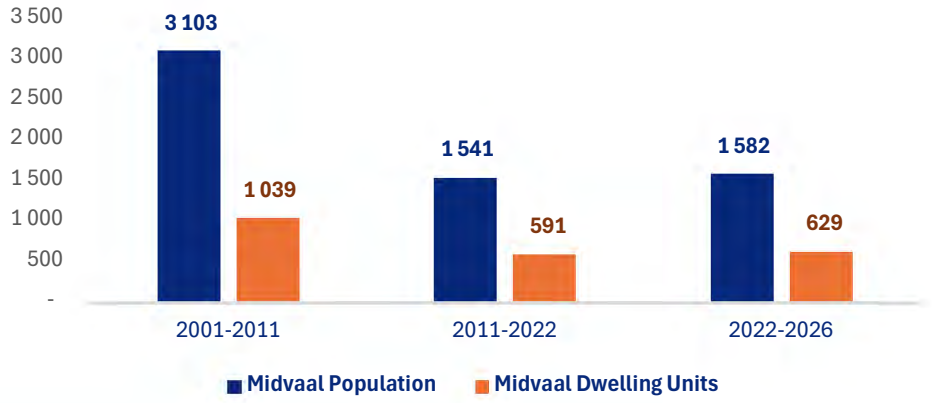
R59-Study Area, 2026



Midvaal LM: Incremental Population and DU



Midvaal LM: Population and DU Increment p.a.



Source : STATSA Community Profile, 2026, 2026 DEMACON Estimate

3.3.3 Study Area Demographic Size and Composition

Diagram 16 depicts the Demographic Size and Composition of the Study Area.

From the total of 52,947 people in the study area, there is a fairly even split between the male (51,1%) and female (48,9%) composition, with the most popular age range being young adults between 25 and 29 years old and young children between 0 and 4 years old. The number of people in the study area above the age of 65 is very limited (4,3%).

Data indicates that 36,1% of the population in the study area migrated there since 2011, with most of these people (31,8% of the 36,1%) being South African migrants and 4,4 % being from other countries.

The Education Profile of persons aged 20 and older indicates university attendance at 47,5%, TVET College attendance at 17,8% and high school graduation at 13,2%.

3.3.4 Study Area Household Profile

Diagram 17 depicts the Household Profile of the study area.

In terms of the dwelling typologies of the study area; majority of households (73,9%) reside in a formal dwelling, while 25,8% reside in informal dwellings and 0,3% reside in traditional dwellings.

In the context of the household income groups, the term Socio-Economic Measure (SEM) refers to a statistical classification used to group households according to income levels and living standards. SEM categories provide an indicative measure of socio-economic status and are used to better understand household characteristics, affordability, and service demand across different income groups.

It was found that 48,4% of households in the study area are low-income households; 37,6% are middle-income households and 14% are high-income households.

3.3.5 Study Area Labour Force Profile

Diagram 18 depicts the Labour Force Profile of the study area.

In terms of the economically active segment, 68,3% of the study area is economically active, with 31,7% not economically active.

In terms of the employment status (which only considers economically active persons) 80,9% of the study area population is employed, with an unemployment rate of 19,1%.

Majority of the occupation profile comprises semi-skilled occupations (49,6%), elementary occupations (25,7%) and low-skilled occupations (25,7%).

In terms of the employment industries, 4,7% of employees are employed in the primary sector, with 28,4% in the secondary sector and 55,8% in the tertiary sector (comprising manufacturing – 19,8%; wholesale and retail trade – 18,7%; and community and social services – 17%).

R59-Corridor Study Area: Demographic Size and Composition

POPULATION SIZE

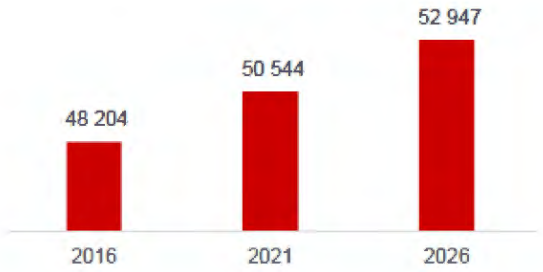
52 947 PEOPLE IN THE STUDY AREA

Population Average Annual Growth Rate **0.97%**

17 086 HOUSEHOLDS

Household Average Annual Growth Rate **1.07%**

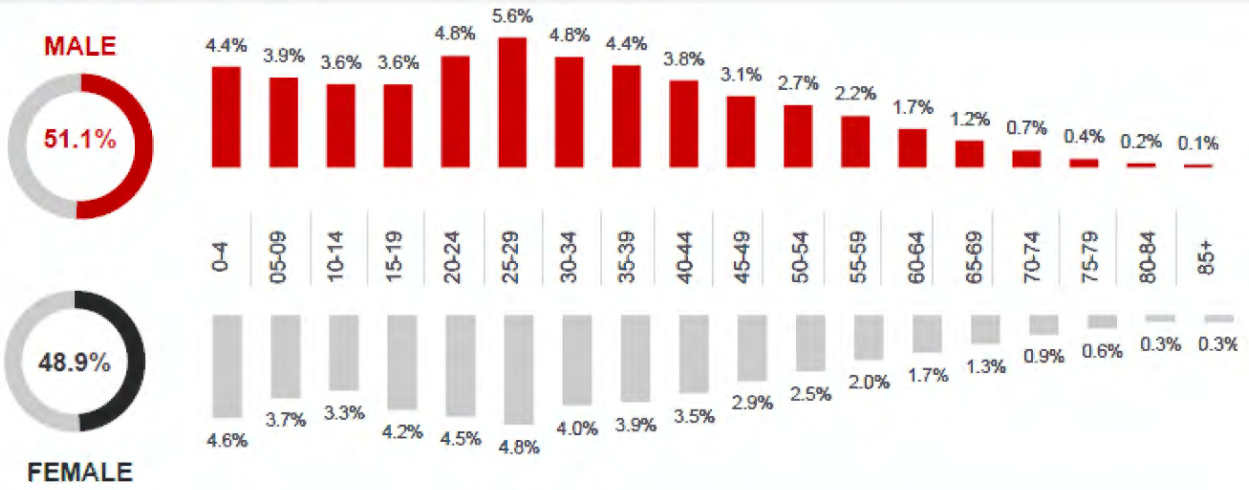
POPULATION GROWTH



HOUSEHOLD GROWTH



AGE AND GENDER PROFILE



POPULATION GROUP



Black African	54.6%
Coloured	1.3%
Indian / Asian	0.7%
White	43.4%

MIGRATION PROFILE

Data indicates that 36.2% of people migrated to the study area since 2001.

31.8% of migrants are South African

4.4% of migrants are from other countries



EDUCATION PROFILE

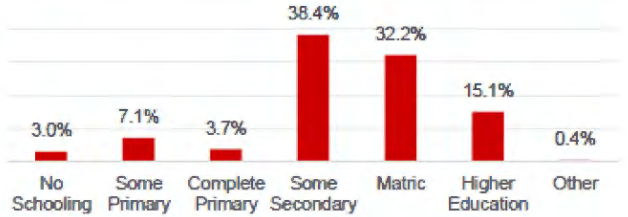
Education Institution Attended by a Person Enrolled and Aged 20 and Older

47.5% attend **Universities**

17.8% attend **TVET Colleges**

13.2% attend **Ordinary School**

Highest Level of Education Obtained – Working Age Population (15 to 64)



Source : DEMACON, January 2026

Diagram 16

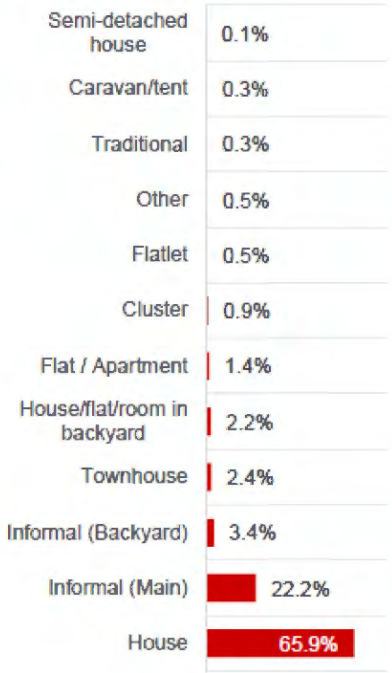
R59-Corridor Study Area: Household Profile

DWELLING TYPOLOGY

Majority of Households Reside in a **Formal Dwelling** **73.9%**

25.8% of households reside in an **informal dwelling**

0.3% of households reside in a **traditional dwelling**



TENURE STATUS



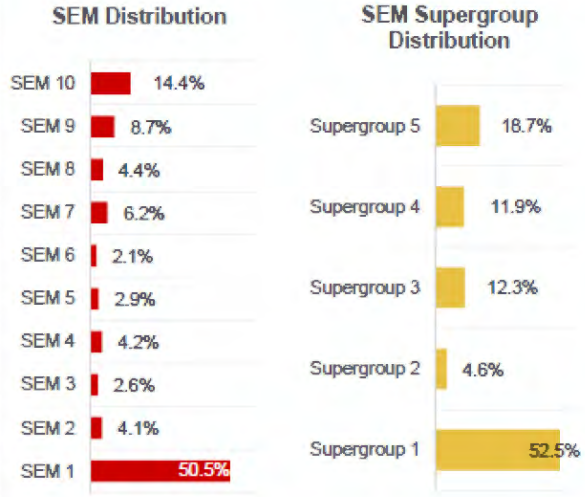
25.9% of households **own** and have **paid** for the property where they reside

21.4% of households **own** but have **not finished paying** for the property where they reside

24.8% of households **occupy** the property where they reside **rent free**

27.9% of households **rent** the property where they reside

SEM



HOUSEHOLD INCOME PROFILE

Average annual household income for all SEM Supergroups (2026)

R204 520

Average annual household income for SEM Supergroups 2+ (2026)

R425 594

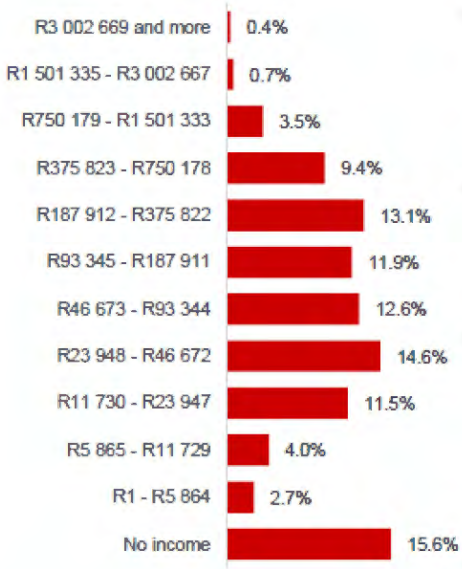


Average monthly household income for all SEM Supergroups (2026)

R17 043

Average monthly household income for SEM Supergroups 2+ (2026)

R35 466



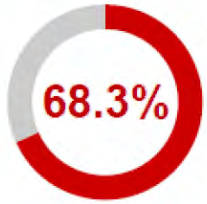
±14.0% of households in the study area are **high-income** households

±37.6% of households in the study area are **middle-income** households

±48.4% of households in the study area are **low-income** households

R59-Corridor Study Area: Labour Force Profile

ECONOMICALLY ACTIVE SEGMENT



ECONOMICALLY
ACTIVE
Population

31.7% Not Economically Active

Economically active population refers to a person of working age 15 to 65 who are either employed or unemployed.

Not economically active population refers to ages 0 to 14 and 65 and older, persons unable to work or persons engaged in educational activities or are homemakers.

EMPLOYMENT PROFILE



Employed
Economically
Active

19.1% Unemployed Economically Active

Employed and unemployed persons are considered to be economically active and thus is a segment of the economically active percentage.

OCCUPATION PROFILE

Skilled Occupations
15.8%



Semi-Skilled Occupations
49.6%



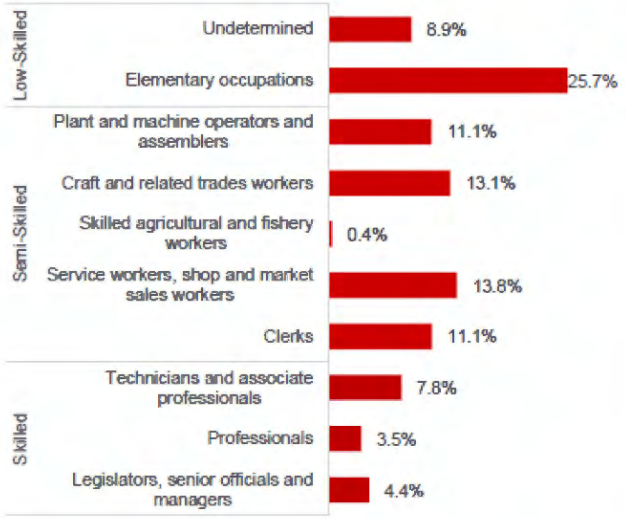
Low-Skilled Occupations
25.7%



Elementary Occupations
Are most popular
25.7%

Service workers, shop and market sales workers
Are the second most popular
13.8%

Craft and related trade workers
Are the third most Popular
13.1%



EMPLOYMENT PER INDUSTRY

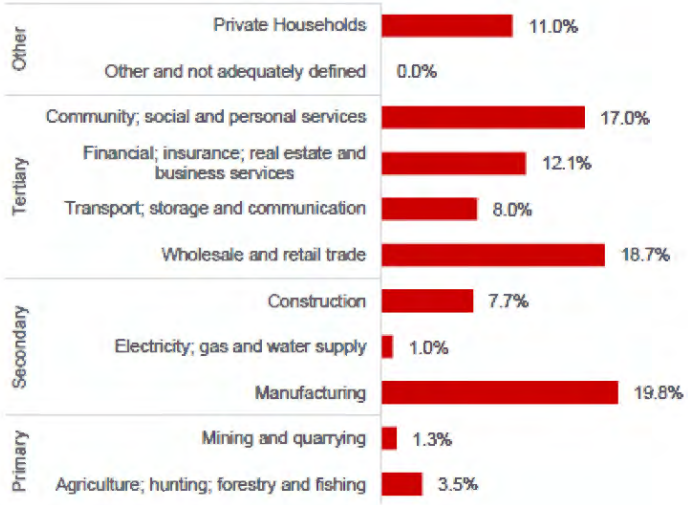


4.7%
Employed in the
Primary Sector

28.4%
Employed in the
Secondary Sector

55.8%
Employed in the
Tertiary Sector

19.8% Manufacturing
18.7% Wholesale and retail trade
17.0% Community; social and personal services



Source : DEMACON, January 2026

Diagram 18

3.4 Synthesis: Opportunities and Constraints

This section synthesises the key opportunities and constraints identified through the Situational Analysis.

Opportunities:

- The regional natural environment presents significant opportunities to structure development in a manner that enhances ecological resilience while reinforcing the corridor's identity and liveability.
- The Klip River and associated riparian corridors provide opportunities for an integrated green–blue network supporting biodiversity, stormwater management, and recreation.
- The R59 functions as a critical component of the regional movement network and offers opportunities to strengthen economic connectivity and spatial integration at both regional and local scales.
- The R59's role as a north–south spine positions the corridor as a key logistics and commuter route linking Gauteng, Sedibeng and the Free State.
- Strong east–west connections via the R550, R557 and R551 enable transversal movement and support node-based development.
- The parallel rail corridor presents long-term potential for multimodal freight and passenger integration, particularly around Meyerton.
- Established industrial nodes along the corridor provide a strong foundation for industrial clustering and job creation.
- The Meyerton CBD presents opportunities for revitalisation, mixed-use intensification and transit-supportive development.
- Vacant and underutilised land within nodes allows for phased growth aligned with infrastructure capacity.
- Strong performance in transport, storage, government and community services underpins economic resilience.
- Population growth supports demand for housing, services and local economic activity within identified nodes.

Constraints:

- Critical biodiversity areas, riparian zones and floodplains constrain development and require careful management.
- Traffic congestion on the R59 and R550 places pressure on interchanges and road safety.
- The R59 and railway line act as physical barriers limiting east–west and pedestrian connectivity.
- Fine-grained cadastral patterns and restrictive title conditions limit land assembly and large-scale redevelopment.
- Ribbon development pressure along the R59 risks undermining its mobility and economic function.
- Informal settlements complicate service provision, integration and environmental management.

- Insufficient water storage capacity in parts of the corridor limits short-term development potential.
- Limited spare capacity and uncertainty regarding wastewater treatment infrastructure constrain growth.
- Dependence on Eskom and maintenance backlogs affect electricity reliability.
- Ageing stormwater infrastructure and flood risk increase vulnerability in low-lying areas.
- A high proportion of low-income households places pressure on municipal services and social infrastructure.
- Persistent unemployment and reliance on low- and semi-skilled work limit household resilience.
- Rapid population growth risks outpacing infrastructure capacity if not carefully phased.

Community Resistance to Corridor Scale Development:

Implementation of the R59 Corridor Strategic Development Plan may encounter resistance from local communities, reflecting concerns previously raised during the compilation of precinct plans within the study area, particularly the Waterval and Pendale Precinct Plans. Community engagement undertaken as part of these processes highlighted sensitivities regarding the scale, form and perceived impacts of development associated with the R59 corridor. These concerns represent an important social and institutional constraint that may influence the acceptance, timing and feasibility of corridor level interventions.

In this context, potential sources of resistance include:

- Community opposition to development perceived as incremental, ad hoc or uncontrolled along the R59, particularly where it threatens agricultural land, rural character or environmental assets.
- Concerns regarding increased heavy vehicle movement, traffic congestion and road safety risks associated with corridor related industrial and logistics activities.
- Objections linked to environmental impacts, including pollution of the Klip River system, noise, dust and increased flood risk.
- Frustration with illegal or inappropriate land uses on agricultural holdings and perceptions of weak enforcement of planning and zoning controls.
- Resistance to development initiatives perceived to benefit external investors without delivering tangible local economic, social or infrastructure benefits.
- A strong preference for development to be consolidated within clearly defined and serviced nodes, rather than dispersed ribbon development along the corridor.

These community concerns indicate that, without a clear, enforceable spatial framework and visible implementation mechanisms, the R59 Corridor Plan may face contestation at local level. These issues will need to be addressed during the Development Plan to secure community support and implementation certainty.

4 DEVELOPMENT FRAMEWORK

4.1 Development Vision

"To continue the development of the R59 Corridor as an integrated linear corridor – connecting people, places and opportunity through coordinated nodes and interrelated land uses, supported by an integrated movement network and an integrated open space".

The intended outcome is to guide development within the study area that remains sustainable and contributes to the overall economic growth and property of the broader region.

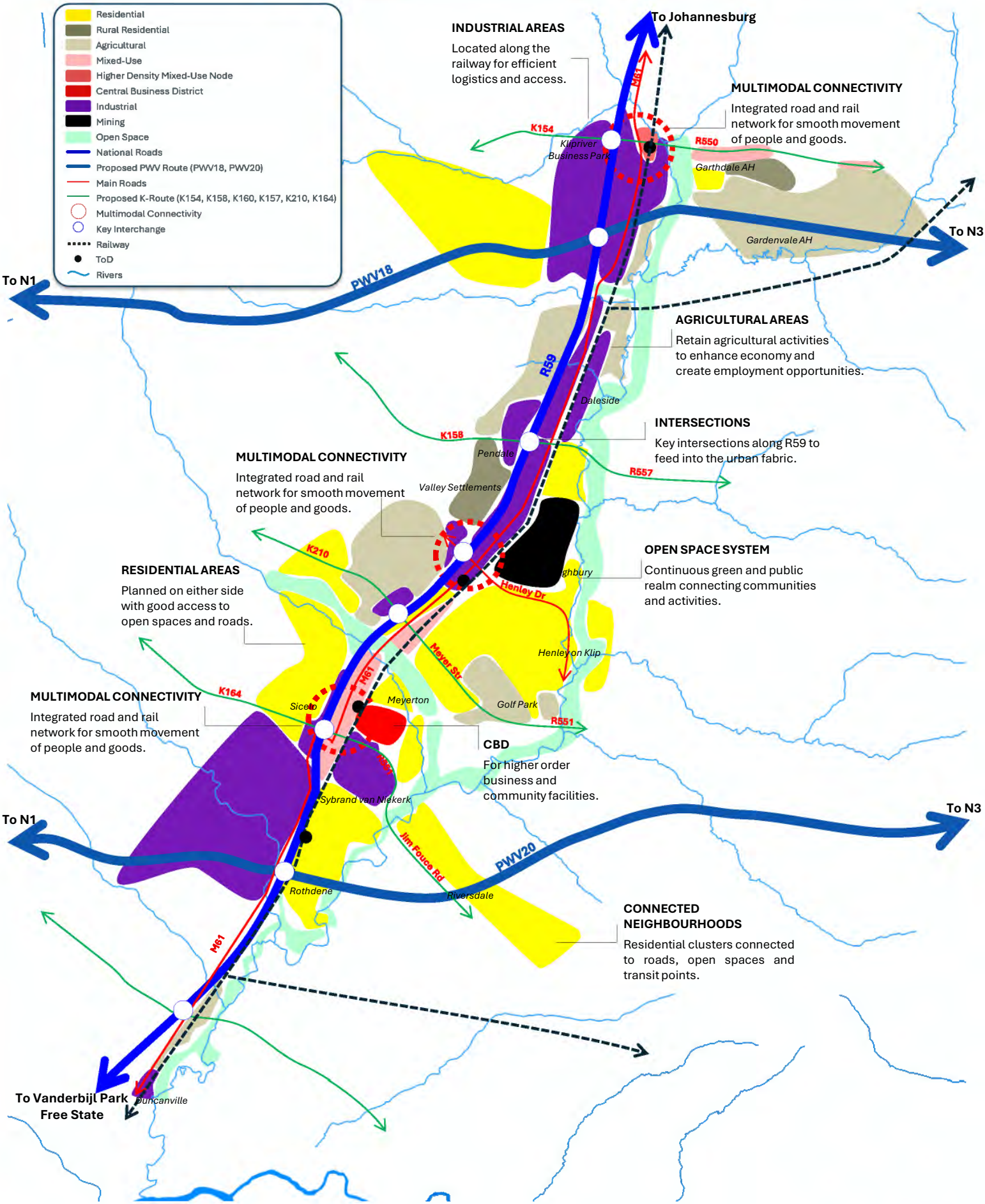
The original R59 Corridor Plan was formulated in 2010 and since its formulation, 96 ha (960,000 m^2) industrial land has developed, and more than 8,000 dwelling units were developed within the study area.

4.2 Development Objectives and Development Concept

The proposed Development Concept is graphically illustrated in ***Figure 46***. The Development Concept is based on the following Development Objectives:

- **Development Objective 1:** Integrated Open Space & Public Environment (linked to agricultural character).
- **Development Objective 2:** Integrated Movement Network (including NMT).
- **Development Objective 3:** Sustainable Human Settlements.
- **Development Objective 4:** Community Facilities.
- **Development Objective 5:** Engineering Infrastructure to Enable Development.
- **Development Objective 6:** Economic Development & Job Creation (clusters).

Development Concept



R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 46

4.3 Development Strategies

4.3.1 Natural Environment and Open Space

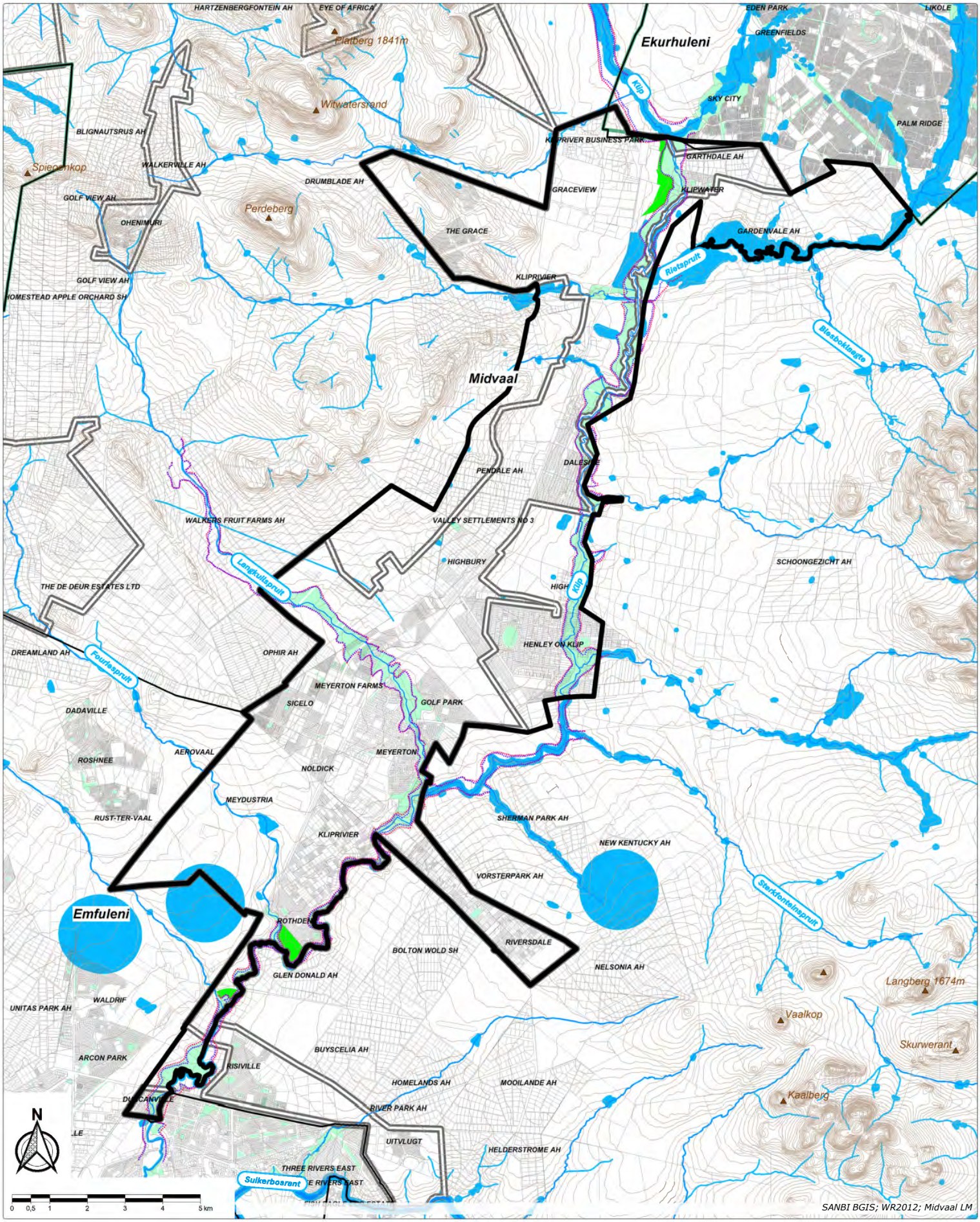
Development Objective 1 (Integrated Open Space & Public Environment (linked to Agricultural Character))

To protect, enhance and connect the Klipriver's and Langkuilspruit natural and agricultural landscapes by establishing a comprehensive, integrated public open space system that improves the quality of the public environment and delivers a network of accessible active and passive public spaces.

The Klipriver system is identified as the primary structuring element of the corridor's open space framework and, together with its tributaries, should form the backbone of an integrated public open space system across the R59 Corridor ***(Figure 47)***. Within the corridor boundary, the Klipriver (and its tributaries), the associated river buffer (including the 32-metre buffer), and linked ecological features (including identified wetland areas) must be protected and incorporated into a connected open space network as core components. This network is further strengthened by the presence of additional water-linked open space elements that traverse settlement areas—such as the Langkuilspruit tributary system through Meyerton—which provides an opportunity to extend connectivity between the corridor's urban areas and the wider river system. The large tracts of vacant and agricultural land can contribute to the corridor open space network, and these key elements should be optimised (incorporating regional open space elements) to create an integrated public open space system, with public spaces linked and made accessible via nodes/areas of use intensity.

Open spaces associated with these river corridors can therefore be used to link the various land uses and activity areas within the study area by creating continuous green connections between nodes, neighbourhoods, and economic clusters, consistent with the framework's intent to link public spaces into an integrated system with access facilitated through development nodes. Where development interfaces with the river and open space system, the corridor approach should encourage developments to incorporate and address this system as part of their site planning and edge conditions, strengthening the relationship between private development and the public realm in a way that supports an integrated, accessible and managed open space network. *(Implementation note: while the framework supports active inclusion of riverine/wetland areas as open space and access via nodes, benefits such as improved maintenance, safety, and reduced dumping/encroachment would be achieved through detailed design, management and enforcement measures aligned to this open-space structure.)*

Objective 1: Integrated Open Space & Public Environment



Study Area
Urban Development Boundary
Cadastral
Municipal Boundary
Dam / Pan / Wetland
River
1 in 100-year Flood Line
1 in 50-year Flood Line
5m / 20m Contours
Hill / Mountain / Peak
Open Space / Parks
Tourism / Recreation

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 47

Incorporate river edge into development:
Singel river with two different approaches and outcomes. Flood plain on left is incorporated / claimed by community for recreation use. Right is unclaimed and results in unwanted activities



In addition to the regional river-based open space system, the existing parks and public open spaces within the corridor settlements should be maintained and enhanced as key local focus points that support social interaction and community events, reinforcing memorable, safe and attractive places. This aligns with the corridor's place-making intent to create people-focused environments with parks and public spaces functioning as destinations and everyday gathering spaces within the wider integrated network.

4.3.2 Movement Network

Development Objective 2 (Integrated Movement Network (including NMT))

To establish a comprehensive regional and local movement network that unlocks development potential, improves connectivity and access for all communities, and supports safe, efficient public and private transport—while strengthening non-motorised movement through walkable connections, pedestrian priority routes and improved crossings linked to corridor nodes and activity areas.

The movement network within the R59 Corridor serves not only to facilitate the movement of people, goods and services between destinations, but also functions as a key spatial structuring element that influences urban form, supports node-based development and contributes to economic connectivity, investment attraction and job creation throughout the corridor.

Development Objective 2 seeks to establish a comprehensive and hierarchical movement network that unlocks land development potential while balancing the two primary, and often competing, functions of a road system, namely mobility and accessibility. Mobility relates to the efficient movement of traffic over longer distances with minimal interruption, while accessibility relates to the ability to appropriately access adjacent land uses and development opportunities. This relationship is formally recognised in TRH26: South African Road Classification and Access Management Manual (COTO), which provides a standardised framework for functional road classification and access management. TRH26 emphasises the distinction between mobility and access functions and establishes an integrated classification system to guide the planning, design and management of roads in accordance with their intended function. Importantly, this framework should be applied as a guideline, with local conditions, development pressures and site-specific constraints being carefully evaluated in the application of its principles.

As illustrated in **Figure 48**, the R59 functions as a transportation corridor within a broader movement system that is influenced by proposed Class 1 (PWV) routes and multiple Class 2 distributor (K-) routes, each of which is associated with specific access management requirements. The R59 Corridor Framework similarly recognises the importance of maintaining the integrity of the road hierarchy by distinguishing between high-mobility routes, where through movement is prioritised and direct access should be limited, and supporting distributor and collector routes that provide appropriate local access and facilitate development within nodes, precincts and development areas.

The Framework therefore recognises the R59 as the primary mobility spine, supported by a hierarchy of distributor and collector roads that provide the necessary accessibility functions without compromising the operational efficiency of the corridor. Particular emphasis is placed on improving east-west connectivity and establishing supplementary lower-order road networks that

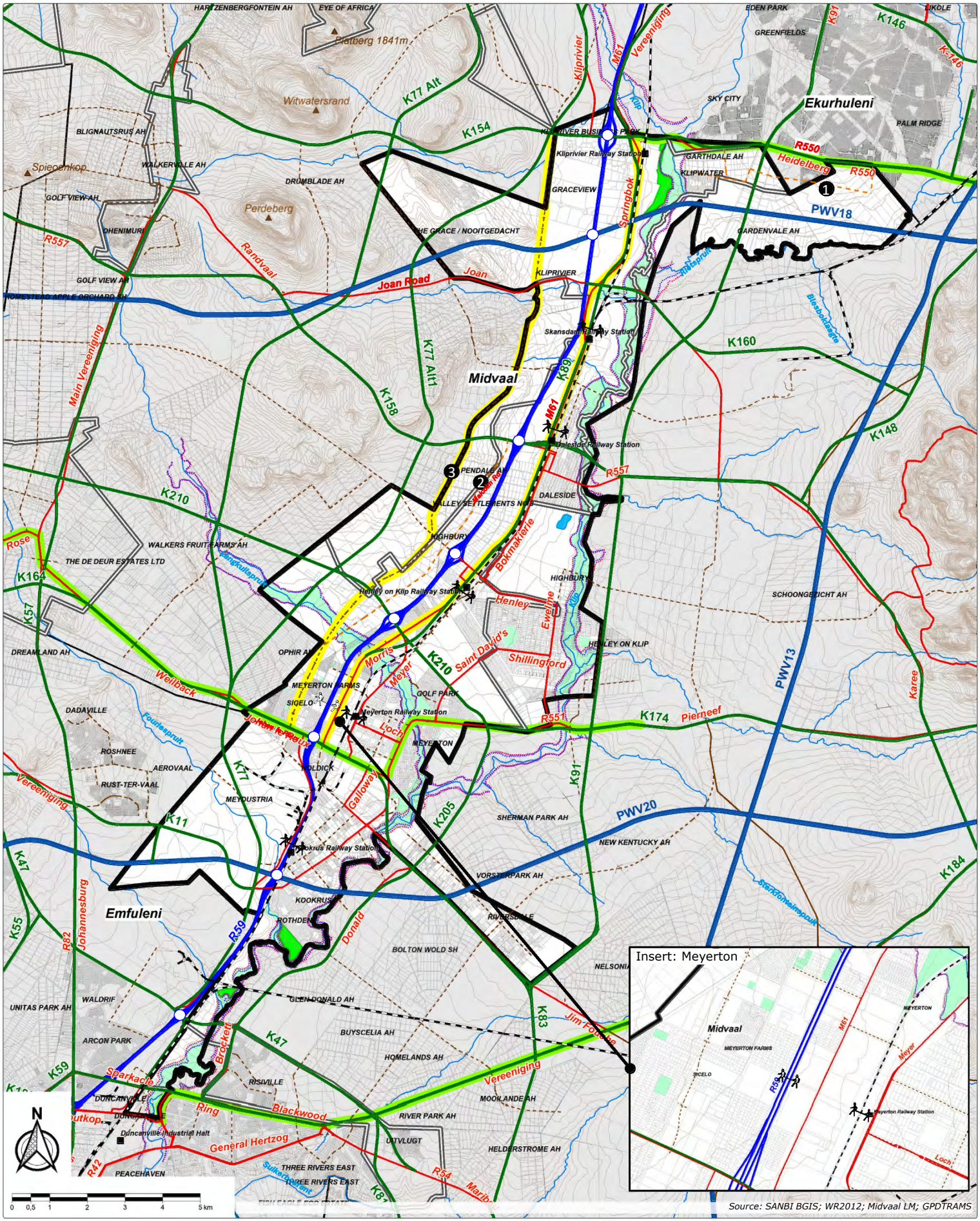
support local access and development opportunities while maintaining the mobility function of the R59. **Info Box 3** further illustrates how the movement network can act as a catalyst for the development and establishment of activity corridors, activity spines and activity streets.

Residential growth within Sky City and Palm Ridge has placed increasing pressure on the broader transportation network, while ongoing development activity along the R550 continues to generate additional traffic demand. In response, Figure 47 illustrates a proposed Class 3 road network through the Garthdale area, aligned with the access management principles implemented by Gautrans. An additional proposed Class 3 road, indicated as ① in the Garthdale area, is proposed to strengthen the local road hierarchy and improve connectivity between the R550 and the proposed PWV18. The provision of this route will assist in distributing traffic movements, improving network resilience and supporting future development within the area.

Further south, Malcolm Road, indicated as ②, is proposed to serve as an interim Class 3 road until such time as the proposed Class 3 road, indicated as ③, can be constructed. The implementation of Road ③ will be dependent on the future development of the land between the R59 and Malcolm Road, where sufficient development intensity will be required to justify and support the construction of the proposed route. Until such time, Malcolm Road will perform an important interim movement and accessibility function within the road hierarchy.

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Objective 2: Integrated Movement Network



Study Area
Urban Development Boundary
Cadastral
Municipal Boundary
River / Dam / Pan
1 in 100-year Flood Line
1 in 50-year Flood Line
5m / 20m Contours
Hill / Mountain / Peak
Open Space/Parks
Tourism / Recreation
National Road
Proposed PWV Route
Interchanges
Main Road
Proposed K-Route
Secondary Road
Proposed Class 3 Rd
Proposed Add Class 3 Rd
Development Spine
Sec Development Spine
Pedestrian Crossing
Proposed Pedestrian Crossing
Railway / Railway Station

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 48

Info Box 3: Activity Corridors, Activity Spines and Activity Streets

ACTIVITY CORRIDORS, ACTIVITY SPINES AND ACTIVITY STREETS

- **Transportation corridor:** A transportation corridor constitutes a strip of land generally with more than one transport facility in reasonably close proximity intended to support each other, and move vehicles, people and goods from one place to another. The emphasis is on providing mobility rather than accessibility. Access points or interchanges in the case of roads are positioned at well-spaced intervals to provide access to adjoining transportation systems.

- **Activity corridor:** An activity corridor is defined as a linear strip of land or area; connecting activity nodes; comprising a major transport facility or facilities (multi-modal); providing an appropriate regional level of mobility and accessibility to adjacent areas; and accommodating a high concentration of population and mixed land-uses (job opportunities).

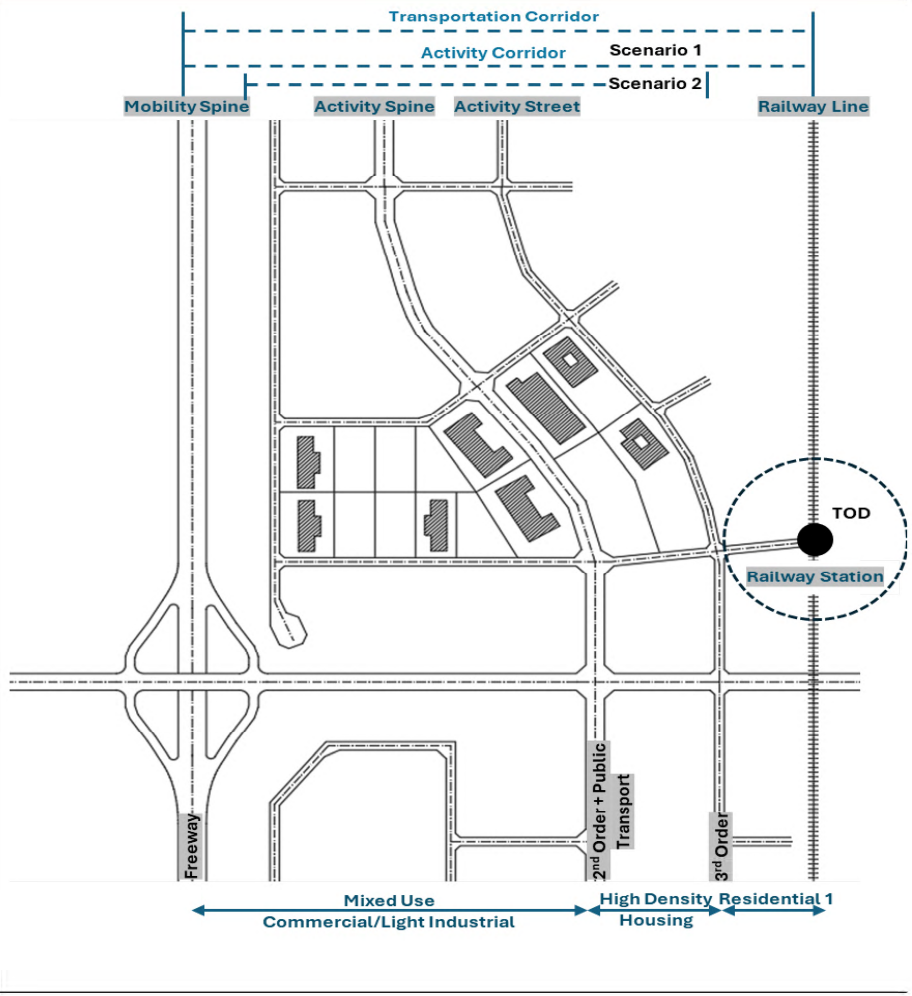
  Activity corridors normally incorporate activity spines and activity streets to accommodate the accessibility need for land use development. This without sacrificing the mobility and regional accessibility function of the higher order transportation facilities in the corridor (mobility spine). The promotion of public transport services and facilities within an activity corridor is also essential.

- **Activity spine:** An activity spine refers to a major road (or roads) or railway line accommodating mixed land-uses and high-density development immediately adjacent to this facility; and it is usually connected to one or more activity nodes. Public transport is a key element of an activity spine. Activity spines should exhibit satisfactory sub-regional mobility and accessibility and do not necessarily form part of activity corridors.

- **Activity street:** Activity streets are of a lower order than, but similar to activity spines where the same principles of linearity and high-density mixed land-use apply. The term also refers to a local road that allows for a high degree of accessibility along its length. Activity streets are of a smaller scale than activity spines and often supports the activity spine by providing access to land uses within an activity corridor.

  Public transport could occur on activity streets but is not essential. Activity streets may develop spontaneously within urban areas and do not necessarily form part of an activity corridor. The nature and design of the activity street promotes accessibility and pedestrian movement.

- **Modal transfer points:** The development of nodes around modal transfer points, particularly in disadvantaged areas, is promoted. Informal trade is currently naturally occurring in these areas and through the provision of infrastructure the level of economic activities could be raised.



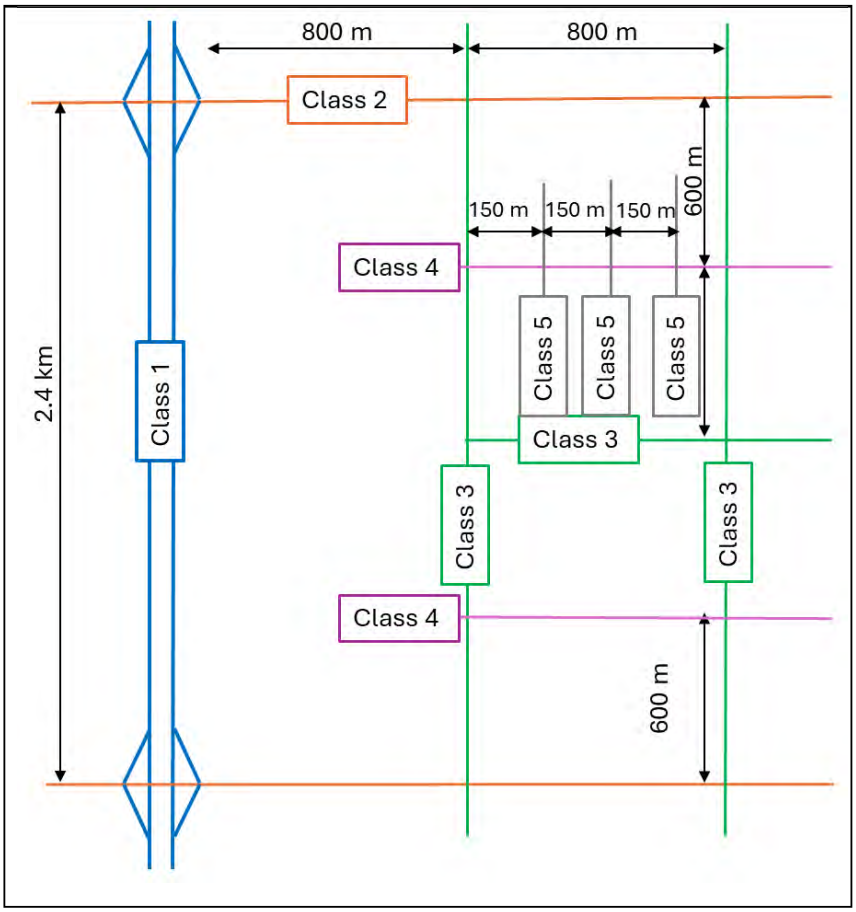
Non-Motorised Transport (NMT) forms a critical component of Development Objective 2. The R59 freeway and the parallel railway line currently function as significant barriers to pedestrian and cyclist movement, restricting connectivity between communities and economic opportunities located on either side of these transportation corridors. The absence of a formal pedestrian bridge across the R59 has contributed to unsafe crossing behaviour, while a key missing linkage remains the Station Road connection between Sicelo and Meyerton.

Improved pedestrian connectivity at this location would significantly enhance access between the historically disadvantaged community of Sicelo and the employment, commercial and service opportunities located in Meyerton. The R59 Framework therefore strongly supports the current initiative to develop a pedestrian bridge across the R59, as illustrated in Figure 47. However, the success of this intervention is dependent on it being implemented in conjunction with the proposed upgrade of the existing railway pedestrian bridge. The enhancement of both facilities, together with improvements to the Station Road linkage, will result in a continuous, safe and functional pedestrian route between Sicelo and Meyerton.

Development Objective 2 therefore requires that the movement proposals illustrated in Figure 47 be complemented by safe, direct and legible NMT crossings over both the freeway and railway infrastructure. Priority should be given to the Sicelo-Meyerton Station Road linkage as a catalytic NMT intervention that will improve accessibility, strengthen spatial integration and support everyday mobility for residents, commuters and users of the corridor

Diagram 19 provides a diagrammatic illustration of the access standards between the various road classes.

Diagram 19: Access Standards



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Railway Line:

The railway line through Meyerton forms part of the Germiston Vereeniging corridor and is operated by both Transnet and PRASA. While the line historically accommodated both commuter and freight services, passenger rail operations on this section are currently not reliably operational due to ongoing infrastructure challenges, vandalism, and network recovery constraints affecting the broader Metrorail system. As a result, the corridor is presently used predominantly for freight movement, with limited to no active commuter or long-distance passenger services. The line can therefore be considered as a freight line with the potential for future reinstatement of passenger service.

Table 20 illustrates the main movement challenges and proposals.

Table 20: Main Movement Challenges and Proposals

No	Movement Challenge	Proposed Improvement
1	Residential expansion in Sky City and Palm Ridge towards Midvaal Local Municipality has significantly increased traffic volumes on the R550 corridor. As the main route linking these areas to the R59, the R550 is operating beyond its capacity, causing congestion and an elevated risk of road accidents.	The R550 (K154) should be upgraded to the planned k route standard with 2 lanes per direction from Sontonga Road to the R59.
2	The M61, which runs parallel to the R59, is facing increased development pressure. Access spacing requirements set by the Gauteng Department of Roads and Transport are limiting the approval of new access points, resulting in challenges for rezoning and township establishment applications.	An access management plan should be developed incorporating the K89 and associated service roads. Once finalised, the plan should be shared with developers to clearly indicate permissible access locations and the required service roads to support development. The access management plan should investigate the function of the M61 between Meyer Road () and Johan le Roux (R551) and indicate if this section of road should not be de-proclaimed and fall under the jurisdiction of the Midvaal Municipality
3	The railway line traversing the study area, parallel to the R59, acts as a barrier to vehicular and pedestrian movement. This has led to the use of multiple illegal rail crossings by the community, creating a significant safety concern.	These informal rail crossings should be investigated, and formal crossings should be provided at strategic locations by Transnet.
4	There is no formal pedestrian link or pedestrian bridge over the R59. Although Station Road is intended to connect Sicelo with the Meyerton CBD and a pedestrian crossing exists at the railway line, pedestrians continue to cross the R59 illegally and unsafely due to the missing pedestrian facility.	The proposed pedestrian bridge over the R59 at Station Road in Meyerton, which is currently under construction, is strongly supported as it will provide a safe pedestrian crossing linking surrounding residential areas with the Meyerton CBD. This initiative should be complemented by the upgrading of the existing railway pedestrian bridge to establish a continuous and safe pedestrian connection between Sicelo and Meyerton.

4.3.3 Human Settlement

Development Objective 3 (Sustainable Human Settlements)

To guide the establishment of well located, sustainable and integrated human settlements that offer a diversity of housing typologies, densities and tenure options, and that are supported by an appropriate range of community facilities and municipal services within and around corridor nodes.

The planning of human settlement opportunities should cater for a variety of housing typologies, as well as for various incomes. The human settlement areas should include areas for subsidised housing, bonded and possible self-build opportunities.

a) Population and Dwelling Unit Projections

Table 21 illustrates the historic, current and future population projections and Midvaal LM illustrates a 1,039 dwelling unit growth per annum between 2001-2011 and the growth slowed to 591 dwelling units per annum from 2011-2027. However, the growth per annum increased to 997 dwelling units per annum between 2022-2026 and the projection is that it may increase to more than 1,000 per annum up to 2050 (*Source: STATSA Community Profile, 2026, STATSA Mid-Year 2025 Population Estimate, Plan Associates Trend Growth Projection*).

Table 21: Midvaal LM: Population and Dwelling Units

	Historic			Current		Projection			Increment p.a.					
Midvaal LM	Census 2001	Census 2011	Census 2022	2025*	2026**	2030	2040	2050	2001-2011	2011-2022	2022-2026	2026-2030	2030-2040	2040-2050
Midvaal Population	64,271	95,301	112,254	120,792	123,067	135,075	163,671	192,399	3,103	1,541	2,703	3,002	2,860	2,873
Midvaal Dwelling Units	19,573	29,961	36,464	39,754	40,454	45,503	56,999	69,171	1,039	591	997	1,262	1,150	1,217
HH size	3.28	3.18	3.08	3.04	3.04	2.97	2.87	2.78						

Source: STATSA Community Profile, 2026, STATSA Mid-Year 2025 Population Estimate, Plan Associates Trend Growth Projection

The study area made up 48.6% of Midvaal LM's population and number of dwelling units (see ***Table 22***). However, given the growth of Savanna City and Eye of Africa, the contribution may decrease to 43.7% (2030) and 39.6% (2050). It is projected that the dwelling units in the R59 study area may grow to 19,723 units (2030) and 26,823 units (2050).

Table 23 illustrates the incremental population and dwelling unit projections, and the following can be noted:

- The 2026-2030 dwelling unit increment is 1,515 units and 3,603 population.
- The 2030-2040 dwelling unit increment is 3,449 units and 8,579 population.
- The 2040-2050 dwelling unit increment is 3,652 units and 8,618 population (*Source: STATSA Community Profile, 2026, Mid-Year 2025 Population Estimate, Plan Counts, 2025 Google Earth, Sedibeng Rural SDF Assumptions*).

Table 22: Midvaal LM vs. R59 Study Area: Population and Dwelling Units Projection

	Historic			Current		Projection		
Midvaal LM	**Census 2001**	**Census 2011**	**Census 2022**	**2025***	**2026****	**2030**	**2040**	**2050**
Midvaal Population	64,271	95,301	112,254	120,792	123,067	135,075	163,671	192,399
Midvaal Dwelling Units	19,573	29,961	36,464	39,754	40,454	45,503	56,999	69,171
HH size	3.28	3.18	3.08	3.04	3.04	2.97	2.87	2.78
R59 Study Area	**Census 2001**	**Census 2011**	**Census 2022**	**2025***	**2026****	**2030**	**2040**	**2050**
Study Area Population	31,920	47,239	54,560	54,717	55,392	58,994	67,573	76,191
Study Area Dwelling Units	9,721	14,851	17,723	18,008	18,208	19,723	23,172	26,823
HH size	3.3	3.2	3.1	3.0	3.0	3.0	2.9	2.8
R-59 Population (% of M LM)	50%	50%	49%	45%	45%	44%	41%	40%
R-59 Dwelling Units (% of M LM)	50%	50%	49%	45%	45%	43%	41%	39%

(Source: STATSA Community Profile, 2026, Mid-Year 2025 Population Estimate, PLAN Counts, 2025 Google Earth, Sedibeng Rural SDF Assumptions)

Table 23: Midvaal LM: Population and Dwelling Units vs. R59 Study Area Increment Projections

	Increment					
Midvaal LM	**2001-2011**	**2011-2022**	**2022-2026**	**2026-2030**	**2030-2040**	**2040-2050**
Midvaal Population	31,030	16,953	10,813	12,008	28,596	28,727
Midvaal Dwelling Units	10,388	6,503	3,990	5,049	11,496	12,172
HH size	2.99	2.61	2.71	2.38	2.49	2.36
R59 Study Area	**2001-2011**	**2011-2022**	**2022-2026**	**2026-2030**	**2030-2040**	**2040-2050**
Study Area Population	15,319	7,321	832	3,603	8,579	8,618
Study Area Dwelling Units	5,130	2,872	485	1,515	3,449	3,652
HH size	2.99	2.55	1.72	2.38	2.49	2.36
R-59 Population (% of M LM)	49.4%	43.2%	7.7%	30.0%	30.0%	30.0%
R-59 Dwelling Units (% of M LM)	49.4%	44.2%	12.2%	30.0%	30.0%	30.0%

(Source: STATSA Community Profile, 2026, Mid-Year 2025 Population Estimate, PLAN Counts, 2025 Google Earth, Sedibeng Rural SDF Assumptions)

The population and dwelling unit projection per annum is an important figure in order to determine the impact on services and the provision of community facilities. ***Table 24*** illustrates the population and dwelling unit projection up to 2050 but illustrates the average increment per annum is projected the annual increment is an average of 363 units per annum.

In order to address the housing need, a variety of housing densities and housing instruments will be required.

Table 24: Midvaal LM vs. R59 Study Area: Population and Dwelling Units per Annum

	Increment p.a.					
Midvaal LM	**2001-2011**	**2011-2022**	**2022-2026**	**2026-2030**	**2030-2040**	**2040-2050**
Midvaal Population	3,103	1,541	2,703	3,002	2,860	2,873
Midvaal Dwelling Units	1,039	591	997	1,262	1,150	1,217
HH size						
R59 Study Area	**2001-2011**	**2011-2022**	**2022-2026**	**2026-2030**	**2030-2040**	**2040-2050**
Study Area Population	1,532	666	208	901	858	862
Study Area Dwelling Units	513	261	121	379	345	365
HH size						
R-59 Population (% of M LM)						
R-59 Dwelling Units (% of M LM)						

Source: STATSA Community Profile, 2026, Mid-Year 2025 Population Estimate, PLAN Counts, 2025 Google Earth, Sedibeng Rural SDF Assumptions, DEMACON, 2026

Diagram 20 graphically illustrates the typical housing typologies and the associated densities. It can be noted that walk-up units have the ability to centre the highest yield and the largest land utilisation. Stand-alone housing has the lowest yield and lowest land utilisation.

Diagram 21 illustrates nine different options with regards to densities and income groups. The diagram illustrates the housing that can be provided for subsidised housing and bonded housing.

Diagram 20: Typical Housing Typologies

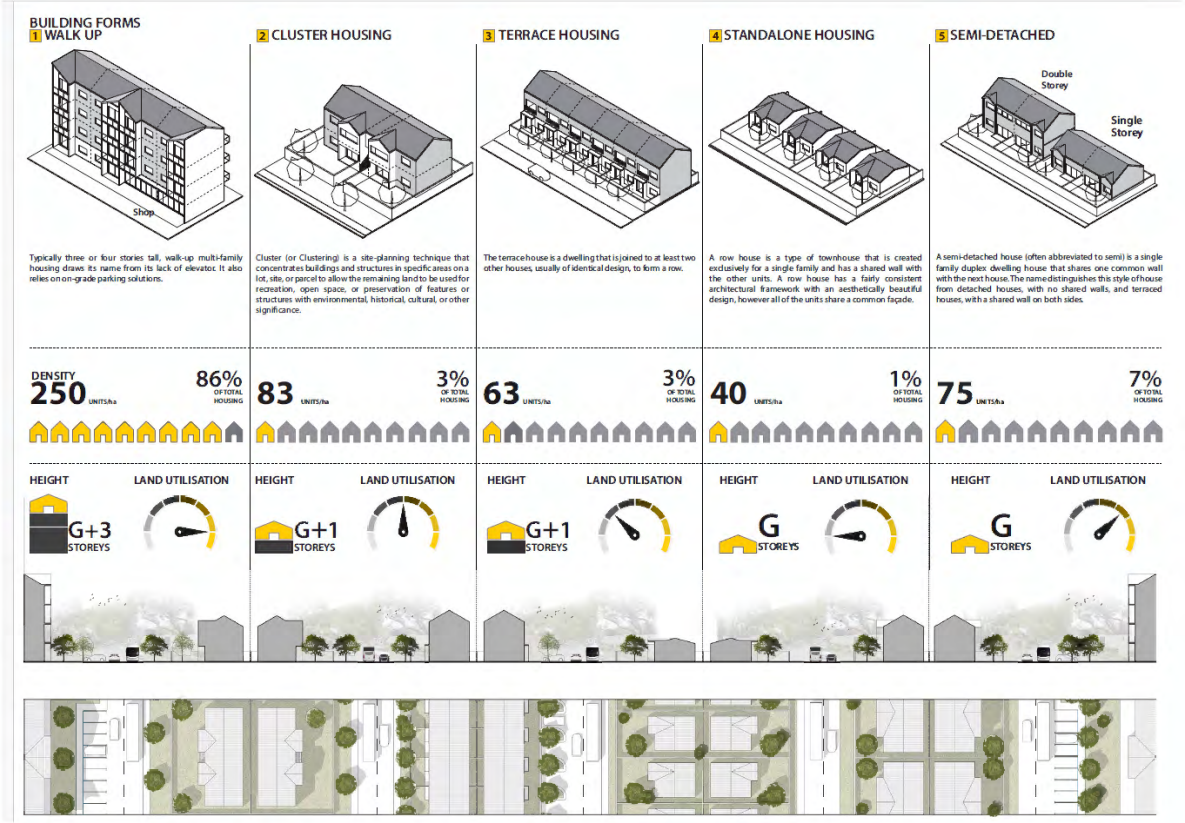


Diagram 21: Subsidised and Bonded Housing



b) Human Settlement Projects

Figure 49 illustrates the existing, proposed single residential medium- and high-density residential developments and the detail of the developments is outlined below.

Table 25 and ***Figure 50*** illustrate the future state driven housing projects, which if successful, may be able to yield 11,634 units (*Source: Annexure H: 2025-2026 Human Settlement Plan Review: Midvaal Community Survey 2020, 2022*). The farm Nooitgedacht (previously The Grace) refers to various portions of the farm Nooitgedacht.

Table 26 illustrates the overall human settlement strategy (applicable to R59 study area) as contained in the Midvaal IDP, and the following can be noted:

- The informal settlements consist of 4,113 units and Sicelo x4 and x5 are programmed to be upgraded in-situ: Piel's Farm, Put Put and Skansdam are proposed to be relocated.
- The formalisation of Sicelo x4 and x5 still leave a deficit of 2,579 units.

Table 25: R59 Study Area: Informal Settlements: Future Housing Projects

#	Project Name	Ward	Property Description	Project Type	Housing Type	Target Beneficiaries	Number of Units	Area (ha)	Gross Density (du/ha)
1	Sicelo Erf 72 Meyerton Farms	10	Erf 72, Meyerton Farms	Walk-up Units with full title deeds	Walk-up units	Sicelo Informal Settlement	720	6,1	119
2	Sicelo Erf 56 Meyerton Farms	8	Erf 56, Meyerton Farms	Walk-up units with full title deeds	Walk-up units	Sicelo Informal settlement	720	6,1	119
3	Sicelo Informal Settlement Upgrading (Ext 4)	8	Erven 1/41 - 42/41 and Erf 184 Meyerton Farms	Res 1, 3 and Others	Informal Settlement Upgrading	Sicelo Informal Settlement	521	18,2	29
4	Sicelo Informal Settlement Upgrading (Ext 5)	8	Erf 52 and 53 Meyerton Farms	Res 1, 3 and others	Informal Settlement Upgrading	Sicelo informal settlement	321	11,2	29
5	Portion 77 Langkuil development	5	Ptn 77 Langkuil 363 IR	Rapid Land Release Program	Mixed Housing Development	Sicelo Informal Settlement	8 500	321,9	26
6	Sicelo Shiceka (Portions of Erf 188)	5	Sicelo Shiceka (Portions of Erf 188)	Provision of serviced stands	De-densification and Relocation	Sicelo Informal Settlement	152	5	31
7	The Grace	12	Erven 1452 - 1458 and 1469, The Grace	Walk-up units with full title deeds	Walk-up units	Boitumelo, Khayelitsha, Piel's Farms, Harolds Farm and neighboring informal settlements	700	8,3	119
Total							**11 634**	**376,7**	**31**

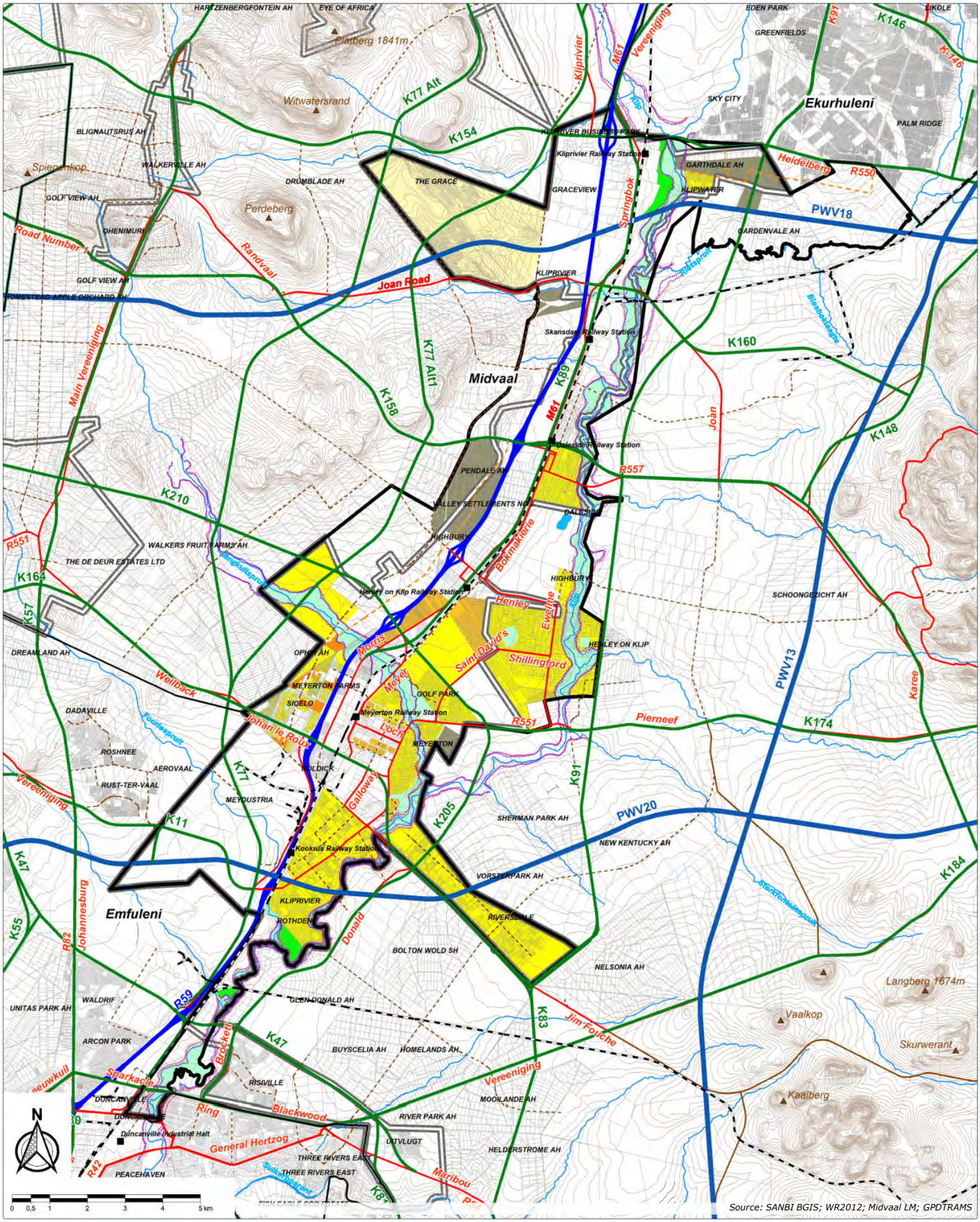
Source: Annexure H: 2025-2026 Human Settlement Plan Review: Midvaal Community Survey 2020, 2022

Table 26: R59 Study Area: Informal Settlements Upgrading Strategy

			Active Projects			In-Situ					Future Projects on State Owned Land (5-10 years)								
	Projects / Informal Settlements		Sicelo Erf 78 (part)	Sicelo 2 Erf 188 (part)	Total Active	Erven 1/41 - 42/41 and Erf 184 Meyerton Farms	Erf 52 and 53 Meyerton Farms	Total In Situ	Subtotal accommodated	Surplus/Deficit	Sicelo Erf 72	Sicelo Erf 56 (was 204)	Erven 1/188, 2/188, 3/188 and 7/188, Meyerton Farms (Part)	Ptn 77 Langkuil	Total Sicelo	The Farm Nooitgedacht (previously The Grace) Subsidy Housing	Total The Farm Nooitgedacht (previous	TOTAL	Surplus/Deficit
	Informal Settlements		**540**	**152**	**692**	**521**	**321**	**842**	**1,534**		**720**	**720**	**320**	**8,500**	**10,260**	**700**	**700**	**12,494**	
1	Piel's Farm	491			-			-	-	- 491					-	491	**491**	**491**	-
2	Put Put (Khayelitsha)	528			-			-	-	- 528					-	166	**166**	**166**	- 362
3	Skansdam (Foundry)	43			-			-	-	- 43					-	43	**43**	**43**	-
28	Sicelo x4	1,406	270		**270**	521		**521**	**791**	- 615	615				**615**		-	**1,406**	-
29	Sicelo x5	1,645	270	152	**422**		321	**321**	**743**	- 902	105	720	77		**902**		-	**1,645**	-
	TOTAL	**4,113**	**540**	**152**	**692**	**521**	**321**	**842**	**1,534**	- 2,579	**720**	**720**	**77**	**-**	**1,517**	**700**	**700**	**3,751**	- 362
	Surplus		-	-	-	0	- 0	-	-		-	-	243	8,500	**8,743**	-	-	**8,743**	**8,743**

Source: Midvaal LM Final 2025/2026 IDP Review: Annexure B: 2025-2026 SDF Review, 2025

Objective 3: Sustainable Human Settlements



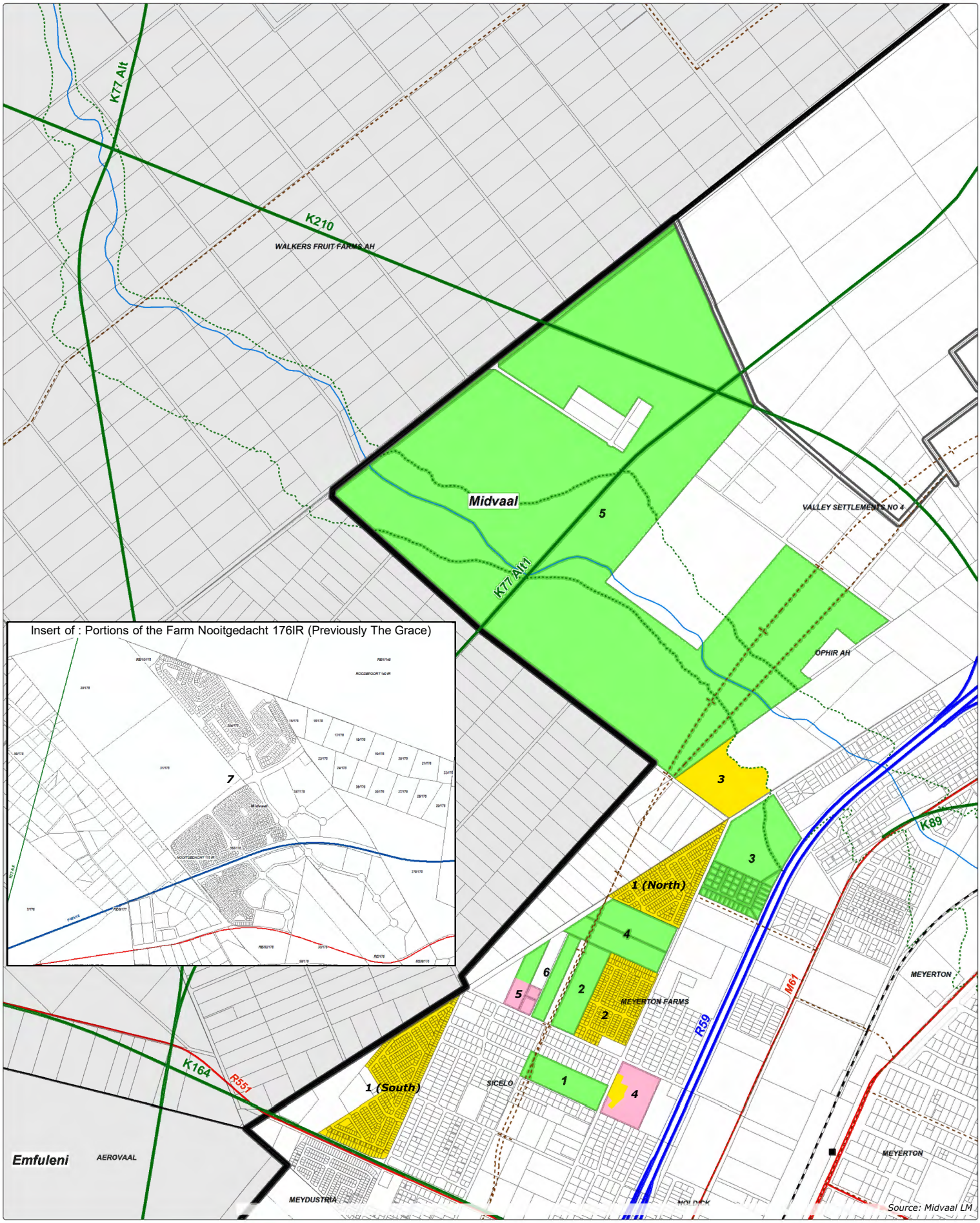
- Study Area
- Urban Development Boundary
- Cadastral
- Municipal Boundary
- River / Dam / Pan
- 1 in 100-year Flood Line
- 1 in 50-year Flood Line
- 5m / 20m Contours
- Hill / Mountain / Peak
- Open Space/Parks
- Tourism / Recreation
- Single Residential
- Medium Density Residential
- High Density Residential
- Rural Residential
- Future Urban Expansion
- National Road
- Proposed PWV Route
- Main Road
- Proposed K-Route
- Secondary Road
- Proposed Class 3 Road
- Proposed Add. Class 3

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 49

Housing Projects Status



Source: Midvaal LM

- Study Area
- Urban Development Boundary
- Cadastral
- Municipal Boundary
- River / Dam / Pan
- 1 in 100year Flood Line
- Completed Housing Projects
- Active Housing Projects
- Future Housing Projects
- National Road
- Main Road
- Proposed K-Route
- Secondary Road
- Proposed Class 3 Road

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 50

- The future projects in Sicelo and portions of the farm Nooitgedacht (previously The Grace) may be able to yield 12,494 units and Piel's Farm, Put Put and Skansdam are proposed to relocate to sections of the farm Nooitgedacht (The Grace).
- The Grace does have a higher yield than 700, however, the IDP Housing Chapter has only identified 700 opportunities. The lower number translates to a deficient of 362 units in the Put Put settlement.
- Should all the housing projects come into fruition a surplus of 8,743 will remain. The surplus is greater than the study area demands up to 2050 (8,616 in Table 22: Midvaal LM: Population and Dwelling Units vs. R59 Study Area Increment Projections). The total surplus is also only applicable to subsidised housing and does not include non-government housing.

Table 27 illustrates the expected growth per residential market 2026-2030, and the following is noted:

- Subsidised housing makes up 45.3% of the demand, followed by 32.8% for FLISP/GAP/Social Housing and 21.9% for bonded housing.
- The bonded housing component which is primarily private sector driven should be clearly supported by Midvaal LM

Table 27: R59 Study Area: Expected Dwelling Unit Growth per Residential Market

	Incremental Households per Market Type				Incremental Households per Market Type p.a.			% per Type		
Market Type	2026-2030	2030-2040	2040-2050	2026-2050	2026-2030	2030-2040	2040-2050	2026-2030	2030-2040	2040-2050
Subsidy Housing	687	1 562	1 654	3 903	172	156	165	45,3%	45,3%	45,3%
FLISP/GAP/Social Housing	496	1 133	1 199	2 829	124	113	120	32,8%	32,8%	32,8%
Bonded	332	754	798	1 883	83	75	80	21,9%	21,9%	21,9%
Total	**1 515**	**3 449**	**3 652**	**8 615**	379	345	365	100,0%	100,0%	100,0%

Source: Market Split: DEMACON: Demand and Impact Assessment, March 2026

BOSS THEORY – LIVEABILITY DRIVEN INVESTMENT MODEL

The attraction and retention of investment is intrinsically linked to the availability of quality residential environments and supporting social infrastructure. Employers and high-skilled individuals are increasingly location-sensitive, prioritising areas that offer secure housing, quality education, healthcare access, and lifestyle amenities for their families. As such, the bonded residential component should be regarded as a critical component of economic infrastructure, underpinning the sustainability and competitiveness of the R59.

Table 28 illustrates the overall demand for the R59 study area, which is 11,194, which consist of the growth (8,615 units) and existing backlog (2,579 units).

Table 28: R59 Study Area: Expected Demand per Residential Market

Market Type	Backlog (Dwelling Units)		Expected Growth (Dwelling Units)				Total Demand (Dwelling Units)	% per Income Category
	Informal for which land is needed	Total	2026-2030	2030-2040	2040-2050	Total 2026-2050	2026-2050	2026-2050
Subsidy Housing	2 579	2 579	687	1 562	1 654	3 903	6 482	58%
FLISP/GAP/Social Housing		-	496	1 133	1 199	2 829	2 829	25%
Bonded		-	274	623	659	1 556	1 556	14%
Bonded (Upper Market)		-	58	131	139	328	328	3%
Total	**2 579**	**2 579**	**1 515**	**3 449**	**3 652**	**8 615**	**11 194**	**100%**

Source: Midvaal LM Final 2025/2026 IDP Review: Annexure B: 2025-2026 SDF Review, 2025

Table 29 illustrates the residential supply per various housing subsidy programmes in the various state-owned projects within the study area. The various land parcels may be able to yield approximately 20,459 housing opportunities focused on the various government housing programmes. The opportunities are more than double the expected dwelling unit projection. ***Table 30*** provides the detailed Land Use Budget for the various portions of the farm Nooitgedacht (previously The Grace) which makes provision for a variety of housing typologies. The LUB formulated for the area took into consideration all the structuring elements (ridges, environmental area) available without doing detail studies to calculate the development yield. It is recommended that the government housing programmes be located in close proximity to the Klipriver Business Park to ensure employees who are dependent on public transport is located in close proximity to employment opportunities and the R59.

Table 29: R59 Study Area: Residential Supply per Residential Market (State Owned)

Market Type	Future Projects on State Owned Land – Number of Units						
	Sicelo Erf 72	Sicelo Erf 56 (was 204)	Erven 1/188, 2/188, 3/188 and 7/188, Meyerton Farms (Part)	Ptn 77 Langkuil	Total Sicelo	Total Nooitgedacht (The Grace*)	Total
RLRP Housing	720	720	152	8 500	10 092	6 010	16 102
FLISP/Social Housing					-	4 357	4 357
Bonded					-	-	-
Bonded (Upper Market)					-	-	-
Total	**720**	**720**	**152**	**8 500**	**10 092**	**10 367**	**20 459**

* Potential of Future Residential Area (larger The Grace Area within UDB, minus Ridges) calculated by applying CSIR standards for Community Facilites. State-Owned estimate.

Table 30: Portions of the Farm Nooitgedacht (previously The Grace) LUBs

Facilities	Various portions of Nooitgedacht (The Grace) number	ha	% du	AVERAGE THRESHHOLD	AREA PER FACILITY	PROVISION CRITERIA
Number of Even	**13,266**	**393.0**	63%			
Single Residential (1000m² erven) - Bonded Upper	504	50.4	3.8%			
Single Residential (500m² erven) - Bonded	2,395	119.8	18.1%			
Single Residential (250m² erven) - Subsidy	6,010	150.2	45.3%			
Multiple Residential (2 storey)(@60du/ha) - Social/FLISP/GAP	4,357	72.6	32.8%			
Population	**39,799**					
Existing Residential Density (du/ha)	34					
Business (floor area in m²)	**51,738**	**17.2**	**3%**			
Offices (floor area in m²)	**5,174**	**1.7**	**0%**			
Education		**33.4**	**5%**	**Education**		
Small Crèche/ECD Development Centre	17	2.0		1/2 400 population	1 200m²	Compulsary
ECD Resource Hub and Care Centre	2	0.2		1/20 000 population	1000m²	Compulsary
Primary (including Grade R)	6	15.9		1/7000 population	2.8ha	Compulsary
Secondary	3	15.3		1/12 500 population	4.8 ha	Compulsary
Health/Emergency		**2.1**	**0%**	**Health/Emergency**		
Primary Health Clinic	2	0.8		1/24 000 population	5 000 m²	Compulsary
Community Health Centre	1	1.0		1/60 000 population	1.5ha	Compulsary
Police Station	1	0.1		1/60 000 population	1000 m² - 1ha	Compulsary
Fire Station	1	0.2		1/60 000 population	3 000 m²	Compulsary
Social /Cultural		**0.1**	**0%**	**Social /Cultural**		
Local Library	2	0.1		1/20 000 population	500m²	Discretionary pro
Civic		**0.2**	**0%**	**Civic**		
Thusong Centre, Home Affairs Office, eGov Integrated Service, Labour Office	1	0.2		1/40 000 population	2 000 m²	Compulsary
Social Services		**3.0**	**0%**	**Social Services**		
Worship Centre	13	2.0		1/3 000 population	1 500 m²	Compulsary
Community Hall (Small)	4	0.8		1/10 000 population	5 000 m²	Compulsary
Post Office/ICT Access Point	4	0.2		1/10 000 population	300m² (+ add 200m² for ICT)	Compulsary
Recreation (Sports and Parks)		**25.3**	**4%**	**Recreation (Sports and Parks)**		
Sports Facilities		13.4		0.56ha/1 000 population	5 600m²	Compulsary
Parks and Play Grounds		11.9		0.5ha/1 000 population	5 000m²	Compulsary
TOTAL without streets		**476.1**	**76%**			
Streets		**147.6**	**24%**			
TOTAL		**623.7**	**100%**			
Gross Density	**21**					

Table 31 provides an overview of the combined residential supply which includes the yield on the various SDAs identified in the SDF. The R59 Corridor has a potential of 25,508 housing opportunities with the following breakdown:

- Subsidy Housing : 16,555 units (65%)
- FLISP/GAP/Social Housing : 5,126 units (20%)
- Bonded : 3,166 units (12%)
- Bonded (Upper Market) : 662 units (3%)

Table 31: R59 Study Area: Residential Supply per Residential Market

Market Type	Future Potential Number of Units								
	Sicelo Erf 72	Sicelo Erf 56 (was 204)	Erven 1/188, 2/188, 3/188 and 7/188, Meyerton Farms (Part)	Ptn 77 Langkuil	Total Sicelo	Total Nooitgedacht (The Grace *)	Total SDA's**	Total	% Residential Market
RLRP Housing	720	720	152	8 500	10 092	6 010	453	16 555	65%
FLISP/Social Housing					-	4 357	768	5 126	20%
Bonded					-	2 395	771	3 166	12%
Bonded (Upper Market)					-	504	158	662	3%
Total	**720**	**720**	**152**	**8 500**	**10 092**	**13 266**	**2 150**	**25 508**	**100%**

* Potential of Future Residential Area (larger The Grace Area within UDB, minus Ridges) calculated by applying CSIR standards for Community Facilites.

**SDA's: Final 2025/2026 IDP Review: Annexure B: 2025-2026 SDF Review: Assumptions made on Densification/Type of Housing that could take place in suburbs such as Klipriversval, Henley on Klip, Meyerton, Rothdene, Kookrus etc, although more potential could be avaliable in future.

Table 32 provides the synthesis of the housing demand (11,194) vs. the housing supply (25,508 up to 2050) and if all the developments come into fruition the study area may have a surplus of 14,314. However, should the Nooitgedacht farms not come into fruition, the area may still have a surplus of 1,048 units. However, the uncertainty of the Nooitgedacht farm development may result in a deficit of FLISP and Bonded Housing. It is proposed that Portions 28 and 32 of the farm Klipriviersval 371 IR be considered to augment the deficit. The various Strategic Development Areas (SDAs) identified in the SDF and the larger residential areas hold latent potential (e.g. densification) which can contribute to housing surplus.

Table 32: R59 Study Area: Expected Demand vs. Supply (2026-2050)

Market Type	DEMAND (Dwelling Units)			SUPPLY (Dwelling Units)				SUPPLY minus DEMAND	SUPPLY minus DEMAND (excluding the farm Nooitgedacht (The Grace))
	Backlog (Dwelling Units)	Expected Growth (Dwelling Units)	Total Demand (Dwelling Units)	Future Projects on State Owned Land		Private Development	Total Supply (Dwelling Units)		
	Total	Total 2026-2050	2026-2050	Total Sicelo	Total Nooitgedacht (The Grace*)	Total SDA's**	Total	Total	Total
RLRP Housing	2 579	3 903	**6 482**	10 092	6 010	453	**16 555**	**10 072**	**4 063**
FLISP/Social Housing	-	2 829	**2 829**	-	4 357	768	**5 126**	**2 297**	**- 2 060**
Bonded	-	1 556	**1 556**	-	2 395	771	**3 166**	**1 610**	**- 785**
Bonded (Upper Market)	-	328	**328**	-	504	158	**662**	**335**	**- 170**
Total	**2 579**	**8 615**	**11 194**	**10 092**	**13 266**	**2 150**	**25 508**	**14 314**	**1 048**

* Potential of Future Residential Area (larger The Grace Area within UDB, minus Ridges) calculated by applying CSIR standards for Community Facilites.

**SDA's: Final 2025/2026 IDP Review: Annexure B: 2025-2026 SDF Review: Assumptions made on densification/Type of Housing that could take place in suburbs such as Klipriversval, Henley on Klip, Meyerton, Rothdene, Kookrus etc, although more potential could be avaliable in future.

Table 33 outlines the overall Land Use Budget for the R59 study area which illustrates the total housing demand (growth and demand) and the socio-economic facilities required to create a sustainable development. Approximately **674 ha** will be needed to accommodate future (up to 2050) housing and community facilities demand.

Table 33: R59 Study Area: Demand LUB 2026-2050

Facilities	Expected Demand (Growth+Backlog)			AVERAGE THRESHHOLD	AREA PER FACILITY	PROVISION CRITERIA
	number	ha	% du			
Number of Even	**11 194**	**289,6**	**43%**			
Single Residential (800m² erven) - Bonded Upper	328	26,2	3%			
Single Residential (500m² erven) - Bonded	1 556	77,8	14%			
Single Residential (250m² erven) - Subsidy	6 482	162,1	58%			
Multiple Residential (3 storey walk-ups)(@120du/ha)-FLISP/GAP/Social	2 829	23,6	25%			
Population	**26 866**					
Existing Residential Density (du/ha)	**39**					
Business (floor area in m²)	**34 926**	**11,6**	**2%**			
Offices (floor area in m²)	**3 493**	**1,2**	**0%**			
Industrial/Commercial (floor area in m²)	-		**0%**			
Education		**22,5**	**3%**	**Education**		
Small Crèche/ECD Development Centre	11,2	1,3		1/2 400 population	1 200m²	Compulsory
ECD Resource Hub and Care Centre	1,3	0,1		1/20 000 population	1000m²	Compulsory
Primary (including Grade R)	3,8	10,7		1/7000 population	2.8ha	Compulsory
Secondary	2,1	10,3		1/12 500 population	4.8ha	Compulsory
Health/Emergency		**1,4**	**0%**	**Health/Emergency**		
Primary Health Clinic	1,1	0,6		1/24 000 population	5 000 m²	Compulsory
Community Health Centre	0,4	0,7		1/60 000 population	1.5ha	Compulsory
Police Station	0,4	0,0		1/60 000 population	1000 m² - 1ha	Compulsory
Fire Station	0,4	0,1		1/60 000 population	3 000 m²	Compulsory
Social /Cultural		**0,1**	**0%**	**Social /Cultural**		
Local Library	1,3	0,1		1/20 000 population	500m²	Compulsory
Civic		**0,1**	**0%**	**Civic**		
Thusong Centre, Home Affairs Office, eGov Integrated Service, Labour Office	0,7	0,1		1/40 000 population	2 000 m²	Compulsory
Social Services		**2,0**	**0%**	**Social Services**		
Worship Centre	9,0	1,3		1/3 000 population	1 500 m²	Compulsory
Community Hall (Small)	2,7	0,5		1/10 000 population	5 000 m²	Compulsory
Post Office/ICT Access Point	2,7	0,1		1/10 000 population	300m² (+ add 200m² for ICT)	Compulsory
Recreation (Sports and Parks)		**14,4**	**2%**	**Recreation (Sports and Parks)**		
Sports Facilities		9,0		0.56ha/1 000 population	5 600m²	Compulsory
Parks and Play Grounds		5,4		0.5ha/1 000 population	5 000m²	Compulsory
Industrial		**175,3**				
TOTAL without streets		**518,3**	**51%**			
Streets		**155,5**	**23%**			
TOTAL		**673,8**	**74%**			
Gross Density	**17**					

4.3.4 Community Facilities

Development Objective 4 (Community Facilities Investment)

To prioritise and coordinate investment in a comprehensive range of community facilities and services – including education, health, safety and security, welfare and recreation/open space – so that corridor development is socially supportive, accessible and integrated across settlements.

Table 34 illustrates the current and future (2050) need for community facilities within the study area. The compulsory current shortfall in community facilities consist of the following:

- 3 ECD Resource Hub and Care Centres
- 1 Community Health Centre/Hospital
- 1 Thusong Centre
- 3 Post Office / ICT Access Points
- Sports Facilities (9 ha)

Info Box 4: Phasing of Community Facilities

The roll out of Community Facilities should be prioritized to be rolled out at the same time as the human settlement development. The delay in the roll out of community facilities creates a strain on existing surrounding facilities. The delay in the provision of community facilities leads to conflict between communities with communities with facility lodging complaints of poorer level of services.

The incremental compulsory facilities need for 2050 is:

- 4 ECD Hubs/Centres
- 2 Primary Schools
- 1 Community Health/Hospital
- 2 Thusong Centres
- 5 Post Offices/ICT Access Points
- Sports Facilities (15 ha)

Given the current and projected future deficit of community facilities, coupled with the fiscal limitations experienced at both municipal and provincial levels, it is highly unlikely that these deficits will be fully eradicated through conventional public sector funding and implementation mechanisms alone. Accordingly, a proactive and innovative approach to the provision, maintenance and expansion of community facilities is required within the R59 Corridor.

The following approach and guidelines are proposed in respect of the provision of community facilities within the R59 Corridor:

- **Maintain:** Existing community facilities should be properly maintained to ensure their continued functionality, accessibility and sustainability. Every effort should be made to

ensure that the services provided at these facilities remain comprehensive, efficient and responsive to the needs of the communities they serve.

- **Cluster:** Community facilities should, as far as practicable, be clustered in order to maximise efficiency, accessibility and utilisation. The clustering of facilities offers several advantages, including:
    - Improved convenience, as multiple services can be accessed during a single trip;
    - Reduced costs through the sharing of land, infrastructure, resources and equipment;
    - Increased utilisation, as facilities are generally more likely to be used when located in proximity to one another rather than in isolated locations; and
    - Enhanced safety and passive surveillance, as clustered facilities are more likely to remain active and utilised over extended periods throughout the day and evening.

In recognition of the significant existing and future demand for community facilities, as well as the fiscal constraints facing government, the potential role of Public-Private Partnership (PPP) initiatives should be actively considered as a mechanism to facilitate the provision of community facilities within the corridor. PPP initiatives may create opportunities to accelerate the delivery of social infrastructure, improve service accessibility and support the implementation of facilities in areas where public sector funding is constrained.

Furthermore, landowners and developers should be encouraged, and where appropriate approached, to participate in the co-development of community facilities as part of broader development initiatives. Such an approach acknowledges that large-scale residential, mixed-use and economic developments generate demand for social infrastructure and that collaborative implementation mechanisms can contribute towards addressing facility shortages in a more coordinated and sustainable manner.

The provision of community facilities should therefore not be viewed solely as a public sector responsibility, but rather as a shared endeavour involving the public sector, private sector, landowners and developers. Through the application of innovative partnership arrangements, coordinated planning and the clustering of facilities, opportunities may be created to improve the availability, accessibility and long-term sustainability of community facilities throughout the R59 Corridor.

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Table 34: R59 Study Area: Community Facilities Need: 2026, 2026-2030, 2030-2040 and 2040-2050

Facilities	2026					Total 2050			Community Facilities 2026-2050			CSIR GUIDELINES for Small-Medium Towns (60 000- 100 000 people)		
	Requirement			CF Provided	Shortfall	Requirement			Surplus/Deficit			AVERAGE THRESHHOLD	AREA PER FACILITY	PROVISION CRITERIA
	number	ha	%	number	number	number	ha	%	number	ha	%			
Number of Units	**18 208**	**1 052**	**69%**			**26 823**	**1 300**	**69%**			**0%**			
Population	**55 392**		3			**76 191**								
Nett residential Density	17					21								
Education		**44**	**3%**				**61**	**3%**		**5,7**	**-4%**			
Small Crèche	23	0		Detail not available		32	1					1/2 400 population	200m²	Compulsory
ECD Resource Hub and Care Centre	3	0		-	(3)	4	0		(4)	0,4		1/20 000 population	1000m²	Compulsory
Primary (including Grade R)/Intermediate	8	22		9	1	11	30		(2)	5,3		1/7000 population	2.8ha	Compulsory
Secondary/Combined	4	21		7	3	6	29		1			1/12 500 population	4.8 ha	Compulsory
Training Colleges	0,1	0		3	3	0	0		3			*1/400 000 population*	*1ha*	*Recommended/Additional*
Tertiary Education	0,1	0		-	(0)	0	0		(0,2)	0,2		*1/400 000 population*	*1ha*	*Recommended/Additional*
Special Education	1	5		2	1	2	7		0			*1/50 000 population*	4.8 ha	*Demand Driven*
Health Services		**2**	**0%**				**3**	**0%**		**1,7**	**-1%**			
Primary Health Clinic	2	0		4	2	3	1		1	-0,2		1/24 000 population	2 000 m²	
Community Health Centre/Hospital	1	1		-	(1)	1	2		(1)	1,9		1/60 000 population	1.5ha	Compulsory
Hospice and Health Centre	1	1		-	(1)	2	1		(2)	0,8		*1/50 000 population*	*5 000m²*	*Demand Driven*
Safety and Security		**1**	**0%**				**2**	**0%**		**0,1**	**0%**			
Police	1	1		2	1	1	1		1			1/60 000 population	1 000 m² to 1 ha	Compulsory
Fire Station	1	0,3		1	0	1	0		(0,3)	0,1		1/60 000 population	3 000 m²	Compulsory
Social /Cultural/Civic		**8**	**0%**				**10**	**1%**		**-99,6**	**65%**			
Local Library	3	0		4	1	4	0		0	0,0		1/20 000 population	500m²	Compulsory
Performing Arts Centre	1	1		-	(1)	2	1		(2)	0,8		*1/50 000 population*	*5 000m²*	*Tourism Related*
SASSA Pay point/Home Affairs/Thusong Centre	1	0		-	(1)	2	0		(2)	0,1		1/40 000 population	935m² - 1ha for full range of facilities	Compulsory
Solid Waste Disposal Site	-	-		1	1	-	-		1	-100,0		One per Municipality	100ha	Compulsory
Municipal Office/Civic Centre	1	1		5	4	1	1		4			One per Municipality	3 000m² to 1ha	Compulsory
Magistrate's Court	1	1		1	-	1	1		-			One per Municipality	Site size area specific	Compulsory
Welfare Facilities/Charitable Institution	1	0,6		-	(1)	2	1		(2)	0,8		*1/50 000 population*	5 000m²- 2ha	*Demand Driven*
Old Age Home/Frail Care	1	1,1		3	2	2	2		1	-1,5		*1/50 000 population*	5 000m²- 2ha	*Demand Driven*
Children's Home/Orphanage	1	0,6		1		2	1					*1/50 000 population*	5 000m²- 1ha	*Demand Driven*
Worship Centre	18	2,8		Detail not available		25	4					1/3 000 population	1 500 m²	Compulsory
Post Office/ICT Access Point	6	0		3	(3)	8	0		(5)	0,2		1/10 000 population	300m² (+ add 200m² for ICT)	Compulsory
Community Hall (large)	1	0		4	3	1	1		3			1/60 000 population	2 000 m² - 5000m²	Compulsory
Sports and Recreation		**28**	**2%**				**38**	**2%**		**-23,7**	**15%**			
Sports Facilities (ha)		17		8	(9)		23		(15)	15,0		0.5ha/1 000 populatio	5 000m²	Compulsory
Urban Parks (ha)		11		54	43		15		39	-38,6		0.5ha/1 000 populatio	5 000m²	Compulsory

Thusong Centre Concept:

Figure 51 illustrates the proposed position where possible Thusong Centres may be developed.

The Thusong Centre/Multi-Purpose Centre concept should be applied, as shown in ***Diagram 22*** and elaborated on in ***Annexure C1***. The multi-purpose Thusong Centre should be functionally developed to ensure continuous use and prevent dilapidation. A secondary benefit to be derived from the clustering of community facilities is the fact that it also attracts "feet" to the area, which could in turn create the critical mass required to stimulate local economic development in the surrounding areas.

Cemeteries and associated land uses are essential for sustainable development. ***Annexure C2*** provides guidelines pertaining to the planning and design of cemeteries.

MULTI-PURPOSE COMMUNITY CENTRE (MPCC) / THUSONG CENTRE CONCEPT

MPCC in Thekwane, Rustenburg, Limpopo Province



Public-Private Partnership funded by Glencore Mine and Merafe Resources (R20-million)

SASSA Grant Office



Multi-Purpose Courts



Home Affairs Office



Community Hall



Police Station

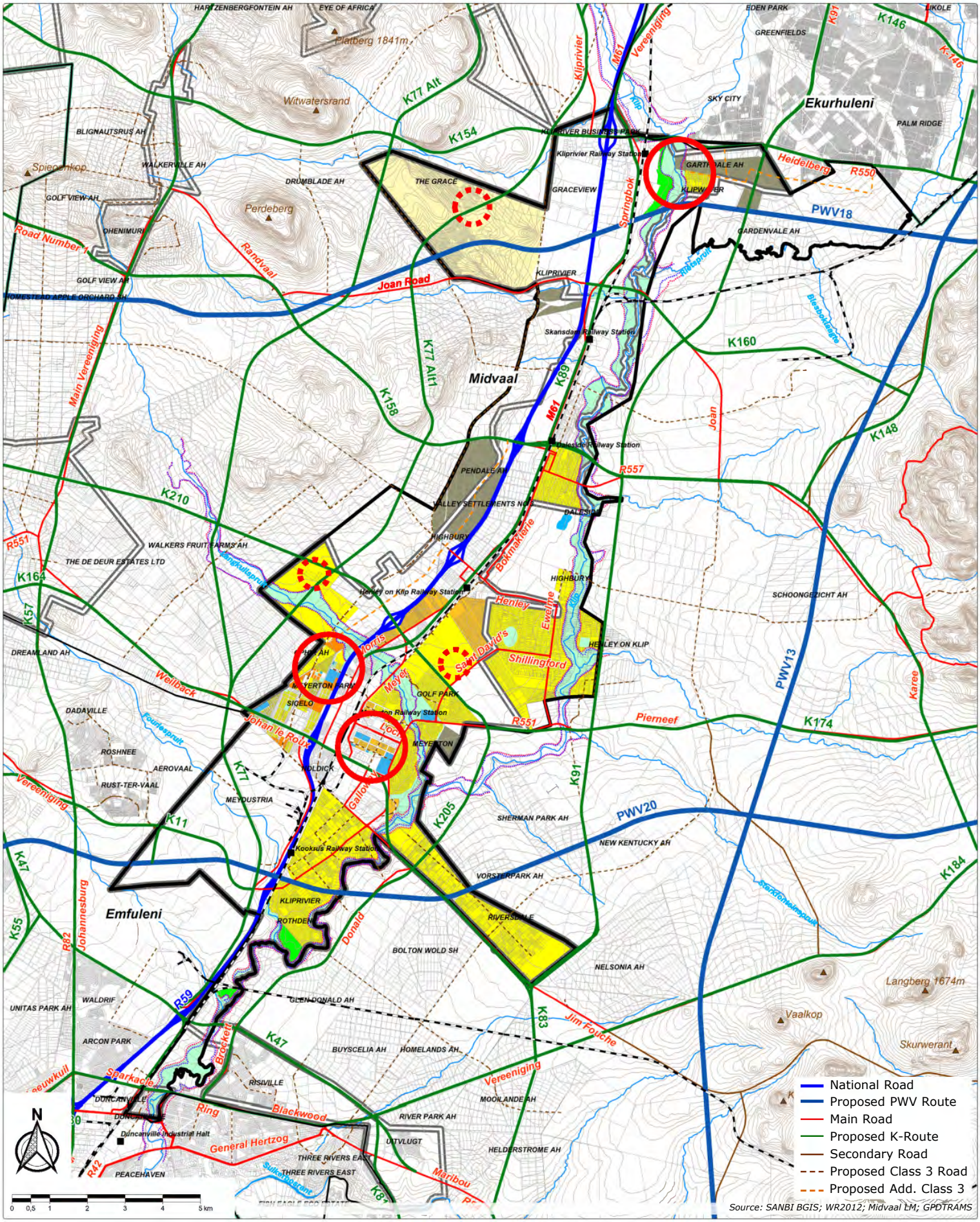


Clinic



Source:
South African Business Website: https://www.southafricanbusiness.co.za/08/2023/construction-and-engineering/r20-million-multi-purpose-community-centre-constructed-in-rustenburg/

Objective 4: Community Facilities



R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 51

4.3.5 Engineering Infrastructure

Development Objective 5 (Engineering Infrastructure to Enable Development)

To ensure the provision and upgrading of bulk and internal engineering infrastructure (including water, sanitation, electricity, roads, stormwater and ICT) that meets community needs, addresses service constraints, and enables planned development and economic activity at appropriate locations along the corridor.

Engineering infrastructure is required to meet the basic needs and for future expansion. Secondly, engineering infrastructure should be a lever to unlock the economic development potential of the R59 which is key to long-term sustainability.

4.3.5.1 Water

The water demand for the R59 is based on the proposed human settlement demand (Objective 3) and Economic Development (Objective 6).

The proposed development area currently includes stands which are supplied by the following bulk water infrastructure with the respective source bulk meter for each:

- RW2940 Direct / Klipwater Water Tower (RW2940)
- Klipriver Reservoir (RW5629)
- Randvaal Reservoir (RW2853)
- Meyerton Reservoir (RW2279)
- Duncanville Direct (Vereeniging Connection 4)

Certain changes to the water distribution zone boundaries are proposed between the current and the ultimate future water supply scenario in the master plan, with direct implications on the existing development. These will affect the future distribution zones and therefore where certain areas within the proposed development area are supplied from in future. New future distribution zones will also be required with new reservoirs required to be constructed.

The proposed source for each development is as follows in ***Table 35*** (Sources in bold are new/proposed).

Table 35: Proposed Water Sources

Development Name	Source
Garthdale	Klipwater Tower
Klipriver Business Park	Klipriver Reservoir
Daleside	**Klipview Reservoir**
Pendale/Highbury	Randvaal Reservoir
Meyerton Farm	Meyerton Reservoir
Duncanville	Duncanville Direct
Sicelo	**Nooitgedacht Reservoir**
Various portions of the farm Nooitgedacht (previously The Grace	**Klipriver HL Reservoir**

Reservoir and Tower Capacities

The total AADD of the zones currently being supplied from the sources mentioned before was calculated from RW meter readings, in conjunction with Midvaal Local Municipality (MLM) treasury data.

According to MLM's modelling guidelines, a minimum of 36 h x AADD and4 h x AADD is required as reservoir and tower storage capacity respectively.

New Future Rand Water connections and reservoirs will also be required to supply the proposed developments. ***Table 36*** below shows the estimated costs, existing demand, future demand, storage capacity and resulting emergency storage time for each source. The names in bold are proposed future sources.

Table 36: Sources Water Demands and Storage Capacity

Source Name	AADD (kL/d)	Future AADD (kL/d)	Capacity (kL)	Current Hours	Future Hours	Capacity Deficit (kL)	Estimated Cost (R)
Klipwater Tower	249	1033	200	19.3	4.6	0	R0
Kliprivier Reservoir	9 428	24 500	10 000	25.5	9.8	26750	R52 162 500
Randvaal Reservoir	3 232	6542	8 200	60.9	30.1	1613	R6 081 010
Meyerton Reservoir	7 968	27 845	20 000	60.2	17.2	21768	R44 624 400
Duncanville Direct	90	164	0	0.0	0.0	246	R1 825 320
Klipview Reservoir	0	4842	8000	-	39.7	-	R20 000 000
Nooitgedacht Reservoir	1455	9585	15000	-	37.6	-	R32 550 000
Kliprivier HL Reservoir	0	10083	16000	-	38.1	-	R34 240 000
Total	**22 422**	**84 594**	**-**	**-**	**-**	**50 377**	**R191 483 230**

The future sources with current AADDs are cases where the existing supply from existing reservoirs will be taken over by the future reservoir. The deficit capacities will require additional reservoir storage to be constructed at the existing reservoir sites. Randvaal reservoir does not immediately require additional capacity as it is just under the 36 hours requirement. Duncanville also has a small deficit but is fully supplied from a bulk connection.

Pump Station Capacities

Randvaal Booster Pump Station:

According to GLS' hydraulic model, the Randvaal Booster pump station consists of two pumps operating in parallel, with an unknown pumping capacity. The pumping capacity required to supply the future demand can be calculated as follows:

Pumping capacity required = 1.1 x Peak Demand
= 1.1 x PHF x AADD / 86.4
= 1.1 x 3.5 x 14,280 / 86.4
= 265 L/s

For the pump station to supply sufficient pressure it has to be able to supply a flow of 250 L/s at a head of 100 m. An investigation of the pump station is proposed to determine the existing capacity

and if it is found that it cannot supply 250 L/s at a head of 100 m, the pump station needs to be upgraded to allow it.

Klipriver HL Pump Station:

The Klipriver HL pump station is required to fill the Klipriver HL reservoir from the Klipriver reservoir. The pumping capacity required to fill the Klipriver HL reservoir can be calculated as follows:

Pumping capacity required = 1.5 x Average Demand
= 1.5 x AADD / 86.4
= 1.5 X 6,542 / 86.4
= 113 L/s

For the pump station to supply sufficient pressure to fill the reservoir, the pump station has to be able to supply a flow of 113 L/s at a head of 30 m.

Bulk Pipe Capabilities

Existing Affected Bulk Pipes:

We confirm from our hydraulic analysis that only a small amount of the existing affected main feeder lines supplying the areas within the proposed development are currently experiencing flow velocities exceeding the maximum allowable flow velocity of 2.0 m/s. These are all pipes located directly downstream of the Rand Water meters or reservoirs.

Future Planned Bulk Pipes:

Various new bulk pipelines will be required to supply the proposed developments as shown in the individual figures for each development. A summary of the required bulk pipelines for each proposed development is summarized below in ***Table 37***:

Table 37: Summary of Required Bulk Water Pipelines for Each Development

Development Name	Required Bulk Pipes
Garthdale	800m x 250mm
Klipriver Business Park	9500m x 315mm; 650m x 400mm; 3800m x 450mm; 2200m x 500mm; 1800m x 630mm
Daleside	4250m x 200mm; 1150m x 250; 1100m x 315mm; 1500m x 450mm; 2450m x 500mm
Pendale/Highbury	1700m x 160mm; 5100m x 200mm; 500m x 250mm; 3700m x 315mm
Meyerton Farm	3100m x 900mm
Duncanville	None
Sicelo	1850m x 250mm; 5700m x 500mm; 2100m x 630mm; 1750m x 800mm
Various portions of the farm Nooitgedacht (previously The Grace)	620m x 450mm; 1500m x 560mm; 4200m x 710mm

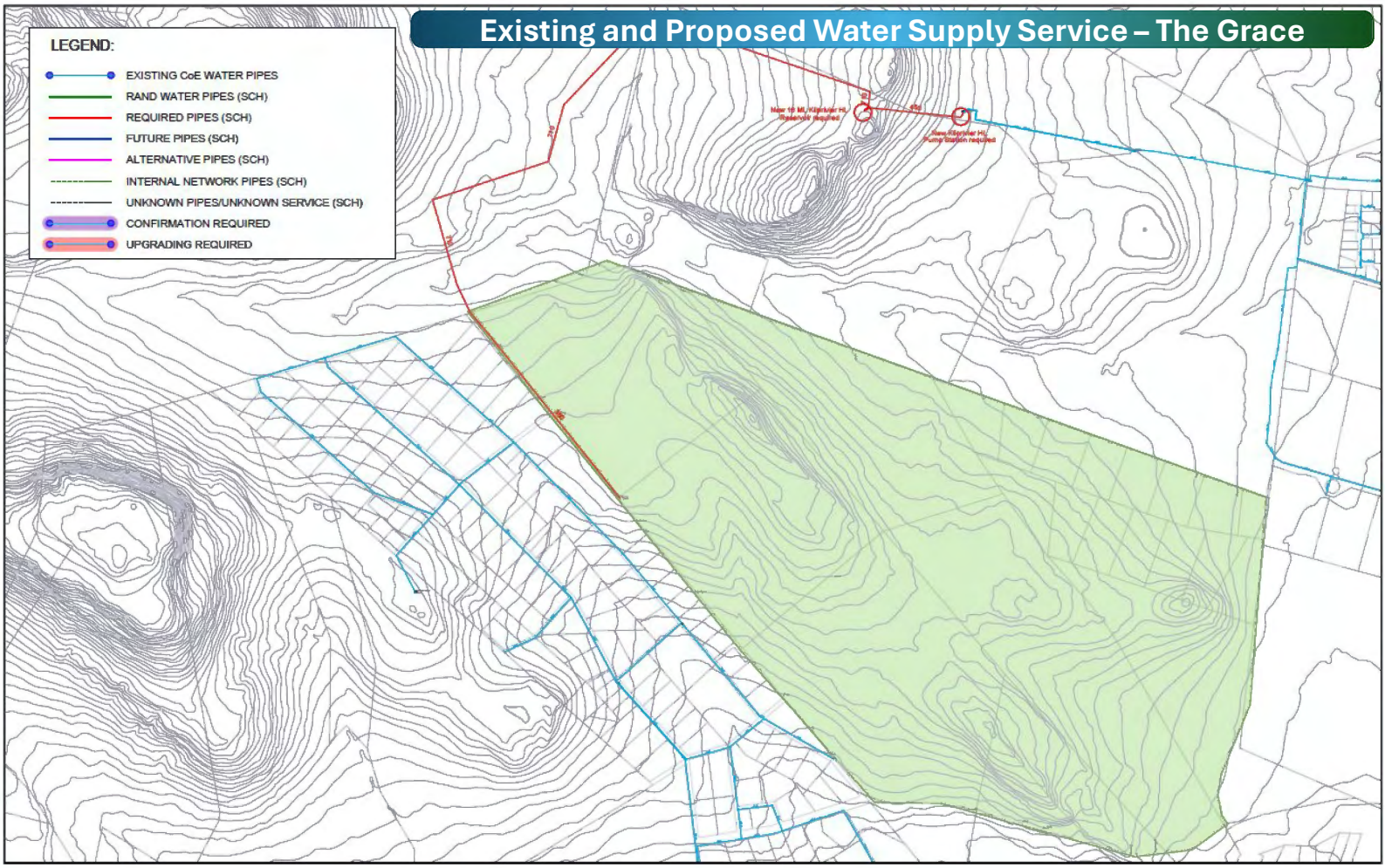
The estimated total cost for each development's required bulk pipelines is indicated in **Table 38.**

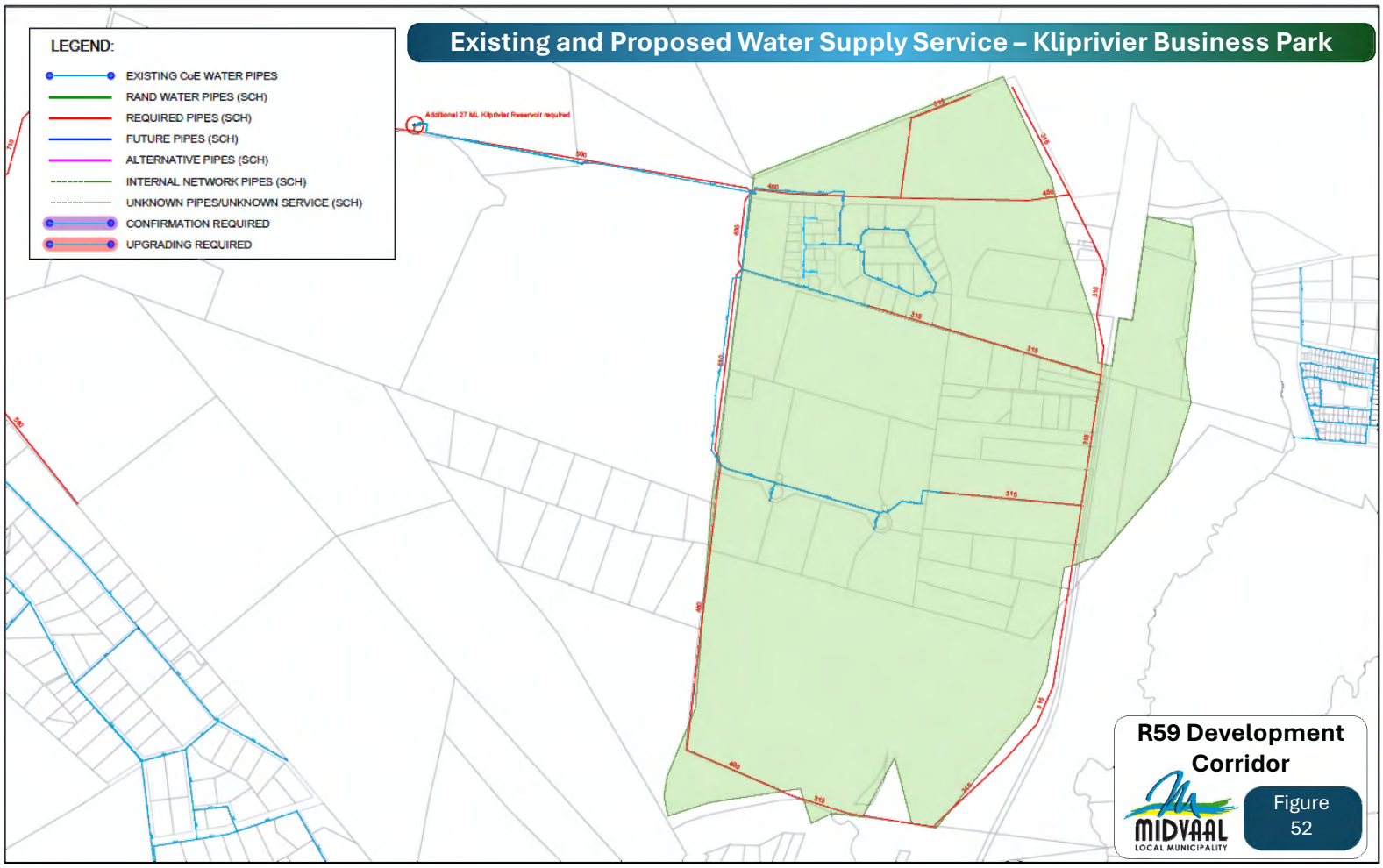
Table 38: Estimated Total Cost per Development (Required Bulk Pipelines)

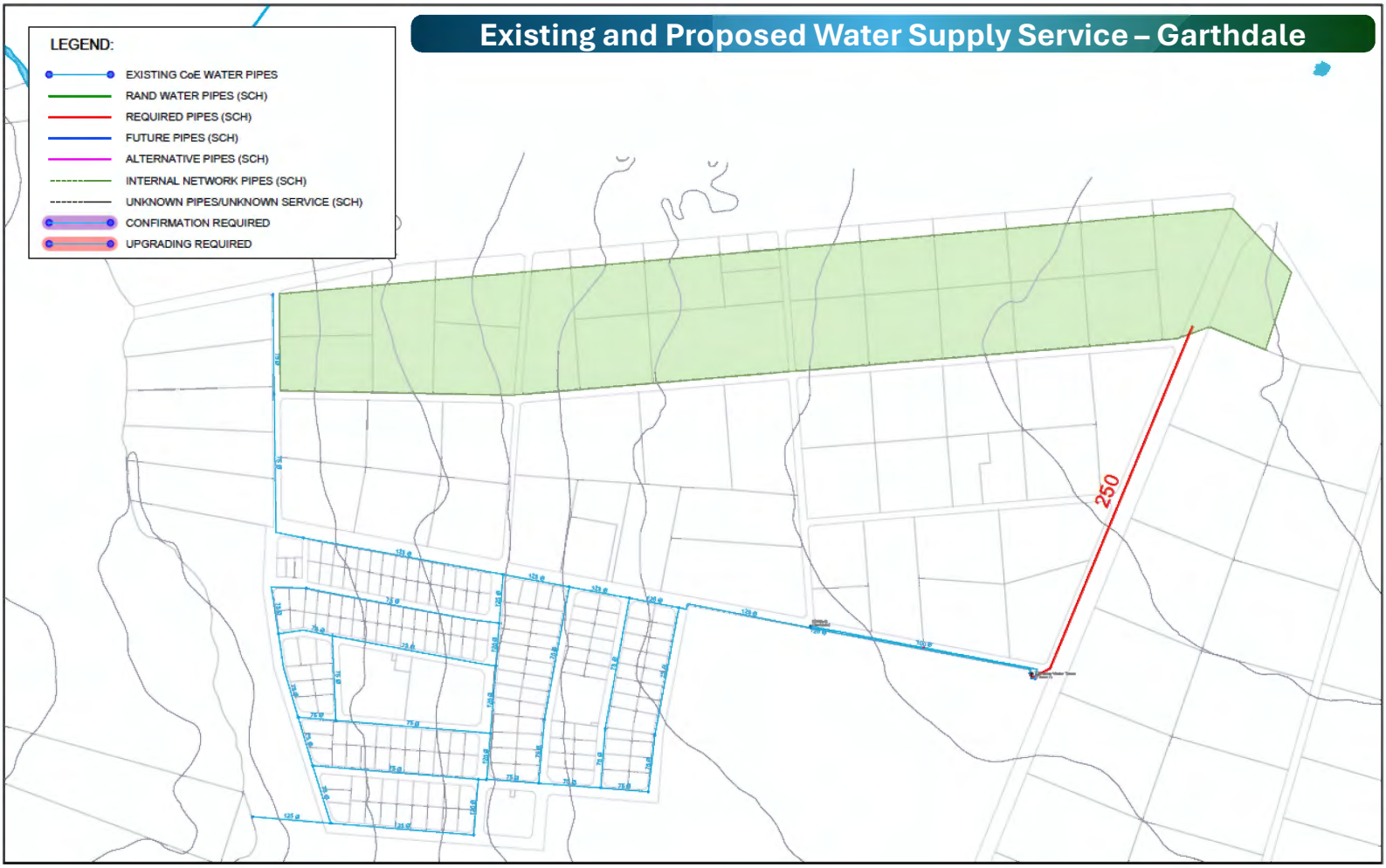
Development	Total bulk pipeline cost
Daleside	R32 940 677
Garthdale	R1 553 339
Grace	R71 860 672
Kliprivier Buss Park	R76 144 254
Meyerton	R59 570 406
Pendale	R20 410 490
Sicelo	R86 255 383
Grand Total	**R348 735 221**

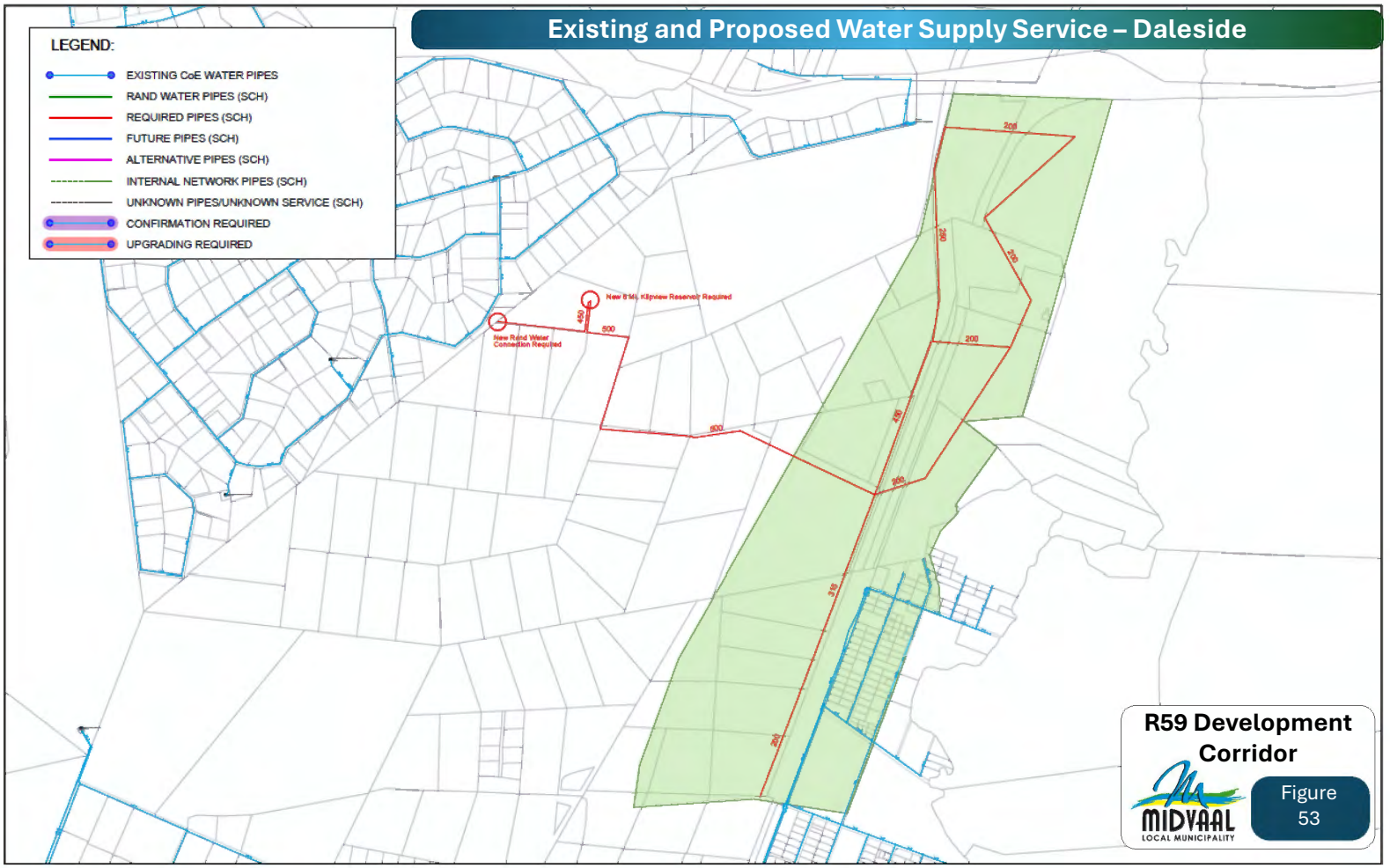
The layouts of the required bulk pipelines are shown schematically in the individual figures (***Figures 52*** to ***55***) for each development. The pipe layout may differ when final designs and town layouts are finalised, therefore the main supply pipelines up to the development boundary is most crucial.

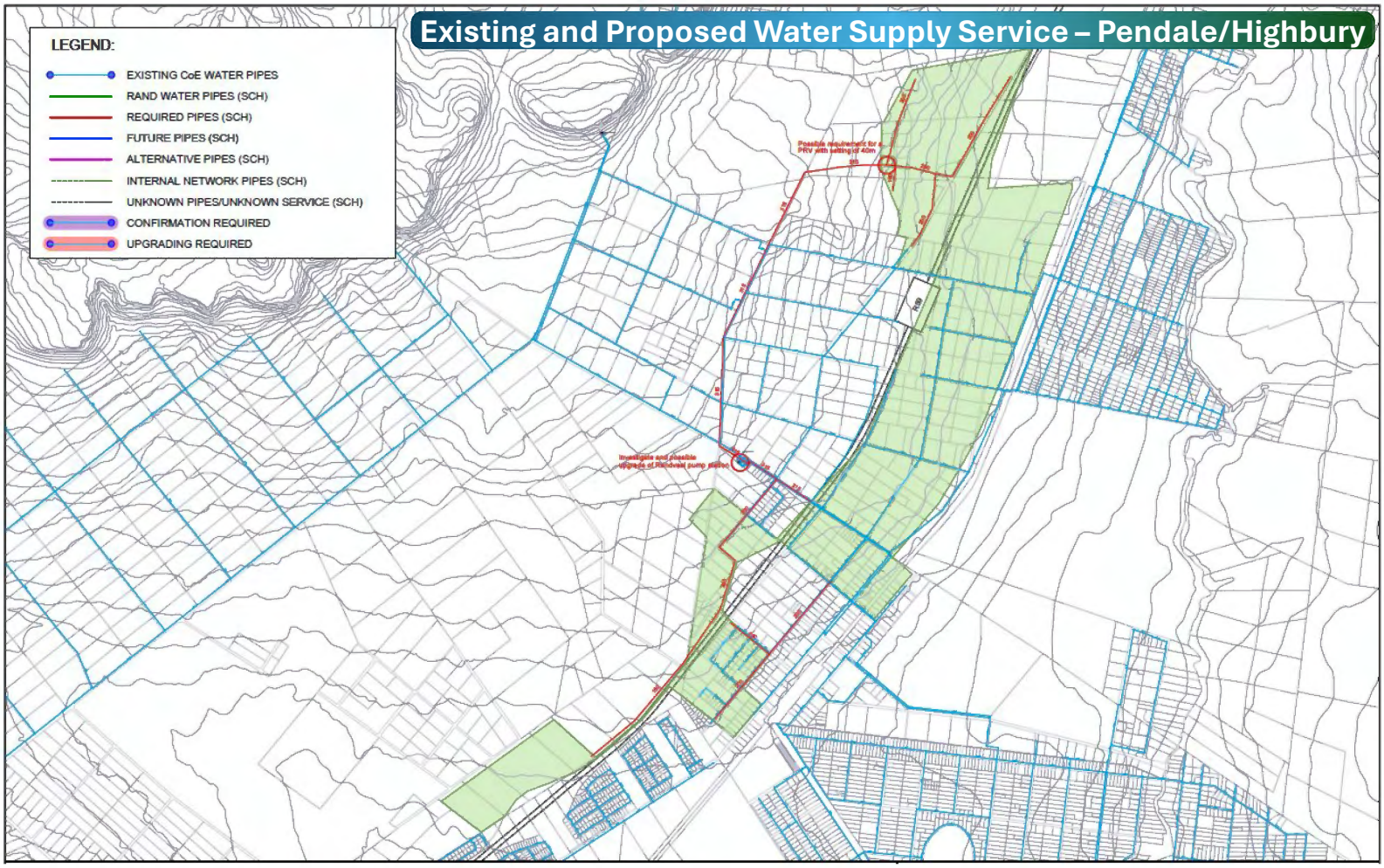
Figures 56 and ***57*** illustrate the consolidated view of the proposed water network upgrades and future water distribution zones.

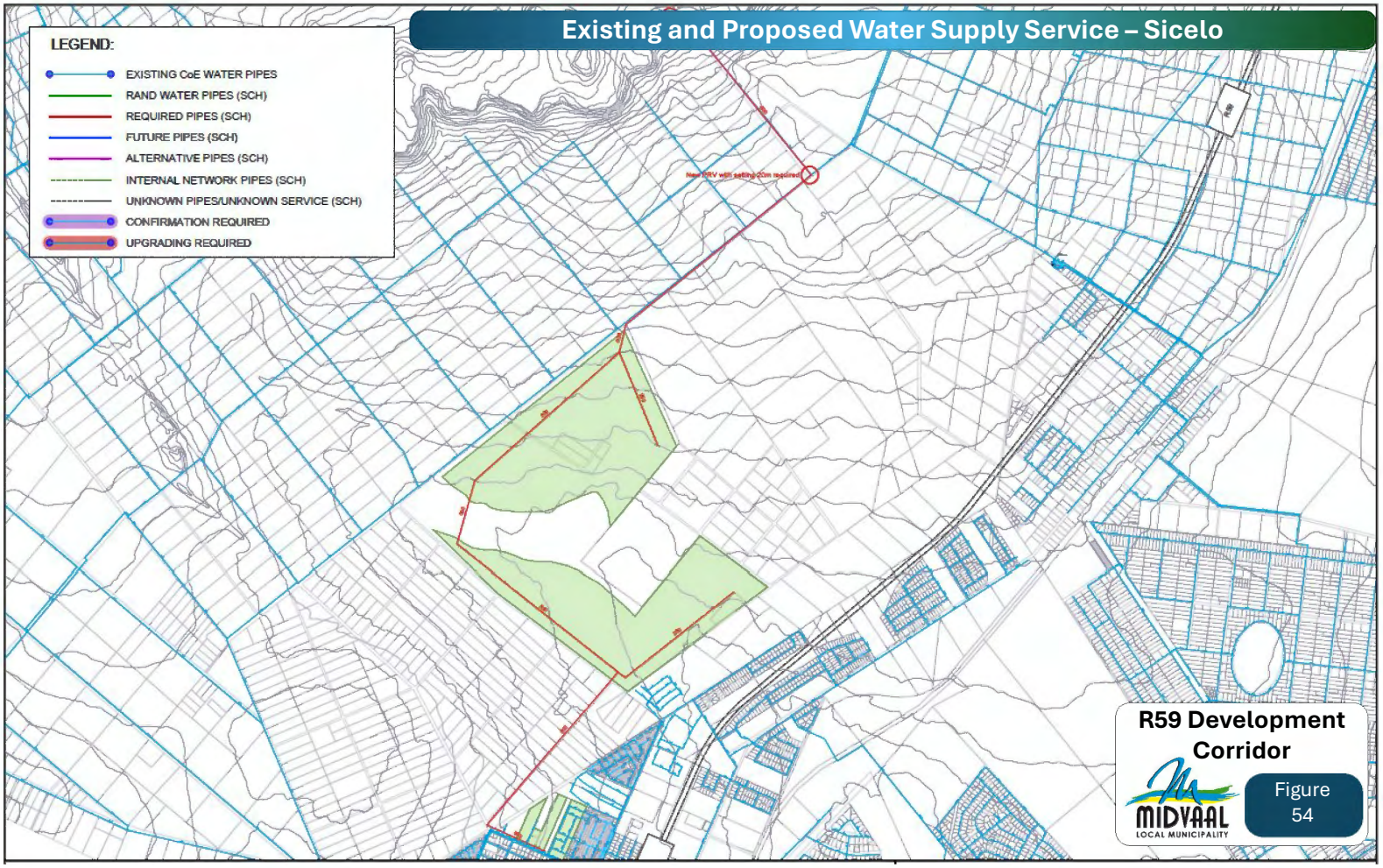

Existing and Proposed Water Supply Service – The Grace
LEGEND:
EXISTING CoE WATER PIPES
RAND WATER PIPES (SCH)
REQUIRED PIPES (SCH)
FUTURE PIPES (SCH)
ALTERNATIVE PIPES (SCH)
INTERNAL NETWORK PIPES (SCH)
UNKNOWN PIPES/UNKNOWN SERVICE (SCH)
CONFIRMATION REQUIRED
UPGRADING REQUIRED

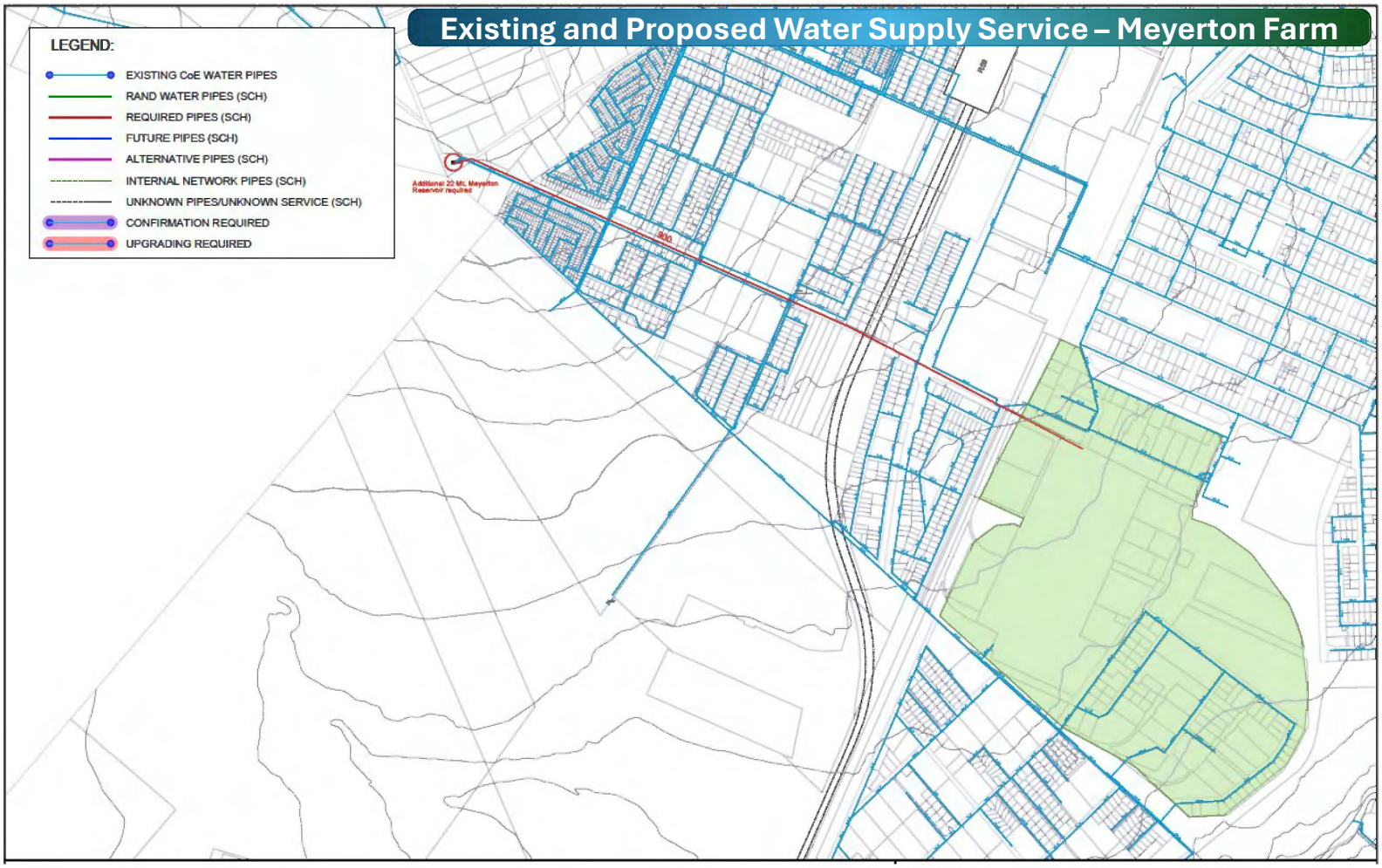

Existing and Proposed Water Supply Service – Kliprivier Business Park
LEGEND:
EXISTING CoE WATER PIPES
RAND WATER PIPES (SCH)
REQUIRED PIPES (SCH)
FUTURE PIPES (SCH)
ALTERNATIVE PIPES (SCH)
INTERNAL NETWORK PIPES (SCH)
UNKNOWN PIPES/UNKNOWN SERVICE (SCH)
CONFIRMATION REQUIRED
UPGRADING REQUIRED
Additional 27 ML Kliprivier Reservoir required
R59 Development Corridor
MIDVAAL LOCAL MUNICIPALITY
Figure 52

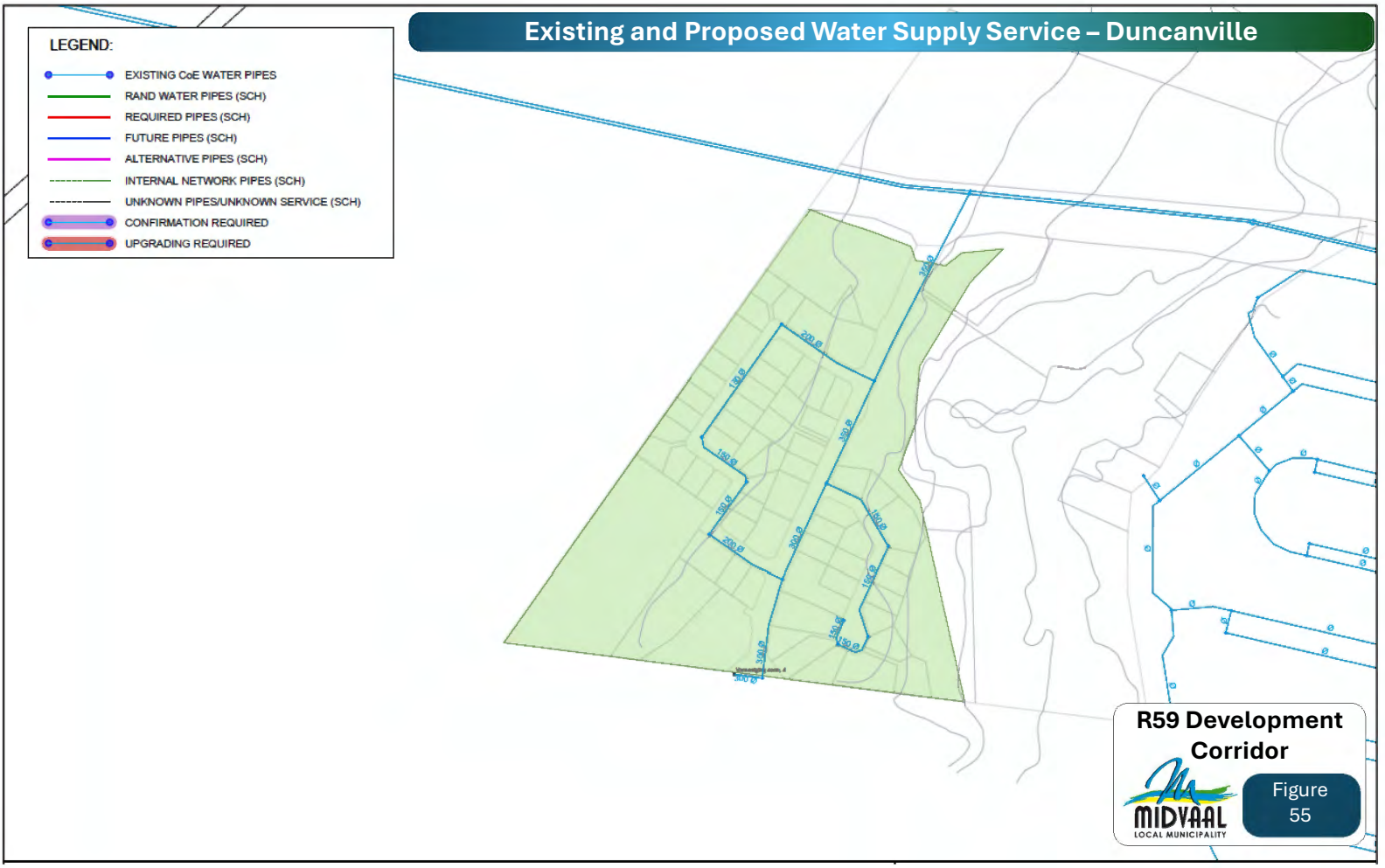

Existing and Proposed Water Supply Service – Garthdale
LEGEND:
EXISTING CoE WATER PIPES
RAND WATER PIPES (SCH)
REQUIRED PIPES (SCH)
FUTURE PIPES (SCH)
ALTERNATIVE PIPES (SCH)
INTERNAL NETWORK PIPES (SCH)
UNKNOWN PIPES/UNKNOWN SERVICE (SCH)
CONFIRMATION REQUIRED
UPGRADING REQUIRED
250


Existing and Proposed Water Supply Service – Daleside
LEGEND:
EXISTING CoE WATER PIPES
RAND WATER PIPES (SCH)
REQUIRED PIPES (SCH)
FUTURE PIPES (SCH)
ALTERNATIVE PIPES (SCH)
INTERNAL NETWORK PIPES (SCH)
UNKNOWN PIPES/UNKNOWN SERVICE (SCH)
CONFIRMATION REQUIRED
UPGRADING REQUIRED
New Rand Water Connection Required
600
R59 Development Corridor
MIDVAAL LOCAL MUNICIPALITY
Figure 53

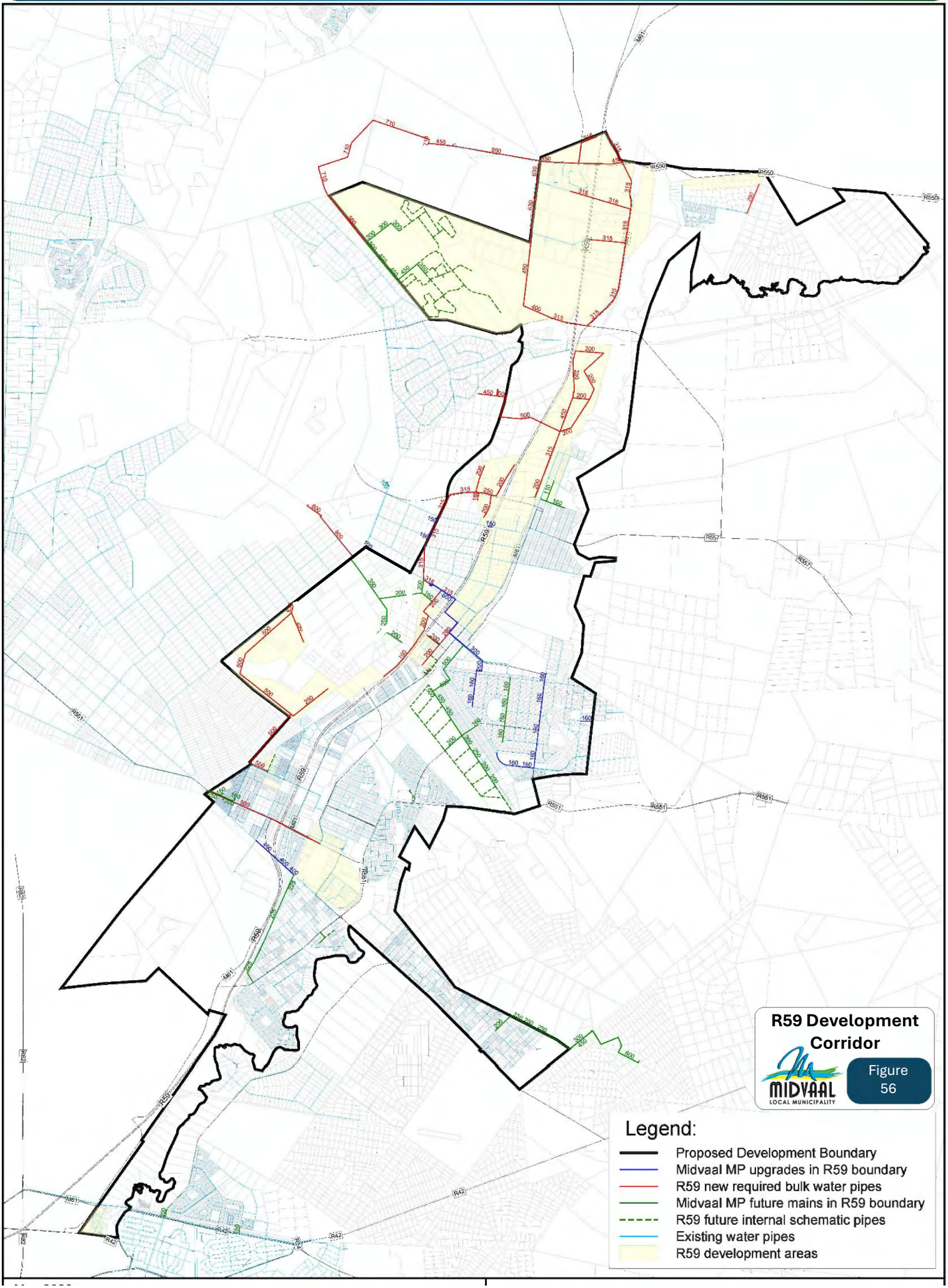

Existing and Proposed Water Supply Service – Pendale/Highbury
LEGEND:
EXISTING CoE WATER PIPES
RAND WATER PIPES (SCH)
REQUIRED PIPES (SCH)
FUTURE PIPES (SCH)
ALTERNATIVE PIPES (SCH)
INTERNAL NETWORK PIPES (SCH)
UNKNOWN PIPES/UNKNOWN SERVICE (SCH)
CONFIRMATION REQUIRED
UPGRADING REQUIRED


Existing and Proposed Water Supply Service – Sicelo
LEGEND:
EXISTING CoE WATER PIPES
RAND WATER PIPES (SCH)
REQUIRED PIPES (SCH)
FUTURE PIPES (SCH)
ALTERNATIVE PIPES (SCH)
INTERNAL NETWORK PIPES (SCH)
UNKNOWN PIPES/UNKNOWN SERVICE (SCH)
CONFIRMATION REQUIRED
UPGRADING REQUIRED
R59 Development Corridor
MIDVAAL LOCAL MUNICIPALITY
Figure 54

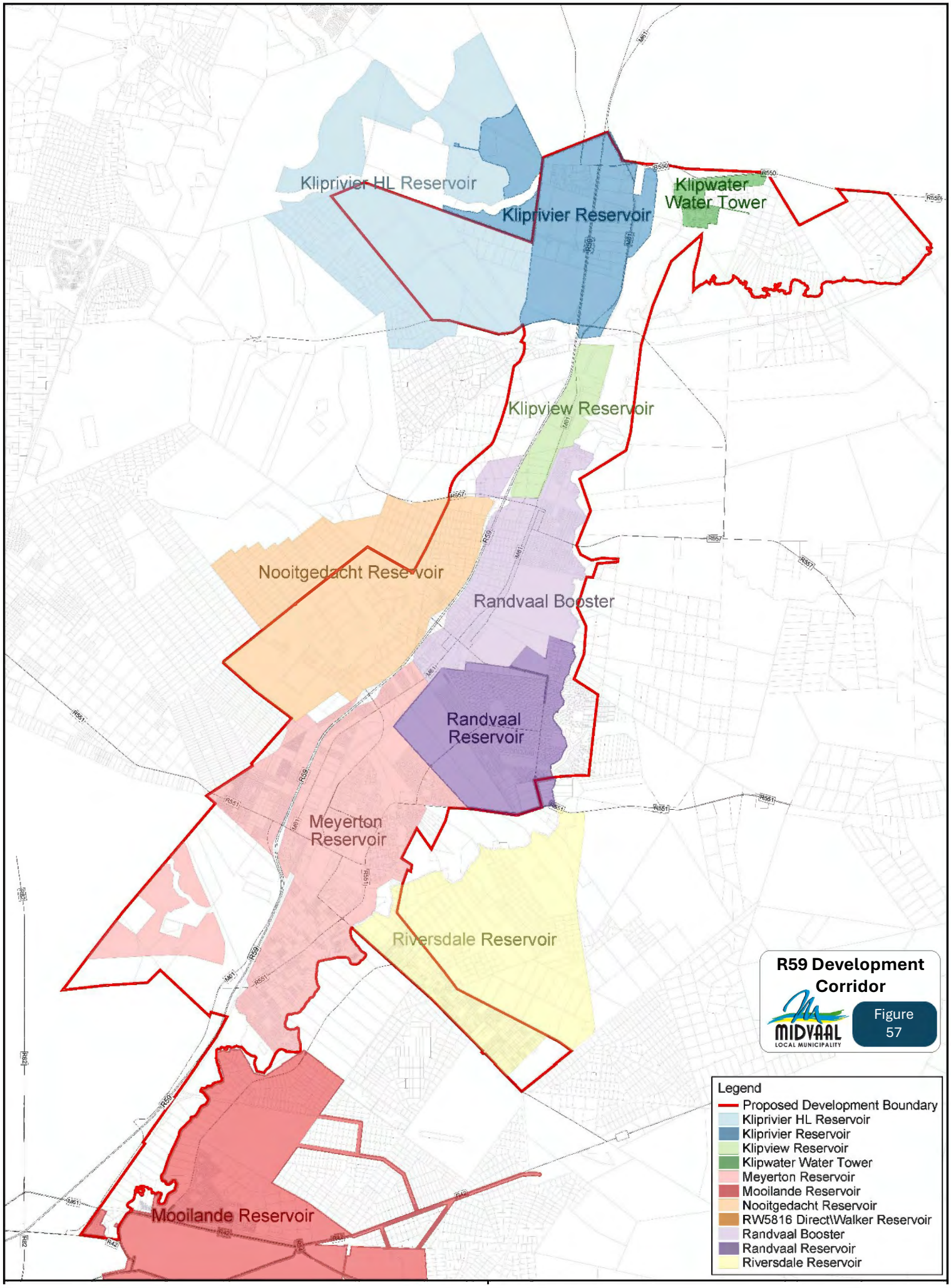

LEGEND:
EXISTING CoE WATER PIPES
RAND WATER PIPES (SCH)
REQUIRED PIPES (SCH)
FUTURE PIPES (SCH)
ALTERNATIVE PIPES (SCH)
INTERNAL NETWORK PIPES (SCH)
UNKNOWN PIPES/UNKNOWN SERVICE (SCH)
CONFIRMATION REQUIRED
UPGRADING REQUIRED
Existing and Proposed Water Supply Service – Meyerton Farm


LEGEND:
EXISTING CoE WATER PIPES
RAND WATER PIPES (SCH)
REQUIRED PIPES (SCH)
FUTURE PIPES (SCH)
ALTERNATIVE PIPES (SCH)
INTERNAL NETWORK PIPES (SCH)
UNKNOWN PIPES/UNKNOWN SERVICE (SCH)
CONFIRMATION REQUIRED
UPGRADING REQUIRED
Existing and Proposed Water Supply Service – Duncanville
R59 Development Corridor
MIDVAAL LOCAL MUNICIPALITY
Figure 55

R59 Corridor - Required Water Bulk Pipes and Upgrades



R59 Corridor – Future Water Distribution Zones



4.3.5.2 Sewer

The sewer system proposals are formulated based on the residential proposals (Objective 3) and non-residential proposals (Objective 6). The proposed R59 proposals currently includes stands which drain to the following wastewater treatment works (***Table 39***):

Table 39: WWTP Current Capacity

Pump Station Name	Upstream Sewage Flow (kL/d)	Minimum Inflow (L/s)	Maximum Inflow (L/s)
Waterval WWTP	9,772.69	52.52	127.19
Meyerton WWTP	13,333.40	108.36	178.65
Leeuwkuil WWTP*	178.88	1.45	2.91

*Leeuwkuil WWTP values only includes inflow from Midvaal and not Emfuleni.

The Waterval WWTP has a current capacity of 170 ML/d but is receiving an inflow of approximately 417 ML/d, which means the WWTP is operating at 245% of its capacity and in urgent need of upgrades.

The capacities of the Meyerton and Leeuwkuil WWTPs are unknown.

Certain changes to the sewer drainage area boundaries are proposed between the current and the ultimate future drainage scenario in the master plan, with direct implications on the proposed development. These will affect the future drainage areas but will not change where areas within the proposed development area drain to in future. (See ***Table 40***).

Table 40: Current Pump Stations and WWTP

Development Name	Pump Stations	WWTP
Garthdale	Klipwater PS3	Waterval WWTP
Klipriver Business Park	Klipwater PS4	Waterval WWTP
Daleside	Leeuw Str PS – Adelaar Str PS – Main PS – Visser Str PS	Meyerton WWTP
Pendale/Highbury	Adelaar Str PS – Main PS – Visser Str PS	Meyerton WWTP
Meyerton Farm	Visser Str PS	Meyerton WWTP
Duncanville	Duncanville PS	Leeuwkuil WWTP
Sicelo	Visser Str PS	Meyerton WWTP
Various Portions – Nooitgedacht (previously The Grace)	Klipwater PS4	Waterval WWTP

Sewage Pump Station Capacities:

The total AADD of the zones draining to the pump stations and WWTPs was calculated from RW meter readings, in conjunction with Midvaal Local Municipality (MLM) treasury data.

Several existing municipal sewage pump stations are affected by the proposed development proposals (shown in bold – 8 of 12) as well as adjacent development within the R59 study area, namely the following in ***Table 41***:

Table 41: Sewage Pump Station Capacities

Pump Station Name	Current Upstream Sewage Flow (kL/d)	Current Maximum Inflow (L/s)	Future Upstream Sewage Flow (kL/d)	Future Maximum Inflow (L/s)	Future Required Capacity (L/s)
Klipwater PS2	0.0	0.0	1,800	20	28.6
Klipwater PS3	691.23	8.45	2,000	40	57.1
Klipwater PS4	6542.98	121.20	52,000	580	828.6
Visser Str PS	12,511.65	178.66	56,000	570	814.3
Leeuw Str PS	119.98	1.87	8,000	82	117.1
Adelaar Str PS	862.59	12.21	10,000	157	224.3
Main PS	4,805.97	62.21	13,000	255	364.3
Regatta Str PS	108.71	2.15	200	3	4.3
Wargrave Str PS	136.70	2.65	200	3	4.3
Church Str PS	67.38	1.14	130	1.5	2.1
Keurboom Str PS	123.99	2.07	2,400	30	42.9
Duncanville PS	97.94	1.64	152	2	2.9

The capacities of these pump stations are unknown, but the theoretical minimum pumping capacity required to accommodate the existing inflow can be calculated as follows:

Required Pumping Capacity = Max Inflow / 0.7

The pump stations and rising mains must be surveyed and if they are found to have capacities below the required values, upgrading should be done accordingly.

Main Outfall Sewers:

Existing main outfall sewers:

The GLS hydraulic analysis confirms that multiple existing affected bulk outfall sewers located downstream in the various sub-areas are currently experiencing levels of spare capacity below the minimum requirement of 30%.

Existing network pipe capacities:

Some existing affected bulk and collector sewers located downstream of the proposed developments are currently experiencing levels of spare capacity below the minimum requirement of 30% or and be further decreased from the flow from the proposed developments or will decrease to below 30% because of the additional flow from the proposed developments; therefore, pipes need to be upgraded. Additional existing sewer pipes and upgrades are also required to drain other development inside the R59 study area according to the Midvaal Master Plan.

The following main outfall sewers are required for each development and schematic layouts of the required bulk outfall sewer pipes and upgrades, as well as pump stations or WWTPs are reflected on the respective figures and ***Table 42***.

Table 42: Future Planned Main Outfall Sewers

Development Name	Required Outfall Sewer Pipes	Figure No.
Various Portions - Nooitgedacht (previously The Grace)*	470m x 315; 430m x 355; 520m x 400; 300m x 450; 170m x 600mm; 8800m x 675mm; 640m x 750mm; 4150m x 825mm	***Figure 58***
Klipriver Business Park*	800m x 200mm	***Figure 59***
Garthdale	900m x 200mm	***Figure 60***
Daleside	1300m x 160mm; 900m x 250mm; 1000m x 355mm	***Figure 61***
Pendale/Highbury	5000m x 160mm; 900m x 200mm; 950m x 315mm; 350m x 355; 400m x 1100m	***Figure 62***
Sicelo	150m x 110mm; 1100m x 160mm; 900m x 315mm; 400m x 355mm; 1450m x 400mm	***Figure 63***
Meyerton Farm	1600m x 200mm	***Figure 64***
Duncanville	None	

*Note that some pipes are shared between the Farm Nooitgedacht (previously The Grace) and Klipriver Business Park

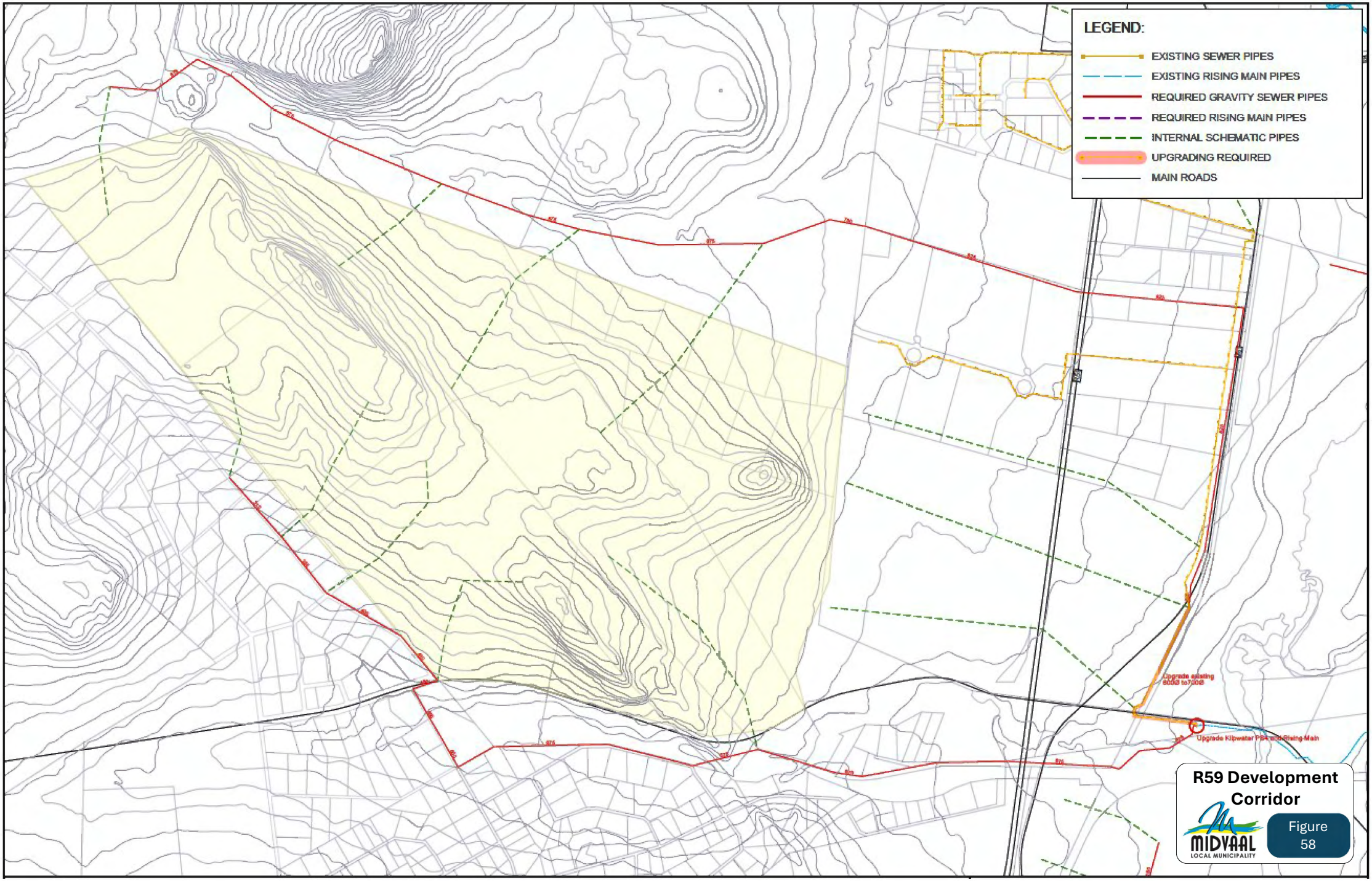
The estimated total cost for each development's required outfall sewers is as shown in **Table 43**

Table 43: Estimated Total Cost for per Development (required outfall sewers)

Development	Total new outfall sewer cost	Total outfall sewer upgrade cost	Total
Daleside	R7 514 528.43	R8 024 585.64	**R15 539 114.07**
Garthdale	R1 827 721.81	-	**R1 827 721.81**
Kliprivier	R1 550 418.92	R22 710 887.25	**R24 261 306.17**
Meyerton	R3 095 047.01	R2 412 874.10	**R5 507 921.11**
Pendale/Highbury	R17 899 141.67	-	**R17 899 141.67**
Sicelo	R10 829 329.03	R78 362 293.63	**R89 191 622.66**
The Grace	R105 320 351.15	-	**R105 320 351.15**
Grand Total	**R148 036 538.02**	**R111 510 640.62**	**R259 547 178.64**

*These costs do not include sewer pump station or rising main upgrades.

Existing and Proposed Sewer Services and Required Upgrade Service – The Grace

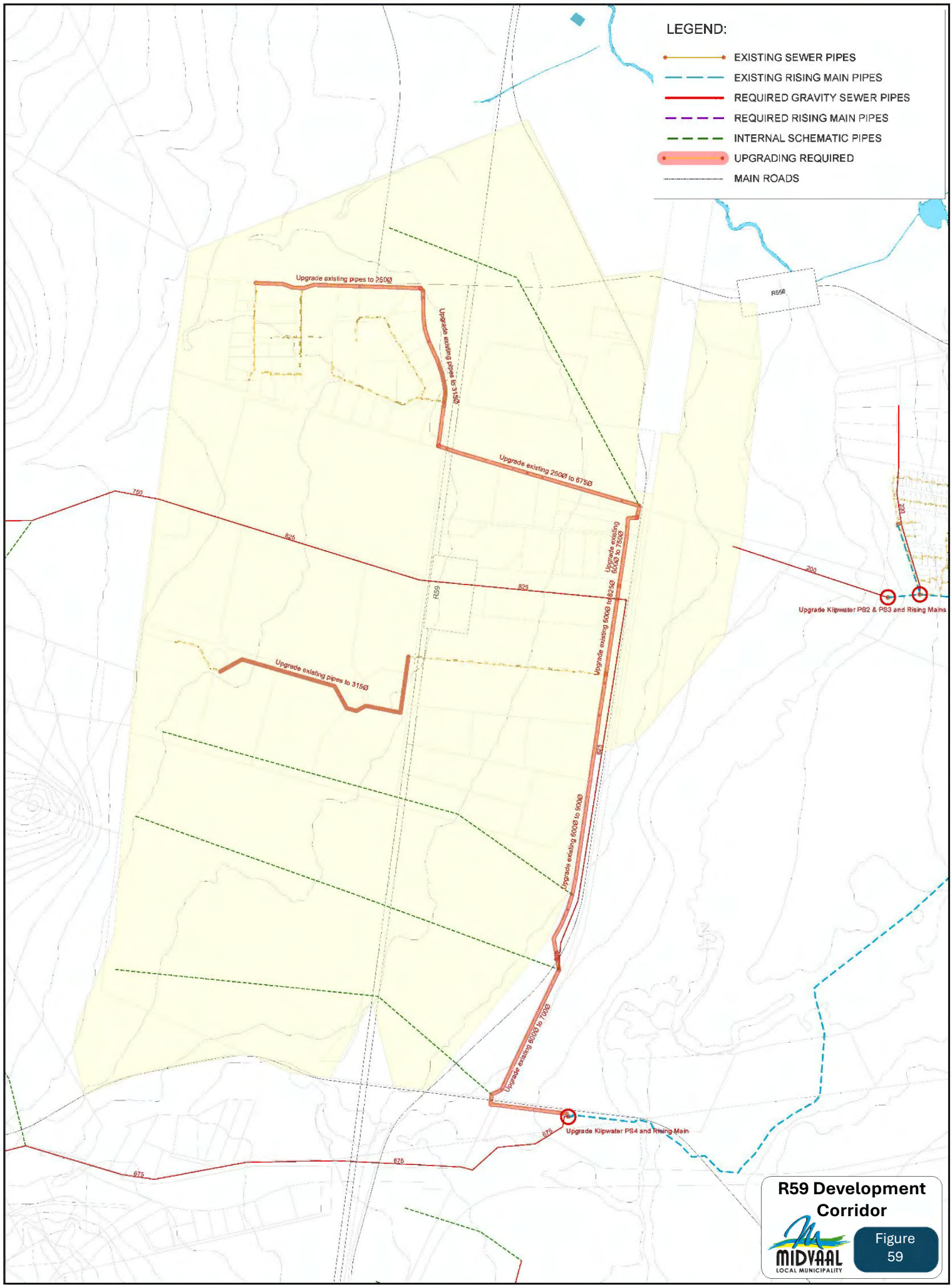


R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 58

Existing and Proposed Sewer Services and Required Upgrade Service – Kliprivier Business Park

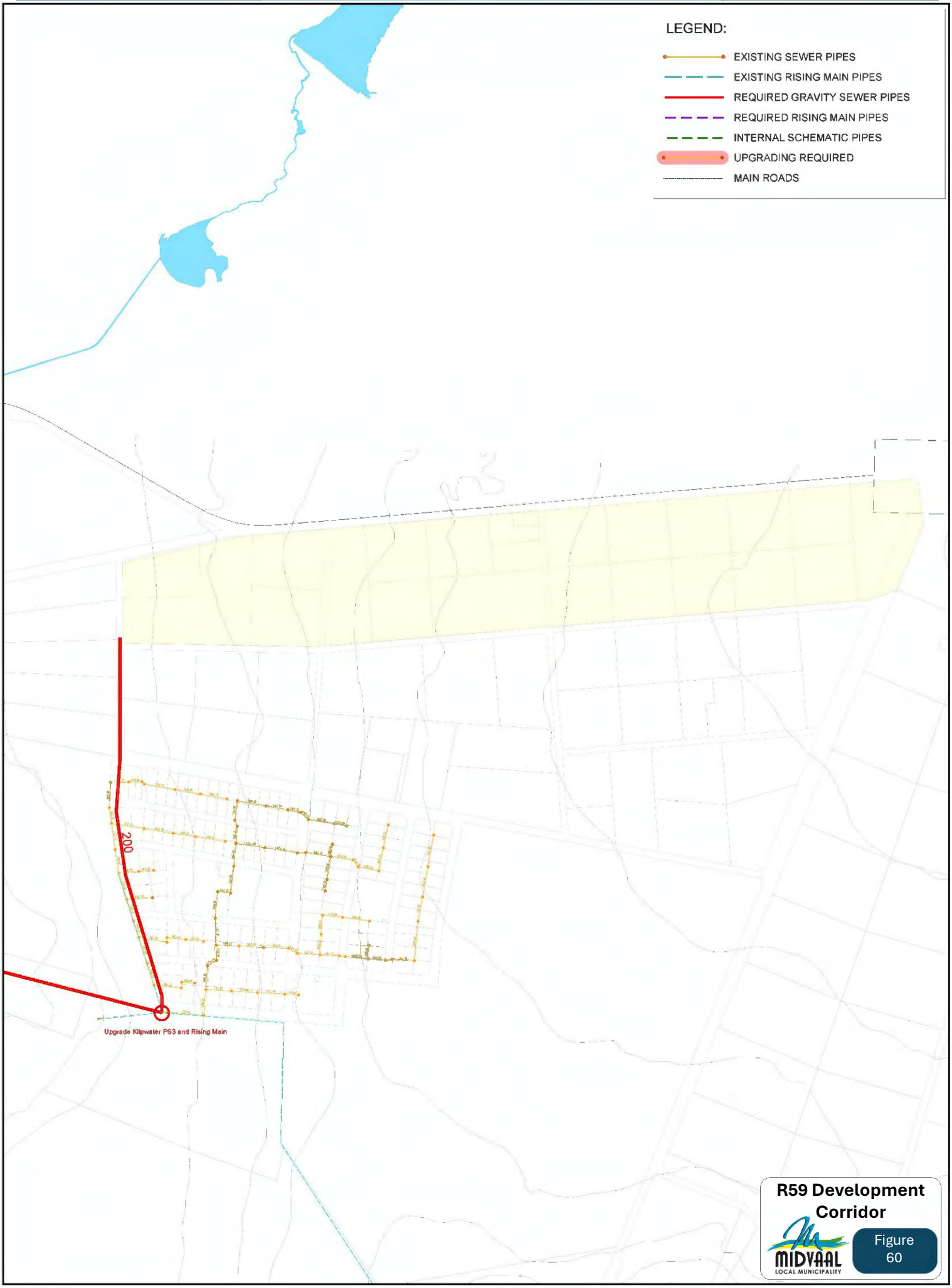


R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 59

Existing and Proposed Sewer Services and Required Upgrade Service – Garthdale

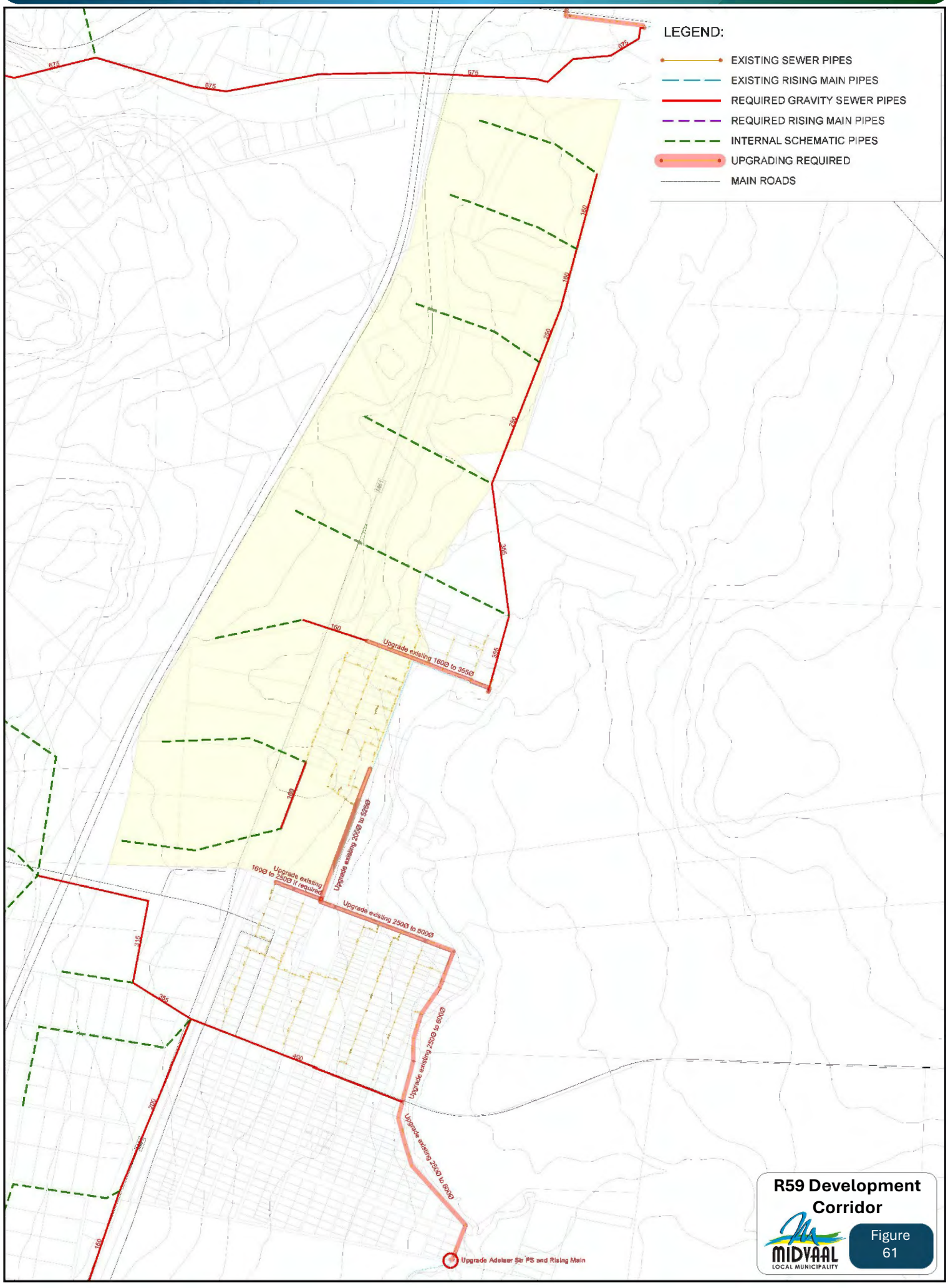


R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 60

Existing and Proposed Sewer Services and Required Upgrade Service – Daleside

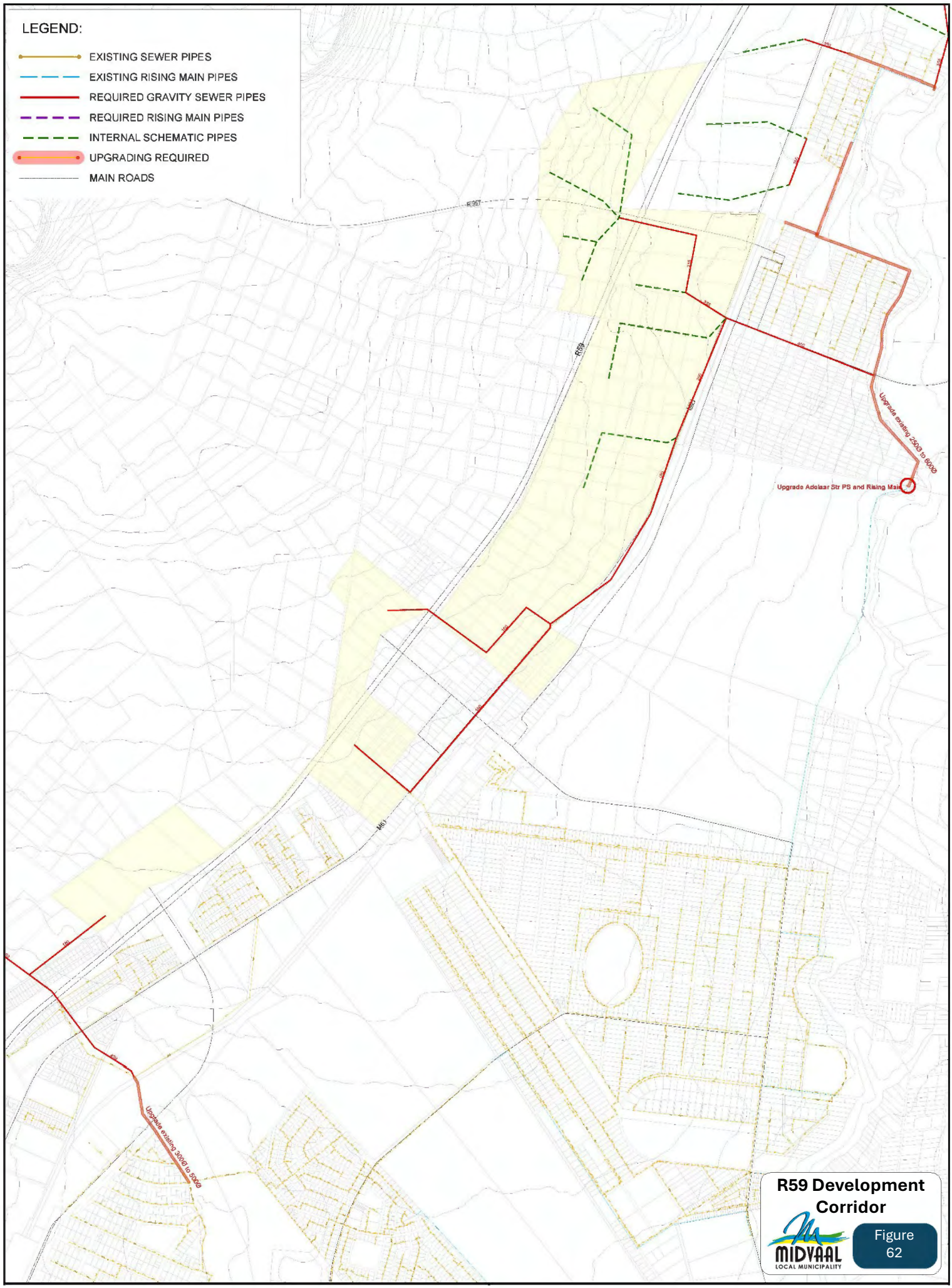


R59 Development Corridor

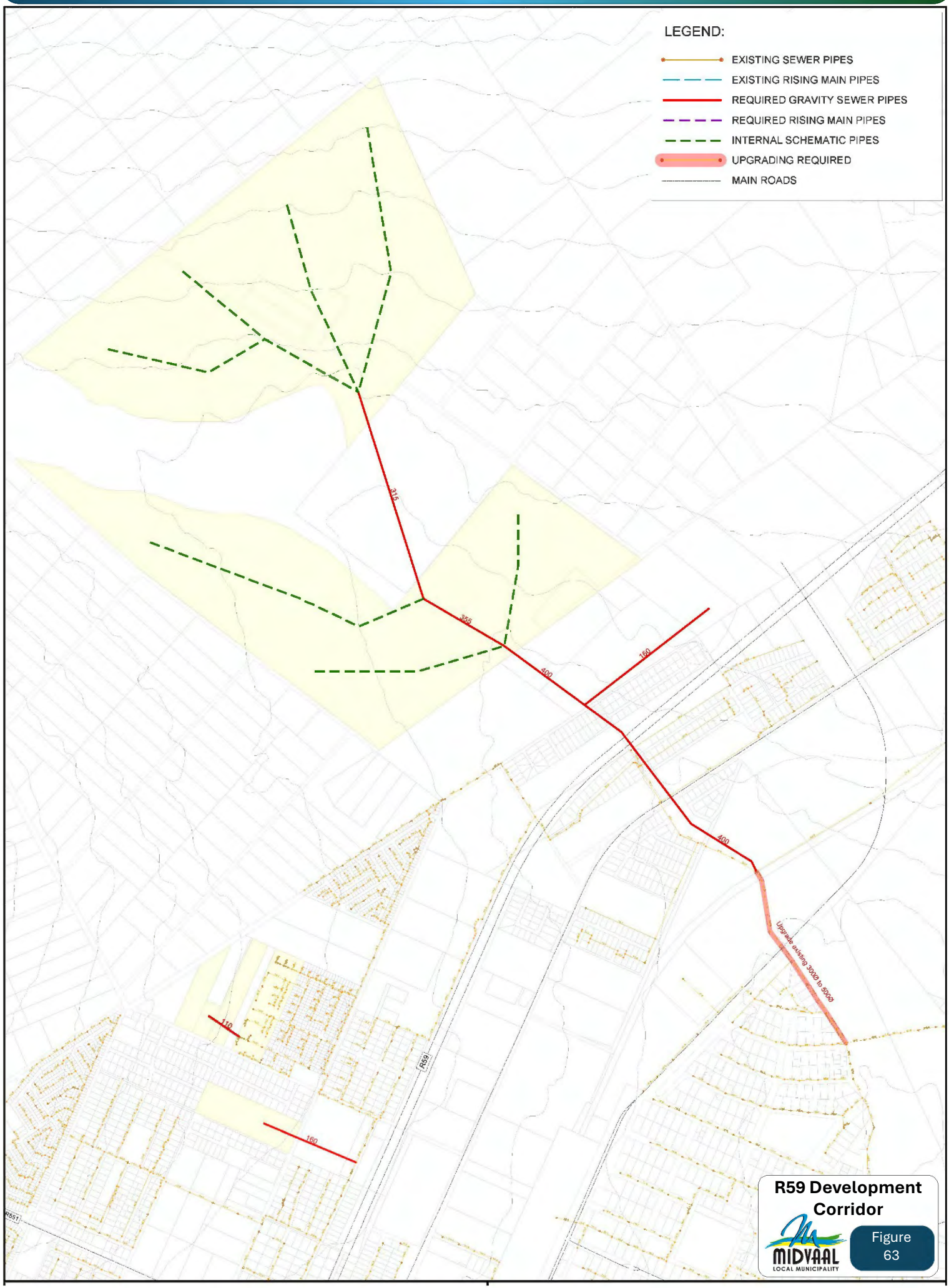
MIDVAAL LOCAL MUNICIPALITY

Figure 61

Existing and Proposed Sewer Services and Required Upgrade Service – Pendale/Highbury



Existing and Proposed Sewer Services and Required Upgrade Service – Sicelo

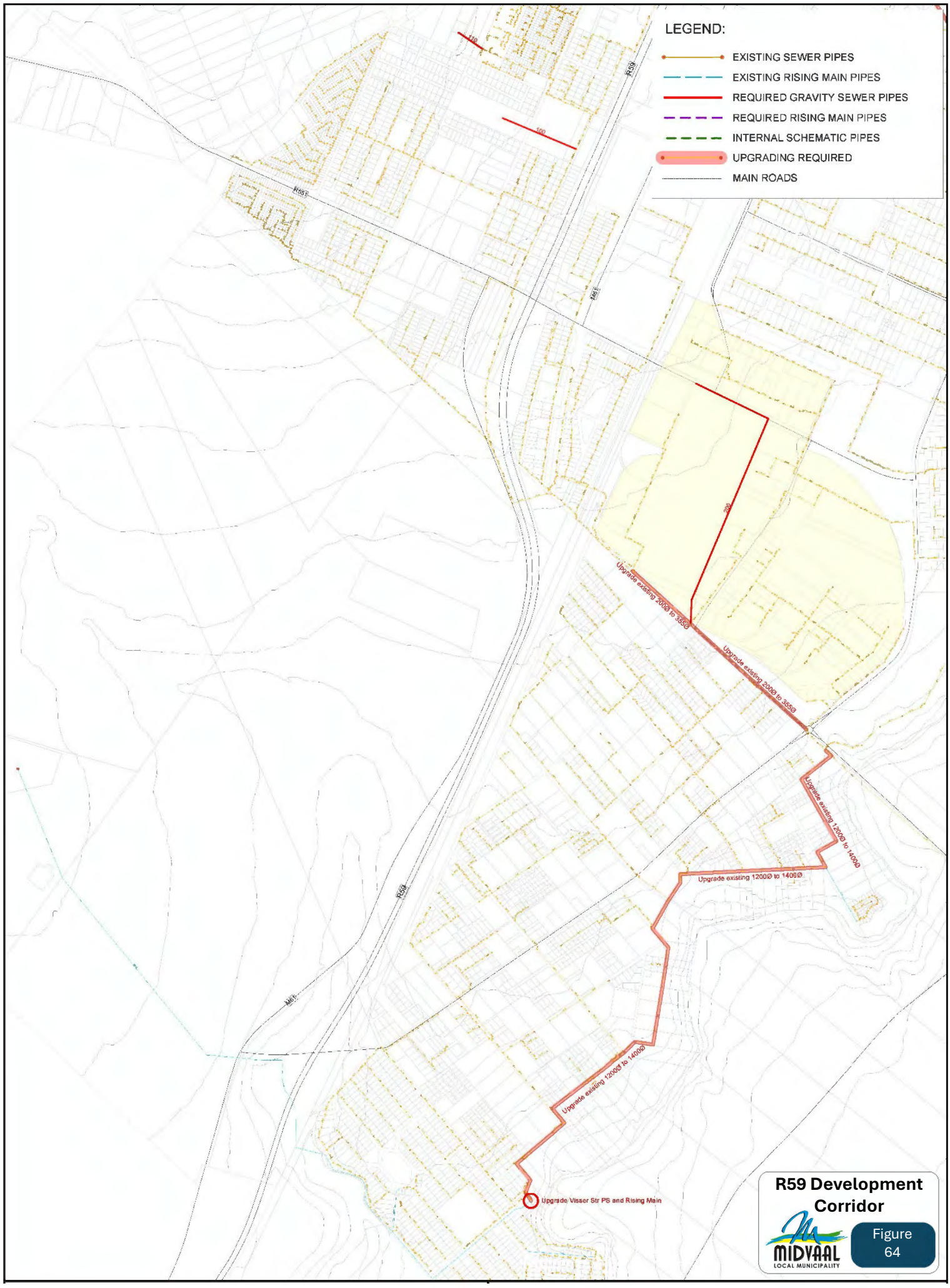


R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 63

Existing and Proposed Sewer Services and Required Upgrade Service – Meyerton



R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 64

Additional existing sewer pipes and upgrades are also required to drain other development inside the R59 study area according to the Midvaal Master Plan, which is shown on ***Figure 65***, and ***Figure 66*** outlines the drainage areas to the three Wastewater Treatment Plants (Waterval, Meyerton and Leeuwkuil).

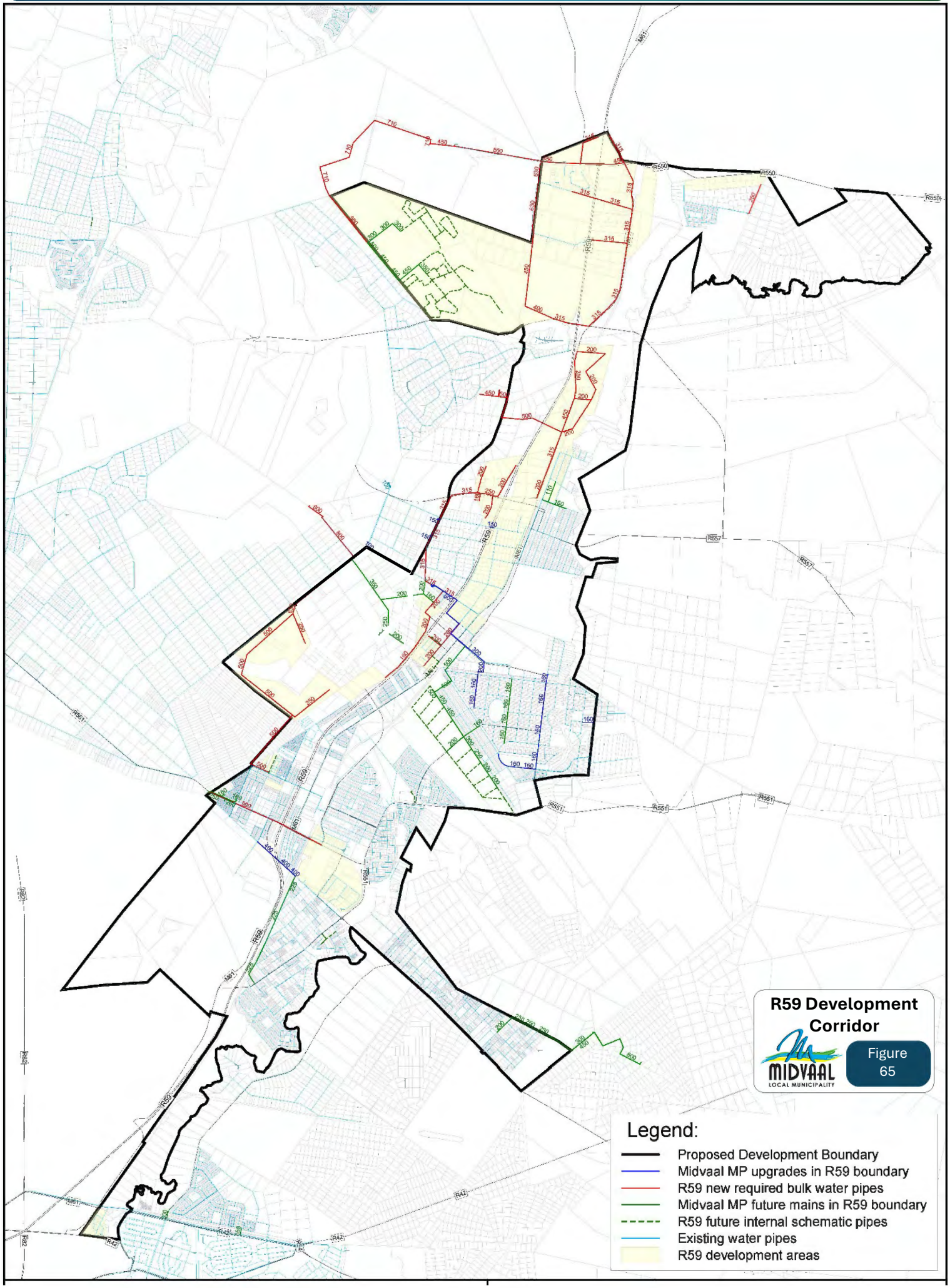
Table 44 provides the estimated cost of the proposed new outfall sewers and proposed sewer upgrades.

Table 44: Outfall Sewer Upgrade Costs

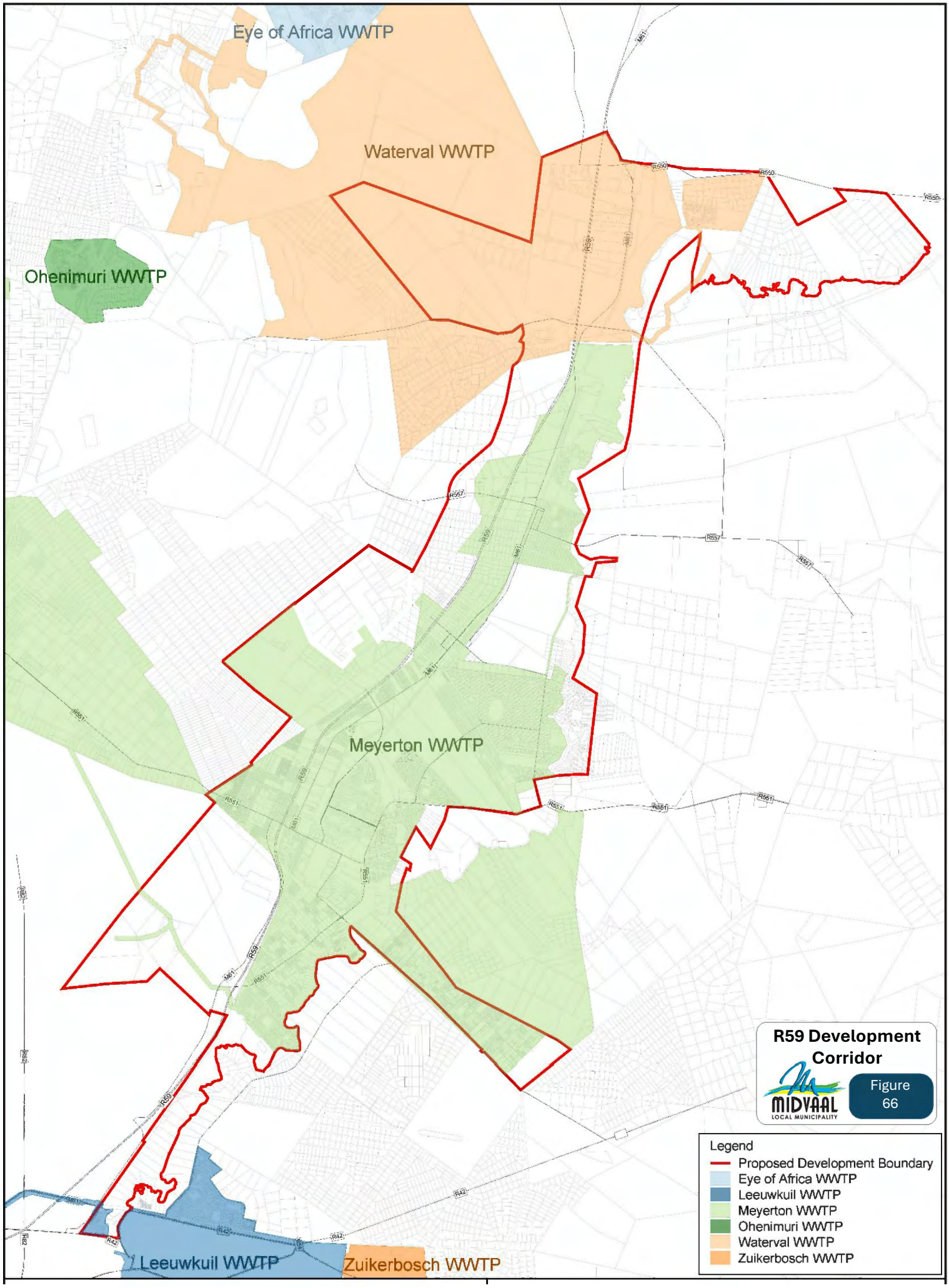
Development	Total New Outfall Sewer Cost	Total Outfall Sewer Upgrade Cost	Total
Daleside	R7 514 528.43	R8 024 585.64	R15 539 114.07
Garthdale	R1 827 721.81	-	R1 827 721.81
Klipriver	R1 550 418.92	R22 710 887.25	R24 261 306.17
Meyerton	R3 095 047.01	R2 412 874.10	R5 507 921.11
Pendale/Highbury	R17 899 141.67	-	R17 899 141.67
Sicelo	R10 829 329.03	R78 362 293.63	R89 191 622.66
Various Portions – Nooitgedacht (previously The Grace)	R105 320 351.15	-	R105 320 351.15
Grand Total	**R148 036 538.02**	**R111 510 640.62**	**R259 547 178.64**

*These costs do not include sewer pump station or rising main upgrades.

R59 Corridor - Required Sewer Bulk Pipes and Upgrades



R59 Corridor – Future WWTP drainage areas



4.3.5.3 Stormwater Management

Stormwater management is a core urban management instrument—an enabling "gear" that must be planned and designed into the R59 corridor's spatial structure, road hierarchy, and precinct layouts from the outset, rather than being retrofitted once development has occurred. The Midvaal Roads and Stormwater Master Plan 2024 confirms that development alters natural runoff behaviour through increased impervious surfaces and channelisation, resulting in higher runoff volumes and velocities, which—if not managed—translate directly into flood hazards, asset damage, and downstream environmental impacts.

Accordingly, stormwater infrastructure for the R59 corridor should be approached as a functional system comprising (i) an urban dual stormwater system (minor piped reticulation and major overland conveyance via road reserves), (ii) targeted low-point protection with higher design standards at known risk points, and (iii) a formalised peak flow attenuation policy for all new developments. The Master Plan specifically recommends designing local low-point discharge infrastructure to higher recurrence intervals (including 1:25-year protection where required), improving kerb inlet capacity and efficiency, ensuring appropriately sized conveyance (minimum pipe diameters for maintainability), and protecting discharge points through energy dissipation and erosion control.

Attenuation facilities—particularly well-designed open attenuation ponds—should be used optimally as part of the corridor's green-blue infrastructure, not only to manage peak flows but also to improve the resilience and maintainability of the overall system. The Master Plan recommends open attenuation ponds (rather than tanks) because they are maintainable and allow visual inspection, and sets out key functional design components such as energy dissipation at inlets, sediment forebays, extended detention for pollutant settling, and safe emergency overflows. This approach supports safer conveyance, reduces downstream stress at discharge points, and promotes long-term asset performance through practical maintenance access and sediment management.



R59 dolomitic considerations: where dolomitic ground conditions occur along or adjacent to the corridor, stormwater controls should be treated as risk-critical infrastructure—avoiding uncontrolled concentration of flows and ensuring that attenuation, discharge protection, and subsoil drainage measures are appropriately located and engineered to reduce geotechnical risk.

Smart City principles:

The following smart city principles should be pursued for all engineering services

- The integration of smart city principles into engineering services along the R59 Corridor is critical to ensuring that infrastructure investment is future-proofed, responsive, and capable of supporting both current and projected growth demands.
- Smart engineering services enable the real-time monitoring and management of bulk and internal infrastructure systems (water, sanitation, electricity, and stormwater), improving operational efficiency, reducing losses, and enhancing service reliability across the corridor.
- The adoption of data-driven infrastructure planning and asset management systems allows municipalities to prioritise upgrades, optimise maintenance cycles, and make informed decisions that align capital expenditure with areas of highest demand and growth potential.
- Smart technologies support resource efficiency and sustainability, including water conservation through leak detection systems, energy optimisation via smart grids, and climate-responsive stormwater management solutions—key considerations given increasing environmental pressures.
- The incorporation of digital infrastructure (fibre networks, IoT platforms, and integrated service dashboards) within engineering services strengthens the corridor's attractiveness for

investment, supports business retention, and enables the development of a connected and competitive economic environment.

- Ultimately, embedding smart city concepts within engineering services contributes to improved quality of life, enhanced service delivery, and long-term resilience, positioning the R59 Corridor as a modern, efficient, and sustainable development spine within the broader municipal context.

4.3.6 Economic Development & Job Creation

Development Objective 6 (Economic Development & Job Creation (clusters))

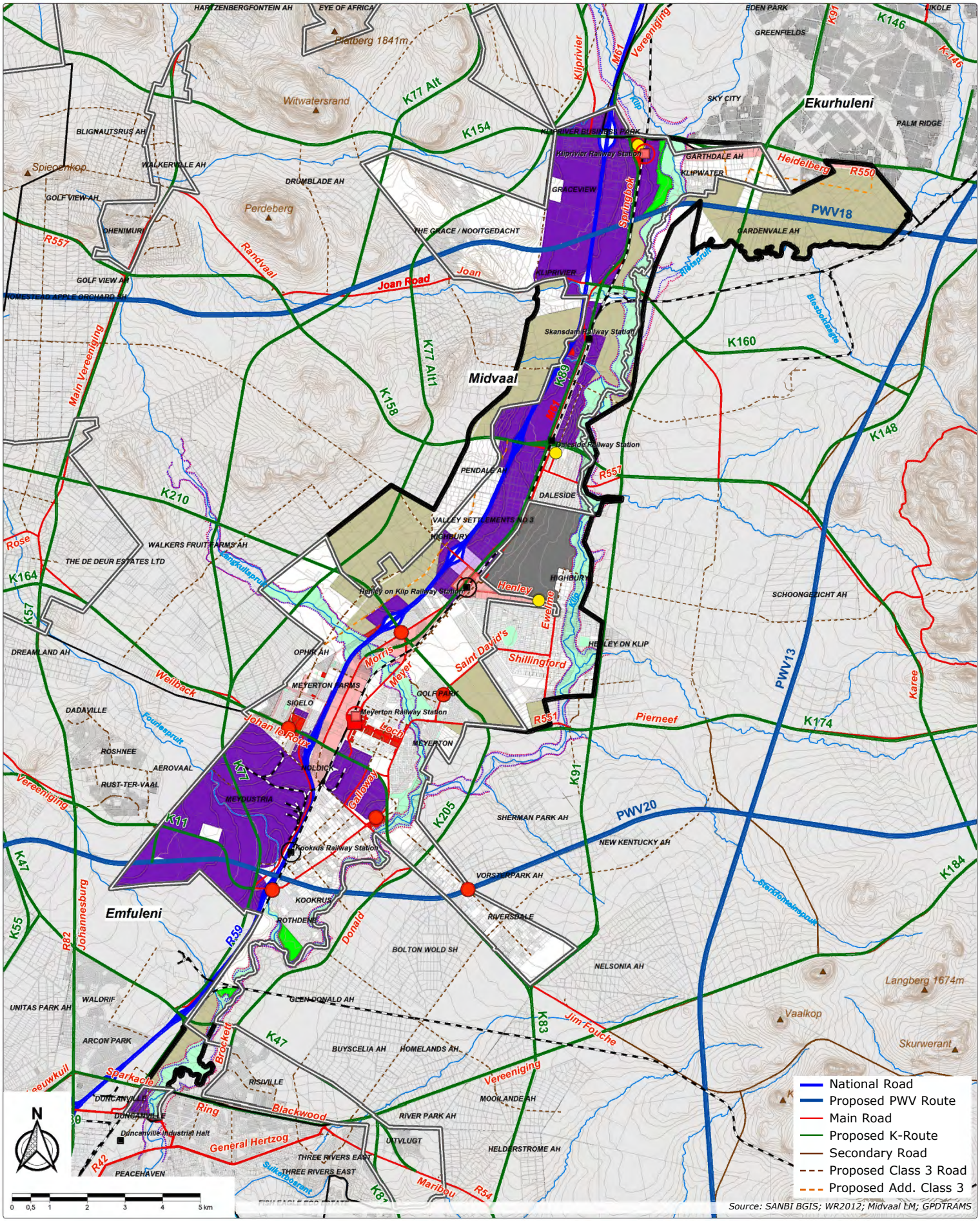
To promote inclusive economic development and job creation by directing business, commercial, light industrial and tourism activities to strategic locations within a coordinated system of economic clusters and nodes, supported by appropriate access, services, urban design quality and an enabling investment environment.

The R59 Corridor occupies a strategically important position within the Midvaal Local Municipality and forms part of a broader economic system that links the Sedibeng District, the Emfuleni urban-industrial complex and the Gauteng City Region. The corridor serves as a major north-south movement spine that supports the movement of goods, services and people between key economic centres while providing direct access to established industrial, commercial, agricultural and residential areas. As illustrated in **Figure 67**, the Economic Development and Job Creation Framework seeks to strengthen this role by consolidating existing economic activities, attracting new investment and directing future development towards strategic economic clusters and activity nodes.

The proposed framework recognises that economic growth and employment creation are intrinsically linked to the efficient functioning of transportation infrastructure, the availability of appropriately located development land and the concentration of complementary land uses within identifiable economic clusters. The framework therefore promotes a corridor-wide approach to economic development that leverages the locational advantages of the R59 while reinforcing the established nodal hierarchy and supporting the long-term spatial vision for the area. Figure 67 illustrates how industrial areas, commercial centres, mixed-use nodes, agricultural production areas and emerging transit-oriented development opportunities collectively contribute towards the development of a resilient, diversified and competitive regional economy and is discussed below.

The industrial, business and agriculture development has contributed to the overall development of the R59 Corridor, and it is proposed that it should continue. The corridor has been divided into sub-areas to illustrate the industrial, business, agriculture and mixed proposals and are discussed below:

Objective 6: Economic Development & Job Creation



Study Area
Urban Development Boundary
Cadastral
Municipal Boundary
River / Dam / Pan

1 in 100-year Flood Line
1 in 50-year Flood Line
5m / 20m Contours
Hill / Mountain / Peak
Open Space/Parks
Tourism / Recreation

Industrial
Gateway Node: Mixed Use
Business
Mixed Use
Mining/Quarrying
Agriculture

High Intensity ToD
Medium Intensity ToD
Primary Node
Secondary Node

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 67

Industrial Development and Expansion Strategy

Industrial development represents the cornerstone of the proposed economic development strategy for the R59 Corridor. The development framework promotes the consolidation and expansion of existing industrial concentrations rather than the creation of dispersed new industrial areas. Future industrial growth should therefore be focused at existing interchanges and established industrial precincts along the corridor, particularly within and adjacent to the Kliprivier Business Park, Kliprivier Industrial Area, Daleside Industrial Area, and other established industrial nodes situated on the western side of the R59. This approach will reinforce existing industrial investments, maximise the value of available infrastructure, and support the continued operation and expansion of established businesses.

The existing industrial concentrations along the R59 corridor provide a strong foundation for future economic expansion and continue to perform an important regional function in manufacturing, logistics, warehousing, construction materials, engineering, transport and distribution activities. The corridor has developed into a significant industrial and logistics cluster that benefits from direct access to the regional transportation network, skilled and semi-skilled labour markets, and major consumer markets within Gauteng. The concentration of industrial activities along the corridor has created important economies of scale and agglomeration benefits that enhance business efficiency and competitiveness.

The Kliprivier Business Park and surrounding industrial areas already accommodate a range of major industrial, manufacturing and logistics operators, including beverage manufacturing, transport and logistics services, mining and industrial equipment suppliers, chemical manufacturers, construction material producers and corporate support functions. Similarly, the Daleside Industrial Area has established itself as an important manufacturing, processing and distribution node supporting regional industrial activity. These established industrial precincts should form the primary focus areas for future industrial expansion through the phased release of additional industrial land adjacent to existing developments and at strategic interchange locations.

The proposed framework therefore promotes the expansion and consolidation of strategically located industrial and logistics clusters that capitalise on the accessibility advantages offered by the R59. The corridor provides direct connections to regional freight routes and urban markets, supporting the efficient movement of raw materials, manufactured products and agricultural goods. Continued industrial development along the corridor is intended to strengthen regional competitiveness, attract private sector investment, support business retention and expansion, and facilitate industrial diversification into higher-value manufacturing, warehousing and logistics activities

Industrial Potential:

Table 45 provides the overall industrial potential for the R59 Corridor and the following is noted:

- 150 Industrial zoned properties representing 3121 ha can still be developed and an additional 66 properties can be redeveloped which translates to 216 properties than can be developed.

- 223 Properties have been earmarked for industrial development within the R59 Corridor which is 1,270 ha.
- 1,556 Ha of land has already been developed for industrial development, and 1,682 ha represent the zoned and proposed development areas. Therefore, almost **50%** of the corridor has been developed.
- The take up rate for industrial development is calculated at 4-6 ha per annum; therefore, 68-105 ha will be required between 2025-2040; 46-70 ha between 2040-2050.

The total industrial land need is approximately 1124-175 ha up to 2050, while 311 ha of land is already zoned for industrial purposes.

Table 45: R59 Industrial Survey – Industrial Development Potential

	Current Industrial/ Commercial	1. Industrial Zoned Erven							2. Properties Earmarked for Industrial Expansion							TOTAL INDUSTRIAL POTENTIAL (Zoned & Earmarked)	
	Occupied	Vacant		GLA (m^2)	Redevelopable		Total Vacant/Redevelopable		Vacant		GLA (m^2)	Redevelopable		Total Vacant/Redevelopable		Total Vacant/Redevelopable	
Geographical Area	Area (ha)	Number of Erven/Properties	Area (ha)	LUS: 75% Coverage	Number of Erven/Properties	Area (ha)	Number of Erven/Properties	Area (ha)	Number of Erven/Properties	Area (ha)	LUS: 75% Coverage	Number of Erven/Properties	Area (ha)	Number of Erven/Properties	Area (ha)	Number of Erven/Properties	Area (ha)
Garthdale	31		-		1	2	1	2		-	-		-	-	-	1	2
Kliprivier Business Park/Industrial Park	259	55	224	1,678,513			55	224	55	344	2,579,460	2	7	57	351	112	574
Daleside	33	3	9	65,335	28	62	31	71	63	86	647,507	3	136	66	222	97	293
Pendale/Highbury	236	37	34	251,632	20	34	57	67	5	21	160,196	89	57	94	78	151	146
Meyerton Farm/Sybrand van Niekerk	968	34	43	319,160	15	2	49	45	6	619	4,643,642		-	6	619	55	664
Duncanville	20	20	2	17,498	2	0	22	3		-	-		-	-	-	22	3
Other	9	1	0	1,852	-	-	1	0		-	-		-	-	-	1	0
Grand Total	**1,556**	**150**	**311**	**2,333,991**	**66**	**100**	**216**	**412**	**129**	**1,071**	**8,030,805**	**94**	**200**	**223**	**1,270**	**439**	**1,682**

1. Calculation based on vacant Industrial erven, as well as erven zoned Industrial but currently used for something else, but with Development Potential.
2. Calculation based on land earmarked for Industrial in the SDF, both vacant or with other uses that have the potential to redevelop.

Business Development

While industrial development forms the primary economic growth driver, the Economic Development Framework also seeks to strengthen the role of business, commercial and service activities throughout the corridor. The framework recognises that the sustainable expansion of these activities requires a clear nodal focus in order to maximise investment efficiency, reinforce the spatial structure of the corridor, and avoid the fragmentation of economic activity.

Meyerton remains the primary commercial, administrative and service centre within the study area and functions as the highest-order node within the proposed nodal hierarchy. As such, Meyerton serves as the principal destination for higher-order retail, service, office, financial and institutional functions and will continue to accommodate a significant proportion of future commercial investment. Care should be taken to protect, strengthen and enhance the role of the Meyerton CBD as the municipality's primary business centre and to avoid the unnecessary dispersal of commercial activities that could dilute its market base, investment attractiveness and consumer spending power. Business and commercial development should therefore be prioritised within the Meyerton CBD, Sicelo and the identified primary activity nodes.

The framework further recognises the role of secondary activity nodes in providing localised economic opportunities and improving access to employment, retail and community services.

These nodes are intended to accommodate appropriately scaled commercial, business and service activities that respond to local market demand while reducing dependence on higher-order centres. The clustering of business activities within identified nodes supports economies of scale, promotes investment certainty and reinforces the spatial structure proposed for the corridor.

Transit-Oriented Development (TOD) areas and secondary nodes may accommodate smaller-scale mixed-use and neighbourhood-serving business activities that support surrounding communities and public transport users. Such development should complement, rather than compete with, the higher-order functions of the Meyerton CBD and primary nodes, thereby contributing to a balanced and integrated nodal system.

Market indicators suggest that continued population growth, household expenditure patterns and business service demand will support the expansion of business activities over time. Although projected office demand is relatively modest when compared to industrial demand, it remains an important component of the corridor economy and contributes towards the diversification of employment opportunities. The expansion of business and commercial activities is therefore expected to support local enterprise development, improve access to services and create opportunities for employment growth within the tertiary sector of the economy. This approach is consistent with the broader nodal policy direction of consolidating higher-order business activities within established centres while supporting appropriately scaled local economic development within secondary nodes and TOD locations

Mixed Use development and Activity Areas

The Development Plan promotes the development of strategically located mixed-use nodes and activity areas that integrate residential, institutional, recreational, community, and logistics-supporting economic land uses. These nodes are intended to function as integrated destinations that accommodate a variety of activities, support economic diversification, and enhance the efficiency and sustainability of the urban structure. By locating employment opportunities, services, community facilities and housing in close proximity, mixed-use development contributes to the creation of compact, balanced and resilient settlements.

The concentration of complementary land uses within accessible locations facilitates the more efficient utilisation of existing infrastructure and public investment while creating opportunities for local economic development, entrepreneurship and appropriate logistics-related activities. The Development Plan therefore encourages higher-density and higher-intensity mixed-use development in locations where infrastructure capacity, accessibility, service availability and market demand justify increased development intensity. Such development supports the creation of walkable and attractive environments, strengthens the viability of activity nodes, and enhances the overall investment appeal and competitiveness of the corridor.

Agriculture, Agri-Processing and Rural Economy

Agriculture remains a defining component of the Midvaal economic landscape and continues to play an important role within the R59 Corridor. The market assessment identifies agriculture as a high-priority retention sector and indicates that the sector exhibits a relatively high level of economic specialisation and competitiveness within the local economy. Agriculture further forms part of the economic base of the municipality and contributes significantly towards employment generation, food production and rural economic activity.

The Economic Objective therefore seeks to protect high-potential agricultural land while supporting opportunities for agricultural diversification, value-addition and agri-processing. The strategic location of agricultural production areas in proximity to transportation infrastructure provides opportunities for the development of logistics, packaging, storage and processing activities that can strengthen agricultural value chains and improve market access. The promotion of agri-processing activities is expected to contribute towards economic diversification while creating employment opportunities within both rural and urban areas of the corridor.

Mining and Mineral Resources

The R59 Corridor contains areas of existing and potential mineral extraction that contribute to the regional economy and support downstream manufacturing activities. Of particular importance is the existing dolomite mining operation within the study area, which provides a significant source of raw material for a range of steel-related manufacturing and industrial processes within the broader Gauteng and Sedibeng economies. The continued operation of this resource contributes to the strengthening of local industrial value chains and supports employment within both the mining and manufacturing sectors.

The Development Plan recognises mining as an important economic activity and supports the continued extraction of mineral resources in appropriate locations where such activities can be undertaken in a responsible and sustainable manner. At the same time, mining activities should be carefully managed to minimise potential conflicts with environmental resources, agricultural land, existing settlements and future development opportunities. Particular consideration should be given to the protection of strategic water resources, biodiversity areas and productive agricultural land.

All mining operations and associated infrastructure must comply with the provisions of applicable legislation. Particular emphasis should be placed on water resource protection, air quality management, biodiversity conservation, buffer management and the progressive rehabilitation of disturbed areas. The rehabilitation of mining areas should form an integral component of mine planning to ensure that post-mining landscapes can support productive future land uses, economic diversification and the long-term sustainable development objectives of the corridor.

Align Tertiary Education and Skills Development Programmes to Priority Economic Sectors

The long-term competitiveness and sustainability of the R59 Corridor will depend on the availability of a skilled and adaptable workforce capable of supporting both existing industries and future investment opportunities. Skills development initiatives should therefore be strategically aligned with the economic strengths, growth sectors and investment priorities of the corridor.

Particular emphasis should be placed on developing specialised skills programmes that respond to the needs of the existing manufacturing, agro-processing, logistics, industrial and agricultural sectors that have become established along the corridor. This includes providing training in agricultural production, precision farming, agro-processing, food and beverage manufacturing, logistics and supply chain management, engineering trades, mechanical and electrical maintenance, automation technologies, quality assurance, packaging, warehousing and industrial operations. These sectors have been identified as key contributors to the corridor economy and are expected to play an increasingly important role in future employment creation and investment attraction.

The establishment and expansion of strategic investments such as the Soufflet Malt malting facility and the Heineken brewery, together with the broader food and beverage manufacturing sector, present significant opportunities for the development of specialised technical and vocational skills. Training programmes should therefore be developed in partnership with industry stakeholders, Technical and Vocational Education and Training (TVET) colleges, universities and private training providers to ensure that local residents can access employment opportunities generated by these investments and participate meaningfully in associated value chains.

In addition, skills development programmes should support entrepreneurship, supplier development and SMME participation in manufacturing, agriculture, logistics and industrial services. Training should extend beyond technical skills to include business management, financial literacy, innovation, digital technologies and enterprise development in order to strengthen local economic participation and enhance the resilience of the corridor economy.

To maximise accessibility, local skills development and training centres should be established within the major economic nodes of the corridor and linked to existing industrial areas, agricultural production zones and business precincts. These centres should function as hubs for continuous learning, apprenticeship programmes, workplace-based training and industry partnerships. The curriculum offered at these facilities should be reviewed regularly to ensure alignment with evolving industry requirements, technological advancements and emerging economic opportunities.

Through a coordinated approach to education, training and industry collaboration, the R59 Corridor can strengthen its human capital base, improve labour market readiness, attract further investment, support industrial expansion and create sustainable employment opportunities for local communities

Economic Upscaling:

There is a wide variety of economic activities that can be pursued in a "Township Economy" as listed in **Annexure D1**. Midvaal should actively promote the establishment of as many as possible of these enterprises within the settlement areas (Sicelo, Meyerton, etc.) in order to promote local economic development and job creation.

Linked to the above, a variety of formalised informal trading structures should be encouraged at strategic locations within business areas and close to community facilities (Thusong Centres) and public transport facilities.

Informal trading, skills training of informal traders, and proper management and regulation of designated informal trade areas should be dealt with as a consolidated SMME Support Programme as part of the LED.

The R59 has a very diverse range of economic activities and to ensure inclusive economic participation, it is essential to commission targeted training and awareness programmes. The private sector could also provide mentorship assistance to emerging entrepreneurs in such programmes.

Annexure D2 provides more detail about informal trade empowerment and upgrading and illustrates various 'levels' of informal trade. These range from traders operating without formalised informal trading structures at 'level 1'; and up to 'level 4' where traders are incorporated into the formal economy within the retail and manufacturing/ service industry sectors.

Following from the above, it is vital that provision be made – both physically and institutionally – for a variety of entrepreneurial activities within the R59. Initiatives to encourage and support entrepreneurship may include, amongst others, a variety of trade stalls at strategic locations (such as along major pedestrian movement lines of public transport transfer facility) within nodes and at major tourism destinations

4.4 R59 Corridor Strategic Development Plan

To facilitate the coordinated and structured development of the R59 Corridor, the study area has been divided into four sub-areas, each containing detailed spatial development proposals that respond to the specific characteristics, opportunities and constraints of the respective area. In addition to the individual sub-area plans, a Composite R59 Corridor Strategic Development Plan has been prepared to illustrate the overall development vision and the spatial relationships between the various activity nodes, development areas, agricultural land, residential areas, industrial precincts, tourism destinations and environmental resources within the corridor.

The spatial proposals are supported by a series of Linkage Tables that have been prepared for each sub-area as well as a Composite Linkage Table applicable to the study area as a whole. These tables constitute an integral component of the Development Plan and serve as a land-use compatibility framework that links the Spatial Planning Categories depicted on the maps with the land use zones contained in the Midvaal Land Use Scheme.

The horizontal rows (left side of table) of the linkage tables represent the Spatial Planning Categories identified on the spatial proposal maps, including, amongst others, industrial areas, business nodes, Transit-Oriented Development (TOD) nodes, mixed-use areas, residential areas, agricultural land, tourism and recreation areas, municipal uses and open space systems. The vertical columns (top of tables) represent the corresponding Midvaal Land Use Scheme use zones and zoning categories that may potentially be considered within each spatial planning category.

The linkage tables should be interpreted as a strategic planning and development management tool that provides guidance regarding the suitability and compatibility of various land uses within the identified spatial planning categories. Three levels of compatibility are reflected in the tables, namely:

- ✓ Allowed: Land uses that are generally aligned with the spatial vision and development objectives of the applicable spatial planning category and may be supported, subject to compliance with the relevant statutory requirements.
- ○ Allowed under Certain Conditions: Land uses that may be considered where site-specific circumstances, mitigation measures, infrastructure capacity, environmental considerations, operational impacts or planning merits justify such development.
- △ Allowed (Long Term): Land uses that may be appropriate over the longer term and may only be considered once certain strategic, infrastructure, market or development prerequisites have been met, or where the area's planned future development trajectory supports such a transition.

The linkage tables do not replace statutory planning processes and should not be interpreted as granting development rights or conferring zoning entitlements. Rather, they provide a policy-based framework to guide investment decisions, land use planning and the assessment of development applications within the context of the Development Plan. All applications for rezoning, consent uses, subdivisions, township establishment or other land use approvals must still be submitted through the appropriate statutory processes and evaluated on their individual merits in terms of the Spatial

Planning and Land Use Management Act (SPLUMA), the Midvaal Municipal Planning By-Law, the Midvaal Land Use Scheme and other applicable legislation, policies and technical requirements.

The spatial proposals and linkage tables should therefore be read together as an integrated development management system. While the spatial proposals establish the desired future land use structure and development pattern of the corridor, the linkage tables provide practical guidance regarding the types of land uses that may be supported within each spatial planning category and the circumstances under which such support may be considered.

In addition, Annexure E contains supplementary development assessment guidelines that must be considered during the evaluation of land use and development applications. These guidelines provide further direction regarding:

- Building Scale and Site Design;
- Traffic Impact and Access Requirements;
- Operational Impacts on Surrounding Properties;
- The Scale and Intensity of Development within Residential Areas; and
- Noxious, Potentially Hazardous or Incompatible Industrial Activities.

Together, the Spatial Development Proposals, Linkage Tables and Annexure E Guidelines provide a comprehensive and integrated framework to guide future development, promote investment certainty, support informed decision-making and ensure that development within the R59 Corridor is undertaken in a coordinated, sustainable and context-sensitive manner.

4.4.1 Sub-Area 1: Klipriver / Garthdale (Figure 68):

The Kliprivier Business Park / Graceview area serves as the primary gateway to the Midvaal Development Corridor. To capitalise on its strategic location and accessibility, industrial development is proposed on both the eastern and western sides of the R59, extending towards the K160 (Joan Road). Future industrial development should be concentrated and clustered along the R59 corridor in order to strengthen the area's industrial identity, improve investment attractiveness and maximise the benefits associated with the corridor's regional accessibility.

To the east, industrial development is proposed to extend towards the Kliprivier, where Everite is located, and further south in alignment with the railway corridor. On the western side of the R59, industrial development is proposed to extend across various portions of the farm Nooitgedacht (previously known as The Grace). The future expansion and development of the Grace / Nooitgedacht area will be subject to the availability of engineering services and the successful approval of the required land use applications.

Figure 67 further includes an indicative proposal for future Class 3 roads through the Garthdale area. These roads are intended to form part of an integrated road hierarchy and provide improved local connectivity in conjunction with the existing R550 and PWV18 routes. The final alignment and

implementation of these roads will be subject to detailed planning, engineering investigations and the necessary statutory approvals.

Deliberate intervention is also required to support the proposed upgrading of the R550 in order to alleviate existing and anticipated traffic congestion associated with future development within the area. In addition, broader road upgrading and maintenance interventions will be required to ensure that the road network functions effectively and safely. Traffic-calming measures should be considered within portions of land located in close proximity to the R550 to prevent rat-running through residential and rural residential areas and to protect the function of local roads.

The Kliprivier Railway Station and the surrounding land parcels are proposed as a High-Intensity Transit-Oriented Development (TOD) Node, supported by a range of complementary mixed-use activities. This node is intended to capitalise on the area's accessibility, promote higher-intensity development and encourage a mix of land uses in proximity to public transport infrastructure.

The existing single residential development identified as W6 should be retained for heritage and tourism purposes. The area presents an opportunity to reinforce the historical character of the corridor and may be integrated with the proposed open space system along the Kliprivier to create an attractive heritage and recreational environment.

The properties identified as W3, located along the R550 (K154), are earmarked for mixed-use development. However, the future development potential of these properties will be dependent on appropriate access arrangements and traffic management measures to ensure efficient movement and maximise development opportunities. Properties situated between the R550 and Croft Road may be consolidated to create larger development parcels, as contemplated in the Waterval Precinct Plan.

The Gardenvale Agricultural Holdings and associated farm portions identified as K4, located between the railway line and the ERWAT Plant, are proposed to remain in agricultural use. This area provides an opportunity to retain productive agricultural land within the broader corridor and contribute to the area's rural character and agricultural economy. The portion of Gardenvale Agricultural Holdings located within the urban development boundary and identified as W5 is earmarked for rural residential development, providing for low-density residential opportunities that are consistent with the area's semi-rural character.

Table 46 and 47 *illustrates the linkage table applicable to Sub-Area 1. The table should be read in conjunction with Figure 67 and provides guidance regarding the relationship between the Spatial Planning Categories identified within the sub-area and the applicable Midvaal Land Use Scheme use zones that may be considered within each category.*

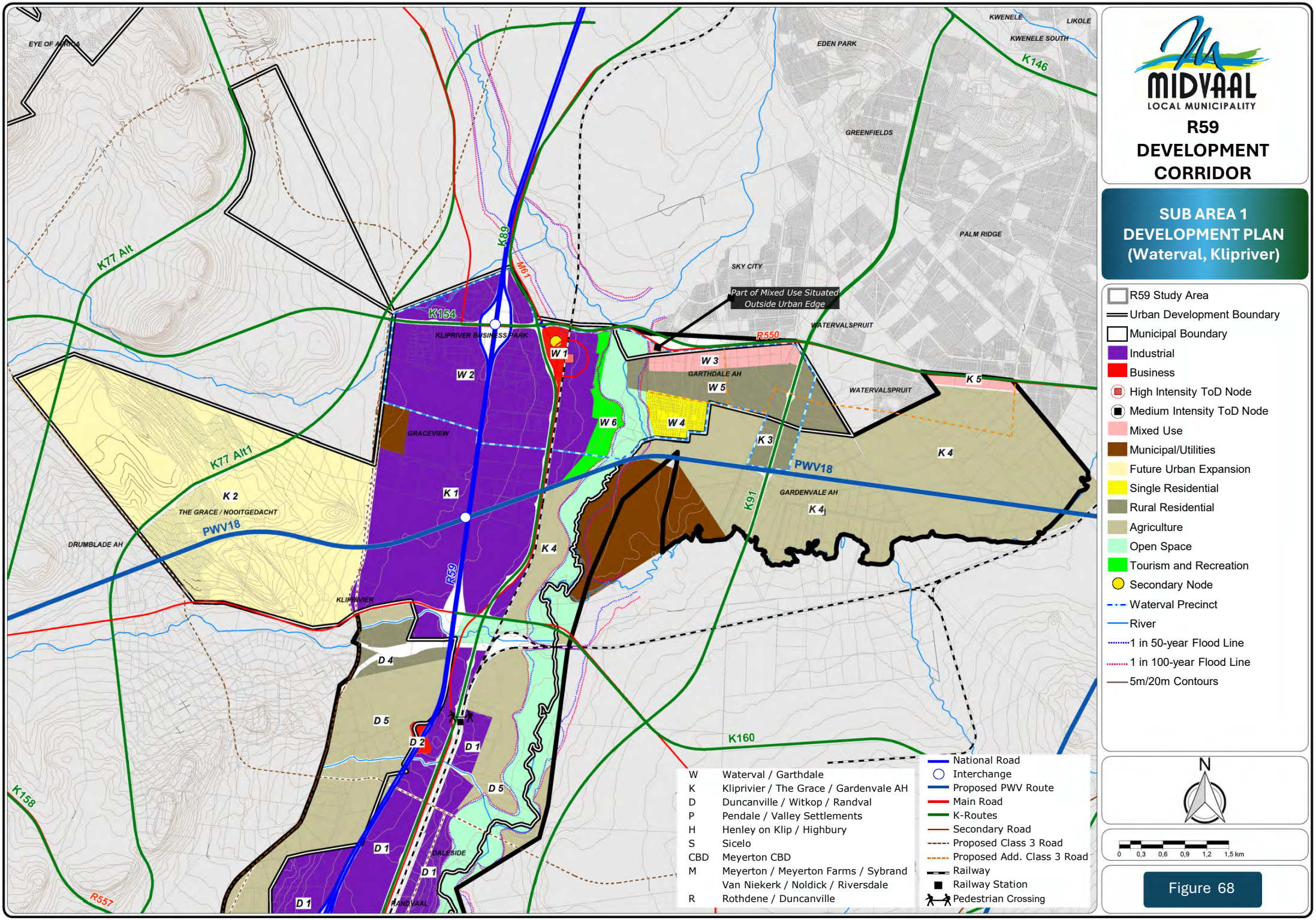

MIDVAAL
LOCAL MUNICIPALITY
R59
DEVELOPMENT
CORRIDOR
SUB AREA 1
DEVELOPMENT PLAN
(Waterval, Klipriver)
R59 Study Area
Urban Development Boundary
Municipal Boundary
Industrial
Business
High Intensity ToD Node
Medium Intensity ToD Node
Mixed Use
Municipal/Utilities
Future Urban Expansion
Single Residential
Rural Residential
Agriculture
Open Space
Tourism and Recreation
Secondary Node
Waterval Precinct
River
1 in 50-year Flood Line
1 in 100-year Flood Line
5m/20m Contours
W Waterval / Garthdale
K Kliprivier / The Grace / Gardenvale AH
D Duncanville / Witkop / Randval
P Pendale / Valley Settlements
H Henley on Klip / Highbury
S Sicelo
CBD Meyerton CBD
M Meyerton / Meyerton Farms / Sybrand Van Niekerk / Noldick / Riversdale
R Rothdene / Duncanville
National Road
Interchange
Proposed PWV Route
Main Road
K-Routes
Secondary Road
Proposed Class 3 Road
Proposed Add. Class 3 Road
Railway
Railway Station
Pedestrian Crossing
N
0 0,3 0,6 0,9 1,2 1,5 km
Part of Mixed Use Situated Outside Urban Edge
KLIPRIVER BUSINESS PARK
GRACEVIEW
THE GRACE / NOOITGEDACHT
DRUMBLADE AH
KLIPRIVIER
GARTHDALE AH
WATERVALSPRUIT
GARDENVALE AH
SKY CITY
PALM RIDGE
GREENFIELDS
EDEN PARK
KWENELE
KWENELE SOUTH
LIKOLE
DALESIDE
RANDVAAL
EYE OF AFRICA
K77 Alt
K77 Alt1
K89
K91
K146
K154
K158
K160
M61
R550
R59
R557
PWV18
W 1
W 2
W 3
W 4
W 5
W 6
K 1
K 2
K 3
K 4
K 5
D 1
D 2
D 4
D 5

Figure 68

Table 46: Waterval: Linkage Table (Refer to Waterval Precinct Plan for more detailed information)

Zone Nr.	Notation	Section A: Spatial Planning Categories	Section B: Midvaal LUS: Use Zones Applicable to Future Usage of Land																		Density	Precinct Plans: Additional Uses Proposed (not part of indicated Use Zones)	Notes	Recommendation
			Residential 1	Residential 2 (25du/ha - FAR: 0,6 3 storeys)	Residential 3 (60du/ha - FAR: 1,0 4storeys)	Transitional Residential	Rural Residential	Business 1 (CBD: FAR: 3,0 4storeys)	Business 2 (Local/Neighbourhood: FAR:2,0 3 storeys)	Industrial 1 (FAR: 1,5 3 Storeys)	Industrial 2 (Inc. Noxious FAR: 1,5 3 Storeys)	Institutional	Municipal	Utilities	Cemetery	Agriculture	Conservation	Open Space	Recreation	Transport	Mining				
	Urban Node/Precinct																							
W 1		Business/ToD Node: High Intensity (Vertical) Mixed Use		√	√			√	√			√	√	√				√		√		40du/ha within ToD Node	**Additional Uses: Light Industry** (on merit)	The Precinct Plan allowed a selection of Land Uses from Business 1, 2, Residential 1,2,3, Institutional, Municipal, Open Space, Recreation, Utilities and Transport.	Urban Design to accommodate the best possible solution for the area. A ToD node should ideally include Higher Densities.
W 2		Industrial								√	√	√	√	√				√		√			**Additional Uses:** Conference Facility, Production/Television Studio, Hostel	The Precinct Plan allowed a selection of Land Uses from Industrial 1,2.	Industrial should be allowed in accordance with the MLUS.
W 3		Transitional Strip: Low Intensity (Horizontal) Mixed Use	√	√			√		○	○		√	√	√		√		√		√			**Additional Uses:** Panelbeater, Production/Television Studio, Show Room, Laboratory, Laundromat, Light Industry, Motor Sales Market, Scrapyard, Service Enterprise, Storage.	The Precinct Plan allowed a selection of Land Uses from Agriculture, Rural Residential, Residential 2, Institutional, and limited Industrial 1 uses.	PP Additional uses allowed subject to Compatibility Guidelines (Annexure E)
W 4		Single Residential	√	√					○			√	√	√				√		○			**Additional Uses:** Shop, Taxi Rank	The Precinct Plan allowed a selection of Land Uses from Residential 1, Municipal, Open Space.	Local Retail should be allowed on merit in the suburb subject to Compatibility Guidelines (Annexure E)
W 5		Rural Residential					√					√	√	√	○	√		√	√	○			**Additional Uses:** Production/Television Studio, Taxi Rank **Additional Uses (Agriculture/Recreation)**:Agricultural Industry, Botanical Garden, Conservation, Equestrian Centre, Feed-pen Farming, Flea market, Garden Centre, Greenhouse, Nursery Gardens, Clinic, Place of Refreshment, Private Club, Service Enterprise, Social Hall.	The Precinct Plan allowed a selection of Land Uses from Agriculture, Rural Residential, Recreation.	PP Additional uses allowed subject to Compatibility Guidelines (Annexure E)
W 6		Tourism and Recreation														○	√	√	√				The Precinct Plan allowed a selection of Land Uses from Open Space and Recreation.	

Notes:
√ Allowed
○ Allowed under certain conditions

General Notes:

1. All applications and land use proposals shall be subject to relevant application procedures and any relevant provisions or requirements, as depicted in SPLUMA, SPLUMA By-laws, Midvaal LUS and any other parts of the SDF, as well as access management requirements and any required studies or investigations provided for in any other applicable policy or legislation.
2. Compatibility Table (Annexure E) to be used in evaluating applications in terms of (a) Building Scale and Site Design, (b) Traffic Impact, (c)Operational Impact, (d) Scale of uses/development in residential areas, (e)Noxious Industries

Table 47: Klipriver Business Park/Industrial Park South: Linkage Table

Zone Nr.	Notation	Section A: Spatial Planning Categories	Section B: Midvaal LUS: Use Zones Applicable to Future Usage of Land																		Sources
			Residential 1	Residential 2 (25du/ha -FAR: 0,6 3 storeys)	Residential 3 (60du/ha -FAR: 1,0 4storeys)	Transitional Residential	Rural Residential	Business 1 (CBD: FAR: 3,0 4storeys)	Business 2 (Local/Neighbourhood: FAR:2,0 3 storeys)	Industrial 1 (FAR: 1,5 3 Storeys)	Industrial 2 (Inc. Noxious FAR: 1,5 3 Storeys)	Institutional	Municipal	Utilities	Cemetery	Agriculture	Conservation	Open Space	Recreation	Transport	Mining	
	Urban Node/Precinct																				
K 1		Industrial								√	√	√	√	√				√		√		Midvaal SDF 2022-2027, May 2022
K 2		Future Urban Expansion	ΔΔ	ΔΔ	ΔΔ	○			ΔΔ			ΔΔ	ΔΔ	ΔΔ	○	√		ΔΔ		ΔΔ		Midvaal SDF 2022-2027, May 2022
K 3		Rural Residential					√					√	√	√	○	√		√	√	○		Continuation of Rural Residential (Waterval Precinct)
K 4		Agriculture										√	√	√	○	√		√	○	○		Current Agriculture
K 5		Transitional Strip: Low Intensity (Horizontal) Mixed Use (Long Term)	√	√			√		○	○		√	√	√		√		√		√		Extension of Transitional Strip (Waterval Precinct)

Notes:

√	Allowed
○	Allowed under certain conditions
ΔΔ	Allowed (Long Term)

General Notes:

1. All applications and land use proposals shall be subject to relevant application procedures and any relevant provisions or requirements, as depicted in SPLUMA, SPLUMA By-laws, Midvaal LUS and any other parts of the SDF, as well as access management requirements and any required studies or investigations provided for in any other applicable policy or legislation.
2. Compatibility Table (Annexure E) to be used in evaluating applications in terms of (a) Building Scale and Site Design, (b) Traffic Impact, (c)Operational Impact, (d) Scale of uses/development in residential areas, (e)Noxious Industries

4.4.2 Sub-Area 2: Daleside, Pendale and Highbury (Figure 69):

Industrial development is proposed on the eastern side of the R59, between the R59, the M61/K81 and the railway line. A smaller area of industrial development is also proposed north of the existing Daleside Industrial Area, extending towards the Skansdam Railway Station. On the western side of the R59, industrial development is proposed at the intersection of the R557 and the R59, extending up to the Urban Development Boundary. Additional industrial development is proposed on the south-western corner of the intersection, extending to Malcolm Road.

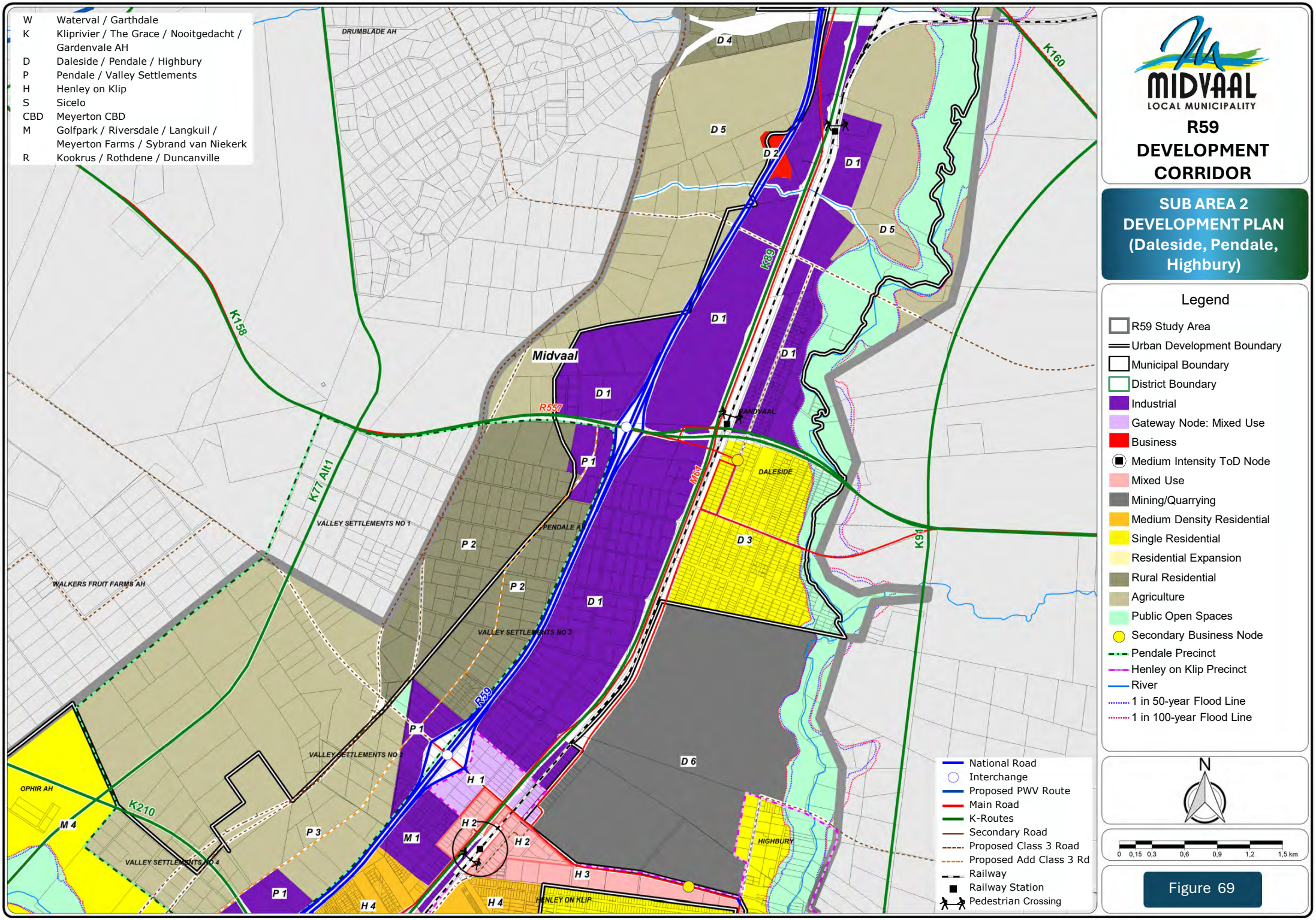
It should be noted that large portions of the broader Daleside Precinct are underlain by dolomitic formations. Consequently, all development applications within these areas will be subject to detailed geotechnical investigations as well as compliance with critical development guidelines and requirements relating to matters such as density, coverage, minimum service levels and other applicable development parameters.

Malcolm Road should serve as the interim Class 3 road until such time as the area between Malcolm Road and the R59 has been developed and a more comprehensive movement network can be established. Accordingly, Malcolm Road should be upgraded, as also identified in the Pendale Precinct Plan, to ensure that it can adequately fulfil its intended movement and accessibility function within the area.

The Valley Settlements area adjacent to the proposed Langkuil development is earmarked for agricultural-related development. However, more intensive development may be considered within the context of the proposed residential area. The more intensive development identified adjacent to the Langkuil development relates specifically to more intensive agricultural activities or complementary uses that support and are compatible with the broader character and function of the area.

Agricultural activities within the area should be actively supported to contribute to the livelihoods of farmers and to facilitate employment creation. The retention and promotion of agricultural production remain important components of the area's economic base and rural character.

Table 48 and 49 illustrates the linkage tables applicable to Sub-Area 2. The table should be read in conjunction with the spatial development proposals and provides guidance on the relationship between the Spatial Planning Categories identified within the sub-area and the applicable Midvaal Land Use Scheme use zones.



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R59 DEVELOPMENT CORRIDOR

SUB AREA 2 DEVELOPMENT PLAN (Daleside, Pendale, Highbury)

Legend

- R59 Study Area
- Urban Development Boundary
- Municipal Boundary
- District Boundary
- Industrial
- Gateway Node: Mixed Use
- Business
- Medium Intensity ToD Node
- Mixed Use
- Mining/Quarrying
- Medium Density Residential
- Single Residential
- Residential Expansion
- Rural Residential
- Agriculture
- Public Open Spaces
- Secondary Business Node
- Pendale Precinct
- Henley on Klip Precinct
- River
- 1 in 50-year Flood Line
- 1 in 100-year Flood Line

Figure 69

Table 48: Daleside/Pendale/Highbury: Linkage Table

Zone Nr.	Notation	Section A: Spatial Planning Categories	Section B: Midvaal LUS: Use Zones Applicable to Future Usage of Land																			Sources
			Residential 1	Residential 2 (25du/ha -FAR: 0,6 3 storeys)	Residential 3 (60du/ha -FAR: 1,0 4storeys)	Transitional Residential	Rural Residential	Business 1 (CBD: FAR: 3,0 4storeys)	Business 2 (Local/Neighbourhood: FAR:2,0 3 storeys)	Industrial 1 (FAR: 1,5 3 Storeys)	Industrial 2 (Inc. Noxious FAR: 1,5 3 Storeys)	Institutional	Municipal	Utilities	Cemetery	Agriculture	Conservation	Open Space	Recreation	Transport	Mining	
	Urban Node/Precinct																					
D 1		Industrial								√	√	√	√	√				√		√		Midvaal SDF 2022-2027, May 2022
D 2		Business							√											√		Current Zoning
D 3		Single Residential	√	√					○			√	√	√				√		○		Midvaal SDF 2022-2027, May 2022
D 4		Rural Residential					√					√	√	√	○	√		√	√	○		Current Land Use
D 5		Agriculture										√	√	√	○	√		√	○	○		Current Agriculture
D 6		Mining/Quarrying												√						√	√	Midvaal SDF 2022-2027, May 2022
		Notes:	√ Allowed																			
			○ Allowed under certain conditions																			

General Notes:

1. All applications and land use proposals shall be subject to relevant application procedures and any relevant provisions or requirements, as depicted in SPLUMA, SPLUMA By-laws, Midvaal LUS and any other parts of the SDF, as well as access management requirements and any required studies or investigations provided for in any other applicable policy or legislation.
2. Compatibility Table (Annexure E) to be used in evaluating applications in terms of (a) Building Scale and Site Design, (b) Traffic Impact, (c)Operational Impact, (d) Scale of uses/development in residential areas, (e)Noxious Industries

Table 49: Pendale: Linkage Table (Refer to Pendale Valley Settlement Precinct Plan for more detailed information)

Zone Nr.	Notation	Section A: Spatial Planning Categories	Section B: Midvaal LUS: Use Zones Applicable to Future Usage of Land																			Precinct Plans: Additional Uses Proposed (not part of indicated Use Zones)	Precinct Plans: Excluded Land Uses	Recommendation
			Residential 1	Residential 2 (25 du/ha -FAR: 0,6 3 storeys)	Residential 3 (60 du/ha -FAR: 1,0 4storeys)	Transitional Residential	Rural Residential	Business 1 (CBD: FAR: 3,0 4storeys)	Business 2 (Local/Neighbourhood: FAR:2,0 3 storeys)	Industrial 1 (FAR: 1,5 3 Storeys)	Industrial 2 (Inc. Noxious FAR: 1,5 3 Storeys)	Institutional	Municipal	Utilities	Cemetery	Agriculture	Conservation	Open Space	Recreation	Transport	Mining			
	Urban Node/Precinct																							
P 1		Industrial								√	√	√	√	√				√		√			Some Industrial 1 Land Uses of were omitted, but can be evaluated by Midvaal LM when compared with the vision for the area, subject to Compatibility Guidelines (Annexure E)	
P 2		Rural Residential and Tourism					√					√	√	√	○	√		√	√	○		**Additional Uses:** Boarding House, Garden Centre, Greenhouse		PP Additional uses allowed subject to Compatibility Guidelines (Annexure E)
P 3		Agriculture and Open Space										√	√	√	○	√		√	○	○				

Notes:
√ Allowed
○ Allowed under certain conditions

General Notes:

1. All applications and land use proposals shall be subject to relevant application procedures and any relevant provisions or requirements, as depicted in SPLUMA, SPLUMA By-laws, Midvaal LUS and any other parts of the SDF, as well as access management requirements and any required studies or investigations provided for in any other applicable policy or legislation.
2. Compatibility Table (Annexure E) to be used in evaluating applications in terms of (a) Building Scale and Site Design, (b) Traffic Impact, (c)Operational Impact, (d) Scale of uses/development in residential areas, (e)Noxious Industries

4.4.3 Sub-Area 3: Meyerton, Sicelo and Henley-on-Klip (Figure 70):

The Henley Drive / Blesbok Street interchange with the R59 is proposed as a Gateway Node combined with a High-Intensity Transit-Oriented Development (TOD) Node. This node is intended to capitalise on its strategic location and accessibility, providing an opportunity for higher-intensity, mixed-use development associated with the regional movement network and public transport accessibility.

The land parcels identified as H3, situated between Henley Drive and Iffley Road, are proposed for mixed-use activities. These areas are intended to accommodate an appropriate mix of compatible land uses that contribute to economic activity, investment attraction and local service provision.

The western portion of Henley-on-Klip that falls within the Urban Development Boundary e is proposed for medium-density residential development, linked to the land situated between Springbok Road and the R59. This residential component should be integrated with the broader development structure of the area and contribute towards the creation of a coherent and sustainable urban environment.

The land located south of Henley-on-Klip and Golf Park is earmarked for residential development, together with the provision of the required community facilities necessary to support future residents and ensure the sustainable development of the area.

The land parcels situated on either side of the K89 and K210 are proposed for mixed-use or light industrial development, subject to compliance with the applicable access requirements associated with these K-routes. The appropriateness and extent of development within these areas will therefore be informed by the ability to provide suitable access arrangements and maintain the functionality of the road network.

The land parcels situated between the railway line and the R59, extending from the proposed K210 northwards to Noldick, are earmarked for mixed-use activities. These mixed-use activities may include residential, business, commercial and industrial uses. Clarification regarding the future intentions of Gautrans in respect of Morris Road, including the possible deproclamation thereof, will be critical to unlocking and guiding the future development potential of this area.

Particular emphasis should be placed on promoting mixed-use development within the Noldick area north of Johan le Roux Road. The northern section of Noldick should have a strong mixed-use focus, while the southern section is also proposed for mixed-use development that may incorporate a combination of land uses, including residential development. Notwithstanding the inclusion of residential opportunities, the primary emphasis for both areas remains the establishment of a mixed-use environment that promotes economic activity, accessibility and a diverse range of compatible land uses.

The current initiative relating to the development of the proposed pedestrian bridge across the R59, as illustrated on the figure, is strongly supported. This initiative should be further enhanced through the upgrading of the existing railway pedestrian bridge. In addition, Station Road, which provides the link between the proposed pedestrian bridge and the railway pedestrian bridge, should be upgraded in order to complete and strengthen the pedestrian connection between Sicelo

and Meyerton. The enhancement of this pedestrian linkage will improve accessibility and reinforce connectivity between residential areas, transport infrastructure and economic opportunities on either side of the R59.

The Meyerton CBD is earmarked for retail and business uses, while infill development to the south of the CBD should be actively promoted. Continued revitalisation of the CBD should be encouraged in order to strengthen its role as the primary commercial and business centre within the area, improve investment confidence and support ongoing economic activity.

Tables 50 – 53 illustrates the linkage tables applicable to Sub-Area 3. The tables should be read in conjunction with the spatial development proposals and provides guidance regarding the relationship between the Spatial Planning Categories identified within the sub-area and the applicable Midvaal Land Use Scheme use zones.

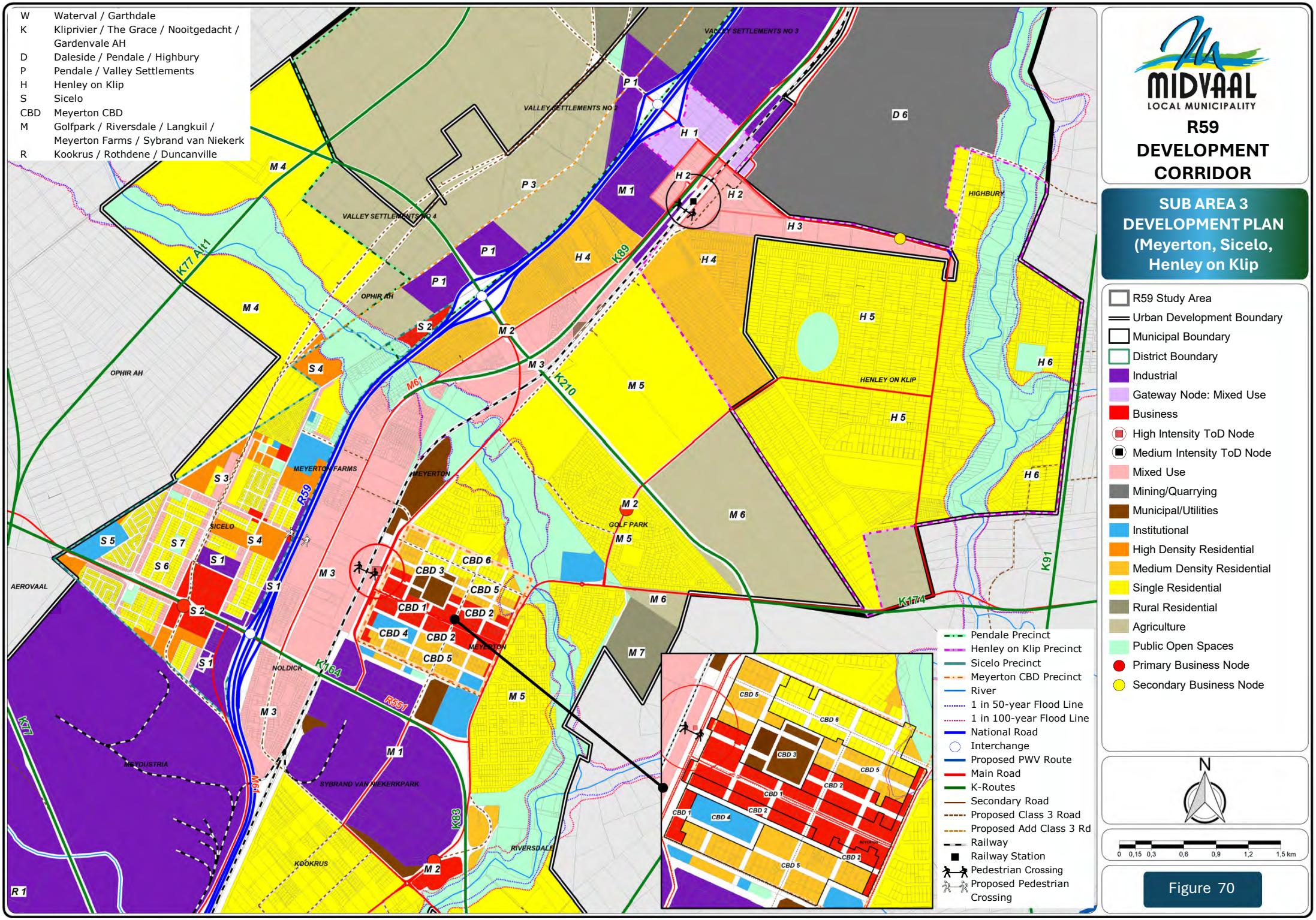

W Waterval / Garthdale
K Klipriver / The Grace / Nooitgedacht / Gardenvale AH
D Daleside / Pendale / Highbury
P Pendale / Valley Settlements
H Henley on Klip
S Sicelo
CBD Meyerton CBD
M Golfpark / Riversdale / Langkuil / Meyerton Farms / Sybrand van Niekerk
R Kookrus / Rothdene / Duncanville
MIDVAAL
LOCAL MUNICIPALITY
R59 DEVELOPMENT CORRIDOR
SUB AREA 3 DEVELOPMENT PLAN (Meyerton, Sicelo, Henley on Klip
R59 Study Area
Urban Development Boundary
Municipal Boundary
District Boundary
Industrial
Gateway Node: Mixed Use
Business
High Intensity ToD Node
Medium Intensity ToD Node
Mixed Use
Mining/Quarrying
Municipal/Utilities
Institutional
High Density Residential
Medium Density Residential
Single Residential
Rural Residential
Agriculture
Public Open Spaces
Primary Business Node
Secondary Business Node
Pendale Precinct
Henley on Klip Precinct
Sicelo Precinct
Meyerton CBD Precinct
River
1 in 50-year Flood Line
1 in 100-year Flood Line
National Road
Interchange
Proposed PWV Route
Main Road
K-Routes
Secondary Road
Proposed Class 3 Road
Proposed Add Class 3 Rd
Railway
Railway Station
Pedestrian Crossing
Proposed Pedestrian Crossing
N
0 0,15 0,3 0,6 0,9 1,2 1,5 km
Figure 70

Table 50: Henley on Klip: Linkage Table (Refer to Henley on Klip Precinct Plan for more detailed information)

Zone Nr.	Notation	Section A: Spatial Planning Categories	Section B: Midvaal LUS: Use Zones Applicable to Future Usage of Land																			Density	Precinct Plans: Excluded Land Uses	Recommendation
			Residential 1	Residential 2 (25du/ha -FAR: 0,6 3 storeys)	Residential 3 (60du/ha -FAR: 1,0 4storeys)	Transitional Residential	Rural Residential	Business 1 (CBD: FAR: 3,0 4storeys)	Business 2 (Local/Neighbourhood: FAR:2,0 3 storeys)	Industrial 1 (FAR: 1,5 3 Storeys)	Industrial 2 (Inc. Noxious FAR: 1,5 3 Storeys)	Institutional	Municipal	Utilities	Cemetery	Agriculture	Conservation	Open Space	Recreation	Transport	Mining			
	Urban Node/Precinct																							
H 1		Gateway Node: Medium Intensity (Vertical & Horisontal) Mixed Use		√					√	√		√	√	√				√		√		40du/ha		**Industrial 1** should also be allowed (Land Earmarked for Industrial/Commercial in SDF).
H 2		Business/ToD Node: Medium Intensity (Vertical) Mixed Use		√					√			√	√	√				√		√		Close as possible to 40du/ha		A ToD node should ideally include Higher Densities.
H 3		Extended (Linear Strip) Secondary Node: Low Intensity (Horisontal) Mixed Use	√	√					√			√	√	√				√		√		Within node: 40du/ha Within 200m from node: Densification not allowed		
H 4		Medium Density Residential	√	√					○			√	√	√				√		○		Single Res: 20du/ha (each erf min. 500m²). ST: 25du/ha		Local Retail should be allowed on merit in the suburb subject to Compatibility Guidelines (Annexure E)
H 5		Single Residential	√						○			√	√	√				√		○		10du/ha (each erf min. 1 000m²)	No Sectional Title Units allowed.	Local Retail should be allowed on merit in the suburb subject to Compatibility Guidelines (Annexure E)
H 6		Rural Density Residential	√									√	√	√				√		○		5du/ha (each erf min. 2 000m²)	No Sectional Title Units allowed.	
		Notes:	√ Allowed																					
			○ Allowed under certain conditions																					

General Notes:

1. All applications and land use proposals shall be subject to relevant application procedures and any relevant provisions or requirements, as depicted in SPLUMA, SPLUMA By-laws, Midvaal LUS and any other parts of the SDF, as well as access management requirements and any required studies or investigations provided for in any other applicable policy or legislation.
2. Compatibility Table (Annexure E) to be used in evaluating applications in terms of (a) Building Scale and Site Design, (b) Traffic Impact, (c)Operational Impact, (d) Scale of uses/development in residential areas, (e)Noxious Industries

Table 51: CBD: Linkage Table (Refer to Midvaal CBD Precinct Plan for more detailed information)

Zone Nr.	Notation	Section A: Spatial Planning Categories	Section B: Midvaal LUS: Use Zones Applicable to Future Usage of Land																			Density
			Residential 1	Residential 2 (25du/ha - FAR: 0,6 3 storeys)	Residential 3 (60du/ha - FAR: 1,0 4storeys)	Transitional Residential	Rural Residential	Business 1 (CBD: FAR: 3,0 4storeys)	Business 2 (Local/Neighbourhood: FAR:2,0 3 storeys)	Industrial 1 (FAR: 1,5 3 Storeys)	Industrial 2 (Inc. Noxious FAR: 1,5 3 Storeys)	Institutional	Municipal	Utilities	Cemetery	Agriculture	Conservation	Open Space	Recreation	Transport	Mining	
	Urban Node/Precinct																					
CBD 1		CBD ToD/Core Node: High Intensity (Vertical) Mixed Use			√			√	√			√	√	√				√		√		Residential Density close as possible to 60du/ha
CBD 2		CBD Core Support Area: Medium Intensity (Horisontal & Vertical) Mixed Use		√	√				√			√	√	√				√		√		Residential Density 25-60du/ha
CBD 3		Municipal/Utilities										√	√	√				√		√		
CBD 4		Institutional										√	√	√				√		√		
CBD 5		Medium to High Density Residential		√	√				○			√	√	√				√		√		Residential Density 25-60du/ha
CBD 6		Single Residential	√	√					○			√	√	√				√		○		Local Retail should be allowed on merit in the suburb subject to Compatibility Guidelines (Annexure E)

Notes:

√	Allowed
○	Allowed under certain conditions

General Notes:

1. All applications and land use proposals shall be subject to relevant application procedures and any relevant provisions or requirements, as depicted in SPLUMA, SPLUMA By-laws, Midvaal LUS and any other parts of the SDF, as well as access management requirements and any required studies or investigations provided for in any other applicable policy or legislation.
2. Compatibility Table (Annexure E) to be used in evaluating applications in terms of (a) Building Scale and Site Design, (b) Traffic Impact, (c)Operational Impact, (d) Scale of uses/development in residential areas, (e)Noxious Industries

Table 52: Golf Park/Riversdale/Langkuil/Meyerton/Sybrand van Niekerk: Linkage Table

Zone Nr.	Notation	Section A: Spatial Planning Categories	Section B: Midvaal LUS: Use Zones Applicable to Future Usage of Land																		Sources
			Residential 1	Residential 2 (25du/ha - FAR: 0,6 3 storeys)	Residential 3 (60du/ha - FAR: 1,0 4storeys)	Transitional Residential	Rural Residential	Business 1 (CBD: FAR: 3,0 4storeys)	Business 2 (Local/Neighbourhood: FAR:2,0 3 storeys)	Industrial 1 (FAR: 1,5 3 Storeys)	Industrial 2 (Inc. Noxious FAR: 1,5 3 Storeys)	Institutional	Municipal	Utilities	Cemetery	Agriculture	Conservation	Open Space	Recreation	Transport	Mining	
	Urban Node/Precinct																				
M 1		Industrial								√	√	√	√	√				√		√		Midvaal SDF 2022-2027, May 2022
M 2		Business Node: Medium Intensity (Horisontal & Vertical)		√					√			√	√	√				√		√		Neighbourhood Nodes, SDF,2022
M 3		Medium Intensity (Horisontal & Vertical) Mixed Use	√	√					√	√	○	√	√	√				√		√		R-59 Corridor, 2011
M 4		Single to High Density Residential	√	√	√				○			√	√	√				√		√		Midvaal SDF 2022-2027, May 2022
M 5		Single Residential	√	√					○			√	√	√				√		○		Midvaal SDF 2022-2027, May 2022
M 6		Agriculture										√	√	√	○	√		√	○	○		Midvaal SDF 2022-2027, May 2022
M 7		Rural Residential					√					√	√	√	○	√		√	√	○		Midvaal SDF 2022-2027, May 2022
		Notes:	√ Allowed																		
			○ Allowed under certain conditions																		

General Notes:

1. All applications and land use proposals shall be subject to relevant application procedures and any relevant provisions or requirements, as depicted in SPLUMA, SPLUMA By-laws, Midvaal LUS and any other parts of the SDF, as well as access management requirements and any required studies or investigations provided for in any other applicable policy or legislation.
2. Compatibility Table (Annexure E) to be used in evaluating applications in terms of (a) Building Scale and Site Design, (b) Traffic Impact, (c)Operational Impact, (d) Scale of uses/development in residential areas, (e)Noxious Industries

Table 53: Sicelo: Linkage Table (Refer to Sicelo Precinct Plan for more detailed information)

Zone Nr.	Notation	Section A: Spatial Planning Categories	Section B: Midvaal LUS: Use Zones Applicable to Future Usage of Land																			Density
			Residential 1	Residential 2 (25du/ha -FAR: 0,6 3 storeys)	Residential 3 (60du/ha -FAR: 1,0 4storeys)	Transitional Residential	Rural Residential	Business 1 (CBD: FAR: 3,0 4storeys)	Business 2 (Local/Neighbourhood: FAR:2,0 3 storeys)	Industrial 1 (FAR: 1,5 3 Storeys)	Industrial 2 (Inc. Noxious FAR: 1,5 3 Storeys)	Institutional	Municipal	Utilities	Cemetery	Agriculture	Conservation	Open Space	Recreation	Transport	Mining	
	Urban Node/Precinct																					
S 1		Industrial								√	√	√	√	√				√		√		
S 2		Business Nodes: Medium Intensity (Vertical) Mixed Use		√					√			√	√	√				√		√		Residential Density close as possible to 40du/ha
S 3		Residential/Business Spines: Medium Intensity (Horisontal & Vertical) Mixed Use		√					√			√	√	√				√		√		Residential Density 25du/ha
S 4		High Density Residential		√	√				○			√	√	√				√		√		Residential Density 60du/ha
S 5		Social Nodes										√	√	√				√		√		
S 6		Single Residential	√	√					○			√	√	√				√		○		Local Retail should be allowed on merit in the suburb subject to Compatibility Guidelines (Annexure E)
S 7		Open Space/Parks																√	√			
		Notes:	√ Allowed																			
			○ Allowed under certain conditions																			

General Notes:

1. All applications and land use proposals shall be subject to relevant application procedures and any relevant provisions or requirements, as depicted in SPLUMA, SPLUMA By-laws, Midvaal LUS and any other parts of the SDF, as well as access management requirements and any required studies or investigations provided for in any other applicable policy or legislation.
2. Compatibility Table (Annexure E) to be used in evaluating applications in terms of (a) Building Scale and Site Design, (b) Traffic Impact, (c)Operational Impact, (d) Scale of uses/development in residential areas, (e)Noxious Industries

4.4.4 Sub-Area 4: Kookrus, Rothdene and Duncanville (Figure 71):

The area located to the west of the R59, comprising Samancor, Meydustria and surrounding industrial areas, is proposed for heavy industrial development. In order to protect the integrity and development potential of the remainder of the R59 Development Corridor, noxious industries should, where appropriate, be concentrated within this area. This approach seeks to spatially contain potentially incompatible industrial activities within an established industrial precinct while minimising potential land use conflicts elsewhere in the corridor.

The creation of smaller cadastral entities (erven) within the industrial area is proposed in order to stimulate SMME development and support entrepreneurial activity. Smaller erven provide opportunities for emerging businesses and smaller industrial operators to establish operations without the need to develop or acquire large industrial land parcels before becoming operational. This approach is intended to create a more accessible and flexible industrial development environment, particularly for small-scale industrial enterprises and specialised industrial activities.

The sub-area should also take into consideration the proposed Springfield Coal Mine and any associated mining activities. Alignment between mining operations and adjacent non-mining land uses will be important, and potential land use conflicts should be mitigated through appropriate planning and development management measures. Particular consideration should be given to ensuring compatibility between mining-related activities and surrounding industrial, business, agricultural and residential land uses.

Business Nodes (M2) are proposed at Riverstone Mall and Riversdale along the proposed PWV20, as well as at the Pierneef Boulevard / R59 interchange. These nodes are intended to strengthen the area's commercial function, improve access to goods and services, and support economic activity within strategically located areas of the corridor.

The land situated between the Kliprivier and the R59 should be reserved for agricultural uses. Properties within this area front onto the Kliprivier and possess potential for intensive agricultural activities. The retention of agricultural land within this locality contributes to the area's agricultural economy while taking advantage of the opportunities associated with river frontage and productive agricultural uses.

The southern portion of the study area is earmarked for industrial development, as it forms part of the broader Duncanville Industrial Area. This area represents the location where the Midvaal portion of the R59 Corridor interfaces and integrates with the industrial structure of the Emfuleni Local Municipality. The continued promotion of industrial development within this area is therefore consistent with the established land use pattern and broader economic function of the southern section of the corridor.

Table 54 contains the linkage table applicable to Sub-Area 4. The table should be read in conjunction with the spatial development proposals and provides guidance regarding the relationship between the Spatial Planning Categories identified within the sub-area and the applicable Midvaal Land Use Scheme use zones.

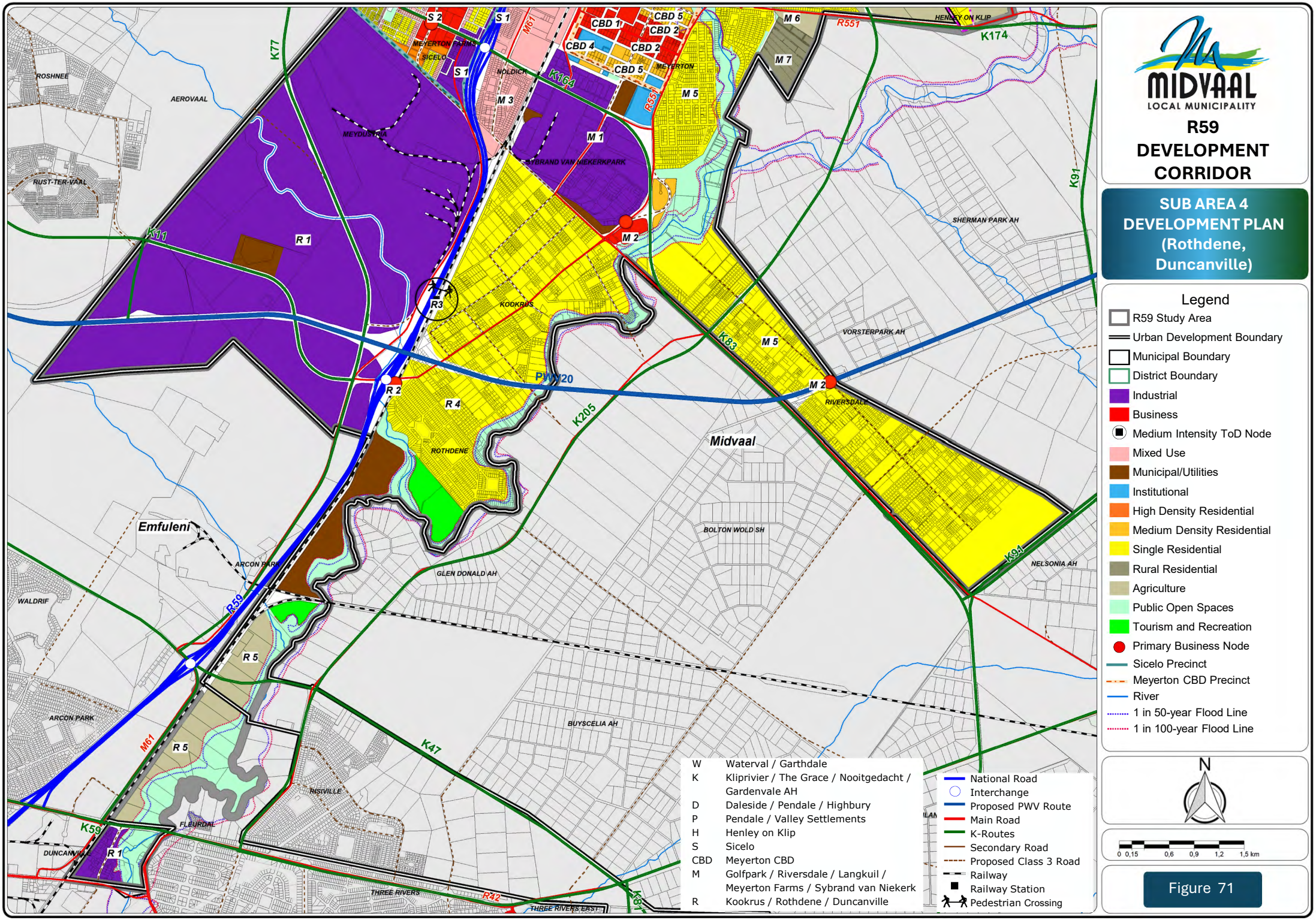

MIDVAAL
LOCAL MUNICIPALITY
R59 DEVELOPMENT CORRIDOR
SUB AREA 4 DEVELOPMENT PLAN (Rothdene, Duncanville)
Legend
R59 Study Area
Urban Development Boundary
Municipal Boundary
District Boundary
Industrial
Business
Medium Intensity ToD Node
Mixed Use
Municipal/Utilities
Institutional
High Density Residential
Medium Density Residential
Single Residential
Rural Residential
Agriculture
Public Open Spaces
Tourism and Recreation
Primary Business Node
Sicelo Precinct
Meyerton CBD Precinct
River
1 in 50-year Flood Line
1 in 100-year Flood Line
W Waterval / Garthdale
K Kliprivier / The Grace / Nooitgedacht / Gardenvale AH
D Daleside / Pendale / Highbury
P Pendale / Valley Settlements
H Henley on Klip
S Sicelo
CBD Meyerton CBD
M Golfpark / Riversdale / Langkuil / Meyerton Farms / Sybrand van Niekerk
R Kookrus / Rothdene / Duncanville
National Road
Interchange
Proposed PWV Route
Main Road
K-Routes
Secondary Road
Proposed Class 3 Road
Railway
Railway Station
Pedestrian Crossing
N
0 0,15 0,6 0,9 1,2 1,5 km
Figure 71
Midvaal
Emfuleni
ROSHNEE
AEROVAAL
RUST-TER-VAAL
MEYERTON FARMS
SICELO
NOLDICK
MEYERTON
HENLEY ON KLIP
SHERMAN PARK AH
VORSTERPARK AH
RIVERSDALE
KOOKRUS
ROTHDENE
BOLTON WOLD SH
GLEN DONALD AH
NELSONIA AH
BUYSCELIA AH
ARCON PARK
WALDRIF
RISIVILLE
FLEURDAL
DUNCANVILLE
THREE RIVERS
THREE RIVERS EAST
SYBRAND VAN NIEKERKPARK
PWV20
K77
K164
K174
K11
K83
K205
K91
K94
K59
K47
K61
R59
R551
R42
M61
S 1
S 2
CBD 1
CBD 2
CBD 4
CBD 5
M 1
M 2
M 3
M 5
M 6
M 7
R 1
R 2
R3
R 4
R 5

Table 54: Kookrus/Rothdene/Duncanville: Linkage Table

Zone Nr.	Notation	Section A: Spatial Planning Categories	Section B: Midvaal LUS: Use Zones Applicable to Future Usage of Land																			Sources
			Residential 1	Residential 2 (25du/ha -FAR: 0,6 3 storeys)	Residential 3 (60du/ha -FAR: 1,0 4storeys)	Transitional Residential	Rural Residential	Business 1 (CBD: FAR: 3,0 4storeys)	Business 2 (Local/Neighbourhood: FAR:2,0 3 storeys)	Industrial 1 (FAR: 1,5 3 Storeys)	Industrial 2 (Inc. Noxious FAR: 1,5 3 Storeys)	Institutional	Municipal	Utilities	Cemetery	Agriculture	Conservation	Open Space	Recreation	Transport	Mining	
	Urban Nod	Section A: Spatial Planning Categories																				
R1		Industrial								√	√	√	√	√				√		√		Midvaal SDF 2022-2027, May 2022
R2		Business Node: Medium Intensity (Horisontal & Vertical)		√					√			√	√	√				√		√		Midvaal SDF 2022-2027, May 2022
R3		ToD Node: Medium Intensity (Vertical) Mixed Use		√					√			√	√	√				√		√		Midvaal SDF 2022-2027, May 2022
R4		Single Residential	√	√					○			√	√	√				√		○		Midvaal SDF 2022-2027, May 2022
R5		Agriculture										√	√	√	○	√		√	○	○		Midvaal SDF 2022-2027, May 2022
		Notes:	√ Allowed																			
			○ Allowed under certain conditions																			

General Notes:

1. All applications and land use proposals shall be subject to relevant application procedures and any relevant provisions or requirements, as depicted in SPLUMA, SPLUMA By-laws, Midvaal LUS and any other parts of the SDF, as well as access management requirements and any required studies or investigations provided for in any other applicable policy or legislation.
2. Compatibility Table (Annexure E) to be used in evaluating applications in terms of (a) Building Scale and Site Design, (b) Traffic Impact, (c)Operational Impact, (d) Scale of uses/development in residential areas, (e)Noxious Industries

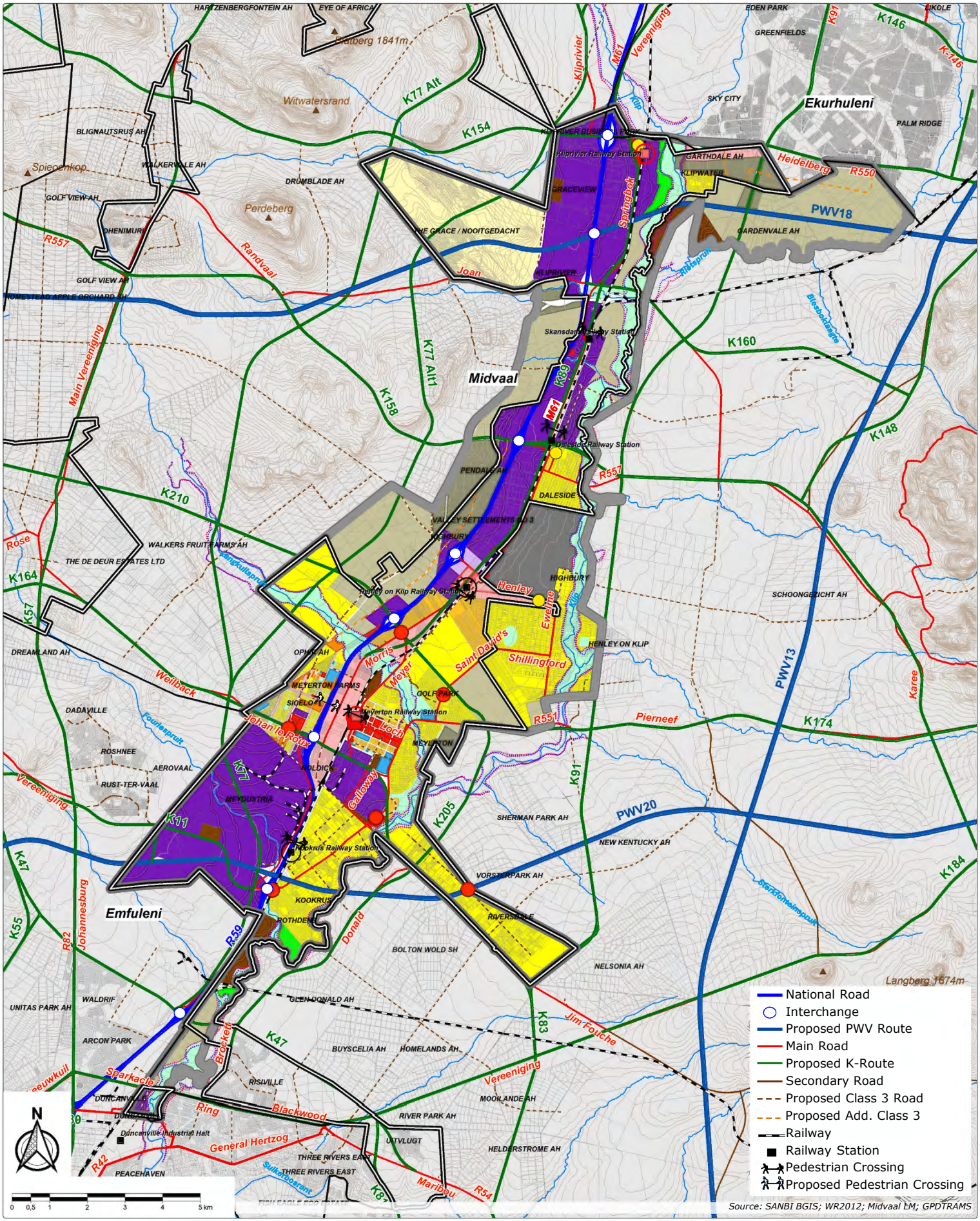
4.4.5 Composite R59 Corridor Strategic Development Plan

This section serves as the culmination of the four sub-area plans and presents the integrated Composite R59 Corridor Strategic Development Plan. It consolidates the spatial vision, development objectives and strategic proposals for the corridor into a single, comprehensive development plan, thereby providing an overarching guide for future growth, development management and investment within the study area.

Figure 72 illustrates the Composite R59 Corridor Strategic Development Plan, which integrates the Vision and Development Objectives into an overall spatial development plan. The composite framework should be read in conjunction with the individual sub-area plans, as it reflects the collective outcome of the spatial proposals and strategic interventions identified for each sub-area and demonstrates how these proposals function as an interconnected development corridor.

As part of the Growth Management Strategy for the study area, a linkage table is provided as **Table 55.** The table establishes a relationship between the land uses proposed within the Development Plan and the zoning categories contained in the Midvaal Land Use Scheme

Composite R59 Corridor Strategic Development Plan



Study Area
Urban Development Boundary
Cadastral
Municipal Boundary
River / Dam / Pan
1 in 100-year Flood Line
1 in 50-year Flood Line

5m / 20m Contours
Hill / Mountain / Peak
Open Space/Parks
Tourism / Recreation
Agriculture
Single Residential
Medium Density Residential

High Density Residential
Rural Residential
Future Urban Expansion
Social / Institutional
Industrial
Gateway Node
Business

High Intensity ToD
Medium Intensity ToD
Mixed Use
Mining/Quarrying
Municipal / Utilities
Primary Node
Secondary Node

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 72

Table 55: R59 Study Area: Combined Linkage Table

Notation	Section A: Spatial Planning Categories	Section B: Midvaal LUS: Use Zones Applicable to Future Usage of Land																		
		Residential 1	Residential 2 (25du/ha -FAR: 0,6 3 storeys)	Residential 3 (60du/ha -FAR: 1,0 4storeys)	Transitional Residential	Rural Residential	Business 1 (CBD: FAR: 3,0 4storeys)	Business 2 (Local/Neighbourhood: FAR: 2,0 3 storeys)	Industrial 1 (FAR: 1,5 3 Storeys)	Industrial 2 (Inc. Noxious FAR: 1,5 3 Storeys)	Institutional	Municipal	Utilities	Cemetery	Agriculture	Conservation	Open Space	Recreation	Transport	Mining
Urban Node/Precinct																				
	Industrial								√	√	√	√	√				√		√	
	Gateway Node: Medium Intensity (Vertical & Horisontal) Mixed Use		√					√	√		√	√	√				√		√	
CBD 1	CBD Zone 1: ToD/Core Node: High Intensity (Vertical) Mixed Use			√			√	√			√	√	√				√		√	
CBD 2	CBD Zone 2: CBD Core Support Area: Medium Intensity (Horisontal & Vertical) Mixed Use		√	√				√			√	√	√				√		√	
M2, S2, R2	Business Node		√					√			√	√	√				√		√	
W1	ToD Node: High Intensity (Vertical) Mixed Use		√	√			√	√			√	√	√				√		√	
H2, R3	ToD Node: Medium Intensity (Vertical) Mixed Use		√					√			√	√	√				√		√	
M3	Medium Intensity (Horisontal & Vertical) Mixed Use	√	√					√	√	○	√	√	√				√		√	
S3	Residential/Business Spines: Medium Intensity (Horisontal & Vertical) Mixed Use		√					√			√	√	√				√		√	
W3,K5	Transitional Strip: Low Intensity (Horizontal) Mixed Use	√	√			√		○	○		√	√	√		√		√		√	
H3	Extended (Linear Strip) Neighbourhood Node: Low Intensity (Horisontal) Mixed Use	√	√					√			√	√	√				√		√	
	Mining/Quarrying												√						√	√
	Municipal/Utilities										√	√	√				√		√	
	Social/Institutional										√	√	√				√		√	
	High Density Residential		√	√				○			√	√	√				√		○	
	Medium Density Residential	√	√					○			√	√	√				√		○	
M4	Single to High Density Residential	√	√	√				○			√	√	√				√		○	
	Single Residential	√	√					○			√	√	√				√		○	
H6	Rural Density Residential	√									√	√	√				√		○	
	Future Urban Expansion	ΔΔ	ΔΔ	ΔΔ	○			ΔΔ			ΔΔ	ΔΔ	ΔΔ	○	√		ΔΔ		ΔΔ	
	Rural Residential					√					√	√	√	○	√		√	√	○	
	Agriculture										√	√	√	○	√		√	○	○	
	Open Space/Parks																√	√		
	Tourism and Recreation														○	√	√	√		

Notes:

√	Allowed
○	Allowed under certain conditions
ΔΔ	Allowed (Long Term)

General Notes:

1. All applications and land use proposals shall be subject to relevant application procedures and any relevant provisions or requirements, as depicted in SPLUMA, SPLUMA By-laws, Midvaal LUS and any other parts of the SDF, as well as access management requirements and any required studies or investigations provided for in any other applicable policy or legislation.
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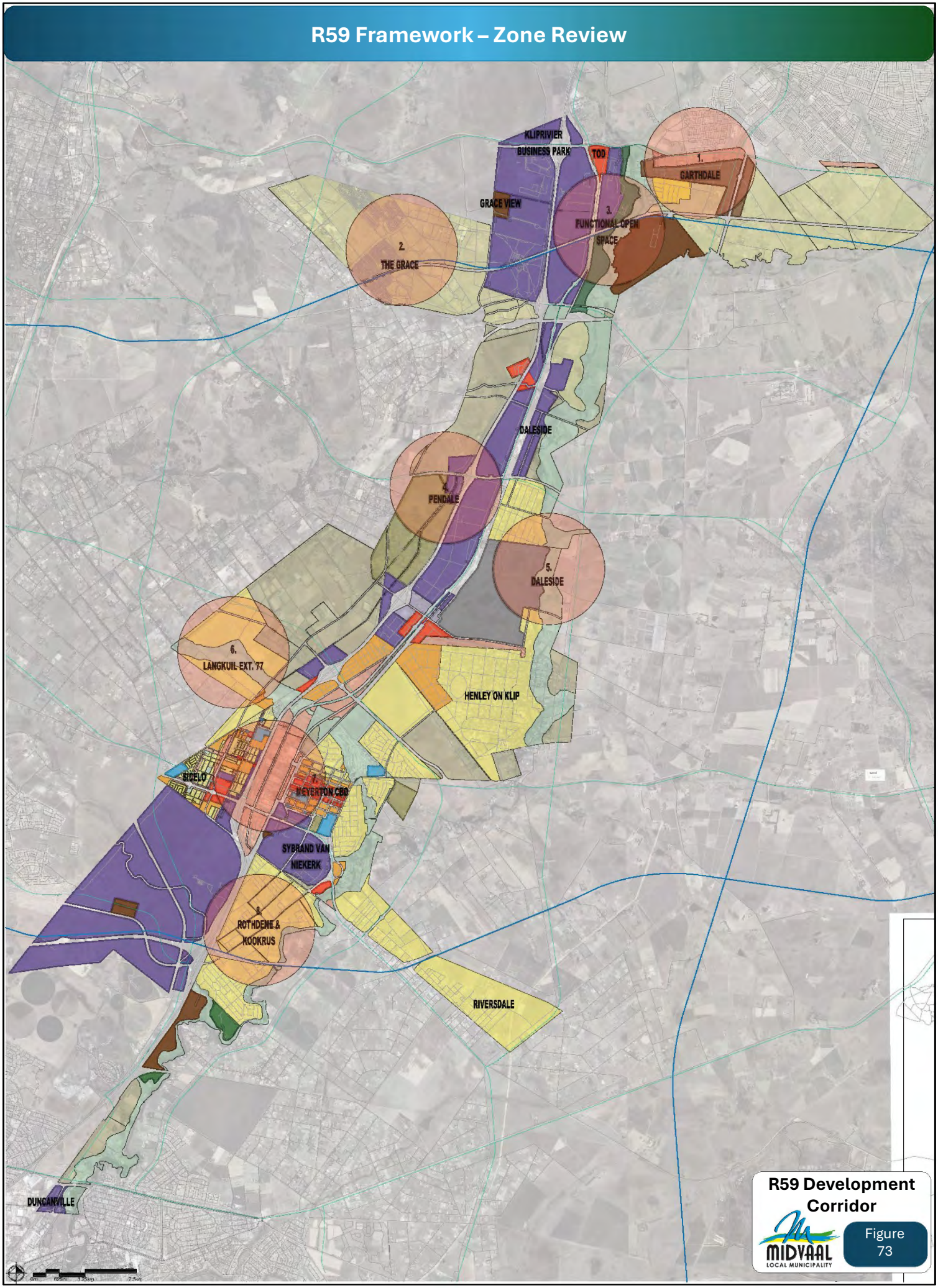
5 URBAN DESIGN FRAMEWORK

Section 5 represents the Urban Design Framework which was formulated to refine the Development Concept contained in Section 4.

The purpose of the Urban Design Framework, which is a component of the R59 Development Framework, aims to strengthen spatial integration, guide future development, and provide clear actionable strategies to support coordinated and sustainable growth along the corridor.

Figure 72 illustrates the overall R59 Framework with specific focus areas for which detail design have been formulated.

R59 Framework – Zone Review



R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure 73

5.1 Urban Design Objectives

The following 7 objectives are a distillation of current policy and best practice principles of good urban design to establish sustainable and responsible urban environments. **Possible examples of practical applications in the development are provided at the end of the paragraph.**

	**Places for people** Distinct loci are to be established for social interaction and events, shaping lasting impressions of a safe, varied and attractive urban environment where people and community are placed first. (Parks, pause areas, activated street facades, pedestrian preference design, street furniture for public use, well-lit evening routes, etc.)
	**Legible environments** The precinct must provide means whereby users, regular or visitors, can orient themselves. The definition of street edges and movement corridors through gateways and landmarks will contribute to an urban image that is understandable and recognisable. (Street-specific landscaping, visual landmark elements (art, etc.) to orientate pedestrians, well-recognisable entrances and routes, hierarchy of roads and routes).
	**Making connections** A variety of transport networks will be integrated to facilitate efficient use with direct service routes. The design will prioritise pedestrian movement by providing safe and direct routes for convenience. (New pedestrian bridge, streets designed for pedestrian preference, safe road crossings, direct routes for pedestrians, active street edges, bus stops, intermodal transport hub, non-motorised vehicle lanes).
	**Mixed uses and forms** Different building forms, uses, tenures, and densities will be woven together. This creates varied, integrated, flexible and safer environments. (Compulsory residential component in all private developments according to zoning, residential component to be mixed-use, form-based coding instead of singular zoning, re-zone where necessary)
	**Densities** Higher density levels create more sustainable developments that offer a high quality of life whilst minimising resource consumption. The aim shall be to generate a critical mass of people able to support urban services. (Form-based coding with built-to-line, makes residential components medium to high densities).
	**Enrich the existing** New development is to respond to the cultural context of the sites through an understanding of the cultural landscape. It will enrich the qualities of the existing contexts, complementing the setting. (Create memory areas, story tree for oral history celebration, celebrate national holidays with special happenings, and arrival routes celebrated with landscaping).
	**One Planet Living** All new developments are committed to the Green Building Policy. This encompasses the One Planet Living goals for sustainable development.

5.2 Guideline Application

5.2.1 Urban Design Elements

5.2.1.1 Gateways

Gateways define the entrances and exit of an area and mark the transition between them. The R59 serves as the principal North-South Gateway, connecting the multiple sub-areas regionally to neighbouring cities and towns. From this main artery, various K-routes connect the suburbs to the R59, creating gateways for each sub-area. Each gateway will be unique and celebrated through the development of iconic buildings or structures.

5.2.1.2 Landmarks

Landmarks are design features that act as focal points, meeting places, terminal points of vistas and elements of orientation. Landmarks operate at various levels of scale, from a city-wide scale down to an individual site scale.

Landmark sculptures, iconic buildings, vertical elements and more are to be provided as focal points of the identified gateways and nodes.

5.2.1.3 Views and Vistas

Vistas are to be established to direct views towards specific features or lead people to sites of importance and interest. Vistas towards the open spaces are ensured by means of the landscape and urban design guidelines. This includes the facilitation of mid-block servitudes that create both physical and visual links toward the river.

5.2.1.4 Nodes

Nodes are places of high concentration of activity and facilities that provide the focal points of the precincts within which they are located.

There are a number of major nodes, one in each precinct, which in turn are supported by several minor nodes. In the High Street Precinct and Urban Core, a specific development approach is required to protect the existing commercial activities.

5.2.1.5 Edges

Edges separate land uses and precincts from one another and need to be clearly defined for the purposes of legibility, imageability and the creation of neighbourhoods. Clear and well-defined building edges give containment to public spaces and streets, providing its users with a sense of safety, comfort and well-being. It protects users against the elements by incorporating canopies and colonnades in the design of the building edge. Distinct edge treatment is required in the placement of buildings on the streets, and the design of facades of buildings fronting main routes.

At the larger scale, the building edges form the 'city walls' of the development, but more minor edges are required at a local scale. An example of lower-order edges would be along activity streets, where each building forms an edge to the street by being built hard up to the site boundaries, and setbacks are not allowed.

5.2.1.6 Pathways

Pathways assist people in orienting themselves and leading them between key points. The principle paths include the path along the Klipriver linking the pedestrian paths that bisect the blocks. All paths are to be distinctively landscaped in their entirety with both hard and soft materials to create a high degree of legibility.

5.2.1.7 Permeability

Permeability is the extent to which people can move by foot or vehicle through an area. Generally, the higher the permeability, the better, as access is improved and congestion is limited. All security lines are to be visually permeable, robust and environmentally friendly and should only be permitted where critically required.

5.3 Objectives

The main objective of the guidelines is to provide a framework and principles within which individual land parcels should be developed, to achieve the cohesive vision that the developers envisaged. The objectives of the guidelines are to:

- Provide urban form guidance that may enable a mix of land uses and to create a unified, dense urban environment.
- Provide a framework that should make the development an attractive and vibrant pedestrian-friendly environment for shopping, dining, working and living.
- Provide built and urban form directions that incorporate sustainability principles, including sustainable building design and sustainable transport practices.

5.4 Form-Based Coding

The main objective of the guidelines is to provide a framework and principles within which individual land parcels should be developed, to achieve the cohesive vision for the Precinct.

The objectives of the guidelines include:

- The provision of urban form-based coding that should enable a mix of land uses and to create a unified, dense urban environment.
- Provide built and urban form directions that incorporate sustainability principles, sustainable transport practices such as focusing pedestrian routes with on-walkable urban layouts.

5.4.1 Design Guidelines

5.4.1.1 Building Placement

The placement of iconic buildings on strategic sites within the development should facilitate orientation within the development and act as the visual manifestation of the start of a new urban core for the whole area. Where a portion of a site is identified for a landmark, the architect should create an element that responds to this location and significance without detracting from the overall requirement of the building location.

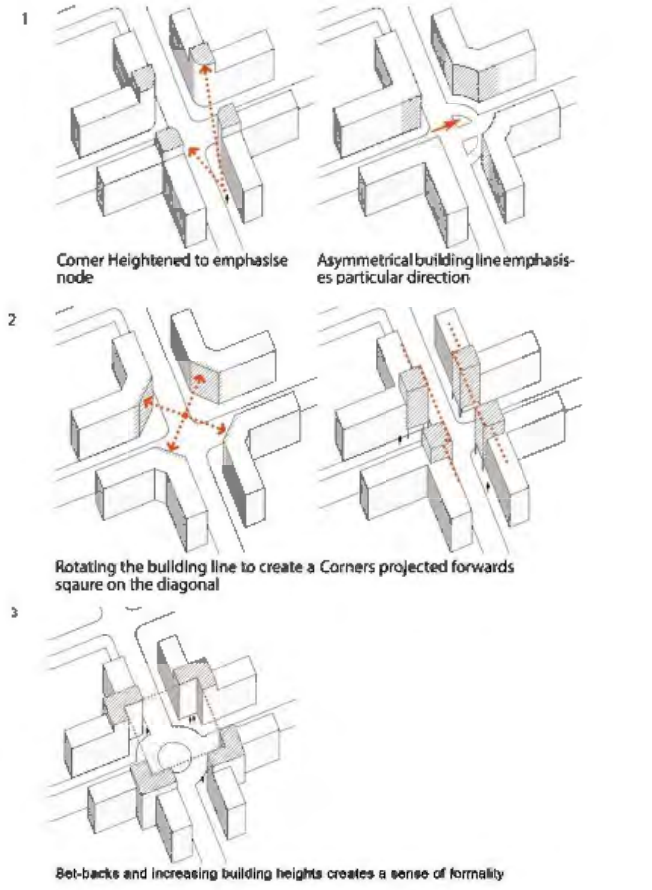
Where a site is identified as part of a gateway, the architect must acknowledge both the existence (if any) of other buildings relating to the gateway.

Significant Corners:

Corner sites (see ***Diagram 23***) are visually prominent, have two frontages and can potentially offer more entrances to different parts of the building. They provide special opportunities for mixed uses and activities. Corners are best emphasised by incorporating prominent entrances and/or windows at the apex, expressing the height by, for instance, using double volumes to accentuate the corner or entrance.

Diagram 23: Significant Corners

1. Diagrams of significant corners 2. General guidelines for significant corners
3. Gateway significant corners



Perimeter Blocks:

Perimeter blocks define the public realm. The street-facing facades create a continuous streetscape and unified urban form. A perimeter block further distinguishes between the public and private realms by creating a more private inner courtyard. The intent is to avoid blank facades, ground-level car parks, and vehicular/service entrances facing the street.

Active Frontage:

Multiple entrance doors and shop front windows activate the public realm and create a pedestrian-friendly environment. In the high street, a direct frontage-to-pavement relationship assists commercial viability, street vitality and safe environments as people inside can watch over those outside. Floor levels can be adjusted to allow privacy for office and residential uses. (See ***Diagram 24***).

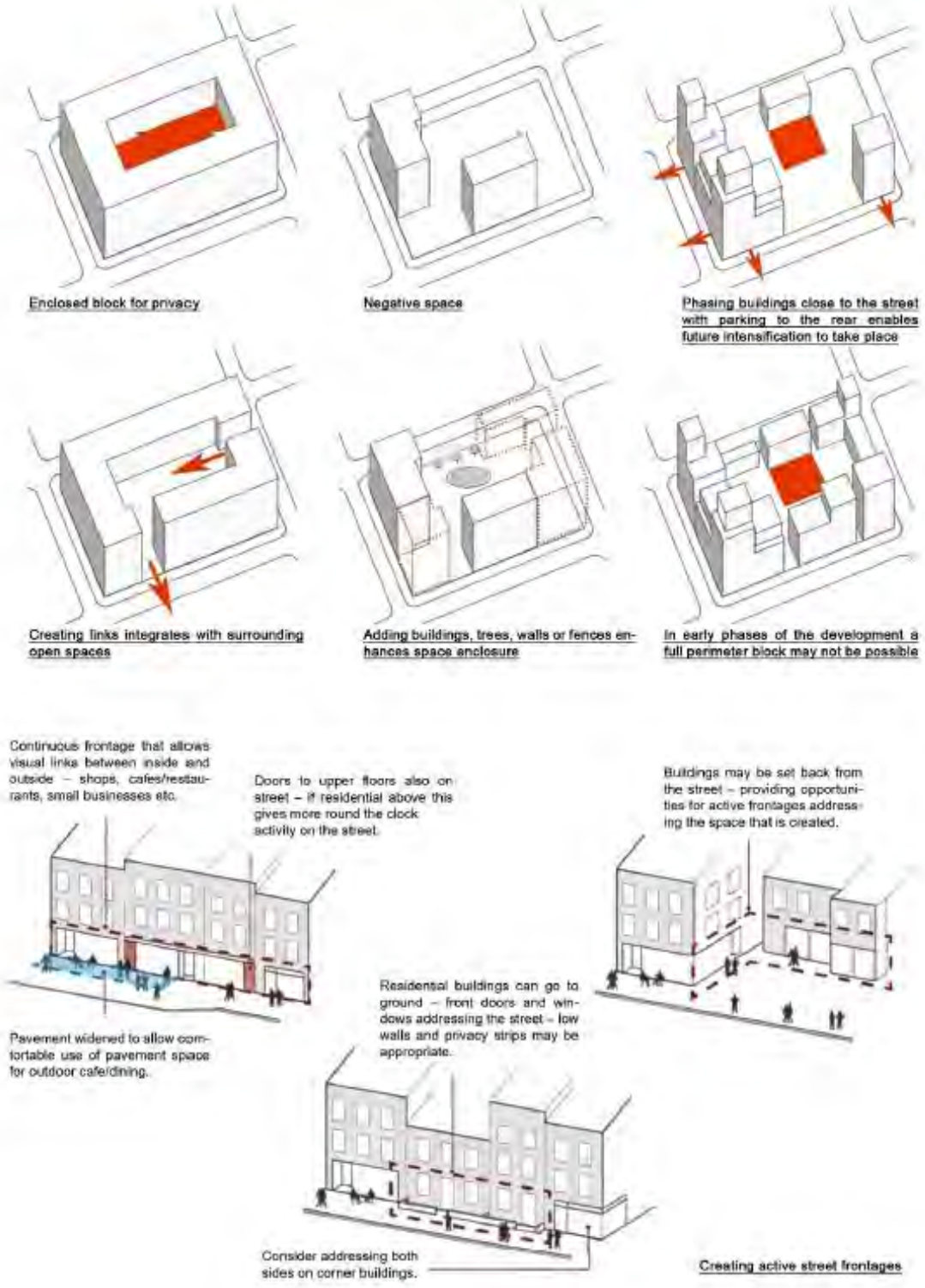
Topography:

The natural slope of the site will be altered to create platform levels as part of the stormwater mitigation approach. All buildings should acknowledge the topography and design the street interface accordingly. Where street facades are created on slopes, the building should respond appropriately with stepped floors. These platform levels should be used as opportunities for vertical expression.

Establish Positive Outdoor Space:

Buildings can give positive definition to the shape and function of outdoor space and accommodate and encourage a range of activities to take place. Buildings contribute to the public domain - encouraging people to meet, talk and linger. The definition of the built-to-line and three-dimensional mass of the building creates the character of streets and squares, later brought to life with planting, street furniture, public art, etc., that give these spaces their warmth and vitality.

Diagram 24: Active Frontage



5.4.1.2 Street Interface (Diagram 25)

Liveable building edges should define the streets:

Articulation of the façades and building activities should be on a human scale and promote active ground floor uses with a pedestrian-friendly interface. The articulation of different buildings should have a unified urban form with a variety in detail and active frontages. It is this interaction between buildings and the public domain - this edge - that determines the relationship between inside and outside, built and open, public and private, individual and community. Active frontages assist commercial viability, street vitality and safety and include the provision of balconies on the public facades of all building types. These building edges play different roles in defining the urban realm, articulating the building's edge, providing environmental (solar, wind, rain, etc.) protection, and providing space for environmental services.

Ground floor apartments and offices should be entered directly from the public domain where possible, in order to activate the building edge.

Vertical building expression:

Facades should be broken into smaller elements such as windows, doors and balconies. Certain facades have an important topological role to play and must therefore display continuity of architectural treatment across individual buildings. Specific examples occur on the major through-route for the development and therefore require specific treatment on certain facades.

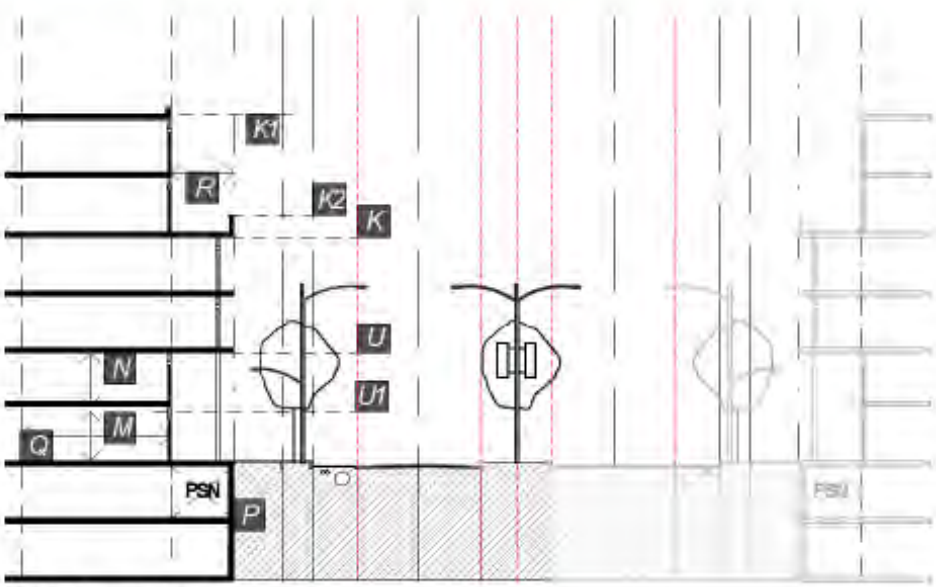
Projecting canopies:

Shop canopies may project beyond the build-to line.

Continuity for Public Domain:

Facades should be continuous along the build-to line to create a defined urban edge . Eaves should also be continuous to ensure harmony.

Diagram 25: Example of Street Interface



Example of street interface

DESIGN CODING

USE

Ground floor	*refer to development rights*	T
Upper floors	*refer to development rights*	U

HEIGHT

Building min	*NA storeys*	X
Building max (not over build to line)	*as per dev rights*	K1
Building max (over build to line)	*16 storeys*	K2
Ancillary building max	*NA*	L
Finishing Ground Floor Level	*4700mm*	
First Floor Ceiling Height	*3100mm min*	W
Upper Floor(s) Ceiling Height	*3100mm max*	W

*All heights measured to eaves or base of parapet

PARKING

Locations *(distance from property line- basement)*		
Front setback	*0m*	P
Side setback	*0m*	P1
Side street setback	*0m*	P2
Rear setback	*0m*	P2
Locations *(min distance from building line - surface)*		
Front setback	*0 m*	O
East Side setback	*0m*	O1
West Side setback	*0m*	O1
Rear setback	*0m*	O2
Required Spaces		
Basement		
Office	*1 / 100 sqm*	
Total Parking	*204*	

DESIGN CODING

ENCROACHMENT

Locations		
Front setback	*0mm max*	R
East side setback	*4800mm max*	S
West side setback	*0mm max*	S
Rear setback	*3000mm max*	T

Notes:
Canopies, Awnings, and Balconies may encroach over the BTL on the street sides, as shown indicated.
Similarly, balconies may encroach into the setback on the rear.

Upper-storey galleries facing the street must not be used to meet primary circulation requirements.

ALLOWED FRONTAGE TYPES

Arcade		
Height' max	*5700mm*	V
Height' min	*3600mm*	W
Awning depth	*NA*	
Forecourt	*NA*	V
Depth	*refer to BTL*	
Width	*erf width*	
Building Setback Gradient	*45Odm*	W
(From 59% Regulatory Setback Gradient)		

5.4.1.3 Access & Parking

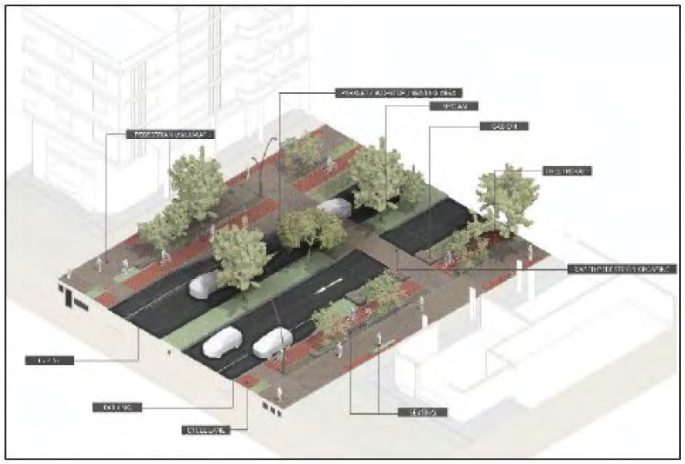
Visual and Pedestrian Connections:

There should be direct, attractively landscaped connections between key facilities, and dead ends must be avoided. This will help to create more convenient, safe and comfortable places. The intent is to connect the development towards the Open Space system through visual and physical corridors.



Build Walkable Neighbourhoods:

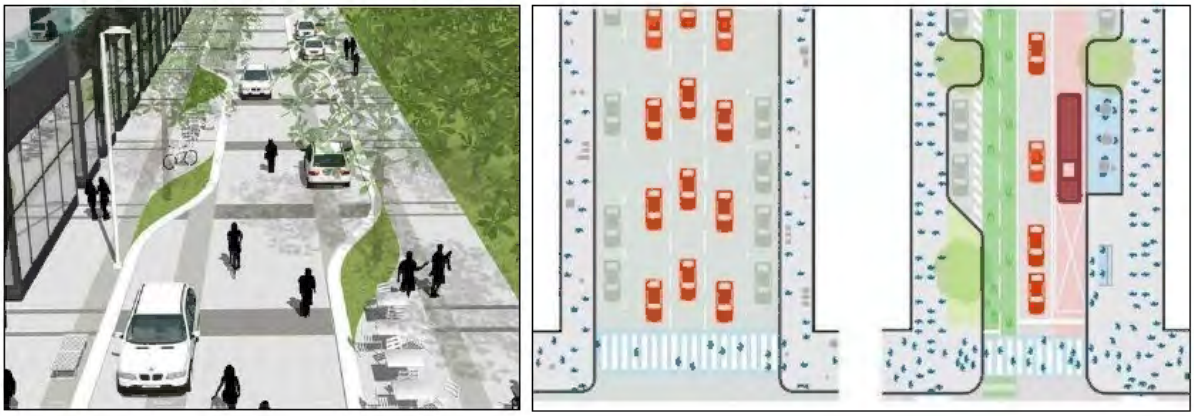
The sidewalks play an essential role in the success of the development to accommodate an active street realm. The pavements should therefore be generous to accommodate pedestrian movement and other activities where appropriate. Street intersections are designed to accommodate pedestrian safety and will therefore include traffic calming measures.





Parking:

On-street parking is being encouraged and promoted throughout the development to encourage street activity and accessibility. It should be managed to suit the functions of particular streets.



Parking behind, under, above or to the side of the building:

The manner in which car parking is arranged has a fundamental effect on the quality of place. Land uses should contribute towards the creation of lively streets and ensure surveillance of them.

Parking should preferably be located away from the street at the back of buildings. If parking is provided at the front, a maximum of two rows of parking should be provided on ground level.

Parking for commercial developments should be designed as an integral part of the landscape treatment and managed communally. Pedestrian movement should not be determined and restricted by vehicular movement requirements. Parking layouts should be obvious and logical and avoid the creation of leftover space. Basements should preferably be accessed from the secondary streets to minimise breaks in the street continuity.

Should the site levels dictate that basement parking be located on street level, offices, retail, or a similar function should be used to mask the presence of parking.



Future-enabled Basement:

Basements are made larger, more flexible and more economical by extending over Land Parcel boundaries. The precise configuration and extent are subject to finalisation, but it should be noted that the planning and structural layout of the basements may impact the organisation of the building.)





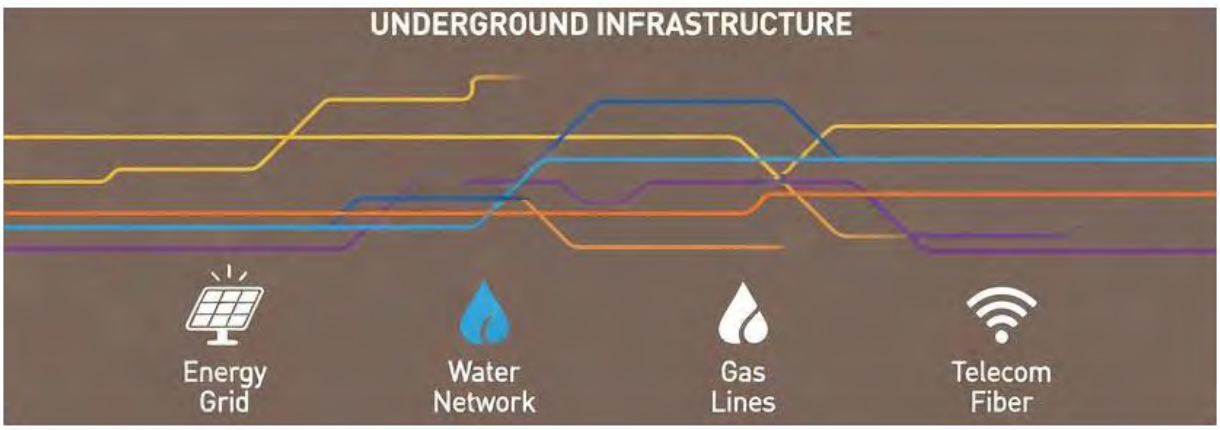
5.4.1.4 Services

Services Agreement:

All developers must comply with the Services Agreement.

Private Services Network:

All development parcels are served by a private services network running inside most properties within the environmental zone. A range of private services may be provided, such as a private renewable energy grid, water, gas, telecoms and security infrastructure, amongst others.



Service and Rubbish Centres:

These facilities must be located below or to the rear of developments, with measures to mitigate adverse noises and smells (to avoid vermin and the need for trucks to use their reversing horns, for instance).



Vents:

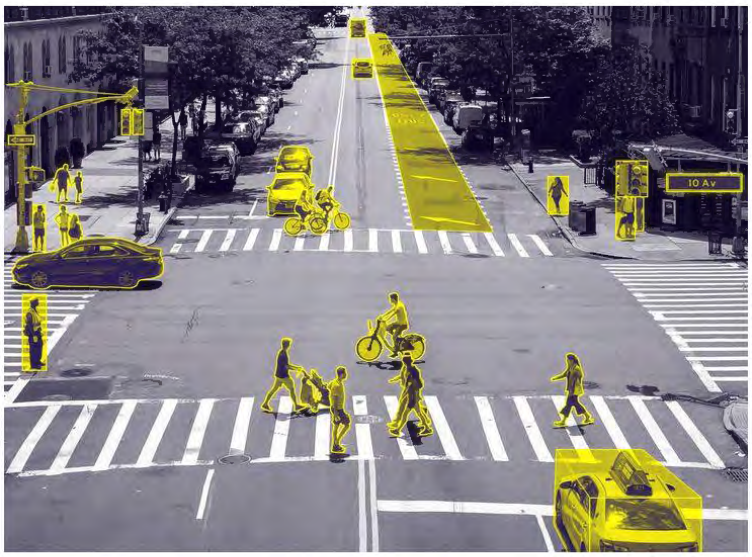
Extend vents from smell or pollution sources (such as basement parking emissions, and kitchens) away from residential developments. All vents and extractors must comply with the National Building Regulations.



5.4.1.5 Safety and Security

Active Surveillance:

There should be a precinct-wide security camera network, which will be linked to a monitored central control room. All developments must be connected to this network.



Passive Surveillance:

Design in a way that social policing (overlooking, active edges) creates a safe and secure environment. Ensuring natural surveillance and human presence:

- Making buildings front onto the public realm;
- Enabling 'eyes on streets' and minimising exposed blank facades;
- Mixing land uses, particularly at ground level, adding vitality at different times of the day and night;
- Lighting and uninterrupted lines of sight are important to ensure increased visibility;
- Designing an integrated network of streets, rather than more vulnerable cul-de-sacs;
- Being careful not to plant too high or dense to screen potential assailants in certain locations.

It is preferred not to have any fences or walls in residential developments on the street boundary. However, should fences be put up, it is proposed that the boundary treatment be visually permeable to provide maximum visibility and ensure surveillance of the street.

5.4.1.6 Advertising & Signage

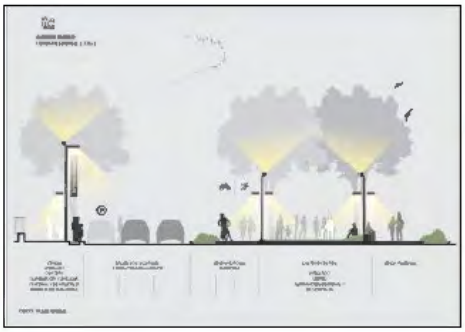
Advertisements and/or signboards shall not be erected or displayed on the erf without the written consent of the Municipality in terms of municipal by-laws for outdoor advertising.






5.4.1.7 Lighting & Ancillaries

Security lights, if any, shall be located in such a way that they would not create a nuisance to adjacent residential erven.


5.4.2 Application of Design Guidelines

5.4.2.1 Building Lines

A common building line creates continuity of frontage and provides definition and enclosure to the public realm. It also ensures a new development is properly integrated into an existing street. Minimising setback distances increases the ability of a building to interact with the public realm. Where buildings are permitted to step back from the building line, care needs to be taken to ensure the resulting spaces are usable and attractive.

5.4.2.2 Servitudes

All service servitudes should either be part of the landscape network, natural areas, or landscaped open spaces. This can be applicable to active or passive open spaces.

5.4.2.3 Environmental Zone & Facades

The role of the environmental zone is to provide a buffer zone as an interface between the building and street domain.

5.4.2.4 Land Use

Land use compatibility is determined by the choice of land use and the development guidelines for the interface. This should ensure liveable urban environments and avoid social and environmental conflict.

In the urban core, it is important that all the ground floor areas are 'active' uses.

Ground floor: Commercial, retail, or recreation & office public amenities

First floor: Residential, commercial, office

5.4.2.5 Access & Parking

Access to the erf:

Entrances and exits from the erf shall be located, constructed and maintained to the satisfaction of the Municipality.

Loading and off-loading facilities:

Loading facilities shall be provided on the erf to the satisfaction of the Municipality, and all loading and unloading activities should take place on the erf.

Turning facilities:

Turning space for light-/medium-/heavy vehicles, as appropriate, shall be provided on the erf to the satisfaction of the Municipality.

Physical barriers:

Permanent non-removable physical barriers shall be erected and maintained on those sections of the street boundaries of the erf where the lines of no-access are applicable, to the satisfaction of the Municipality.

5.4.2.6 Health & Safety

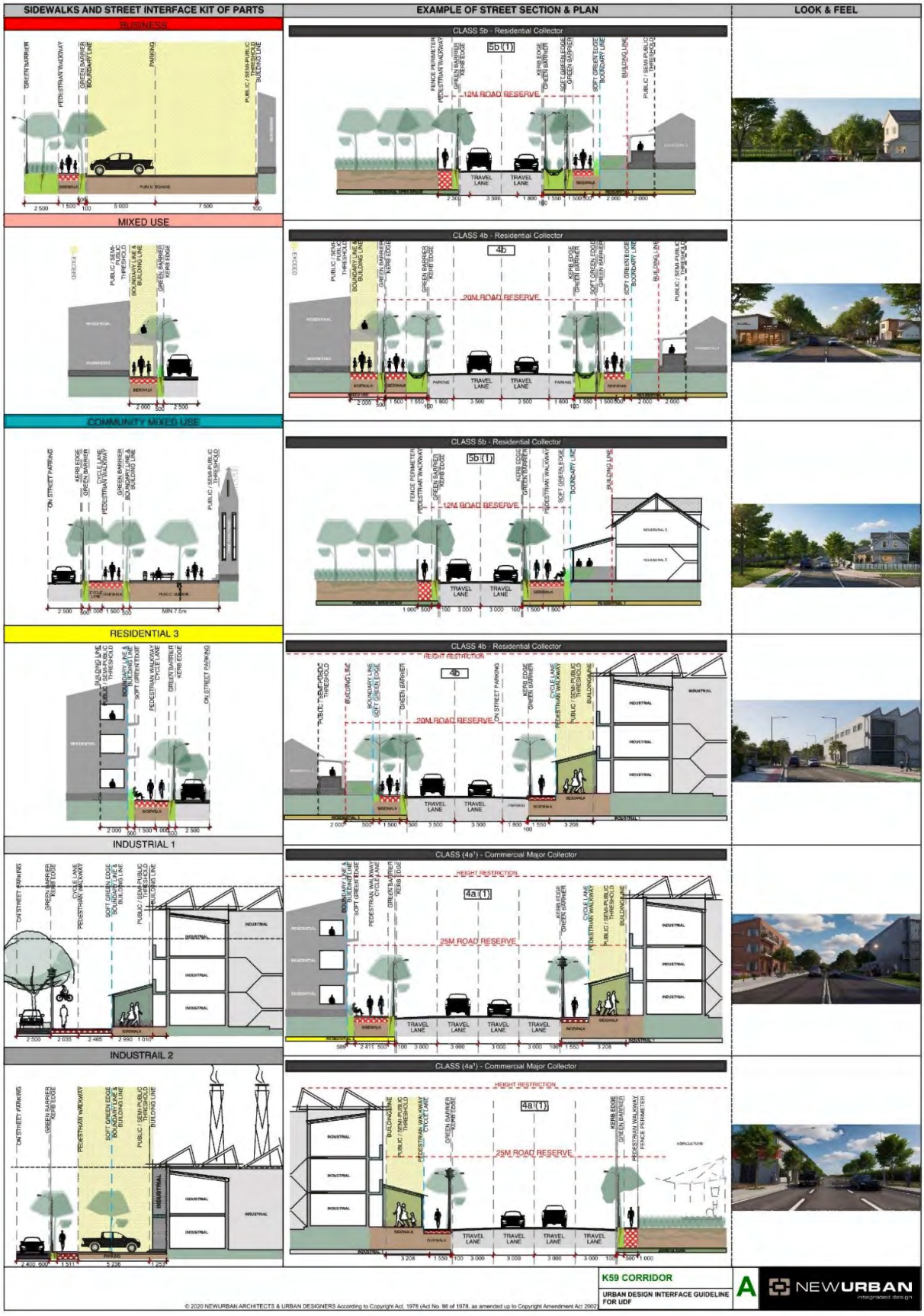
Special attention shall be given to the acoustic design of the building by an acoustic engineer to ensure that noise levels are kept within the standards set by the Municipality.

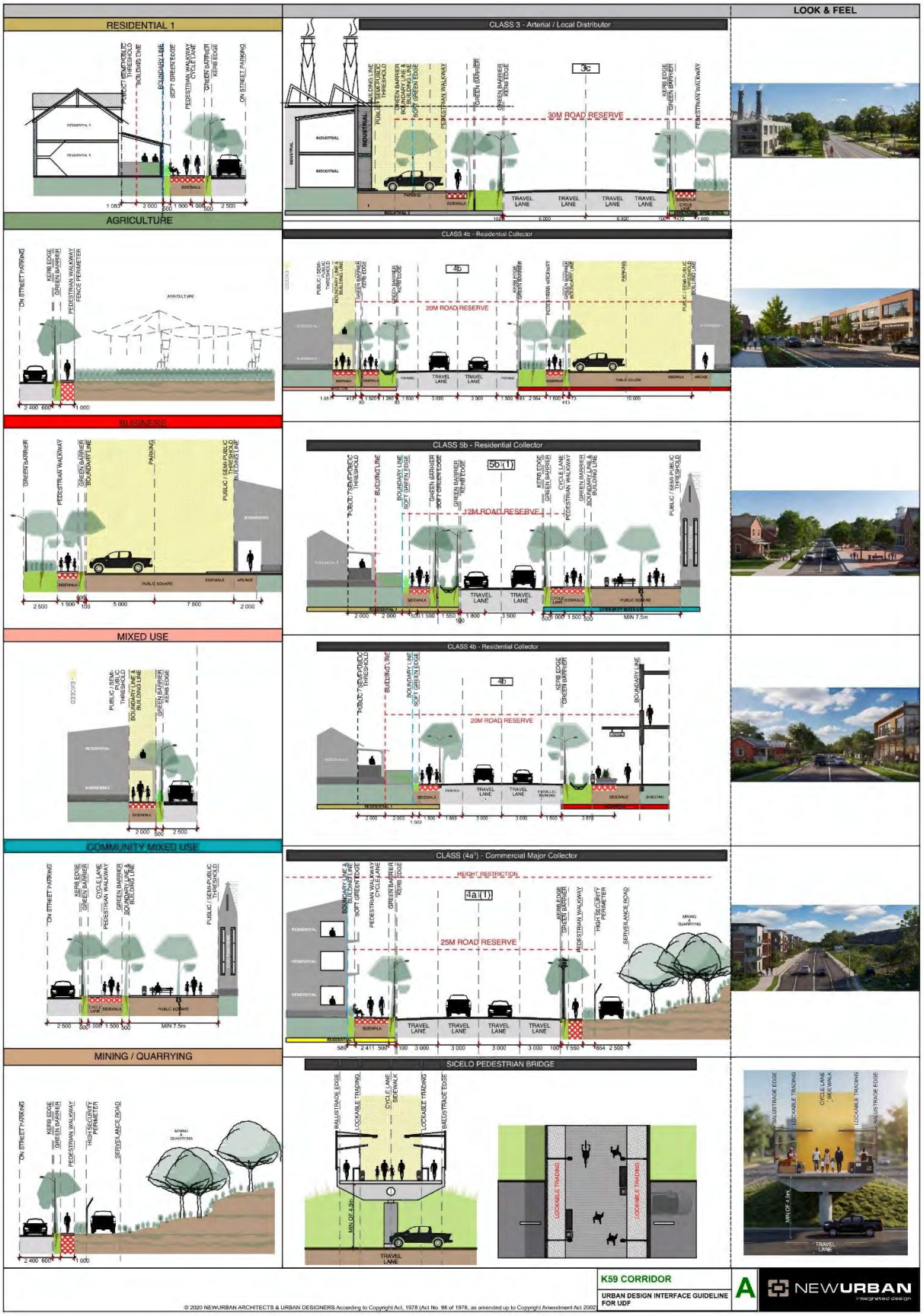
Any requirements for air pollution-, noise abatement- or health measures set by Municipality shall be complied with to the satisfaction of the Municipality without any costs to the Municipality.

5.4.3 Urban Design Interface Guideline for UDF

(See ***Diagram 26*** overleaf).

Diagram 26: Urban Design Interface Guideline for UDF





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5.4.4 The Areas this Document's Coding will Focus On

As outlined below, 8 focussed areas have been unpacked to illustrate the various urban faces and to provide the following:

- Urban interface
- Structured layout
- Look and feel

5.4.4.1 Garthdale

- Urban Interface
- Mix-Use & Agriculture options (Look & Feel)

5.4.4.2 Various Portions of Nooitgedacht Farm (previously The Grace)

- Urban Interface
- Active open space (Structure Layout)

5.4.4.3 Functional Open Space

- Urban Interface
- Active Open Space Look and feel (Structure Layout)
- Recreational options (Look & Feel)

5.4.4.4 Pendale

- Urban Interface (Industrial & Rural Living)
- Look and feel

5.4.4.5 Daleside

- Open parks principles (Look & Feel)

5.4.4.6 Area 3 Meyer M4:

- Urban Interface
- Sustainable Stormwater (Structure Layout)
- Active Open Space
- Industrial Development (Look & Feel)

5.4.4.7 Meyerton CBD

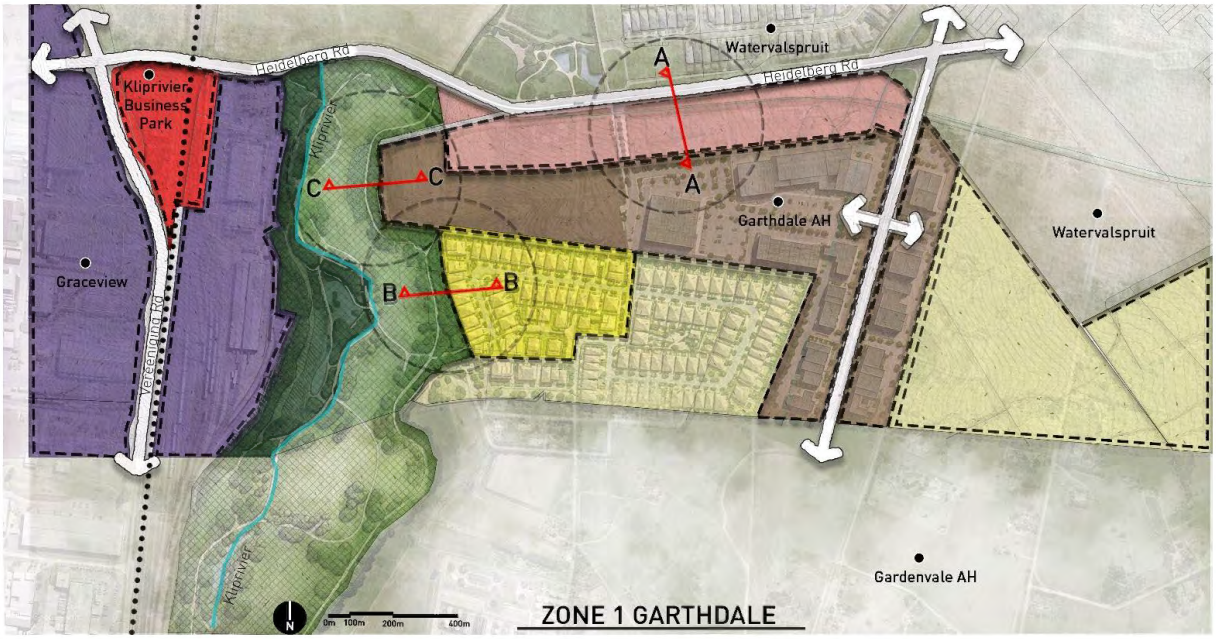
- Intermodal (Look & Feel)
- Pedestrian connection
- Urban Interface (Proposal)

5.4.4.8 Rothdene & Kookrus

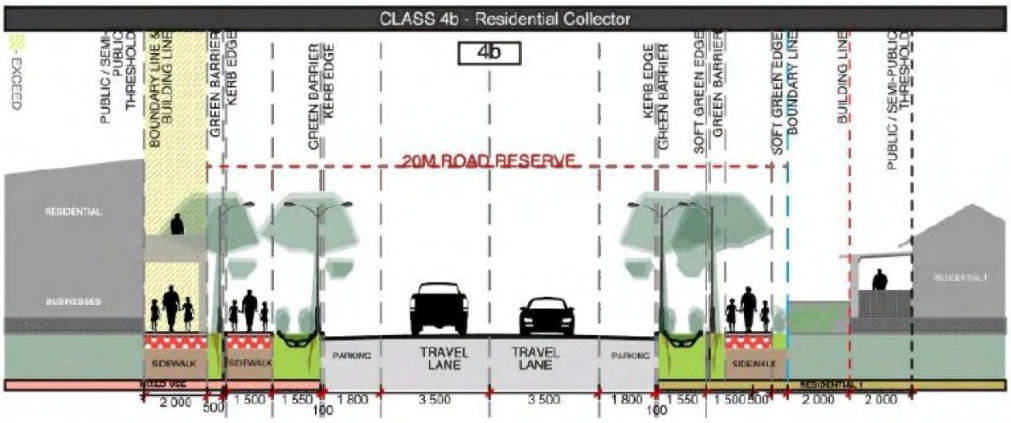
- Town House Developments (Look & Feel)

5.5 R59 Designated Areas

5.5.1 Garthdale

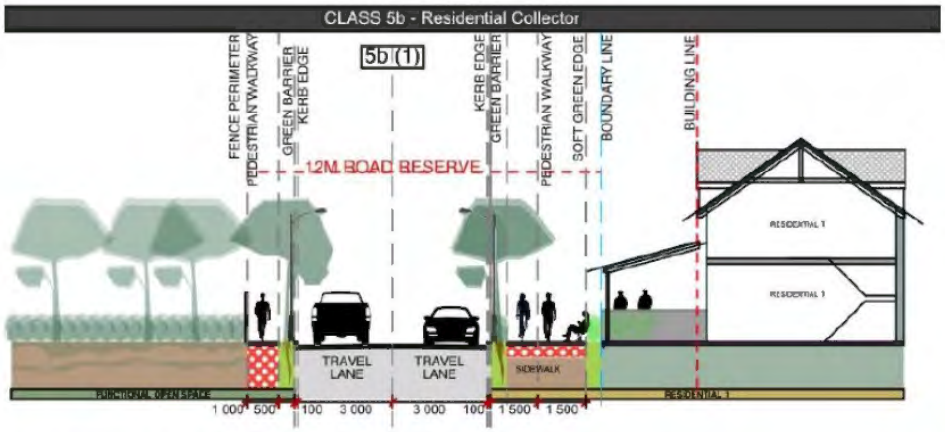


Section A-A:



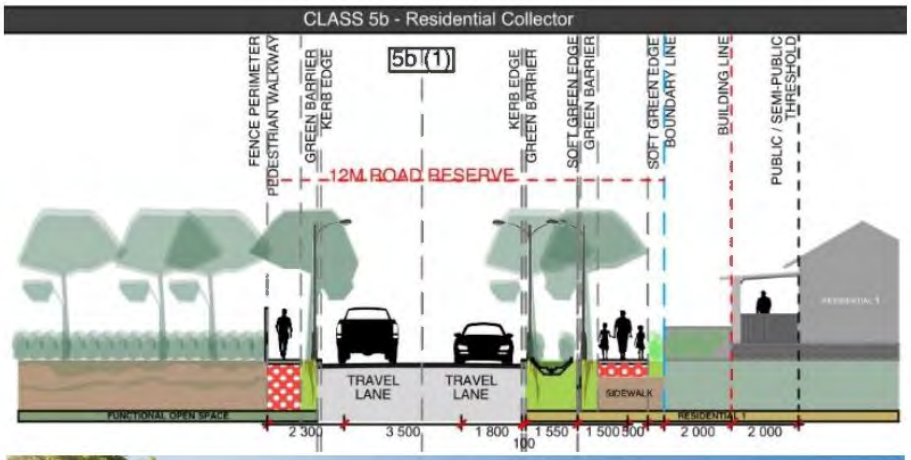


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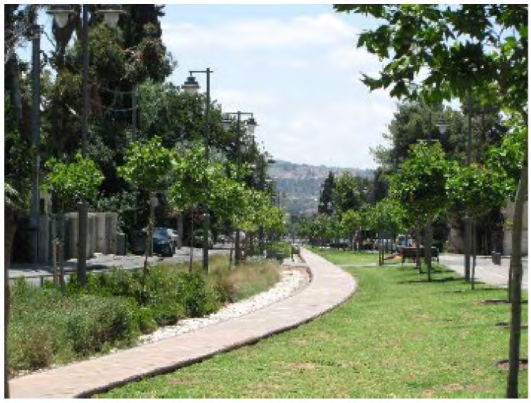


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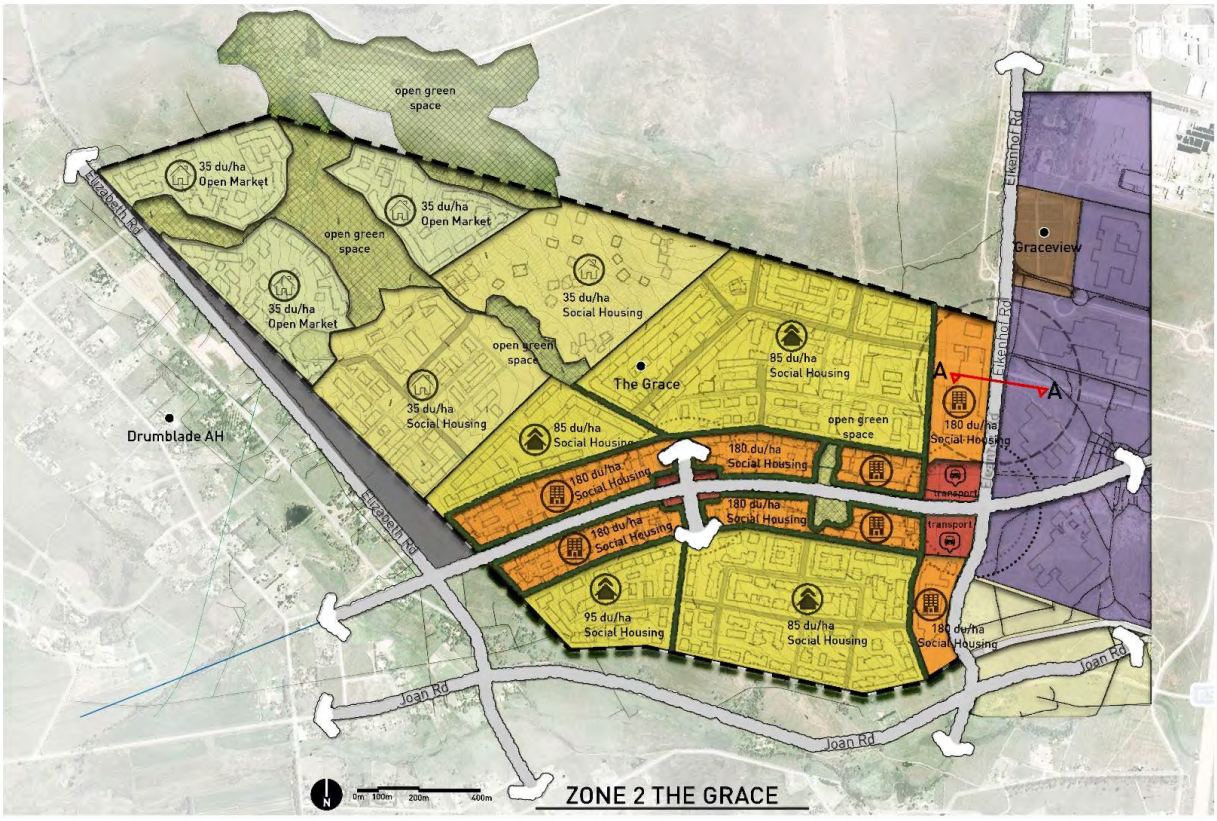


Look & Feel:

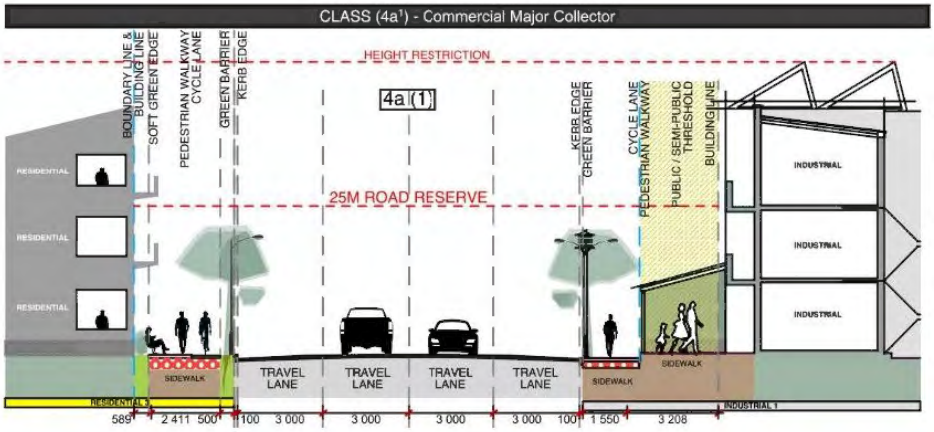




5.5.2 Various Portions of Nooitgedacht Farm (previously The Grace)



Section A-A:



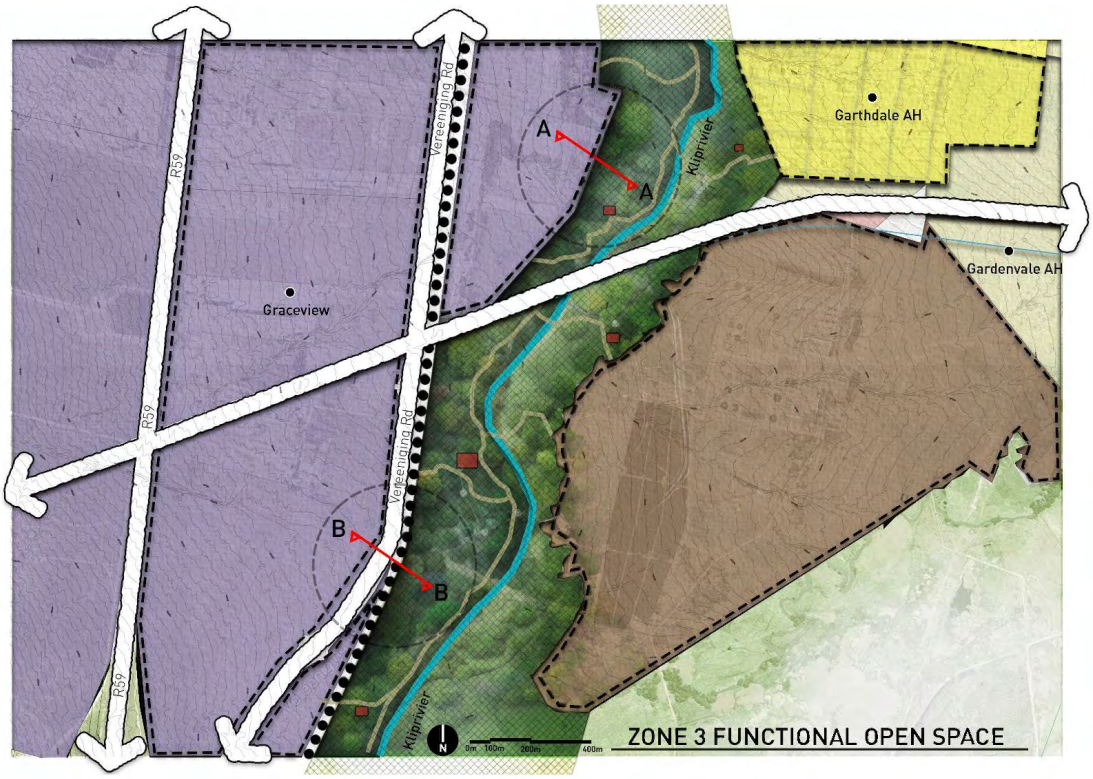


Look & Feel:

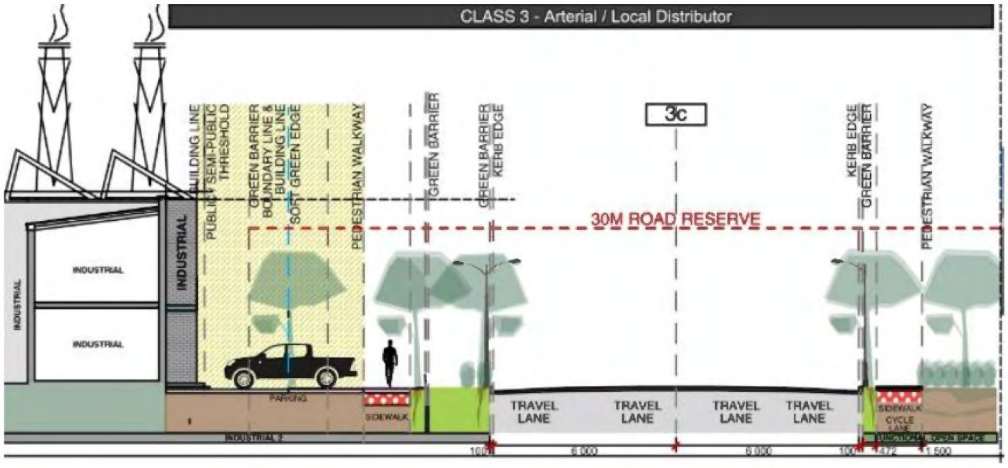


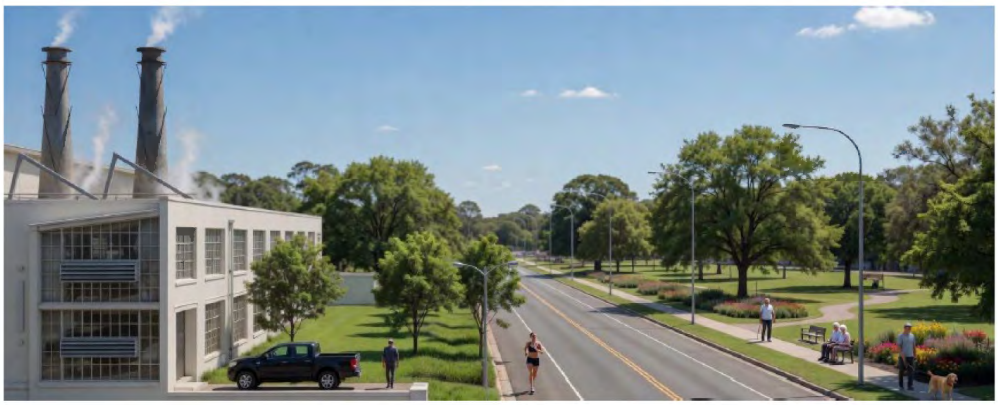


5.5.3 Functional Open Space



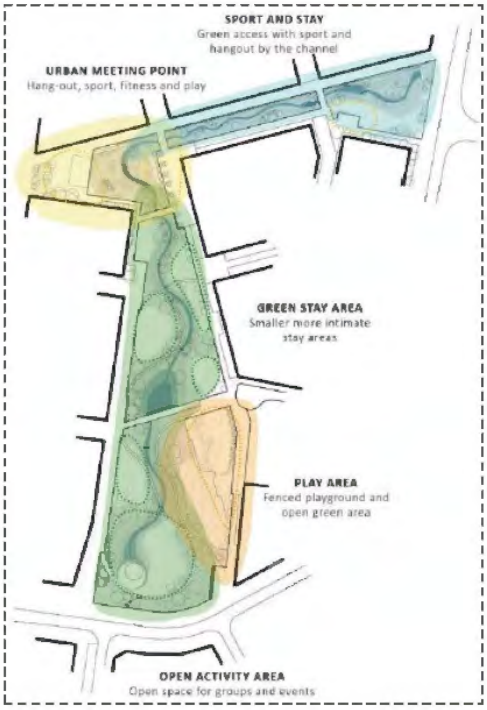
Section A-A:



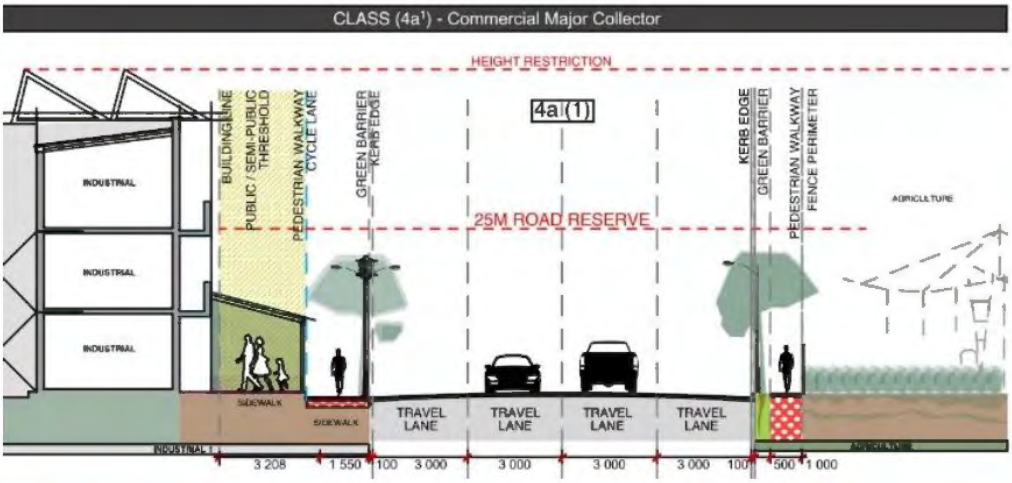


Look & Feel:





Section B-B:





Look & Feel:





Look & Feel (Noxious Industry):







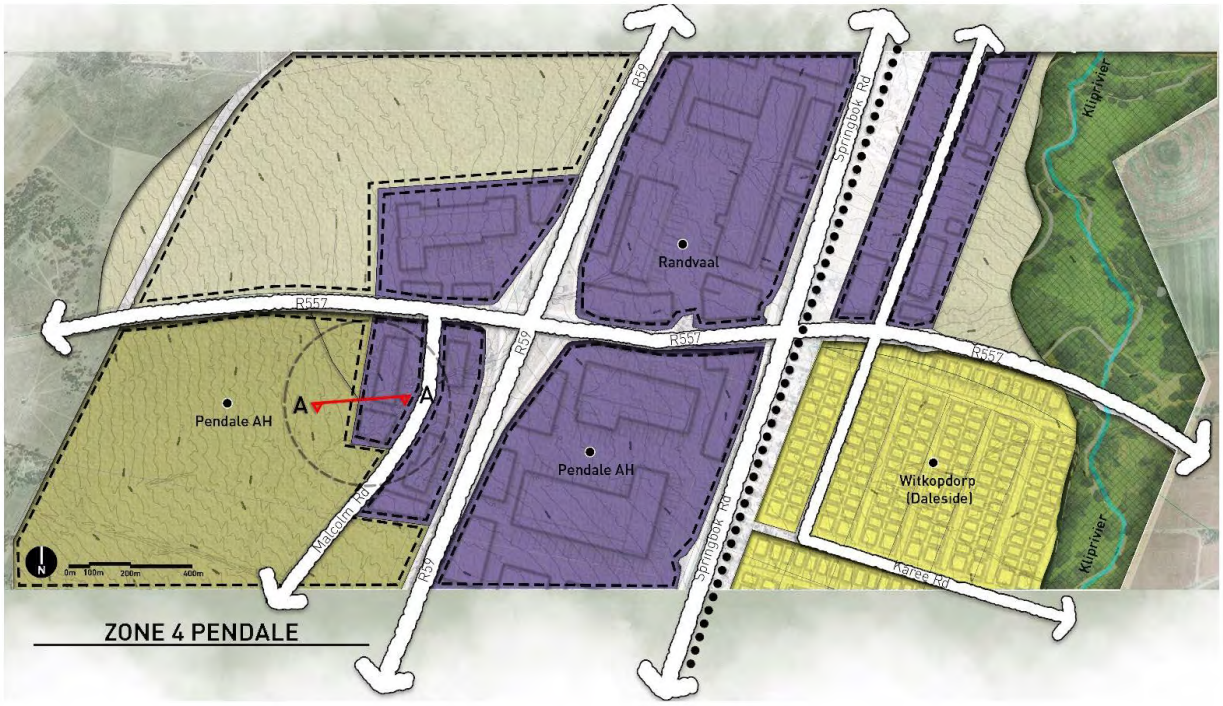
Look & Feel (Agriculture):



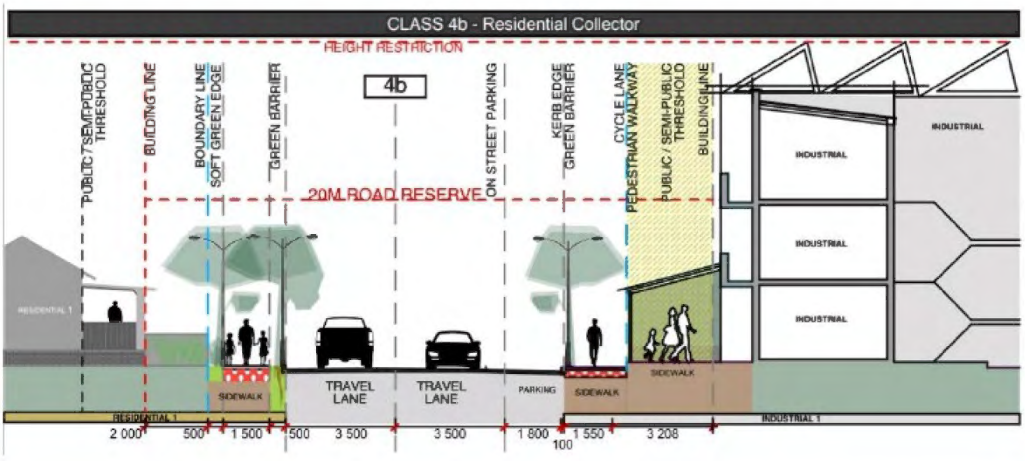




5.5.4 Pendale



Section A-A:





Look & Feel:

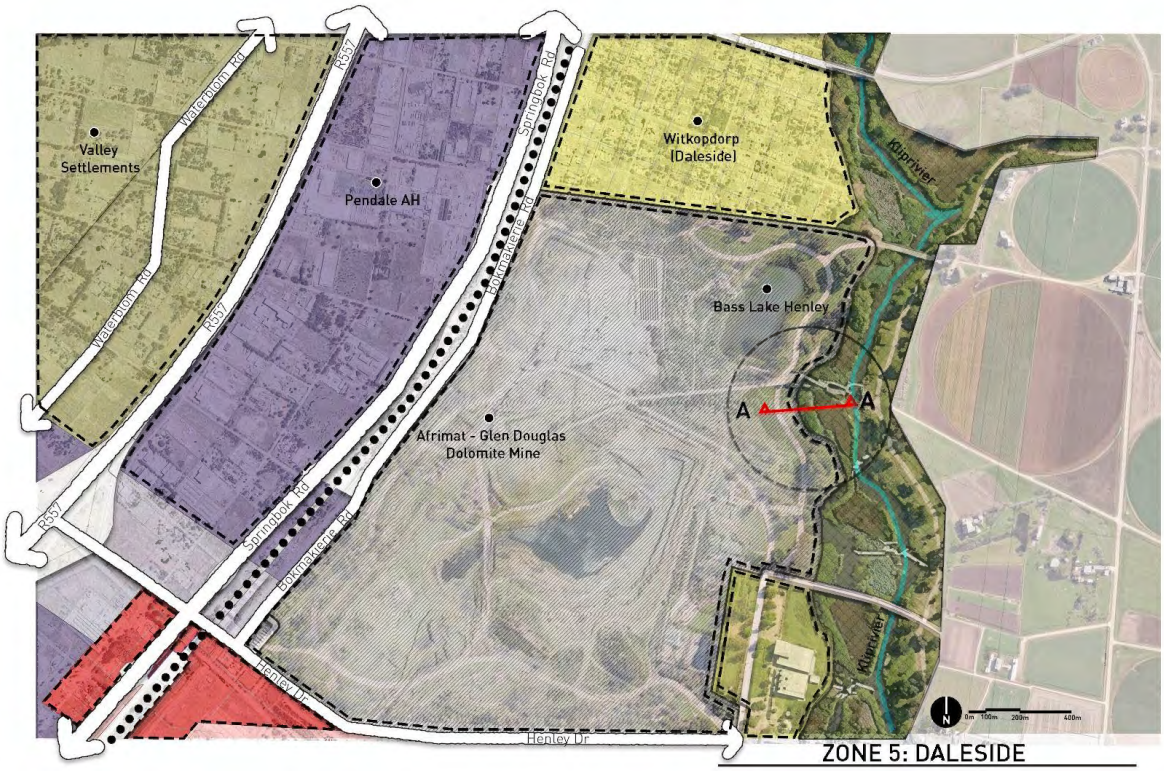




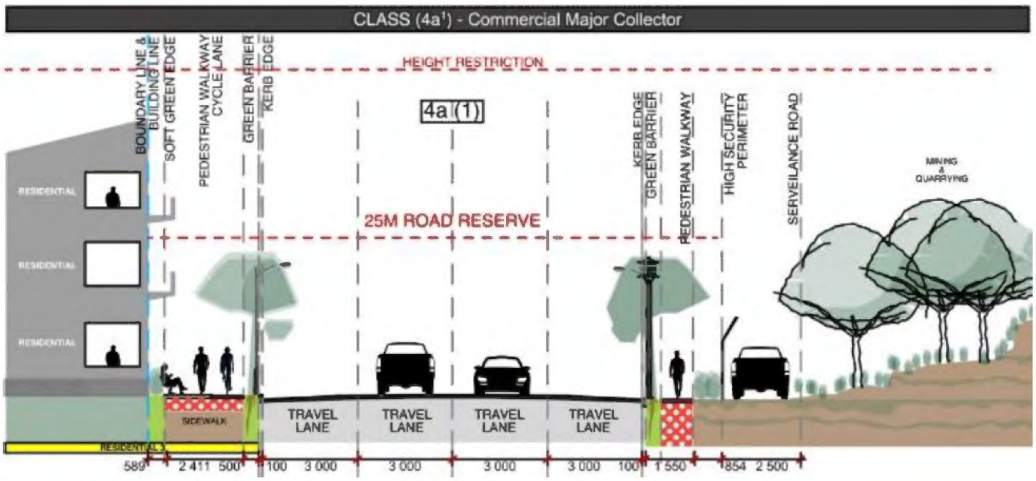




5.5.5 Daleside



Section A-A:



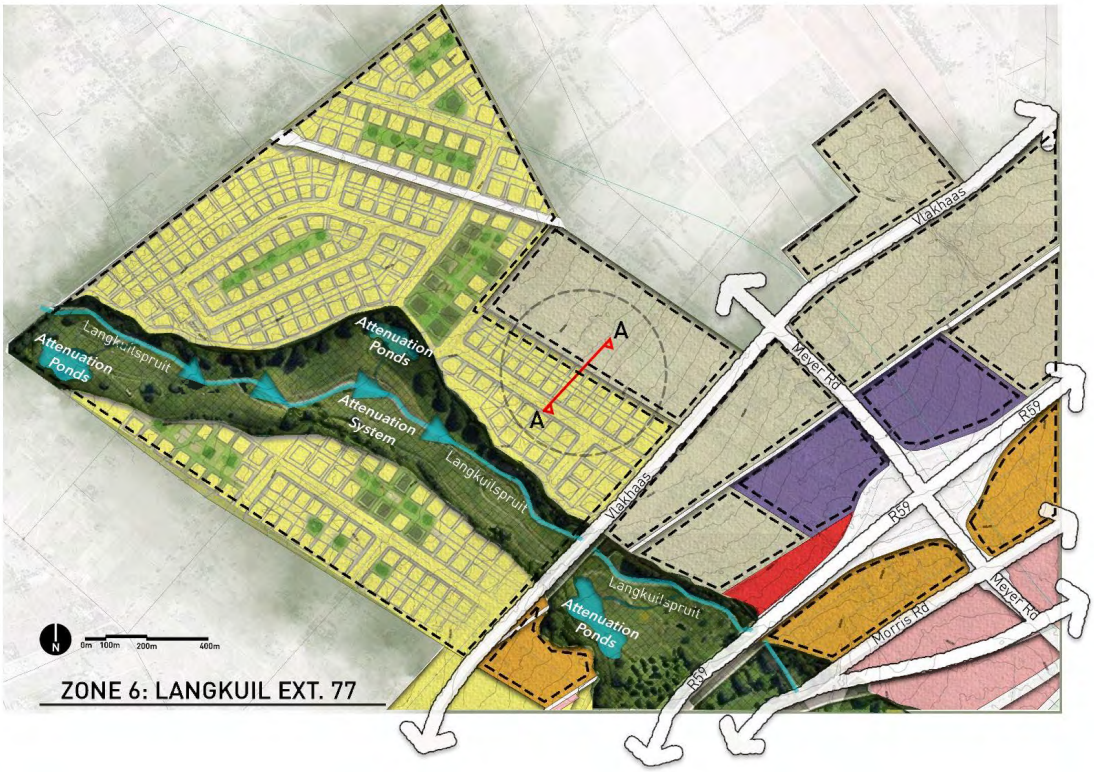


Look & Feel:

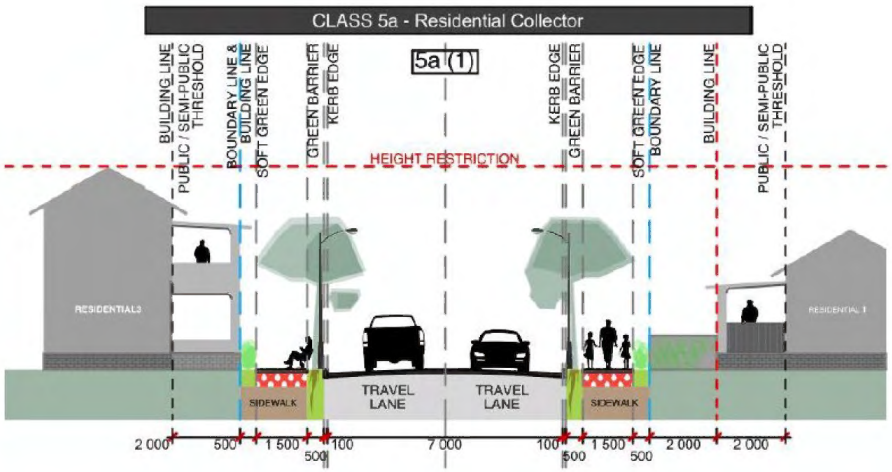




5.5.6 Langkuil Ext 77



Section A-A:





Look & Feel:

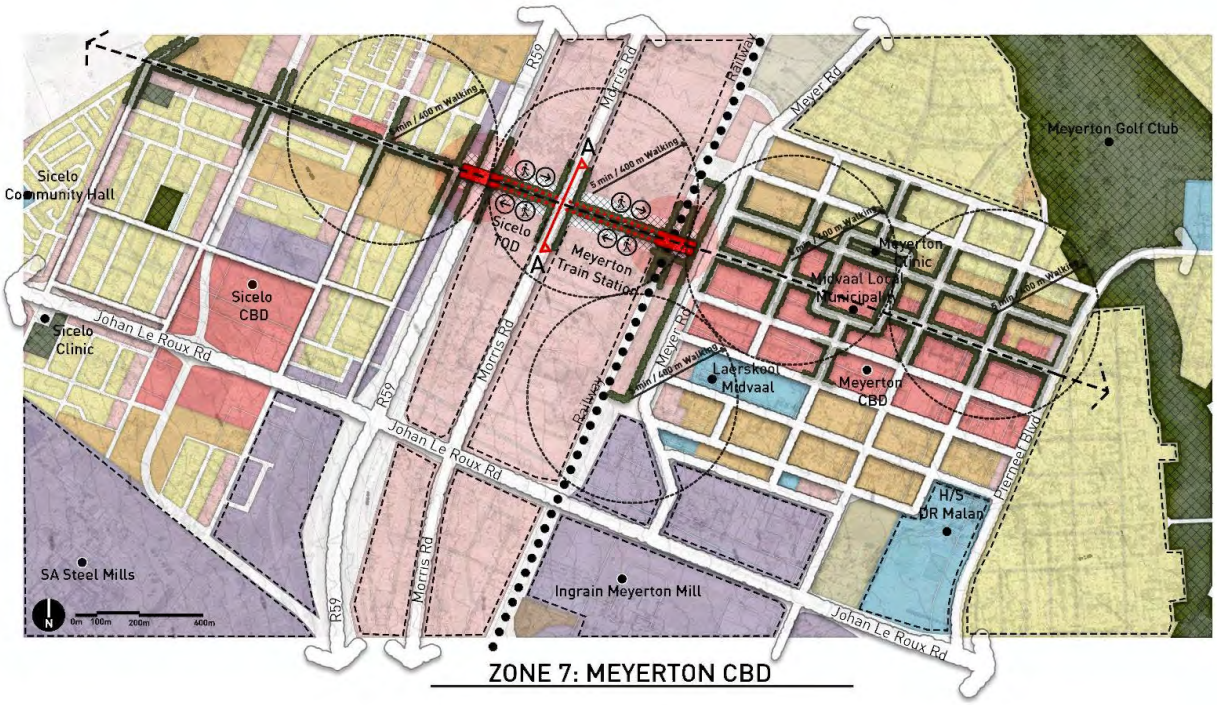
Residential 1:



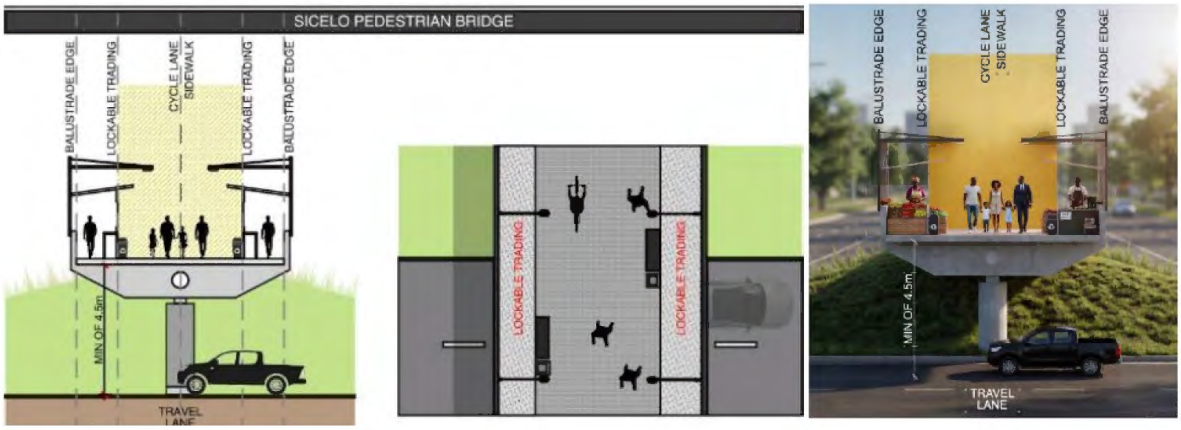
Residential 3:

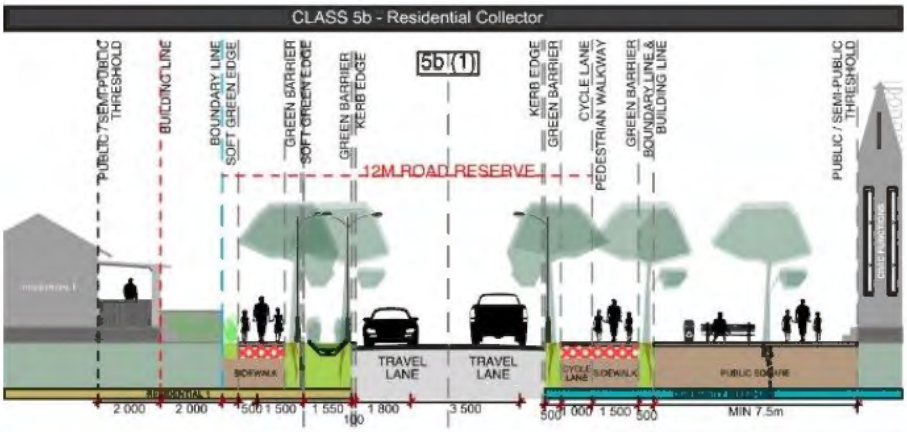


5.5.7 Meyerton CBD

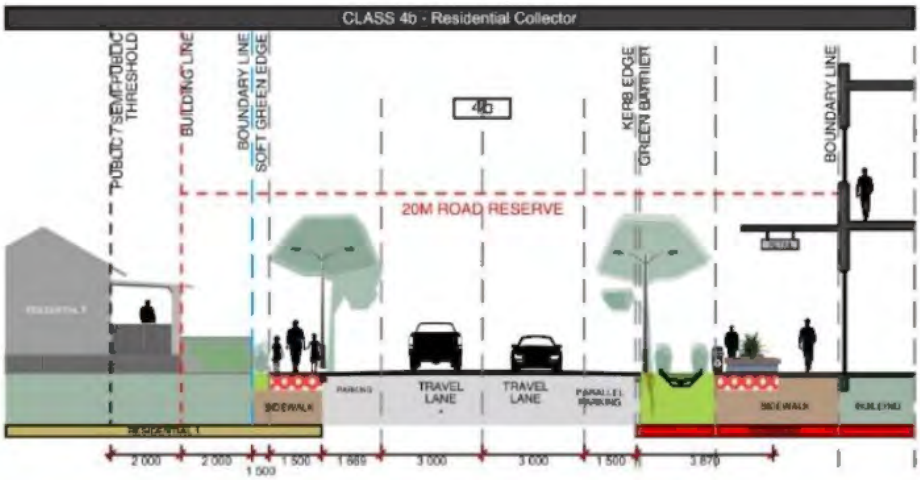


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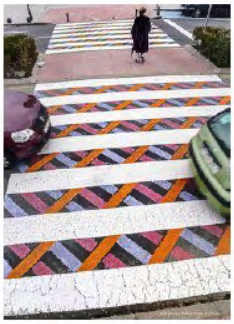

CLASS 5b - Residential Collector
5b (1)
12M ROAD RESERVE
BUILDING LINE
BOUNDARY LINE
SOFT GREEN EDGE
GREEN BARRIER
KERB EDGE
CYCLE LANE
PEDESTRIAN WALKWAY
BOUNDARY LINE & BUILDING LINE
PUBLIC / SEMI-PUBLIC THRESHOLD
SIDEWALK
TRAVEL LANE
TRAVEL LANE
CYCLE LANE
SIDEWALK
PUBLIC SQUARE
2 000
2 000
500
1 500
1 550
1 800
3 500
1 000
1 500
500
MIN 7.5m




CLASS 4b - Residential Collector
4b
20M ROAD RESERVE
BUILDING LINE
BOUNDARY LINE
SOFT GREEN EDGE
KERB EDGE
GREEN BARRIER
SIDEWALK
TRAVEL LANE
TRAVEL LANE
SIDEWALK
2 000
2 000
1 500
3 000
3 000
1 500


Main Street Market

Look & Feel:


Michelle's Plain Public Transport Interchange:

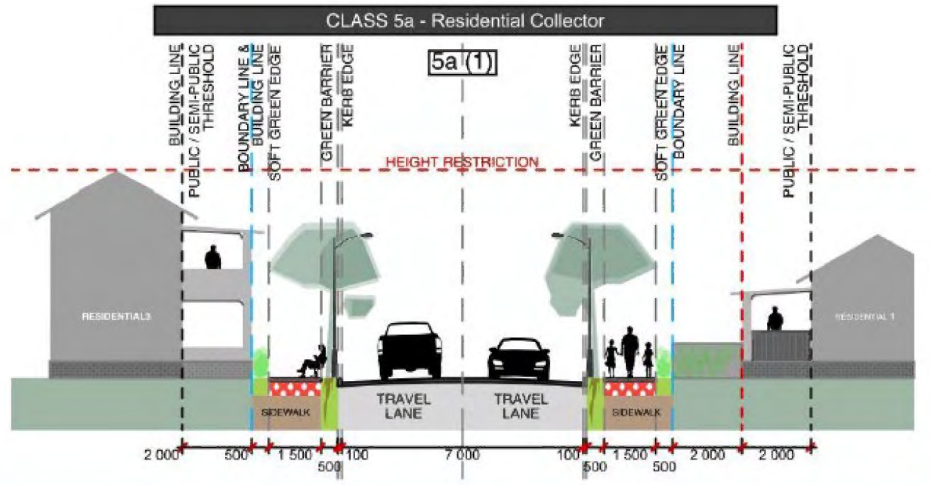




5.5.8 Rothdene & Kookrus



Section A-A (Duplex & Walk-up Typology):





6. IMPLEMENTATION FRAMEWORK

6.1 Investment Levers

The realisation of the residential and non-residential demand outlined in the preceding sections depends not only on demographic and economic drivers, but also on the presence of enabling conditions that attract and sustain investment. These "investment levers" are the mechanisms through which municipalities, developers and stakeholders can unlock development potential, reduce risk and accelerate market absorption. By identifying and strengthening these levers, the R59 Corridor can position itself as a competitive and resilient investment destination, ensuring that projected demand translates into tangible projects, jobs, and socio-economic benefits.

Key Investment Levers include:

1. **Infrastructure Provision and Upgrades**
   - Reliable bulk services (water, electricity, sanitation, stormwater).
   - Transport connectivity (road upgrades, logistics hubs, public transport integration).
   - Digital infrastructure (broadband, smart utilities).

2. **Policy and Regulatory Certainty**
   - Clear zoning and land use rights.
   - Streamlined development approval processes.
   - Alignment with municipal IDP, SDF and provincial growth strategies.

3. **Incentives and Financial Instruments**
   - Tax rebates or reduced development charges for strategic sectors.
   - Subsidies and grants (e.g., FLISP for housing, industrial development incentives).
   - Public-private partnerships (PPPs) for catalytic projects.

4. **Strategic Land Assembly and Release**
   - Consolidation of fragmented land parcels.
   - Release of strategically located municipal land for development.
   - Land banking for future industrial and housing projects.

5. **Institutional Support and Governance**
   - Dedicated corridor management or development agency.
   - Transparent stakeholder engagement and community buy-in.
   - Partnerships with provincial and national agencies for funding and oversight.

6. **Market Positioning and Branding**
   - Promotion of the R59 Corridor as a logistics and industrial hub.
   - Marketing of residential opportunities (affordable housing, mixed-use precincts).
   - Leveraging proximity to Gauteng's economic core for investor confidence.

7. Skills Development and Labour Market Readiness

- Training programs aligned with industrial and service sector needs.
- Collaboration with TVET colleges and universities.
- Ensuring a pipeline of skilled labour to support corridor industries.

6.2 Implementation Plan

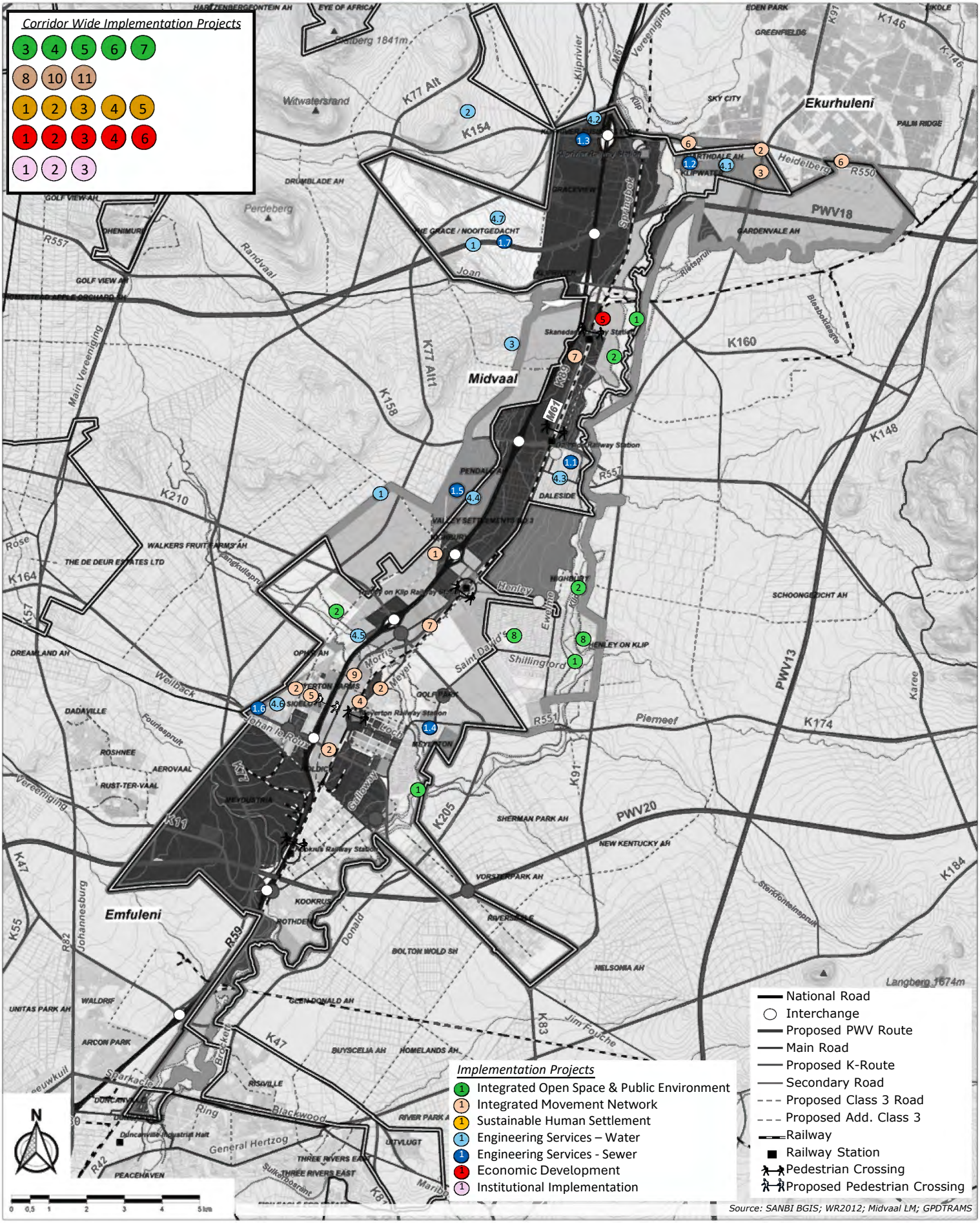
Table 56 below outlines the Implementation Plan which lists the various proposed projects emanating from the Development Strategies and **Figure 74** provides the spatial location of the projects.

Table 56: Implementation Plan

PROJECT NO.	PROJECT DESCRIPTION	RESPONSIBLE DEPARTMENT /ENTITY	APPROXIMATE/ ESTIMATED BUDGET	POSSIBLE FUNDING SOURCE	PRIORITY		
					S	M	L
DEVELOPMENT OBJECTIVE 1: INTEGRATED OPEN SPACE & PUBLIC ENVIRONMENT							
1	Facilitate agreement between river facing owners to allow for continuous walkways along river front for cycling/walking	Midvaal LM Tourism	Operational	Op Budget	**X**		
2	Develop policy on land that falls within 1:100-year floodline and maybe incorporated into development to form active open space	Midvaal LM GDARD	Operational	Op Budget; GCF; UN-Habitat	**X**		
3	Maintain all public open spaces in R59, cutting all grass, and manufacturing Park furniture	Midvaal LM	Operational	Op Budget; EPWP (Mun)	**Continuous**		
4	Midvaal can explore mechanism of allowing civil society to "adapt a spot" to involve community to maintain public open spaces	Midvaal LM Community	Operational	Op Budget; PPP	**X**		
5	Define the green-blue network, buffers, access, recreation, development interfaces and management measures	Midvaal LM	Operational	Op Budget; GCF; UN-Habitat; DBSA			

PROJECT NO.	PROJECT DESCRIPTION	RESPONSIBLE DEPARTMENT /ENTITY	APPROXIMATE/ ESTIMATED BUDGET	POSSIBLE FUNDING SOURCE	PRIORITY		
					S	M	L
6	Design and implement selected landscaped walking, cycling and recreation links connected to nodes.	Midvaal LM		Capital Budget; MIG; NDPG; GCF; EPWP (Mun)			
7	Provide and place park furniture (benches/dustbins) along cycling/walkways along Klipriver and open space areas	Midvaal LM	R 280,000.00	Capital Budget; NDPG; EPWP (Mun)		**X**	
8	Redesign and upgrade Oval Park, Fraser Park and area around library (Henley-on-Klip) for a variety of recreational activities	Midvaal LM	R 150,000.00	Capital Budget; MIG; NDPG; EPWP (Mun)	**X**		

Implementation Plan



PROJECT NO.	PROJECT DESCRIPTION	RESPONSIBLE DEPARTMENT /ENTITY	APPROXIMATE/ ESTIMATED BUDGET	POSSIBLE FUNDING SOURCE	PRIORITY		
					S	M	L
DEVELOPMENT OBJECTIVE 2: INTEGRATED MOVEMENT NETWORK							
1	Upgrade Malcolm Road to perform the interim distributor and local-access function.	Midvaal LM Gautrans	R18 million	Capital Budget; MIG; DBSA; Mun Bonds	**X**		
2	Develop and create NMT along R550, Meyer Road, Station Road, Johan Le Roux Road	Midvaal LM Gautrans	TBD	Capital Budget; MIG; NDPG; EPWP (Mun); Gauteng Provincial Transport Programmes	**X**		
3	Plan and design the proposed priority Class 3 road link, intersections, drainage and safety works within the Garthdale Area	Midvaal LM Gautrans	Approximately R8million per km	Op Budget; Capital Budget; MIG; DBSA		**X**	
4	Upgrade the railway pedestrian bridge as part of the continuous Sicelo-Meyerton pedestrian route.	Midvaal LM/ PRASA	TBD	PRASA Capital Programme; Capital Budget; Gauteng Provincial Transport Programmes	**X**		
5	Upgrade Station Road with pedestrian facilities, lighting, landscaping and safety measures	Midvaal LM	R16 million	Capital Budget; MIG; NDPG; EPWP (Mun)		**X**	
6	Upgrade R550 (K154) to planned K-Route standard with 2 lanes per direction from Sontago Road to R59	Midvaal LM Gautrans	TBD	Gauteng Provincial Roads Budget; Capital Budget; DBSA; Mun Bonds	**X**		
7	Develop an access management plan incorporating the K89 and associated service roads. The plan should be developed with community to clearly indicate permissible access locations	Midvaal LM Gautrans	R 250,000.00	Op Budget; GTAC; DBSA	**X**		

PROJECT NO.	PROJECT DESCRIPTION	RESPONSIBLE DEPARTMENT /ENTITY	APPROXIMATE/ ESTIMATED BUDGET	POSSIBLE FUNDING SOURCE	PRIORITY		
					S	M	L
	and the required service roads to support development						
8	Informal rail crossings (pedestrian/vehicle) should be investigated, and formal crossings should be provided at strategic locations by Transnet	Midvaal LM Transnet	TBD	Transnet / PRASA Capital Programme; Capital Budget; Gauteng Provincial Transport Programmes	**X**		
9	The status/intent of Gautrans should be confirmed for the section of the M61 (Morris Road) up to where it terminates at Johan Le Roux Road. Clarity needs to be obtained of the section of road that should not be deproclaimed	Midvaal LM Gautrans	R 250,000.00	Op Budget; Gauteng Provincial Roads Budget	**X**		
10	Passenger Rail Reinstatement Feasibility and Coordination Study: Assess feasibility, infrastructure requirements and the institutional pathway for passenger rail reinstatement.	PRASA / Transnet	R1,5miilion	PRASA / Transnet; Op Budget; GTAC; DBSA	**X**		
11	Reinstate railway service as a passenger service	Transnet	Operational	PRASA / Transnet Operating Budget; Gauteng Provincial Transport Programmes	**X**		
DEVELOPMENT OBJECTIVE 3: SUSTAINABLE HUMAN SETTLEMENT							
1	Review Midvaal LM Housing Chapter linked with detailed housing market study to quantify housing need and housing programme mixture. Housing Chapter should allow for accreditation	Midvaal LM Gauteng DHS	R 680,000.00	Op Budget; HSDG; HDA; GPF; NHFC	**X**		

PROJECT NO.	PROJECT DESCRIPTION	RESPONSIBLE DEPARTMENT /ENTITY	APPROXIMATE/ ESTIMATED BUDGET	POSSIBLE FUNDING SOURCE	PRIORITY		
					S	M	L
2	Allow for the formulation of PPP for the development of housing on government owned land	Midvaal LM Gauteng DHS	TBD	HSDG; HDA; GPF; NHFC; PPP; Priv Equity	**X**		
3	Delineate and proposed Restructuring Zone within the next cycle of the Midvaal SDF to allow for the development of Social Housing	Midvaal LM	Operational	Op Budget; SHRA; GPF; HSDG	**X**		
4	Allow for the formulation of PPP between government and private land owners who offer to have their land included in housing projects	Midvaal LM Gauteng DHS Private Land Owners	Operational	HSDG; HDA; GPF; NHFC; PPP; Priv Equity	**X**		
5	Community Facilities Co-Development and PPP Programme: Structure participation by government, developers and landowners in community-facility delivery.	Midvaal LM, Private Sector, DoE, DoSD	Operational	Capital Budget; HSDG; NDPG; PPP; Developer Contributions	**X**		
DEVELOPMENT OBJECTIVE 5: ENGINEERING SERVICES							
Water							
1	Design and construct the proposed Nooitgedacht Reservoir (15 ML) and install new Rand Water connection to service Langkuil Development	Midvaal LM Gauteng DHS Rand Water	R32,550,000.00	RBIG; WSIG; MIG; HSDG; Capital Budget; DBSA; Rand Water	**X**		
2	Design and construct the proposed Klipriver HL Reservoir (16 ML) and pumpstation to service the various portions of the farm Nooitgedacht (previously The Grace) development	Midvaal LM Gauteng DHS Rand Water	R34,240,000.00	RBIG; WSIG; MIG; HSDG; Capital Budget; DBSA; Rand Water		**X**	

PROJECT NO.	PROJECT DESCRIPTION	RESPONSIBLE DEPARTMENT /ENTITY	APPROXIMATE/ ESTIMATED BUDGET	POSSIBLE FUNDING SOURCE	PRIORITY		
					S	M	L
3	Design and construct the additional Klipview Reservoir (27 ML) to service Klipriver Business Park	Midvaal LM Gauteng DHS Rand Water	R20,000,000.00	RBIG; WSIG; MIG; Capital Budget; DBSA; Developer Contributions		**X**	
4	**Design and install proposed planned water bulk pipelines**	**Midvaal LM Gauteng DHS Rand Water**		RBIG; WSIG; MIG; HSDG; Capital Budget; DBSA; Developer Contributions			
4.1	Garthdale (800m x 250mm)	Midvaal LM Rand Water	R1,553,339.00	RBIG; WSIG; MIG; Capital Budget; DBSA; Developer Contributions	**X**		
4.2	Klipriver Business Park (9500m x 315mm; 650m x 400mm; 3800m x 450mm; 2200m x 500mm; 1800m x 630mm)	Midvaal LM Rand Water Gauteng dhs	R76,144,254.00	RBIG; WSIG; MIG; HSDG; Capital Budget; DBSA; Developer Contributions	**X**		
4.3	Daleside (4250m x 200mm; 1150m x 250; 1100m x 315mm; 1500m x 450mm; 2450m x 500mm)	Midvaal LM	R32,940,677.00	RBIG; WSIG; MIG; Capital Budget; DBSA; Developer Contributions		**X**	
4.4	Pendale/Highbury (1700m x 160mm; 5100m x 200mm; 500m x 250mm; 3700m x 315mm)	Midvaal LM	R20,410,490.00	RBIG; WSIG; MIG; Capital Budget; DBSA; Developer Contributions		**X**	
4.5	Meyerton Farm (3100m x 900mm)	Midvaal LM Gauteng DHS	R59,570,406.00	RBIG; WSIG; MIG; HSDG; Capital Budget; DBSA; Developer Contributions	**X**		
4.6	Sicelo (1850m x 250mm; 5700m x 500mm; 2100m x 630mm; 1750m x 800mm)	Midvaal LM Gauteng DHS	R86,255,383.00	RBIG; WSIG; MIG; HSDG; Capital Budget; DBSA; Developer Contributions	**X**		
4.7	Various portions of the farm Nooitgedacht (previously The Grace) (620m x 450mm; 1500m x 560mm; 4200m x 710mm)	Midvaal LM Gauteng DHS	R71,860,672.00	RBIG; WSIG; MIG; HSDG; Capital Budget; DBSA; Developer Contributions		**X**	

PROJECT NO.	PROJECT DESCRIPTION	RESPONSIBLE DEPARTMENT /ENTITY	APPROXIMATE/ ESTIMATED BUDGET	POSSIBLE FUNDING SOURCE	PRIORITY		
					S	M	L
Sewer							
1	The following sewer upgrades will be required to service the various development areas:			RBIG; WSIG; MIG; HSDG; Capital Budget; DBSA; Developer Contributions			
1.1	Daleside:	Midvaal LM					
	- Total new outfall sewer cost		R7,514,528.43	RBIG; WSIG; MIG; Capital Budget; DBSA; Developer Contributions		**X**	
	- Total outfall sewer upgrade cost		R8,024,585.64	RBIG; WSIG; MIG; Capital Budget; DBSA; Developer Contributions			
1.2	Garthdale:	Midvaal LM					
	- Total new outfall sewer cost		R1,827,721.81	RBIG; WSIG; MIG; Capital Budget; DBSA; Developer Contributions	**X**		
	- Total outfall sewer upgrade cost		-	RBIG; WSIG; MIG; Capital Budget; DBSA; Developer Contributions			
1.3	Klipriver:	Midvaal LM					
	- Total new outfall sewer cost		R1,550,418.9	RBIG; WSIG; MIG; Capital Budget; DBSA; Developer Contributions		**X**	
	- Total outfall sewer upgrade cost		R22,710,887.25	RBIG; WSIG; MIG; Capital Budget; DBSA; Developer Contributions		**X**	
1.4	Meyerton:	Midvaal LM					

PROJECT NO.	PROJECT DESCRIPTION	RESPONSIBLE DEPARTMENT /ENTITY	APPROXIMATE/ ESTIMATED BUDGET	POSSIBLE FUNDING SOURCE	PRIORITY		
					S	M	L
	- Total new outfall sewer cost		R3,095,047.01	RBIG; WSIG; MIG; Capital Budget; DBSA; Developer Contributions	**X**		
	- Total outfall sewer upgrade cost		R2,412,874.10	RBIG; WSIG; MIG; Capital Budget; DBSA; Developer Contributions	**X**		
1.5	Pendale/Highbury:	Midvaal LM					
	- Total new outfall sewer cost		R17,899,141.67	RBIG; WSIG; MIG; Capital Budget; DBSA; Developer Contributions		**X**	
	- Total outfall sewer upgrade cost		-	RBIG; WSIG; MIG; Capital Budget; DBSA; Developer Contributions			
1.6	Sicelo:	Midvaal LM Gauteng DHS					
	- Total new outfall sewer cost		R10,829,329.03	RBIG; WSIG; MIG; HSDG; Capital Budget; DBSA; Developer Contributions	**X**		
	- Total outfall sewer upgrade cost		R78,362,293.63	RBIG; WSIG; MIG; HSDG; Capital Budget; DBSA; Developer Contributions	**X**		
1.7	Various Portions of the Farm Nooitgedacht (previously The Grace):	Midvaal LM Gauteng DHS					
	- Total new outfall sewer cost		R105,320,351.15	RBIG; WSIG; MIG; HSDG; Capital Budget; DBSA; Developer Contributions			

PROJECT NO.	PROJECT DESCRIPTION	RESPONSIBLE DEPARTMENT /ENTITY	APPROXIMATE/ ESTIMATED BUDGET	POSSIBLE FUNDING SOURCE	PRIORITY		
					S	M	L
	- Total outfall sewer upgrade cost			RBIG; WSIG; MIG; HSDG; Capital Budget; DBSA; Developer Contributions		**X**	
*(These costs do not include sewer pump station or rising main upgrades)							
DEVELOPMENT OBJECTIVE 6: ECONOMIC DEVELOPMENT							
1	Develop a skills development programme aimed at emerging farmers and linking it to the industrial activities in the region, i.e. Heineken, Lynca Meats, Meze Foods, Soufflet Mall, etc.	Midvaal LED DLRRD GDARD	TBD	Op Budget; EPWP (Mun); DLRRD / GDARD Programmes; NDPG; PPP	**X**		
2	Compile feasibility study to outline strategies for the retention of existing industries and to attract additional investment (tax rebates, reduced bulk service contributions)	Midvaal LM	TBD	Op Budget; GTAC; DBSA; NDPG	**X**		
3	Establishment of beehive industrial complex to stimulate economic development and assist EMEs and SMMEs	Midvaal LM	TBD	NDPG; Capital Budget; DBSA; PPP; Priv Equity; Infra Fund	**X**		
4	Agricultural Value-Chain and Agri-Processing Support Programme: Link producers to packaging, storage, processing, logistics and markets.	Midvaal LM GDED	Operational	Op Budget; DLRRD / GDARD Programmes; DBSA; PPP; Priv Equity	**X**		
5	Klipriver Heritage and Recreation Precinct Initiative: Plan and implement heritage, tourism and recreation measures around the W6 area and river system.	Midvaal LM GDED	Operation	NDPG; GCF; UN-Habitat; Capital Budget; PPP; Priv Equity		**X**	

PROJECT NO.	PROJECT DESCRIPTION	RESPONSIBLE DEPARTMENT /ENTITY	APPROXIMATE/ ESTIMATED BUDGET	POSSIBLE FUNDING SOURCE	PRIORITY		
					S	M	L
6	Tourism, Gateway Signage and Wayfinding Programme: Implement coordinated gateway identification, directional signage, tourism information and route branding.	Midvaal LM GDED Gauteng Tourism Authority	TBD	Op Budget; NDPG; Capital Budget; PPP; Tourism Partnerships		**X**	
Institutional Implementation							
1	R59 Corridor Implementation and Coordination Structure: Establish a dedicated mechanism for programme coordination, departmental alignment and engagement with authorities.	Midvaal LM	Operational	Op Budget	**Continuous**		
2	R59 Spatial Development and Infrastructure Monitoring System: Establish a GIS-based system tracking applications, development uptake, capacity and project implementation.	Midvaal LM	Operational	Op Budget; DBSA; GTAC; UN-Habitat	**Continuous**		
3	R59 Corridor Investment Prospectus and Marketing Programme: Package and periodically update verified industrial, logistics, mixed-use, housing and business opportunities.	Midvaal LM	Operational	Op Budget; NDPG; DBSA; PPP; Priv Equity	**Operational**		

Table 57 provides an overall indication of the estimated bulk infrastructure investment required to support future development within the R59 Corridor. The table outlines the capital costs associated with the provision and upgrading of bulk water and sewer infrastructure and demonstrates the extent of development potential that can be unlocked through these investments. Specifically, the table quantifies the additional industrial, residential and mixed-use development opportunities that become feasible once the required bulk infrastructure capacity is in place.

It should be noted that the estimated infrastructure costs presented in the table exclude the cost of road infrastructure. The extent and cost of internal road networks can only be accurately determined once detailed township layouts and development plans have been prepared. Furthermore, portions of the study area are already served by existing road infrastructure, the capacity and upgrading requirements of which will need to be assessed on a site-specific basis as development proposals are advanced. As a result, the costs presented should be viewed as indicative bulk water and sanitation infrastructure investments required to unlock the identified development potential.

The table therefore serves as a strategic planning tool illustrating the relationship between bulk infrastructure investment and development yield, highlighting the potential return on investment in terms of residential, industrial and mixed-use land development opportunities within the corridor

Table 57: Potential Developable Land Enabled by Bulk Infrastructure Investment (m^2)/units)

Area	Potential Yield			Infrastructure Cost		Total Infrastructure Cost (R million*)
	Industrial -75% Coverage (m^2 million*)	Residential (Units)	Mixed Use m^2)	Water (R million*)	Sewer (R million*)	
Garthdale			195 922	R1 900	R1 900	R3 800
Klipriver	4 300			R96 000	R24 000	R120 000
Various portions of the Farm Nooitgedacht (Previously The Grace)		13 266		R106 000	R105 000	R211 000
Daleside	2 200			R33 000	R15 000	R48 000
Pendale/Highbury	1 000			R20 000	R18 000	R38 000
Sicel/Langkuil		10 260		R119 000	R89 000	R208 000
Meyerton	5 000			R3 000	R5 000	R8 000
Sub Total				**R378 900**	**R257 900**	
Total	**12 500**	**23 526**	**195 922**			**R636 800**

**Values rounded to nearest million*

Table 58: Funding Source Reference Table

Acronym / Label	Funding Source	Description	Indicative Eligibility Criteria
MIG	Municipal Infrastructure Grant	Conditional grant for basic municipal infrastructure.	Municipal projects providing basic infrastructure and community services, subject to registration, technical assessment, sector conditions and inclusion in the municipal planning and budgeting processes.
RBIG	Regional Bulk Infrastructure Grant	National water and sanitation grant supporting regional bulk infrastructure.	Regional bulk water or sanitation infrastructure with a demonstrated service need and approved sector planning. Municipal participation may occur through the responsible national department and relevant water-sector institutions.
WSIG	Water Services Infrastructure Grant	Water-services grant supporting water and sanitation infrastructure.	Water-services projects addressing access, reliability, refurbishment or service backlogs, subject to the municipality being eligible under the annual framework and the project meeting water-sector requirements.
NDPG	Neighbourhood Development Partnership Grant	National Treasury programme supporting township and neighbourhood development through catalytic public investment and planning support.	Projects in underserved neighbourhoods or township nodes that can leverage wider public and private investment. Access is subject to programme selection, project preparation requirements and National Treasury approval.
EPWP	Expanded Public Works Programme Integrated Grant for Municipalities	Incentive grant supporting labour-intensive municipal programmes and work opportunities.	Eligible municipal infrastructure, environmental, cultural, social or maintenance activities implemented using approved labour-intensive methods and reported through the applicable EPWP systems.
HSDG	Human Settlements Development Grant	Provincial human-settlements grant used for housing and supporting infrastructure.	Human-settlement projects approved and implemented through the provincial human-settlements programme. Midvaal projects require alignment with the provincial business plan and approved housing project pipeline.
Capital Budget	Midvaal Local Municipality Capital Budget	Municipal own funding for creation, acquisition, renewal or upgrading of capital assets.	Projects approved through the IDP, budget and capital prioritisation process, supported by affordability, technical readiness, procurement and asset-management requirements.

Acronym / Label	Funding Source	Description	Indicative Eligibility Criteria
Op Budget	Midvaal Local Municipality Operating Budget	Municipal own funding for operations, maintenance, studies, planning and programme administration.	Activities approved through the municipal IDP, SDBIP and annual operating budget, within the responsible department's mandate and available operating resources.
DBSA	Development Bank of Southern Africa	Development finance and project-preparation support for public infrastructure.	Bankable public-infrastructure projects or project-preparation assignments with an identified implementing institution, affordability, governance arrangements and capacity to meet the applicable financing conditions.
GTAC	Government Technical Advisory Centre	National Treasury technical and transaction-advisory support.	Government-led feasibility, business-case, public-private partnership and project-preparation assignments accepted through the applicable GTAC support or procurement mechanism.
HDA	Housing Development Agency	National public entity supporting land assembly and human-settlement development.	Human-settlement land identification, acquisition, assembly, planning or project support undertaken through an approved mandate or agreement with the relevant government authority.
SHRA	Social Housing Regulatory Authority	Regulator and capital-funding authority for the social-housing programme.	Social-housing projects undertaken by an accredited social housing institution, within an approved restructuring zone and in accordance with programme, institutional and project requirements.
GPF	Gauteng Partnership Fund	Gauteng development-finance institution supporting affordable housing and related developments.	Qualifying Gauteng housing or mixed-use development proposals that meet the relevant product, affordability, due-diligence and security requirements.
NHFC	National Housing Finance Corporation / Human Settlements Development Finance Institution	Development finance for affordable residential property and housing market programmes.	Viable affordable-housing, rental, incremental or housing-market projects meeting the institution's financing, affordability, governance and due-diligence requirements.
Infra Fund	Infrastructure Fund	Blended-finance and project-preparation mechanism for strategic infrastructure.	Large or catalytic infrastructure projects with a sponsoring public institution, credible project preparation, defined revenue or fiscal support arrangements and potential for blended public-private financing.

Acronym / Label	Funding Source	Description	Indicative Eligibility Criteria
PPP	Public-Private Partnership	Contractual arrangement through which a private party may finance, design, build, operate or maintain a public project or facility.	Projects capable of demonstrating value for money, affordability and appropriate risk transfer, and which comply with the applicable municipal finance and public-private partnership approval requirements.
Priv Equity	Private Equity / Private-Sector Investment	Commercial investment by private developers, investors or operators.	Revenue-generating or commercially viable industrial, mixed-use, tourism, housing or service projects with acceptable development rights, risk allocation and expected investment returns.
Mun Bonds	Municipal Borrowing / Municipal Bonds	Long-term municipal debt used to finance capital infrastructure.	Capital projects with a long useful life, subject to municipal creditworthiness, affordability, council approval and compliance with municipal borrowing and financial-management requirements.
GCF	Green Climate Fund	International climate-finance mechanism supporting mitigation and adaptation.	Climate projects demonstrating measurable mitigation or adaptation outcomes and submitted through an accredited entity. Municipal projects require suitable project preparation and an eligible accredited delivery route.
UN-Habitat	United Nations Human Settlements Programme	Technical assistance and programme support for sustainable settlements and urban development.	Projects aligned with an available UN-Habitat programme or partnership, commonly involving planning, public space, settlement improvement, resilience, capacity-building or demonstration initiatives.
Developer Contributions	Development Contributions / Developer-Funded Infrastructure	Contributions or infrastructure delivered by developers to address impacts of land development.	Infrastructure reasonably linked to an approved development and required through lawful development conditions, agreements or the applicable municipal development-charge framework.
Rand Water	Rand Water Capital or Partnership Programme	Bulk-water infrastructure funding or implementation undertaken by Rand Water within its mandate.	Bulk-water projects falling within Rand Water's system and approved capital programme, or projects implemented through an agreement with the municipality and other water-sector authorities.
Gauteng Provincial Transport Programmes	Gauteng Provincial Roads and Transport Funding	Provincial funding or implementation for roads and transport infrastructure under provincial jurisdiction.	Projects on, affecting or requiring approval for provincial roads or transport systems, subject to inclusion in the provincial programme, technical approval and budget availability.

Acronym / Label	Funding Source	Description	Indicative Eligibility Criteria
PRASA / Transnet Programmes	PRASA or Transnet Capital and Operating Programmes	Rail infrastructure, stations, crossings or services funded and implemented by the responsible rail entity.	Projects within the relevant entity's statutory and operational mandate and accepted into its planning, safety, asset-management and capital or operating programme.
DLRRD / GDARD Programmes	National or Gauteng Agriculture and Rural Development Programmes	Sector programmes supporting agriculture, rural development, land reform or producer development.	Qualifying agricultural enterprises, producer-support, rural-development or land-reform initiatives aligned with the relevant department's approved programme and beneficiary criteria.
Tourism Partnerships	Public and Private Tourism Partnerships	Partnership funding from tourism authorities, destination organisations, businesses, sponsors or operators.	Tourism signage, marketing, heritage, events or visitor facilities supported by an approved partnership, sponsorship, co-funding arrangement or commercially viable operator model.

Excluded metropolitan-only sources: USDG, IUDG and PTNG have not been retained as possible funding sources for Midvaal Local Municipality in this table. ISUPG has not been included because the listed R59 projects do not comprise an identified informal-settlement upgrading project; if such a project is subsequently included, provincial human-settlements funding should be assessed against the current grant framework.

6.3 Fiscal and Socio-Economic Impact Assessment

This chapter assesses the potential fiscal and socio-economic impacts that may arise from the uptake of additional residential and non-residential land uses within the delineated R59 Corridor. Whereas Chapter 4 quantified the scale of future demand, this section evaluates the broader consequences of translating that demand into actual development. The analysis considers both the construction phase, where capital investment generates temporary employment and procurement opportunities, and the operational phase, where new households and businesses contribute to sustained economic activity, municipal revenue and long-term employment creation.

The impacts extend beyond the direct jobs and income generated by new developments. They include the multiplier effects that ripple through the local, provincial and national economies as suppliers, service providers and households respond to increased demand. To quantify these effects, the study employs an input-output model, which captures the interdependencies between sectors and provides a structured framework for estimating the total economic contribution of projected development.

The section below provides a synopsis of the fiscal and socio-economic impact that may emanate from the construction and operational phases.

6.3.1 Impact Synopsis

Total Estimated Capital Investment (CAPEX) and Operational Expenditure (OPEX):

The total estimated Capital Investment associated with the uptake of additional residential and non-residential land uses (Net Present Value for the current year) is approximately R10,32 billion – It should be noted that the Total CAPEX includes expenditure on furniture, fixtures, fittings and related services. The total estimated operational expenditure (annualised on-site business sales or turnover) linked to the new land uses is approximately R8,44 billion.

Summary of Construction Phase Impacts:

Impacts generated during the Construction Phase of the additional land use uptake are once-off and sustained for as long as construction occurs. These impacts dwindle as construction activity comes to an end and operational impacts are activated. The total CAPEX could temporarily add approximately R29,19 billion in additional business sales, R12,82 billion in additional GDP (contributing ± 0,61% to the provincial economy) and approximately 42 097 once-off jobs (formal and informal) throughout the Gauteng provincial economy.

An estimated 121 new formal small, medium and micro-enterprise (SMME) opportunities could be created, with black-owned SMME's potentially representing 74,38% of new formal opportunities, given the prevailing legislative environment.

Formal employment opportunities during the Construction Phase represent 32 948 jobs (total direct, indirect and induced). Approximately 22,92% of formal employment opportunities are expected to be filled by skilled labourers compared to 58,53% semi-skilled labourers and 18,55%

low-skilled labourers. Additional compensation paid to employees during the Construction Phase is estimated to be approximately R4,73 billion.

It is estimated that approximately R3,55 billion in additional taxes could be generated during the Construction Phase. The largest contributor to new taxes is as a result of personal income tax, contributing 33,45% to all taxes collected economywide.

Summary of Operational Phase Impacts:

Operational Phase impacts are generated once the new residential and non-residential land uses commence operations. Impacts created during the Operational Phase are "sustained" impacts. “Sustained impacts” are impacts that are continuously generated (i.e. created and then sustained annually).

The total OPEX (operational expenditure) could annually add approximately R23,28 billion in additional business sales, R11,48 billion in additional GDP (contributing ±0,55% to the provincial economy) and approximately 30,440 sustained jobs (formal and informal) throughout the Gauteng provincial economy.

An estimated 109 new formal small, medium and micro-enterprise (SMME) opportunities could be created, with black-owned SMME's potentially representing 73,39% of new formal opportunities, given the prevailing legislative environment.

Formal Employment opportunities created during the operational phase represent 24 426 jobs (total direct, indirect and induced). Approximately 29,06% of Formal Employment opportunities are expected to be filled by skilled labourers compared to 50,88% semi-skilled labourers and 20,06% low-skilled labourers. Additional annual compensation paid to employees during the Operational

Phase is estimated to be approximately R4,05 billion.

It is estimated that approximately R3,05 billion in additional taxes could be generated annually during the Operational Phase. The largest contributor to new annual taxes is as a result of personal income tax, contributing 35,48% to all taxes collected economywide.

Overall Outcome:

Overall, the construction and operational phases of the additional land use uptake within the R59 Corridor would have a measurable positive effect on the Gauteng provincial economy. The impacts include sizeable GDP over the short- to long-term, high additional business sales, new business formation and a considerable number of new employment opportunities - across all skill levels.

Additional taxes can contribute to national and local treasuries and households across the province can increase their livelihoods. The increased demand for social amenities will influence the fiscus and operation of public sector entities. The increased pressure on the fiscus is offset by the addition of productive rateable assets through the envisaged capital investment in the corridor's future land uses.

6.3.1.1 Construction Phase Impacts

The following diagrams (***Diagrams 27 – 29***) provide a concise overview of impacts that could arise during the Construction Phase. For a detailed breakdown of Construction Phase impacts, please refer to Appendix A. Please note that all effects of the Construction Phase are unsustained meaning that impacts are once-off and sustained for the duration of the Construction Phase.

Diagram 27: Construction Phase: Overarching Impacts



Diagram 28: Construction Phase: Formal Job Opportunities and Compensation

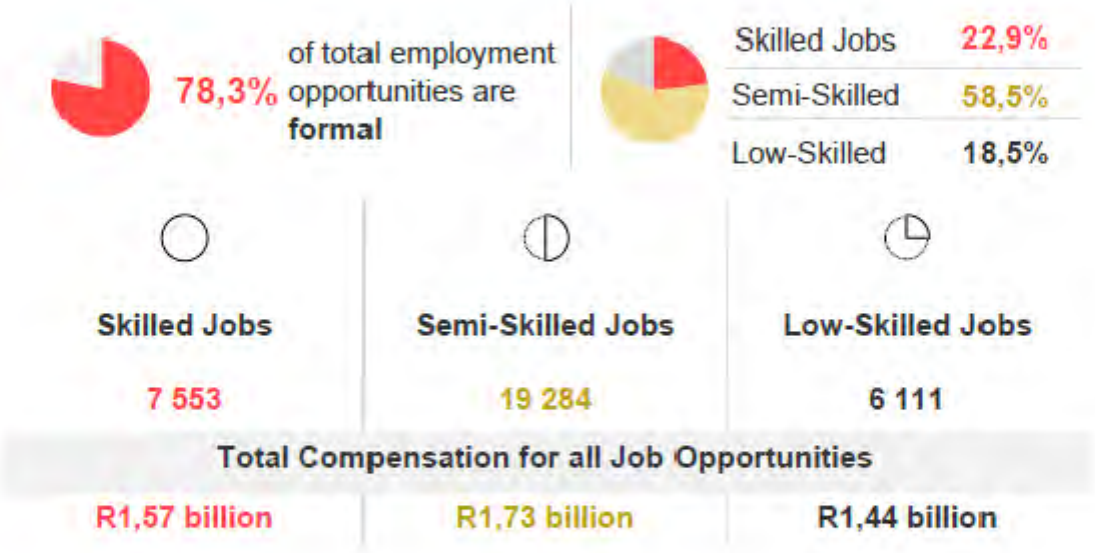
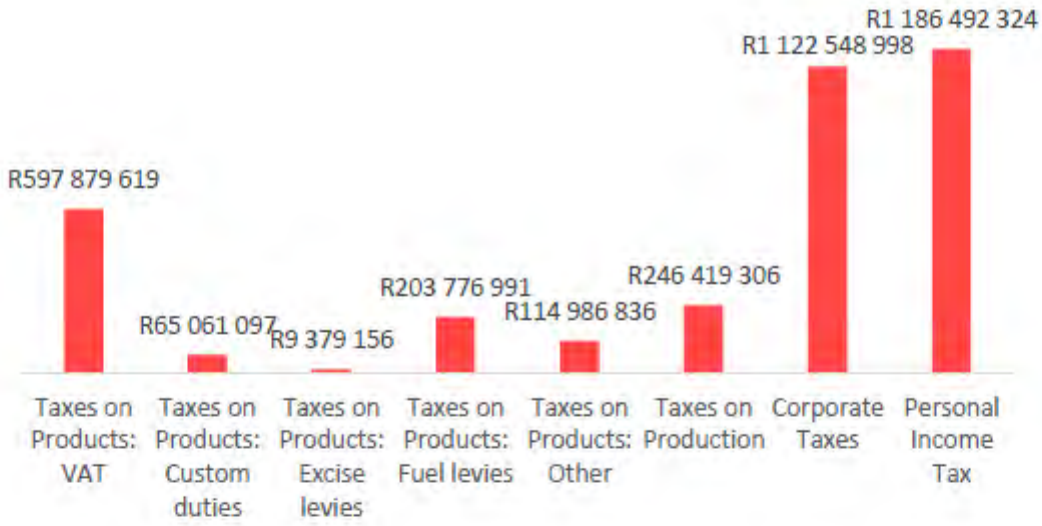


Diagram 29: Construction Phase: Impact on Taxation



Social Amenities Potentially Required:

No social amenity impacts apply during the Construction Phase.

6.3.1.2 Operational Phase Impacts

The following diagrams (***Diagrams 30 – 34***) provide a concise overview of impacts that could arise during the Operational Phase. For a detailed breakdown of Operational Phase impacts, please refer to Appendix A. Please note that all effects of the Operational Phase are sustained meaning that impacts are continuously generated (i.e. created and then sustained annually) once the new residential and non-residential land uses commence operations (long-term impacts).

Diagram 30: Operational Phase: Overarching Impacts



Diagram 31: Operational Phase: Estimated Number of New Enterprise Opportunities



Diagram 32: Operational Phase: Formal Job Opportunities and Compensation



Diagram 33: Operational Phase: Impact on Taxation

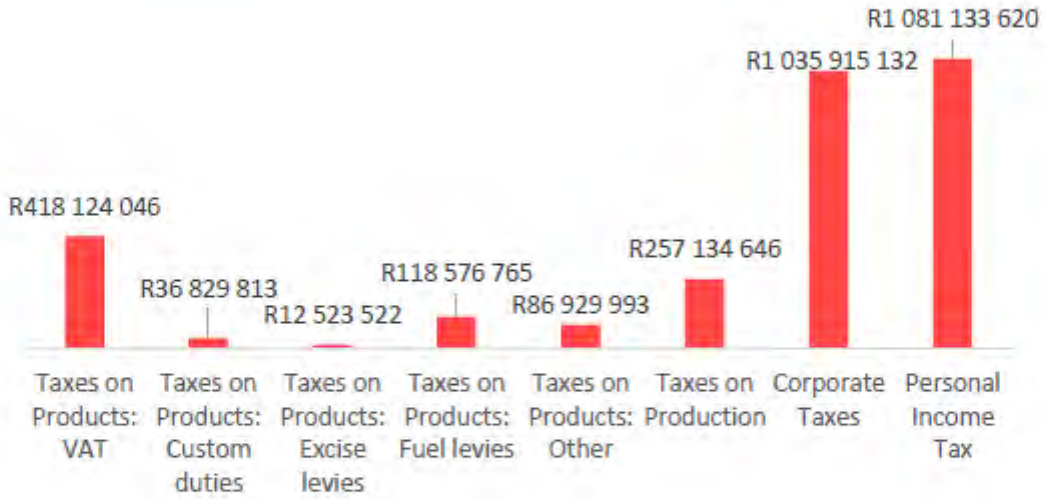


Diagram 34: Operational Phase: Social Amenities Potentially Required



6.3.1.3 Synthesis

The impact assessment confirms that the uptake of additional residential and non-residential land uses within the R59 Corridor would generate substantial benefits for the Gauteng provincial economy. The construction phase provides a once-off but significant stimulus, creating thousands of jobs, new SMME opportunities and sizeable contributions to GDP and tax revenue. The operational phase sustains these impacts over the long term, adding continuous employment, household income and municipal revenue through productive rateable assets.

Together, these impacts demonstrate that the corridor's development potential is not only spatially and economically viable, but also fiscally beneficial and socially inclusive. The ripple effects extend beyond direct investment, strengthening backward and forward linkages across industries, supporting household livelihoods and increasing demand for social amenities. Importantly, the fiscal pressures associated with growth are offset by the creation of new assets and revenue

streams, ensuring that the municipality and province are better positioned to manage and finance future development.

In synthesis, the fiscal and socio-economic impacts validate the strategic importance of the R59 Corridor as a growth node. The findings provide a compelling evidence base for decision-makers, confirming that the projected land use demand can translate into measurable economic value, enhanced community well-being and long-term competitiveness. This positions the corridor as a catalyst for balanced, inclusive and sustainable development within Midvaal and the broader Gauteng economy.

The detail methodology for the Fiscal and Socio-economic Impact Assessment is contained in ***Annexure F***.

The full results of the Fiscal and Socio-economic Impact Model are contained in ***Annexure G***. The model aims to illustrate the impact the development may have on the Midvaal Municipality as well as the broader region. The fiscal and socio-economic projections derived from the Demacon Model are indicative in nature and should not be interpreted as precise or final values; rather they are intended to illustrate the potential scale, benefits and opportunities that could materialise should the proposed development be successfully implemented.

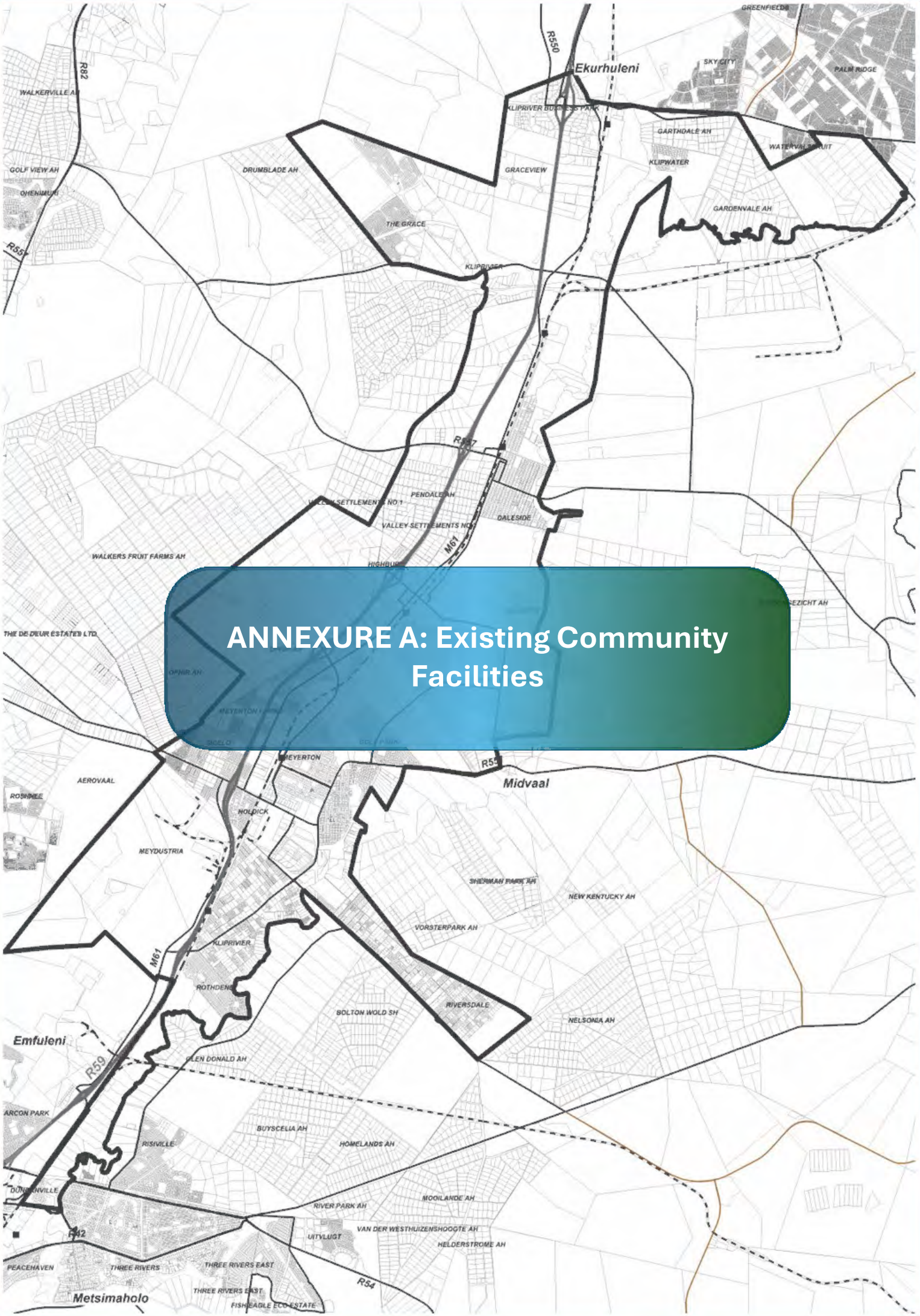
Annexure F contains the following key information:

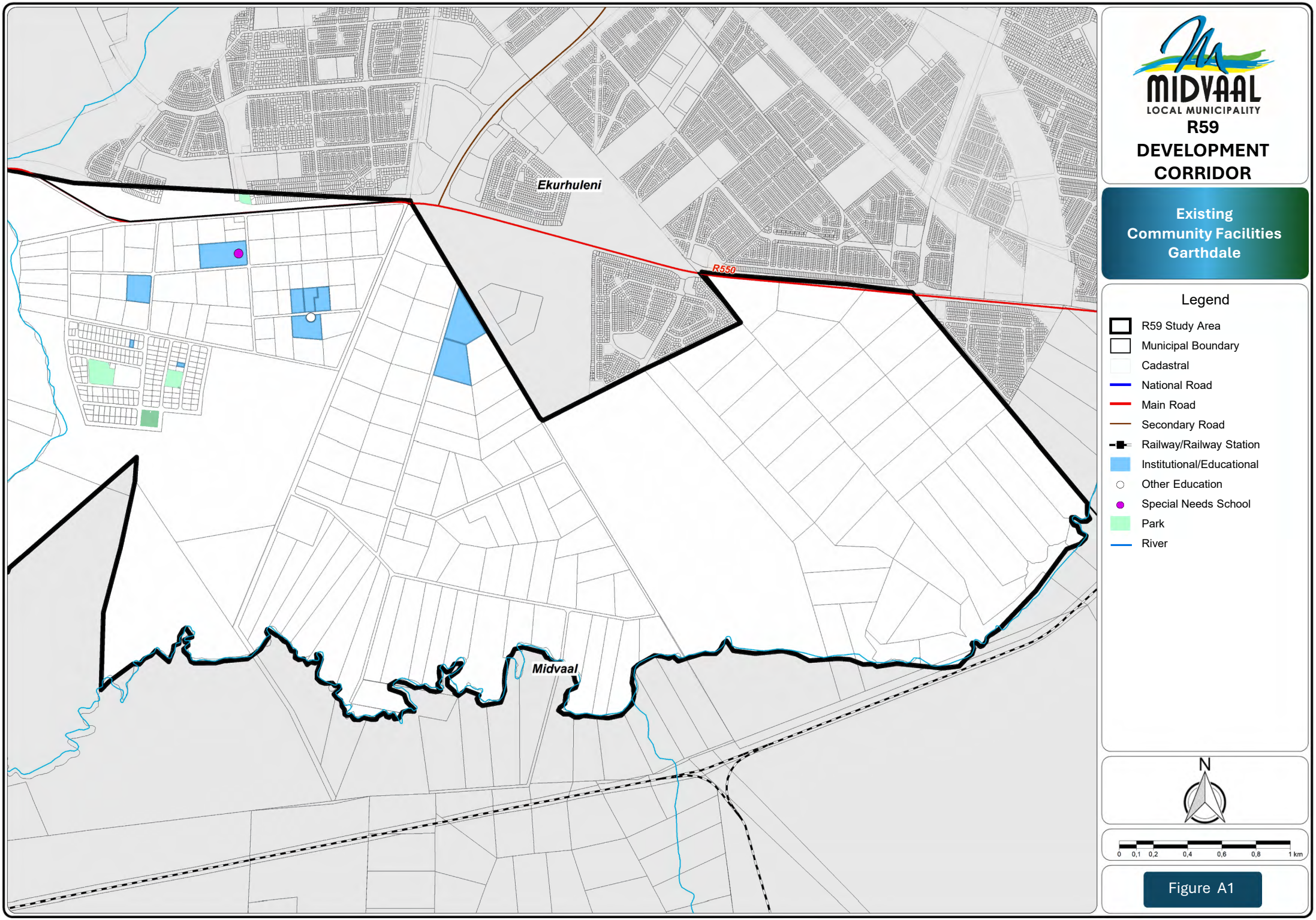
- Construction Phase Economic Impacts
- Operational Phase Economic Impacts
- Estimated Number of Formal SMME Opportunities
- Formal Jobs Created per Skills Level
- Impact on Compensation
- Impact on Social Facilities
- Impact on Taxation

Chapter 10
Sector Profiling

This section of the report focuses on the value chain reaction created within the sectoral profile (50 sub-sectors) of the provincial economy by the construction and operational impact of the proposed mixed-use project.

Ultimately, the profile provides an overview as to where within the provincial economy construction and operational phase impacts will generate added GDP and employment. The data is used to illustrate the value chain impact that the proposed project could have on the economy and where in the economy changes and benefits can be expected.


ANNEXURE A: Existing Community Facilities
Ekurhuleni
Midvaal
Emfuleni
Metsimaholo
R550
R82
R554
R57
M61
R59
R54
GREENFIELDS
SKY CITY
PALM RIDGE
WALKERVILLE AH
GOLF VIEW AH
DRUMBLADE AH
GRACEVIEW
KLIPWATER
GARDENVALE AH
THE GRACE
PENDALE AH
DALESIDE
WALKERS FRUIT FARMS AH
THE DE DEUR ESTATES LTD
AEROVAAL
ROSHNEE
HOLDICK
MEYDUSTRIA
KLIPRIVIER
VORSTERPARK AH
NEW KENTUCKY AH
NELSONIA AH
RIVERSDALE
SOLTON WOLD SH
GLEN DONALD AH
ARCON PARK
BUYSCELIA AH
RISIVILLE
HOMELANDS AH
MOOILANDE AH
RIVER PARK AH
VAN DER WESTHUIZENSHOOGTE AH
HELDERSTROME AH
UITVLUGT
PEACEHAVEN
THREE RIVERS
THREE RIVERS EAST
FISHEAGLE ECO ESTATE



MIDVAAL
LOCAL MUNICIPALITY

R59 DEVELOPMENT CORRIDOR

Existing Community Facilities Garthdale

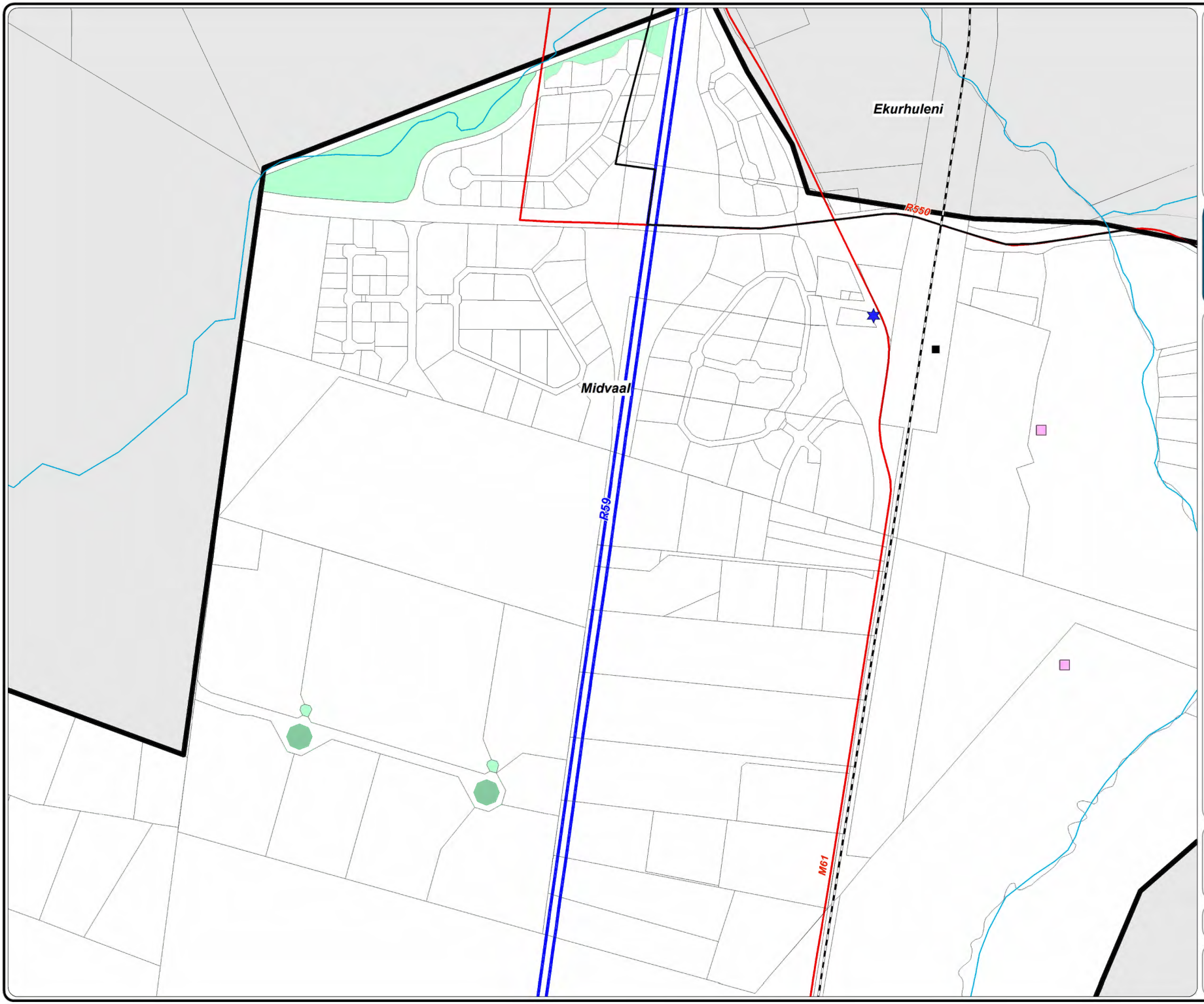
Legend

- R59 Study Area
- Municipal Boundary
- Cadastral
- National Road
- Main Road
- Secondary Road
- Railway/Railway Station
- Institutional/Educational
- Other Education
- Special Needs School
- Park
- River

N

0 0,1 0,2 0,4 0,6 0,8 1 km

Figure A1



MIDVAAL
LOCAL MUNICIPALITY

R59 DEVELOPMENT CORRIDOR

Existing Community Facilities Klipriver Park

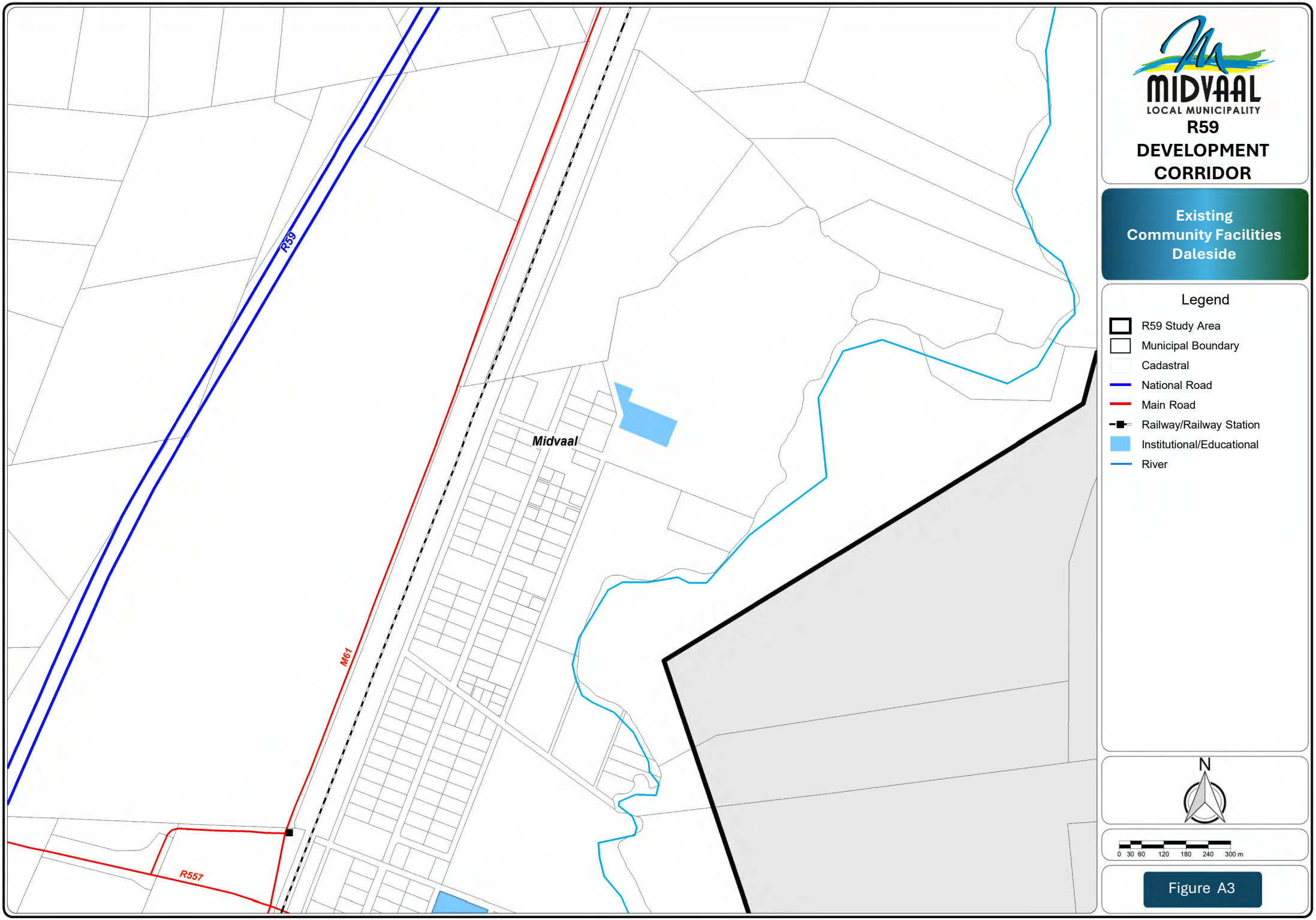
Legend

- R59 Study Area
- Municipal Boundary
- Cadastral
- National Road
- Main Road
- Secondary Road
- Railway/Railway Station
- Institutional/Educational
- Police Station
- Community Hall
- Park
- River

N

0 60 120 240 360 480 600 m

Figure A2



MIDVAAL
LOCAL MUNICIPALITY

R59 DEVELOPMENT CORRIDOR

Existing Community Facilities Daleside

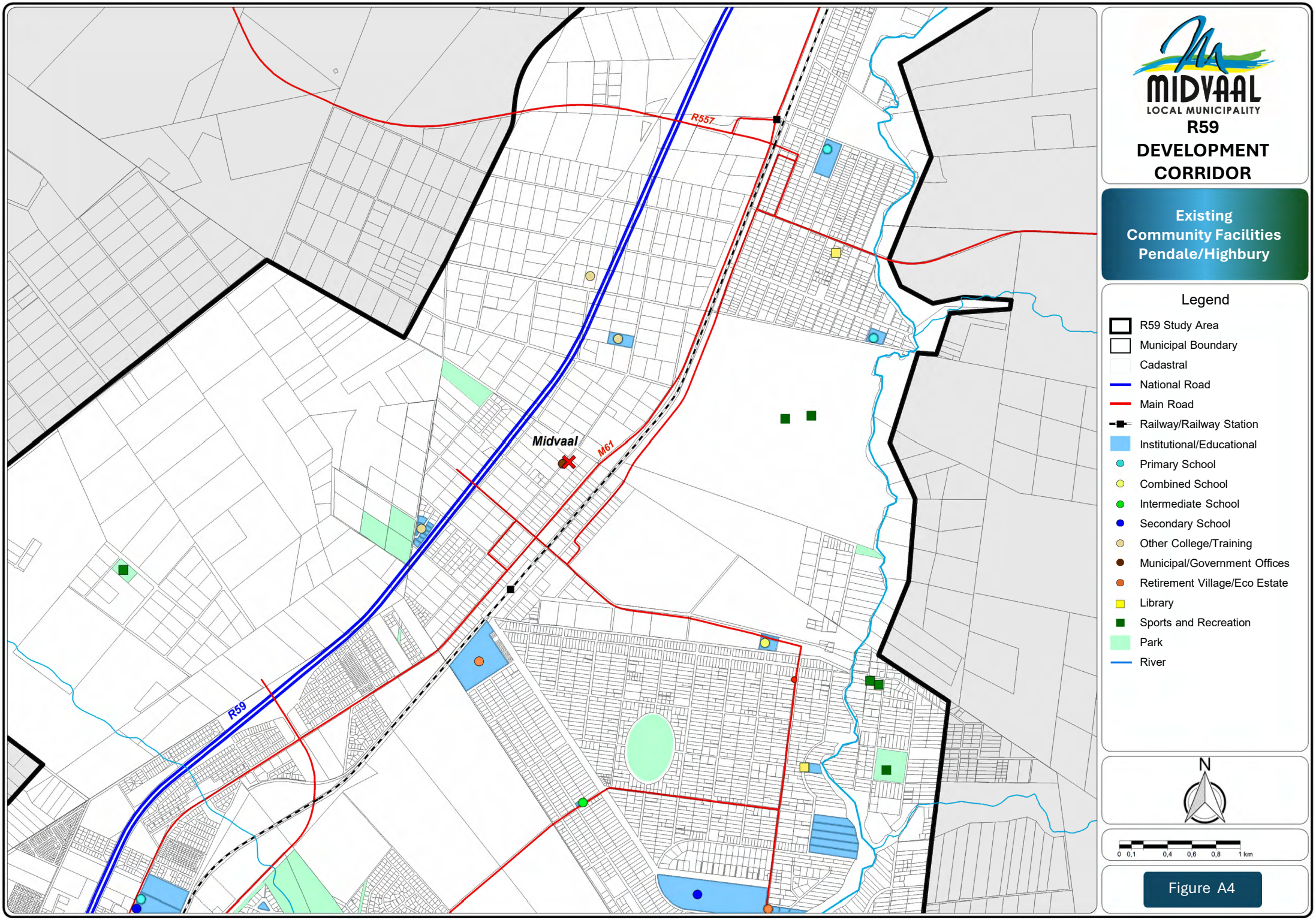
Legend

- R59 Study Area
- Municipal Boundary
- Cadastral
- National Road
- Main Road
- Railway/Railway Station
- Institutional/Educational
- River

N

0 30 60 120 180 240 300 m

Figure A3



MIDVAAL LOCAL MUNICIPALITY

R59 DEVELOPMENT CORRIDOR

Existing Community Facilities Pendale/Highbury

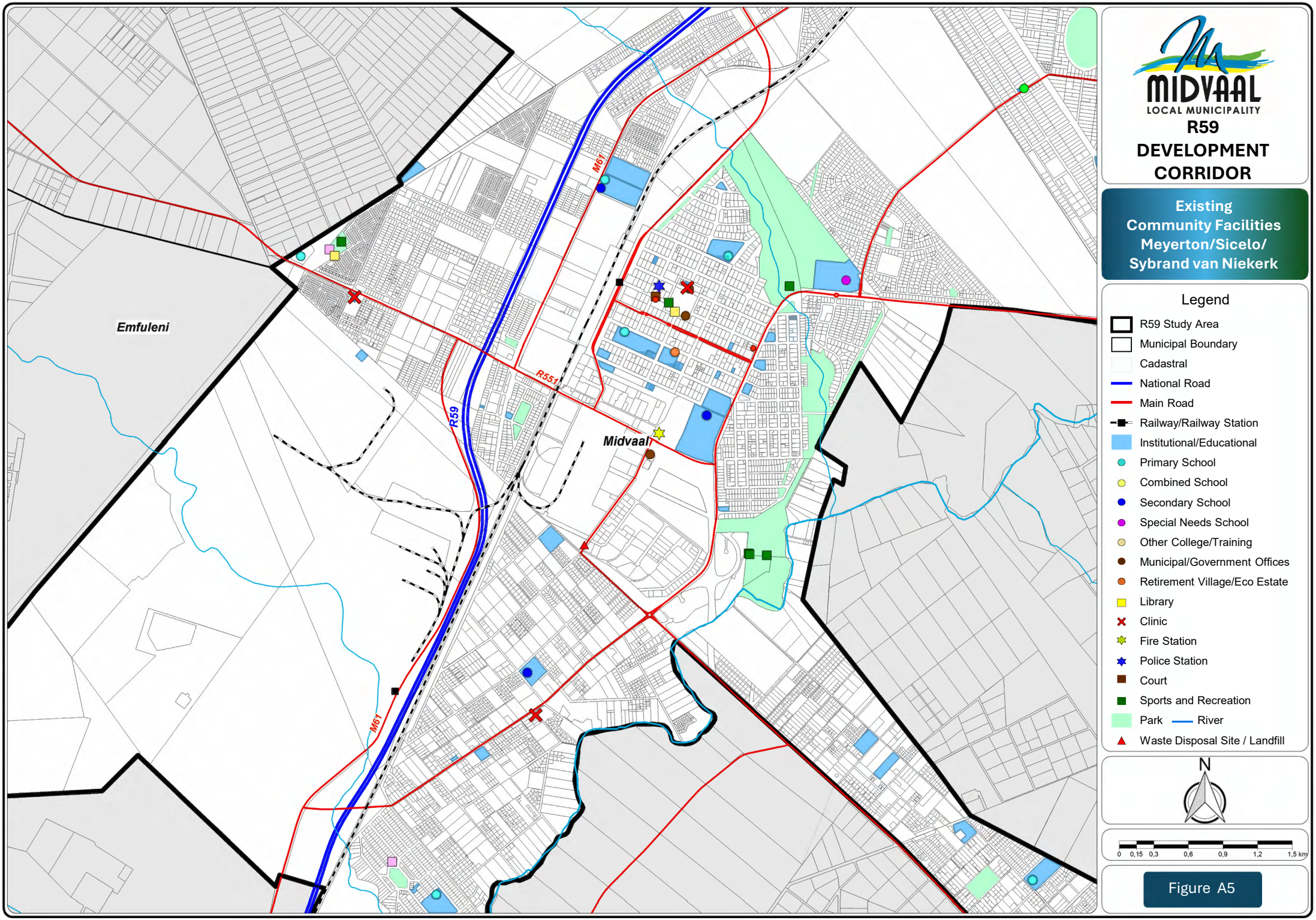
Legend

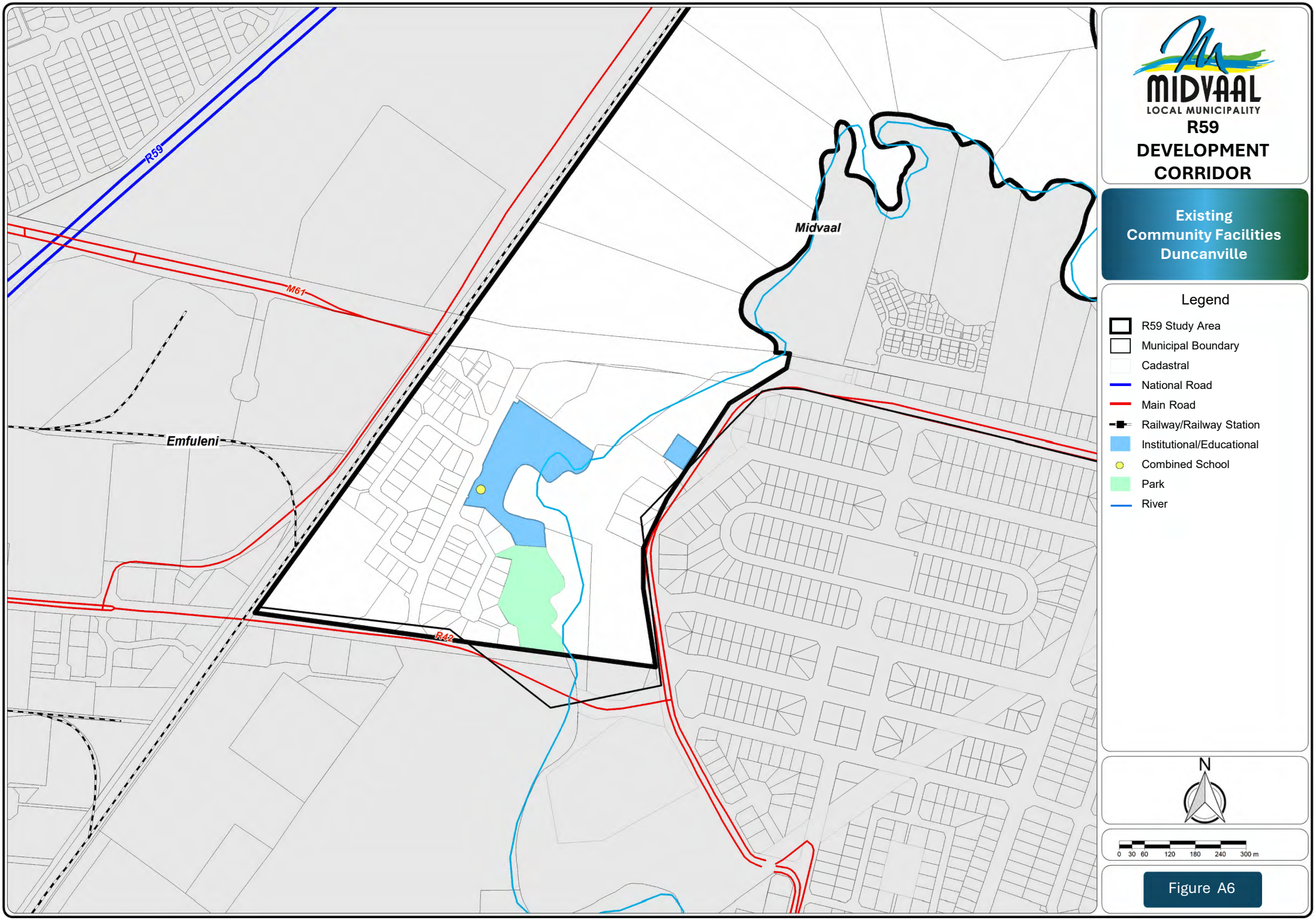
- R59 Study Area
- Municipal Boundary
- Cadastral
- National Road
- Main Road
- Railway/Railway Station
- Institutional/Educational
- Primary School
- Combined School
- Intermediate School
- Secondary School
- Other College/Training
- Municipal/Government Offices
- Retirement Village/Eco Estate
- Library
- Sports and Recreation
- Park
- River

N

0 0,1 0,4 0,6 0,8 1 km

Figure A4


MIDVAAL
LOCAL MUNICIPALITY
R59
DEVELOPMENT
CORRIDOR
Existing
Community Facilities
Meyerton/Sicelo/
Sybrand van Niekerk
Legend
R59 Study Area
Municipal Boundary
Cadastral
National Road
Main Road
Railway/Railway Station
Institutional/Educational
Primary School
Combined School
Secondary School
Special Needs School
Other College/Training
Municipal/Government Offices
Retirement Village/Eco Estate
Library
Clinic
Fire Station
Police Station
Court
Sports and Recreation
Park
River
Waste Disposal Site / Landfill
N
0 0,15 0,3 0,6 0,9 1,2 1,5 km
Figure A5
Emfuleni
Midvaal
R59
R551
M61
M61



MIDVAAL
LOCAL MUNICIPALITY

R59 DEVELOPMENT CORRIDOR

Existing Community Facilities Duncanville

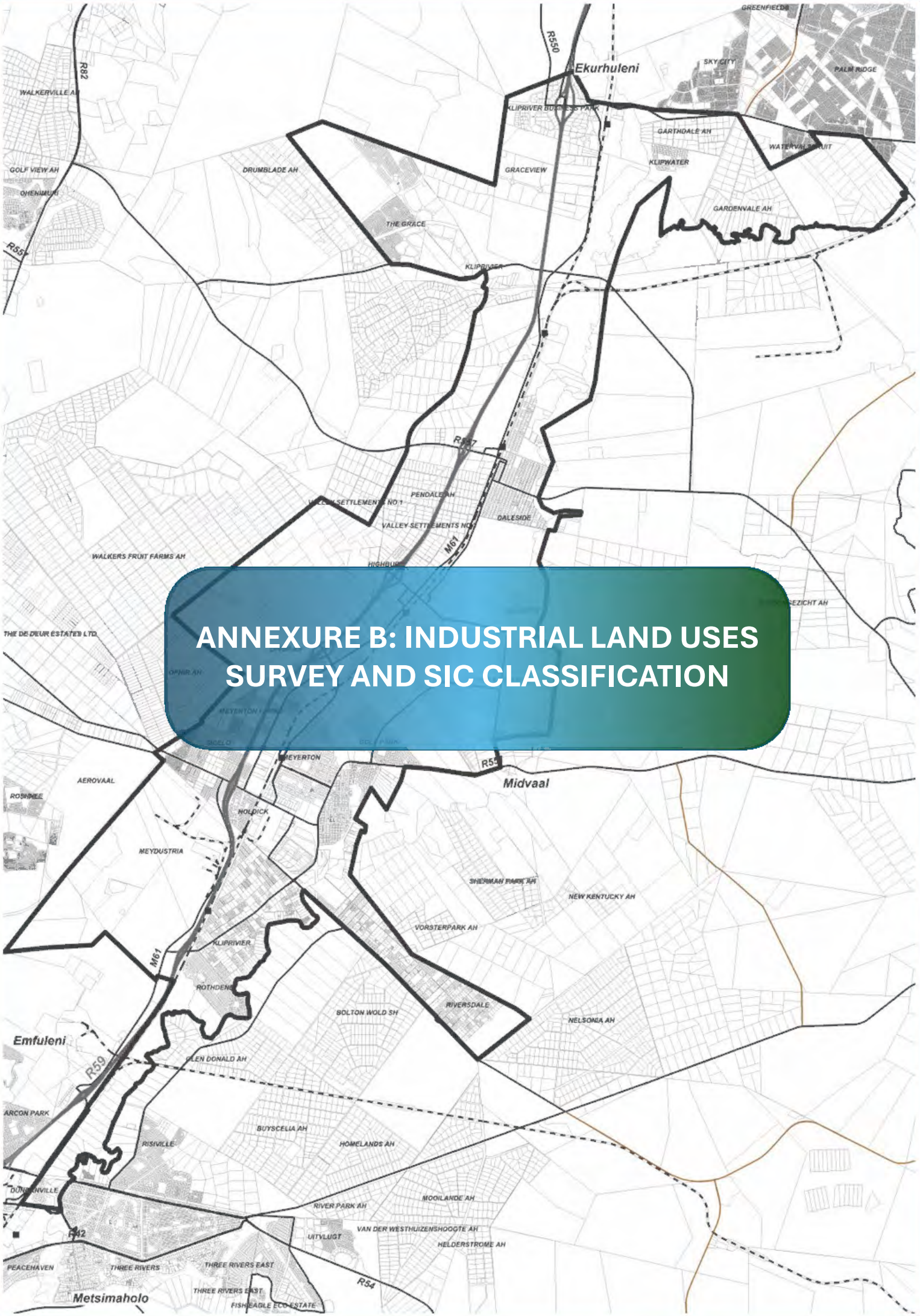
Legend

- R59 Study Area
- Municipal Boundary
- Cadastral
- National Road
- Main Road
- Railway/Railway Station
- Institutional/Educational
- Combined School
- Park
- River

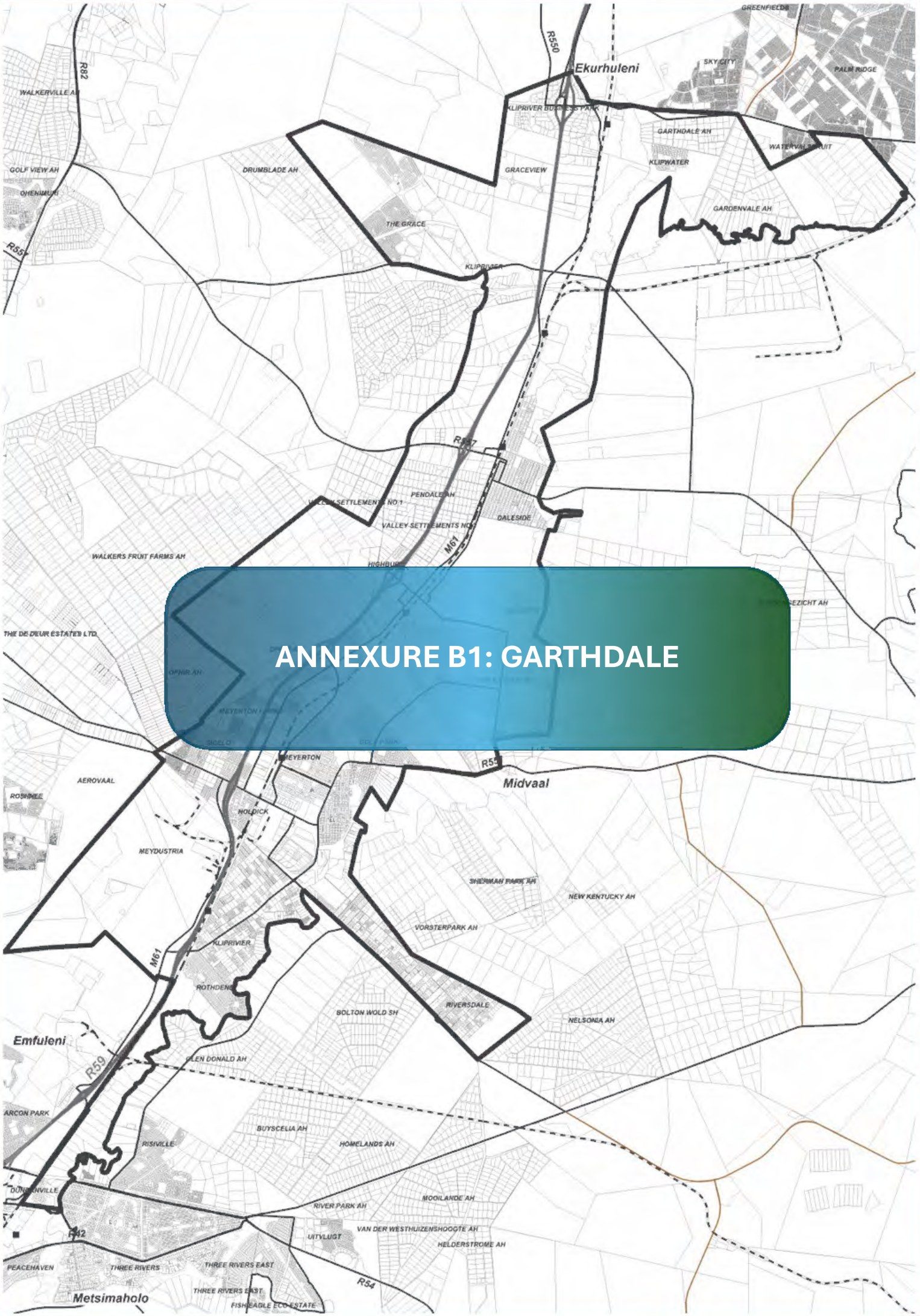
N

0 30 60 120 180 240 300 m

Figure A6



ANNEXURE B: INDUSTRIAL LAND USES SURVEY AND SIC CLASSIFICATION


ANNEXURE B1: GARTHDALE
Ekurhuleni
Midvaal
Emfuleni
Metsimaholo
R82
R550
R55
R57
M61
R59
R54
R42
GREENFIELDS
SKY CITY
PALM RIDGE
WALKERVILLE AH
GOLF VIEW AH
ONEHMUNI
DRUMBLADE AH
GRACEVIEW
KLIPWATER
GARTHDALE AH
GARDENVALE AH
THE GRACE
KLIPRIVER
PENDALE AH
DALESIDE
VALLEY SETTLEMENTS NO 1
VALLEY SETTLEMENTS NO 2
WALKERS FRUIT FARMS AH
HIGHBURY
THE DE DEUR ESTATES LTD
OPNIR AH
MEYERTON
SICELO
REYERTON
AEROVAAL
ROSHNEE
HOLDICK
MEYDUSTRIA
SHERMAN PARK AH
NEW KENTUCKY AH
VORSTERPARK AH
KLIPRIVIER
ROTHDENE
SOLTON WOLD SH
RIVERSDALE
NELSONIA AH
GLEN DONALD AH
ARCON PARK
BUYSCELIA AH
RISIVILLE
HOMELANDS AH
DUNCANVILLE
RIVER PARK AH
MOOILANDE AH
VAN DER WESTHUIZENSHOOGTE AH
UITVLUGT
HELDERSTROME AH
PEACEHAVEN
THREE RIVERS
THREE RIVERS EAST
FISHEAGLE ECO ESTATE

R59-Corridor: Garthdale

Table : Garthdale: Industrial Survey - Industrial Entities per Division.

SIC Division	Description	Number of Properties	%	Number of Industries	%	Area (ha)	%
Garthdale		**14**	**100%**	**14**	**100%**	**31**	**100%**
29	Manufacture of motor vehicles, trailers and semi-trailers	1	7%	1	7%	0	0%
33	Repair and installation of machinery and equipment	1	7%	1	7%	2	7%
46	Wholesale trade, except of motor vehicles and motorcycles	1	7%	1	7%	2	7%
49	Land transport	6	43%	6	43%	17	54%
52	Warehousing and support activities for transportation	4	29%	4	29%	9	29%
77	Rental and leasing activities	1	7%	1	7%	1	3%

- **Mostly characterised by Transport Related Activities/Logistics**

Source : Standard industrial Classification (Seventh Edition), Oct 2012, Report No. 09-90-02, STATSSA

2010 Land Use for Garthdale



Source: Plan Associates; Google Earth; Mowbray (February 2025); Google Open Street

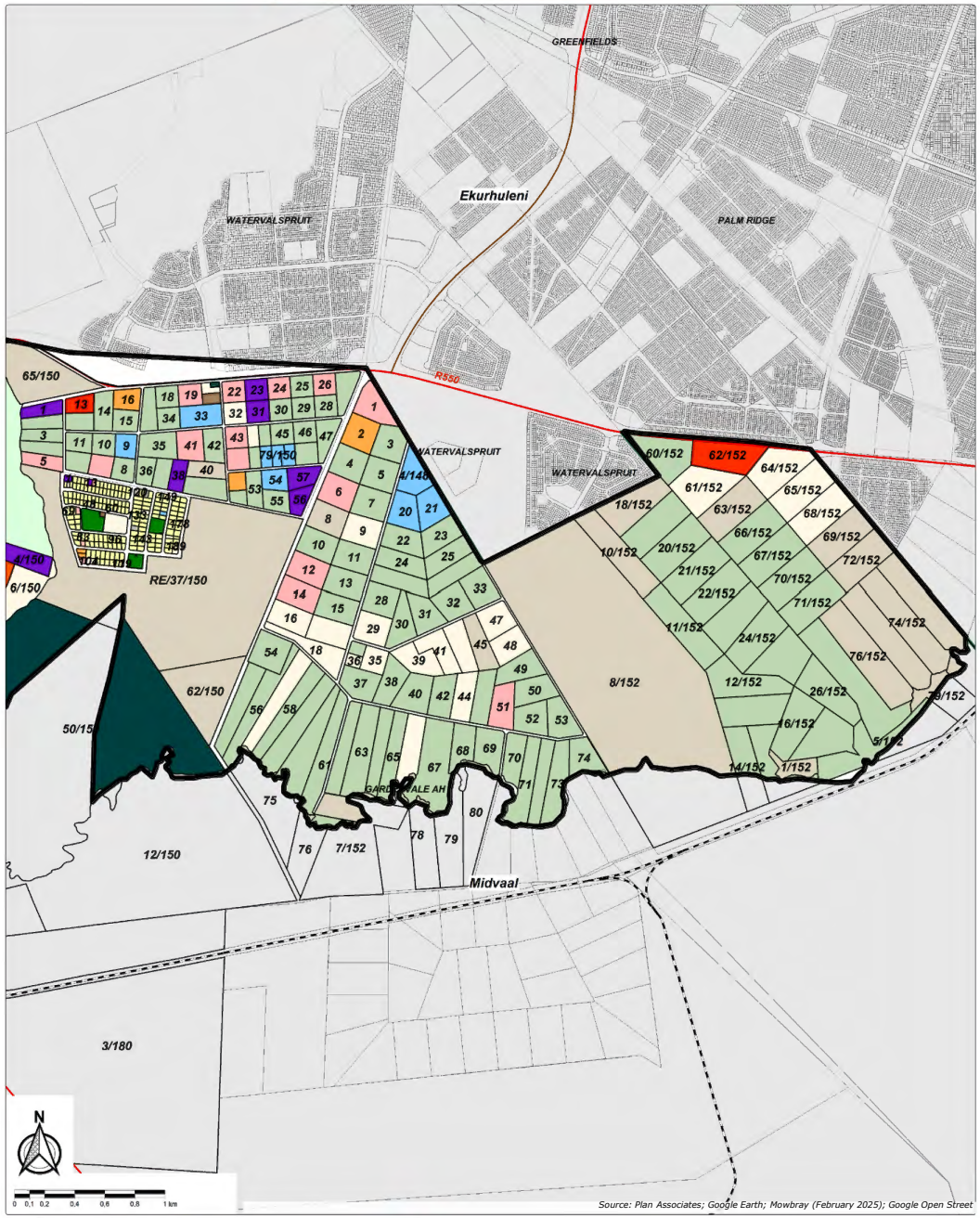
Study Area
Municipal Boundary
District Boundary
Agriculture
Residential
Rural Residential
Informal Residential
Institutional
Municipal/Government
Utilities
Hospitality
Business
Mixed Use
Industrial/Commercial
Vacant
National Roads
Main Roads
Secondary Roads
Railway
Railway Station

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure B1.1

2025 Land Use for Garthdale



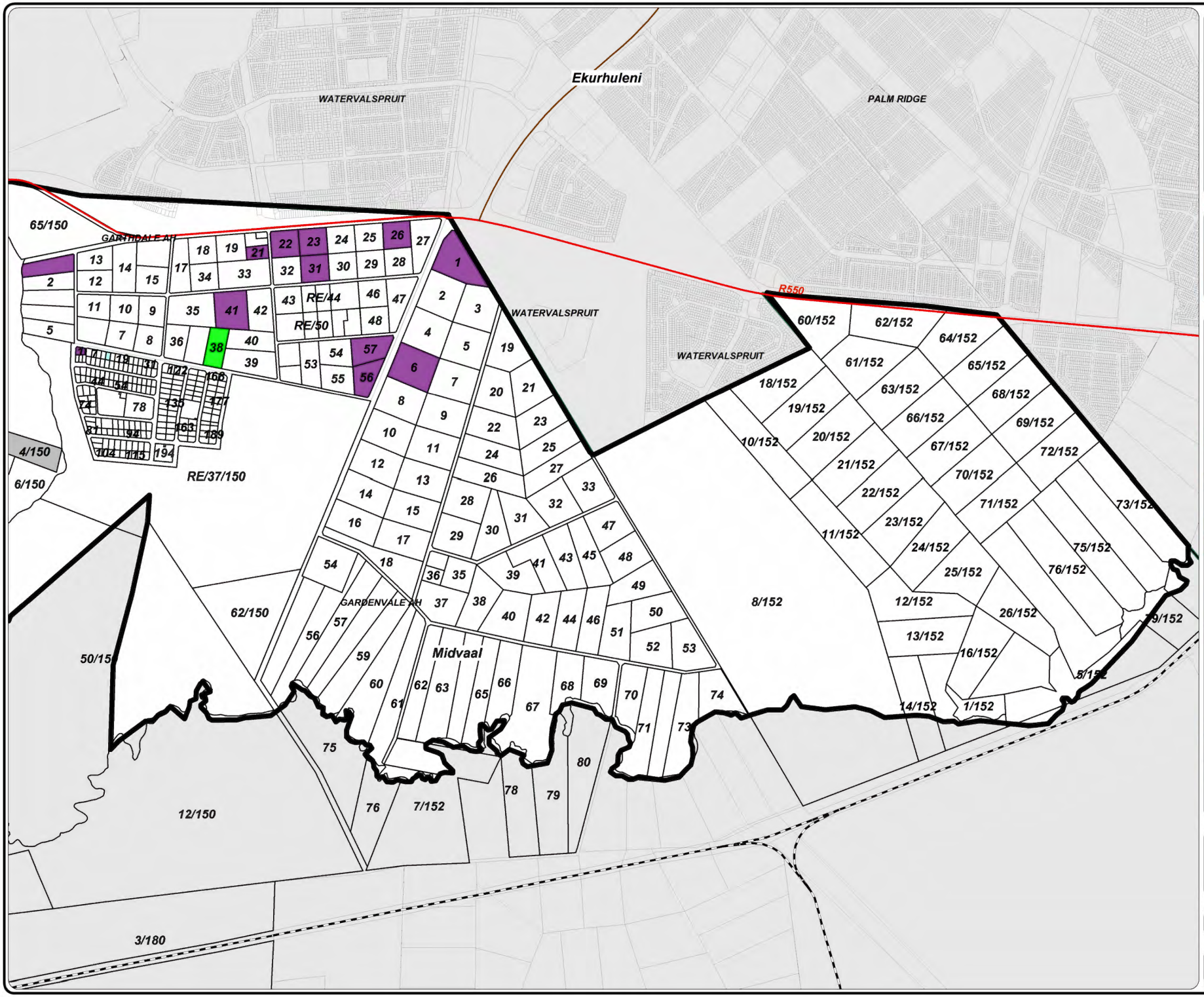
Source: Plan Associates; Google Earth; Mowbray (February 2025); Google Open Street

Study Area
Municipal Boundary
District Boundary
Agriculture
Residential
Rural Residential
Informal Residential
Institutional (Education)
Municipal/Government
Utilities
Hospitality
Business
Mixed Use
Industrial/Commercial
Vacant
National Roads
Main Roads
Secondary Roads
Railway
Railway Station

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure B1.2



MIDVAAL
LOCAL MUNICIPALITY

R59 CORRIDOR DEVELOPMENT BOUNDARY

Garthdale Industrial Classification (Combined Divisions)

Legend

- R59 Study Area
- Municipal Boundary
- District Boundary

Industrial Classifications

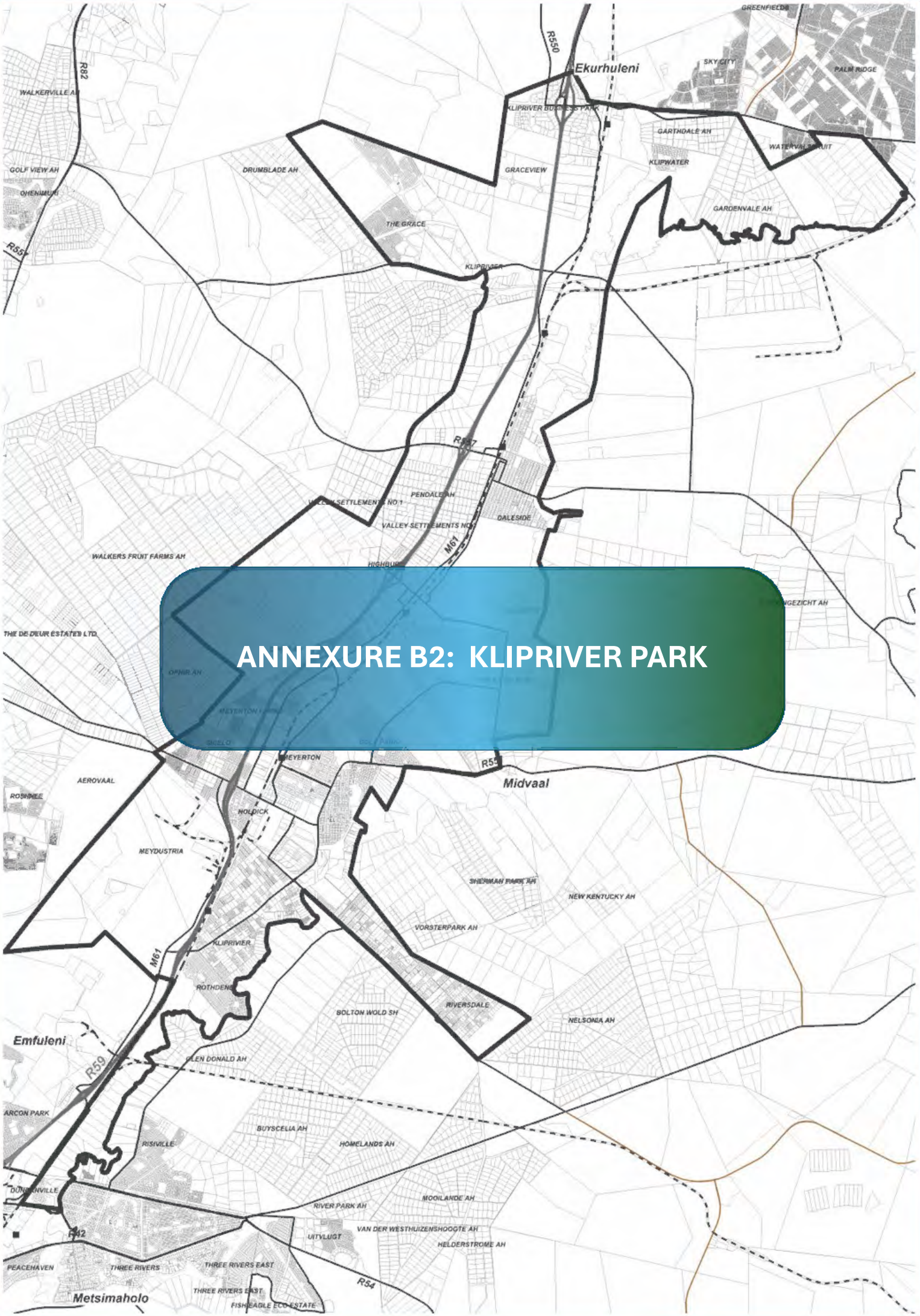
- Metals, Metal Products Machinery & Equipment
- Petroleum Products, Chemicals Rubber and Plastic
- Food, Beverages & Tabacco
- Repair and installation of machinery and equipment
- Motor Vehicles, Trailers, Semi Trailers & Transport Equipment
- Logistics/Transport, Warehousing, Wholesale, Waste Collection/Remediation, Rental/Leasing of Machinery, Motor Vehicle Repair, Scrapyards
- Other Manufacturing*
- Other Non-Metal Industries
- Remainder of Industries

* Industries grouped together if type of industry is unclear

N

0 75 150 300 450 600 750 m

Figure B1.3


ANNEXURE B2: KLIPRIVER PARK
Ekurhuleni
Midvaal
Emfuleni
Metsimaholo
R82
R550
R554
R57
M61
R59
R42
R54
GREENFIELDS
SKY CITY
PALM RIDGE
WALKERVILLE AH
GOLF VIEW AH
DRUMBLADE AH
GRACEVIEW
KLIPWATER
GARDENVALE AH
THE GRACE
KLIPRIVER
PENDALE AH
DALESIDE
VALLEY SETTLEMENTS NO 1
WALKERS FRUIT FARMS AH
HIGHBURY
THE DE DEUR ESTATES LTD
OPNIR AH
MEYERTON
AEROVAAL
ROSHNEE
HOLDICK
MEYDUSTRIA
SHERMAN PARK AH
NEW KENTUCKY AH
VORSTERPARK AH
KLIPRIVIER
ROTHDENE
SOLTON WOLD SH
RIVERSDALE
NELSONIA AH
GLEN DONALD AH
ARCON PARK
BUYSCELIA AH
RISIVILLE
HOMELANDS AH
DUNCANVILLE
RIVER PARK AH
MOOILANDE AH
VAN DER WESTHUIZENSHOOGTE AH
UITVLUGT
HELDERSTROME AH
PEACEHAVEN
THREE RIVERS
THREE RIVERS EAST
FISHEAGLE ECO ESTATE

R59-Corridor: Klipriver Business Park/Industrial Node

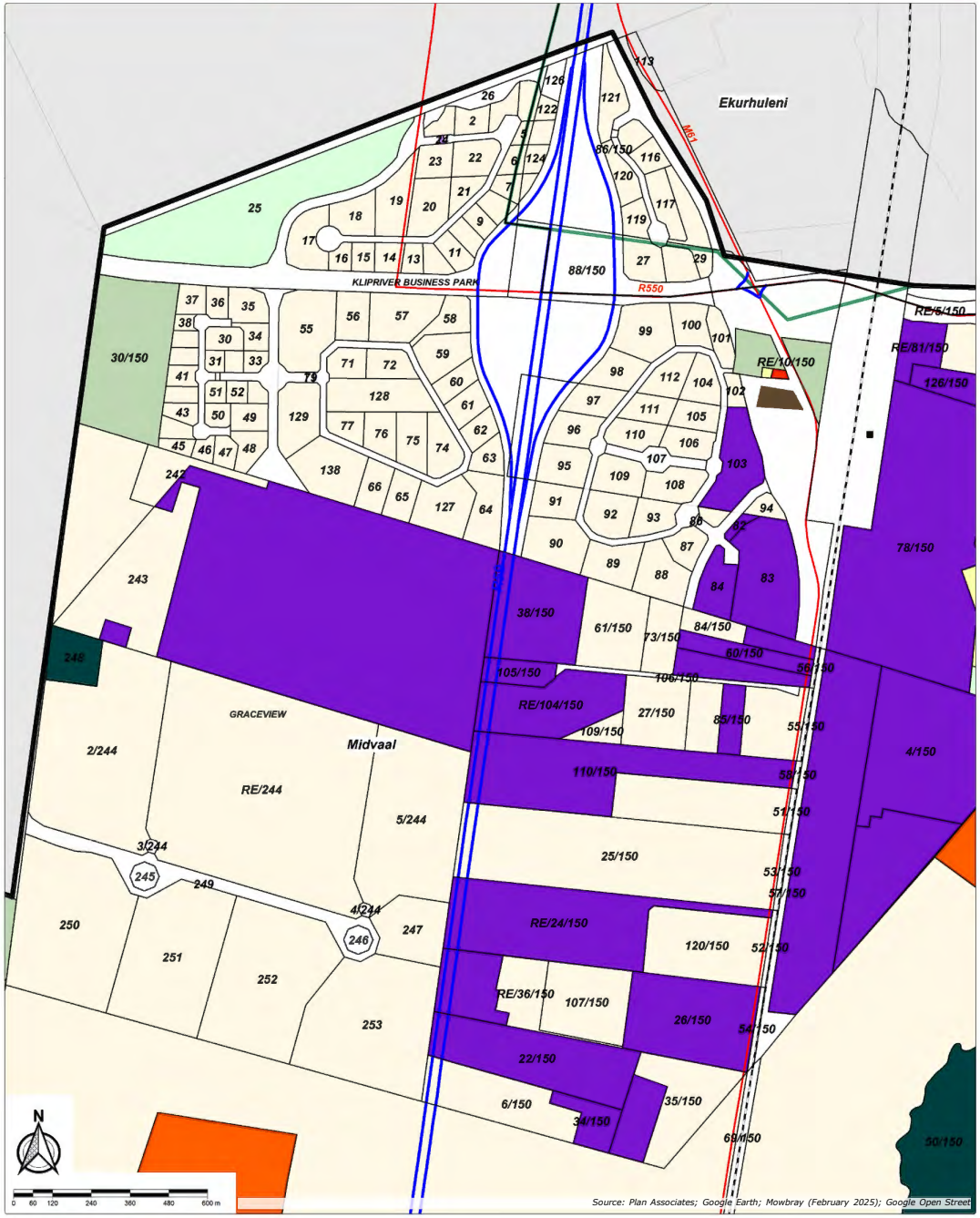
Table : Klipriver Business Park / Industrial Park: Industrial Survey - Industrial Entities per Division.

SIC Division	Description	Number of Properties	%	Number of Industries	%	Area (ha)	%
Klipriver Business Park / Industrial Park		**45**	**100%**	**36**	**100%**	**259**	**100%**
10	Manufacturing of food products	2	4%	2	6%	5	2%
11	Manufacturing of beverages	2	4%	1	3%	63	24%
16	Manufacturing of wood and of product of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	3	7%	3	8%	6	2%
17	Manufacturing of paper and paper products	1	2%	1	3%	2	1%
20	Manufacture of chemicals and chemical products	4	9%	4	11%	14	5%
22	Manufacture of rubber and plastic products	2	4%	2	6%	2	1%
23	Manufacture of other non-metallic mineral products	7	16%	5	14%	85	33%
24	Manufacture of basic metals	2	4%	2	6%	25	10%
25	Manufacture of fabricated metal products, except machinery and equipment	2	4%	2	6%	12	4%
27	Manufacture of electrical equipment	3	7%	1	3%	23	9%
28	Manufacture of machinery and equipment n.e.c.	1	2%	1	3%	2	1%
29	Manufacture of motor vehicles, trailers and semi-trailers	3	7%	1	3%	5	2%
43	Specialised construction activities	1	2%	1	3%	1	0%
45	Wholesale and retail trade and repair of motor vehicles and motorcycles	3	7%	1	3%	3	1%
46	Wholesale trade, except of motor vehicles and motorcycles	5	11%	5	14%	5	2%
49	Land transport	1	2%	1	3%	4	2%
52	Warehousing and support activities for transportation	1	2%	1	3%	1	0%
71	Architectural and engineering activities; technical testing and analysis	1	2%	1	3%	0	0%
77	Rental and leasing activities	1	2%	1	3%	0	0%

- **Mostly characterised by manufacturing of Non-Metallic Mineral Products, Chemicals, Food & Beverages and Wholesale.**

Source : Standard industrial Classification (Seventh Edition), Oct 2012, Report No. 09-90-02, STATSSA

2010 Land Use for Klipriver Business, Klipriver Industrial Park and Everite Industrial Area



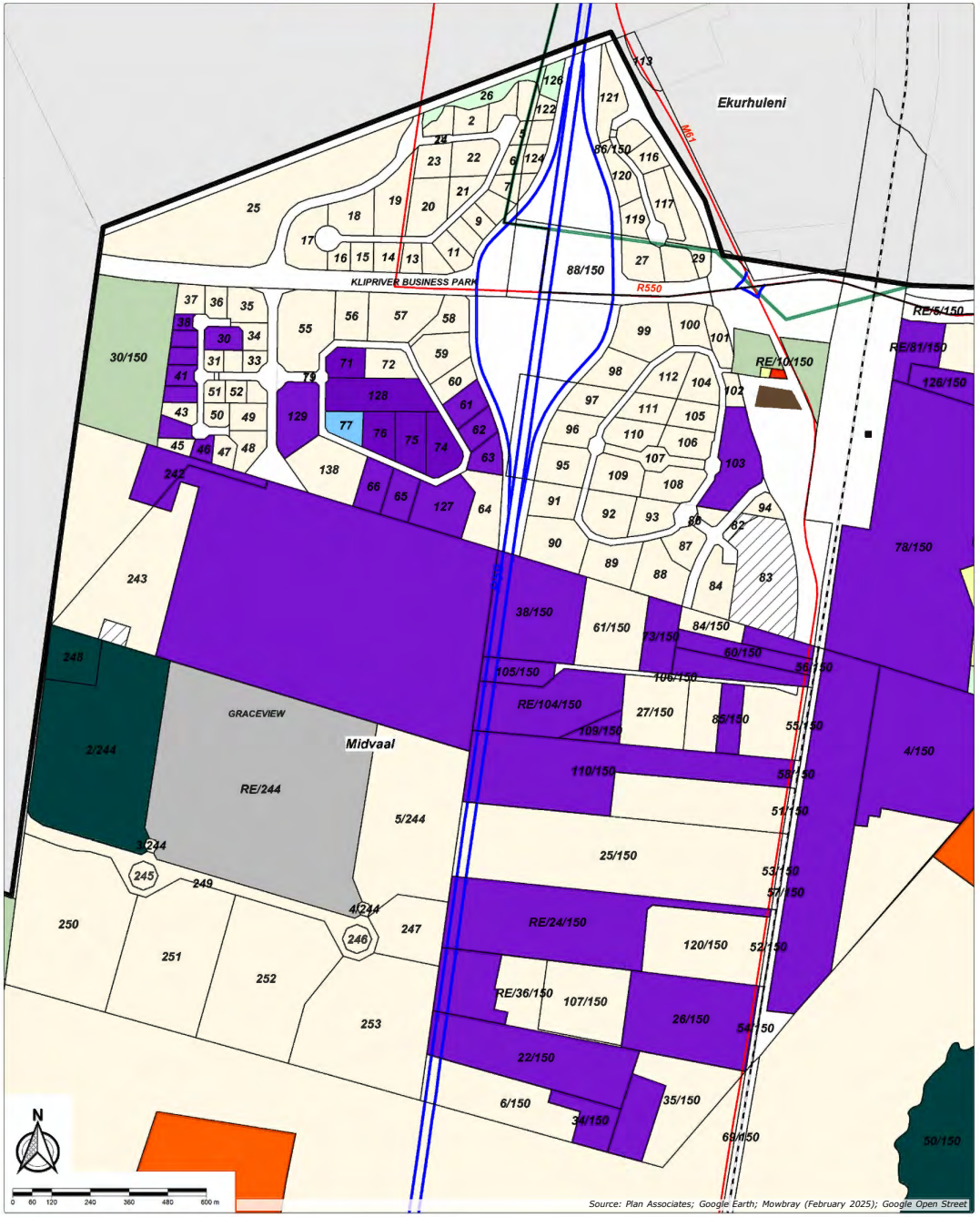
- Study Area
- Municipal Boundary
- District Boundary
- Residential
- Rural Residential
- Informal Residential
- Municipal/Government
- Utilities
- Business
- Industrial/Commercial
- Vacant
- National Roads
- Main Roads
- Secondary Roads
- Railway
- Railway Station

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure B2.1

2025 Land Use for Klipriver Business, Klipriver Industrial Park and Everite Industrial Area

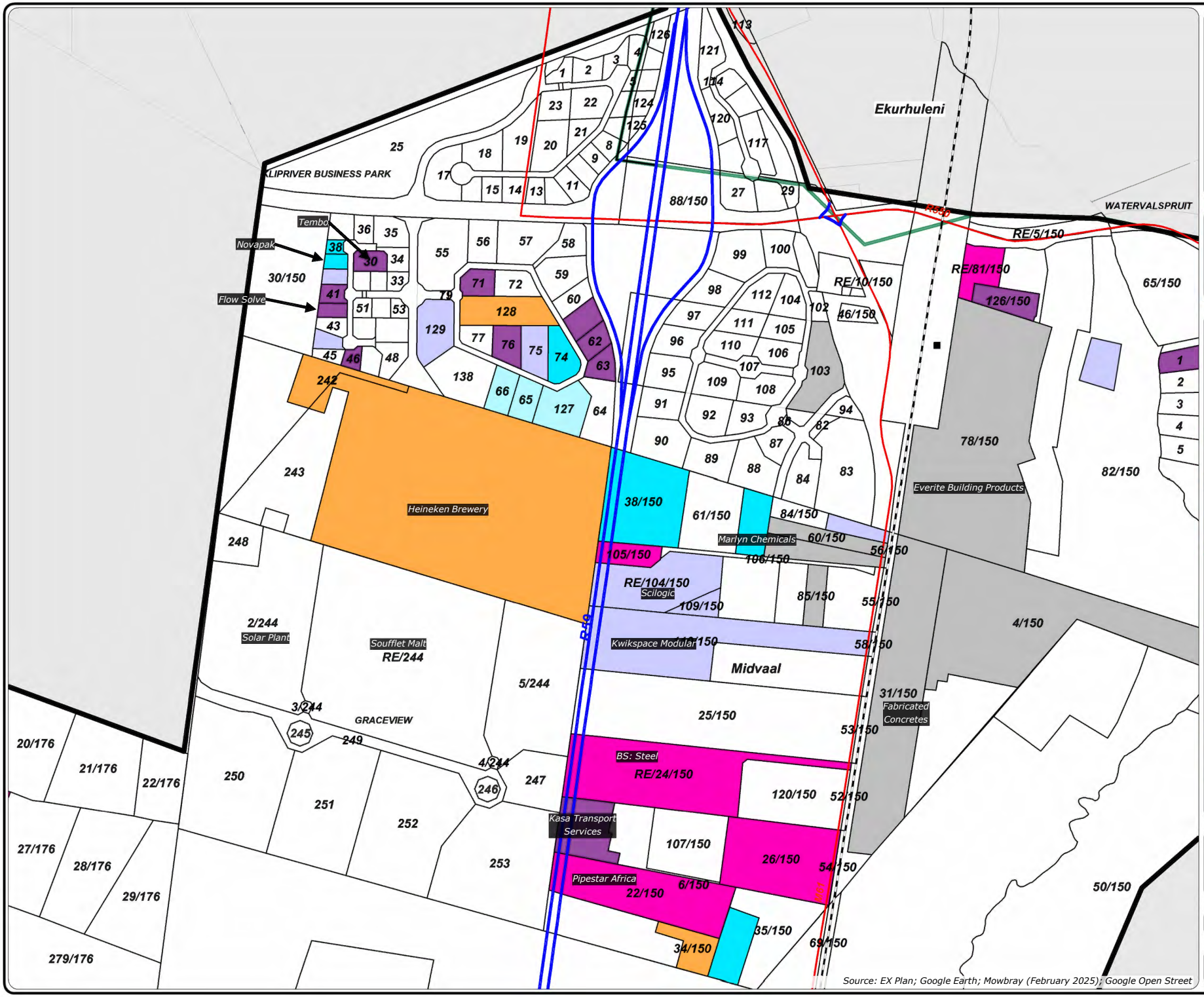


- Study Area
- Municipal Boundary
- District Boundary
- Residential
- Rural Residential
- Informal Residential
- Institutional (Education)
- Municipal/Government
- Utilities
- Business
- Industrial/Commercial
- Vacant
- Under Construction
- Demolished/Dilapidated Building
- National Roads
- Main Roads
- Secondary Roads
- Railway / Railway Station

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure B2.2



MIDVAAL LOCAL MUNICIPALITY

R59 CORRIDOR DEVELOPMENT BOUNDARY

Klipriver Park Industrial Classification (Combined Divisions)

Legend

- R59 Study Area
- Municipal Boundary
- District Boundary

Industrial Classifications

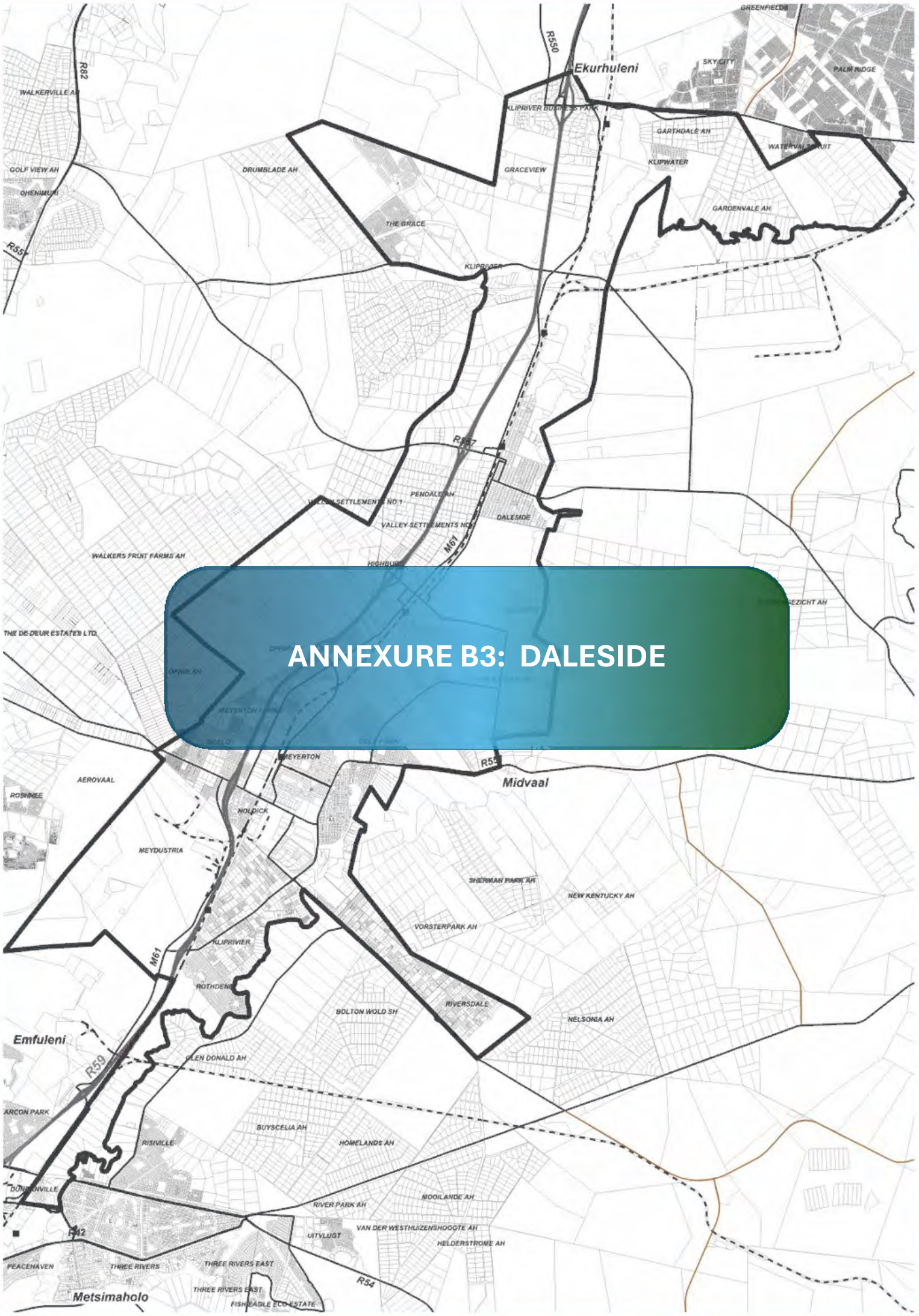
- Metals, Metal Products Machinery & Equipment
- Petroleum Products, Chemicals Rubber and Plastic
- Food, Beverages & Tabacco
- Repair and installation of machinery and equipment
- Motor Vehicles, Trailers, Semi Trailers & Transport Equipment
- Logistics/Transport, Warehousing, Wholesale, Waste Collection/Remediation, Rental/Leasing of Machinery, Motor Vehicle Repair, Scrapyards
- Other Manufacturing*
- Other Non-Metal Industries
- Remainder of Industries

* Industries grouped together if type of industry is unclear

N

0 60 120 240 360 480 600 m

Figure B2.3


ANNEXURE B3: DALESIDE
Ekurhuleni
Midvaal
Emfuleni
Metsimaholo
R550
R82
R554
R57
M61
R59
R54
R42
GREENFIELDS
SKY CITY
PALM RIDGE
WALKERVILLE AH
GOLF VIEW AH
DRUMBLADE AH
GRACEVIEW
KLIPWATER
GARDENVALE AH
THE GRACE
KLIPRIVER
PENDALE AH
DALESIDE
VALLEY SETTLEMENTS NO 1
VALLEY SETTLEMENTS NO 2
WALKERS FRUIT FARMS AH
HIGHBURY
THE DE DEUR ESTATES LTD
OPHIR AH
MEYERTON
SICELO
REYERTON
AEROVAAL
ROSHNEE
HOLDICK
MEYDUSTRIA
KLIPRIVIER
ROTHDENE
SHERMAN PARK AH
NEW KENTUCKY AH
VORSTERPARK AH
SOLTON WOLD SH
RIVERSDALE
NELSONIA AH
GLEN DONALD AH
ARCON PARK
BUYSCELIA AH
RISIVILLE
HOMELANDS AH
DUNCANVILLE
RIVER PARK AH
MOOILANDE AH
VAN DER WESTHUIZENSHOOGTE AH
UITVLUGT
HELDERSTROME AH
PEACEHAVEN
THREE RIVERS
THREE RIVERS EAST
FISHEAGLE ECO ESTATE

R59-Corridor: Daleside

Table : Daleside: Industrial Survey - Industrial Entities per Division.

SIC Division	Description	Number of Properties	%	Number of Industries	%	Area (ha)	%
Daleside		**57**	**100%**	**41**	**100%**	**33**	**100%**
10	Manufacturing of food products	5	9%	3	7%	3	9%
16	Manufacturing of wood and of product of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	2	4%	1	2%	0	1%
18	Printing and reproduction of recorded media	1	2%	1	2%	0	1%
20	Manufacture of chemicals and chemical products	6	11%	3	7%	2	7%
22	Manufacture of rubber and plastic products	1	2%	1	2%	0	1%
23	Manufacture of other non-metallic mineral products	2	4%	1	2%	1	2%
25	Manufacture of fabricated metal products, except machinery and equipment	9	16%	7	17%	3	9%
27	Manufacture of electrical equipment	3	5%	3	7%	1	2%
28	Manufacture of machinery and equipment n.e.c.	10	18%	8	20%	3	8%
33	Repair and installation of machinery and equipment	2	4%	1	2%	2	6%
38	Waste collection, treatment and disposal activities; materials recovery	2	4%	1	2%	1	2%
39	Remediation activities and other waste management services	3	5%	1	2%	1	4%
41	Construction of buildings	1	2%	1	2%	0	1%
43	Specialised construction activities	3	5%	3	7%	1	2%
45	Wholesale and retail trade and repair of motor vehicles and motorcycles	1	2%	1	2%	13	39%
49	Land transport	3	5%	2	5%	1	4%
52	Warehousing and support activities for transportation	3	5%	3	7%	1	2%

- **Mostly characterised by manufacturing of Metals, Metal Products, Machinery & Equipment**
- **Also, several Food Related Industries found in Daleside.**

Source : Standard industrial Classification (Seventh Edition), Oct 2012, Report No. 09-90-02, STATSSA

2010 Land Use for Daleside



Study Area
Municipal Boundary
District Boundary
Agriculture
Residential
Rural Residential
Institutional
Heritage Site
Business
Industrial/Commercial
Vacant
National Roads
Main Roads
Secondary Roads
Railway
Railway Station

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure B3.1

2025 Land Use for Daleside



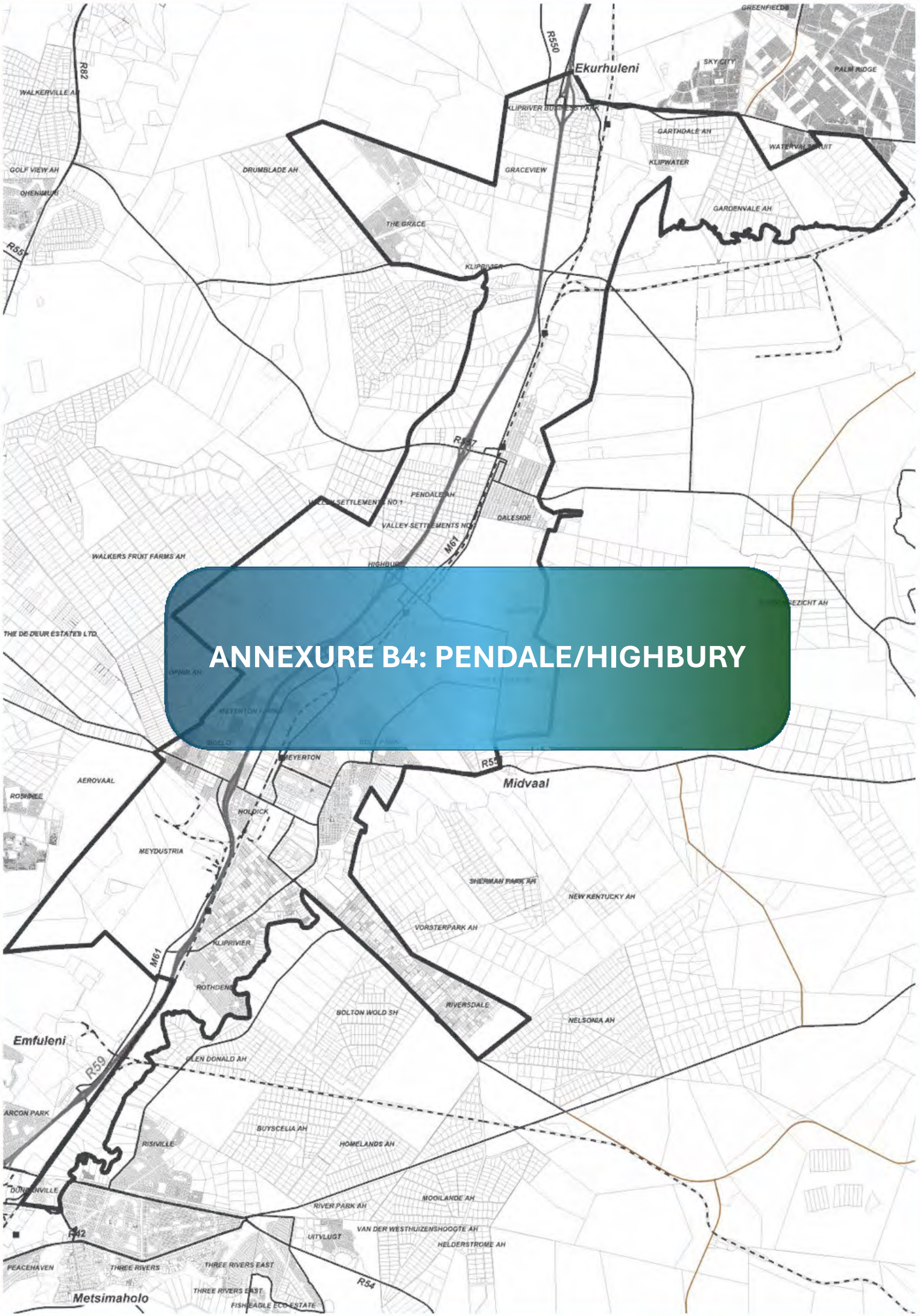
Study Area
Municipal Boundary
District Boundary
Agriculture
Residential
Rural Residential
Institutional
Heritage Site
Office
Business
Industrial/Commercial
Vacant
Vacant Building
National Roads
Main Roads
Secondary Roads
Railway
Railway Station

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure B3.2


MIDVAAL
LOCAL MUNICIPALITY
R59 CORRIDOR DEVELOPMENT BOUNDARY
Daleside Industrial Classification (Combined Divisions)
Legend
R59 Study Area
Municipal Boundary
District Boundary
Industrial Classifications
Metals, Metal Products Machinery & Equipment
Petroleum Products, Chemicals Rubber and Plastic
Food, Beverages & Tabacco
Repair and installation of machinery and equipment
Motor Vehicles, Trailers, Semi Trailers & Transport Equipment
Logistics/Transport, Warehousing, Wholesale, Waste Collection/Remediation, Rental/Leasing of Machinery, Motor Vehicle Repair, Scrapyards
Other Manufacturing*
Other Non-Metal Industries
Remainder of Industries
* Industries grouped together if type of industry is unclear
N
0 30 60 120 180 240 300 m
Figure B3.3
Midvaal
Allied Steelrode/Michelin Tyres
Pendale Foods
Fresh Pack
Rust Oleum
Oilskip
Meze Foods
East Rand Enterprises
WITKOP
R59
M61
R53


ANNEXURE B4: PENDALE/HIGHBURY
Ekurhuleni
Midvaal
Emfuleni
Metsimaholo
R82
R550
R554
R57
M61
R59
R42
R54
GREENFIELDS
SKY CITY
PALM RIDGE
WALKERVILLE AH
GOLF VIEW AH
ONEHMUNI
DRUMBLADE AH
GRACEVIEW
KLIPWATER
GARDENVALE AH
THE GRACE
KLIPRIVER
PENDALE AH
DALESIDE
VALLEY SETTLEMENTS NO 1
VALLEY SETTLEMENTS NO 2
WALKERS FRUIT FARMS AH
HIGHBURY
THE DE DEUR ESTATES LTD
OPHIR AH
MEYERTON
SICELO
REYERTON
AEROVAAL
ROSHNEE
HOLDICK
MEYDUSTRIA
SHERMAN PARK AH
NEW KENTUCKY AH
VORSTERPARK AH
KLIPRIVIER
ROTHDENE
SOLTON WOLD SH
RIVERSDALE
NELSONIA AH
GLEN DONALD AH
ARCON PARK
BUYSCELIA AH
RISIVILLE
HOMELANDS AH
DUNCANVILLE
RIVER PARK AH
MOOILANDE AH
VAN DER WESTHUIZENSHOOGTE AH
UITVLUGT
HELDERSTROME AH
PEACEHAVEN
THREE RIVERS
THREE RIVERS EAST
FISHEAGLE ECO ESTATE

R59-Corridor: Pendale

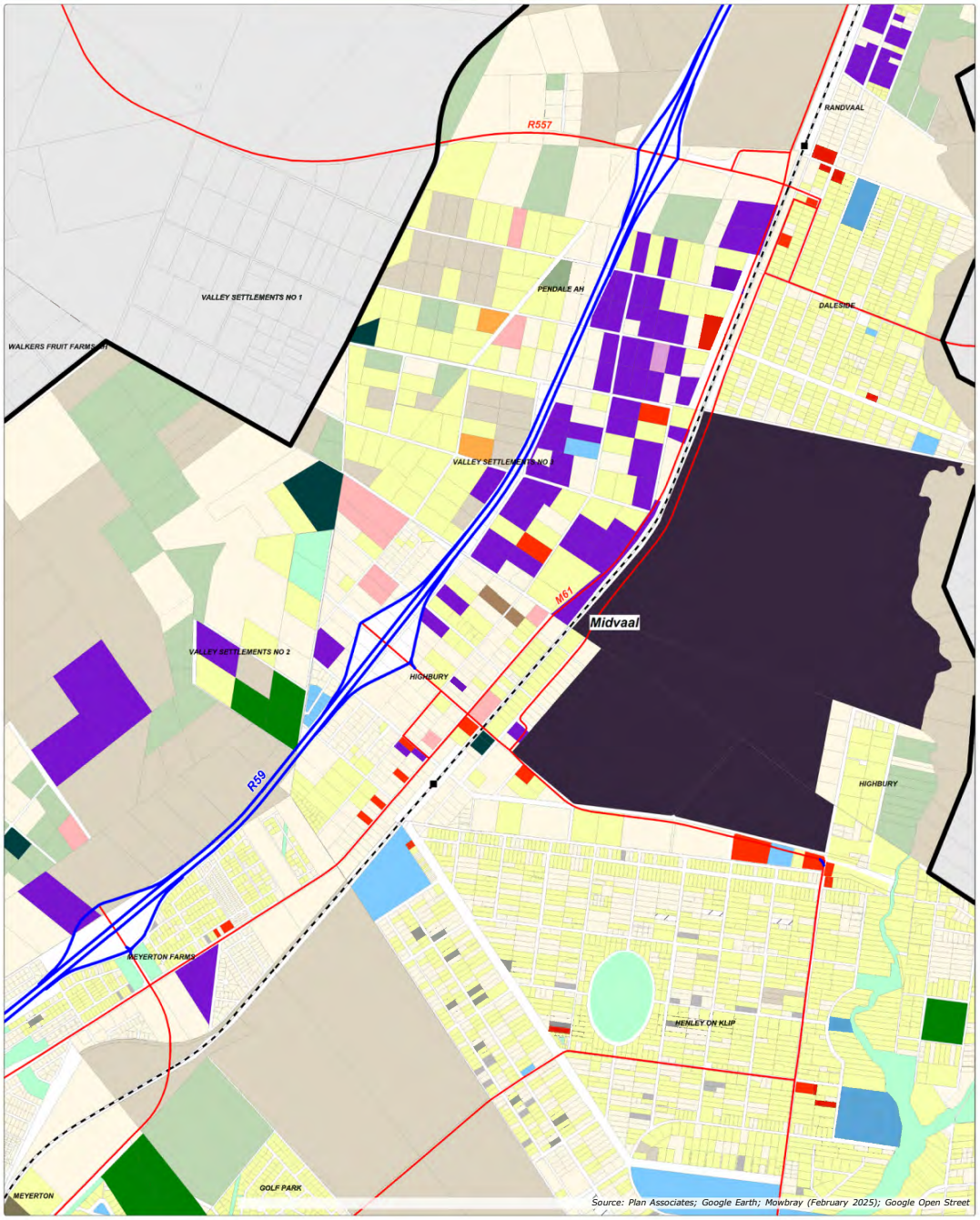
Table : Pendale: Industrial Survey - Industrial Entities per Division.

SIC Division	Description	Number of Properties	%	Number of Industries	%	Area (ha)	%
Pendale		**130**	**100%**	**100**	**100%**	**236**	**100%**
10	Manufacturing of food products	4	3%	4	4%	39	16%
11	Manufacturing of beverages	1	1%	1	1%	1	1%
16	Manufacturing of wood and of product of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	1	1%	1	1%	2	1%
20	Manufacture of chemicals and chemical products	3	2%	3	3%	6	2%
22	Manufacture of rubber and plastic products	4	3%	4	4%	7	3%
23	Manufacture of other non-metallic mineral products	8	6%	5	5%	14	6%
24	Manufacture of basic metals	1	1%	1	1%	2	1%
25	Manufacture of fabricated metal products, except machinery and equipment	7	5%	6	6%	13	5%
28	Manufacture of machinery and equipment n.e.c.	1	1%	1	1%	0	0%
29	Manufacture of motor vehicles, trailers and semi-trailers	2	2%	2	2%	2	1%
30	Manufacture of other transport equipment	3	2%	1	1%	4	2%
31	Manufacture of furniture	1	1%	1	1%	5	2%
32	Other manufacturing*	8	6%	7	7%	9	4%
33	Repair and installation of machinery and equipment	3	2%	3	3%	5	2%
35	Electricity, gas, steam and air conditioning supply	2	2%	1	1%	6	3%
38	Waste collection, treatment and disposal activities; materials recovery	3	2%	2	2%	6	2%
39	Remediation activities and other waste management services	1	1%	1	1%	3	1%
41	Construction of buildings	3	2%	3	3%	3	1%
43	Specialised construction activities	2	2%	2	2%	4	2%
45	Wholesale and retail trade and repair of motor vehicles and motorcycles	10	8%	5	5%	12	5%
46	Wholesale trade, except of motor vehicles and motorcycles	7	5%	7	7%	12	5%
49	Land transport	22	17%	17	17%	27	12%
52	Warehousing and support activities for transportation	28	22%	19	19%	51	22%
73	Advertising and market research	1	1%	1	1%	2	1%
77	Rental and leasing activities	4	3%	2	2%	1	0%

- **Mostly characterised by Transport Related Activities/Logistics and Wholesale/Storage (low intensity use of land)**

Source : Standard industrial Classification (Seventh Edition), Oct 2012, Report No. 09-90-02, STATSSA

2010 Land Use for Pendale, Highbury etc.



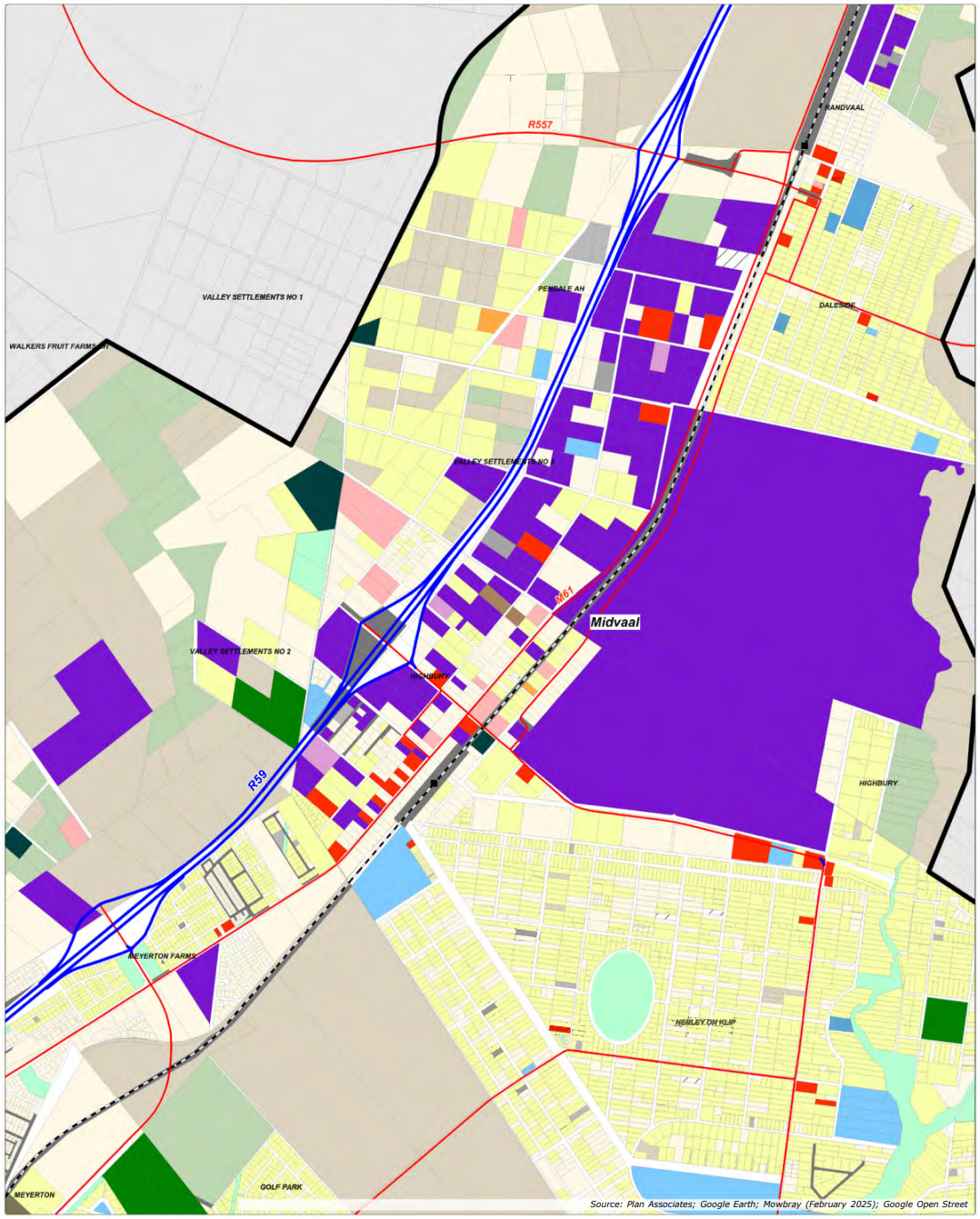
Study Area
Municipal Boundary
District Boundary
Agriculture
Residential
Rural Residential
Institutional
Municipal/Government
Utilities
Hospitality
Office
Business
Mixed Use
Industrial/Commercial
Mining
Vacant
Under Construction
Sports and Recreation
Open Space
National Roads
Main Roads
Secondary Roads
Railway
Railway Station

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure B4.1

2025 Land Use for Pendale, Highbury etc.

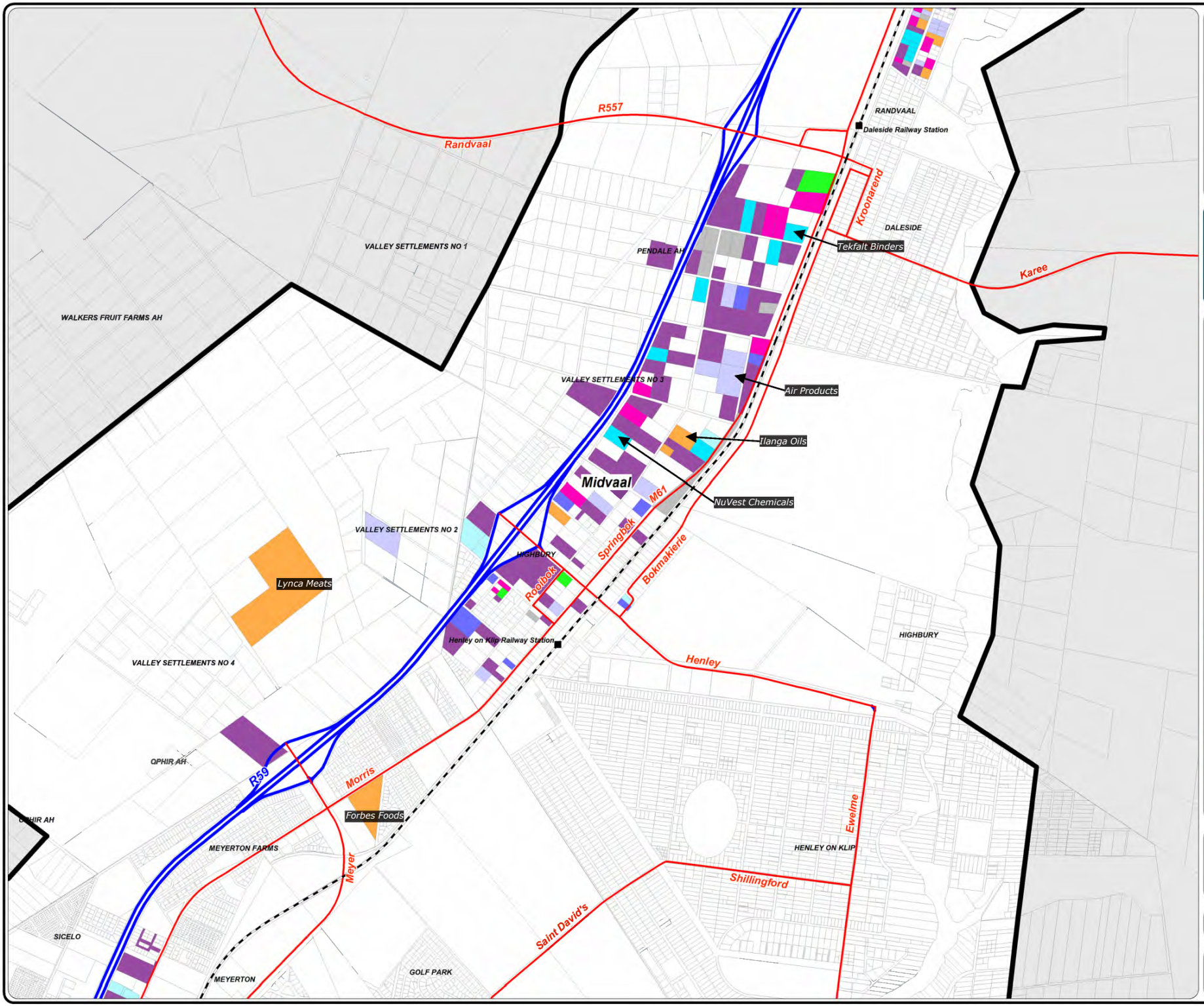


Study Area
Municipal Boundary
District Boundary
Agriculture
Residential
Rural Residential
Institutional
Municipal/Government
Utilities
Hospitality
Office
Business
Mixed Use
Industrial Park
Industrial/Commercial
Mining
Vacant
Vacant Building
Dilapidated Building
Sports and Recreation
Open Space
National Roads
Main Roads
Railway/Railway Station

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure B4.2



MIDVAAL LOCAL MUNICIPALITY

R59 CORRIDOR DEVELOPMENT BOUNDARY

Pendale/Highbury Industrial Classification (Combined Divisions)

Legend

- R59 Study Area
- Municipal Boundary
- District Boundary

Industrial Classifications

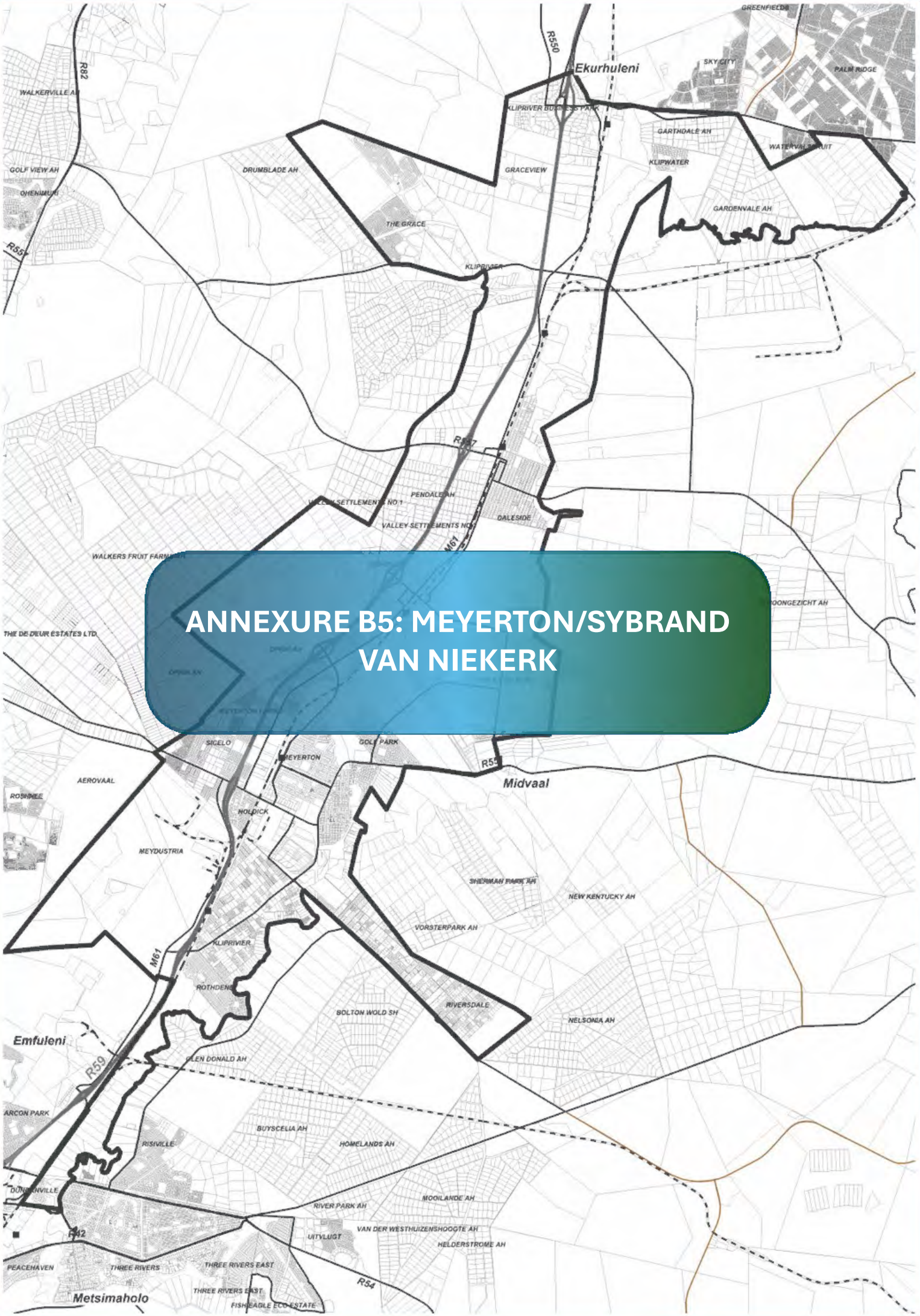
- Metals, Metal Products Machinery & Equipment
- Petroleum Products, Chemicals Rubber and Plastic
- Food, Beverages & Tabacco
- Repair and installation of machinery and equipment
- Motor Vehicles, Trailers, Semi Trailers & Transport Equipment
- Logistics/Transport, Warehousing, Wholesale, Waste Collection/Remediation, Rental/Leasing of Machinery, Motor Vehicle Repair, Scrapyards
- Other Manufacturing*
- Other Non-Metal Industries
- Remainder of Industries

* Industries grouped together if type of industry is unclear

N

0 0,1 0,4 0,6 0,8 1 km

Figure B4.3


ANNEXURE B5: MEYERTON/SYBRAND VAN NIEKERK
Ekurhuleni
Midvaal
Emfuleni
Metsimaholo
R550
R82
R55
R57
R59
R54
M61
GREENFIELDS
SKY CITY
PALM RIDGE
WALKERVILLE AH
GOLF VIEW AH
DRUMBLADE AH
GRACEVIEW
KLIPWATER
GARDENVALE AH
THE GRACE
PENDALE AH
DALESIDE
WALKERS FRUIT FARMS
THE DE DEUR ESTATES LTD
SIGELO
MEYERTON
GOLF PARK
AEROVAAL
ROSHNEE
HOLDICK
MEYDUSTRIA
SHERMAN PARK AH
NEW KENTUCKY AH
VORSTERPARK AH
KLIPRIVIER
ROTHDENE
SOLTON WOLD SH
RIVERSDALE
NELSONIA AH
GLEN DONALD AH
ARCON PARK
BUYSCELIA AH
RISIVILLE
HOMELANDS AH
RIVER PARK AH
MOOILANDE AH
VAN DER WESTHUIZENSHOOGTE AH
UITVLUGT
HELDERSTROME AH
PEACEHAVEN
THREE RIVERS
THREE RIVERS EAST
FISHEAGLE ECO ESTATE

R59-Corridor: Meyerton Farm/Sybrand van Niekerk

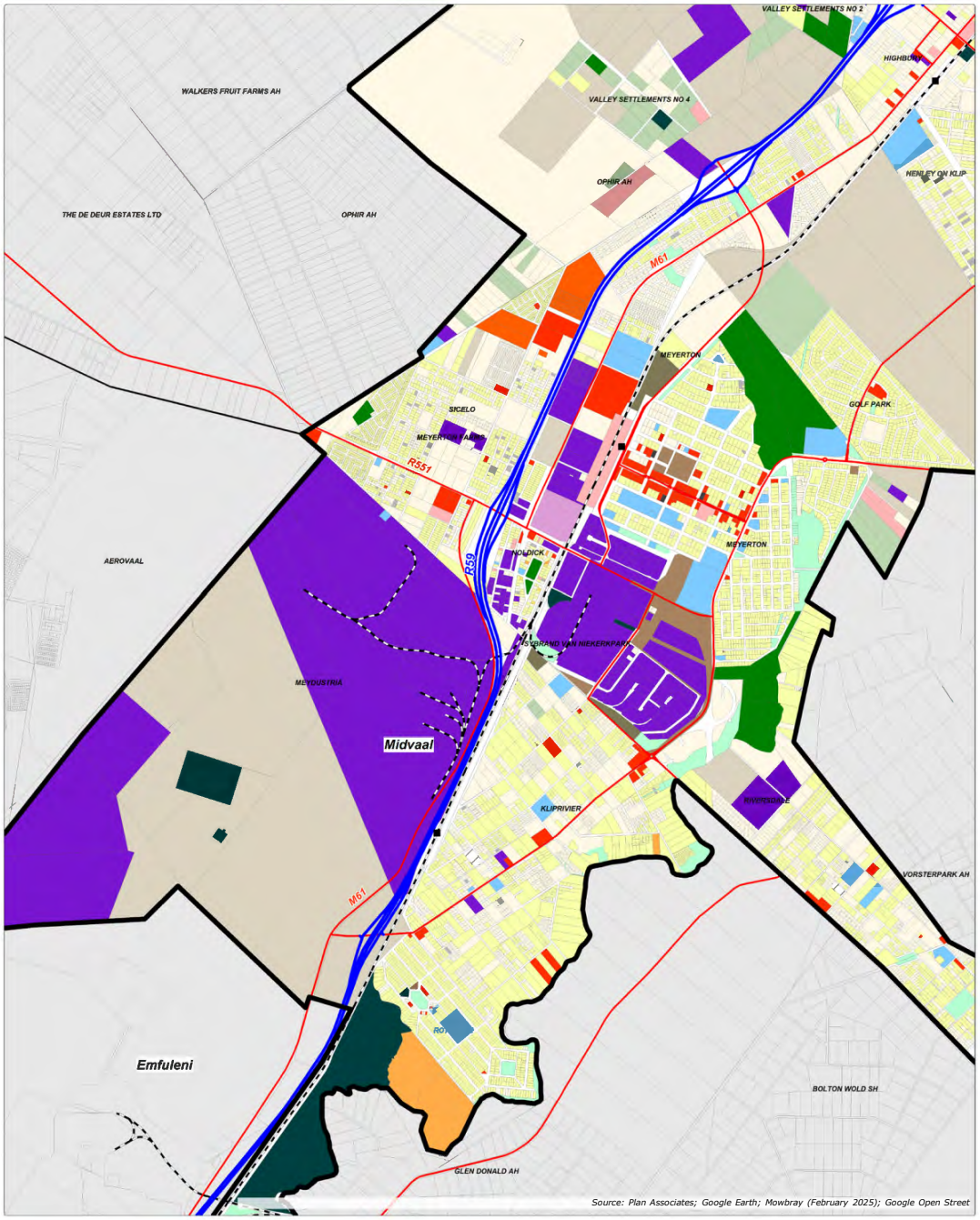
Table : Meyerton Farm/Sybrand van Niekerk: Industrial Survey - Industrial Entities per Division.

SIC Division	Description	Number of Properties	%	Number of Industries	%	Area (ha)	%
Meyerton Farm/Sybrand van Niekerk		**263**	**100%**	**152**	**100%**	**968**	**100%**
10	Manufacturing of food products	6	2%	3	2%	47	5%
16	Manufacturing of wood and of product of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	1	0%	1	1%	0	0%
19	Manufacture of coke and refined petroleum products	2	1%	1	1%	3	0%
20	Manufacture of chemicals and chemical products	11	4%	6	4%	11	1%
22	Manufacture of rubber and plastic products	2	1%	2	1%	4	0%
23	Manufacture of other non-metallic mineral products	31	12%	13	9%	245	25%
24	Manufacture of basic metals	12	5%	4	3%	516	53%
25	Manufacture of fabricated metal products, except machinery and equipment	40	15%	31	20%	25	3%
28	Manufacture of machinery and equipment n.e.c.	8	3%	6	4%	3	0%
29	Manufacture of motor vehicles, trailers and semi-trailers	14	5%	12	8%	8	1%
30	Manufacture of other transport equipment	2	1%	2	1%	1	0%
31	Manufacture of furniture	1	0%	1	1%	0	0%
32	Other manufacturing*	19	7%	17	11%	34	4%
33	Repair and installation of machinery and equipment	12	5%	8	5%	9	1%
35	Electricity, gas, steam and air conditioning supply	1	0%	1	1%	0	0%
38	Waste collection, treatment and disposal activities; materials recovery	7	3%	6	4%	8	1%
41	Construction of buildings	3	1%	2	1%	0	0%
45	Wholesale and retail trade and repair of motor vehicles and motorcycles	8	3%	7	5%	9	1%
46	Wholesale trade, except of motor vehicles and motorcycles	12	5%	7	5%	5	1%
49	Land transport	50	19%	8	5%	19	2%
52	Warehousing and support activities for transportation	16	6%	13	9%	14	1%
73	Advertising and market research	5	2%	1	1%	6	1%

- **Mostly characterised by manufacturing of Metals, Metal Products, Machinery & Equipment**

Source : Standard industrial Classification (Seventh Edition), Oct 2012, Report No. 09-90-02, STATSSA

2010 Land Use for Meyerton, Sybrand van Niekerk



Source: Plan Associates; Google Earth; Mowbray (February 2025); Google Open Street

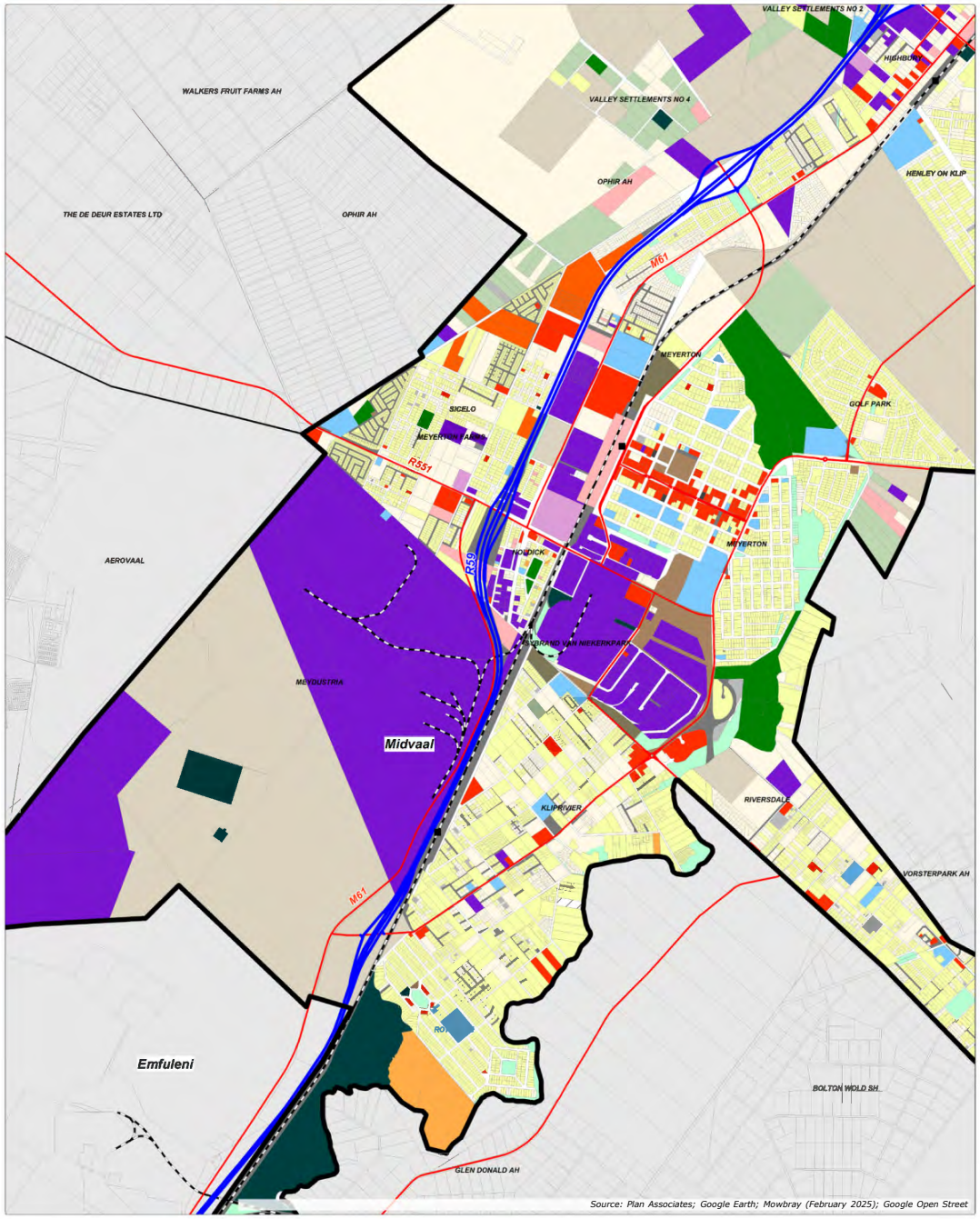
- Study Area
- Municipal Boundary
- District Boundary
- Agriculture
- Residential
- Rural Residential
- Institutional
- Municipal/Government
- Utilities
- Hospitality
- Office
- Business
- Mixed Use
- Industrial/Commercial
- Vacant
- Sports and Recreation
- Open Space
- National Roads
- Main Roads
- Secondary Roads
- Railway
- Railway Station

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure B5.1

2025 Land Use for Meyerton, Sybrand van Niekerk



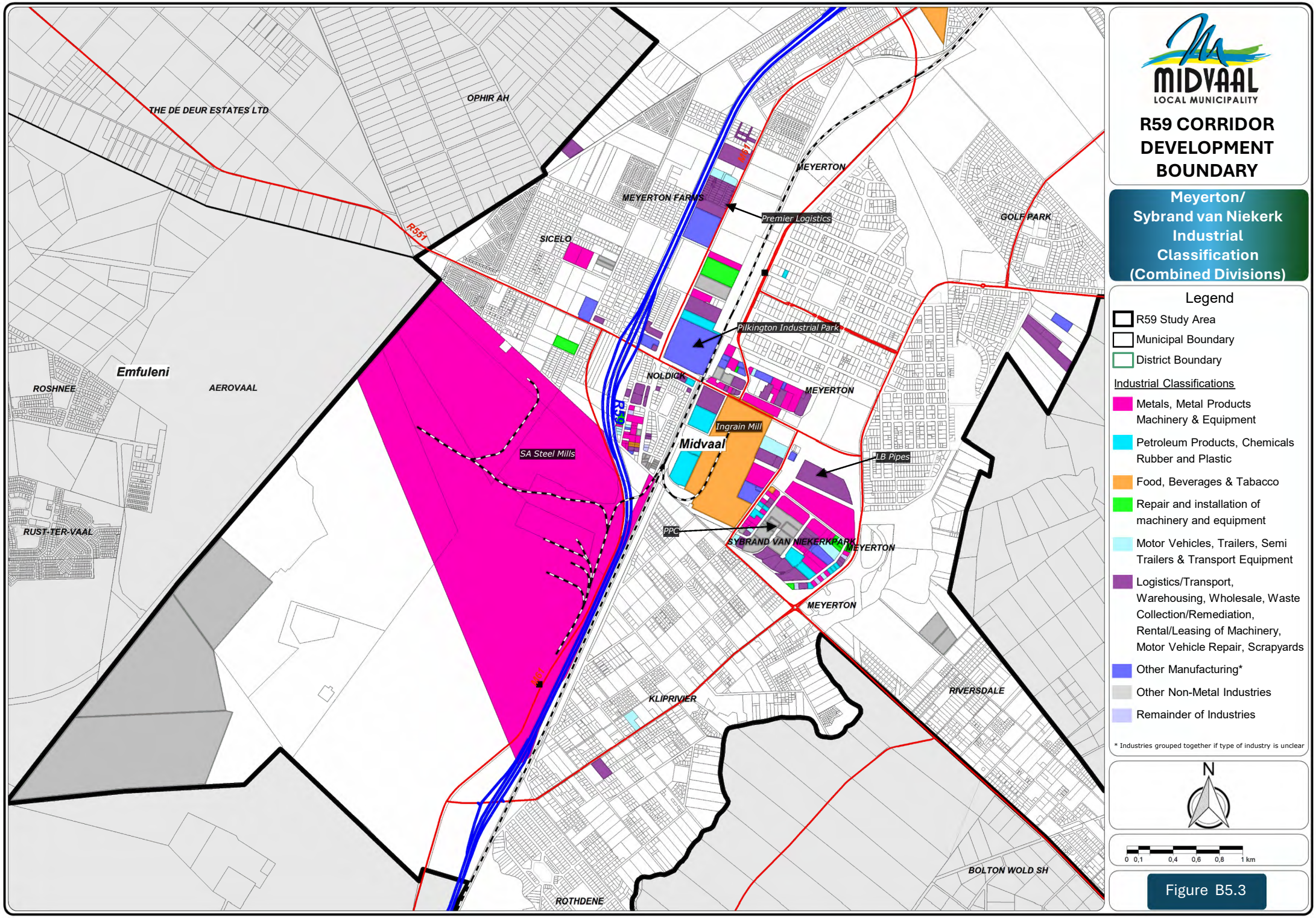
Source: Plan Associates; Google Earth; Mowbray (February 2025); Google Open Street

- Study Area
- Municipal Boundary
- District Boundary
- Agriculture
- Residential
- Rural Residential
- Institutional
- Municipal/Government
- Utilities
- Hospitality
- Office
- Business
- Mixed Use
- Industrial Park
- Industrial/Commercial
- Vacant
- Vacant Building
- Dilapidated Building
- Sports and Recreation
- Open Space
- Transportation
- National Roads
- Main Roads
- Secondary Roads
- Railway
- Railway Station

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure B5.2



MIDVAAL LOCAL MUNICIPALITY

R59 CORRIDOR DEVELOPMENT BOUNDARY

Meyerton/ Sybrand van Niekerk Industrial Classification (Combined Divisions)

Legend

- R59 Study Area
- Municipal Boundary
- District Boundary

Industrial Classifications

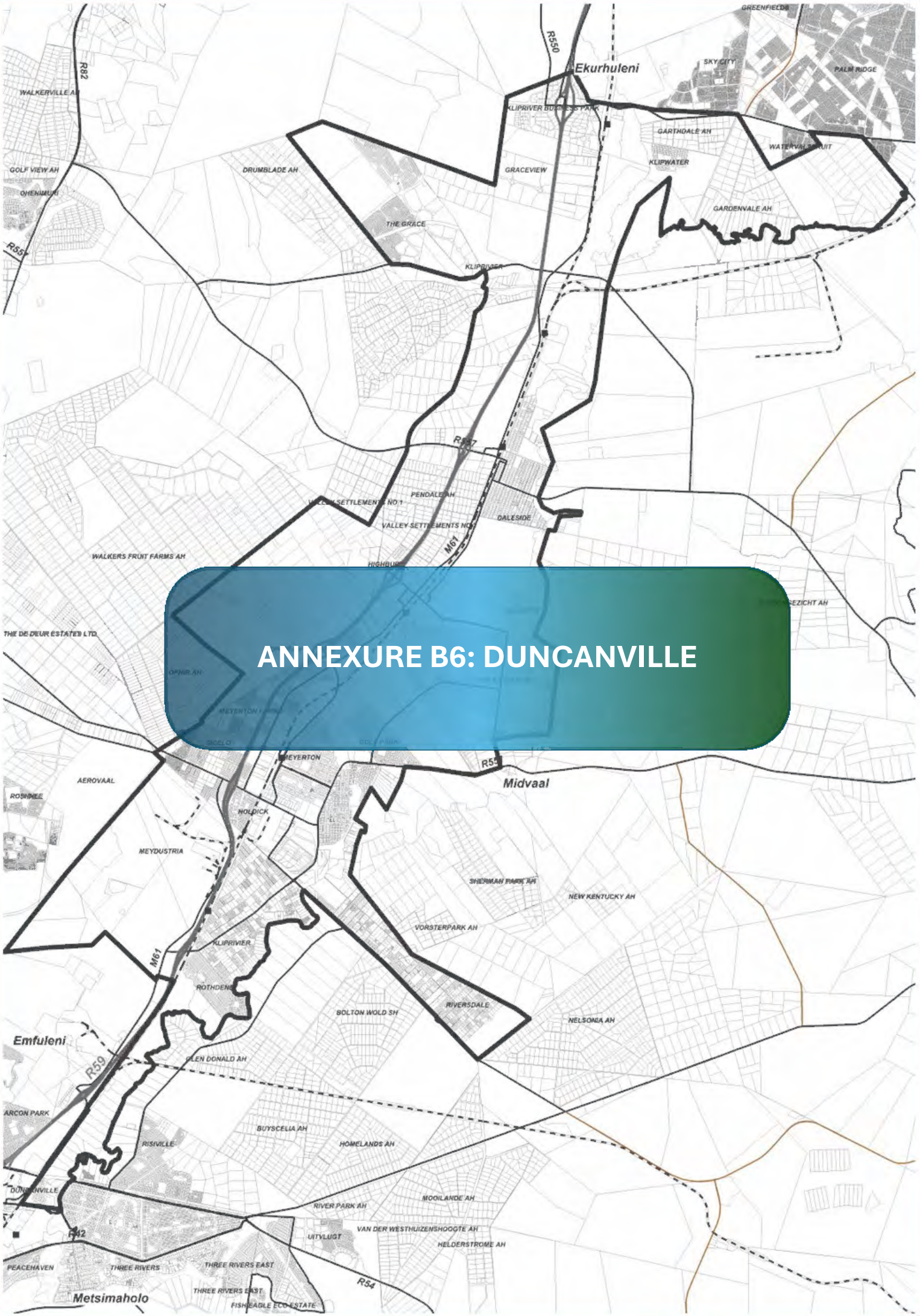
- Metals, Metal Products Machinery & Equipment
- Petroleum Products, Chemicals Rubber and Plastic
- Food, Beverages & Tabacco
- Repair and installation of machinery and equipment
- Motor Vehicles, Trailers, Semi Trailers & Transport Equipment
- Logistics/Transport, Warehousing, Wholesale, Waste Collection/Remediation, Rental/Leasing of Machinery, Motor Vehicle Repair, Scrapyards
- Other Manufacturing*
- Other Non-Metal Industries
- Remainder of Industries

* Industries grouped together if type of industry is unclear

N

0 0,1 0,4 0,6 0,8 1 km

Figure B5.3


ANNEXURE B6: DUNCANVILLE
Ekurhuleni
Midvaal
Emfuleni
Metsimaholo
R82
R550
R554
R57
M61
R59
R42
R54
GREENFIELDS
SKY CITY
PALM RIDGE
WALKERVILLE AH
GOLF VIEW AH
DRUMBLADE AH
GRACEVIEW
KLIPWATER
GARDENVALE AH
THE GRACE
KLIPRIVER
PENDALE AH
DALESIDE
VALLEY SETTLEMENTS NO 1
WALKERS FRUIT FARMS AH
HIGHBURY
THE DE DEUR ESTATES LTD
OPNIR AH
MEYERTON
AEROVAAL
ROSHNEE
HOLDICK
MEYDUSTRIA
KLIPRIVIER
ROTHDENE
SHERMAN PARK AH
NEW KENTUCKY AH
VORSTERPARK AH
SOLTON WOLD SH
RIVERSDALE
NELSONIA AH
GLEN DONALD AH
ARCON PARK
BUYSCELIA AH
RISIVILLE
HOMELANDS AH
DUNCANVILLE
RIVER PARK AH
MOOILANDE AH
VAN DER WESTHUIZENSHOOGTE AH
UITVLUGT
HELDERSTROME AH
PEACEHAVEN
THREE RIVERS
THREE RIVERS EAST
FISHEAGLE ECO ESTATE

R59-Corridor: Duncanville

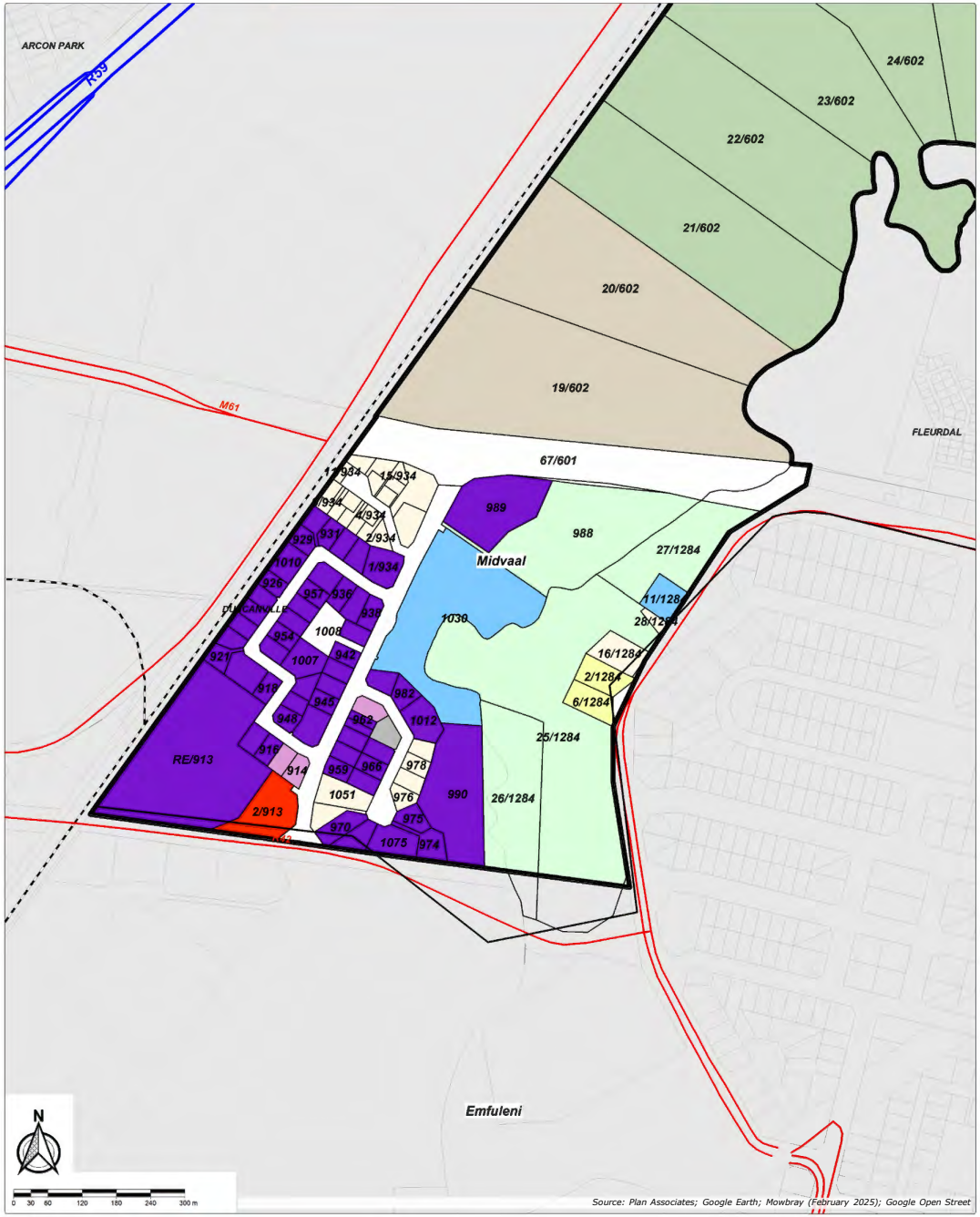
Table : Duncanville: Industrial Survey - Industrial Entities per Division.

SIC Division	Description	Number of Properties	%	Number of Industries	%	Area (ha)	%
Duncanville		**61**	**100%**	**39**	**100%**	**20**	**100%**
10	Manufacturing of food products	1	2%		0%	0	1%
16	Manufacturing of wood and of product of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	1	2%	1	3%	2	11%
18	Printing and reproduction of recorded media	1	2%	1	3%	2	8%
19	Manufacture of coke and refined petroleum products	4	7%	2	5%	1	3%
20	Manufacture of chemicals and chemical products	1	2%	1	3%	5	26%
22	Manufacture of rubber and plastic products	1	2%	1	3%	0	2%
25	Manufacture of fabricated metal products, except machinery and equipment	17	28%	10	26%	3	15%
28	Manufacture of machinery and equipment n.e.c.	1	2%	1	3%	0	1%
32	Other manufacturing*	18	30%	12	31%	4	18%
33	Repair and installation of machinery and equipment	5	8%	4	10%	1	4%
45	Wholesale and retail trade and repair of motor vehicles and motorcycles	2	3%	2	5%	0	2%
46	Wholesale trade, except of motor vehicles and motorcycles	8	13%	3	8%	2	8%
71	Architectural and engineering activities; technical testing and analysis	1	2%	1	3%	0	1%

- **A mix of Industrial Activities found in Duncanville**

Source : Standard industrial Classification (Seventh Edition), Oct 2012, Report No. 09-90-02, STATSSA

2010 Land Use for Duncanville



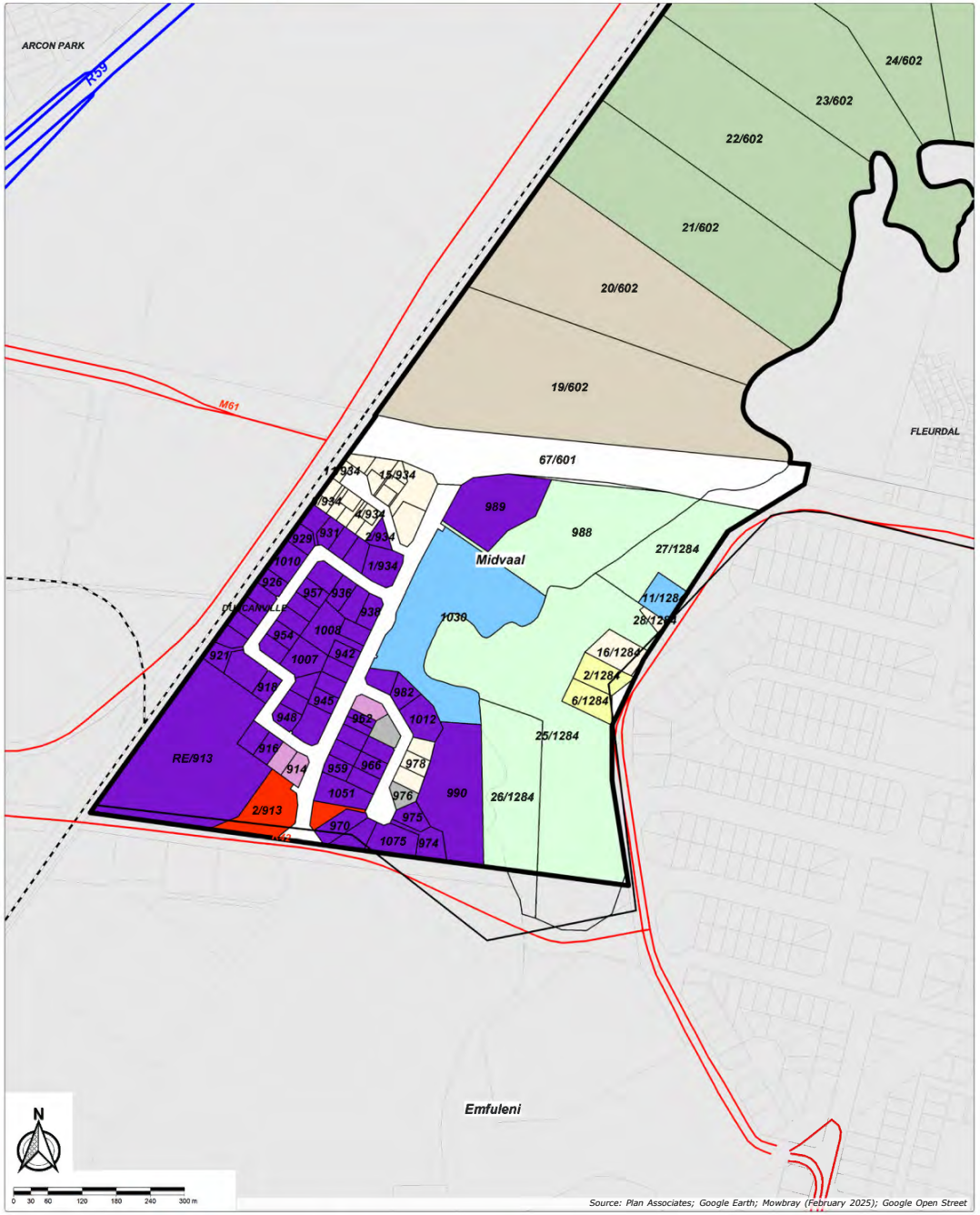
Study Area
Municipal Boundary
District Boundary
Agriculture
Residential
Rural Residential
Institutional
Municipal/Government
Utilities
Hospitality
Office
Business
Mixed Use
Industrial/Commercial
Vacant
Sports and Recreation
Open Space
National Roads
Main Roads
Secondary Roads
Railway
Railway Station

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure B6.1

2025 Land Use for Duncanville

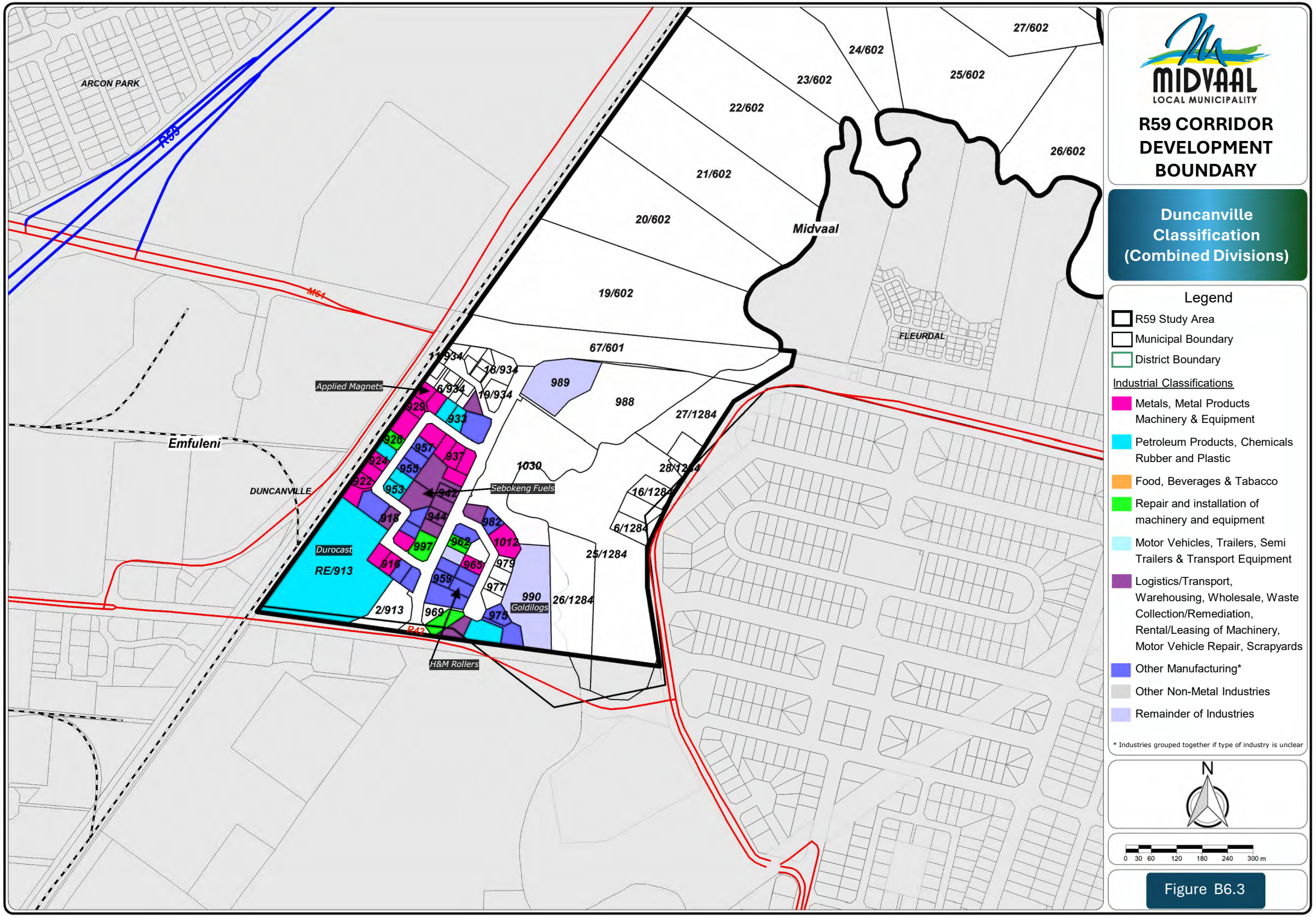


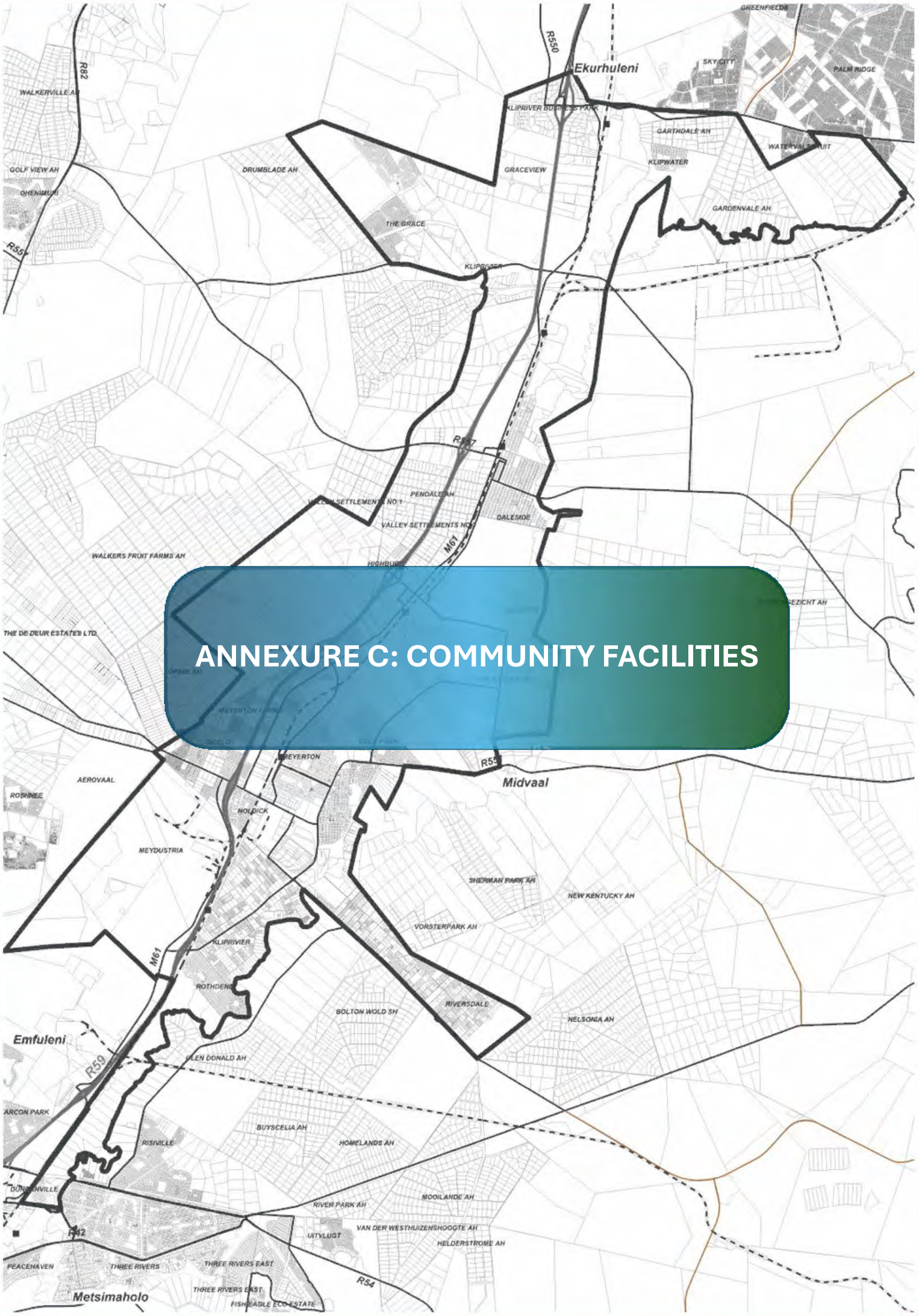
Study Area
Municipal Boundary
District Boundary
Agriculture
Residential
Rural Residential
Institutional
Municipal/Government
Utilities
Hospitality
Office
Business
Mixed Use
Industrial Park
Industrial/Commercial
Vacant
Vacant Building
Dilapidated Building
Sports and Recreation
Open Space
Transportation
National Roads
Main Roads
Secondary Roads
Railway
Railway Station

R59 Development Corridor

MIDVAAL LOCAL MUNICIPALITY

Figure B6.2


ARCON PARK
R59
M64
Emfuleni
DUNCANVILLE
Midvaal
FLEURDAL
Applied Magnets
Sebokeng Fuels
Durocast
RE/913
Goldilogs
H&M Rollers
R42
2/913
989
988
990
1030
1012
982
962
997
965
959
977
979
975
969
944
942
937
957
955
953
929
933
926
924
922
918
916
27/602
24/602
23/602
25/602
22/602
26/602
21/602
20/602
19/602
67/601
27/1284
28/1284
16/1284
6/1284
25/1284
26/1284
MIDVAAL
LOCAL MUNICIPALITY
R59 CORRIDOR DEVELOPMENT BOUNDARY
Duncanville Classification (Combined Divisions)
Legend
R59 Study Area
Municipal Boundary
District Boundary
Industrial Classifications
Metals, Metal Products Machinery & Equipment
Petroleum Products, Chemicals Rubber and Plastic
Food, Beverages & Tabacco
Repair and installation of machinery and equipment
Motor Vehicles, Trailers, Semi Trailers & Transport Equipment
Logistics/Transport, Warehousing, Wholesale, Waste Collection/Remediation, Rental/Leasing of Machinery, Motor Vehicle Repair, Scrapyards
Other Manufacturing*
Other Non-Metal Industries
Remainder of Industries
* Industries grouped together if type of industry is unclear
N
0 30 60 120 180 240 300 m
Figure B6.3



ANNEXURE C: COMMUNITY FACILITIES

ANNEXURE C: COMMUNITY FACILITIES

ANNEXURE C1: MULTI PURPOSE GOVERNMENT/THUSONG CENTER CONCEPT

INCREMENTAL DEVELOPMENT OF A THUSONG CENTRE/MPCC

Essentially, a Thusong Node/Centre is "*a focal point at which a comprehensive range of essential services can be obtained by people living in its vicinity*".

The key to the success of Thusong Node/Centre development is rooted in the principle of focused and deliberate government investment spending within and around a strategically selected spatial point, to ensure that these areas/centres develop to provide an extensive range of community facilities. If successfully developed, these clusters/centers can contribute to/create the critical mass (feet) required to act as catalyst for development of an extensive range of formal and informal economic activity within the surrounding area – leading to the creation of a functional activity node.

Diagram C1 illustrates this concept of a cluster of community facilities located in a "Government Precinct" which forms part of a larger activity node serving the surrounding community.

A good example of such range of community facilities being consolidated into a single building (Thusong Centre) in Olievenhoutbosch is depicted on **Diagram C2**, while the Thekwane Thusong Centre (**Diagram C3**) in Rustenburg was developed as a joint venture with Gencore Mine and Merafe Resources.

DIAGRAM C1-1: Multi-Purpose "Government Precinct" Concept



DIAGRAM C1-2: Example of a Thusong Centre

EXAMPLE OF A THUSONG CENTRE/ MPCC IN OLIEVENHOUTBOSCH



Floor Area of MPCC 1 878m^2

Community Facilities at Thusong Centre











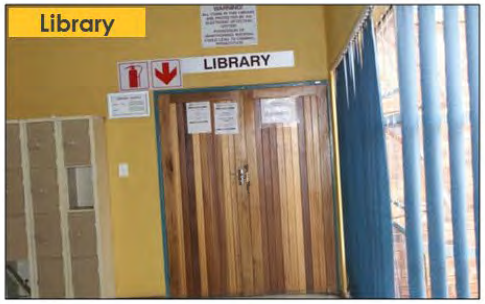


Diagram C1-3: Thusong Center Concept



Source:
South African Business Website: https://www.southafricanbusiness.co.za/08/2023/construction-and-engineering/r20-million-multi-purpose-community-centre-constructed-in-rustenburg/

1. Introduction: The Role of Cemeteries

As a point of departure, emphasis should be placed on the 'green lung' role cemeteries can play as parks and open spaces within the urban environment.

As cemeteries reach closure, they need to be, where practically possible, destinations within a community not only for memorials to the deceased but for use by the community long after the cemetery has closed, so as not to make them sterile areas.

To this end the planting of trees and the possible development of recreational facilities, such as walking paths within cemeteries, needs to be enhanced, with due consideration to societal norms.

One of the most dramatic changes in cemetery planning and design is the growing trend of "green burial." Green cemeteries help to establish and protect natural habitat through use of indigenous plants or trees over the grave, with footpaths connecting memorial structures located within the emerging forest.

Careful, creative planning of a modern green cemetery or something more conventional, will ensure that the right product is developed, in the right location at the right time.

2. Estimating Grave Demand

As urbanisation and population growth continue, it is imperative to project future burial space requirements accurately.

- Grave demand is primarily calculated using data from burial requests recorded in the municipal burial register. Municipal cemeteries typically sell or reserve graves for public use, and the burial register, in conjunction with municipal death registration records, forms the basis for estimating future demand.
- As a cross-check the "10 hectares of land per 100,000 residents ratio" can be used as a rule of thumb.
- Adjustments must be made to account for alternative interment methods, such as cremation.
- Once the total demand is determined, it should be spatially distributed across municipal functional areas to guide strategic planning.
- Due to the rate at which cemeteries are filling and the limited availability of suitable land for their development, alternative sustainable burial methods should be considered, including vertical burials and the use of biodegradable materials.

3. Site Selection Process

(i) General

- As cemeteries represent a permanent and non-repurposable land use, careful planning is essential in identifying appropriate locations.
- Land that is not ideally suited for housing, such as land on suitable dolomite areas, and perhaps land outside of the UDB should be targeted for cemeteries.
- Furthermore, Council-owned land should be prioritized for this use, while potential private land acquisitions should also be timeously identified in order to meet future demands.
- There needs to be a move towards larger, more regionalised cemeteries that will have an economy-of-scale benefit to the municipality and provide land for an extended long term rather than ad-hoc extensions to existing cemeteries to meet short-term needs.
- The planning and development of cemeteries require careful analysis of criteria such as the need, planning horizon, location, size, intensification, compatibility, environment and permanency. A comprehensive analysis of the factors below (**Table 1**) is necessary.

Table 1: Cemetery Site Selection and Environmental Impact Components

	SITE SELECTION	ENVIRONMENTAL IMPACT
1	Market and demographic analysis	Natural Heritage Designations and Zoning
2	Geohydrologic dolomite, soils and drainage survey	Geotechnical, Hydrology, and Hydro geology
3	Tree inventory / arborist report	Natural Hazard Analysis
4	Natural heritage assessment	Comprehensive Biological Inventory
5	Traffic analysis / sight lines	Identify existing or potential linkages to natural heritage features and habitats

(ii) Key Considerations

a) Policy Alignment:

Site selection must align with the municipality's **Spatial Development Framework (SDF)**. Ideally, cemeteries should be planned as infill development on otherwise undevelopable land within the urban fabric; or, preferably, in future urban expansion zones (closer to the urban development boundary); and/or where it could serve as a functional extension/interface between the regional open space system and the surrounding urban fabric.

b) Legislative Compliance:

Cemeteries must comply with several legislative requirements, including:

- **National Environmental Management Act (NEMA):** Requires an Environmental Impact Assessment (EIA) or Basic Assessment (BA), supported by specialist studies (e.g., ecological, geotechnical, geohydrological assessments). Groundwater monitoring through boreholes and a detailed **Stormwater Management Plan** are also mandatory.
- **Municipal Land Use By-Law:** The land must be appropriately zoned for cemetery use in accordance with the municipality's town planning regulations.

c) Geotechnical and Environmental Factors:

- Sites must have suitable soil conditions, allowing for easy excavation and a grave depth that avoids shallow groundwater.
- The subsurface geology should ideally consist of impermeable rock layers to prevent groundwater contamination.
- Cemeteries must be sited away from rivers, wetlands, and environmentally sensitive or protected areas.

d) Accessibility:

- Cemeteries serve an important social function and must be accessible within the urban fabric.
- Good accessibility facilitates regular visitation by families, and it reduces operational and maintenance costs.

e) Crematoriums:

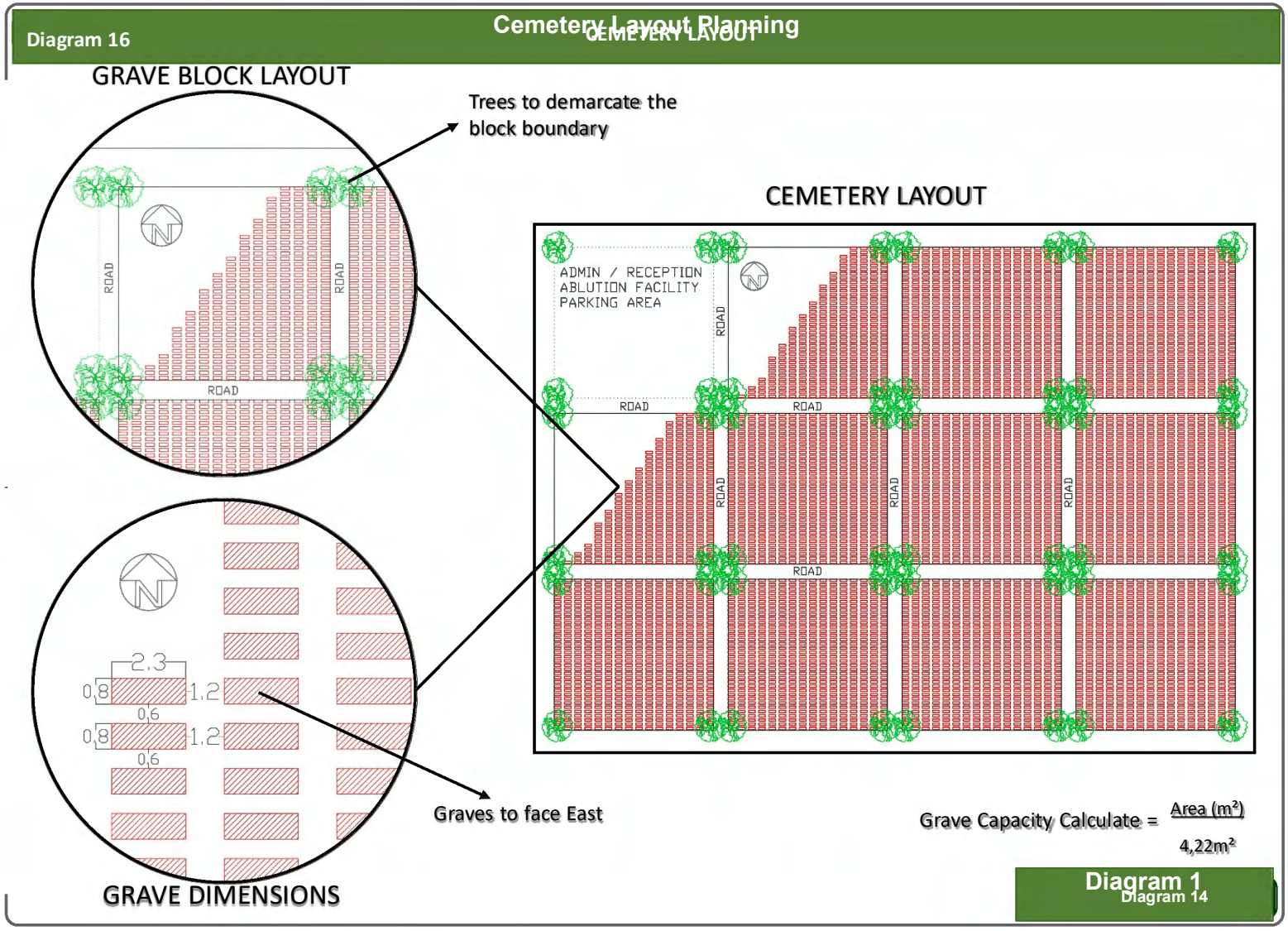
- Crematoriums entail gases that are listed activities in terms of the Air Quality Act (Act 39 of 2004) and will require an Environmental Impact Assessment coupled with an Air Quality Impact Assessment.
- Specific attention needs to be paid to the following:
  - A crematorium requires continuous emissions monitoring.
  - Design of exhaust stck.

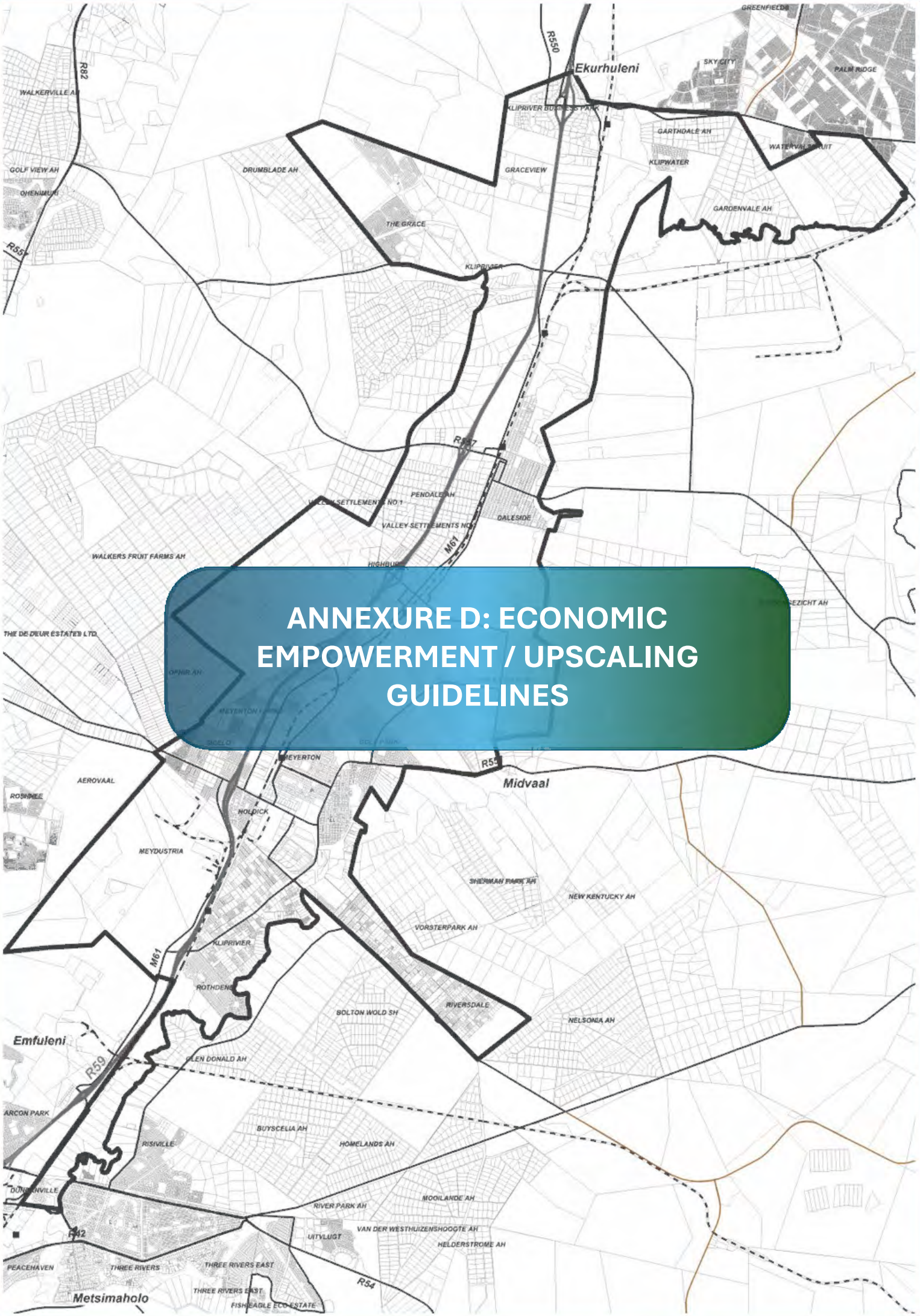
4. Cemetery Layout Design

Diagram 1 provides a schematic illustration of a cemetery layout, and the following can be noted.

- **Grave Capacity Calculation:**
  - Usable area (m^2) ÷ 4.22 m^2 = number of graves.
- **Layout Pattern:**
  - While a grid-iron layout is not essential, it aids in legibility, organization, and effective stormwater management.
- **Facilities & Infrastructure:**
  - Designated areas for administration, ablution, and parking are essential.
  - A detailed grave register must be maintained on-site to track mortality data and project the cemetery's lifespan.
- **Security & Access Control:**
  - Cemeteries should be fully fenced to manage access and protect graves from vandalism or intrusion by domestic animals.
- **Cultural Considerations:**
  - Traditional grave alignment is typically east-west and should be respected where applicable.
- **Survey & Land Marking:**
  - Cemetery block corners should be professionally surveyed. These corners can be marked with planted trees to aid in the orderly marking of new graves and efficient use of space.

Diagram C2-1: Cemetery Layout Planning





ANNEXURE D: ECONOMIC EMPOWERMENT / UPSCALING GUIDELINES

ANNEXURE D: ECONOMIC EMPOWERMENT / UPSCALING GUIDELINES

ANNEXURE D1: TOWNSHIP ECONOMY: POTENTIAL JOB CREATION OPPORTUNITIES

Main Sectors	Secondary Category	Examples of Business Opportunities
1. Business	Retail (Formal)	Butchery, Bottle store, Cellphone, Café, Clothing, Tombstones, Fast Food, General Dealer, Farm Shop, Plant Nursery
	Retail (Informal)	Street Vending/Food Seller, Fruit & Vegetable Seller, Brick Making, Liquor Seller, Shebeen, Tavern, Spaza, Tombstone Trader
	Retail (Markets)	Crafters Market, Food & Fresh Produce Market
	Personal Services	Hair & Beauty Salons, Fashion Designer, Laundrette, Gym, Traditional Healer
	Offices	Burial Society, Banks, ATM, Financiers/Cash Loans, Internet Café, Renting of Machinery, Home Office, Security Companies
	Motor Vehicle Related Retail	Car Sales Lot, Car Wash, Cash for Scrapyard, Motor Spares, Filling Station
2. Service Industries	Services	Dress Making/Tailors/Manufacture Uniforms, Bakery/Catering, Engraving, Printing, Picture Framing, Jewellery Manufacturing, Watch/Cellphone Repairs, Shoe Repairs, Key Cutting, Dry Cleaners, Funeral Services (Parlour/Undertaker), Basket Ware and Cane Furniture, Office Furniture, Upholstery
	Infrastructure	Sanitation (plumbers), Electrician, Security Gates & Fencing, Mobile Toilets, Solar Panels/Geysers
	Green Economy	Cleaning Services, Waste Collection and Sorting/Recycling
3. Tourism	Retail (Formal)	Craft/Curio Shop, Coffee Shop, Restaurant
	Retail (Informal)	Crafters Market, Food & Fresh Produce Market
	Offices	Tourist Operators
	Hospitality Establishment	Hotel, Guest House, Bed & Breakfast, Conferencing, Camp Sites
	Services	Catering & Events, Heritage Tourism, Sports/Adventure Tourism, Water Sports and Recreation Parks, Tourist Guide, Hunting Guide

Main Sectors	Secondary Category	Examples of Business Opportunities
4. Creative Industry	Services	Arts & Crafts Workshops/Exhibitions, Cinemas, Music & Entertainment, Music & Video Production, Fashion Designer, Jewellery Manufacturing, Bead Making, Leather/Hide Products, Coordination of Cultural Events
5. Community Services	Medical & Health	Hospital and Clinic, Substance Abuse Treatment/War on Drugs, Hospice/Nursing/Care Centre (treatment and care for HIV/AIDS and other chronic ailments), Traditional Healer
	Funeral / internment services (confinement)	Burial Society, Catering-, Renting-, Cemetery Services
	Institutional Care Facility	Orphanage/Children's Home, Shelters, Soup Kitchen, Care for Elderly, Assisting the Elderly with Social Grants
	Cultural Facilities	Community Centres, Church and Religious Services
	Educational Facilities	Crèche & pre-schools, Schools, Sports Coaching, FET Colleges, Feeding schemes for schools and hospitals
	Other Education	Motor vehicle driving school, Special education - disabilities, Initiation school, Dancing /Music/Art Schools
	Protection services	Security Guards
	Emergency services	Ambulance Services/Paramedics
	Administrative	Postal/Courier Services
	Animal Care Facilities	Indoor / outdoor kennels, Veterinarian clinic, Animal rehabilitation centres
	ICTS	Internet Solutions, Multimedia Service Centres, Internet Cafes, Electronic Repairs, ICT Recycling Depots
6. Agriculture and Agro Processing	Animal production	Livestock/Poultry Farming
	Crop production	Vegetable/Herb Farming
	Agricultural industry	Milling, Feed Mixing, Processing/Sorting/Packing of Farm Produce, Farm Stall, Oil refinery, Biofuels
7. Transport	Services	Taxi Operators/Associations, Logistics companies, Tour Operators
	Infrastructure	Paving of Walkways and Cycle Lanes
8. Finance	Services	Stokvels, Money Lending Schemes, Burial Societies

Main Sectors	Secondary Category	Examples of Business Opportunities
9. Manufacturing	Production & Manufacturing	Food production, Bakery, Manufacturing of Machinery-/Metal (steel)- /Non-metal (charcoal/tar/bricks)-/Clothing and Textile-/ Wood and Furniture (Carpentry) Products, Abattoir
	Motor Service related (Light) Industry	Fitment centre/Vehicle repairs, Panelbeater/Auto body, Towing Service, Motor Workshop
	Engineering Service related (Light) Industry	Engineering Workshop e.g. welding, cutting, joinery, pumps, pipes and fitting, etc. Electrical Workshop/Contractors, Lawnmower Repairs
10. Commercial	Warehousing & storage	Storage Facilities, Storage and selling of coal, sand, building material, Scrap Yard, Recycling Depot, Auction Yard
11. Construction and Real Estate	Services	Construction Business, Property Developers, Estate/Renting Agents
	Infrastructure	Builders, Carpenters, Brick/Paving layers, Electricians, Plumbers
12. Mining	Active Mining	Sand Mining, Quarrying
	Mining Rehabilitation	Cleaning Services, Waste Collection and Planting of new vegetation

ANNEXURE D2.1

Informal Trade Empowerment and Upscaling

Annexure D2.1 highlights the concept to upscale informal trading businesses, the stages to achieve upscaling are represented as **Level 1 – Level 4. Annexure D2.2** – **Annexure D2.5** highlights examples of the various informal trade structures referred to the Informal Trade Upscaling concept on Annexure D2.1.

LEVEL 1	Informal trading business in a form of selling perishable or non-perishable goods, and informal motor repair businesses are being conducted without adequate formalised informal structures.
LEVEL2	Formalised informal trading structures in this level are very basic. Level 2A structures are temporary and may be placed along pedestrian movement desire lines where space is limited, see examples on **Annexure D2.2**. Level 2B structures are more permanent in nature, and may be utilised by small emerging service industries.
LEVEL 3	The structures at Level 3 are permanent and typically larger in size when compared with 'level 1' informal trading structures. Level 3a includes features such as lock-up roller doors for over-night storage, and may include water and sanitation services shared between traders, see examples on **Annexure D2.2**. This allows for more comprehensive retail activities including food preparations and/ or service industries such as internet cafes, kiosk, electronic repair services, motor repairs services and welding works, as reflected on **Annexure D2.3** and **Annexure D2.4**.
LEVEL 4	Level 4 provides that informal traders be incorporated into the formal economy (as illustrated on **Annexure D2.5**) by way of providing permanent and formalised trading structures as part of a shopping centre or business incubation centre.

DEVELOPMENT APPROACH TO INFORMAL TRADE

ANNEXURE D2.1

LEVEL 1 - Lack of Formal Structure

Retail



A Trade of goods along roadside

Manufacturing/ Service Industry



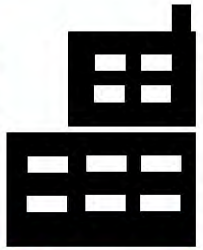
B Services and sales along roadside

LEVEL 4 - Informal Trade Incorporated into Formal Retail

Retail



A Market area forms part of shopping centre/ parking lot



B Fresh produce processed at Agro-Industries

Manufacturing/ Service Industry



C Formal business eg. workshop

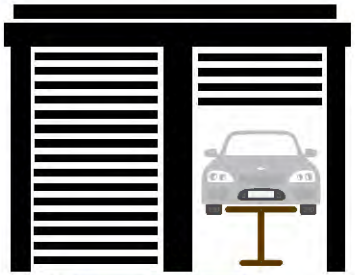
LEVEL 2 - Small-scale Formalised Structure

Retail



A Temporary stalls, with display shelves

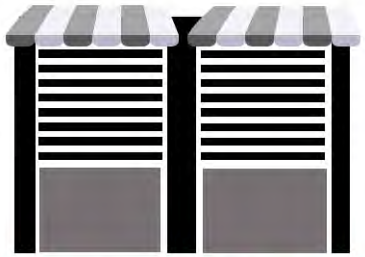
Manufacturing/ Service Industry



B Narrow 'beehive industries'

LEVEL 3 - Medium-scale Formal Business Structure

Retail



A More comprehensive stalls (eg. Including bench, lock-up option, services etc)

Manufacturing/ Service Industry



B Larger 'beehive industries'

TYPES OF FORMALISED INFORMAL TRADE STRUCTURES

ANNEXURE D2.2

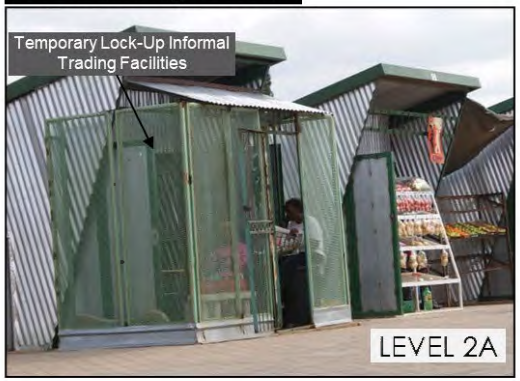
LEVEL 2

RETAIL – Temporary Formalised Informal Trading Structures

Pretoria - Hatfield



Johannesburg - Lesedi



SERVICE INDUSTRIES - Formalised Informal Trading Structures



LEVEL 3

RETAIL – Permanent Formalised Informal Trading Structures

Tshwane – Khutsong Station



Ogies – Nkangla DM



SERVICE INDUSTRIES - Formalised Informal Trading Structures



Emerging Local Entrepreneurs - Shipping containers converted for Business

ANNEXURE D2.3

RETAIL – Temporary Formalised Informal Trading Structures



Local Barber



4Walls Business – Selling and Educating on Green Energy



Local Businesses in Shipping Containers close to Taxi Rank



Spinach King Bakery and Gym in Khayelisha

LEVEL 3B

SERVICE INDUSTRIES - Formalised Informal Trading Structures



Motor Repair Services







LEVEL 3B

TYPES OF FORMALISED INFORMAL TRADE STRUCTURES

ANNEXURE D2.5

RETAIL - Formalised Informal Trading Structures

LEVEL 4A

Cape Town - Nomzamo Business Area



Johannesburg - Lesedi



Ga- Nala – Ogies, Nkangala DM



SERVICE INDUSTRIES - Formalised Informal Trading Structures

LEVEL 4B

SMME INFRASTRUCTURE - Linear Beehive Buildings





PROMINENT TOURISM DESTINATIONS DESIGNED FROM SHIPPING CONTAINERS

ANNEXURE D2.6



- Restaurants at Ground Floor
- Retail Clothing Shop on Upper Floor



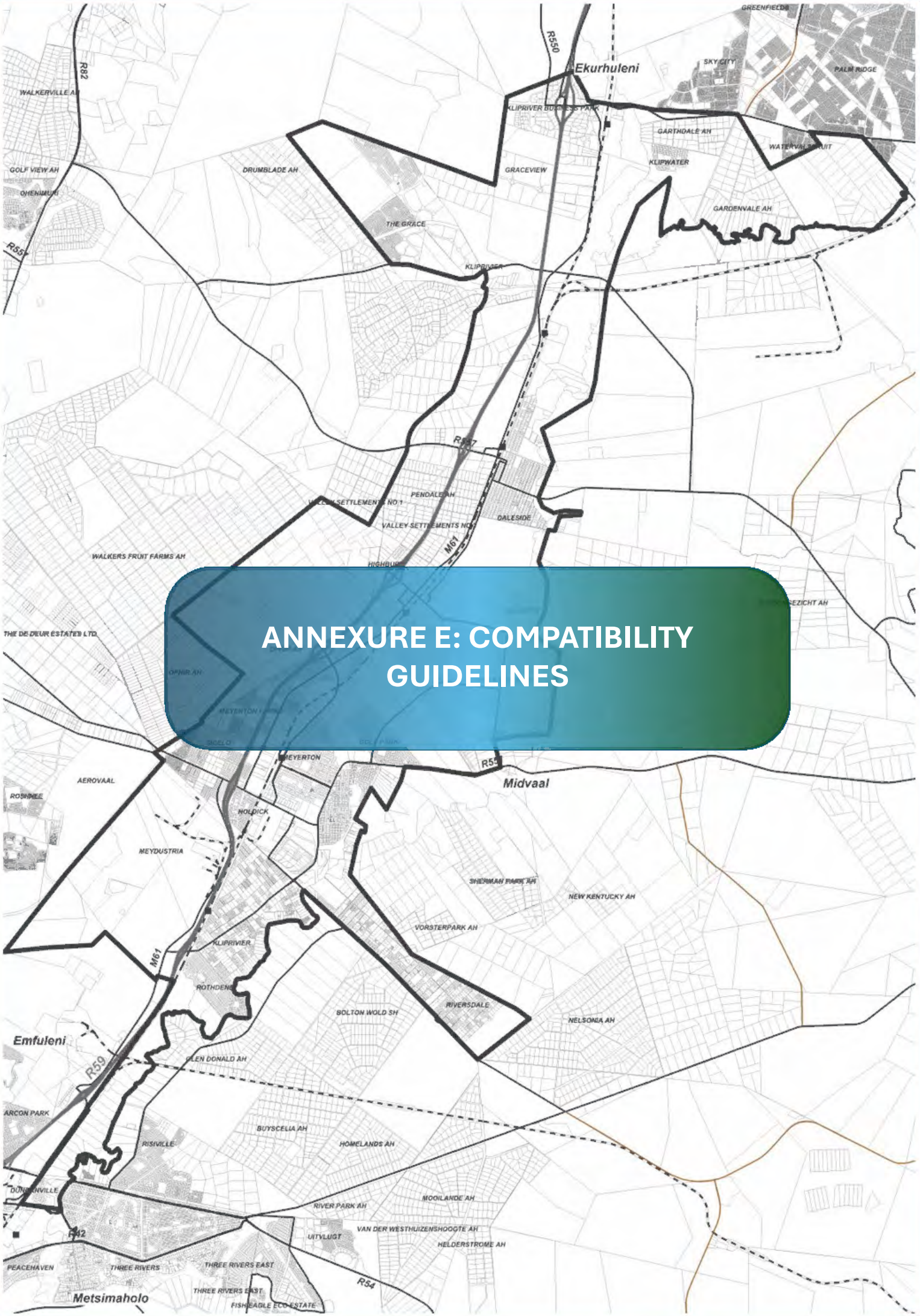
Food Court



Las Vages – Downtown Container Park with an Outdoor Cinema



Shopping Mall


ANNEXURE E: COMPATIBILITY GUIDELINES
Ekurhuleni
Midvaal
Emfuleni
Metsimaholo
R82
R550
R55
R57
M61
R59
R54
GREENFIELDS
SKY CITY
PALM RIDGE
WALKERVILLE AH
GOLF VIEW AH
DRUMBLADE AH
GRACEVIEW
KLIPWATER
GARDENVALE AH
THE GRACE
PENDALE AH
DALESIDE
WALKERS FRUIT FARMS AH
AEROVAAL
ROSHNEE
MEYDUSTRIA
KLIPRIVIER
NEW KENTUCKY AH
VORSTERPARK AH
RIVERSDALE
NELSONIA AH
BUYSCELIA AH
HOMELANDS AH
RISIVILLE
RIVER PARK AH
MOOILANDE AH
VAN DER WESTHUIZENSHOOGTE AH
HELDERSTROME AH
UITVLUGT
PEACEHAVEN
THREE RIVERS
THREE RIVERS EAST
FISHEAGLE ECO ESTATE

ANNEXURE E: COMPATIBILITY GUIDELINES

The tables below must only serve as a guiding tool to evaluate various applications for Triggers and Mitigation Measures relating to compatibility with adjacent land use. When conducting a compatibility assessment and applying mitigation in relation to these compatibility guidelines, it must be done in a manner that does not create an unwanted precedent for similar uses along the same road or within the subject area.

1. Building Scale and Site Design

This factor relates to how an entire site is developed in relationship to neighbouring uses, paying particular attention to building height and scale, orientation, and layout. The presence of these triggers in higher intensity Spatial Planning Categories (e.g. Nodes) may not indicate a compatibility concern because larger differences in scale and massing are expected and appropriate in these more urban areas.

Triggers

Development proposals that trigger the criteria and considerations, such as those listed below, must be evaluated in relation to mitigation measures to mitigate compatibility issues (this is however not an exhaustive list of scenarios).
1. Is the proposed density/intensity of development misaligned with the designated density for the area (with due regard for the residential density guidelines in the MSDF)?
2. Is the proposed built form and / or layout of the proposed development (height, coverage, setback, street frontage, building orientation, building position, etc.) incompatible or in contrast with the surrounding built form?
3. Will the building position creating a shadow effect on adjacent buildings?

Mitigation Measures

List of potential measures, for evaluation, to mitigate issues of compatibility. This list is not exhaustive, and appropriate mitigations may also vary according to the site-specific circumstances and context. Developers are encouraged to propose their own solutions that are suitable to the circumstances of the particular site and that are to the satisfaction of the municipality (with due regard for the relevant objectives and intent of the SDF, as well as MLLUS and applicable policies and legislation). Also refer to the Midvaal Urban Design Guidelines for urban design mitigations that may be appropriate for the particular development proposal.
1. Provide gradual transition between smaller and larger residential erven through the arrangement and scale of erven and/ or by providing appropriately scaled buffers.
2. Minimize the mass of buildings that directly face smaller, pre-existing buildings by: a) reducing the visual impact with larger setbacks than those prevailing on the street; b) incorporating design and elevation features that complement adjacent lower-density development; c) stepping buildings down to a scale (building bulk, footprint size, and height) complementing adjacent development; and/or e) breaking up massing of buildings.
3. Design structures in a manner that provides a visual or height transition and complements the scale and form of adjacent development. This can be done through reducing building height, providing step-backs, varying massing, increasing setbacks, and other techniques.
4. Request screens on balconies and frosted glass on windows to prevent overlooking onto entertainment areas of single residential properties.
5. Require a physical screening barrier (e.g. a 2 m high screen wall or alternatively require the use of plants to provide screening) along the boundaries of the erf abutting residential properties.

6. In cases where boundary walls are causing a negative impact on neighbouring property, the application of architectural responses such as green wall responses are encouraged as means of softening the imposing impact on neighbouring property. In cases where the wall is creating a dark space, the implementation of adequate lighting solutions is encouraged.
7. Alternating/undulating facades, especially for buildings longer than a standard block.
8. Use drainageways, mature trees, wetlands, and grassland areas to improve compatibility in building scale.
9. Locate, design, and manage stormwater management features (including retention and detention basins, surface drainageways, constructed wetlands, and greenways) to provide visual amenities or entryways, or to provide opportunities for passive recreation.
10. Require open space (active or passive) as an interface. This could be an attribute to a development and provides environmental and climate resilience in terms of water run-off and cool environments.
11. Impose a servitude or building line on the common boundary to separate the uses and protect low density residential development.
12. Use landscape, pedestrian ways, and parking design to divide large parking lots into smaller blocks.
13. Use landscaped buffers and screening to reduce the visual impact of parking facilities on adjacent residential areas.

2. Traffic

In auto-oriented settings, the amount, timing, and routing of traffic generated by the use can produce impacts on the surrounding area. This measure focuses on the differences in the amount and type of traffic generated between a proposed development and existing uses. Issues of traffic compatibility may be less of a concern in Nodes. The potential impact of a proposed development on pedestrian and traffic safety should also be considered.

Triggers

Development proposals that trigger the criteria and considerations, such as those listed below, must be evaluated in relation to mitigation measures to mitigate compatibility issues (this is however not an exhaustive list of scenarios).
1. Is the development proposal consistent / inconsistent with COTO guidelines as determined by the relevant Roads Authorities?
2. Does average daily traffic to be generated by the proposed development substantially exceeds that of existing, adjacent uses?
3. Could proposed access arrangements have an undesirable impact on the functioning of adjacent or nearby higher order roads?
4. Could the proposed development place undue pressure on the capacity of the surrounding roads and transportation infrastructure network?
5. Is the proposed development likely to result in the mixing of incompatible vehicle / transportation types (with due regard for not only light passenger vehicles and large delivery vehicles, but also public transport and pedestrians and non-motorised modes of transport)?
6. Could the proposed development have a potential detrimental impact on pedestrian and traffic safety?

Mitigation Measures

List of potential measures, for evaluation, to mitigate issues of compatibility. This list is not exhaustive, and appropriate mitigations may also vary according to the site-specific circumstances and context. Developers are encouraged to propose their own solutions that are suitable to the circumstances of the particular site and that are to the satisfaction of the municipality (with due regard for the relevant objectives and intent of the SDF, as well as MLLUS and applicable policies and legislation).
1. Coordinate with the municipality (and relevant Roads Authorities) to construct improvements necessary to mitigate the proposed development's impact on the subject street or intersection. Enter into a development agreement with the Municipality to jointly upgrade intersections or networks over time.
2. Utilize site designs, building groupings, and site features that accommodate and encourage the use of transportation alternatives, including pedestrian, bicycle, and public transportation. Examples of techniques include continuous walkways from public sidewalks, transit stops, and multi-use paths and trails to building entrances; use of durable surface materials to define pedestrian routes and crossings; and visible and convenient bicycle parking facilities.
3. Increase the connectivity of the street network to reduce reliance on single routes for access.
4. Design connections to avoid channelling traffic generated by higher intensity uses onto neighbourhood streets except as part of comprehensively planned mixed-use developments. Provide means of access to residential areas that avoids requiring residents to use arterial streets for short-distance trips.
5. Use traffic calming techniques to promote pedestrian and traffic safety.
6. Illustrate how access to the proposed development, as well as associated parking and manoeuvring space will be provided in a manner that does not compromise pedestrian and traffic safety along the road reserve.

3. Operational Impact
These potential conflicts are caused by operational characteristics such as noise, dust, light, hours of operation, emissions, and odors. Typically, operational impact concerns arise when a development is proposed next to a less intense use. However, in some cases the proposed development may need to take measures to reduce the impact of an existing use, such as a residential use proposed next to an existing industrial use.
Triggers
Development proposals that trigger the criteria and considerations, such as those listed below, must be evaluated in relation to mitigation measures to mitigate compatibility issues (this is however not an exhaustive list of scenarios).
1. Will the noise levels exceed the ambient noise levels in the surrounding area and is any noise emanating from the proposed development likely to be audible from outside the property?
2. Will there be any detectable odours, or other emissions emanating from the proposed development?
3. Will any dust emanate from the proposed development?
4. Will any spill light, brighter than the ambient level of light in the surrounding areas, emanate from the proposed development? (e.g. spotlights, floodlights, security lighting, etc.)
5. Will hours of operation of proposed use be compatible with the nature and character of the surrounding area?
Mitigation Measures
List of potential measures, for evaluation, to mitigate issues of compatibility. This list is not exhaustive, and appropriate mitigations may also vary according to the site-specific circumstances and context. Developers are encouraged to propose their own solutions that are suitable to the circumstances of the particular site and that are to the satisfaction of the municipality (with due regard for the relevant objectives and intent of the SDF/Corridor Plan, as well as MLLUS and applicable policies and legislation).
1. Contain operating effects (including noise and odours) within building walls to the maximum degree possible and at least within site boundaries.
2. Refuse storage areas for non-residential uses should be far from adjacent residential uses to prevent nuisance caused by smells, rodents and flies.
3. Minimise dust pollution, through proposed mitigating measures for dust control.
4. Use vertical screening to block visual effects of high-impact components such as mechanical equipment and service areas.
5. Direct light generated by higher intensity uses, including direct illumination of parking and service areas, signs, and structures, away from adjacent residential areas.
6. Screening and orientation of buildings for drive-through services, to mitigate the noise impact of intercom systems on the amenity of adjacent residential properties.
7. Integrate screening into the overall design of buildings and landscaping.
8. Reduce noise through additional wall insulation, plantings, fences and walls, and strategic placement of doors and windows, as well as appropriate site layout.
9. In cases where there are two incompatible land uses (such as residential and industrial) adjacent to each other, the treatment of the interface between these uses is crucial.
10. Restrict operating hours to be compatible with the character of the area.

4. Scale of uses/development in residential areas

The scale of uses/development in residential areas relates to the impact that non-residential uses have in predominantly residential areas. The evaluation criteria are aimed at directing higher impact non-residential use to cluster in appropriate locations (e.g. Business areas, Light Industrial/Commercial, B1, B2 – SDF/Corridor Plan Spatial Planning Categories). Furthermore, in designated residential areas (outside and around the above-mentioned designated mixed-use areas) non-residential uses are required to be limited to types of uses that directly support the surrounding residential community and such non-residential uses are also required to be clustered together, as opposed to be scattered randomly throughout the residential area. Proposals for non-residential uses in designated residential areas, that do not conform to the above-mentioned clustering requirements, are discouraged. All proposals for non-residential uses in designated residential areas (outside and around the above-mentioned designated mixed-use areas) will be subject to scrutiny in relation to the nature and scale of such development proposals (as per typical considerations and mitigations listed below) as well as other relevant compatibility criteria and policies.

Triggers

Development proposals that trigger the criteria and considerations, such as those listed below, must be evaluated in relation to mitigation measures to mitigate compatibility issues (this is however not an exhaustive list of scenarios).

1. Is the proposed use located within a land use area typical of a low-density residential suburb (e.g. low density residential, typical 1 dwelling house per erf, single to double storey buildings)?

2. If a use is proposed to be clustered with other non-residential uses, is it related to the nature of such other non-residential uses that it is intended to be clustered with?

3. Is the proposed use a type of use that will serve the needs of the directly surrounding residential community, or is it a type of use that is likely to draw patrons from a wider area into the local residential area where the proposed use will be located?

4. Is the intended scale of the proposed use of such an extent that it will serve only the directly surrounding residential community, or is it likely to draw patrons from other residential neighbourhoods in the wider surrounding area?

5. Does the proposed development constitute a "destination" type of development, that is likely to attract patrons from other residential neighbourhoods in the wider surrounding area?

6. Will the proposed non-residential use coexists with a residential use (e.g. a dwelling house / dwelling units) on the same property and, if so, what will the ratio of the non-residential use to residential use be (with due regard for the extent of the non-residential use and the residential use respectively)?

7. What is the nature (type of vehicles), volume and frequency of non - residential traffic likely to be drawn to the proposed development, into the neighbourhood from wider surrounding areas?

8. Is the property easily accessible from main roads, or will access to the property require travelling along low order internal roads, through the inner parts of the residential neighbourhood?

Mitigation Measures
List of potential measures, for evaluation, to mitigate issues of compatibility. This list is not exhaustive, and appropriate mitigations may also vary according to the site-specific circumstances and context. Developers are encouraged to propose their own solutions that are suitable to the circumstances of the particular site and that are to the satisfaction of the municipality (with due regard for the relevant objectives and intent of the SDF/Corridor Plan, as well as MLLUS and applicable policies and legislation).
1. Illustrate how the nature, scale and locality of the proposed non-residential use will be appropriate, with due regard for considerations above and with particular emphasis on the point of departure stated above, i.e.: "In designated residential areas (outside and around the above-mentioned designated mixed use areas) non-residential uses are required to be limited to types of uses that directly support the surrounding residential community and such non-residential uses are also required to be clustered together, as opposed to be scattered randomly throughout the residential area. Proposals for non-residential uses in designated residential areas, that do not conform to the above-mentioned clustering requirements, are discouraged".
2. In the event that the above cannot be illustrated to the satisfaction of the municipality (with due regard for the relevant objectives and intent of the SDF/Corridor Plan, as well as MLLUS and applicable policies and legislation), it is suggested that, either the proposed non-residential use be relocated to an appropriate area or cluster of non-residential uses, or the proposed non-residential use be scaled down to an appropriate scale.
3. Illustrate how the proposed use can serve as a compatible interface / buffer between low density areas and high-density residential development, or other non-residential uses.
4. Use traffic calming techniques to promote pedestrian and traffic safety.
5. Illustrate how access to the proposed development, as well as associated parking and manoeuvring space will be provided in a manner that does not compromise pedestrian and traffic safety along the road reserve (MLLUS compliant).

5. Locality of Noxious Industries

This section relates to the locality of noxious industrial uses (as defined in MLLUS). Noxious industries should, as a point of departure, be located within the designated Industrial areas as per SDF/Corridor Plan (where "Industrial 2" zonings in terms of MLLUS are typically prevalent). The triggers and mitigation measures below relate to evaluation of proposals for noxious industries.

Triggers

Development proposals that trigger the criteria and considerations, such as those listed below, must be evaluated in relation to mitigation measures to mitigate compatibility issues (this is however not an exhaustive list of scenarios).

1. Is the proposed use a "noxious" use / industry as defined in MLLUS?

2. Is the proposed use classified as a "Major Hazard Installation" (MHI), in terms of the MHI-Regulations, under the Occupational Health and Safety Act?

3. Will the proposed use triggers any requirements for environmental authorisation or licencing?

4. Will the proposed noxious use be located close to the outer border of the designated Industrial area and, if so, will it be located close to other uses (near or adjacent to the Industrial area) that may be sensitive to noxious uses?

5. Will the ongoing adverse effects of the day-to-day operations of the noxious use extend beyond the boundaries of the application property?

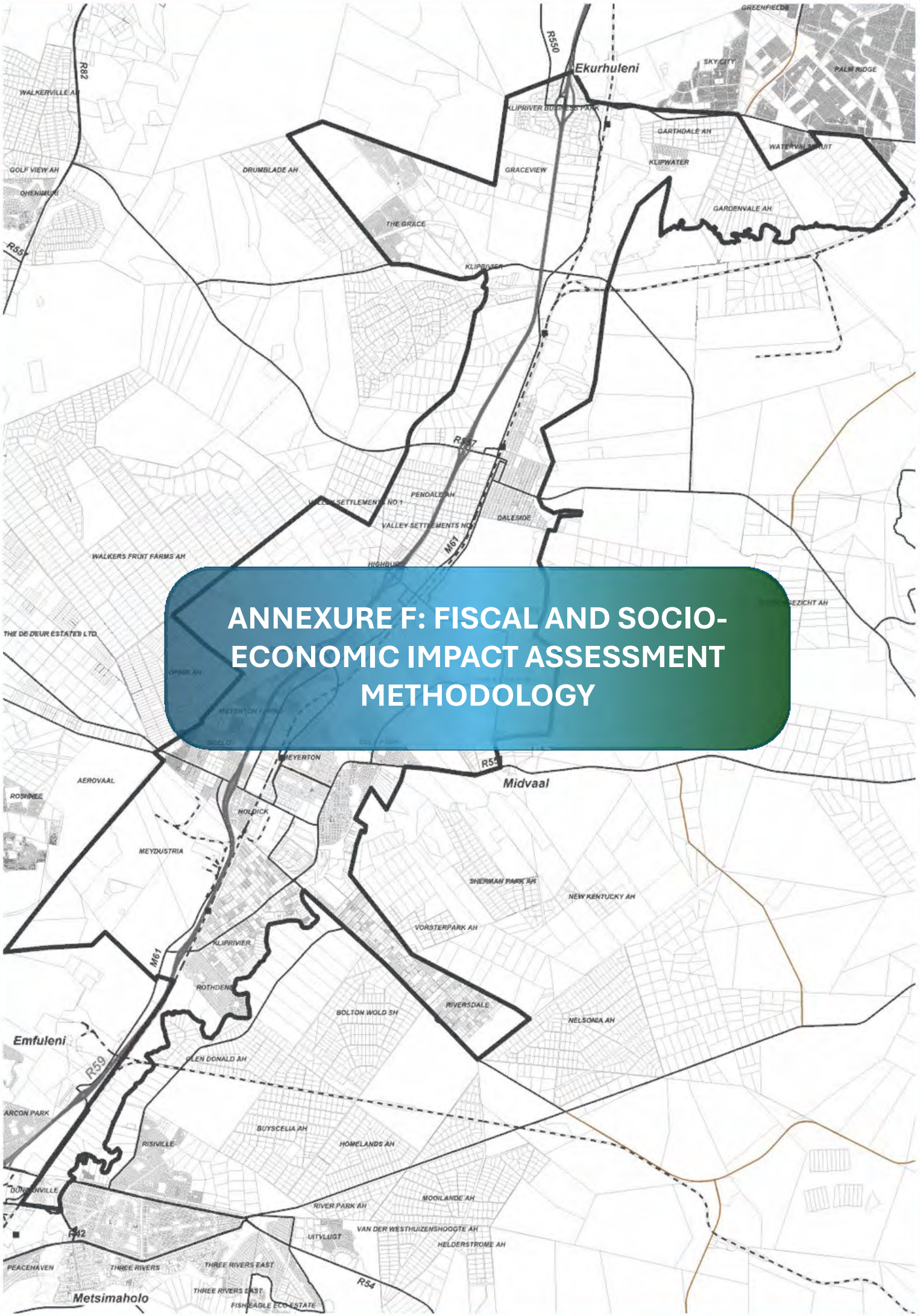
6. Will the ongoing adverse effects of the day-to-day operations of the noxious use be perceptible on an ongoing / regular basis from beyond the boundaries of the application property?

7. Is a buffer zone associated with the proposed noxious use and, if so, does the buffer zone extend beyond the borders of the Industrial area and does the buffer zone overlap surrounding uses that should not be permitted within the buffer zone?

Mitigation Measures

List of potential measures, for evaluation, to mitigate issues of compatibility. This list is not exhaustive, and appropriate mitigations may also vary according to the site-specific circumstances and context. Developers are encouraged to propose their own solutions that are suitable to the circumstances of the particular site and that are to the satisfaction of the municipality (with due regard for the relevant objectives and intent of the SDF/Corridor Plan, as well as MLLUS and applicable policies and legislation).

Applicant needs to address and illustrate the following in the application:
1. Compliance with all relevant environmental and licencing requirements;
2. Surrounding land uses and the potential impact of the proposed noxious use on such surrounding land uses;
3. Proposed measures aimed at containing and mitigating any regular and ongoing adverse effects emanating from the day-to-day operations of the noxious use, as well measures aimed at containing and mitigating risk factors and potential or latent adverse effects that may emanate from possible contingencies associated with the type of noxious use;
4. Buffer area around the proposed noxious use (if a buffer zone is applicable) and the impact that such buffer area may have on the development potential of the surrounding area (with due regard for the extent of the buffer area and the type of uses that should not be permitted within the buffer area);
5. The presence of existing uses within the buffer area, that should not be permitted within the buffer area.



ANNEXURE F: FISCAL AND SOCIO-ECONOMIC IMPACT ASSESSMENT METHODOLOGY

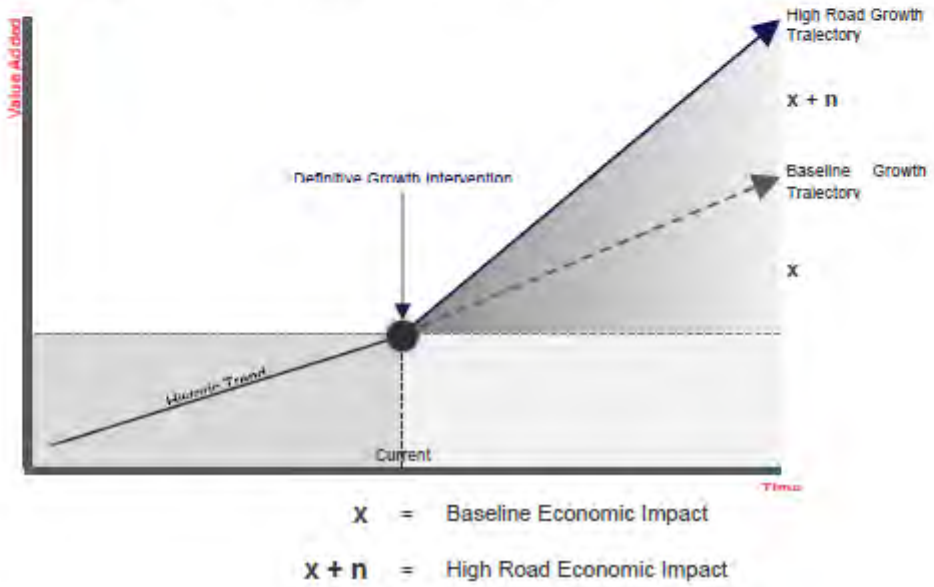
1 FISCAL AND SOCIO-ECONOMIC IMPACT ASSESSMENT

1.1 INPUT-OUTPUT MODEL METHODOLOGY

Figure 5.1 conceptually illustrates the socio-economic impact that the uptake of additional residential and non-residential land use could have on the economy in terms of additional GDP.

Before the input-output model is discussed, it is necessary to understand the community economic system and underlying interrelationships (Refer to Figure 5.2).

Figure 5.1: Economic Impact of a Development

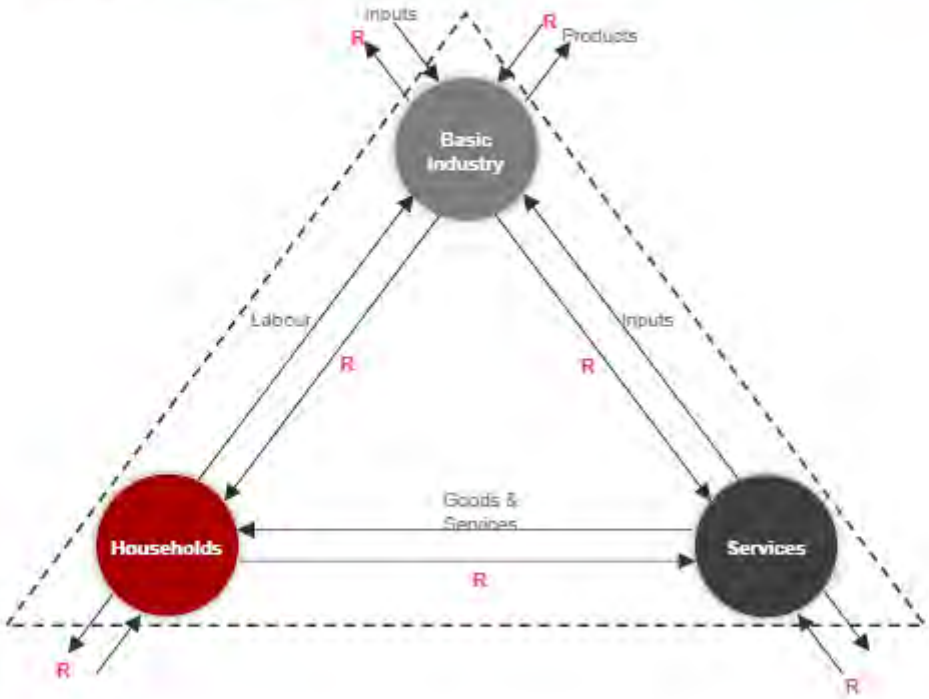


There are strong interrelationships and interdependencies between the three dominant sectors of the local economy: Basic industry, households and services. These interrelationships refer to sectors purchasing from other sectors, sectors selling to other sectors, sectors selling outside of the local economy and sectors buying outside of the local economy.

This results in the flow of labour, inputs, goods and services as well as money within and beyond the local economy. The input-output analysis creates a picture of a provincial economy describing the flows to and from industries and institutions. In other words, it describes the provincial economy and predicts the estimated impacts resulting from changes in land use demand and uptake scenarios.

The input-output model depicts economic relationships between different components of an economy by identifying monetary flows (expenditures, receipts) between various units. The relationship between the initial spending and the total effects generated by the spending is known as the multiplier effect of the sector, or more generally as the impact of the sector on the economy. The input-output table represents the nucleus of the input-output model – as reflected in Table 5.1

Figure 5.2: Community Economic System



	Intermediate Outputs	Final Demand	Total production
Intermediate inputs	Quadrant I x11 x12 x21 x22 xn1 xn2 m11 m12	Quadrant II C1 G1 I1 IC1 E1 C2 G2 I2 IC2 E2 Cn Gn In ICn En MC MG	X1 X2 Xn Mn
Primary Inputs	Quadrant III A1 A2 B1 B2 T1 T2	Quadrant IV VC VG Vi VIC VE	A B T
Total Production	X1 X2 Xn	C G | IC E	Z

Final demand (Y) can be presented by the following formula:

Y = C + I + G + (X - Z) where: C: Private consumption expenditure I: Gross domestic fixed investment G: Government consumption expenditure X: Exports Z: Imports

Both the intermediate inputs as well as intermediate outputs for the different production sectors are shown in Quadrant I. This quadrant is usually referred to as the transaction table or transaction matrix and is an indication of the transfer of goods and services between the industrial sectors for production purposes.

The different final demand components as applied in the input-output table are shown in Quadrant II. Components of final demand are private consumption expenditure (C), Government consumption expenditure (G), gross domestic fixed investment (I), change in inventories (IC) and total exports (E).

Quadrant III represents the demand for primary inputs by the industrial sector. The elements of primary input, which are referred to are the remuneration of employees (A), the gross operating surplus (B) as well as net indirect taxes (T).

Quadrant IV is that portion of primary input, which is part of the final demand.

The linkage effects between the various sectors in the transaction matrix can be presented by xij, which shows the flow of goods from sector i to sector j.

The input-output model consists of three basic components:

- Transaction table: illustrate the monetary flows of goods and services in a local economy for a given period
- Direct Requirements table: indicates the purchases of resources (inputs) by a sector from all sectors to produce one Rand of output (creating a production recipe)
- Total Requirements table: indicates the indirect and induced transactions caused by the purchases of resources (inputs) by a sector from all sectors

The input-output table is also based on certain basic assumptions:

- It is possible to group the different production activities in homogeneous industries
- The demand for intermediates by a particular sector will change in direct proportions to the specific sector's change in output
- No substitution of intermediates is possible due to price changes
- No technological change takes place
- Each sector produces only one primary product

It should be noted that:

All rand values in the report represent 2026 current values

- The different measures of economic impact cannot be added together and should be interpreted separately
- The model quantifies the economic impacts for a specific amount of time, and it is not derived gradually over time
- The input-output table is based on provincial supply and use tables, therefore, the multipliers and other related data measure economic impacts throughout the provincial economy (Quantec derived multipliers based on StatsSA Annual Financial Statistics, GDP at various economic levels, employment data and quarterly labour force surveys, 2025/26).

Impacts are traced through the provincial economy in terms of the application of a set of multipliers derived from provincial economic accounts (only local transactions are used to create the multiplier effect).

A multiplier summarises the total impact that can be expected throughout the economy from one-unit change for a given sector. There are several types of multipliers used by the model:

- Output multipliers (Business revenue or sales): it estimates the total change in sales volume
- Employment multipliers: measures the total change in employment resulting from an initial change in output/production of a specific industry
- Value-added multiplier (GDP): provides an estimate of the additional value added to the products as a result of this economic activity. Value-added includes employee compensations, corporate profits, indirect business taxes, and proprietary and other property income. It is the sum of the remuneration of employees and the gross operating surplus.
- Income multiplier: measures the total increase in income in the local economy resulting from a 1 Rand increase in total output/production

- Taxation multiplier: measures the increase in tax revenue that the national treasury could collect from the operation of business activities
- SMME opportunities measure the potential of the economy to create opportunities for new SMME's based on the causal relationship with an increase in the GDP of the economy. The analysis also considers the relationship between SMME growth and black ownership. The relationship takes into consideration GDP growth (StatsSA) and concomitant business registration and ownership data (SARS).
- Potential skills requirements: measures the demand for jobs based on different skill levels, i.e. low, semi and skilled jobs
- Sector profiling measures the linkage of defined land uses with sectors of the economy and estimates the impact that increased economic activity could have on the various components of the economy.
- In addition to the preceding multipliers, reference is also made to the need and demand for social amenities based on economic growth. The growth of the economy increases the demand for jobs. Consequently, an increased demand for jobs, aligned with increased livelihoods increases demand for social amenities. The impact tool seeks to measure the increased demand for a spectrum of social amenities.

Difference between multipliers and turnover:

Turnover is typically used as a synonym for the output or production of business. Turnover refers to the number of times some of the initial Rand that is received from outside the community, changes hands within the community. Example: 1 Rand received from a new investment changes hands five times within the local economy. The multiplier is 1.66, although some portion of the initial Rand turns over five times.

During each exchange of money for goods or services, some of the original Rand leaves the local economy, which reduces the amount spent locally during the next exchange. Multipliers measure the full impact of a Rand on the local economy, whereas turnover merely indicates the number of times some of the initial Rand is spent locally.

The economic impact can be measured in terms of three effects:

- Direct effects: those economic effects caused by the new investment or additional land use developed
- Indirect effects: occurs to industries in the backward linked industries that supply goods and services to the new investment or additional land use developed. Economic activity triggered by the purchases made as a result of the initial round of new investment or additional land use developed expenditure
- Induced effects: result from households spending some of the additional income they receive on goods and services within the local, regional and provincial economies.

There are two types of multipliers:

- Type 1 multipliers: Include direct or initial spending, as well as indirect spending or business buying and selling to each other
- Type 2 multipliers: Include Type 1 multiplier effects, plus household spending based on the income earned from the direct and indirect effects – the induced effects

In summary: Economic impacts represent the positive or negative effects caused by the expansion or contraction of an area's economy, resulting from changes in residential and non-residential land use

uptake. In the case of the R59 Corridor study, it represents the impacts caused by the construction activities associated with new housing and business development, as well as the operational effects once these land uses are absorbed into the economy.

Subsequent sections provide an overview of the estimated socio-economic impacts that could be caused by the implementation and operation of the additional land uses identified in Chapter 4. These impacts are estimated in terms of two phases – the construction phase and the operational phase – to capture both short-term and long-term effects on the local, provincial and national economies.

1.2 KEY INDICATORS AND INPUTS

The following section provides an overview of the key indicators and inputs used to inform the input-output model. The data used as input to the model assists with calculating an estimated capital expenditure (CAPEX) and estimated operational expenditure/revenue (OPEX) of the implementation and operation of the additional land uses.

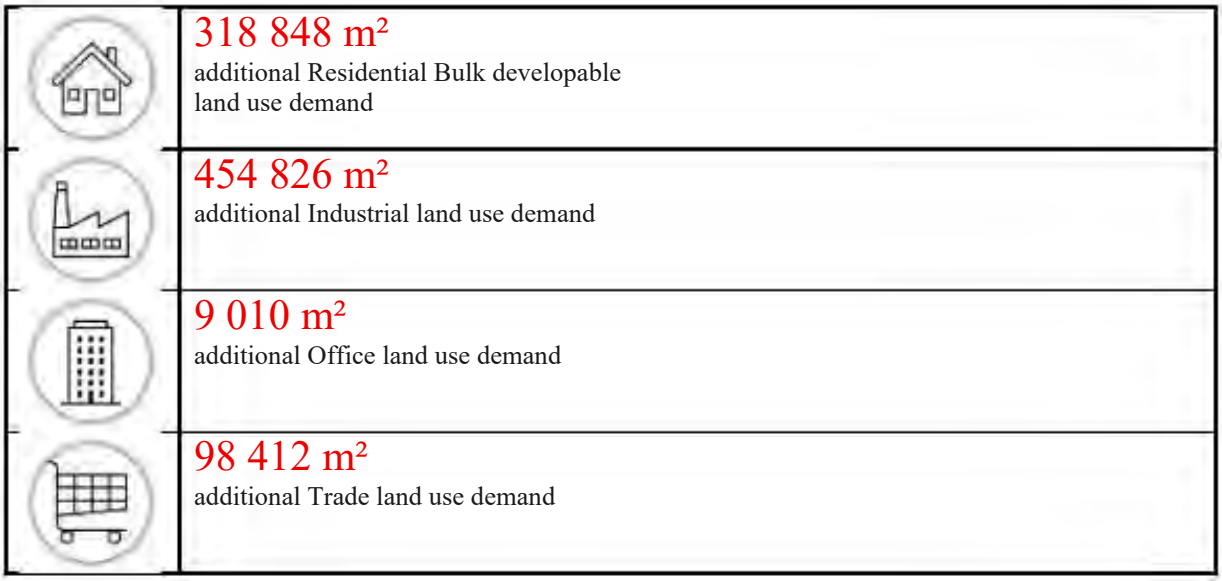
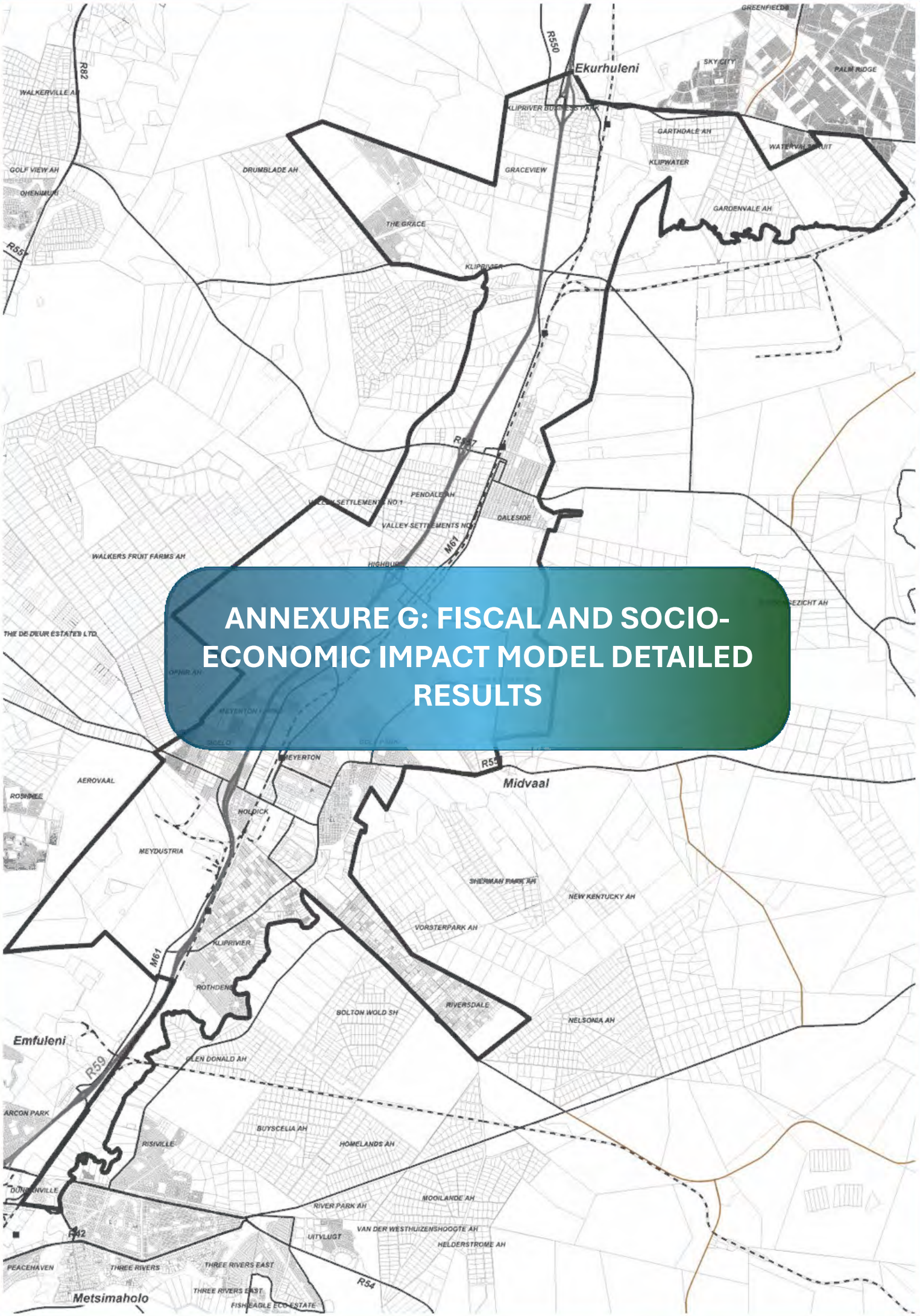


Table 5.2: Fiscal and Economic Impact Modelling Key Indicators and Inputs

	Estimated Bulk (m²)	CAPEX	OPEX
Residential	318 848	R3,44 billion	R317,21 million
Industrial	454 826	R4,85 billion	R4,24 billion
Office	9 010	R153,37 million	R270,30 million
Trade	98 412	R1,88 billion	R3,74 billion
Total	**881 096**	**R10,32 billion**	**R8,56 billion**



ANNEXURE G: FISCAL AND SOCIO-ECONOMIC IMPACT MODEL DETAILED RESULTS

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Index and Glossary

Direct Impacts	Those economic effects caused by the new investment or proposed project
Indirect Impacts	Occurs to industries in the backward linked industries that supply goods and services to the proposed project. Economic activity triggered by the purchases made as a result of the initial round of project expenditure
Induced Impacts	Result from households spending some of the additional income they receive on goods and services within the local, regional and provincial economy
Construction Phase	Focuses on the period during which the proposed project is constructed
Operational Phase	Focuses on the period after construction has completed and operations are started
Capital Investment	The investment by public and private sector stakeholders in land, infrastructure, top structures and other items required to undertake and complete the construction of a project
Annual Turn Over	Estimated annual turn over expected by the project due to normal day to day operations
Gross Domestic Product	Gross domestic product (GDP) at market prices (value added originating) is the value that the production processes and services rendered in the economy adds to the value of goods sold or services delivered (Gross domestic product (GDP) at market prices = Gross value added at basic prices + Net indirect taxes on products (by government))
Formal Employment	Employment figures indicate the number of paid employees and include casual, seasonal and informal workers. Employment consists of three main categories, namely skilled, semi-skilled, low skilled and informal labour
Informal Employment	Number of paid employees that are employed by informal buisnesses - informal businesses are businesses not registered as a formal enterprise
Compensation	The compensation of employees is equal to the income received by employees, i.e. wages and salaries
SMME	Small, Medium and Micro Enterprises

Taxes on Products	Indirect taxes on products include all indirect taxes levied by the government on products. These taxes include the following: Value added tax (VAT) and customs and excise duties
Taxes on Production	Taxes on production are the value of all the money paid by producers to the government, in respect to taxes on their production
Corporate Taxes	Corporate taxes
Personal Taxes	Personal taxes include UIF and PAYE

Chapter 1
Project Information

The following section of the report is focused on providing an overview of the project modeled by the fiscal and socio-economic impact model. The purpose of the section is to introduce the project, highlight the broad land uses of the project, identify capital investment and operational expenditure frameworks and timeframes, and to highlight the intended target market.

1 Project Information

1.1 Project Description

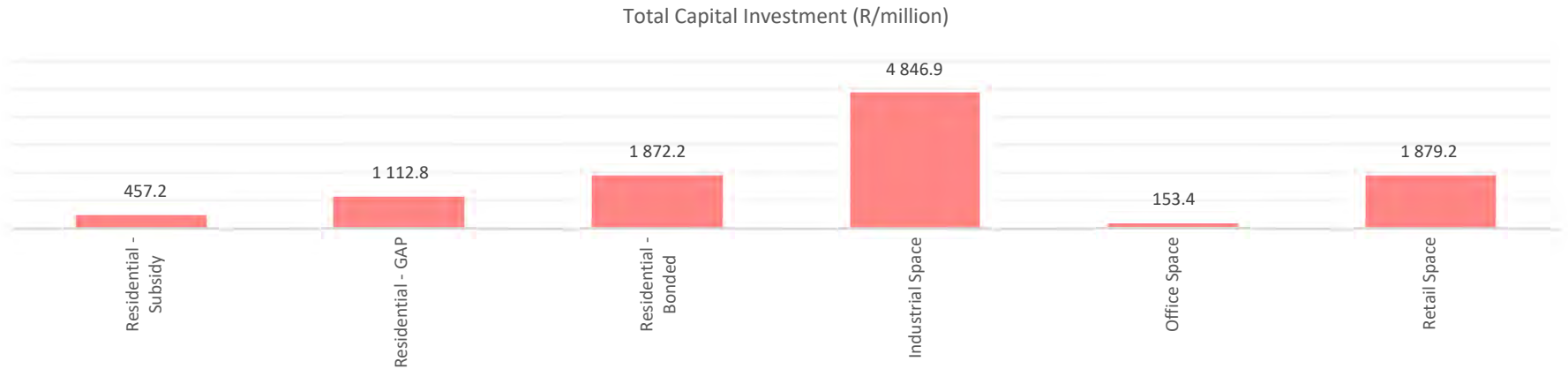
Project Name:	R59 Corridor	**Project Description:**	Review of impacts that could arise as a result of the implmentation of the project

1.2 Land Use and Bulk Overview

Land Use Description	Number of Units / Keys / Seats	Bulk m²	% Contribution
Residential - Subsidy	2 421	96 867	11.0%
Residential - GAP	1 752	105 123	11.9%
Residential - Bonded	1 168	116 858	13.3%
Industrial Space		454 826	51.6%
Office Space		9 010	1.0%
Retail Space		98 412	11.2%
Total	**5 341**	**881 096**	

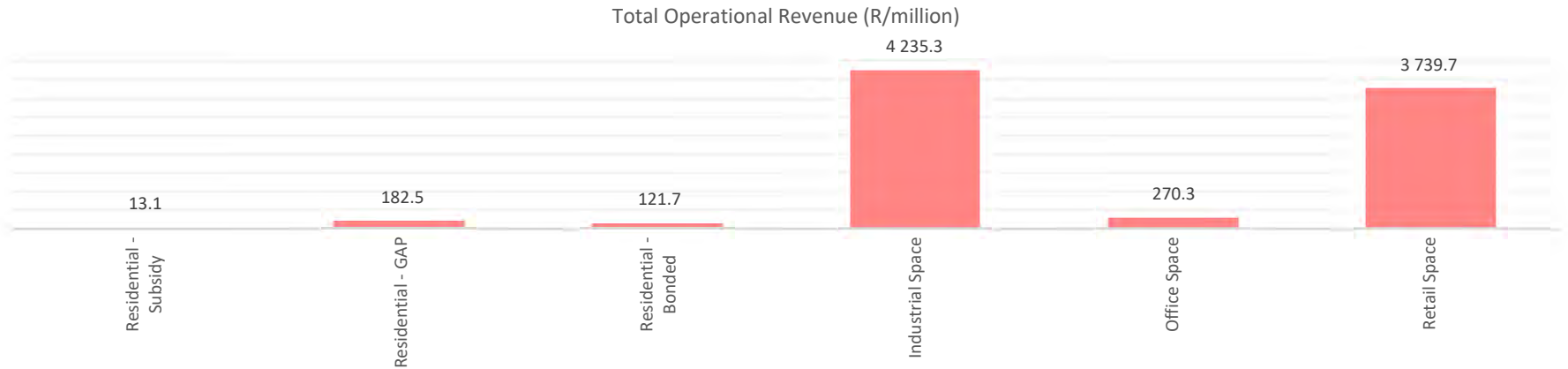
1.3 Capital Investment Overview

Land Use Description	Buildings	Furniture, Fittings & Related Services	Total Capital Investment	% Contribution
Residential - Subsidy	397 576 071	59 636 411	457 212 482	4.4%
Residential - GAP	967 615 166	145 142 275	1 112 757 441	10.8%
Residential - Bonded	1 627 960 484	244 194 073	1 872 154 556	18.1%
Industrial Space	4 214 736 094	632 210 414	4 846 946 508	47.0%
Office Space	133 362 867	20 004 430	153 367 296	1.5%
Retail Space	1 634 119 525	245 117 929	1 879 237 453	18.2%
Total	**8 975 370 206**	**1 346 305 531**	**10 321 675 737**	



1.4 Operational Revenue Overview

Land Use Description	Total Operational Revenue	% Contribution
Residential - Subsidy	13 073 400	0.2%
Residential - GAP	182 483 765	2.1%
Residential - Bonded	121 655 843	1.4%
Industrial Space	4 235 339 712	49.5%
Office Space	270 300 000	3.2%
Retail Space	3 739 662 926	43.7%
Total	**8 562 515 646**	



Chapter 2
Synopsis

This section of the report focuses on providing a concise and digestable overview of the outcomes of the socio-economic impact model. The purpose is to highlight key outcomes and considerations from the impact analysis. The Section also serves as an introduction to the remainder of the report which, from Secion 2 onwards, provide detailed information regarding every impact modeled.

2 Synopsis

2.1 Impact Outcome Synopsis

2.1.1 Total Estimated Capital Investment (CAPEX) and Annualised Operational Revenue (OPEX)

The total estimated capital investment of the R59 Corridor (Net Present Value for the current year) is R10.32 billion - It should be noted that the Total CAPEX includes expenditure on furniture, fixtures, fittings and related services.

The total estimated operational revenue (annualised on-site business sales or turnover) of the development (Net Present Value for the current year) is R8.56 billion.

2.1.2 Summary of Construction Phase Impacts

Impacts generated during the construction phase of the project are once-off and are sustained for as long as construction occurs. These impacts dwindle as construction activity comes to an end and the development becomes operational – then operational impacts, which are created and sustained annually, are activated.

The total CAPEX (Capital Investment) of the project could temporarily add approximately R29.19 billion in additional business sales, R12.82 billion in additional GDP (contributes +0.61% to the provincial economy) and approximately 42 097 once-off jobs (formal and informal) throughout the Gauteng provincial economy.

An estimated 121 additional formal small, medium and micro-enterprise opportunities could be created. Black-owned SMMEs would potentially represent 74.38% of new formal SMME opportunities, given the prevailing legislative environment.

Formal employment during the construction phase represents 32 948 jobs (total direct, indirect and induced). Approximately 22.92% of formal employment opportunities are expected to be filled by skilled labourers compared to 58.53% semi-skilled labourers and 18.55% low-skilled labourers.

Additional compensation paid to employees during the construction phase is estimated to be approximately R4.73 billion.

It is estimated that approximately R3.55 billion in additional taxes could be generated during the construction phase. The largest contributor to new taxes is as a result of personal income tax, contributing 33.45% to all taxes collected economywide.

2.1.3 Summary of Operational Phase Impacts

Operational phase impacts are generated when the productive-land uses of the development commence with operations. Impacts created during the operational phase are "sustained" impacts. “Sustained impacts” are impacts that are continuously generated (i.e. created and then sustained annually) as soon as the full operation of the project commences (long-term impacts).

The total annualised OPEX (operational revenue) of the project could annually add approximately R23.28 billion in additional business sales, R11.48 billion in additional GDP (contributes +0.55% to the provincial economy) and approximately 30 440 sustained jobs (formal and informal) throughout the Gauteng provincial economy.

An estimated 109 additional formal small, medium and micro-enterprise opportunities could be created. Black-owned SMMEs would potentially represent 73.39% of new formal SMME opportunities, given the prevailing legislative environment.

Formal employment opportunities created throughout the lifetime of the project represents 24 426 jobs (total direct, indirect and induced). Approximately 29.06% of formal employment opportunities are expected to be filled by skilled labourers compared to 50.88% semi-skilled labourers and 20.06% low-skilled labourers. Additional annual compensation paid to employees during the operational phase is estimated to be approximately R4.05 billion.

It is estimated that approximately R3.05 billion in additional taxes could be generated during the operational phase. The largest contributor to new taxes is as a result of personal income tax, contributing 35.48% to all taxes collected economywide.

2.1.4 Overall Outcome

Overall, the construction and operational phase of the project would have a measurable positive effect on the Gauteng provincial economy, generating sizeable GDP over the short- to long-term, high additional business sales and new business formation and a considerable number of new employment opportunities - across all skill levels. Additional taxes can contribute to national and local treasuries and households across the province can increase their livelihoods.

The increased demand for social amenities will influence the fiscus and operation of public sector entities. The increased pressure on the fiscus is offset by the addition of productive rateable assets through the envisaged capital investment in the project.

2.2 Construction Phase Economic Impacts

Construction Phase CAPEX
10 321 675 737

Additional Business Sales	**29 193 014 033**
Additional GDP	**12 815 080 351**
Additional Employment (Formal and Informal)	**42 097**

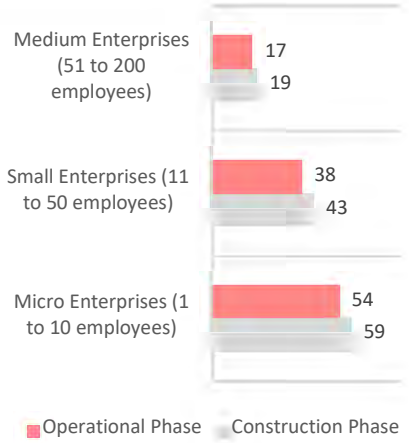
2.3 Operational Phase Economic Impacts

Operational Phase OPEX
8 562 515 646

Additional Business Sales	**23 281 166 754**
Additional GDP	**11 478 244 245**
Additional Employment (Formal and Informal)	**30 440**

2.4 SMME Opportunities

Enterprise Type	Construction Phase	Operational Phase
Micro Enterprises (1 to 10 employees)	59	54
Small Enterprises (11 to 50 employees)	43	38
Medium Enterprises (51 to 200 employees)	19	17
Estimated Number of New Enterprise Opportunities	121	109
Estimated Number of New Black Owned SMME Opportunities	90	80
	74.4% of new business opportunities could be black owned	**73.4%** of new business opportunities could be black owned



2.5 Formal Jobs Created by Skill Level - Construction Phase Economic Impacts

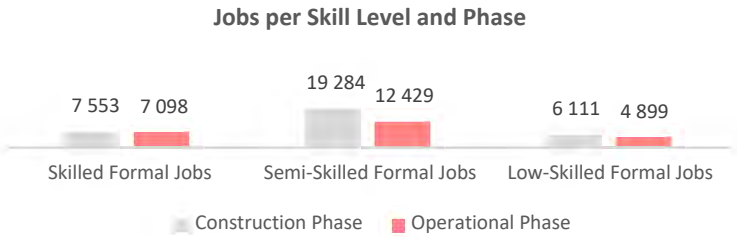
Construction Phase CAPEX
10 321 675 737

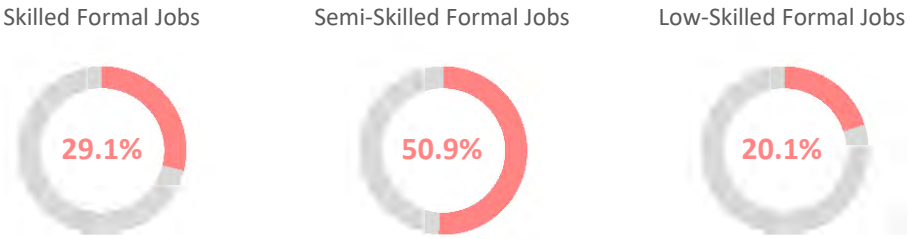
Skilled Formal Jobs	**7 553**
Semi-Skilled Formal Jobs	**19 284**
Low-Skilled Formal Jobs	**6 111**

2.6 Formal Jobs Created by Skill Level - Operational Phase Economic Impacts

Operational Phase OPEX
8 562 515 646

Skilled Formal Jobs	**7 098**
Semi-Skilled Formal Jobs	**12 429**
Low-Skilled Formal Jobs	**4 899**



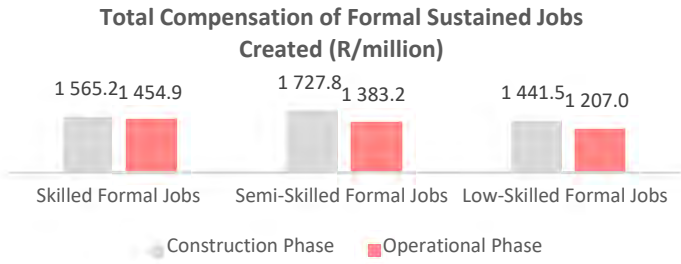


2.7 Impact on Compensation of Formal Jobs per Skill Level

Job Typer per Skill Level	Construction Phase	Operational Phase
Skilled Formal Jobs	1 565 192 713	1 454 946 953
Semi-Skilled Formal Jobs	1 727 793 539	1 383 174 635
Low-Skilled Formal Jobs	1 441 460 612	1 206 975 925
Total	**4 734 446 864**	**4 045 097 513**

Average Annual Compensation per Formal Job Created

143 692	**165 615**



2.8 Additional Social Facilities Required

Social Facility Type (Main Category)	Additional Facilities Required (Sustained)
Health and Emergency Services	1
Social and Cultural Services	0
Civic Services	1
Social Services	17
Education Services	30
Parks and Recreation Services	15
Total	**64**

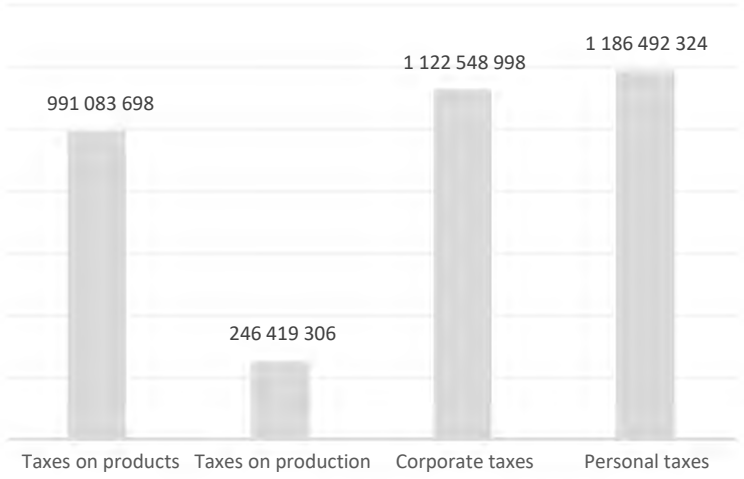


2.9 Additional Taxes Generated

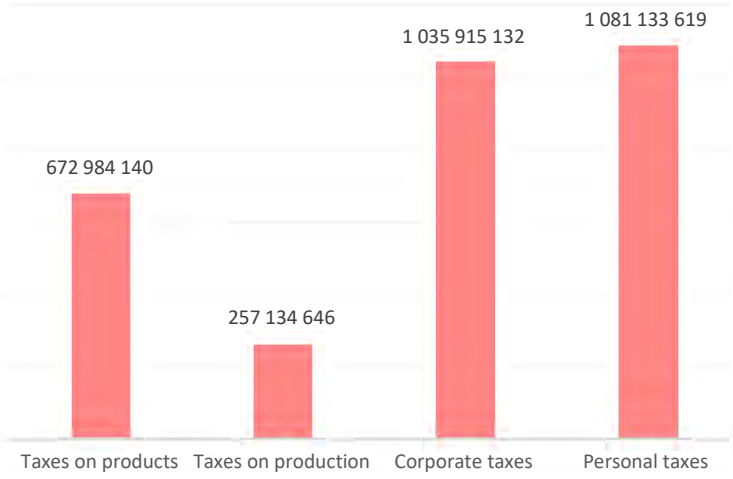
Taxation Type	Construction Phase	Operational Phase
Taxes on products	991 083 698	672 984 140
Taxes on production	246 419 306	257 134 646
Corporate taxes	1 122 548 998	1 035 915 132
Personal taxes	1 186 492 324	1 081 133 619
Total Tax Impact	**3 546 544 325**	**3 047 167 537**

Property Taxation	Property Rates per Annum
Total Property Taxes (i.e. Taxable Property Types)	188 138 286
Total Property Taxes Foregone by Local Municipality (i.e. Subsidy Housing Programmes, etc.)	1 085 274
Total	**189 223 560**

Construction Phase



Operational Phase



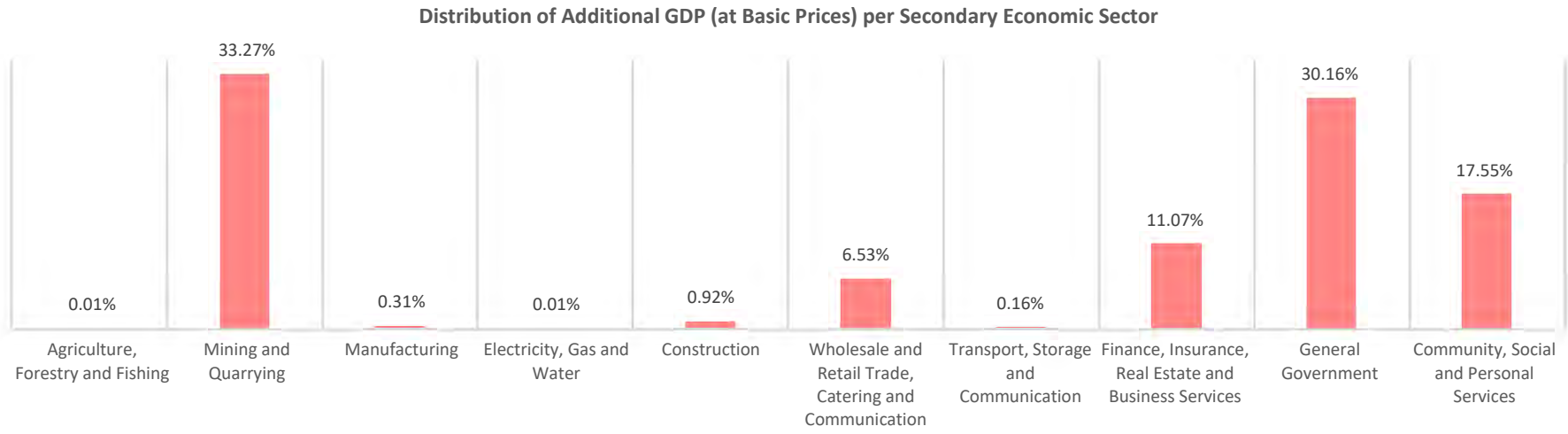
2.10 Sector Profiling

Impact on GDP during the Construction Phase (Different Economic Geographies)

Economic Geography	Current GDP (at Basic Prices)	Additional GDP (at Basic Prices)	New GDP (at Basic Prices)	% Contribution
Gauteng Provincial Economy	2 088 550 181 000	11 846 680 606	2 100 396 861 606	0.56%
Sedibeng Regional Economy	102 690 845 000		114 537 525 606	10.34%
Midvaal Sub-Regional Economy	15 788 567 000		27 635 247 606	42.87%

Top Economic Sectors that Benefit from Increased GDP

1	National and Provincial government	3 503 255 898	6	Coal	418 002 792
2	Metals	2 848 194 494	7	Gold	393 611 549
3	Education (Private)	1 496 194 620	8	Health and social work (Private)	291 425 688
4	Professional business services	1 099 182 627	9	Other community, social and personal services	251 241 620
5	Wholesale and retail trade	562 784 908	10	Other mining and quarrying	205 584 612

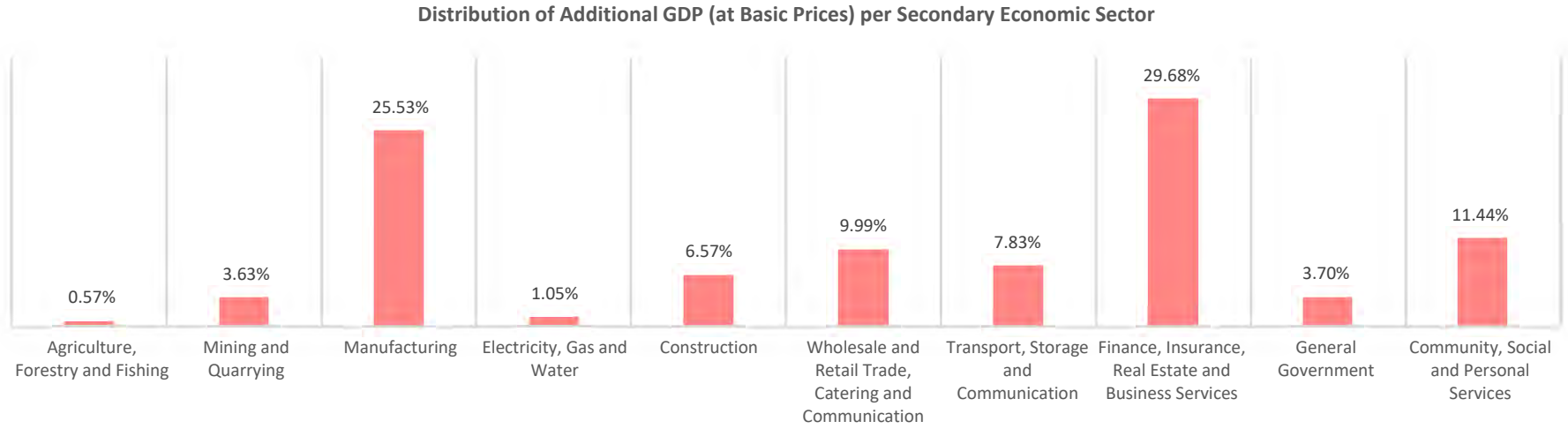


Impact on GDP during the Operational Phase (Different Economic Geographies)

Economic Geography	Current GDP (at Basic Prices)	Additional GDP (at Basic Prices)	New GDP (at Basic Prices)	% Contribution
Gauteng Provincial Economy	2 088 550 181 000	10 823 222 364	2 099 373 403 364	0.52%
Sedibeng Regional Economy	102 690 845 000		113 514 067 364	9.53%
Midvaal Sub-Regional Economy	15 788 567 000		26 611 789 364	40.67%

Top Economic Sectors that Benefit from Increased GDP

1	Professional business services	1 530 273 422	6	Food	694 768 419
2	Finance and insurance	1 396 813 931	7	Other community, social and personal services	629 086 334
3	Wholesale and retail trade	884 566 666	8	Health and social work (Private)	402 872 000
4	Transport and storage	755 550 429	9	National and Provincial government	400 409 277
5	Construction	711 304 702	10	Machinery and equipment	390 593 856



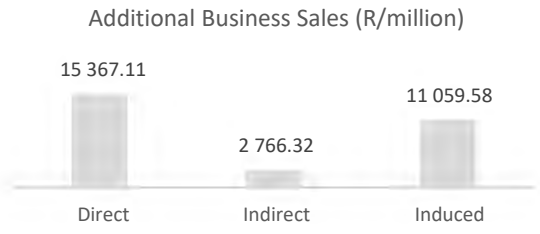
Chapter 3
Construction Phase Economic Impacts

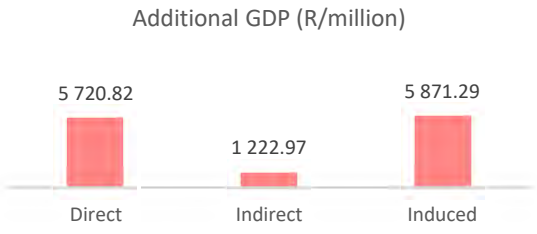
This section of the report is focused on providing an overview of potential economic and socio-economic impacts that may arise during the construction phase of the proposed project. Impacts generated during this phase are not sustained impacts because the construction phase of a project only lasts up until the necessary land improvements, buildings, bulk infrastructure, other infrastructure, fittings and furnishings and operational machinery etc. have been constructed and completed.

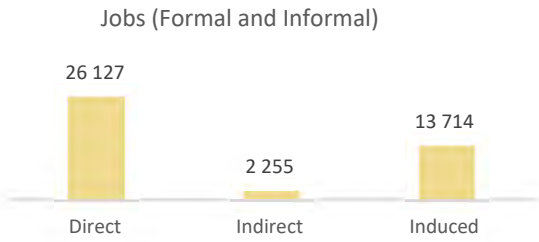
3 Construction Phase Economic Impacts

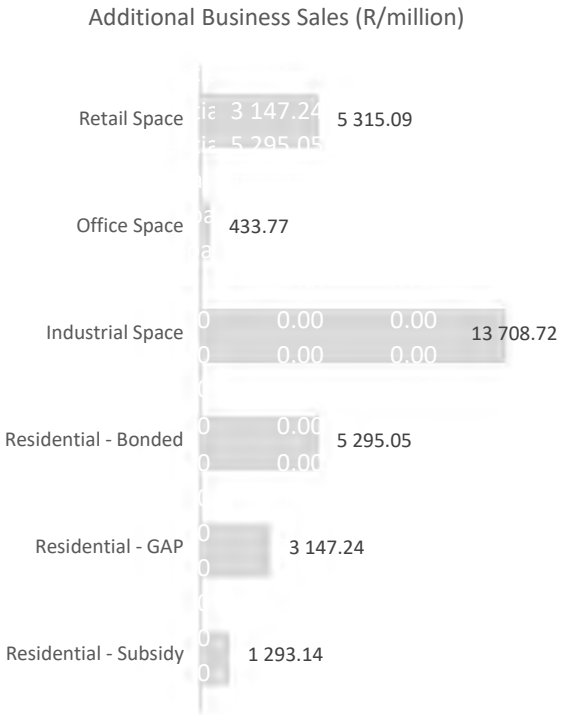
TOTAL estimated **CAPEX** of the project **10.32 billion**

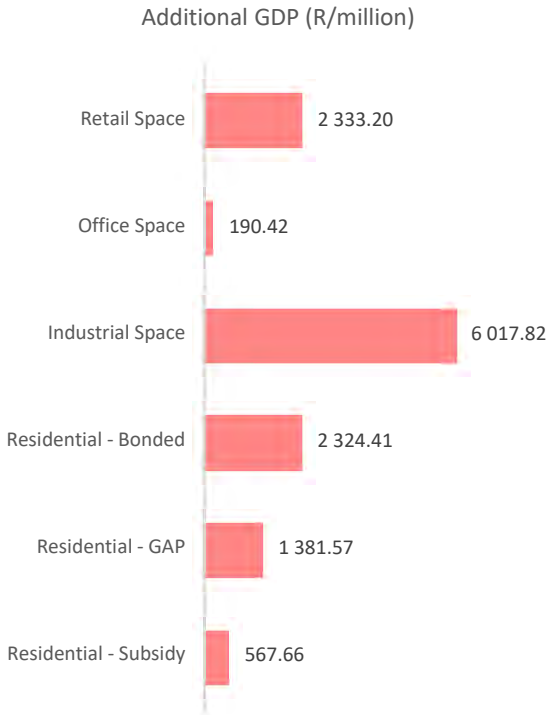
Additional Business Sales (Unsustained)	**29.19 billion**
Additional GDP - Market Prices (Unsustained)	**12.82 billion**
Additional Jobs - Formal & Informal (Unsustained)	**42 097 jobs**

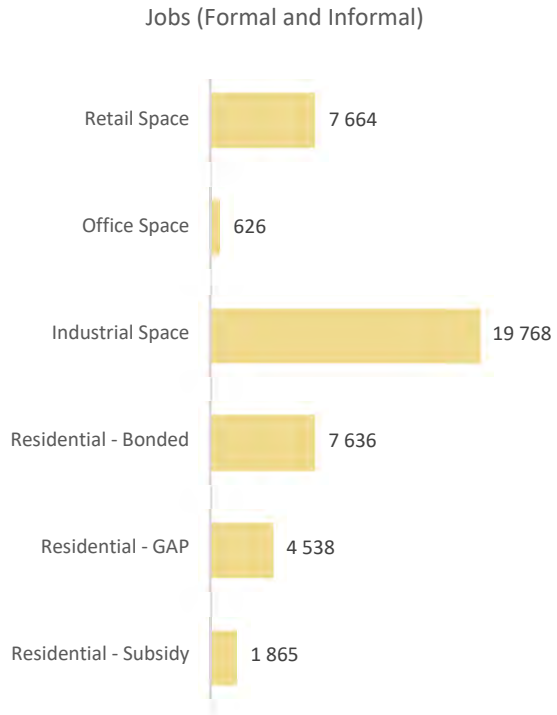






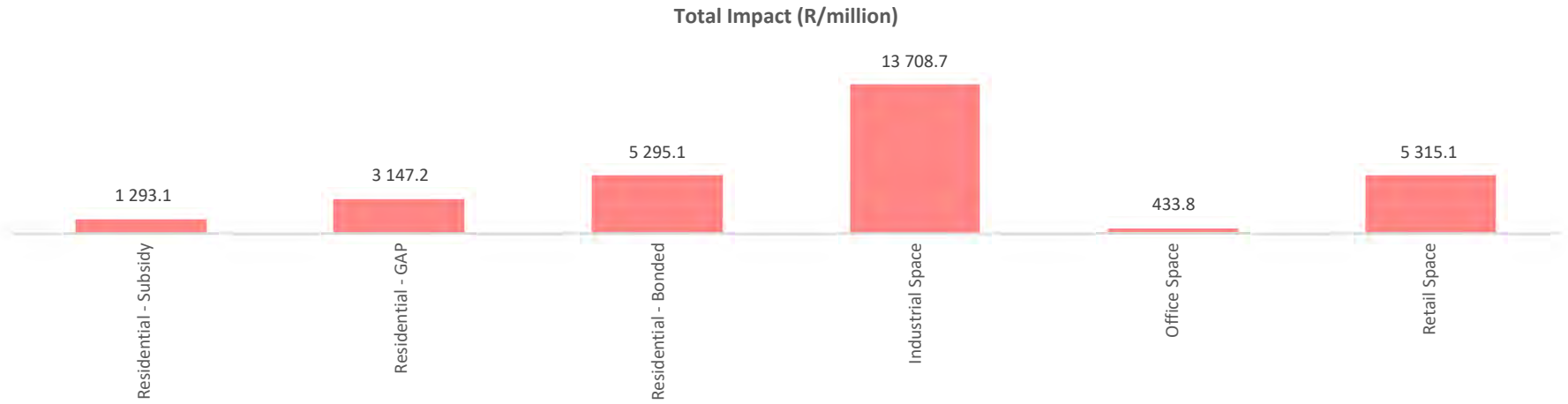






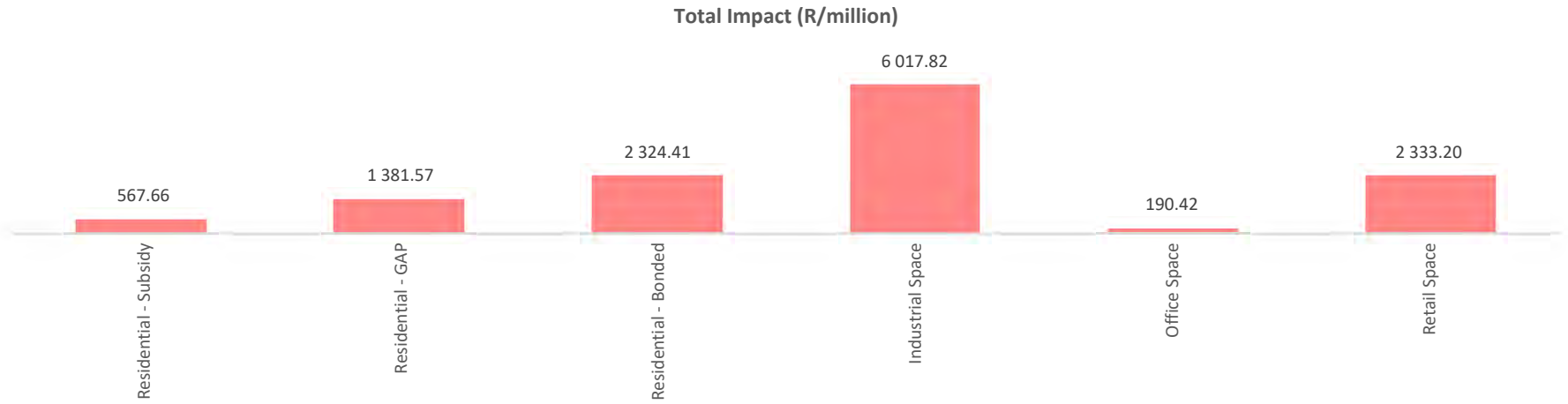
3.1 Impact on Additional Business Sales

Land Use	Direct Impacts	Indirect Impacts	Induced Impacs	Total Impacts
Residential - Subsidy	680 706 853	122 538 073	489 898 818	1 293 143 744
Residential - GAP	1 656 694 962	298 231 473	1 192 308 995	3 147 235 430
Residential - Bonded	2 787 300 186	501 758 416	2 005 995 769	5 295 054 372
Industrial Space	7 216 228 414	1 299 036 020	5 193 457 002	13 708 721 436
Office Space	228 336 220	41 104 155	164 331 597	433 771 972
Retail Space	2 797 845 341	503 656 712	2 013 585 026	5 315 087 079
Total	**15 367 111 976**	**2 766 324 848**	**11 059 577 208**	**29 193 014 033**



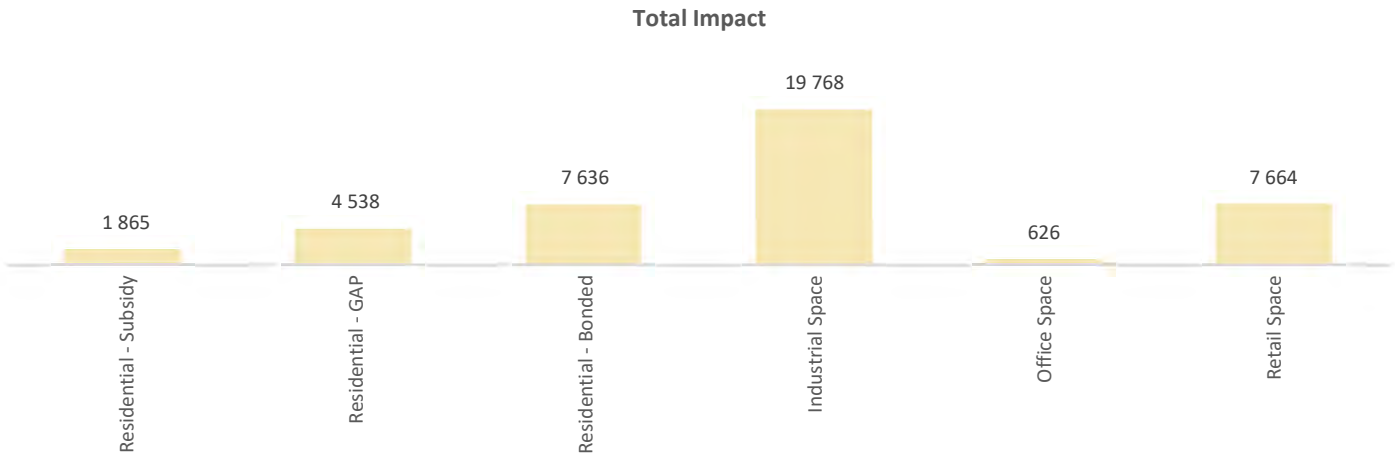
3.2 Impact on Gross Domestic Product

Land Use	Direct Impacts	Indirect Impacts	Induced Impacs	Total Impacts
Residential - Subsidy	253 411 296	54 173 029	260 076 862	567 661 187
Residential - GAP	616 748 921	131 845 571	632 971 483	1 381 565 976
Residential - Bonded	1 037 646 895	221 823 084	1 064 940 483	2 324 410 462
Industrial Space	2 686 433 648	574 292 661	2 757 095 849	6 017 822 158
Office Space	85 004 253	18 171 794	87 240 149	190 416 196
Retail Space	1 041 572 610	222 662 304	1 068 969 458	2 333 204 373
Total	**5 720 817 623**	**1 222 968 442**	**5 871 294 285**	**12 815 080 351**



3.2 Impact on Employment

Land Use	Direct Impacts	Indirect Impacts	Induced Impacs	Total Impacts
Residential - Subsidy	1 157	100	607	1 865
Residential - GAP	2 817	243	1 478	4 538
Residential - Bonded	4 739	409	2 487	7 636
Industrial Space	12 269	1 059	6 440	19 768
Office Space	388	34	204	626
Retail Space	4 757	411	2 497	7 664
Total	**26 127**	**2 255**	**13 714**	**42 097**



Distribution between the Formal and Informal Economy

Total Number of Formal Jobs Created	**32 948**
Total Number of Informal Jobs Created	**9 148**

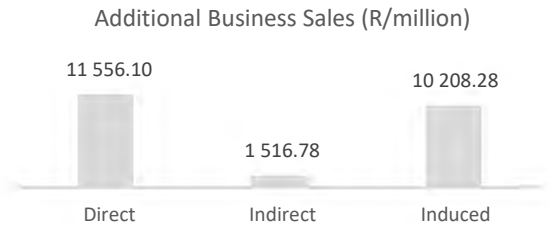


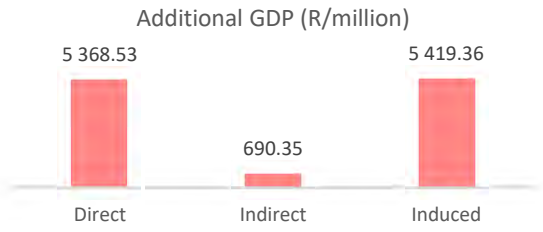
Chapter 4
Operational Phase Economic Impacts

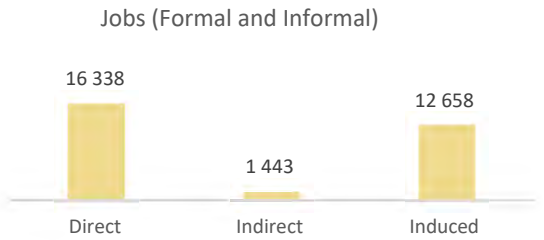
This section of the report is focused on providing an overview of potential economic and socio-economic impacts that may arise during the operational phase of the proposed project. Impacts generated during this phase are sustained impacts meaning, impacts generated are sustained for the duration of the the project lifecycle given that annual turn over remains constant.

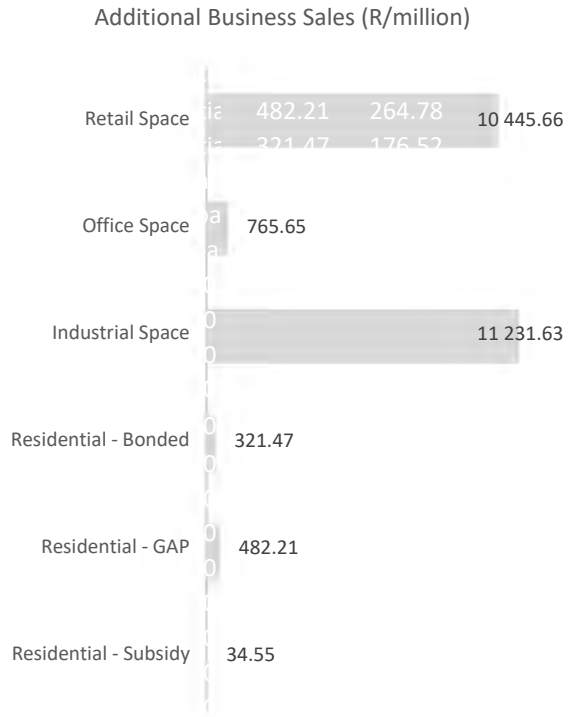
TOTAL estimated **OPEX** of the project **8.56 billion**

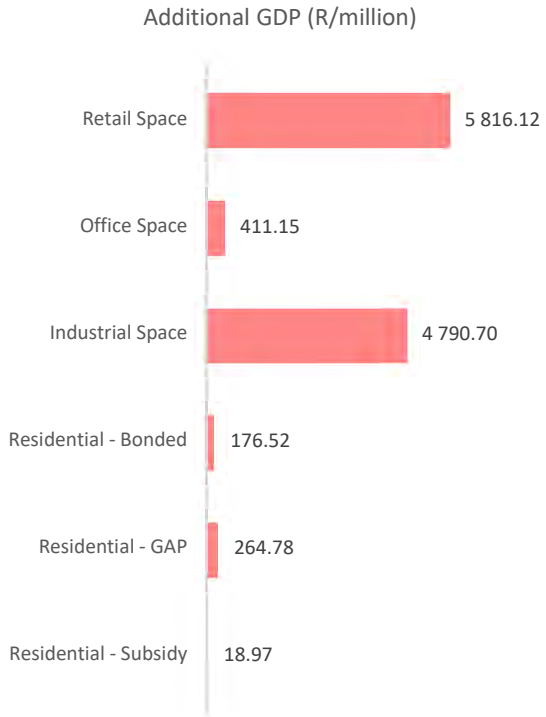
Additional Business Sales (Unsustained)	**23.28 billion**
Additional GDP - Market Prices (Unsustained)	**11.48 billion**
Additional Jobs - Formal & Informal (Unsustained)	**30 440 jobs**

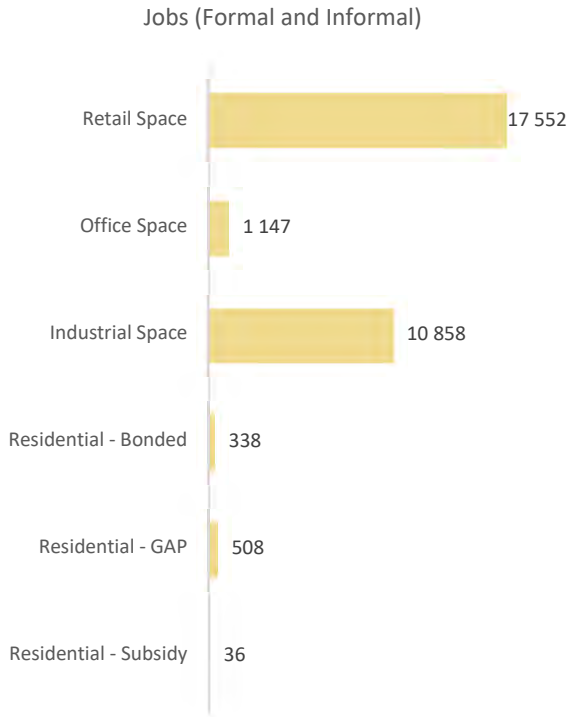






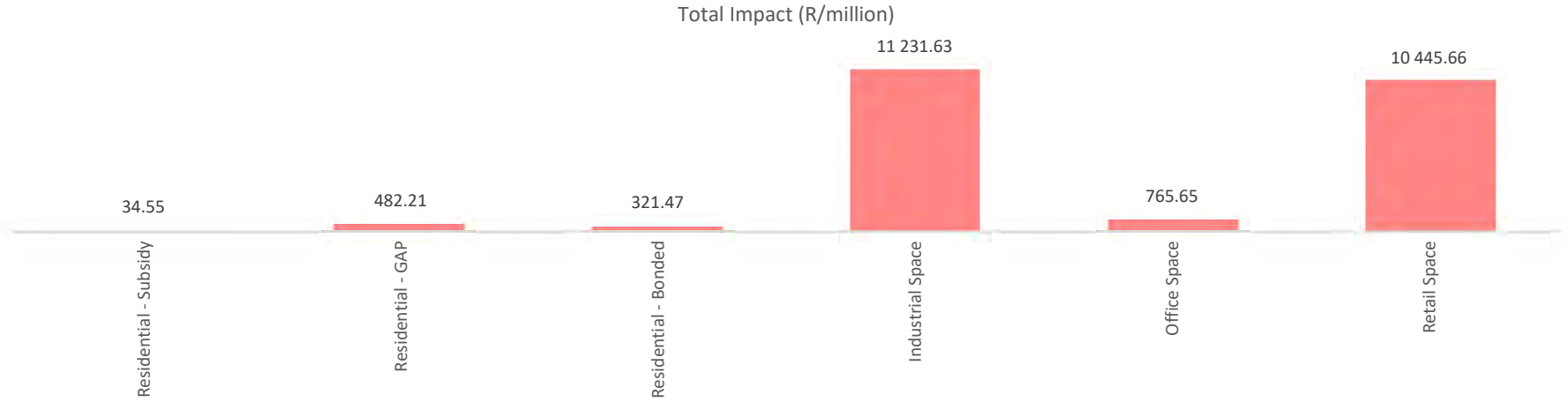






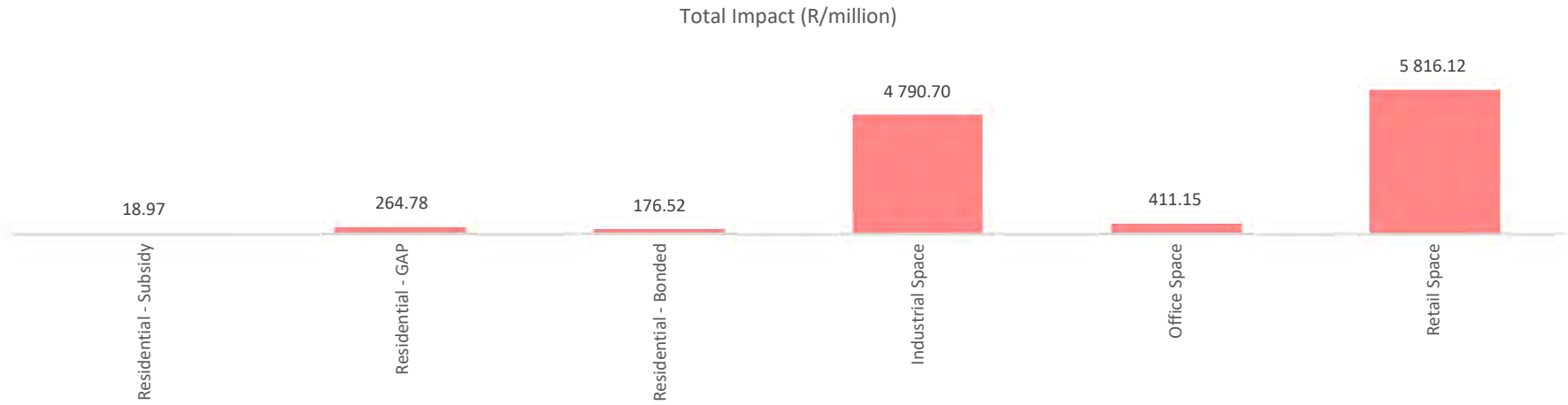
4.1 Impact on Additional Business Sales

Land Use	Direct Impacts	Indirect Impacts	Induced Impacs	Total Impacts
Residential - Subsidy	15 715 126	1 526 449	17 304 349	34 545 924
Residential - GAP	219 358 038	21 306 789	241 541 051	482 205 877
Residential - Bonded	146 238 692	14 204 526	161 027 367	321 470 585
Industrial Space	5 891 655 910	961 817 491	4 378 161 357	11 231 634 757
Office Space	358 039 127	40 619 852	366 987 197	765 646 176
Retail Space	4 925 097 173	477 302 720	5 043 263 541	10 445 663 434
Total	**11 556 104 066**	**1 516 777 827**	**10 208 284 861**	**23 281 166 754**



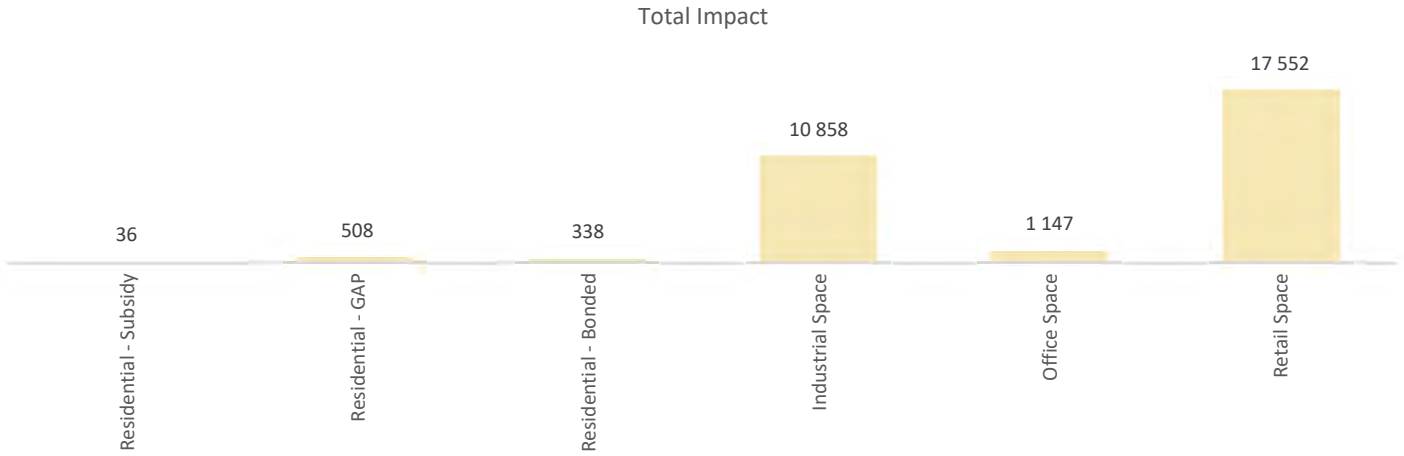
4.2 Impact on Gross Domestic Product

Land Use	Direct Impacts	Indirect Impacts	Induced Impacs	Total Impacts
Residential - Subsidy	8 987 787	795 159	9 186 511	18 969 457
Residential - GAP	125 455 138	11 099 154	128 229 006	264 783 298
Residential - Bonded	83 636 759	7 399 436	85 486 004	176 522 199
Industrial Space	2 045 399 586	421 029 158	2 324 272 734	4 790 701 477
Office Space	195 830 689	20 491 517	194 825 696	411 147 903
Retail Space	2 909 218 109	229 540 466	2 677 361 335	5 816 119 911
Total	**5 368 528 068**	**690 354 891**	**5 419 361 286**	**11 478 244 245**



4.3 Impact on Employment

Land Use	Direct Impacts	Indirect Impacts	Induced Impacs	Total Impacts
Residential - Subsidy	13	2	21	36
Residential - GAP	181	27	300	508
Residential - Bonded	121	18	200	338
Industrial Space	4 554	875	5 429	10 858
Office Space	647	46	455	1 147
Retail Space	10 822	476	6 254	17 552
Total	**16 338**	**1 443**	**12 658**	**30 440**



Distribution between the Formal and Informal Economy	
Total Number of Formal Jobs Created	24 425
Total Number of Informal Jobs Created	6 015



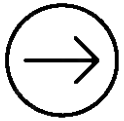
Chapter 5
Estimated Number of Formal SMME Opportunities

This section of the report is focused on providing an overview of potential number of new small, medium or micro enterprises that could become operational as a result of the added GDP generated during the construction and operational phases. The impact considers the current impact (includes an historic perspective) that changes in the GDP of the regional economy has had on the number of SMME's operational and formally registered with SARS. The section thus estimates the number of potential new SMME's that could be established due to changes in the provincial economy's GDP and the segment that could potentially be black owned.

5 Estimated Number of Formal SMME Opportunities

5.1 Construction Phase Enterprise Opportunities

TOTAL estimated **CAPEX** of the project **10.32** billion





Micro Enterprises (1 to 10 employees) **59 enterprises**

Small Enterprises (11 to 50 employees) **43 enterprises**

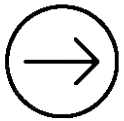
Medium Enterprises (51 to 200 employees) **19 enterprises**

Enterprise Type	Direct Impact	Indirect Impact	Induced Impact	Total Impact
Micro Enterprise Opportunities	26	6	27	59
Small Enterprise Opportunities	18	4	21	43
Medium Enterprise Opportunities	9	1	9	19
Estimated Number of New Enterprise Opportunities	**53**	**11**	**57**	**121**
Estimated Number of New Black Owned Entrprise Opportunities				**90**

Calculations indicate that the total estimated GDP impact of the construction phase could create 121 new SMME enterprise opportunities. Approximately 74.4% of opportunities could be black owned.

5.1 Operational Phase Enterprise Opportunities

TOTAL estimated **OPEX** of the project **8.56** billion





Micro Enterprises (1 to 10 employees) **54 enterprises**

Small Enterprises (11 to 50 employees) **38 enterprises**

Medium Enterprises (51 to 200 employees) **17 enterprises**

Enterprise Type	Direct Impact	Indirect Impact	Induced Impact	Total Impact
Micro Enterprise Opportunities	25	3	26	54
Small Enterprise Opportunities	18	2	18	38
Medium Enterprise Opportunities	8	1	8	17
Estimated Number of New Enterprise Opportunities	**51**	**6**	**52**	**109**
Estimated Number of New Black Owned Entrprise Opportunities				**80**

Calculations indicate that the total estimated GDP impact of the construction phase could create 109 new SMME enterprise opportunities. Approximately 73.4% of opportunities could be black owned.

Chapter 6
Formal Jobs Created per Skill Level

This section of the report focuses on providing an overview of the impact on formal job creation per skill level during the construction and operational phases of the proposed project. The purpose of the section is to estimate the potential number of new jobs created throughout the provincial economy and the distribution of those jobs per skill level required.

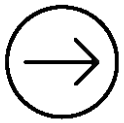
The information provides an indication as to the extent to which the implementation of the proposed project could influence the growth and demand for new skilled labourers. The information also provides a contextual background as to the opportunity to develop skills in the provincial economy.

6 Formal Jobs Created per Skill Level

6.1 Construction Phase Skills Demand

TOTAL estimated **CAPEX** of the project

10.32 billion



Skilled Jobs	**7 553 jobs**
Semi-Skilled Jobs	**19 284 jobs**
Low-Skilled Jobs	**6 112 jobs**

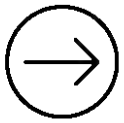
Skill Level	Direct Impact	Indirect Impact	Induced Impact	Total Impact
Skilled Jobs	3 209	486	3 858	7 553
Semi-Skilled Jobs	13 321	1 000	4 963	19 284
Low-Skild Jobs	3 061	364	2 687	6 112
Estimated Number of New Employment Opportunities	**19 591**	**1 850**	**11 508**	**32 949**

The data shows that the majority of employment opportunities generated as a result of the project primarily consist of semi-skilled job opportunities.

6.2 Operational Phase Skills Demand

TOTAL estimated **OPEX** of the project

8.56 billion



Skilled Jobs	**7 098 jobs**
Semi-Skilled Jobs	**12 429 jobs**
Low-Skilled Jobs	**4 899 jobs**

Skill Level	Direct Impact	Indirect Impact	Induced Impact	Total Impact
Skilled Jobs	3 193	344	3 561	7 098
Semi-Skilled Jobs	7 228	620	4 581	12 429
Low-Skild Jobs	2 184	235	2 480	4 899
Estimated Number of New Employment Opportunities	**12 605**	**1 199**	**10 622**	**24 426**

The data shows that the majority of employment opportunities generated as a result of the project primarily consist of semi-skilled job opportunities.

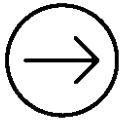
Chapter 7
Impact on Compensation

This section of the report focuses on providing an overview of the impact on employee compensation for potentially new formally employed persons during the construction and operational phases of the proposed project. The purpose of the section is to identify the additional compensation that could be generated as a result of additional employment.

7 Impact on Compensation

7.1 Construction Phase Impact on Compensation

TOTAL estimated **CAPEX** of the project **10.32** billion

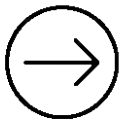


Skilled Jobs Total Compensation	**1 565 192 713**
Semi-Skilled Jobs Total Compensation	**1 727 793 539**
Low-Skilled Jobs Total Compensation	**1 441 460 611**

Skill Level	Direct Impact	Indirect Impact	Induced Impact	Total Impact
Skilled Jobs	501 063 254	112 834 801	951 294 658	1 565 192 713
Semi-Skilled Jobs	924 419 550	127 420 019	675 953 970	1 727 793 539
Low-Skild Jobs	692 534 746	102 800 156	646 125 709	1 441 460 611
Estimated Number of New Employment Opportunities	**2 118 017 550**	**343 054 976**	**2 273 374 337**	**4 734 446 863**
Average Annual Compensation per Job Created	**108 112**	**185 435**	**197 547**	**143 690**

7.2 Operational Phase Impact on Compensation

TOTAL estimated **OPEX** of the project **8.56** billion



Skilled Jobs Total Annual Compensation	**1 454 946 953**
Semi-Skilled Jobs Total Annual Compensation	**1 383 174 635**
Low-Skilled Jobs Total Annual Compensation	**1 206 975 925**

Skill Level	Direct Impact	Indirect Impact	Induced Impact	Total Impact
Skilled Jobs	503 320 007	73 556 594	878 070 352	1 454 946 953
Semi-Skilled Jobs	687 461 658	71 789 427	623 923 550	1 383 174 635
Low-Skild Jobs	553 281 433	57 303 222	596 391 270	1 206 975 925
Estimated Number of New Employment Opportunities	**1 744 063 098**	**202 649 243**	**2 098 385 172**	**4 045 097 513**
Average Annual Compensation per Job Created	**138 363**	**169 015**	**197 551**	**165 606**

Chapter 8
Impact on Social Facilities

This section of the report focuses on providing an overview of the impact on social amenities as a result of the growth of new employment in the provincial economy due to the construction and operation of the proposed project. The purpose of the section is to illustrate the range of social amentities that could be required should the added employment generated within the provincial economy become a reality.

8 Impact on Social Facilities

8.1 Operational Phase Impact on Social Facilities

Primary Category	Secondary Category	Additional Amenities
Health and Emergency Services	Tertiary Hospital	0
	Regional Hospital	0
	District Hospital	0
	Community Health Centre	0
	Primary Health Clinic	0
	Small- to Medium-Sized Clinic	1
	Large Clinic	0
	Extra Large Clinic	0
	Fire Station	0
	Police Station	0
Social and Cultural Services	Performing Arts Centre	0
	Museum	0
	Local Library	0
	Regional Library	0
Civic Services	Civic Centre	0
	Major Public Event Venue	0
	Home Affairs Office	0
	Regional Home Affairs Office	0
	District Office	0
	Permanent Service Point	0
	Thusong Service Centre	1
Social Services	Community Hall	1
	ICT Access Point	2
	Post Office / Agency and Post Boxes	1
	Large Cemetery	0
	Medium Cemetery	0
	Small Cemetery	1
	Very Small Cemetery	4
	Local Market	4
	Place of Worship	4
Education Services	University	0
	Colleges	0
	Secondary School	1
	Primary School	3
	Grade R ECD	18
	Creche ECD	7
	Resource Hub and Xare Centre ECD	1
Parks and Recreation Services	Small Park	6
	Large Park	1
	Community Parks	0
	Neighbourhood Sports Fields	6
	Community / Sub-District Sports Field	1
	District / Sub-Regional Sports Field	0
	Metro / Regional Sports Field	0
	Multi-Purpose Sports Halls	1
	Swimming Pools	0
	Sports Complexes	0
	Sports Stadiums	0
	Regional Sports Arenas	0
	Interntional Sports Complex	0

Primary Category	Additional Amenities
Health and Emergency Services	1
Social and Cultural Services	0
Civic Services	1
Social Services	17
Education Services	30
Parks and Recreation Services	15
Total	**64**

Chapter 9
Impact on Taxation

This section of the report focuses on providing an overview of the possible taxation and related impacts that could arise during the construction and operational phase of the proposed project. The purpose of the analysis is to estimate the impact, be it direct, indirect or induced, that the construction and operation of the proposed project could have on the provincial economy.

The data provides an informative basis from which to consider the range of tax related revenue that could be generated throughout the provincial economy and as a result of the value chain of the proposed project. Tax related revenue could include taxation of production, products, corporate taxes and personal income taxes.

9 Impact on Taxation

9.1 Construction Phase Impact on Taxation

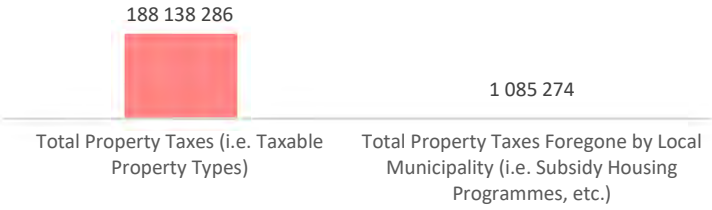
Tax Type	Direct Impacts	Indirect Impacts	Induced Impacts	Total Impact
Value Added Tax	357 509 723	56 838 579	183 531 317	597 879 619
Custom Duties	50 220 241	3 295 918	11 544 938	65 061 097
Excise Levies	1 166 672	265 782	7 946 702	9 379 156
Fuel Levies	125 811 397	26 897 438	51 068 156	203 776 991
Other Taxes	64 988 985	11 525 953	38 471 898	114 986 836
Taxes on Production	84 109 239	29 611 442	132 698 625	246 419 306
Corporate Taxes	809 514 283	69 913 935	243 120 780	1 122 548 998
Personal Income Tax	516 212 059	112 292 584	557 987 681	1 186 492 324
Total Impact	2 009 532 599	310 641 631	1 226 370 097	3 546 544 327

9.2 Operational Phase Impact on Taxation

Tax Type	Direct Impacts	Indirect Impacts	Induced Impacts	Total Impact
Value Added Tax	219 406 283	29 313 461	169 404 302	418 124 046
Custom Duties	24 495 127	1 678 401	10 656 285	36 829 813
Excise Levies	4 979 581	208 923	7 335 018	12 523 522
Fuel Levies	56 983 354	14 456 141	47 137 270	118 576 765
Other Taxes	45 304 757	6 114 648	35 510 588	86 929 993
Taxes on Production	116 240 098	18 410 177	122 484 371	257 134 646
Corporate Taxes	777 384 135	34 124 030	224 406 967	1 035 915 132
Personal Income Tax	502 480 169	63 615 933	515 037 518	1 081 133 620
Total Impact	1 747 273 504	167 921 714	1 131 972 319	3 047 167 537

9.3 Operational Phase Property Taxation

Property Taxation	Total Annual Property Taxes
Total Property Taxes (i.e. Taxable Property Types)	**188 138 286**
Total Property Taxes Foregone by Local Municipality (i.e. Subsidy Housing Programmes, etc.)	**1 085 274**



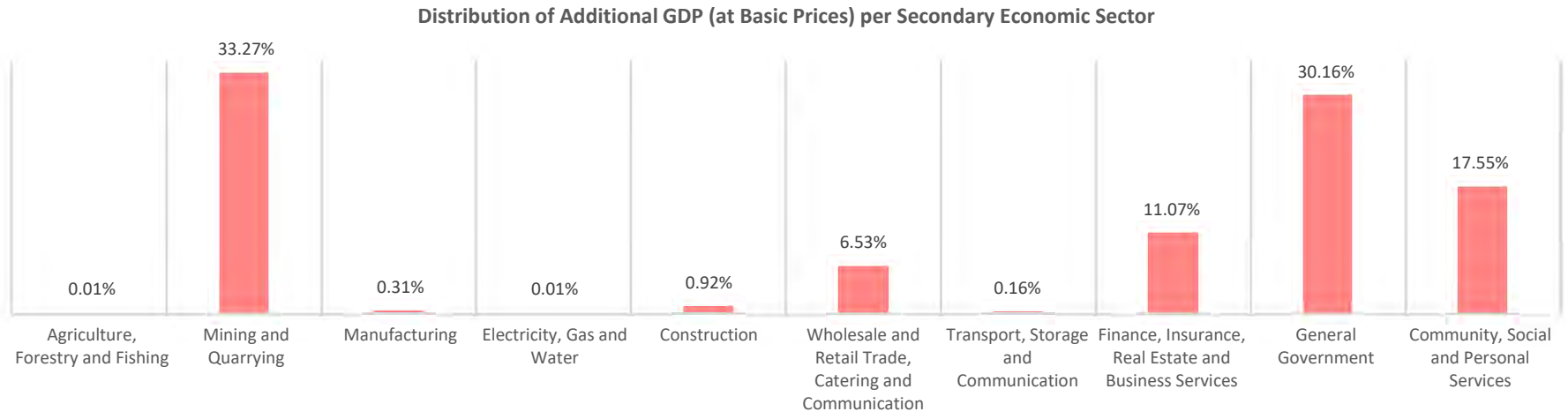
10 Sector Profiling

10.1 Construction Phase Sector Profiling Impact

Economic Geography	Current GDP (at Basic Prices)	Additional GDP (at Basic Prices)	New GDP (at Basic Prices)	% Contribution
Gauteng Provincial Economy	2 088 550 181 000	11 846 680 606	2 100 396 861 606	0.56%
Sedibeng Regional Economy	102 690 845 000		114 537 525 606	10.34%
Midvaal Sub-Regional Economy	15 788 567 000		27 635 247 606	42.87%

Top Economic Sectors that Benefit from Increased GDP

1	National and Provincial government	3 503 255 898	6	Coal	418 002 792
2	Metals	2 848 194 494	7	Gold	393 611 549
3	Education (Private)	1 496 194 620	8	Health and social work (Private)	291 425 688
4	Professional business services	1 099 182 627	9	Other community, social and personal services	251 241 620
5	Wholesale and retail trade	562 784 908	10	Other mining and quarrying	205 584 612



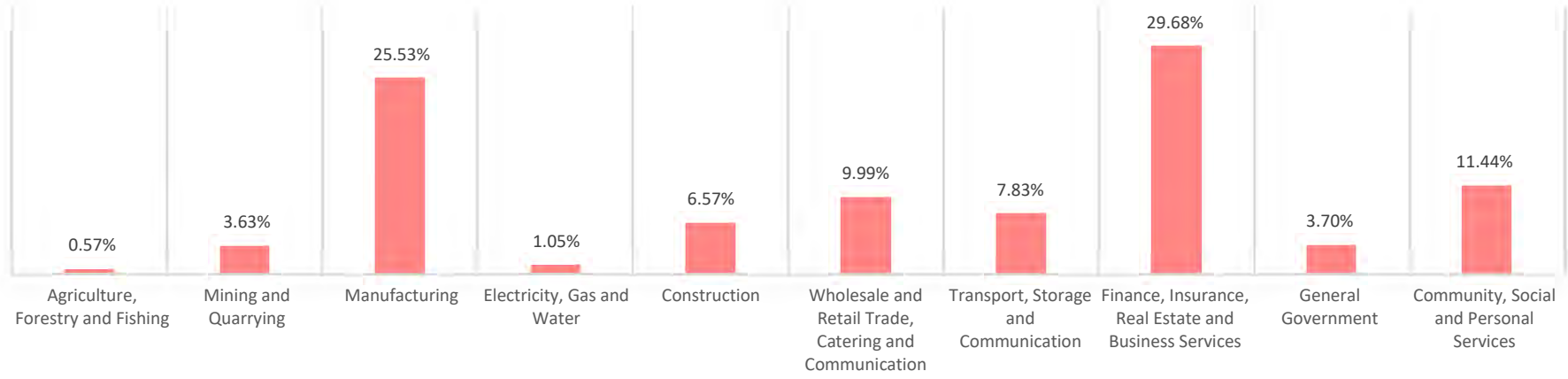
10.2 Operational Phase Sector Profiling Impact

Economic Geography	Current GDP (at Basic Prices)	Additional GDP (at Basic Prices)	New GDP (at Basic Prices)	% Contribution
Gauteng Provincial Economy	2 088 550 181 000	10 823 222 364	2 099 373 403 364	0.52%
Sedibeng Regional Economy	102 690 845 000		113 514 067 364	9.53%
Midvaal Sub-Regional Economy	15 788 567 000		26 611 789 364	40.67%

Top Economic Sectors that Benefit from Increased GDP

1	Professional business services	1 530 273 422	6	Food	694 768 419
2	Finance and insurance	1 396 813 931	7	Other community, social and personal services	629 086 334
3	Wholesale and retail trade	884 566 666	8	Health and social work (Private)	402 872 000
4	Transport and storage	755 550 429	9	National and Provincial government	400 409 277
5	Construction	711 304 702	10	Machinery and equipment	390 593 856

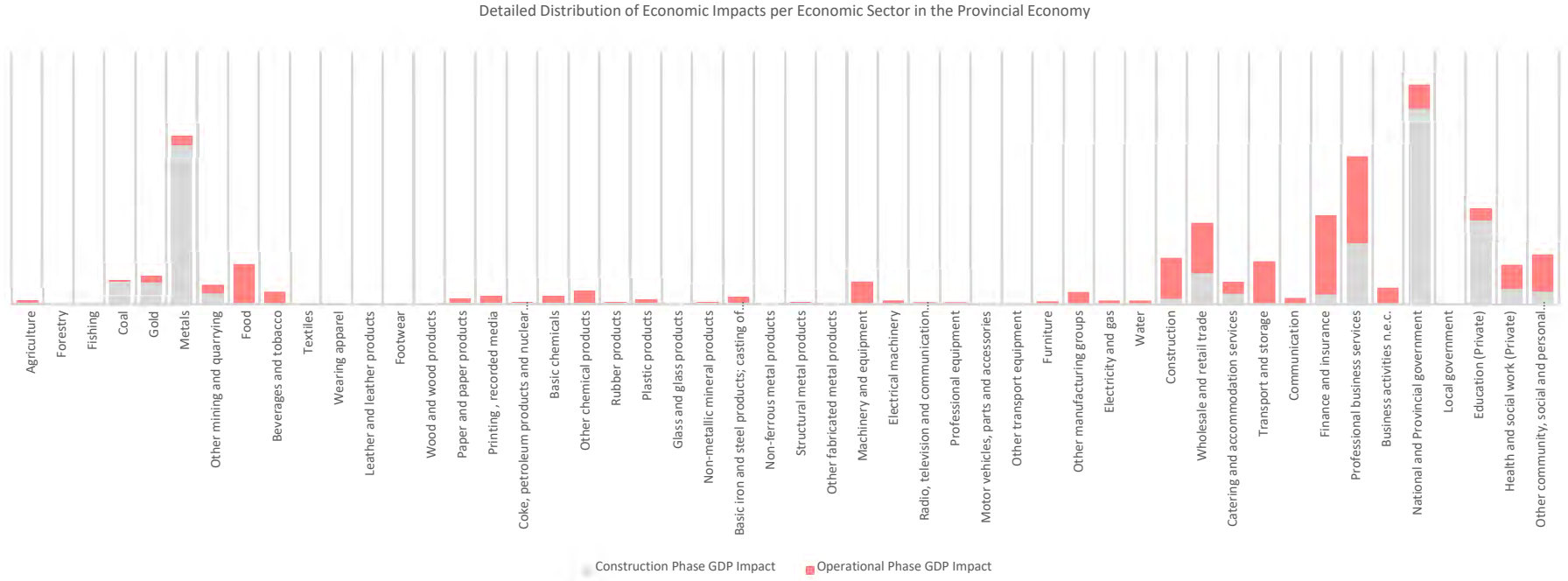
Distribution of Additional GDP (at Basic Prices) per Secondary Economic Sector



10.3 Detailed Added GDP Breakdown

Economic Sector	Actual Sector GDP (at Basic Prices)	Construction Phase GDP Impact	Operational Phase GDP Impact	Distribution (Operational
Agriculture	13 168 149 000	1 647 139	60 982 831	
Forestry	444 937 000	0	766 823	
Fishing	447 272 000	37 549	224 348	
Coal	316 891 000	418 002 792	2 312 048	
Gold	17 951 913 000	393 611 549	113 266 421	
Metals	18 332 077 000	2 848 194 494	151 614 423	
Other mining and quarrying	8 203 008 000	205 584 612	126 116 522	
Food	39 581 494 000	1 414 047	694 768 419	
Beverages and tobacco	32 698 349 000	1 908 064	221 588 751	
Textiles	3 436 017 000	248 629	14 247 494	
Wearing apparel	3 387 739 000	869 242	22 040 578	
Leather and leather products	698 577 000	55 743	4 972 821	
Footwear	252 072 000	2 470 436	2 878 436	
Wood and wood products	3 925 396 000	124 840	7 347 821	
Paper and paper products	13 630 638 000	1 407 848	90 124 824	
Printing , recorded media	12 197 457 000	5 629 349	136 110 408	
Coke, petroleum products and nuclear fuel	27 145 948 000	480 435	27 879 210	
Basic chemicals	12 394 798 000	614 402	132 976 522	
Other chemical products	27 853 929 000	4 215 700	233 593 488	
Rubber products	1 736 836 000	738 506	38 603 266	
Plastic products	6 728 947 000	1 259 096	74 826 923	
Glass and glass products	2 117 361 000	70 181	17 321 183	
Non-metallic mineral products	8 811 427 000	1 786 586	39 019 479	
Basic iron and steel products; casting of metal	16 060 937 000	25 840	124 168 488	
Non-ferrous metal products	7 318 830 000	6 776	0	
Structural metal products	6 300 466 000	1 094 006	30 787 372	
Other fabricated metal products	15 870 347 000	130 210	24 197 118	
Machinery and equipment	39 657 339 000	1 156 726	390 593 856	
Electrical machinery	9 965 901 000	39 897	68 813 252	
Radio, television and communication apparatus	1 058 183 000	276 807	38 718 061	
Professional equipment	4 137 270 000	4 739 484	26 540 078	
Motor vehicles, parts and accessories	21 748 877 000	144 392	7 582 700	
Other transport equipment	4 382 424 000	335 773	19 471 108	
Furniture	2 701 460 000	4 591 265	51 255 487	
Other manufacturing groups	35 635 692 000	35 018	222 899 417	

Economic Sector	Actual Sector GDP (at Basic Prices)	Construction Phase GDP Impact	Operational Phase GDP Impact	Distribution (Operational
Electricity and gas	56 822 834 000	279 405	56 524 705	
Water	17 057 883 000	901 213	57 235 748	
Construction	50 989 560 000	106 914 713	711 304 702	
Wholesale and retail trade	253 857 464 000	562 784 908	884 566 666	
Catering and accommodation services	22 196 723 000	195 587 250	196 575 418	
Transport and storage	102 443 523 000	6 608 675	755 550 429	
Communication	80 657 092 000	12 040 263	91 527 058	
Finance and insurance	177 303 828 000	177 999 160	1 396 813 931	
Professional business services	397 522 929 000	1 099 182 627	1 530 273 422	
Business activities n.e.c.	65 305 068 000	9 183 767	285 236 732	
National and Provincial government	151 943 286 000	3 503 255 898	400 409 277	
Local government	64 761 237 000	208 534	0	
Education (Private)	87 188 249 000	1 496 194 620	206 635 965	
Health and social work (Private)	72 961 473 000	291 425 688	402 872 000	
Other community, social and personal services	67 240 074 000	251 241 620	629 086 334	
Total	**2 088 550 181 000**	**11 616 755 774**	**10 823 222 364**	



10.4 Detailed Added Jobs Breakdown

Economic Sector	Actual Sector Jobs	Construction Phase Jobs Impact	Operational Phase Jobs Impact	Distribution (Operational
Agriculture	108 451	6	172	
Forestry	8 925	0	2	
Fishing	2 760	0	1	
Coal	1 104	1 515	7	
Gold	41 106	1 426	319	
Metals	10 771	10 321	426	
Other mining and quarrying	15 301	745	355	
Food	129 629	5	1 954	
Beverages and tobacco	31 886	7	623	
Textiles	16 642	1	40	
Wearing apparel	16 350	3	62	
Leather and leather products	3 904	0	14	
Footwear	1 894	9	8	
Wood and wood products	23 586	0	21	
Paper and paper products	17 461	5	253	
Printing , recorded media	37 869	20	383	
Coke, petroleum products and nuclear fuel	16 318	2	78	
Basic chemicals	16 872	2	374	
Other chemical products	59 457	15	657	
Rubber products	7 331	3	109	
Plastic products	38 996	5	210	
Glass and glass products	7 949	0	49	
Non-metallic mineral products	33 496	6	110	
Basic iron and steel products; casting of metal	26 379	0	349	
Non-ferrous metal products	4 087	0	0	
Structural metal products	28 913	4	87	
Other fabricated metal products	62 165	0	68	
Machinery and equipment	127 870	4	1 099	
Electrical machinery	59 468	0	194	
Radio, television and communication apparatus	8 399	1	109	
Professional equipment	14 498	17	75	
Motor vehicles, parts and accessories	78 601	1	21	
Other transport equipment	13 948	1	55	
Furniture	21 815	17	144	
Other manufacturing groups	35 775	0	627	

Economic Sector	Actual Sector GDP (at Basic Prices)	Construction Phase GDP Impact	Operational Phase GDP Impact	Distribution (Operational
Electricity and gas	29 311	1	159	
Water	10 308	3	161	
Construction	511 028	387	2 001	
Wholesale and retail trade	1 780 760	2 039	2 488	
Catering and accommodation services	234 409	709	553	
Transport and storage	339 316	24	2 125	
Communication	105 071	44	257	
Finance and insurance	398 116	645	3 928	
Professional business services	932 236	3 983	4 304	
Business activities n.e.c.	1 016 647	33	802	
National and Provincial government	365 476	12 695	1 126	
Local government	169 621	1	0	
Education (Private)	535 886	5 422	581	
Health and social work (Private)	371 488	1 056	1 133	
Other community, social and personal services	1 121 686	910	1 769	
Total	**9 051 335**	**42 097**	**30 440**	

