EXECUTIVE SUMMARY

LEGAL AND POLICY CONTEXT

This document comprises the 2019 Midvaal Spatial Development Framework which was reviewed as part of the 2019/2020 Midvaal IDP review process in terms of the provisions of the Municipal Systems Act. The Midvaal Spatial Development Framework was also compiled to comply with the content requirements for a Municipal Spatial Development Framework as defined in Section 21 (a) to (p) of the Spatial Planning and Land Use Management Act, Act 16 of 2013 (SPLUMA).

The Midvaal SDF should also be read (where applicable) in conjunction with the following development policies and more detailed local/precinct plans for specific areas within the municipal area or any other policy as approved by Council:

- Vaal Dam/ Vaal Marina Development Guidelines
- Accommodation Policy
- Midvaal Nodal Policy
- Midvaal Density Policy
- Midvaal Economic Analysis
- Midvaal Migration Plan
- Strategic Development Plan for R59 Corridor
- R59 Urban Design Framework
- De Deur Precinct Plan
- Walkerville Precinct Plan
- Doornkuil Precinct Plan
- Tedderfield Precinct Plan
- Elandsfontein Precinct Plan
- Sicelo Precinct Plan
- Central Business District Precinct Plan
- Waterval Precinct Plan
- Agricultural Policy
- Division of Land Policy
- Midvaal Environmental Management Framework
- Telecommunication Mast Policy
- Human Settlement Plan
- Local Economic Development Strategy
SITUATIONAL ANALYSIS: KEY FEATURES

The following is a brief summary of some of the key features and structuring elements identified from the situational analysis:

- The study area has strong regional linkages to major economic cores like Johannesburg, Ekurhuleni and the Vereeniging-Vanderbijlpark complex. These include routes R59 and R82, and the Vereeniging-Germiston railway line.
- Midvaal is predominantly rural, with urban development predominantly consolidated along routes R59 and R82 in the north-western parts of the municipal area.
- Meyerton is the highest order town in the area with a relatively large business and residential component. Smaller settlements and agricultural holdings in the surrounds act as service centres to the surrounding local communities.
- The local population is relatively well educated, and unemployment levels are low compared with provincial and national averages.
- The strongest economic drivers in Midvaal are: Manufacturing (29.5%), Financial and Business Services (18.5%), Trade (14.5%), and General Government Services (9.4%). There are indications that the Manufacturing sector is declining; there is thus a need to diversify the Midvaal economy.
- The urban areas and agricultural holdings exhibit the highest population growth rates.
- The official backlog with regards to informal settlements and backyard units (according to Census 2011) was determined to be 5546.
- The population is projected to grow between 3288 and 4681 people per annum for the next six (6) years. The related projected household growth is between 1034 and 1472 housing units per annum.
- The total housing supply of existing housing projects is calculated at 23 825 units comprising 8858 middle and high income units and 14 994 subsidised units which is sufficient to meet current and projected demand beyond the year 2020.

SPATIAL DEVELOPMENT FRAMEWORK

The Midvaal SDF (see Composite Map overleaf) is based on a number of Development Principles associated with the various functional and structuring elements identified within the Midvaal area. These Principles form the individual layers which the SDF comprises, and these are incrementally consolidated to form one Integrated Spatial Development Framework for the Midvaal area.

The ten Development Principles (and associated themes) are summarised below:
• **Environmental Management:** To protect and actively manage the natural environmental resources in the Midvaal Municipal Area in order to ensure a sustainable equilibrium between agricultural, tourism, industrial/manufacturing and mining activities, as well as urbanisation pressures in the area.

• **Agricultural Production:** To facilitate and enhance agricultural production in the municipal area by actively protecting all land earmarked for agricultural purposes, and to target agricultural holdings for innovative small scale farming and agro-processing.

• **Tourism Promotion:** To promote tourism development through the active utilization of tourism resources available like the Vaal Dam, the Ridges Precincts, and the Nature Reserves in the area.

• **Corridor Development:** To pro-actively plan, design and facilitate the establishment of a Development Corridor along the R59 freeway.

• **Nodal Development (Economic and Social Facilities):** To facilitate the development of a hierarchy of sustainable Activity Nodes in partnership with stakeholders to ensure equitable access to social infrastructure, and to promote Local Economic Development in the urban and rural parts of the municipality.

• **Movement Network:** To capitalise on the strategic location of the municipality by way of regional and provincial linkages, and to establish an internal movement network comprising a hierarchy of roads which include a comprehensive public transport network and services.

• **Industrial, Commercial, Mining Activity:** To promote the development of a diverse range of industrial, commercial and mining activities in the Midvaal area through partnerships with the private sector, and with specific focus along the R59 Corridor and at the designated nodal points.

• **Human Settlement Development:** To provide for a wide range of bonded and subsidised housing typologies and tenure alternatives within clearly defined Strategic Development Areas, and to continuously manage residential densification by way of the Midvaal Density Policy.

• **Compact City:** To delineate an Urban Development Boundary to encourage consolidated urban development and to protect high potential agricultural land and sensitive environments.

• **Targeted Engineering Infrastructure Investment:** To prioritise the bulk of short to medium term upgrading/provision of engineering services to nodal areas within the Urban Development Boundary.
KEY PERFORMANCE AREA ALIGNMENT

The MLM Performance Framework is composed of Key Performance Areas (KPA’s) which are the areas of focus required for the Municipality to achieve its strategic objectives. MLM has developed eight KPA’s, the definitions of which are presented below:

<table>
<thead>
<tr>
<th>KPA</th>
<th>Definition</th>
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<tbody>
<tr>
<td>KPA 1: Good Governance and Public Participation</td>
<td>To promote increased participation and improved communication with all key internal and external stakeholders</td>
</tr>
<tr>
<td>KPA 2: Safety and Environment</td>
<td>To create a sustainable environment safe from harm</td>
</tr>
<tr>
<td>KPA 3: Social and Community Development</td>
<td>To create and environment focused on uplifting the youth, the poor and the most vulnerable</td>
</tr>
<tr>
<td>KPA 4: Institutional Transformation</td>
<td>To transform and align the people, processes and systems of the municipality to achieve its objectives</td>
</tr>
<tr>
<td>KPA 5: Financial Sustainability</td>
<td>To improve the financial sustainability and capacity of the municipality, whilst adhering to statutory requirements</td>
</tr>
<tr>
<td>KPA 6: Physical Infrastructure and Energy Efficiency</td>
<td>To ensure efficient infrastructure and energy supply that will improve the quality of life of the community</td>
</tr>
<tr>
<td>KPA 7: Services and Customer Care</td>
<td>To deliver inclusive and excellent services to the community</td>
</tr>
<tr>
<td>KPA 8: Economic Growth and Development</td>
<td>To facilitate sustainable economic empowerment for all communities within Midvaal and through the development of partnerships and innovation</td>
</tr>
</tbody>
</table>

The SDF review process sought to align with the KPA’s (where possible) and specifically contributes to achieving the following:

**Sustainable Environment**: All critical and high biodiversity areas and high potential agricultural land are protected from urbanisation by way of the implementation of an urban development boundary.

**Social and Community Development**: Nodal points have been identified at optional locations for the provision of social facilities and services which would enhance the livelihood of vulnerable communities. Priority areas have also been identified for the delivery of housing to these communities and the road network is designed to ensure easy access to services and job opportunities.

**Financial Sustainability**: The urban development boundary demarcates priority areas where urban development will be accommodated over the next few years. This ensures that all land within the boundary is optimally utilised through processes of infill development and densification which also makes the provision of engineering services more cost efficient. This will enhance the capacity of the MLM to provide services in priority areas (Spatial Targeting).

**Infrastructure and Energy Efficiency**: The Urban Development Boundary is a Growth Management Tool which assists the municipality in providing infrastructure in an efficient way (incremental upgrading and expansion).
Economic Growth and Development: The Midvaal SDF identified a number of Development Nodes and the R59 Development Corridor which will form the backbone to future economic development in the municipal area.

Precinct Plans for the priority nodes and the R59 Development Corridor indicated optimum sites for future Business, Commercial and Industrial development in close proximity to all major residential areas in the MLM.

The MLM SDF also identified the preferred location for future Agri-Hub development (to provide more residents access to the formal economy), and all high potential agricultural land is reserved for exclusive agricultural use.

Several strategically located areas for enhanced tourism development have also been identified.
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<thead>
<tr>
<th>ACRONYM</th>
<th>FULL FORM</th>
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<tbody>
<tr>
<td>CBD</td>
<td>Central Business District</td>
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<td>CIF</td>
<td>Capital Investment Framework</td>
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<tr>
<td>COGTA</td>
<td>Department of Cooperative Governance and Traditional Affairs</td>
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<td>CRDP</td>
<td>Comprehensive Rural Development Programme</td>
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<tr>
<td>DFA</td>
<td>Development Facilitation Act</td>
</tr>
<tr>
<td>DIDS</td>
<td>District Industrial Development Strategy</td>
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<tr>
<td>DITP</td>
<td>District Integrated Transport Plan</td>
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<tr>
<td>DM</td>
<td>District Municipality</td>
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<tr>
<td>DMA</td>
<td>Department of Mineral Affairs</td>
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<td>DRDLR</td>
<td>Department of Rural Development and Land Reform</td>
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<td>DTTI</td>
<td>Department of Trade and Industry</td>
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<td>EMF</td>
<td>Environmental Management Framework</td>
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<td>EMP</td>
<td>Environmental Management Plan</td>
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<td>EPWP</td>
<td>Expanded Public Works Programme</td>
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<td>ESKOM</td>
<td>Electricity Supply Commission (ESCOM)</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GDRP</td>
<td>Gross Domestic Regional Product</td>
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<td>GLA</td>
<td>Gross Leasable Area</td>
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<td>GVA</td>
<td>Gross Value Added</td>
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<tr>
<td>ICC</td>
<td>International Convention Centre</td>
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<td>IDP</td>
<td>Integrated Development Plan</td>
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<td>IGR</td>
<td>Inter Government Relations</td>
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<td>KM</td>
<td>Kilometres</td>
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<td>LED</td>
<td>Local Economic Development</td>
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<td>LM</td>
<td>Local Municipality</td>
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<td>LSDF</td>
<td>Local Spatial Development Framework</td>
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<td>LUMS</td>
<td>Land Use Management Systems</td>
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<td>MLL</td>
<td>Minimum Living Level</td>
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<td>MLM</td>
<td>Midvaal Local Municipality</td>
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<td>MPCC</td>
<td>Multi-Purpose Community Centre</td>
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<td>MSA</td>
<td>Municipal System Act</td>
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<td>NATMAP</td>
<td>National Transportation Master Plan</td>
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<tr>
<td>NDP</td>
<td>National Development Plan</td>
</tr>
<tr>
<td>NR</td>
<td>Nature Reserve</td>
</tr>
<tr>
<td>NSDP</td>
<td>National Spatial Development Perspective</td>
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<td>PGDS</td>
<td>Provincial Growth and Development Strategy</td>
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<td>RDP</td>
<td>Rural Development Programme</td>
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<td>RIDS</td>
<td>Regional Industrial Development Strategy</td>
</tr>
<tr>
<td>SANRAL</td>
<td>South African National Road Agency</td>
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<tr>
<td>SARCC</td>
<td>South African Rail Commuter Corporation</td>
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<td>SDF</td>
<td>Spatial Development Framework</td>
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<td>SMME</td>
<td>Small Medium and Micro Enterprises</td>
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<td>SPLUMA</td>
<td>Spatial Planning and Land Use Management Act</td>
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<td>WMA</td>
<td>Water Management Areas</td>
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<td>WWTWs</td>
<td>Waste Water Treatment Works</td>
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1 INTRODUCTION

1.1 Background

In terms of Chapter 5 of the Municipal Systems Act which was promulgated in 2000, each local authority in South Africa is required to compile an Integrated Development Plan for its area of jurisdiction. In Section 26 of the Municipal Systems Act it is furthermore stated that the core components of an Integrated Development Plan are the following:

a) the municipal council’s vision for the long-term development of the municipality with special emphasis on the municipality’s most critical development and internal transformation needs;
b) an assessment of the existing level of development in the municipality, which must include an identification of communities which do not have access to basic municipal services;
c) the council’s development priorities and objectives for its elected term, including its local economic development aims and its internal transformation needs;
d) the council’s development strategies which must be aligned with any national or provincial sectoral plans and planning requirements binding on the municipality in terms of legislation;
e) a spatial development framework which must include the provision of basic guidelines for a land use management system for the municipality;
f) the council’s operational strategies;
g) applicable disaster management plans;
h) a financial plan, which must include a budget projection for at least the next three years; and
i) the key performance indicators and performance targets determined.

It is evident from the above (paragraph (e)), that the formulation of a Spatial Development Framework is a key component of an IDP by law. Midvaal Local Municipality responded to this legislative requirement by formulating a Spatial Development Framework in 2010/11 as part of its IDP, and it was reviewed again during 2014. The 2014 Midvaal SDF will now be reviewed in line with the provisions of the Spatial Planning and Land Use Management Act, 2013 (SPLUMA) and in order to cater for changing development dynamics in the Midvaal Municipal area since 2014.
### 1.2 SPLUMA Principles

The Spatial Planning and Land Use Management Act (2013) puts forward principles to influence spatial planning, land use management and land development. It also provides for national and regional land use frameworks as well as provincial and municipal frameworks, implying that a package of plans will be undertaken from national to municipal level to direct land use management, while providing for uniform regulation of land use management.

The general principles endorsed by SPLUMA is that spatial planning, land use management and land development must promote and enhance Spatial Justice, Spatial Sustainability; Efficiency; Spatial Resilience, and Good Administration as summarised below:

<table>
<thead>
<tr>
<th>Spatial Justice</th>
<th>Sustainability</th>
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<tbody>
<tr>
<td>(i) past spatial and other development imbalances must be redressed through improved to and use of land;</td>
<td>(i) promote land development that is within the fiscal, institutional and administrative means of the Republic;</td>
</tr>
<tr>
<td>(ii) spatial development frameworks and policies at all spheres of government must address inclusion of persons and areas that were previously excluded, with an emphasis on settlements, former homeland areas and areas characterised by widespread poverty and deprivation;</td>
<td>(ii) ensure that special consideration is given to the protection of prime and unique agricultural land;</td>
</tr>
<tr>
<td>(iii) spatial planning mechanisms, including land use schemes, must incorporate provisions that enable redress in access to land by disadvantaged communities and persons;</td>
<td>(iii) uphold consistency of land use measures in accordance with environmental management instruments;</td>
</tr>
<tr>
<td>(iv) must include all areas of a municipality and specifically include provisions that are flexible appropriate for the management of disadvantaged areas, informal settlements and former homeland areas;</td>
<td>(iv) promote and stimulate the effective and equitable functioning of land markets;</td>
</tr>
<tr>
<td>(v) must include provisions that accommodate access to secure tenure and the upgrading of informal areas; and</td>
<td>(v) consider all current and future costs to all parties for the provision of infrastructure and services in land developments;</td>
</tr>
<tr>
<td>(vi) a Municipal Planning Tribunal considering an application before it, may not be impeded or restricted in the exercise of its discretion solely on the ground that the value of land property is affected by the outcome of the application.</td>
<td>(vi) promote land development in locations that are sustainable and limit urban sprawl; and</td>
</tr>
<tr>
<td>(vii) result in communities that are viable.</td>
<td>(vii) result in communities that are viable.</td>
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</table>
### Spatial Efficiency

(i) Land development optimises the use of existing resources and infrastructure;

(ii) Decision-making procedures are designed to minimise negative financial, social, economic or environmental impacts; and

(iii) Development application procedures are efficient and streamlined.

### Spatial Resilience

(i) Flexibility in spatial plans, policies and land use management systems are accommodated to ensure sustainable livelihoods in communities most likely to suffer the impacts of economic and environmental shocks.

### Good Administration

(i) All spheres of government ensure an integrated approach to land use and land that is guided by the spatial planning and land use management systems as embodied in Act;

(ii) All government departments must provide their sector inputs and comply with any prescribed requirements during the preparation or amendment of spatial frameworks;

(iii) The requirements of any law relating to land development and land use are met timeously;

(iv) The preparation and amendment of spatial plans, policies, land use schemes as well procedures for development applications, include transparent processes of participation that afford all parties the opportunity to provide inputs on matters affecting and

(v) Policies, legislation and procedures must be clearly set in order to inform and members of the public.

### 1.3 Preparation and Contents of SDF

As far as the compilation methodology and minimum content of a Spatial Development Framework are concerned, the SPLUMA stipulates as follow:

### Municipal Spatial Development Framework

#### Preparation of Municipal Spatial Development Framework

| (1) | The Municipal Council of a municipality must by notice in the Provincial Gazette adopt a municipal spatial development framework for the municipality. |
| (2) | The municipal spatial development framework must be prepared as part of a municipality’s integrated development plan in accordance with the provisions of the Municipal Systems |
| (3) | Before adopting the municipal spatial development framework contemplated in subsection and any proposed amendments to the municipal spatial development framework, Municipal Council must— |
(a) give notice of the proposed municipal spatial development framework in the Gazette and the media;

(b) invite the public to submit written representations in respect of the proposed municipal spatial development framework to the Municipal Council within 60 days after the publication of the notice referred to in paragraph (a); and

(c) consider all representations received in respect of the proposed municipal spatial development framework.

<table>
<thead>
<tr>
<th>Contents of Municipal Spatial Development Framework</th>
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<tbody>
<tr>
<td>(a) give effect to the development principles and applicable norms and standards set out in Chapter 2;</td>
</tr>
<tr>
<td>(b) include a written and spatial representation of a five-year spatial development plan for the spatial form of the municipality;</td>
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<tr>
<td>(c) include a longer term spatial development vision statement for the municipal area which indicates a desired spatial growth and development pattern for the next 10 to 20 years;</td>
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<tr>
<td>(d) identify current and future significant structuring and restructuring elements of the spatial form of the municipality, including development corridors, activity spines and economic nodes where public and private investment will be prioritised and facilitated;</td>
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<tr>
<td>(e) include population growth estimates for the next five years;</td>
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<td>(f) include estimates of the demand for housing units across different socio-economic categories and the planned location and density of future housing developments;</td>
</tr>
<tr>
<td>(g) include estimates of economic activity and employment trends and locations in the municipal area for the next five years;</td>
</tr>
<tr>
<td>(h) identify, quantify and provide location requirements of engineering infrastructure and services provision for existing and future development needs for the next five years;</td>
</tr>
<tr>
<td>(i) identify the designated areas where a national or provincial inclusionary housing policy may be applicable;</td>
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<tr>
<td>(j) include a strategic assessment of the environmental pressures and opportunities within the municipal area, including the spatial location of environmental sensitivities, high potential agricultural land and coastal access strips, where applicable;</td>
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<td>(k) identify the designation of areas in the municipality where incremental upgrading approaches to development and regulation will be applicable;</td>
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<td>(l) identify the designation of areas in which—</td>
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<td>(i) more detailed local plans must be developed; and</td>
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<tr>
<td>(ii) shortened land use development procedures may be applicable and land use schemes may be so amended;</td>
</tr>
<tr>
<td>(m) provide the spatial expression of the coordination, alignment and integration of sectoral policies of all municipal departments;</td>
</tr>
<tr>
<td>(n) determine a capital expenditure framework for the municipality's development programmes, depicted spatially;</td>
</tr>
<tr>
<td>(o) determine the purpose, desired impact and structure of the land use management scheme.</td>
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</tbody>
</table>
apply in that municipal area; and

include an implementation plan comprising of—

(i) sectoral requirements, including budgets and resources for implementation;
(ii) necessary amendments to a land use scheme;
(iii) specification of institutional arrangements necessary for implementation;
(iv) specification of implementation targets, including dates and monitoring indicators; and
(v) specification, where necessary, of any arrangements for partnerships in the implementation process.

2 STUDY OBJECTIVES, METHODOLOGY AND REPORT STRUCTURE

2.1 Study Objectives

Primary Objective: The main objective of the project is to develop a Spatial Development Framework for the Midvaal Municipality which will update/enhance the existing municipal SDF (2014). The new SDF will address spatial, environmental and economic issues confronting the urban and rural areas of the Municipality, and incorporate all new information and plans applicable to the Midvaal area. The SDF will also facilitate implementation of the IDP and all government intentions to fight poverty and facilitate rural development in the rural parts of the Midvaal Municipality.

2.2 Methodology

The study of the original five-year SDF commenced during October 2016 following a presentation on the proposed study objectives, methodology and deliverables to the Project Steering Committee established by the Midvaal Local Municipality.

The months of October and November 2016 were dedicated towards the visioning assessment and analysis of all Status Quo information, and in December 2016 the project team submitted the Vision and Status Quo information (draft Status Quo Report) to the Project Steering Committee. All departments had an opportunity to provide comments and to add to the information available. The Draft Status Quo report was then amended based on the comments and additional information made available.

The next phase entailed the formulation of draft Development Proposals for the MLM SDF based on the information obtained. The Draft SDF Report was submitted to the Municipality and distributed to the various departments and other stakeholders for their
comments by early March 2017. The Draft Report was amended based on the comments received, and the Final Report was delivered to the MLM by early May 2017.

The 2019 SDF Review does not include any major changed but aims to address errors and omissions and includes any decisions by council, organs of state as of the date the 2019/2020 IDP is approved.

2.3 Report Structure

Section 3 comprises an overview of the Issues identified in the latest Midvaal LM IDP, and highlights the spatial implications thereof before linking this to the Vision of the SDF.

Section 4 represents an analysis of the national, provincial, district and local policy environment that form the basis for a normative based spatial planning approach (Section 4.1).

Sections 5.1 – 5.9 provide a multi-disciplinary analysis of the current situation regarding the regional and local context of the MLM area. From this situational analysis a list of development opportunities and constraints were identified and summarised as a Synthesis in Section 5.10 of the document.

Section 6 contains the proposed Spatial Development Framework for the Midvaal Local Municipality, based on a set of Development Objectives with a Spatial Plan and Development Strategy.

Section 7 delineates the Way Forward in terms of an Implementation Programme comprising a list of SDF related Priority Projects earmarked for future Implementation in the MLM area.

3. VISION AND KPI ALIGNMENT

The Vision for the Midvaal Local Municipality reads as follow:

“To inclusively serve the needs of our community”.

Mission

The Midvaal Local Municipality will execute its vision through the following:

1. Adopting a **mind-set of innovation** to revolutionise the way we operate;
2. **Leveraging partnerships** to realise our full potential;
3. **Driving sustainability** within the local ecosystem;
4. **Growing the economy** in the Midvaal LM, premised on incubating entrepreneurship, socio-economic growth and environmental responsibility;
5. Providing **excellent and standardised service delivery** for all;
6. Prioritizing the **upliftment of our youth**;
7. Being **ethical and proactive** local municipality;
8. Elevating the Midvaal LM to be the **best and most attractive municipality** in the country.

**Performance Framework**

The MLM Performance Framework is composed of Key Performance Areas (KPA’s) which are the areas of focus required for the Municipality to achieve its strategic objectives. MLM has developed eight KPA’s, the definitions of which are presented below:

<table>
<thead>
<tr>
<th>KPA</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>KPA 1: Good Governance and Public Participation</td>
<td>To promote increased participation and improved communication with all key internal and external stakeholders</td>
</tr>
<tr>
<td>KPA 2: Safety and Environment</td>
<td>To create a sustainable environment safe from harm</td>
</tr>
<tr>
<td>KPA 3: Social and Community Development</td>
<td>To create and environment focussed on uplifting the youth, the poor and the most vulnerable</td>
</tr>
<tr>
<td>KPA 4: Institutional Transformation</td>
<td>To transform and align the people, processes and systems of the municipality to achieve its objectives</td>
</tr>
<tr>
<td>KPA 5: Financial Sustainability</td>
<td>To improve the financial sustainability and capacity of the municipality, whilst adhering to statutory requirements</td>
</tr>
<tr>
<td>KPA 6: Physical Infrastructure and Energy Efficiency</td>
<td>To ensure efficient infrastructure and energy supply that will improve the quality of life of the community</td>
</tr>
<tr>
<td>KPA 7: Services and Customer Care</td>
<td>To deliver inclusive and excellent services to the community</td>
</tr>
<tr>
<td>KPA 8: Economic Growth and Development</td>
<td>To facilitate sustainable economic empowerment for all communities within Midvaal and through the development of partnerships and innovation</td>
</tr>
</tbody>
</table>

The SDF review process sought to align with the KPA’s (where possible) and specifically contributes to achieving the following:

**Sustainable Environment:** All critical and high biodiversity areas and high potential agricultural land are protected from urbanisation by way of the implementation of an urban development boundary.

**Social and Community Development:** Nodal points have been identified at optional locations for the provision of social facilities and services which would enhance the livelihood of vulnerable communities. Priority areas have also been identified for the delivery of housing to these communities and the road network is designed to ensure easy access to services and job opportunities.
**Financial Sustainability:** The urban development boundary demarcates priority areas where urban development will be accommodated over the next few years. This ensures that all land within the boundary is optimally utilised through processes of infill development and densification which also makes the provision of engineering services more cost efficient. This will enhance the capacity of the MLM to provide services in priority areas (Spatial Targeting).

**Infrastructure and Energy Efficiency:** The Urban Development Boundary is a Growth Management Tool which assists the municipality in providing infrastructure in an efficient way (incremental upgrading and expansion).

**Economic Growth and Development:** The Midvaal SDF identified a number of Development Nodes and the R59 Development Corridor which will form the backbone to future economic development in the municipal area.

Precinct Plans for the priority nodes and the R59 Development Corridor indicated optimum sites for future Business, Commercial and Industrial development in close proximity to all major residential areas in the MLM.

The MLM SDF also identified the preferred location for future Agri-Hub development (to provide more residents access to the formal economy), and all high potential agricultural land is reserved for exclusive agricultural use.

Several strategically located areas for enhanced tourism development have also been identified.

**4. NATIONAL AND PROVINCIAL POLICY CONTEXT AND DEVELOPMENT GUIDELINES**

Development in South Africa (and by implication the Midvaal Municipality) is broadly guided and directed by a wide range of legislation. Some legislation is discipline specific e.g. housing, transport and environment, while others are more generic in nature, focusing on comprehensive development processes, alignment of multi-sectoral planning processes and proposals, and the legal requirements pertaining to contents of such plans compiled.

The following is a brief summary of national and provincial policy guidelines which are applicable to the Midvaal LM and which need to be adhered to in the reviewed Midvaal SDF:
The National Development Plan: Vision for 2030 reports that in urban areas in-migration, especially by the young and poor, increases pressure on services and transport, complicated by apartheid-fragmented geography. Economic growth has been slower than the demand for employment. In particular, accommodation faces challenges, including financing for lower end housing and its incorporation into the market, and slow progress on rental accommodation (CRU and Social Housing) and upgrading of informal settlements.

In urban areas, key NDP recommendations include:

- Upgrading all informal settlements on suitable, well-located land by 2030;
- Increased urban densities to reduce sprawl and costs;
- Investments to shift jobs and investment to the urban townships on the peripheries;
- Substantial investments in safe, reliable and affordable public transport and better co-ordination among the various modes;
- A comprehensive review of the grant and subsidy regime for housing to ensure diversity in product and finance options and spatial mix;
- A focused strategy on the housing gap market, involving banks, subsidies and employer housing schemes;
- The development of spatial compacts.

In the rural areas, the National Development Plan reports that general productivity has been declining and outmigration to cities and towns has been accelerating. The rural landscape is characterised by rural densification without associated infrastructure and governance arrangements, ill-located land-reform initiatives from the perspective of viable farming, or access to markets, and many of these initiatives are in conflict with other imperatives such as mining or preserving biodiversity.

The NDP suggest that rural interventions will differentiate less dense marginal areas primarily needing appropriate service provision from more viable and denser areas with transport and market access, including:

- Innovative, targeted and better co-ordinated provision of infrastructure (including ICTs) and services provision supported by the spatial consolidation of rural settlements to enhance densities and associated service delivery;
- Prioritising agricultural and rural development along mobility corridors, to build local economies and contribute to national food security;
- Identification of non-agricultural opportunities such as tourism and mining, especially with a "green" focus;
- Promoting small-town development as nodes of rural development;
CRDP CONCEPT

**AGRARIAN TRANSFORMATION**
- Land
- Livestock
- Cropping
- Commodity
- Markets

Agrarian transformation is the rapid fundamental change in the relations of land, livestock, cropping & community.

**RURAL DEVELOPMENT**
- Economic infrastructure
- Social infrastructure
- Public Amenities and Facilities
- ICT infrastructure
- Human Settlements

**LAND REFORM**
- Land tenure
- Redistribution
- Restitution
- Strategic land reform interventions

STRATEGIC OBJECTIVE: SOCIAL COHESION AND DEVELOPMENT
• Mechanisms to make land markets work more effectively for the poor, especially women.

The national spatial development interventions that emanated from the NDP are illustrated on Figure 1. Those relevant to Midvaal are namely that Gauteng was identified as a national Node of Competiveness which strongly associates with the Maputo Development Corridor; and that the southern parts of Gauteng Province were earmarked as a Job Intervention Zone.

4.2 Medium Term Strategic Framework

The Medium Term Strategic Framework (MTSF) is Government’s strategic plan for the 2014-2019 electoral term. It has two over-arching strategic themes – radical economic transformation and improving service delivery.

To give effect to these two key pillars, the MTSF is structured around fourteen (14) Priority Outcomes which cover the focus areas identified in the NDP and Government’s electoral mandate as listed below:

• Quality basic education;
• A long and healthy life for all South Africans;
• All people in South Africa are and feel safe;
• Decent employment through inclusive growth;
• A skilled and capable workforce to support an inclusive growth path;
• An efficient, competitive and responsive economic infrastructure network;
• Vibrant, equitable, sustainable rural communities contributing towards food security for all;
• Sustainable human settlements and improved quality of household life;
• Responsive, accountable, effective and efficient local government;
• Protect and enhance our environmental assets and natural resources;
• Create a better South Africa and contribute to a better Africa and a better world;
• An efficient, effective and development-oriented public service;
• A comprehensive, responsive and sustainable social protection system;
• A diverse, socially cohesive society with a common national identity.

The successful achievement of the above objectives is reliant on Good Administration and co-operative governance among all spheres of government which is Principle 5 of SPLUMA.
The Industrial Policy Action Plan 2012/13 to 2014/15 or the ‘Revised IPAP2’ as it has become known builds on the National Industrial Policy Framework (NIPF), IPAP1 (2007/08 IPAP) and IPAP2 (2011/12 IPAP). Successive iterations of IPAP seek to scale up key interventions over a rolling three-year period, with a 10 year outlook on desired economic outcomes.

As a backdrop to IPAP, the NIPF has the following core objectives:

- To facilitate diversification beyond the economy’s current reliance on traditional commodities and non-tradable services that require the promotion of value-addition, characterised particularly by the movement into non-traditional tradable goods and services that compete in export markets and against imports;
- To ensure long-term intensification of South Africa’s industrialisation process and movement towards a knowledge economy;
- To promote a labour-absorbing industrialisation path, with the emphasis on tradable labour-absorbing goods and services and economic linkages that create employment;
- To promote industrialisation characterised by the increased participation of historically disadvantaged people and marginalised regions in the industrial economy; and
- To contribute towards industrial development in Africa with a strong emphasis on building the continent’s productive capacity and secure regional economic integration.

Significant achievements in implementing transformative industrial policy actions plans at the sectoral level and the development of stronger transversal platforms set the basis for further strengthening of industrial policy interventions. Special emphasis will be placed on three sectors that are particularly well placed for scaling up through leveraging market growth and associated upgrading of supply capacity and capabilities. These are:

- **“Green” industries**: In particular, the manufacture of components for the 17.8 GW renewable energy generation programme and the production of solar heaters and components, and a range of other goods and services that arise from the requirements of higher energy efficiency in the economy;
- **Agro-processing**: In particular, the expediting of regulatory and support mechanisms to create a large-scale bio-fuels industry, the identification and promotion of export market opportunities to major net food-importing countries; and investment, production development and standards support.
- **Metal fabrication, capital and transport equipment**: Significant opportunities arise from the leveraging of large public procurement in rail and electricity, the provision of associated investment and upgrading support, and exploitation of opportunities arising from mining capital equipment investment in South Africa and on the rest of the continent.
Those key sectors most relevant to Midvaal would be:

- “Green” and energy-saving industries
- Agro-processing, linked to food security and food pricing imperatives
- Creative and cultural industries linked to tourism in the Province
- Business process services
- Electro-technical and ICT

### 4.4 National Comprehensive Rural Development Programme (CRDP, 2009)

The CRDP is aimed at being an effective response to poverty alleviation and food insecurity by maximizing the use and management of natural resources to create “vibrant, equitable and sustainable rural communities”.

The vision of the CRDP is to be achieved through a **three-pronged strategy** based on:

1. A coordinated and integrated broad-based *Agrarian Transformation*;
2. Strategically increasing *Rural Development* through infrastructure investment; and
3. An improved *Land Reform Programme*.

Seeing as Midvaal essentially forms part of the rural hinterland of Gauteng Province, the objectives of each of the three strategic thrusts thought applicable to the formulation of a SDF for Midvaal are as follows (see *Figure 2*):

#### 1. Agrarian Transformation

- Facilitating the establishment of rural and agro-industries, cooperatives, cultural initiatives and vibrant local markets.
- Increased production and sustainable use of natural resources by promoting farming and related value chain development (exploring all possible species for food and economic activity).

#### 2. Rural Development

- Access to community and social infrastructure, especially well-resourced clinics.
- Focusing on the development of new and the rehabilitation of existing infrastructure.
- Improving and developing infrastructure conducive to economic development – e.g. distribution and transportation infrastructure, agricultural infrastructure, water and electricity infrastructure, market and storage infrastructure, retail infrastructure, and telecommunications infrastructure.
- Improving and developing infrastructure conducive to social development – e.g. sanitation infrastructure, health infrastructure, sports and recreation infrastructure, and educational infrastructure (especially ABET centres).
3. Land Reform

- Promoting restitution, tenure reform, and redistribution in a sustainable manner.
- Increased access to land by previously disadvantaged people.
- Establishing Agri-villages for local economic development on farms.
- Up-to-date information pertaining to land claims.
- Providing reliable and efficient property (deeds) registration systems.
- Contributing to economic growth and housing development by providing government and private agents with essential land information in order to engage in planning as well as economic transactions.
- Providing spatial planning information and services to local municipalities and other public or private institutions that may require these services for development purposes.

The entire Gauteng Province is a CRDP focus area. The four priority areas in the Province include Bantu-Bonke in Midvaal, Devon (Lesedi), Hekpoort (West Rand) and Kwa-Sokhulumi (City of Tshwane).

Bantu-Bonke is a hydroponics project in the southern extents of Midvaal which provides jobs for about 20 people. The farm produces cucumber, green pepper, tomato and spinach. The main buyers of their crops are Johannesburg, Pretoria, Klerksdorp, Vereeniging and Springs Fresh Produce markets.

New phases are being planned for Bantu-Bonke, including chicken farming and a piggery, which would involve GDARD purchasing more land around the existing hydroponics farm.

4.5 Gauteng City Region (GCR)

The Gauteng City has a long-term vision of building a Metropolitan System of Governance, realised through working in a seamless way and characterised by high levels of coordination and integrated planning.

The GCR’s vision is:

“an integrated city region, characterised by social cohesion and economic inclusion; the leading economy on the continent underpinned by smart, sustainable and social-economic development”.

The Sedibeng District in which Midvaal Local Municipality is located, has been identified as the southern development corridor and is expected to contribute to the region through the creation of new industries, economic nodes and cities.

The Development of the GCR is anchored on the Transformation, Modernisation and Re-Industrialisation programme as listed on section 4.6 below.
4.6 Gauteng TMR Programme

The Gauteng Provincial Government administration has adopted ten pillars aimed at radical socio-economic and political transformation towards the modernisation and re-industrialisation of the province’s economy. The ten pillars are as follow:

- **Radical economic transformation**: Revitalising township economics and strengthening key economic sectors: Agro Processing, Aquaculture, Hydroponics, Automotive.
- **Decisive spatial transformation**: Focusing on agriculture and agro-processing in Midvaal area.
- **Accelerated social transformation**: Emphasis on Education, Health and Safety.
- **Transformation of the state and governance**: Including establishment of one-stop Thusong Service Centres
- **Modernisation of the public service and the state**: Expand access to e-governance.
- **Modernisation of human settlements and urban development**: New Post-Apartheid Cities, Greening, Modernisation (ICT) and Basic Services, Inner City Revitalisation.
- **Modernisation of public transport and other infrastructure**: BRT, Freight Hubs, Aerotropolis.
- **Re-industrialising Gauteng as our country’s economic hub**: Focusing on Transport Sector, Health Sector and Agro Processing.
- **Taking a lead in Africa’s new industrial revolution**: Gateway to Africa, Intra Africa Trade, BRICS.

4.7 Gauteng Integrated Urban Development Framework (IUDF)

The main objective of the Gauteng Integrated Urban Development Framework (IUDF, 2014) is to address the need for integrated urban development focusing on the following four imperatives:

- **Economic imperative**: High poverty in cities, yet cities and towns can help to create jobs more cost-effectively due to the efficiencies and potential they offer by virtue of their scale, diversity and density of activity and population.
- **Inclusion imperative**: The need to be more tolerant and supportive of survival strategies of poor households (informality).
- **Spatial imperative**: Reverse inefficient and exclusionary practices, and spatial
segregation in cities and towns.

- Institutional imperative: Establish proper governance systems and strengthen intergovernmental collaboration to effectively manage urban areas.

The Midvaal SDF should be aligned with the above imperatives and the following nine policy levers which emanate from it:

1. Integrated Urban Planning and Management
2. Integrated Transport and Mobility
3. Integrated and Sustainable Human Settlements
4. Integrated Urban Infrastructure
5. Efficient Land Governance and Management
6. Inclusive Economic Development
7. Empowered Active Communities
8. Effective Urban Governance
9. Sustainable Finances

4.8 Gauteng Provincial Spatial Development Framework 2030

The Gauteng Spatial Development Framework 2030 is based on the following six Spatial Objectives:

- **Liveability**: Focus on the creation of settlements in which people live their lives in a way that is worthy of human beings, that enables contentment, personal growth and healthy social interactions.

- **Concentration**:
  - Allow the concentration of (i) opportunities in key nodes and along key ‘connectors’ and (ii) of public investment in and around these nodes or connectors.
  - Focus on the integration between land use and public transport around nodes and along connectors according to the nature of these two structural elements.
  - Bring more people closer to a greater number of opportunities in the areas of concentration through increased densities, implying a need for affordable and lower income housing as well.

- **Connectivity**: Ensure connectivity between nodes and connectivity from surrounding areas, for example lower density neighbourhoods, major industrial zones, or the rural hinterland, to areas of concentration, which implies a hierarchy of movement routes.

- **Conservation**: Allow for the maintenance of healthy natural environments, ecosystems and biophysical processes which support life and which must be allowed to continue without significant change.

- **Diversity**: Make provision for and allow the development of various types of
environment that are linked to the spatial characteristics of that particular geographic location. All areas in the province should not be the same. Different zones would be suitable for different types of development and housing types, which in turn would also be able to accommodate different income groups and lifestyles. The overall design of cities must suit all income groups and lifestyles and offer a multitude of equally accessible and convenient choices (i.e. everyone, depending on their personal preferences and not on the income group they belong to, should be able to choose between urban or suburban lifestyle, high or low density neighbourhood, public or private transport, etc.).

- **Viability**: Maximise residents’ access to goods, services and opportunities within a region, and ensure the optimal use of available land, services and facilities in the region in a manner that can be sustained over time.

The Gauteng Spatial Development Framework 2030 is furthermore based on four (4) key spatial development strategies (that engage the six spatial objectives in varying degrees of relevance), namely:

- Building an Integrated Network;
- Capitalising on Proximity;
- Managing Settlement Development and Growth; and
- Creating a Viable and Productive Hinterland.

These four strategies ultimately make up the composite Gauteng Spatial Development Framework 2030 as depicted on **Figure 3**.

From Figure 3 the following are directly relevant to the MLM:

- Incremental development of the strip of land between R82 and N1 that traverses the Midvaal area to the west;
- Consolidation and expansion of the urban footprint along the R59 corridor;
- Proposed infill development between the R59 corridor and the City of Johannesburg to the north;
- The southern extents of Midvaal were identified as one of a number of provincial agricultural hubs;
- Proposed extensive agriculture in the remaining northern extents of the LM;
- Development of the Vaal Marina as a tourism/ cultural node
4.9 Gauteng 25-Year Integrated Transport Master Plan (GITMP25, 2013)

The Gauteng Integrated Transport Master Plan (GITMP25) aims to deliver a **world class and sustainable transport system** that supports Gauteng’s economic, social, cultural, and environmental goals. It provides a planning framework which assists government at all three levels to develop a comprehensive transport system over the next 25 years. It further empowers the Gauteng Department of Roads and Transport (GDRT), in collaboration with other spheres of government, to plan, regulate and develop an integrated and efficient transport system for the province that serves the general public interest. It also strives to embody the principles of an efficient, competitive and responsive economic infrastructure network that prioritises public transport.

The founding **principles** for the GITMP25 are:

- Integration of land use with transport, as well as integration of networks, modes and services;
- Being “smart” by using scarce resources more effectively and application of suitable technology;
- Social inclusion and beneficiation; and
- Promotion of a more sustainable Gauteng City Region (GCR).

GITMP25 is furthermore centered around the following ten interventions of which the first three relate to land use:

<table>
<thead>
<tr>
<th>INTEGRATED TRANSPORT INTERVENTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land Use Development</strong></td>
</tr>
<tr>
<td>1 Subsidised housing provision within urban core areas</td>
</tr>
<tr>
<td>2 Facilitating local economic development outside the urban core</td>
</tr>
<tr>
<td>3 Land use densification in support of public transport</td>
</tr>
<tr>
<td><strong>Strategic Public Transport Network</strong></td>
</tr>
<tr>
<td>4 Reinforcing passenger rail network as the backbone of the system</td>
</tr>
<tr>
<td>5 Extending the integrated rapid and road-based public transport networks</td>
</tr>
<tr>
<td>6 Capacity building in the transport industry</td>
</tr>
<tr>
<td><strong>Freight Transport</strong></td>
</tr>
<tr>
<td>7 Strengthening intermodal freight hubs</td>
</tr>
<tr>
<td><strong>Road Transport</strong></td>
</tr>
<tr>
<td>8 Travel demand management</td>
</tr>
<tr>
<td>9 Mainstreaming non-motorised transport</td>
</tr>
<tr>
<td>10 Continued provincial wide mobility</td>
</tr>
</tbody>
</table>

Key to the GITMP25 is the focus on public transport with the rail system being the backbone of the network (in line with NATMAP). This is in order to enable a shift from private vehicles to reduce congestion, enhance public transport efficiency and promote sustainability of the province as a whole. GITMP25 proposes that public transport be the catalyst towards social integration of society and be applied as such in the Gauteng City Region.
Freight rail and the movement of freight from road to rail is a key departure point, which includes the focus on the development of major rail-based freight logistic hubs, located on the periphery of the core urban areas. This is to reduce extensive heavy vehicle freight traffic moving through core urban areas, taking up road space and adding to congestion. PWV18 is particularly relevant to the study area (refer to Figure 4).

Importantly, route K154 forms part of the Ennerdale-Chamdor Corridor/ east-west linkage that is vital to open up the southern parts of the Province and stimulate local economic development. The section up to Klipriver has already been constructed; while the section from Klipriver to Walkerville has been prioritised in the GITMP25. This link will eventually be further extended to a proposed interchange onto the N1 national freeway at Elandsfontein in Midvaal, before extending westward into the City of Joburg MM and up to Chamdor in Mogale City.

4.10 Sedibeng District Regional Spatial Development Framework (RSDF)

The Sedibeng DM RSDF is a legislative mechanism to address the developmental challenges of the district municipality and to give an overview of the desired spatial form to be achieved in the long term.

The key structuring elements in the Sedibeng District were divided into six (6) elements/categories and are as follows (also refer to Figure 5):

- **Primary Nodes**: Vereeniging and Vanderbijlpark CBDs.
- **Secondary Nodes**: Meyerton and Heidelberg
- **Tertiary Nodes**: Vischkuil/ Endicott, Devon/ Mpumelelo, the Nampak/ Everite area, Sebokeng (vicinity of the hospital/ rank) and Evaton (along the Golden Highway).
- **Zone of Opportunity**: At the intersection of N3 and R42 (mixed retail development).
- **Development Corridors**: R59 Freeway (between Meyerton/ Vereeniging), N17 Freeway (intersection N17/R24 and N17 /R550), and N3 Freeway (intersections with R23, R42 and R550).
- **Mobility Corridors**: Route R54 (between Sebokeng and Vereeniging), Route R82 (between Vereeniging and De Deur) and Route R42.
categories and are as follows (also refer to Figure 5):

- **Primary Nodes**: Vereeniging and Vanderbijlpark CBDs.
- **Secondary Nodes**: Meyerton and Heidelberg
- **Tertiary Nodes**: Vischkuil/Endicott, Devon/ Mpumelelo, the Nampak/ Everite area, Sebokeng (vicinity of the hospital/ rank) and Evaton (along the Golden Highway).
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- **Development Corridors**: **R59 freeway** (between Meyerton/ Vereeniging), N17 Freeway (intersection N17/R24 and N17 /R550), and N3 Freeway (intersections with R23, R42 and R550).
- **Mobility Corridors**: Route R54 (between Sebokeng and Vereeniging), **Route R82** (between Vereeniging and De Deur) and Route R42.

The Sedibeng District Municipality seeks to address past spatial planning imbalances by bringing services and economic opportunities close to previously disadvantaged areas. This initiative is supported by the proposed consolidation of development in a conurbation including Vanderbijlpark, Vereeniging, Meyerton and Sebokeng.
GITMP25: 2037 Road Network

Legend
- Existing Class 1
- GFIP Phase 2 & 3
- Class 2
- Freight & Mobility
<table>
<thead>
<tr>
<th>Project Title</th>
<th>Description</th>
<th>Strategic Importance of Projects</th>
<th>Implementation Agent</th>
<th>Municipality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure the development of the R59 Corridor</td>
<td>Corridor with well-established road and rail infrastructure. Various developments along the corridor to be promoted and facilitated, especially light industrial and manufacturing. Residential development at higher densities should also be promoted to increase feasibility of public transport.</td>
<td>• Economical growth and diversity • Increased job opportunities • Increased public transport</td>
<td>Private Sector developments, municipality to provide infrastructure</td>
<td>Midvaal Local Municipality</td>
</tr>
<tr>
<td>Savanna City</td>
<td>Integrated Housing project with 18 000 households proposed. The first development in SA where township has been linked to financial and urban management model. 20% (3738 houses) of the development (18 691 mixed housing) will be dedicated to low-cost housing.</td>
<td>• Densification in areas close to economic activities • Social inclusion • Create densities to support public transport</td>
<td>A developer driven project by Basil Rad in partnership with Old Mutual.</td>
<td>Midvaal Local Municipality</td>
</tr>
<tr>
<td>Klipriver Business Park and Graceview</td>
<td>The home of Heineken Brewery, Pick n Pay will be constructing a distribution centre of 300 000m², currently busy constructing a trailer manufacturing company measuring 30 000m².</td>
<td>• Major investment in area • Consolidation of development corridor and optimal use of engineering services • Job creation opportunities • Increased rates base</td>
<td>Private Sector</td>
<td>Midvaal Local Municipality</td>
</tr>
<tr>
<td>Sicelo Precinct</td>
<td>Construction of mobility spine roads. Creating safe road crossing intersections. Establishment of informal trading in the area.</td>
<td>• Upgrading/consolidation of area • Increased accessibility</td>
<td>Public Sector</td>
<td>Midvaal Local Municipality</td>
</tr>
</tbody>
</table>
4.11 Neighbouring Municipalities’ SDFs

4.11.1 Emfuleni Local Municipality

The development concept drafted for Emfuleni aimed to strengthen the role of the ELM as the southern anchor of the greater Emfuleni-Johannesburg-Tshwane axis. The ELM Development Framework is illustrated on Figure 6. The proposals relevant to the MLM include:

- The following regional linkages were noted as part of the strategic road network:
  - K53 (Golden Highway) and P156/ R59 freeway, which connects Johannesburg and Germiston to the Vanderbijlpark CBD and the Vereeniging CBD respectively;
  - K83, which connects Evaton to Meyerton via the planned Savanna City development;
  - Vereeniging-Meyerton-Germiston freight railway line, utilised for industrial and commercial development.
- Limited commercial/ light industrial development is supported to the north of Vereeniging, bordering onto the MLM.
- Medium density infill development is encouraged between Vereeniging and Sebokeng, some of which might spill over to Midvaal.
- High density residential development was also proposed adjacent to De Deur in the MLM.
- Agriculture and intensive agricultural activities are supported in certain areas along the eastern border of the LM, though the bulk of agricultural activities are consolidated in the west.
- To give effect to the River City Concept, the SDF supports developing the precinct along the Vaal River in the south as a tourism destination.

4.11.2 Lesedi Local Municipality

The Lesedi LM SDF (2012) is illustrated on Figure 7. Midvaal shares the western border of Lesedi LM; the proposals that affect the study area are briefly discussed below:

- Lesedi is a predominantly rural area with two urban nodes, namely Heidelberg/ Ratanda and Devon/ Impumelelo.
- Route R42 to Vereeniging traverses the study area and was earmarked as a tourism corridor. The Blesbokspruit, Suikerbosrand River and their various tributaries should be regarded as ecologically sensitive areas and be protected.

- Lesedi LM shares the Suikerbosrand Nature Reserve with the MLM. The Reserve was earmarked as one of two ecological focus areas in the LLM. According to the SDF the Reserve should be conserved and promoted as eco-tourism and recreational centres. An ecological transition (buffer) area should be created around the resource.

- To the south the Lesedi municipal area also comprises a ridges precinct, similar to the ridges in Midvaal. The ridges and Suikerbosrand Nature Reserve act as a buffer to urban development from Lesedi (specifically Heidelberg) spilling over into Midvaal LM.

4.22.3 City of Johannesburg Metropolitan Municipality

The City of Johannesburg SDF 2010-11 is graphically illustrated on Figures 8a and 8b and the relevant directives that affect the Midvaal LM are discussed below:

- The most prominent inter-municipal linkages between the City of Johannesburg (CoJ) and Midvaal LM are namely the R59 (Golden Highway), R82 (Old Vereeniging Road) and the railway line linking Germiston with Ekurhuleni Metro.

- It was proposed that the bulk of investment be consolidated along the N1 and R59 corridors and in the surrounding urban complex.

- Incremental consolidation of the Lenasia, Ennerdale, Orange Farm low income urban conurbation in the south-west of the City is likely to spill over to the MLM in time.

- The Klip River conservation area acts as a buffer between the CoJ and Midvaal in the vicinity of Tedderfield and Eikenhof. This south-eastern part of the City of Johannesburg area of jurisdiction was earmarked for conservation and/or agriculture.

4.12 Conclusive Summary

Municipalities throughout South Africa are finding it increasingly difficult to provide its inhabitants not only with cost-effective and equitable infrastructure, but also with sufficient social infrastructure and economic opportunities. For this reason, development in South Africa is guided and directed by a range of national, provincial and local development policies, as discussed. The most prominent development directives emerging from the various developments policy documents, which should inform the development of an SDF for the MLM includes:
CoJ Spatial Development Framework

The Spatial Development Framework

Growth Management Strategy
- **National Development Plan (NDP)**
  - Gauteng Province was identified as a core economic area of the country in terms of highly diversified economic activities.

  **Urban Areas**
  - Upgrading of informal settlements;
  - Urban densification within existing urban fabric and along development corridors;
  - Extensive provision and prioritisation of public transport;
  - Job creation and urban renewal in former township areas;
  - Diverse range of subsidised housing typologies and densities, and focusing on filling the housing “gap market” in terms of bonded housing.

  **Rural Areas**
  - Spatial consolidation of rural settlements to increase densities and enhance sustainability;
  - Innovative (green), targeted and coordinated infrastructure delivery;
  - Prioritise rural development along mobility corridors and at strategic intersections;
  - Rural nodal development and revitalisation of small towns;
  - Diversification of rural economy towards mining, tourism and local business.

- **Medium Term Strategic Framework (MTSF)**
  - Respond to development imperatives as set out by National Outcomes, focusing especially on youth, job creation, equity, public transport, internet access, access to basic services, and industrial development.

- **Industrial Policy Action Plan (IPAP)**
  - “Green” and energy-saving industries;
  - Agro-processing, linked to food security and food pricing imperatives;
  - Creative and cultural industries linked to tourism in the Province;
  - Business process services;
  - Electro-technical and ICT.

- **Comprehensive Rural Development Programme (CRDP)**
  - Seeks to advance rural development through a three-pronged approach: Agrarian Transformation, Targeted Infrastructure Provision and Tenure Reform;
  - The entire Gauteng Province is a CRDP focus area – including all rural parts of Midvaal.

- **Gauteng Global City Region Strategy**
  - The Midvaal local economy, though located peripherally, forms part of the greater Gauteng City-Region, with the R59 freeway forming a vital part of the regional movement network.
  - The MLM should be prepared for in-migration related to (real or perceived) better work and education opportunities, higher levels of access to good housing and essential household infrastructures, and proximity to urban amenities.

- **Gauteng Provincial SDF (GSDF)**
- Contain urban development within the existing Gauteng urban footprint;
- Prioritise development along the major public transport network in the Province (Gautrain, PRASA rail and BRT networks);
- Utilise well-located vacant land within the existing urban footprint for infill development;
- The following strategic development initiatives are directly relevant to the MLM:
  - Incremental development of the western parts of the municipality in the strip of land between route R82 and N1 (from De Deur towards Elandsfontein);
  - Consolidation and expansion of the urban footprint along the R59 corridor;
  - Proposed infill development between the R59 corridor and the City of Johannesburg to the north;
  - The south-eastern extents of Midvaal were identified as one of three agricultural hubs in the SDM;
  - Proposed extensive agriculture in the remaining northern extents of the LM;
  - Development of the Vaal Marina and Suikerbosrand Nature Reserve as Provincial Tourism/ Cultural Nodes.

• GITMP25

- Promote the rail system as the backbone of the Provincial movement network, including the Vereeniging-Meyerton-Germiston freight railway line;
- Utilise public transport as a catalyst towards social integration of society;
- Densification along public transport corridors should maintain net densities of at least 80 units per hectare.

• Sedibeng GDS 2

- Meyerton was identified as a Secondary Development Node in the District, and the Primary Node along the R59 corridor;
- R59, R82 and Route R550 were identified as Development Corridors;
- The Vaal Marina was prioritised for development;
- The Midvaal LM should consider also focusing on the sectors identified for future diversification and intensification within Gauteng Province as a whole, namely:
  - Smart Industries (including ICT, Pharmaceuticals);
  - Trade and Services (including Finance and Film);
  - Tourism
  - Agriculture (agri-processing and bio-tech);
  - Manufacturing (steel related industries, automotive parts and components, beer and malt);
  - Infrastructure expansion and investment.

• Sedibeng RSDF

- Identified Meyerton as a Secondary Node in the District.
- Identified the R59 freeway between Meyerton and Vereeniging as a Development Corridor, as well as the R82 between Vereeniging and De Deur.
- Other development nodes in Midvaal include the Vaal Marina and Savanna City.
- Highlights the need for diversification of economic base of the District.
- The important economic sectors identified were namely:
  - Manufacturing (SASOL, Heineken, Liquid Fuel Mass Storage Hub, Coca-Cola South
Africa, BHP Billiton Manganese Metalloys plant in Meyerton, DCD ringrollers in Vereeniging)
- Industrial and commercial development (especially in the Vereeniging-Vanderbijlpark-Evaton/Sebokeng triangle), Heineken Brewery (Klipriver), Samancor (Meydustria)
- Tourism (Suikerbosrand Nature reserve and Vaal Dam area)
- Agriculture (Maize Triangle Scheme, and area between Suikerbosrand Nature Reserve and Klipriver).

### Emfuleni SDF
- K83 that links Evaton and Meyerton via Savanna City earmarked as strategic regional link;
- Vereeniging-Meyerton-Germiston freight railway line is strategic link;
- Proposed medium density infill development between Vereeniging and Sebokeng, and proposed high density residential development adjacent to De Deur in the MLM;
- Intensive agriculture activities proposed along the remainder of the eastern border of Emfuleni LM.

### Lesedi SDF
- Route R42 to Vereeniging earmarked as a tourism corridor;
- Suikerbosrand Nature Reserve to be conserved and promoted as eco-tourism and recreational centre;
- The ridges in the south of Lesedi act as a buffer to urban development from Heidelberg spilling over to Midvaal.

### City of Joburg SDF
- Strategic linkages between the CoJ and MLM are namely the R59, R82 and the railway line linking Germiston and Ekurhuleni;
- Proposed N1 and R59 corridors;
- Growth of nearby low income conurbation (Lenasia, Ennerdale, Orange Farm) is likely to spill over to the MLM in time.

## 5. SPATIAL ANALYSIS AND SYNTHESIS
### 5.1 REGIONAL CONTEXT: SEDIBENG DISTRICT

The Midvaal Local Municipality is one of three local municipalities located in the Sedibeng District Municipality, which constitutes the southernmost local authority in Gauteng Province (Figure 9). It is furthermore bordered by the Mpumalanga Province (Dipaleseng LM) to the east and the Free State Province (Metsimaholo LM) to the south.

Figures 10a and 10b illustrate the distribution and relative size and composition of job opportunities in the Gauteng Province in 2010 and projected to 2037 respectively. The Midvaal municipal area is situated south of the main concentration of current and future economic activities in Gauteng. The area between the City of Johannesburg, OR Tambo International Airport (ORTIA) and City of Tshwane (CoT) was identified through the Gauteng Spatial Development Framework as the core economic.
focus area in which the bulk of economic development of Gauteng Province is expected to take place in future.

The Emfuleni municipal area constitutes the major centre of economic activity in the southern parts of Gauteng Province but there is a significant lack of economic activity in this region compared to the central and northern parts of Gauteng as evident from Figures 10a and 10b.

5.2 INSTITUTIONAL CONTEXT

5.2.1 Wards and Regions

The Midvaal Local Municipality was established in 2000, when the town of Meyerton split from Vereeniging (Emfuleni Local Municipality) and joined five Rural Area Committees to create the new Midvaal Local Municipality.

The Midvaal LM is a Category B municipality as defined in the Municipal Structures Act and is divided into 15 wards as depicted on Figure 11. The rural south-eastern parts of the LM all form part of Ward 1, while the Suikerbosrand Nature Reserve is in Ward 4. The agricultural holdings, together with the R82 and associated settlements (in the west) fall within Wards 5, 6, 7 and 11. Finally, the urbanised area along the R59 freeway comprises Wards 2, 3, 8, 9, 10, 13, 14 and 15. Waterval to the north is part of ward 12.

5.2.2 Land Use Management

At present the Midvaal Municipality is making use of a single land use scheme called the Midvaal Land Use Scheme adopted in 2017. The Scheme is used to determine the legally registered/approved development rights on any property within the municipal area;

- To compare existing rights with potential rights as depicted in the municipal Spatial Development Framework;
- To determine the most appropriate procedure to follow in acquiring new development rights on a property.

The need for uniform land use management measures and policies throughout the Midvaal area is paramount.
5.3 SOCIO-ECONOMIC PROFILE, LOCAL MIGRATION PATTERNS AND POPULATION PROJECTIONS

5.3.1 Socio-Economic Profile

The following section depicts the demographic profile of the MLM, comprising extracts from the Midvaal Economic Development Analysis (Demacon, 2014) and additional information obtained from the Stats SA 2016 Community Survey.

Population and Household Dynamics

As shown on Table 2 Midvaal is the smallest of the three local municipalities in the Sedibeng District, comprising 12% of the Sedibeng District population. The total municipal population in Midvaal grew from 64 640 in 2001 to 95 301 in 2011, and to 111 612 in 2016. This represents an increment of 30 661 in the 10 years between 2001 and 2011, and an additional 16 311 from 2011 to 2016. The year on year growth for the total population for the past 5 years was 3.21% – representing 3262 people per year (far above the District growth rate which stands at 0.88 for this period).

Table 2: Sedibeng District and Local Municipalities Population: 2011-2016

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2016</th>
<th>2011-2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
</tr>
<tr>
<td>GT421: Emfuleni</td>
<td>354,862</td>
<td>366,800</td>
<td>721,663</td>
</tr>
<tr>
<td>GT422: Midvaal</td>
<td>49,178</td>
<td>46,123</td>
<td>95,301</td>
</tr>
<tr>
<td>GT423: Lesedi</td>
<td>51,317</td>
<td>48,203</td>
<td>99,520</td>
</tr>
<tr>
<td>DC42: Sedibeng</td>
<td>455,358</td>
<td>461,126</td>
<td>916,484</td>
</tr>
<tr>
<td>Gauteng</td>
<td>6,189,875</td>
<td>6,082,388</td>
<td>12,272,263</td>
</tr>
</tbody>
</table>

Age Profile and Employment

The age profile of an area provides valuable insight into the working age population of an area and can therefore be translated into whether an area has a large enough working age population to maintain and expand economic activities.

According to Census 2011, approximately 70% of the total Midvaal population falls in the potential economically active population (EAP), implying that a large proportion of the population form part of the potential workforce and require employment opportunities in the Municipality.

Of the economically active population in Midvaal, 81.2% are employed and 18.8% unemployed.
Level of Education

The highest level of education achieved by the population informs the employment and income potential of the local population. **Diagram 1** overleaf compares the highest level of education for the population in the three local authorities in Sedibeng.

In Midvaal LM, 55% of the population have not completed secondary education (up to Grade 12).

**Diagram 1: Highest Level of Education (population segment aged 20 years and older)**

Source: Stats SA: 2016 Community Survey

Household Income Distribution

Average household income is a direct indicator of consumer demand for a broad spectrum of economic goods and services and the quantity of additional floor space that could be sustained by a given consumer market. Average household income, to an extent, also reflects the living standard of a household, and influences aspects such as asset ownership.

**Diagram 2** overleaf indicates that the local population is a predominantly low to middle income community.

- The weighted average annual household income in the market area for 2014 amounts to:
  - R189 524 per annum, which translates into R15 794 per month (All LSM groups)
  - R254 234 per annum, which translates into R21 186 per month (LSM 4 to 10+)
- A significant portion of the population in the market area earns no income at all (13.9%).

The income profile affirms a consumer market with a predominant demand profile for lower to lower-middle-end residential and commercial products.
Diagram 2: Average Annual Household Income of MLM compared with Gauteng, 2014

Internal comparison reveals that the Central Region (comprising the R59 corridor and related urban areas) has the highest weighted annual income level in the municipal area, while the Eastern Region (largely rural) has the lowest.

Living Standard Measurement (LSM) Profile

Diagram 3: Midvaal LSM Profile, 2011

Essentially, the Living Standard Measurement (LSM) system is a wealth measure based on standard of living, rather than income alone. As evident from Diagram 3, the bulk of households (44.0%) in the MLM are located within the first to third LSM levels (low living standard). This is followed by a large section (41.8%) of the population falling within LSM groups 4-10. A notable section (14.2%) of the Midvaal LM population falls within the LSM 10+ group (very high living standard).

It is worth noting that the LSM profile together with the education levels of the Midvaal LM population serve as a proxy to the promising economic conditions – including employment opportunities – of the municipal area. It was found that the best associations between high living standards, level of education and job opportunities, was namely in the local government sector, financial sector, and manufacturing sector.
5.3.2 Midvaal Migration Patterns

The following section comprises extracts from the Midvaal Migration Plan (2014) which found that approximately 37 000 people migrated to the study area between 2001 and 2011. This translates to about 3 700 people per annum. The total migrant population includes those who relocated domestically and foreigners who relocated from another country.

The majority of migrants in Midvaal Local Municipality (70%) relocated from other regions/municipalities of Gauteng. Migration from outside South Africa accounted for approximately 11% of migration. Approximately 72% of international migrants to Midvaal Local Municipality migrated from the SADC region. It was also found that the primary age groups that relocate to the area are between 18 and 40 years. Roughly 64% of foreign migrants in Midvaal Local Municipality are males; and almost 90% of foreign migrants are in the potential economically active population.

Of the proportion of domestic population that migrated to Midvaal Local Municipality between 2001 and 2011, 60% constituted black migrants, while 38% were white; while more than 90% of foreign migrants in Midvaal LM were black, and 7% were white.

The bulk of the municipal population are consolidated in the north-western parts of the LM, and specifically along the R82 and R59 freeways, the precinct in between the two freeways, and in and around Meyerton as is evident from Figure 12.

Furthermore, a comparison between 2001 and 2011 data illustrates that the urban areas (such as Meyerton, Golf Park, Randvaal and Risiville) and nearby agricultural holdings are the focus of the majority of residential growth (indicating urbanisation).

It was determined that people selected Midvaal to relocate to because of a number of reasons including:
- Its central location among major economic nodes.
- The availability of land to relocate to, and the perception that space is limited in major areas such as Johannesburg and Ekurhuleni.
- Perception of employment opportunities because of major construction activities in the municipality.
- Some foreign migrants relocate to the municipality in order to hide from local authorities and avoid prosecution.
Population Dynamics (2001 to 2011)
Popular Migrant Destinations

The research showed that domestic migration is distributed throughout Midvaal Local Municipality. The foreign migrated population are, however, clustered mainly around the R550 and R59 interchange. It appears that foreign migrants are locating to farms and agricultural holdings, in other words the northern, north-eastern, central and north-western regions of the Municipality; as well as selected areas along the R59 freeway, such as portions between Daleside and Henley-on-Klip, and certain parts of Henley-on-Klip. Foreign migrants are also locating to Sicelo settlement and Balmoral Agricultural Holdings (AH) to the east and Vaal Marina in the south. Relocation to informal settlements on the peripheries of urban areas was also a key choice. Lakeside Estate is an example of new development with migrants relocating to the region to find temporary construction work.

Migration trends indicate the location of migrated population primarily in the central and western regions of Midvaal LM and in formal residential areas and small-holdings in particular. The highest migration rates are in the primary urban and agricultural holdings regions – areas such as Meyerton, Kookrus, Rothdene, Riversdale, Ophir AH, Ohenimuri, Drumblade and Waterval show significant proportions of migrated population for the period 2001 to 2011.

Areas that had migration rates above 50% of the population include Lakeside Estates, Klipview AH, Homestead Apple Orchards, Walkersville Fruit Farms, Ophir, and select sections of Sicelo and Rothdene. These trends show a preference for urban-related migration.

Proposed Approach to Migration Management

According to the MLM Migration Plan, Council must actively direct spatial development and contribute to a compact city as a means of addressing migration pro-actively. This includes the following objectives:

- Accelerate spatial restructuring;
- Improve city fabric to ensure more liveable neighbourhoods;
- Limit the urban development footprint (and consequent spatial impact on the environment);
- Create better economies of scale for engineering and public services (improve urban efficiency);
- Promote integrated mixed land use that provides employment opportunities to residents close to their work.

Secondary principles that were identified include the following:

- Contribute to improved living conditions
- Plan for population growth and social facilities
- Promote social cohesion, inclusion and protection of all population groups
- Develop markets and fight against unemployment
- Develop market-related skills
- Enable migrant contributions to reach economic growth for the well-being of the population
- Environmental conservation, agricultural and sustainable development
- Direct future corridor development through sustainable infrastructure investment
- Streamline migration into development planning

The above objectives and principles should be incorporated in the Midvaal SDF proposals.

5.3.3 Population Projections

The Midvaal Migration Plan documents three scenarios of population growth in the study area, exploring the changes to in-migration and the likely effects on spatial development and the demand for housing and related services in each of the scenarios. The findings are summarised below:

Table 3: Core Assumptions of Population Growth Scenarios

<table>
<thead>
<tr>
<th>Scenario 1: Continuation of Historical Growth Trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Total population growth continues at current trends (4% per annum)</td>
</tr>
<tr>
<td>• High in-migration patterns</td>
</tr>
<tr>
<td>• High population gain due to positive net migration</td>
</tr>
<tr>
<td>• Natural population growth slightly above national average</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scenario 2: Decreased Population Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Total population growth decreases below current trends (3.5% per annum)</td>
</tr>
<tr>
<td>• In-migration patterns decrease</td>
</tr>
<tr>
<td>• Reduced population gain owing to decreased positive net migration</td>
</tr>
<tr>
<td>• Natural population growth slightly above national average</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scenario 3: Substantial Decrease in Population Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Total population growth decreases to approximate growth experienced by the province (2.9% per annum)</td>
</tr>
<tr>
<td>• In-migration patterns decrease significantly</td>
</tr>
<tr>
<td>• Population gain owing to positive net migration significantly decreased</td>
</tr>
<tr>
<td>• Natural population growth slightly above national average</td>
</tr>
</tbody>
</table>

Source: MLM Migration Plan, 2013

The results for the three scenarios are graphically illustrated on Diagram 4 (population) and Diagram 5 (households) below.

It is evident from Diagram 4 that the three population growth scenarios for Midvaal predict that the population will increase from 107 072 in 2014 (based on Kayamandi’s projections of 2011 census data) to between 126 799 and 135 156 in 2020. This indicates an increment of between 19 727 and 28 084 in six (6) years, which translates to growth of between 3288 and 4681 people per annum.
The three scenarios predict household growth of between 39,867 and 42,495 by 2020 (Diagram 8). This represents an increment of between 6,202 and 8,830 households in the period from 2014 to 2020, which translates to between approximately 1,034 and 1,472 new households per annum.
5.4 ENVIRONMENTAL FEATURES

5.4.1 Hydrology and Topography

The Klip River with its main tributaries like the Natal Spruit, the Varkensfontein Spruit, as well as the Suikerbosrand River constitute the main drainage system within the northern and central parts of the Midvaal area, while the Vaal River and Vaal Dam are the most prominent features in the southern and south-eastern parts (see Figure 13). This network provides for a comprehensive open space system to be incorporated into the future spatial structure of the municipal area.

There are two major ridges precincts located within the Midvaal municipal area. These include the Platberg-Perdeberg complex in the north-western quadrant of the municipal area between Homestead Apple Orchards A.H. and Tedderfield A.H.; as well as the Vaalkop-Skurwerant-Bezuidenhoutsberg- Langberg-Bakenkop complex located in the south-eastern parts of the municipal area between Vaal Marina and the Suikerbosrand Nature Reserve.

5.4.2 Geology

The far northern parts of the MLM fall within a massive dolomite belt that passes through the southern extents of the City of Johannesburg. The major areas in Midvaal that are impacted upon by the presence of dolomite are reflected on Figure 13 and includes the northern extents of the R59 corridor. This is a major physical structuring element which affects potential development in the area.

5.4.3 Agricultural Potential

Figure 14 gives an indication of the distribution of high potential agricultural land in the Gauteng Province. It is evident that the municipal area is generally a high potential agricultural area with the largest concentration of high potential land located around Klipriviersberg to the north and in the agri-hub which covers the largest part of the south-eastern extents of the municipality.

5.4.4 Nature Reserves and Conservancies

The Suikerbosrand Provincial Nature Reserve located in the north-eastern part of Midvaal is a major structuring element and is legally protected from development (refer to Figure 15). There are also eight registered conservancies in the LM, namely Kliprivier-Suikerboschrand Conservancy, Welverdiend Triangle Conservancy, Thorntree Conservancy, Henley-on-Klip Conservancy, Drumblade Conservancy, Apple Orchards Conservancy, Klipkraal Conservancy, and Vaaldam Conservancy.
5.4.5 Biodiversity

The Gauteng Conservation Plan (C-Plan 3.3) offers guidance with regards to the location of areas with high biodiversity including ridges and environmental corridors. As is evident from Figure 16, much of the north-western extents of the LM up to the R59 freeway, the entire area surrounding the Suikerbosrand Nature Reserve in the north-east, the far-eastern corner of the LM, as well as the Vaal Marina precinct adjacent to the Vaal Dam in the south were earmarked as ‘important’ areas with regards to biodiversity. These precincts should be protected accordingly.

5.4.6 Gauteng Provincial EMF Guidelines

The Draft Gauteng Environmental Management Framework (EMF, 2014) is strongly linked to the Gauteng Spatial Development Framework (GSDF) and has divided the Province into five Environmental Zones, based on the desired prominent land use activity per zone, and related environmental guidelines (refer to Figure 17). The five zones are namely:

- Zone 1: Urban Development Zone
- Zone 2: High Control Zone (within the Urban Development Zone)
- Zone 3: High Control Zone (outside the Urban Development Zone)
- Zone 4: Normal Control Zone
- Zone 5: Industrial and Large Commercial Focus Zone

The five Zones are briefly summarised in the table below in terms of the intention, composition and conditions of each. Development in Midvaal should adhere to the EMF Guidelines as described.

Two additional categories exist, namely Protected Areas, together with a number of Special Management Zones. The Vaal Dam Special Management Zone and Johannesburg South Special Control Zone are relevant to the study area and are also described below.

<table>
<thead>
<tr>
<th>Zone 1: Urban Development Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intention</strong></td>
</tr>
<tr>
<td>The intention with Zone 1 is to streamline urban development activities in it and to promote infill development, densification and concentration of urban development within the urban development zones as defined in the Gauteng Spatial Development Framework (GSDF). Certain currently listed activities may be exempted from environmental assessment requirements at the discretion of the competent authority.</td>
</tr>
<tr>
<td><strong>Composition</strong></td>
</tr>
<tr>
<td>The Urban Development Zone is composed of the following control areas (as per the GSDF):</td>
</tr>
</tbody>
</table>
- LC01: Urban existing developed land;
- LC02: Urban development priority;
- LC03: Rural development priority;
- LC04: Rural and urban development priority.
- ISM01: Conservation and agricultural priorities;
- ISM02: Conservation and urban development priorities;
- ISM03: Conservation, urban development and rural development priorities;
- ISM04: Agriculture and urban development priorities;
- ISM05: Agriculture, conservation and rural development priorities;
- ISM06: Agriculture, conservation and urban development priorities;
- ISM07: Agriculture, conservation, urban development and rural development priorities; and
- ISM08: Agriculture, rural and urban development priorities.

**Conditions**

- Development in this area must be sustainable in respect to the capacity of the environment and specifically the hydrological system to absorb additional sewage and stormwater loads as a result of increased densities;
- Existing open spaces should be retained as open space for the foreseen increased densities; and

**Application**

- The entire area around the R59 Development Corridor as well as the east-west link from Klip River towards Walkerville, Elandsfontein and Ennerdale are included in this zone. Large scale developments around route R82 in the western parts of Midvaal like Lakeside/De Deur and Savanna City are, however, excluded.

**Zone 2: High Control Zone (within the Urban Development Zone)**

**Intention**

*Sensitive areas within the urban development zone must be conserved and where linear development (roads etc.) cannot avoid these areas, a proper assessment and implementation of alternatives must be undertaken.*

**Composition**

Sensitive areas within the Urban Development Zone include:
- Conservation priority areas (CBAs);
- Rivers (including 32m buffers);
- Ridges;
- Areas that are sensitive (as determined in the sensitivity assessment); and
- Protected areas.

**Application**

The ridges located in the Urban Development Zone between Klip River Business Park and Walkerville-Elandsfontein have been included under this category.

**Zone 3: High Control Zone (outside the Urban Development Zone)**

**Intention**

Special control zones are sensitive areas outside the urban development zone. These areas are sensitive to development activities and in several cases also have specific values that need to be protected.

**Composition**

The following areas have been identified in this zone:
- Rivers (including a 32m buffer on each side) and currently undeveloped Ridges that must be conserved;
- The maintenance of current protected areas;
- The creation of the Vaal Dam conservation and recreation area with the focus on grassland conservation and extensive recreation activities;
- The creation of the Johannesburg south conservation, recreation and intensive small scale agriculture area.

**Conditions**

*No listed activities may be excluded from environmental assessment requirements* in this zone and further activities may be added where necessary to protect the environment in this zone. Additional requirements (guidelines, precinct plans, etc.) to ensure the proper development of identified areas in this zone, in a manner that will enhance their potential for conservation, tourism and recreation may be introduced.

**Application**

The ridges in the agricultural hub of Midvaal in the south-east, and the ridges in the far-north-western extents of the municipality around Tedderfield and the Klip River Nature Reserve fall under this category.

---

**Zone 4: Normal Control Zone**

**Intention**

This zone is dominated by *agricultural uses* outside the urban development zone as defined in the Gauteng Spatial Development Framework. *No listed activities may be excluded from environmental assessment requirements in this zone.*

**Composition**

The normal control zone is comprised of the following areas outside the SDF area and special control areas:

- LC01, LC02, LC03, LC04, ISM01, ISM02, ISM03, ISM04, ISM05, ISM06, ISM07, ISM08 [see Zone 1 for details]

**Application**

All the areas characterised by extensive agriculture in Midvaal are included in this category.

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**Zone 5: Industrial and Large Commercial Focus Zone**

**Intention**

The intention is to consolidate non-polluting industrial and large scale commercial (warehouses etc.) activities in areas that are already used for such purposes and areas that are severely degraded but in close proximity to required infrastructure (such as old and even current mining areas). *Certain currently listed activities, in addition to those intended for Zone 1 may be excluded from environmental assessment requirements in this zone.*

**Conditions**

- Development in this area must be sustainable in respect to the capacity of the environment and specifically the hydrological system to absorb additional sewage and stormwater loads of increased densities; and
- Development in this area must identify any unmapped wetlands, especially seep areas that may occur on any site and when necessary apply for the required water use licence.

Non-polluting Industrial Promotion Areas where selected activities are to be excluded from EIA processes in addition to those excluded in Zone 1.

**Application**

This category includes all the industrial/commercial clusters along the R59 Development Corridor.

**Protected areas**

Each protected area is required to have a management plan in terms of NEM: Protected Areas Act. Compatible, conditionally compatible and undesirable development and land-uses in protected areas...
5.5 MUNICIPAL SPATIAL STRUCTURE

5.5.1 Land Use Composition and Distribution

The Midvaal LM is approximately 1722 km² in extent and is predominantly rural in nature (Figure 18). It comprises extensive commercial farming areas which cover approximately 50% of the total municipal area. There are several natural features impacting on land use development in the municipal areas including the Suikerbosrand Nature Reserve; the two clusters of ridges in the municipal area (north and south-east); the Vaal River and Vaal Dam to the south; and the Klip River running parallel to the east of route R59 through the central parts of the municipality.

Urban activities in Midvaal is mainly concentrated along the R59 freeway in the central extents of the municipal area while increased urbanisation pressure is also experienced in the De Deur area along route R82 to the west.

Meyerton town which includes Riversdal, Rothdene, Kookrus and Golf Park – represents the highest order urban complex in the Midvaal area and is located along the southern extents of route R59. Further towards the north along route R59 is Henly-on-Klip, Randvaal, Daleside and Waterval. This strip also comprises a large business and industrial land use component. The Vaal Marina represents the only urban development in the southern extents of the municipal area.

To the west, several small nodal developments occur along route R82 which is a major local transport link between Vereeniging and City of Johannesburg. These nodes include De Deur, Ohenimuri and Walkerville, and Tedderfield. Savanna City is a new mega city.

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**Vaal Dam Special Management Zone**

While the normal EMZ guidelines will apply in this area, additional consideration needs to be given to the following:

- Local tourism focused on the domestic market;
- Intensive recreation next to the Vaal Dam;
- Conservation of grassland habitat in the area;
- Rural development that focuses on tourism and recreation;
- Recreation.

**Johannesburg South Special Control Zone (Klipriviersberg Economic and Ecosystem Development Zone [KEEDZ] project area)**

Only a small portion of Midvaal LM falls within this Zone, namely the precinct between the Eye of Africa development/ Klipriver drainage system and the R59 freeway. The Zone includes the SOJO and KlipSA initiatives. The normal EMZ guidelines will apply in this area but decisions should be taken with due regard of the current initiatives in the area, and in consultation with the City of Joburg and City of Ekurhuleni Metros.
development located adjacent to the north-west of De Deur and which is developed as a functional extension of the larger Evaton-, Sebokeng-Orange Farm residential complex located adjacent to the west thereof.

Residential Settlement Patterns

a) Formal Residential

Midvaal comprises the following formal towns:

Table 4: Towns in the MLM Area

<table>
<thead>
<tr>
<th>Meyerton</th>
<th>Risiville</th>
<th>The De Deur Estates</th>
<th>Highbury</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaal Marina</td>
<td>Henley-on-Klip</td>
<td>Ohenimuri</td>
<td>Witkop</td>
</tr>
<tr>
<td>Klipwater</td>
<td>Sybrand van Niekerpark</td>
<td>Witkop Industrial</td>
<td>Noldick</td>
</tr>
<tr>
<td>Eye of Africa</td>
<td>Duncanville X3</td>
<td>Golf Park</td>
<td>Savanna City</td>
</tr>
<tr>
<td>Sicelo</td>
<td>Riversdale</td>
<td>Lakeside Estates</td>
<td>Rothdene</td>
</tr>
<tr>
<td>Klipriviersdorp (Kookrus)</td>
<td>Klipriver Business Park</td>
<td>Meyerton Farms</td>
<td>Fleurdal</td>
</tr>
</tbody>
</table>

Source: MLM IDP 2014/15

The largest residential township in the MLM are namely Ohenimuri, Lakeside, Meyerton Park, Meyerton Central and Risiville. All of these townships, with the exception of Ohenimuri, consist of large erven (in excess of 2000m² in some instances). A single dwelling house and subsidiary dwelling unit for domestic workers usually occupy these properties. The average stand size in Ohenimuri is 700m².

b) Informal Settlements

Since 2000 (when the MLM was established) numerous informal settlements have established in the municipality. Informal settlements often occur on land not suitable for housing development, such as within the 1:50 and 1:100 year flood line areas or areas with problematic geotechnical conditions (dolomite). The location of the 18 largest informal settlements is indicated with red dots on Figure 18. It is evident that the majority of informal settlements are consolidated along the R59 corridor close to urban areas, though there are a few informal settlements situated on farmland in the deep rural areas.
Rural Residential

Table 5: Agricultural Holdings in the MLM Area

<table>
<thead>
<tr>
<th>Blignautsrus A.H.</th>
<th>Blue Saddle Ranch</th>
<th>Buycelia A.H.</th>
<th>Boltonwold A.H.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperville A.H.</td>
<td>Gardenvale A.H.</td>
<td>Glen Donald A.H.</td>
<td>Drumblade A.H.</td>
</tr>
<tr>
<td>Garthdale A.H.</td>
<td>Golfview A.H.</td>
<td>Homelands A.H.</td>
<td>Schoongezicht A.H.</td>
</tr>
<tr>
<td>Hartzenbergfontein A.H.</td>
<td>Heiderstrom A.H.</td>
<td>Mooiland A.H.</td>
<td>Homestead Apple Orchards A.H.</td>
</tr>
<tr>
<td>Ironsyde A.H.</td>
<td>McKay Estates</td>
<td>Walkerville A.H.</td>
<td>Nelsonia A.H.</td>
</tr>
<tr>
<td>Walkers Fruit Farms</td>
<td>Riverpark A.H.</td>
<td>Vorsterpark A.H.</td>
<td>Tedderfield A.H.</td>
</tr>
<tr>
<td>Valley Settlements A.H.</td>
<td>Vanderwesthuizenshoogte</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: MLM IDP 2014/15

Rural residential land use occurs in the form of farmhouses and houses on agricultural holdings. These activities are mostly concentrated in the north-western part of the municipal area, and more specifically around route R82 to the west, and along both sides (north and south) of route R42 between De Deur and Meyerton.

Smallholdings and Farms

The agricultural holdings in Midvaal are mostly characterised by a main dwelling unit and subsidiary dwelling units where domestic workers and other labourers stay. Agricultural holdings in the area are used for small, intensive agricultural purposes, secondary industries, or pure residential purposes. Service levels on these agricultural holdings vary.

Farms are usually occupied by a main dwelling house and subsidiary dwelling units for farm labourers. Farms are mostly supplied with electricity by Eskom and provide their own water, sanitation and refuse removal services. Farmers mostly assist farm labourers with these services.

Business Nodes:

The major business node within the MLM is the Meyerton CBD which is situated along the R59 freeway. The smaller nodal points, De Deur and Walkerville, also act as service centres to the surrounding local communities offering limited retail and commercial services.

The De Deur node along route R82 experiences significant pressure for expansion due to extensive residential development towards the west in Ironside, Lakeside and the eastern extensions of Evaton.

Industrial:

Industrial activities are found mainly along the R59 freeway and are clustered in Meyerton, Daleside and Klipriver (R59 and R550 interchange) (refer to Figure 18). Industrial activity ranges from light to heavy and contains major industries such as the Heineken Bottling Plant,
Everite and Samancor.

The route R59 economic corridor currently extends from the Heineken Brewery and Klipriver Business Park to the north through to Samancor in Meydustria to the south and has the potential to expand in both directions. The southern extension of route R59 forms part of the “triangle” between Vereeniging, Vanderbijlpark and Evaton/ Sebokeng which was identified as the Sedibeng District’s economic core (GSDF).

Several smaller commercial activities are also located along route R82 to the west, but these are mainly builders yards/ hardware outlets serving the needs of the large clusters of low income residential areas that are located in close proximity.

- **Mining:**
The Glen Douglas Dolomite mine which is situated near Randvaal to the south of Meyerton, is the only operational mine in the area. Proposals for further mining in the area surrounding Bantu Bonke are being explored by mining companies such as Exxaro.

- **Tourism:**
The MLM has a number of areas with intrinsic potential for tourism, including areas such as the Suikerbosrand Nature Reserve and numerous historical and other sites. A major asset with potential for tourism is the Vaal Dam and the precinct along the Vaal River, with potential for inter-provincial collaboration such as the Vaal 21 Initiative. Walkerville has potential for development as a tourism node, offering a range of art and craft shops, galleries, coffee shops and restaurant, and with a strong link to the surrounding agricultural and equestrian culture.

- **Agriculture:**
Agricultural activity in Midvaal comprise commercial farming operations such as crop production (including maize and grain) and animal production (including milk, beef, mutton and lamb, eggs and poultry). The performance of the agricultural sector in the municipal area is very dependent on climatic conditions and may fluctuate from year to year.

The south-eastern extents of the municipality form part of one of the Agri Hubs identified for Gauteng Province, and produces the bulk of the annual agricultural yield in the municipality.

### 5.5.2 Transport Network

**Road Network**
The existing road network as depicted on Figure 18 mainly caters for north-south movement through the Midvaal area due to the historic functional relationship between Johannesburg to
the north and Vereeniging-Vanderbijlpark to the south thereof. The following are routes of national and/or provincial and local significance in and around the Midvaal area (refer to Figure 18):

- Route R59 which links Vereeniging with Alberton and the N12 in Johannesburg. This route is situated in the central part of Midvaal Local Municipality area and has been marketed as a development/industrial corridor since the late 1990’s;
- The N1 which is the major national north-south route linking Musina in the north to Cape Town in the south and which passes adjacent to the west of the Midvaal area;
- N3 which is the major transport link between Gauteng Province and Ethekwini (Durban) and which passes the Midvaal area a few kilometres to the north-east;
- Route R82, a secondary north-south route linking Vereeniging and Johannesburg via Walkerville and De Deur situated in the western parts of Midvaal. The route runs parallel to and midway between the N1 and the R59 freeways and attracts mixed use development around De Deur, Walkerville and Tedderfield. Gautrans is in the process of incrementally upgrading route R82 from north to south and the section from the City of Joburg up to just past Walkerville has been completed;
- The M61 is a secondary north-south route running parallel to route R59 linking Vereeniging and Alberton via Meyerton, Randvaal and Kliprivier;
- Route R42 runs east-west through Midvaal and links Meyerton to Heidelberg and the N17 in the Lesedi Local Municipality;
- Route R551 is an east-west route between the N1 and the Suikerbosrand Nature Reserve. This road merges with route R42 at the Nature Reserve;
- Route R557 is an east-west link between the N3, route R59 and route R82 in Midvaal, linking Waterval and Walkerville to the N3;
- Route R54 links Vaal Marina to Meyerton and to route R82 further to the west; and
- Route R549 functions as the Heidelberg-Vaal Marina-Potchefstroom connector.

The condition of provincial roads in the MLM is generally poor and the routes require upgrading (MLM IDP). Excessive freight transport (overloading) and a lack of maintenance are contributing to the deterioration of provincial road infrastructure.

Stormwater is primarily drained via surface drains and channels which are cleaned annually (MLM IDP). Stormwater runoff is a particular problem in the rural areas where roads are not properly constructed/maintained. During heavy rains damage is caused to roads by stormwater, rendering the roads unusable and requiring frequent maintenance and repair.

**Railway Network**

The main railway line in the Midvaal area stretches from north to south parallel to the R59 and connects Vereeniging with Germiston and Johannesburg. This railway is mainly used for freight services in Midvaal. To the west, and running along the far western border of the MLM
in the vicinity of Savanna City, is a second line which serves as the main commuter line between Emfuleni municipality and the City of Joburg. There is a secondary railway line from this line, which traverses the area from east to west but it is not operational anymore.

**Public Transport**

The public transport system in Midvaal is as efficient as it can be at present to deliver a reliable service to all communities. Private transport seems to be the norm in the urban parts of the Midvaal area while public transport is more commonly used in the rural areas. Route R82 is a major public transport corridor.

Taxis are the most dominant form of public transportation, followed by buses. The low levels of private vehicle ownership correspond with the low-income levels in the disadvantaged communities. This emphasises the need for public transport routes and facilities in the MLM. Population densities in the rural areas are however very low, which is not conducive to effective public transport.

Meyerton Station is the major modal transfer point between rail, bus and taxi in the Midvaal area. There is a need to develop the station and to pay particular attention to the safety of pedestrians crossing the roads between the taxi rank and bus stop. (Construct a pedestrian bridge over the R59 freeway linking Sicelo with the station).

**Air Travel**

The Aerovaal Airport is the only airport situated within the Sedibeng District. It is located within a proclaimed aeronautical airstrip (the Vereeniging Airport), on the boundary between Midvaal and Emfuleni, outside the jurisdiction of Midvaal (11 km to the north of Vereeniging and 4 km northwest of Meyerton). The airport has two runways and hangar facilities to accommodate approximately 64 aeroplanes.

The viability of rerouting cargo flights from the Johannesburg International Airport to this airport is currently being investigated, to alleviate airspace congestion. This holds tremendous opportunity for the Sedibeng District and particularly Midvaal in light of the proximity of the airport to Meyerton.

The only airfield situated within Midvaal is the Tedderfield Airfield. It is privately owned and is used mostly for recreational purposes by micro lights.
5.6 HOUSING PROFILE

5.6.1 Dwelling Type

Diagram 6 gives an overview of the dwelling type composition in Midvaal LM as documented in the 2016 Community Survey.

It is evident that the dominant dwelling type is a house or brick structure on a separate stand or yard (81%), followed by informal dwellings in informal settlements representing 12% of all housing stock.

Backyard units represent about 5% of housing stock while townhouses and flats represent around 1% each.

Diagram 6: Dwelling Type - Midvaal LM (2011 vs 2016)

5.6.2 Housing Demand

According to the Midvaal Clarification Report on Informal Settlements (Household Survey, 2013), the community survey conducted by the Red Ants Security Services estimated the housing backlog in the municipal area at 5497 units. This figure was however expected to increase once all the informal settlements had been enumerated (refer to Figure 19 depicting the spatial distribution of informal settlements throughout the Midvaal area).

According to the Census 2011 data, the Municipality’s backlog was estimated at 5546, only slightly higher than the figure from the Red Ants Household Survey (see details below).
Table 6: MLM Housing Backlog (Census 2011)

<table>
<thead>
<tr>
<th>Category</th>
<th>No. of Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional dwelling / hut / structure</td>
<td>150</td>
</tr>
<tr>
<td>Informal dwelling / backyard shacks</td>
<td>944</td>
</tr>
<tr>
<td>Informal dwellings in informal settlement</td>
<td>4435</td>
</tr>
<tr>
<td>Caravan, tents or container</td>
<td>117</td>
</tr>
<tr>
<td>Total</td>
<td>5546</td>
</tr>
</tbody>
</table>

The Clarification Report concluded that the Census figure (5546) should be considered as the official housing backlog for planning purposes in the MLM.

5.6.3 Housing Projects in Process (Supply)

The Midvaal Migration Plan (2014) noted the following new housing projects underway in the study area. These are respectively listed as Private Sector (High and Middle Income) Bonded Housing (Low Income) Projects and Subsidy Housing Projects as noted below:

**Middle and High Income Bonded Housing**

1. The Grace township ([Figure 20](#)) is located to the west of Klipriver Business Park. The Grace provides approximately 1414 Res 1 residential units, with a subsidy component for 850 Res 3 Sectional Title units. The development will include mixed use and commercial stands.

2. Two smaller residential developments, Pine Valley and The Grace (referred to as The Grace EoA, to avoid confusion) are currently underway in the Eye of Africa (EoA) Residential Estate. These will consist of approximately 80 stands and are targeted at higher-income residents. They include a golf course, and may be classified as lifestyle estates.

3. Savanna City is the largest and most significant development in Midvaal LM ([Figures 21 and 22](#)). It borders Orange Farm in the City of Johannesburg. This development comprises 1462 Ha of land. It will offer 18 399 mixed income residential stands (with collective capacity for 19 264 dwelling units), together with various community facility and commercial stands. It is considered the largest development of its kind. More specifically, the development will comprise 5517 RDP houses, 5518 Finance Linked Individual Subsidy Programme (FLISP) housing opportunities, 2 635 Residential 3 units, and 4 729 bonded houses. It will also provide numerous fully subsidised housing options. When completed, the township will also include 16 schools, 32 institutional sites, 9 municipal sites and 9 business areas.
Table 7 depicts the status of the various extensions in Savanna City

Table 7: Status Quo of Approvals and Serviced Sites: Savanna City

<table>
<thead>
<tr>
<th>Development / Approval Status</th>
<th>Proper</th>
<th>Ext 1</th>
<th>Ext 2</th>
<th>Ext 3</th>
<th>Ext 4</th>
<th>Ext 5</th>
<th>Ext 6</th>
<th>Ext 7</th>
<th>Ext 8</th>
<th>Ext 9</th>
<th>Ext 10</th>
<th>Node</th>
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<td>3244</td>
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<td><strong>SUB-TOTAL</strong></td>
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<td>6. Stormwater</td>
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</table>
Summary: Current and Future Demand

- There are currently 33,665 households in the MLM (2014).
- The official backlog with regards to informal settlements and backyard units (according to Census 2011) was confirmed to be 5,546 units.
- The projected additional demand up to 2020 is about 1,472 housing units per annum from 2014. There will be a need for an estimated 8,830 additional housing units in the MLM by 2020 based on the above.
- Hence, the total demand for 2020 is 14,376 units (8,830 increment and 5,546 backlog).
- The total future housing supply by 2020 (based on housing projects currently in process) is calculated at 23,438 units (comprising 8,858 middle and high income units, and 14,580 subsidised units).
- It can be concluded that there is sufficient projects currently in progress to accommodate the current and projected demand in Midvaal up to 2020 and even beyond. (See Table 9 below)

Table 9: Housing Supply and Demand Summary

<table>
<thead>
<tr>
<th>Area</th>
<th>Full Ownership</th>
<th>Rental/Sectional Title</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Bonded</td>
<td>FLISP</td>
<td>Subsidised</td>
</tr>
<tr>
<td>The Grace (Blue Rose)</td>
<td>1414</td>
<td></td>
<td>850</td>
</tr>
<tr>
<td>Pine Valley</td>
<td>52</td>
<td></td>
<td>52</td>
</tr>
<tr>
<td>The Grace (Eye of Africa)</td>
<td>28</td>
<td></td>
<td>28</td>
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<tr>
<td>Savanna City</td>
<td>4729</td>
<td>5518</td>
<td>2635</td>
</tr>
<tr>
<td>Mamello X1</td>
<td></td>
<td>465 + 50</td>
<td></td>
</tr>
<tr>
<td>Sicelo Erf 204</td>
<td>430</td>
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<tr>
<td>Sicelo Erf 78</td>
<td>700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sicelo (Two Blocks)</td>
<td>1000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6223</td>
<td>5518</td>
<td>8162</td>
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<tr>
<td>Subsidised</td>
<td>5518</td>
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</tr>
<tr>
<td>Bonded</td>
<td>6223</td>
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</table>

**Note**: Total demand up to 2020 = 8,830 increment + 5,546 backlog = 14,376 units.

5.7 COMMUNITY FACILITIES

There are various social facilities located throughout the municipal area which contribute towards the social development of local communities. Table 10 below and Figure 23 provide an indication of the quantity and distribution of community services/facilities in the municipal area. Note that the community facilities on Figure 23 are spaced such that all symbols are visible – they thus do not reflect their exact location but rather indicate spatial trends (clusters etc.).

It is evident that there are concentrations of community facilities in Meyerton, Henley-on-Klip, De Deur and Vaal Marina. There are limited community facilities in the eastern rural areas because facilities are mainly clustered in the urban core areas/activity nodes along the R59 and R82 corridors, as well as in Vaal Marina.
### Table 10: Community Facilities

<table>
<thead>
<tr>
<th>Facility</th>
<th>Quantity</th>
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</thead>
<tbody>
<tr>
<td>Private hospital</td>
<td>0</td>
</tr>
<tr>
<td>Clinic</td>
<td>3</td>
</tr>
<tr>
<td>Mobile Clinic</td>
<td>4</td>
</tr>
<tr>
<td>Fire station</td>
<td>2</td>
</tr>
<tr>
<td>Police station</td>
<td>4</td>
</tr>
<tr>
<td>Libraries</td>
<td>6</td>
</tr>
<tr>
<td>Thusong Centre</td>
<td>1</td>
</tr>
<tr>
<td>Magistrate’s Court</td>
<td>1</td>
</tr>
<tr>
<td>Municipal Office</td>
<td>1</td>
</tr>
<tr>
<td>Landfills</td>
<td>3</td>
</tr>
<tr>
<td>Community Halls</td>
<td>7</td>
</tr>
<tr>
<td>Post Offices</td>
<td>6</td>
</tr>
<tr>
<td>SASSA office (social service)</td>
<td>1</td>
</tr>
<tr>
<td>Cemeteries/ Crematoria</td>
<td>3</td>
</tr>
<tr>
<td>Primary schools</td>
<td>17</td>
</tr>
<tr>
<td>Secondary schools</td>
<td>5</td>
</tr>
<tr>
<td>Combined schools</td>
<td>7</td>
</tr>
<tr>
<td>Special Education Schools</td>
<td>3</td>
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</table>

### Education

Educational facilities include primary, secondary and combined schools, as well as special needs schools. Access to educational facilities is critically important to local communities as it enables livelihoods and growth in skilled labour.

Primary schools are essential in establishing foundation phase education. Primary schools are distributed throughout the municipality and can be found mostly in the central and western regions, with limited facilities in the eastern region. Secondary schools in the MLM are mainly clustered around Meyerton. Secondary schools also offer training to adults. The three special needs schools are located in Waterval, Meyerton and De Deur. These provide dedicated education for people with disabilities.

There are no Tertiary academic institutions in Midvaal. Given the extent of the agricultural land in Midvaal and surrounds, an Agricultural College will likely benefit the agricultural industry (MLM IDP).

### Health

There are no public hospitals in Midvaal, and only one private hospital in Meyerton. Furthermore, there are three clinics, namely in Meyerton, Randvaal and Kookrus. There is also one community day centre and four (4) mobile units in the MLM.
Sport and Recreational Facilities
Midvaal Local Municipality has three (3) quality sporting facilities. This is, however, insufficient to serve the entire municipal area.

Safety and Security
Police stations are distributed throughout the municipal area, with offices in Meyerton, Waterval, De Deur and Vaal Marina.

Disaster Management
Fire stations are important facilities for promoting safety and security in local communities. There are fire stations in Meyerton and Vaal Marina. According to the IDP there is a need for a disaster management centre, and the Vaal Marina fire station needs to be upgraded.

Municipal
The primary municipal offices are situated in Meyerton and there is a regional office in Vaal Marina to provide a direct access point for local communities in the southern parts of the LM (MLM Migration Plan, 2013).

Community Halls
Community halls refer to a combination of town halls and multi-purpose community centres (MPCC). These facilities provide central locations in which to conduct community meetings, and serve as gathering points. There are town halls in Meyerton and Rothdene, with community halls or MPCCs in Vaal Marina, Bantu-Bonke, Lakeside Estate, Henley-on-Klip and Sicelo.

Post Offices
Post offices provide access to mail and services such as licence renewals, certification and banking. Post office facilities are distributed throughout the larger urban areas of Midvaal, including Daleside, Meyerton, Henley-on-Klip, De Deur, Walkerville and Vaal Marina.

Libraries
There are six (6) libraries in Midvaal, namely in Meyerton, Henley-on-Klip, Randvaal, Sicelo, De Deur, and Lakeside. There is, however, a need for additional facilities according to the IDP.
5.8 ENGINEERING SERVICES

5.8.1 Water and Sanitation

The standard for water provision in terms of the Reconstruction and Development Plan and Water Supply and Sanitation White Paper is 25 litres per person per day, within 200 metres walking distance. This was confirmed by government’s commitment to deliver 6 kilolitres of free water per household per month, which now has to be implemented by municipalities.

Approximately 65% of households in Midvaal Local Municipality have access to piped water inside their dwellings; 18% have access inside their stand/yard; 13% have access to a communal tap; and 4% have no access to water. In total, 96% of households in Midvaal Local Municipality have some sort of piped water source.

Bulk water is supplied to Midvaal Local Municipality by Rand Water, while the local distribution network is mainly focused in the central and western parts of the LM as illustrated on Figures 24a and 24b. The network covers all urban areas as well as large parts of the agricultural holdings around routes R59 and R82. Hence, it is mainly farm labourers and residents of informal settlements who do not have access to formal treated water sources (MLM Migration Plan, 2013).

In the past, water reticulation networks in the Municipality were designed and constructed for low intensity land use e.g. agricultural holdings. Capacity of existing systems is thus limited which may inhibit new economic and residential developments. Note also that some sections of the existing water reticulation network still comprise asbestos, and should be upgraded as a priority.

Vast distances between settlements and the largely rural character of the Midvaal area further complicates the provision of water to all parts of the municipal area.

Water Service Provision and Capacity

Rand Water is the main service authority for bulk water supply in the Midvaal area, with a main water pipeline (2300mm diameter) transversing the Suikerbosrand area. Bulk water to the central and western rural areas is supplied mainly by the Randvaal and Langerand reservoirs and pipeline systems of Rand Water. Rand Water does not serve Vaal Marina, but the water supply in Vaal Marina forms part of a service contract entered into between the local municipality and a contractor.

The Randvaal system supplies water to the Randvaal/Daleside areas and part of the
surrounding agricultural holdings. The Langerand system supplies water to the De Deur/Walkerville area and parts of the former Lekoa Vaal and Greater Johannesburg Metropolitan areas around route R82. No regional bulk water scheme currently exists in the Eikenhof area to the north of Tedderfield.

The groundwater source in the region is mainly used for irrigation purposes. Large quantities of groundwater are present in the dolomite areas to the north. This source of water is under-utilised, but to minimise the possible development of sinkholes, careful consideration should be given to any withdrawal from this source (Wagner Nel, 1998).

The main rivers in the region, namely the Klip, Riet and Suikerbos Rivers flow into the Vaal River in the south. Water in these rivers is polluted by various sources and is used mainly for crop irrigation.

Industries such as Nampak (outside Midvaal), Heineken, and Everite are supplied with potable water directly from Rand Water pipelines. The Klipwater Township in the Waterval area is serviced via a 200kl elevated tower linked to a Rand Water pipeline located to the east thereof.

Rand Water recently constructed the new Spioenkop reservoir and pump station. This reservoir has a 42 Ml capacity and is located approximately 16 km north west of Meyerton Town, and more specifically in the vicinity of Walkerville. This new infrastructure benefits users in Orange Farm, Ennerdale, Weilers Farm/ Sweetwaters (City of Johannesburg) and Walkerville/ De Deur (Midvaal). A new reservoir was also recently constructed to serve the Savanna City development in the Doornkuil area.

Meyerton is serviced by 2x10MI reservoirs situated in Meyerton Farms. Rand Water supplies water to these reservoirs. A borehole also exists to supply water to this reservoir, but is currently not in use.

Riversdale is serviced by a 50kl water tower. This tower is filled by means of a pump station in Jan Neethling Street. An additional connection to the nearby Rand Water line is required to solve some supply pressure problems in the area.

The De Deur, Balmoral and Walkers Fruit Farms areas are served by the Langerand Reservoir.
As reflected on Figures 24a and 24b the following areas in Midvaal have internal water reticulation systems:

- Homestead Apple Orchards;
- Blue Saddle Ranches;
- De Deur;
- Duncanville Ext. 3
- Golfview;
- Henley-on-Klip;
- Highbury;
- Ironsyde A.H.,
- Klipriver;
- Meyerton;
- Tedderfield;
- Ohenimuri;
- Parts of Walkerville;
- Randvaal;
- Risiville; and
- Vaal Marina

From this it is evident that the water reticulation network is mostly concentrated in the central and north-western parts of the municipality.

As mentioned, the reticulation system was originally designed and constructed in accordance with the land use characteristics and associated water demand in the various parts of the Midvaal area e.g. agricultural holdings, residential, industrial etc. As a result there is very limited spare capacity on the system to cater for significant land use changes, densification, etc. without large scale upgrading of the system.

The most problematic areas in terms of current capacity include the Sicelo area, Henley-on-Klip, Walkers Fruit Farms, Blignautsrus, Homestead Apple Orchards, Ohenumuri, Golf View, Daleside, Kookrus and the eastern parts of Riversdale.

Farmers usually provide water to their farm workers. However, when farms are sold or sublet, workers lose access to this water.

Water is currently being supplied to Sicelo informal settlement by means of pre-paid water meters at 200m intervals. The water provision in Sicelo (phase I) has just been completed and (phase II) will proceed shortly.

Vaal Marina has a new 10ML reservoir and the water treatment works has recently been upgraded (see Figure 24b).
Sanitation Service Provision and Capacity

There are three (3) waste-water treatment works in the MLM, namely Ohenimuri WWTW, Vaal Marina WWTW, and Meyerton WWTW of which the Meyerton Treatment Works is the main regional facility (Figures 25a and 25b). The other two facilities only serve the local surrounding areas and thus hold very limited capacity. Insufficient capacity at the Meyerton Plant needs to be addressed as a matter of urgency to make provision for future growth in the surrounding core urban area of the Midvaal Municipality (including Sicelo). There is also an ERWAT Treatment Plant at the Waterval Node area in the northern section of the R59 Corridor, but this facility serves the Ekurhuleni area located to the north thereof. At present Midvaal has no connections to this facility.

Approximately 82% of households in the Midvaal area are served by waterborne sewer, which is relatively high, considering the rural nature and vast extent of the area. Assuming that the pit latrines are not Ventilated Improved Pit (VIP) Latrines, it could be said that the sanitation backlog in the area is 18% or 5598 households. It is mostly farm labourers and residents of informal settlements who do not have access to proper sanitation facilities.

5.8.2 Electricity

As depicted on Figures 26a and 26b only the urban parts of the Midvaal municipal area are provided with electricity by the local municipality, while the entire remainder area is served by Eskom. Areas served by the MLM include: Ironsyde Agricultural Holdings, Homestead Apple Orchards, Blue Saddle Ranches, Blignautsrus, De Deur, Golfview, Hartzenbergfontein, Henley-on-Klip, Highbury, Klipriver, and parts of Walkerville. As illustrated on Figures 26a and 26b there is also an extensive Master Plan in place to ensure that new developments along routes R59 and R82 in the Midvaal area can be supplied with electricity as and when required.

Approximately 79% of households in Midvaal receive electricity from the local authority. There is a backlog of approximately 5598 households (18% of the households) without access to electricity. Census 2011 data indicated that approximately 79% of households in Midvaal Local Municipality utilise electricity as the main source for lighting, while 15% utilise candles and 4% use paraffin.

It is considered that it is mostly farm labourers and residents of informal settlements who do not have electricity, especially in the Mamello and Sicelo areas. These areas will only be reticulated once they are formalised (IDP). Electricity provision to schools, clinics and other community facilities should also be prioritised.
A number of new substations have been proposed along route R59; and Meyerton substation will be upgraded to provide electricity to new developments in the short to medium term.

5.8.3 Solid Waste

All urban areas have access to refuse removal services, while about 84% of Small Holdings and Agricultural Holdings are served. There are no waste removal services on farms in the MLM. Waste in these areas is disposed of by residents themselves.

There is a regional landfill site located to the north of the Suikerbosrand Nature Reserve, outside the jurisdictional area of Midvaal. There is a second (small) landfill site in Vaal Marina, which is in the process of being licensed. The landfill sites in Walkerville and Henley-on-Klip are currently being licensed. There are also mini dump sites in Risiville, Klipriver, and Meyerton.

While it is recognized that there is limited refuse removal services in the extensive agricultural and rural areas of the MLM, the sensitive nature of the natural environment and proximity to major rivers indicate that this is a potentially hazardous situation. This indicates a need for smaller landfill sites located throughout the region to assist communities in the agricultural and rural areas with refuse disposal in a safe and environmentally conscious manner. There is a need for a Solid Waste Master Plan for Midvaal, to deal with the social, physical and environmental aspects of solid waste management.
BULK SUPPLY

BACKLOG & ELECTRIFICATION

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<td>R6.8 million</td>
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<td>R10 Million</td>
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<td>R10 Million</td>
<td>R10 Million</td>
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<td>R10 Million</td>
</tr>
<tr>
<td>Sicelo Informal</td>
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<td>R13.8 million</td>
<td>R13.8 million</td>
<td>R13.8 million</td>
<td>R13.8 million</td>
<td>R13.8 million</td>
</tr>
</tbody>
</table>

PROPOSED VIKING BAY S/S 15MVA

MAMELLO (600 + 400 HOUSES)

PROPOSED EAGLE VIEWS S/S
3 x 20MVA
88/22KV

VAAL MARINA S/S UPGRADE
1 x 10MVA
88/11KV

PROPOSED ECO ESTATE S/S 15MVA

MUNICIPAL LEGEND:

- PROPOSED SUBSTATION
- PROPOSED SWITCHING STATION
- EXISTING SUBSTATION
- NEW SWITCHING STATION
- 88KV OVERHEAD LINE
- DEMARCATION BOUNDARY
5.9 ECONOMIC DEVELOPMENT POTENTIAL

8.9.1 Midvaal Macro Economy

Size of the Midvaal Economy

The Sedibeng District Economy contributes 5.6% towards the Gauteng GVA. Emfuleni Local Economy contributes 77.2% to the Sedibeng District Economy, while Midvaal and Lesedi Local Municipalities contribute 13.6% and 9.2% respectively. It should however be noted that the Emfuleni population comprises 76.9% of the District labour force, while Midvaal comprises 13.2%. The economic contributions of each municipality are thus directly proportional to the size of the population and, more specifically, the labour force.

At a local level, the Central Region of the MLM makes the largest contribution to the municipal economy (53.5%). This is not surprising, as this region encompasses the R59 Development Corridor – the economic heart of the Midvaal Local Economy.

Economic Profile

The structure of the economy provides valuable insight into the dependency of an area on specific sectors and its subsequent sensitivity to fluctuations in global and regional markets.

Table 11 below provides an indication of the percentage distribution of contributions by economic sectors to the economy of South Africa, Gauteng, Sedibeng and Midvaal between 2001 and 2011.

Table 11: Percentage Contribution to GVA per Sector per Region, 2006 and 2011

<table>
<thead>
<tr>
<th>Economic Sector</th>
<th>South Africa</th>
<th>Gauteng</th>
<th>Sedibeng</th>
<th>Midvaal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>2%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Mining</td>
<td>7%</td>
<td>6%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>19%</td>
<td>17%</td>
<td>22%</td>
<td>19%</td>
</tr>
<tr>
<td>Electricity and water</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Construction</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Wholesale and trade</td>
<td>14%</td>
<td>14%</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>Transport</td>
<td>10%</td>
<td>10%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Finance and business</td>
<td>22%</td>
<td>24%</td>
<td>25%</td>
<td>27%</td>
</tr>
<tr>
<td>Community services</td>
<td>6%</td>
<td>6%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Government services</td>
<td>15%</td>
<td>15%</td>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Midvaal Migration Plan 2013
It is evident that the manufacturing sector is the major contributor to the local economy of Midvaal LM. It contributes roughly 30% to the total economy, while the finance and business services sector (18%) and wholesale and trade sector (14%) are also major role players.

From a detailed analysis, it is evident that the Western Region’s largest economic sectors are Finance and Business Services (53.1%), followed by Government and Community Services (17.3%). The largest economic sectors in the Central Region are Mining and Quarrying (34.7%), followed by Financial and Business Services (17.8%); and the Eastern Region’s main economic sectors are namely Manufacturing (38.4%), followed by Government and Community Services (16.7%).

The following locations contribute significantly to the manufacturing sector of Midvaal LM (refer to Figure 18):
- Though the largest section of Vereeniging falls outside the boundaries of Midvaal LM, the area between Vereeniging and Meyerton contributes significantly to the Midvaal economy.
- In the Henley-on-Klip/ Daleside urban concentration, the industrial zone along the M61 gives access to a main area of manufacturing close to the R59 freeway.
- Klipriver (e.g. Klipriver Business Park).

Note that the Manufacturing Sector, the main economic pillar, showed a decrease in employment opportunities in 2011. The other main economic pillars all showed an increase of employment opportunities for the same period.

The central part of Midvaal is the primary contributor to the financial and business services sector, in other words the area along the R59 freeway between Vereeniging, Meyerton, Henley-on-Klip, Highbury, and Daleside.

The greatest contribution to Midvaal LM’s trade sector comes from Henley-on-Klip/ Highbury/ Daleside agglomeration along the R59 freeway, followed by the Vereeniging/ Meyerton agglomeration and the Walkerville area. The areas with the smallest contributions to the trade sector are generally located in the central and south-eastern parts of the LM, and lacking access to route R59.

5.9.2 Midvaal Local Economic Development (LED) Strategy

The Midvaal Local Economic Development (LED) Strategy is based on the following two strategic thrusts intended to stimulate sustainable economic growth in the local municipality:
- Economic diversification; and
- Growth in sectors with comparative advantage: increased focus on tourism, agriculture, manufacturing, and trade sectors.

The LED Strategy noted that Midvaal should diversify its economic base in order to reduce its dependency on a single economic sector (Manufacturing). There is potential to grow the manufacturing, trade, tourism, agriculture and construction sectors in the study area.

The proposed strategies to grow the mentioned five sectors are briefly summarised below:

**Construction:** There has been a steady growth in building plan approvals, subdivision and rezoning applications. The residential boom that some Midvaal towns are experiencing, along with the expansion of some existing and new businesses and industries, predominantly along route R59, and the anticipated development at Savanna City means that construction remains a growing sector. Another possible reason for the growth in the construction sector could be effective land use management through the myriad of policies and Precinct Plans which was developed and approved by Council in recent years. These policies and plans not only gives guidance to land owners and developers, but also creates a sense of stability in the built environment (Demacon).

The construction sector is a labour-intensive sector and has significant potential for job creation, although this tends to be short term. There are also backward and forward linkages to a number of other sectors. For example, the inputs to construction, such as electrical fittings, plumbing, painting, etc. could possibly be sourced locally. Downstream/post-construction benefits to the economy include home furnishing (manufacturing) and an ongoing need for goods and services (trade).

**Tourism:** This was identified as one of the economic sectors that have the potential to reverse a sluggish economy, mobilize domestic and foreign investment and develop SMMEs. Midvaal has significant untapped tourism potential.

Midvaal's proximity to Johannesburg and Ekurhuleni Metropolitan Municipalities is potentially one of its greatest assets, as these areas host large potential visitors, and the regional linkages are generally in a good state.

Midvaal offers scenic beauty with ridges and river systems, conservancies, nature reserves, game farms, a range of outdoor activities; cultural experiences; local cuisine; and historical landmarks. Sedibeng DM, together with Birdlife SA, has developed the Sedibeng Birding Route of which many sites are located in Midvaal or just outside of the Midvaal area of jurisdiction. This route should be promoted and marketed, and additional tourist attractions
could be incorporated as part of the route. Lastly, Walkerville is being developed into a tourist town.

Tourism products should include business tourism, eco-tourism and adventure tourism. The partnership with Sedibeng Tourism and the neighbouring local authorities should be furthered so that the area as a whole can be branded and promoted as a destination; and relationships with travel agents and the promotion of holiday packages to Midvaal should be explored.

**Agriculture:** This sector should be encouraged in the form of improved linkages between small scale niche farming and the Walkerville Farmers Market. The development of agri-processing plants (to process and package agricultural produce) in the rural areas should also be encouraged. Also, the Midvaal Agricultural Policy highlights strategies for the establishment of Bamboo farming in the MLM. These non-invasive activities could be done on a small scale with very little start-up capital.

**Manufacturing:** Currently trade and manufacturing in the Midvaal area is closely linked to the steel sector. The manufacturing sector can expand into agri-processing activities (see above) as well as the production of biofuels, beer, ales, salad dressing etc. from agricultural products. This could be linked to a marketing strategy, which promotes the trade of these goods. Importantly, the potential of economies of scale should be explored.

**Trade:** is a growing sector with the potential to absorb more labour. This can happen through the provision of value added goods and services. It is important that trade’s contribution to GRP increases as its workforce percentage increases. A further important aspect to this sector is the role and function of the so called second (or informal) economy. In the Midvaal economy, trade can be linked to manufacturing, construction and tourism. Linking the growth of trade to these sectors creates opportunities to provide value added goods and specialised services.

### 5.10 Synthesis and Conclusive Summary

**Key Features and Structuring Elements**

- The study area has strong regional linkages to major economic cores like Johannesburg, Ekurhuleni and the Vereeniging-Vanderbijlpark complex. These include routes R59 and R82, and the Vereeniging-Germiston railway line.
- Midvaal is predominantly rural, with urban development predominantly consolidated along routes R59 and R82 in the north-western parts of the municipal area.
- Meyerton is the highest order town in the area with a relatively large business and residential component. Smaller settlements and agricultural holdings in the surrounds act
as service centres to the surrounding local communities.

- The local population is relatively well educated, and unemployment levels are low compared with provincial and national averages.
- The strongest economic drivers in Midvaal are: Manufacturing (29.5%), Financial and Business Services (18.5%), Trade (14.5%), and General Government Services (9.4%). There are indications that the Manufacturing sector is declining; there is thus a need to diversify the Midvaal economy.
- The urban areas and agricultural holdings exhibit the highest population growth rates. The official backlog with regards to informal settlements and backyard units (according to Census 2011) was determined to be 5546.
- The population is projected to grow between 3288 and 4681 people per annum for the next six years. The related projected household growth is between 1034 and 1472 housing units per annum.
- The total housing supply of existing housing projects is calculated at 23,825 units comprising 8,858 middle and high income units and 14,994 subsidised units which is sufficient to meet current and projected demand beyond the year 2020.

**Key Issues**

- Horizontal alignment of economic initiatives with the adjoining LMs’ SDFs, especially Emfuleni, Lesedi and the City of Joburg is important for future development.
- The study area is surrounded by large concentrations of low income communities (especially in the City of Joburg area of jurisdiction), with very limited economic activity and job opportunities to serve them.
- Unlike urban areas in the MLM, rural communities have limited access to engineering infrastructure and social services.
- The most problematic areas in terms of current water capacity include the Sicelo area, Henley-on-Klip, Walkers Fruit Farms, Blignautsrus, Homestead Apple Orchards, Ohenumuri, Golf View, Daleside, Kookrus and the eastern parts of Riversdale.
- There is a need for the revitalisation of CBD/activity areas in the MLM, together with general local economic development and growth of SMMEs.

**Development Opportunities**

- Midvaal is located midway between two major industrial cores in Gauteng Province – Ekurhuleni MM and Emfuleni LM. The three areas are all linked via the R59 freeway.
- The study area will in future gain direct access onto the N1 corridor at Elandsfontein, via a new access interchange from K154 which is already partially constructed. The Elandsfontein precinct has significant development potential – especially in the medium to longer term.
• The Vaal Marina and Suikerbosrand Nature Reserves are potential major tourist attractions.
• There are a number of important ridges in the study area which also have potential for tourism development.
• There may be potential for further mining in the area – especially in the Randvaal-Daleside area.
• The south-eastern extents of Midvaal were identified as a provincial agricultural hub.
• There are a number of important ridges in the study area which also have potential for tourism development.
• The south-eastern extents of Midvaal were identified as a provincial agricultural hub.
• The R59 freeway and routes R82 and R550 were earmarked as development/industrial corridors in the GSDF.
• It might be viable to reroute cargo flights from the OR Tambo International Airport to the Vereeniging airport, which would hold opportunities for extensive industrial and commercial development around Meyerton.
• Walkerville has potential for development as a tourism town, similar to Clarens/Cullinan.
• The De Deur area will experience increased development pressure from the west over the next few years.

Development Constraints
• Localised dolomitic conditions is a concerning development constraint; dolomite mainly occurs in the central-northern parts of the municipal area.
• Environmentally sensitive areas such as the Suikerbosrand Nature Reserve and important ridges must be conserved.
• The condition of provincial roads in the MLM is generally poor, mitigating economic development and access to the area.
• Insufficient water and sanitation infrastructure in urban areas and along routes R59 and R82 may deter development.
• Spatial discrepancy with the largest concentration of low income residential development being located towards the west of route R82 while the bulk of economic activities/job opportunities are located to the east of route R59.
• The urban footprint of Midvaal is very fragmented. The long term vision for the area is thus extensive corridor development along routes R59, R82 and R154 and K164 (Johan le Roux) in an effort to functionally consolidate the urban fabric of the municipality along two north-south and two east-west routes.
6. SPATIAL DEVELOPMENT FRAMEWORK

Table 12 below represents the Land Use Budget for the Midvaal SDF up to the year 2020. The following are to be noted from this:

- The projected population is 135 156 people (current = 107 072) based on the Historical Growth Trends Scenario of the Midvaal Migration Plan. This represents an increase of 28 084 people at a rate of 4681 people per annum.
- The households increase by 8830 at a rate of 1472 per annum to bring the total number of households by 2020 to 42 495 units.
- The population will be able to sustain approximately 229 765m² of retail floor space and 22 977m² of office floor space which should be mainly located in the nodal points identified.
- The incremental population will justify the construction of one new primary school and seven Educational Care Centres in the municipal area while secondary schools are sufficiently provided for (based on the population size). However, the spatial distribution of these and other facilities should also be considered to ensure that all communities are served within appropriate distance. This may necessitate providing additional facilities in outlying areas in future.
- As far as other community facilities are concerned, the Midvaal Municipality would require one more Primary Health Clinic and Local Library, as well as four additional Post Office/ICT Access Points.
- In general, however, the Midvaal Municipality is currently well-provided with a wide range of community facilities and services, and only a limited number of new facilities need to be provided up to 2020 (based on population growth forecasts).

Similar to the 2014 Midvaal SDF, the reviewed Midvaal SDF is based on a number of Development Principles associated with the various functional and structuring elements within the Midvaal area. These Principles form the individual layers which the SDF comprises, and these are incrementally consolidated to form one Integrated Spatial Development Framework for the Midvaal area.

The ten Development Principles (and associated themes) are summarised below:

- **Environmental Management**: To protect and actively manage the natural environmental resources in the Midvaal Municipal Area in order to ensure a sustainable equilibrium between agricultural, tourism, industrial/manufacturing and mining activities, as well as urbanisation pressures in the area.

- **Agricultural Production**: To facilitate and enhance agricultural production in the municipal area by actively protecting all land earmarked for agricultural purposes, and to
target agricultural holdings for innovative small scale farming and agro-processing.

- **Tourism Promotion**: To promote tourism development through the active utilization of tourism resources available like the Vaal Dam, the Ridges Precincts, and the Nature Reserves in the area.

- **Corridor Development**: To pro-actively plan, design and facilitate the establishment of a Development Corridor along the R59 freeway.

- **Nodal Development (Economic and Social Facilities)**: To facilitate the development of a hierarchy of sustainable Activity Nodes in partnership with stakeholders to ensure equitable access to social infrastructure, and to promote Local Economic Development in the urban and rural parts of the municipality.

- **Movement Network**: To capitalise on the strategic location of the municipality by way of regional and provincial linkages, and to establish an internal movement network comprising a hierarchy of roads which include a comprehensive public transport network and services.

- **Industrial, Commercial, Mining Activity**: To promote the development of a diverse range of industrial, commercial and mining activities in the Midvaal area through partnerships with the private sector, and with specific focus along the R59 Corridor and at the designated nodal points.

- **Human Settlement Development**: To provide for a wide range of bonded and subsidised housing typologies and tenure alternatives within clearly defined Strategic Development Areas, and to continuously manage residential densification by way of the Midvaal Density Policy.

- **Compact City**: To delineate an Urban Development Boundary to encourage consolidated urban development and to protect high potential agricultural land and sensitive environments.

- **Targeted Engineering Infrastructure Investment**: To prioritise the bulk of short to medium term upgrading/provision of engineering services to nodal areas within the Urban Development Boundary.

Each of these principles is expounded individually in the section that follows:
<table>
<thead>
<tr>
<th>Scenario 1</th>
<th>Existing Facilities</th>
<th>Surplus/Deficit</th>
<th>CSIR Guidelines for Large Cities/Small Metros</th>
<th>Area per Facility</th>
<th>Provision Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BASE DATA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dwelling Units</td>
<td>42 495</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>135 156</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Creche</td>
<td>56 1.1</td>
<td>-56 1/2 400 population 200m²</td>
<td>Compulsary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary (including Grade R)</td>
<td>19 54.1</td>
<td>18 1/7000 population 2.8ha</td>
<td>Compulsary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>11 51.9</td>
<td>13 2 1/12 500 population 4.8 ha</td>
<td>Compulsary</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Business</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local retail centre (floor area in m²)</td>
<td>67 578</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neighbourhood retail centre (floor area in m²)</td>
<td>81 094</td>
<td>27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community, small regional retail centre (floor area in m²)</td>
<td>81 094</td>
<td>27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Offices (floor area in m²)</strong></td>
<td>22 977</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Community Facilities</strong></td>
<td>16.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health/Emergency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Health Clinic</td>
<td>6 1.1</td>
<td>5 1/24 000 population 2 000 m²</td>
<td>Compulsary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Health Centre</td>
<td>1 2.0</td>
<td>1/100 000 population 1.5ha</td>
<td>Compulsary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police</td>
<td>2 0.5</td>
<td>4 2/1 600 000 population 1 000 m² to 1 ha</td>
<td>Compulsary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Station</td>
<td>2 0.7</td>
<td>2 1/60 000 population 3 000 m²</td>
<td>Compulsary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social /Cultural</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Library</td>
<td>1 0.3</td>
<td>6 1/20 000 population 500m²</td>
<td>Compulsary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thusong Centre/Labour/SASSA</td>
<td>1 0.5</td>
<td>1 0 One per Municipality 2 000 m² - 1ha for full range of facilities</td>
<td>Compulsary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magistrate’s Court</td>
<td>1 1.0</td>
<td>1 0 One per Municipality Site size area specific</td>
<td>Compulsary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Municipal Office</td>
<td>1 0.2</td>
<td>2 1 One per Municipality 2 000m² to 1ha</td>
<td>Compulsary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prison and Place of Safety</td>
<td>1 2.0</td>
<td>1 One per Municipality 2ha - 5ha</td>
<td>Compulsary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Hall (medium/small)</td>
<td>4 0.8</td>
<td>5 1/10 000 population 2 000 m² - 5000m²</td>
<td>Discretionary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Office/ICT Access Point</td>
<td>14 0.7</td>
<td>10 1/10 000 population 300m² (+ add 200m² for ICT)</td>
<td>Compulsary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worship Centre</td>
<td>45 6.8</td>
<td>1/3 000 population 1 500 m²</td>
<td>Compulsary</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Open Space</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>75.7</td>
<td>1000 population 0.56ha</td>
<td>Compulsary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passive</td>
<td>67.6</td>
<td>1000 population 0.5ha</td>
<td>Compulsary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solid Waste Disposal Site/Recycling Depot</td>
<td>1 100.0</td>
<td>3 One per Municipality 100ha, but varies in size</td>
<td>Compulsary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cemetery</td>
<td>23.2</td>
<td>100 000 population 17.2ha</td>
<td>Compulsary</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Development Principle 1: To protect and actively manage the natural environmental resources in the Midvaal Municipal Area in order to ensure a sustainable equilibrium between agricultural, tourism, industrial/ manufacturing and mining activities, as well as urbanisation pressures in the area.

In line with the directives provided in the Gauteng EMF (2014) and the Midvaal EMP (2008), it is proposed that the Midvaal area be subdivided into the following four distinct Environmental Control Zones:

- **Zone 1: High Control Zone** (Regional Open space System)

- **Zone 2: Normal Control Zone** (Agricultural, Low Density Residential Tourism and Light Industrial/ Agri Industries outside Zone 1 (Open Space) and Zone 3 (Urban Edge))

- **Zone 3: Urban Development Zone** (All areas earmarked for Urbanisation/Township Establishment) – also nodes along corridors

- **Zone 4: Industrial and Large Commercial Focus Areas** (Normally within Urban Edge)

Each of these zones are briefly discussed in the section below:

**Zone 1: High Control Zone ( Regional Open Space System)**

Figure 27.1 reflects the environmental features that are deemed to form part of the regional open space system (High Control Zone) of the Midvaal area. It includes the drainage system, the proclaimed nature reserves and registered conservancies, as well as the ridges within the municipal area.

The Klip River with its main tributaries like the Natal Spruit, the Varkensfontein Spruit, as well as the Suikerbosrand River constitute the main drainage system within the northern and central parts of the Midvaal area, while the Vaal River and Vaal Dam are the most prominent features in the southern and south-eastern parts. This network provides for a comprehensive open space system to be incorporated into the future spatial structure of the municipal area. Along the entire drainage system there is a 50 and 100 year floodline area which needs to be protected, managed and conserved as per the relevant legislative guidelines, and which provides for linear continuity of the proposed Midvaal Regional Open Space System.

Supplementary to the drainage system as depicted on Figure 27.1, the Regional Open Space System also incorporates the proclaimed Suikerbosrand Nature Reserve which is located in the north-eastern parts of the municipal area and which is legally protected from development.

The third important structuring element which forms part of the proposed Midvaal Regional
Open Space System is the two major ridges precincts located within the municipal borders. These include the Platberg-Perdeberg complex in the north-western quadrant of the municipal area between Homestead Apple Orchards A.H. and Tedderfield A.H.; as well as the Vaalkop-Skurwerant- Bezuidenhoutsberg-Langberg-Bakenkop complex located in the south-eastern parts of the municipal area between Vaal Marina and the Suikerbosrand located within the Suikerbosrand Nature Reserve.

This Regional Open Space System must be managed in line with the Midvaal Environmental Management Framework (June 2008).

The existing conservancies within the Midvaal area as well as the EMF guidelines pertaining to Conservancies also need to be considered as supplementary development guidelines to the Midvaal High Control Zone. This must be read in conjunction with the guidelines for areas classified as High Control Zone in the Gauteng EMF as listed in the table below:

<table>
<thead>
<tr>
<th>Zone 1: High Control Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intention</strong></td>
</tr>
<tr>
<td>Special control zones are sensitive areas within and outside the urban development zone. These areas are sensitive to development activities and in several cases also have specific values that need to be protected.</td>
</tr>
<tr>
<td><strong>Composition</strong></td>
</tr>
<tr>
<td>The following areas have been identified in this zone:</td>
</tr>
<tr>
<td>• Conservation priority areas (CBAs);</td>
</tr>
<tr>
<td>• Rivers (including 32m buffers);</td>
</tr>
<tr>
<td>• Ridges;</td>
</tr>
<tr>
<td>• Areas that are sensitive (as determined in the sensitivity assessment);</td>
</tr>
<tr>
<td>• Protected areas;</td>
</tr>
<tr>
<td>• The creation of the Vaal Dam conservation and recreation area with the focus on grassland conservation and extensive recreation activities;</td>
</tr>
<tr>
<td>• The creation of the Johannesburg south conservation, recreation and intensive small scale agriculture area around the Klip River.</td>
</tr>
<tr>
<td><strong>Conditions</strong></td>
</tr>
<tr>
<td>No listed activities may be excluded from environmental assessment requirements in this zone and further activities may be added where necessary to protect the environment in this zone. Additional requirements (guidelines, precinct plans, etc.) to ensure the proper development of identified areas in this zone, in a manner that will enhance their potential for conservation, tourism and recreation may be introduced.</td>
</tr>
</tbody>
</table>
The following is a list of the features in the MLM EMP which are considered to be Non-Negotiable components of the Regional Open Space System:

<table>
<thead>
<tr>
<th>Non-Negotiables</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature Reserves</td>
<td>• Suikerbosrand Nature Reserve</td>
</tr>
<tr>
<td>Wetlands</td>
<td>• Widely dispersed</td>
</tr>
<tr>
<td>Ridges</td>
<td>• Predominantly Category I and II ridges</td>
</tr>
<tr>
<td>Heritage sites</td>
<td>• Blockhouse</td>
</tr>
<tr>
<td>Conservancies</td>
<td>• Apple Orchards</td>
</tr>
<tr>
<td></td>
<td>• Thomtree</td>
</tr>
<tr>
<td></td>
<td>• Henley-on-Klip</td>
</tr>
<tr>
<td></td>
<td>• Kliprivier/ Suikerboscharand</td>
</tr>
<tr>
<td></td>
<td>• Drumblade</td>
</tr>
<tr>
<td></td>
<td>• Welverdiend</td>
</tr>
<tr>
<td></td>
<td>• Vaaldam</td>
</tr>
<tr>
<td></td>
<td>• Klipkraal</td>
</tr>
<tr>
<td>Natural Water Courses</td>
<td>• Suikerbosrand River</td>
</tr>
<tr>
<td></td>
<td>• Klip River</td>
</tr>
<tr>
<td></td>
<td>• Rietspruit</td>
</tr>
<tr>
<td></td>
<td>• Vaal River</td>
</tr>
</tbody>
</table>

With regards to future plans the intention of the Gauteng Conservancy Association (GCA) is to form conservancies in areas where the GDACE Conservation Plan 2 has recognised important and irreplaceable sites.

Another major physical structuring element which will dictate the nature and extent of development within the Midvaal area is dolomite which mainly occurs in the central-northern parts of the municipal area. Figure 27.2 illustrates the spatial extent of dolomite in the municipal area, and which will have an influence on the type and intensity of development to be allowed in these areas. Detailed, site specific geotechnical studies need to be conducted for individual land use/ township applications in these areas.

In the final instance it is confirmed that environmental concerns in the Midvaal area will continue to be managed in terms of the relevant legislation and EIA processes, following which the appropriate mitigation and conservation measures pertaining to the specific land use application will be put in place.

**Zone 2: Normal Control Zone**

This includes all agricultural land outside the urban edge (Zone 3) and not included in Zone 1 (High Control Zone). It includes activities like low density/rural residential, tourism e.g. Vaal Marina, light commercial and agri-industries in the agricultural areas. The following guidelines will apply:
Intention
This zone is dominated by agricultural uses outside the urban development zone as defined in the Gauteng Spatial Development Framework. No listed activities may be excluded from environmental assessment requirements in this zone.

Composition
The normal control zone is comprised of the following areas outside the SDF area and special control areas:

- LC01, LC02, LC03, LC04, ISM01, ISM02, ISM03, ISM04, ISM05, ISM06, ISM07, ISM08;
- Area between R54 and R42 (within MLM border);
- This area also comprises the Bantu Bonke initiative as well as the Kudung Land Reform area;
- It is recommended that development in this zone be carried out along the lines of agri-villages which will prove to be more sustainable in terms of job creation and economic growth while preserving the environmental integrity of the area.

Precautionary Guiding Principles

- No densification or subdivision on farms east of existing development from (north to south) Rietspruit/Green Valley, Witkop/Daleside, Henly-on-Klip, Riversdale, Koolfontein/Nelsonia and Mooiland/Helderstroom.

- Development in these areas will be subject to conditions as determined by the MLM and will only be considered on very low potential agricultural land.

Zone 3: Urban Development Zone (Urban Edge)
This zone includes all areas within the Midvaal Urban Edge except for High Control Zone areas and the Industrial and Large Commercial Focus Zone within the Urban Edge.

The following guidelines will apply:

Intention
The intention with Zone 1 is to streamline urban development activities in it and to promote development infill, densification and concentration of urban development within the urban development zones as defined in the Gauteng Spatial Development Framework (GSDF), in order to establish a more effective and efficient city region that will minimise urban sprawl into rural areas. Certain currently listed activities may be exempted from environmental assessment requirements at the discretion of the competent authority.

Composition
The Urban Development Zone is composed of the following control areas within the area covered by the GSDF as defined in the previous chapter:

- LC01: Urban existing developed land;
- LC02: Urban development priority;
- LC03: Rural development priority;
- LC04: Rural and urban development priority.
- ISM01: Conservation and agricultural priorities;
- ISM02: Conservation and urban development priorities;
- ISM03: Conservation, urban development and rural development priorities;
- ISM04: Agriculture and urban development priorities;
- ISM05: Agriculture, conservation and rural development priorities;
- ISM06: Agriculture, conservation and urban development priorities;
- ISM07: Agriculture, conservation, urban development and rural development priorities; and
- ISM08: Agriculture, rural and urban development priorities.

**Conditions**

- Development in this area must be sustainable in respect to the capacity of the environment and specifically the hydrological system to absorb additional sewage and stormwater loads as a result of increased densities;
- Existing open spaces and urban should be retained as open space for the foreseen increased densities; and

**Zone 4: Industrial and Large Commercial Focus Zone**

**Intention**

The intention with Zone 4 is to streamline non-polluting industrial and large scale commercial (warehouses etc.) activities in areas that are already used for such purposes and areas that are severely degraded but in close proximity to required infrastructure (such as old and even current mining areas). Certain currently listed activities, in addition to those intended for Zone 3 may be excluded from environmental assessment requirements in this zone in future.

**Conditions**

- Development in this area must be sustainable in respect to the capacity of the environment and specifically the hydrological system to absorb additional sewage and stormwater loads of increased densities; and
Development Principle 2: To facilitate and enhance agricultural production in the municipal area by actively protecting all land earmarked for agricultural purposes, and to target agricultural holdings for innovative small scale farming and agro processing.

The Midvaal municipal area is well-endowed with high and medium/moderate potential agricultural land which is deemed to form part of the “bread basket” of Gauteng Province. In line with the above Agri Vision for the MLM reads as follow: AGRITROPOLIS, food basket of Gauteng supporting farmers to graduate from subsistence Small Holder Farmers to commercial farmers and ultimately become Agro-Preneurs.

The areas of high agricultural potential mainly occur in the south-eastern parts of the municipal area between Suikerbosrand and Vaal Marina where extensive agricultural activity currently takes place in an area classified as one of the provincial agricultural hubs; and the central north-western parts between Doornkuil, Homestead Apple Orchards, Walkerville, Tedderfield and Waterval.

This principle states that all agricultural land as depicted on Figure 28 must be protected against urbanisation and/or extensive subdivision in order to protect the agricultural potential and integrity of these farm units (supports growth management) in support of the Agricultural Policy Objectives as contained in the Midvaal Agricultural Policy which states as follow:

- Preserve land with high conservation potential in support of the livelihoods of communities and to ensure food security;
- Preserve agricultural land in support of the livelihoods of communities and to ensure food security, especially on agricultural land with high yield potential;
- Provide a high level of certainty to landowners, decision makers and other stakeholders with regard to the status and future of agricultural land;
- Regulate and control access to agricultural land by proponents of non-agricultural development, thereby giving effect to the provisions of agricultural legislation;
- Build awareness and knowledge about the value of agricultural land and the need to preserve it and on matters pertinent to the threats that contribute to the loss of this resource;
- Promote efficiency in decision-making on applications relating to the subdivision of agricultural land and the change in use of agricultural land;
- Promote investment into alternative agricultural practices in the Midvaal area, for the...
benefit of the economy and to improve the quality of life.

The **Midvaal Agricultural Policy (2015)** is based on the following strategic pillars:

- Pillar 1: Obtaining funding for agriculture
- Pillar 2: Quantification (Audit) of infrastructure available
- Pillar 3: Establishment of Midvaal Agricultural Forum
- Pillar 4: Cluster farmers per commodity
- Pillar 5: Skills development and training
- Pillar 6: Market opportunities and linkages
- Pillar 7: Climate smart technology
- Pillar 8: Traceability through production, processing and distribution
- Pillar 9: Branding of Midvaal specific commodities
- Pillar 10: Regulations and By-Laws Awareness enhancement
- Pillar 11: Agricultural infrastructure provision
- Pillar 12: Development of Agro-Preneurs
- Pillar 13: Agro Processing enhancement
- Pillar 14: Consolidation of agricultural initiatives
- Pillar 15: Agro Industry Value Chain extension
- Pillar 16: Establishment of agricultural development nodes around Doornkuil, De Deur, Bantu Bonke and Vaal Marina

All policy statements and criteria as contained in the Midvaal Agricultural Policy are applicable to the land earmarked for agricultural purposes as reflected on Figure 27 of the Midvaal Spatial Development Framework. It should also be noted that the MLM intends to make 600 ha of agricultural land available as part of a Farmers Support Programme to provide more people access to land.

**Agricultural Hubs**

The Midvaal Municipality wishes to enhance agricultural production and processing as part of its vision to promote the municipal area as an agricultural hub in Gauteng context. This might require farmers to form functional clusters (agricultural hubs) within the area to collectively perform specialised agricultural activities (agglomeration and economy of scale benefits). Such activities may comprise intense production with related infrastructure, processing of products (agro-industries), training facilities and associated accommodation/social facilities for workers, and even commercial outlets to sell the processed agricultural products locally.

In such cases the farmers should approach the municipality with a business plan/proposal for the declaration of the relevant area as an “Agricultural Hub”. The MLM will then consider the basket of land uses required and negotiate with the group of farmers accordingly on the range and scale of land uses that can be allowed in such “Agricultural Hub” – even if it does not...
comply with the Agricultural Policy referred to above. Each case will be evaluated on its own merit.
In this regard the Doornkuil and Homestead Apple Orchards areas represent a proposed pilot Agricultural Hub (refer to Figure 27) where innovative agricultural production and processing should be established in line with the objectives noted in the De Deur Development Framework and Precinct Plan (2017).

**Agricultural Holdings**

As far as agricultural holdings in general are concerned, Council should strictly control the land uses as these areas have the tendency to become “mixed use transition areas” if not properly managed.

The primary purpose of agricultural holdings is to accommodate small-scale farming and rural-residential activity and the original layout, road reserves and engineering services provided in these areas were designed in accordance with this concept.

In many instances the illegal land uses performed on agricultural holdings have a severe negative impact on the surrounding environment in terms of noise pollution (small industrial activities), traffic (especially “trucking business”, sanitation (normally these areas only have septic tanks) and waste disposal.

In all these areas the general rule should be to allow agricultural services, public open space, rural residential and community facilities. Any other uses should be subject to the Consent of the Midvaal Local Municipality.

It should be noted that Rural Local Economic Development (LED) is a critical element towards future social and economic stability in the rural/agricultural areas of Midvaal, and therefore require very specific interventions in future (in partnership with Gauteng Department of Agriculture and Land Reform).
There are four major tourism features within the municipal area which should be promoted as tourism destinations in the Midvaal area (see Figure 29).

The first and most prominent tourism feature is the Vaal Marina precinct located in the far south-eastern parts of the municipal area, and which comprise a number of holiday resorts located around the Vaal Dam. This area is an asset not only to the local Midvaal community, but also to the broader Gauteng and regional population. It needs to be actively managed and protected in order to ensure that the character of the area as a tourism destination is maintained in the long term. The development guidelines as formulated for the Vaal Dam Special Control Zone as noted under Development Principle 1 as well as those contained in the Midvaal Environmental Management Framework (2008) are applicable to this precinct.

Supplementary to the Vaal Marina area, the world renowned Suikerbosrand Nature Reserve which is located in the north-eastern parts of the municipal area and which incidentally also consist of a range of ridges, represent a second prominent tourism feature/destination to the Midvaal area. The nature reserve should be actively marketed and promoted as a destination for day visitors from all over Gauteng Province. At present it already hosts some annual sports events which attract people from afar, but much more could be done to effectively brand it as a tourism precinct supplementary to it being a Nature Reserve. A one kilometre wide buffer zone of low intensity and compatible land use must be maintained in all directions around the Nature Reserve in order to protect it from negative external influences.

The Klip River and specifically the Henley-on-Klip area along the Klip River represent the third prominent tourism feature located within the Midvaal area. The area is characterised by a village atmosphere and forms part of a conservancy. The Bass Lake precinct adjacent to the north of Henley-on-Klip is also very popular for fishing and a number of adventure sports facilities.

The existing character of the area should be maintained and protected by restricting subdivision of properties and ensuring that farm portions are used for agricultural purposes.

The agricultural properties to the east, south and west need to be maintained as a green belt/buffer, while the establishment of bridle paths should be encouraged for the use of horse riders and cyclists.

The Midvaal Density Policy (outside the Urban Development Boundary), Accommodation
Policy, and Agricultural Policy are applicable to this area.

The fourth tourism precinct within the municipal area is represented by the extensive ridges located in the south-eastern and north-western parts of the municipal area respectively, and which form part of the Midvaal Regional Open Space System. Because of the strict development limitations applicable to these areas, there is potential to utilise these to further enhance the tourism character of the Midvaal area. The ridges areas can be utilised to expand on the range of tourism facilities and services being provided by the Midvaal municipality. Such services and facilities could include the development of mountain biking routes, hiking trails, game farming, and a range of adventure sport facilities as long as these do not impact negatively on the environmental quality of the area. The proposed Walkerville tourism village concept as discussed in the Walkerville Development Framework/ Precinct Plan could play an anchor role towards strengthening the tourism component in the Platberg ridges area.

Supplementary to the above, routes R42, R549 and R54 which serve most of the tourism precincts could be developed as tourism corridors by catering for supportive tourism initiatives and hospitality uses subject to the following conditions:
- The land use must be compatible with the character of the surrounding area;
- The scale and intensity must be compatible with the surrounding area;
- It may not interfere or impact negatively on the amenity of the area.

In principle, the majority of guest accommodation typologies as contained in the Midvaal Accommodation Policy should be promoted in and around the tourism precincts identified in the Midvaal SDF, subject to these facilities complying with all the requirements and conditions as set out in the policy. The Accommodation Policy provides guidelines to the following typologies/activities:

- Camping and Caravaning;
- Bed and Breakfast Establishments;
- Guesthouses;
- Backpackers Accommodation (including boarding house);
- Self-catering Apartments;
- Hotel;
- Resort/Lodge;
- Game Farm.

It should be emphasised that the SDF supports the principle that the majority of the guest accommodation typologies as reflected above should be concentrated in and around the identified tourism precincts. However, this does not prevent land owners within any other parts of the municipal area from applying for such rights as long as they comply with the criteria, guidelines and justification requirements for such facilities as contained in the Midvaal Accommodation Policy.
There is significant potential to promote a variety of economic activities, as well as residential development along the R59 Corridor in the Midvaal area. Extensive studies were conducted to determine the development potential of this corridor during 2004 and 2008, and Council approved the R59 Corridor Development Framework during July 2010. Following from this, the more detailed R59 Corridor Urban Design Framework was developed during July 2014. The footprint of the R59 Corridor functional area is schematically illustrated on Figure 30. The R59 Corridor functional area is the priority area for the bulk of economic and residential development within the Midvaal Municipality, and should thus also be prioritised in terms of the provision of engineering services. The bulk of development in the short to medium term is to be located to the east of route R59, but some areas to the west of the freeway are now also earmarked for development in the short to medium term, and more specifically the following:

- The land to the west of route R59 from the Graceview Industrial Park southwards up to road 1073 (future K160);
- The land to the west of route R59 from route 1322 (future K158) at Daleside, southwards and right up to Meyer Street (future K210).

Due to limited infrastructure capacity to the west of route R59, the preferred use in the above two areas would be typical services with low bulk service requirements (especially water and sanitation) e.g. storage/ warehousing, packaging, dry assembly plants, showrooms etc.

It is important to define a proper nodal structure within the municipal area in order to enhance service delivery, and to promote the provision of both social and economic infrastructure. This in turn, will result in consolidated social and economic development in both the urban and rural parts of the municipality as a form of growth management. As part of the 2011 Municipal SDF process, the Midvaal Municipality commissioned the formulation of a Nodal Development Policy for the municipal area.

According to the Midvaal Nodal Policy (2011), “Nodal development is defined as a mixed-use pedestrian-friendly land use pattern that seeks to increase concentrations of population and employment in well-defined areas with good transit service, a mix of diverse and compatible land uses, and public and private improvements designed to be pedestrian and transit oriented.”
1) **Nodal Hierarchy**

The Midvaal Nodal Development Policy makes provision for a three tier hierarchy of nodes within the Midvaal area as depicted on Figure 31:

- Primary Nodes: Core Area (CBD)
- Secondary Nodes: Neighbourhood Nodes
- Tertiary Nodes: Rural Nodes

a) **Primary Node: Core Area (CBD)**

The first and most prominent activity node within the Midvaal municipality is the Core Area which represents the Midvaal CBD located in the central part of Meyerton. This is the largest and most comprehensive activity node within the municipal area and will act as the priority area for promoting the widest range of economic activities, as well as higher order social facilities and amenities in the municipal area.

b) **Secondary Node: Neighbourhood Nodes**

The second category, which is the Neighbourhood Node, is generally located within the Midvaal Urban Development Boundary and comprise a number of evenly spaced nodal points identified all along the R59 corridor in the central Region, as well as some nodal points in the western parts of the municipal area (especially along route R82). These nodes are intended to provide lower order goods and services conveniently close to where communities currently reside. In total there are thirteen neighbourhood nodes identified within the Midvaal area, as listed below:

- Waterval
- Daleside
- Golf Park
- Meyer Street Entrance (Gateway)
- Sicelo
- Riversdale
- Kookrus
- Rothdene
- Walkerville
- Savanna City
- De Deur
- Vaal Marina
- Elandsfontein (It is anticipated that the Elandsfontein Node, once the precinct starts developing, will also become one of the secondary nodes in the Midvaal municipal area).

Note that the GITMP supports nodal development and densification along public transport corridors such as route R82.
c) **Tertiary Nodes: Rural Nodes**

The third category of node is specifically located outside the Urban Development Boundary of Midvaal and comprises two Rural Nodes which do not form part of proclaimed townships (refer to Figure 30). These include one nodal point along the R82 Corridor in the Western Region of the municipality at Tedderfield, and the Henley-on-Klip node in the Central Region of the municipality.

More detailed Precinct Plans have been compiled for a number of nodes in Midvaal, including the CBD, Waterval, Tedderfield, Elandsfontein, Walkerville and De Deur which are the largest ones.

All the nodes referred to above represent the consolidation and integration of a range of economic, social and residential facilities at strategically located points accessible at a convenient distance to the surrounding communities.

d) **Multi Purpose Community Centres**

Clusters of community facilities in the form of Multi Purpose Community Centres exist at the following points within the municipal area (see Figure 30):

- Bantu Bonke MPCC
- Lakeside MPCC
- Ohenumeri MPCC
- Randvaal MPCC

The purpose of a Multi Purpose Community Centre is primarily to provide a one-stop service comprising a fairly comprehensive range of social facilities and services to the surrounding community at strategic points within the municipal area. Such services and facilities could include schools, clinics, satellite police stations, libraries, post offices, community halls, and a range of additional social facilities and services e.g. pension pay-out points.

By implication a Multi Purpose Community Centre can/should form part of the identified hierarchy of nodes (Core Area, Neighbourhood Nodes and Rural Nodes) in the Midvaal area, but the four cases referred to above already exist, and should thus be maintained.

e) **Agri Village**

The Bantu Bonke area in the central-southern parts of the municipal area is classified as an Agri Village. This is a small residential settlement with a number of community facilities serving the local and surrounding rural communities. It has a strong agricultural character with a hydroponic plant forming part of the village.
2) **Economic Development Centres**

Figure 31 above depicts the proposed introduction of Economic Development Centres (EDC’s) which are aimed at realising economic growth and creation of jobs as outlined on the Midvaal IDP Theme for 2018-2019. The main objective of the EDC’s is to serve as integrated distinct anchors allocated within five (5) Midvaal Townships ranging from, but not limited to:

- **Milling Plant**- To develop a milling plant that will produce maize products and animal feeds. The objective of this plant would be to attract local business that is in the agricultural and farming industry to buy stock from this plant.

- **Agro-Processing Centre**- To develop a Agri-processing facility that will comprise of the following uses: agricultural and agro-processing purposes, restaurant, car wash and mini/family market/s (fruit and vegetables), training facility, production infrastructure, pack house with cold storage and administration offices, this hub is also aimed at supplying local farmers and shops that are within the agriculture business.

- **Upholstery and Sewing Hub**- To develop a hub that will specialise in the production of municipal uniform and other clothing needs- The targeted market are the Municipality, schools and other businesses

- **Tourism**- To create tourism objective for Midvaal in partnership with Heineken and Netherlands Embassy together with tourism related facilities- This centre is aimed at promoting private public partnerships, as this centre is looking at attracting Heineken and the Netherlands Embassy to work together with the municipality.

- **Plastic Manufacturing Plant** – To develop a hub that will look at manufacturing plastics and be sold to the municipality and the local business.

An extensive investigation/research approach is required prior to the realisation of the above mentioned centres. It is important to note that certain critical and realistic steps would have to be taken looking at but not limited to the following:

- **Comparative advantage studies**- That will look at the viability of the centres, the rationale, Its target market, approach and benefits within the community

- **Available and Required Engineering Infrastructure Services**- To look at the available and required services that will be required to establish extra commercial/industrial loading on the municipality’s capacity.

- **Policy Framework**- Extensive Policy frameworks would have to be formulated, to serve as guiding documents so as to legally facilitate the centres within a framework.

- **Other relevant research studies** relevant to the establishment of the EDC’s.

All of the centres are aimed at utilizing and improving skills and employment for the local communities, through prioritising local labour and youth employment. It is envisaged that all
the centres be integrated through participating in the leading and lagging economic value chain.

3) Projected Land Use Demand per Node (2034)

Table 13 below depicts the projected 20 year demand forecast for floor space demand in the various parts of the Midvaal Municipality as determined from the Midvaal Economic Development Analysis (Demacon 2014).

- Along the R59 Corridor the major areas of projected trade growth are around Gateway/Golf Park (37 000-39 000m² GLA); at Highbury/Henley-on-Klip (5500-7500m² GLA); and Waterval (2000- 3500m² GLA).
- In terms of office demand the Gateway/Golf Park and Highbury/Henley-on-Klip Nodes are highest while the projected demand for warehousing/industrial uses are highest at four nodes: Waterval/Nampak (150 000-180 000m² GLA); Daleside/Witkop (75 000-105 000m² GLA); and Henley-on-Klip/Highbury and Sicelo with 45 000-65 000m² GLA each.
- Residential densification and infill development (housing) is projected around all these nodes.
- Along route R82 the projected demand is significantly smaller than along the R59 Corridor. Savanna City holds the highest projected demand for Trade (21 000-23 000m² GLA) and office (1500-3500m² GLA) while De Deur and Walkerville are expected to yield about 2500 – 4000m² each.
- De Deur and Elandsfontein can expect the bulk of industrial demand (11 000-13 000 and 3000- 5000m² GLA respectively) while Walkerville could also yield significant commercial development.
- The bulk of residential development is also projected around Savanna City (470 000-500 000m² GLA).

In the remaining nodal areas in Midvaal the projected demand is limited, although significant residential development will occur around Mamello.
Table 13: Twenty Year Demand Forecast Space Demand (Baseline Scenario)

<table>
<thead>
<tr>
<th>Nodes/Development Areas</th>
<th>Trade (m² GLA)</th>
<th>Office (m² GLA)</th>
<th>Industrial/ Warehousing (m² GLA)</th>
<th>Housing (m² GLA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>R59 Functional Areas</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waterval/Nampak-Everite</td>
<td>2000 – 3500</td>
<td>1000 – 3000</td>
<td>150 000 – 185 000</td>
<td>54 000 – 56 000</td>
</tr>
<tr>
<td>Daleside/Wilkop</td>
<td>1000 – 2500</td>
<td>1000 – 3000</td>
<td>75 000 – 105 000</td>
<td>17 500 – 19 000</td>
</tr>
<tr>
<td>Henley-on-Klip/Highbury</td>
<td>5500 – 7500</td>
<td>3000 – 5000</td>
<td>45 000 – 65 000</td>
<td>54 000 – 56 000</td>
</tr>
<tr>
<td>Gateway</td>
<td>37 000 – 39 000</td>
<td>22 000 – 25 000</td>
<td>0</td>
<td>54 000 – 56 000</td>
</tr>
<tr>
<td>Golf Park</td>
<td>2000 – 3500</td>
<td>14 000 – 17 000</td>
<td>0</td>
<td>54 000 – 56 000</td>
</tr>
<tr>
<td>Meyerton CBD</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>17 500 – 19 000</td>
</tr>
<tr>
<td>Sicelo</td>
<td>2000 – 3500</td>
<td>1000 – 3000</td>
<td>45 000 – 65 000</td>
<td>72 500 – 74 500</td>
</tr>
<tr>
<td>Kookrus</td>
<td>2000 – 3500</td>
<td>1000 – 3000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rothdene</td>
<td>1000 – 2500</td>
<td>1000 – 3000</td>
<td>0</td>
<td>17 500 – 19 000</td>
</tr>
<tr>
<td>Riversdale</td>
<td>1500 – 3500</td>
<td>1000 – 3000</td>
<td>0</td>
<td>17 500 – 19 000</td>
</tr>
<tr>
<td><strong>R82 Functional Areas</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tedderfield</td>
<td>1000 – 2500</td>
<td>150 – 350</td>
<td>800 – 1100</td>
<td>17 500 – 19 000</td>
</tr>
<tr>
<td>Elandsfonteine</td>
<td>1000 – 2500</td>
<td>150 – 350</td>
<td>3000 – 5000</td>
<td>17 500 – 19 000</td>
</tr>
<tr>
<td>Walkerville</td>
<td>2500 – 4500</td>
<td>350 – 550</td>
<td>0</td>
<td>17 500 – 19 000</td>
</tr>
<tr>
<td>Savanna City</td>
<td>21 000 – 23 000</td>
<td>1500 – 3500</td>
<td>2000 – 3500</td>
<td>470 000 – 500 000</td>
</tr>
<tr>
<td>De Deur</td>
<td>2500 – 4500</td>
<td>350 – 550</td>
<td>11 000 – 13 000</td>
<td>17 500 – 19 000</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vaal Marina/Mamello</td>
<td>3500 - 5000</td>
<td>1000 - 2500</td>
<td>0</td>
<td>245 000 – 247 000</td>
</tr>
<tr>
<td>Eye of Africa</td>
<td>2500 – 4500</td>
<td>300 – 500</td>
<td>0</td>
<td>60 500 – 63 000</td>
</tr>
<tr>
<td>Suikerbosrand</td>
<td>300 – 600</td>
<td>150 – 350</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bantu Bonke Agricultural Village</td>
<td>300 – 600</td>
<td>150 – 350</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
3) Detailed Development Guidelines

The following more detailed development guidelines are applicable to the various types of nodes in the Midvaal area.

a) Primary Node: Core area (CBD)

“The CBD area provides the highest residential and commercial densities in the municipal area and the greatest variety of services in the region. It is intended to have the character of a central business district. As a regional destination, a core area typically contains larger retail stores, entertainment, offices and a mix of higher density housing.

The CBD area is of a municipal-wide significance and can therefore develop a strong retail, entertainment and office component. The retail component can accommodate a regional shopping centre or 2 or more community shopping centres. Alternatively, the core area can accommodate a total and combined retail floor area of between 10,000m² and 60,000m². The viability of the retail figures given above needs to be validated through a retail study that accompanies each individual application of retail land use rights within the municipal area.

The CBD area needs to provide higher-order community services that serve the entire municipal area. With regard to health care, the core area should provide the region’s hospital(s), as well as other higher order and specialized medical facilities. Other community facilities to be provided in such a node include a large police station and emergency service centre. These facilities are all highest-order facilities when compared to similar facilities provided in lower-order nodes.

The core area can provide recreation facilities that serve the municipal area, usually consisting of a stadium that forms the central facility within such a node. Such a recreational facility can serve as the base for regional sports clubs. In addition to the stadium, the core area should contain other highest-order recreations facilities, such as a cricket oval, a swimming pool and a multi-purpose indoor sports centre.

The CBD area can also accommodate a significant higher-density housing component to enable a more vibrant nodal configuration. The Meyerton CBD is most probably the only area within Midvaal that is suited for the development of walk-ups and a higher-density housing option.
b) Secondary Nodes: Neighbourhood Nodes

These nodes are intended to create a focus for more residential, suburban areas within the urban boundary of the municipal area. They are to provide a variety of services for local residents, including a mix of medium density housing, ranging from semi-detached housing to duplex housing, shopping, offices and community services. Neighbourhood nodes are intended to help steer urban development on a municipal level and provide structure to residential neighbourhood on a local level. Although there is no single design template that can be applied to all neighbourhood nodes, there are certain planning and design principles present in all good examples of neighbourhood node development, which are set out in the document.

A neighbourhood node can accommodate a community shopping centre and two or more local shopping centres or a total and combined retail floor area of between 5,000m² and 10,000m² in size. The viability of the retail figures given above needs to be validated through a retail study that accompanies each individual application of retail land use rights within the municipal area. In addition, a neighbourhood node can accommodate entertainment venues of local significance and an office component that can provide office space for local businesses.

**Table 14: Typical Retail Centre Classification**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Centre (Rural Centre)</td>
<td>1000-5000</td>
</tr>
<tr>
<td>Neighbourhood Centre</td>
<td>5000-10000</td>
</tr>
<tr>
<td>Community Centre</td>
<td>10000-30000</td>
</tr>
<tr>
<td>Small Regional Centre</td>
<td>30000-60000</td>
</tr>
<tr>
<td>Regional Centre</td>
<td>60000-100000</td>
</tr>
<tr>
<td>Super-Regional Centre</td>
<td>&gt;1000000</td>
</tr>
</tbody>
</table>

Source: Urban Dynamics Gauteng, 2010

A neighbourhood node should provide community services to the residential neighbourhoods they serve and should at least comprise a clinic, a post office, a community centre and a library. A recreational component can also be attached to a neighbourhood node. These recreational facilities can supplement the recreation facilities of schools.

c) Tertiary Nodes: Rural nodes

As the name suggests, rural nodes are nodes in rural areas that provide basic services and shopping opportunities to rural communities. These nodes are all located outside of the existing urbanized areas and Urban Development Boundary. These nodes should have a semi-rural character which can be expressed in their layout and building design.

A rural node can accommodate two or more local shopping centres, or a total and combined retail floor
area of up to 5,000 m² in size. (Also refer to Table 13). In addition, a rural node can accommodate office floor area catering for local businesses.

Due to the travel distances associated with rural areas, it is imperative that rural nodes should provide community services to the rural communities they serve. A rural node should at least comprise a clinic, a post office and a community hall. It is also important that the rural node comprises a police station due to the short reaction times required to respond to emergencies. A rural node can also comprise recreational facilities, such as a rugby field and a few tennis courts, to serve as a community facilitator within rural areas.

As part of a general drive towards enhancing the development of activity nodes in the municipal area, it is suggested that Council commission the compilation of detailed precinct plans for such areas. Most of the nodes in Midvaal already have such plans.

The Midvaal Nodal Policy is currently being reviewed and will be adopted as per Council Resolution. The 2019 Midvaal Nodal Policy shall then henceforth come into effect and previous nodal policies will be rescinded.

### Development Principle 6

To capitalise on the strategic location of the municipality by way of regional and provincial linkages, and to establish an internal movement network comprising a hierarchy of roads which include a comprehensive public transport network and services.

It is important to provide for proper regional, as well as local road network linkages within and around the municipal area. As illustrated on Figure 32.1 the most important regional routes currently serving the Midvaal area include the R59 freeway, route R82 in the western parts of the municipal area, route R550 which runs from the Waterval area towards the N3 in the eastern parts, route P25-1/ R551 which links Midvaal (Meyerton) to Lesedi (Heidelberg); route K78 which links the Meyerton area to the Vaal Dam and to the N3 freeway to the east (south of Heidelberg); route P41-2 which links the Vaal Marina area to Heidelberg towards the north-west; and route R557 which links Meyerton to the Suikerbosrand Nature Reserve.

This road network needs to be protected and enhanced at all cost in order to ensure that Midvaal is functionally linked to the surrounding urban fabric and performs its function, both economically and socially, in the broader regional and provincial context.

**Figure 32.2** comprises the proposed Strategic Road Hierarchy of existing and proposed first, second and third order routes in the Midvaal area as contained in the Midvaal Integrated Transport Plan and the Gautrans Strategic Road Network.

In brief the proposed future road hierarchy comprise the following route as reflected on Figure 6.2:
First Order (Freeways):
- N1 towards the west;
- R59 in the central Midvaal area;
- PWV13 broadly linking Suikerbosrand to the Vaal Dam;
- PWV18, 20 and 22 which will serve the Midvaal area in an east-west direction in the
  northern, central and southern parts once it is constructed.

Second Order: K-routes/Conventional Dual Carriageway Routes:
- Routes K47, K57 (existing R82), and K77 parallel to the west of route R59;
- Routes K91, K135 and K167 parallel to the east of Route R59;
- In an east-west direction and from north to south in the Midvaal area the following
  routes:
    • K144 past Tedderfield to the north towards Lenasia;
    • K154 through the Waterval Node (Heidelberg Road) towards Walkerville and
      Elandsfontein;
    • K158 through Daleside towards Suikerbosrand;
    • K210 from Golf Park through Doornkuil towards the N1;
    • K174 between Meyerton and Heidelberg (Lesedi);
    • K164 from Meyerton CBD through Sicelo towards Ironside and Everton-
      Sebokeng (Johan le Roux extension);
    • K184 from Emfuleni/Vereeniging towards Ironside;
    • K83 between Emfuleni/Vereeniging and the Vaal Dam.

The most important routes from the above are K57 (R82) to the west (serving the area in a
north-south direction); K154 to the north linking Waterval Node to Elandsfontein and beyond
(east to west); and K164 (Johan le Roux) linking Midvaal CBD to Sicelo and to De Deur (east-
west). Combined with route R59 these routes form the lattice around which the bulk of
development in Midvaal will take place over the next few decades.

Supplementary to the above, there is also a third order network which serves to provide
access to individual farm areas and agricultural holdings/properties at local level. This is the
first road hierarchy that provide direct access to land uses and is the highest order route
network under the authority of the Midvaal Municipality.

It is important to note that the Strategic Road Network as depicted on Figure 31.2 is a long
term plan (50 years plus), and that individual routes or parts thereof will only be constructed
if/when traffic volumes emanating from land use development/urbanisation warrants the
construction thereof.

**Figure 32.3** depicts the priority public transport routes as well as taxi and bus stops within
the municipal area. The most important routes in this regard include route R551 which links
De Deur to Meyerton; route K89 which serves as the main public transport route parallel to
R59 and the railway line; as well as some local linkages towards the east and south of Meyerton. The priority taxi ranks and bus stops proposed for the Midvaal area are also illustrated on Figure 32.3.

The two existing railway lines are assets to the Midvaal area and the municipality will contribute towards enhancing the viability of these as commuter railway lines by promoting Transit Orientated Development around all the railway stations along the lines both along the R59 Development Corridor and at the Residentia and Stretfort railway station in Savanna City. (Also refer to sections 4.2.1 and 6.5.2 of the Midvaal Nodal Policy.)
As depicted on Figure 33 the bulk of proposed industrial and commercial activity within the Midvaal area over the short to medium term should be located within the R59 Development Corridor. The more detailed development proposals associated with this area are discussed in greater detail in the R59 Development Framework and the R59 Urban Design Framework documents. Limited development may also be allowed in certain areas to the west of route R59, subject to the bulk service requirements of the intended use (preferably low) and the availability of such infrastructure.

It is however important to note that limited small scale light industrial/commercial development can and should also be accommodated in some of the other nodal points in the municipality (also refer to Table 12 to see projections). The De Deur, Walkerville and Tedderfield nodal points located along route R82 in the western parts of the Midvaal municipal area are earmarked to accommodate supplementary light industrial and/or commercial activity (at limited scale). The Precinct Plans for each of these nodal areas provide more detail pertaining to the range of activities to be allowed, as well as the exact location, scale and extent of such developments.

Similarly, the area adjacent to the N1 freeway at the Elandsfontein Node is earmarked for future industrial use at a scale similar to that envisaged around the Klip River Business Park. The Midvaal Municipality should, however, commence with discussions at provincial level to elevate this project to Blue IQ status in provincial context.

Substantial parcels of vacant industrial-zoned land are still available within the R59 corridor area and development of these land parcels should receive priority. Light industrial and commercial use will be an important component of the land use mix which will eventually make up the proposed R59 Development Corridor.

As far as heavy/noxious industrial development is concerned, it should be consolidated in the Meydustria area which has sufficient buffer zones between the industrial area and surrounding residential suburbs.
**Development Principle 8:** To provide for a wide range of bonded and subsidised housing typologies and tenure alternatives within clearly defined Strategic Development Areas, and to continuously manage residential densification by way of the Midvaal Density Policy.

*Figure 34* illustrates the fourteen Strategic Development Areas identified within the municipal area where Council should promote the bulk of residential development in the short, medium and longer term (these form part of Council’s Growth Management Strategy). These areas are generally located close to the major centres of economic activity, and support-supplement the development of the R59 Development Corridor and to a lesser extent route R82. By implication the Strategic Development Areas could comprise a range of housing densities starting at about 10 to 12 units per hectare in conventional middle to high income residential areas, and up to about 60 units per hectare, especially around the major public transport routes e.g. SDA2 and SDA5.

The fourteen Strategic Development Areas where residential development/densification can/should be promoted include the following:

<table>
<thead>
<tr>
<th>Strategic Development Area</th>
<th>Potential Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDA1: Waterval Node within UDB</td>
<td>550 Units</td>
</tr>
<tr>
<td>SDA2: Skansdam and Daleside railway stations</td>
<td>1000 Units</td>
</tr>
<tr>
<td>SDA3: Golf Park-Meyerton CBD Precinct *</td>
<td>1000 Units</td>
</tr>
<tr>
<td>SDA4: Riversdale</td>
<td>200 Units</td>
</tr>
<tr>
<td>SDA5: Rothdene-Kookrus</td>
<td>200 Units</td>
</tr>
<tr>
<td>SDA6: Risiville</td>
<td>100 Units</td>
</tr>
<tr>
<td>SDA7: Sicelo *</td>
<td>5476 Units</td>
</tr>
<tr>
<td>SDA8: Savanna City *</td>
<td>18 399 Units</td>
</tr>
<tr>
<td>SDA9: De Deur</td>
<td>20 028 Units</td>
</tr>
<tr>
<td>SDA10: Walkerville</td>
<td>2523 Units</td>
</tr>
<tr>
<td>SDA11: Eye of Africa: Mountain View/Woodacres</td>
<td>2158 Units</td>
</tr>
<tr>
<td>SDA12: Elandsfontein</td>
<td>16 182 Units</td>
</tr>
<tr>
<td>SDA13: The Grace *</td>
<td>1414 Units</td>
</tr>
<tr>
<td>SDA14: Mamello *</td>
<td>1031 Units</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>69 230 Units</strong></td>
</tr>
</tbody>
</table>

* Short to Medium Term Priority

The Vaal Marina complex is not earmarked for conventional residential development/densification as it caters for holiday accommodation, but Mamello will become a permanent residential township in this area.

It is estimated that these areas could collectively accommodate about 69 230 units which is sufficient to serve the incremental residential demand in the municipal area for at least the
next two to three decades.

The highest priority areas for the short to medium term are highlighted in the table below, and mainly include The Grace, Golf Park CBD and Sicelo along route R59; Savanna City along route R82; and Mamello in the Vaal Marina area. All development will, however, be subject to engineering services availability.

Part of the Walkerville node is Ohenimuri where approximately 373 residential erven are still vacant. It is recommended that Council call for proposals for a developer to develop all the Council owned properties in Ohenimuri. A variety of housing typologies catering for different affordability levels should be catered for and could include RDP, GAP Market (FLISP) bonded units and Full Bonded Units as well as bonded or subsidised (CRU/Social) rental units.

As far as residential densification outside the Urban Development Boundary is concerned the Midvaal Density Policy (2011) will be applied. In principle, Rural Residential development is allowed in all rural areas as depicted on Figure 33, but it should be noted that there are strong guidelines and parameters contained in the Midvaal Density Policy within which such development can and should be allowed.

In general, the formalisation of informal settlements need to be achieved through upgrading programmes. This is done as part of the low cost housing process, in terms of provincial housing subsidies.

There is almost never a sharp cut-off point between urban development and extensive agriculture, and it is therefore envisaged that a transitional area will develop on the agricultural holdings and around the urban edge, which may comprise of a range of different peripheral uses.

It is proposed that low intensity land uses associated and compatible with agricultural holdings and rural residential areas may be supported. Intensive agriculture should also be promoted in these areas, where potential exists. If properly developed, these uses can actually support the Urban Development Boundary and serve as a barrier/obstacle to future expansion of the urban environment.

Transitional residential zoned spaces provide adequate land for residential development of informal human settlements, which might include low-cost housing (RDP) while providing ample economic opportunities and necessary social amenities within the zone without creating any inconvenience to the residents and disturbing the residential fabric of the zone. This promotes sustainable development, creates spatial resilience and assists in facilitating gradual formalisation of human settlements.
Transitional Residential zones are only permitted on Council owned land or State-owned land managed by the municipality with the agreement from the relevant sphere of Government and by a service agreement between the municipality and the land owner on privately owned land.

Inclusionary housing is a mechanism used to ensure housing topologies of low to medium income households are catered for in housing developments. The concept of inclusionary housing shall be applied to all meg housing projects as a condition of approval. Mega projects that have been approved with the application of inclusionary housing methodology are Savanna City and The Grace developments.

**Development Principle 9:** To delineate an Urban Development Boundary to encourage consolidated urban development and to protect high potential agricultural land and sensitive environments.

In order to enhance the development of the R59 Corridor and the other identified secondary activity nodes in the municipal area, the Midvaal Municipality opted to utilise an Urban Development Boundary as one of a series of Growth Management Instruments aimed to guide the direction, size, extent, intensity and phasing of development along the R59 Development Corridor and around the various nodes identified in the municipality. As a result the majority of land to the east of the R59 freeway and around the secondary activity nodes along route R82 are included within the Urban Development Boundary as depicted on Figure 35.

From this it is evident that the major focus area for urbanisation in the Midvaal area is to the east of the R59 corridor extending along the entire length of route R59 from Rothdene in the south up to Waterval in the north. The Lakeside/Doornkuil, De Deur, Walkerville, Ohenimuri, Eye of Africa and Vaal Marina precincts are also included within the Urban Development Boundary as these areas already represent extensive development.

The following guidelines pertaining to land uses to be allowed within and outside the Midvaal Urban Development Boundary will apply:

a) **Land Use within the Urban Development Boundary**

As far as land uses inside the Urban Development Boundary are concerned, a land use that is consistent with the relevant municipality’s IDP, spatial development framework, land use
management plan and/or town planning scheme should be permitted, subject to the normal procedures and legislation, e.g., environmental considerations, transportation requirements, etc. It is important to note that the Urban Development Boundary does not imply that the entire area within the boundary can/should be allowed to develop and that development rights are therefore guaranteed. Factors such as timing, availability of services, the environmental impact/conditions, etc., must and should still be applicable when considering an application within the Urban Development Boundary.

b) Land Use outside the Urban Development Boundary

Land uses that are rural in nature would be more desirable, and should therefore be promoted outside the Urban Development Boundary rather than inside it. Where applicable, it will also have to be in line with provincial policies, e.g., GDACE policy on subdivision of land, etc., and/or the local development frameworks compiled for the various rural areas in the Midvaal area, e.g., Walkerville and De Deur Precinct Plan. The following land uses will be allowed in the rural areas outside the Midvaal Urban Development Boundary:

- Extensive agriculture;
- Conservation Areas/Nature Reserves;
- Tourism and related activities, e.g., curio markets;
- Recreational Facilities, e.g., hiking trails/hotels/game lodges;
- Farm stalls and home industries;
- Rural residential uses/Agricultural Holdings in specific areas; or
- Any other related development of service;

Provided that the proposed development or service

a) services primarily the local market; and/or
b) is resource-based; and/or
c) is located at a defined and approved service delivery centre/nodal point.

Developments or services not complying with the criteria set in (a) – (f) may thus only be allowed if it complies to one or more of the criteria listed as (h), (i) and (j).

It is important to note that, in line with the Urban Development Boundary, the Midvaal Municipality already identified the short, medium, and longer term priority areas for the upgrading and expansion of engineering services to promote and facilitate economic development.

In principle, all parts of the Midvaal Municipality located within the Urban Development Boundary are deemed to be priority areas for accommodating development, while the remainder part of the municipal area is deemed to be rural in nature, and thus all policies, guidelines, and principles applicable to rural development are to be applied in these areas.
**Development Principle 10:** To prioritise the bulk of short to medium term upgrading/provision of engineering services to nodal areas within the Urban Development Boundary.

As a principle, areas located within the Urban Development Boundary in the Midvaal area will be prioritised for bulk engineering services capital investment.

The Midvaal Municipality will work in accordance with this principle without neglecting the constitutionally mandated rights of all communities – even those outside the Urban Development Boundary – of having access to a minimum level of basic services like water, sanitation, electricity, shelter, education and health.

Even within the Urban Development Boundary not all areas are equally prioritised. Therefore, the town planning and engineering services departments of the Midvaal Municipality need to align their programmes in order to ensure that whatever spare capacity is available within the municipality is used for the prioritised areas within the Urban Development Boundary.

The upgrading and/or expansion of engineering services in order to facilitate development or to unlock the development potential of certain areas needs also to be scheduled accordingly.

The following is a brief summary of the rationale/approach to be followed by the Midvaal Municipality in terms of the provision/upgrading of engineering services in the next three to five years:

**a) Meyerton/Sicelo Core Area**

**Water:** As far as water is concerned a new reservoir will be constructed in the northern parts of the Meyerton/Sicelo core area as depicted on Figure 36. This reservoir will have a capacity of 10ML which should be sufficient to accommodate approximately 5000 additional households.

**Sanitation:** In terms of sanitation the entire Meyerton/Sicelo functional area as depicted on Figure 37 will benefit from the upgrading of the Meyerton sewer treatment plant from the current 12ML to approximately 22ML. This upgrade will be conducted over a period of approximately 3 to 4 years and will serve about 15 000 more residential units in the Meyerton/Sicelo area, and even beyond.

The outfall sewers serving this functional area will also be upgraded as and where required. This includes a new bulk outfall sewer from Sicelo to link up with the existing Klip River outfall sewer.

In the vicinity of Rothdene the existing pump station and rising main will also have to be upgraded in order to cater for the increased capacity of the total catchment area.
b) Waterval Node

**Water:** In the Waterval Node functional area the Drumblade reservoir will be upgraded to serve the new residential developments associated with The Grace located to the west of the existing node. This is the most important water related upgrade for the short to medium term in this area.

**Sanitation:** In terms of sanitation each development in and around this area will have to provide its on-site package plant in line with current policy. The long term vision for this area is, however, to link into the existing Erwat sewer treatment plant which is located within this functional area. It is anticipated that this will only materialise in the medium to longer term (beyond 6 years from now).

c) Walkerville/Elandsfontein

**Water:** The Walkerville area and future development in Elandsfontein will be served by the Spioenkop reservoir which is located in the northern extents of this functional area. There is sufficient capacity to serve the demand.

**Sanitation:** In terms of sanitation, Walkerville will rely on package plants for the short to medium term until the Erwat plant located at the Waterval Node is accessible for use by the Midvaal municipality. It is envisaged that Walkerville will eventually be linked by way of an outfall sewer from Walkerville through to the Erwat plant in Waterval.

The Elandsfontein sewer will be treated at the Sebokeng treatment plant which is located to the south-west of the area in the area of jurisdiction of the Emfuleni Local Municipality.

d) Savanna City Functional Area

The infrastructure for Savanna City will mostly be provided by the developers. These include the recently completed reservoir located in the north-eastern extents of the functional area as illustrated on Figure 36, as well as an outfall sewer link to the Sebokeng Treatment Plant towards the south-west as indicated on Figure 37. It should, however, be noted that the Sebokeng Plant is already under severe pressure and does not have spare capacity.

e) De Deur

**Water:** Once the intensity of development in the De Deur area warrants it, the existing Langerand reservoir serving the area will be upgraded to 10 or 15ML which will cost approximately R100 million.
Sanitation: The current policy with regards to the provision of package plants for individual developments in De Deur will remain until such time as the scale/magnitude of development warrants the construction of an outfall sewer line to link up with the Meyerton treatment plant. This link will require that the Meyerton treatment plant at the time be expanded from the 22Ml currently planned to approximately 30Ml. The expansion of the treatment plant as well as the feeder line is expected to cost in the order of approximately R300 million. This initiative is scheduled for the medium to longer term and will only follow once the intensity of development in De Deur justifies such large scale upgrading.

f) Vaal Marina

At the Vaal Marina Node the priority matters relate to the construction of a new water tower of approximately 0.3Ml as well as the improvement of the existing sewer treatment plant. Both these projects are already on the capital programme of the local municipality.

Conclusion

It is evident that the priority areas in terms of bulk infrastructure provision in the short to medium term are the Meyerton/Sicelo functional area; the Waterval Node and surroundings to the north of the R59 Corridor; as well as the Savanna City Precinct located in the far western extents of the municipality.

The functional precincts around route R82 which include De Deur, Ohenimuri, Walkerville and Elandsfontein are lower priorities at this stage and will link into the Meyerton and/or Waterval sewer functional areas once development warrants such large scale upgrading of engineering services.

Regarding waste removal the priority of the municipality at this stage is the construction of a new waste treatment plant (Phase 3), as well as the upgrading of the existing ones at Walkerville and Meyerton town.
7. IMPLEMENTATION

7.1 Implementation Monitoring and Evaluation Guidelines

In terms of Section 26 of the Municipal Systems Act the Spatial Development Framework of a municipality is one of nine legal components of the Integrated Development Plan (IDP) of that municipality. As such the SDF thus becomes part of the statutory processes associated with the IDP, and which includes, amongst others, the processes related to Inter Governmental Relations (IGR), Community Consultation and Participation, and the Budgeting process of the local municipality.

In view of the above it is firstly proposed that the Midvaal Local Municipality SDF be incorporated into the MLM IDP process during the 2019/2020 IDP Review. Within the IDP, the MLM SDF should then serve as the backdrop against which all development needs, and projects and initiatives forthcoming, should be measured and assessed.

All projects and programmes to be implemented by the various spheres of government, parastatals organisations, and/or the private sector should then firstly be evaluated in order to ensure that these are in support of the principles of the SDF, and that these will contribute towards the achievements of the spatial vision for the municipal area, before being included into the IDP for the next financial year.

The two consultation mechanisms in the IDP process i.e. the IDP Technical Committee and the IDP Representative Forum involve all technical and political stakeholders, public and private, and is the ideal medium to use to promote and market the development opportunities as reflected in the SDF. This process is illustrated on Figure 38.

However, there is also opportunity to utilise existing or new Working Groups/Task Teams to implement aspects of the SDF even outside the official IDP structures. Typical aspects to be addressed in this manner include the monitoring of agricultural activity in the MLM, working groups overseeing feasibility studies conducted for various Strategic Development Areas etc.

Representatives of departments from all three spheres of government participate in the IDP process, and if they all work in accordance with the principles contained in the SDF, the alignment and synchronisation of the programmes of sectoral departments can be significantly improved. This will specifically be of critical importance in the establishment of Multi Purpose Community Centres where a number of stakeholders have a role to play.
The next important benefit to be derived from utilising the IDP process to promote and market the SDF, is the fact that the IDP process involves all communities, and private stakeholders in the municipal area. As part of a general capacity building initiative the contents and philosophy of the SDF should be presented to these stakeholders during the IDP process. This will ensure that communities have a common understanding of the principles fundamental to the SDF, and will also guide and inform the inputs provided by communities during the IDP consultation process.

If stakeholders (public and private) in the Midvaal LM have a common understanding of the long term spatial vision for the area, it will ensure the effective alignment of all development initiatives in the area, and optimise the collective benefits to be derived from these.

The next significant benefit associated with implementing the SDF via the MLM IDP process, is the fact that the IDP is legally linked to the Budgeting Process of the Municipality (in terms of the Municipal Systems Act and the Municipal Finance Management Act).

By incorporating the MLM SDF into the IDP process, it ensures that the proposed projects and programmes emanating from the SDF process are incorporated into the IDP, from where it feeds into the Budgeting process of the Municipality. In this way the effective linkage of the SDF to the Municipal Budget is achieved.

The last important component to be addressed is the Monitoring and Evaluation of the implementation of the SDF proposals. The IDP process is subject to a cyclical review on an annual basis. It is appropriate that, as part of the annual IDP Review Process, an assessment/audit should be done by November of each year to determine to what degree the goals and objectives of the SDF have been achieved during the preceding year. This also leaves sufficient time (December up to March) to rectify the shortcomings identified, and to include these in the Revised IDP and Budget for the next financial year. As the IDP Review process involves all development partners in the municipal area, it will also be possible to grant each partner an opportunity during the SDF assessment process to report on progress made in implementing their respective spatial initiatives, and for the various stakeholders to illustrate how their initiatives support the realisation of the spatial vision as contained in the MLM SDF.

It is of critical importance that the developers active in the MLM participate in this process as their investment in social services and residential development contributes significantly to the local spatial structure. Without this level of co-operation and alignment there is no hope of achieving long term sustainability in the Midvaal area.
7.2 Capital Investment Framework and Implementation Programme

Table 15 is a list of priority projects to be initiated in the Midvaal area, based on the findings and development proposals contained in the SDF. The various Departments of the Midvaal Local Municipality should assess and incorporate these projects into their respective departmental Capital Investment Frameworks. From here it should be consolidated into the Municipal Capital Investment Framework and Medium Term Expenditure Framework. Accordingly, the CFO and PMU Managers should seek to acquire funding for the various projects via the relevant sources e.g. grants, subsidies etc. Note: This table with projects will be updated once the updated Capital Investment Framework of the municipality is available/ approved.
### Table 15: SDF Related Capital Investment Programme

<table>
<thead>
<tr>
<th>Principle</th>
<th>Responsibility</th>
<th>Cost</th>
<th>Phasing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Development Principle 1: Environmental Management</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action 1.1: Implement/Apply EMF Guidelines based on four Control Zones as defined in SDF in all new applications.</td>
<td>Midvaal Local Municipality</td>
<td>Operational</td>
<td>X</td>
</tr>
<tr>
<td>Action 1.2: Enhance Green Technology/Energy Efficiency in terms of Annexure XA of the National Building Regulations.</td>
<td>Midvaal Local Municipality</td>
<td>Operational</td>
<td>X</td>
</tr>
<tr>
<td><strong>Development Principle 2: Agricultural Development</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action 2.1: Strict Control of Land Use on Agricultural Holdings and Farms.</td>
<td>Midvaal Local Municipality</td>
<td>Operational</td>
<td>X</td>
</tr>
<tr>
<td>Action 2.2: Support CRDP initiatives on agricultural land as/when initiated by DRDLR.</td>
<td>Midvaal Local Municipality/DRDLR</td>
<td>Operational</td>
<td>X</td>
</tr>
<tr>
<td>Action 2.3: Support all agricultural pillars/initiatives in Midvaal.</td>
<td>Midvaal Local Municipality/DRDLR</td>
<td>Operational</td>
<td>X</td>
</tr>
<tr>
<td>Action 2.4: Make available 600 ha of land</td>
<td>Midvaal Local Municipality/DRDLR</td>
<td>Operational</td>
<td>X</td>
</tr>
<tr>
<td><strong>Development Principle 3: Tourism Promotion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action 3.1: Formulate Municipal Tourism Enhancement Strategy for each of the five Tourism Precincts.</td>
<td>Midvaal Local Municipality</td>
<td>R600 000</td>
<td>X</td>
</tr>
<tr>
<td>Action 3.2: Enhance branding of five Tourism Precincts through signage.</td>
<td>Midvaal Local Municipality</td>
<td>R100 000</td>
<td>X</td>
</tr>
<tr>
<td>Action 3.3: Implement/Apply the Midvaal Accommodation Policy.</td>
<td>Midvaal Local Municipality</td>
<td>Operational</td>
<td>X</td>
</tr>
<tr>
<td><strong>Development Principle 4: R59 Development Corridor</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action 4.1: Continuously brand the R59 functional area as a provincial Development Corridor and prioritise this area for infrastructure investment (public/private).</td>
<td>Midvaal Local Municipality</td>
<td>Operational</td>
<td>X</td>
</tr>
<tr>
<td><strong>Development Principle 5: Enhance Nodal Development to Guide/ Direct Service Delivery</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action 5.1: Initiate compilation of Precinct Plans for following secondary nodes:</td>
<td>Midvaal Local Municipality (Grant funding: DRDLR/ GDED/ Other)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Henley-on-Klip</td>
<td>R100 000</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Principle</td>
<td>Responsibility</td>
<td>Cost</td>
<td>Phasing</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-------------------------------------</td>
<td>---------------</td>
<td>------------------</td>
</tr>
<tr>
<td>- Gateway</td>
<td>MLM (MIG Funding)</td>
<td>R80 000</td>
<td>X</td>
</tr>
<tr>
<td>- Golf park</td>
<td>MLM (MIG Funding)</td>
<td>R80 000</td>
<td>X</td>
</tr>
<tr>
<td>- Sicelo</td>
<td>MLM (MIG Funding)</td>
<td>R100 000</td>
<td>X</td>
</tr>
<tr>
<td>- Kookrus</td>
<td>MLM (MIG Funding)</td>
<td>R80 000</td>
<td>X</td>
</tr>
<tr>
<td>- Rothdene</td>
<td>MLM (MIG Funding)</td>
<td>R80 000</td>
<td>X</td>
</tr>
<tr>
<td>- Riversdale</td>
<td>MLM (MIG Funding)</td>
<td>R50 000</td>
<td>X</td>
</tr>
<tr>
<td>Action 5.2: Construction of Sport Centre at Lakeside MPCC.</td>
<td>MLM (MIG Funding)</td>
<td>R18,3 million</td>
<td>X</td>
</tr>
<tr>
<td>Action 5.3: Construction of Informal Trade Shelters in Various Nodes.</td>
<td>MLM (MIG Funding)</td>
<td>R9,2 million</td>
<td>X</td>
</tr>
<tr>
<td>Action 5.4: Construction of Fire station at Vaal Marina.</td>
<td>MLM (MIG Funding)</td>
<td>R7,05 million</td>
<td>X</td>
</tr>
<tr>
<td>Action 5.5: Construction of Schools in Savanna City.</td>
<td>G Dept Education</td>
<td>R1,4 billion</td>
<td>X</td>
</tr>
<tr>
<td>Action 5.6: Construction of Clinics in Savanna City.</td>
<td>G Dept Health</td>
<td>R500 million</td>
<td>X</td>
</tr>
<tr>
<td>Action 5.7: Construction of Doornkuil Regional Cemetery (Savanna City). (As per Doornkuil Precinct Plan)</td>
<td>SDM</td>
<td>R25 million</td>
<td>X</td>
</tr>
<tr>
<td>Action 5.8: Construction of Doornkuil Regional Tertiary Agricultural Training Facility (Savanna City).</td>
<td>G Dept Education</td>
<td>To be determined</td>
<td>X</td>
</tr>
<tr>
<td>Action 5.9: Construction Regional Hospital and Training Facility (Savanna City).</td>
<td>MLM (MIG Funding)</td>
<td>To be determined</td>
<td>X</td>
</tr>
<tr>
<td>Action 5.10: Development of Precinct Plans for Economic Development Centres</td>
<td>MLM</td>
<td>To be determined</td>
<td>X</td>
</tr>
</tbody>
</table>

**Development Principle 6: Movement Network**

| Action 6.1: Maintenance of route R59. | SANRAL/ GAUTRANS | To be determined | X | X | X |
| Action 6.2: Upgrading of route R62. | Gautrans | To be determined | X | X | |
| Action 6.3: Upgrading of route K164 (Johan le Roux). | Gautrans | To be determined | X | X | |
| Action 6.4: Upgrading of route K154. | Gautrans | To be determined | X | X | |
| Action 6.5: Construction of link road: Henley-on-Klip to Golf Park (R59 to K174 link road). | MLM | To be determined | X | |
| Action 6.6: Gravel to Tar Roads (Phase 4). | MLM (MIG Funding) | ± R5 million p.a. | X | X | X |
| Action 6.7: Mamello Access Road. | MLM (MIG Funding) | R600 000 | X | |
| Action 6.8: Pedestrian bridge over R59. | Gautrans | R4 189 900 | X | |

**Development Principle 7: Industrial, Commercial and Mining Activity**

| Action 7.1: Elandsfontein Blue IQ Elevation. | MLM/GDED | To be determined | X | X | X |
| Action 7.2: Revitalisation Strategy for Southern Industries within R59 Corridor. | MLM/GDED | To be determined | X | |

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<table>
<thead>
<tr>
<th>Principle</th>
<th>Responsibility</th>
<th>Cost</th>
<th>Phasing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Development Principle 8: Residential development in SDAs</strong></td>
<td>MLM</td>
<td>To be determined</td>
<td>X</td>
</tr>
<tr>
<td>Action 8.1: Facilitate Development in all Strategic Development Areas.</td>
<td>MLM</td>
<td>To be determined</td>
<td>X</td>
</tr>
<tr>
<td>Action 8.2: Compile Sustainable Human Settlement Plan for Midvaal.</td>
<td>MLM</td>
<td>R400 000</td>
<td>X</td>
</tr>
<tr>
<td><strong>Development Principle 9: Urban Development Boundary</strong></td>
<td>MLM</td>
<td>Operational</td>
<td>X</td>
</tr>
<tr>
<td>Action 9.1: Strictly apply guidelines pertaining to development within/</td>
<td>MLM</td>
<td>Operational</td>
<td>X</td>
</tr>
<tr>
<td>outside UDB in Midvaal.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Development Principle 10: Provision of Engineering Services</strong></td>
<td>MLM/MIG Funding</td>
<td>To be determined</td>
<td>X</td>
</tr>
<tr>
<td>Action 10.1: Upgrade Meyerton Treatment Plant (12MI to 22MI).</td>
<td>MLM/MIG Funding</td>
<td>± R8 million p.a.</td>
<td>X</td>
</tr>
<tr>
<td>Action 10.2: Upgrade all Outfall Sewers in surrounding area.</td>
<td>MLM/MIG Funding</td>
<td>To be determined</td>
<td>X</td>
</tr>
<tr>
<td>Action 10.3: Sicelo/Highbury reservoir and mains.</td>
<td>MLM/MIG Funding</td>
<td>R57 million</td>
<td>X</td>
</tr>
<tr>
<td>Action 10.4: Upgrade Rothdene pump station and rising main.</td>
<td>MLM/MIG Funding</td>
<td>To be determined</td>
<td>X</td>
</tr>
<tr>
<td>Action 10.5: Upgrade Drumblade reservoir to serve The Grace.</td>
<td>MLM/MIG Funding/ Developer</td>
<td>To be determined</td>
<td>X</td>
</tr>
<tr>
<td>Action 10.6: New Savanna Reservoir.</td>
<td>Developer</td>
<td>To be determined</td>
<td>X</td>
</tr>
<tr>
<td>Action 10.7: Savanna Outfall Sewer to Sebokeng WTW.</td>
<td>Developer</td>
<td>To be determined</td>
<td>X</td>
</tr>
<tr>
<td>Action 10.8: Vaal Marina water tower.</td>
<td>MLM/MIG Funding</td>
<td>R1,35 million</td>
<td>X</td>
</tr>
<tr>
<td>Action 10.9: Mamello Bulk Sewer.</td>
<td>MLM/MIG Funding</td>
<td>R60 000</td>
<td>X</td>
</tr>
<tr>
<td>Action 10.10: Upgrade Landfill Sites: Vaal Marina, Walkerville.</td>
<td>MLM/MIG Funding</td>
<td>R10 million</td>
<td>X</td>
</tr>
<tr>
<td>Action 10.11: New waste disposal site (Phase 3).</td>
<td>MLM/MIG Funding</td>
<td>To be determined</td>
<td>X</td>
</tr>
</tbody>
</table>
7.3 Alignment with Midvaal LUMS

A Land Use Scheme is interpreted to be a scheme which subsequently regulates and records the permissible use and/or restrictions applicable to each property within the area of the municipality. It is therefore the “mechanism” or legislative document which provides the final management/control over land use over each piece of land on an administrative and technical level in accordance with the SDF in general.

The MLM Development Principles and accompanying Precinct Plans are well aligned with the various Town Planning Schemes in the Midvaal area, and is compatible and supportive of the Principles/ Norms pertaining to Spatial Planning and Land Use Management Systems as contained in Chapter 2, Sections 7 and 8 of the Spatial Planning and Land Use Management Act (SPLUMA). Furthermore the MLM SDF is well aligned with the recently completed Sedibeng District SDF, and with the SDFs of adjoining local municipalities. The horizontal and vertical alignment of the area's envisioned spatial structure should continually be improved through the review process of these documents. In this way alignment between the District and local SDFs will continuously be improved.

7.4 Conclusion: Alignment with SPLUMA Principles

The MLM Spatial Development Framework incorporates and functionally integrates a wide range of development disciplines. These development disciplines are interdependent and collectively contribute towards achieving the principles stipulated in Spatial Planning and Land Use Management Act (SPLUMA). The functional relationship between the ten development principles inherent to the MLM SDF and the development principles contained in SPLUMA is illustrated on the table below and briefly discussed:
As far as the environment is concerned, it should be noted that the aim of the MLM SDF is to mitigate the negative impacts of land uses on the environment as far as possible, and to enhance the invaluable environmental resources of the municipal area. In this regard the SDF defined a priority ‘green’ network for the Midvaal area which should be enhanced and protected at all cost. The network includes all ridges, water courses, and formally protected areas. Only land uses compatible with the

<table>
<thead>
<tr>
<th>DP</th>
<th>Description</th>
<th>Spatial Justice</th>
<th>Spatial Sustainability</th>
<th>Spatial Efficiency</th>
<th>Spatial Resilience</th>
<th>Good Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP 1</td>
<td>Protect and actively manage the natural environmental resources in the Midvaal Municipal Area in order to ensure a sustainable equilibrium between agricultural, tourism, industrial/ manufacturing and mining activities, as well as urbanisation pressures in the area.</td>
<td></td>
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</tr>
<tr>
<td>DP 2</td>
<td>Facilitate and enhance agricultural production in the municipal area by actively protecting all land earmarked for agricultural purposes, and to maintain agricultural holdings for small scale agriculture and rural residential purposes.</td>
<td></td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>DP 3</td>
<td>To promote tourism development in the Midvaal area by way of the active utilisation of tourism resources available like the Vaal Dam, the Ridges Precincts, and the nature Reserves in the area.</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>DP 4</td>
<td>Pre-actively plan, design and facilitate the establishment of a Development Corridor along the R59 freeway.</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>DP 5</td>
<td>Facilitate the development of a hierarchy of Activity Nodes and a number of Multi Purpose Community Centres in the Midvaal area to ensure equitable access to social infrastructure, and to promote Local Economic Development in the Urban and Rural parts of the municipality.</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>DP 6</td>
<td>Capitalise on the strategic location of the municipality by way of regional and provincial linkages, and to establish an internal movement network comprising a hierarchy of roads which include a comprehensive public transport network and services.</td>
<td></td>
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<tr>
<td>DP 7</td>
<td>Promote the development of a diverse range of industrial and commercial and mining activities in the Midvaal area with specific focus along the R59 Corridor and at the designated nodal points.</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>DP 8</td>
<td>Provide for a wide range of housing typologies and tenure alternatives within the municipal area by way of clearly defined Strategic Development Areas, and to manage residential densification by way of the Midvaal Density Policy.</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>DP 9</td>
<td>Delineate and Urban Development Boundary to encourage consolidated urban development.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>DP 10</td>
<td>Prioritise the bulk of short to medium term upgrading/provision of engineering services in accordance with the Urban Development Boundary.</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

As far as the environment is concerned, it should be noted that the aim of the MLM SDF is to mitigate the negative impacts of land uses on the environment as far as possible, and to enhance the invaluable environmental resources of the municipal area. In this regard the SDF defined a priority ‘green’ network for the Midvaal area which should be enhanced and protected at all cost. The network includes all ridges, water courses, and formally protected areas. Only land uses compatible with the
guidelines in the Midvaal SDF for this regional open space network can/should be allowed.

Furthermore, the SDF provided for the consolidation, densification and intensification of urban settlement in both the urban and rural parts of the district, with proposals to implement an urban development boundary around the nodal points and corridors to contain urban sprawl and to manage growth. The urban footprint is minimised at all cost while the surrounding land is made available for a combination of agriculture, tourism, and conservation activity.

The proper management of the natural environment is a critical success factor towards spatial sustainability, as well as economic growth, in the MLM area in future.

With regards to transportation the SDF highlights a number of road and rail corridors which will enhance the spatial efficiency of the Municipality significantly, the most prominent being route R59. This network ensures that the LM is effectively linked to external regional economies, but also enhances spatial justice by giving marginalised communities access to economic and social services and facilities. The latter is achieved by connecting all activity nodes to one another, thereby providing continuity for various communities to reach any destination in the municipal area.

The nodal hierarchy advocated provides for a variety of activity nodes as focus areas for provision of economic and social infrastructure. The adoption of this principle ensures that collective contributions of various government departments will enhance one-stop service delivery at strategic points (identified nodes) which supports the SPLUMA principle of Good Administration.

The concept of a Multi Purpose Community Centre ensures that marginalised communities are being served with a comprehensive range of services (spatial justice), but also supports the principle of spatial sustainability as it consolidates activities around the most accessible points in the municipal area. Such clustering of activities also act as stimulus to local economic development and the establishment of SMME's which also enhances the Spatial Efficiency of such areas. More nodal points can be defined in future which provides for Spatial Resilience in the SDF.

The SDF also makes provision for the incremental upgrading of services in very
specific areas like Sicelo and Mamello. Furthermore, upgrading of services are also earmarked for priority Strategic Development Areas in order to cater for new residential mixed income development, and in identified activity nodes where infrastructure provision caters for economic growth and job creation. The Midvaal SDF focuses on the space economy of the municipal area and aims to highlight the optimum location for different economic sectors active within. The high potential agricultural land is earmarked for agricultural purposes while the tourism opportunities associated with the proposed conservation areas, ridges and water features (Vaal Dam) are also highlighted. This supports the principles of Spatial Resilience, Spatial Efficiency, and eventually Spatial Sustainability.

Industry/ manufacturing is mainly guided by the R59 Development Corridor activities which represent opportunities for a wide range of industries, while business activities are mainly guided by the hierarchy of nodes – the most accessible points in terms of the movement network.

The Strategic Development Areas identified in the Midvaal SDF incorporates historically segregated communities into the urban fabric of the municipality in pursuance of Spatial Justice, Spatial Efficiency, and eventually also Spatial Sustainability.

From the above it is also evident that various departments/ development disciplines at municipal, provincial and national level all have a role to play and a contribution to make towards the successful implementation of the Midvaal SDF. This is in support of the principle of Good Administration whereby all spheres of government contribute towards ensuring an integrated approach to land use and land development.

Finally, the Midvaal SDF also supports/is aligned with the Gauteng Pillars of Radical Transformation, and the Gauteng Integrated Urban Development Framework (refer to sections 4.5 and 4.7 respectively).