The content of this document is based on work done by the consultants and does not necessarily reflect the opinion, views or policies of the municipal council or any of its employees.

Prepared by

The Development Partnership
A JOINT VENTURE FOR MUNICIPAL PLANNING, FINANCE AND DEVELOPMENT
The Core Project Team

represented by

Ms Londiwe Mthembu
Directorate: Economic Services
Development Planning
Tel. 011 951 2412
E-mail: londiwem@mogalecity.gov.za

Mr Vuyani Bekwa
Directorate: Enterprise Development
Tel.: 011 668 0603
E-mail: vuyanib@mogalecity.gov.za

Mr Stephan du Toit
Directorate: Integrated Environmental Management
Tel: 011 660 8757
E-mail: Stephand@mogalecity.gov.za

Mr Koogan Naidoo
Directorate: Integrated Environmental Management
Tel. 011 660 8757
E-mail: Koogann@mogalecity.gov.za

Khangwe Siliga
Directorate: Development Planning
Tel. 011 951 2411
E-mail: khangwes@mogalecity.gov.za

Mr Christo van Wyk
Directorate: Development Planning
Tel. 011 951 2413
E-mail: Christow@mogalecity.gov.za

Ms Glaudi Turner
Directorate: Development Planning
Tel. 011 951 2004
E-mail: glaudit@mogalecity.gov.za

Mr Koogan Naidoo
Directorate: Integrated Environmental Management
Tel. 011 660 8757
E-mail: Koogann@mogalecity.gov.za

The Development Partnership
A JOINT VENTURE FOR MUNICIPAL PLANNING, FINANCE AND DEVELOPMENT

Project Manager: Themb Maluleke
Telephone: 011 4476388
Cell phone: 083 700 4352
E-mail: thembam@mweb.co.za

Team leader and development planner: Burgert Gildenhuys TRP(SA)
Telephone: 012 460 8550
Fax: 086 659 7248
E-mail: bge@logov.org

GIS and data Specialist: Werner Fourie
Telephone: 012 844 0660
Fax: 012 844 0668
E-mail: werner@globalimage.co.za

Urban Planning Specialist: Riana du Plessis TRP(SA)
Telephone: 083 415 8031
Fax: 086 503 7308
E-mail: rianaduplessis@iburst.co.za
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Executive Summary</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introduction</td>
<td>1</td>
</tr>
<tr>
<td>2. Institutional context</td>
<td>1</td>
</tr>
<tr>
<td>3. Contextual analysis</td>
<td>2</td>
</tr>
<tr>
<td>4. Spatial Development Objectives</td>
<td>3</td>
</tr>
<tr>
<td>5. The Spatial Development Concept</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Introduction</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Legislative requirements for the formulation of Spatial Development Frameworks</td>
<td>6</td>
</tr>
<tr>
<td>2. The purpose of a Spatial Development Framework</td>
<td>7</td>
</tr>
<tr>
<td>3. The SDF within the context of municipal planning</td>
<td>8</td>
</tr>
<tr>
<td>4. The structure of the SDF</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Institutional Context and Directives for Spatial Development</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introduction</td>
<td>10</td>
</tr>
<tr>
<td>2. National and provincial institutional context</td>
<td>10</td>
</tr>
<tr>
<td>2.1 Legislation</td>
<td>11</td>
</tr>
<tr>
<td>2.2 National policies and frameworks</td>
<td>16</td>
</tr>
<tr>
<td>2.3 Provincial policies and frameworks</td>
<td>18</td>
</tr>
<tr>
<td>2.4 Key considerations emanating from the national and provincial planning context</td>
<td>21</td>
</tr>
<tr>
<td>3. District and local municipal development plans and frameworks</td>
<td>22</td>
</tr>
<tr>
<td>3.1 Integrated Development Plans</td>
<td>22</td>
</tr>
<tr>
<td>3.2 West Rand District Municipality SDF, 2008</td>
<td>25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Introduction</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Legislative requirements for the formulation of Spatial Development Frameworks</td>
<td>6</td>
</tr>
<tr>
<td>2. The purpose of a Spatial Development Framework</td>
<td>7</td>
</tr>
<tr>
<td>3. The SDF within the context of municipal planning</td>
<td>8</td>
</tr>
<tr>
<td>4. The structure of the SDF</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Institutional Context and Directives for Spatial Development</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introduction</td>
<td>10</td>
</tr>
<tr>
<td>2. National and provincial institutional context</td>
<td>10</td>
</tr>
<tr>
<td>2.1 Legislation</td>
<td>11</td>
</tr>
<tr>
<td>2.2 National policies and frameworks</td>
<td>16</td>
</tr>
<tr>
<td>2.3 Provincial policies and frameworks</td>
<td>18</td>
</tr>
<tr>
<td>2.4 Key considerations emanating from the national and provincial planning context</td>
<td>21</td>
</tr>
<tr>
<td>3. District and local municipal development plans and frameworks</td>
<td>22</td>
</tr>
<tr>
<td>3.1 Integrated Development Plans</td>
<td>22</td>
</tr>
<tr>
<td>3.2 West Rand District Municipality SDF, 2008</td>
<td>25</td>
</tr>
</tbody>
</table>

| 3.3 West Rand District Municipality Integrated Transport Plan Update 2007 | 26 |
| 3.4 West Rand District Municipality Tourism Development Strategy, 2005 | 26 |
| 3.5 West Rand Rural Housing Strategy, 2008 | 27 |
| 3.6 Mogale City Spatial Development Framework, 2003 | 27 |
| 3.7 Mogale City Environmental Management Framework | 29 |
| 3.8 Local/specialised spatial development frameworks and policies | 29 |
| 3.9 Implication for the SDF arising from district and local directives for spatial planning and development | 29 |

<table>
<thead>
<tr>
<th>Introduction</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Legislative requirements for the formulation of Spatial Development Frameworks</td>
<td>6</td>
</tr>
<tr>
<td>2. The purpose of a Spatial Development Framework</td>
<td>7</td>
</tr>
<tr>
<td>3. The SDF within the context of municipal planning</td>
<td>8</td>
</tr>
<tr>
<td>4. The structure of the SDF</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Institutional Context and Directives for Spatial Development</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introduction</td>
<td>10</td>
</tr>
<tr>
<td>2. National and provincial institutional context</td>
<td>10</td>
</tr>
<tr>
<td>2.1 Legislation</td>
<td>11</td>
</tr>
<tr>
<td>2.2 National policies and frameworks</td>
<td>16</td>
</tr>
<tr>
<td>2.3 Provincial policies and frameworks</td>
<td>18</td>
</tr>
<tr>
<td>2.4 Key considerations emanating from the national and provincial planning context</td>
<td>21</td>
</tr>
<tr>
<td>3. District and local municipal development plans and frameworks</td>
<td>22</td>
</tr>
<tr>
<td>3.1 Integrated Development Plans</td>
<td>22</td>
</tr>
<tr>
<td>3.2 West Rand District Municipality SDF, 2008</td>
<td>25</td>
</tr>
</tbody>
</table>

| 3.3 West Rand District Municipality Integrated Transport Plan Update 2007 | 26 |
| 3.4 West Rand District Municipality Tourism Development Strategy, 2005 | 26 |
| 3.5 West Rand Rural Housing Strategy, 2008 | 27 |
| 3.6 Mogale City Spatial Development Framework, 2003 | 27 |
| 3.7 Mogale City Environmental Management Framework | 29 |
| 3.8 Local/specialised spatial development frameworks and policies | 29 |
| 3.9 Implication for the SDF arising from district and local directives for spatial planning and development | 29 |

| 4. Spatial links to adjoining municipalities | 30 |
| 5. Summary: Key issues flowing from the assessment of the institutional context and directive for spatial planning | 31 |
| 5.1 Key issues arising from the national and provincial spheres of government | 31 |
| 5.2 Matters pertaining to the district and local government spheres | 31 |

<table>
<thead>
<tr>
<th>The Municipal Area in Context</th>
<th>33</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The spatial context of Mogale City</td>
<td>33</td>
</tr>
<tr>
<td>1.1 Regional context</td>
<td>33</td>
</tr>
<tr>
<td>1.2 Internal spatial structure</td>
<td>34</td>
</tr>
<tr>
<td>2. Physical determinants of development</td>
<td>37</td>
</tr>
<tr>
<td>2.1 Slope and drainage</td>
<td>37</td>
</tr>
<tr>
<td>2.2 Geology</td>
<td>40</td>
</tr>
<tr>
<td>2.3 Soil potential</td>
<td>41</td>
</tr>
<tr>
<td>2.4 Land use and land cover</td>
<td>44</td>
</tr>
</tbody>
</table>
6. Rural Areas ................................................................. 112
   6.1 High Potential Agricultural Land .............................. 113
   6.2 Muldersdrift rural transition zone and the CoH Buffer Zone ..................... 114
   6.3 Rural Service Centres ............................................. 115
   6.4 Rural housing development ..................................... 117
   6.5 Tourism .............................................................. 117
7. The movement system .................................................. 118
   7.1 Inter-regional movement ........................................ 118
   7.2 Intra-municipal movement ..................................... 118
   7.3 Public Transport Network ...................................... 118
8. Cultural heritage .......................................................... 119
9. City Image and Public Spaces ........................................ 119

Implementation 121

1. Further studies, plans and policies ..................................... 121
2. Catalytic projects and capital investment .......................... 122
List of Tables

Table 1: Relevance of national legislation to the SDF ............................................................. 12
Table 2: The implications of provincial planning legislation ............................................... 15
Table 3: Principles and directives embedded in national polices and frameworks .............. 16
Table 4: Principles and directives embedded in provincial polices and frameworks ............ 19
Table 5: Local Integrated Development Plans ...................................................................... 23
Table 6: Key aspects of the Mogale City Spatial Development Framework, 2003 .............. 28
Table 7: Key road linkages ..................................................................................................... 36
Table 8: Land capability table ............................................................................................... 41
Table 9: Major road links ...................................................................................................... 55
Table 10: Household distribution by settlement type ............................................................ 65
Table 11: Walking distance from schools ............................................................................ 73
Table 12: Walking distance to health facilities ..................................................................... 74
Table 13: Drive times from police stations – population within reach ................................ 76
Table 14: Population changes ............................................................................................... 76
Table 15: Population growth and changes ........................................................................... 77
Table 16: Total household growth per income category ....................................................... 77
Table 17: Household growth - increments per annum ............................................................ 77
Table 18: Contributions to provincial GVA by sector by municipality 2004 (%) ................. 78
Table 19: GVA growth per sector 1996 to 2004 ................................................................... 79
Table 20: Comparative Basic /Non-basic ratios (Provincial economy) ................................. 79
Table 21: Comparative Basic /Non-basic ratios (National economy) .................................... 80
Table 22: General development objectives ......................................................................... 87
Table 23: Development objectives and strategies ................................................................. 89
Table 24: Natural structuring elements ................................................................................ 92
Table 25: Hierarchy of Activity Nodes ................................................................................ 98
Table 26: Density Guideline ............................................................................................... 106
Table 27: Estimated land requirements ................................................................................ 107
Table 28: Core settlement areas .......................................................................................... 108
Table 29: Activities permitted in the agricultural hub ............................................................ 114
Table 30: Development strategy for rural service centres .................................................... 116
List of Figures

Figure 1: SDF focus and integration .......................................................................................... 9
Figure 2: West Rand District Municipality SDF, 2008 .............................................................. 25
Figure 3: Objectives and Strategies......................................................................................... 86
Figure 4: The development concept ....................................................................................... 90
Maps

Map 1: Mogale City and its neighbours ................................................................. 30
Map 2: Mogale City Regional Context ................................................................. 34
Map 3: Internal spatial structure ...................................................................... 36
Map 4: Slope and drainage ................................................................................ 38
Map 5: Slope analysis ....................................................................................... 39
Map 6: Geology .................................................................................................. 40
Map 7: General soil potential .......................................................................... 42
Map 8: Land capability ..................................................................................... 43
Map 9: Land uses and cover ............................................................................. 44
Map 10: Protected areas and conservancies in the municipal area ..................... 45
Map 11: Tourism points and routes in WDM ..................................................... 46
Map 12: Constraints on urban development ................................................... 48
Map 13: Constraints on rural development ....................................................... 49
Map 14: Constraints on crop farming ............................................................... 50
Map 15: Constraints on ranching activities ..................................................... 51
Map 16: Constraints on conservation activities .............................................. 52
Map 17: Land use suitability preferences ....................................................... 53
Map 18: Roads and railway lines .................................................................... 54
Map 19: Travelling time and functional service area ....................................... 56
Map 20: Population distribution ...................................................................... 57
Map 21: Age distribution ................................................................................ 58
Map 22: Gender distribution ........................................................................... 59
Map 23: Gender of the heads of households .................................................... 60
Map 24: Level of education ............................................................................ 61
Map 25: Employment ....................................................................................... 62
Map 26: Monthly household income ................................................................ 63
Map 27: Number of households ...................................................................... 64
Map 28: Dwelling types ................................................................................... 66
Map 29: Period of residence .......................................................................... 67
Map 30: Access to water services ................................................................... 68
Map 31: Access to sanitation services ............................................................. 69
Map 32: Electricity services ............................................................................ 70
Map 33: Access to refuse services ................................................................. 71
Map 34: Distribution of social facilities ......................................................... 72
Map 35: Walking time to schools .................................................................... 73
Map 36: Distance from health facilities .......................................................... 74
Map 37: Drive time from police stations ....................................................... 75
Map 38: Current planning and development initiatives ................................... 82
Map 39: Development applications ............................................................... 84
Map 40: Mogale City SDF .............................................................................. 120
Executive Summary

1. Introduction

In terms of Chapter 5 of the Municipal Systems Act, 2000 (Act 32 of 2000), the municipality’s Integrated Development Plan in turn “must reflect … a spatial development framework which must include the provision of basic guidelines for a land use management system for the municipality”.

The central question that all urban and regional planners and city managers grapple with is how to ensure the development of sustainable cities, towns and rural areas in a climate where the immediate needs of poverty and lack of basic services overshadow the development agenda. This is the fundamental role that the Mogale City Municipal Spatial Development Framework must play in Mogale City’s municipal area, namely ensuring the development of a sustainable urban and rural environment while at the same time creating an enabling environment for the implementation of the developmental agenda of national government.

The Spatial Development Framework is structured around the following sections:

- Institutional context and directives for spatial development.
- The Municipal area in context.
- Objectives of the SDF.

2. Institutional context

The planning and development of cities, towns and rural areas in South Africa are governed by a national developmental agenda that aims to improve the manner in which urban and rural areas develop so as to increase the efficiency, sustainability and investment potential of urban areas, better the conditions in which people live and conduct their daily lives, and protect valuable resources from irresponsible consumption. This developmental agenda finds expression in numerous sets of national and provincial legislation and policy documents. In order to ensure legitimacy the Mogale City Spatial Development Framework must be formulated within the parameters of this institutional framework. In addition, the Spatial Development Framework is also affected by existing local strategic planning documents, such as the Integrated Development Plans, that direct development of the district and local municipality.

An analysis of all the existing legislation and policy frameworks from the three spheres of government that impact on spatial planning and development in Mogale City produced a set of
directives which form the foundation of the spatial development framework. These directives all relate to the national spatial development principles of –

- Sustainability
- Efficiency
- Equity
- Integration
- Economic development

3. Contextual analysis

Mogale City lies directly west and south of the Johannesburg and Tshwane metropolitan areas respectively, and forms part of one of three districts that make up the peripheral areas of Gauteng province. To the north, west and south it borders onto Madibeng Local Municipality, the West Rand District Management Area, Rustenburg Local Municipality and Randfontein Local Municipality respectively.

The spatial structure of Mogale City is made up of four major development/use zones, namely:

- The extensive rural environment
- The urban area
- Muldersdrift rural/urban transition zone
- The Buffer Zone around the Cradle of Humankind World Heritage Site

Due to its location on the edge of Gauteng’s conurbation, the largest part of Mogale City is rural in nature. The rural environment is characterised by intensive as well as extensive agricultural development, agricultural holdings, physical elements such as mountains and rivers, wilderness areas and nature conservation areas.

The largest urban concentration in Mogale City is found in the south-eastern part of Mogale City, around Krugersdorp and Kagiso. This area forms part of a band of development stretching from the Johannesburg Inner City westwards along the mining belt up to Krugersdorp. The Krugersdorp/Kagiso area therefore forms an integral part of the Gauteng conurbation. Krugersdorp comprises the Krugersdorp CBD which is the main business, social and administrative centre in Mogale City and fulfils a regional function.

The areas to the south of Krugersdorp, namely Kagiso, Azaadville and Rietvallei are predominantly previously disadvantaged settlements with more limited access to services and facilities than the Krugersdorp areas. These areas are also physically separated from the Krugersdorp urban areas by an extensive mining belt that runs in an east-west direction through the area. This makes future integration of these areas very difficult, if not impossible.

Other settlements in Mogale City are Tarlton, Magaliesburg and Hekpoort, located in the western part of Mogale City. These are generally small settlements that are in essence no more than rural service centres providing a central place service to the surrounding rural and farming communities. Magaliesburg is perhaps the best developed of the three with a distinctive tourism function.

The Muldersdrift area lies to the north of Krugersdorp, on either side of the R28. To the east it is bounded by urban development in Johannesburg, while the Cradle of Humankind World Heritage site lies to the west thereof. The clash between pressure for urban expansion and the conservation requirements results in conflicting development agendas in the area.

The Cradle of Humankind World Heritage Site lies predominantly in the West Rand District Management area to the north of Mogale City, but also extends into the western, central and eastern part of Mogale City. The new buffer zone around the Cradle of Humankind World Heritage Site however extends deep into Mogale City in a western, southern and eastern direction.

The major movement linkage that exists in the municipal area is the R28/N14 route, which runs through Mogale City from the City of Tshwane, across part of Johannesburg and onto Randfontein Municipality and North-west Province. The strongest east-west movement linkages between Mogale City and Johannesburg are along the R512 (Malibongwe Road), Beyers Naude Drive, Hendrik Potgieter, Voortrekker/Ontdekkers/ Main Reef Road and Randfontein Road, as well as the east-west railway line.
The major pressure points for development are –

- Around Krugersdorp, which sees natural continuous urban expansion as this urban area grows;
- The Muldersdrift area which have begun to experience more and more development pressure, especially as development in Johannesburg moves further outward, and
- The area around Lanseria Airport.

The following constraints have an impact on the spatial structure and the development potential of the municipality:

- The band of dolomite that runs through the central part of Mogale City restricts long term westward urban expansion. These dolomite areas are precisely that natural feature that gave rise to the cave formations that led to the creation of the Cradle of Humankind World Heritage Site.
- The Gauteng Urban Edge, 2009 has been drawn conservatively around existing urban areas, and virtually no provision has been made for urban expansion.
- The new buffer zone around the Cradle of Humankind covers a large section of Mogale City, and places a constraint on the development potential of the area.
- Natural elements such as mountains, ridges, rivers and conservation areas are constraints to physical development in the sense that linkages between developments are often broken by the natural elements.
- The mining belt that runs in an east-west direction through the south-eastern part of Mogale City poses a constraint for the integration of the urban areas to the north and south thereof.
- The availability of engineering services in the Muldersdrift and Lanseria area will prevent any development in the short to medium term, depending on when major engineering infrastructure investment take place in this area.

4. Spatial Development Objectives

The spatial development objectives for Mogale City are informed by the legislative and policy framework as well as the contextual analysis of Mogale City itself. The objectives are –

- The integration of various areas in Mogale City to form a cohesive, well functioning space economy;
- The development of sustainable human settlements and urban renewal of existing settlements;
- The promotion and facilitation of economic development;
- The sustainable management of the natural environmental assets and heritage;
- The promotion of tourism development;
- The promotion of sustainable rural development;
- The development and improvement of linkages with Johannesburg, Tshwane, Madibeng, the rest of Gauteng and the broader region, and
- Service delivery, specifically focusing on providing sufficient capacity in development priority areas.

5. The Spatial Development Concept

The Spatial Development Concept for Mogale City has been developed around a number of key spatial structuring elements that together make up the desired spatial development arrangements of the area. The Mogale City Spatial Development Framework is broad strategic planning framework due to the large geographic space that it covers. It cannot therefore make detail proposals for specific areas. For that purpose, local spatial development frameworks or precinct plans must be drafted.

The spatial structuring elements that are addressed in the spatial development concept are-

- Natural Structuring Elements
One of the major issues that face the future development and spatial structure of Mogale City is urban growth management and the application of the provincial urban edge strategy. National and provincial policy directives demand of local authorities to compact urban areas and prevent continuous outward urban sprawl. To this effect, the Gauteng Provincial Government has introduced an urban edge or growth boundary in a bid to manage the outward growth of the provincial urban areas. Peripheral locations such a Mogale City are due to their location on the edge of the urban conglomerate the recipients of continuous outward development pressures and are typically seen as the perpetrators of sprawl.

Future growth opportunities in Mogale City were therefore investigated from a provincial and structural perspective as opposed to looking at individual pockets of development pressure. In this regard, the area that presents the most meaningful opportunity for future development is the area to the east of the N14, between Hendrik Potgieter in the south and the R512 in the north. This section of the N14 is seen as one of the future provincial development corridors, spurred on by the development proposals currently taking shape around Lanseria Airport. The highway forms a physical boundary between urban and rural development, and the areas to the west of the corridor development will be reserved for rural environmental purposes as part of the Cradle of Humankind Buffer Zone.

The activity areas that form part of the spatial development concept are focused on the following –

- Strengthening the Krugersdorp Central Business District,
- Ensuring a network of interlinked activity nodes that ensures an equitable distribution of services and facilities throughout Mogale City; and
- Utilising the energy created by major movement infrastructure and public transport networks to create activity spines. These spines are especially focused on linking up with activity areas to the east of Mogale City to ensure functional integration with the Johannesburg urban system.

Densification proposals for the urban areas are focused around these major activity areas in order to ensure increased population concentrations around areas with the highest levels of job opportunities, social services, business opportunities and transport services.

Because of the fact that the largest part of Mogale City is rural in nature, a specific focus of the spatial development framework is on how to enhance and support rural development in the area. To this effect the spatial development framework looks at strengthening the inherent
functions of the three existing rural towns without promoting unsustainable development, the protection of valuable agricultural land, the protection of pristine and valuable natural environments and the promotion of rural based tourism which is one of Mogale City’s main competitive advantages.

Lastly, the spatial development concept sets out principles for the protection and promotion of cultural heritage. Although cultural heritage is not necessarily always spatial in nature, or are not necessarily always of the same scale as other components of the spatial development concept, it is necessary to address it as part of the spatial development proposals as it forms an important part of the spatial environment and development proposals can have a harmful impact on the area’s cultural heritage.