

**FINAL REPORT FOR DIPALESENG HUMAN SETTLEMENT SECTOR PLAN 2020/2021**

*Compiled by Mzansi Professional Consulting*

**SUBMITTED TO:**

**DIPALESENG LOCAL MUNICIPALITY**

## Contents

<b>LIST OF FIGURES</b> .....	<b>7</b>
<b>1. INTRODUCTION</b> .....	<b>11</b>
<b>1.1. PURPOSE OF THE REPORT</b> .....	<b>11</b>
<b>1.2. BACKGROUND TO THE DIPALISENG LOCAL MUNICIPALITY</b> .....	<b>12</b>
<b>1.3. Methodology</b> .....	<b>13</b>
<b>1.3.1 Desk-Top Literature and Data Review</b> .....	<b>13</b>
<b>1.3.2 Stakeholder Engagement</b> .....	<b>13</b>
<b>1.3.3 Spatial Data Analysis using GIS.</b> .....	<b>13</b>
<b>2. POLICY AND LEGISLATIVE CONTEXT</b> .....	<b>14</b>
<b>2.1. NATIONAL CONTEXT</b> .....	<b>14</b>
<b>2.1.1. THE CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA, ACT 108 of 1996</b> .....	<b>14</b>
<b>2.1.2. NATIONAL HOUSING ACT No.107 of 1997</b> .....	<b>14</b>
<b>2.1.3 THE NATIONAL DEVELOPMENT PLAN (Vision 2030)</b> .....	<b>15</b>
<b>2.1.4. THE NEW HUMAN SETTLEMENT PLAN (BREAKING NEW GROUND/BNG 2009)</b> .....	<b>15</b>
<b>2.1.5. THE LOCAL GOVERNMENT MUNICIPAL SYSTEM ACT 32 of 2000)</b> .....	<b>16</b>
<b>2.1.6.THE INTER-GOVERNMENT RELATIONS FRAMEWORK ACT No.13 of 2005</b> .....	<b>16</b>
<b>2.1.7. OTHER RELEVANT KEY POLICIES/LEGISLATIVE PRESCRIPTS</b> .....	<b>16</b>
<b>2.1.8. Expected Role and Input from the DLM on the National Housing Code</b> .....	<b>17</b>
<b>2.1.9. IMPLICATIONS OF THE NATIONAL POLICY/LEGISLATIVE PRESCRIPTS TO THIS</b> .....	<b>18</b>
<b>HSSP</b> .....	<b>18</b>
<b>2.2. PROVINCIAL CONTEXT</b> .....	<b>19</b>
<b>2.2.1. MPUMALANGA ECONOMIC GROWTH AND DEVELOPMENT PATH (MEGDP)</b> .....	<b>19</b>

2.2.2. MPUMALANGA INDUSTRIAL DEVELOPMENT PLAN.....	20
2.2.3. MPUMALANGA COMPREHENSIVE RURAL DEVELOPMENT PLAN.....	21
2.2.4. MPUMALANGA HUMAN SETTLEMENT MASTER PLAN (2013).....	22
<b>2.3. DISTRICT CONTEXT .....</b>	<b>24</b>
2.3.1. GERT SIBANDE SPATIAL DEVELOPMENT FRAMEWORK, 2014.....	24
2.3.2. GERT SIBANDE RURAL DEVELOPMENT PLAN.....	26
<b>2.4. LOCAL CONTEXT.....</b>	<b>27</b>
2.4.1 Dipaleseng Local Municipality Integrated Development Plan (DLM IDP) .....	27
2.4.2. DIPALISENG ENVIRONMENTAL MANAGEMENT FRAMEWORK .....	28
2.4.3. DIPALISENG LAND USE MANAGEMENT SCHEME .....	29
<b>Figure 3: Dipaleseng Local Municipality Composite SDF Map.....</b>	<b>31</b>
<b>3. CRITICAL INSTITUTIONAL CONSIDERATIONS AND GOVERNANCE .....</b>	<b>32</b>
3.1. NATIONAL DEPARTMENT OF HUMAN SETTLEMENT .....	32
3.2. PROVINCIAL DEPARTMENT OF HUMAN SETTLEMENT .....	32
3.3. GERT SIBANDE DISTRICT MUNICIPALITY .....	33
3.4. DIPALISENG LOCAL MUNICIPALITY.....	33
3.4.1. Department of Planning and Economic Development.....	33
3.4.2. Department of Infrastructure Services.....	34
3.4.3. Community Services Department.....	34
3.4.4. REQUISITE INSTITUTIONAL AND TECHNICAL SKILLS SET REQUIRED BY THE MUNICIPALITY .....	35
<b>3.5 SUPPORTING ENABLERS/STATE-OWNED INSTITUTIONS/ENTITIES .....</b>	<b>36</b>
3.5.1 HOUSING DEVELOPMENT AGENCY (HDA).....	36
3.5.2. NATIONAL HOUSING FINANCE CORPORATION (NHFC) .....	37

3.5.3. NATIONAL HOME BUILDER'S REGISTRATION AUTHORITY.....	37
3.5.4. SOCIAL HOUSING REGULATORY AUTHORITY .....	39
4. SITUATIONAL ANALYSIS/DEVELOPMENT PROFILE .....	39
4.1. DEMOGRAPHIC PROFILE .....	<b>39</b>
4.1.1. Number of Households.....	39
4.1.2. Population Size.....	40
4.1.3. Population Distribution .....	42
4.1.4. Age and Gender Distribution .....	43
4.1.5. Employment Profile.....	44
4.1.6. Income Profile.....	45
4.1.7. Education Profile.....	46
4.2. ACCESS TO INFRASTRUCTURE .....	<b>46</b>
4.2.1. WATER.....	46
4.2.2. SANITATION.....	48
4.2.3. ELECTRICITY/SOURCES OF ENERGY .....	49
4.2.4. REFUSE REMOVAL .....	50
4.2.5. ACCESS TO HEALTH CARE .....	50
4.2.6. ACCESS TO EDUCATIONAL FACILITIES .....	50
4.2.7. ACCESS TO LIBRARIES/THUSONG CENTRES .....	51
4.2.8. ACCESS TO POLICE STATIONS, COMMUNITY HALLS & POST OFFICES .....	51
4.2.9. ACCESS TO CEMETRIES.....	52
4.2.10. ACCESS TO ROAD NETWORK .....	53
4.2.11. ACCESS TO PUBLIC TRANSPORTATION INFRASTRUCTURE.....	54

5.2.7. HOUSING TYPOLOGIES.....	70
6. HOUSING DEMAND AND BACKLOG.....	71
6.1 HOUSING DEMAND ANALYSIS.....	71
6.2 HOUSING BACKLOG ANALYSIS.....	72
6.3. VACANT LAND/ERFS ANALYSIS.....	72
6.3.1. Figure: 27: Balfour Vacant Land/Erfs.....	73
6.3.2. Figure 28: Siyathemba Vacant Land/Erfs.....	74
6.3.3. Figure 28: Grootvlei Vacant Land/Erfs.....	75
6.3.4. Figure 29: Greylingstad & Nthorwane Vacant Land/Erfs.....	76
6.4. DILAPIDATED AND/OR UN-USED BUILDINGS ANALYSIS.....	77
6.4.1. Figure 30: BALFOUR DILAPIDATED BUILDINGS.....	77
6.4.2. Figure 31 : GROOTVLEI DILAPIDATED BUILDINGS.....	78
6.4.3. Figure 32 : GREYLINGSTAD & NTHORWANE DILAPIDATED BUILDINGS.....	79
7. HUMAN SETTLEMENT SUPPLY OPTIONS (CURRENT PROJECTS).....	80
7.1. SUMMARY OF HUMAN SETTLEMENT SUPPLY OPTIONS.....	80
7.1.1. Inner & Outer Township Extensions.....	80
7.1.2. UPGRADING OF INFORMAL SETTLEMENT PLANS (UISP) & SOCIAL LIVELIHOOD PLAN(SLP).....	80
7.1.3. INTEGRATED RESIDENTIAL DEVELOPMENT PROGRAM (IRDP).....	87
7.2. CURRENT PROJECTS.....	88
8. SUMMARY OF PRIORITY HUMAN SETTLEMENT ISSUES.....	89
8.1. Human Settlement Priorities.....	89
8.2 Human Settlement Opportunities.....	89
8.3 Human Settlement Constraints / Challenges.....	90

<b>9. HUMAN SETTLEMENT STRATEGY</b> .....	<b>91</b>
The DLM Human Settlement Development Strategy seeks to address the following considerations:.....	<b>91</b>
<b>9.1. Development Goals</b> .....	<b>92</b>
<b>10. Current Housing Projects</b> .....	<b>97</b>
<b>11. IMPLEMENTATION FRAMEWORK</b> .....	<b>100</b>
<b>11.1. SCHEDULE OF HUMAN SETTLEMENT PROJECTS</b> .....	<b>100</b>
<b>11.1.1. HUMAN SETTLEMENT PIPELINE PROJECTS</b> .....	<b>101</b>
<b>11.1.3. Projects Breakdown</b> .....	<b>102</b>
<b>11.2. Water Supply (Estimated Domestic &amp; Non-domestic Consumption</b> .....	<b>104</b>
<b>11.2.1. General</b> .....	<b>104</b>
<b>11.2.2. Water Demand</b> .....	<b>104</b>
<b>11.2.3. Water demand for developing areas (IRC 1980)</b> .....	<b>105</b>
<b>11.2.4. Non-domestic water demand in developing areas/ Table 8</b> .....	<b>105</b>
<b>11.2.5. Fire Demand</b> .....	<b>108</b>
<b>11.3. Sanitation/Sewer Drainage</b> .....	<b>108</b>
<b>11.3.1. Design Flows</b> .....	<b>108</b>
<b>11.3.2. Volumes</b> .....	<b>108</b>
<b>11.4. SULLAGE (GREYWATER) DISPOSAL</b> .....	<b>108</b>
<b>11.4.1. General</b> .....	<b>108</b>
<b>11.4.2. Health aspects</b> .....	<b>109</b>
<b>11.4.3. Disposal</b> .....	<b>109</b>
<b>11.4.4. Sullage generation</b> .....	<b>109</b>
<b>11.4.5. UPGRADING OF SANITATION FACILITIES</b> .....	<b>110</b>

<b>12.1 Integrated Residential Development Program/IRDP .....</b>	<b>112</b>
<b>12.1.1. TOTAL NUMBER OF JOBS IN THE 3 X Human Settlement Projects (IRDP`s).....</b>	<b>112</b>
<b>12.2. Phased Eradication and Upgrading of Informal Settlements .....</b>	<b>124</b>
<b>12.3. Inner Town Redevelopment/Regeneration (Vacant Stands &amp; Dilapidated or Defunct Buildings) .....</b>	<b>124</b>
<b>12.4. Farm workers and/or People Living on Farms Housing Project (s)/ Agri-village Concept.....</b>	<b>124</b>
<b>13. HSSP INTEGRATION PLAN .....</b>	<b>125</b>
<b>14. CONCLUSION .....</b>	<b>128</b>
<b>15. APPROVAL PHASE.....</b>	<b>128</b>

## **LIST OF FIGURES**

**Figure 1: Locality Map for the Dipaleseng Local Municipality (DLM)**

**Figure 2: Provincial Department of Human Settlement Strategic Objectives (Table 1)**

**Figure 3: DLM Composite SDF Map**

**Figure 4: DLM Number of Households**

**Figure 5: Population Size**

**Figure 6: Population Distribution**

**Figure 7: Age and Gender Distribution**

**Figure 8: Employment Profile**

**Figure 9: Income Profile**

**Figure 10: Education Profile**

**Figure 11: Access to Water**

**Figure 12: Access to Sanitation**

**Figure 13: Access to Electricity**

**Figure 14: Access to Social and Public Infrastructure**

**Figure 15: Access to Roads Network**



**Figure 16: Access to Public Transportation Infrastructure**

**Figure 17: Balfour Ward 3 Settlement Map**

**Figure 18: Siyathemba Ward 1, 2 and 4 Settlement Map**

**Figure 19: Grootvlei Ext 1,2 and Dassville Settlement Map**

**Figure 20: Greylingstad and Nthorwane Settlement Map**

**Figure 21: Land Use/Cover**

**Figure 22: Topography**

**Figure 23: Bio-diversity Areas**

**Figure 24: Conservation Areas**

**Figure 25: Agricultural Land**

**Figure 26: Geology**

**Figure 27: Balfour Vacant Land/Erfs**

**Figure 28: Grootvlei Vacant Land/Erfs**

**Figure 29: Greylingstad and Nthorwane Vacant Land/Erfs**

**Figure 30: Balfour Dilapidated Buildings**

**Figure 31: Grootvlei Dilapidated Buildings**

**Figure 32: Greylingstad and Nthorwane Dilapidated Buildings**

**Figure 33: Ward 1 First Informal Settlement Ext 5**

**Figure 34: Ward 1 Second Informal Settlement**

**Figure 35: Ward 2 Three (3) Informal Settlements**

**Figure 36: Ward 4 Two (2) Informal Settlements**

**Figure 37: Ward 5 One (1) Informal Settlement**

**Figure 38: Ward 6 (One) Informal Settlement**

**Figure 39: HSSP Key Performance Areas**

**Ward 40: Ward 4 Vipcon 1 500 Units Human Settlement Project**

**Figure 41 National Department of Public Works Replacement Land (Sizanani CPA)**

**Figure 42: Current Human Settlement Projects**

**Figure 43: Human Settlement Projects Breakdown**

**Figure 44: Water for Domestic and Non-domestic Consumption Vlakfontein 556 IR**

**Figure 45: Water for Domestic and Non-domestic Consumption Grootvlei 604 IR**

**Figure 46: Water for Domestic and Non-domestic Consumption Doornhoek 577 IR**

**Figure 47: Estimated Sanitation Domestic and Non-domestic Usage Vlakfontein 556 IR**

**Figure 48: Estimated Sanitation Domestic and Non-domestic Usage Grootvlei 604 IR**

**Figure 49: Estimated Sanitation Domestic and Non-domestic Usage Doornhoek 577 IR**

**Figure 50: Locality Map Vlakfontein 556 IR**

**Figure 51: Township Establishment Scenarios Vlakfontein 556 IR**

**Figure 52: Preliminary Costs Assumptions Vlakfontein 556 IR**

**Figure 53: Locality Map Grootvlei 604 IR**

**Figure 54: Township Establishment Scenarios Grootvlei 604 IR**

**Figure 55: Preliminary Costs Assumptions Grootvlei 604 IR**

**Figure 56: Locality Map Doornhoek 577 IR**

**Figure 57: Township Establishment Scenarios Doornhoek 577 IR**

**Figure 58: Preliminary Costs Assumptions Doornhoek 577 IR**

**Figure 59: HSSP Integration Plan**

## 1. INTRODUCTION

This document constitutes a Human Settlement Sector Plan (HSSP) for the Dipaleseng Local Municipality (DLM), which forms an integral Chapter of the Municipal Integrated Development Plan (IDP) with the strategic objective to develop institutional and technical capacity within the Municipality in the delivery and provision of human settlements to the inhabitants of the Dipaleseng Local Municipality

This HSSP further aims to develop a comprehensive framework to guide the Dipaleseng Local Municipality in performing its human settlement planning functions as mandated by the Constitution, National Housing Act and successive policy and legislative prescripts governing the delivery and provision of human settlement development products within its jurisdictional areas.

### 1.1. PURPOSE OF THE REPORT

The main purpose of this **HSSP** seeks to:

- a) Provide a formal and practical framework of prioritizing human settlement development projects and obtaining administrative and political consensus for implementation.
- b) To ensure more integrated development by bringing together all the relevant cross-sectoral line

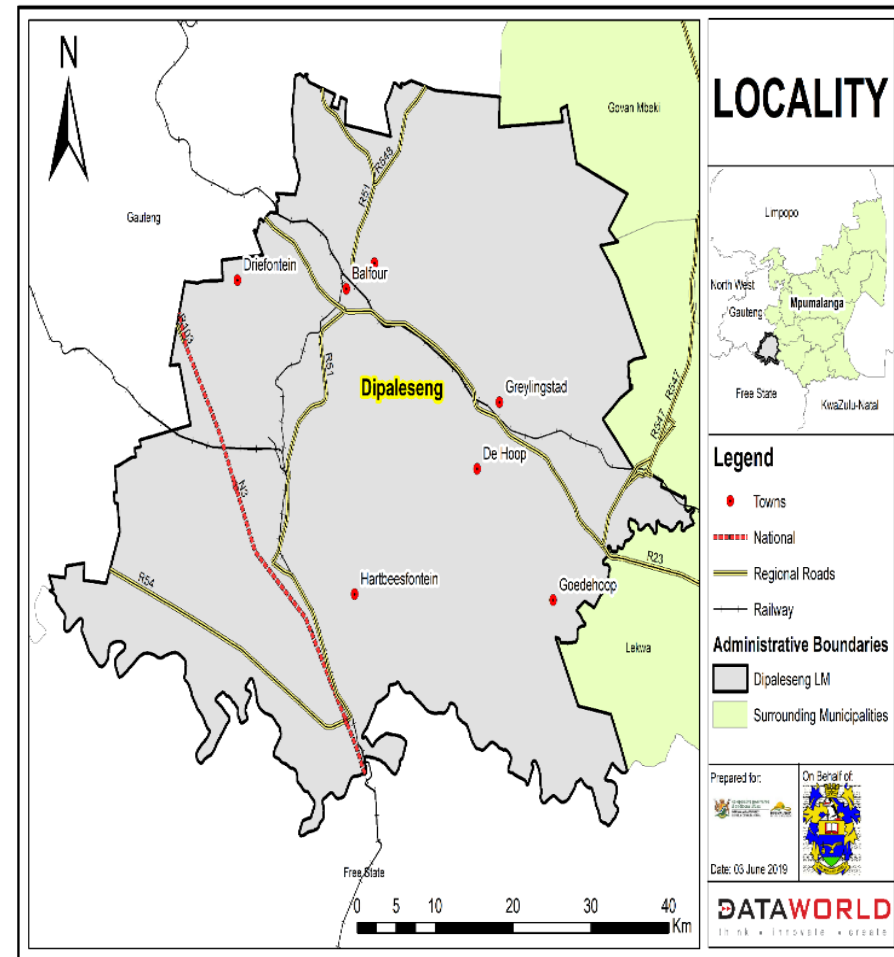
departments and stakeholders to coordinate their development interventions in one integrated plan.

- c) To provide greater spatial linkages and integration between the spatial development framework and the physical implementation of the projects on the ground
- d) To ensure effective human settlement development subsidy budgeting and cash-flows both at the Municipality and Provincial/National levels.

## 1.2. BACKGROUND TO THE DIPALISENG LOCAL MUNICIPALITY

The Dipaleseng Local Municipality (DLM) is one of the seven Local Municipalities in the Gert Sibande District Municipality (GSDM) and borders the Gauteng Province (through the N3 road), Free State Province (through the R51 road) and other GSDM neighbouring Local Municipalities.

The Municipality is comprised of One Primary or Services Town, Balfour according to the Council for Scientific and Industrial Research (CSIR) matrix, Two Secondary Towns (Greylingstad and Grootvlei) which are fully serviced, parallel with medium to high density settlements comprised of previously (pre-1994) proclaimed Townships of Siyathemba, Nthorwane and Grootvlei Ext. 1 which also are fully serviced but engulfed with constraints of rising population of urban poor and encroachment by informal settlements, both internal and outer boundaries/ and on settlement edges



### 1.3. Methodology

#### 1.3.1 Desk-Top Literature and Data Review

Human Settlement Sector Development Plans, Research Reports and Policy Documents were collected, reviewed, and assessed focusing mainly on drawing implications for Dipaleseng Local Municipality.

They generally fall within the following categories:

- National Housing Act
- National Housing Code
- Breaking New Ground
- Housing Subsidy Scheme (HSS)
- Rental Stock Act
- Spatial Development Planning policies that establish a set of norms and standards that should be applied to attain sustainable and integrated human settlements.
- Provincial Human Settlement Policies
- Integrated Development Plans (2016/17) and Spatial Development Plan (Draft Final Report 2020) for the DLM Land Use Management and associated tools.

- DLM Sector Master Plans (Water; Sanitation; Electricity; Roads; LED)

#### 1.3.2 Stakeholder Engagement

Stakeholder consultation and engagement did take place in the form of meetings and interviews with a range of stakeholders, through an established **Municipality-based Project Steering Committee (PSC)**

Discussions and In-loco inspection and verification on current and future human settlement projects and issues within the DLM as conducted with a lot of valuable information obtained from these engagements.

#### 1.3.3 Spatial Data Analysis using GIS.

Geographical Information System (GIS) tools and techniques were used to capture and overlay information at **Ward-level** indicating inter-alia:

- Existing/current human settlements projects
- Identified/Confirmed available suitable land for future human settlements development projects/greenfield options.
- Mapping of the existing informal settlements (magnitude and extent with regards to settlements patterns and typology)

- Mapping of Vacant Sites/Erfs within the existing Towns and Townships
- Mapping of Dilapidated or Dysfunctional Buildings (for possible conversion into human settlements uses)
- Mapping of Social and Public Infrastructure

## 2. POLICY AND LEGISLATIVE CONTEXT

### 2.1. NATIONAL CONTEXT

#### 2.1.1. THE CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA, ACT 108 of 1996

According to Section 26 (2) of the Constitution, the state must take reasonable legislative and other measures within its available resources to ensure that the right to housing is realised.

The Housing Act No.107 of 1997 was enacted to provide legislative framework to affect this right to housing.

While housing is a current legislative competence of National and Provincial government in terms of Schedule 4, Part A of the Constitution (1996), **the pivotal role of the Municipalities in ensuring horizontal and vertical**

**integration of human settlement delivery is acknowledged in housing-related legislation and policy.**

**Municipalities are required to take a lead role in negotiating the location of housing supply to facilitate spatial restructuring, facilitate a match between demand and supply of different human settlement products.**

**Municipalities are accredited or assigned responsibilities by Provinces for the administration of national housing programmes order to facilitate such integrated planning and delivery of human settlement products.**

#### 2.1.2. NATIONAL HOUSING ACT No.107 of 1997

**Municipalities must, according to this ACT, develop appropriate strategies to facilitate housing development within their area's jurisdiction.**

Section 9(1)(F) of the Housing ACT 1997 states that every Municipality must as part of IDP's take reasonable and necessary steps within the Framework of National and Provincial legislation and policy initiatives, plan,

coordinate, facilitate, promote, and enable appropriate housing development in its area of jurisdiction.

### **2..1.3 THE NATIONAL DEVELOPMENT PLAN (Vision 2030)**

The National Development Plan aims at eliminating poverty and reduced inequality by 2030. **Chapter 9 of the NDP highlights problems around Human Settlement Planning and provision of infrastructure that support settlements.**

The NDP proposes that the responsibility for provision of housing should shift to the level at which planning is executed mainly the Municipal level.

**The NDP recognises the challenges that Local Governments faces including poor capacity, weak administration systems, undue political influence in technical and administrative decision - making and uneven fiscal capacity.**

**It calls for the asymmetric allocation of powers and functions and for more diversity in how development priorities are implemented.**

### **2.1.4. THE NEW HUMAN SETTLEMENT PLAN (BREAKING NEW GROUND/BNG 2009)**

The BNG moves the focus of Government towards developing integrated and sustainable human settlement while alleviating poverty and marks a major fundamental shift from housing-only approach to integrated human settlements, incorporating social and public infrastructure.

The BNG promotes safe environment, adequate access to economic opportunities, safe and secure housing through security of tenure, reliable and affordable basic services, educational, entertainment and cultural activities, health, and welfare services.

**The BNG promotes mixed land uses and encourages the development of Low-income groups near areas of opportunity and integration of the previously disadvantaged groups into the Cities, with zero or reduced daily commuting costs to places of work.**

**The BNG further promotes the Multipurpose Cluster Concept that incorporates the provision of primary municipal facilities, such as parks, playground, sports fields, crèches, community halls, taxi ranks, Satellite**



**Police Stations, Municipal Clinics, and informal trading facilities.**

#### **2.1.5. THE LOCAL GOVERNMENT MUNICIPAL SYSTEM ACT 32 of 2000)**

This Act compels the Municipalities to develop Integrated Development Plans, which are primary investments tools for Municipalities.

The functions and powers of Municipalities are further described in Chapter 5 of Local Government Municipality Structures Act 1998 as amended.

**The IDPs are also required to include Human Settlement Sector Plans (HSSP), which need to be reviewed every Five/5 years.**

#### **2.1.6. THE INTER-GOVERNMENT RELATIONS FRAMEWORK ACT No.13 of 2005**

The Inter-Governmental Relations Framework Act (IGFR Act) establishes a framework for National Government, Provincial Governments, and Municipalities to promote and facilitate inter-governmental relations and provide mechanisms and procedures to facilitate the settlement of inter-Governmental disputes.

**Chapter 3 of the Inter-Governmental Relations Act provides for organs of State to enter into an Implementation Protocol as an agreement where the implementation of policy, the exercise of statutory power, the performance of statutory function or provision of service depends on the participation of organs of state in different spheres of government.**

#### **2.1.7. OTHER RELEVANT KEY POLICIES/LEGISLATIVE PRESCRIPTS**

- The Spatial Planning and Land Use Management Act (Act 16 of 2013).
- Extension of Security of Tenure Act (Act 62 of 1997).
- Public Finance Management Act (1 of 1999).
- Municipal Finance Management Act (Act 56 of 2003).
- Guidelines for Human Settlement Planning and Design.
- National Housing Code (2009).
- Rental Stock Act & Advent of Social Housing Entities

### **2.1.8. Expected Role and Input from the DLM on the National Housing Code**

The National Government has introduced a comprehensive program to address a range of housing needs in South Africa (**National Housing Code 1997**).

The rationale, context and objectives of the **Human Settlement Sector Plan (HSSP)** are outlined in the **National Housing Code** and the comprehensive plan for the creation of integrated human settlements (**Breaking New Ground**).

The **National Housing Code** sets out policy principles, guidelines, norms, and standards, which apply to government various human settlement products assistance programs.

The **National Housing Code** identifies the primary role of the Municipalities as taking all reasonable and necessary steps within the Framework of National and Provincial legislation and policy.

**Those steps are to ensure that the inhabitants within its areas of jurisdiction have access to the adequate housing on progressive basis. These steps entail the following:**

- Initiating, planning, facilitating, and coordinating human settlement development.

**This can be undertaken by a Municipality itself or by an appointed Implementation Agent.**

- Preparing a housing delivery strategy and setting up housing delivery goals.
- Setting aside planning and managing land for housing.
- Creating financially viable environment for housing delivery (supply-side delivery)
- Facilitating the provision of bulk services.
- Administering National Housing Programmes.
- Acquiring land for housing development, even if it is through expropriation of land.

### **2.1.9. IMPLICATIONS OF THE NATIONAL POLICY/LEGISLATIVE PRESCRIPTS TO THIS HSSP**

The National Department of Human Settlement Reserve Book on Housing Chapters directs that Housing Chapters of the IDPs should include:

- Municipality Housing Needs Assessment
- Prioritization of Informal Settlements
- Identification of well-located land for human settlement development and/or mixed housing options and densification
- Integration of the HSSP with other Infrastructure development plans such as Transport, Environment, Electricity, Water and Sanitation.

The overriding objective of this HSSP is for the creation of sustainable human settlements and to capacitate the DLM in fulfilling the above-mentioned roles assigned to it in terms of the National Housing Code.

- This **HSSP** seeks to provide a comprehensive framework for the DLM in fulfilling its development responsibility, its development goals and objectives as outlined in the DLM IDP and SDF documents and should be aligned with strategies, development goals and objectives in the IDP and SDF.

The DLM has committed itself to support the acceleration of sustainable human settlements at appropriate locations and ensuring that social development is catered for within the DLM.

- **This HSSP integrates the Housing Chapter of the Integrated Development Plan (IDP) with the Spatial Development Framework (SDF), Land Use Management Strategy (LUMS) and Municipal Infrastructure Development in the delivery and provision of human settlement products, which can be described as Government-subsidized housing and related social and public infrastructure grants.**

**This HSSP has been designed to meet the following core objectives:**

- Outline housing/human settlement backlogs and priorities in the DLM
- Document housing/human settlement delivery, best practices, and lessons
- Set out proposals to fast-track human settlement delivery and address shortcomings of the current delivery systems in the DLM.

**2.2. PROVINCIAL CONTEXT**

**2.2.1. MPUMALANGA ECONOMIC GROWTH AND DEVELOPMENT PATH (MEGDP)**

The Mpumalanga Economic Growth and Development Path (MEGDP) is informed by the National Economic Growth Path. The Mpumalanga Province is committed to increasing local economic development and job creation in the agricultural, industrial, manufacturing, green economy, tourism and mining sectors. The MEGDP provides a detailed framework for the realisation of these objectives.

The focal point of the Mpumalanga Economic Growth and Development Path is the creation of appropriate labour absorbing jobs which will have a positive direct, indirect and induced effect on the Provincial economy and the living standards of its people.

The primary objective of the MEGDP is to grow the economy of the Province; balance growth and development in order to create jobs, reduce poverty and inequality and improve the socio-economic conditions of the Province.

The growth plan is anchored on a few factors which include sector development, inclusive & shared growth, spatial distribution, regional integration, sustainable human development and environmental sustainability with clearly defined strategic targets over a medium to long term period.

The following job drivers will be utilised to realise the objectives of the MEGDP and to secure strong and sustainable growth for the next decade:

The DLM has a key role to play in facilitating the achievement of these job drivers.

- **Infrastructure for Employment & Development**
  - **Job Creation in Economic Sectors such as: Agriculture; Mining; Petro-chemical; Wood/Forestry**
  - **Seizing the Potential for New Economies in: Manufacturing; Tourism**
  - **Investing in Social Capital & the Public Service**
- Spatial Development**

### **2.2.2. MPUMALANGA INDUSTRIAL DEVELOPMENT PLAN**

The Mpumalanga Industrial Plan (MIDP) as an integrative strategy that aims to build robust partnerships between government, industry sector and interested stakeholders to alter the structure and distribution of the industrial activity to promote economic growth, development together with job creation. Therefore, the provincial Industrial Development Strategy provides a framework for state-led plans and intervention areas thus building productive capability to place the province on a more reasonable and labour absorptive growth path.

The MIDP has therefore further identified Industrial Centres of Competence that establish innovative platforms required for supporting sustainable industrial development in the targeted sectors, which shall form a central hub to be effectively marketed, promoted and coordinated. Such promising centres have been identified as follows:

- **Mining and Metals Technology Park-** A comprehensive facility for promoting industrial development within the mining and metals manufacturing sectors. This should be logistically well-positioned, adjacent to the N4 between eMalahleni and Middleburg. The preferred size of this park is 600 hectares.
- **Forestry Technology Park-** It will provide a platform for inter-firm cooperation, and lead to specialisation and improvement in quality standards for exports out of the Province. The park will be based at Sabie.
- **International Fresh Produce Market-** A site has been identified on the Sabie/Mashishing Road close to Nelspruit and the Riverside Park mixed-use regional node.

- **Petrochemicals Technology Park-** One of the major industrialisation initiatives in the Province, aimed at stimulating economic growth and job creation, both through Small, Medium and Micro-sized Enterprise (SMME) incubation and large-scale production. This park is based at Secunda. Land for the development of the proposed Technology Park has already been allocated by the Local Municipality.
- **Agro-processing Technology Park-** The Park has been proposed within the Nkomazi SEZ. The proposed Technology Park will serve as a hub for the development of other rural nodes, such as the proposed agro-processing hub in Bushbuckridge linked to the Dumphries C Irrigation Scheme and the Giba Community Property Association farming development new Hazy view.

In addition to intensification of industrial activities within the Industrial Centres of Competence, the MIDP advocates for the industrialisation of rural nodes to promote holistic socio-economic development in the province. The importance of developing priority rural nodes to enable business flows, technology transfer and capacity development. To promote rural industrialisation, the plan proposes to develop activity links between the priority rural nodes with the Industrial Centres of Competence to enable business flows, technology transfer and capacity development.

### **2.2.3. MPUMALANGA COMPREHENSIVE RURAL DEVELOPMENT PLAN**

The Comprehensive Rural Development Programme (CRDP) is third planned priority for rural development within the government's current Medium-Term Strategic Framework which was drafted for 2014-2019. The strategic design of the programme is established on experiences from pilot sites designated through socio-economic profiling, community participatory processes and intergovernmental co-operation. The CRDP is based on a positive participatory community-based planning approach rather than an interventionist approach to rural development.

The CRDP aims to be 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:

- A coordinated and integrated broad-based **Agrarian Transformation**.

- Strategically increasing **Rural Development** through infrastructure investment; and
- An improved **Land Reform Programme**.

### **Outcome 7**

Vibrant, equitable and sustainable rural communities and food security for all will be achieved through the following outputs:

Following are the Projects and Provincial output of CRDP:

- **Output 1:** Sustainable agrarian reform with a thriving small and large farming sector services to support livelihoods.
- **Output 2:** Improved access to affordable and diverse food
- **Output 3:** Improved rural services to support livelihoods.
- **Output 4:** Improved employment opportunities and economic livelihoods
- **Output 5:** Enabling institutional environment for sustainable and inclusive growth.

#### **2.2.4. MPUMALANGA HUMAN SETTLEMENT MASTER PLAN (2013)**

The Mpumalanga Province aims to eradicate current housing backlogs through the development of the Sustainable Human Settlement Master Plan (SHSMP). The intent is assisting in providing guidance in prioritising housing projects for urban, rural and Agri-villages. Thus, one of the fundamental roles of the SHSMP is guide the Provincial Government through the preparation and maintenance of strategic housing plans which targets housing challenges and delivery schedules. These plans therefore need to be in line with the National Housing Policy.

The SHSMP also endorsed various human settlement programmes/strategies and guidelines in order to facilitate and enhance special focus of rural and informal development through the provision of sustainable housing and formalisation of such areas. The goal is to promote mixed use, mixed density housing projects which offer a variety of tenure alternatives and providing economic and social integration.

**Table 1: Provincial Human Settlement Strategic Objectives**

The Table below represents objectives and strategies; and further represents **Programs/Projects as well as Indicators** that will assist with basic performance measuring and reporting.

This basic performance measures should be put in place to enable evaluation of effectiveness and efficiency of housing delivery within the Municipality.

Objectives	Description
Aligning Housing delivery to Economic Development	The objective will focus on establishing linkages with Department of Trade and Industry Development, SEZ and District Development Model (DDM). Department of Small Business Development
Aligning Housing delivery to Provincial Economic Development and Tourism	It is aiming to establish linkages with Department of Economic Development and Tourism. Development initiatives and plans will include nodes and development corridors.
Aligning Housing delivery to Municipal Development Plans	Linkages with Municipal Development plans will be re- enforced.
Aligning Housing delivery with Agriculture, Land Reform and Rural Development	It is aiming to establish linkages with the Provincial Department of Agriculture and Rural Development to foster sustainable economic agricultural activities in the province.
Supporting Historically Townships.	The focus will be on developing hubs, nodes, and linkages with previously disadvantaged communities. (Revitalization of the Township Economy through DLM LED projects)



Address existing housing backlog	The objective is in alignment with Outcome 8 of National Development Plan and Human Settlement mandate of the Provincial DHS
Creating dignified Human Settlement places	The objective will focus on promoting the values of equality, integration, and sustainable development.

### **IMPLICATIONS FOR THE DLM HSSP**

- **The DLM to establish a comprehensive human settlement development strategy with is aligned to the above Provincial Strategy with regards to performance measurements, indicators and reporting**

### **2.3. DISTRICT CONTEXT**

#### **2.3.1. GERT SIBANDE SPATIAL DEVELOPMENT FRAMEWORK, 2014**

In 2014 the Gert Sibande Municipality undertook the review of the District SDF. The aim of the Gert Sibande SDF is to address integration and alignment between spatial, engineering, environmental and socio-economic issues confronting the district and local municipalities; and facilitate implementation of the IDP and all related government intentions to reduce poverty and facilitate urban and rural development in the GSDM area.

The Gert Sibande District SDF vision is as follows:

***“STRIVING TO EXCEL IN GOOD GOVERNANCE AND QUALITY INFRASTRUCTURE”***

The Gert Sibande District SDF also outlines 12 development principles which are to be achieved in order to realise the district’s vision. The principles are:

- **Development Principle 1:** Actively protect, enhance and manage the natural environmental resources of the District by way of the guidelines provided in the GSDM Environmental Management Framework (EMF).
- **Development Principle 2:** Optimally capitalise on the strategic location of the District through strengthening of the five national/provincial economic corridors, and to functionally link all towns and settlements to one another and to surrounding regions.
- **Development Principle 3:** Establish a functional hierarchy of nodal points in the Gert Sibande District area to optimise the delivery of social and engineering infrastructure/services, promote local economic development, and protect valuable agricultural land.
- **Development Principle 4:** Provide a full range of social services at all the identified nodal points, in accordance with the nationally approved Thusong Centre concept.
- **Development Principle 5:** Consolidate the urban structure of the District around the highest order centres by way of residential infill development and densification in Strategic Development Areas (SDAs) identified in Municipal Spatial Development Frameworks.
- **Development Principle 6:** Ensure that all areas in the GSDM (urban and rural) are at least provided with the constitutionally mandated minimum levels of services as prescribed by the NDP and enshrined in the Constitution.
- **Development Principle 7:** Utilise the Chrissiesmeer-Heyshope-Wakkerstroom precincts as Tourism Anchors around which to develop and promote the eastern parts of the District (around route R33) as a Primary Tourism Corridor.
- **Development Principle 8:** Promote forestry within and along the identified Primary Tourism Corridor
- **Development Principle 9:** Promote small-scale and extensive commercial farming activities throughout the District and facilitate Agrarian Transformation within the CRDP priority areas.
- **Development Principle 10:** Facilitate and accommodate mining in the District in a sustainable manner in order to support local electricity generation and industrial development.
- **Development Principle 11:** Unlock the industrial development potential of existing towns through developing industry specific Special Economic Zones/Economic Clusters throughout the District, in line with the Mpumalanga SDF and the Mpumalanga Vision 2030 Strategy in accordance with the following sectors:
  - Agricultural Cluster

- Forestry Cluster
- Industrial Cluster
- **Development Principle 12:** Enhance business activities (formal and informal) in the identified nodal points in the District.

#### **IMPLICATIONS FOR THE DLM HSSP:**

- **Development Principle 2-** The R23 Corridor represents the old route between Gauteng Province and Durban/eThekweni in KwaZulu-Natal, linking prominent towns and settlements such as Balfour, Standerton and Volksrust to one another. This route virtually runs parallel and to the north of the N3 freeway, which is the main link between Gauteng and KwaZulu-Natal.
- **Development Principle 3-** in terms of settlement hierarchy, Balfour and Greylingstad are identified as tertiary node within the district and Grootvlei and Driefontein are identified as rural nodes.
- 
- **Development Principle 11-** Agricultural Cluster should be focused on agro-industrial, and more specifically Agri- processing of livestock and crop farming products in Standerton, Bethal, Ermelo and Mkhondo. Secondary Clusters could include Amersfoort, Volksrust and Balfour.

### **2.3.2. GERT SIBANDE RURAL DEVELOPMENT PLAN**

The Gert Sibande Rural Development Plan is a plan seeking to achieve enhanced rural production and productivity, greater socio-economic equity, and aspiration, balance in social and economic development. The Rural Development Plan aims to also improve the impact of intensified and targeted government and private investments in rural areas through an assessment of current developmental realities and potential in these areas. The main objective of GSDM Rural Development Plan (RDP) is to address the needs of people who live in extreme poverty and who are subjected to underdevelopment in the rural areas of the District.

The District RDP has also been prepared to ease integration of the Agri-Park Initiative and the implementation of DRDLR projects into the various Local Municipalities of the District. They also intended to assist the LMs, GSDM and other sector departments and the private sector to invest and enable the development and functioning of Agri-Parks. The Gert Sibande Agri-Parks Business Plan identifies eMkhondo (Piet Retief) as the most suitable site for the establishment of an Agri Hub within the district. Ermelo town is allocated to perform the function of a Rural Urban Market Centre in the district.

**IMPLICATIONS FOR THE DLM HSSP:**

The Gert Sibande Agri-Parks Business Plan also outlines that the proposed Agri- Hub in eMkhondo is to be supported by 28 FPSU's, of which 3 of those FPSU's are situated in Dipaleseng LM, in Balfour, Greylingstad and Grootvlei. Dipaleseng LM is also classified as priority 1 intervention for Rural Intervention Areas.

## **2.4. LOCAL CONTEXT**

### **2.4.1 Dipaleseng Local Municipality Integrated Development Plan (DLM IDP)**

The Dipaleseng LM IDP was compiled following consultation with stakeholders in government, civil society and the private sector. The IDP outlines clear objectives and strategies which serve to guide the allocation and management of resources thus improving coordination and integration of planning, budgeting and development within the municipal area.

The Dipaleseng IDP proposes the following vision, mission and corporate values of the municipality:

IDP VISION:

***The vision of the Dipaleseng Local Municipality is to be “a centre of quality, affordable, good governance and sustainable economic opportunities”.***

IDP MISSION: *The Dipaleseng SDF mission “is to provide sustainable services to communities and ensure that they are served by accountable and effective Municipality.”*

Dipaleseng Local Municipality Priorities:

- Enhancement of revenue collection
- Basic Service Delivery (Water, sanitation, electricity & refuse removal)
- LED and Job Creation
- Attraction of investors
- Public Participation and Good Governance
- Institutional Development
- Social Services (Education, Health, HIV/AIDS, Crime and Drugs Prevention)

Dipaleseng’ development plans are mostly geared towards infrastructure upgrades and economic growth. In particular, housing, water and sanitation are key focus areas. Given the dependence on non-employment income, many households cannot afford services (infrastructure or social), the IDP has therefore Identified 4 KPA in order to address this challenge in the municipality. The KPA’s are:

- **KPA 1: MUNICIPAL TRANSFORMATION AND ORGANISATIONAL DEVELOPMENT**
- **KPA 2: SERVICE DELIVERY AND INFRASTRUCTURE DEVELOPMENT**
- **KPA 3: LOCAL ECONOMIC DEVELOPMENT**
- **KPA 4: MUNICIPAL FINANCIAL VIABILITY AND MANAGEMENT**

#### **2.4.2. DIPALISENG ENVIRONMENTAL MANAGEMENT FRAMEWORK**

The Dipaleseng Environmental Management Framework (EMF) 2011 is a sectoral policy that guides the protection and management of the environment in the municipality. The EMF was developed in terms of NEMA EMF Regulations, which serves as a management and decision-

support tool to assist authorities with the planning parameters and environmental status quo. The purpose Dipaleseng EMF is to identify and spatially represent areas of potential conflict between sensitive environments and development proposals. Chapter 6 of the framework covers the Strategic Environmental Management Plan (EMP) which identified development zones based on environmental opportunities and constraints thus providing practical guidelines for land use management and informed decision-making within each development zone. The following is a list of the identified guidelines and zones:

- **General Guidelines & Existing Planning/Policy Documents**
- **Environmental Constraint Guidelines**
- **Environmental Management Zone**

As a result of the above a priority rating was assigned based on their conservation and development potential to ensure that the desired land uses in each area do not compromise the integrity of the environment. Therefore, five Environmental Management Zones were identified within the DLM, namely:

- Conservation/Ecotourism,
- Agriculture,
- Urban/Residential,
- Industrial/ Commercial, and
- Rural/Mining.

#### **2.4.3. DIPALISENG LAND USE MANAGEMENT SCHEME**

The Dipaleseng Local Municipality Land Use Management Scheme was prepared under the provisions of section 18 of the Town Planning and Townships Ordinance, 1986 (15 of 1986). Dipaleseng Local Municipality is the responsible authority for enforcing and/or executing the

provisions of this Scheme. The intent of this scheme is to have a well-coordinated and harmonious development of the scheme area in order to effectively promote the economy, sustainable environment, health, safety and good order of the municipal area.

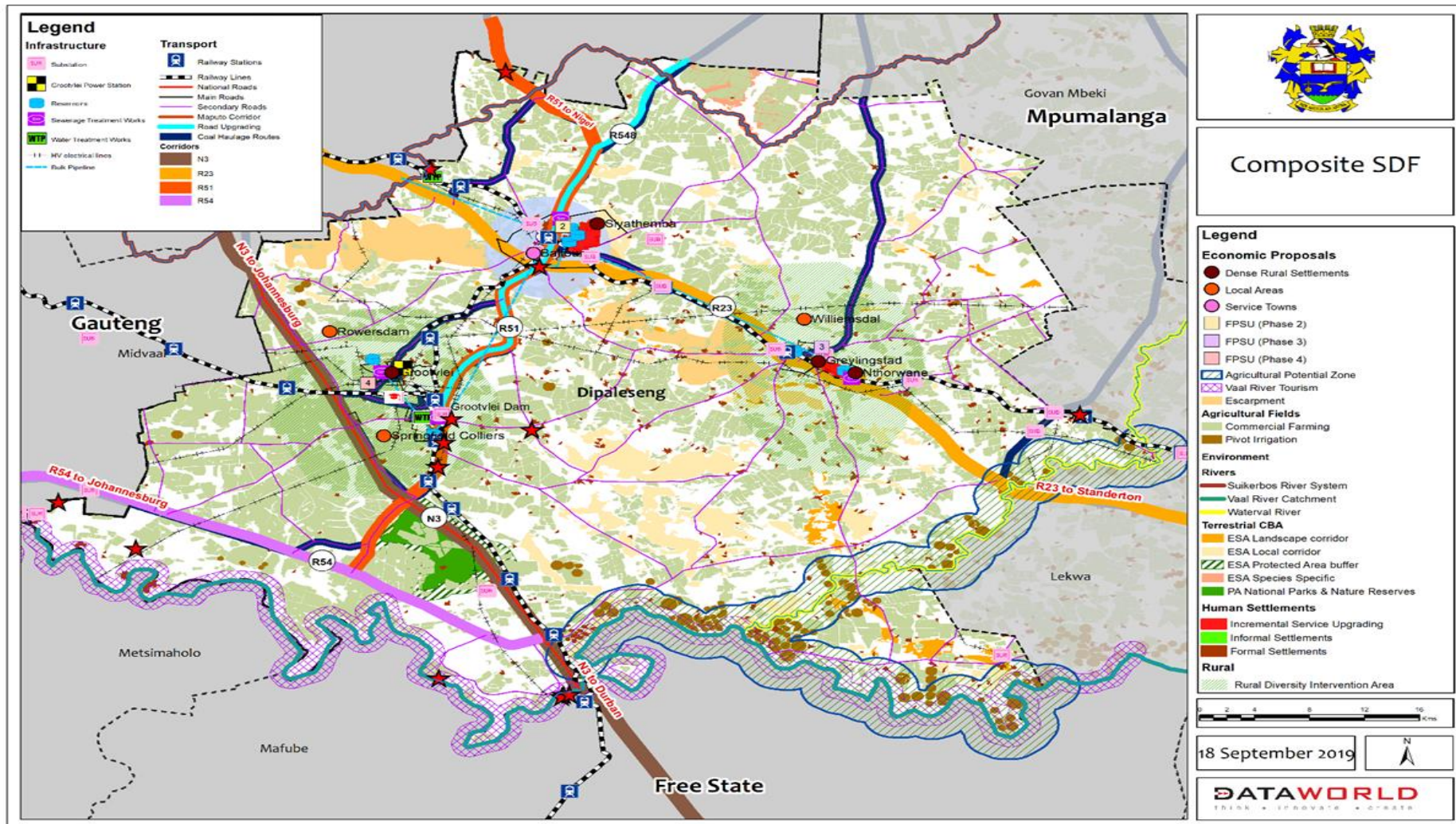
The principles of the Dipaleseng Land Use Management Scheme are to:

- Ensure sustainable and orderly development in the municipal area.
- To allow for a healthy and clean environment.
- Allow for a healthy economic environment with access to opportunities for all residents.
- Ensure equity to all in terms of land management.
- Allow for a democratic administrative and participatory process in land management.
- Ensure the optimal usage of resources such as agriculture, land, minerals, infrastructure and social facilities.
- Promotion of diversity of land uses.
- Promote the concept of compact urban areas.
- Contribute to the correction of historically distorted spatial patterns of settlement.
- Encourage environmentally sustainable land development.
- Promote the establishment of viable communities.
- Aspire to meet the basic needs of all communities in an affordable way.

**IMPLICATIONS FOR THE DLM HSSP:**

**DLM has currently identified new integrated residential nodes, according to the DLM IDP (2016/17) described as new Integrated Residential Development Projects (IRDP) through Greenfield development options as the key anchor projects in this HSSP planned Pipeline Projects**

Figure 3: Dipaleseng Local Municipality Composite SDF Map





### **3. CRITICAL INSTITUTIONAL CONSIDERATIONS AND GOVERNANCE**

**This section entails a brief description of the roles, functions and responsibilities in the provision and delivery of human settlement development amongst the key primary stakeholders involved, including human settlement supporting institutions, described as:**

#### **3.1. NATIONAL DEPARTMENT OF HUMAN SETTLEMENT**

The National Department of Human Settlement (NDHS) seeks to implement the provisions of the Constitution of South Africa/ Bill of Rights on the realization of the inalienable right of access to housing, shelter and comfort bestowed to every living being resident in South Africa and the NDHS is poised to create enabling and conducive environment for the realization of this basic human right to housing including livelihood development ( improved quality of life and improved standard of living hence integrated and sustainable human settlements not provision of housing and/or brick and mortar)

Numerous NDHS policy and legislative prescripts have been enacted or promulgated over a period in time to ensure that human settlement development remains the key priority of all spheres of government, in particular Local Municipalities which should become human settlement delivery vehicles rather conveyor belts, in this regards the National Housing Code of 2009 was established to quantify applicable policy imperatives, norms and standards and various human settlement products, in the form of the Housing Subsidy Scheme(HSS) outlining various subsidy model in the realm of Government-subsidized housing as well as means tests and/or criteria for qualification.

#### **3.2. PROVINCIAL DEPARTMENT OF HUMAN SETTLEMENT**

The Vision of the Mpumalanga Department of Human Settlement (PDHS) explicitly expressed in the Provincial Human Settlement Master Plan (2013) seeks to roll-out the delivery and provision of human settlement development equitably to all Local Municipalities in the Mpumalanga Province, with the objectives to address provincial human settlement backlogs, within the context of “Creation of Integrated and Sustainable Human Settlements”.

The phased eradication, upgrading and development of Informal Settlements, through the instruments of the Upgrading of Informal Settlement Plans (UISP) and Sustainable Livelihood Plans (SLP) with regards to assisting Local Municipalities to plan and budget, with the view to improve

human settlement delivery with regards to efficiency, improved stakeholder and community participation, inter-sectoral and cross-sectoral collaboration, as well as facilitation of accreditation of Local Municipalities.

### **3.3. GERT SIBANDE DISTRICT MUNICIPALITY**

The Gert Sibande District Municipality (GSDM) has a key role to play in the delivery and provision of human settlement development, with regards to **provision of services and bulk connector infrastructure development** and is responsible for all the human settlement development planning functions at district level which is aligned and intertwined with planning at local municipal level, transcending down to ward-level planning or ward-based planning.

### **3.4. DIPALISENG LOCAL MUNICIPALITY**

This HSSP aims to assist the Dipaleseng Local Municipality to implement the development goals and objectives of the Municipal IDP and SDF, as well as developing a comprehensive framework for the Local Municipality to implement its constitutional and legislative mandates in line with the National Housing Act and the National Housing Code

There are **Three (3) Key Departments in Dipaleseng Local Municipality** responsible for, among others, functions and responsibilities relating to Human Settlement Development.

#### **3.4.1. Department of Planning and Economic Development**

This Department is responsible for the development of Spatial Development Framework (SDF), Human Settlement Development Plan (HSDP), Local Economic Development, LED, and Rural Development Plan (RDP). The Department has got 5 employees with only two (2) Professional Town Planners responsible for the Land Use Management for the whole Municipality.

The Land Use Management Division assesses applications for among other subdivisions, consolidations, rezoning, extensions of urban boundaries, townships establishment, recommendation, and approval of Land use maps.

- There is a serious lack of capacity in this Department especially the Land Use Management Division. The lack of capacity will cause delays in the processing and implementation of the human settlement development projects.
- The DLM Housing Needs Register (HNR) section/division capacity with regards to data capturing, processing and to develop innovative mechanisms to reach out to register people outside the R0 – R3,500 income bracket as the HNR List should be broader than an” RDP Housing Waiting List”, hence new capacity needs to be recruited into this section.

### **3.4.2. Department of Infrastructure Services**

This is an important institution responsible for the provision of services in the Municipality. There are only three (3) professionals responsible for water, sewer, electricity supply, storm water management and waste removal.

- There is a serious lack of institutional capacity in the DLM Infrastructure Service Department.

### **3.4.3. Community Services Department**

This Department is responsible for, among others, the development of Public Facility Master Plan (PFMP), Environmental Management Plan (EMP), Integrated Transport and Land Use Macro Plan (ITLUMP). There are only 5 officials in this Department, which indicates once again that there is a lack of capacity in this Department.

- **Although we know that the assessment of Environmental application is the responsibility of the Provincial Department, Municipalities are responsible to oversee that all conditions, recommendations, and mitigation in the Record of Decisions (ROD's) are implemented without exception during construction stage. Therefore, it is important to have sufficient personnel for monitoring purposes.**

#### **3.4.4. REQUISITE INSTITUTIONAL AND TECHNICAL SKILLS SET REQUIRED BY THE MUNICIPALITY**

**This requisite skills sets should be recruited to harness and enable the Municipality to implement this HSSP in line with the provisions of National/Provincial and Local policies and legislative prescripts, and these recommended skills sets presents the priorities of both soft skills (institutional-based) and hard skills (built-environment based)**

**These Recommended Skills Sets seeks to quantify and establish what constitutes “Roles and Responsibilities of Local Municipalities on human settlement planning functions” which entails:**

- a) Settlement Planning and Design**
- b) Design of Low-cost/RDP housing (different designs not monotype/monotonous units)**
- c) Subsidy Administration and Cash-flow Management**
- d) Monitoring and Evaluation**
- e) Stakeholder Relations and Beneficiary Management**
  - Project Management**
  - Contract Management**
  - Financial Management (Subsidy Administration)**
  - Construction Economist/Cost Accounting**
  - Environmentalist**
  - Communication and Stakeholder Management**
  - Beneficiary Management and Customer Care**

### **3.5 SUPPORTING ENABLERS/STATE-OWNED INSTITUTIONS/ENTITIES**

#### **3.5.1 HOUSING DEVELOPMENT AGENCY (HDA)**

The Housing Development Agency (HDA) is mandated by the Housing Development Agency Act No. 23 of 2008 which is articulated as follows:

This piece of legislation mandated the Housing Development Agency to play a pivotal role in assisting organs of State with regards to the upgrading of informal settlements. In response to the mandate the agency commissioned a study with the Stats SA data along with other sources and formulated analysis that related to the profile, status and trends of informal settlements. The studies commissioned by the agency provided data that plays a vital role in the upgrading of informal settlements.

The Strategy promotes the following main developmental actions and responses in respect of addressing the basic infrastructure and housing needs of informal settlements:

- ❖ Rapid Up-Front Preliminary Assessments and Categorisation of all informal settlements to obtain an adequate profile and to enable the determination of the appropriate developmental response(s).
- ❖ Full Upgrading (full services, top-structures, and tenure) where appropriate, affordable, and viable.
- ❖ Interim Basic Services for settlements viable and appropriate for long term full upgrading but where this is not imminent (a situation which often prevails).

Emergency Basic Services for settlements where long-term upgrading is not viable or appropriate but relocation is not urgent or possible (a situation which also often prevails).

Relocations as a last resort for settlements where this is an urgent priority.

### **3.5.2. NATIONAL HOUSING FINANCE CORPORATION (NHFC)**

The National Housing Finance Corporation (NHFC) is one of several Development Finance Institutions (DFIs) created by the South African Government to sustainably improve on the socio-economic challenges of the country.

The developmental financial focus of the NHFC is specifically about finding workable models on affordable housing finance for the low- and middle-income target market. The NHFC defines its end-beneficiary target market as “any South African household with a monthly income that is between R1 500 and R15 000”, namely, the low- to middle-income household also known as the Gap market.

This market sector is mostly able to contribute towards its housing costs but finds it hard to access bank-funded housing finance<sup>3. 1 32</sup>. The NHFC was established in 1996, by the then National Department of Housing (NDoH), to offer housing finance, project facilitation and technical assistance to private and public entities ensuring availability of housing stock for the target market. As a means of sustaining its funding programs, the NHFC searches for better ways to mobilise finance for affordable housing from sources outside the state in partnership with the broadest range of organisations.

The NHFC, in the affordable housing finance market sector, adopts a role of Financier, Facilitator and Innovator, to ensure viable housing finance solutions; growth of sustainable human settlements; and mobilization of relevant partnerships, through enhanced insights and knowledge gained.

### **3.5.3. NATIONAL HOME BUILDER’S REGISTRATION AUTHORITY**

The National Home Builders Registration Council (NHBRC) The National Home Builders Registration Council (NHBRC) requires that all new houses be inspected during the building process to ensure that they comply with the relevant Act.

There is currently no legal requirement for an inspection of second-hand houses before a sale takes place. The Home inspection industry in South Africa In South Africa, there has been a fledgling property inspection industry for about 30 years but most South Africans still don't make use of property inspectors when buying, selling, building or altering a property.

The role of the professional property inspector is to provide common sense, factual answers regarding the actual physical condition of the property. Using his training, extensive knowledge and experience, the property inspector will document all significant observable defects, assess, and explain the significance of each defect and, where practical, provide an informed estimate as to the cost of repair.

In South Africa, it is a fact that most people still pay more attention to the condition of a second-hand motor vehicle than to the condition of a property they are interested in buying. That is pretty weird when one considers the amount of money it takes to build, buy or maintain a property in South Africa. To avoid expensive mistakes, anyone who is thinking of buying or owning property needs accurate information regarding the property they are interested in. They need answers to questions such as:

- ❖ How long will the roof last before needing replacement or repair?
- ❖ Are there any problems with damp in the walls, roof leaks or storm water runoff?
- ❖ Are there any structural concerns regarding the foundations, walls and roof?
- ❖ Are the visible cracks in the walls serious – does it mean the house will fall?
- ❖ Are the geyser, plumbing and drainage systems all in order?
- ❖ Is the electrical system adequate and safe?

- ❖ Have all the improvements on the property been approved by the local authority?
- ❖ Has the building been well maintained?
- ❖ What maintenance and repairs are needed – immediately and within the foreseeable future?

#### **3.5.4. SOCIAL HOUSING REGULATORY AUTHORITY**

Investment Social Housing is a rental or co-operative housing option, which requires institutionalized management.

It is provided by accredited SHIs or in accredited social housing projects in designated restructuring zones.

Regulation Social housing provides good quality rental accommodation for the upper end of the low-income market (R1 500 - R7 500).

The primary objective of urban restructuring is creating sustainable human settlements.

Promote Social housing is not just about building houses; it is also about transforming our residential areas and building communities.

#### **4. SITUATIONAL ANALYSIS/DEVELOPMENT PROFILE**

This Chapter presents the situational analysis phase involves capturing and analysing human settlements patterns/trends, supply and demands based on secondary research mainly drawn from existing data in the SDF, IDP and meetings with communities.

##### **4.1. DEMOGRAPHIC PROFILE**

###### **4.1.1. Number of Households**

There is a registered steady increase in number of households comparing the 2011 Community Survey indicating 12 637 households and 14 877 accounted for in the 2016 Community Survey (2 240 more households)



- There is a registered decrease in household sizes from 4,0 declining to in-between 3,4 to 3,0 in the same period under review (2011 -2016) but it also indicates an increase in population size

**Figure 4: DLM Households Size**

Area	Population	Number of Households	Average Household Size
<b>Siyathemba</b>	22768	6739	3,38
<b>Balfour</b>	3201	972	3,29
<b>Dipaleseng NU</b>	4046	1079	3,75
<b>Greylingstad</b>	840	217	3,87
<b>Nthorwane</b>	6120	1826	3,35
<b>Grootvlei</b>	5415	1804	3,00
<b>Dipaleseng LM</b>	42390	12637	3,35

#### 4.1.2. Population Size

The DLM population increased from **42 390 in 2011 to 45 232 in 2016**, with a growth rate of 1,5% per Annum which constitutes 4% of the total population of the Gert Sibande District in 2016 (Stats SA Community Survey 2016)

- **It has been further established that the DLM population in 2019 was 47 298 and estimated to reach 56 715 mark by 2030 based on the historic population growth rates.**

Figure 5: Population Size

Area	Population			Growth Rate	
	2001	2011	2016	2001-2011	2011-16
Dipaleseng LM	38 618	42 390	45 232	0,93	1,47
Gert Sibande DM	900 007	1 043 194	1 135 409	1,48	1,92
Mpumalanga	3 365 554	4 039 939	4 335 964	1,83	1,61

### Population projection 2019

- Projected population in Dipaleseng = 47 298
- Smallest population
- 1.0% of the total projected population of 2019

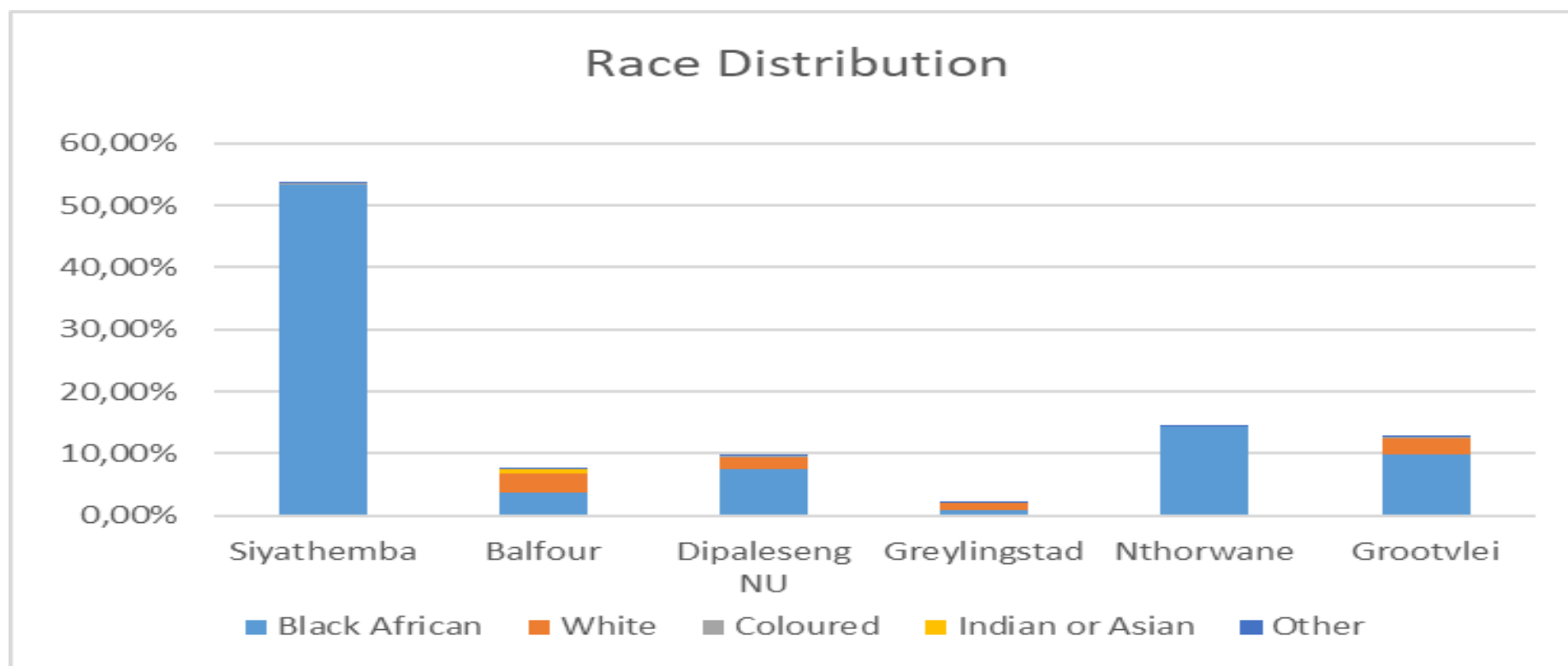
### Projected population 2030

- Projected population = 55 715
- 1.0% of the MP population

### 4.1.3. Population Distribution

DLM is comprised of six Wards and covers an area of approximately 2644,81 km<sup>2</sup> and showing an increase in number of people/inhabitants during the 2011 to 2016 period at a positive annual growth rate of 1,5%

- **The racial composition of the DLM indicates that Black African people account to 89,83% of the total population, followed by White people (8,57%), Indian/Asian people (0,935%) and Coloured people (0,50%)**



#### 4.1.4. Age and Gender Distribution

Children less than 15-Years (25,46%)

Working Age Youth between 15 to 34-Years (39,46%)

Working Age Non-Youth between 34 to 64-Years (28,85%)

Elderly People from 64-Years Upward (6,23%)

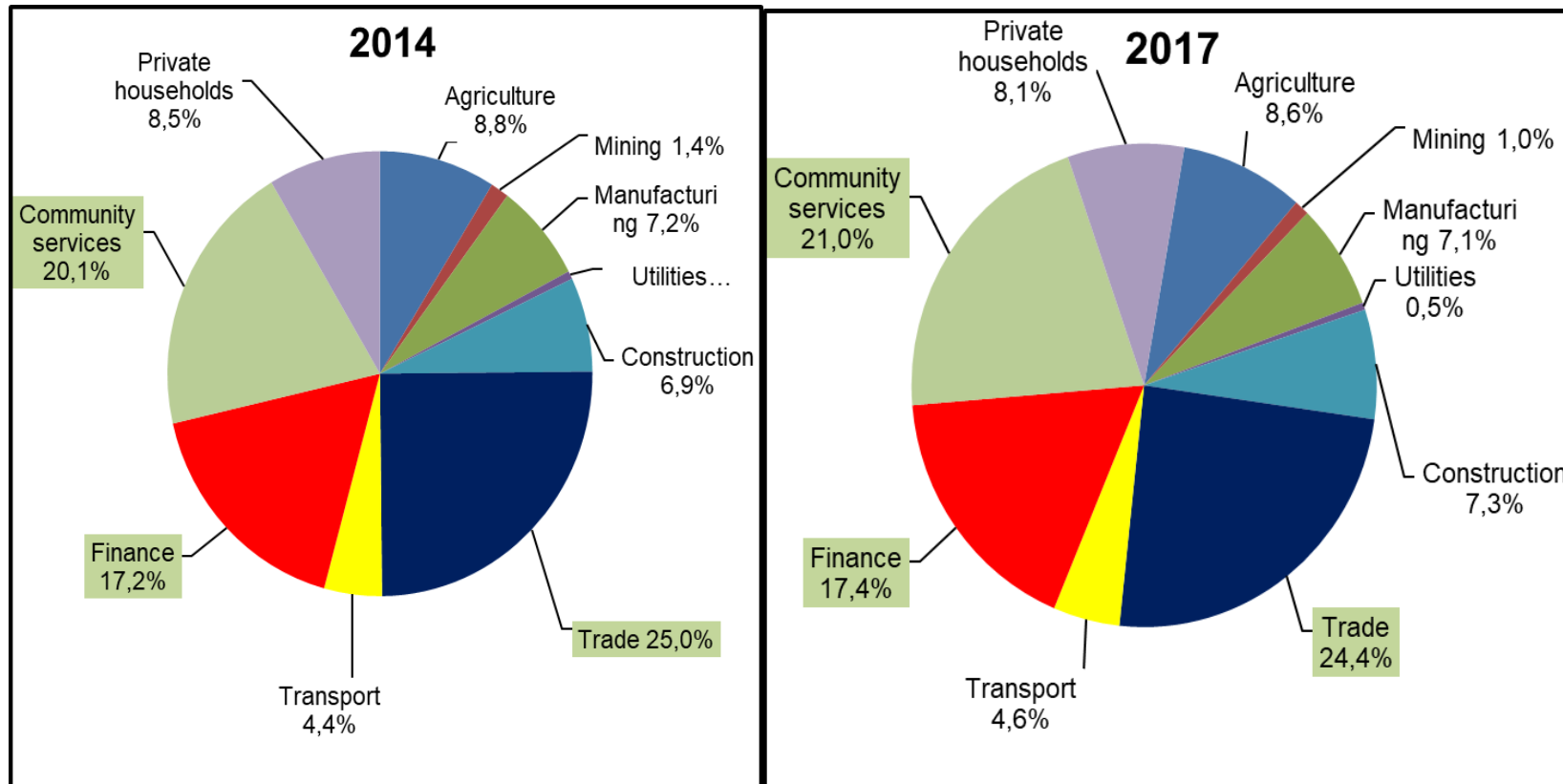
- **This indicates that young people constitute 66,92% of the DLM total population, with more than 28,85% people in the working age bracket implying the socio-economic and health conditions in the DLM shows lesser mortality rates amongst these categories of the population, and further shows lesser migratory patterns from these age groups**

**Figure 7: Age and Gender Distribution**

Age Bracket	Male Population	%	Female Population	%	Overall Population	%
<b>Children (less than 15)</b>	5759	12,73%	5757	12,73%	11516	25,46%
<b>Working Age Youth Population (15-34)</b>	9489	20,98%	8359	18,48%	17848	39,46%
<b>Working Age Non-Youth Population (35-64)</b>	6999	15,47%	6050	13,38%	13049	28,85%
<b>Elderly Population (64+)</b>	1155	2,55%	1665	3,68%	2820	6,23%
<b>Total</b>	23402	51,74%	21831	48,26%	45233	100,00%

#### 4.1.5. Employment Profile

Figure 8: Employment Profile by industry/Sector



Based on 2017 employment figures 10 703 people were employed and 7 111 people were unemployed, and also shows unemployment increasing from **34,8% in 2016 to 36,9%** and the **4<sup>th</sup> highest in the Mpumalanga Province in 2017** calculated against a total of 19 292 people classified as economically active population

- Youth un-employment standing at 45,2% in the DLM with female youth mostly affected.
- Un-employed females stand at 42,4% against males' un-employment at 30,2%, meaning females mostly affected
- The employment by industry shows that the trade, finance, community services, trade and agriculture remain the dominant economic sectors.

#### 4.1.6. Income Profile

It has been established that about 60% of the DLM employed population earn below and/or equal to the R3,500 income bracket through the Gini Coefficient measurements

- This shows the DLM is having a very high-income poverty and disparities in addition to the highest unemployment rate as compared to other Municipalities in the GSDM and Mpumalanga Province, with a high number of people living under poverty or living below the poverty line (about 40% of the total population)
- DLM income profile has a direct correlation or inversely proportional with the DLM Human Development Index (HDI) which includes inter-alia infant mortality rate, education and health levels which indicates steady growth year-on-year

Figure 9: Income Profile/Human Development Index

Area	2010	2011	2012	2013	2014	2015	2016	2017	2018
Dipaleseng LM	0.57	0.56	0.57	0.57	0.58	0.58	0.58	0.59	0.59
Gert Sibande DM	0.62	0.62	0.62	0.62	0.61	0.61	0.60	0.60	0.60
Mpumalanga	0.62	0.61	0.62	0.61	0.61	0.61	0.60	0.60	0.60

#### 4.1.7. Education Profile

Good prospects for the DLM exists in this front reflected by the 33,2% in university entrance admission rates in 2018 with the improved Grade 12 pass rate from 81,4% (2014) to 86,9% (2018) making the DLM number one in the Province.

- **Major challenges remain on how to incorporate these educated youth into mainstream economic opportunities and the provision of further education and training including skills development, recreational and sporting facilities.**

Figure 10: Education Profile

Education Level	Dipaleseng LM	Gert Sibande DM	Mpumalanga
<b>No Schooling</b>	13,53%	16,79%	17,57%
<b>Some Primary</b>	22,57%	23,49%	23,73%
<b>Completed Primary</b>	4,78%	3,74%	3,76%
<b>Some Secondary</b>	35,29%	28,44%	27,07%
<b>Grd 12/Std 10</b>	19,07%	20,29%	20,72%
<b>Higher</b>	4,15%	5,67%	5,66%
<b>Other</b>	0,03%	0,26%	0,32%
<b>Unspecified</b>	0,06%	0,11%	0,09%
<b>No Applicable</b>	0,52%	1,22%	1,07%

## 4.2. ACCESS TO INFRASTRUCTURE

### 4.2.1. WATER

The 2014 Water Demand for DLM is 16,8ML/day to provide for the 42 390 population, which fail to meet the current DLM demand.

Currently, DLM with Water Demand of **16.8 ML/d** is supplied by **6.5 ML/d Fortuna Water Treatment Works (WTW)** and the balance supplied by the **Grootvlei Water Treatment Works (WTW)**

It is projected that the Water Demand in the year 2034 will be approximately **19.5ML/d**.

It is evident that the current and future demand of water are greater than what **Fortuna (WTW)** can treat and supply. It is against the background that it has become necessary to augment the water supply to Fortuna WTW in order to cater for current and future growth in water demands.

The total number of households as per **2016 Community Survey** is **13 479** and several households with access to **which is 90.6%** and households without access to water is **1 397 which is 9.4%**.

➤ **On the Implication of Bulk and Reticulation Services for new human settlement development projects**

**DLM Water Master Plan** identifies two inter-linked planning scenarios:

**Short-term to Medium-term Planning and Medium-term to Long-term Planning**

- a) **Short-term to Medium-term Planning:** to accommodate current population, no upgrading is required to the existing infrastructure. The Water Master Plan also recommend that the existing vacant erven in Balfour, Siyathemba, Greylingstad and Nthorwane, Grootvlei Ext 1 and 2 and informal settlement be serviced and developed before any new developments are implemented.
- b) **Medium-term to Long-term Planning:** to accommodate new proposed developments in Balfour, Siyathemba, Greylingstad and Nthorwane new bulk water lines are required. In addition, the treatment capacity of the existing water treatment works needs to be increased to **12 ML/day for medium term and 13ML/day for Long term planning**.

In terms of Grootvlei Ext 1 and 2 and Informal settlement, to accommodate proposed new developments, the treatments plant capacity of the **existing WTW should be increased to 2.5 ML/day**.



**Figure 11: Access to Water Infrastructure**

Water Services	Dipaleseng Municipality	Gert Sibande District	Mpumalanga
Total number of HH	14877	333815	1238861
HH with access to piped water inside yard	13480	275921	811767
HH with access through communal standpipes	551	19353	178957
HH with access through boreholes	89	12942	362368
Total HH with access to water	14120	308216	1121361
HH with access to water as %	94.9%	92.3%	90.5%
HH below basic level of service	757	25599	117500
Backlogs as %	5.1%	7.7%	9.5%

#### 4.2.2. SANITATION

The 2016 Community Survey indicated a total number of 10 996 (73,9%) households with access to water-borne sanitation/flush/chemical toilets, with 20% households with access to Ventilated Pit Latrine (VIP Toilet) and 901 (6,1%) households with no access to sanitation (no toilet)

- **Critical bottlenecks relate to perceived and/or actual sewage spillage, illegal dumping, and pollution.**

**Figure 12: Access to Sanitation**

Sanitation Services	Dipaleseng Municipality	Gert Sibande District	Mpumalanga
Total Number of HH 2016 (Community Survey)	14877	333815	1238861
Households with Access to Flush/Chemical toilets	10996	234267	607081
Households with Access to sanitation as a %	73.9%	66.9%	49.0%
Households with Access to VIP toilets	2980	90786	593603

Households with Access to VIP as %	20.0%	27.2%	47.9%
Households below basic level of service / backlogs	901	8762	38177
Households below basic level of service / backlogs as %	6.1%	2.6%	3.1%

#### 4.2.3. ELECTRICITY/SOURCES OF ENERGY

Household with connections to electricity stand at **12 126 (82%)** indicating an estimated 73,4% (cooking purposes), 57,6% (heating purposes) and 83,1% (lighting purposes, with **2 655 (17,8%) backlogs** not yet connected including related electricity backlogs including ageing infrastructure due for upgrading in most parts of the DLM.

Figure 13: Access to Electricity

Electricity Source	Cooking	Heating	Lighting
Electricity	73,4%	57,6%	83,1%
Gas	2%	1,8%	0%
Paraffin	6%	3,2%	0,8%
Solar	0,1%	0,2%	0,3%
Candles	0%	0%	15,4%
Wood	7,9%	9,2%	0%
Coal	10%	20,3%	0%
Animal Dung	0,3%	0,3%	0%
Other	0%	0%	0%
None	0,2%	7,3%	0,3%

#### **4.2.4. REFUSE REMOVAL**

Refuse removal and waste management services have improved in the DLM with **81.8% of 12 637 households** have access to refuse removal services, with only a **backlog of 5,5%**. There are three operational **Landfill Sites in Balfour, Grootvlei and Greylingstad** respectively, but there exist operational constraints namely lack of fencing, no signage and dysfunctional Weighbridge and/or lack there-of amongst others including matters of **detection and monitoring hazardous waste including lack of early warning systems**

- **Mushrooming illegal dumping sites across the DLM Wards which creates health hazards as well as the pending finalization of the DLM Integrated Waste Management Plan (IWMP).**

#### **4.2.5. ACCESS TO HEALTH CARE**

**Access to healthcare facilities is based on number and spread of such facilities within a geographic space, and it shows that the DLM is serviced a total of seven healthcare facilities and three mobile clinics.**

#### **4.2.6. ACCESS TO EDUCATIONAL FACILITIES**

Current facilities according to the Provincial Department of Education has capacity to service the whole DLM area, with the need to upgrade and improve such existing facilities.

- **There are currently no tertiary or further education (TVET) institution to cater for developing a home-grown skill base compatible with the needs of a DLM economy.**
- **The DLM needs to develop a comprehensive tertiary and further education financing models, through engaging the state entities and private sector entities for a Bursary Scheme for the DLM matriculants with some mandatory conditions for retained the resultant trained professional/specialists into the DLM economic space**

#### **4.2.7. ACCESS TO LIBRARIES/THUSONG CENTRES**

These are Service Centres/Hubs for providing communities with access to information and services in an integrated manner, with these Services Centres to be modelled to access community needs and provide feedback mechanisms through the muted Six-Block Service Model

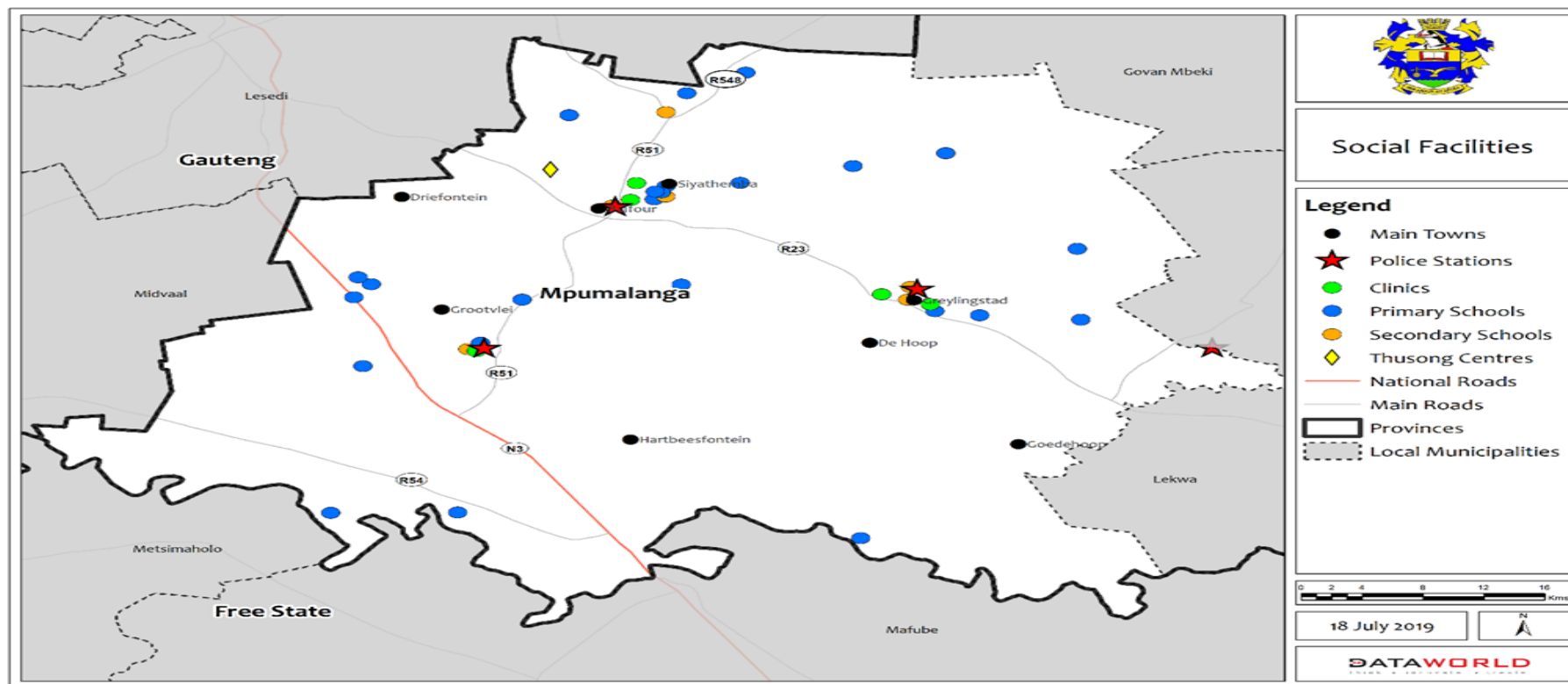
- **There are four (4) planned Thusong Centres, with only one established and operational at Siyathemba.**

#### **4.2.8. ACCESS TO POLICE STATIONS, COMMUNITY HALLS & POST OFFICES**

The DLM is serviced by four (4) SAPS Centres, four (4) Community Halls and three (3) Post Offices, which implies as these facilities are evenly spread within specific geographic areas and cater the high density as well settlements.

- **It is not yet clearly stated and/or established with regards to the infrastructure status of these facilities, namely of whether these facilities are due for upgrading or some improvements.**

Figure 14: Access to Public and Social Infrastructure



#### 4.2.9. ACCESS TO CEMETRIES

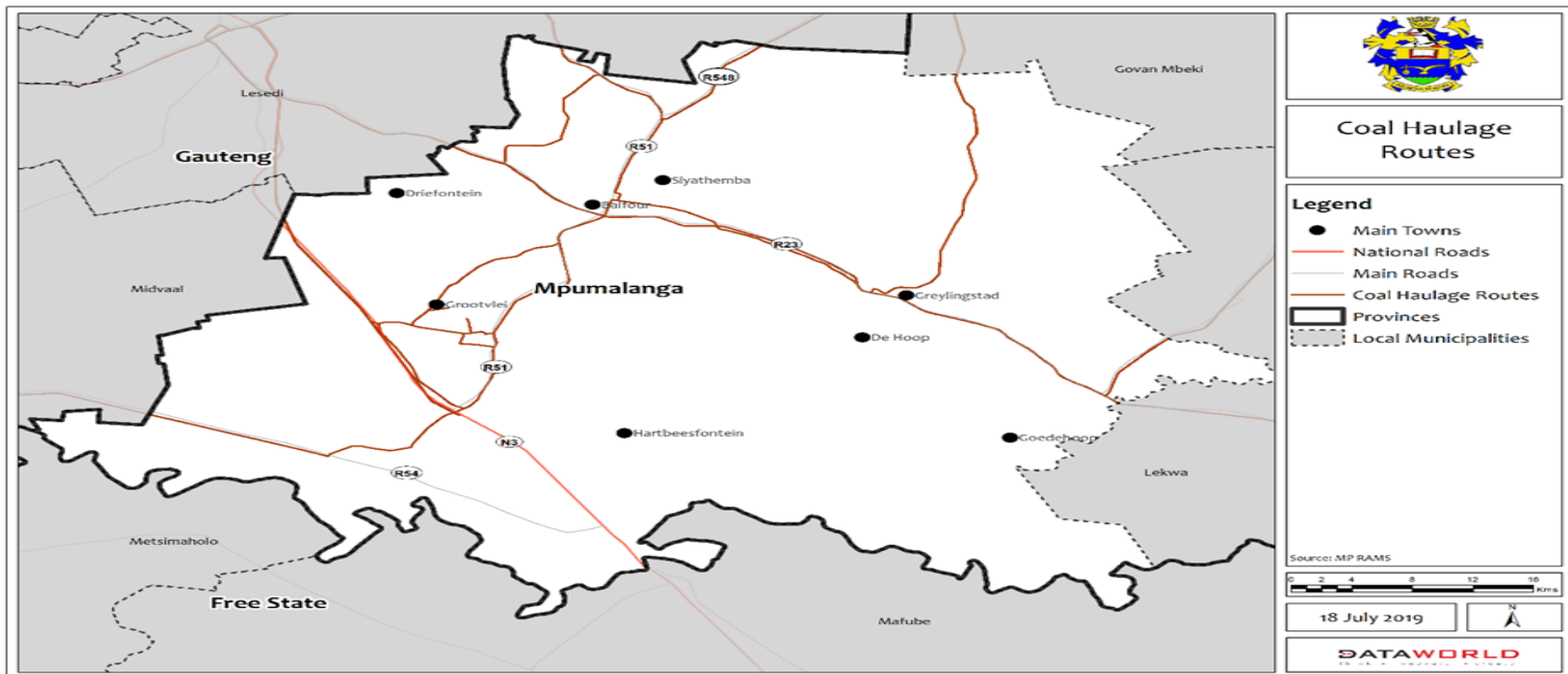
On general observations and assessment, cemeteries are steadily reaching full capacity in Siyathemba and Nthorwane with Grootvlei having identified a new cemetery which need to be formalized for usage.

#### 4.2.10. ACCESS TO ROAD NETWORK

DLM has N3, N17, R51 and R23 and becomes a strategic location with this inherent road link to other Municipalities with regards to freight/goods and people or commuters across these transportation routes.

- **The Transportation Network or Grid will allow and build linkages in development initiatives to be underway undertaken by all the adjoining Municipalities, namely: Lesedi, Lekwa, Midvaal, Metsimaholo and Mafube Local Municipalities**

**Figure 15: Access to Road Infrastructure**

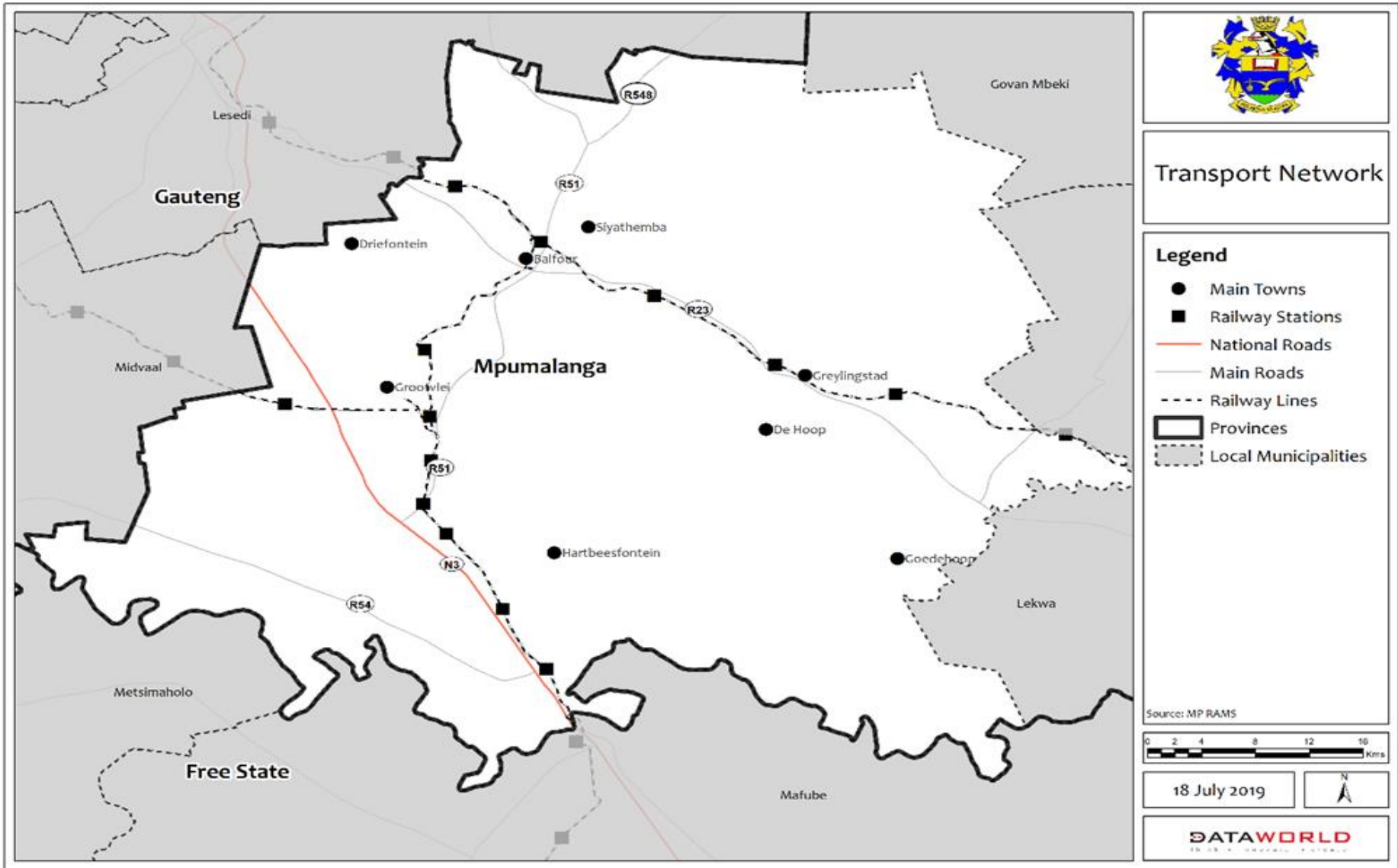


#### **4.2.11. ACCESS TO PUBLIC TRANSPORTATION INFRASTRUCTURE**

Movements and linkages with other adjoining or neighbouring Local Municipalities are accessible by both the DLM Road Link [N3 (Johannesburg to Durban); N17 (Johannesburg to Trichard/Secunda); R23 (Secunda/Standerton; R548 (Middleburg/Witbank); R51 (Mafube/Metsimaholo)]and Rail Link ( Johannesburg/KwaZulu Natal . Different movement linkages in the DLM shows that the Bus and Minibus Taxi are the two primary DLM public transport systems.

- **Access to these modes of transport problematic due to low densities and these prevent access of these communities to various economic opportunities within the DLM, Road freight which impact negatively to the DLM roads infrastructure due to heavy haulages (coal trucks) as well as movement of goods and people within the DLM road grid**
- **Rail Freight from Johannesburg to Richards bay which also link the DLM with Heidelberg and Free State Towns and Vereeniging plays a pivotal role in the movement of freight.**

**Figure 16: Access to Public Transportation Infrastrure.**





## 5. SPATIAL AND ENVIRONMENTAL CONSIDERATIONS

### 5.1. SPATIAL GEOGRAPHY

The geographic location and positioning of where people live (settlements) were underpinned by apartheid spatial planning model of segregation of communities and establishing black townships or areas as dormitories of migrant labour reserves which also includes victims of forced removals from what was perceived/captioned as “White Areas”.

These black areas were located outside formal white towns, poorly or under-served and the DLM has three pre-1994 former proclaimed White towns described as Balfour, Grootvlei and Greylingstad & three (3) pre-1994 former Black townships described as Siyathemba, Nthorwane and Grootvlei Extension 1 with number of services delivery backlogs, including aging basic community infrastructure.

The Main Roads, as described in the **Movement and Linkages Infrastructure**, the Vaal River in the southern boundary of the DLM feasible for agricultural development and the Grootvlei Dam posing positive potential due to location of Eskom Power Plant, high tourism potential as well as new residential nodes of low to high income people, notwithstanding that the dam area as considered environmentally sensitive.

- **The main objective of the Breaking New Ground (BNG) centres on spatial integration whereby development of new integrated residential nodes should be near places of work, with the Eskom power station as a competitive advantage for mixed human settlement development options.**

#### 5.1.1 SETTLEMENT PATTERNS & DENSITY

##### 5.1.1.1. BALFOUR

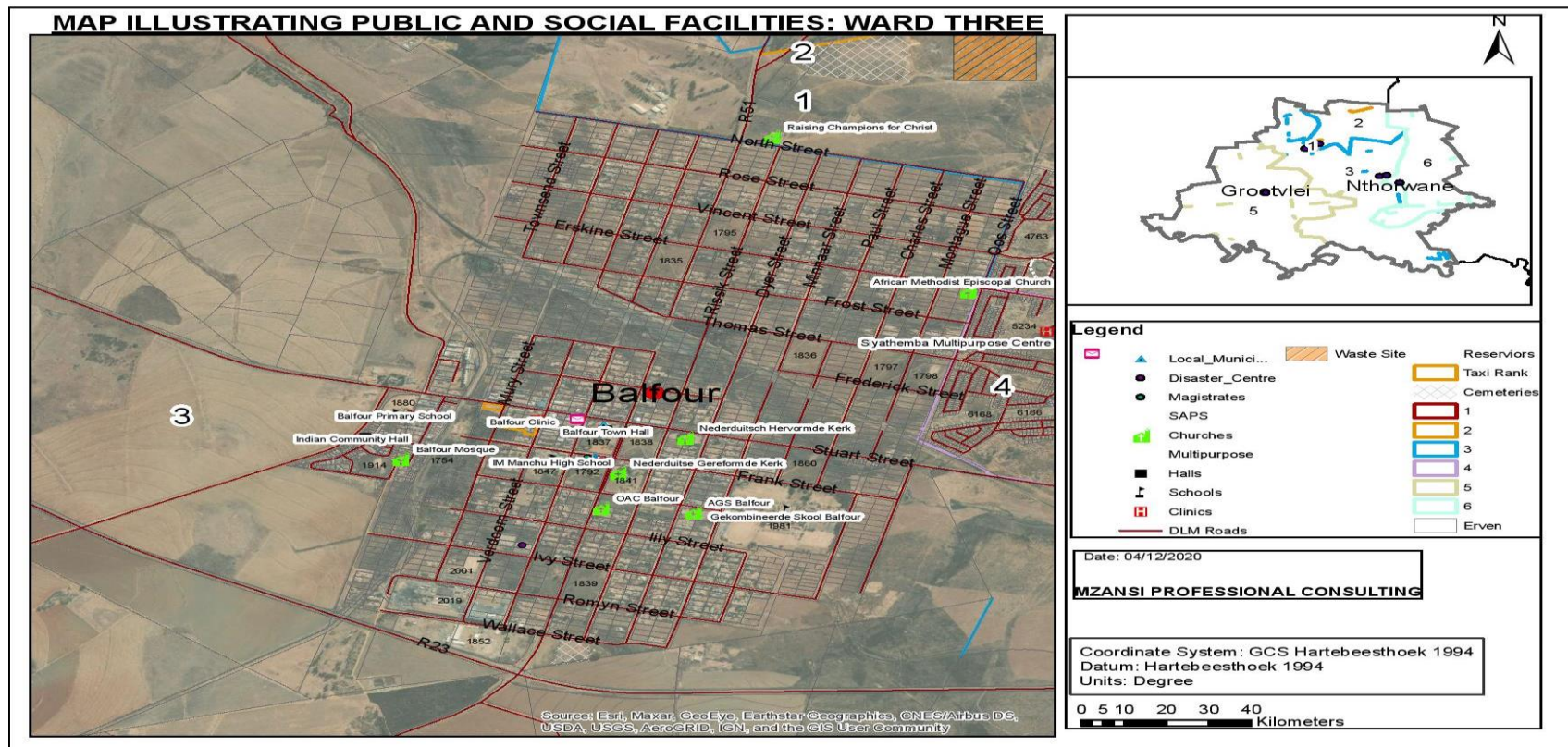
Balfour is a DLM primary town, located in the north-western part of the DLM incorporating a globally known abattoir “Biggest Abattoir in Africa” and number of manufacturing base of by-products (in-organic chemicals, fertilizers etc)

The Balfour Central Business District (CBD) has various retail outlets with buildings looking outdated and dull highlighting imperatives for inner-town regeneration, with the residential precinct indicative of vacant land parcels and erven which creates major potential for development of this residential erven (land in-fill development project).

➤ **Inner-Town Regeneration becomes a priority.**

Through utilizing the vacant land parcels and /or residential erven and the un-used dilapidated buildings for densification purposes and stimulation of the local economy.

**Figure 17: Balfour Settlement (Ward 3)**



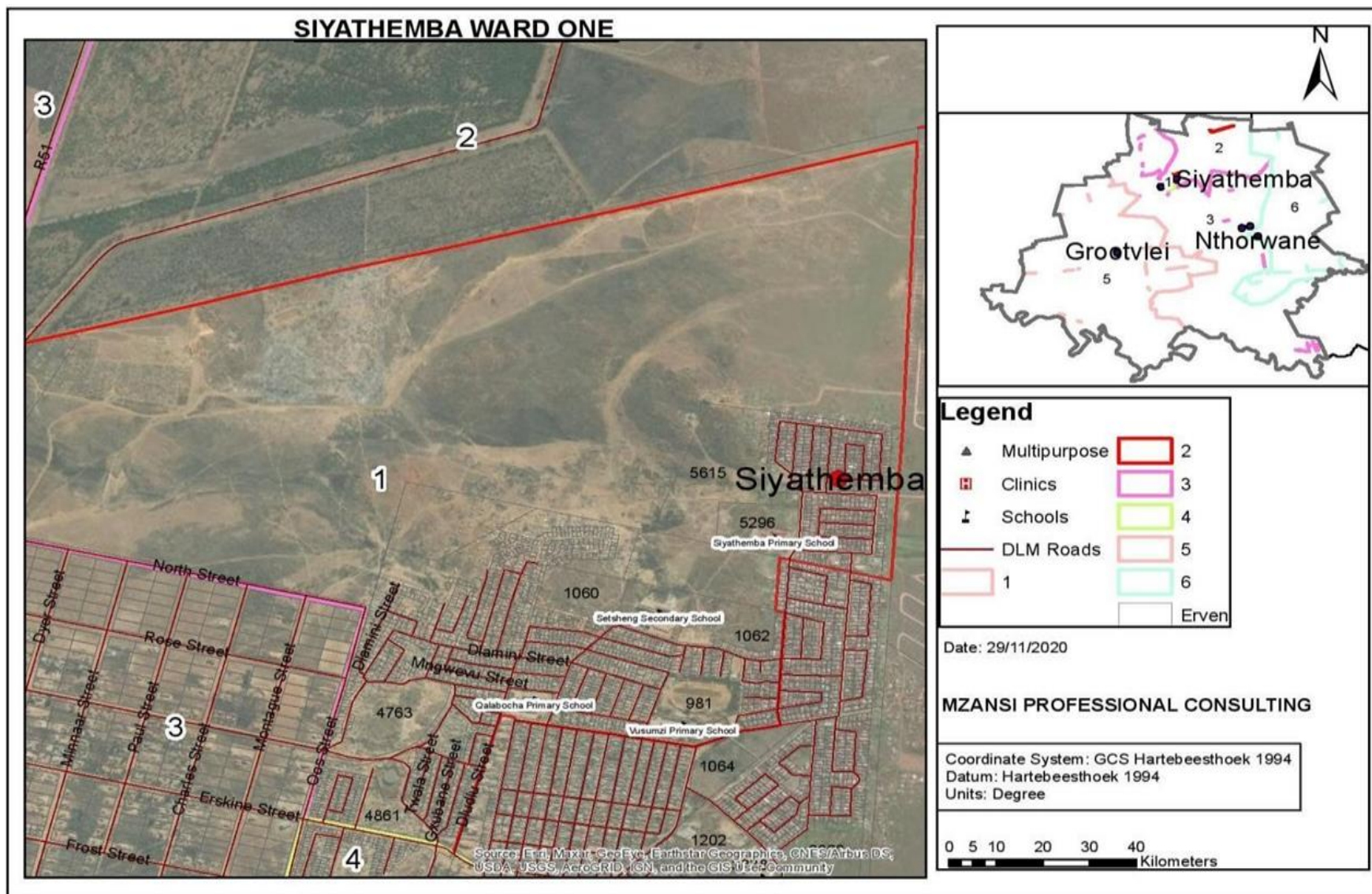
#### **5.1.1.2. SIYATHEMBA**

Siyathemba is located on the eastern side of the Balfour town, and is a fully serviced settlement with formal residential erven with formal dwellings or residential units/houses in the form of brick and mortar.

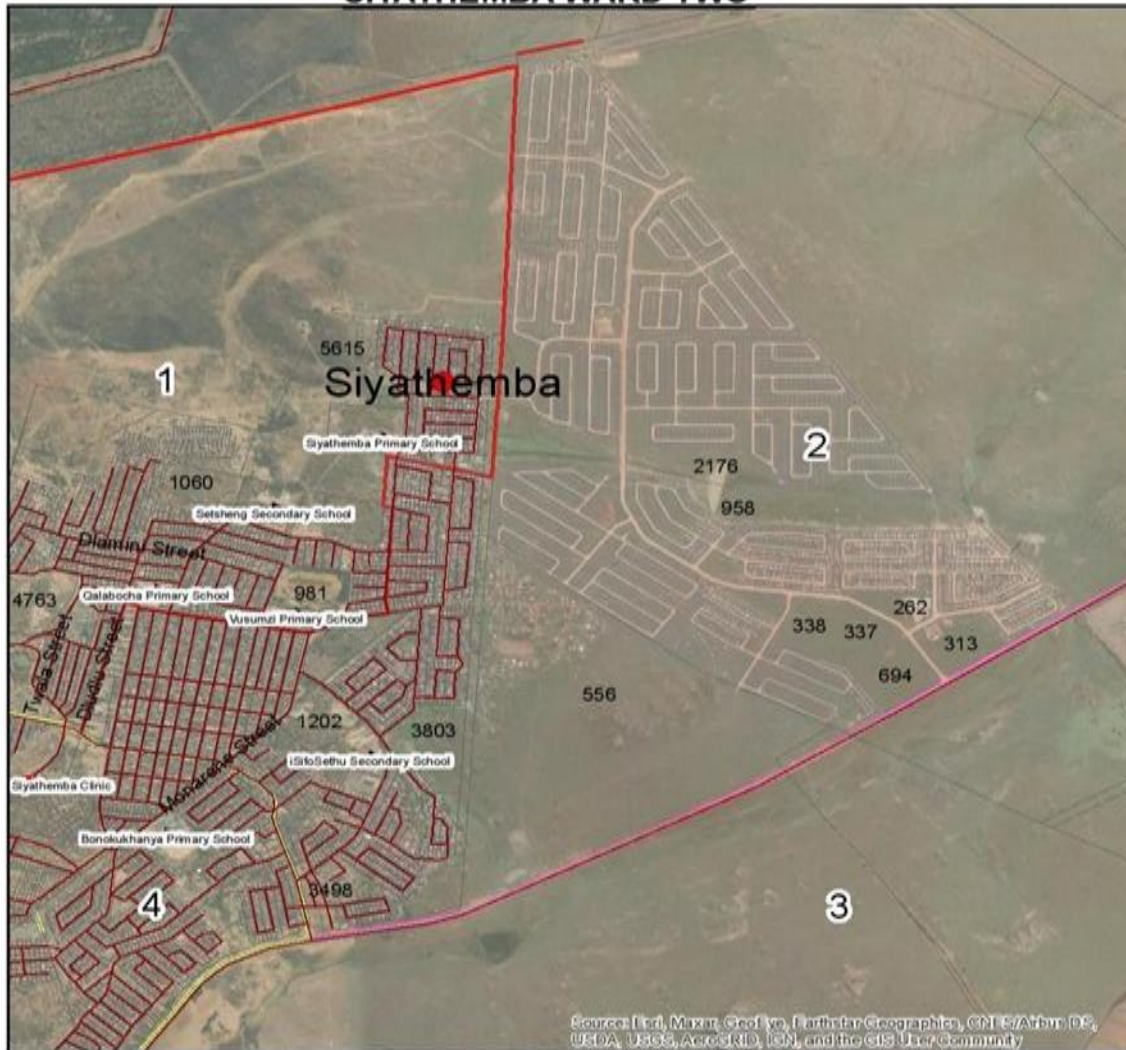
Siyathemba Ward 1, Ward 2 and Ward 3 are impacted by larger informal settlements both at the outer boundaries/edges (peripherals) as well within the interior boundary which are either concentrated and/or dispersed either with low-density or high densities

- **These are high density populated settlements where the majority of DLM population resides, with the expressed and visible need for Inner-Township Regeneration in the areas of upgrading and/or relocation options on the informal settlement encroachments, upgrading of the DLM municipal services infrastructure, upgrading of the public and social infrastructure and re-development of the Township Economy.**
- **Ward 1: There are dimensions of Informal Settlements in the immediate edges of Ward 1 with number of residents on municipal proclaimed erf and within the Township General Plan, but not with Title Deeds of the erfs these residents are occupying [ This HSSP will need to factor this consideration into proper planning for redress]**
- **Ward 4: There are dimensions of Informal Settlements in the immediate edge of Ward 4 whereby residents have occupied land already with Township General Plan (Surveyed but not yet Pegged erfs) which also needs immediate attention of this HSSP.**

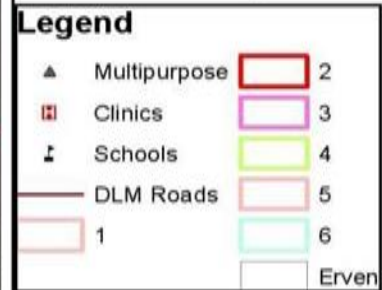
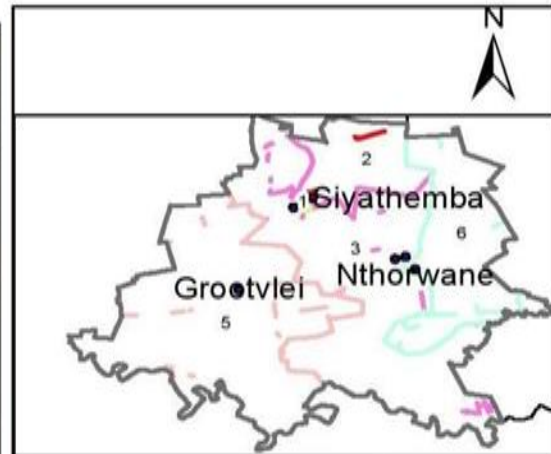
Figure 18: Siyathemba Ward 1



# SIYATHEMBA WARD TWO



Source: Esri, Maxar, GeoEye, DigitalGlobe, CNR, Airbus, DE, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Date: 29/11/2020

## MZANSI PROFESSIONAL CONSULTING

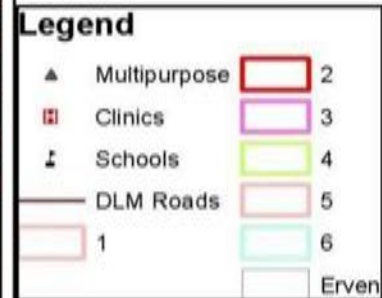
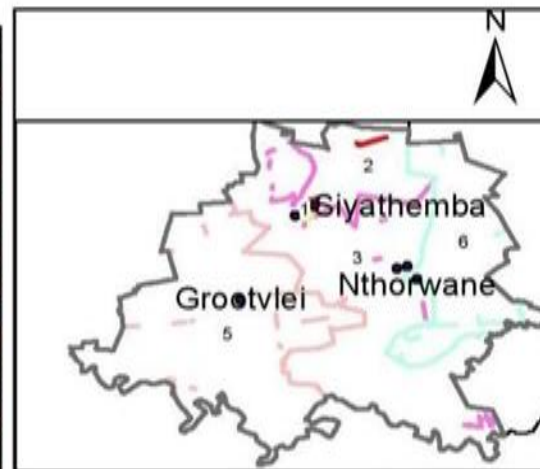
Coordinate System: GCS Hartebeesthoek 1994  
 Datum: Hartebeesthoek 1994  
 Units: Degree



### SIYATHEMBA WARD FOUR



Source: First, Mxolisi, Goshu, and the Geographical Information System (GIS) of the Department of Agriculture, Forestry and Fisheries (DAFF) and the GIS User community



Date: 29/11/2020

**MZANSI PROFESSIONAL CONSULTING**

Coordinate System: GCS Hartebeesthoek 1994  
 Datum: Hartebeesthoek 1994  
 Units: Degree



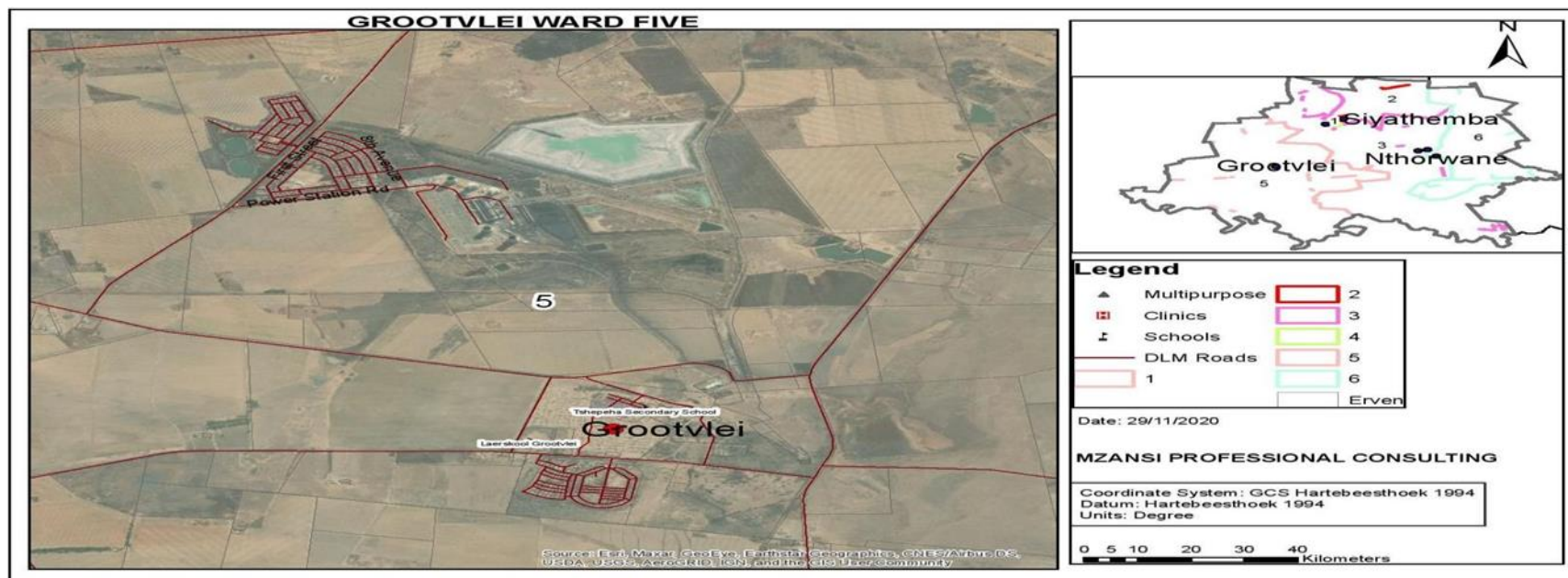
### 5.1.1.3. GROOTVLEI EXTENSION 1 and 2 & DASVILLE

Grootvlei is in the western part of the DLM and 18km south west of the Balfour town, with the formal economy anchored by agricultural production and electricity generation (Grootvlei Power Plant)

The Dassville Township is located south west of Grootvlei and comprises of both formal and informal settlements, with the southern section formalized with fully serviced infrastructure.

The northern section is occupied by informal settlements comprised of employment seekers to employment opportunities in Dasville and Grootvlei Power Plant

- **This is a medium density populated settlement with the expressed need for Inner-Township Regeneration in the areas of upgrading and/or relocation options on the informal settlement encroachments, upgrading of the public and social infrastructure and re-development of the Township Economy [ Figure 19: Grootvlei Ward 5)**



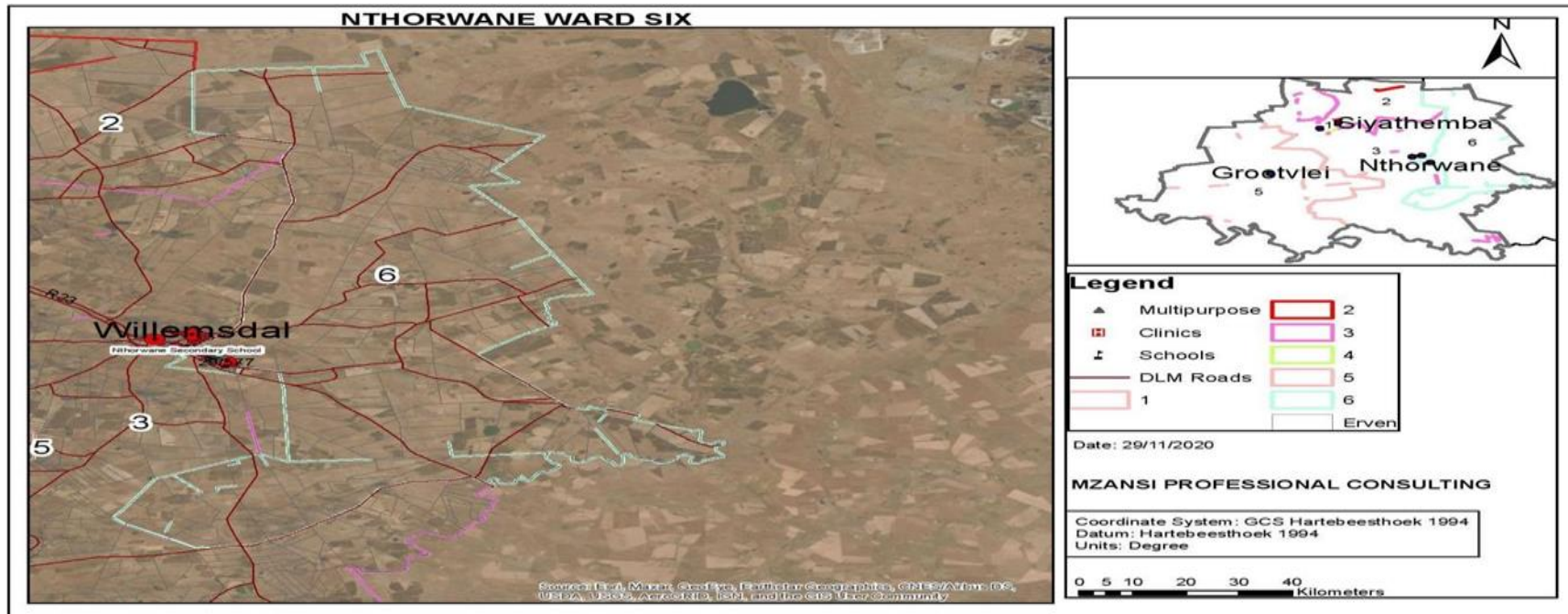
#### 5.1.1.4. GREYLINGSTAD & NTHORWANE

Greylingstad and Nthorwane are located on the eastern section of the DLM 21km east of Balfour.

Greylingstad comprises large parcels of un-developed residential land/erven, and there are number of un-used and dilapidated buildings along the main road.

Nthorwane is a fully serviced township, like Siyathemba Wards, and has challenges of existing growing informal settlements at its doorstep.

- **This is a medium density populated settlement with the expressed need for inner-township regeneration in the areas of upgrading and/or relocation options on the informal settlement encroachments, upgrading of the public and social infrastructure and re-development of the township economy [ Figure 20: Greylingstad & Nthorwane]**





## 5.2. NATURAL ENVIRONMENT

This aspect relates to the bio-physical environment and natural resources base including protected and environmentally sensitive areas.

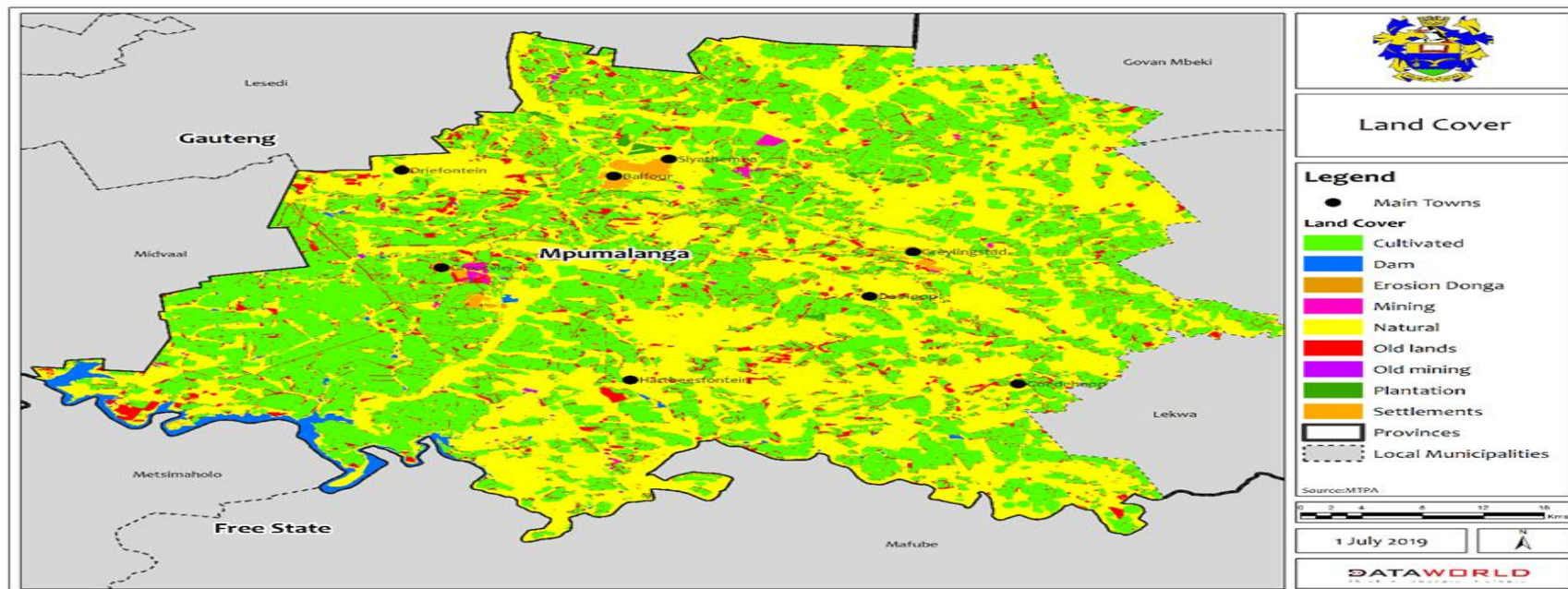
### 5.2.1. LAND USE/LAND COVER

This aspect relates to land uses and what capabilities the land cover offers with regards to its interactions with the climate, soils and terrain

The DLM land cover is classified as moderate to low moderate (71,7%), very high potential land (22%) and low-very low potential (6%)

Areas which are of a very high potential are in the north-western part of the DLM (Balfour and Grootvlei)

**Figure 21: Land Use/Land Cover**

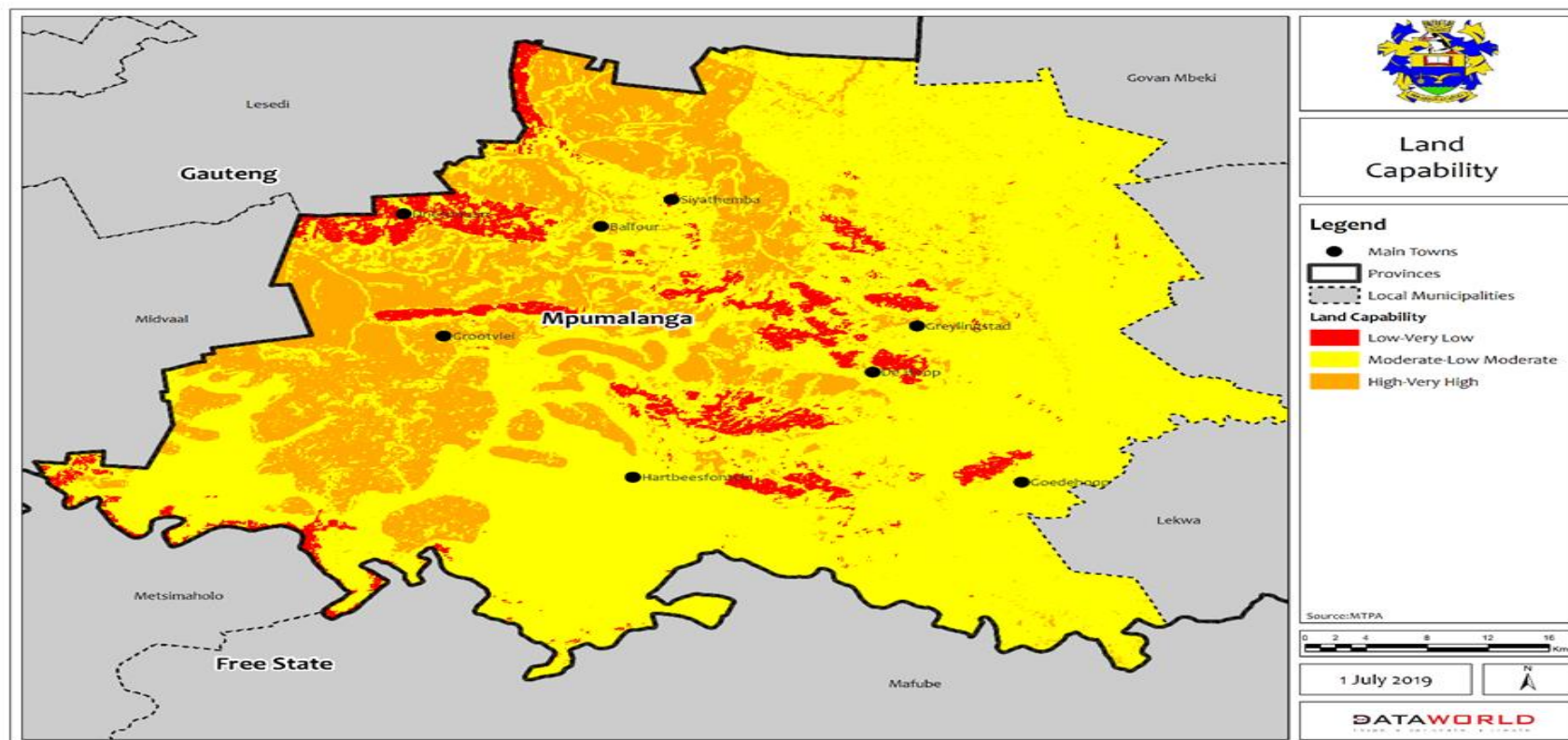


### 5.2.2. TOPOGRAPHY

DLM landscape is comprised of relatively flat areas and a fair amount of moderate to steep areas, and borders Gauteng to the west through the N3 Corridor, Free State to the south and Lekwa & Govan Mbeki Local Municipalities in the eastern and southern boundaries, respectively.

Mountainous areas are in the northern side alongside the Greylingstad-Balfour Railway line, with the DLM drainage southwards towards the Vaal River in the South.

**Figure 22: Topography**



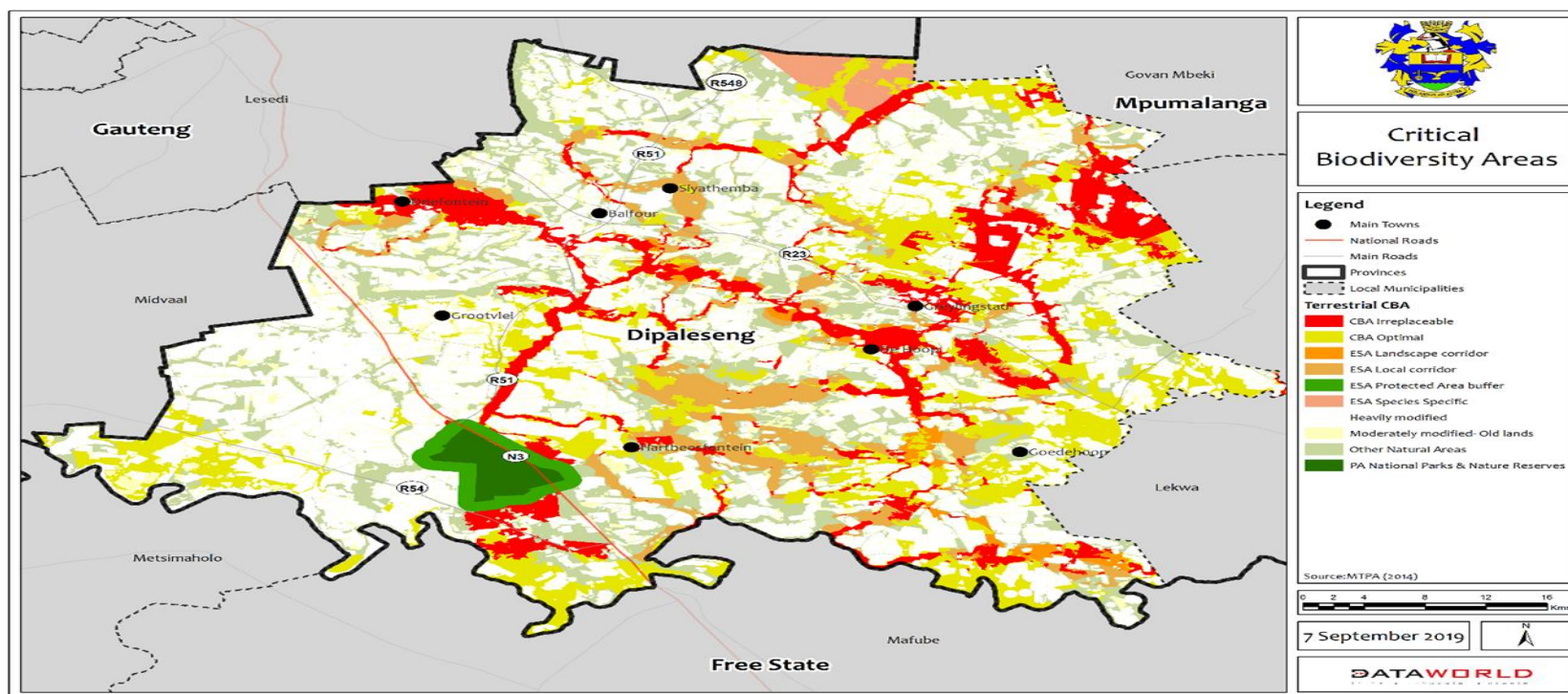
### 5.2.3. BIO-DIVERSITY AREAS

The DLM diverse topography and climatic conditions (more temperate and higher altitude) has shaped and developed an eco-system for different animals and plant life.

There is a perceived and/or actual loss of biodiversity in part due to proliferation of new developments (competing land uses) which destroys the natural habitat namely cultivation, mining, urban sprawl, invasive alien species, pollution and climate change amongst others.

Loss of biodiversity has been taking place over a period, which in turn there has been lost of species and natural mammals due to degradation or denudation of wetlands (certain lost species/mammals are of a high conservation significance).

**Figure 23: Bio-diversity Areas**



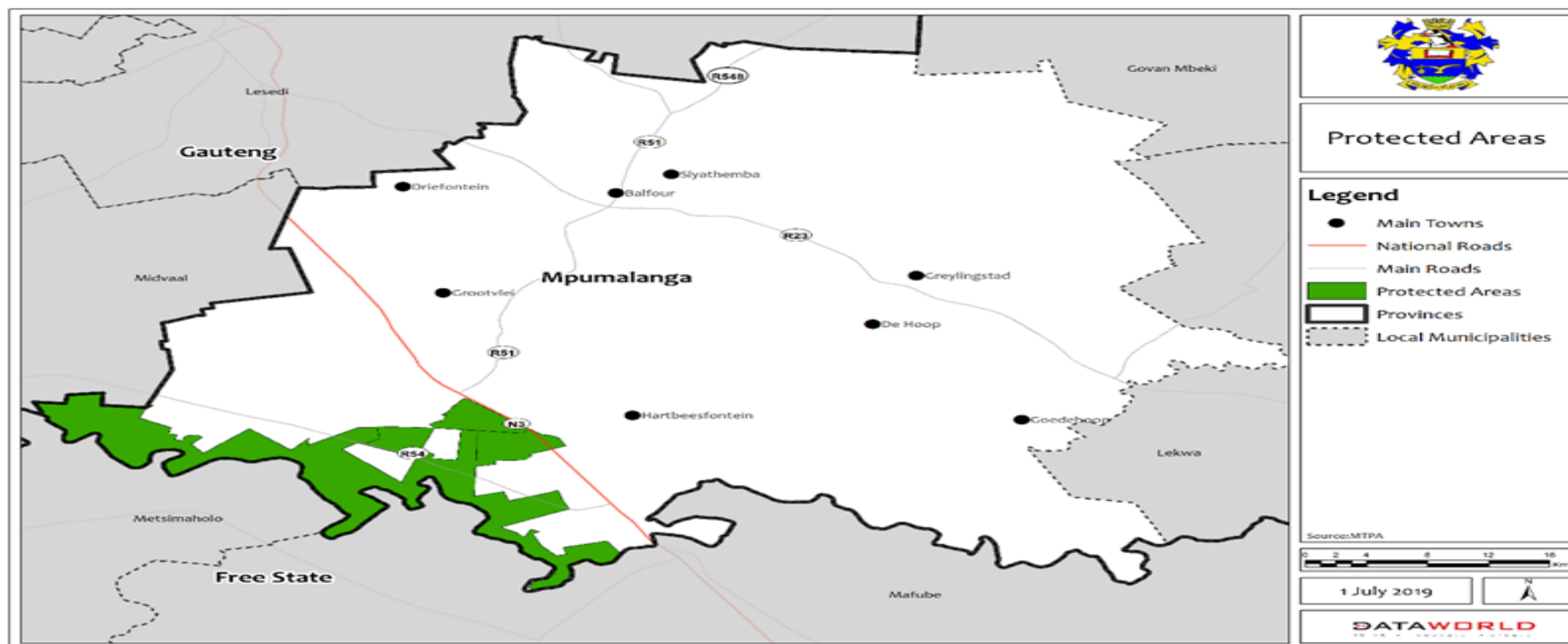
## 5.2.4. CONSERVATION AREAS

These areas, captioned as “Protected Areas” are used to conserve and sustain biodiversity to maintain the natural ecosystem and its functionalities, and there is a need for well managed protected areas so that the DLM biodiversity do not become extinct.

There are four (4) protected areas under formal protection covering a total of 17 959.30 Ha, with private nature reserves (0,97%) and state-owned nature reserves (5,82%)

These protected areas are a critical shield in mitigating the impacts of climate change and global warming.

**Figure 24: Conservation Areas**



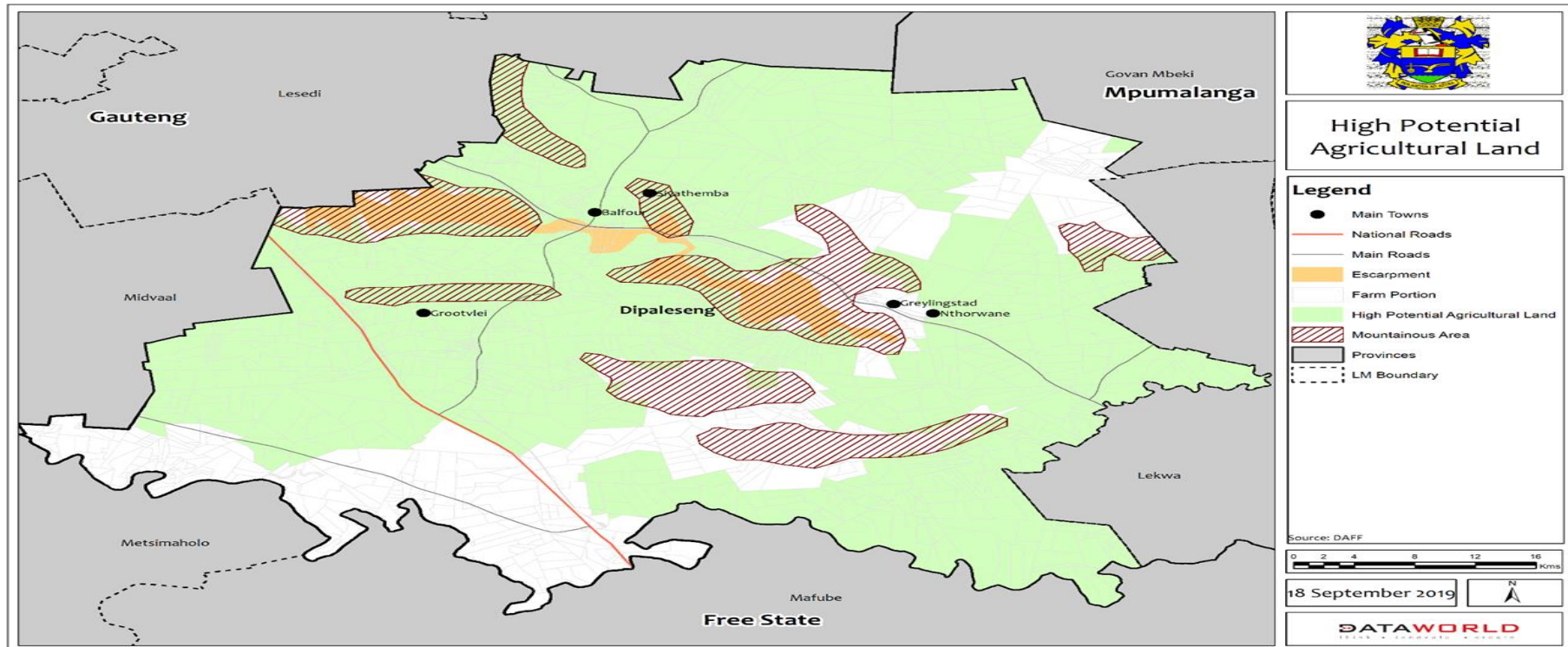
### 5.2.5. AGRICULTURE

Agriculture is a key driver of economic growth in the DLM, and the DLM is endowed with natural resources in the form of soils, water, climate, and land ownership.

42% of DLM land is under cultivation through dry land farming or rain-fed agriculture, hence whole range of agricultural products such as grain, beef, mutton, wool and dairy, with the DLM being one of the largest producers of beef and mutton in the RSA.

Medium to high agricultural potential exists within the DLM given the mix of commercial crop production in the higher potential soils which is funnelled to beef and sheep farming as a supporting industry.

**Figure 24: Agricultural Land**



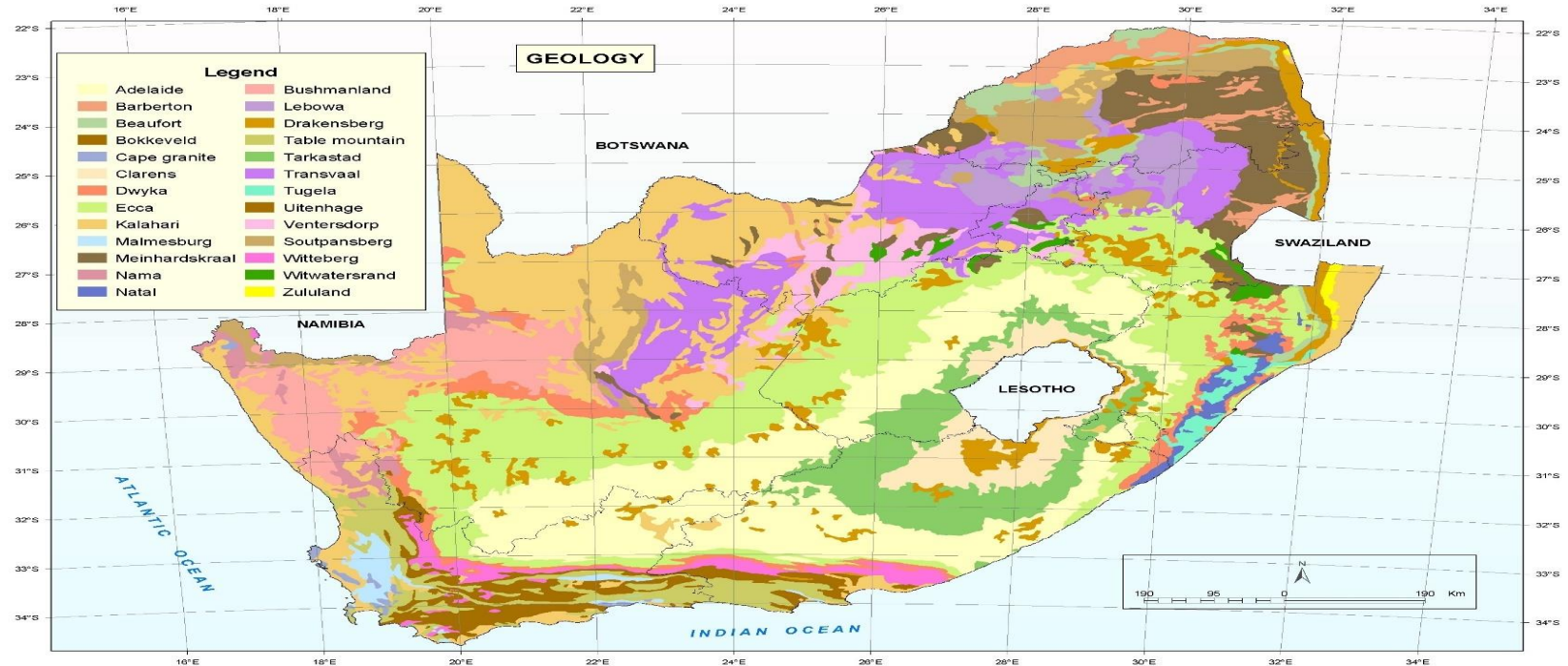
## 5.2.6. GEOLOGY

The dominant soil types and patterns is the red and yellow massive or weak structured soils which underly the largest part of the DLM, which shows very stable soil and geological formations and poses no constraints to geotechnical considerations with regards to infrastructure development

Agricultural potential with regards to soil and land capability is un-even as there exists different levels of soil suitability.

High potential agricultural land with suitable soils and land capability is located in the vicinity of Grootvlei and Driefontein.

**Figure 25: Geology**



### 5.2.7. HOUSING TYPOLOGIES

**Table 2: Definition on Types of Dwellings, Census 2011**

TERMS	DEFINITIONS
Dwelling Type	Census 2011 dwelling types have the following three categories: a) Cluster/Town Houses/Semi-detached houses (includes: Cluster house in Complex, Town house in Complex and Semidetached house) b) House/Flat/Room on other property (includes house/Flat/Room in back yard) c) Room/Flat let on a property or larger dwelling/servants quarters/granny flat (include caravan/tent, Tin house and other.
Adequate Housing	All Census 2011 dwelling types excluding informal dwellings and informal backyard shacks. Include Traditional dwellings and formal backyard structures.
Inadequate Housing	Census 2011 for informal dwellings, informal backyard shacks and a calculated figure for overcrowding.
Informal dwelling	Shack not in the backyard e.g., in an informal/squatter settlement or on a farm. It is a makeshift structure not approved by local Authority and not intended as a permanent dwelling typically built with corrugated iron, cardboard, plastics
Informal backyard shacks	Census 2011 dwelling type (Informal dwelling shack in the backyard).
Informal settlement	All households (in any dwelling type) in Census 2011 category: 'Informal Residential Area'.
Rural settlement	Census 2011 settlement categories: "Farms" "Small Holdings" and Traditional residential.
Urban settlement	All Census 2011 settlement types excluding those included in the definition of rural above.
Overcrowding	Calculated figure based on an assumption of more than two people per room (as measured in Census 2011 resulting in overcrowding and requiring additional room for every two people.

**Source: Statistics South Africa**

## 6. HOUSING DEMAND AND BACKLOG

### 6.1 HOUSING DEMAND ANALYSIS

According to **Stats SA Community Survey 2016**, the DLM is a home to approximately **45 232 people and 14 877 Households** of which.

**9 402 (63,2%) Households live in formal dwellings and 5 745 (36,8%) Households live in an Informal Dwellings/Settlements and Backyards.**

Census 2001 shows that the size of households has declined nationally from **4.5 to 3.8 persons**; and the DLM it has declined to **4 persons**.

**Community Survey 2016 indicates that the household size has shrunk to 3,0 to 3,4 persons/household.**

The **decrease in household size** has meant an **increase in the number of households by about 30%**. This will also increase the demand for bulk infrastructure provision.

It is therefore necessary to minimise the utilization of land and services to reduce urban sprawl through densification, mixed land use development, promoting integrated settlements and sustainable use of resources.

The reduction in household size also means a **corresponding increase in the number of single parents, usually female headed households.**

Backyard Dwellings	700 and this is equivalent to 5.3%
Existing informal settlements	2 900 this is equivalent to 22.3%
Annualised growth between 300-400	400 this is equivalent 3.0%

Housing solutions need to consider the changing family sizes and dynamics by offering different housing typologies, tenure options and financing models as appropriate.



## 6.2 HOUSING BACKLOG ANALYSIS

The declared **Housing Backlog** by the DLM as at **2016/17** for the **Low-income** beneficiaries is estimated to be **5 745 Units made up of households living in informal settlements and backyards and an estimated demand of 300 - 400 per annum**. This means that the current demand is estimated as set out below:

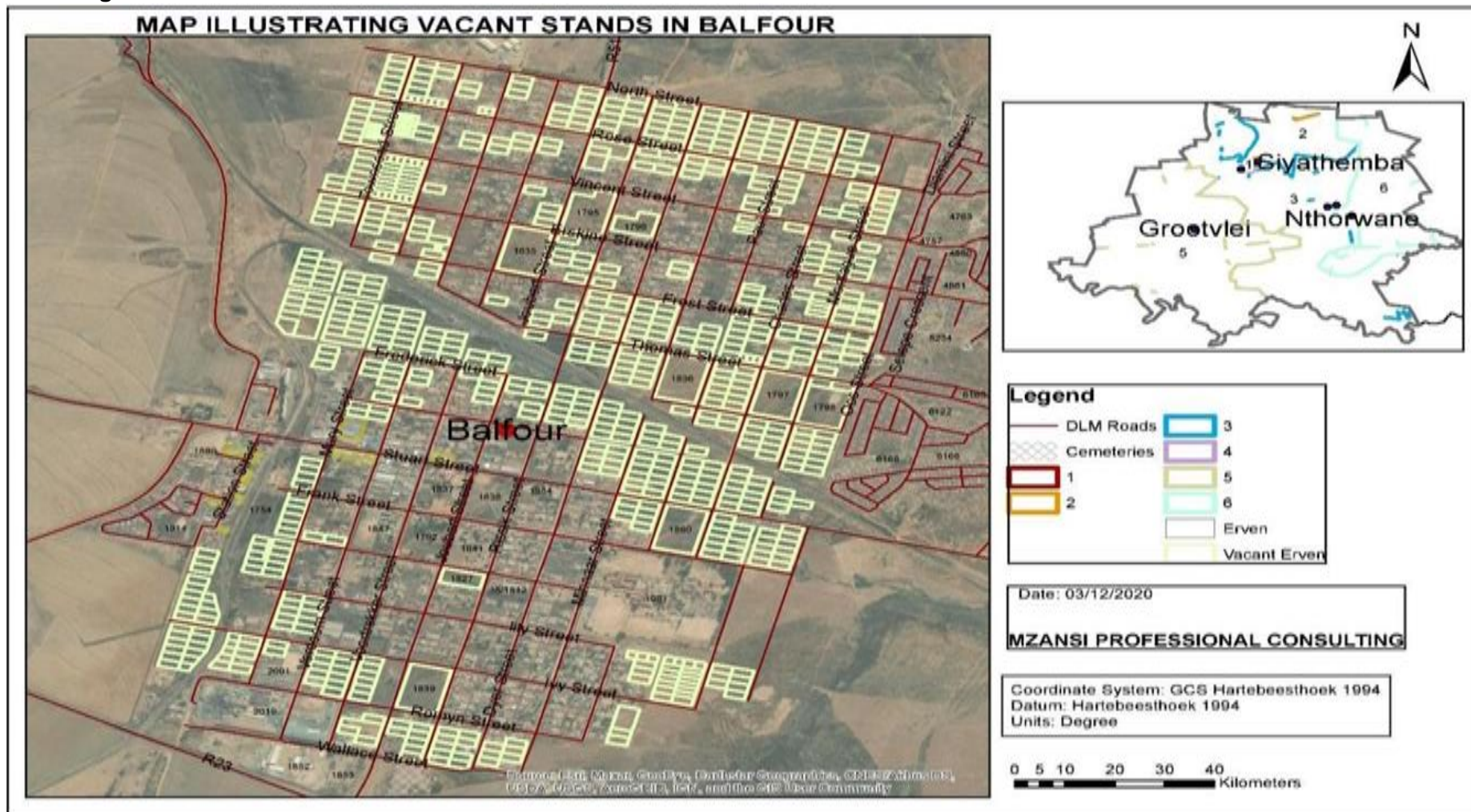
According to the **National Housing Needs Register** the **DLM** stands at a Housing Demand of **4 645 Units (Low-cost)**, with **1 115** approved Housing Subsidy Scheme (HSS) Applications, **182** Applications declined, **18** in process and **3 273** Applications not yet registered and/or processed,

- The Housing Backlog stands @ **5 745 H/holds** and viewed from the above matrix it stands @ **4 000 H/holds** and the registered NNHR beneficiaries not yet processed stands @ **3 273 H./holds** with majority registered earning equal or lesser than R3,500; this HSSP need to come to finality with regards to a comprehensive accurate Housing Backlog either through Mean Averaging Tests matrix]

## 6.3. VACANT LAND/ERFS ANALYSIS

**A study was done to investigate and enumerate vacant land/erfs which are located across in the DLM Area, and these vacant land/erfs could be converted and be used for integrated human settlement development/densification and mixed land uses development purposes.**

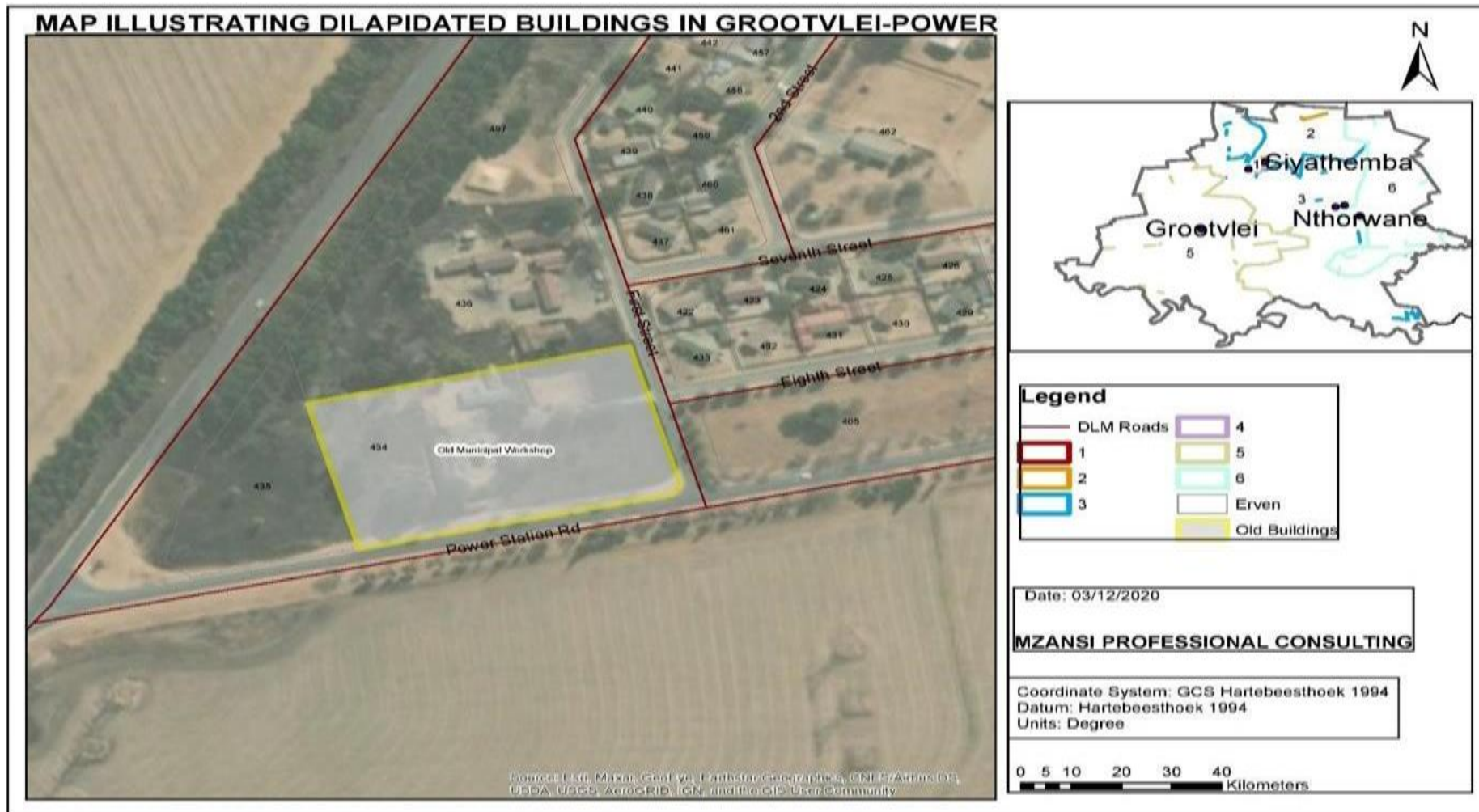
6.3.1. Figure: 27: Balfour Vacant Land/Erfs



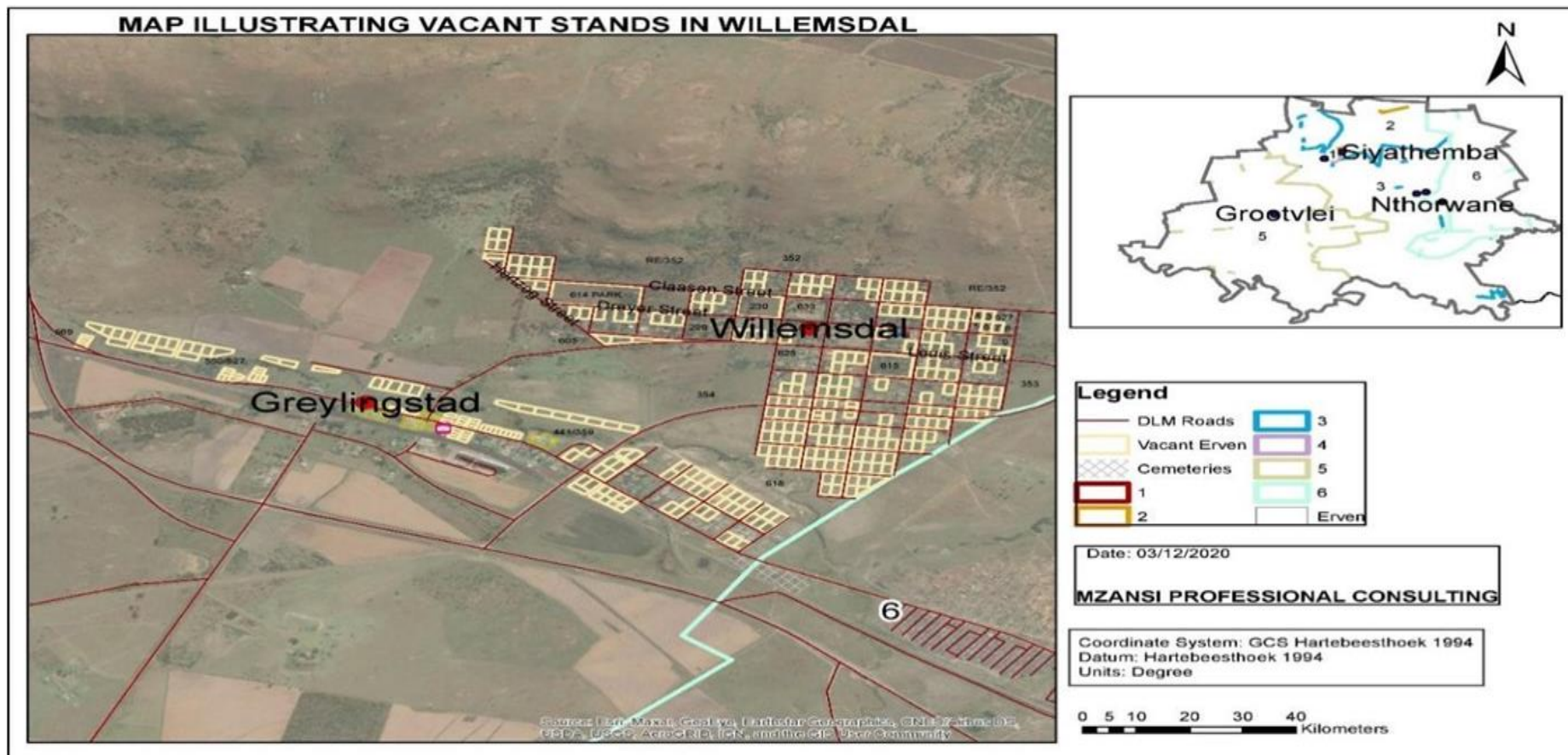
6.3.2. Figure 28: Siyathemba Vacant Land/Erfs



6.3.3. Figure 28: Grootvlei Vacant Land/Erfs

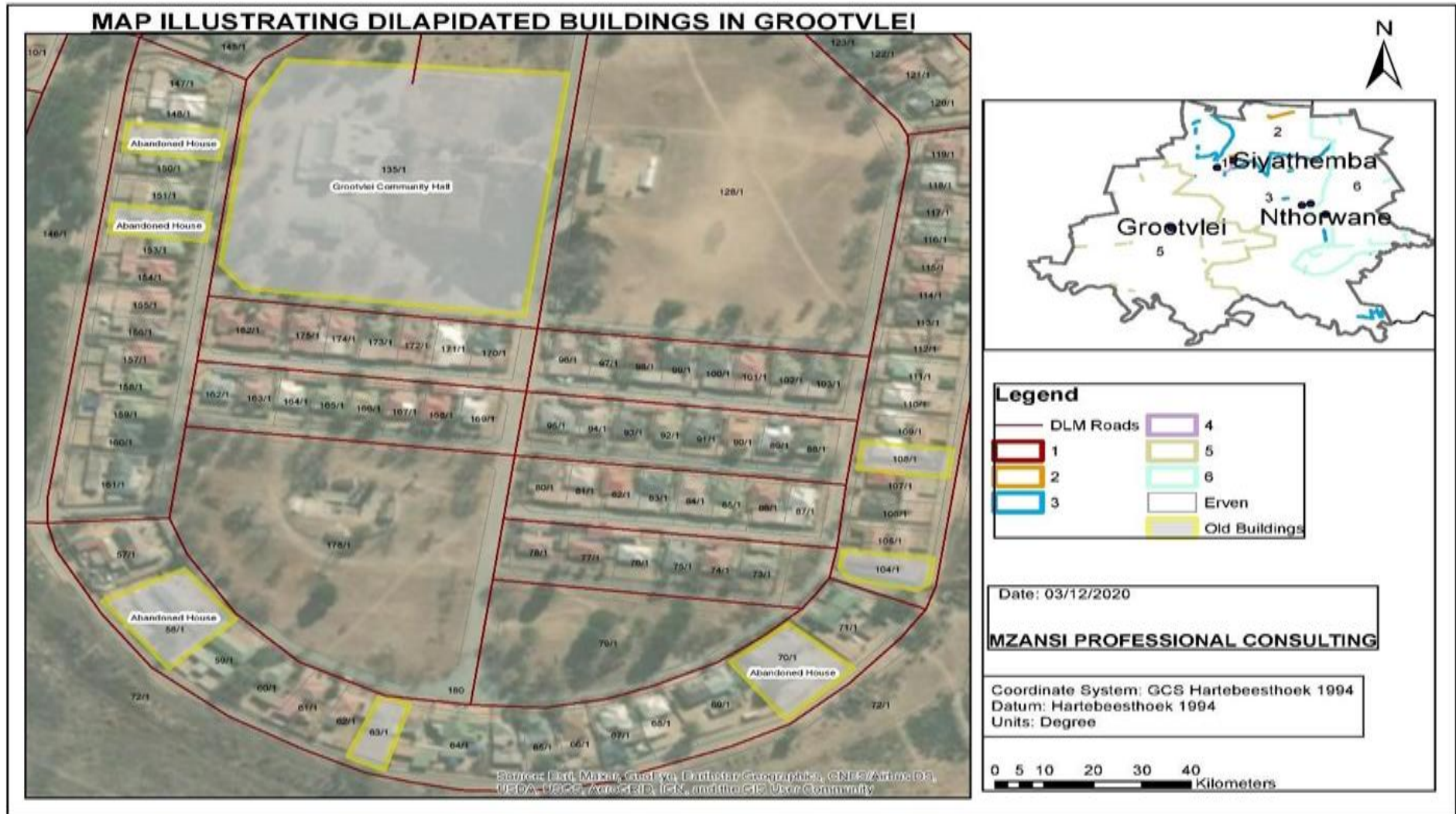


6.3.4. Figure 29: Greylingstad & Nthorwane Vacant Land/Erfs

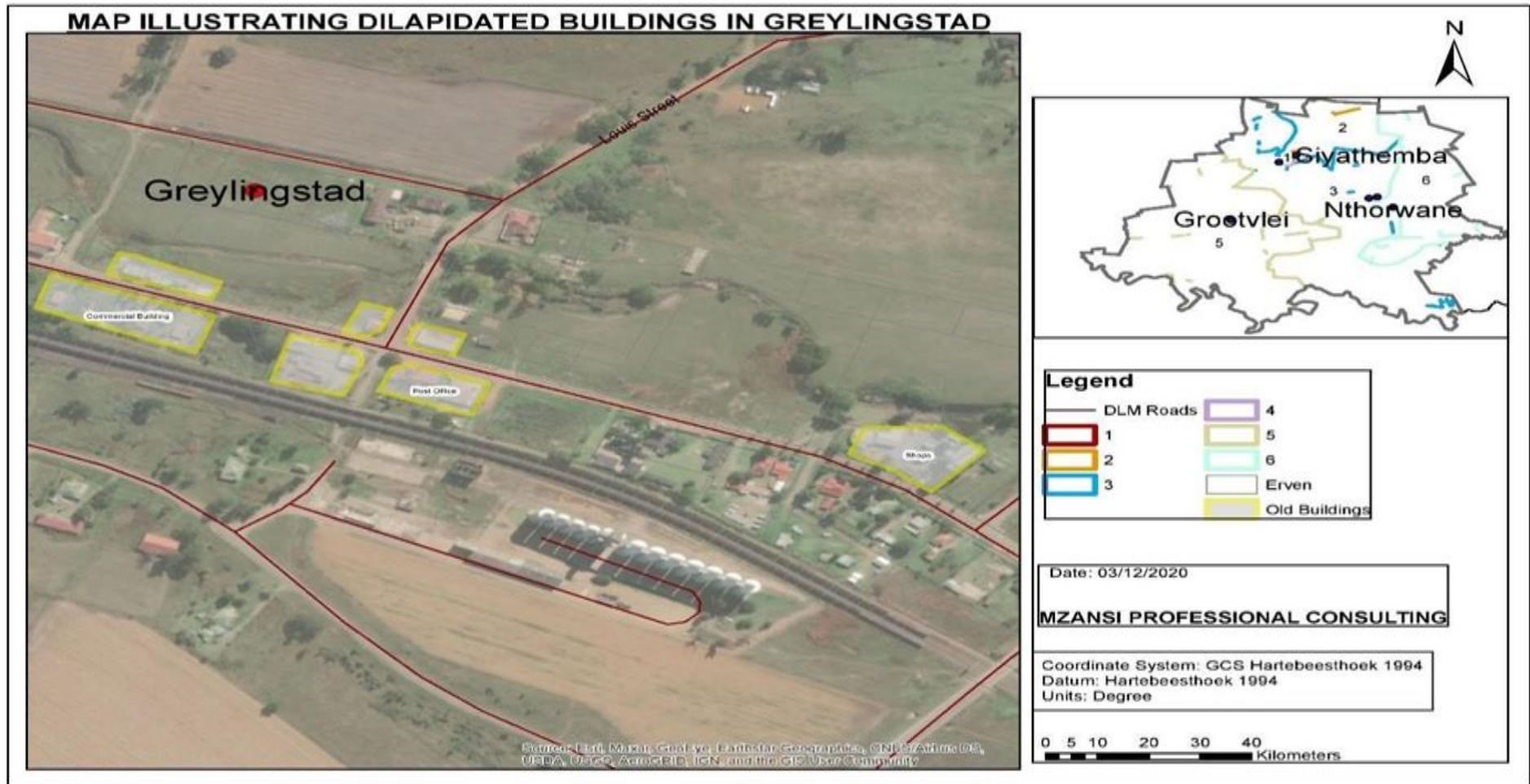




6.4.2. Figure 31 : GROOTVLEI DILAPIDATED BUILDINGS



6.4.3. Figure 32 : GREYLINGSTAD & NTHORWANE DILAPIDATED BUILDINGS





## 7. HUMAN SETTLEMENT SUPPLY OPTIONS (CURRENT PROJECTS)

### 7.1. SUMMARY OF HUMAN SETTLEMENT SUPPLY OPTIONS

The following is a summary of the housing supply option which need to be applied to meet housing demands in DLM.

#### 7.1.1. Inner & Outer Township Extensions

The development of Greenfield Sites to accommodate beneficiaries with to address the **DLM Cumulative Housing Backlog** inclusive of possible relocations options from informal settlement areas and backyards shacks constitute the main bedrock of the **DLM Housing Delivery Strategy**, based on a demand-side housing delivery management.

The relocation generally occurs to Greenfield areas located on the periphery of the Municipality owned land that is planned and earmarked for housing development in the Spatial Development Framework. The relocation is dependent on the finalisation of Town Planning Layout, Township Establishment, Compilation of General Plans, and the installation of bulk and internal services.

The beneficiaries generally move from Shack to Shack on to planned and surveyed Sites (some partially or full serviced sites) to await a top structure to be built later. **One case in a point is in the DLM Ward 4.**

The Municipality should act a **Developer** and performs all the functions required of the Developer, either directly or indirectly through the Consultants and Contractors appointed to perform various tasks.

#### 7.1.2. UPGRADING OF INFORMAL SETTLEMENT PLANS (UISP) & SOCIAL LIVELIHOOD PLAN(SLP)

There are **Nine (9) Informal Settlement** in Dipaleseng Local Municipality area of jurisdiction.

The Upgrading of Informal Settlement Programme is the Government of South Africa's overarching policy approach on the eradication and upgrading of the Country's informal settlement.

It details the process and procedures for the in situ upgrading of informal settlements as it relates to the provision of grants to a Municipality to carry out the Upgrading of Informal Settlements within its jurisdiction in a structured manner.

The programme includes as a last resort and in exceptional circumstances, the possibility of relocation and resettlement of people on a voluntary and cooperative basis because of the implementation of upgrading projects.

The program is instituted in terms of Section 3(4)(g) of the Housing Act, (Act No 107 of 1997). Not all of these informal settlements can be upgraded. Some for e.g., those who are living on road reserve, rocky area and those who are affected by 1:50 and 1:100 flood line will have to be relocated, probably to a new Greenfield development.

There are some services like water, sewer, and electricity near this informal settlement. According to the Master Plan for Dipaleseng Infrastructure services, there is sufficient bulk services to support the upgrading of some informal settlement in Balfour and Siyathemba, without any need for their upgrading.

**The priority actions to be implemented toward activating the project will be as follows:**

➤ Stakeholder Engagement

Before embarking on the process of upgrading of plans through Town Planning, Land Surveying and Services Designs, it is necessary to engage the affected community about the advantages and disadvantages of upgrading the informal settlement in that the inhabitants will get permanent residential status (Security of Tenure). They will also get access to full Municipality services.

However, there are some sacrifices which need to be made by informal dwellers as well. As the area is being put into some orderly arrangement e.g., Proper Township design some of the shacks will find themselves and must be removed to make way for Roads and Township erven.

It is also important for the community to know that as they are living haphazardly in the area not all of them may be accommodated in the new stands in the same area. The criteria for qualifying for new stands should also be explained to the community to avoid future complaints.

Once the development dynamics of upgrading the informal settlement have been work-shopped with the informal settlement dwellers and their buy-in have been obtained the Town Planning process, Land Surveying and Services Design may commence.

- The upgrading of the Nine (9) above-mentioned Informal Settlements are also identified as priority projects in Dipaleseng SDF and in line recommendations of the GLM SDF.
- Development Funds for the planning phase for the upgrading of this informal settlement should be part of the budget priorities of both the Municipality and the Provincial Department of Human Settlement/DHS.

**Ward 1 informal Settlement** (Extension 5 located at the outer boundary of Siyathemba

Ward 1 and includes pockets subsistence-based livestock grazing/farming) **Figure 33 : Ward 1 First Informal Settlement**



**Figure 34: Ward 1 Second Informal Settlement** (Zone 7 same as Extension 5 above, inclusive of pockets of subsistence-based livestock grazing/farming)



**Figure 35: Ward 2: Three (3) Informal Settlements**







**Figure 37: Ward 5 One (1) Informal Settlement**



**Figure 38: Ward 6 One (1) Informal Settlement**



### 7.1.3. INTEGRATED RESIDENTIAL DEVELOPMENT PROGRAM (IRDP)

The program provides for planning and developing an integrated project which provide for housing as well as social and economic needs of different income categories.

- **It replaces the requirements found in other policy programs to identify subsidized housing recipients upfront and provide for both subsidized and finance linked houses, social and rental housing, commercial, institutional, and other land uses to be developed.**

IRDP provides for substantial economies of scale through its holistic approach. Integration is achieved through the provision of both bonded and subsidized housing in a mixed appropriate to the project location. Projects can be planned and developed in two phases.

**a) First phase by encompassing planning, land acquisition, Township establishment and provision of serviced residential stands in a variety of price categories; as well as stands for other land uses to ensure holistic and sustainable community.**

**b) Second phase, houses are constructed for qualifying housing beneficiaries. The stands are also allocated to non-qualifying beneficiaries and for commercial and social purposes.**

In summary, IRDP provides for phases approach to provide for:

- a) Land acquisition where required.
- b) Township Planning/Establishment and Municipal engineering services design.
- c) Provision of Municipal engineering services to all stands where no alternative funds are available.
- d) The sale of the stands not identified for subsidized housing created in the Township.



- e) The construction of houses by registered contractors for housing subsidy beneficiaries who choose contractor's-built houses. It can also be achieved through a variety of contracting options.

## **7.2. CURRENT PROJECTS**

### ***Project 1:***

The status of this project is that land has been acquired 580.253 hectares in extent. This Land is intended for the establishment of integrated human settlement with mixed use Zoning. The land is still a Greenfield and Township establishment process has been done.

### ***Project 2:***

Portion 28 (a portion of portion 20) of the farm Vlakfontein 556 IR. The Private Developer is developing the Land on behalf of the Municipality. **One Thousand Five hundred (1500)** services sites were purchased on behalf of the Municipality by **Vipcon PTY LTD** through Department of Human Settlement.

The newly established Township is known as Ridgeview. Land will be transferred to individual beneficiaries. The number of completed houses is **857 and there are 643 outstanding houses**. However, there are challenges in the implementation of this project. Currently the Contractor is not on site and there is no certainty that there is budget to complete the outstanding houses. i.e., there is no information on this issue. **(Map 13: Ward 4/Ridgeview 1500 RDP Units under PPP model)**.

### ***Project 3:***

Portion 24 (a portion of portion 23) of the farm Grootvlei No. 604-IR measuring approximately 130.34 hectares in extent. The land is for integrated Human Settlement and Cemetery.

#### ***Project 4: Replacement/Compensatory Land***

Portion 27 of the farm Vlakfontein 558 IR 188 hectares. It is a state- owned land, which is owned by National Department of Public Works. The Municipality intends acquiring it through donation, with an aim to swap with **Sizanani CPA Land** invaded by Nthorwane. A request for donation has been forwarded to **National Department of Public Works (NDP)**

### **8. SUMMARY OF PRIORITY HUMAN SETTLEMENT ISSUES**

**This summary of priority human settlement issues was randomly captured in the DLM Integrated Development Plan (2016/2017)**

#### **8.1. Human Settlement Priorities**

- Formalization of informal settlements at Siyathemba Extension 5 and 7
- Upgrading of the electricity and storm water management in Balfour and Greylingstad
- Land availability for informal settlement which cannot be upgraded.
- Installation of Water, Sanitation and Electricity in Phomolong.
- Formalization of informal settlements in Phomolong (Dikulubeng).
- Formalization of Zenzele informal settlement is very high on priorities., Township establishment to be followed by installation of services.

- Rebuilding of damaged houses in Nthorwane
- Community Parks to be established in Nthorwane.
- Community Halls need renovation.
- Sport facility to be renovated.
  - Service connection to houses without connection in Balfour.
  - Landfill Sites need maintenance.

#### **8.2 Human Settlement Opportunities**

DLM plans to implement the following projects to address challenges to **Water Supply:**

- DLM Bulk Water Scheme
- Raising the Suikerboskrand Dam wall to 2m.
- Upgrading of the Fortuna Works
- Construction of new bulk water pipeline to Grootvlei, Greylingstad and Nthorwane.

- Construction of additional storage Reservoirs in Balfour/Siyathemba, Greylingstad/Nthorwane. DLM plans to implement the following projects to address challenges to access to **Sanitation**.
  - Upgrading of Wastewater Treatment Works in Balfour from 4ML/day to 12 ML/day.
  - Construction of new 1.5 ML/day Wastewater Treatment Works in Grootvlei.
  - Upgrading of Water Treatment Plant in Greylingstad from 0.5 ML/day to 1.5 ML/ day.
  - Provision of sewer reticulation in Grootvlei Ext 1, Balfour North, Siyathemba Ext 5 & 6 and Nthorwane.
- There is sufficient Infrastructure in Dipaleseng to support some of informal settlement upgrading as well as the development of vacant stands.

### **8.3 Human Settlement Constraints / Challenges**

There is sufficient infrastructure in Dipaleseng to support some form of informal settlement in-situ upgrading and development as well as the development of the vacant stands.

- There is a tendency for people to occupy any available space throughout the DLM.
- Funding allocation from Provincial as well as Municipal budget for housing and infrastructure is insufficient.
- Inter departmental coordination is weak.
- Beneficiary administration in projects is still problematic.
- Budget to be made available for Township Establishment and bulk services for the in -situ. Upgrading of informal settlement at **Siyathemba Ext 5 and 7**
- Siyathemba and Nthorwane cemeteries have reached maximum burial capacity -Need for new cemetery.
- Landfill sites lack maintenance.

## 9. HUMAN SETTLEMENT STRATEGY

Human Settlement Development Strategy for DLM embraces the Vision Statements as introduced in the Municipal IDP.

The vision of DLM is to be "**a Centre of equality, affordable services, good governance and sustainable economic opportunities**".

This IDP developmental vision underpins an integrated approach where socio-economic development is coupled with good governance for the achievements\_ of sustainable service delivery.

It aims to improve the standard of living for all people residing within DLM area of jurisdiction.

The above vision embraces principle captured within the vital planning tools such as SPLUMA.

It aspires for the creation of functional, integrated communities and settlements that provide vital services, facilities, and economic opportunities for the inhabitants of DLM. The above vision will only be achieved through the following:

- Build the requisite institutional and technical capacity within the DLM to undertake and implement human settlement planning functions.
- Integration of services and other facilities with human settlement development.
- Secure and coordinate funding for human settlement development
- Introduction of effective measures to manage development of sustainable human settlement across the spectrum.

The DLM **Human Settlement Development Strategy seeks to address the following considerations:**

- a) **Integration:** This principle of integration will ensure that the various Land uses function as a single combined unit. It requires identifying the areas for development, improved movement networks and improving accessibility within the area.
- b) **Densification:** Entails a change in settlement management approaches and introduction of Systems and Procedures.

- c) **Spatial justice:** This principle is in accordance with SPLUMA 2013. It ensures inclusion of persons and areas that were previously excluded, with an emphasis on informal settlements.
- d) **Sustainability:** It suggests that the development should be undertaken in a manner that meets the social, economic and environment needs in a unified way.
- e) **Accessibility:** This involves the improving of the efficiency of the current system, safety of pedestrians and improving the environmental condition along mobility routes/corridors.
- f) **Connectivity:** Focusing mainly on defining functional and structural linkages between different elements of Municipal area
- g) **Liveability:** This forms the basis for the provision of supporting facilities Including diversification of residential products.
- h) **Choice:** It is necessary for a range of housing products to be provided in different parts of the Municipality. This would give residents a choice in terms of where to live and the conditions under which they want to live.

### 9.1. Development Goals

**DLM Human Settlement Sector Plan (HSSP)** primary objective is to facilitate the creation of sustainable human settlements and provide a range of human settlement products in a safe, accessible, and affordable locations.

This **Human Settlement Sector Plan (HSSP)** strategic goals and objectives are as follows:

- Reduce housing backlog in line with the National and Provincial norms and standards.
- To contribute towards spatial transformation and creation of an efficient settlement and spatial pattern (**spatial integration**)
- To accelerate development and consolidate human settlement development in line with National policy directions and IDP of the Municipality and with particular focus to the **Provincial Housing Department Master Plan & Strategic Plans**
- To facilitate rapid and cost-effective release of Land for human settlement development purposes.
- To build institutional and technical capacity for effective human settlement development

**Table 2: Key Performance Measures**

<b>Focus area</b>	<b>Objective</b>	<b>Strategy</b>	<b>Performance indicators</b>
Spatial development	To improve spatial structure and settlement partners	<ul style="list-style-type: none"> <li>a) Identify suitably located Government owned land for housing</li> <li>b) Formalize existing informal settlement</li> <li>c) Enable security of tenure</li> <li>d) Promote variety of typologies and densities in and around identified nodes</li> <li>e) Provide and upgrade infrastructure</li> <li>f) Establish hierarchy of nodes</li> <li>g) If Government land is not available, purchase adequate land to provide stands for housing backlog</li> </ul>	<ul style="list-style-type: none"> <li>a) Number of serviced and surveyed stands</li> <li>b) Number of upgraded informal settlements</li> <li>c) Percentage of households with infrastructure</li> <li>d) Number of housing typologies</li> <li>e) Number of densified settlements</li> <li>f) Number of hierarchy of nodes</li> </ul>
Land use management	To manage the settlements efficiently and effectively	<ul style="list-style-type: none"> <li>a) Develop land use regulations</li> <li>b) Facilitate the use of settlement plans to guide future allocation of land</li> <li>c) Delineate development edge for each settlement</li> <li>d) Reserve land for non-residential uses (e.g.</li> </ul>	<ul style="list-style-type: none"> <li>a) Establish wall to wall scheme</li> <li>b) Maps of land targeted for housing development</li> <li>c) Amount of land reserved for public facilities</li> </ul>

		public facilities, commercial, industrial development, etc)	
Human settlement	<ul style="list-style-type: none"> <li>a) To create sustainable human settlements</li> <li>b) To address the housing within Dipaleseng Municipality</li> </ul>	<ul style="list-style-type: none"> <li>a) Identify and prioritize housing projects in Dipaleseng</li> <li>b) Develop housing list to determine the demand</li> <li>c) Prepare and submit applications for funding of prioritized housing projects to DoHS</li> <li>d) Manage and monitor all housing projects</li> </ul>	<ul style="list-style-type: none"> <li>a) Approved human settlement development plans</li> <li>b) Development plan</li> <li>c) Housing list</li> <li>d) Number of priority housing projects</li> <li>e) Signed agreements for allocation of funds</li> <li>f) Feedback on applications for funds</li> </ul>
Bulk infrastructure	<ul style="list-style-type: none"> <li>a) To ensure that bulk infrastructure made available</li> <li>b) To ensure that there is services reticulation in Dipaleseng</li> </ul>	<ul style="list-style-type: none"> <li>a) Develop new infrastructure and upgrade existing bulk infrastructure</li> <li>b) Apply to the relevant authority for infrastructure funding</li> <li>c) Maintenance of existing infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>a) Number of new bulk infrastructure and number of upgraded bulk new infrastructure</li> <li>b) Feedback on infrastructure application</li> <li>c) Uninterrupted service delivery</li> </ul>
Land release	<ul style="list-style-type: none"> <li>a) To facilitate the release of land for the development of human settlement</li> </ul>	<ul style="list-style-type: none"> <li>a) Undertake land audit to determine land ownership pattern within Dipaleseng</li> <li>b) Undertake land right enquiry on state land as a means to establish nature and extend of</li> </ul>	<ul style="list-style-type: none"> <li>a) Land audit report</li> <li>b) Land rights enquiry report</li> <li>c) Amount of state land released for human settlement</li> </ul>

		<p>land rights</p> <p>c) Engage the department of human settlement and Public works about the release of land for housing purposes</p> <p>d) Use projects link subsidy route for projects allocated on state land</p> <p>e) Identify and facilitate the acquisition of land for future housing development</p>	
Prevention of land invasion	To Prevent illegal occupation of land	<p>a) Set up a control room for lodging complaints</p> <p>b) Set up investigative units</p>	<p>a) Number of interdicts against land invasion</p> <p>b) Number of charges laid against ring leaders for land invasion</p>
Economic development	<p>a) To use house delivery process as a creator of employment opportunities</p> <p>b) To maximize economic benefit of housing provision</p> <p>c) To improve tourism facilities</p> <p>d) To locate new developments, close to</p>	<p>a) Integrate planning for housing development with planning for provision of basic services, public facilities and economic development</p> <p>b) Develop mix land uses of houses, employment nodes and public facilities</p> <p>c) Improve public transport between residential and</p>	<p>a) Number of trained employees</p> <p>b) Number of mixed land use development</p> <p>c) Quality of roads</p> <p>d) Number of tourists visiting the area</p>



	<p>employment nodes</p> <p>e) To encourage development of employment nodes(e.g. malls, light industry, etc adjacent to the proposed housed housing development</p>	<p>employment nodes</p> <p>d) Utilisation of local labour and skills transfer</p> <p>e) Facilitate sub-contracting opportunities for local contractors</p> <p>f) Protect and maintain existing tourism assets</p>	
Environmental	<p>a) To create safe and clean-living environment</p> <p>b) To reach a balance between natural environment and human settlement for efficient of sustainable development</p>	<p>a) Identify settlement to make service provision affordable and sustainable</p> <p>b) Improve SEA</p> <p>c) Promote environment awareness on erosion, water usage, air pollution, littering and environment health, etc</p>	<p>a) Quality of clean settlement</p> <p>b) Quality of public facilities</p> <p>c) Number of environment awareness campaigns</p>
Institution building	<p>To build capacity of the institution to deliver housing efficiently and effectively</p>	<p>a) Employ professional staff and managers in those institutions</p> <p>b) Develop housing strategy, procedures and guideline to set frameworks for quick and smooth implementation</p> <p>c) Introduce and train staff on project management software</p>	<p>a) Number of professionals' staff and managers in housing unit</p> <p>b) Approved housing strategy, procedures and guidelines documents</p> <p>c) Number of training staff and courses completed</p>
Social/ community developme	<p>To create awareness and broaden understanding of</p>	<p>a) Undertake housing consumer education</p> <p>b) Workshop community</p>	<p>a) Number of workshops with community leaders</p>

nt	housing issues in Dipaleseng	leaders on the notion of sustainable human settlement, map reading and usage	b) Number of housing consumer education workshops
----	------------------------------	--	---

## 10. Current Housing Projects

### *Project 1:*

Portion 28 (a portion of portion 20) of the farm Vlakfontein 556 IR. The Private Developer is developing the Land on behalf of the Municipality. **One Thousand Five hundred (1500)** services sites were purchased on behalf of the Municipality by **Vipcon PTY LTD** through Department of Human Settlement.

The newly established Township is known as Ridgeview. Land will be transferred to individual beneficiaries. The number of completed houses is **857 and there are 643 outstanding houses**. However, there are challenges in the implementation of this project. Currently the Contractor is not on site and there is no certainty that there is budget to complete the outstanding houses. i.e., there is no information on this issue. **(Map 13: Ward 4/Ridgeview 1500 RDP Units under PPP model)**

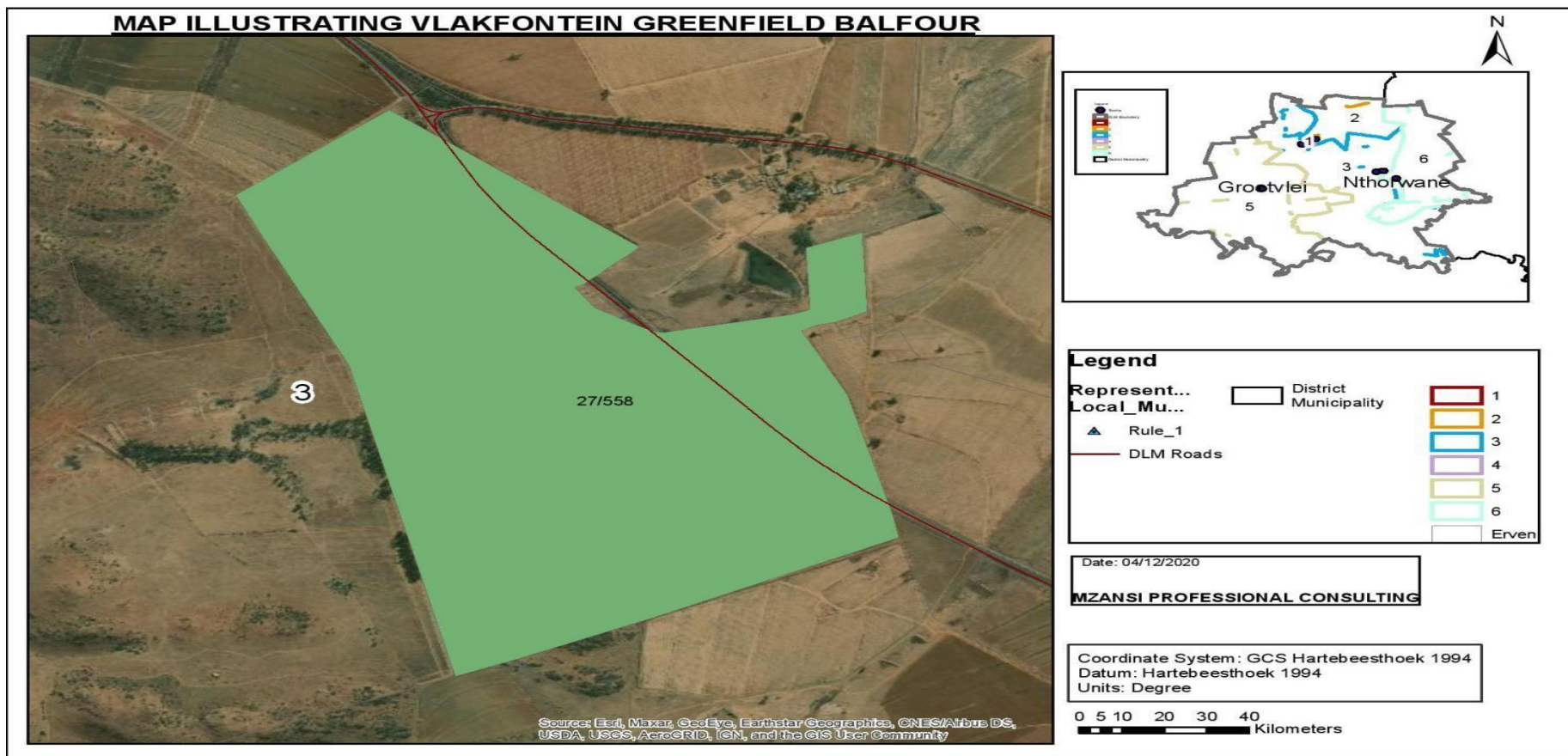
Figure 39: Ward 4 Vipcon 1500 Units Project



Project 2

Portion 27 of the farm Vlakfontein 558 IR 188 hectares. It is a state- owned land, which is owned by National Department of Public Works. The Municipality intends acquiring it through donation, with an aim to swap with **Sizanani CPA Land** invaded by Nthorwane. A request for donation has been forwarded to **National Department of Public Works (NDPW)**.

**Figure 41: NDPW Replacement/Compensatory Land**



**Figure 42: Current Housing Projects**

<b>Name of Project</b>	<b>Number of Units</b>	<b>Status</b>
Ridgeview (IRDP)	1500	Current (1 000 completed)
Siyathemba/ Grootvlei	500	Completed
Nthorwane	800	Completed

## **11. IMPLEMENTATION FRAMEWORK**

Dipaleseng Local Municipality has number of housing projects at different stages of planning and implementation.

The Table below indicates several projects in the study area. The first category of the projects short term being implemented in 5-year period. Some of these projects have started in year 2017/18 and are still being implemented.

The second category of projects are medium term projects that will be completed in the next 10 years while the third category is long-term projects that may be implemented.

### **11.1. SCHEDULE OF HUMAN SETTLEMENT PROJECTS**

The estimated times frames for the proposed Top Four (4) Human Settlements Pipeline Projects are Ten (10) Years (Grouped into Three/3 Development Phases) to be completed, depending on the availability of funds. The Implementing Agencies will be the Municipality and its appointed Implementation Agents and a private sector where necessary.

The Provincial Department of Human Settlement is expected to assist with funding for the development of these projects, to further explore development of Public Private Partnership/PPP

The Municipality is expected to re-priorities their budget to accommodate these Top Four (4)

### **11.1.1. HUMAN SETTLEMENT PIPELINE PROJECTS**

The Recommended Top Four (4) Human Settlement Pipeline Projects, which forms the basis of the DLM Housing Sector Plan, can be described as follows:

- 1. Integrated Residential Development Program/IRDP (3 x Greenfields Projects whereby Township Establishment has been done):**
- 2. Phased Eradication and Upgrading of Informal Settlements**
- 3. Inner-Towns and Inner-Townships Regeneration (Township Economy)**
- 4. Housing for People Working and/or Living on Farms.**

It is hereby recommended that the Municipality should establish and convene a broad-based **Project Steering Committee**, comprised of the following primary stakeholders:

- a) **DLM: MMC (as Convenor)**
- b) **DLM Line Departments**
- c) **Provincial Department of Human Settlement**
- d) **Appointed Services Provider (as Consulting and Project Management)**
- e) **Gert Sibande District Municipality**
- f) **Department of Economic Development and Tourism**
- g) **Department of Agriculture, Rural Development and Environmental Affairs**
- h) **Department of Public Works, Roads and Transport**
- i) **Department of Trade and Industry**
- j) **Department of Minerals Resources and Energy**

k) **Department of Environment, Fisheries and Forestry**

l) **Private Sector (Karan Beef, Sasol etc)**

The PSC main responsibility centres on enticing private sector participation and collaboration (**through establishing a PPP modelling**) into the **IRDP process** as it involves both **Residential** (RDP and None-RDP Housing Options) and **Retail** (Shopping and Industrial/SMME Complex) Development

### **11.1.2. Public Private Partnership (PPP) Modalities**

The PPP model to be designed and formalised involves the following key stake holders and their respective role and input:

Provincial DHS and DLM: Provision of land and financing of basic engineering infrastructure (bulk and internal connector; subsidized and institutionalized housing including human settlement related infrastructure)

➤ Private Sector Partner: Provision of finance (retail components of the IRDP) and technology (turn-key services across the built environment sector construction economics, civil, electrical, geo-tech)

Note that the whole IRDP projects involves two critical components for sustainability of the projects into its totality, namely Residential and Retail component.

### **11.1.3. Projects Breakdown**

The Table bellows shows the **Projects Breakdown** in addressing the **DLM Housing Backlogs** and noting that the **Housing Backlog** is not static but cumulative @ **Four hundred (400) New Houses per Year** to be built after the **Housing Backlog** has been disposed.

**Figure 43: Pipeline Projects Breakdown on Housing Backlog**

➤ **Proposed Number of RDP Units, Block of Flats & Serviced Sites (based on the Cumulative Housing Backlogs)**

<b>1<sup>st</sup> phase</b>		<b>RDP</b>	<b>BLOCK OF FLATS</b>	<b>SERVICED SITES</b>
	<b>BALFOUR</b>	<b>1000</b>	<b>250</b>	<b>250</b>
	<b>GROOTVLEI</b>	<b>500</b>	<b>125</b>	<b>125</b>
	<b>GREYLINGSTAD</b>	<b>500</b>	<b>125</b>	<b>125</b>
	<b>AGRI-VILLAGE</b>	<b>300</b>	<b>N/A</b>	<b>N/A</b>

<b>2<sup>nd</sup> phase</b>		<b>RDP</b>	<b>BLOCK OF FLATS</b>	<b>SERVICED SITES</b>
	<b>BALFOUR</b>	<b>500</b>	<b>125</b>	<b>125</b>
	<b>GROOTVLEI</b>	<b>250</b>	<b>125</b>	<b>125</b>
	<b>GREYLINGSTAD</b>	<b>250</b>	<b>125</b>	<b>125</b>
	<b>AGRI-VILLAGE</b>	<b>300</b>	<b>N/A</b>	<b>N/A</b>



## 11.2. Water Supply (Estimated Domestic & Non-domestic Consumption)

### 11.2.1. General

Water distribution and storage are, in most instances, the costly parts of a water supply scheme. Hence savings in these areas through good design can often result in significant savings for a whole project.

The elements of a water distribution and -storage system include some or all of the following:

- bulk water transmission systems.
- bulk-storage reservoirs.
- intermediate-storage reservoirs.

- distribution networks; and
- terminal consumer installations

### 11.2.2. Water Demand

The water demand of the proposed development is assessed according to the adopted design guidelines and standards. The development will cater for housing for low, medium, and high-income residents with unit sizes of approximately 45m<sup>2</sup>(RDP) to 100 m<sup>2</sup> and above.

Based on the lower limit for multiple dwelling units in General Residential for low-cost housing, the **Average Annual Daily Demand (AADD) is 450 litres/unit/day.**

Water demand is usually based on historical consumption. Where water consumption records are not available, present consumption per capita can be estimated by consulting the residents.

### 11.2.3. Water demand for developing areas (IRC 1980)

TYPE OF WATER SUPPLY	TYPICAL CONSUMPTION (l/c/d)	RANGE (l/c/d)
Communal water point		
well or standpipe at considerable distance (>1000 m)	7	5-10
well or standpipe at medium distance (250-1000 m)	12	10-15
well nearby (<250 m)	20	15-25

### 11.2.4. Non-domestic water demand in developing areas/ Table 8

Water requirements for non-domestic purposes are difficult to estimate and, where possible, field measurements should be taken.

Provision must also be made for the water demand at public open spaces. **Non-domestic water demand**

NON-DOMESTIC USER	WATER DEMAND
Schools: day boarding	15-20 90-140 litres/pupil/day
Hospitals	220-300 litres/bed/day
Clinics	5- outpatients 40-60 - in-patients litres/bed/day

Bus stations

15 - for those persons outside the community litres/user/day

**Figure 44: Estimated Water for Domestic & Non-domestic Consumption Vlakfontein 556 IR**

Land Use	Area(ha)	QTY Units	L/person /day	No of people/unity	Unit Water Demand ℓ/Unit/day	Total Water Demand (excl Fire) ℓ/day
Residential 1 (high density)	16.08	974	25	5	125	121750
Residential 1 (medium density)	20.72	788	25	5	125	98500
Residential 1 (low density)	22.25	687	25	5	125	85875
Residential 3 (75 unit/per ha)	8.33	9	25	5	125	1125
<b>TOTAL</b>		2458	100	20	500	307250

**Figure 45: Estimated Water for Domestic & Non-domestic Consumption Grootvlei 604 IR**

Land Use	Area (ha)	No of Units	L/per son/day	No of people/unity	Unit Water Demand ℓ/Unit/day	Total Water Demand (excl Fire) ℓ/day
Residential 1 (detached housing units)	63.52	2063	25	5	125	257875
Residential 2(high density housing units,2 storey walks ups)	2.71	500	25	5	125	62500
<b>TOTAL</b>	2563	2067	50	10	250	320375

**Figure 45: Estimated Water for Domestic & Non-domestic Consumption Doornhoek 577 IR**

Land Use	Area(ha)	QTY Units	L/person/day	No of people/unity	Unit Water Demand ℓ/Unit/day	Total Water Demand (excl Fire) ℓ/day
Residential 1 (one dwelling per erf-high density)	51.92 34	1309	25	5	125	167552
<b>TOTAL</b>		1309	25	5	125	167552

### **11.2.5. Fire Demand**

This development is classified as low-risk Group, which requires a minimum fire flow of 900 l/min with a residual head of 7 m at any one of the fire hydrants within the development.

#### **Water supply for firefighting**

The elements in a water reticulation system for the supply of water for firefighting are:

- trunk main: the pipeline used for bulk water supply.
- water storage: reservoir and elevated storage.
- reticulation mains: the pipelines in the reticulation to which hydrants are connected; and
- hydrants: these may be of the screw-down or sluice-valve type.

The capacity of the above elements is determined according to the category of fire risk applicable.

### **11.3. Sanitation/Sewer Drainage**

#### **11.3.1. Design Flows**

The design flows for the Development were calculated based on W&S Tariff Policy which equates to 70 % of the Water AADD.

Percentage Infiltration: 15%

Peak Flow Factor: 2.5

#### **11.3.2. Volumes**

The per capita volume of sullage generated depends on the water consumption. The water consumption is to a large extent dependent on the level of water supply and the type of on-site sanitation the contributor enjoys.

### **11.4. SULLAGE (GREYWATER) DISPOSAL**

#### **11.4.1. General**

On-site excreta-disposal technologies require that separate provision be made for the disposal of sullage. Sullage, also referred to as greywater, is defined as all domestic wastewater other than toilet water. This refers to wastewater from baths, sinks, laundry, and kitchen waste. Although this “greywater” is supposed not to contain harmful excreted pathogens, it often does wash babies’ nappies, for example, automatically contaminates the water. Sullage, however,

contains considerably fewer pathogenic micro-organisms and has a lower nitrate content than raw sewage. It also has a more soluble and biodegradable organic content. Sullage is produced not only on private residential stands but also at communal washing places and taxi stands, and provision should therefore be made for its disposal.

#### 11.4.2. Health aspects

Mosquito breeding can take place where ponds are created by casual tipping of sullage, and conditions favourable for the development of parasitic worms could also be created in this

#### 11.4.4. Sullage generation

AVAILABLE WATER SUPPLY AND SANITATION	SULLAGE GENERATION – LITRES PER CAPITA PER DAY
Standpipes, water vendors. Pit toilets.	20 – 30
On-site single-tap supply (yard connection). Pit toilets.	30 – 60

way. Infection can also occur in constant muddy conditions. To reduce potential health hazards, it is of the utmost importance to choose the right option for sullage disposal.

#### 11.4.3. Disposal

The type of disposal system chosen by the designer will depend on various factors such as the availability of land, the volume of sullage generated per day, the risk of groundwater pollution, the availability of open drains, the possibilities of ponding and the permeability of the soil. Where water is available on the site, a disposal facility should be considered.

#### 11.4.5. UPGRADING OF SANITATION FACILITIES

Possible upgrading routes should be considered when the initial choice of a system is made, particularly if an appreciable increase in the water supply is expected at some time in the future. However, it is unlikely that all the residents of a township will be able to afford upgraded services at the same time, which will be necessary if one is upgrading to full waterborne sanitation.

**Figure 47: Estimated Sanitation Utilization Vlakfontein 556 IR**

<b>Land Use</b>	<b>Area(ha)</b>	<b>No of Units</b>	<b>Unit Sewer Demand % Water</b>	<b>AADD (m<sup>3</sup>/day)</b>	<b>sewer (m<sup>3</sup>/day)</b>
Residential 1 (high density)	16.08	974	75	121.75	91.3125
Residential 1 (medium density)	20.72	788	75	98.5	73.875
Residential 1 (low density)	22.25	687	75	85.875	64.40625
Residential 3 (75 unit/per ha)	8.33	9	75	1.125	0.84375
<b>TOTAL</b>		2458	75	307.250	230.4375

**Figure 48: Estimated Sanitation Utilization Grootvlei 604 IR**

<b>Land Use</b>	<b>Area(ha)</b>	<b>No of Units</b>	<b>Unit Sewer Demand % Water</b>	<b>AADD (m<sup>3</sup>/day)</b>	<b>sewer (m<sup>3</sup>/day)</b>
Residential 1 (detached housing units)	63.52	2063	75	257.875	198.40625
Residential 2(high density housing units,2 storey walks ups)	2.71	500	75	62.5	46.875
<b>TOTAL</b>	2563	2067	75	320.375	230.67

**Figure 49: Estimated Sanitation Utilization Doornhoek 577 IR**

<b>Land Use</b>	<b>Area(ha)</b>	<b>No of Units</b>	<b>Unit Sewer Demand % Water</b>	<b>AADD (m<sup>3</sup>/day)</b>	<b>sewer (m<sup>3</sup>/day)</b>
Residential 1 (one dwelling per erf- high density)	51.9234	1309	75	167.552	125.664
<b>TOTOL</b>		1309	75	167.552	125.664



## Proposed Sewer Reticulation Network

The proposed sewer network is made up of ± 1 km of sewer pipeline. The typical pipe used will be 160 mmØ Heavy Duty Class 34 uPVC pipes. The sewer network is designed to provide a connection point to each erf, either adjacent to the sewer pipeline or across the street from the sewer pipeline.

## 12. Human Settlement Pipeline Projects (Top 4)

### 12.1 Integrated Residential Development Program/IRDP

This first project category involves integrated planning and construction attached as **Housing Infrastructure Designs Folder** which includes, but not limited to:

- RDP Units (different designs/housing typologies)
- Serviced Sites
  - Block of flats/Rental stock
  - Early Childhood Centre/Kindergarten
  - Community Hall
  - Taxi Rank
  - Retail Complex + Industrial SMME Park (small business and formal/informal traders)
- Water Treatment Plant + Water storage capacity

- Wastewater Treatment Plant
- Works and Installations (Civil, Mechanical, Electrical, Roads, Geo-technical)

### 12.1.1. TOTAL NUMBER OF JOBS IN THE 3 X Human Settlement Projects (IRDP`s)

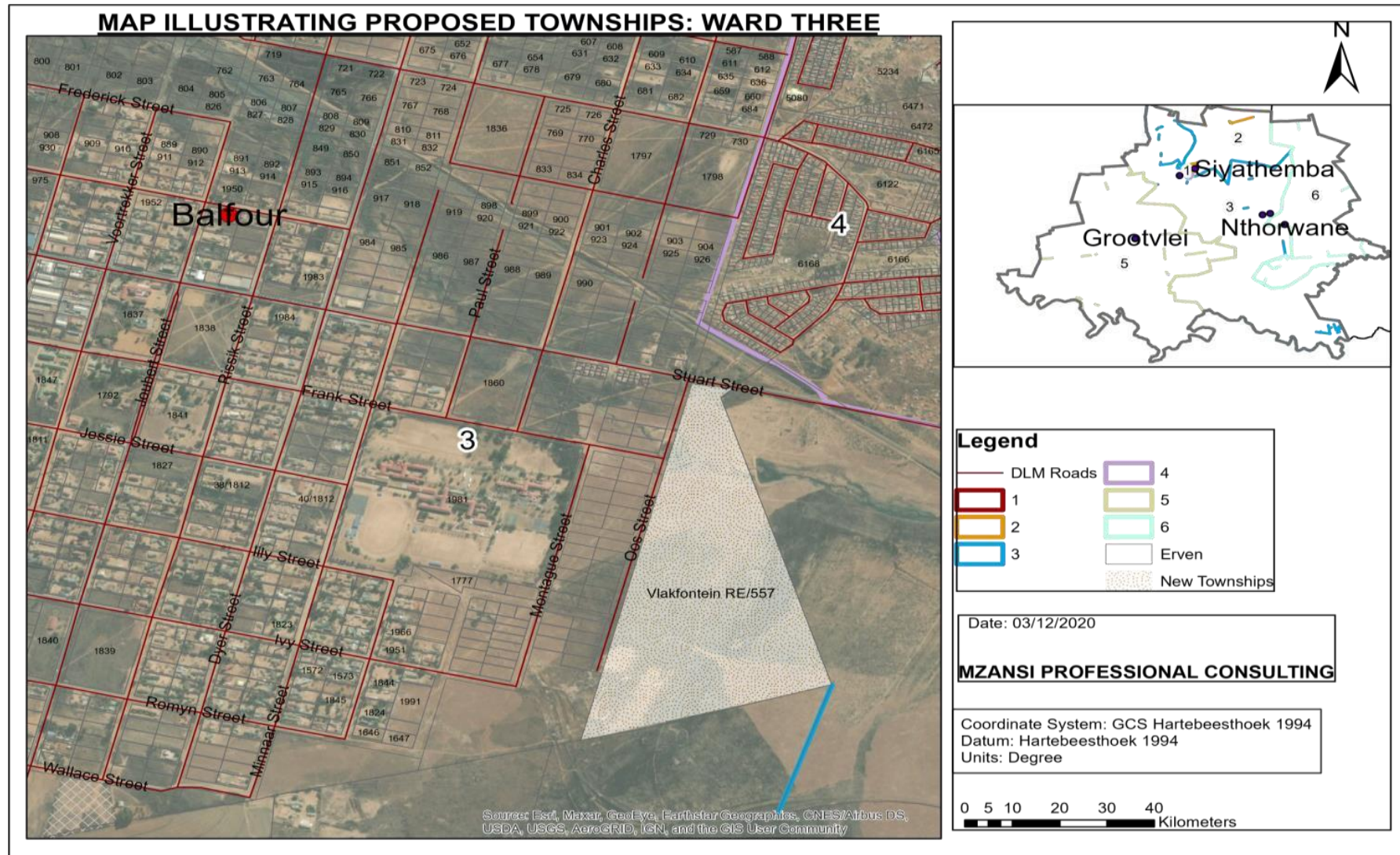
a) UPSTREAM (Construction Phase) = 1 500 + 15 Local-based Contractors)

b) DOWNSTREAM (Post-Construction) = 750A.1)

#### A.1 Portion 5 Farm Vlakfontein 556

Dipaleseng Local Municipality IDP has prioritized this project on acquisition of land for housing development at Portion 5 of the farm Vlakfontein No,556 IR measuring 186.16 in extent of the development of the integrated human settlement( the overall property measures 780 Ha the portion of the farm has been acquired by the Municipality to provide a mixed development housing for different income categories, public facilities and economic opportunities. **An DHS-appointed Services Provider (Atile Projects)** has done a detailed Township Establishment. Application, with an issued Record of Decision/RoD by the Provincial Department of Agriculture, Rural Development and Environmental Affairs.

Figure 50: Locality Map Vlakfontein IRDP



**Figure 51 Township Establishment Scenarios (Vlakfontein 556 IR)**

<b>ZONING</b>	<b>LAND USE</b>	<b>NO OF ERVEN</b>	<b>Area (ha)</b>
Business 1	Business uses	10	5.76
Educational	Educational Facilities	12	17.11
Institutional	Clinics, Places of Worship, Community Facilities	8	1.10
Municipal	Municipal Purposes	1	1.12
Open Space	Play parks, gardens, environmentally sensitive areas, sport and recreation.	36	16.27
Open Space	Reserved for Servitude.	15	20.58
Residential 1	One dwelling per erf (high density)	974	16.08
Residential 1	One dwelling per erf (medium density)	788	20.72

Residential 1	One dwelling per erf (low density)	687	22.25
Residential 3	75 units/per ha	9	8.33
SAR (Transnet)	Railway purposes	3	7.39
Special	Telecommunication masts	1	0.04
Transportation	Public Transport hub	2	0.99
Existing Public Roads	Roads		48.2
<b>TOTAL</b>		<b>2566</b>	<b>186.16</b>

### **Preliminary Costs Assumptions (5-Years)**

The attached are preliminary costs covering the **IRDP 12.1 Items** required human settlement infrastructure and bulk including internal reticulation infrastructure (water and sanitation)

### **Figure 52: Preliminary Costs Assumptions (Vlakfontein 556 IR)**

## PRELIMINARIES COST BREAKDOWN FOR HUMAN SETTLEMENT SECTOR PLAN 2020/2021

BALFOUR GREENFIELD



human settlements  
MPUMALANGA PROVINCE  
REPUBLIC OF SOUTH AFRICA



DESCRIPTIONS	CONSTRUCTION COSTS	CONS. & PM FEE @10%	SUB TOTAL	VAT @15%	FINAL TOTAL
<b>TOTAL</b>	<b>566.700.000,00</b>	<b>38.445.000,00</b>	<b>605.145.000,00</b>	<b>57.667.500,00</b>	<b>662.812.500,00</b>
<b>1st PHASE</b>					
A1 COMMUNITY HALL @ (2285m <sup>2</sup> ),(R11000/m <sup>2</sup> )	25.135.000,00	2.513.500,00	27.648.500,00	3.770.250,00	31.418.750,00
A2 PARKING & LAND SCAPPING @ (1071m <sup>2</sup> ),(R3600/m <sup>2</sup> )	3.855.600,00	385.560,00	4.241.160,00	578.340,00	4.819.500,00
A3 RDP HOUSE @45m <sup>2</sup> ,(R2700/m <sup>2</sup> ),(121.500,00 x1000)	121.500.000,00	-	121.500.000,00	-	121.500.000,00
A4 SERVICED SITES @ R25.000,00 PER ERF (250 ERF)	6.250.000,00	625.000	6.875.000,00	937.500,00	7.812.500,00
A5 BLOCK OF FLATS @50m <sup>2</sup> ,(R9000/m <sup>2</sup> ),(R450.000,00 x250)	112.500.000,00	11.250.000,00	123.750.000,00	16.875.000,00	140.625.000,00
A6 TAXI RANK @ (3000m <sup>2</sup> ),(R12600/m <sup>2</sup> )	37.800.000,00	3.780.000,00	41.580.000,00	5.670.000,00	47.250.000,00
A7 ECD @1000m <sup>2</sup> ,(R6900/m <sup>2</sup> ) & PLAY GROUND(@ (1474m <sup>2</sup> ),(R600/m <sup>2</sup> ))	7.784.400,00	778.440,00	8.562.840,00	1.167.660,00	9.730.500,00
A8 RETAIL @2000m <sup>2</sup> ,(R19995/m <sup>2</sup> )	39.990.000,00	3.999.000,00	43.989.000,00	5.998.500,00	49.987.500,00
A9 WORKS TO BE CONFIRMED WITH DETAILED SURVEYING AND GEOTECH	19.760.000,00	1.976.000,00	21.736.000,00	2.964.000,00	24.700.000,00
A10 SEWER TREATMENT PLANT FOR 4000 USERS	24.000.000,00	2.400.000,00	26.400.000,00	3.600.000,00	30.000.000,00
A11 WATER TREATMENT PLANT FOR 4000 USERS	22.000.000,00	2.200.000,00	24.200.000,00	3.300.000,00	27.500.000,00
A12 WATER RESEVOUR FOR 4000 USERS	26.000.000,00	2.600.000,00	28.600.000,00	3.900.000,00	32.500.000,00
<b>TOTAL</b>	<b>446.575.000,00</b>	<b>32.507.500,00</b>	<b>479.082.500,00</b>	<b>48.761.250,00</b>	<b>527.843.750,00</b>
<b>2nd PHASE</b>					
A13 RDP HOUSE @45m <sup>2</sup> ,(R2700/m <sup>2</sup> ),(R121.500,00 x500)	60.750.000,00	-	60.750.000,00	-	60.750.000,00
A14 BLOCK OF FLATS @50m <sup>2</sup> ,(R9000/m <sup>2</sup> ),(R450.000,00 x125)	56.250.000,00	5.625.000,00	61.875.000,00	8.437.500,00	70.312.500,00
A15 SERVICED SITES @ R25000 PER ERF ( 125 ERF)	3.125.000,00	312.500,00	3.437.500,00	468.750,00	3.906.250,00
<b>TOTAL</b>	<b>566.700.000,00</b>	<b>38.445.000,00</b>	<b>605.145.000,00</b>	<b>57.667.500,00</b>	<b>662.812.500,00</b>
A16 NB: STAND ALONE PROJECT-FARMS( @45m <sup>2</sup> ,(R2700/m <sup>2</sup> ),(121.500,00 x300)	36.450.000,00	-	36.450.000,00	-	36.450.000,00

NOTE:

1. FIGURES ARE PROVISIONAL AT THIS STAGE
2. ELECTRICAL/ MECHANICAL COSTS INCLUDED IN CONSTRUCTION COST
3. FIGURES EXCLUDES LAND COST

## A.2) Grootvlei 604 IR

Dipaleseng Local Municipality IDP has prioritized this project on acquisition of land for housing development. Portion 24(a portion of portion 23) of the Farm Grootvlei No.604 IR MEASURING 130.34 Been earmarked for the development of the integrated human settlement and provision of the much-needed cemetery. This portion of the farm has been acquired by the Municipality to provide a mixed development of housing for different income categories, public facilities and economic opportunities. An DHS-appointed services Provide (Metro Projects) has done a detailed Township Establishment Application, with an issued Record of Decision/RoD by Provincial Department of agriculture, Rural Development and Environment Affairs.

**Figure Locality Map Grootvlei 504 IR**



**Figure 54: Township Establishment Scenario Grootvlei 604 IR**

<b>ZONING</b>	<b>LAND USE</b>	<b>NO OF ERVEN</b>	<b>Area (ha)</b>
Business	Retail, offices, institutional, community facilities, service industries, high density residential	5	2.66
Community facilities	local community facilities	4	0.81
Schools	Primary Schools	2	4.81
Cemetery	Municipal cemetery	1	7.11
Public Open Space	Play parks, stormwater, attenuation, agriculture	6	17.28
Streets	Streets, public transport facilities		29.57
Residential 1	Detached Housing units	2063	63.52
Residential 2	High density housing units, 2-4 storey walk ups	4	2.71
<b>TOTAL</b>		<b>2085</b>	<b>128.47</b>

**Preliminary Costs Assumptions (5-Years)**

The attached are preliminary costs covering the **IRDP 12.1 Items** required human settlement infrastructure and bulk including internal reticulation infrastructure (water and sanitation)

**Figure 55: Preliminary Costs Assumptions Grootvlei 604 IR**

## PRELIMINARIES COST BREAKDOWN FOR HUMAN SETTLEMENT SECTOR PLAN 2020/2021

GROOTVLEI GREENFIELD



human settlements  
MPUMALANGA PROVINCE  
REPUBLIC OF SOUTH AFRICA



DESCRIPTIONS	CONSTRUCTION COSTS	CONS. & PM FEE @10%	SUB TOTAL	VAT @15%	FINAL TOTAL
<b>TOTAL</b>	<b>338.526.300,000</b>	<b>24.740.130,000</b>	<b>363.266.430,000</b>	<b>37.110.195,000</b>	<b>400.376.625,000</b>
<b>1st PHASE</b>					
A1 COMMUNITY HALL, @ (1500m <sup>2</sup> ), (R11000/m <sup>2</sup> )	16.500.000,00	1.650.000,000	18.150.000,000	2.475.000,000	20.625.000,000
A2 PARKING & LAND SCAPPING @ (700m <sup>2</sup> ), (R3600/m <sup>2</sup> )	2.520.000,00	252.000,000	2.772.000,000	378.000,000	3.150.000,000
A3 RDP HOUSE @45 m <sup>2</sup> , (R2700/m <sup>2</sup> ), (R121.500,00 ×500)	60.750.000,00	-	60.750.000,00	-	60.750.000,00
A4 BLOCK OF FLATS @50 m <sup>2</sup> , (R9000/m <sup>2</sup> ), ( R450.000,00 ×125)	56.250.000,00	5.625.000,000	61.875.000,000	8.437.500,000	70.312.500,000
A5 SERVICED SITES @ R25.000,00 PER ERF (125 ERF)	3.125.000,00	312.500,000	3.437.500,000	468.750,000	3.906.250,000
A6 TAXI RANK @ (1500m <sup>2</sup> ), (R12600/m <sup>2</sup> )	18.900.000,00	1.890.000,000	20.790.000,000	2.835.000,000	23.625.000,000
A7 ECD @662m <sup>2</sup> , (R6900/m <sup>2</sup> ) & PLAY GROUND@ (700m <sup>2</sup> ), (R600/m <sup>2</sup> )	4.978.800,00	497.880,000	5.476.680,000	746.820,000	6.223.500,000
A8 RETAIL @1500m <sup>2</sup> , (R19995/m <sup>2</sup> )	29.992.500,00	2.999.250,000	32.991.750,000	4.498.875,000	37.490.625,000
A9 WORKS TO BE CONFIRMED WITH DETAILED SURVEYING AND GEOTECH	19.760.000,00	1.976.000,000	21.736.000,000	2.964.000,000	24.700.000,000
A10 SEWER TREATMENT PLANT FOR 2000 USERS	12.000.000,00	1.200.000,000	13.200.000,000	1.800.000,000	15.000.000,000
A11 WATER TREATMENT PLANT FOR 2000 USERS	11.000.000,00	1.100.000,000	12.100.000,000	1.650.000,000	13.750.000,000
A12 WATER RESEVOUR FOR 2000 USERS	13.000.000,00	1.300.000,000	14.300.000,000	1.950.000,000	16.250.000,000
<b>TOTAL</b>	<b>248.776.300,000</b>	<b>18.802.630,000</b>	<b>267.578.930,000</b>	<b>28.203.945,000</b>	<b>295.782.875,000</b>
<b>2nd PHASE</b>					
A13 RDP HOUSE @45 m <sup>2</sup> , (R2700/m <sup>2</sup> ), (R 121.500,00 ×250)	30.375.000,00	-	30.375.000,00	-	30.375.000,00
A14 BLOCK OF FLATS @50 m <sup>2</sup> , (R9000/m <sup>2</sup> ), ( R450.000,00 ×125)	56.250.000,00	5.625.000,000	61.875.000,000	8.437.500,000	70.312.500,000
A15 SERVICED SITES @ R25000 PER ERF ( 125 ERF)	3.125.000,00	312.500,000	3.437.500,000	468.750,000	3.906.250,000
<b>TOTAL</b>	<b>338.526.300,000</b>	<b>24.740.130,000</b>	<b>363.266.430,000</b>	<b>37.110.195,000</b>	<b>400.376.625,000</b>
A6 NB: STAND ALONE PROJECT-FARMS( @45 m <sup>2</sup> , (R2700/m <sup>2</sup> ), ( 121.500,00 ×30)	36.450.000,00	-	36.450.000,00	-	36.450.000,00

NOTE:

- FIGURES ARE PROVISIONAL AT THIS STAGE
- ELECTRICAL/ MECHANICAL COSTS INCLUDED IN CONSTRUCTION COST
- FIGURES EXCLUDES LAND COST



### **A.3. Portion 24 Farm Doornhoek 577 IR**

Dipaleseng Local Municipality IDP has prioritised this project on acquisition of land for housing development. 24 Farm Doornhoek 577 IR measurement 161,23 b33n earmarked for the development of the integrated human settlement.

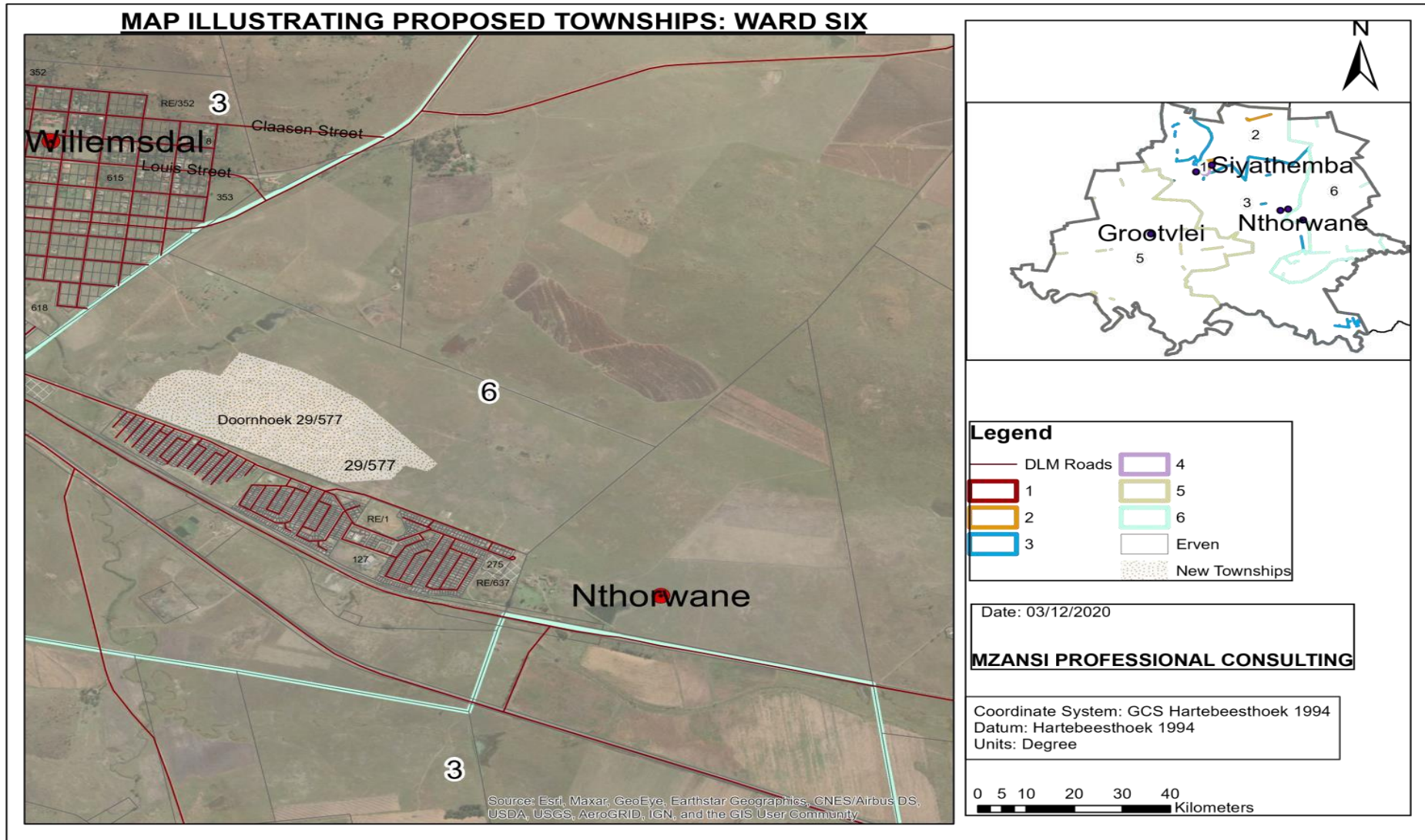
This portion of the farm should be acquired by the Municipality from Sizanani CPA to provide a mixed development of housing for different income categories, public facilities, and economic opportunities.

This project is for in situ upgrading and development of the informal settlement. The Municipality is in the process to acquire alternative land (Portion 27 of Farm Vlakfontein 558 IR described as State-owned/NPWD/SANDF, measuring 188Ha in extent) with the view to compensate the

Sizanani CPA in exchange of Portion 24 Farm Doornhoek 577IR

**A Sasol-appointed Services Provider (Reed Geomatics)** has done a detailed Township Establishment Application, with an issued Record of Decision/RoD by the Provincial Department of Agriculture, Rural Development and Environmental Affairs.

Figure 56: Locality Map Doornhoek 577 IR



**Figure 57: Township Establishment Scenario Doornhoek 577 IR**

<b>ZONING</b>	<b>LAND USE</b>	<b>NO OF ERVEN</b>	<b>Area (ha)</b>
Business 1	Business uses	4	1.9696
Community Facilities	Educational Facilities	1	4.3405
Community Facilities	Places of Worship	2	0.14104
Municipal	Cemetery	1	31.3190
Municipal	Council buildings and clinic	2	0.9745
Open Space	Play parks, gardens, environmentally sensitive areas, sport and recreation	11	29.2823
Municipal	Taxi rank	1	1.1310
Residential 1	One dwelling per erf (high density)	1309	51.9234
Special		1	21.6548
Public Roads	Roads		18.2424
<b>TOTAL</b>		<b>1332</b>	<b>161.2304</b>

**Preliminary Costs Assumptions (5-Years)**

The attached are preliminary costs covering the **IRDP 12.1 Items** required human settlement infrastructure and bulk including internal reticulation infrastructure (water and sanitation) **Figure 58: Preliminary Costs Assumptions Doornhoek 577 IR**

## PRELIMINARIES COST BREAKDOWN FOR HUMAN SETTLEMENT SECTOR PLAN 2020/2021

GREYLINGSTAD GREENFIELD



DESCRIPTIONS	CONSTRUCTION COSTS	CONS. & PM FEE @10%	SUB TOTAL	VAT @15%	FINAL TOTAL
<b>TOTAL</b>	<b>338.526.300,00</b>	<b>24.740.130,00</b>	<b>363.266.430,00</b>	<b>37.110.195,00</b>	<b>400.376.625,00</b>
<b>1st PHASE</b>					
A1 COMMUNITY HALL @ 1500m <sup>2</sup> ,(R11000/m <sup>2</sup> )	16.500.000,00	1.650.000,00	18.150.000,00	2.475.000,00	20.625.000,00
A2 PARKING & LAND SCAPING @ (700m <sup>2</sup> ) ,(R3600/m <sup>2</sup> )	2.520.000,00	252.000,00	2.772.000,00	378.000,00	3.150.000,00
A3 RDP HOUSE @45m <sup>2</sup> ,(R2700/m <sup>2</sup> ) ,(R121.500,00 x500)	60.750.000,00	-	60.750.000,00	-	60.750.000,00
A4 BLOCK OF FLATS @50m <sup>2</sup> ,(R9000/m <sup>2</sup> ) ,( R450.000,00 x125)	56.250.000,00	5.625.000,00	61.875.000,00	8.437.500,00	70.312.500,00
A5 SERVICED SITES @ R25.000,00 PER ERF (125 ERF)	3.125.000,00	312.500,00	3.437.500,00	468.750,00	3.906.250,00
A6 TAXI RANK @ (1500m <sup>2</sup> ) ,(R12600/m <sup>2</sup> )	18.900.000,00	1.890.000,00	20.790.000,00	2.835.000,00	23.625.000,00
A7 ECD @662m <sup>2</sup> ,(R6900/m <sup>2</sup> ) & PLAY GROUND@ (700m <sup>2</sup> ) ,(R600/m <sup>2</sup> )	4.978.800,00	497.880,00	5.476.680,00	746.820,00	6.223.500,00
A8 RETAIL @1500m <sup>2</sup> ,(R19995/m <sup>2</sup> )	29.992.500,00	2.999.250,00	32.991.750,00	4.498.875,00	37.490.625,00
A9 WORKS TO BE CONFIRMED WITH DETAILED SURVEYING AND GEOTECH	19.760.000,00	1.976.000,00	21.736.000,00	2.964.000,00	24.700.000,00
A10 SEWER TREATMENT PLANT FOR 2000 USERS	12.000.000,00	1.200.000,00	13.200.000,00	1.800.000,00	15.000.000,00
A11 WATER TREATMENT PLANT FOR 2000 USERS	11.000.000,00	1.100.000,00	12.100.000,00	1.650.000,00	13.750.000,00
A12 WATER RESEVOUR FOR 2000 USERS	13.000.000,00	1.300.000,00	14.300.000,00	1.950.000,00	16.250.000,00
<b>TOTAL</b>	<b>248.776.300,00</b>	<b>18.802.630,00</b>	<b>267.578.930,00</b>	<b>28.203.945,00</b>	<b>295.782.875,00</b>
<b>2nd PHASE</b>					
A13 RDP HOUSE @45m <sup>2</sup> ,(R2700/m <sup>2</sup> ) ,(R 121.500,00 x250)	30.375.000,00	-	30.375.000,00	-	30.375.000,00
A14 BLOCK OF FLATS @50m <sup>2</sup> ,(R9000/m <sup>2</sup> ) ,( R450.000,00 x125)	56.250.000,00	5.625.000,00	61.875.000,00	8.437.500,00	70.312.500,00
A15 SERVICED SITES @ R25000 PER ERF ( 125 ERF)	3.125.000,00	312.500,00	3.437.500,00	468.750,00	3.906.250,00
<b>TOTAL</b>	<b>338.526.300,00</b>	<b>24.740.130,00</b>	<b>363.266.430,00</b>	<b>37.110.195,00</b>	<b>400.376.625,00</b>
A16 <b>NB: STAND ALONE PROJECT-FARMS( @45m<sup>2</sup> ,(R2700/m<sup>2</sup>) ) ( 121.500,00 x30</b>	<b>36.450.000,00</b>	<b>-</b>	<b>36.450.000,00</b>	<b>-</b>	<b>36.450.000,00</b>

NOTE:

- FIGURES ARE PROVISIONAL AT THIS STAGE
- ELECTRICAL/ MECHANICAL COSTS INCLUDED IN CONSTRUCTION COST
- FIGURES EXCLUDES LAND COST

## **12.2. Phased Eradication and Upgrading of Informal Settlements**

There is a high number of informal settlements within the area of jurisdiction of Dipaleseng Local Municipality (**9 informal settlements in total**). These informal settlement dwellers put extreme pressure on the Municipality in terms of the demand for services and the demand for their areas of inhabitants to be formalized. Although it would not be possible to formalize all the informal settlement as they appear, it is possible for some informal settlements to be given a permanent status.

## **12.3. Inner Town Redevelopment/Regeneration (Vacant Stands & Dilapidated or Defunct Buildings)**

The DLM SDF 2010 made a brief appraisal based on a visual analysis on the state of the primary town (Balfour) and the secondary towns of Grootvlei and Greylingstad. which depicts these towns as reflecting dullness, outdated buildings, and areas of neglect.

There are several vacant stands and dilapidated building in Dipaleseng Local Municipality (Balfour;

Grootvlei; Greylingstad, which can be developed to alleviate housing shortages. Most of these vacant stands are in Balfour Town and Siyathemba Township.

The stands sizes are big and cannot just accommodate the RDP house only. They may need to be further subdivided to accommodate several Human Settlement products (RDP Units; Rental Stock, Serviced Sites and other social/public infrastructure)

The services are readily available on those stands and it is recommended in the Infrastructure Master Plan the Municipality should consider developing these stands/erfs as its first and short-term option to tackle housing backlog.

## **12.4. Farm workers and/or People Living on Farms Housing Project (s)/ Agri-village Concept.**

Agricultural development constitutes a major economic sector that contributes to the DLM Gross Domestic Product/GDP, and the DLM SDF 2010 outlines the imperatives and priorities to grow the agricultural economy through diversification and beneficiation of products.

The DLM LED, due for integration into this DLM Housing Sector Plan, which positions the following core commodities as key in driving the DLM agricultural economy with multiplier spin-off in both upstream and downstream industries:

- Beef and Dairy farming (including related feed-lotting) for new Black commercial farmers on both upstream and downstream beneficiation.
- Game Ranching
- Poultry
- Sunflower and Maize
- Fruit juice processing plant ➤ Cooking Oil producing plant.
- Forestry, Mining and Tourism

Hence the priorities to structure a sustainable Farmworker and People-On-Farms Housing, which should involve collaboration of the farm owners towards development of Agri-villages with bigger Erfs to accommodate Subsistence-based farming.

This process of diversifying agriculture will create sustainable employment whilst at the same time creates a

sustainable market for the DLM IRDP products (Rental Stock & Serviced Sites)

It is highly recommended that the DLM pilot Farmworker and People-On-Farms Housing in the form of **Two-Hundred Units per Balfour/Siyathemba; Grootvlei; Greylingstad respectively in this IDP/HSP duration (5-Years) which totals to Six-Hundred RDP Unit**

### **13. HSSP INTEGRATION PLAN**

The purpose of integration is to ensure that the projects elaborated above are integrated with other projects identified in the IDP document to achieve proper coordination and alignment considering their contents, location, and lining.

Human settlement development can be aligned with land acquisition and development, installation of infrastructure, economic development (Job creation), provision of municipal amenities (Schools, Police Station, Community Health Centre, etc.

The provision of all the above, with housing development is the correct way in realizing integrated development in a true sense. Integration of all relevant sector departments delivery program can also be achieved through an effective human settlement.

**Table 3 below indicates the role of various developmental plans in relation to Human Settlements:**

Dipaleseng Sector Plans relevant to Human Settlements Plan and their effect on human settlement development

**Figure 59: INTEGRATION PLAN**

Name of Integrated Programmes	Purpose and Content	Effect on Housing Issues
Five (5) year Financial Plan	It considers all financial aspects of the possible sources of Finance.	Payment or non-payments by occupants of the new housing project determine the future financial viability of the Municipality.
Five (5) year Capital investment Programme	It links all projects with possible sources of finance.	Costs of all housing projects must be included into this programme.
Five (5) year Programme	It provides the Municipality with overview of the major activities resulting from IDP.	Include all activities related to housing projects.
Performance management System	The KPIs for housing projects should be set and its performance monitored	It should be continuously measured.

Spatial Development Framework	It controls Strategies of land use management	All housing projects should be aligned to the requirements of the SDF.
Integrated Environmental Programme	Environmental issues must be adequately addressed. There is a need to consider how the designed housing projects will influence the Environment and if an EIA necessary or not.	Measures must be put in place to ensure that all housing projects do not degrade the environment, but rather contribute to more sustainability.
Integrated LED	The Municipality must implement the LED projects and always promote LED.	Housing projects are great opportunity of creating jobs because of their labour-intensive nature.
Integrated Institutional Programs	This programme is about Institutional capacity and transformation of the Municipality. It also includes projects.	There is a need to ensure that the municipality has more capacity to handle its human settlement issues.
Integrated poverty reduction and Gender Equality Programme	The programme ensures that poverty is reduced and indicates how the municipality is contributing to gender equality issues.	Low-cost housing projects can be considered as poverty alleviation and employment of women contributing to gender equality.



#### **14. CONCLUSION**

If approved / accepted, the above-mentioned priority projects will have the implication in other Municipal departments, e.g., Department of Planning and Economic Development, Department of Infrastructure services, Community Services and Department of Finance

#### **15. APPROVAL PHASE**

This Human Settlement Sector Plan will be distributed to different divisions of Dipaleseng Local Municipality and to the Provincial Department of Human Settlement.

The Plan is circulated to allow the DLM Divisions to make inputs for implementation of the IDP and its Housing Chapter, and the alignment with their Sector Policies, Strategies and Program.

Date: \_\_\_\_\_