Setsoto Local Municipality

Draft SDF 2017/18

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LIST OF ACRONYMS

BNG	Breaking New Ground
CBD	Central Business District
EMF	Environmental Management Framework
FSGDS	Free State Provincial Growth and Development Strategy
IDP	Integrated Development Plan
ISRDS	Integrated Sustainable Rural Development Strategy
IUDF	Integrated Urban Development Framework
LED	Local Economic Development
LUMS	Land Use Management System
MSA	Municipal Systems Act
NEMA	National Environmental Management Act
NSDP	National Spatial Development Perspective
PGDS	Provincial Growth and Development Strategy
RDP	Reconstruction and Development Programme
SANBI	South African National Biodiversity Institute
SDF	Spatial Development Framework
SMME	Small, medium, micro enterprises
SPC	Spatial Planning Category
VIP	Ventilated Improved Pit-latrine

DEFINITIONS

Activity Spine/Corridor: A linear zone(s) or area(s) (approximately k kilometres wide) surrounding a major high street (or activity spine), containing high concentration of transportation, land uses and densities. Activity corridors will accommodate major linear transport routes like heavy and light rail and freeways, large shopping concentrations, social, cultural and sporting facilities as well as large amounts of residential accommodation.

Agricultural land: Land and buildings used for any bona fide farming activities.

Biophysical Environment: Refers to abiotic and biotic surrounding of a population. It includes the factors that have an influence in their survival, development and evolution. The biophysical environment can vary in scale from microscopic to global extent. The term "the environment" often refers to a singular global environment in relation to humanity.

Central Business District (CBD): This is the focal point in the city. It is attributed by offices, businesses, retail and government services. It is typically located in the oldest part of the town and it is attributed to transport routes converging in it.

Socio-Economic Environment: Refers to the combination of external social and economic conditions that influence the operation and performance of an individual. The socio-economic environment is part of the overall economic environment.

Tourism Nodes: A place within which activities people travelling to and stay in for leisure, business or other purposes.

Urban Edge: Refers to a line within which growth and development is encouraged (growth area) and beyond which rural land uses occur. The area within the urban edge often refers to urban areas where full municipal services are provided (i.e. roads, sewer, water, storm water system and electricity), in order to accommodate the expected growth of the urban area.

EXECUTIVE SUMMARY

The Setsoto Local Municipality Spatial Development Framework seeks to guide and establish the direction in which the spatial form of the current and future development within the jurisdiction of the municipality should take place. The SDF as an integral part of the Municipal Integrated Development Plan, gives effect to the achievement of the spatial vision, goals and objectives of the municipality, while aligning the SDF with relevant legislatives directives from all three spheres of government. The Setsoto Local Municipality Spatial Development Framework has been prepared in accordance to the SDF guidelines set out by the Department of Rural Development and Land Reform.

1 INTRODUCTION

1.1 BACKGROUND

To be able to review the spatial development framework for Setsoto Local Municipality, different levels of analysis is required through a spatial analysis e.g. biophysical environmental analysis, socio-economic environmental and the built environment analysis. The Setsoto Local Municipality SDF has been prepared in alignment to the Constitution of the Republic of South Africa (Act 106 of 1996) in terms of the provision of service delivery, together with the principles of Spatial Planning and Land Use Management Act (16 of 2013) and other imperative national directives. The Provincial policies (FSGDS as well as the FS PSDF) were also revisited as well as municipal mandates (IDP's, housing sector plans, Local Economic Development Strategies, etc.) to ensure coordination, integration and alignment with other sector plans which focuses on enhancing economic development, the provision of infrastructure and service delivery as well as the provision of adequate housing in suitable land. The rationale of this Draft SDF is to give an understanding of the current state of affairs within Setsoto Local Municipality, and a variety of issues facing it in order to compile a Spatial Development Framework (SDF) that will assist in addressing those issues from a spatial perspective.

1.2 PURPOSE AND OBJECTIVES

The main aim of the SDF is the provision of guidance with regard to physical development of Setsoto Local Municipality so as to improve the manner in which activities are arranged in the physical space. By enhancing the ways in which activities are situated in Setsoto Local Municipality as well as interrelation of several activities with others will eventually improve the efficient and effective functioning of Setsoto Local Municipality. This strategic arrangement of activities will also improve the municipality capability to contribute to economic expansion, social well-being and environmental sustainability. The key objective of Setsoto SDF is the attainment of an integrated and coordinated municipal area wherein all the sectors have the ability to contribute to an effective, well-organized, justifiable, liveable as well as sustainable urban environment.

The SDF has an influence on both private and public capital investments in the sense that it needs to fulfil the following:

- The SDF ought to give direction to private investors with regard to where certain developments will be allowed as well as where they won't be allowed;
- The SDF should make it a point that it creates a conducive environment for the implementation of municipality's Integrated Development Plan; and

SDF ought to provide guidance in terms of spatial location of Setsoto capital interventions in ensuring that the maximum benefits are attained from investment in place.

1.3 PROJECT METHODOLOGY

The five phases are followed in developing a spatial development framework, as illustrated in the figure below.

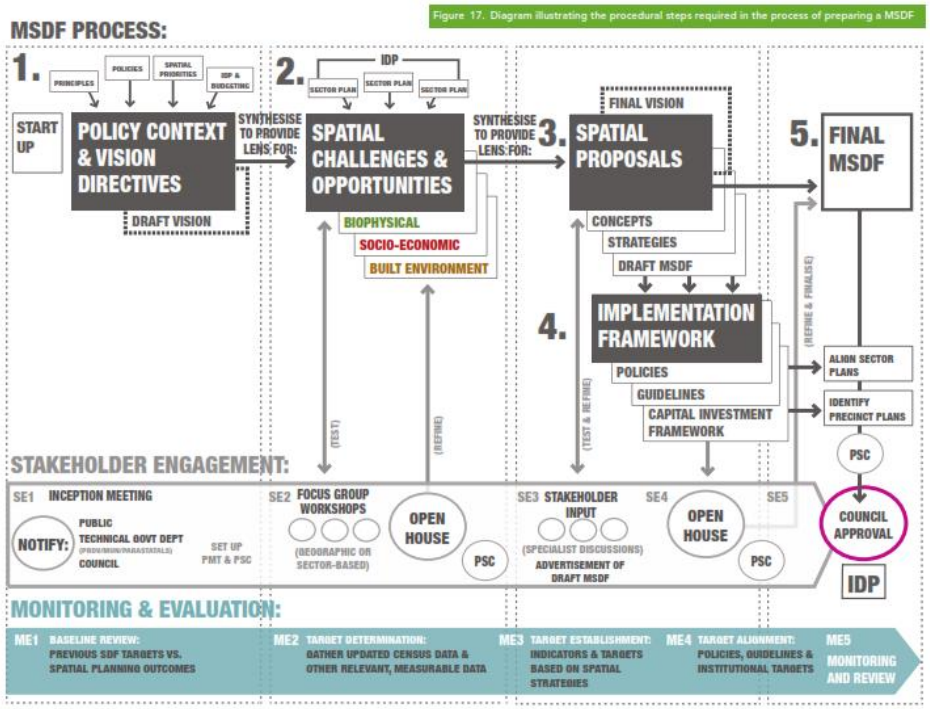


Figure 1: Phases in the Process of Completing SDF

Source: SDF Guidelines and Evaluation Framework (2014)

2 LEGISLATIVE AND POLICY BACKGROUND

Development within South Africa is guided by a multitude of legislation covering the three spheres of government, National, Provincial and Municipal. A core ideal within this legislation is to redress past apartheid imbalances created by apartheid era legislation, promoting a prosperous and united South Africa. The Legislation aims to achieve this through creating a legal framework that promotes economic growth and development, increased service delivery and improved livelihoods while protecting South Africa valuable resources. This section details the relevant legislation and policies which directly influence the preparation of spatial development frameworks.

2.1 NATIONAL DIRECTIVES

The South African government has placed a strong importance on developing policies at a national level. National policies provide the overarching framework towards development at a country wide level. National policies also act as an influence and guide towards provincial and municipal developmental strategies. This section focuses on the relevant National Directives for Setsoto Local Municipality SDF.

Table 1: National Directives

GUIDING FRAMEWORK	*STRATEGIC CONTEXT*
The Constitution of the Republic of South Africa Act 107 of 1996	The Constitution is the supreme law of the land. The Bill of Rights protects the rights of all people in our country and affirms the democratic values of human dignity, equality and freedom. In terms of the Constitution, the following Sections are relevant to the structure plan. Sections 15(1) (e), 152, 195(e) and 24, of The Constitution mandates municipalities to involve the public in policy making process, and clarifies the mandate of municipalities to ensure provision of basic services; promote social and economic development; and promote safe and healthy environment. In addition, Section 25(4) (a) clarifies the commitment to land reform, while 25(8) is mandates the state to acquire land and water for necessary reform. In terms of housing, Section 26, of the Constitution provides all citizens with the right to adequate housing, while mandating the state to develop necessary legislation and policy to ensure this. The same goes for other basic needs and social services such as healthcare (Sec. 27) and education (Sec. 29). **IMPLICATIONS FOR THE SDF:** SDF contributes towards the realization of the objectives of the Constitution through the provision of guidelines regarding the types of developments and improvements to be made in prioritised areas. These may range from the provision of adequate services, the promotion of social and economic development as well as the preservation and development of sustainable and defensible environments.
Spatial Planning and Land Use Management Act (Act 16 Of 2013)	The Spatial Planning and Land Use Management Act (SPLUMA) plays a significant role in the spatial planning and land use management in the country. The Act provides development principles and norms and standards as well as frameworks on land use therefore falling within section 146 of the Constitution. The following principles have been outlined in the act for spatial planning, land development and land use management: • Spatial Justice • Spatial Sustainability • Efficiency • Spatial Resilience

	• Good Administration SPLUMA is of vital importance as a reference to the development of structure plans as it aligns also itself with the NDP 2030 by incorporating the same developmental principles for spatial planning. **IMPLICATIONS FOR THE SDF:** SPLUMA instructs national and provincial government to prepare Spatial Development Frameworks. Therefore, municipalities are beholden by this act to ensure that the preparation of the IDPs includes Spatial Development Frameworks to provide strategic spatial proposals based on the above mentioned spatial principles and to outline the current status of each municipality.
State of the Nation Address 2017	Key points from the State of the Nation address by his excellency President Jacob G Zuma at the Joint sitting of Parliament in Cape Town (February 2017) are listed: • The key policy framework for economic growth and job creation mentioned in the SONA 2017 was the Nine Point Plan. Focus areas include: o Industrialisation o mining and beneficiation o agriculture and agro-processing o energy o small, medium and micro enterprises (SMMEs) o managing workplace conflict o investment attraction o growing the oceans economy o tourism • The Department of Economic Development will bring in legislation to Cabinet that will seek to amend the Competition Act, 1998 (Act 89 of 1998). This with the aim of creating a more inclusive economy. • The government is promoting Radical Transformation of the South African economy with the aim of opening the economy to new a broader set of players. Giving black South Africans opportunities in the economy thus making the economy more inclusive. • A draft Property Practitioners Bill is to be tabled by the department of Human Settlements for public comment with the purpose of establishing a more inclusive, representative sector. This as black Africans comprise less than 5% of the ownership within the property sector. • New public transport centres in the Northern Cape, North West, Limpopo, Free State and Eastern Cape, to be built by the department of Social Development. **IMPLICATIONS FOR THE SDF:**

	Imperatives of the South African government bind the SDF to develop an inclusive economy, leading to the identification of areas of potential growth and development which can assist identified municipalities to achieve radical transformation.
Budget Speech 2017	Key points from Finance Minister February 2017 budget speech, in relation to public infrastructure investments are listed below: • The Provincial Roads Maintenance Grant is allocated R10.8 billion in 2017/18, taking into account the increase in road traffic volumes. • SANRAL receives R15.4 billion over the period ahead for strengthening and maintenance of the national road network, which now stands at 21 946 kilometres. • The Department of Telecommunications and Postal Services receives R1.9 billion over the medium term to invest in high-speed internet connections in public buildings and schools in eight NHI pilot districts. • The Passenger Rail Agency of South Africa continues to implement its modernisation and rolling stock renewal programme. Over the medium term, R16.7 billion is allocated for 70 new train-sets for Metrorail. • The development and operation of integrated public transport networks, funded through the Public Transport Network Grant receives R6.2 billion in 2017/18. • To support higher density housing, subsidies for social housing have been rationalised and R600 million over the medium term is reprioritised to the Social Housing Regulatory Authority for investment in rental housing units. **IMPLICATIONS FOR THE SDF:** The budget impacts the SDF because the budget provides an allocation of finances towards transportation, infrastructure and housing. This impacts directly on the ability of the municipal SDF to achieve the successful implementation of such projects.
National Development Plan: Vision for 2030	The National Planning Commission has developed a National Development Plan (NDP) which concentrations on enabling sustainable and inclusive development. The NDP introduces the long-term vision for the future development of South Africa. It acknowledges the spatial inefficiencies that characterizes existing settlements and commits the national government to developing a National Spatial Framework. The National Development Plan, 2030 provides a new scope of focus for planning authorities, in that its focus areas that affect spatial planning include the following: • Creating jobs and livelihoods • Expanding infrastructure • Transition to a low carbon economy

- Transforming urban and rural spaces
- Education and training
- Provide adequate health care

The spatial principles that are identified in the NDP include the following:

- the integration of urban and rural areas;
- ensuring social diversity within the built environment;
- increasing the density of settlements without increasing costs of land and housing for the poor;
- ensuring the integration of transportation systems and land use;
- Supply reliable infrastructure, suitable land and property, connectivity, skills and logistics to broaden the economic base of towns and cities
- build community involvement and partnerships;
- Supporting the development of vibrant, diverse, safe, green and valued places

IMPLICATIONS FOR THE SDF:

The objectives of the SDF is out to uphold the standards and elements outlined in NDP to ensure realization of spatial objectives set based on the challenges and opportunities identified within the SDF areas.

National Environment Management Act 1998 (Act 107 of 1998)

With regards to the provision of the National Environmental Management Act, the following directives are significant for all development:

- Developments should be socially and economically viable, while being environmentally just;
- The protection of natural resources and maintenance of natural systems should always be prioritised;
- There should be equal access to natural resources, benefits and services to meet the human needs; as well as
- Precautionary measures should be taken into account when permission is granted for new developments.

IMPLICATIONS FOR THE SDF:

This act obligates municipalities to create rural and urban spaces which enhances economic opportunities and environments, while preserving the environment for future generation. As such, the SDF is ought to take cognizance to the NEMA regulation when developing spatial proposals for all municipal areas.

National Land Transport Act 2009, (Act no. 5 of 2009)	The National Transport Act (2009) provides the regulatory framework for public transport across the country. According to the National Transport Act, the following are important aspects: • All public transport must be affordable and designed to integrate different modes of transport to restructure South Africa's national land transport system • All planning authorities must prepare and submit integrated transport plans for a five-year period and update them regularly • Land transport planning must be integrated with land development and land use planning processes • Ensuring there is provision of quality public transport infrastructure facilities and services **IMPLICATIONS FOR THE SDF:** The transportation plan within the SDF will carry out the governmental mandate based on the aforementioned aspects to ensure efficiency with regards to the conduction of; transportation impact studies, availability of infrastructure and land use intensification in prioritized areas of relevant local municipalities.
New Growth Path (2010)	The New Growth Path (NGP) 2010 aims to grow the economy by 7%, create 37000 jobs per annum and create 5 million additional jobs by 2020. The New Growth path is proposed to address the economic downturn since 2008. The NGP economic development focus areas are as follows: • Employment creation; • Cross-cutting development policy package for growth, decent work and equity; • Proposals for macro-economic policy, micro-economic policy, and social partners; • Resources required to support economic development; • Incorporation of stakeholders in the economy through institutional arrangements. **IMPLICATIONS FOR THE SDF:** The SDF needs to ensure the creation of rural-urban linkages within the municipality in order to bridge the development and economic gap between poorer rural areas within the municipality and the urban areas.

Intergovernmental Relations Framework Act (No 13 of 2005)	The Intergovernmental Relations Framework Act was established in reference to the constitutional mandate in section 41(2) of the South African Constitution. The IGR was established to provide a legal framework to guide relations between the different spheres of government. The main focus areas of the act are: • To provide principles for Intergovernmental relations in the country • To regulate intergovernmental forums • To provide guidelines for internal intergovernmental procedures • To provide a framework to assist in the settlement of disputes between the different spheres of government **IMPLICATIONS FOR THE SDF:** Where corridors proposed by the SDF cross municipal boundaries, the development of such corridors should be jointly planned by the affected municipalities to ensure integration, successful implementation and reduced potential for conflict. The intergovernmental forums created through the Intergovernmental Relations Act can be used to achieve this.
Integrated Urban Development Framework (2016-2019)	The Integrated Urban Development Framework (IUDF) was created to work towards the achievement of resilient, inclusive and liveable cities and towns within South Africa. The IUDF builds upon several chapters from the National Development Plan (NDP) as well as extending on Chapter 8 of the constitution. The vision of the (IUDF) is: 'Liveable, safe, resource-efficient cities and towns that are socially integrated, economically inclusive and globally competitive, where residents actively participate in urban life'. It aims to achieve this vision through focusing on eight levers which are: 1. Integrated Spatial Planning 2. Integrated Transport and Mobility 3. Integrated and Sustainable Human Settlements 4. Integrated Urban Infrastructure 5. Efficient Land Governance and Management 6. Inclusive Economic Development 7. Effective Urban Governance **IMPLICATION FOR THE SDF:**

	The IUDF deals with issues relating to Spatial Planning, Transport, Human Settlements and Urban Infrastructure, all of which are issues directly relating to local municipality SDF. Therefore decisions taken in relation to these issues should be reflected in the local SDF.
National Housing Act 1997 (act.107 of 1997)	The National Housing Act reiterates the Constitutional right to access adequate housing and identifies the state's legal responsibility to a sustainable housing development process. The act identifies general principles applicable to housing development. The Act provides the following recommendations concerning housing provision: • Prioritise the housing needs of the poor; • Provide a wide choice of housing and tenure options; • Be economically, fiscally, socially and financially affordable and sustainable; • Focus on integrated development planning; • Consider and address the impact on the environment; • Socially and economically viable communities; • Safe and healthy living conditions; • Racial, social, economic and physical integration in urban and rural areas; • Effective functioning of the housing market and level playing fields; • Higher densities and the economical utilisation of land and services. **IMPLICATIONS FOR THE SDF:** The SDF out to be aligned to the National Housing Act 107 of 1997 for the purpose of ensuring the provision of sustainable human settlements as well as strengthening spatial integration within urban and rural areas.
National Housing Code (2009)	The National Housing Code (2009) was developed under the direction of the National Housing Act 107 of the 1997. Section 4 of the National Housing Act (1997) requires that the Minister develops a housing code. The National Housing Code contains the National Housing Programmes which are described below: • Financial Housing Programmes o Individual Housing Subsidies

	o Enhanced Extended Discount Benefit Scheme o Social and Economic Facilities o Accreditation of Municipalities o Operation Capital Budget o Housing Chapters of IDPs o Rectification of Pre-1994 Housing Stock • Incremental Housing Programmes o Integrated Residential Development Programme o Enhanced People's Housing Process o Informal Settlements Upgrading Programme o Consolidation Subsidies o Emergency Housing Assistance • Social and Rental Housing Programmes o Institutional Subsidies o Social Housing Programme o Community Residential Units • Rural Housing Programmes o Rural Subsidy: Informal Land Rights o Farm Residents Housing Assistance Programme **IMPLICATIONS FOR SDF:** The SDF should be aligned to the National Housing Code to ensure the effective implementation provision of integrated Human Settlements within the municipality.
Breaking New Ground Policy (2004)	The Breaking New Ground Policy 2004 was adopted by government as a framework policy which focuses on a holistic approach to developing human settlements, including the provision of social and economic infrastructure. The BNG Policy prescribes that housing delivery should comply with the following objectives: • Safe and secure environments; • Adequate access to economic opportunities;

	• A mix of safe and secure housing and tenure types; • Reliable and affordable basic services, educational, entertainment, health, welfare and police services within a Multi-purpose cluster concept; • Compact, mixed land use, diverse, pedestrian friendly, and promotes good quality of life; • Low-income housing in close proximity to areas of opportunity; • Integrated, functional, and environmentally sustainable human settlements, towns and cities; • Social (Medium-Density) Housing; • Alternative technology and design. **IMPLICATIONS FOR THE SDF:** The SDF is ought to be aligned with the BNG policy in order to identify potential sites for the development of affordable housing within a reasonable distance to social and economic opportunities.
Municipal Systems Act 2000 (Act 32 of 2000)	The Municipal Systems Act, 2000 stipulates that all municipalities must prepare a Spatial Development Framework (SDF) as an essential component of the Integrated Development Plan (IDP). The IDP must therefore reflect a Spatial Development Framework and must include the provision of basic guidelines for land use management systems for the municipality. Section 25(1): The municipal council must, within a prescribed period after the start of its selected term, adopt a single, inclusive and strategic plan for the development of the municipality which: • Links, integrates and co-ordinates plans and takes into account proposals for the development of the municipality; • Aligns the resources and capacity of the municipality with the implementation of the plan; • Forms the policy framework and general basis on which annual budgets must be based; and • Is compatible with national and provincial development plans and planning requirements binding on the municipality in terms of legislation Section 35(1), 2. (4), A spatial development framework reflected in a municipality's integrated development plan must - a) give effect to the principles contained in Chapter 1 of the Development Facilitation Act' 1995 (Act No. 67 of 1995); b) set out objectives that reflect the desired- spatial form of the municipality;

	c) contain strategies and policies regarding the manner in which to achieve the objectives referred to in paragraph (b), which strategies and policies must- d) indicate desired patterns of land use within the municipality; e) address the spatial reconstruction of the municipality; and f) provide strategic guidance in respect of the location and nature of development within the municipality. g) set out basic guidelines for a land use management system in the municipality; h) set out a capital investment framework for the municipality's development programs; i) contain a strategic assessment of the environmental impact of the spatial development framework; j) identify programs and projects for the development of land within the municipality; k) be aligned with the spatial development frameworks reflected in the integrated development plans of neighbouring municipalities; and provide a visual representation of the desired spatial form of the municipality, which representation: i. must indicate where public and private land development and infrastructure investment should take place; ii. must indicate desired or undesired utilisation of space in a particular area; iii. may delineate the urban edge; iv. must identify areas where strategic intervention is required; and v. must indicate areas where priority spending is required. The MPPMR spells out the required content of municipalities' Spatial Development Framework Plans (SDFP). Most of the content requirements are compulsory (i.e. the SDF must set out objectives or must contain a strategic assessment, etc.) whereas only one of the requirements is optional, i.e. the delineation of the urban edge, and could be provided on the discretion or need by the relevant local authority **IMPLICATIONS FOR THE SDF:** The SDF is prepared under the set vision of the municipal IDP. Strategic Spatial Proposals are therefore guided by the MSA mandate requiring the preparation of SDF's as a component of the IDP.
Subdivision of Agricultural Land Act, 1970 (Act No. 70 of 1970)	The purpose of the Act is to control the subdivision and, in connection therewith, the use of agricultural land. The Act applies to areas in the former South Africa that lie outside the borders of local authorities, land which is part of an area subdivided in terms of the Agricultural Holdings (Transvaal) Registration Act, 1919, land in proclaimed townships or former South African Development Trust Land. While these "areas" were effectively removed from existence with the advent of "wall to wall" local authorities, an amendment to the Act in 1995 (Proclamation R100 of 1995), explicitly provided for the Act's continued applicability in areas formally located outside the areas of jurisdiction of municipalities.

Act No. 70 of 1970 will be replaced by a new Act that currently serves as a Bill before Parliament. The new Act will support/control the new policy of the Department of Agriculture with respect to the protection of commercial farmland from changes in land-use, and to prohibit the subdivision of properties that will create "uneconomical or unviable "production entities. The policy of the Department of Agriculture is not available in documentary format and could be considered cumbersome and contradictory in parts. The policy entails the following:

- Any new subdivision must be able to generate an income of at least R29 000 per annum
- (minimum subsistence level);
- Any new subdivision intended for irrigation farming, must have access to a minimum of 10 ha of water rights or sufficient abstraction from boreholes for 10 ha of irrigation farming;
- The farm must accommodate at least 20 ha of existing irrigation fields;
- A subdivision of 100 ha of existing dry cultivated fields is considered the minimum that would be allowable;
- If no cultivated fields exist, the subdivision must be able to support at least 60 large livestock-units;
- The subdivision for certain non-agricultural uses, e.g., guesthouses and businesses, may be considered favourably.

Subdivision for plots / smaller farm portions for rural residential occupation of 1 ha to 10 ha, will not be dealt with in terms of Act No. 70 of 1970.

The Department of Agriculture approached all local authorities in South Africa, in order to identify farms located around existing towns that could be utilized for rural residential purposes. The Department's intension is to "remove" these farms from the ambit of Act No. 70 of 1970. This would allow local authorities to authorize the subdivision of farms in terms of the Division of Land Ordinance, 1986 (Ord. No. 20 of 1986), to a pre-determined size.

2.2 PROVINCIAL DIRECTIVES

The policies and frameworks developed at a Provincial level have a more direct impact on local development. Provincial policies cover the entire province but they need to focus on priority areas within the Province where development needs are most required. This section focuses on the relevant Provincial directives for the Setsoto local municipality SDF.

Table 2: Provincial Directives

GUIDING FRAMEWORK	*STRATEGIC CONTEXT*
Free State Provincial Spatial Development Framework (PSDF) (2014)	The Provincial SDF was developed in terms of SPLUMA and aims to bring unity in spatial planning and land use management in the Free State. The PSDF also guides the re-development of the urban spaces such as Brandwag in order to align the people's aspirations, while also addressing objectives of social justice, economic development and environmental sustainability. In addition, the PSDF gives a highlight of the development elements within the province, and these elements, which are Biophysical, Heritage, Demographic, Built-environment and Socio-economic will also be stipulated in the structure plan accordingly. **IMPLICATIONS FOR THE SDF:** The PSDF provides guidance to municipal Spatial Development Frameworks. The municipal SDF needs to be aligned to the PSDF.
Free State Growth and Development Strategy (FSGDS) (2005 – 2014)	The Free State Growth and Development Strategy (FS GDS) envisages the Free State to be a resilient, thriving and competitive economy that is inclusive and has immense prospects for human development anchored on the principles of unity, dignity, diversity, equality and prosperity for all. The vision is supported with 6 pillars: • Inclusive Economic Growth and Sustainable Growth Job Creation • Education, Innovation and Skills Development • Improved Quality of Life • Sustainable Rural development • Build Social Cohesion • Good Governance The revised Free State Provincial Growth and Development Strategy aims to serve as a common strategic vision, as well as a blueprint for future strategies and development plans in the Free State Province. It analysed economic development opportunities within the social context, in line with the National Spatial Development Framework. A further goal is to provide the framework for public and private sector investment, indicating areas of opportunities and development priorities. Underlying the FSGDS are the following (quoted from the document): • The need to effectively use scarce resources within the Province, whilst addressing the real causes of development challenges.

- The need to accelerate service delivery based on a common provincial development agenda as the basis for provincial strategic direction.
- The need to identify investment opportunities and provide an environment of certainty critical for private-sector investment.
- The need to promote intergovernmental coordination between the three spheres of government.
- The need to facilitate the implementation of the People's Contract within the Province.
- The need to provide a common vision as the basis for common action amongst all stakeholders, both inside and outside government.
- The need to provide a framework for budgets, implementation, performance management and spatial development.

The four-identified key provincial priorities are:

- Economic development, employment and investment.
- Human and social development.
- Justice, crime prevention and security.
- Stable and well-managed governance and administrative structures

IMPLICATIONS FOR THE SDF:

The implications for the Setsoto SDF are to ensure alignment to the provincial principles listed in the LEGDS.

2.3 MUNICIPAL DIRECTIVES

Municipal government policies and legislation have the most direct impact on the day to day running of a local municipality because it is at a municipal level where service delivery actually takes place. Thus, Municipal directives are central to the development of the local municipality Spatial Development Framework. This section focuses on the relevant Municipal Directives for the Setsoto local municipality SDF.

Table 3: Municipal Directives

Guiding Framework	*Strategic Context*
Thabo Mofutsanyane District Spatial Development Framework (2012/13)	The goals of the Thabo Mofutsanyane District Spatial Development Framework are: • To formulate a district industrial strategy so that the district can direct economic development and investment. • Emphasize local job creation, the alleviation of poverty and the redistribution of opportunities and wealth. • Promote the creation of an enabling environment conducive for economic development • Focus explicitly on opportunities for SMME development in all economic sectors. **IMPLICATIONS FOR THE SDF:** The MSDF should be informed by the principles of DSDF. The MSDF should be aligned to the DSDF to ensure synergy between spatial strategies at District and Municipal level.
Thabo Mofutsanyane District IDP (2017-2022)	The Thabo Mofutsanyane IDP has established several key strategies to allow it to achieve the desired development. These key priorities are as follow: • Sustainable infrastructures • Local Economic Development, Job creation and Tourism • Agriculture and Rural Development • Social Development, Sports, Arts and Culture • Good Governance and Community Participation • Financial viability **IMPLICATIONS FOR SDF:** The local SDF should show appreciation of the priorities within the District IDP. The SDF should use the District IDP principles as a guide on where to locate specific areas of development within the municipality.

Thabo Mofutsanyane Integrated Transport 2005/2010	The transport vision for the TMDM is: " A co-ordinated transport system which promotes the use of appropriate modes of transport and time sensitive transport operations and provides appropriate, accessible and convenient transport infrastructure to ensure safe, affordable and comfortable journeys thereby maximising the opportunities for the people in Thabo Mofutsanyane" The objectives that have been devised to achieve this vision are to focus on: • Accessibility • Affordability • Safety • Co-ordination **IMPLICATIONS FOR THE SDF:** The District ITP provides guidance to the transport related plans at a municipal level. The SDF should seek alignment in relation to the transport strategies provided at a District level.
Draft Setsoto Integrated Development Plan 2017/18-2020/21	According to the Setsoto Integrated Development Plan, 2016/2017, the overall vison of the municipality is to become "a unified, viable and progressive municipality". The Setsoto IDP aims to deliver, water, sanitation, electricity, waste management, housing, roads, safety, health, education and job creation to residents of Setsoto municipality. These key priorities are as follow: • Basic Services: Creating conditions for decent living • Good Governance • Public Participation: Putting people first • Sound Financial Management • Building capable institutions and administration **IMPLICATIONS FOR THE SDF:** The SDF is out to be aligned to the vision of the municipality in order to ensure that the development of spatial objectives and proposals are correlated to the challenges and opportunities identified within the IDP.

Setsoto Spatial Development Framework ***2012***	Setsoto municipality aims to develop industries around the vast array of agricultural produce and to develop the area into a place of beauty utilising the historic, cultural and natural beauty of the area. The SDF has the following priorities to achieve this: • To protect and enhance tourism opportunities within the municipality • To protect and enhance agricultural opportunities within the municipality • To ensure the careful management of water to meet urban, agricultural and mining needs. • Efficient spatial planning to ensure that the municipality's resources are utilised to optimum efficiency and not damaged for use by another sector. • To develop urban settlements of high image quality for locals and to attract tourist to the area. **Alignment to the SDF** This SDF is the review of the current SDF as means to ensure that the set 5 year plan of the district is being achieved.
Setsoto Integrated Environmental Plan 2015 -2020	The Setsoto IEMP assists the municipality to identify environmental issues within the municipality and to mitigate, avoid, reduce and restore the area from negative impacts. The key environmental recommendations for the Setsoto municipality are listed below: • Water management • Waste management • Air quality management **IMPLICATIONS FOR SDF:** The IEP should act as a guide to the SDF, guiding the SDF spatially on which environmentally sensitive areas to avoid when selecting areas within the municipality for development. In this sense, the SDF should align itself with the IEP.
Setsoto Housing Sector Plan	The Setsoto Housing Sector plan has a number of priorities to achieve housing development within the municipality. • Provision of subsidized housing • Provision of low, middle income, high income housing • Consumer education

- Provision of rental housing stock
- Provision of child headed households

IMPLICATIONS FOR THE SDF:

The SDF and the Housing Sector Plan should be aligned to one another in order to ensure successful provision of housing in the municipality. The SDF should guide the Housing Sector Plan on where to locate new housing developments within the municipality.

Local Government: Municipal Planning & Performance Management Regulations 2001 (No R 796 of 2001)

The Performance Management Regulations necessitate a framework that represents the specific processes that needs to be conducted by the municipality.

IMPLICATIONS FOR THE SDF:

Section 2(4) of the Local Government: Municipal Planning and Performance Management Regulations provide that an SDF should:

- Give effect to the SPLUMA principles;
- Set out objectives that reflect the desired spatial form of the municipality;
- Contain strategies and policies to achieve the objectives and which should indicate desired patterns of land use;
- Address the spatial reconstruction;
- Provide strategic guidance regarding the location and nature of development;
- Set out basic guidelines for a land use management system in the municipality;
- Set out a capital investment framework for the municipality's development programs;
- Contain a strategic assessment of the environmental impact of the SDF;
- Identify programs and projects for the development of land within the municipality;
- Be aligned with the spatial development frameworks reflected in the integrated development plans of neighbouring municipalities;
- Provide a plan of the desired spatial form of the municipality, which should:
- indicate where public and private land development and infrastructure investment should take place;
- indicate desired or undesired utilization of space in a particular area;
- delineate an urban edge;
- identify areas for strategic intervention;
- Indicate priority spending areas.

Setsoto LED 2014	According to the Setsoto LED 2014, the proposed LED vision for the municipality is "aspire to be one of the leading and prosperous municipalities in South Africa." The LED objectives are to: • Explore tourism potential and Increase the number of emerging farmers and SMME development • Reduce the levels of poverty in the area and the rate of unemployment; • Create an investor friendly environment conducive to economic development (growth): • Expand and retain existing businesses; • Draw new investment into the area and create employment; • Expand the agricultural, tourism, manufacturing, mining and mineral beneficiation sectors; and strengthen the institutional capacity of SMME's and • Increase the number of viable emerging businesses **IMPLICATIONS FOR THE SDF:** The SDF provides the strategic spatial concept for the Setsoto Local Municipality. The LED should take cognisance of these spatial proposals when determining areas for development.
Sustainable Community Guide 2007	The Sustainable Community Guide (2007) promotes a new approach to planning to create integrated and sustainable communities. The guide focuses on planning at an intermediate or Sustainable Community Unit level. The guide covers: • The planning process and the organization, management and co-ordination of stakeholders in the process. • How to achieve stakeholder and community participation and effective communication as an essential component of the process • The application of the principles in six elements, housing, work, services, transport, community and character and identity to spatial planning in general. **IMPLICATIONS FOR THE SDF:** As the Sustainable Community Guide (2007) aims to fill the gap between SDFs and more local community planning, LASDF (Local Areas Spatial Development Frameworks), the LASDF should be guided by the SDF planning strategies and objectives when developing spatial strategies at a more local, community based level.

3 SITUATIONAL ANALYSIS

3.1 BACKGROUND OF THE STUDY AREA

The Setsoto Local Municipality is a Category B municipality situated in the eastern Free State Province within the Thabo Mofutsanyane District. It is bordered by the Fezile Dabi District in the north, the Kingdom of Lesotho in the south, Dihlabeng in the east, and Lejweleputswa District in the west. It is one of the six municipalities that make up the Thabo Mofutsanyane District, accounting for 17% of its geographical area. The Setsoto Local Municipal area measures 5 966.37 km^2 and comprises four urban areas namely Ficksburg, Senekal, Marquard and Clocolan, as well as some surrounding rural areas of 5880.95km^2 (refer to Map 1). The 2016 Community Survey indicated a total of 37338 erven for the Municipality.

3.1.1 FICKSBURG/MAQHELENG/CALEDON PARK

Ficksburg is located west of the Maputsoe Bridge at the border of between South Africa and Lesotho. The town is situated at the foot of the 1 750m high Imperani Mountain. The town is 200km north-east of Bloemfontein (via R708/R26 route) and 370km south of Johannesburg (via N3 route). It encompasses 25,99km^2 of the municipality with 13621 erven according to the 2011 Census (Setsoto Local Municipality Draft IDP 2017-2020).

3.1.2 SENEKAL/MATWABENG

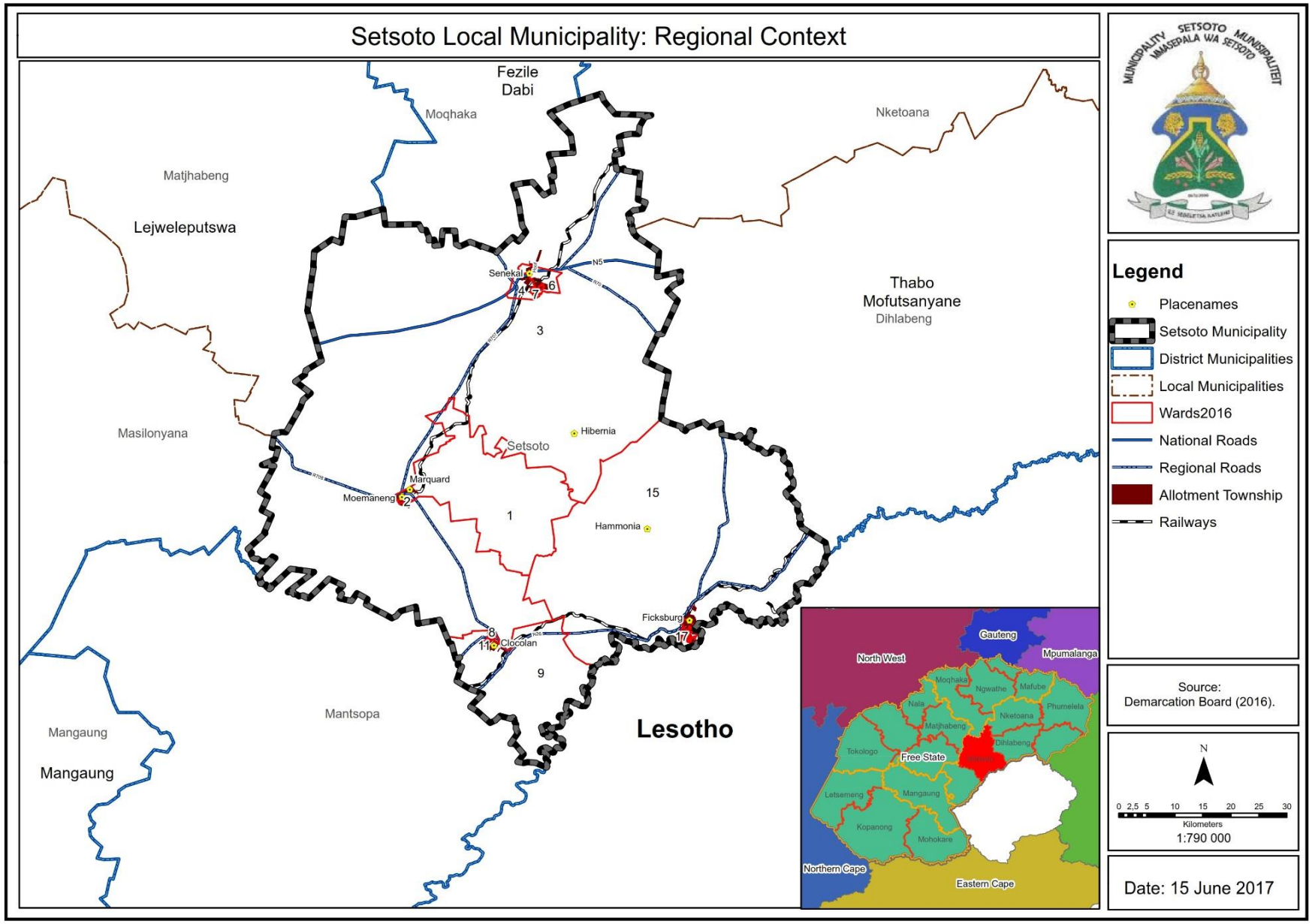
The town, Senekal, is located on the banks of Sand River north of the Moetlamogale Uplands on the N5 national in between the N1 at Winburg and the N3 to Durban via Bethlehem and Harrismith. It encompasses 37.05km^2 of the municipality with 9387 erven according to the 2011 Census (Setsoto Local Municipality Draft IDP 2017-2020).

3.1.3 MARQUARD/MOEMANENG

The small farming town, Marquard is situated in the Eastern Free State, at the centre of the Moetlagamale Uplands towards the west at the junction of the R708 from Clocolan to Winburg and the N1, as well as the R707 to Senekal and the N5 to Harrismith. It encompasses 3.42km^2 of the municipality with 4460 erven according to the 2011 Census (Setsoto Local Municipality Draft IDP 2017-2020).

3.1.4 CLOCOLAN/HLOHLOLWANE

Clocolan is located west of Prynnsberg along the Maluti Route, 20km from the Caledon River and 160km north-east of Bloemfontein. The routes R703 to Excelsior intersects with the R708 at Clocolan. It encompasses 18.96km^2 of the municipality with 6219 erven according to the 2011 Census (Setsoto Local Municipality Draft IDP 2017-2020).



Map 1: Demarcation of the Study area
Source: Demarcation Board (2011)

3.2 BIOPHYSICAL ANALYSIS

Setsoto Local Municipality (SLM) comprises of various natural resources; however, it comprises of only two protected area which privately owned. There are hydrological features such as wetlands, rivers and dams. The area also comprises of a grassland biome and sandstone formations with potential for mining, however these natural resources are face with challenges of environmental degradations (Setsoto Local Municipality Integrated Environmental Management Plan 2015).

3.2.1 VEGETATION

As mentioned above the SLM is characterized by grassland biome which consist of the following various vegetation types; Basotho Montane Shrubland, Bloemfontein Karroid Shrubland, Central Free State Grassland, Eastern Free State Clay Grassland, Eastern State Sandy Grassland, Eastern Free State Temperate Freshwater Wetlands, Highveld Salt pans, Lesotho Highlands Basalt Grassland, Vaal-Vet Sandy Grassland and Winburg Grassy Shrubland (refer to Map 2).

The area is mostly dominated by Eastern Free State Clay Grassland. Basotho Montane Shrubland appears on the south-western part of the Municipality. Vaal-vet Sandy Grass appears on the northern part around Middlespruit River while Winburg Grassy Shrubland appears on the northern part of the Municipality along the Aldam Dam. The municipality has two different types of farming namely crop farming and stock farming. Due to fertile soil and good climatic condition wheat, maize, cherries and cattle farming is some of the main agricultural opportunities in this Local Municipality (Setsoto Local Municipality IDP 2016/2017).

3.2.2 HYDROLOGY

The hydrological features within SLM comprises of rivers, dams and wetlands. Aldam Dam is situated on the north-western side of the Municipality but only a part of it falls within the municipal boundaries. As depicted in Map 3, SLM has three water management areas covering 596635, 9 ha namely:

- Middle Vaal WMA;
- Unknown WMA; and
- Upper Orange WMA.

The municipality has 8 rivers in the municipality which are Caledon, Klein-Vet, Laaispruit, Meulspruit, Mopeli, Sand, Sandspruit and Wonderkopspruit.

The groundwater recharge of the municipality is presented in the Map 4. The highest groundwater recharge ranges from 114mm to 451mm while the lowest groundwater recharge ranges from 0mm to 63mm. The lowest ground water recharge is mostly received on the north-western side in some parts of Marquard

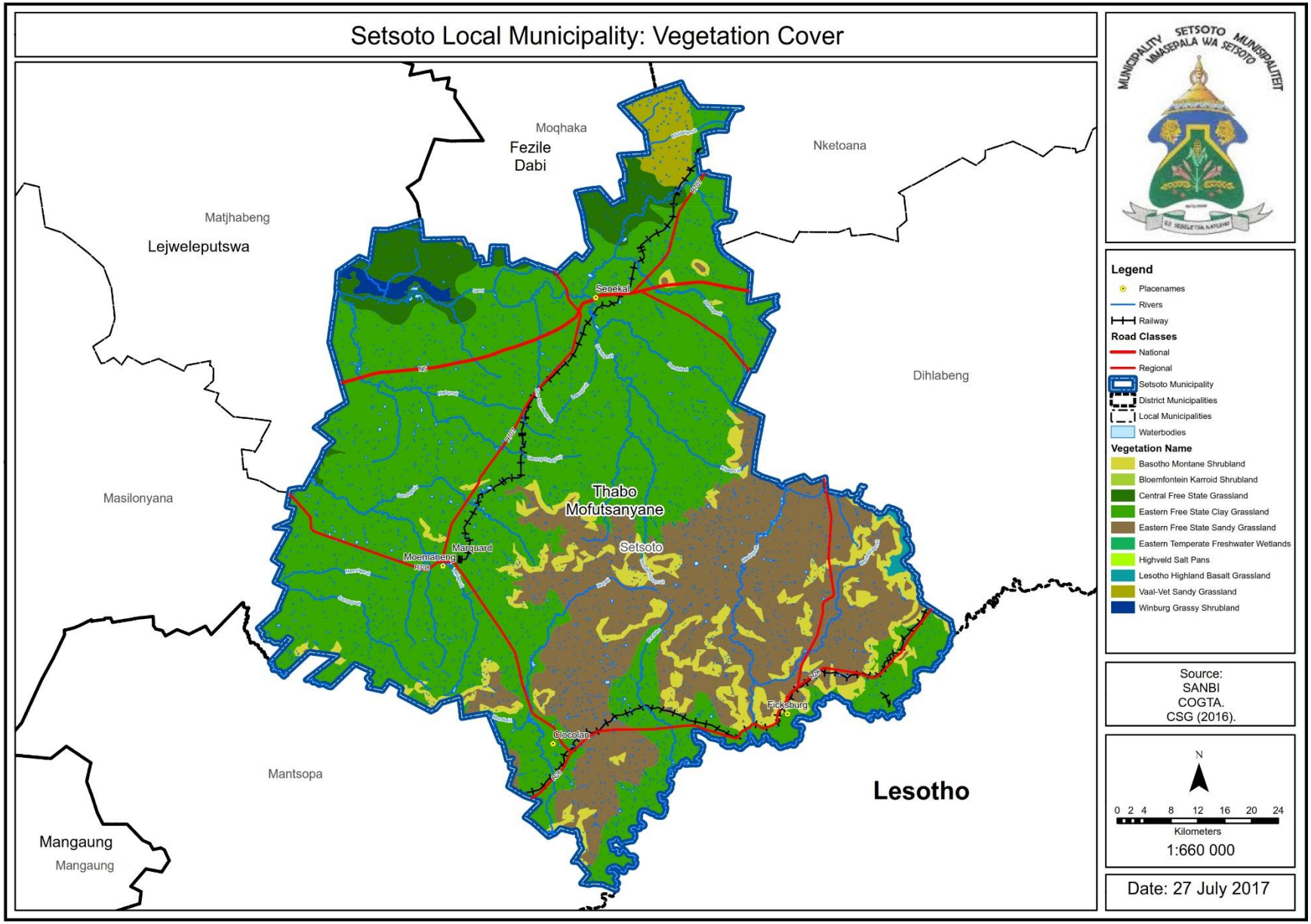
which stretches to the northern part until Senekal town and the highest ground water recharge is received on the southern side in areas such as Ficksburg and parts of Clocolan. This means the south-eastern side of the Municipality which includes Ficksburg, has a potential for groundwater harvesting. There are wetlands all over the municipality in which few of them are surrounding Ficksburg and Senekal towns while Clocolan and Marquard towns are surrounded by many wetlands. The wetlands are also depicted in Map 4.

3.2.3 GEOLOGY

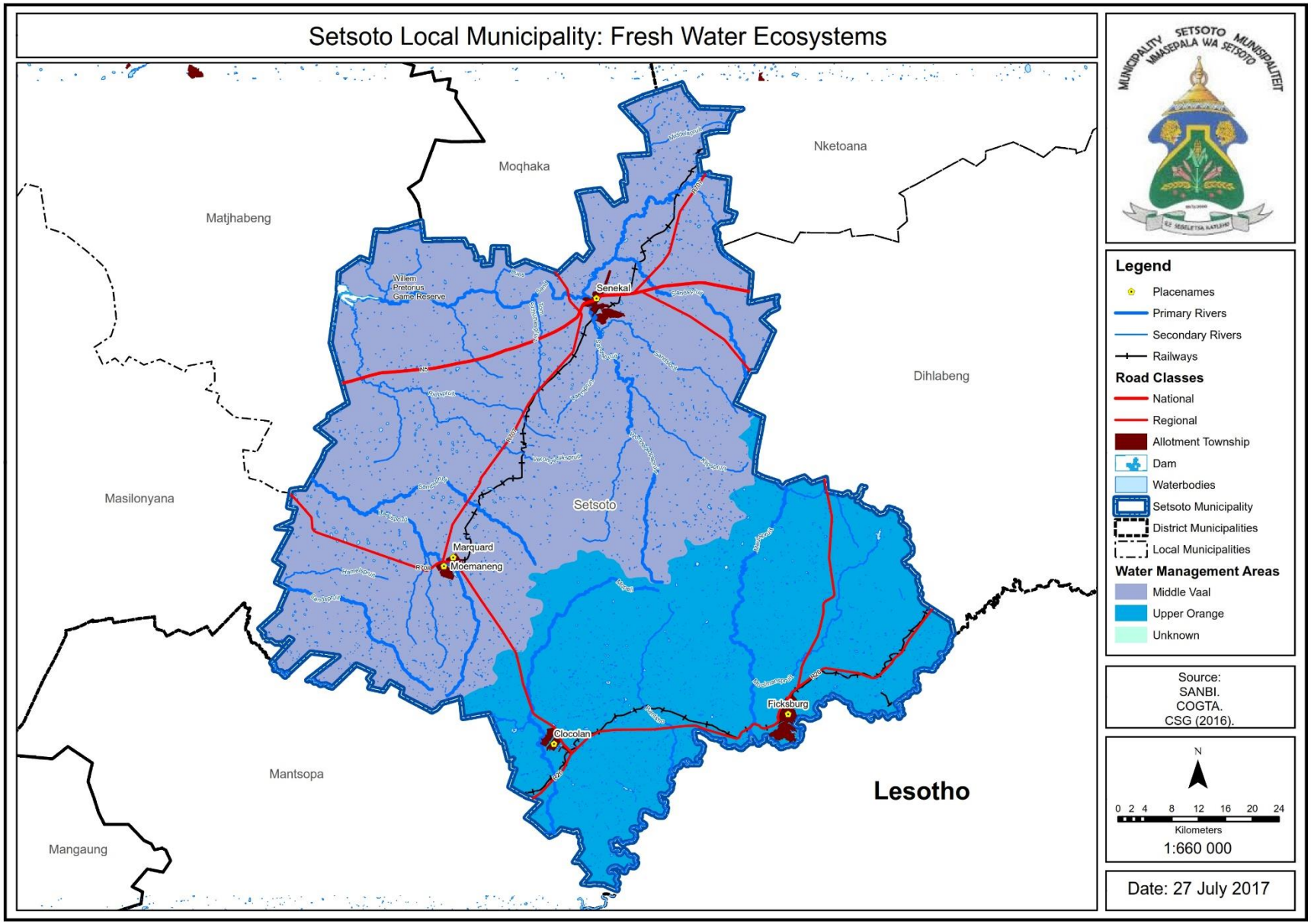
In terms of SLM Paleontological Impact Assessment Report for Solid Waste Management 2012, the high laying areas are dominated by the Dolerite sills, while the valley floors are characterized by the Quaternary sediments. The geological characteristic of the Municipality, comprises of Beaufort group of the Karoo Super-group of which consist of Adelaide, Clarens, Ellot, Molteno and Tarkastad geological forms (refer to Map 5). Adelaide geological form is evident on the northern side of the municipality, while Clarens, Ellot, Molten are evident on the southern side of the Municipality while Tarkastad is evident on the central part of the Municipality. The Setsoto Local Municipality Integrated Environmental Management Plan (2015) highlighted that the Municipality comprises of sandstone formations with potential for mining.

3.2.4 PROTECTED AREAS

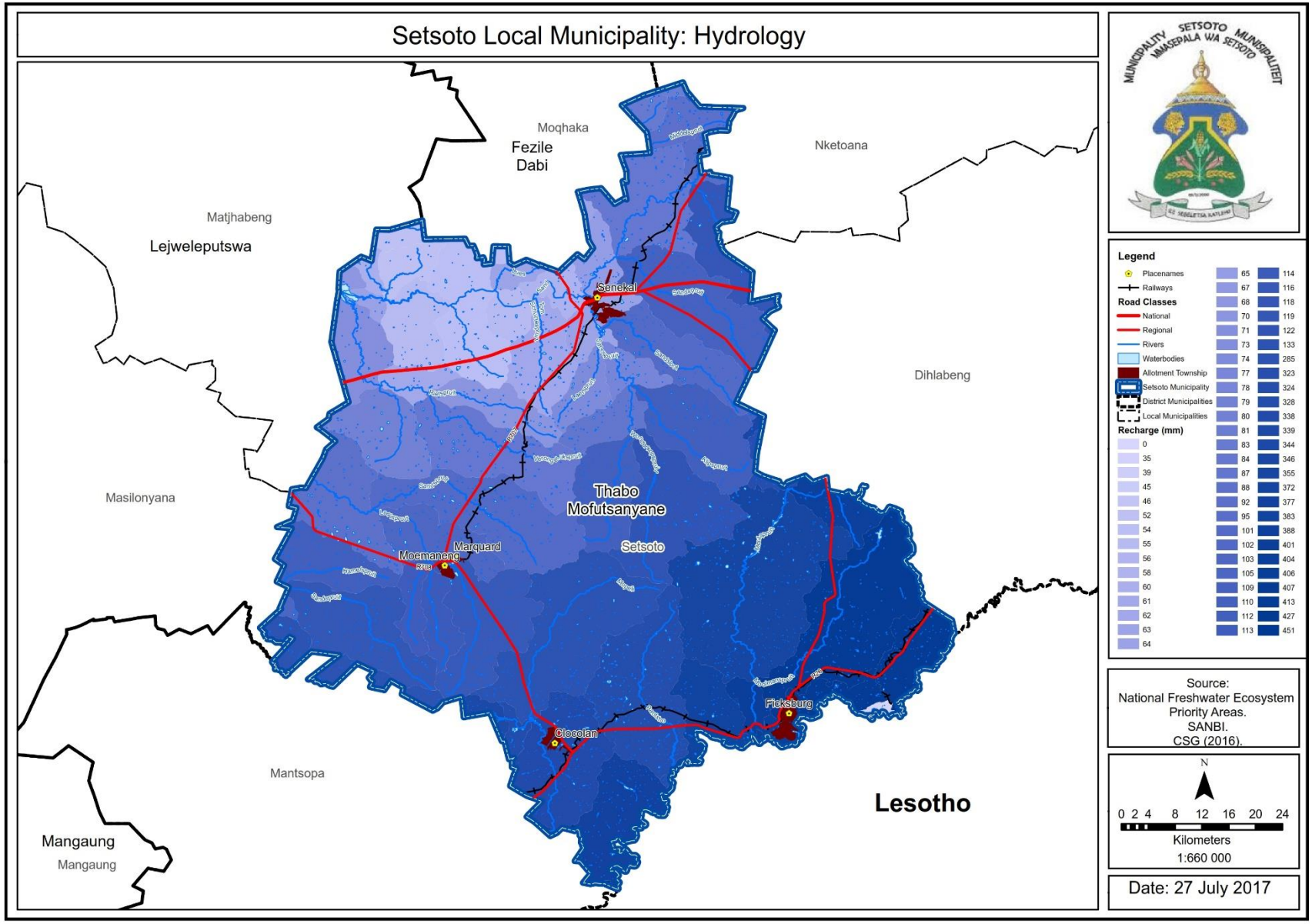
SLM consists of only two protected areas which include part of the Willem Pretorius Nature Reserve and Ficksburg Nature Reserve, as depicted in Map 6. Ficksburg Nature Reserve is located along the R26 road, on the west of Ficksburg. The Meulsprit River passes through the nature reserve and intersects with R29 road. It comprises of many various species of which includes goliath herons, malachite, kingfishers and fish eagles. The Willem Pretorius Nature Reserve covers an area of approximately 12 000 hectares. The Allemanskraal dam is part of the nature reserve and Sand River passes through it. The reserve consists of hills covered by wild olive, grass-veld and patches of sweet thorn trees, karee trees and densely vegetated kloofs (Setsoto Local Municipality Paleontological Impact Assessment Report for Solid Waste Management 2012). The Municipal area comprises of biodiversity, wetlands and some vegetation which are considered endangered and vulnerable of which there is a need for conservation (Setsoto Local Municipality Integrated Environmental Management Frame 2015).



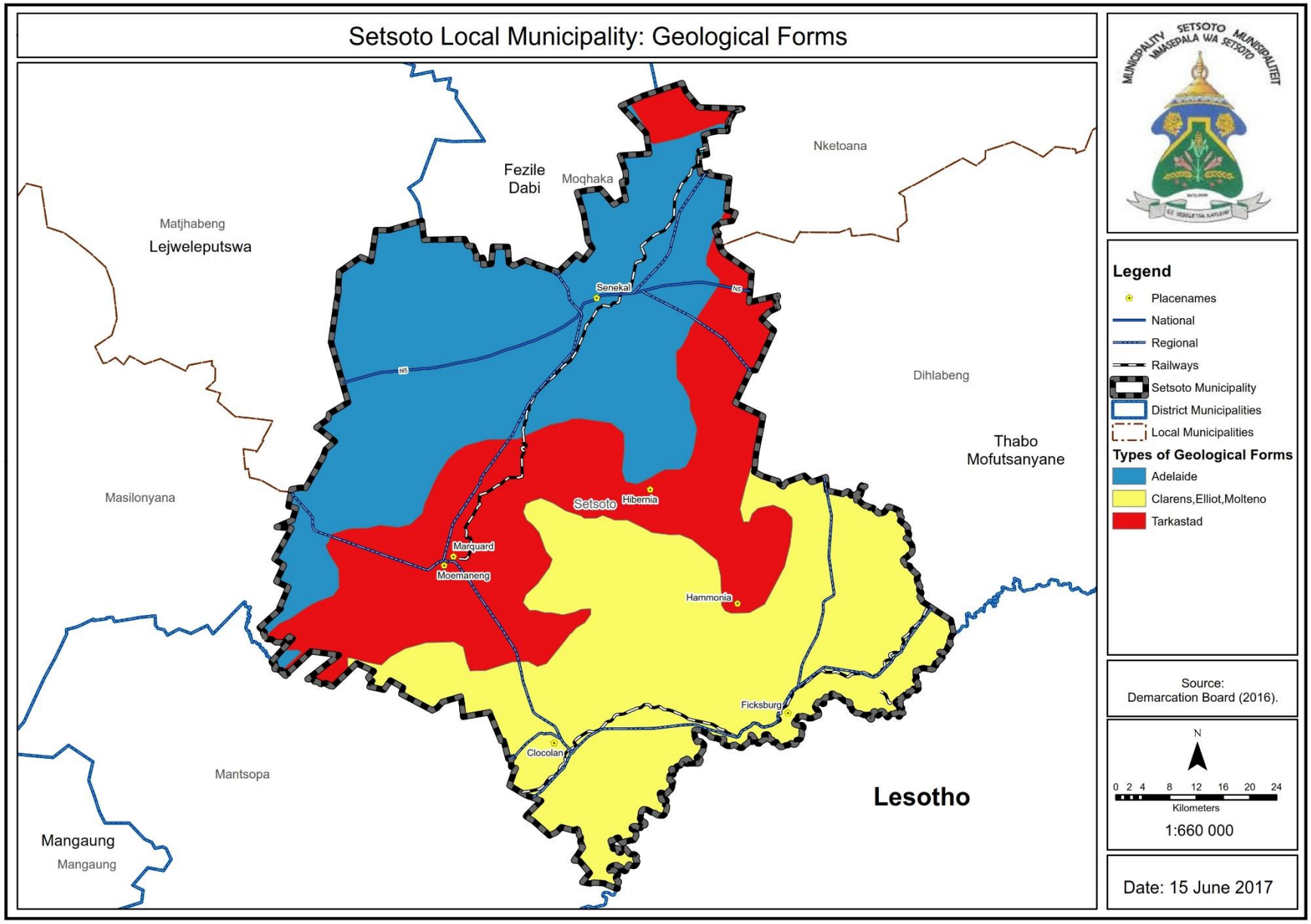
Map 2: Vegetation Cover
Source: South African National Biodiversity Institute



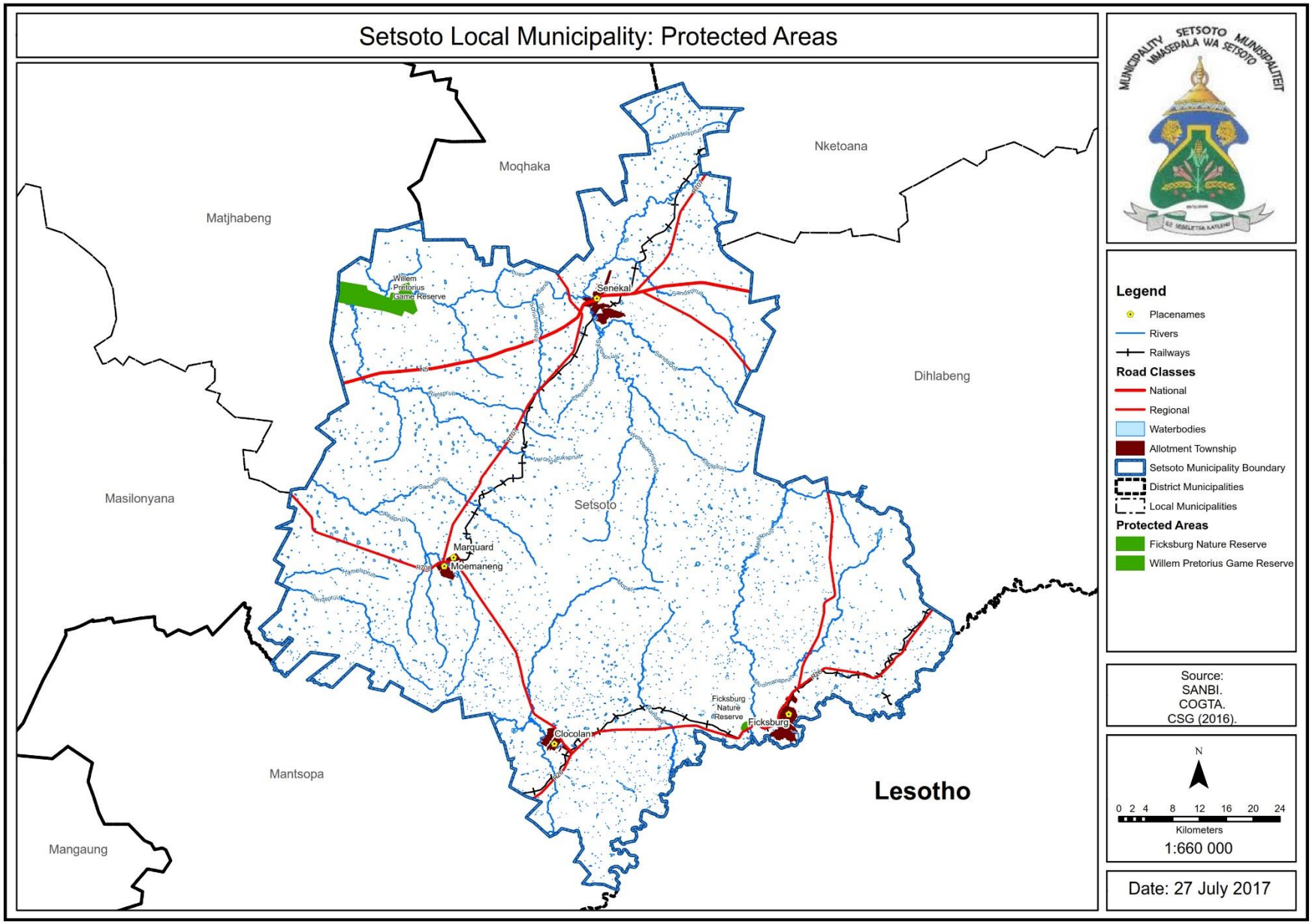
Map 3: Freshwater Ecosystems
Source: South African National Biodiversity Institute



Map 4: Hydrology
Source: South African National Biodiversity Institute (2011)



Map 5: Geological Form
Source: Department of Environmental Affairs



Map 6: Protected Areas
Source: South African National Biodiversity Institute

3.2.5 AGRICULTURE

The Setsoto Local Municipality Integrated Development Plan, 2016/17 indicates that the Municipality has quality soil which is suitable for agriculture that is coupled with suitable climate. Soil potential is regarded as a main issue which determines the agricultural potential of an area. However, soil potential is also largely influenced by climate and other factors. The various soils found in the SLM have potential with regard to various land uses and their location. SLM covered by soils which are of provisional suitability for arable agriculture. Soils of poor suitability for arable agriculture are located from the central (around Marquard) to the northern parts of the municipal area (Senekal). Soil of intermediate suitability for arable agriculture is mostly located east of Marquard down to Ficksburg. Soil with very high arable agricultural potential is located in the south eastern most corner of the municipality. Table 4 represent different minerals in SLM as well as their soil profiles this is essential for the soil potential since soil minerals play a vital role in soil fertility.

Table 4: Soil profiles for different minerals in Setsoto LM

MINERAL	*SOIL PROFILE*
ARENITE	• In most cases Arenites occur within recent sand deposits forming more local harder zones. • Weathering of Arenites results in a sandy material consisting of medium sized quartz grains. • The residual material is seldom deeper than 1m.
BASALT	• The weathering of Basalt results in a clayey silt or silty clay soil depending on the rainfall and topography of the specific area. • In the mountainous regions erosion rates are very high with virtually no soil cover except in the river valleys. • On the Springbok Flats the weathering of Basalt has resulted in so-called black cotton soil, which is a dark brown to black highly expansive clay.
DOLERITE	• In terms of climate, the weathering of Dolerite can be classified into three types: In the western drier regions, disintegration of Dolerite results in a gravelly soil. In the semi-arid regions, some minerals decompose forming a sandy soil. In the wetter eastern parts, all the primary minerals are susceptible to decomposition resulting in a clayey soil. • The clays are generally red in colour and may be quite thick.
MUDSTONE	• Mudstone weathers to a clayey soil, which may have expansive characteristics depending on the original mineralogy of the soils from which the rock formed. • In some areas mudstone is weathered to great depths. • The soils of Mudstone are usually highly erodible and dispersive.

The Municipality practices various agricultural activities which include livestock, poultry, vegetable, dairy and agro-processing and other crops. The northern and eastern part of the Municipality practices mostly crop farming and on the central and western parts of the Municipality there are livestock farming (Setsoto Local Municipality LED Strategy 2014).

The Municipality has identified Ficksburg on the western side of Meqheleng, Clocolan on the eastern part of the road to Excelsior, Marquard on the eastern side nearby the show ground for the pasturing of animals on a common land. The Municipality also undertook planning on the development of intensive horticulture and dairy farming. The IDP (2016/17) has also indicated that there is a need for skills development, training and funding for agriculture within the Municipality. It was noted that the availability of quality soil and climatic condition to develop the agricultural sector properly can be capitalised upon while the development of a local agricultural strategy that is aligned to the current Free State Agricultural Masterplan, should be focused on to unleash the full potential for agricultural development which incorporates skills development and training and funding opportunities to align with the Municipal IDP.

Setsoto Local Municipality comprises of two bio regions namely; Moetlagamale Uplands and Witterberg Mountains. The soil for arable agriculture in Moetlagamale Uplands is poor; however, this bio region is good for cattle farming while maize farming is produced on lesser scale. It is dominated by agricultural activities while tourism is to a lesser extent preferred. The bio region comprises of undulating plains and the eastern part is hilly when approaching the Witterberg Mountains. The bio region has potential for renewable energy in the form of solar energy.

The soil for arable agriculture in Witterberg Mountains is good and it has potential for forestry; however, this bio region is suitable for maize while cattle farming is produced on lesser scale. In this region tourism is the dominant activity rather than agricultural. The area is distinctive and characterful with the Witterberg Mountains with its profusion of distinctive sandstone cliffs and dramatic valleys opening to the Caledon River and the Maluti Mountains in Lesotho to the East. The bio region has low potential for renewable energy in the form of solar energy.

3.2.6 CLIMATE CHANGE

Climate change is defined as, according to IPCC (2015), the change in the state of the climate that can be identified by changes in the mean and the variability of its properties and that persists for a period of 10 years or more. It is mainly due to an excessive amount of greenhouse gases emitted to the atmosphere due to human activities. South Africa has regarded climate change as the most significant environmental challenge which poses threat to the human population.

Furthermore, the Free State Climate Change Response Strategy (2013) has indicated that the province should expect warmer and wetter winters and hotter, drier summers in the future.

Free State Province has been experiencing extreme weather events which may have been attributed by climate change impacts which includes drought, heat waves, frost, flooding and storms. During 2015 and 2016 the Free State Province has been declared a disaster area in terms of the drought. Setsoto Local Municipality, especially in Senekal, was one of the local municipalities in the Free State Province which were mostly affected by this disaster.

a) Climate change risks

Climate Change impacts results in the following aspects as predicted by the IPCC, 2014;

- Higher temperatures
- Altered rainfall patterns
- More frequent or intense extreme weather events including heat-waves, droughts, storms and floods
- Rising sea levels

The implications of the above predicted climate change impacts and climatic changes will impact on the physical environment which will ultimately impact on the sustainability of human livelihoods. SLM is prone to various disasters which some of them may be related to climate change namely (Setsoto Local Municipality DMP, 2014);

- Drought
- Hail
- Windstorm
- Tornado
- Floods
- Structural fires
- Veldt fires
- Hazmat transportation
- Hazmat biological
- Transport motor vehicles
- Snow

b) Water Sources

Extreme weather conditions such as drought and flooding can have a negative influence on water management areas, rivers and wetlands. Drought accelerate high evaporation of water and leading to loss of water in water management areas, rivers and wetlands. Flooding can also affect water management leading to overflow of water which busts water management area walls. It can also lead to water pollution that may lead to more cost for clean drinking water. SLM is one of the municipalities in South Africa that are facing water challenges. Lately the water challenges in SLM have been exacerbated by the drought which the municipality has been experiencing for the past two years especially Senekal.

While considering the development of water infrastructure, the erection of structures or any proposed development should only be allowed at 1:50-year floodline (32m) with the minimum buffer zone of 10m. This will ensure that no development will have any direct impact on the natural flow of streams and rivers. Measures should be in place as development can contribute to water pollution and also affect the water tables negatively which will eventually affect wetlands negatively). No earthworks and backfilling should be allowed in the 1:50-year floodline. In addition, concrete channelling is not allowed near the rivers (CSIR, 2005).

For the municipality to adapt, respond and address the water challenges they are facing, there are measures that need to be taken into consideration. These include, rainwater harvesting as well as water recycling. Rainwater harvesting is one of the measures that have become popular recently. This is due to a push towards water conservation. Rainwater harvesting is mostly found in the areas where water is polluted or is scares. Since SLM is a water scares region, it will be better to consider rainwater harvesting.

Recycling water as one of the options can be considered in Setsoto LM. This can be achieved by cleaning the effluent from the wastewater treatment facilities that is released into the rivers. The effluent can be diverted to the water purification facilities to be cleaned and used again. This can assist in combating the challenges regarding shortage of water within the Municipality. The use of water from the oxidation ponds for irrigation by farmers and golf courses is encouraged since it lessens the pressure on ground water and water resources in general.

c) Air Quality

Air quality in various areas of the country is affected by pollutants emitted by various sources. These sources include power generation activities, industrial processes, waste disposal, transportation (private and public vehicles), biomass burning, domestic fuel burning, landfill sites, waste water treatment and

agriculture. In South Africa, outdoor and indoor air pollution continues to be perceived as a serious with emissions for Sulphur dioxide, particulate matter, nitrogen oxide, ozone, and benzene.

There are different sources of greenhouse gas emission within the Free State Province and these gases are emitted by various activities namely: agricultural activities, biomass burning, domestic fuel burning, denuded land, landfill disposal sites, Listed Activities, mining activities, small industries, vehicles and waste water treatment works.

- **Sources of greenhouse gases at Setsoto Local Municipality**

SLM has various activities which are the source of greenhouse gases; a summary of these activities is represented graphically in Table 5.

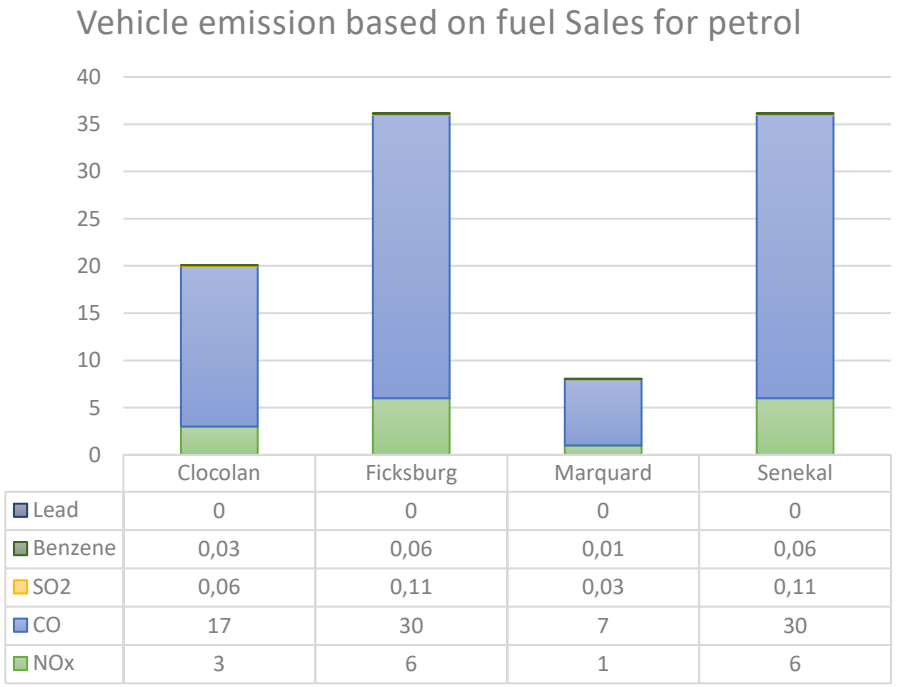
Table 5: Biomass emission at Setsoto Local Municipality.

Source	*SO2*	*NO*	*PM10*
Paraffin	57.89	6.13	0.82
Coal	2167.23	747.32	2241.96
Wood	90.42	587.73	7821.33

Source: Setsoto Local Municipality IEMP (2015-2020)

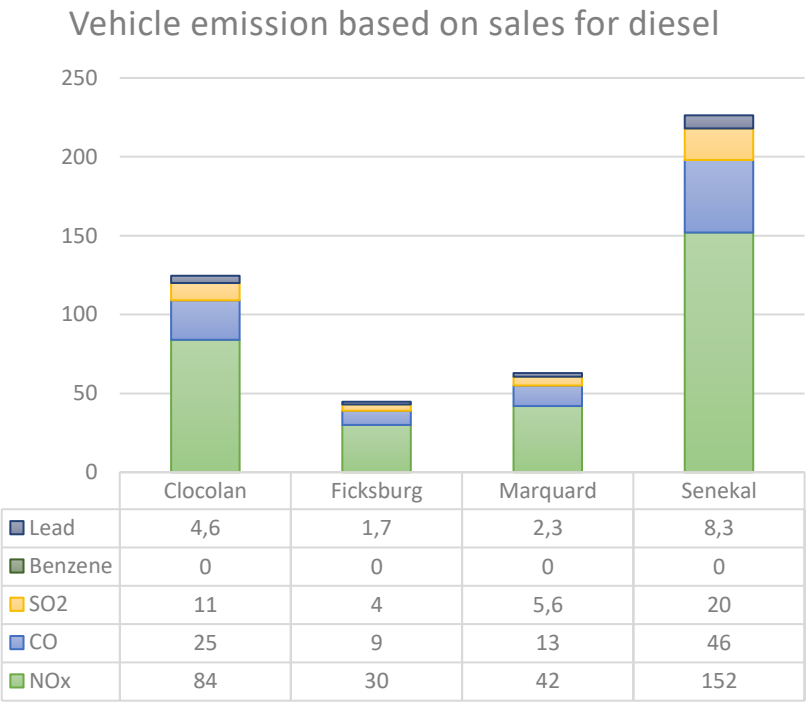
- **Vehicle emission**

Figure 2 represents vehicle emissions based on fuel sales for petrol in Clocolan, Ficksburg, Marquard and Senekal. The following gases; Lead, Benzene, So2, CO and NOx are emitted by vehicles. Ficksburg and Senekal have the highest vehicle emission based on the sales for petrol, followed by Clocolan and Marquard. The highest vehicle emission is 30 and the lowest is 7.



	Clocolan	Ficksburg	Marquard	Senekal
Lead	0	0	0	0
Benzene	0,03	0,06	0,01	0,06
SO2	0,06	0,11	0,03	0,11
CO	17	30	7	30
NOx	3	6	1	6

Figure 2: Vehicle emission based on fuel sales for petrol



	Clocolan	Ficksburg	Marquard	Senekal
Lead	4,6	1,7	2,3	8,3
Benzene	0	0	0	0
SO2	11	4	5,6	20
CO	25	9	13	46
NOx	84	30	42	152

Figure 3: Vehicle emission based on sales for diesel

Source: Setsoto Local Municipality IEMP (2015-2020)

Figure 3 represents vehicle emission based on sales for diesel in Clocolan, Ficksburg, Marquard and Senekal. The following gases; Lead, Benzene, SO2, CO and NOx are emitted. The highest vehicle emission is at Senekal and the lowest is at Ficksburg. NOx is the most emitted gas with 152 followed by benzene which is not emitted at all by vehicles which utilizes diesel.

SLM has boilers which contribute to air quality at the municipality due to their emissions of boilers. Figure 4 has represented emission from small boilers namely Clocolan Hospital, Ficksburg District Hospital and Senekal Provincial Hospital which they emit the 4,800 Ton/Year.

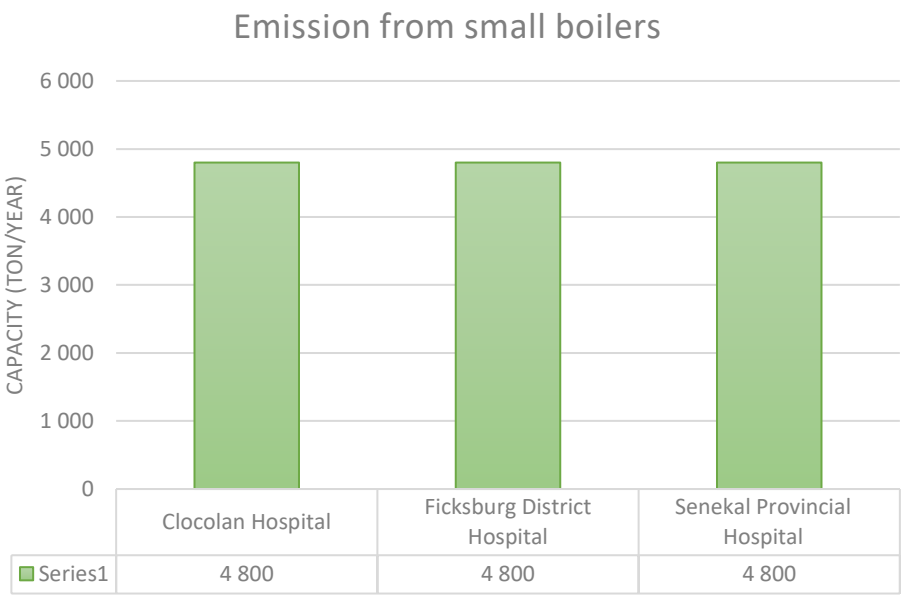


Figure 4: Emission from small boilers

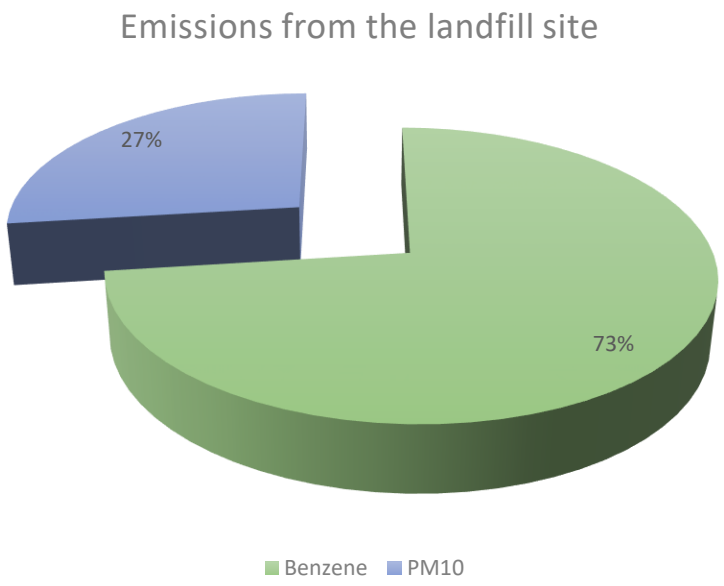


Figure 5: Emission from the landfill sites

Source: Setsoto Local Municipality IEMP (2015-2020)

Figure 5 represents emissions from the landfill sites at SLM which the highest emission is Benzene with 73% followed by PM10 which is 27%.

d) Mitigation

Climate Change Mitigation refers to efforts to reduce or prevent emission of greenhouse gases. Mitigation can mean using new technologies and renewable energies, making older equipment more energy efficient, or changing management practices or consumer behaviour. Climate change mitigations include actions taken to limit changes in the global climate caused by human activities. Mitigation activities are designed to reduce greenhouse gas emissions and to increase the amount of greenhouse gases removed from the atmosphere by greenhouse sinks. Mitigation cannot stop climate change and its impacts from happening; as the greenhouse gases are already released into the atmosphere and will remain there for many years.

e) Energy

According to the Setsoto Local Municipality IDP,2016/17 the municipality has few number of households utilising solar energy, compared to the number of households utilizing other sources of energy such as electricity, paraffin, candles and gas. The municipality can increase the number of households to utilize solar energy and other renewable energy since it reduces greenhouse gases which is mostly from generation electricity.

f) Extreme weather events mitigations

Drought

In order to adapt drought to climate change people need to save water and use water in a sustainable way. Water can be saved in the following ways;

- People who use more water pay an increasing higher price for it
- Introduce high tolerates plants/grass to drought because native plants can save 100,000 gallons of water per year

It is recommended that the municipality consider water recycling, ground water and rain water harvesting. Rainwater harvesting has various advantages namely; it is easy to maintain, reducing water bill, suitable for irrigation, reduces demand on ground water, and reduces floods and soil erosion. Recycling of water reduced the pressure of depending on natural rehouses for fresh water and decreases waste of water.

Floods

- Reforestation in rural and urban areas, vegetation reduces surface run off
- Building dwellings that are more resistant to flooding and do away with mud structures
- People who live near the coast or river must build their homes on an elevated to a height above the area predicted food level rise
- For people who are already living on a flood zone when building choose flood damage-resistant material such as glazed bricks, concrete, stones, steel and recycled plastic lumber.
- Rather than paving a drive way, choose materials such as pavers that allow water to seep through them into the ground or gravel

The use of ecosystem-based adaptation strategies

Large-scale labour-intensive clearing of invasive alien vegetation in mountain catchments to increase water supply to urban centres affected by drought as a result of climate change, and large-scale restoration of water catchments and wetlands to ensure they provide a good buffer effect and filtration service during floods.

Temperature

- Keeping the streets unpaved or grassy surfaces because paved surfaces absorb radiation and keep heat for longer
- As temperatures are generally higher as one is closer to the ground, people should build houses that are not close to the ground

Health service

Health actions which can be taken will include;

- emergency medical services;
- improved climate-sensitive disease surveillance and control;
- Safe water and improved sanitation

3.3 SOCIO- ECONOMIC ANALYSIS

An overview was provided for SLM with regard to the socio-economic characteristics within the municipal area followed by an analysis of the demographic features and indicators that assisted in identifying the localised issues with reference to demographic, access to services and labour force dimensions. It provides a basic overview leading to a comprehensive baseline of the key spatial trends, demographics, educational, income, migration and employment profile within the municipality.

3.3.1 POPULATION COMPOSITION

According to the Community Survey of 2016, the population in Setsoto grew by 0.88% between 2011-2016. The Survey indicated that Setsoto Local Municipality comprise of a total population of 117632 as compared to the 2011 Census which indicated a population of 112597 individuals. This shows that the number of people within the jurisdiction of the municipality increased. Table 6 indicates the place of birth within the Thabo Mofutsanyane District of which 102421 of SLM were born within the local municipality.

Table 6: Region of birth for the Thabo Mofutsanyane District Municipality population

Region of birth	Number of births
Setsoto	102421
Dihlabeng	113945
Nketoana	55502
Maluti-a-Phofung	304906
Phumelela	41452
Mantsopa	45389
Total	**663615**

Source (Stats SA: 2011)

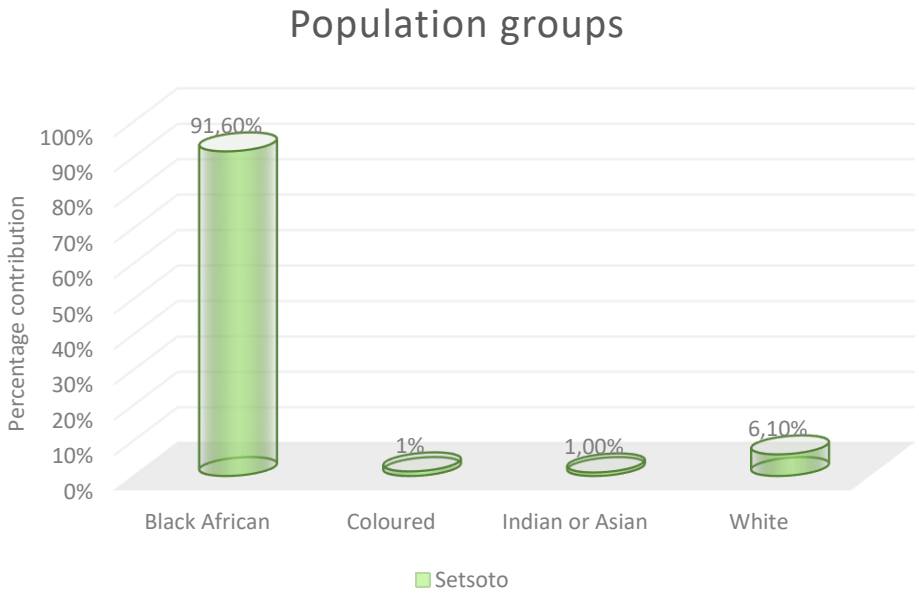


Figure 6: Population Distribution (Source Stats SA,2016)

Figure 6 indicates that the black population makes up 91,6%, 6,1% are white while the coloured and Indians contribute only 1% of the population each, also refer to Map 7 for a spatial representation. Within SLM, the youth accounted for 39 868 during 2011 and increased to 45 957 during 2016 as per Table 7. As can be seen that the youth increased with 6089 people from 2011-2016. This can further be confirmed by the fact that the youth accounts for 39.1% of the total population as per the 2016 Community Survey.

Table 7: Population by Age for Setsoto Local Municipality

	2011	2016
Population	112588	117632
Youth	39868	45957

Source: Community Survey, 2016

The majority of the population (86%) of the municipality has Sesotho as their home language while 7% speaks Afrikaans and 2.18% of the population speaks English. The remaining 3% speak other languages as can be seen in Figure 7.

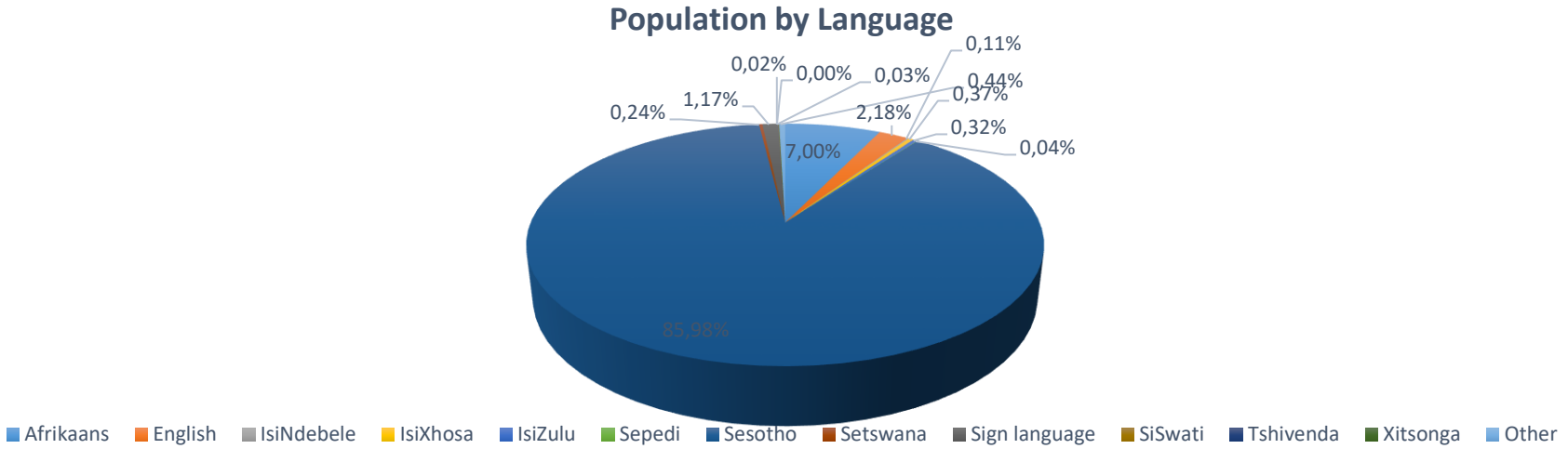


Figure 7: Population by Language (Source, Stats SA,2011)

In Setsoto women contribute 62095 while men contribute 55537of the total population. The numbers show that there has been population increase from 2011 to 2016. From the Figure 8 below it is clear that woman (62095) contribute more to the population of Setsoto LM that the male (55537) population. Even though the females contribute the most to the municipality the male population increase is just a bit higher than the females between 2011 and 2016.

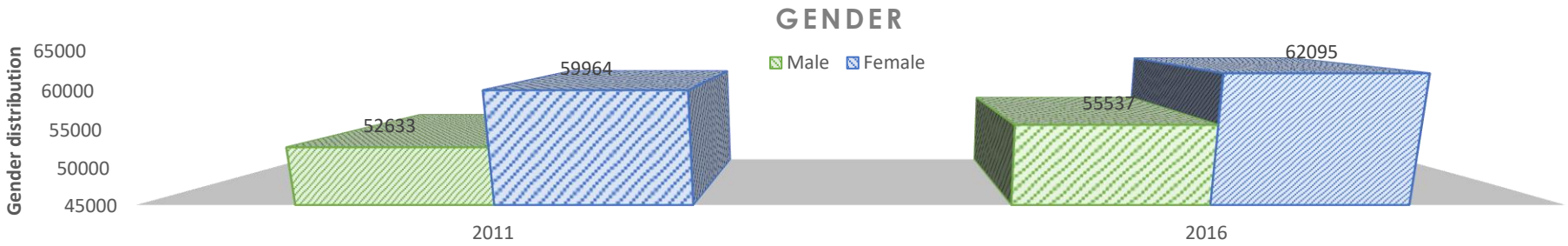


Figure 8: Population by Gender (Source, Community Survey,2016)

3.3.1.1 POPULATION PROJECTIONS

Over the course of 5 years the population of Setsoto Local Municipality grew from 112597 in 2011 to 117632 in 2016, indicating an annual population growth rate of 0,89%. Using the formula below, the population growth projections were made:

$$\boldsymbol{P = P_0(1 + r)^t}$$

Whereby:

P= Future Population

r =rate of growth

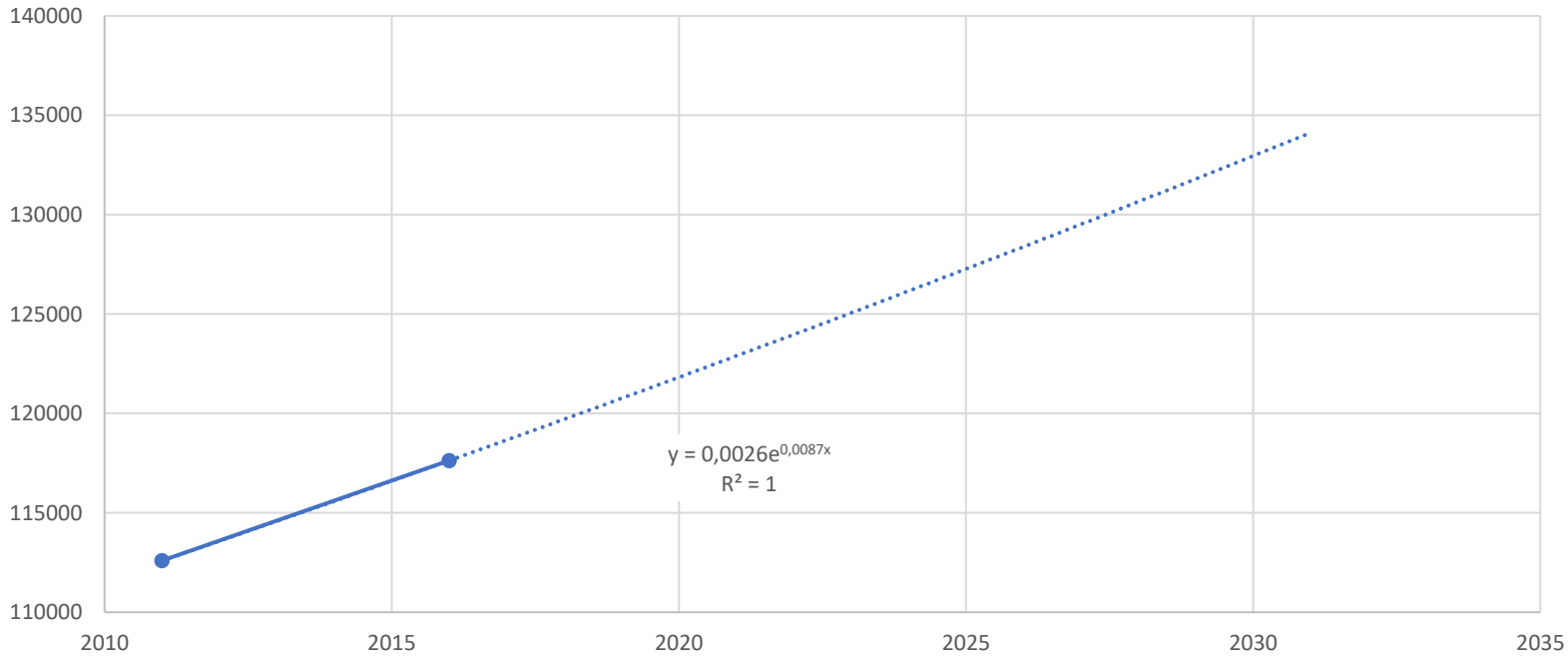
P_0 =Initial Population

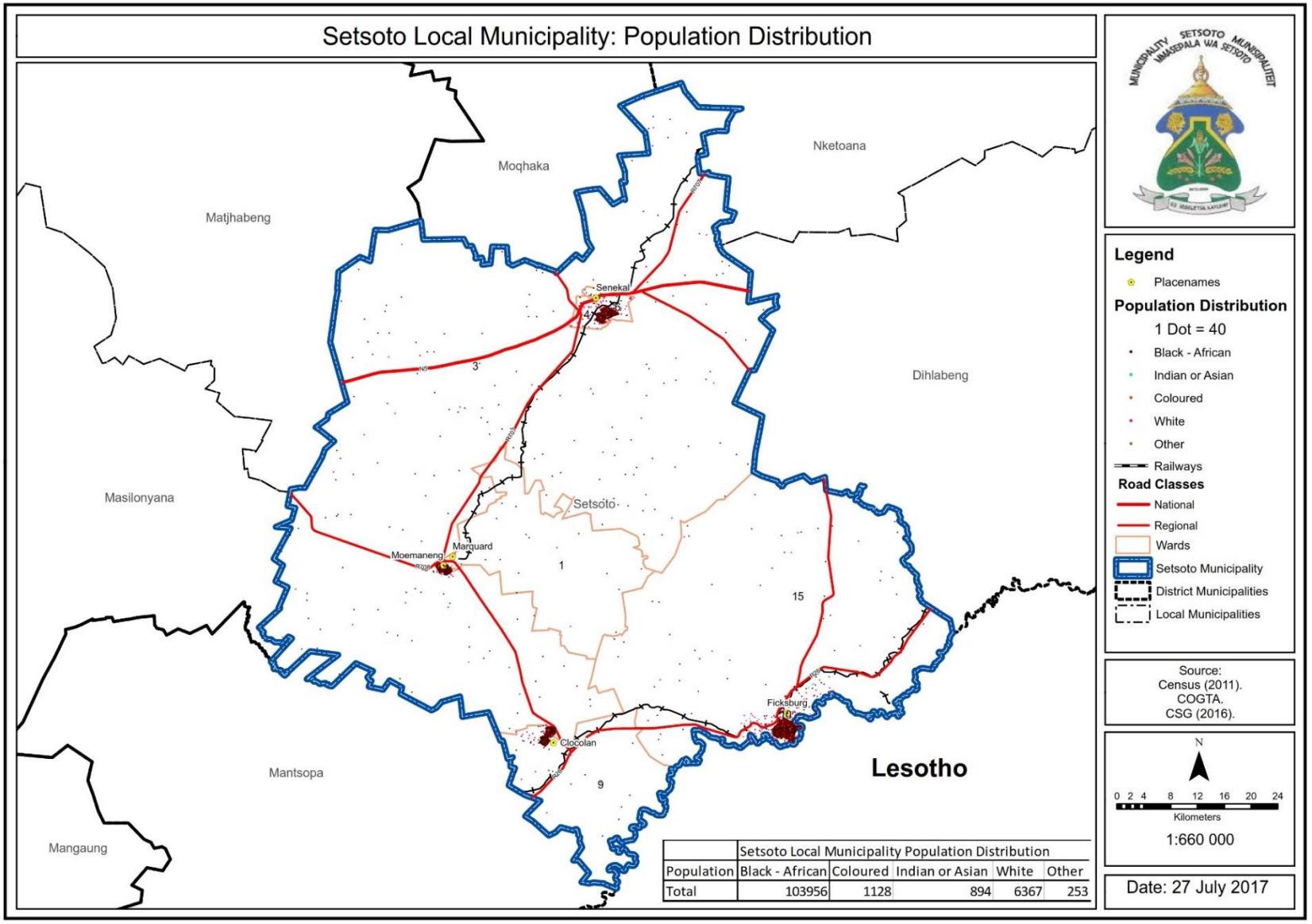
t =time (number of years)

The projections of the population growth of Setsoto Local Municipality in Table 8.

Table 8: Population Projection for Setsoto Local Municipality

Year	*Population*
2011	112597
2016	117632
2021	122961
2026	128531
2031	134353
2036	140439
2041	146801
2046	153451





Map 7: Population Distribution
Source: Stats SA (2011)

3.3.2 EDUCATION LEVEL

A total of 11184 individuals attended at a registered school in Grade 10. The number increased to 19337 for Grade 12, data from the table below shows that no individual attained N1 but 59 individuals have N2 qualifications. There are 414 individuals that have attained N4 qualifications while a total of 232 have N5 qualifications. 199 individuals have N6 qualifications in Setsoto while 900 people have bachelor's degrees, 607 have honours degrees and 149 people have masters or PhD. Also refer to Map 8 for a spatial representation.

Table 9: Educational Levels.

Education Attainment	*Number of People*
Grade 10 /	11184
Grade 11	**8695**
Grade 12	19337
NTC I / N1/ NIC/ V Level 2	**0**
NTC II / N2/ NIC/ V Level 3	59
NTC III /N3/ NIC/ V Level 4	**49**
N4 / NTC 4	414
N5 /NTC 5	**232**
N6 / NTC 6	199
Certificate with less than Grade 12 /	**85**
Diploma with less than Grade 12 /	199
Certificate with Grade 12 /	**752**
Diploma with Grade 12 /	1997
Higher Diploma	**653**
Post Higher Diploma Masters; Doctoral Diploma	262
Bachelors Degree	**900**
Bachelors Degree and Post graduate Diploma	607
Honours degree	**607**
Higher Degree Masters / PhD	149

Source (Stats SA: 2016)

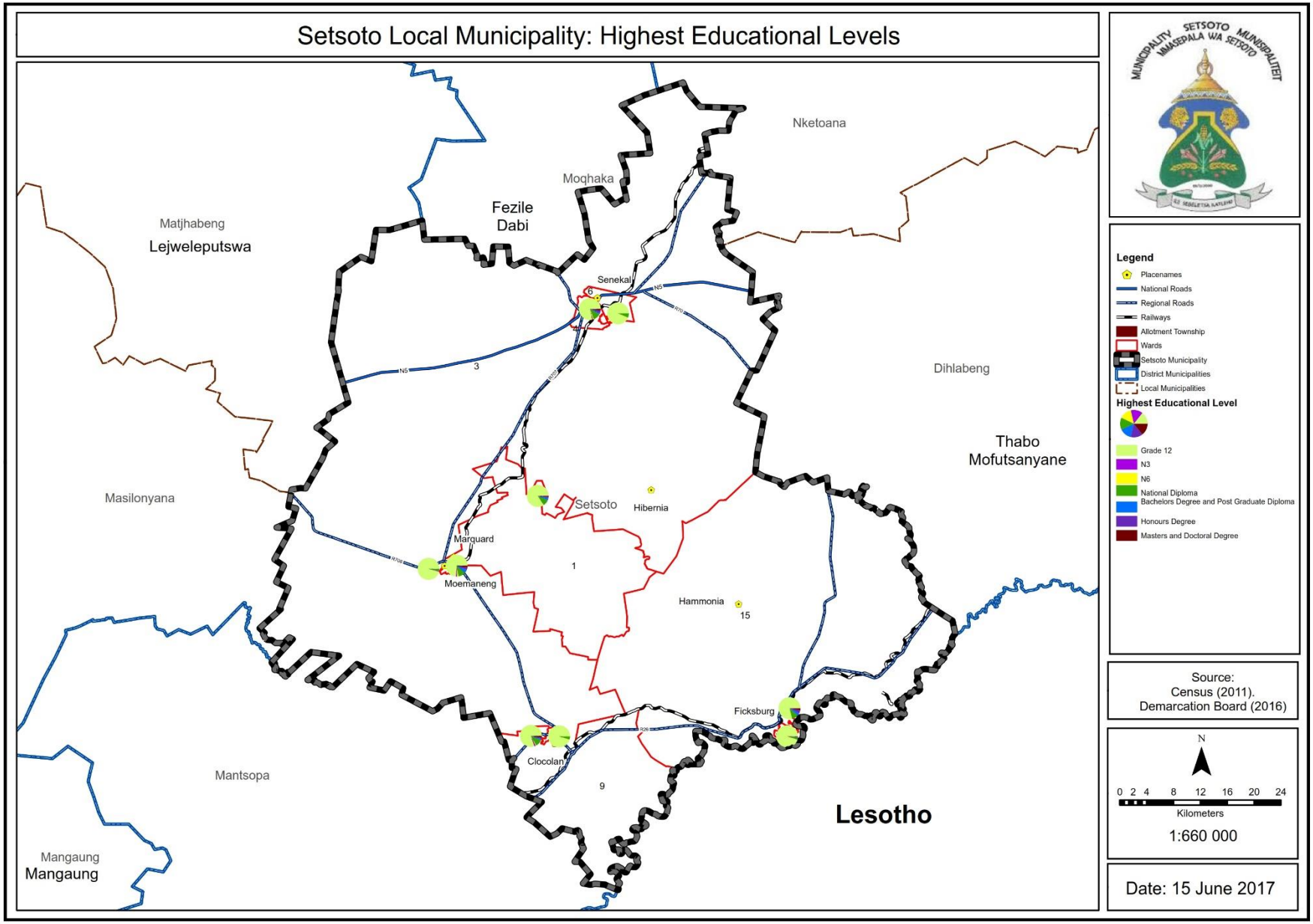
3.3.2.1 SCHOOLS

As can be seen from Table 10, Meqheleng has a total number of 15 pre-primary schools, 5 primary schools, 3 secondary schools and no tertiary schools. Marquard and Moemaneng have only one pre-primary school each and an addition will beneficial not only to the children but the community in terms of distance and accessibility. The number of primary and secondary schools in Meqheleng need to be increased to ensure that learners access a good learning environment. Hlohlolwane has 7 pre-primary schools and the area is only serviced by one secondary school.

Table 10: Number of Schools.

Area	*Pre: primary*	*Primary*	*Secondary*	*Tertiary*	*Special*
Ficksburg	3	2	3	0	1
Caledon Park	2	1	0	0	0
Meqheleng	15	5	3	0	1
Senekal	2	2	1	0	0
Motwabeng	5	5	4	0	0
Clocolan	2	1	1	0	0
Hlohlolwane	7	3	1	0	0
Marquard	1	2	1	0	0
Moemaneng	1	2	1	0	0
Rural	0	147	3	0	0
Total	38	170	18	0	1

Source (Stats SA: 2011)



Map 8: Highest Education Levels
Source: Stats SA (2011)

3.3.3 EMPLOYMENT STATUS

To be considered as unemployed using the strict measure of unemployment, an unemployed person must have taken active steps to look for work or to start some form of self-employment. Figure 9 indicates that 21493 individuals are employed in Setsoto Local Municipality according to the Setsoto Draft IDP 2017-2018. Also refer to Map 9 for a spatial representation.

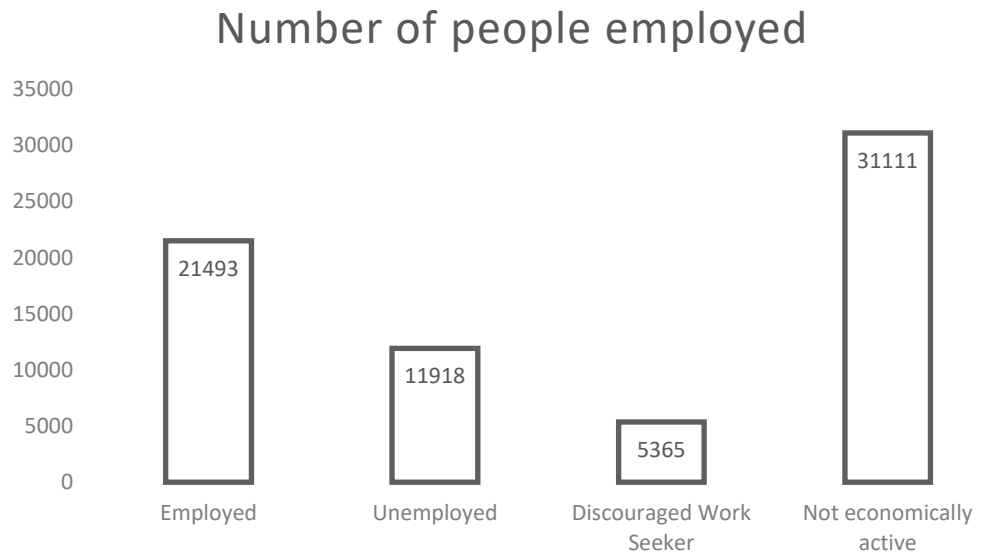


Figure 9: Employment (Source: StatsSA,2011)

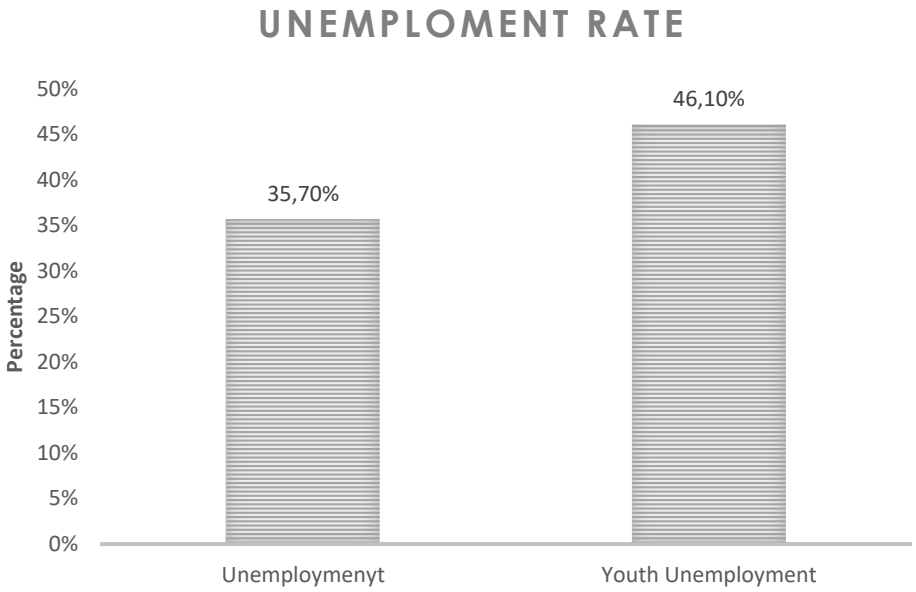
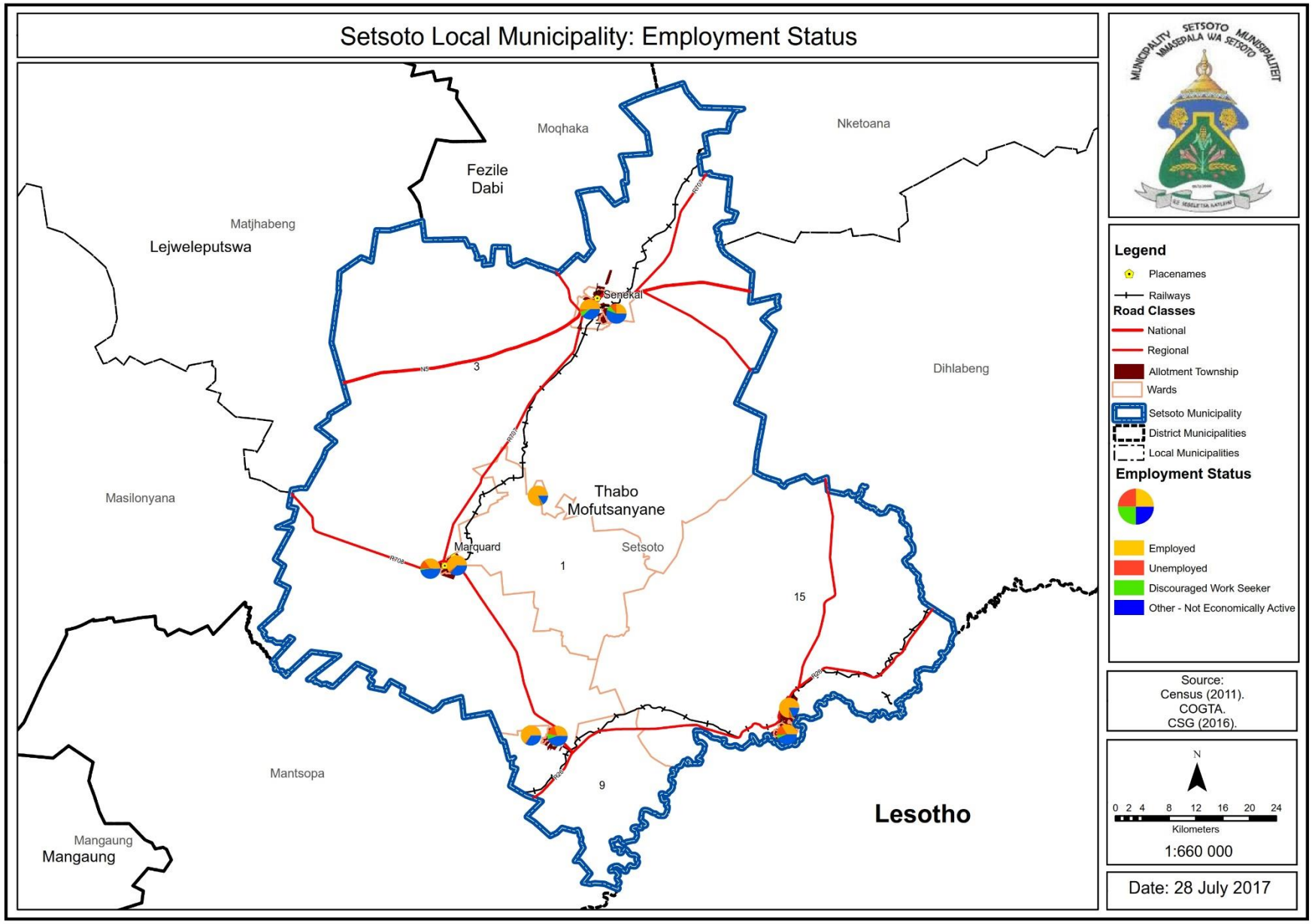


Figure 10: Unemployment Rate (Source: Stats SA, 2011)

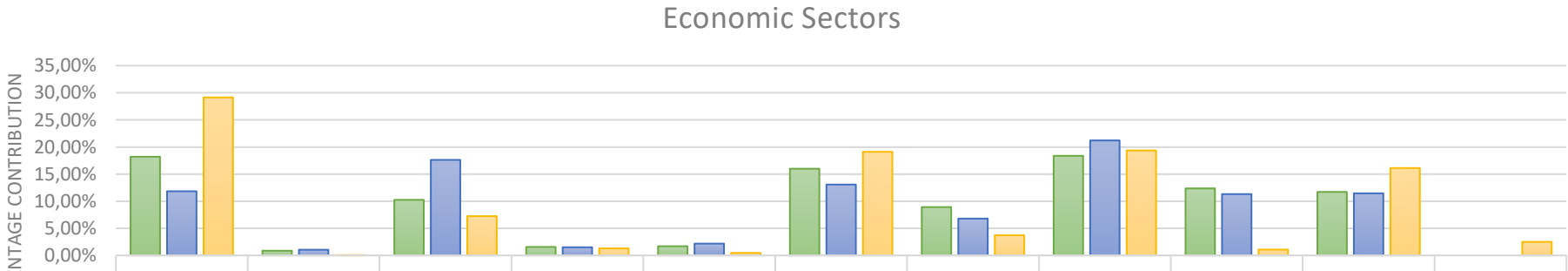
A total of 11918 of the population are unemployed in the formal sector while 31111 are not economically active (refer to Figure 10). According to Statistics South Africa (2011) 35.7% of the population were unemployed, in which 46.1% were the youth (age 15 -54).



Map 9: Employment Status
Source: Stats SA (2011)

3.3.4 ECONOMIC SECTOR ANALYSIS

This sub-section undertakes economic sector assessment in SLM. It seeks to identify the main sectors in the economy, to identify trends within each sector, and to provide initial recommendations with regards to the development of certain industries or sectors. Agriculture, community services, and retail trade were identified as main economic drivers of the district municipality. Gross value added (GVA) is the measure of the value of goods and services produced in an area, industry or sector of an economy. The dominant role played by agriculture in the municipal economy is evident with a 29.15% contribution. The municipality forms part of the most fertile agricultural areas in the Free State due to the soil quality and wonderful climate, a variety of farming activities occur throughout the area. Livestock farming is evident in the central and western parts of the municipal area, whilst crop farming is evident in the northern and eastern parts of the municipality. According to Figure 11, the trends indicates that the agricultural sector declined by 6.37% of the total GDP of the economy but increased in 2011 to 29.15%. Mining and Quarrying increased by 0.18% and further declined in 2011 to 1.02%, manufacturing increased by 7.37% in 2009 then declined to 10.38% electricity decreased by 0.06%in 2009 and further declined by 0,29% in 2011, construction increased by 0.48% and further declined by 1,72% in 2011 , wholesale and trade decreased by 2.92% and increased by 6,04 in 2011, transport and storage decreased by 2.12% and in 2011 it further declined to 3,72%, finance increased by 2.84% in 2009 then by the 2011 it further dropped down to 1.85%, community services increased by 1.05% and further dropped by a huge 10,24% in 2011and government services increased by 1,05% and in 2011 increased to 4.67.



	Agriculture	Mining	Manufacturing	Electricity & Water	Construcution	Trade	Transport	Finance	Community	General Government	Other Producers
2001	18,20%	0,86%	10,25%	1,56%	1,69%	15,99%	8,91%	18,37%	12,36%	11,71%	
2009	11,83%	1,04%	17,62%	1,50%	2,17%	13,07%	6,79%	21,21%	11,31%	11,45%	
2011	29,15%	0,02%	7,24%	1,29%	0,45%	19,11%	3,72%	19,36%	1,07%	16,12%	2,49%

Figure 11: Economic Sectors
(Source: Setsoto Local Municipality IDP 2016 and Draft Setsoto Local Municipality IDP 2017-2018)

Even though agriculture is the biggest contributor to the economic sector, Figure 12 indicates that the Manufacturing (25,24%), Wholesale (20,85%) and the Community (20,02%) are the main employment sectors in SLM.

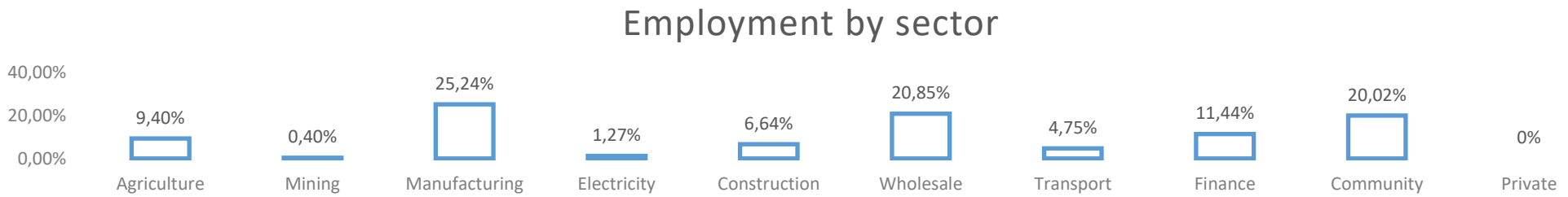


Figure 12:Employment by sector, (Source: Setsoto Final Integrated Development Plan 2016/2017)

According to the 2014 LED of SLM, Senekal is the largest centre for agriculture followed by Marquard in SLM while they are also the two main areas for maize production. Cattle farming also play a significant role as during dry spells, farmers can concentrate on cattle farming. More concentration should be put along the Caledon river to ensure that struggling farmers can access water and irrigate their crops. Sparta beef farming is being done on a large-scale close to Marquard. Ensuring extension services are offered to local emerging farmers such as mentorship will assist in the growth of the Municipality.

3.3.5 POVERTY AND ISSUES OF MIGRATION

Ficksburg is not only the main town of the Municipality but also the administrative centre. So many people move from rural areas into the town causing increased pressure in terms of service delivery. According to the Community Survey of 2016, poverty headcount decreased by a mere 0.2% from 6.6% but the intensity is worrying at 42.3% as can be seen in Figure 13. The majority of the people residing in SLM are South African's, while a small percentage of immigrants come from SADC countries. In terms of foreign migration, the majority of immigrants are from the African continent. For school children, migration occurred into the main urban areas of Ficksburg from rural areas. This area is close to the Lesotho border as the possibility exists that most of the migrating population come from Lesotho for employment and economic services.

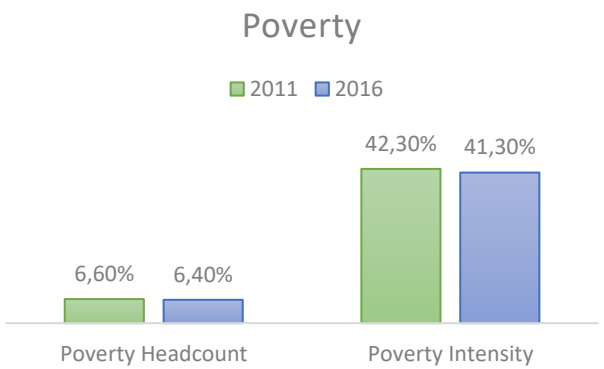


Figure 13: Poverty headcount and Intensity
Source: Community Survey (2016)

3.3.6 LEVELS OF CRIME AND PREVENTION STRATEGIES

Ficksburg has 274 cases of common assault and 25 cases of common robbery. There were 204 cases recorded for robbery at residential area in Ficksburg. Ficksburg had the highest number of murder rates in the municipality with 8 cases recorded tied with Senekal. In Senekal 120 cases were recorded for common assault, 110 cases for burglary at residences, 35 cases for sexual offense. Marquard had 2 murder cases booked, 25 cases for sexual assault and 50 cases for burglary of residence property (refer to Table 11).

Table 11: Crime levels

Crime statistics in Setsoto

	Clocolan	Ficksburg	Marquard	Senekal
Murder	5	8	2	8
Sexual Offense	20	76	25	35
Common Assault	32	274	12	120
Common robbery	2	25	3	12
Burglary at residence	56	204	50	110
commercial crime	12	68	9	56

(Source: Crime Statistics 2016)

Table 12: Crime prevention Amenities

Area	*Police Station*	*Boarder post station*	*Cluster command centre*	*Mobile Police*
Clocolan	1	1	0	0
Ficksburg	0	0	0	0
Caledon Park	1	1	1	0
Meqheleng	0	0	0	0
Senekal	1	0	0	1
Matwabeng	0	0	0	0
Marquard	1	0	0	0
Moemaneng	0	0	0	0
Total	4	2	1	1

(Source: Crime Statistics 2016)

According to Table 12, there are 4 police stations, 1 mobile police station, 2 border post stations and 1 cluster command centre servicing the entire area. To ensure that the municipality fights crime in rural areas the Cross-Border, District Liaison Committee and other community structures, supports the SAPS. The structures are put in place mainly due to the long reaction time by the police to arrive at a crime scene especially in rural area. Satellite police stations should be encouraged in rural areas.

3.3.7 ECONOMIC ESTIMATES

Using the growth estimates obtained by Investec research institute (2017), the following growth formula was used to calculate the expected growth rate for Gross Domestic product, Employment, Unemployment and Compensation for employees at district level (refer to Table 13).

$$V_0 = V_1(1 + r)^t$$

Whereby:

V= Future value r *= rate of growth*

V_0 *=Initial Value* t *= time (number of years)*

Table 13: SLM Economic Estimates

Setsoto Local Municipality	***2017***	***2018***	***2019***	***2020***	***2021***	***2022***
GDP Finance	21,9%	22,2%	22,6%	23%	23,46%	23,97%
Manufacturing	18,2%	18,4%	18,7%	19,04%	19,42%	19,84%
Wholesale	13,5%	13,7%	13,9%	14,15%	14,43%	14,75%
Agriculture	12,2%	12,4%	12,6%	12,82%	13,1%	13,4%
Government services	11,8%	12%	12,2%	12,4%	12,65%	12,93%
Community services	11,7%	11,8%	11,99%	12,215	12,46%	12,73%
Transport	7,0%	7,1%	7,2%	7,3%	7,45%	7,61%
Employment	26738	27551	27991	28494	29064	29703
Unemployment rate	35.7%	36,79%	37,27%	37,94%	38,7%	39,55%

The above estimates are for Setsoto local municipality for the 5-year period, 2018-2022. It is expected that Finance will grow by 2,07% over the next 5 years while manufacturing is expected to grow by 1,64% over the next 5 years, Wholesale is expected to grow by 1,25%, Agriculture is expected to grow by 1,2% while employment is expected to grow by 2965 over the next 5 years and the unemployment rate is expected to rise with 3,85%.

3.3.8 SOCIO-ECONOMIC ASPECTS IN RELATION TO THE PROVISION OF HOUSING

The section provides demand projections for housing for SLM. The projections are sorely based on income levels of SLM and there are prerequisites to be followed when determining the housing demand. Poverty intensity at 41,3% should be taken into consideration when identifying the housing typologies within the municipality.

3.3.8.1 GOVERNMENT HOUSING SUBSIDIES

Table 14 provides the different government housing subsidy programmes together with eligible income criteria. From the table, it can be noted that only the Social Housing Programme, provides rental solutions, while the FLISP and Government Subsidise Housing provide tenure security.

Table 14: Government subsidy programmes and eligible selection criteria

Government Housing Subsidy Programs	*Ownership/Rental*	*Income Requirements (per month)*
Finance Linked Individual Subsidy Projects (FLSP)	Ownership	R3, 501.00 and R15, 000.00 per month
Social Housing Programme	Rental	R1, 500.00 - R7, 500.00 per month
Government Subsidised Housing	Ownership	<R3, 500.00

Table 15 depicts the average monthly household income for SLM. As indicated below, 12,7% of the households do not have an income and the majority earn between R4800- R38200, the types of housing which can be constructed within this municipality should accommodate the income levels of the average household income to ensure accessibility to affordable housing.

Table 15:Monthy Distributable Income.

Income	*Percentage*
None income	12,70%
R1 - R4,800	6,90%
R4,801 - R9,600	11,30%
R9,601 - R19,600	24,90%
R19,601 - R38,200	22,20%
R38,201 - R76,4000	9,80%
R76,401 - R153,800	5,80%
R153,801 - R307,600	4,20%
R307,601 - R614,400	1,70%
R614,001 - R1,228,800	0,30%
R1,228,801 - R2,457,600	0,20%
R2,457,601+	0,10%

Source: Stats SA (2011)

Table 16 provides the estimated housing demand for Setsoto Local Municipality. Categories are provided below. It should be noted that there are people that may fall in two categories, for example a household with a monthly income of R1- R4800 falls in both the category of Government Subsidised Housing and FLSP.

Table 16: Types of Government subsidies within Setsoto

Government Subsidy	***Setsoto***
Government Subsidised Housing	6,9%
Finance Linked Individual Subsidy Projects (FLSP)	43,1%
Social Housing Programme	18,2%

Source: Stats SA (2011)

Due to the low levels of income for people in Setsoto it is highly possible that people within the municipality are more dependent on the government for the provision of housing, economic, social and infrastructure services. The unemployed need to be capacitated to be more labour intensive in the construction

of human settlements. This will provide job opportunities and help in the provision of training to local contractors. Human settlement need to be developed closer to economic activities and social facilities to reduce expensive travelling from social and economic activities. It is important for the municipality to understand the housing demand within Setsoto. The municipality should be aware of the following:

- Resistance to rental solutions;
- Migrant workers, that are not seeking permanent residency as they have homes elsewhere;
- Unavailability of feasible land for human settlements in close proximity to economic hubs and social amenities; as well as
- Over-dependence on the government for the provision of housing.

It should be noted that provision should be made for medium-high income housing units to cater for the needs of income earners falling under those categories. The development of Setsoto can attract investment opportunities since tourism and the agricultural market within the municipality still needs to be enriched.

3.3.9 SOCIO-ECONOMIC CHALLENGES

Below is a list of socio economic challenges identified while doing the situational analysis for the municipality.

- Most communities residing within the Municipality are facing severe water scarcity, either as a result of dried water sources (boreholes, springs) or due to a lack of investment in water infrastructure such as dams and reservoirs
- Poor sanitation facilities
- Low skilled workforce in terms of job creation
- Backlogs on basic services.
- High levels of unemployment
- No tertiary facility in Setsoto

3.3.10 SOCIO-ECONOMIC OPPORTUNITITES

The following are socio economic opportunities for the municipality based on the gaps found form the analysis:

- The annual cherry festival in Ficksburg has become part of the culture and heritage for Setsoto. This festival has been conducted over the years to strengthen the tourism sector within the local municipality.
- Abundance of natural resources potential to establish forward linkages with manufacturing initiatives;
- There is vast sandstone formation with mining potential
- Caledon River has potential for irrigation farming to Ficksburg residents

- Diamond potential in Marquard
- Housing Infrastructure
- Educational facilities
- Availability of low-cost labour;
- Provision of staff with scarce skills e.g. Engineers by offering bursaries
- Sustainable Local Economic Development initiatives
- Creation of a skilled community that is self-reliant and innovative.
- Agricultural land potential for horticulture
- Agricultural extension services
- Tannery
- Bead and pottery plant Erecting an Art & Craft centre in all towns with Guest Houses or B&Bs in all towns
- Water sport in dams in Ficksburg
- Encourage Agro Processing: Vegetables/Maize/Beans Canning Project
- Wool production, Grain Milling, Sunflower and essential oils, Soap and Bath Foam Manufacturing
- Meat Processing: Process raw meat into biltong, canned meat, etc.
- Community poultry farm

The major project which has very good potential to succeed and create jobs is for example the Henry Foods Canning Factory. Establishing a good working relationship with Sparta in Marquard will be beneficial to the municipality. Also refer to Table 17 for identified business opportunities.

Table 17: Identified Business Opportunities

Identified Business Activities and Opportunities	
Ficksburg	Expansion capabilities with agricultural communities
	Expansion of the industry in terms of retail, manufacturing and wholesale
	Manufacturing
	The railway linkage can boost economic activities in the area due to easy accessibility to and from the CBD
	Professional and financial services accommodation and
	Entertainment and administrative offices and Informal trade exist in Ficksburg.
Clocolan	Most of the activities are informal business activities
	Future business development must focus in a more central area

	Residential housing opportunities
	Only one industrial area exists in Clocolan
Marquard	103 business sites and the diamond mining potential
	Truck stop on the Winburg – Clocolan Road
	Smaller light industries along the major access road to Marquard as a business corridor.
Senekal	The business component is poorly developed and consists of low order businesses (i.e. spaza shops)
	The industrial area could be extended towards Matwabeng

3.4 BUILT ENVIRONMENT ANALYSIS

The availability of adequate infrastructure connects communities, enhances economic growth and promotes health and safety in urban and rural landscape. It is has become fundamentally important to enhance the provision of service delivery as part of the governmental mandate. The provision of adequate basic services improves the quality of life of the community. Improved infrastructure promotes efficiency and accessibility to various land uses within the urban and rural landscape. Infrastructure enables economic growth and development. It is thus fundamentally important to ensure that the existing infrastructure gets maintained and upgraded and provisions be made for the installation of new ones. This section deals with the supply of basic services within the jurisdiction of Setsoto Local Municipality.

3.4.1 HUMAN SETTLEMENTS

This section provides a rigorous analysis of the human settlements in Setsoto Local Municipality.

3.4.1.1 SETTLEMENT PATTERNS, TYPES & ENUMERATION AREA

As depicted in the figures below, the land parcels classified as urban areas are the highest, followed by farms. It can be noted that there are no land parcels that are regarded tribal/traditional. Although the number urban land parcels are high, the area which they cover is generally small due to the high densities and relatively smaller erven within urban areas.

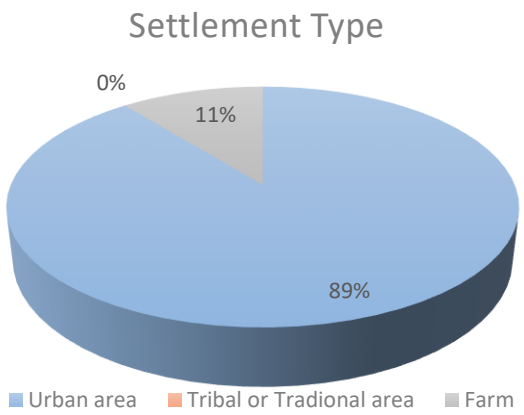


Figure 14: Settlement type

Source: Stats SA (2011)

It can then be further delineated according to the main enumeration type in SLM as can be seen in the figure below. It is clear that the municipality comprise of 85.97% formal dwellings, followed by 11.12% of farms and 2.24% of informal residential areas.

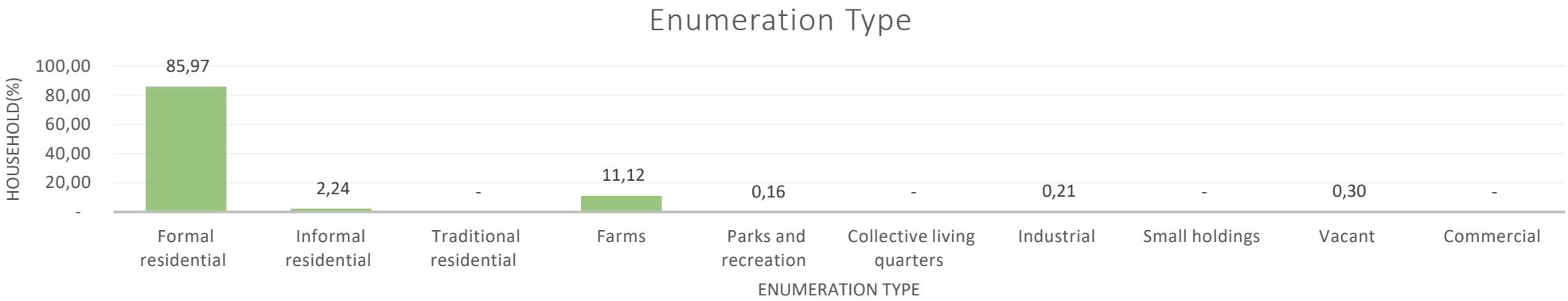


Figure 15: Enumeration Type

Source: Stats SA (2011)

3.4.1.2 INFORMAL SETTLEMENTS

There are 6 informal settlements in Setsoto Local Municipality as depicted in the table below. These total number of households in these informal settlements are 1004. The categorisation of informal settlements is important in order to decide on the way to progress with the project. Therefore, all the informal settlements should be analysed considering the development pathway of each settlement, rationale as well as the readiness of each settlement for either upgrading or relocation. The informal settlements are considered into 4 designated categories, namely:

- Category A
- Category B1
- Category B2
- Category C

The section below summaries the different categories of the informal settlements in relation to the previously mentioned factors in the section of Resettlement Rationale. In addition, as you may know, this categorisation is aligned to the informal settlements guidelines of HDA.

(1) **Category A:** Suggests that informal settlements must be fully upgraded in their current locations.

ii. Development pathway – The main focus of the development of Category A of informal settlements is rapid formalisation. This includes formal planning approvals, complete services, top structures and formal tenure.

iii. Rationale – The rationale behind these informal settlements is based on a site appropriate for formalisation and feasible for development.

iv. Readiness of Implementation – This is dependent on whether full upgrading is able to start rapidly. In the situation of Category A, this simply means that land has been attained with feasibility studies finalised and so on.

(2) **Category B1**: The informal settlements of Category B1 are provided with temporary basic services and ultimately formalised.

i. Development pathway – The development of Category B sites is widely concentrated on providing interim basic services as mentioned above then later formalised.

ii. Rationale – The rationale behind these informal settlements is also based on a site appropriate for formalisation and feasible for development.

iii. Readiness of Implementation – Category B areas are not ready for implementation. This is often caused by significant delays anticipated as result of factors such as land acquisition and the provision of bulk infrastructure.

(3) **Category B2:** These informal settlements are to be provided with emergency basic services then relocated at a later stage.

i. Development pathway – This category will not be formalised. Instead these sites are to be provided with basic services for the moment and more likely to be relocated at a later stage.

ii. Rationale – Category B2 sites are not feasible for formalisation and development. But, the there is no immediate health safety threat that cannot be mitigated through the provision of emergency services.

iii. Readiness of Implementation – While there is no immediate relocation; these areas are only to be provided with emergency services. Once sites suitable for relocation are available households must be effectively relocated.

(4) **Category C**: Informal settlements in Category C are to be relocated immediately or as soon as possible because the residents are threatened by serious health safety pressures.

i. Development pathway: The development pathway of these sites is rapid relocation to an already availed site or to one which will be relocated to in future.

ii. Rationale – Category C areas are not feasible for development and carry serious and immediate heath safety risks.

iii. Readiness of Implementation – Because of the significant and immediate risks recognised within these informal settlements, the need for relocation is urgent. Unfortunately, these threatening risks cannot be well-mitigated in a short-term period. Thus, it is necessary to relocate residents to more appropriate relocation areas as soon as possible.

It can be noted that 2 informal settlements are eligible for formalisation at a later stage.

Table 18: Setsoto Informal Settlements.

Settlement Name	Town/Farm	Category	Current number of households	Township Establishment Progress	Infrastructure Status (Bulk Water, Sanitation & Electricity)	Infrastructure Status (Internal Water, Sanitation & Electricity)	Additional Status /Plans/Challenges
Oudstad	Caledonpark	B1 and B2	120	In progress	None	No taps, bucket system and No electricity	Consultant has been appointed to do township establishment
Katlehong 1 and 2	Meqheleng	B1 and B2	200	In progress	Water	Communal tap, bucket system and No electricity	Consultant has been appointed to do township establishment
Boitumelo	Ficksburg	B2	30	None	None	No taps, long drop toilets and No electricity	No funding

Baipehing	Hlohlolwane	B1 and B2	75	None	Water, Sewer and Electricity	No taps, long drop toilets and no electricity	No funding
Masaleng	Matwabeng	B1	563	None	None	Communal taps, bucket system and no electricity	No funding
Riverside	Moemaneng	B1	16	None	None	No taps, bucket system and no electricity	No funding

Source: Free State Human Settlements (2017)

3.4.1.3 TENURE STATUS

The figure below portrays the tenure status in the Setsoto Local Municipality. From the figure below, it can be noted that over half of the properties are owned and fully paid off (53%); 18% are occupied rent-free; another 18% are rented; 8% are owed but not yet paid off; and the rest are classified as other (2%).

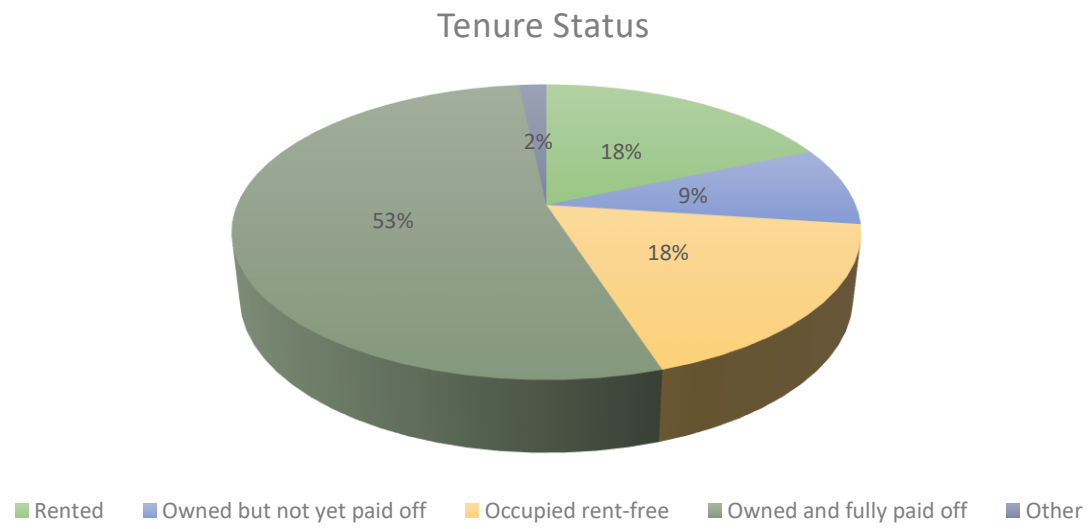


Figure 16: Tenure Status

Source: Stats SA (2011)

3.4.1.4 TYPE OF MAIN DWELLING

With regards to the types of main dwellings, Setsoto Local Municipality is largely characterised by houses on a separate stand/yard/farm (22643), as shown in the figure below. This is then followed by informal dwellings in an informal settlement (6481), then informal dwellings on a backyard (2473). This is an indication of the housing demand and backlog within the municipality.

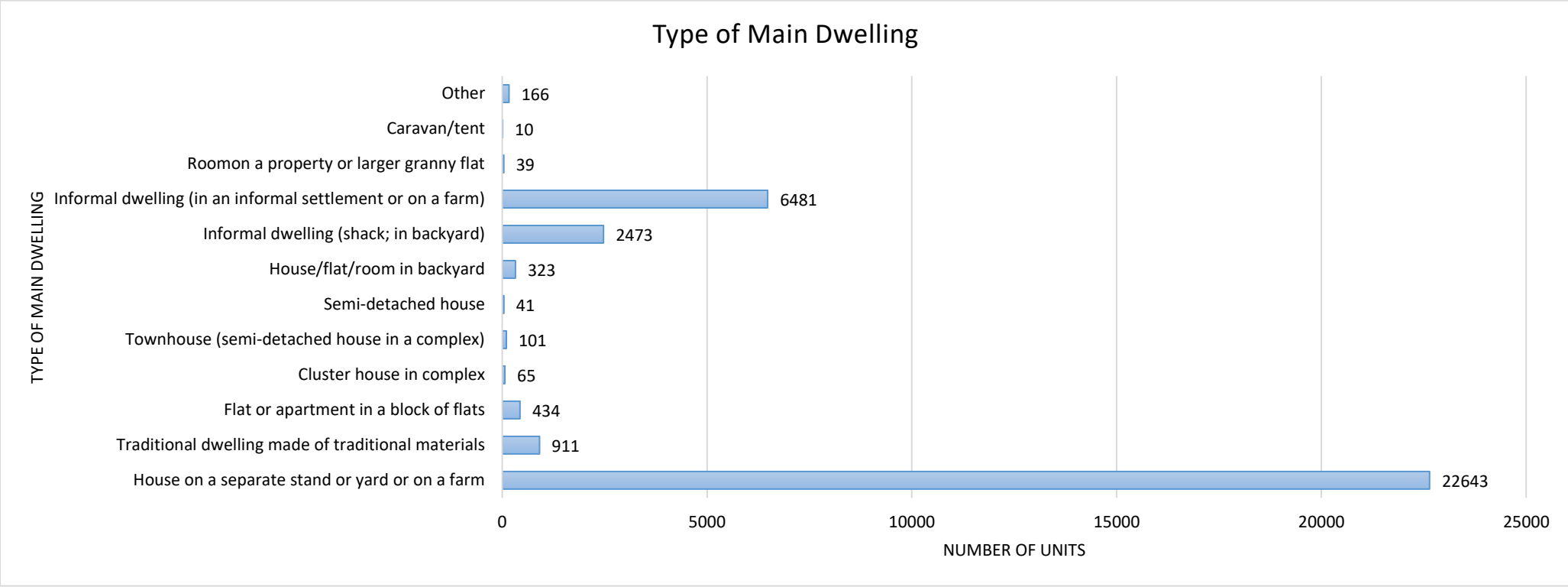


Figure 17: Type of Dwelling

Source: Stats SA (2011)

Figure below outlines the main dwelling types as outlined in the 2016 Community Survey for Setsoto Municipality. These types of dwellings are only clustered in terms of formal, traditional, informal and other. Although Setsoto Local Municipality comprise mainly of formal dwellings (28 564) in 2016 as compared to (23 646) in 2011, it can be noted traditional dwelling types decreased significantly from (911) in 2011 to (373) in 2016. Even smaller numbers of informal dwellings have

decreased in 2016 as compared to numbers in 2011. Although there is a housing backlog within the municipality, improvements have occurred in terms of the number of formal dwelling houses within the municipality.

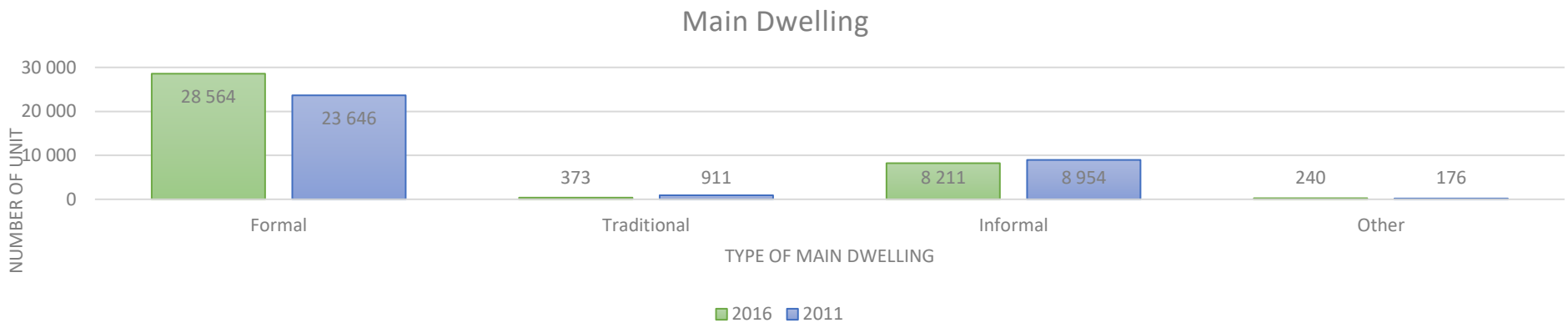


Figure 18: Main Dwelling Type
Source: Community Survey (2016)

The table below depicts the housing overview of the four towns, namely Clocolan, Ficksburg, Marquard and Senekal. It can be noted that there has been a rapid increase in formal housing in the township Hlohlolane (more than doubled in 10 years), and a rapid decrease in informal housing. This could be attributed to the subsidy housing provision throughout the country, guided by policies such as the BNG. Although there has been a drastic increase in formal housing in the Meqheleng Township, informal housing has continued to increase gradually. Generally, the relationship between formal housing and informal housing is inversely proportional, whereby increase in formal housing results in the decrease in informal housing. Meqheleng, has proven not to be the case. This could be a result of other factors at play, such as immigration. Ficksburg is also faced with the challenge of availability of land due to the biophysical constraints surrounding the town i.e. Caledon River and Lesotho border east and south of Ficksburg, and mountainous area north and west of the town. This then leaves relatively little room for expansion of the town. In the future, the municipality might have to move towards in-fill developments and densify the town vertically.

There has been a gradual increase in formal housing in Marquard, and aggressive increase in the township of Moemaneng. With regards to informal housing, the Moemaneng Township has experienced a drastic decrease, which could be attributed the provision of subsidy housing facilitated by policies such as BNG. It should be noted that although there has been a drastic increase in formal housing for both Senekal and Matwabeng, there has not been any radical changes in informal housing. In fact, informal housing has increased in Senekal.

Table 19: Type of Main Dwelling per town. Source: Stats SA (2011)

Type	Category	Clocolan				Ficksburg				Marquard				Senekal			
		Clocolan		Hlohlolwane		Ficksburg		Meqheleng		Marquard		Moemaneng		Senekal		Matwabeng	
		2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
Formal	House or brick structure on separate stand	274	399	1381	3587	1195	1378	3354	6402	304	397	1405	3121	443	757	2531	4195
	Flat in block of flats	21	10	15	13	55	232	9	36	0	15	3	16	26	26	9	43
	Town/cluster/semi-detached house	6	0	9	14	9	31	36	17	0	5	0	14	0	94	21	10
	House/flat/room in backyard	6	8	42	13	24	24	352	184	21	2	15	27	9	8	45	48
	Room/flatlet on shared property	0	0	50	9	3	4	42	2	0	6	24	4	3	4	22	8
Sub-total		**307**	**417**	**1497**	**3636**	**1286**	**1669**	**3793**	**6641**	**325**	**425**	**1447**	**3182**	**481**	**889**	**2628**	**4304**
Informal	Informal dwelling/shack in backyard	0	0	383	488	146	17	1055	836	0	0	416	483	60	36	354	526
	Informal dwelling/shack elsewhere	58	3	2905	735	753	19	3044	3281	0	2	1154	349	296	281	2293	1632
	Caravan/tent	6	0	9	3	3	5	6	0	0	1	0	0	3	0	15	0
	Other	0	3	0	24	0	2	0	11	0	1	0	8	0	44	0	18
Sub-total		**64**	**6**	**3297**	**1250**	**902**	**43**	**4105**	**4128**	**0**	**4**	**1570**	**840**	**359**	**361**	**2662**	**2176**
Other Housing	Traditional dwellings	6	5	209	10	98	6	169	44	3	1	184	7	33	1	0	5
	Institution/hostels	41	0	15	0	84	0	30	0	3	0	18	0	0	0	39	0
Sub-total		**47**	**5**	**224**	**10**	**182**	**6**	**199**	**44**	**6**	**1**	**202**	**7**	**33**	**1**	**39**	**5**
Total (All Housing Type)		**418**	**428**	**5018**	**4896**	**2370**	**1718**	**8097**	**10813**	**331**	**430**	**3219**	**4029**	**873**	**1251**	**5329**	**6485**

3.4.1.5 HOUSING DEMAND

The Setsoto Local Municipality IDP Review (2016-2017) indicates that the municipality is faced with a housing backlog of 12 400, with informal settlements persisting to be a problem. There is also a backlog of 2 273 sites that do not have services. Table 20 depicts the distribution of the sites that need services in the municipality.

Table 20: Sites in need of services within Setsoto Local Municipality

Town	*No. of Sites (excluding Parks and Streets)*
Ficksburg	6
Ficksburg Industrial	41
Clocolan	60
Clocolan Ext. 5	89
Hlohlolwane Ext. 7	18
Hlohlolwane Ext. 8	36
Hlohlolwane Ext. 9	106
Moemaneng Ext. 10	1 100
Senekal	18
Senekal Industrial	21
Matwabeng Ext. 7	781
Total	2237

It should be noted that Moemaneng Ext. 10 has the highest number of stands that are in need of services.

a) Projections

The housing demand projections made in this section are based on the informal housing statistics trends (between 2001 and 2011). It is projected that the total informal housing in Setsoto Local Municipality will continue to decrease, however the rate at which the decrease will occur is relatively low and will see the municipality still facing the issue of informal housing even in 2031. To be location specific, more attention should be paid to the following areas:

- Meqheleng, as it the highest contributor to the municipal informal housing and the number is estimated to continue rising;
- Senekal, as informal housing is predicted to continue increasing;
- Matwabeng, as it has the second highest number of informal housing in the municipality and the rate at which the number is decreasing is relatively low.

Table 21: Projected Housing Demand

Town	Year			
	2001	**2011 (% growth rate)**	**(Projected)**	
			2021	**2031**
Clocolan	64	6 (-23, 67%)	0	0
Hlohlolwane	3297	1250 (-9, 70%)	451	162
Ficksburg	902	43 (-30, 43%)	1	0
Meqheleng	4105	4128 (0, 06%)	4151	4174
Marquard	0	4 (NA)	-	-
Moemaneng	1570	840 (-6, 25%)	440	231
Senekal	359	361 (0, 06%)	363	365
Matwabeng	2662	2176 (-2, 02%)	1775	1448
Total	**12959**	**8808**	**7181**	**6380**

Although this section provides the necessary insight for the future of housing, the methodology that has been applied has implications on the accuracy of the predictions i.e. the projected housing demand is determined based on a one-to-one relationship predictor variable. In other words, only the growth rate of informal housing in the municipality (between 2001 and 2011) was utilised to estimate the future housing demand. This is rather simplistic, as in reality, housing demand is influenced by a combination of diverse factors including **(and not limited to)** the following:

- **Biophysical**
  - Availability of land in suitable locations; and
  - Biophysical constraints (e.g. mountains, borders and rivers).
- **Socio-economic**
  - Growth Rate;
  - Immigration Rate; and
  - Poverty Rate.
- **Built Environment**
  - Provision of infrastructure

3.4.1.6 HOUSEHOLD SIZE

Single person households the highest in the Setsoto Local Municipality. There is gradual decrease in the number of households as the household size increases, indicating an inversely proportional relationship between the two aspects. The households that have 9 people are the lowest (as indicated in the figure below).

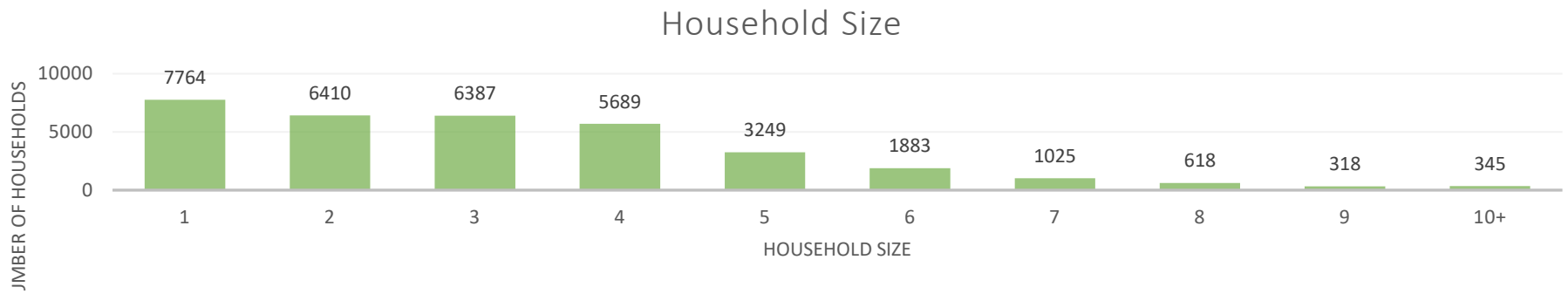


Figure 19: Household Size

Source: Stats SA (2011)

The 2016 Community Survey indicated that the average population household size in Setsoto Local Municipality is 3.1% while the 2011 Census indicated an average household size of 3.3%. This shows that, although there is a small difference (0.2%) the household sizes within this municipality is decreasing.

3.4.1.7 NUMBER OF ROOMS

The figure below indicates the number of rooms per dwelling unit in Setsoto Local Municipality. Dwelling units that 4 rooms are the highest in the municipality. This could be attributed to the provision of subsidy housing since the implementation of RDP and BNG housing policies.

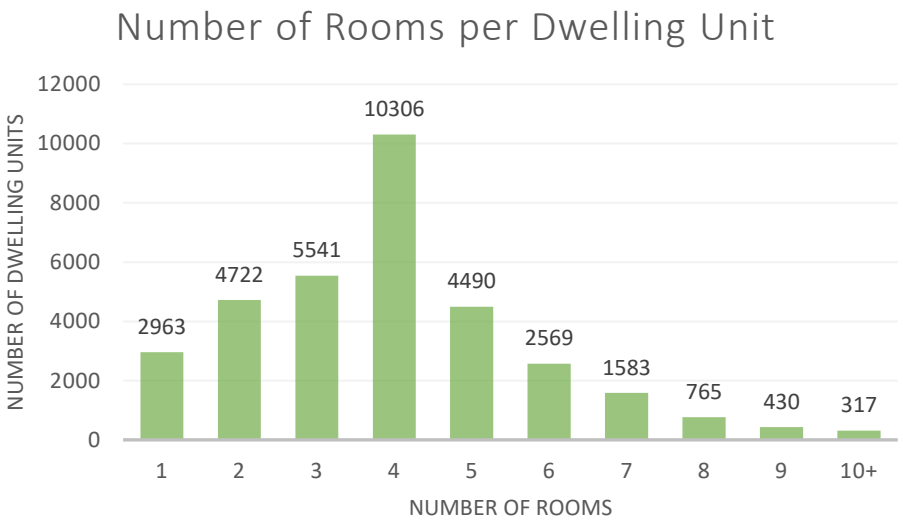


Figure 20: Number of rooms per dwelling

Source: Stats SA (2011)

3.4.1.8 NUMBER OF ERVEN PER TOWN

Table 23 depicts the number of erven per town in Setsoto Local Municipality. Ficksburg has the highest number of erven, followed by Senekal and Clocolan. Marquard has the least number of erven in the municipality.

Table 22: Number of Erven per Town.

Town	***Number***
Ficksburg/Maqheleng/Caledon Park	13 621
Senekal/Matwabeng	9 387
Marquard/Moemaneng	4 460
Clocolan/Hlohlolwane	6 219
Total	**33 687**

Source: Setsoto Local Municipality IDP Review (2016-2017)

3.4.2 INFRASTRUCTURE

3.4.2.1 WATER SUPPLY

Access to water is a human right that every citizen should have access to. This part of the document denotes water supply for the Setsoto Local Municipality with a specific focus on the type of water sources the Setsoto Local Municipality. 88% of water supply in Setsoto Local Municipality is sourced by the Regional/Local water scheme which is operated by the municipality or other water service provider. The table below denotes all sources of water supply within this municipality.

Table 23: Source of Water.

Source of water	*Percentage*
Regional/Local water scheme (operated by municipality or other water services provider)	87,80%
Borehole	7,40%
Spring	0,40%
Rain water tank	0,30%
Dam/Pool/Stagnant water	0,50%
River/Stream	0,10%
Water vendor	0,90%
Water tanker	1,80%
Other	0,80%

Source: Stats SA (2011)

The Setsoto Local Municipality Community Survey (2016) indicated that 34 695 people have access to piped water, while the remaining 2 693 used other sources of water supply. In contrast to the table above, it is clear that the Setsoto Local Municipality has the capacity to provide water to its communities when there is sufficient water resources within the municipality.

3.4.2.2 SANITATION

The Setsoto Sewer Master Plan (2015) indicated that that most sewerage system in Setsoto LM are not fully functioning. This is due to the saturated soil condition in most of the areas within the municipality. The sewer network in Meqheleng (Ficksburg) flows within the stormwater drainage system which becomes problematic during storms. Marquard and Hlohlolwane also experienced challenges in relation to sewer network as its not fully functioning, the manholes flow in areas close to the river. Adequate sanitation promotes human dignity and good health. It is clear that the municipality needs to embark on measures to ensure that residents have fully accessibility to adequate sanitation system.

Stats SA (2011) indicated that 57% of households have access to flush toilets which are connected to the sewerage system, 23% uses flush toilets with septic tanks and 19% uses PIT toilets without ventilation. The fact that there are still households which uses the bucket system should be taken into consideration as it is the governmental mandate to eradicate all bucket systems and promote flush toilets connected to the sewerage system.

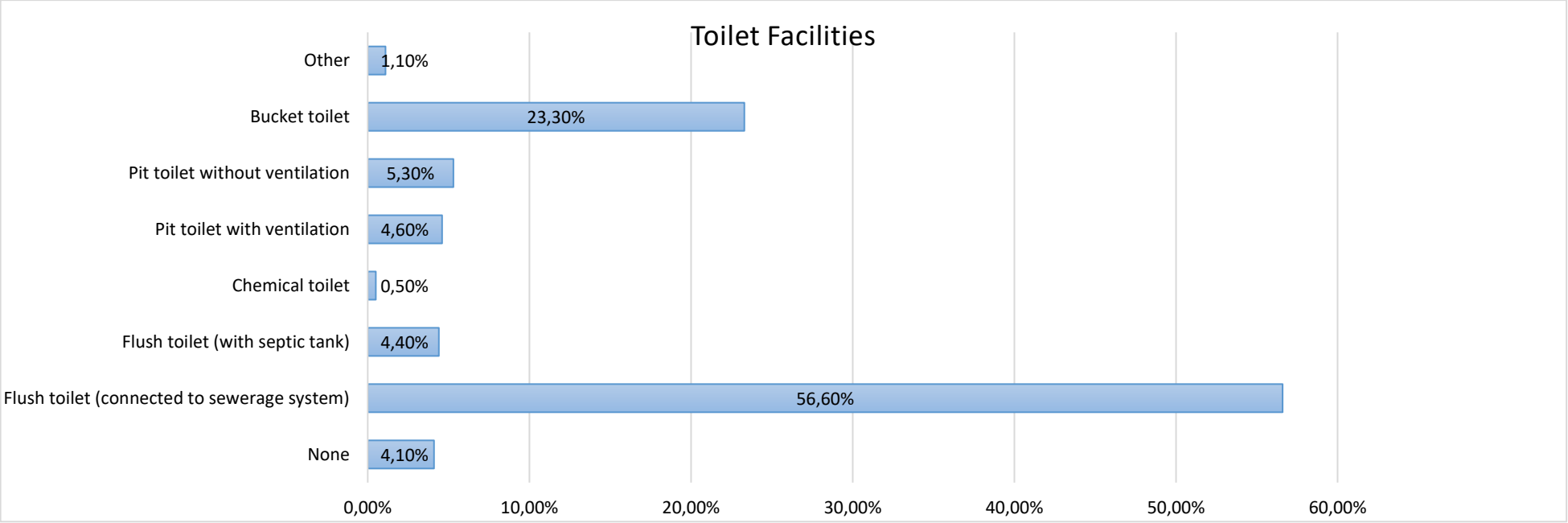


Figure 21: Sanitation

Source: Stats SA (2011)

The figure below illustrates the types of sanitation facilities used by households in Setsoto Local Municipality as outlined in the Community Survey (2016).

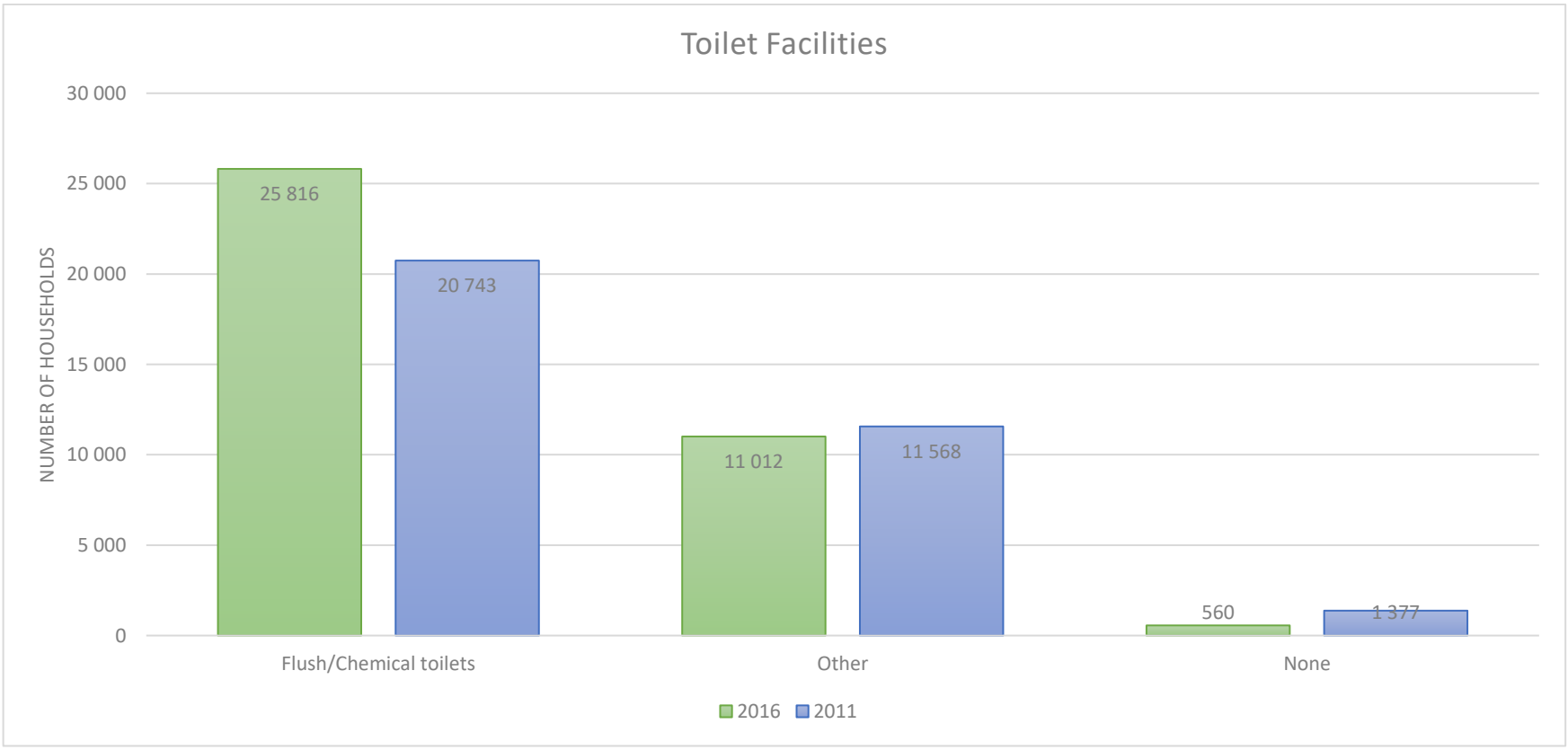


Figure 22: Toilet facilities

Source: Community Survey (2016)

As depicted in the figure above, it is clear that most (25 816) of the households have access to flush/chemical toilets in 2016 as compared to 2011(20 743) although there is still not much difference. The fact that there are still households which uses other methods of toilet facilities is alarming. Radical measure should thus be taken to ensure that all households within the municipality have access to flush toilets.

Table 15 below illustrates the types and numbers of pump stations as per town within the Setsoto Local Municipality, as well as the condition of the infrastructure and challenges faced by the municipality with regards to the sewerage system.

Table 24: The sewerage system

Town	Sanitation usage	Pump stations	Location	Infrastructure Condition	Challenges
Ficksburg	Most of households use waterborne sanitation systems.	Zone 8 Pump Station	South western side of Meqheleng	Good	Sewerage pipes breakage is a main challenge which mainly occurs along the main sewerage lines and flows directly into small streams that runs through the town and to the Caledon River thereof. Although the topographic layout of the Ficksburg comprise of steep slopes and the sewerage lines are designed according to the topographic layout, it must be noted that domestic waste is the main challenge which causes drain blockages.
		EDC Pump Station	Northern side of Fickburg	Moderate	
Senekal	Most of households use waterborne sanitation system. There are no VIP/PIT Latrine system. There is still a need for the eradication of the bucket system. A portion of households within Matwabeng uses conservancy tanks which gets emptied once a week by a vacuum tanker. A portion of households is however connected to the sewerage system.	Main PS @ Golf course	Senekal Golf Course	Good	The infrastructure is inadequate and incomplete, although moderately functioning. There are uncovered manholes and accessibility is poor due to lack of proper grassing and vegetation. There is a need to ensure safety measures and ensure that proper installation of adequate infrastructure is conducted to avoid spill off which may run into the township. There are also challenges with regards to drain blockages caused by domestic waste. This blockage is also caused by the layout of the area, within which waste water overflows over the manholes and causes pipe breakage. This causes environmental pollution and becomes costly for the municipality to maintain.
		Matwabeng PS	Western side of Matwabeng +- 70 meters from residential land uses	Moderate	
		Matwabeng Zone 1 PS	Southern side of OR Tambo	Good	
		Northern PS	Northern side of Senekal	Poor	
Marquard	Most of households use waterborne sanitation system.	Marquard PS1	Marquard	No information	Domestic waste disposition is the main challenge which causes drain blockage. The waterborne system is also neglect. This is an indication

	There a Vacuum truck (empties per request) and a soil remover vehicle (removes buckets on a daily basis)	Moemameng PS1	Moemaneng	No information	that more needs to be done with regards to the provision of adequate sanitation system in order to connect the majority of the households with the sewer system and eradiate the bucket system.
		Moemameng PS2	Moemaneng	No information	
		Vacuum truck / Night Soil Removal service	Marquard	No information	
Clocolan	Most of households use waterborne sanitation system. Some households uses VIP system, Conservation tanks (emptied by vacuum truck once a month) and the bucket system(which gets disposed twice a week)	Ext 6 Pump Station	Extension 6	Good	The main challenge is the obstruction of the sewer system which is caused by domestic waste which causes drain blockages. The problem with the sewer lines causes environmental pollution, which also increases the negative impact on public health. It is vital important for the municipality to ensure that eradication of the bucket system and enhance the provision of adequate infrastructure and community education with regards to the maintenance and protection of the sanitation infrastructure.
		Slovo Pump Station	Hlohlolwane	Good	
		Bucket removal Pump Station	Corner of Andries Pretorius and 2nd street	Good	
		Golf Course Pump Station	Clocolan Golf Course	Good	
		Mokoadi Pump Station	Clocolan	Poor	
		Vacuum truck / Night Soil Removal service	Clocolan	Poor	

Source: Ficksburg, Senekal, Clocolan and Marquard Wastewater Risk Abatement Plan (2014)

3.4.2.3 ENERGY SUPPLY

Energy has become one of the main fundamental instruments that improves the quality of life. Society depends abundantly on energy supply, it is thus fundamentally important to ensure that all sectors of the economy as well as the majority of households have sufficient access to the supply of energy.

85% of households uses electricity for lighting, while 12% uses candles and only 3% uses paraffin. The fact that there are still households which uses candles and paraffin for lighting is worrying. 88.60% of houses uses electricity for cooking, while 13% use wood, Cooking 8% use paraffin and 4% use gas. This shows that there is sufficient usage for electricity in Setsoto municipality. The main energy usage for heating is electricity, followed by wood.

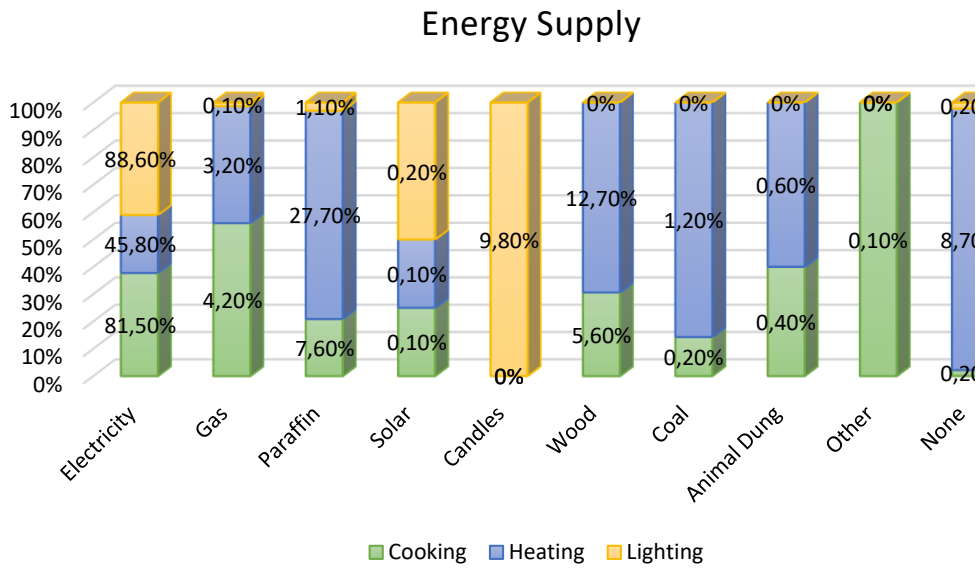


Figure 23: Energy Supply

Source: Stats SA (2011)

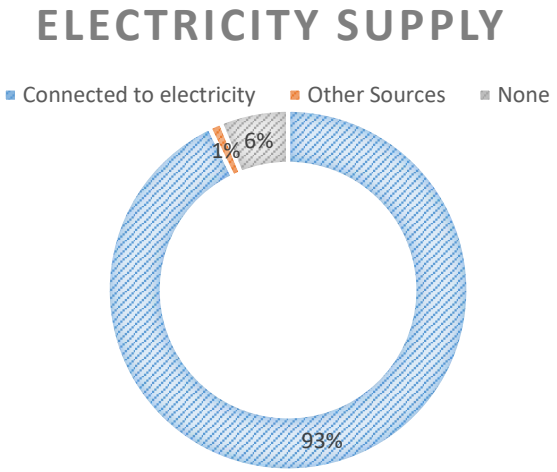


Figure 24: Electricity Supply

Source: Community Survey (2016)

Figure 26 indicates that the majority of households within the Setsoto Local Municipality are connected to the Electricity supply, while only 6% use of households use other sources of energy supply.

3.4.2.4 REFUSE REMOVAL

The refuse removal services eliminate the occurrence of illegal dumping sites which can impact negatively on human life. 55% of household refuse is removed by local authority private company at least ones a week, while 32.50% of households use own refuse dump. The figure below denotes the types of refuse removal used by the households within the jurisdiction of Setsoto Local Municipality.

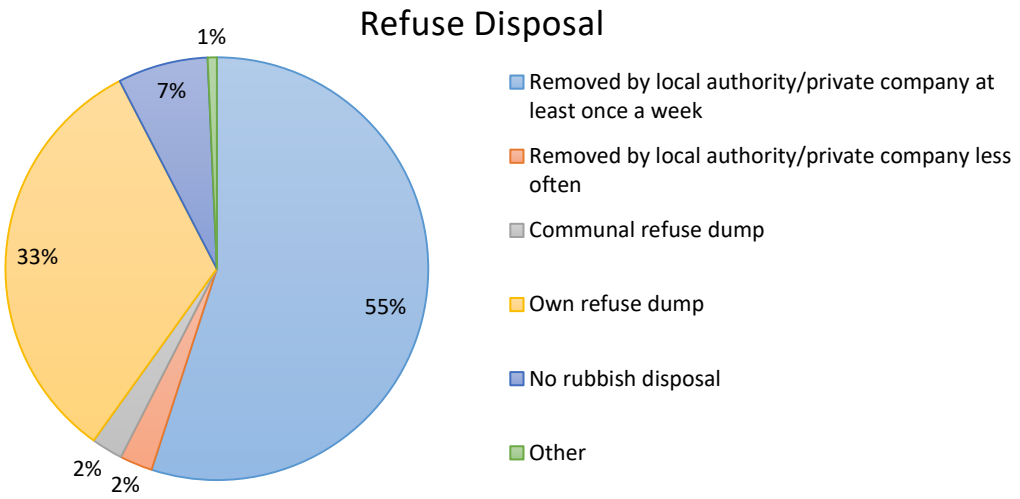


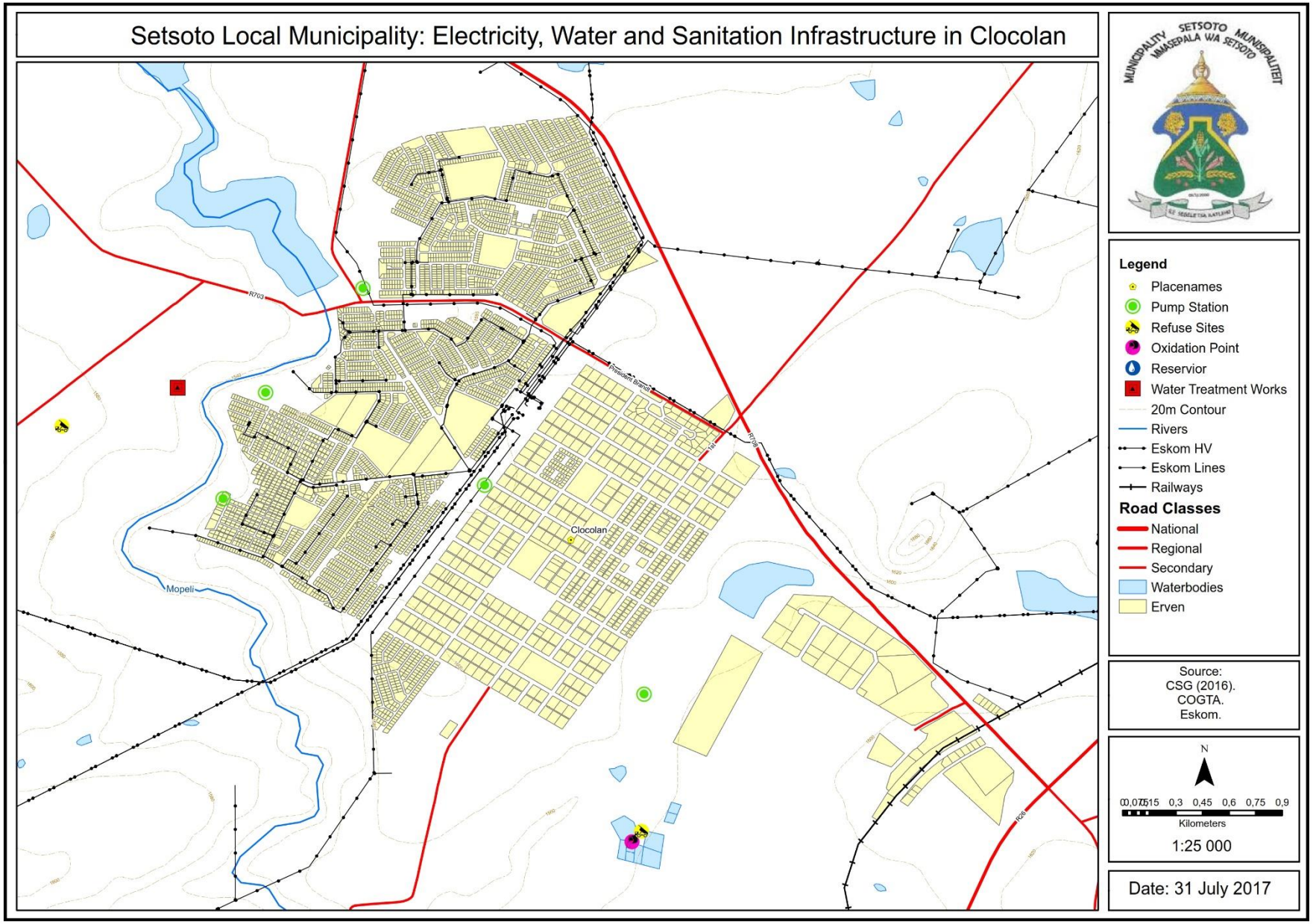
Figure 25: Refuse Removal

Source: Stats SA (2011)

The table below demonstrates the key findings on the location of infrastructure of Clocolan. For a detailed illustration (refer to Map 10).

Table 25: Summary of Infrastructure for Clocolan

TOWN	INFRASTRUCTURE	DESCRIPTION
Clocolan	Water	Reservoirs are located on the western side of Clocolan in close proximity of the R708
	Sanitation	3 **sewer pump stations** are located on the western side of Hlohlolwane; the other one is located between Clocolan and Hlohlolwane; while the last one is situated on the western side of Clocolan.
		Sewerage System is situated on the southern side of Clocolan
		Waste Water Treatment Works is located in on the eastern side of Hlohlolwane.
	Electricity	The Eskom HV power lines are located in the vicinity of Clocolan town, while the Eskom Power lines are located in Hlohlolwane.
	Refuse Disposal	Clocolan Landfill Site: Recommended for closure (No apparent landfill method and formal waste reclamation, uncontrolled drainage). Proposals for development of new site.

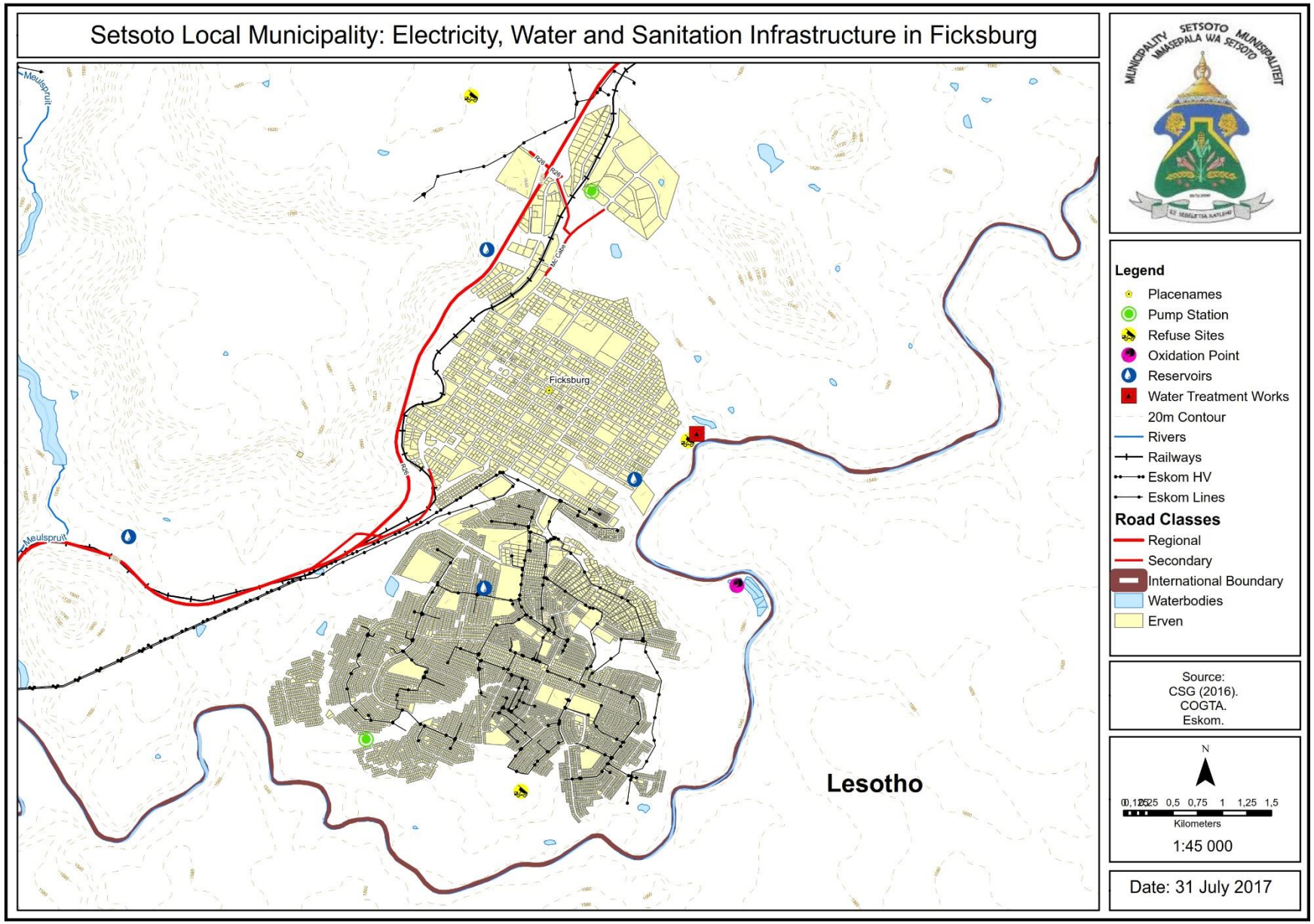


Map 10: Electricity, Water and Sanitation Infrastructure in Clocolan

Tabulated below is the summary of infrastructure in Ficksburg (refer to Map 11).

Table 26: Summary of Infrastructure location for Ficksburg

TOWN	INFRASTRUCTURE	LOCATION
Ficksburg	Water	There are 4 Reservoirs in Ficksburg. One being located on the northern side of Ficksburg along the R26, another on the south-western side of Ficksburg, while the other reservoir is located in Meqheleng and the last one is located on the southern side of the R26 near a railway.
	Sanitation	There are two **sewer pump stations**
		Sewerage System is located in Meqheleng and drains towards the new pump station, but however in a very bad condition.
		Water Treatment Works are situated near the Caledon River
	Electricity	**Eskom HV** Powerlines are installed in the proximity of R26 between Ficksburg and Meqheleng. While Eskom power lines are situated in Meqheleng Township.
	Refuse Disposal	The landfill sites, on being located on the far north of Ficksburg and the other landfill site is located on the south-western side of Ficksburg in the vicinity of a Waste Water Treatment Works.

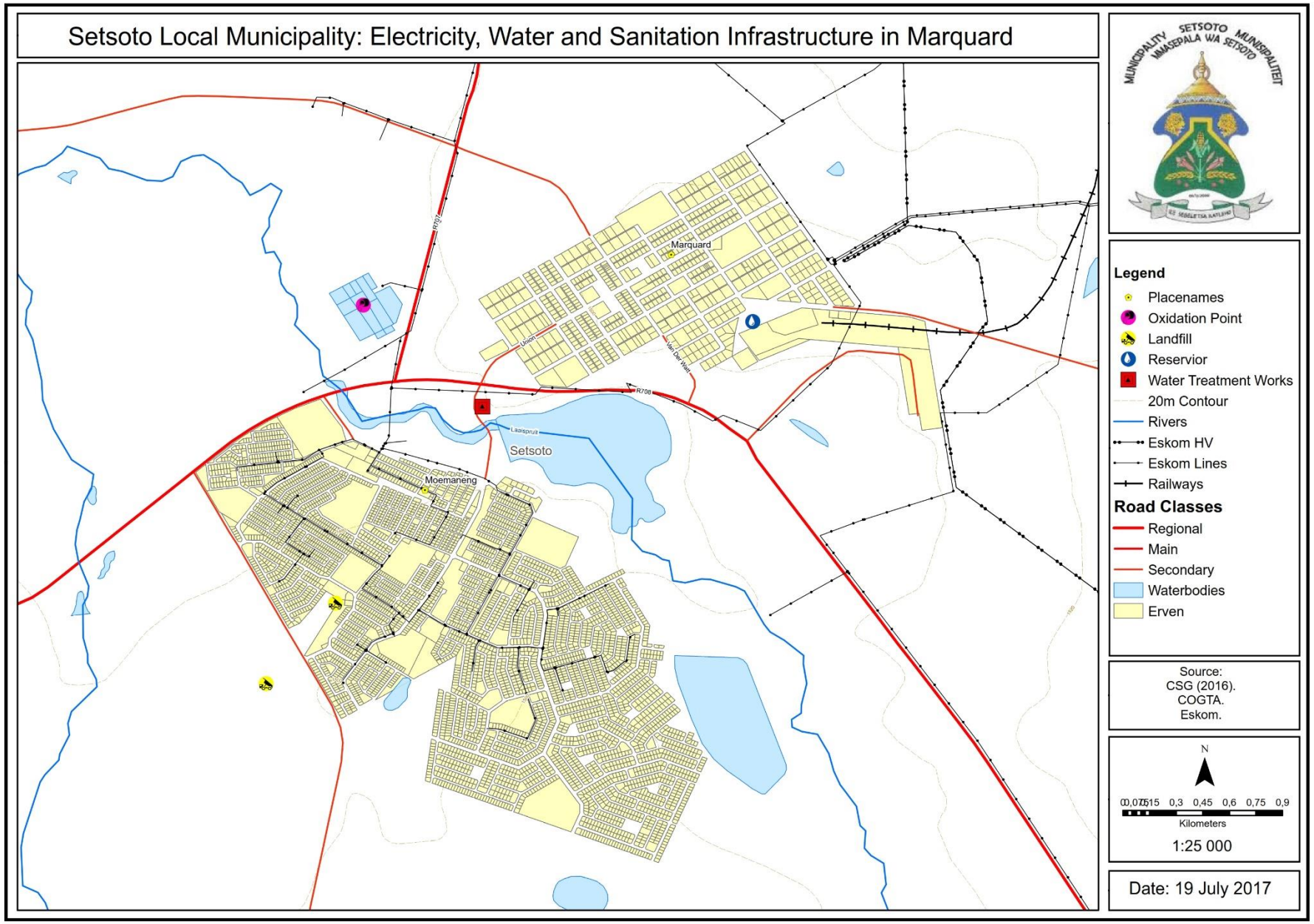


Map 11: Electricity, Water and Sanitation Infrastructure in Ficksburg

The table below illustrates the summary of findings regarding infrastructure in Marquard (see Map 12).

Table 27: Summary of Infrastructure location for Marquard

TOWN	INFRASTRUCTURE	LOCATION
MARQUARD	Water	There is a reservoir in Marquard in the vicinity of a railway.
	Sanitation	Awaiting updated information on **sewer pump stations**.
		Sewerage System is located along the R707, on the eastern side of Marquard.
		Waste Water Treatment Works are situated on the northern side of Moemaneng along R708.
	Electricity	Eskom HV powerlines runs in the vicinity of Marquard on the western side, while Eskom overhead power lines surrounds Marquard along the R707. Some power lines are also installed in Moemaneng Township.
	Refuse Disposal	A landfill site is located on the south-eastern side of Moemaneng: Closure of the old site(lack of management, rehabilitation, equipment and vehicles) and proposal for a new one

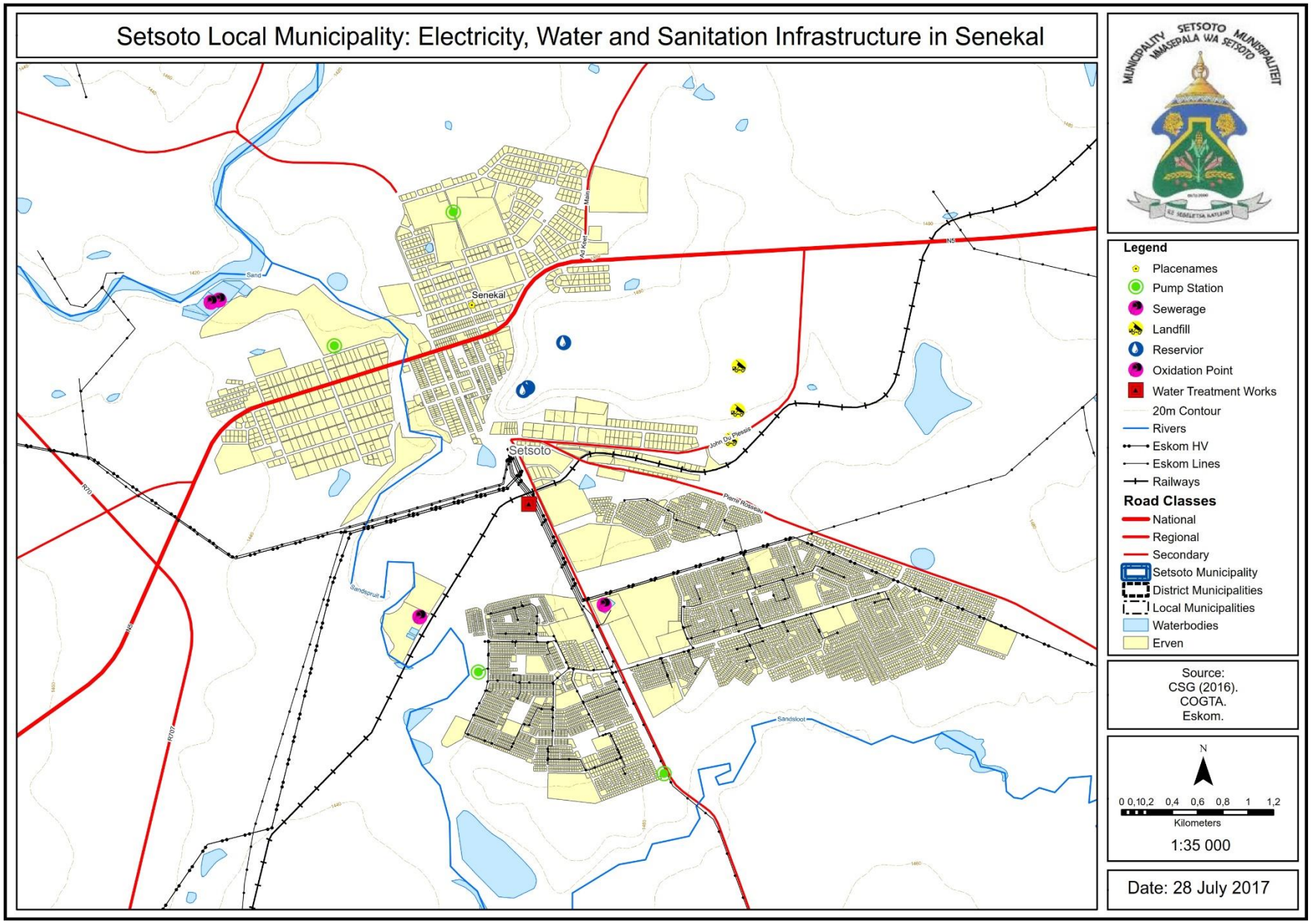


Map 12: Electricity, Water and Sanitation Infrastructure for Ficksburg

Depicted in the table below is the summary of findings for the infrastructure in Senekal (refer to Map 13).

Table 28: Summary of Infrastructure location for Senekal

TOWN	INFRASTRUCTURE	LOCATION
SENEKAL	Water	Two **Reservoir**s are located on the NORTH-WESTERN side of Setsoto LM in Senekal.
	Sanitation	2 **sewer pump stations** are located on the northern side of Setsoto LM on the north-eastern side of the N5 national road in Senekal, while the other two pump stations are located on the southern side of the railway in Matwabeng Township.
		2 **Sewerage System** are located on the north-eastern side of Senekal, while the other one is located in the vicinity of a railway and last one is located on the south-western side Setsoto LM in Matwabeng Township.
		Waste Water Treatment Works are located on the left bank of Sand River. The other WWTW is located in the middle of Matwabeng Township
	Electricity	Eskom High Voltage Powerlines and Eskom Overhead Powerlines are situated in Matwabeng Township.
	Refuse Disposal	There are two landfill sites located on the western side of Senekal, in the vicinity of a railway.



Map 13: Electricity, Water and Sanitation Infrastructure for Senekal

3.4.2.5 ROADS, STORMWATER AND AVAILABLE TRANSPORTATION

Roads and storm water drainages plays a fundamental role in the transportation of goods and people. As a result, roads need to be maintained and upgraded to ensure flexible movement of public/private transportation as well as the promotion of safety for pedestrian movement. The movement of people and goods is facilitated by a road network which creates a linkage between settlements and various land uses and thus utilized through a wide spectrum of different transportation systems (public transport, private, trucks, etc.). The table below depicts the main road classification within the municipality, different transportation system within Setsoto LM will be discussed thereafter.

a) Transportation system

The table below denotes the different types of the transportation system in Setsoto LM.

Table 29: Transportation System. Source: Local Integrated Transport Plan for Setsoto LM (2017)

TRANSPORTATION SYSTEM	USAGE	TYPES
PUBLIC TRANSPORTATION	The majority of the population residing in Hlohlolwane, Matwabeng, Moemaneng and Marquard rely mainly on the road based public transportation. Provisions should thus be made to ensure the public transportation needs and demands of these areas are accommodated.	**Mini-bus taxis-**Setsoto LM comprise of formal and informal taxi rank facilities in all major towns, excluding Clocolan. The majority of taxi ranks facilities are on-street, except for two off-street taxi ranks in Senekal and Marquard. **Buses-** There is only one bus operator (Maluti Bus Service) which 40% of it is owned by the Free State Corporation and the remaining 60% is privately owned.
THE RAILWAY SYSTEM	The municipality comprise of a railway system which serves all the main settlements within the municipality. The railways system provides a connection between the municipalities with other areas outside the municipal border (Bloemfontein) and the provincial border (Durban) as it passes through Ficksburg and Senekal. A railway line has	**Railway –**passing through Free State to link Bloemfontein-Durban and passes via Ficksburg. The Ficksburg station is located on the north-western side of the CBD.

	been developed for the purpose of farming and leisure along Ficksburg and Fouriesmith. This railway development also provides a linkage between Sandstone Estate and the golf and polo fields so as to enhance the Eco-tourism prospects of the municipality. There is also a railway line which moves along Marquard which serves the industrial area. An assessment for the viability of this railway line still needs to be conducted to outline weather this line can enhance growth. The railway station is the backbone of the industrial land uses in Ficksburg Industrial area. It can also be noted that this railway system is a two-line railway which is also linked with Senekal.	
FREIGHT	Provides a linkage between Setsoto LM and adjacent municipalities and provinces.	**Road based freight-** Links Ficksburg-Bethlehem-Reitz and Gauteng via the P18/P9 and Ficksburg-Clocolan-Free State via P18-5 **Rail based freight-** is administered by Spoornet
AIR TRANSPORTATION	There is only one airport located in the Setsoto Local Municipal, within which the landing strips are located in Senekal and Marquard. It must however be noted that this landing stripes are badly deteriorating.	The **Maluti Airport** is located in close proximity (5km) from Ficksburg on the R26 along Fouriesburg. There is also a privately-owned airfield located at Sparta in Marquard. The air traffic has been estimated as 25-80 flights per month. Another airfield is located north of Senekal
NON-MOTORIZED TRANSPORTATION	Comprise of walking, bicycle and animal-drawn vehicle modes.	**Walking-** Primary means of transport to access public transportation and various economic and social facilities in close proximity to residential land uses. To enhance this mode

		of transportation, the municipality needs to ensure the availability of sidewalks/foot paths, and sufficient street lighting to promote defensible living in all communities. **Bicycle-** Provisions should be made for the parking of bicycles more especially in town in order to accommodate the needs of people who use this mode of transportation if needs be. Animal**-drawn vehicle modes-** Animal carts are mainly used by rural communities. Provisions should be made for animal facilities (signs for stopping) to ensure safety in order to avoid accidents at night or during bad conditions.

4 SWOT ANALYSIS

Illustrated in the table below is the Strengths, Weaknesses, Opportunities and Threats for the Setsoto Local Municipality based on the situational analysis and synthesis. It can be noted that the municipality has the potential to foster economic growth and job creation, through tourism, manufacturing, agriculture as well as mining. However, the municipality is faced with a number of challenges which threaten the quality of life of the municipality's residents as well as the existing resources of the municipality.

Table 30: SWOT Analysis of Setsoto Local Municipality

Strength	**Weakness**
• Presence of unique heritage and indigenous biodiversity; • Arable land; • Availability of mineral resources; and • Availability of infrastructure for the transportation of goods (railway and roads).	• Poor management of natural resources (rivers, wetlands etc.); • High youth unemployment; • Public Transport is limited; • Households which still uses the bucket system and PIT toilets without ventilation. • Basic service backlog; and • Poor maintenance of existing infrastructure.
Opportunities	**Threats**
• Potential for crop and stock farming due to fertile soils and good climatic conditions; • Use manufacturing and agro-processing for economic growth; • Vacant land between Ficksburg and Meqheleng which can be developed for residential and business to foster convenience and integration • Tourism potential through the sustainable use of protected areas, scenic beauty and unique heritage; and • Job creation opportunity through tourism, mining, manufacturing ng and agriculture.	• Loss of indigenous biodiversity due to development; • Environmental degradation of rivers due to poor management and misuse; • Pollution of wetlands due to illegal dumping of waste; • Water scarcity; and • Persistence of land invasions and informal settlements.

5 SPATIAL VISION AND OBJECTIVES

The Vision of the municipality is as follows:

"A unified, viable and progressive municipality",

Given the analysis of the spatial characteristics and the above vision, the following spatial vision can be derived:

"To develop Setsoto into a place of beauty that recognises its setting comprising of historical, cultural and natural scenic assets that continue to give rise to tourism appeal while developing its industries around the diversity of agricultural produce to result in a unified and sustainable municipality"

The implications of the above vision are as follows:

- The tourism opportunities should be protected and enhanced
  - ✓ Eastern Free State mountain scenery;
  - ✓ Historic urban settlements with Victorian sandstone architecture; and
  - ✓ Basotho (Southern Sotho) regional culture spilling over from 'the mountain kingdom in the sky'.
- Agricultural opportunities that should be supported and protected
  - ✓ Mixed farming, mainly cattle;
  - ✓ Some maize and wheat; and
  - ✓ Cherries around Ficksburg.
- Spatial Planning must ensure that the municipality's resources, mainly arable land, are not unnecessarily damaged for their use by another sector, for example, future urban development should not take good agricultural land out of production.
- Urban settlements should present a high-quality image and appearance so that they are attractive to visitors and residents alike.

6 STRUCTURING ELEMENTS

6.1 REGIONAL CONTEXT

There are four main urban centres in Setsoto Local Municipality, namely Ficksburg, Senekal, Marquard and Clocolan. These are relatively small towns, and are surrounded by commercial farms. The municipality borders Lesotho on the east, with Ficksburg situated at the border of Lesotho. The municipality has been experiencing rural to urban migration since the early 1990s, which has placed pressure on the urban centres with regards to human settlements, basic services as well as economic development.

The overall desired spatial form should comprise of the following

- Tourism development can be located on the southern side of the municipality along the R26.
- Conservation and tourism development can be encouraged on the Willem Pretorius Nature Reserve.
- Agricultural activities should be encouraged outside settlements where viable.

6.1.1 NODAL/HIERARCHY DEVELOPMENT

The hierarchy of nodes are clustered according to the types of services that each node should contain. To ensure viability, these nodes need not be in close proximity to each as to accessibility and economic strength of each specific node. These nodes should be developed in areas which requires growth and can handle the level of such intensifications through adequate infrastructure for the purpose of ensuring the success of these businesses. The strategic hierarchy of clustered facilities are outlined hereunder.

Table 31: Cluster of Facilities Source: Setsoto LM SDF (2012)

Tertiary Cluster of Facilities	***Secondary Cluster Of Facilities***	***Primary Cluster of Facilities***
Regional Shopping Center, Information Center/Library, Technikon/College, High Density, Sports hall, margistrate, Taxi/buses, Markets, Hospital	Main Sports, High Schools, High Density Residential, Market, Library.	Community Food Garderns, Primary Schools, Clinic, Taxi-stop, crech, mixed land use(apartment above shops)

The nodes that have been identified for the Setsoto Local Municipality are outlined in the table hereunder:

Table 32: Identified Nodes

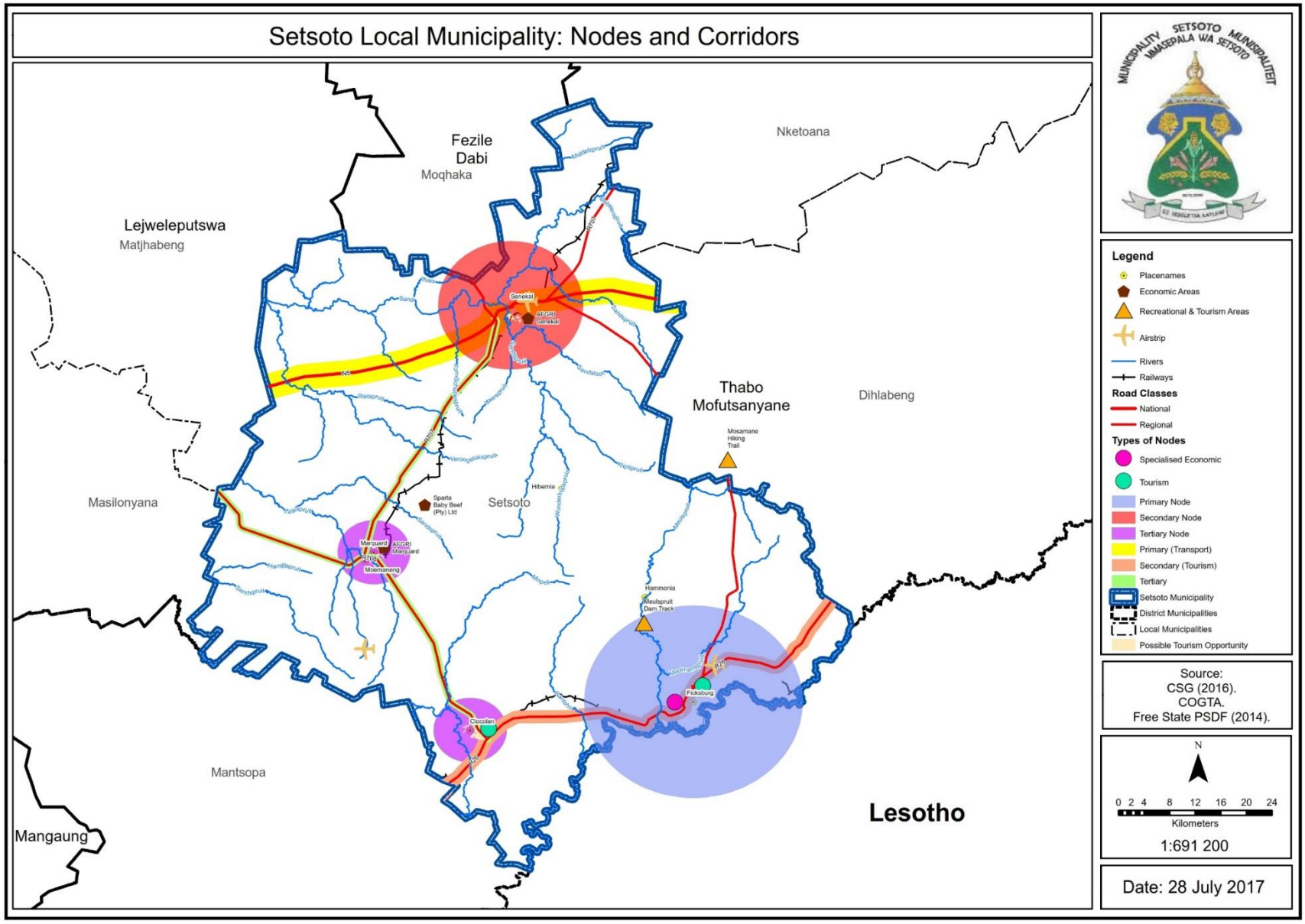
Types of Nodes	*Location*	*Description*
Primary Node	Ficksburg(R26)	This node is made up predominantly of tourism attraction as well as industrial activities. It is also the Administrative centre of the municipality.
Secondary Node	Senekal	This node comprises of minimal business activities as well as community facilities.
Tertiary Nodes	Marquard	This node comprises mainly of farming activities and informal businesses.
	Clocolan	Industrialization and informal businesses are the main land uses in this node.
Tourism Nodes	Clocolan and Ficksburg(R26)	Identified as a "spatial focal point' for tourism potential.

6.1.2 TRANSPORTATION PLANNING

The table below outlines corridors which have been identified within the Setsoto Local Municipality:

Table 33: Corridor developments

Corridor Development	***Route***	***Linkage***
Primary Corridor (Transport)	N5 passing Senekal	This corridor connects Senekal with Bethlehem on Eastern Side and Winburg on the Western side. This also links to Harrismith, which then links to the N3. The N3 is the transport route linking Gauteng with KwaZulu-Natal
Secondary Corridor (Tourism)	R26 passing through Ficksburg and Clocolan	Connects areas in Setsoto Local Municipality with the western side of Lesotho border between Harrismith on the N5 and Rouxville on the N6 to East London.
Tertiary Corridor (Regional connectors)	R708 from Clocolan passing through Marquard	This route links Marquard with the secondary corridor which moves along Clocolan and pass through Ficksburg.
	R707 from Marquard passing by Senekal	This route links Marquard with the secondary node in Senekal.



Map 14: Nodes and Corridors

6.1.3 CROSS BORDER ALIGNMENT

For strengthening the economic development through trade and tourism, the Setsoto Municipality cannot work in isolation, the municipality needs to form trading relations with their neighbouring areas. The following roads have been identified as main linkages from Setsoto Local Municipality to areas neighbouring the municipality.

- Ficksburg has been depicted as one of the main border posts to Lesotho (via the Ficksburg Bridge). This border provides a linkage which mainly focuses on trade and tourism attraction.
- A major transportation road corridor system was also identified along the N5, which is a national road that connects Winburg with the northern parts of the SDF area, particularly Senekal straight through to Harrismith all the way to Kwa-Zulu Natal. Along the Eastern side of the municipality, R26 connects Ficksburg with Fouriesmith.
- Special Economic Zone (SEZ) in Tshiame, Harrismith.
- Ficksburg, Clocolan, and Marquard(R708) connects areas in Setsoto Municipality with Clarens, Fourisburg and Winburg
- Senekal is connected with Bloemfontein (N1-Windburg-N5) and Harrismith.

To strengthen the existing corridors, roads that connects border settlement corridor between Marquard and Rosendal needs to be upgraded. It has to be noted that the previous SDF (2012) outlined the difficulty of the establishment of corridors due to the fact that the border of areas runs across other municipalities (Senekal and Ficksburg linkage passes across Dihlabeng Local Municipality) and settlements are separated by Witterberg Mountains. Another direct link can be provided on the R26 corridor through Ficksburg and Clocolan which runs across Wepener and Smithfield, although this road is a bit far from the municipality it needs to be tarred. Nevertheless, it is important to note that the upgrading and maintenance of these roads can encourage trade and free movement of goods and people within the jurisdiction of Setsoto Local Municipality and other surrounding areas.

Notwithstanding the economic and tourism opportunities along the Lesotho Border posts, the potential threats that can be endured includes illegal immigration and criminal activities occurring on town located in the proximity of the border posts. The Setsoto Municipality needs to work in collaboration with Lesotho government in order to provide regulation to eliminate the occurrence of crime in order to enhance a sustainable cross border with the municipality, Lesotho and adjacent municipality. Depicted in the table below is the cross-border alignment to the adjacent local municipalities.

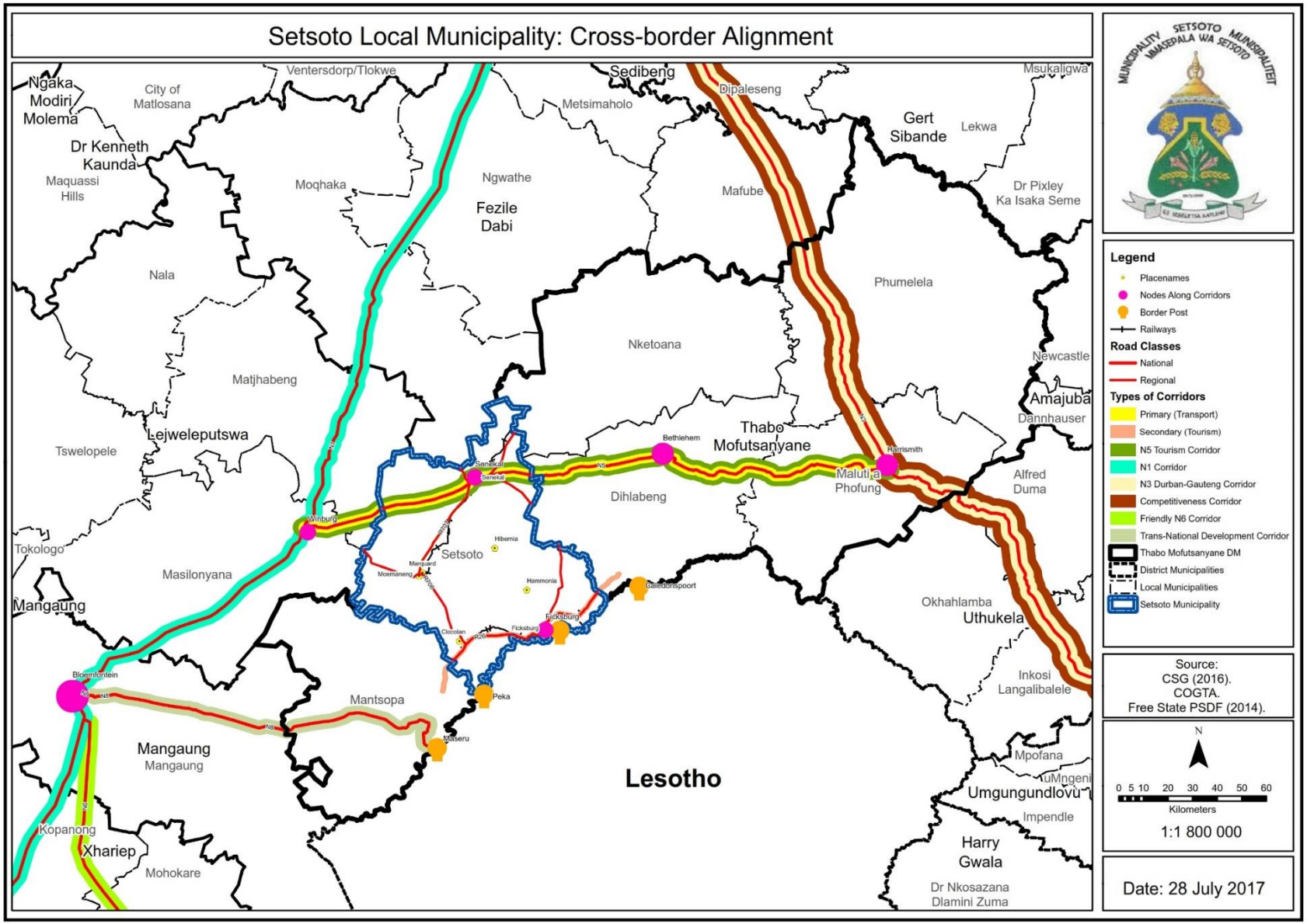
Table 34: Alignment to adjacent municipalities

Alignment to Adjacent Municipalities	*Road Linkage*	*Types of services*
Dihlabeng Local Municipality	The R26 links Ficksburg with Fouriesburg and Clarens.	Small service centre to the surrounding agricultural communities. The primary function of this alignment is the stimulation of growth in the tourism industry (Craft route in the picture sandstone Rooiberg and a view of Maluti Mountain). The tourism industry is stimulated to enhance tourism within the Eastern Free State.
	N5 provides a direct link between Senekal and Bethlehem.	Large Service centre which comprise of a mall, Hospital, Clinics, schools in Bethlehem. Transportation of goods plays a major role in this linkage
	Rosendale is 40km south of Senekal and north of Ficksburg.	This alignment comprises of agricultural significance and provides services to the rural surrounding areas and also stimulates growth through tourism.
Mantsopa Local Municipality	R26 links Ladybrand with Ficksburg on the northern side of Matsopa Local Municipality via the R26.	A service centre which is mainly predominated by agricultural activities in Ladybrand, surrounding rural areas and towards Lesotho. The viability of the retail and industrial land uses still needs to be explored to enhance the economy of this municipality
Nketoana Local Municipality	R707 links Senekal with Arlington and Lindly on the northern side of Setsoto LM.	Limited Business activities in Arlington. The CBD is however in close proximity to Senekal

The following table depicts the alignment to remote municipalities within the Free State that have linkages with the Setsoto Local Municipality.

Table 35: Alignment to remote municipalities

Alignment to Remote Municipalities	*Road Linkage*	*Types of services*
Maluti-A-Phofung	The N5 links with Harrismith.	There is a Special Economic Zone located in Tshiame (Harrismith), which is part of the Free State Development Corporation (FDC) to attract investors to the SEZ for food processing and packaging. The long-term concept of this SEZ is to position Harrismith as an agro-industry hub in the Free State.
Mangaung	The N5 (Senekal to Windburg) also links with the N1 (Windburg to Bloemfontein)	Bloemfontein is regarded as the capital city of the Free State, and provides high order services to the entire province. These services include institutions of higher learning, provincial government administrative offices, provincial hospital etc.



Map 15: Cross-border Alignment

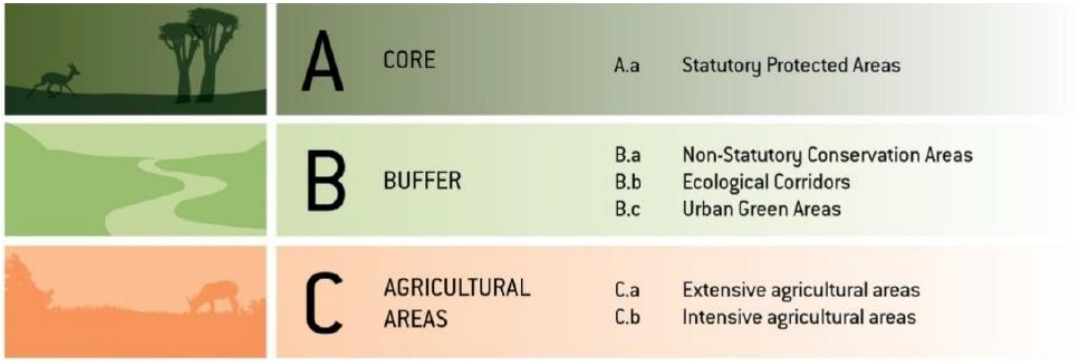
7 DRAFT SDF

The preparation of this SDF has been conducted in alignment to the SPLUMA principles which are:

Table 36: SPLUMA Development Principles

Spatial Justice	to redress spatial and other development imbalances of the past, to ensure the inclusion of the previously disadvantages
Spatial Sustainability	also take into account the economic, environmental and social factors of the proposed land development
Efficiency	to allow for the optimum use of existing resources for the proposed land development
Spatial Resilience	to allow flexibility in land developments to ensure sustainable livelihoods in communities
Good Administration	to ensure compliance spatial plans with prescribed requirements and allow transparent public participation process

The desired spatial form of the four urban centres within the jurisdiction of Setsoto Local Municipality is depicted as follows. These depictions are in table format according to the Spatial Planning Categories as per the figure below.



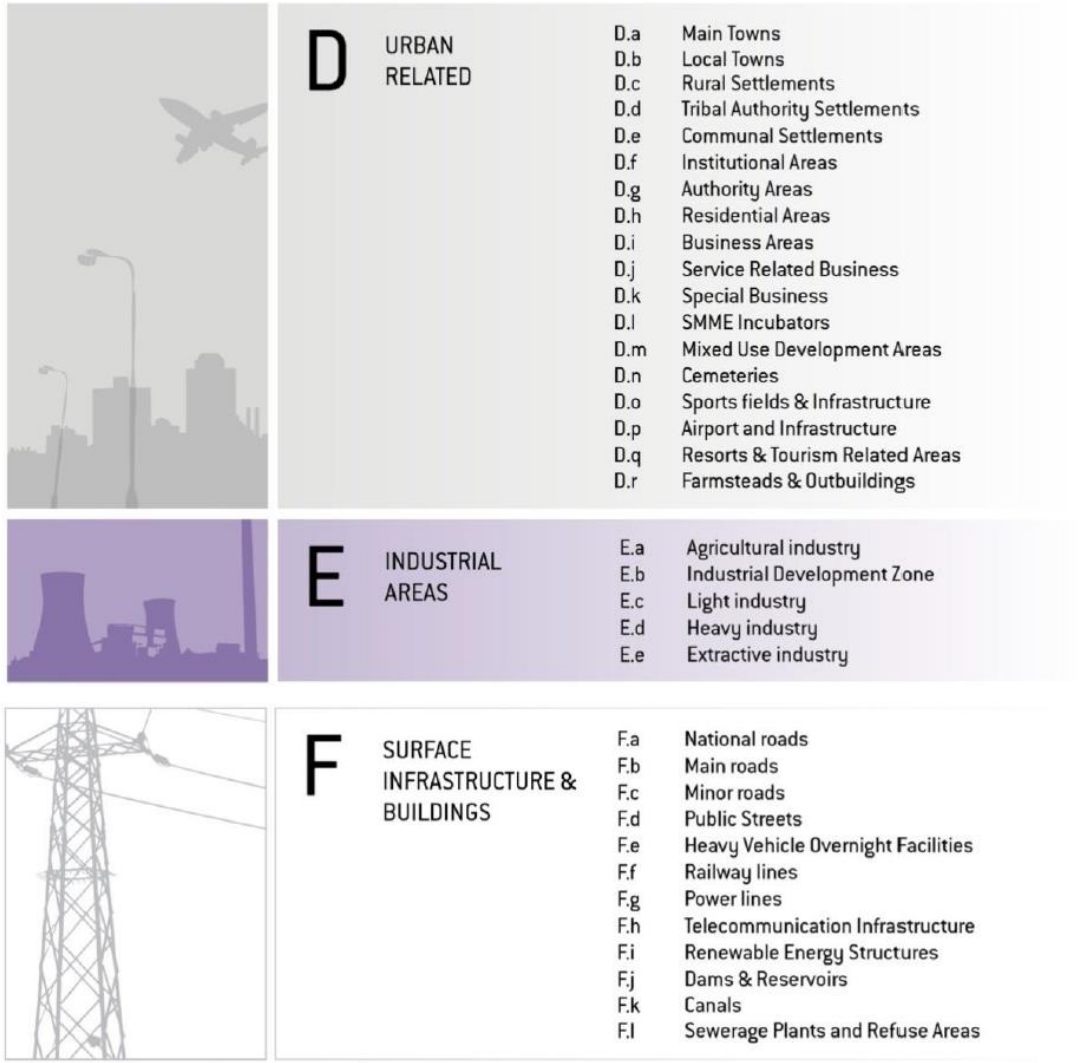


Figure 26: Spatial Planning Categories

7.1 FICKSBURG

The table below depicts the breakdown of the Spatial Planning Categories (SPCs) for Ficksburg on Map 16 while Map 17 depicts the current land uses for ease of reference.

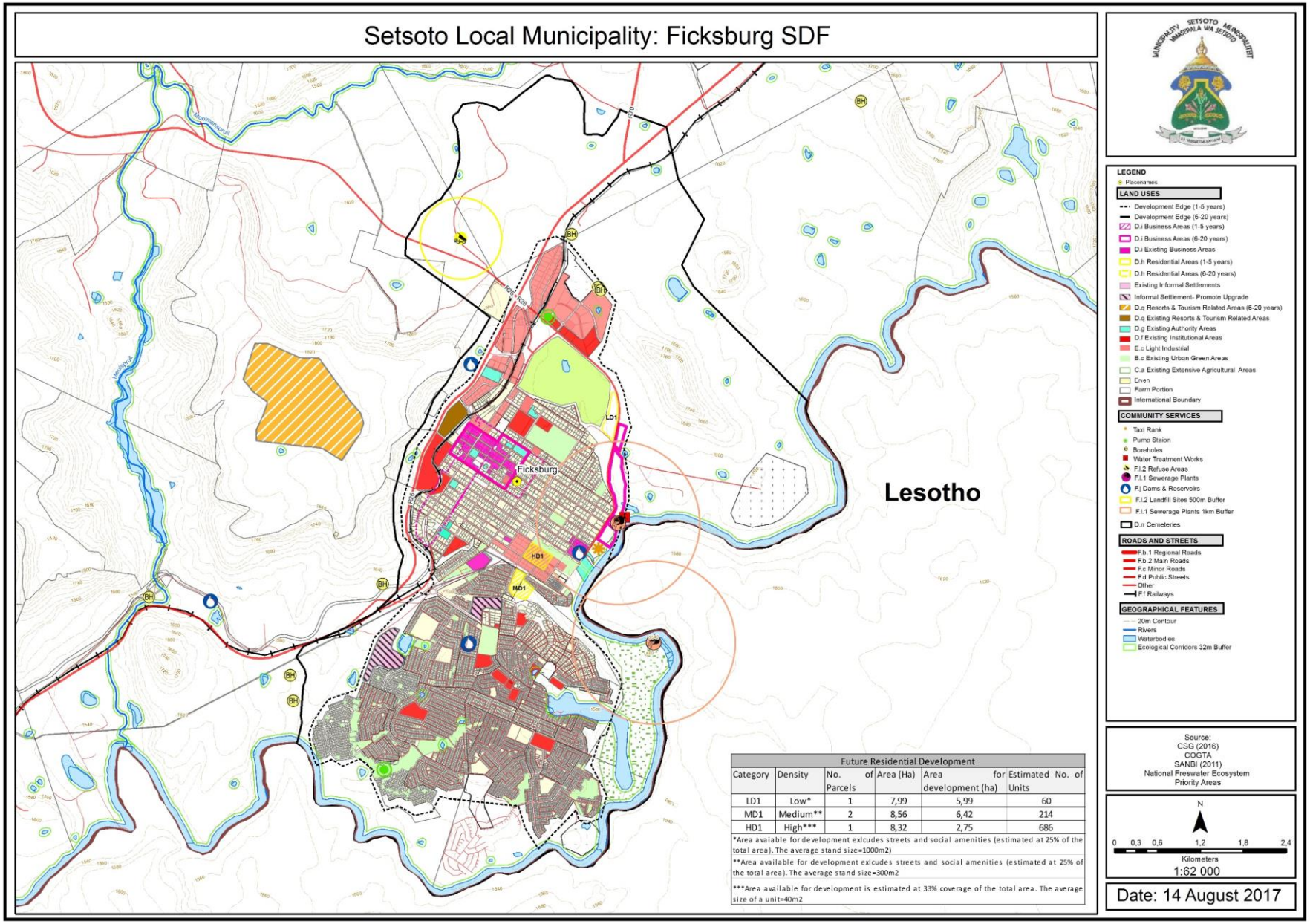
Table 37: Ficksburg SPCs

CONSERVATION	
B BUFFER AREAS	
B.b ECOLOGICAL CORRIDORS	
Linkages between natural habitats or ecosystems that contribute to the connectivity of the latter and to the maintenance of associated natural processes.	
Current SDF for Ficksburg	**Future SDF for Ficksburg**
Ficksburg is characterised by the following rivers: • Caledon River; • Meulspruit River; and • Mooimanspruit River. There are also number of water bodies all around Ficksburg.	• There should be restraint of development to small and low-density footprint, as well as recreational facilities. • For simpler delineation of buffer areas, there should be plantation of trees along the boundaries.
B.c URBAN GREEN AREAS	
Municipal open spaces that form an integral part of the urban structure.	
Current SDF for Ficksburg	**Future SDF for Ficksburg**
• Ficksburg has a number of Public Open Spaces which are utilised for the following purposes: o Recreation; o Ecology; and o Aesthetic Value.	• The current Public Open Spaces in Ficksburg should be conserved; and • Development occurring on these spaces should be for recreational purposes to the benefit of the surrounding communities.
AGRICULTURAL	
C AGRICULTURAL AREAS	

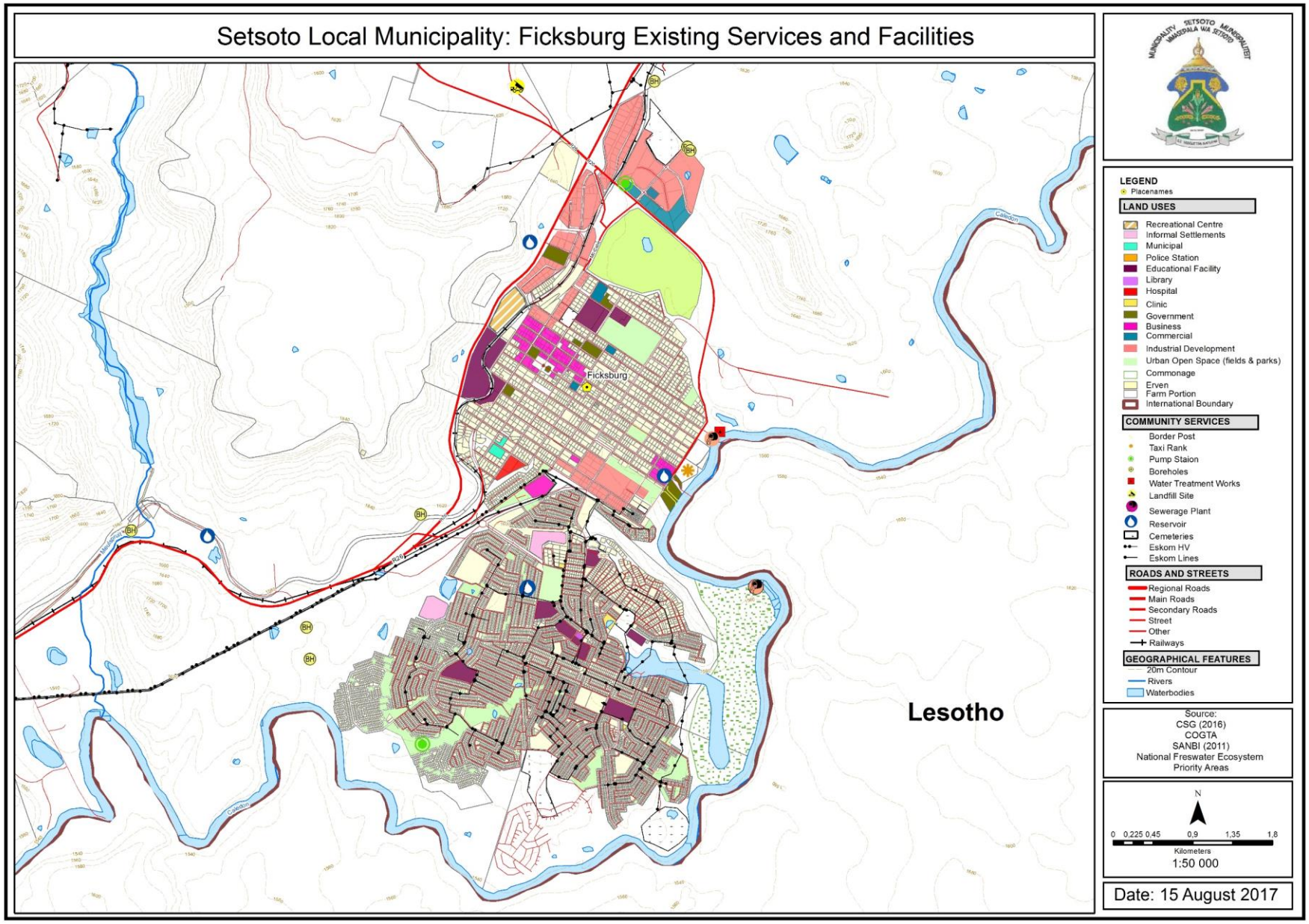
Land typically devoted for agricultural purposes i.e. cropland, farmland, pasture and rangeland.	
Current SDF for Ficksburg	**Future SDF for Ficksburg**
• Ficksburg is surrounded by good agricultural land; • There is a commonage area on the eastern side of Meqheleng township	• Encourage the protection of agricultural land; • Extensive agricultural activities should occur on the area; • Limit the subdivision of agricultural land for residential purposes; and • Promote sustainable farming practices.
URBAN	
URBAN RELATED AREAS	
D.f INSTITUTIONAL AREAS	
Areas designated for schools, colleges, churches and mosques and other institutional purposes.	
Current SDF for Ficksburg	**Future SDF for Ficksburg**
• There are a number of institutional areas scattered throughout Ficksburg	• Provision of new institutional areas should be based on the CSIR Guidelines for the Provision of Social Facilities in South African Settlements (2012); and • The relevant sector departments should be contacted for the necessary norms and standards.
D.h RESIDENTIAL AREAS	
Areas designated for residential purposes, e.g. single title erven, group housing, estates, 'GAP housing' and residential smallholdings.	
Current SDF for Ficksburg	**Future SDF for Ficksburg**
• There are 4 informal settlements in Ficksburg; • Ficksburg has the highest housing demand which is projected to continue to increase; • Ficksburg has biophysical constraints limiting the expansion of the town (Caledon River on the east and south, as well as the Mountain range on the north and west);	• There are low, medium and high-density developments proposed in Ficksburg with the locations and estimated quantities depicted on the map. • Promote development in suitable locations; • Encourage infill developments; and • Limit urban sprawl.
D.i BUSINESS AREAS	

Areas designated for activities associated with retail and service industries, e.g. shops, restaurants, professional offices (areas zoned for business purposes).	
Current SDF for Ficksburg	**Future SDF for Ficksburg**
• The CBD of Ficksburg is located more central to the town; and • There is limited formal business activity occurring in the Meqheleng township	**Ficksburg** • Business activity should be intensified in the CBD; and • Businesses which are compatible to those within the CBD (mixed use) should be encouraged along McCabe Street, as well as east of the CBD. **Meqheleng** • Encourage business on the community nodes in Meqheleng
D.n CEMETERIES	
Cemeteries and formal burial parks, excluding crematoriums.	
Current SDF for Ficksburg	**Future SDF for Ficksburg**
• There is 1 cemetery in Ficksburg (north of the town); and • There are 2 in Meqheleng (south of the township).	• There is a proposed cemetery on the north-eastern side of Ficksburg.
INDUSTRIAL	
E INDUSTRIAL RELATED AREAS	
Areas designated for industrial activities	
Current SDF for Ficksburg	**Future SDF for Ficksburg**
• There are industrial activities occurring on the north-east of Ficksburg town.	• Light industrial activities should be intensified on the existing area; • Suitable industrial activities should occur in the area, considering the area is in close proximity to the settlements (including land acquired by HDA for the municipality); • Industrial activities should also occur in appropriate scales
SURFACE INFRASTRUCTURE	
F SURFACE INFRASTRUCTURE AND BUILDINGS	

F.a NATIONAL ROAD F.b MAIN ROADS F.c MINOR ROADS F.d PUBLIC STREETS	
Current SDF for Ficksburg	**Future SDF for Ficksburg**
• There is R26 running from south-west to north-east; • There is also R70 north of Ficksburg; and • There are a number of minor roads and public streets running within Ficksburg and Meqheleng.	• Regular maintenance and upgrading of roads is vital
F.f RAILWAY LINES	
Current SDF for Ficksburg	**Future SDF for Ficksburg**
• There is a railway line passing on the western side of Ficksburg.	• Transportation of goods by rail should be enhanced and encouraged
F.g POWER LINES	
Current SDF for Ficksburg	**Future SDF for Ficksburg**
• There are a number of high voltage powerlines, dividing the town into Ficksburg and Meqheleng.	• The servitude areas for these high voltage powerlines should be retained as open spaces. These could also be utilised as commonage areas.
F.j. DAMS & RESERVOIRS	
Current SDF for Ficksburg	**Future SDF for Ficksburg**
• There are two Reservoirs in Ficksburg town – one located on the north-western side of the town (near the industrial area) and the other on the eastern side of the town (near the border post) • There is only one in Meqheleng, located central of the township	• Regular maintenance of the reservoirs should be conducted to ensure that the ageing of infrastructure does not lead to disasters as the reservoirs are in close proximity to settlements.
F.l SEWERAGE PLANTS AND REFUSE AREAS	
Current SDF for Ficksburg	**Future SDF for Ficksburg**
• There is 1 refuse area in Ficksburg located on the north-eastern side of the town; and • There are 2 sewage plants in Ficksburg – one on the eastern side of Ficksburg town and the other on the eastern side of Meqheleng.	• Feasibility studies should be done for proposed developments within 500m radius of refuse areas and 1km radius of the sewage plants; and • These developments should be carried out based on recommendations of the feasibility studies.



Map 16: Draft SDF for Ficksburg



Map 17: Current Land Uses for Ficksburg

7.2 SENEKAL

The SPCs of Senekal are described in the table below on Map 18 while Map 19 depicts the current land uses for ease of reference.

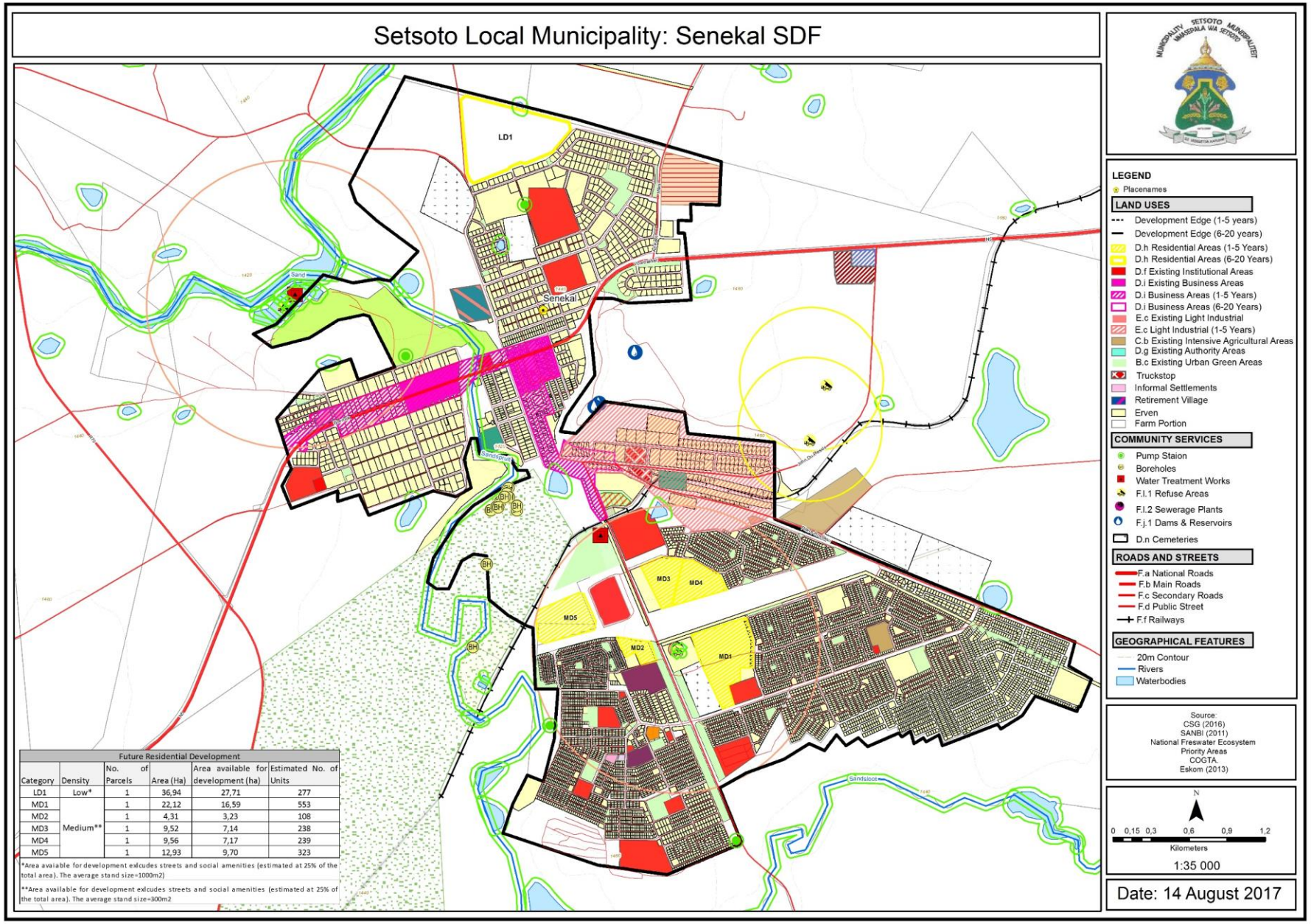
Table 38: Senekal SPCs

CONSERVATION	
B BUFFER AREAS	
B.b ECOLOGICAL CORRIDORS	
Linkages between natural habitats or ecosystems that contribute to the connectivity of the latter and to the maintenance of associated natural processes.	
Current SDF for Senekal	**Future SDF for Senekal**
• Senekal is characterised by the following rivers: • Sand River; • Sandspruit River; and • Sandsloot River.	• There should be restraint of development to small and low-density footprint, as well recreational facilities. • For simpler delineation of buffer areas, there should be plantation of trees along the boundaries.
B.c URBAN GREEN AREAS	
Municipal open spaces that form an integral part of the urban structure.	
Current SDF for Senekal	**Future SDF for Senekal**
• Senekal has a number of Public Open Spaces which are utilised for the following purposes: o Recreation; o Ecology; and o Aesthetic Value.	• The current Public Open Spaces in Senekal should be conserved; and • Development occurring on these spaces should be for recreational purposes to the benefit of the surrounding communities.
AGRICULTURAL	
C AGRICULTURAL AREAS	

Land typically devoted for agricultural purposes i.e. cropland, farmland, pasture and rangeland.	
Current SDF for Senekal	**Future SDF for Senekal**
• Senekal is surrounded by good agricultural land.	• Encourage the investment and protection of agricultural land; • Limit the subdivision of agricultural land for residential purposes; and • Promote sustainable farming practices.
URBAN	
D. URBAN RELATED AREAS	
D.f INSTITUTIONAL AREAS	
Areas designated for schools, colleges, churches and mosques and other institutional purposes.	
Current SDF for Senekal	**Future SDF for Senekal**
• There are a number of institutional areas scattered throughout Senekal.	• Provision of new institutional areas should be based on the CSIR Guidelines for the Provision of Social Facilities in South African Settlements (2012); and • The relevant sector departments should be contacted for the necessary norms and standards.
D.h RESIDENTIAL AREAS	
Areas designated for residential purposes, e.g. single title erven, group housing, estates, 'GAP housing' and residential smallholdings.	
Current SDF for Senekal	**Future SDF for Senekal**
• There are 2 informal settlements in Senekal with a total 963 households; • There are 781 erven that still in need of services; • The rate at which the housing demand is decreasing it is projected that the housing demand in Matwabeng will be still persistent even in year 2031	• Medium density residential developments **on** undeveloped portions between Senekal and Matwabeng, and low density development is proposed on the north western side of Senekal – with estimated quantities depicted on the map (away from high voltage powerline servitude); • Promote development in suitable locations; • Encourage infill developments; • Promote integrated human settlements; and • Limit urban sprawl.

D.i BUSINESS AREAS	
Areas designated for activities associated with retail and service industries, e.g. shops, restaurants, professional offices (areas zoned for business purposes).	
Current SDF for Senekal	**Future SDF for Senekal**
• The CBD of Senekal is located more central to the town; and • There is limited formal business activity occurring in the Matwabeng township	**Senekal** • Business activity (mixed use) should be intensified in the CBD; • Business activity should also be intensified along Boerbok Street, Landross Street • Businesses which are compatible to those within the CBD should be encouraged along Union Street, as well as west of the CBD. **Matwabeng** • Business activity should be encouraged along the Street that joins Matwabeng Township with Senekal (joining Landross Street). • Business activity should also be intensified on areas identified as community nodes
D.n CEMETERIES	
Cemeteries and formal burial parks, excluding crematoriums.	
Current SDF for Senekal	**Future SDF for Senekal**
• There are two cemeteries in Senekal, on the west of the town; and • There is also one cemetery in Matwabeng, located on the north of the township.	• There are two proposed cemeteries in close proximity to the existing cemeteries in Senekal; • There is one proposed cemetery adjacent to the existing cemetery in Matwabeng.
INDUSTRIAL	
E INDUSTRIAL RELATED AREAS	
Areas designated for industrial activities	
Current SDF for Senekal	**Future SDF for Senekal**

• There are industrial activities occurring on the north of Matwabeng Township.	• Industrial activities should be intensified on the existing area; • Suitable industrial activities should occur in the area, considering the area is in close proximity to the settlements; • Industrial activities should also occur in appropriate scales
SURFACE INFRASTRUCTURE	
F SURFACE INFRASTRUCTURE AND BUILDINGS	
F.a NATIONAL ROAD F.b MAIN ROADS F.c MINOR ROADS F.d PUBLIC STREETS	
Current SDF for Senekal	**Future SDF for Senekal**
• N5 is running from south-west to north east of Senekal; • R707 runs on the south east of Senekal; and • There are a number of minor roads and public streets running within Matwabeng and Senekal.	• Regular maintenance and upgrading of roads is vital
F.f RAILWAY LINES	
Current SDF for Senekal	**Future SDF for Senekal**
• There is a railway line passing by the existing industrial area.	• Transportation of goods should be enhanced by rail
F.g POWER LINES	
Current SDF for Senekal	**Future SDF for Senekal**
• There are high voltage powerlines running from west to east in Matwabeng.	• The servitude areas for these high voltage powerlines should be retained as open spaces.
F.I SEWERAGE PLANTS AND REFUSE AREAS	
Current SDF for Senekal	**Future SDF for Senekal**
• There are 2 refuse areas, both located on the northern side of Matwabeng; • There are 2 sewage plants, one is located west of Senekal, while the other is located central to the Matwabeng township; and • There is also 1 water treatment works, located north-east of Matwabeng.	• Feasibility studies should be done for proposed developments within 500m radius of refuse areas and 1km radius of the sewage plants; and • These developments should be carried out based on recommendations of the feasibility studies.



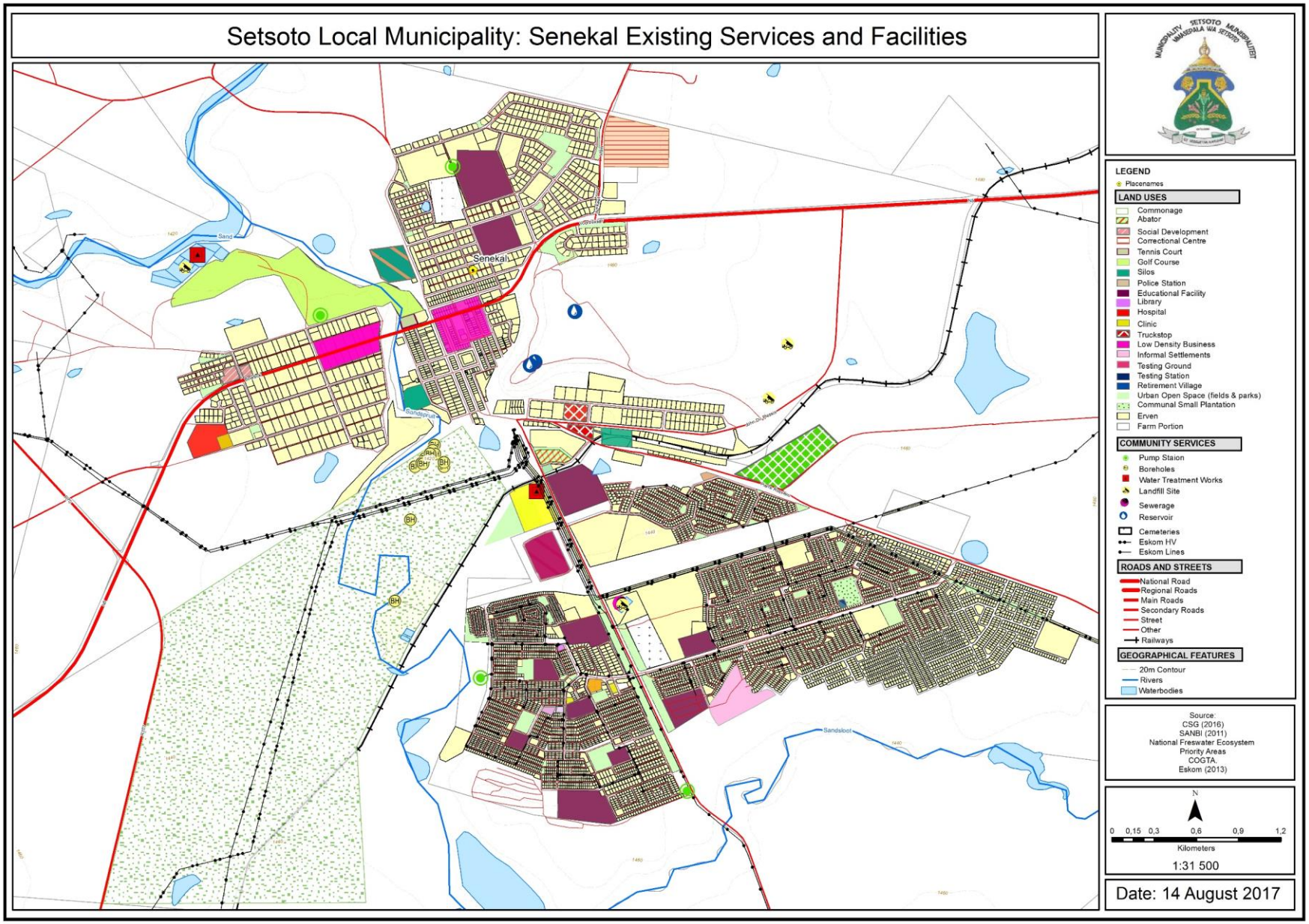
Future Residential Development

Category	Density	No. of Parcels	Area (Ha)	Area available for development (ha)	Estimated No. of Units
LD1	Low*	1	36,94	27,71	277
MD1	Medium**	1	22,12	16,59	553
MD2		1	4,31	3,23	108
MD3		1	9,52	7,14	238
MD4		1	9,56	7,17	239
MD5		1	12,93	9,70	323

*Area avaiable for development exlcudes streets and social amenities (estimated at 25% of the total area). The average stand size=1000m2)

**Area available for development exlcudes streets and social amenities (estimated at 25% of the total area). The average stand size=300m2

Map 18: Draft SDF for Senekal



Map 19: Existing Land Uses for Senekal

7.3 CLOCOLAN

Depicted in the table below, and on Map 20, is the SPCs for Clocolan. Map 21 depicts the current land uses for ease of reference.

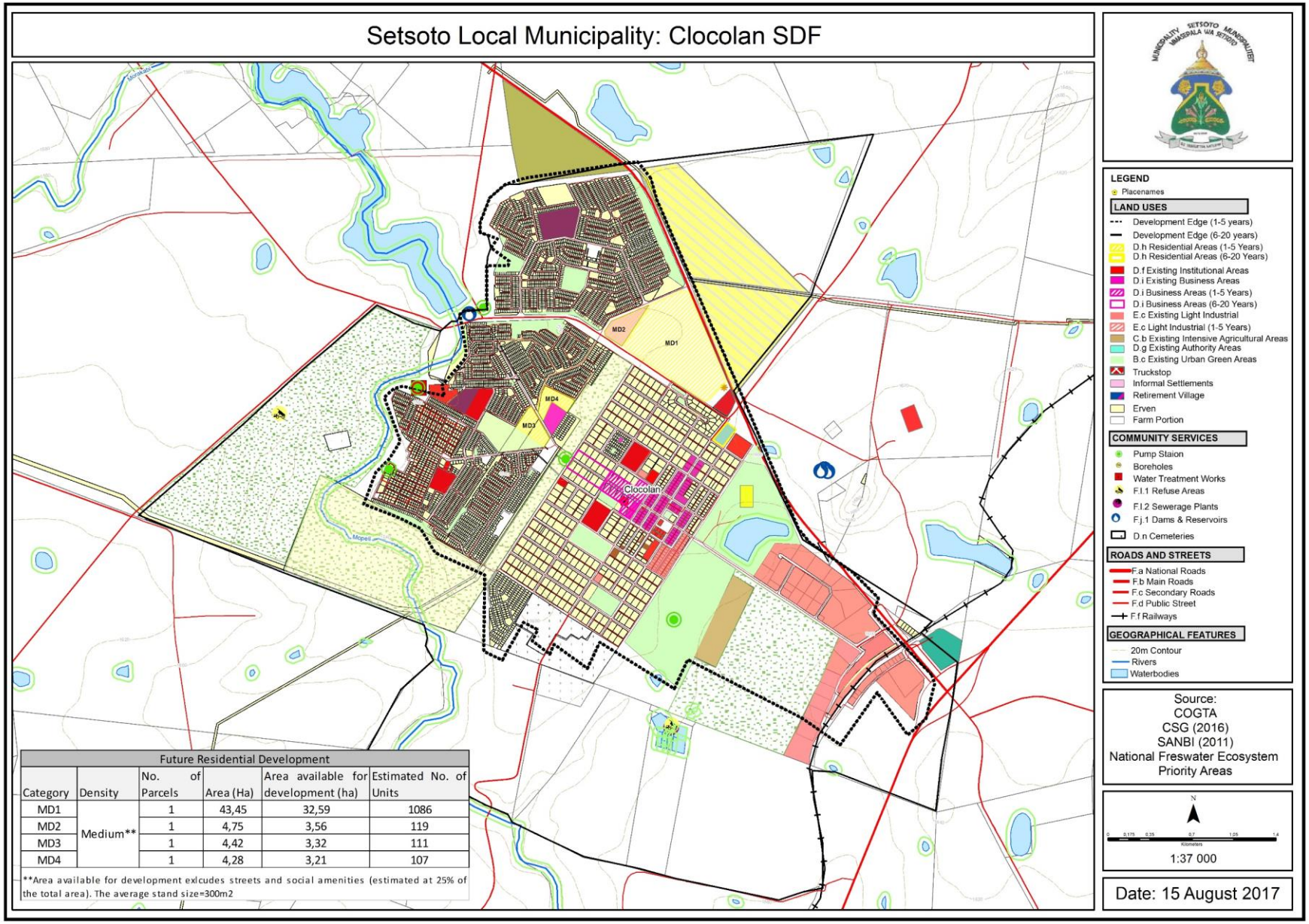
Table 39: Clocolan SPCs

<table>
<tr><th colspan="2">CONSERVATION</th></tr>
<tr><td colspan="2">B BUFFER AREAS</td></tr>
<tr><td colspan="2">B.b ECOLOGICAL CORRIDORS</td></tr>
<tr><td colspan="2">Linkages between natural habitats or ecosystems that contribute to the connectivity of the latter and to the maintenance of associated natural processes.</td></tr>
<tr><td>Current SDF for Clocolan</td><td>Future SDF for Clocolan</td></tr>
<tr><td>• The Morakabi River runs on the east on Clocolan; and
• A number of water bodies all around Clocolan.</td><td>• There should be restraint of development to small and low-density footprint, as well as eco-friendly tourism and recreational facilities.
• For simpler delineation of buffer areas, there should be plantation of trees along the boundaries.</td></tr>
<tr><td colspan="2">B.c URBAN GREEN AREAS</td></tr>
<tr><td colspan="2">Municipal open spaces that form an integral part of the urban structure.</td></tr>
<tr><td>Current SDF for Clocolan</td><td>Future SDF for Clocolan</td></tr>
<tr><td>• Clocolan has a number of Public Open Spaces which are utilised for the following purposes:
o Recreation;
o Ecology; and
o Aesthetic Value.</td><td>• The current Public Open Spaces in Clocolan should be conserved; and
• Development occurring on these spaces should be for recreational purposes/ to the benefit of the surrounding communities.</td></tr>
<tr><th colspan="2">AGRICULTURAL</th></tr>
<tr><td colspan="2">C. AGRICULTURAL AREAS</td></tr>
<tr><td colspan="2">Land typically devoted for agricultural purposes i.e. cropland, farmland, pasture and rangeland.</td></tr>
</table>

Current SDF for Clocolan	Future SDF for Clocolan
• Clocolan is surrounded by good agricultural land; • There is an existing commonage on the eastern side of the road heading to Excelsior (R703)	• Encourage the investment and protection of agricultural land; • Limit the subdivision of agricultural land for residential purposes; and • Promote sustainable farming practices.
URBAN	
D. URBAN RELATED AREAS	
D.f INSTITUTIONAL AREAS	
Areas designated for schools, colleges, churches and mosques and other institutional purposes.	
Current SDF for Clocolan	**Future SDF for Clocolan**
• There are a number of institutional areas scattered throughout Clocolan	• Provision of new institutional areas should be based on the CSIR Guidelines for the Provision of Social Facilities in South African Settlements (2012); and • The relevant sector departments should be contacted for the necessary norms and standards.
D.h RESIDENTIAL AREAS	
Areas designated for residential purposes, e.g. single title erven, group housing, estates, 'GAP housing' and residential smallholdings.	
Current SDF for Clocolan	**Future SDF for Clocolan**
• There is one informal settlement in Hlohlolwane; • The housing backlog in Hlohlolwane is still high; and • Spatially segregation between Hlohlolwane and Clocolan.	• Medium density residential development on undeveloped portions of land in Hlohlolwane Township, as well as vacant land on the northern side of Clocolan with estimated quantities depicted on the map; • Promote development in suitable locations • Limit urban sprawl • Channel residential development towards Clocolan, for integration
D.i BUSINESS AREAS	
Areas designated for activities associated with retail and service industries, e.g. shops, restaurants, professional offices (areas zoned for business purposes).	
Current SDF for Clocolan	**Future SDF for Clocolan**

• The CBD of Clocolan is located more central to the town; and • There is limited formal business activity occurring in the Hlohlolwane township	**Clocolan** • Business activity should be intensified in the CBD; and • Businesses which are compatible to those within the CBD should be encouraged along First Street up until Second Avenue as well as along Andries Pretorius Street, from Second Street intersection to Piet Retief Street. **Hlohlolwane** • Opportunity for small scale businesses in the area.
D.n CEMETERIES	
Cemeteries and formal burial parks, excluding crematoriums.	
Current SDF for Clocolan	**Future SDF for Clocolan**
• Clocolan has two cemeteries, one south of Hlohlolwane, while the other is west of the town.	• There is proposed cemetery on the south of the existing cemetery **(FC)** in Hlohlolwane.
INDUSTRIAL	
E INDUSTRIAL RELATED AREAS	
Areas designated for industrial activities	
Current SDF for Clocolan	**Future SDF for Clocolan**
• There are industrial activities occurring on the eastern side of Clocolan.	• Industrial activities should be intensified on the existing area; • Suitable industrial activities should occur in the area, considering the area is in close proximity to the settlements; • Industrial activities should also occur in appropriate scales
SURFACE INFRASTRUCTURE	
F SURFACE INFRASTRUCTURE AND BUILDINGS	
F.a NATIONAL ROAD **F.b MAIN ROADS** **F.c MINOR ROADS** **F.d PUBLIC STREETS**	
Current SDF for Clocolan	**Future SDF for Clocolan**

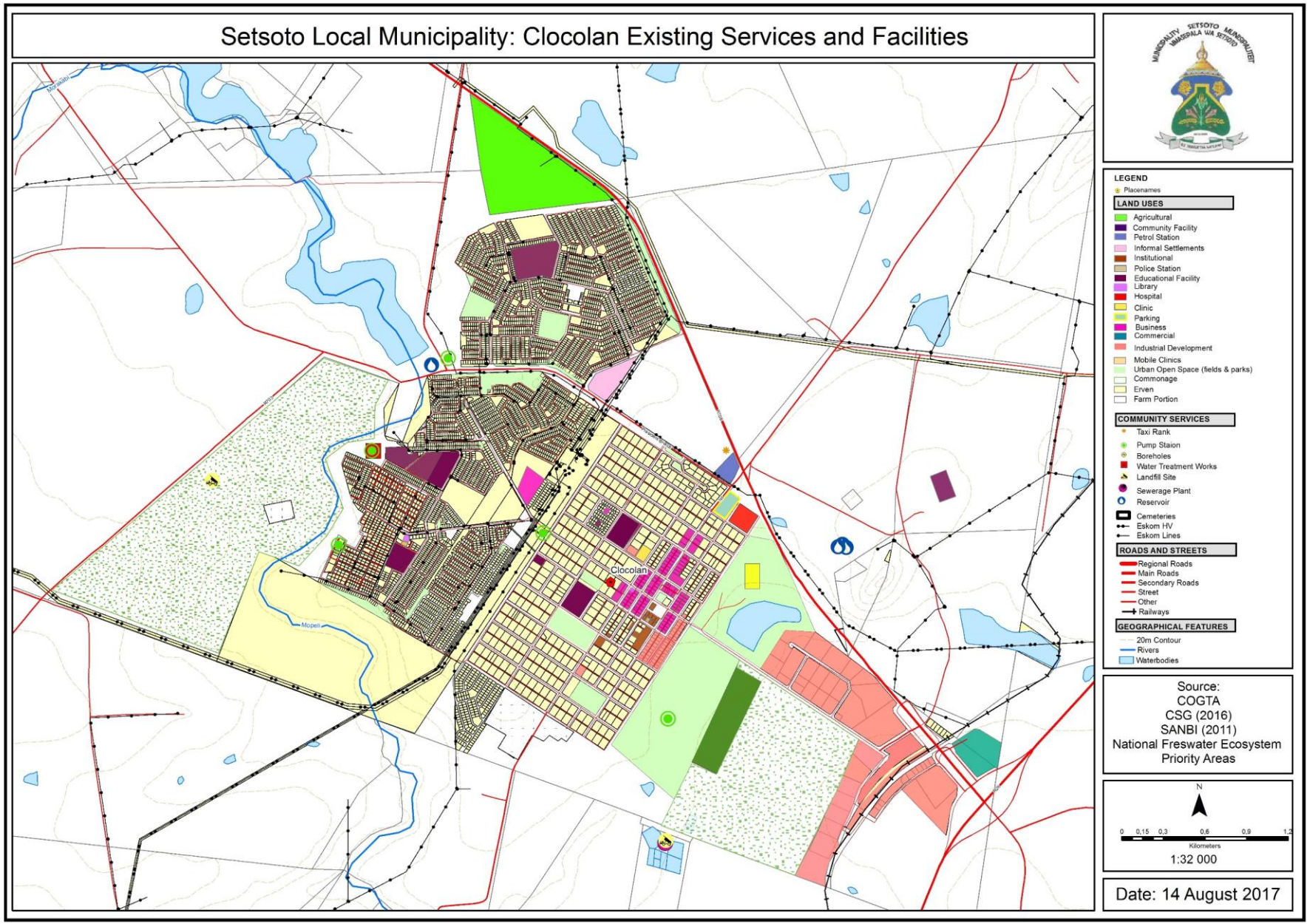
• R708 is running on the northern side of Clocolan; • R703 runs on the eastern side of Hlohlolwane; and • There are a number of minor roads and public streets running within Clocolan and Hlololwane.	• Regular maintenance and upgrading of roads is vital
F.f RAILWAY LINES	
Current SDF for Clocolan	**Future SDF for Clocolan**
• There is a railway line passing on the eastern side of Clocolan.	• Transportation of goods should by rail should be enhanced
F.g Power Lines	
Current SDF for Clocolan	**Future SDF for Clocolan**
• There are a number of high voltage powerlines, dividing the town into Clocolan and Hlohlolwane.	• The servitude areas for these high voltage powerlines should be retained as open spaces.
F.I SEWERAGE PLANTS AND REFUSE AREAS	
Current SDF for Clocolan	**Future SDF for Clocolan**
• There are two refuse areas in Clocolan, one is located on the western side, and the other on the southern side of Hlohlolwane; and • There is also one sewage plant, located on the southern side of the town.	• Feasibility studies should be done for proposed developments within 500m radius of refuse areas and 1km radius of the sewage plants; and • These developments should be carried out based on recommendations of the feasibility studies.



Future Residential Development					
Category	Density	No. of Parcels	Area (Ha)	Area available for development (ha)	Estimated No. of Units
MD1	Medium**	1	43,45	32,59	1086
MD2		1	4,75	3,56	119
MD3		1	4,42	3,32	111
MD4		1	4,28	3,21	107

**Area available for development exlcudes streets and social amenities (estimated at 25% of the total area). The average stand size=300m2

Map 20: Draft SDF for Clocolan



Map 21: Current Land Uses for Clocolan

7.4 MAQUARD

The table below outlines the SPCs for Marquard in relation to Map 22. Map 23 depicts the current Land uses for ease of reference.

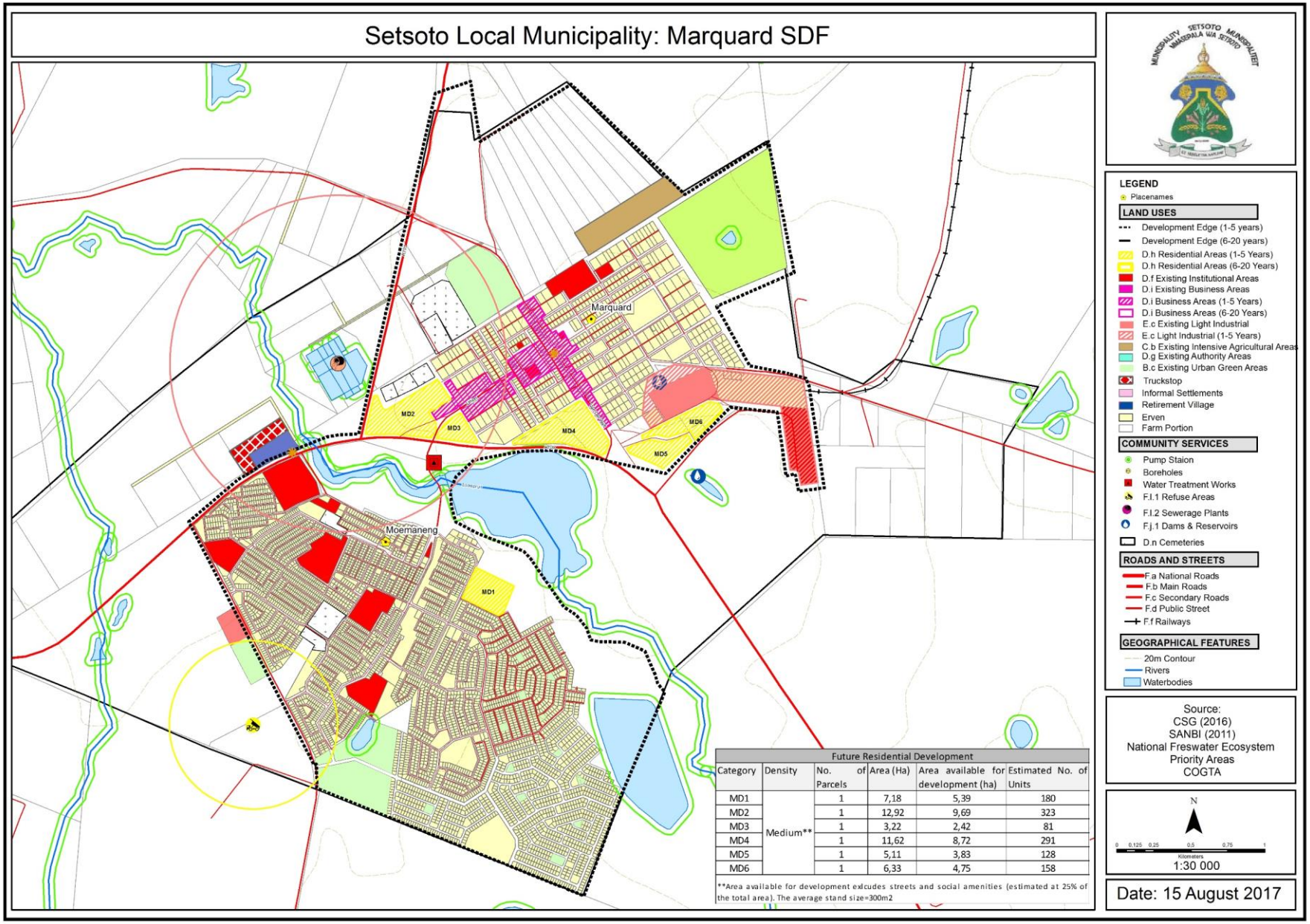
Table 40: Marquard SPCs

<table>
<tr><th colspan="2">CONSERVATION</th></tr>
<tr><td colspan="2">B BUFFER AREAS</td></tr>
<tr><td colspan="2">B.b ECOLOGICAL CORRIDORS</td></tr>
<tr><td colspan="2">Linkages between natural habitats or ecosystems that contribute to the connectivity of the latter and to the maintenance of associated natural processes.</td></tr>
<tr><td>Current SDF for Marquard</td><td>Future SDF for Marquard</td></tr>
<tr><td>• The Laaispruit River separates the Marquard town and Moemaneng;
• There are also a number of streams running on the south of Moemaneng; and
• A number of water bodies all around Marquard.</td><td>• There should be restraint of development to small and low-density footprint, as well as eco-friendly tourism and recreational facilities.
• For simpler delineation of buffer areas, there should be plantation of trees along the boundaries.</td></tr>
<tr><td colspan="2">B.c URBAN GREEN AREAS</td></tr>
<tr><td colspan="2">Municipal open spaces that form an integral part of the urban structure.</td></tr>
<tr><td>Current SDF for Marquard</td><td>Future SDF for Marquard</td></tr>
<tr><td>• Marquard has a number of Public Open Spaces which are utilised for the following purposes:
o Recreation;
o Ecology; and
o Aesthetic Value.</td><td>• The current Public Open Spaces in Marquard should be conserved; and
• Development occurring on these spaces should be for recreational purposes/ to the benefit of the surrounding communities.</td></tr>
<tr><th colspan="2">AGRICULTURAL</th></tr>
<tr><td colspan="2">C AGRICULTURAL AREAS</td></tr>
<tr><td colspan="2">Land typically devoted for agricultural purposes i.e. cropland, farmland, pasture and rangeland.</td></tr>
</table>

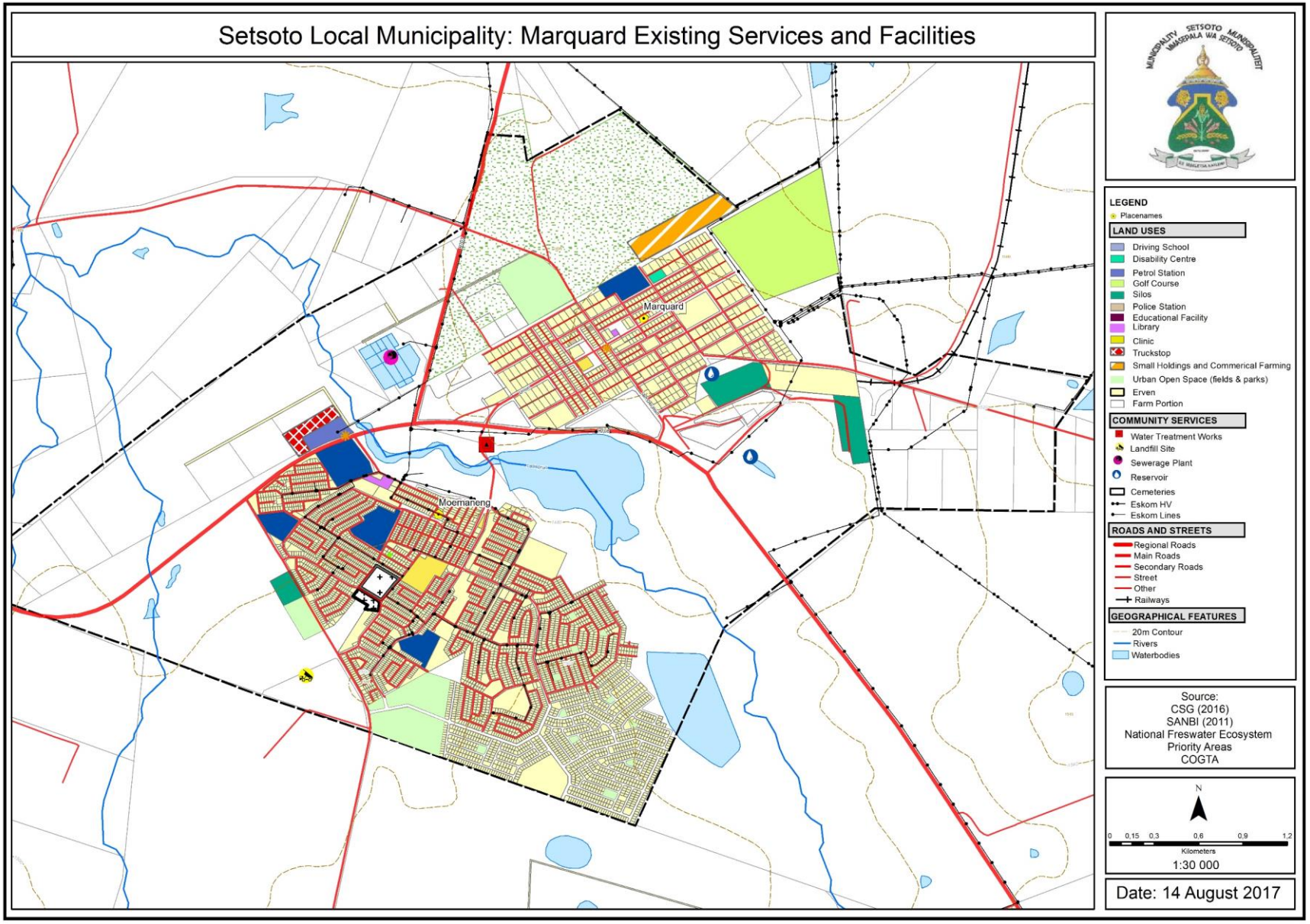
Current SDF for Marquard	Future SDF for Marquard
• Marquard is surrounded by good agricultural land; • There is also an existing commonage area on the northern side of the Marquard town	• Encourage the investment and protection of agricultural land; • The commonage should be utilised as an intensive agricultural area (urban agriculture) • Limit the subdivision of agricultural land for residential purposes; and • Promote sustainable farming practices.
URBAN	
URBAN RELATED AREAS	
D.f INSTITUTIONAL AREAS	
Areas designated for schools, colleges, churches and mosques and other institutional purposes.	
Current SDF for Marquard	**Future SDF for Marquard**
• There are a number of institutional areas scattered throughout Marquard	• Provision of new institutional areas should be based on the CSIR Guidelines for the Provision of Social Facilities in South African Settlements (2012); and • The relevant sector departments should be contacted for the necessary norms and standards.
D.h RESIDENTIAL AREAS	
Areas designated for residential purposes, e.g. single title erven, group housing, estates, 'GAP housing' and residential smallholdings.	
Current SDF for Marquard	**Future SDF for Marquard**
• There is one informal settlements in Marquard; • There are 1000 erven that still in need of services; • The housing demand in Moemaneng is projected to be still persistent even in year 2031	• Medium density residential development on undeveloped portions between Marquard and Moemaneng (away from 100-year flood-line) – with estimated quantities depicted on the map ; • Promote development in suitable locations; • Encourage infill developments; • Promote integrated human settlements; and • Limit urban sprawl.

D.i BUSINESS AREAS	
Areas designated for activities associated with retail and service industries, e.g. shops, restaurants, professional offices (areas zoned for business purposes).	
Current SDF for Marquard	**Future SDF for Marquard**
• The CBD of Marquard is located more central to the town; and • There is limited formal business activity occurring in the Moemaneng township	**Marquard** • Business activity should be intensified in the CBD; and • Businesses which are compatible to those within the CBD should be encouraged along Union Street, as well as west of the CBD. **Moemaneng** • Opportunity for small scale businesses in the area
D.n CEMETERIES	
Cemeteries and formal burial parks, excluding crematoriums.	
Current SDF for Marquard	**Future SDF for Marquard**
• There is one cemetery in Marquard, on the west of the town; and • There is also one cemetery in Moemaneng, located on the south of the township.	• There is 1 proposed cemetery adjacent to the existing cemetery in Marquard; • There 2 proposed cemeteries on the south of Moemaneng, in close proximity to the existing cemetery.
INDUSTRIAL	
E INDUSTRIAL RELATED AREAS	
Areas designated for industrial activities	
Current SDF for Marquard	**Future SDF for Marquard**
• There are industrial activities occurring on the north-east of Marquard town.	• Industrial activities should be intensified on the existing area; • Suitable industrial activities should occur in the area, considering the area is in close proximity to the settlements; • Industrial activities should also occur in appropriate scales
SURFACE INFRASTRUCTURE	

F SURFACE INFRASTRUCTURE AND BUILDINGS	
F.a NATIONAL ROAD F.b MAIN ROADS F.c MINOR ROADS F.d PUBLIC STREETS	
Current SDF for Marquard	**Future SDF for Marquard**
• The R708 runs between Marquard and Moemaneng; • R707 runs west of Marquard; and • There are a number of minor roads and public streets running within Moemaneng and Marquard.	• Regular maintenance and upgrading of roads is vital
F.f RAILWAY LINES	
Current SDF for Marquard	**Future SDF for Marquard**
• There is a railway line passing by the existing industrial area.	• Transportation of goods should by rail should be enhanced
F.g POWER LINES	
Current SDF for Marquard	**Future SDF for Marquard**
• There are high voltage powerlines on the north-eastern side of Marquard	• The servitude areas for these high voltage powerlines should be retained as open spaces.
F.I SEWERAGE PLANTS AND REFUSE AREAS	
Current SDF for Marquard	**Future SDF for Marquard**
• There is one refuse area located on the south side of Moemaneng; • There is a water treatment works between Marquard and Moemaneng; and • There is also one sewage plant, located on the eastern side of Meqheleng.	• Feasibility studies should be done for proposed developments within 500m radius of refuse areas and 1km radius of the sewage plants; and • These developments should be carried out based on recommendations of the feasibility studies.



Map 22: Draft SDF for Marquard



Map 23: Current Land Uses for Marquard

7.5 CAPITAL INVESTMENT FRAMEWORK

This section outlines the types of projects per municipal area, highlighting the key issues and the estimated budget for each project as per the 2016 IDP.

Table 41: Types of Projects

KEY PERFORMANCE AREA	FUNDED INFRASTRUCTURE AND SERVICE DELIVERY PROJECTS										
Project Number and Name	Key Focus Area	Predetermined Objective	Key Performance Indicator	Location/Ward	Baseline Indicator	Annual Target		Timeframe and Funding Source			
							2016/2017	2017/2018	2018/2019	Project Costs	Source
SLM 001/2016/2017 Ficksburg/Meqheleng: Construction of 3km Paved Road and Storm water Drainage	Roads and Storm Water Drainage	To ensure proper road network throughout the entire area to benefit all residents	Kilometre of road constructed with paving and storm water drainage system	12,13,14,16,17,18	0	3	21 992 290.00	0	0	21 992 290.00	Municipal Infrastructure Grant
SLM 002/2016/2017 Senekal Matwabeng: Construction of 3km Paved Road and Storm water Drainage	Roads and Storm Water Drainage	To ensure proper road network throughout the entire area to benefit all residents	Kilometre of road constructed with paving and storm water drainage system	3,4,5,6,7	0	3	21 992 290.00	0	0	21 992 290.00	Municipal Infrastructure Grant
SLM 003/2016/2017 Marquard/Moemaneng: Construction of 3km Paved Road and Storm	Roads and Storm Water Drainage	To ensure proper road network throughout the entire area to benefit all residents	Kilometre of road constructed with paving and storm water	1,2	0	3	21 992 290.00	0	0	21 992 290.00	Municipal Infrastructure Grant

SLM 004/2016/2017 Clocolan/Hlohlolwane: Construction of 3km Paved Road and Storm water Drainage	Roads and Storm Water Drainage	To ensure proper road network throughout the entire area to benefit all residents	Kilometre of road constructed with paving and storm water drainage system	8,9,11	0	3	21 992 290.00			21 992 290.00	Municipal Infrastructure Grant
SLM005/2016/2017 Clocolan/Hlohlolwane: Development of Solid Waste Site	Waste Management	To continue to provide a regular, healthy and effective refuse removal services in all urban areas	Number of Solid Waste Disposal Sites developed	8,9,11	0	1	16 594 150.00	0	0	16 594 150.00	Municipal Infrastructure Grant
SLM006/2016/2017 Marquard/Moemaneng: Development of Solid Waste Site	Waste Management	To continue to provide a regular, healthy and effective refuse removal services in all urban areas	Number of Solid Waste Disposal Sites developed	1,2	0	1	15 757 561.00	0	0	15 757 561.00	Municipal Infrastructure Grant
SLM007/2017/2018 Ficksburg/Meqheleng: New Stadium Lighting and Seating	Recreation and Sport	Upgrading of recreational and sport facilities	Percentage lighting and seating competed	10,12,13,14,15,16,17,18	0%	90%	9 120 000.00	0	0	9 120 000.00	Municipal Infrastructure Grant
SLM008/2016/2017 Senekal/Matwabeng: Construction of Central Water Treatment Works with Rising Main Pipes and Raw Water Supply Pipes from all dams	Water	To ensure good quality water and affordable infrastructure available and accessible to all communities and continuous maintenance thereof at a high standard	Percentage work completed	3,4,5,6,7	0	80%	145 000 000.00	0	0	145 000 000.00	RBIG

KEY PERFORMANCE AREA	FUNDED INFRASTRUCTURE AND SERVICE DELIVERY PROJECTS										
KPA	Infrastructure and Service Delivery										
Project Number and Name	Key Focus Area	Predetermined Objective	Key Performance Indicator	Location/Ward	Baseline Indicator	Annual Target	Timeframe and Funding Source				
							2016/2017	2017/2018	2018/2019	Project Costs	Source
SLM009/2016/2017 Acquisition of tools and equipment for fleet management office	Organisational Development	Ensure that the organisation is well equipped and has the adequate resources to provide services to the communities	Percentage equipment purchased	Head Office	50%	100%	448 415.00	0	0	448 415.00	Own Income
SLM010/2016/2017 Purchasing of vehicles and equipment by the fleet management division	Organisational Development	Ensure that the organisation is well equipped and has the adequate resources to provide services to the communities	Percentage equipment purchased	Setsoto	75%	100%	550 000.00	0	0	550 000.00	Own Income
SLM011/2016/2017 Rent of Equipment	Organisational Development	Ensure that the organisation is well equipped and has the adequate resources to provide services to the	Percentage equipment and vehicles rented	Setsoto	25%	5%	400 000.00	0	0	400 000.00	Own Income
KEY PERFORMANCE AREA	UNFUNDED INFRASTRUCTURE AND SERVICE DELIVERY PROJECTS										
SLM012/2016/2021 Development of 1 145 sites in Matwabeng, roads, water and storm water	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality formal housing and receive security of tenure	Number of sites developed	4,5,6,7		1 145				46 000 000.00	Department of Human Settlement

SLM013/2016/2021 Development of 1 110 sites in Hlohlolwane and Moemaneng	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality formal housing and receive security of tenure	Number of sites developed	1,2,3,8,9,11		1 110				29 000 000.00	Department of Human Settlement
SLM014/2016/2021 Development of 30 houses in Senekal with water and sewer	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality formal housing and receive security of tenure	Number of houses developed	4,5,6,7		30					Department of Human Settlement
SLM15/2016/2021 Upgrading of Sewer Pipeline in Van Soelen Street	Sanitation	To ensure access to acceptable sanitation	Percentage pipeline upgraded	Ward 10	0%	100%				30 000 000.00	MIG

KEY PERFORMANCE AREA	UNFUNDED INFRASTRUCTURE AND SERVICE DELIVERY PROJECTS										
Project Number and Name	**Key Focus Area**	**Predetermined Objective**	**Key Performance Indicator**	**Location/Ward**	**Baseline Indicator**	**Annual Target**		**Timeframe and Funding Source**			
							2016/2017	**2017/2018**	**2018/2019**	**Project Costs**	**Source**
SLM016/2016/2021 Construction of new Pump Station Meqheleng	Sanitation	To ensure access to acceptable sanitation	Percentage work completed	10,12,13,14,15,16,17,18	0%	100%				8 000 000.00	MIG

SLM017/2016/2021 Bucket Eradication in Marquard/Moemaneng	Sanitation	To ensure access to acceptable sanitation	Number of households connected	1,2						56 000 000.00	MIG
SLM018/2016/2021 Bucket Eradication in Ficksburg/Caledon Park/Meqheleng	Sanitation	To ensure access to acceptable sanitation	Number of households connected	10,12,13,14,15,16,17,18						123 000 000.00	MIG
SLM019/26/2021 Bucket Eradication in	Sanitation	To ensure access to acceptable sanitation	Number of households	8, 9, 11						136 000 000.00	MIG
SLM020/2016/2021 Bucket Eradication in	Sanitation	To ensure access to acceptable sanitation	Number of households connected	4,5,6,7						136 000 000.00	MIG
SLM021/2016/2021 Remedial Work in	Sanitation	To ensure access to acceptable sanitation	Percentage remedial work done	10,12,13,14,16,18,17	0%	100%				35 000 000.00	MIG
SLM022/2016/2021 Upgrading of Sewer	Sanitation	To ensure access to acceptable sanitation	Percentage work completed	8, 9, 11	0%	100%				19 000 000.00	MIG
SLM023/2016/2021 Refurbishment of Sewer Treatment Works in Ficksburg	Sanitation	To ensure access to acceptable sanitation	Percentage work completed	10,12,13,14,15,16,17,18	0%	100%				10 000 000.00	MIG
SLM024/2016/2021 Clocolan/Hlohlolwane: Conversion of 400 VIP	Sanitation	To ensure access to acceptable sanitation	Number of toilets converted	8,9,11	400	400				6 000 000.00	Water and Sanitation
SLM025/2016/2021 Development of Comprehensive Infrastructure Plan	Spatial Planning and Land Use Management	To ensure good quality and affordable infrastructure available to all communities and	Number of Plans developed and approved	Setsoto	0	1				500 000.00	Own Income

KEY PERFORMANCE AREA		UNFUNDED INFRASTRUCTURE AND SERVICE DELIVERY PROJECTS									
Project Number and Name	**Key Focus Area**	**Predetermined Objective**	**Key Performance Indicator**	**Location/Ward**	**Baseline Indicator**	**Annual Target**		**Timeframe and Funding Source**			
										Project Costs	**Source**
SLM026/2021/2021 Development of Integrated Transport Plan	Spatial Planning and Land Use Management	To ensure proper consumer transport system with proper roads and storm water drainage system	Number of plans developed and approved	Setsoto	0	1				500 000.00	Own Income
SLM027/2016/2021 Development of a Comprehensive Infrastructure Investment Plan	Spatial Planning and Land Use Management	To ensure good quality and affordable infrastructure available to all communities and continuous maintenance thereof at high standard	Number of plans developed and approved	Setsoto	0	1				500 000.00	Own Income
SLM028/2016/2021 Development of 60 residential sites in Ficksburg	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality housing and receive security of tenure	Number of sites developed	10,15		60				4 000 000.00	Own Income
SLM029/2016/2021 Development of Land Use Scheme	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality housing and receive security of tenure	Number of land use schemes developed and approved	Setsoto	0	1				1 000 000.00	Own Income

SLM030/2016/2021 Formalisation of Oudstad Informal Settlement in Caledon Park	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality housing and receive security of tenure	Number of settlements formalised	10		1				500 000.00	Own Income
SLM031/2016/2021 Formalisation of Katlehong 1 and 2 Informal Settlement in Meqheleng	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality housing and receive security of tenure	Number of settlements formalised	16,18		2				1 000 000.00	Own Income
SLM032/2016/2021 Formalisation of Boitumelo Informal Settlement in Meqheleng	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality housing and receive security of tenure	Number of settlements formalised	10		1				5 000 000.00	Own Income
SLM033/2016/2021 Formalisation of Baipehing Informal Settlement in Hlohlolwane	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality housing and receive security of tenure	Number of settlements formalised	9		1				5 000 000.00	Own Income

KEY PERFORMANCE AREA		UNFUNDED INFRASTRUCTURE AND SERVICE DELIVERY PROJECTS									
Project Number and Name	Key Focus Area	Predetermined Objective	Key Performance Indicator	Location/Ward	Baseline Indicator	Annual Target		Timeframe and Funding Source			
							2016/2017	2017/2018	2018/2019	Project Costs	Source
SLM034/2016/2021 Formalisation of Masaleng Informal Settlement in Matwabeng	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality housing and receive security of tenure	Number of settlements formalised	6		1	5 000 000.00			5 000 000.00	Human Settlements
SLM035/2016/2021 Township Establishment if For farm in Clocolan	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality housing and receive security of tenure	Number of township established and approved	11	0	1	5 000 000.00			5 000 000.00	Human Settlements
SLM036/2016/2021 Development of 6 sites in Ficksburg	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality housing and receive security of tenure	Number of sites developed	10,15		6	400 000.00			400 000.00	Own Income
SLM037/2016/2021 Development of 41 sites in Ficksburg Industrial Area	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality housing and receive security of tenure	Number of sites developed	15		41	2 800 000.00	0	0	2 800 000.00	Own Income
SLM038/2016/2021 Development of 79 sites in Ficksburg Extension 29	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality housing and receive security of tenure	Number of sites developed	15		79	3 500 000.00	0	0	3 500 000.00	Own Income

SLM039/2016/2021 Development of 36 sites in Clocolan Extension 8	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality housing and receive security of tenure	Number of sites developed	9		36	2 000 000.00	0	0	2 000 000.00	Own Income
SLM040/2016/2021 Development of 106 sites in Clocolan Extension 9	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality housing and receive security of tenure	Number of sites developed	11		106	4 000 000.00	0	0	4 000 000.00	Human Settlements
SLM041/2016/2021 Development of 60 sites in Clocolan Tienie van Rooyen	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality housing and receive security of tenure	Number of sites developed	8		60	3 000 0000.00	0	0	3 000 0000.00	Human Settlements
SLM042/2016/2021 Development of 18 Extension 10	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality housing and receive security of tenure	Number of sites developed	8		18	2 000 000.00	0	0	2 000 000.00	Human Settlements

KEY PERFORMANCE AREA		UNFUNDED INFRASTRUCTURE AND SERVICE DELIVERY PROJECTS									
Project Number and Name	Key Focus Area	Predetermined Objective	Key Performance Indicator	Location/Ward	Baseline Indicator	Annual Target		Timeframe and Funding Source			
							2016/2017	2017/2018	2018/2019	Project Costs	Source
SLM043/2016/2021 Development of 21 Senekal Industrial	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality housing and receive security of tenure	Number of sites developed	7		21	2 700 000.00	0	0	2 700 000.00	Own Income
SLM044/2016/2021 Development of 781 in Matwabeng Extension 7	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality housing and receive security of tenure	Number of sites developed	8		781	21 000 000.00	0	0	21 000 000.00	Human Settlements
SLM045/2016/2021 Sub-Division of Erf 855 in Meqheleng	Spatial Planning and Land Use Management	To have adequate serviced land available through which residents can develop quality housing and receive security of tenure	Number of sites sub-divided	14		1	6 000 000.00	0	0	6 000 000.00	Human Settlement
SLM046/2016/2021 Development of a cemetery in Ficksburg	Spatial Planning and Land Use Management	To provide an maintain cemeteries	Number of cemeteries developed	10,12,13,14,15,16,17,18		1				6 000 000.00	Human Settlements
SLM047/2016/2021 Development of a cemetery in Senekal	Spatial Planning and Land Use Management	To provide an maintain cemeteries	Number of cemeteries developed	3,4,5,6,7		1				6 000 000.00	Human Settlements

SLM048/2016/2021 Fencing of camps and pounds in the municipal area	Safety and Security	To ensure the safety and security of council properties	Percentage of camps and pounds fenced	Setsoto		100%				6 000 000.00	MIG
SLM049/2016/2021 Re-sealing of roads in Clocolan	Roads and Storm water drainage	To ensure proper road network throughout the entire area to benefit all residents	Kilometre of road re-sealed	8,9,11						10 000 000.00	MIG
SLM050/2016/2021 Re-sealing of roads in Senekal	Roads and Storm water drainage	To ensure proper road network throughout the entire area to benefit all residents	Kilometre of road re-sealed	3,4,5,6,7						10 000 000.00	MIG
SLM051/2016/2021 Re-sealing of roads in Marquard	Roads and Storm water drainage	To ensure proper road network throughout the entire area to benefit all residents	Kilometre of road re-sealed	1,2						10 000 000.00	MIG
SLM052/2016/2021 Re-sealing of roads in Ficksburg	Roads and Storm water drainage	To ensure proper road network throughout the entire area to benefit all residents	Kilometre of road re-sealed	10,12,13,14,15,16,1 7,18						10 000 000.00	MIG
SLM053/2016/2021 Upgrading of Storm Water Networks in Ficksburg	Roads and Storm water drainage	To ensure proper road network throughout the entire area to benefit all residents	Percentage of Storm Water Networks upgraded	10,12,13,14,15,16,1 7,18		100%				20 000 000.00	MIG

KEY PERFORMANCE AREA		UNFUNDED INFRASTRUCTURE AND SERVICE DELIVERY PROJECTS									
Project Number and Name	Key Focus Area	Predetermined Objective	Key Performance Indicator	Location/Ward	Baseline Indicator	Annual Target	Timeframe and Funding Source				
							2016/2017	2017/2018	2018/2019	Project Costs	Source
SLM054/2016/2021 Maintenance or Construction of Sidewalks in Ficksburg	Roads and Storm water drainage	To ensure proper road network throughout the entire area to benefit all residents	Percentage of sidewalk constructed and maintained	10,12,13,14,15,16,17,18		100%				5 000 000.00	Own Income
SLM055/2016/2021 Maintenance or Construction of Sidewalks in Marquard	Roads and Storm water drainage	To ensure proper road network throughout the entire area to benefit all residents	Percentage of sidewalk constructed and maintained	1,2		100%				5 000 000.00	Own Income
SLM056/2016/2021 Maintenance or Construction of Sidewalks in Clocolan	Roads and Storm water drainage	To ensure proper road network throughout the entire area to benefit all residents	Percentage of sidewalk constructed and maintained	8,9,11		100%				5 000 000.00	Own Income
SLM057/2016/2021 Maintenance or Construction of Sidewalks in Senekal	Roads and Storm water drainage	To ensure proper road network throughout the entire area to benefit all residents	Percentage of sidewalk constructed and maintained	3,4,5,6,7		100%				5 000 000.00	Own Income
SLM058/2016/2021 Construction of Storm Water and Culvert in Zone in Meqheleng	Roads and Storm water drainage	To ensure proper road network throughout the entire area to benefit all residents	Percentage of storm water and culver constructed	14		100%				5 000 000.00	Own Income

SLM059/2016/2021 Refuse removal	Waste Management	To have an efficient and environmental friendly waste collection and disposal system	Number of households with kerbside collection	Setsoto	34 687	34 687	38 000.00	38 500.00	40 000.00	116 000.00	Own Income
SLM060/2016/2021 Refuse removal	Waste Management	To have an efficient and environmental friendly waste collection and disposal system	Number of businesses with kerbside collection	Setsoto	735	735					
SLM061/2016/2021 Refuse removal	Waste Management	To have an efficient and environmental friendly waste collection and disposal system	Number of the Integrated Waste Management	Setsoto	1	1				500 000.00	Own Income
SLM062/2016/2021 Refuse removal	Waste Management	To have an efficient and environmental friendly waste collection and disposal system	Number of landfill sites developed	1,2,8,9,11	2	2				20 000 000	Own Income
SLM063/2016/2021 Refuse removal	Waste Management	To have an efficient and environmental friendly waste collection and disposal system	Number of Landfill Sites Management Plans developed	Setsoto	1	1				500 000.00	Own Income
SLM064/2016/2021 Refuse removal	Waste Management	To have an efficient and environmental friendly waste collection and disposal system	Number of refuse bins with lids acquired	Setsoto	0	85				7 100 000.00	Own Income

KEY PERFORMANCE AREA		UNFUNDED INFRASTRUCTURE AND SERVICE DELIVERY PROJECTS									
Project Number and Name	Key Focus Area	Predetermined Objective	Key Performance Indicator	Location/Ward	Baseline Indicator	Annual Target		Timeframe and Funding Source			
							2016/2017	2017/2018	2018/2019	Project Costs	Source
SLM065/2016/2021 Refuse removal	Waste Management	To have an efficient and environmental friendly waste collection and disposal system	Number of 20m^3 mobile compactors purchased	Setsoto		3				6 000 000.00	Own Income
SLM066/2016/2021 Refuse removal	Waste Management	To have an efficient and environmental friendly waste collection and disposal system	Number of vehicles procured	Setsoto	0					26 000 000.00	Own Income
SLM067/2016/2021 Graves Cemetery Software	Cemetery Management	To provide and maintain cemeteries	Number of Cemetery Software purchased	Setsoto	0	1				650 000.00	Own Income
SLM68/2016/2021 Purchasing of Equipment	Cemetery Management	To provide and maintain cemeteries	Number of TLBs purchased	Setsoto		1				2 500 000.00	Own Income
SLM69/2016/2021 Purchasing of Equipment	Cemetery Management	To provide and maintain cemeteries	Number of weed eaters purchased	Setsoto		6				75 000.00	Own Income
SLM70/2016/2021 Development of New Cemetery	Cemetery Management	To provide and maintain cemeteries	Number of new cemetery developed			1				12 000 000.00	Human Settlements

SLM071/2016/2021 Establish Fire Station	Fire Services	To ensure effective and efficient fire services	Number of fire stations established	Setsoto	0	1				15 000 000.00	CoGTA
SLM072/2016/2021 Acquire Fire Truck	Fire Services	To ensure effective and efficient fire services	Number of fire trucks purchased	Setsoto	0	1				15 000 000.00	CoGTA
SLM073/2016/202 Review the Disaster Management Plan	Disaster Management	To provide effective Disaster Management response	Number of plans reviewed and approved	Setsoto	1	1	500 000.00	550 000.00	600 000.00	1 650 000.00	TMDM
SLM074/2016/2021 Fencing of properties	Property Management	To ensure safety of municipal properties and employees	Number of properties fenced	Setsoto	23	1	300 000.00	0	0	300 000.00	Own Income
KEY PERFORMANCE AREA		**UNFUNDED LOCAL ECONOMID DEVELOPMENT PROJECTS**									
SLM075/2016/2021 Review the LED Strategy	Local economy and tourism development	Stimulate key sectors that promote economic growth and creates jobs through providing support for prioritised sectors	Number of LED Strategies reviewed and approved	Setsoto	1	1	500 000.00	550 000.00	600 000.00	1 650 000.00	Own Income
SLM076/2016/2021 Review the Tourism Plan	Local economy and tourism development	Stimulate key sectors that promote economic growth and creates jobs through providing support for prioritised sectors	Number of Tourism Plans reviewed and approved	Setsoto	0	1	500 000.00	650 000.00	600 000.00	1 650 000.00	Own Income
SLM077/2016/2021 Establishment of Imperani Hospitality and Training Centre	Local economy and tourism development	Stimulate key sectors that promote economic growth and creates jobs through providing support for prioritised sectors	Number of centres established	Setsoto	0	1	20 000 000.00	0	0	20 000 000.00	National Development Trust

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