

March 2021

#### **Precinct Plan**

Magaliesburg Precinct Mogale City Local Municipality



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#### LIST OF ACRONYMS

CBD	Central Business District
IUDF	Integrated Urban Development Framework
SDF	Spatial Development Framework
СВА	Critical Biodiversity Area
ESA	Environmentally Sensitive Area
GAUTRANS	Gauteng Department of Roads and Transport
SANRAL	South African National Roads Agency SOC Ltd
PHSHDA	Priority Human Settlements and Housing Development Areas
GLMP	Greater Lanseria Master Plan
DBSA	Development Bank of Southern Africa
FAR	Floor Area Ratio
RDP	Reconstruction and Development
	Programme
FLISP	Finance Linked Individual Subsid Program
MCLM	Mogale City Local Municipality
GDHS	Gauteng Department of Human Settlements
HDA	Housing Development Agency
EIA	Environmental Impact Assessment
WWTW	Waste Water Treatment Works
MSDF	Municipal Spatial Development Framework
СоЈ	City of Johannesburg
BNG	Breaking New Ground
SHRA	Social Housing Regulatory Authority
NUSP	National Upgrading Support Programme
lums	Land Use Management

SDZ

Special Development Zone

# Introduction

Magaliesburg precinct plan

#### INTRODUCTION

#### 1.1 THE PRECINCT PLAN

The Precinct Plan for Magaliesburg aims to guide decision-making and development within the Precinct in order to promote sustainability and achieve environmental, social, and economic objectives through the promotion of appropriate land uses at specific locations, informing how buildings, spaces, activities and transport evolve, as well as the identification of short, medium- and long-term interventions needed to achieve this. The Precinct Plan has been developed to provide a new desired development pattern altering existing settlement dysfunctionalities.

The Magaliesburg Precinct Plan:

- is a planning tool that sets out a <u>vision</u> for the future development trajectory for the area.
- establishes a planning and management framework to <u>guide development and land-use</u> <u>change</u>.
- provides <u>strategies and detailed actions</u> for how the plan can be achieved through the implementation of the Precinct Plan over time.
- <u>informs interventions</u> by both the public and private sectors in order to facilitate economic growth and development through social, spatial, and economic development.

The Magaliesburg Precinct is an area of exceptional natural beauty that is characterised by a mix of tourism

and agricultural facilities. Agriculture is however declining and so are the fortunes of its residents. For the most part, the Precinct is sparsely inhabited and offer little in terms of social and commercial activities and job opportunities. This Precinct Plan aims to address the functioning of the town, enhance its tourism product, and contribute to the living conditions and livelihoods of its residents.

#### 1.2 MAGALIESBURG PRECINCT

The Magaliesburg Precinct is centred on the town of Magaliesburg/Ga-Mohale. It is situated in a valley of the Magaliesberg mountain range, approximately 30 km from Krugersdorp. Its economy is anchored around tourism, leisure activities and farming. It is a well-known tourist destination with many landmarks and places of interest in the form of conservation areas, rugged mountains, ridges, rivers, wildlife and heritage sites. The larger areas of Magaliesburg are surrounded by agriculture such as vegetable farming and horticulture. Magaliesburg acts as a service centre to the surrounding rural areas and is generally located away from urban growth pressures.

Regional transport and movement of goods and people are critical elements influencing the development of the area. The Precinct is traversed by the R24 linking Magaliesburg to Krugersdorp/

Johannesburg to the south-east and Rustenburg/ Botswana to the north-west. The R24 is a significant heavy vehicle route for transporting goods across southern Africa.





Figure 2: MAGALIESBURG PRECINCT



MAGALIESBURG MEGA HOUSING PROJECT



WARD 31 CIVIC CENTRE



GA-MOHALE LIBRARY (ARTS AND CRAFTS CENTRE)



JAMESON COTTAGES

#### 1.3 THE PROCESS

The process followed consisted of a status quo analysis and synthesis, the development of a spatial concept, and the drafting of an implementation framework.



#### 1.4 STAKEHOLDER PARTICIPATION

Stakeholders participation forms an important part of the process. The Coronavirus Pandemic emerged in the midst of the project in March 2020 and presented special challenges for the Stakeholder Participation in light of the phased lockdowns, crowd size restrictions and social distancing.

Accordingly, the Stakeholder Participation Plan which was launched in October 2020 was specially designed to factor for the circumstances of COVID-19 to optimise the engagement process and its outputs as much as possible.

The Stakeholder Participation Plan was comprised of 8 components.

01	02	03	04	05	06	07	80
Municipality Public Notice	Municipality Media Post	Local Newspaper	Public Document	WhatsApp Advert	Social Media	Focus Group Meetings	Project Webpage
			ē	$\bigcirc$	A		www
	~~~~						

Figure 3: COMPONENTS OF STAKEHOLDERS PARTICIPATION PLAN

Each component represents a particular form of media, with an associated platform, as part of a broad spectrum approach to the Stakeholder Participation Plan. A wide variety of components were designed to take advantage of both analogue and digital platforms, in an attempt to optimise the reach and output of the Stakeholder Participation Plan.

#### 1.4.1 MUNICIPAL PUBLIC NOTICE

A summary of the project, client and team contact information and an invitation to submit comments on the Draft Report was compiled in the form of a Municipal Public Notice which was published on the Municipality website. Importantly, the notice also included an active hyperlink to the Stakeholder Participation website.



Figure 4: MUNICIPAL PUBLIC NOTICE

#### 1.4.2 MUNICIPALITY MEDIA POST

A summary of the project and an invitation to submit comments on the Draft Report was packaged as a media article for the Municipality's Website.



Figure 5: MUNICIPALITY MEDIA POST

#### 1.4.3 LOCAL NEWSPAPER

Details of the project and an invitation to submit comments was packaged as a notice in the local community newspaper, the Krugersdorp News issue for the week ending Friday, 16 October 2020.



Figure 6: LOCAL NEWSPAPER ADVERTISEMENT

#### 1.4.4 PUBLIC DOCUMENT

Hard copies of the Draft Report were set up in document stations that were set up at the Municipal Office and respective Ward Offices of the Precinct Plan local areas, together with hard copy comment forms and a comments submission box.



Figure 7: MUNICIPAL DOCUMENT STATION

#### 1.4.5 WHATSAPP ADVERT

Details of the project and an invitation to submit comments was packaged as a digital poster advert designed for sharing via WhatsApp. The poster advert was specifically formatted as a PDF document which allowed the advert to be titled with the name of the project, as well as to include a hyperlinked web address to the Stakeholder Participation website.



Figure 8: DIGITAL POSTER ADVERT

#### 1.4.6 SOCIAL MEDIA

The WhatsApp Poster Advert was steered towards the social media platforms of key stakeholder groups and organisations in the area and shared with the municipality for them to share on their official social media platforms.



Figure 9: WHATSAPP POSTER ADVERT

#### 1.4.7 FOCUS GROUP MEETINGS

A series of intensive small group Focus Group Meetings were scheduled with Key Stakeholders and Community Organisations.

The Key Stakeholders and Community Organisations were strategically identified through intensive research and investigation as well as support and guidance from the Speakers Office and Ward Councillors.



Figure 10: FOCUS GROUP MEETINGS

#### 1.4.8 PROJECT WEBPAGE

A special project website was created to assist with Stakeholder Engagement on the Precinct Plans by giving interested and affected stakeholders an opportunity to have a say and help guide the future of the Precinct local areas.

www.bit.ly/mogale

# <complex-block>

Figure 11: PROJECT WEBSITE

Through the project website the public was able to:

- Download the full Draft Reports of the Precinct Plan
- Find summaries of the development concepts and proposals for the Precinct
- Submit comments using a Form and/or Interactive Map interface



#### Figure 12: WEBSITE DIRECTIONS

For those stakeholders seeking greater detail, the full Draft Reports could be directly downloaded from the website in a PDF format.

To assist stakeholders with easy access to the key information, summaries of the development concepts for each Precinct Plan were also provided on the

#### March 2021

website in content packages that included the Vision, Objectives and Key Concepts linked to a map overview that could also be directly downloaded in a JPEG format.

The Interactive Map platform was designed for those stakeholders that would be able to spatially orientate their comments in and around the Precinct.

Comments submitted via the Interactive Map platform could be categorised by the user as either a Strength, Weakness, Opportunity or Threat (SWOT).

Once the comment marker was classified and placed on the map, the user was prompted to complete a comment form that was linked to the map marker.





Figure 13: INTERACTIVE MAP PLATFORM

# Policy and legislative framework

Magaliesburg precinct plan

#### 2 POLICY AND LEGISLATIVE FRAMEWORK

#### 2.1 SPATIAL POLICY FRAMEWORK

In terms of national spatial policy, the Spatial Planning and Land Use Management Act 16 of 2013 and the integrated urban development framework (IUDF), 2016 provide the principles to be applied in the development of a Precinct Plan.

On a Municipal level, the West Rand District Municipality SDF, 2020 and the Mogale City Local Municipality SDF, 2019 are relevant.

#### 2.2 MUNICIPAL PLANNING

#### 2.2.1 WEST RAND DISTRICT MUNICIPALITY

#### SDF, 2020

the West Rand District Municipality SDF, 2020 designates Magaliesburg as a rural node.

#### 2.2.2 MOGALE CITY LM SDF, 2019

The Mogale City LM SDF, 2019 contain the following development guidelines for the Magaliesburg Precinct:

- Agricultural/ Tourism Node
- Tourism Area along northern part of R24
- Movement Corridor: R24 and R509
- Tourism Corridors: R24
- Agri-industry Green Energy



Figure 14: MOGALE CITY SDF IMPLICATIONS FOR PRECINCT

#### 2.3 SPATIAL PLANNING AND LAND USE MANAGEMENT ACT 16 OF 2013



#### 2.4 INTEGRATED URBAN DEVELOPMENT FRAMEWORK (IUDF), 2016





## The state of the precinct

Magaliesburg precinct plan



#### 3 THE ECONOMY AND THE RESIDENTS

#### 3.1 INTRODUCTION

This section provides a summary of the prominent characteristics of the local economic features and the socio-economic characteristics of the households.

#### 3.2 MACRO-ECONOMIC PROFILE<sup>1</sup>

The following are the salient points emanating from the socio-economic and market study for the Precinct:

- The local economy had an economic growth of 0.43% in 2018 and 0.96% in 2019.
- Economic sectors that performed well in 2019 includes Wholesale and retail trade with 3.64% growth, Transport, storage, and communication with 4.35% growth and General Government + Community, social and personal services with 1.45%.
- Economic sectors that have shown economic decline includes: Agriculture (-7.25%), Mining and quarrying (-9.47%), Manufacturing (-1.84%) and Electricity, gas and water with a decline of 4.82% in 2019.
- Transport, storage, and communication sector contributes 26.49% to the local economy, followed by Manufacturing (21.34%), General Government + Community, social and personal services (19.34%)

and Wholesale and retail trade, catering, and accommodation (18.93%)

The spatial distribution in the wider region indicates a clear divide through the precinct with primary sector activities to the west and tertiary sector activities to the east.

#### 3.3 SPACE ECONOMY

An analysis of the spatial distribution of economic activity within the larger region of small towns and nodes indicate that agriculture plays a small role in the economy and that the most significant sectors of the economic base of Magaliesburg are retail and wholes, catering and accommodation, and personal and community services. This is indicative of the role of Magaliesburg as a tourism destination and a service centre.

 $<sup>^{\</sup>rm 1}$  Source: CSIR, Data provided by Quantec on Local Municipal disseminate to mesozone level with Dasymetric map, 2020



Figure 15: ECONOMIC ACTIVITY WITHIN THE REGION<sup>2</sup>

<sup>2</sup> Darker colour denotes higher intensity.



Figure 16: SPACE ECONOMY

#### 3.4 HOUSEHOLDS AND POPULATION

According to the socio-economic study undertaken for the Precinct, the population is characterised by the following characteristics:

- Household income for the Precinct indicates that 53.46%. of households fall within the low-income category
- A large portion of the population within the Precinct has some secondary education (37.91%).
- 60.88% of the population age between 5 24 are attending ordinary school.
- The Precinct has an employment rate of 51.66%, with an unemployment rate of 14.17%.
- A large portion of the population within the Precinct (21.18%) is skilled. 33.03% of the Precinct population is Semi-Skilled.



Figure 17: POVERTY INDICATORS

#### 4 ENVIRONMENTAL ANALYSIS

The environmental analysis provides an indication of areas to be protected as well as the state of environmental assets.

#### 4.1 RIDGES AND RIVERS

The Magaliesburg Precinct is framed in the south and east by relatively pristine ridge formations and large outcrops of the Witwatersberg range. The ridges play a significant role in the character and sense of place of the Precinct.

The Bloubank Spruit and the Magalies River pass through the Precinct. River ecosystem status in the Magaliesburg Precinct is classified as critical.



Figure 18: RIVERS AND RIDGES

#### 4.2 ENVIRONMENTAL SENSITIVITIES

Large portions of the Precinct are classified as Critical Biodiversity Areas (CBAs) and Environmentally Sensitive Areas (ESAs) according to the Gauteng C-Plan. Terrestrial or aquatic the bulk of land to the east of the Magalies River and to the south of the R509 have some environmental sensitivity.

Land status data for the area indicates that Magaliesburg Precinct status is classified as vulnerable.



Figure 19: ENVIRONMENTAL SENSITIVITIES

#### 4.3 PROTECTED AREAS

The Magaliesburg Precinct contains no protected areas but the area to the east of the R24 and to the north of the R509 is located within the Magaliesberg Biosphere Reserve Transition Area.



Figure 20: PROTECTED AREAS



Figure 21: ENVIRONMENTAL CONDITIONS

#### 5 ROAD AND RAIL NETWORK

The development concept for the Magaliesburg Precinct is significantly influenced by the proposed transportation network. This section describes the existing network as well as the proposed network and how this impacts on the future development of the Precinct.

Magaliesburg is located at the T-junction of route R24 between Rustenburg and Johannesburg and R509 to Koster, Swartruggens and Lichtenburg in the North West Province. Currently non-residential developments, including facilities aimed at the tourism market, exploit the major roads traversing the Magaliesburg Precinct and benefit from their exposure to passing traffic. From a traffic engineering point of view, the consequences are two-fold, namely:

- A high level of friction along major roads that have a primary function of mobility for long distance travel, including freight transport.
- A high level of pedestrian-vehicle conflict.

The isolated nature of existing developments, without a co-ordinated land-use and transportation system, also contributes to the transportation dilemma, namely:

- High reliance on vehicle travel between developments
- Long walking distances.

#### 5.1 ROAD NETWORK

The main routes through the Precinct are the R24 (K76) and the R509 (K228). These routes play an important role in the spatial structure of Magaliesburg and their planned realignment will have a significant impact on the development of the Precinct.

#### 5.1.1 R24 (K76 / P16-1)

The R24 connects Krugersdorp/ Tarlton in the south to Rustenburg in the north. It carries high traffic volumes, including a high percentage of trucks and any negative impacts on the receiving environment will have to be suitably mitigated.

The existing road has steep gradients and provision has been made for on-street parking in the northbound direction and off-street parking directly along the southbound traffic lane. Off-street parking is separated from the roadway by a paved kerb island.

In view of the steep gradients and activities along the existing K24, the road is not considered to be able to serve the mobility needs of a regional road. On the other hand, the existing road environment is not suitable for tourist-type activities and land uses.

An alternative eastern by-pass road (K76) has been proclaimed along the northern boundary of the Precinct. This will remove through traffic, including heavy vehicles, from the commercial centre of Magaliesburg.

#### 5.1.2 R509 (K228 / P47-1)

R509 connects the R24 at Magaliesburg with Koster in the North West Province. The road then splits into the R509 to Swartruggens and R59 to Mahikeng.

The T-junction of R509 and R24 has high geometric standards and can accommodate relatively high-speed turning manoeuvres.

Public transport vehicles also operate from this junction. R509 has direct property access and frequent intersections within the Magaliesburg urban area.

Traffic operations, such as vehicle-pedestrian conflict and public transport operations are unacceptable and must be addressed by the roads authority.

The proposed upgrade of the K228 traverses through the middle of Ga-Mohale and will remove through traffic, including heavy vehicles from the R509 to the K228.

The proposed diversion of major roads (R509 and R24) combined with the resumption of rail services will result in the severe fragmentation of the precinct, as well as reduction of exposure to passing traffic and less favourable access.

#### 5.1.3 D1243

This provincial road starts on the existing R24 (P16-1) between the Bloubank Spruit and the railway line and then runs in a north-easterly direction around the wider Magaliesburg area, crossing D400 and terminating again on the R24 (P16-1) ±8 km south-east of Magaliesburg.

#### 5.1.4 MUNICIPAL ROADS

The Ga-Mohale township north of R509 has a fully developed tarred road network and there are some local streets that link to R509.

However, a large proportion of other properties in the precinct obtain access from the major roads and a supporting road network will be required to provide efficient and effective access to the proposed expanded development area.

#### 5.1.5 NON-MOTORISED TRANSPORT (NMT)

NMT plays a very important role in the transportation system in Magaliesburg, including residents, employees and tourists and there are many examples of foot paths used by large numbers of pedestrians. There is currently a serious lack of facilities for pedestrians and cyclists. The junction of R509 and R24 is an example of an area of high vehicle-pedestrian conflict.

NMT should be an integral part of the development concept for the Magaliesburg Precinct, including safe crossing of major roads.

#### 5.1.6 RAILWAY

Two railway lines traverse the Precinct, namely:

- Krugersdorp-Tarlton to Magaliesburg and then to Swartruggens, Zeerust and Mahikeng
- Magaliesburg to Hekpoort and Pretoria.

Transnet has confirmed that the existing railway line to Hekpoort forms part of the freight network and has to be accommodated in the planning of the Magaliesburg Precinct.

The function of the railway lines from both Hekpoort and Tarlton to Magaliesburg and then westward to Koster, Swartruggens, Zeerust, Mahikeng, Vryburg, Warrenton and Kimberley should be regarded as a strategic transportation asset and accommodated in the spatial framework of Magaliesburg.

The Magaliesburg passenger rail service is not currently in use, but the historic steam locomotive train journeys should be included in the development concept.

The crossing of railway lines by pedestrians and vehicles will require serious attention when rail services are resumed.



Figure 22: RAILWAY LINES



#### 6 AGRICULTURE

#### 6.1 OVERVIEW

According to the Gauteng Agricultural Potential Atlas (GAPA IV)), the portions of the Precinct that has high agricultural value are located to the north of the railway line and to the west of the R24. This is however where Ga-Mohale is located.

Other areas with high agricultural potential are located in the surroundings to the Precinct and not within the Precinct itself.

The contribution of agriculture to the local economy and employment is declining and with it the socio-economic conditions of the residents. Due to reasons such as increasing costs of inputs and decreasing market prices, there is a move away from intensive agriculture to extensive agriculture, which is less labour intensive. Many farmers have turned to game farming or are developing small tourist facilities on their farms to supplement their income.



### 6.2 CARMEL ESTATE FARMER PRODUCTION UNIT (FPSU)

The Carmel Estate is a Farmer Production Support Unit (FPSU) which forms part of the Agri-Parks Programme of the Department of Agriculture, Land Reform and Rural Development. The primary objective of the FPSU is to empower smallholder farmers within the district, thereby increasing the quality and quantity of vegetable production as well as the income generated by the farmers.

The Carmel Estate FPSU is located approximately 1Km west of the Magaliesburg precinct, along the R509 on Portion 106 of the farm Vaalbank 512 JQ. The selected area is well located in terms of access to smallholding farmers in the area, as well as more commercial farmers. The site is approximately 17.6 ha in extent, of which 10 ha will be used for the FPSU.

The Agri-Parks model consists of the following three components:

- Farmer Production Support Unit (FPSU) Several per district
- Agri-hub One per district
- Rural Urban Market Centre (RUMC) One per province



Figure 25: AGRI-PARKS MODEL

The Carmel Estate FPSU is relatively well located in terms of proximity to the Brandvlei Agri-Hub and the Tarlton FPSU.



During the analysis of the area, it was established that the main vegetable productions for the FPSU should be tomatoes, carrots and leafy vegetables.

Five key elements of the FPSU were identified in order to increase vegetable productivity in the district. The elements are:

- Input Support
- Mechanisation Support
- Facilities
- Training
Market Intelligence

Potential stakeholders for the various functions of FPSU have been tabled below:

FPSU FUNCTION	POTENTIAL STAKEHOLDERS
Inputs:	<ul> <li>Starke Ayres</li> </ul>
Seed/seedlings	<ul> <li>Sakata</li> </ul>
Dertiliser	<ul> <li>Villa Crop</li> </ul>
Pesticides & Herbicides	<ul> <li>Senwes</li> </ul>
	<ul> <li>AgriSA</li> </ul>
Mechanisation:	<ul> <li>Radium Engineering</li> </ul>
Tractors	<ul> <li>CLAAS</li> </ul>
Specialised implements	<ul> <li>John Deere</li> </ul>
	<ul> <li>Landini</li> </ul>
	<ul> <li>Massey Ferguson</li> </ul>
	<ul> <li>New Holland</li> </ul>
Training:	<ul> <li>Agricultural Colleges</li> </ul>

	<ul> <li>FET Colleges</li> <li>Extension Officers</li> <li>Westcol</li> <li>AgriSETA</li> <li>Buhle Farmers' Academy</li> <li>Agricultural Research Council (ARC)</li> <li>Vaal University of Technology (VUT)</li> </ul>
Market Intelligence	<ul> <li>Agrinet</li> <li>Tomato Producers Organisation</li> <li>AgriSA</li> <li>Extension Officers</li> </ul>

# 7 SPATIAL STRUCTURE

The spatial structure of the Magaliesburg Precinct is focused on the intersection of the R509 and the R24.

# 7.1 RESIDENTIAL PATTERNS

Except for Ga-Mohale and Magaliesburg town, the Precinct is sparsely inhabited. The first township was established in 1927 along the R24, but most development took place after 1995.

The dominant dwelling typology in the Precinct is a house on a separate stand, which comprises 67.01% of the existing housing stock.

Magaliesburg town consists of approximately 70 residential erven of between 1 000m<sup>2</sup> and 2 000m<sup>2</sup> in extent. Ga-Mohale contains the bulk of residential development, approximately 700 erven of between 150m<sup>2</sup> and 250m<sup>2</sup> in extent.

There are two informal settlements, totaling 6.1ha, to the north of the R509. The second most common dwelling typology is an informal dwelling in a backyard.  $\pm$  20% of households reside in this form of housing.

Two housing projects are in process: Ga-Mohale Ext 1 along the R509 at the western boundary of the Precinct with approximately 550 dwelling units and Magaliesburg Ext 10 and 19 with approximately 1 700 dwelling units. Magaliesburg Ext 10 and 19 form part of the Gauteng Mega Housing Program. Existing and planned residential development can thus be grouped into five distinct segregated zones:

- A small cluster of residential units in the town of Magaliesburg. Most of these properties have either been converted into commercial properties or have not developed.
- Ga-Mohale to the west of the R509 and R24 intersection. It is densely built-up with a significant number of informal backyard units and an informal settlement: Blaauwbank Restant Portion 45. It is wellserved with social facilities.
- Ga-Mohale Ext 1 was proclaimed in 2015 but has not yet been developed. It currently houses the Ga-Mohale informal settlement aka Buya Africa and Rietpoort.
- Magaliesburg Ext 10 and 19, which makes provision for generally higher residential densities and accommodates different housing typologies from fully subsidised to FLISP and social housing.
- Zuikerboschfontein to the south of the R509 and the railway line. It was proclaimed in 2006 but has not yet been developed. It consists of erven ranging from 2 000m<sup>2</sup> and 1 000m<sup>2</sup> and 1 ha 'agricultural holdings'.



Figure 26: RESIDENTIAL PATTERNS

#### 7.2 HOUSING DEMAND

According to the socio-economic study undertaken for this Precinct Plan, there are 2 458 households living in the Precinct. This is projected to grow to 3 274 households by the year 2035 based on population growth trends over the past five years<sup>3</sup>. Based on these figures, the cumulative net effective demand for the Precinct and the larger region, is projected to be  $\pm 1$  490 households by 2035.

There are approximately 300 households that are residing in informal settlements that need to be accommodated. Moreover, there are an estimated 520 households residing in backyard units (21.14% of 2 458).

Given that Magaliesburg is seen as the rural node within the region where new development should be focused, the figures of the housing demand for the region should also be taken into account. There are 4 059 households within the region. This is projected to grow to 5 406 by 2035, thus an increase of 1 347. If 50% of these households settle in Magaliesburg it will mean an increase in demand for housing of approximately 670 dwelling units. There are two proposed housing projects: Ga Mohale Ext 1 with 550 residential units and Magaliesburg Ext 10 and 19 with 1 700 residential units.

Even with the large-scale new projects, there is still an undersupply of units over the medium term based on current and proposed housing.

DEMAND	Nr of households	SUPPLY	Nr of erven
Housing market study - Precinct	820	Magaliesburg Ext 10 and 19	1 700
Informal settlements	300	Ga-Mohale Ext 1	550
Backyard units	520		
Housing market study – -Region	670		
TOTAL	2 310	TOTAL	2 220

Table 1: HOUSING DEMAND VS SUPPLY

rates were applied to the population and household figures to project the future population growth utilising 2011 as the base year.

<sup>&</sup>lt;sup>3</sup> The population growth projections are based on a five-year historic growth rate of 1.73% per annum and a household growth rate of 1.93% for the Precinct. The growth

#### 7.3 HOUSING AFFORDABILITY

Based on the socio-economic study, housing affordability ranges for both rental and bonded housing were determined. These inform the level of affordability between the various income groups within the market area, based on the annual household income figures and population features. A significant portion of the projected population fall within the social housing and FLISP categories.



Figure 27: HOUSING AFFORDABILITY RANGES

#### 7.4 SOCIAL FACILITIES

Social facilities are clustered in the core area of Magaliesburg town and within Ga-Mohale. The facilities consist of:

- Educational:
  - Mphe-thuto Primary School in the eastern side of Ga-Mohale
  - Buya Afrika Combined School in the eastern part of the Precinct
  - Magaliesburg Secondary School in the northwestern part of Ga-Mohale
  - Westcol in the north-western part of Ga-Mohale. It is however currently not operational.
  - Number of informal pre-school facilities scattered throughout Ga-Mohale.
- Magalies Clinic in Ga-Mohale next to the R509.
- Ubuntu Arts and Crafts Centre in Ga-Mohale along the R509. Includes a library.
- Civic centre in Magaliesburg town at the intersection of the R24 and R509. It contains a clinic, ward offices and Mogale City Local Municipality offices.
- Police station at the eastern portion of Ga-Mohale.

Several of the existing facilities are not optimally used, such as the park adjacent to the R509 and the Ubuntu Arts and Crafts centre.

The layout for Ga-Mohale Ext 1 contains nine erven earmarked for community facilities and two erven for Public Open Space, but limited facilities are proposed within Magaliesburg Ext 10 and Ext 19.







Figure 29: SOCIAL FACILITIES IN PRECINCT



#### 7.5 RETAIL AND COMMERCIAL

Retail and commercial activities are concentrated along the R24 to the south of the T-junction with the R509. It takes the form of a linear strip on both sides of the R24. Expansion is limited by the ridge to the west and the railway line to the east.

Although the central business area serves the larger region, including areas as far afield as Hekpoort, the retail offering is limited. Shops include:

- Superspar Magalies Junction
- Build It
- Shoprite
- Wimpy
- Obaro farm equipment supply
- Choppies
- Supaquick tire

The business strip is unattractive, and many shops are vacant and in a state of disrepair. The general character is one of neglect and deterioration. The high number of vehicles, especially heavy vehicles, on the R24 makes it unsafe for pedestrians to cross between the shops and impacts negatively on the general character of the town. According to business owners, the town is however dependent on through traffic for the survival of some of the businesses.

Some informal trade takes place and there is an informal market in front of the Superspar Magalies Junction, but no facilities are provided. Several spaza shops are located within Ga-Mohale.



Figure 30: RETAIL AND COMMERCIAL HEAT MAP





#### 7.6 TOURISM

The Magaliesburg Precinct has high tourism product value, particularly in terms of accommodation, hospitality, spa, restaurants, museums and outdoor adventure facilities. The natural environment with ridges and rivers and the pristine natural environment. The tourism function of the Precinct is recognised in the MSDF, 2019, which designates the R24 as a Tourism Corridor and a large part of the Precinct as a tourism area.

Some of the tourism facilities include the Blaaubank Historical Mine, the Voorhuis Art Gallery, Magalies River Lodge, Mount Grace, Rosewell Spa, the Trading Post, Valley Lodge and Spa, Arts, Crafts Candle Dipping, the Magaliesburg Station and the Jameson Raid Cottages, close to the Magaliesburg Station. It is part of the Route 24 and the Magalies Rocks the Cradle tourism initiatives.

The majority of tourism attractions are located to the east of the R24 in the natural area. The town does not function as a central point for tourism as it has lost its small-town charm due to urban blight and external factors such as the R24 being a major freight through-route.



Figure 32: TOURISM HEAT MAP



Figure 33: TOURISM FACILITIES IN THE MAGALIESBURG PRECINCT



# 8 INFRASTRUCTURE

#### 8.1 ELECTRICAL INFRASTRUCTURE

This area falls within the Mogale City municipal area but is not included in the Mogale City's electricity licence area and is supplied by Eskom from Magalies substation. Mogale City Local Municipality does not have any electrical infrastructure in the area.

The Magalies substation details are as follows:

- Installed transformers: 2 x 10 MVA plus 1 x 5MVA.
- Substation voltage: 44/11kV
- Existing maximum Notified Demand: 16.5 MVA
- Spare capacity: Firm capacity exceeded.

Eskom indicated that the upgrade for this substation is planned and the substation voltage will be changed to 132/11kV and the transformer capacity will be increased to 1 x 20MVA on 132/11kV and have the 1 x 10MVA and 1x 5MVA on 44/11kV when and will be executed when the load is required.

Other than the Magalies substation, Eskom has extensive 11kV rural overhead lines supplying the area with electricity.

#### 8.2 WATER INFRASTRUCTURE

#### 8.2.1 BULK WATER SUPPLY

Water is abstracted from the Maloney's Eye from where it is pumped and treated at the Magaliesburg WTW.

Water is stored and distributed from a 500kl reservoir.

#### 8.2.2 REQUIREMENTS & PLANNING

Construction of a 10Ml reservoir: R44m + fees

#### 8.2.3 WATER RETICULATION NETWORKS

All formal development is reticulated with house connections to individual properties.



Figure 34: ENGINEERING SERVICES

#### 8.3 SEWER INFRASTRUCTURE

#### 8.3.1 BULK SANITATION

- <u>Treatment:</u> Sewer effluent is received and treated at the Magaliesburg WWTW. The Works has been upgraded to a current capacity of 4MI/d. effluent is treated to comply with Special Standards.
- <u>Outfall sewers:</u> The following outfall sewers serve all development within the precinct:
  - o Ga Mohale Outfall Sewer
  - Magaliesburg Outfall Sewer and Pump Stations (River & Hilltop P/S)
- <u>Planned upgrade:</u> The Magaliesburg Outfall Sewer two pump stations are planned to be replaced with a single new sewer pump station and rising main.

#### 8.3.2 SEWER RETICULATION NETWORKS Areas with waterborne sewers

#### 8.4 STORMWATER INFRASTRUCTURE

Drains towards and into the Magalies River.

# 9 SYNTHESIS

The Magaliesburg Precinct and its surrounds are wellknown as a tourism destination. Its dramatic and pristine landscape with a variety of tourism facilities, from luxury accommodation to eco-tourism, attracts many daytrippers and weekend tourists getting away from the densely built-up surrounding areas. However, the town of Magaliesburg does not contribute to the tourism of the Precinct, neither does it benefit from tourism. Its central business strip is built around the R24 which carries high volumes of traffic, particularly heavy goods vehicles. This together with the steep incline of the R24 leads to a high incidence of accidents and vehicle-pedestrian conflict.

A proposed by-pass to the east of the town, the K76, will impact significantly on the tourism in the Precinct and on the viability of businesses. On the one hand it will remove through traffic from the town, allowing for the potential creation of a quaint small town. On the other hand, it will remove potential customers from the town, and it will negatively impact on tourist facilities in the natural areas to the east of the Magalies River. Gautrans has confirmed that the K76 will be constructed. The timeframe for the construction of the road is not known, thereby complicating planning for upgrading, expansion and regeneration. The planning approach should be to accommodate the road plans and to mitigate their impact. The town is built in a linear shape around the R24 and the R509. It is fragmented by roads carrying high volumes of traffic, the Magalies River and Bloubank Spruit, the railway line and the mountainous terrain. This creates segregated pockets of development, such as Magaliesburg town, Ga-Mohale, and the Trading Post tourism cluster. It is necessary to create a more compact and functional urban form and devise ways to overcome spatial barriers.

Another difficulty in achieving integration is the proposed K228, which will replace the R509 and pass through Ga-Mohale. The northern areas of Ga-Mohale, including the high school and Westcol college as well as Ga-Mohale Ext 1 will effectively be cut off from the rest of the town. As with the K76, the planning approach should be to accommodate the roads plans and mitigate their impact.

The wider Precinct is split in half with the eastern portion containing tourism and related activities and the western part, agricultural-related activities. Residents in the eastern part have lower levels of unemployment and higher income levels than those in the western part. The agricultural sector is experiencing decline, with many farmers turning to small scale tourism to supplement their income. The tourism product in the Precinct is extensive and of a high quality. Given that many tourists are from the province, the impact of Covid-19, will be less than tourism markets relying on national and international tourists.



Figure 35: SYNTHESIS



# Spatial development concept

Magaliesburg precinct plan

# 10 VISION AND OBJECTIVES

#### 10.1 VISION

A regional service centre that provides in the need for sustainable human settlements and services within a wider tourism and agricultural zone.

### 10.20BJECTIVES

- To develop an integrated human settlement that functions efficiently.
- To protect the natural elements that provide the backdrop for the tourism product of the Precinct.
- To stimulate economic growth and job creation.
- To balance the need for mobility and accessibility without compromising pedestrian safety.
- To improve the sense of place within the Precinct.

# 11 THE SPATIAL DEVELOPMENT CONCEPT

The spatial development concept explores the structuring elements that guide the creation of a rational and functional spatial form. The Precinct has strong structuring elements on which to base the spatial concept:

The rivers and undulating mountain ranges make the Magaliesburg Precinct exceptionally picturesque and contributes greatly to its attraction as a tourism hotspot. There are ridges on both sides of the Precinct and the Magalies and Bloubank Rivers that pass through the centre of the Precinct.

These natural features also shape the town as it determines the alignment of the roads and the railway line; it forces portions of the town to develop in a linear manner; and through the winding of roads, it creates gateways into the Precinct at both the southern and the northern entrance along the R24.

There is already a clear land use pattern:

- Tourism facilities are distributed in the mountainous area to the east of the R24 along the river. There is a cluster of tourist facilities at the northern entrance of the Precinct creating a gateway enhancing the tourism character of the Precinct.
- Commercial facilities are clustered along the R24 from the railway line crossing to its intersection with the R509. Some commercial development continues from this intersection to the northern

railway line. Several residential properties along the R24 have been converted into retail facilities.

- Social facilities are mostly found in Ga-Mohale with clusters around the R509.
- Existing and planned residential development is grouped into distinct zones that are separated by roads, rivers and the railway line.

The most significant impact on the future development of the Precinct will be the construction of the K76 and the K228. Based on the transport engineering input from Gautrans, the K76 by-pass, which will replace the through movement function of the main road (R24) in the middle of Magaliesburg Town, is taken as a fait accompli, as is the construction of the K228 that will cut through Ga-Mohale and remove through traffic from the R509. This will have negative and positive impacts of the future functioning of the Precinct. The only approach is to embrace the positive impacts and mitigate the negative impacts.

With regards to the K76:

- Positive impacts:
  - Removes heavy vehicles from the main street of the town thereby improving both vehicular and pedestrian safety, reducing air and noise pollution, and allowing for the development of an attractive small-town centre and 'high street'.

- Negative impacts:
  - Removes through traffic which could have a negative impact on the viability of businesses in the town.
  - Cuts off the northern entrance into the town, which would further limit through traffic.
  - Impacts on the tourism facilities to the east of the Magalies River.
- It is thus critical to improve the attractiveness of the town for tourism and as a local service centre and to find ways to address the impact of the by-pass on tourist facilities.

With regards to the **K228**:

- Positive impacts:
  - Removes heavy vehicles from the R509 and improves the intersection between the R509 and the R24.
  - Allows for the development of an activity spine along the R509.
  - Allows for better integration between the southern portion of Ga-Mohale and the rest of Magaliesburg town.
  - Increases pedestrian safety around social facilities and open spaces.
- Negative impacts:
  - Cuts through Ga-Mohale and forms a barrier between the northern parts of Ga-Mohale, the high school, Westcol college and Ga-Mohale Ext 1 to the north of the K228 and the

rest of the town. This will increase vehicularpedestrian conflict.

• No new development should be allowed to the north of the K228 and the R509 should be developed as an activity spine.

The spatial structure of the Precinct is clearly significantly influenced by the proposed road network.

## 11.1 ROAD NETWORK

Gautrans has made available the Draft Final reports regarding the K76 and the K228 and the reports were taken into consideration in the transportation assessment although they have not yet been accepted and the information will have to be confirmed once the reports have been accepted.

The planning, design, protection and implementation of provincial transport infrastructure in Gauteng are governed by the Gauteng Transport Infrastructure Act (GTIA) (Act 8, 2001).

Development proposals, where relevant, are affected by the regulatory measures of Section 7 and 9 of the act, as well as other requirements, such as building restriction areas and procedures to obtain approval for access to provincial roads.

All development proposals in the vicinity of existing and proposed provincial roads must first be evaluated in terms of the requirements of the GTIA.

#### 11.1.1 K76

In terms of the Constitution of the RSA, provincial roads are a fundamental area of exclusive provincial legislature competence (Act 108, 1996, Schedule 5, Part A).

The proposed by-pass of Magaliesburg along the northern boundary of the Precinct must therefore be accepted as the ultimate route of the major arterial road between the Johannesburg metropolitan area, the West Rand District Municipality and Rustenburg.

Current planning proposals indicate that the majority of existing roads in the northern part of the Precinct will be closed where they intersect the alignment of the proposed K76. In the northern part of the precinct only two intersections are proposed on K76, namely:

- Road D96 to the Hekpoort area at km 10.70
- Future extension of K228 at km 13.80.

These intersections are 3.1 km apart.

No intersections are proposed between Ga-Mohale (km 10.06) and K76 (km 11.713) on K228, i.e., a distance of 1.65 km, with no intersection at the existing R24.

The implications are that all traffic from Magaliesburg to the north (Rustenburg) will make use of the eastern intersection in Ga-Mohale. All traffic from Koster and surrounding areas in the North West Province to Johannesburg, West Rand and large other parts of Gauteng will also travel through Ga-Mohale. Access to the established tourism destination Mount Grace (outside precinct boundary) will be closed and a new access road will have to be proclaimed. Many other tourism attractions will be similarly affected.

It is concluded that urgent attention is required to reinstate access to properties affected by the road reserve of K76, as well as to the mitigation of environmental impacts, such as noise and visual intrusion.

Not only vehicular traffic will be affected by the proposed major arterial road, but pedestrian and bicycle traffic will also be affected. The impact of additional travel distance is much more severe on nonmotorised travel than on vehicular travel.

#### 11.1.2 K228

Planning by Gautrans recommends that R509 should be diverted to the road reserve of K228 through Ga-Mohale township. The planning of K228 dates back to 1992 and was accepted by the executive committee of the (then Transvaal) province (EC date 1992-01-18). It is therefore safe to say that road planning preceded the planning of the township and that the planned road was known when the township was laid out.

The preliminary design was subsequently accepted for implementation in terms of the GTIA in terms of Notice 2626 in Provincial Gazette Extraordinary, No 331 of 20 August 2003. The road reserve of K228 and the future implementation of the road therefore have to be accepted as the basis for the planning of the Magaliesburg Precinct. Fortunately, the larger part of Ga-Mohale is on the southern side of K228 and only a minor part of the township will be affected by the traffic on K228. Purely on transportation grounds, the alignment along K228 is preferred to the existing R509 / P47-1, provided that it is essential that K228 must have an intersection on R24 and the existing road must be scaled-down to a Class 4 collector road.

The vertical alignment of R24 is such that sight distance to the north is limited by a vertical curve and the vertical alignment of R24 will have to be amended to accommodate an intersection at K228.

The following is recommended from a transportation point of view regarding K228 / R509:

- K228 should be accepted as the long-term route for R509 from R24 to Koster and beyond.
- Proposed vertical alignment design of K228 must be amended to provide an intersection where the alignment crosses the existing P16-1 / R24.
- The affected road section is only 2.3 km long and it should be implemented as a matter of urgency to allow the Precinct to develop in terms of the long-term transportation framework, rather than to base development on the existing inefficient and unsafe road environment.

K228 can be implemented as a first phase only up to P16-1 and it is not necessary to implement K228 and K76 at the same time.

The scaling-down of R509 will release a large land area between Ga-Mohale and the railway line / Bloubank Spruit for development.

#### 11.1.3 EXISTING R509 (P47-1)

Implementation of the K228 creates the opportunity for the integration of the R509 (P47-1) (existing road to Koster) into the road network and transportation system of the Magaliesburg Precinct. Diversion of longdistance traffic and, in particular heavy goods vehicles, largely removes the conflict between vehicles and pedestrians and creates an environment conducive to production, tourism, recreation and quality residential development.

A network of roads and non-motorised corridors within the envelope between the K228 in the north, R24 in the east and the railway line / Bloubank Spruit unlocks large areas of land than can effectively and efficiently be developed. In the longer term, once the K76 eastern by-pass has been implemented, it may be desirable to extend the existing road to the area west of the Magalies River.

The area along R509 (P47-1) is separated from the Magaliesburg CBD by the Hekpoort railway line. The topography is favourable to provide a pedestrian bridge across the railway line.

#### 11.1.4 EXISTING R24 (P16-1)

The existing activity section along R24 (P16-1), the major road running through the central business area of Magaliesburg is only about 425m in length.

The limited traffic capacity of the existing road and the very unfavourable vertical alignment, railway crossings, parking for private vehicles, freight accesses and intersections, as well as loading / parking of heavy vehicles and lack of non-motorised transport facilities have resulted in a severe deterioration of the urban environment.

From a transportation point of view it is unlikely that redevelopment of the strip along R24 (P16-1) will be successful until the proposed by-pass has been implemented. In the meantime, attention should be focused on non-motorised transport, e.g., extension of the links to the pedestrian bridge across the Bloubank Spruit and the development of a supporting road network on either side of R24 (P16-1).



Figure 36: PROPOSED ROAD NETWORK

#### 11.2 MIXED USE ACTIVITY SPINES AND NODES

Magaliesburg town is structured around the R509 and the R24 and businesses cluster around these roads. Mixeduse spines are proposed along both the R24 and the R509 and mixed-use nodes at the intersection of these two roads. Mixed use refers to the combination of a variety of land uses including amongst others retail, commercial, offices, tourism facilities, light industrial, higher order social facilities and medium density residential. The exact make-up of uses depends on the character of the spine or the node.

Three spines are proposed:

- The south-eastern spine of the mixed-use spine starts at the entrance to the town on both sides of the R24 up to the Magalies River. This is the 'old' part of town and consists of small shops that are currently in a bad state of repair. It is the part of town that has the highest potential to develop as a main street with small shops and restaurants.
- The northern spine of the mixed-use spine starts at the intersection between the R24 and the R509 and stretches on both sides of the R24 up to the proposed K228. Based on existing activities and its surrounding context, this portion of the spine will have a commercial character.
- The western spine of the activity spine will be located on both sides of the R509 from the R24/ R509 intersection node to the western edge of the current Ga-Mohale settlement. This spine will be focussed on

retail, social facilities, open space, and service and light industries. The area to the north of the R509 already contains significant social facilities and open spaces.

The **mixed-use nodes** are proposed at the intersection of the R24 and the R509 and between the station and the R509. The character of the node will change from east to west. Larger land uses such as supermarkets will be located at the R24/ R509 intersection. At the station, the node will consist of a square with public transport and non-motorised facilities should be provided as well as a combination of local and tourism facilities. The development of the area in front of the station is to a large extent dependant on the reactivation of the railway line for passenger transport.



Figure 37: MIXED USE SPINES AND NODES

#### 11.3 RESIDENTIAL ZONES:

**RESIDENTIAL ZONE 1 - 'MAGALIESBURG TOWN'**: this consists of the small number of houses which formed part of the original town (Magaliesburg Proper) that was established in the 1920s as well as the approved townships of Magaliesburg Ext 10 and 19. The old town erven are in excess of 1 000m<sup>2</sup>, whilst densities in Magaliesburg Ext 10 and 19 are significantly higher. The proposed number of units to be provided at Ext 10 and 19 addresses the projected housing need up to the year 2035. Limited social facilities are located in this part of the Precinct.

The northern by-pass (K76) will allow for the integration of the residential zone across the R24 and eliminate the current negative impact of heavy traffic, which includes a significant number of trucks, on the amenity of the living environment.

**RESIDENTIAL ZONE 2 – GA-MOHALE SOUTH:** the existing area of Ga-Mohale south of the K228 is proposed for infill development/ consolidation and for expansion across the R509 up to the railway line. This area already contains significant number of social facilities. The construction of the K228 will allow for the R509 to stitch together the residential areas on both sides of this road.

The portion of Ga-Mohale to the north of the K228 and the approved Ga Mohale Ext 1 township: The locality of this residential area is unfortunate as it is cut off from the rest of the town and the bulk of social, commercial and facilities and job opportunities. No expansion of the existing and approved townships should be allowed, and no new development, residential or non-residential, should be approved in this zone. Land that is currently vacant should be used exclusively for agricultural purposes.

**RURAL RESIDENTIAL ZONE** to the south of the railway line along the Bloubank River. Development in this area should be of a low intensity and density and the natural and rural character of the area should be protected, similar to the proposed Zuikerboschfontein development.



Figure 38: RESIDENTIAL AREAS

#### 11.4PRODUCTION ZONES

**A LIGHT INDUSTRIAL ZONE** between the R509 and the railway line west of Ga Mohale. Small scale production must be stimulated in this zone. It should focus on the agricultural beneficiation and tourism industries.

**URBAN / COMMUNAL AGRICULTURE ZONE** between Ga Mohale and Ga Mohale Ext 1 to the north of the K228. No further development will be allowed in this area. Using the land for agricultural purposes, will provide an income to residents and can link to Carmel Estate FPSU.



Figure 39: PRODUCTION ZONES

#### 11.5TOURISM ZONE

A tourism zone is proposed on the eastern side of the Precinct, east of the R24 and along the Magalies River. The natural beauty of this area should be protected and enhanced. The tourism zone also contains gateways at the southern entrance to the Precinct and a node at the northern entrance to the Precinct.

The gateway at the southern entrance is created by the curve in the R24 at the top of the hill that reveals the town and the tourism node at the north is created by a cluster of tourism facilities located in the Witwatersberg adjacent to the Magalies River.



Figure 40: TOURISM ZONE



Figure 41: DEVELOPMENT CONCEPT

# 12 LAND USE BUDGET

The land use budget indicates the quantitative distribution of land uses. The Tourism Zone and Rural Residential are the largest land uses are 35% and 42% respectively.

LAND USE	AREA (HA)	% OF TOTAL	nr of Units
Existing Residential			
Ga-Mohale	29.4	1.6	700
Ga-Mohale Ext 1	21.8	1.2	703
Mogale Ext 10 & 19	19.4	1.1	1 754
Magaliesburg	13.4	0.7	33
TOTAL	84	4.6	3 190
Proposed residential			
Ga-Mohale Eastern Expansion	16.7	0.9	417.5
Ga-Mohale Western Expansion	4.9	0.3	122.5
Southern Expansion	20.9	1.2	522.5
Rural Residential	774	42.8	387
TOTAL	816.5	45.1	1 449.5
Mixed Use	56	3.1	-
Social	49.5	2.7	-
Agriculture	135	7.5	-
Productive Zone	30.5	1.7	-
Tourism Zone	638	35.3	-
TOTAL	909	50.2	
GRAND TOTAL	1 809.5	100	4 639.5

#### Table 2: LAND USE BUDGET



# Development and design guidelines

Magaliesburg precinct plan

# 13 SOCIAL FACILITY PROVISION

Based on the land use budget approximately 4500 dwelling units can be provided. At a household size of  $\pm 3$  (based on socio-economic study), the total projected population will be around 14000. The existing social facilities and the social facilities required are contained in Table 3.

The number of facilities necessary per population is based on the standards contained in the CSIR Guidelines for the Provision of Social Facilities in South African Settlements.

These are only guidelines and should be considered together with walking distances and the provision of facilities in surrounding areas.

Based on the social facility needs assessment, the bulk of social facilities for the existing and the projected population have already been provided. Most of these facilities are located within Ga-Mohale. There is a need for a primary school, open spaces and parks.

These figures should be treated with circumspection. For example, Magaliesburg Secondary School, the only high school in the Precinct, is located to the north of the proposed K228, which is a major provincial road. The bulk of residential areas in the Precinct are however located to the south of the K228. Pedestrian movement across this road is highly undesirable.

Several social facilities are also proposed for Ga Mohale Ext 1 which is also to the north of the K228. This includes a primary school, a community hall, a clinic, and early childhood development centre.

Moreover, Magaliesburg Ext 10 and 19 will accommodate 1 700 units, yet only provide for one social facility: an early childhood development centre. Based on the standards, the number of units does not justify the provision of any other social facilities. However, if all dwelling units in the Precinct are included, an additional primary school is justified. The provision of a new primary school at Magaliesburg Ext 10 and 19 would be ideal as these developments accommodate the largest number of new units and they are furthest from the existing and proposed primary schools.

Magaliesburg should also be seen as a service centre for a larger area. If the population of the surrounding functional region is considered, it is estimated that an additional 5 000 people are dependent on social facilities within the Precinct. This provides further justification for the provision of an additional primary school.

SOCIAL FACILITY	FACILITY PROVISION STANDARD	NUMBER OF FACILITIES NEEDED	SOCIAL FACILITIES PROVIDED⁴	SOCIAL FACILITIES TO BE PROVIDED
EDUCATIONAL				
Primary school	7 000	2	2	0
Secondary school	12 500	1	1	0
Early childhood development centre	2 400 – 3 000	4 to 6	1	3 to 5
HEALTH				
Clinic (Primary Health Clinic)	24 000 – 70 000	0	3	0
COMMUNITY FACILITIES				
Community halls (medium size)	10 000 -15 000	1	2	0
Community Performing Arts Centre	50 000	0	1	0
Library	20 000 - 70 000	0	2	0
Post Office/Social Grant Paypoint	10 000 - 20 000	0	1	0
SAFETY				
Fire Station	60 000 - 100 000	0	0	0
Police Station	60 000 - 100 000	0	1	0
RECREATION				
Open space	0.56 ha per 1 000	7.8 ha	-	7.8 ha
Community park (Grassed surface - 2 football size)	15 000	1	-	1
Local/Neighbourhood Park	3 000 - 15 000	1 to 5	-	1 to 5
Sports Complex (grouping of fields and or sports complexes)	60 000	0	0	0
Athletics/Cricket stadium	60 000	0	0	0
Combi-court surface (x 2)	15 000	1	0	1
Combi-court surface (x 4)	60 000	0	0	0

Table 3: SOCIAL FACILITY PROVISION

<sup>&</sup>lt;sup>4</sup> Includes existing and proposed.

# 14 TRANSPORTATION

- The existing road network is not adequate or suitable to support future development in the Magaliesburg Precinct.
- The proposed alternatives for K228 to replace R509 and K76 to replace P16-1 / R24 in their current form are expected to have severe negative impacts for the Magaliesburg Precinct.
- The proposed alignment for K228 (to replace the existing eastern section of the R509 to / from Koster) should be implemented up to P16-1 / R24 (existing) with an intersection at P16-1 / R24. Measures must be implemented to minimise the impact of traffic to and from R228 on the Ga-Mohale township
- The planning of K76 should be amended to reinstate access to affected properties and to mitigate negative environmental impacts, such as noise and visual intrusion. Once an acceptable design has been achieved, the road should be implemented as soon as possible.
- The tourism rail service from Johannesburg to Magaliesburg should be reinstated and improved and better integrated with the Magaliesburg Precinct.
- Provision must be made to accommodate a freight rail service from Hekpoort to Magaliesburg. The conflict between trains and pedestrians / road vehicles must be appropriately mitigated.
- Public transport facilities should be improved, including:
  - Proper public transport termini
  - Regular public transport lay-bys and shelters

- Stop for tour coaches
- Integrated service at the rail passenger station.
- Non-motorised transport should receive the highest priority, including universal access for persons with disabilities and special needs.
- Once the K228 has been implemented, P47-1 (existing R509) should be scaled-down and integrated in the development corridor south of K228.
- The existing P16-1 (R24) is not suitable as the spine of an activity corridor and has little potential to redevelopment under current circumstances. Once the K76 eastern by-pass has been implemented, the existing road and ancillary facilities (parking, loading and deliveries) should be re-developed. In the meantime, attention should be focused on non-motorised transport facilities and public transport facilities and the development of a supporting road network.


Figure 42: PROPOSED TRANSPORT NETWORK

# 15 DEVELOPMENT GUIDELINES FOR THE MAGALIESBERG BIOSPHERE RESERVE<sup>5</sup>

The portion of the Precinct to the north of the R509 and to the east of the R24 falls within the Magaliesberg Biosphere Reserve (MBR) Transition Zone.



Figure 43: MAGALIESBERG BIOSPHERE RESERVE

Transition Areas are flexible areas or areas of cooperation, which may contain a variety of agricultural activities and settlements.

The land use within the Transition Zone will allow for game ranching, cattle grazing, pastures, eco-tourism developments, higher level tourism developments, cultivated lands, irrigation, orchards, agro-industries, human settlements, support services and infrastructure, mining, and industrial development.

<sup>&</sup>lt;sup>5</sup> Magaliesberg Biosphere Management Plan, dated November 2011 drafted in support of Registration/Listing application with UNESCO

# 16 DESIGN GUIDELINES

Design guidelines guides both public and private investment in the Precinct. The aim of the guidelines is to enhance the quality and function of the spatial environment. These guidelines are not exhaustive but provide a basic description and explanation of the proposed character of the different Precinct elements.

Guidelines have been developed for:

- Mixed use activity spines
- Mixed use activity nodes
- Community Node
- Tourism spine, gateway, and node

## 16.1 DESIGN GUIDELINES FOR MIXED USE ACTIVITY SPINE

Three mixed use Activity Spines are proposed:

- 1) along the R24 from the southern entrance to the town up to Bloubank Spruit.
- 2) along the R24 from the R24/ R509 intersection to the proposed K228.
- 3) along the R509 to the south of Ga-Mohale from the R24/ R59 intersection.



Figure 44: MIXED-USE ACTIVITY SPINE

## 16.1.1 (1) SOUTHERN ACTIVITY SPINE

The R24/ Rustenburg Road (south) activity spine currently contains the bulk of shops and commercial activities within the Precinct. It should be developed as a high street that serves both local residents and tourists.

Proposed land use on adjacent properties:

- Retail
- Restaurants
- Personal services
- Service industries
- Entertainment
- Tourism-related facilities

- Medium density residential
- Community facilities

The road reserve is of critical importance to create a sense of place and an amenable environment for pedestrians. The following are applicable:

- Wide sidewalks with the full complement of street furniture
- Landscaping
- Pedestrian-scale lighting
- A cycle lane
- Facilities for public transport
- Safe pedestrian crossings
- Public art
- All streetscaping elements must comply with a 'look and feel' palette that is unique to the Precinct, its character, history, and natural beauty, but linked to the Magaliesberg Biosphere Reserve and the CoH WHS.

The following guidelines are applicable to any new development:

- Buildings should define the street through adherence to a built-to line. Buildings can be set back, provided that an accessible public space is provided adjacent to the street.
- Buildings can be a maximum of three storeys.
- Buildings should front onto the street with the entrance and windows facing the street.
- The front of the building should be articulated with elements such as, entrances, windows, wall

plane variations; and roofs that provide visual interest.

- Where applicable, protection for pedestrians should be provided through elements such as canopies and colonnades.
- No parking should be allowed between the road reserve and the building.
- Loading facilities, waste bins, service areas and other utilities should be provided at the back of the building.
- No boundary fences are allowed.





Figure 45: IMAGES OF MIXED-USE ACTIVITY SPINE<sup>6</sup>





Figure 46: EXAMPLES OF ARTICULATED BUILDING FACADES AND BUILDING SETBACKS<sup>7</sup>

<sup>6</sup> Malop Street Green Spine Part of the Malop to Myers revitalisation project http://www.lmdesignllc.com/architecture\_mixeduse.html 7

 $\label{eq:https://library.municode.com/tn/farragut/codes/code_of_ordinances?nodeld=PTIICOOR\_APXDA RDEST$ 

16.1.2 (2) NORTHERN ACTIVITY SPINE The R24/ Rustenburg Road (north) activity spine currently contains activities ranging from commercial facilities in the southern area to tourism facilities in the north.

> This section is more vehicle-oriented than pedestrian oriented. Pedestrian generating land uses are not encouraged in this portion of the activity spine. The character of development and aesthetic treatment of buildings facing the street is of utmost importance, even in the commercial area, as this activity spine forms part of the tourism area.

Proposed land uses for the southern portion:

- Commercial
- Light industrial

Proposed land uses for the northern portion:

Tourism related

In the southern portion of the activity spine, it is important that buildings face onto the street and that all utilities and loading facilities are located at the back of buildings out of the view of passers-by.

In the northern part of the activity spine, indigenous landscaping should dominate the streetscape. Also see guidelines for tourism.

## 16.1.3 (3) WESTERN ACTIVITY SPINE

There is a large number of social facilities and open spaces to the north of the R509. This forms the basis of

the western activity spine and its character is more community oriented. It is proposed that the strip of land to the south of the R509 also be developed with mixed land uses, thereby creating a main street along Ga-Mohale.

The following land uses will be allowed:

- Social facilities
- Small-scale retail
- Personal services
- Service industries
- Medium density residential
- Public open space

A large number of pedestrians make use of the R509 to access facilities. It is therefore important to accommodate public and non-motorised transport.

Streetscaping is of utmost importance. This includes, street trees, landscaping, the full complement of street furniture, appropriate signage, informal trade facilities, public art.

## 16.2 DESIGN GUIDELINE FOR MIXED USE ACTIVITY NODES

A mixed-use node is proposed from the R509/ R24 intersection to the Station. At the intersection it is more vehicle-oriented and consist of larger retail outlets and at the station it is more pedestrian-oriented and consists of smaller shops.



Figure 47: MIXED USE ACTIVITY NODE

The following development and design guidelines are applicable:

Buildings can be a maximum of three storeys

- Buildings should front onto the main street with the entrance and windows facing the street
- The front of the building should be articulated with elements such as, entrances, windows, wall plane variations; and roofs that provide visual interest.
- Buildings should define public spaces in front of the building. These public spaces should be developed as landscaped squares with street furniture, such as seating areas, adequate lighting, and facilities for informal trading.
- Pedestrian facilities should be provided between the different developments.
- A transparent fence should be provided on the street boundary. This fence should channel pedestrian movement to designated areas where pedestrians can safely cross the street.
- A separate entrance should be provided for pedestrians and vehicles.
- Loading facilities should be provided at the back of the building.
- Waste bins, service areas and other utilities should be provided at the back of the building.





Figure 49: TRANSIT ORIENTED DEVELOPMENT<sup>9</sup>

Figure 48: EXAMPLES OF MIXED-USE ACTIVITY NODES8

com%2Fscience%2Farticle%2Fpii%2FS0301479717311660&psig=AOvVaw1ihdWkOVhhALlvYV2ylgBK &ust=1611667920659000&source=images&cd=vfe&ved=0CA0QjhxqFwoTCOCCyYmYt-4CFQAAAAAAAAAAAAAAA

<sup>&</sup>lt;sup>8</sup> https://www.freese.com/our-work/sh-191-corridor-studymanagement-plan

 $<sup>^{9}\</sup> https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.sciencedirect.$ 

## 16.3GA-MOHALE SOCIAL/ COMMUNITY NODE

The most prominent social/ community node is in Ga-Mohale fronting directly onto the R509. The node forms part of the R509 Activity Spine. It consists of a number of facilities: primary school, SAPS, clinic, Ubuntu Arts and Crafts Centre, a park and several religious institutions. It is not intensively developed and there are large portions of land that is still vacant. Some of these are designated as parks but have not been developed as such. Several facilities consist of relatively small buildings on large erven. Extensive infill development can take place in this node in the form of additional social facilities, retail, restaurants, service industries and medium density housing. Attention should be given to the creation of a coherent public space that integrates the different facilities and land uses.

The following additional guidelines are applicable:

- Streets should be pedestrian dominated with wide sidewalks and narrow vehicular lanes consisting of paved, not tarred, surfaces.
- Landscaping and streetscaping in the form of street trees, lighting and street furniture should ensure the safety and convenience of pedestrians and cyclists, definition of space and the creation of a unique character.
- Squares should be developed between and in front of buildings to create a space for users of the social facilities.
- Managed informal trade can be allowed.

 Social facilities should be integrated rather than each facility provided on its own property and fenced off.







Figure 51: IMAGES OF SOCIAL NODE<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> SOURCE https://worldlandscapearchitect.com/student-project-the-urban-spine-scott-edwardsidhom/#.X8X8vM0zZPY

## 16.4 DESIGN GUIDELINES FOR THE TOURISM SPINE AND GATEWAYS

The MSDF, 2019 designates a number of routes as Tourism Corridors. The Tourism Corridors are on portions of the N14, the R24, the R560, the R563 and the R96. These connect to the CoH WHS, pass through large portions of the Magaliesberg Biosphere Reserve, and link Magaliesburg and Hekpoort to Muldersdrift and Hartebeestpoort Dam in Madibeng. These have both a destination and a linkage function. The R24 Tourism Corridor passes through Magaliesburg.

The R24 Tourism Corridor is not visually or functionally uniform and its character changes significantly along its length, with some sections being amenable to tourism and others creating a negative atmosphere for touristic experiences:

- Surrounding land uses vary from commercial developments, to restaurants, to agriculture.
- The surrounding natural landscape ranges from veld, to dramatic mountains rivers and lush landscapes, to barren landscapes with invasive plant species.

It is not necessary, nor is it necessarily desirable, to create a uniform character, function, and experience along all the Corridor. It is however necessary to create some cohesion and integration between the disparate parts. The R24 must therefore form part of the larger tourism network in Mogale City. In order to fully exploit the tourism product in the wider Mogale City, the following should be considered with regards to PRIVATE DEVELOPMENT:

- Compatible and incompatible land uses: a variety of land uses are compatible with the tourism corridors. In addition to tourism facilities such as hotels and museums, restaurants, shops, plant nurseries, agriculture and residential development can also be allowed. Land uses that have a negative visual impact such as the selling and renting of earth-moving equipment, warehouses and storage, and industrial activities, are not compatible. The determining factors should be function: does the land use support tourism or is it linked to tourism? Is the land use neutral to tourism? Will the land use have a negative impact on surrounding existing or future tourism activities?
- Visual impact: what is the visual impact of the development on the corridor? The tourism offering in Mogale City is mostly rural and its strength is to provide a natural sanctuary in close proximity to densely built-up urban areas. The visual impact of surrounding land uses should be evaluated with this in mind. A key factor is the interface between the private and the public realm:
  - Extensive indigenous landscaping should be used
  - No large blank walls should be allowed

- No large parking areas between the building and the street should be allowed.
- Signage should be in keeping with the character of the tourism and rural nature of the corridor.

In order to fully exploit the tourism product in the wider Mogale City, the following should be considered with regards to the ROAD RESERVE:

- The Tourism Corridor should be divided into different zones to reflect the different character and places along its length, i.e., Muldersdrift, Magaliesburg, Hekpoort, the CoH WHS, the MBR.
- A 'look and feel' auidance should be developed for the Tourism Corridors to develop a sense of place. This should be overarching but should allow for variation to accommodate the different zones within the Corridors. The 'look and feel' should provide guidelines for signage and landscaping. However, as stated in the Draft Environmental Management Framework and Management Plan for the COH WHS, 'the sense of place experience is substantially influenced by the visual picture made up of natural and cultural landscape forms and shapes. Visitors and tourists should be able to identify the area and its unique gualities almost by sight and experience rather than guidance supported only by road signage'.
- Gateways have to be defined at entrances to the Tourism Corridor, entrances to the different zones and entrances to important tourism

facilities. These gateways should be in line with the 'look and feel' as referred to above. Local artists should preferably be used in the development of gateway elements.

The R24 is designated as a Tourism Corridor in the MSDF. The character of the area surrounding the R24 differs along the Corridor, with some zones having more potential for tourism development. Four definitive zones along the corridor can be distinguished:

- The southern portion from the southern entrance to the town is veld and characterised by extensive agriculture. It stretches up to the entrance to the 'old' town.
- The 'old' town contains mostly shops. Although it is dilapidated and neglected, this zone has the potential to act as the main street of a small town with restaurants and small shops. This zone extends to the intersection of the R24 with the R509.
- The stretch between the R509 and the K228 intersection contains commercial activities and is generally of a low environmental quality both in terms of natural and built environment.
- From the intersection of the R228 the Witwatersberg becomes visible and the R24 runs along the Magalies River. The natural landscape is lush with large and dense clusters of trees. There is also a number of tourism facilities directly adjacent to the road.



Figure 42: TOURISM CORRIDOR, GATEWAY AND NODE

The two zones with the most tourism potential is the 'old' town and the northern portion. For the northern portion, the landscaping should be protected and enhanced and only land uses that are tourism related should be allowed. For the 'old' town, significant regeneration is needed. The diversion of heavy vehicles and through traffic to the K76 will allow this street to become a place rather than a mere movement channel. Regeneration includes the public and the private realm. For the public realm:

- Sidewalks should be upgraded. This includes widening of sidewalks, paving, streetscaping, landscaping and sufficient lighting.
- Provision for non-motorised transport

- Safe pedestrian crossings
- Look-and-feel to achieve a coherent and visually integrated streetscape

The southern zone of the corridor should retain its agricultural/rural character. In addition, tourism activities can be supported. Attention should be given to landscaping and signage.

The character and land uses in the zone between the R509 and the K228 intersection is not conducive to tourism. As with the southern zone the treatment of the road reserve is of importance and landscaping and signage should be addressed.

Tourism gateways are proposed at the curve in the R24 at the southern entrance to the Precinct, at the top of the hill at the southern entrance to the town and at the curve of the R24 at the northern entrance to the Precinct. At these points, the different portions of the Precinct are revealed. The development of gateways will enhance the sense of place and tourism value of the Precinct. A gateway can take the form of a landmark element such public art.



Figure 45: EXAMPLE OF EXISTING STREETSCAPING









Figure 52: EXAMPLE OF LANDMARK ELEMENTS<sup>11</sup>

<sup>&</sup>lt;sup>11</sup> https://za.pinterest.com/codaworx/public-art/



# **Implementation Framework**

Magaliesburg precinct plan



# 17 STRATEGIC PROJECTS

This Section contains Strategic Projects based on the situational analysis and precinct development. These projects /interventions seek to leverage specific development opportunities, investment projects and market demands associated with the precinct.

## 17.1 DESCRIPTION OF STRATEGIES AND PROJECTS

- 17.1.1 STRATEGY 1: DEVELOP A FUNCTIONAL AND INTEGRATED MOVEMENT NETWORK The Magaliesburg Precinct is severely affected by provincial roads, both current roads and their proposed realignment. The realignment of the provincial roads will have a significant impact on the central section of the town, Ga-Mohale and the tourism zone to the east of the Magalies River.
  - PROJECT 1: ENGAGE WITH GAUTRANS REGARDING THE K76 AND K228
    - This will include setting up a committee with Gautrans to address the construction timeframe of the K-routes, the intersection and access locations, and mitigation measures
  - PROJECT 2: DEVELOP A FORMAL TAXI RANK
    - This project will identify the optimal position of the taxi rank as well as the preparation and construction of the taxi rank. Repurposing of the existing

taxi rank will also form part of this project

- PROJECT 3: DEVELOP A NON-MOTORISED NETWORK
  - A non-motorised transport plan will be developed for the whole Magaliesburg built-up area
  - Pedestrian walkways to be built along with safe intersection crossings and the upgrading of the existing bridge over the Bloubank Spruit



Figure 53: STRATEGY 1

## 17.1.2 STRATEGY 2: DEVELOP A NETWORK OF MIXED-USE SPINES AND NODES TO SUPPORT ECONOMIC AND SOCIAL DEVELOPMENT

The Magaliesburg Precinct has linear development along the main roads: the R509 and the R24.

- PROJECT 1: DRAFT AN URBAN DESIGN FRAMEWORK FOR THE MIXED-USE NODES AND SPINES
  - Drafting of a detailed Urban Design 0 Framework, which indicates land to be acquired. Land activities. use typology/density, residential movement networks, provision of development public spaces, guidelines, sections street and landscaping.
- PROJECT 2: DEVELOP MIXED USE AND SOCIAL NODE AT GA-MOHALE AND THE MAGALIESBURG STATION AND MIXED USE SPINE ALONG THE R509
  - Evaluation of existing facilities, and determining why they are underutilised
  - Drafting of a Site Development Plan indicating streets, walkways, parking, paving etc
  - Training and making land available for small businesses

- o Development of a public space
- Drafting of a maintenance plan
- Identifying ways to ensure the effective use of current social facilities
- PROJECT 3: DEVELOP THE HIGH STREET OF MAGALIESBURG AS A TOURIST STREET
  - Drafting of a Site Development Plan indicating streets, walkways, parking, paving, trading facilities etc
  - This includes the identification of land in order to develop a tourism market
  - o Development of a public space
  - Drafting of a maintenance plan
  - Upgrading of the R24
  - Incentives for business to align with the Site Development Plan



## 17.1.3 STRATEGY 3: STIMULATE LOCAL ECONOMIC DEVELOPMENT THROUGH AGRICULTURE AND TOURISM

The economy of the Magaliesburg Precinct is predominantly based on agriculture and tourism. Both sectors have however shown signs of stagnation and decline and need to be assisted and stimulated.

- PROJECT 1: DEVELOP ZONE FOR THE PRODUCTION OF TOURISM GOODS AND AGRICULTURAL SUPPORT AND BENEFICIATION
  - This will include the confirmation of land identified for the production of tourism goods and agricultural support and beneficiation
  - The identification of land owners and negotiations with them to participate in the project
- PROJECT 2: DEVELOP TOURISM GATEWAYS
  - This project includes the identification of the location of the gateway, the design and construction
- PROJECT 3: DEVELOP TOURISM AND PROTECTED AREAS OVERLAY ZONE
  - Identification of land that should be included in the overlay zone
  - Draft development guidelines, parameters, controls and land use application approval processes

- Incorporate the overlay zone within the LUS
- Ensure that development guidelines are implemented in the development of the road reserve and the abutting properties

- PROJECT 4: ASSIST THE DEVELOPMENT OF SMALL TOURIST FACILITIES ON FARMS
  - Identify constraints and opportunities of tourism development on farms
- PROJECT 5: DEVELOP URBAN AGRICULTURE ZONE
  - This project will include the confirmation of land to be included in the agricultural zone, as well the owners of the properties who will need to be negotiated with
- PROJECT 6: REVIVE WESTCOL FOR AGRICULTURAL AND TOURISM TRAINING
  - Investigate the demise of the Westcol campus and draft a business plan for the revival



Figure 55: STRATEGY 3

# 18 IMPLEMENTATION PLAN

This section contains the project implementation of the Precinct Plan. The implementation is organised as follows:

- Strategy and motivation
- Projects
- Actions

For each ACTION the following elements are discussed:

- Timeframe (shorth, medium and long)
- Responsible agent i.e. agency responsible for driving the implementation of the project
- Potential sources of funding, i.e. funding agency. This list is not finite and other sources of funding such as donations should be sourced. Of concern is the shifting of budgets to accommodate the funds necessary to deal with the Covid-19 epidemic
- Stakeholders: relevant public and private roleplayers that are directly involved in the action or should be consulted in the process.
- Prioritisation indication the urgency of implementation, albeit a short-, medium- or longterm project:
  - $\circ$  Red = high priority
  - Orange = medium priority
  - $\circ$  Green = low priority

The following should be noted:

 Facilities and building costs are estimates, based on industry and development standards, for the construction of new buildings and facilities; therefore, it should be finalised by professional consultants such as engineers, architects, and quantity surveyors.

- Planning and construction costs for residential areas and some social facilities were derived from the 2018/19 Housing Subsidy and Grant Levels of the National Human Settlements Programmes. Costs are based on a typical erf size of 250m<sup>2</sup>, with a 40m<sup>2</sup> building with A Grade Services.
- Primary and Secondary School construction costs are derived from the Guidelines Relating to Planning for Public School Infrastructure, published by the Department of Basic Education, 2012.
- Property value is estimated by the average value of recently transferred properties in the area, as well as the current municipal valuation roll.

#### STRATEGY 1: DEVELOP A FUNCTIONAL AND INTEGRATED MOVEMENT NETWORK

#### MOTIVATION:

The Magaliesburg Precinct is severely affected by provincial roads, both current roads and their proposed realignment. The realignment of the provincial roads will have a significant impact on the central section of the town, Ga Mohale and the tourism zone to the east of the Magalies River.

Scant provision is made for public and non-motorised transport for a population that consists mostly of commuters and pedestrians.

	PROJECT	I: ENGAGE	WITH GAUT	RANS REGARDING	THE K76 AND K228	3	
ACTIONS	SHORT TERM	MEDIUM TERM	LONG TERM	RESPONSIBLE AGENT	POTENTIAL SOURCES OF FUNDING	ESTIMATED COST	STAKEHOLDERS
<ul> <li>Set up a working committee with Gautrans to address the following issues:</li> <li>Timeframe for the construction of the K76 and the K228.</li> <li>Intersections and access points to prevent Magaliesburg town and tourist facilities to be completely cut off from the larger transport network and to reinstate access to affected properties.</li> <li>Mitigation measures, specifically for pedestrians that need to cross the proposed K228 to access facilities and job opportunities to the south.</li> <li>Measures to mitigate negative environmental impacts, such as noise and visual intrusion on area around the proposed K76.</li> </ul>	X	X	×	MCLM Roads and Transport Services	N/A	N/A	<ul> <li>MCLM Development Planning</li> <li>MCLM Roads and Transport Services</li> <li>Gautrans</li> <li>WRDM Transport and Roads</li> <li>WRDM Regional Planning and Environmental Management</li> </ul>

		PROJEC	CT 2: DEVELO	OP A FORMAL TAXI	RANK		
ACTIONS	SHORT TERM	MEDIUM TERM	LONG TERM	RESPONSIBLE AGENT	POTENTIAL SOURCES OF FUNDING	ESTIMATED COST	STAKEHOLDERS
Investigate optimal position for a taxi rank to serve the entire town	X			MCLM Roads and Transport Services	N/A	N/A	<ul> <li>MCLM Development Planning</li> </ul>
Prepare the land for the development of the taxi rank e.g. rezoning, subdivision	x			MCLM Development Planning	MCLM Development Planning	R60 000	<ul> <li>MCLM Roads and Transport Services</li> <li>Taxi association</li> </ul>
Develop a taxi rank with ablutions		X		MCLM Roads and Transport Services	MCLM Roads and Transport Services	R1 200 000	<ul> <li>Bus operators</li> <li>Ward councillor</li> </ul>
Provide taxi laybys and shelters for pedestrians		X		MCLM Roads and Transport Services	MCLM Roads and Transport Services	R500 000	
Repurpose the existing taxi rank			X	MCLM Roads and Transport Services	MCLM Roads and Transport Services	N/A	<ul> <li>WRDM Transport and Roads</li> </ul>
	Р		DEVELOP A	NON-MOTORISED			
ACTIONS	SHORT TERM	MEDIUM TERM	LONG TERM	RESPONSIBLE AGENT	POTENTIAL SOURCES OF FUNDING	ESTIMATED COST	STAKEHOLDERS
Develop a non-motorised transport plan for the entire Magaliesburg built-up area	x			MCLM Roads and Transport Services	MCLM Roads and Transport Services	R500 000	<ul> <li>MCLM Development Planning</li> <li>MCLM Roads and</li> </ul>
Construct pedestrian walkways along the R24 to the south of its intersection with the R509 and along the R509 up to the edge of the town.		x		MCLM Roads and Transport Services	MCLM Roads and Transport Services	R300p/m²	Transport Services <ul> <li>Gautrans</li> </ul>
Upgrade the bridge across the Bloubank Spruit to better integrate with the pedestrian network.		x		MCLM Roads and Transport Services	MCLM Roads and Transport Services	TBD	
Create safe pedestrian crossings across the R24 and the R509	x			MCLM Roads and Transport Services	MCLM Roads and Transport Services	R50 000	

#### STRATEGY 2: DEVELOP A NETWORK OF MIXED-USE SPINES AND NODES TO SUPPORT ECONOMIC AND SOCIAL DEVELOPMENT

MOTIVATION:

The Magaliesburg Precinct has linear development along the main roads: the R509 and the R24.

#### PROJECT 1: DRAFT AN URBAN DESIGN FRAMEWORK FOR THE MIXED-USE NODES AND SPINES

ACTIONS	SHORT TERM	MEDIUM TERM	LONG TERM	RESPONSIBLE AGENT	POTENTIAL SOURCES OF FUNDING	ESTIMATED COST	STAKEHOLDERS
<ul> <li>Draft detailed Urban Design Framework for the mixed-use nodes and spines that addresses at least: <ul> <li>Land parcels to be acquired (if necessary.)</li> <li>Land use and activities both formal and informal.</li> <li>Residential typology and density</li> <li>Motorised, public transport and non-motorised transport networks: movement and termini.</li> <li>Erf subdivision</li> <li>Public space network including hard and soft spaces.</li> <li>Development parameters and building massing and public private interface.</li> <li>Street sections.</li> <li>Streetscaping, landscaping and signage.</li> </ul> </li> </ul>	X			MCLM Development Planning	MCLM Development Planning	R300 000	<ul> <li>MCLM Development Planning</li> <li>MCLM Human Settlement and Real Estate Administration</li> <li>MCLM Roads and Transport Services</li> <li>Magaliesburg Business Forum</li> <li>Magaliesburg Tourism Forum</li> <li>Ward councillor</li> <li>Taxi and bus operators</li> <li>Gautrans</li> <li>Relevant departments</li> </ul>

PROJECT 2: DEVELOP MIXED USE AN	d social n		SA MOHALE	AND THE MAGALIES	_		SPINE ALONG THE R509
ACTIONS	SHORT TERM	MEDIUM TERM	LONG TERM	RESPONSIBLE AGENT	POTENTIAL SOURCES OF FUNDING	ESTIMATED COST	STAKEHOLDERS
Evaluation of current facilities to determine underutilisation and potential multi-use.	x			MCLM Development Planning	N/A	N/A	MCLM Development Planning
Draft a Site Development Plan for the mixed-use and node addressing at least: Streets and walkways Erven Built-to lines Development controls (coverage, FSR, height) Building façade Parking Landscaping Street furniture Paving Lighting Signage Trading facilities Bus and taxi rank	x			MCLM Development Planning	MCLM Development Planning	R500 000	<ul> <li>MCLM Human Settlement and Real Estate Administration</li> <li>MCLM Sports, Arts, Culture and Recreation</li> <li>MCLM Social Development</li> <li>MCLM Roads and Transport Services</li> <li>MCLM Special Economic Initiatives Management</li> <li>CoGTA - MIG</li> <li>GP DoE</li> <li>GP DoED</li> </ul>
Make land available for small businesses		х		MCLM Human Settlement and Real Estate Administration	MCLM Human Settlement and Real Estate Administration	N/A	<ul> <li>GP DoH</li> <li>GP DoHS</li> <li>GP DoSD</li> <li>GP DoSACR</li> </ul>
Provide training for informal and small businesses		x	x	MCLM Special Economic Initiatives Management	N/A	N/A	DoPWI     Relevant National
Develop the public space in line with the SDP		X		MCLM Development Planning	CoGTA - MIG	R2 000 000	departments
Draft a maintenance plan		X		MCLM Development Planning	N/A	N/A	
Ensure effective use of current social facilities	X			MCLM Development Planning	N/A	N/A	

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PRO	DJECT 3: DE	VELOP THE	HIGH STREE	et of magaliesbur	g as a tourist s	TREET	
ACTIONS	SHORT TERM	MEDIUM TERM	LONG TERM	RESPONSIBLE AGENT	POTENTIAL SOURCES OF FUNDING	ESTIMATED COST	STAKEHOLDERS
Draft a Site Development Plan for the mixed-use and node addressing at least: Streets and walkways Erven Built-to lines Development controls (coverage, FSR, height) Building façade Parking Landscaping Street furniture Paving Lighting Signage Trading facilities Bus and taxi rank	x			MCLM Development Planning	MCLM Development Planning	R500 000	<ul> <li>MCLM Development Planning</li> <li>MCLM Human Settlement and Real Estate Administration</li> <li>MCLM Sports, Arts, Culture and Recreation</li> <li>MCLM Social Development</li> <li>MCLM Roads and Transport Services</li> <li>WRDM Economic Development</li> <li>GP DoE</li> </ul>
Identify land and develop a tourism market		X		MCLM Development Planning	GP DoSACR CoGTA - MIG	R2 000 000	<ul><li>GP DoED</li><li>GP DoH</li></ul>
Develop the public space in line with the SDP		X		MCLM Development Planning	CoGTA - MIG	R2 000 000	<ul> <li>GP DoHS</li> <li>GP DoSD</li> <li>GP DoSACR</li> </ul>
Draft a maintenance plan		X		MCLM Development Planning	N/A	N/A	<ul> <li>Gautrans</li> </ul>
Upgrade R24 in line with proposals contained in SDP		X	X	Gautrans	Gautrans	TBD	Relevant National departments
Incentivise business to upgrade buildings in line with proposals contained in SDP		x	X	MCLM Human Settlement and Real Estate Administration	MCLM Human Settlement and Real Estate Administration	TBD	

#### STRATEGY 3: STIMULATE LOCAL ECONOMIC DEVELOPMENT THROUGH AGRICULTURE AND TOURISM

MOTIVATION:

The economy of the Magaliesburg Precinct is predominantly based on agriculture and tourism. Both sectors have however shown signs of stagnation and decline and need to be assisted and stimulated.

#### PROJECT 1: DEVELOP ZONE FOR THE PRODUCTION OF TOURISM GOODS AND AGRICULTURAL SUPPORT AND BENEFICIATION

ACTIONS	SHORT TERM	MEDIUM TERM	LONG TERM	RESPONSIBLE AGENT	POTENTIAL SOURCES OF FUNDING	ESTIMATED COST	STAKEHOLDERS
Confirm land identified for the production of tourism goods and agricultural support and beneficiation.	x			MCLM Development Planning	MCLM Development Planning	N/A	<ul> <li>MCLM Development Planning</li> <li>MCLM Tourism</li> <li>WRDM Economic</li> </ul>
Identify landowners and enter into negotiations to participate in project,	x			MCLM Development Planning	MCLM Development Planning	N/A	<ul><li>GDARD</li></ul>
Draft a business plan for the development of the production zone.		X		DALRRD	DALRRD	R100 000	<ul> <li>DALRRD</li> <li>Relevant National departments</li> <li>Magaliesberg Tourism Association</li> <li>Magaliesberg Business Forum</li> </ul>

PROJECT 2: DEVELOP TOURISM GATEWAYS										
ACTIONS	ACTIONS SHORT TERM MEDIUM LONG TERM RESPONSIBLE AGENT OF FUNDING ESTIMATED COST									
Identify the locality of the gateway		Х	X	MCLM Tourism	N/A	N/A	<ul> <li>MCLM Development Planning</li> </ul>			
Appoint consultants to design the gateway based on clear guidelines		Х	X	MCLM Tourism	GP DoSACR	R1 000 000	<ul> <li>MCLM Tourism</li> <li>MCLM Sports, Arts,</li> </ul>			
Construct the gateway			X	MCLM Tourism	GP DoSACR	R1 000 000	Culture and Recreation MCLM Parks Management and Nature Conservation WRDM Regional Development Planning and Environmental Management Gautrans MBR NPO Local artists GP DoSACR			

PROJECT 3: DEVELOP TOURISM AND PROTECTED AREAS OVERLAY ZONE											
ACTIONS	SHORT TERM	TERM	LONG TERM	RESPONSIBLE AGENT	OF FUNDING	ESTIMATED COST	STAKEHOLDERS				
Identify the geographic areas to be included in the overlay zone		x		MCLM Development Planning	N/A	N/A	<ul> <li>MCLM Development</li> <li>Planning</li> <li>MCLM Tourism</li> </ul>				
Appoint consultants to draft development guidelines, parameters, and controls		x		MCLM Development Planning	MCLM Development Planning	R250 000	<ul> <li>MCLM Sports, Arts, Culture and Recreation</li> </ul>				
Develop land use application and approval processes		x		MCLM Development Planning	N/A	N/A	<ul> <li>MCLM Parks Management and Nature Conservation</li> </ul>				
Incorporate in LUS		x		MCLM Development Planning	MCLM Development Planning	R1000per/page	<ul> <li>MCLM Environmental Management</li> <li>WRDM Regional</li> </ul>				
Apply guidelines to the development of the road reserve and abutting properties along the R24		x	x	MCLM Development Planning	N/A	N/A	Development Planning and Environmental Management MBR NPO CoH WHS MA MACH				

PR	PROJECT 4: ASSIST THE DEVELOPMENT OF SMALL TOURIST FACILITIES ON FARMS											
ACTIONS	SHORT TERM	MEDIUM TERM	LONG TERM	RESPONSIBLE AGENT	POTENTIAL SOURCES OF FUNDING	ESTIMATED COST	STAKEHOLDERS					
Identify procedural and financial administrative constraints that prevent the legal development of small tourist facilities of farms.	x			MCLM Development Planning	N/A	N/A	<ul> <li>MCLM Development Planning</li> <li>MCLM Tourism</li> <li>Private landowners</li> </ul>					
Identify ways in which to remove these constraints	x			MCLM Development Planning	N/A	N/A	<ul> <li>Magaliesberg Tourism Association</li> <li>Magaliesberg Business Forum</li> </ul>					
	PROJECT 5: DEVELOP URBAN AGRICULTURE ZONE											
ACTIONS	SHORT TERM	MEDIUM TERM	LONG TERM	RESPONSIBLE AGENT	POTENTIAL SOURCES OF FUNDING	ESTIMATED COST	STAKEHOLDERS					
Confirm land identified for the urban agricultural zone.	x			MCLM Development Planning	MCLM Development Planning	N/A	<ul> <li>MCLM Development Planning</li> <li>MCLM Special Economic Initiatives</li> </ul>					
Identify landowners and enter into negotiations to participate in project,	x			MCLM Development Planning	MCLM Development Planning	N/A	Management WRDM Economic Development					
Draft a business plan for the development of the urban agriculture zone.		x		DALRRD	DALRRD	R100 000	<ul><li>GDARD</li><li>DALRRD</li></ul>					
							Relevant National departments					

PROJECT 6: REVIVE WESTCOL FOR AGRICULTURAL AND TOURISM TRAINING										
ACTIONS	SHORT TERM	MEDIUM TERM	LONG TERM	RESPONSIBLE AGENT	POTENTIAL SOURCES OF FUNDING	ESTIMATED COST	STAKEHOLDERS			
Investigate reasons behind the closure of Westcol	x			MCLM – Development Planning	N/A	N/A	MCLM – Development Planning MCLM – Social			
Draft a business plan for the revival of Westcol	x			MCLM – Development Planning	GP Dohest	R100 000	Development GP DoHEST			

# 19 GUIDANCE FOR LUMS

## 19.1 LUMS CLAUSES

The following Clauses contained in the Mogale City Local Municipality Land Use Scheme, 2019 – Final Draft are applicable to the Precinct.

#### SECTION 1: LAND DEVELOPMENT RIGHTS

PART IV: DEVELOPMENT RULES AND OVERLAY ZONES

It is proposed that an overlay zone be developed for Tourism Corridors for the entire Mogale City Local Municipal area.

SECTION 2: MANAGEMENT OF LAND DEVELOPMENT RIGHTS

PART V: LAND DEVELOPMENT REQUIREMENTS

32. GENERAL APPEARANCE AND CONVENIENCE

32.1 The Municipality may, if in its opinion any proposed building in any use zone in respect of which building

plans have been submitted to it for approval will disfigurate the environment or may for any reason whatsoever be detrimental to the amenity of the area, require the person who submitted such building plans, to furnish such further information, plans, models or other sufficient indication of the proposed building as it may, in its discretion, deem necessary, before considering such building plans in terms of the provisions of its building Bylaws.

It is proposed that for this Precinct, especially, for the tourism corridor and the mixed-use corridor and node, additional criteria relating to the physical appearance and aesthetics for the buildings and landscaping for new development be considered. These are contained in the design guidelines in the Precinct Plan.

## 19.2LAND USE ZONES

The following land use zones as contained in the Mogale City Local Municipality Land Use Scheme, 2019 – Final Draft are applicable to the respective development categories contained in the Precinct Development Concept.

	MIXED USE ACTIVITY SPINE	MIXED USE NODE	COMMUNITY / SOCIAL NODE	TOURISM CORRIDOR	rural Residential	Low Density Residential	MEDIUM DENSITY RESIDENTIAL	TOURISM ZONE	PRODUCTIO N ZONE	AGRICULTUR AL AREAS
RESIDENTIAL 1 1 dwelling unit per erf (100m <sup>2</sup> - 4 000m <sup>2</sup>	NO	NO	NO	YES	NO	YES	YES	YES	NO	NO
RESIDENTIAL 2 20 up to 40 dwelling units per ha	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO
RESIDENTIAL 3 41 to 60 dwelling units per ha	YES	YES	YES	NO	NO	NO	YES	NO	NO	NO
RESIDENTIAL 4 61 dwellings per ha and higher	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO
RESIDENTIAL 5	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO
AGRICULTURAL RESIDENTIAL One dwelling unit per agricultural holding	NO	NO	NO	YES	YES	NO	NO	YES	NO	YES
BUSINESS 1 Dwelling unit- 40 units / ha	YES	YES	NO	YES	NO	NO	NO	NO	YES	NO
BUSINESS 2 Dwelling unit- 40 units / ha	YES	NO	YES	YES	NO	YES	YES	YES	NO	NO
BUSINESS 3	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO

Table 4: MCLM LUS LAND USE ZONES

	MIXED USE ACTIVITY SPINE	MIXED USE NODE	COMMUNITY / SOCIAL NODE	TOURISM CORRIDOR	RURAL RESIDENTIAL	Low Density Residential	MEDIUM DENSITY RESIDENTIAL	TOURISM ZONE	PRODUCTIO N ZONE	AGRICULTUR AL AREAS
BUSINESS 4	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO
BUSINESS 5	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO
EDUCATIONAL	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES
COMMERCIAL	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO
COMMUNITY FACILITY	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES
INSTITUTIONAL	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES
INDUSTRIAL 1	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO
INDUSTRIAL 2	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
AGRICULTURE	NO	NO	NO	YES	YES	NO	NO	YES	NO	YES
PUBLIC OPEN SPACE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
PRIVATE OPEN SPACE	NO	NO	NO	YES	NO	NO	NO	YES	NO	NO

# 20 ALIGNMENT

## 20.1 INTRODUCTION

This Section contains the alignment of the Precinct development proposals with:

- municipal SDFs
- SDFs of surrounding municipalities
- large strategic projects and sector alignment

## 20.2 MUNICIPAL SDF

The Precinct Plan is aligned with the MCLM MSDF, 2019.

## 20.3SDFS OF SURROUNDING MUNICIPALITIES

The Magaliesburg Precinct Plan does not impact on any surrounding MSDFs.

## 20.4LARGE / STRATEGIC PROJECTS AND SECTOR ALIGNMENT

There is one large strategic human settlements project, Magaliesburg Ext 10 and 19, that will have a significant impact on the future of the Precinct. It is of concern that the different roleplayers are working in silos in the realisation of this project. Magaliesburg Ext 10 and 19 is part of the Gauteng Mega City Projects and is implemented by the GDoHS.

The construction of the K76 and the K228 will have a dramatic impact on the functioning and fortunes of the Precinct. Alignment with Gautrans need to take place

to address issues around timeframes and access, points of access and mitigation measures.