URBAN STUDIES

ZEBEDIELA
RETAIL AND FILLING STATION STUDY

FOR

EXECUTIVE PETROLEUM PTY LTD

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Contents

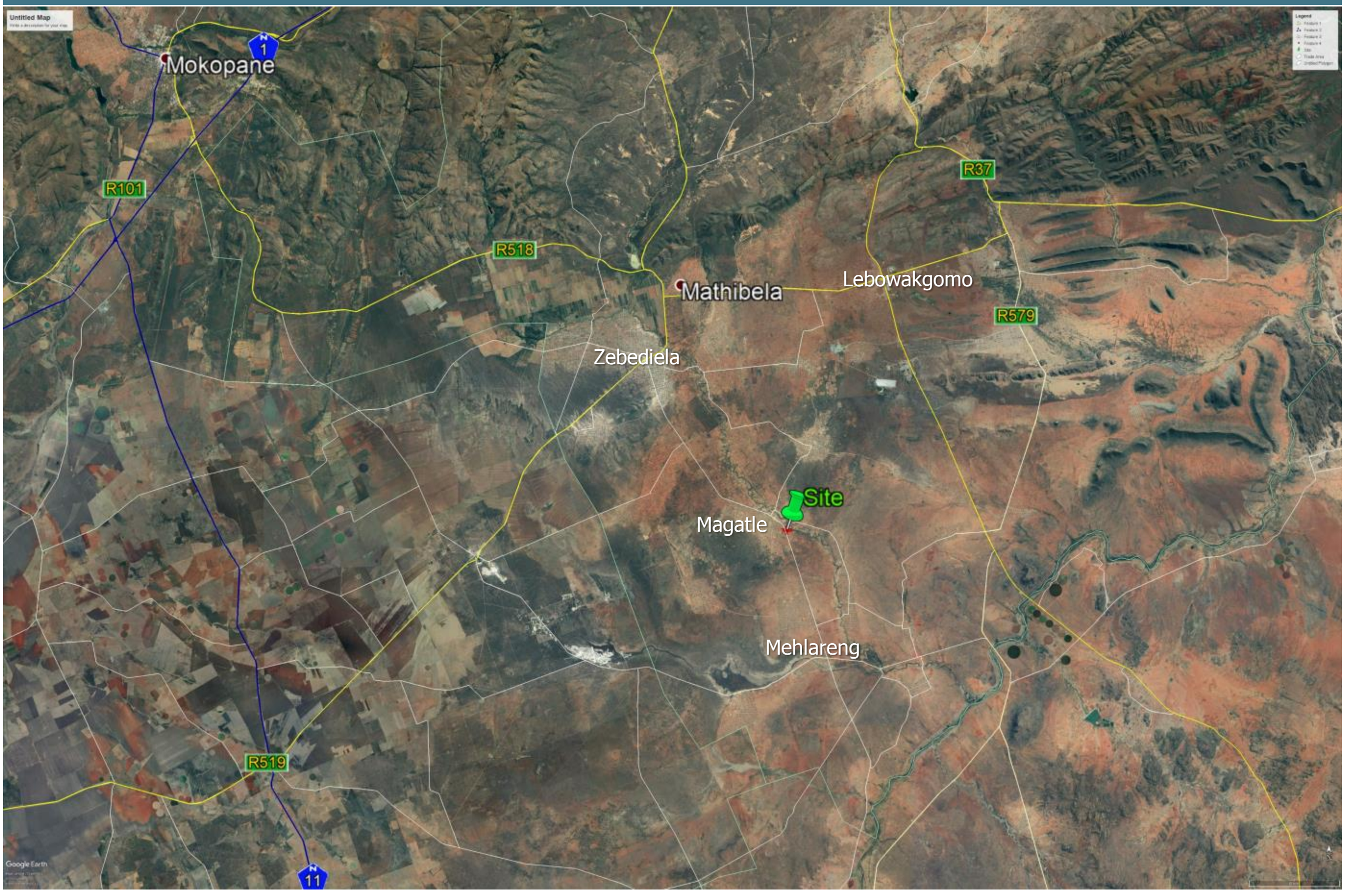
1. BACKGROUND

The proposed Magatle retail & filling station site is located adjacent to the road traveling north towards Zebediela and south to Mehlareng in the Limpopo Province. The surrounding area from Magatle is characterised by small villages and settlements with limited formal retail supply.

The main focus of the research will be to understand the dynamic nature of the market and to quantify the retail and filling station development potential for the Zebediela Magatle site.

The following map shows the macro location of the site.

Macro Location of the Site in Magatle near Zebediela



2. RESEARCH OBJECTIVES

The **main objectives** of the research were the following:

- ✓ To understand the **dynamic nature** and **growth prospects** of the market;
- ✓ To establish the **current** and **future retail** and **filling station market potential** for the proposed site;
- ✓ To focus on the **role** and **function** of the proposed development;
- ✓ To provide **strategic input** for a sustainable development;
- ✓ To quantify the **development potential** for the proposed development.
- ✓ To link a **timeframe** and ideal entry into the market.

The market research will add strategic value for the proposed retail and filling station development.

3. RESEARCH METHODOLOGY

This is a desk research study and the following existing sources of information were used:

- Urban Studies' databank 2005-2019;
- Stats SA, Census 2011, adjusted for 2019/24;
- Stats SA, Community Survey, 2016;
- Various websites;
- Google Earth Pro;
- MapInfo Pro 17.0;
- Traffic Impact Study by Palama Consulting Engineers.

4. POPULATION NUMBERS, GROWTH AND PROJECTIONS

Table 4.1 shows the number of households within the surrounding trade area of the proposed development. Also note the map showing the demarcated trade area.

The growth rate since 2001 for the area was less than 1% although the area surrounding the site has shown good growth since 2011. There are currently ±5 000 households in the trade area.

Table 4.1: Trade Area Population Numbers and Projections

Suburbs	Population	Households
Ga-Madisaleolo SP	2 282	590
Mapatjakeng	1 477	382
Magatle SP	5 281	1 437
Mokgophong SP	3 706	940
GaMolapo SP	4 640	1 197
Total 2011	**17 386**	**4 546**
1% Growth 2019	**18 828**	**4 924**
1% Growth 2024	**19 788**	**5 175**

Source: Stats SA

Magatle Development Trade Area

5. DEMOGRAPHIC AND SOCIO-ECONOMIC PROFILE

5.1. Profile of the Trade Area

The following is a summary of the profile of **Trade Area** compared to the South African Rural Market profile based on Stats SA data.

Key: **Trade Area**; **South African Rural Market**

Age Groups
Younger than 19 Years:
52%
47%

Housing
Houses:
94%
69%

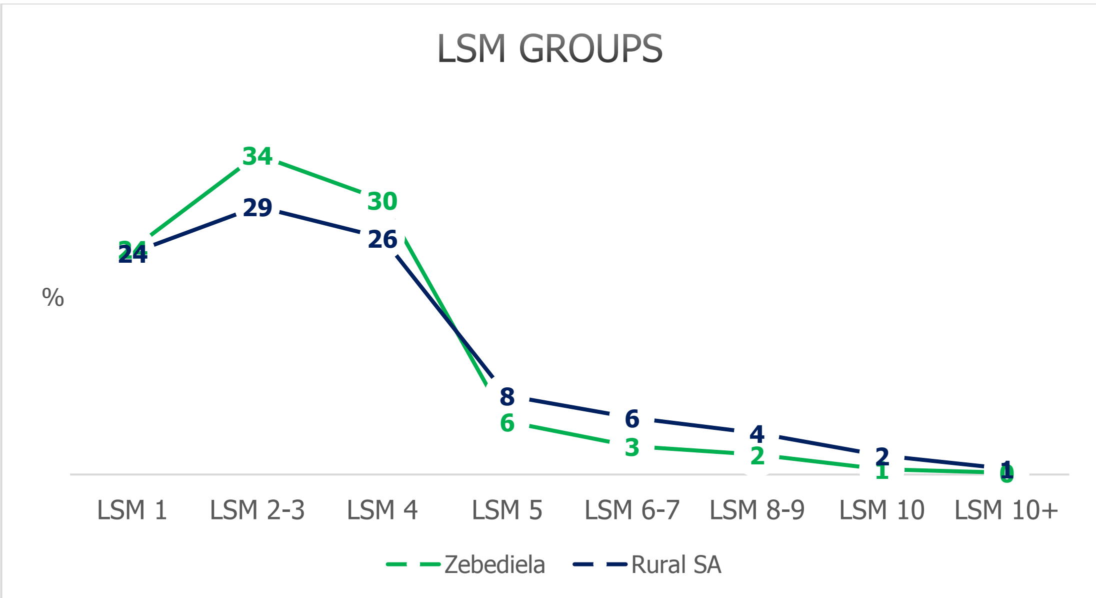
Traditional:
4%
22%

Population Groups
Black:
100%
99%

Education
Matric and higher:
11%
22%

Economically Active
Employed:
10%
23%

Household Income
Monthly:
R2 500
R2 800



*LSM = Living Standard Measurement – a South African classification used countrywide. The income per LSM category reflects the monthly household income.

LSM 1-4	<R5 000		LSM 6	R7 000	R10 000	LSM 8	R15 000	R20 000	LSM 10	R35 000	R60 000
LSM 5	R5 000	R7 000	LSM 7	R10 000	R15 000	LSM 9	R20 000	R35 000	LSM 10+	>R60 000	

Table 5.1: Demographics and Socio-Economic Profile

	Zebediela		Zebediela
Age Groups	%	**Individual Monthly Income**	%
<19 years	52	No income	46
20 to 34	17	R1-400	34
35-54	14	R410-800	2
55+	17	R801-1600	15
Population Groups		R1601-3200	2
Black	100	R3201-6400	1
Coloured	0	R6401-12800	1
Asian	0	R12801-25600	1
White	0	R26501-51200	0
Language Groups		R51201-102400	0
Afrikaans	0	R102401-204800	0
English	1	R204801+	0
African	99	**Annual Household Income**	
Other	0	No income	19
Employment		R1-4800	12
Employed	10	R4801-9600	12
Unemployed	16	R9601-19200	34
Discouraged work seeker	10	R19201-38400	30
Not economically active	64	R38401-76800	6
Education		R76801-153600	3
No schooling	17	R153601-307200	2
Completed Primary	40	R307201-614400	1
Some Secondary	31	R614401-1228800	0
Completed Secondary	9	R1228801-2457600	0
Higher	2	R2457600+	0
Sector		Median hh income 2011	R 16 322
Formal Sector	69	Median hh income 2019	R 30 210
Informal sector	18	Median hh income pm 2019	R 2 518
Private Households	12	**LSM Groups**	
Other	1	LSM 1	24
Dwelling Unit		LSM 2-3	34
House	94	LSM 4	30
Traditional Dwelling	4	LSM 5	6
Flat/Apartment	0	LSM 6-7	3
Cluster House	0	LSM 8-9	2
Townhouse	0	LSM 10	1
Semi detached house	0	LSM 10+	0
House/flat/room in backyard	0	**Tenure**	
Informal dwelling (shack in backyard)	1	Rented	2
Room/flatlet	0	Owned but not yet paid off	0
Other	0	Occupied rent free	15
		Owned and fully paid off	82
		Other	1

Source: StatsSA Census 2011, adjusted for 2019/24

5.2. Urban Studies Data

Based on a number of surveys conducted in rural South Africa – the following shows the updated LSM classification of a typical rural market.

Table 5.2: Urban Studies Rural Market Profile

LSM Group	Rural Market Profile
LSM 1-4	29
LSM 5	21
LSM 6	18
LSM 7	12
LSM 8	14
LSM 9	4
LSM 10	1
LSM 10+	1

5.3. Car Ownership

The following table shows the average number of cars per LSM Group. The surrounding market is mainly represented by LSM 1-6 households with car ownership ranging between 0.3-0.6 per household.

Table 5.3: Number of Cars per LSM Group

LSM Groups	Cars per Household
LSM 1-4	0,3
LSM 5	0,4
LSM 6	0,6
LSM 7	1,1
LSM 8	1,4
LSM 9	1,6
LSM 10	2,1
LSM 10+	2,3

5.4. Expenditure Levels

The expenditure levels for the proposed development can be divided into two sections:

Fuel Expenditure

The expenditure on fuel forms part of the transportation cost of a household. The percentage spend on fuel or transport cost differs for the various LSM categories.

To link up with the demand model for fuel – which is based on the passing traffic volumes - it is more suitable to focus on the average fuel pumped per stop. This figure ranges from 15 to 30+ and correlates with the socio-economic profile of the primary market and the passing traffic.

For the proposed site the average spend would be approximately **15 litre fuel** per stop.

Convenience Retail Expenditure

The expenditure levels for convenience retail at a filling station correlates with total fuel pumped. The rand value ranges from R1 per litre to R3.50 per litre. The retail expenditure level will depend on a number of factors including:

- Fuel demand at the filling station;
- Profile of the surrounding market;
- Profile of the filling station customers;
- Quality of the store;
- Availability of stock;
- Level of competition;
- Service levels;
- Security and especially night-time security.

6. RETAIL MARKET

6.1. Retail Supply

The following table and aerial map show the retail supply within the broader surrounding market. Note the following:

- The nearest formal shopping centre from the site is Zebediela Plaza which is 15km away and located in the Moletlane area;
- Regional retail offering is located in Lebowakgomo and located 35km north east from Magatle.

Table 6.1 Existing Shopping Centre Supply

Centre	GLA in m²	No. of Shops	Tenants*
Zebediela Plaza	15 004	54	Shoprite, Cashbuild
Bopedi SC	13 000	29	Spar, Cashbuild, Dunns
Euphorbia Park Shopping Centre	12 000	20	Friendly Supermarket, Wimpy, Foschini, OK Foods
Ga-Mphahlele Shopping Centre (proposed)	10 000		
	50 004		
Mokopane			
The Crossing	18 733	43	Checkers, Woolworths, Mr Price, Truworths, Miladys, Game, Foschini, Maxi's
Mahwelereng SC	12 879	33	Shoprite, Cashbuild
Spar Plaza	12 221	35	Spar, London Pie
Shoprite Centre	11 815	18	Shoprite
Mokopane Mall	9 000	36	Pick n Pay, Clicks, Pep, Truworths, Standard Bank, ABSA, Crazy Store, Musica, Mr Price
	64 648		
Lebowakgomo			
Mall @ Lebo	23 700	60	Pick n Pay, Edgars, Game, Superspar
Phasha SC	7 608	42	Shoprite Checkers
Metlife Plaza	5 514	22	Boxer
Cashbuild Centre	3 897	1	Cashbuild
	40 719		
Jane Furse			
Jane Furse Plaza	15 178	54	Shoprite, Pick n Pay, Jet
Jane Furse Crossing	10 769	23	Shoprite Checkers
	25 947		

6.2. Planned Retail in Area

Note the following regarding other potential retail developments in the surrounding area:

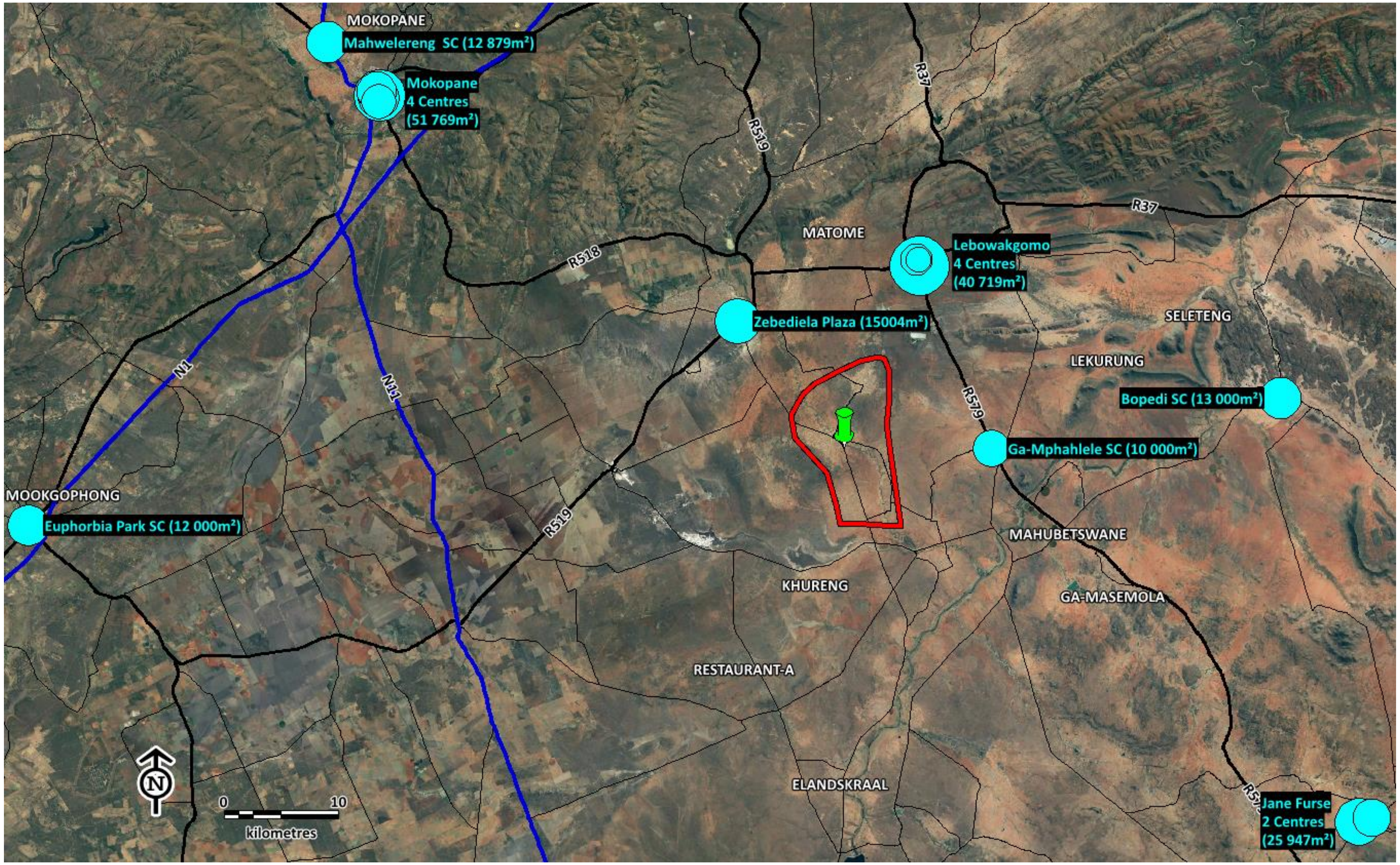
Tooseng Site (Ga-Mphahlele Shopping Centre)

The Tooseng site is located approximately 20km east of Magatle. The planned Tooseng development is still in the application process with no approvals granted as yet (to be confirmed).

Masemola Site

The Masemola site is located approximately 25km south east of Mehlareng. The planned retail development is still in the application process with no approvals granted as yet (to be confirmed).

Shopping Centres in the Area



7. FILLING STATION ANALYSIS

7.1. Traffic Count

A traffic impact study was done by Palama Consulting Engineers. A 12-hour manual count was conducted on 13 June 2019 at the two intersections. The counts were conducted from 6 am to 6 pm and captured all turning movements for light, taxi, bus and heavy traffic.

Traffic Count at Site

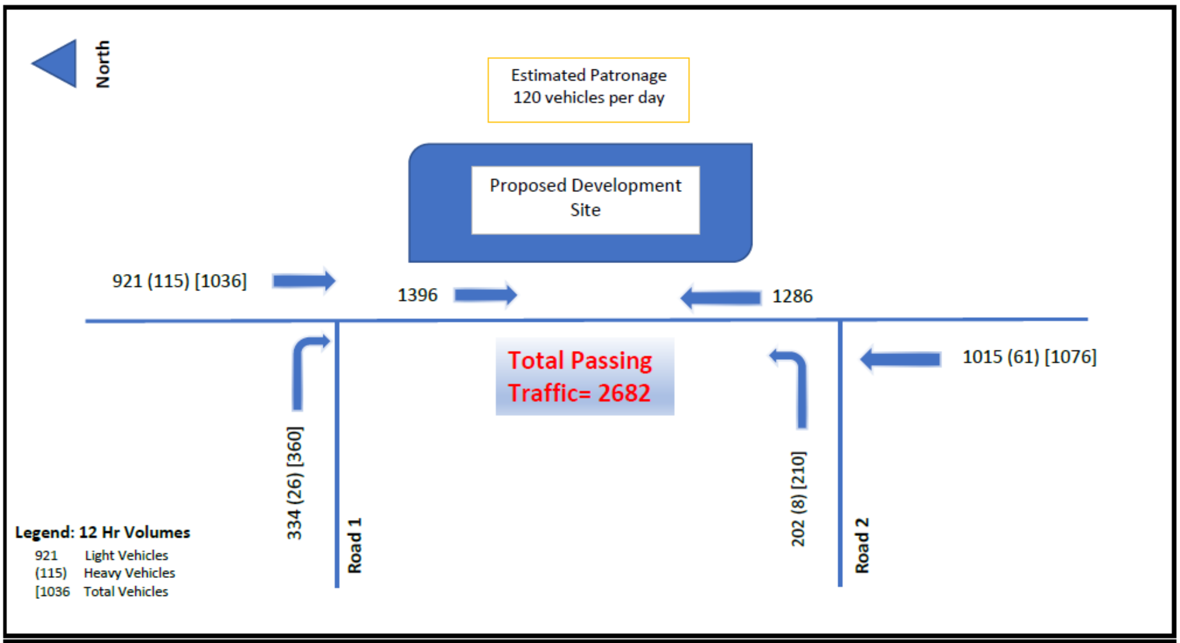
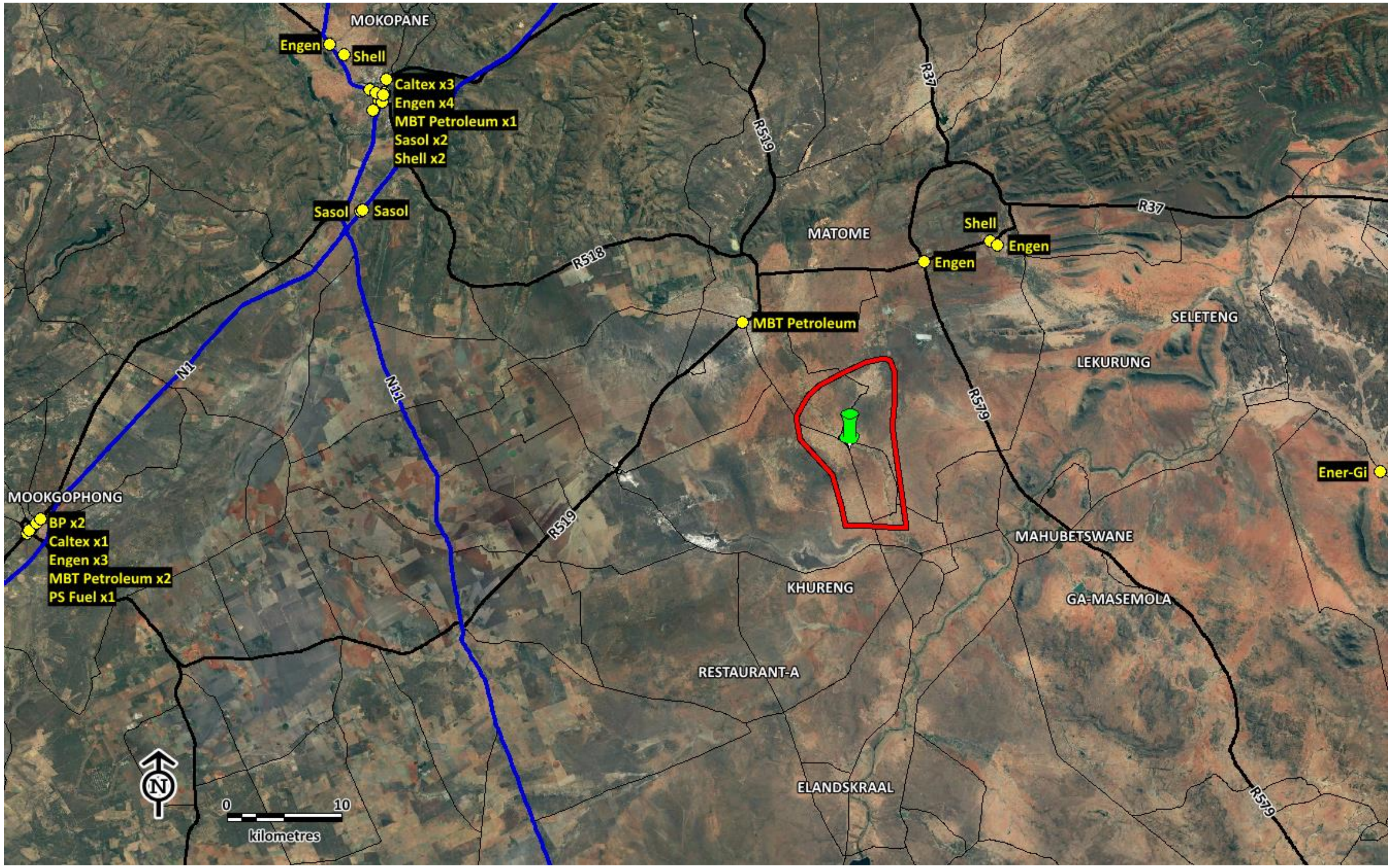


FIGURE 1: 12-Hour Traffic Volumes	PROPOSED FILLING STATION: MOGATLA - ZEBEDIELA	

7.2. Supply Analysis

The only filling station competition is the MBT Petroleum station located in the Moletlane area.

Filling Stations in the Area



8. DYNAMICS OF THE AREA

8.1. Lepelle-Nkumpi Local Municipality

The following maps from the 2018 - 2019 Integrated Development Plan indicate the following

Map 1: The main towns and rural nodes in the municipality.

Map 2: Magatle indicated as a rural development area.

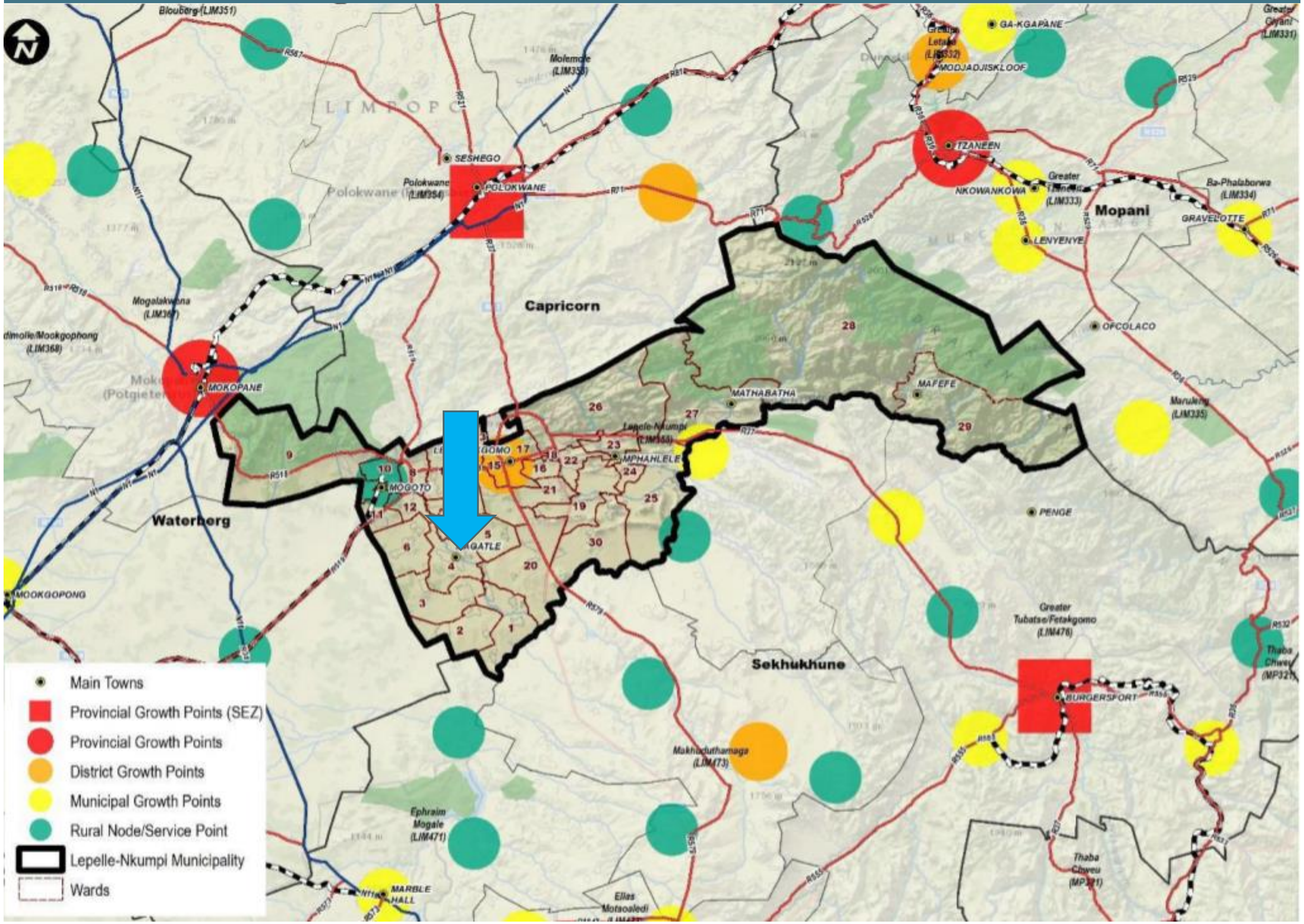
Map 3: As far as traffic flows are concerned the road on which the site is located is identified as an important road.

Map 4: The different transport services enhances the fact that the Magatle area is indicated as settlement areas where formal public transport is in service.

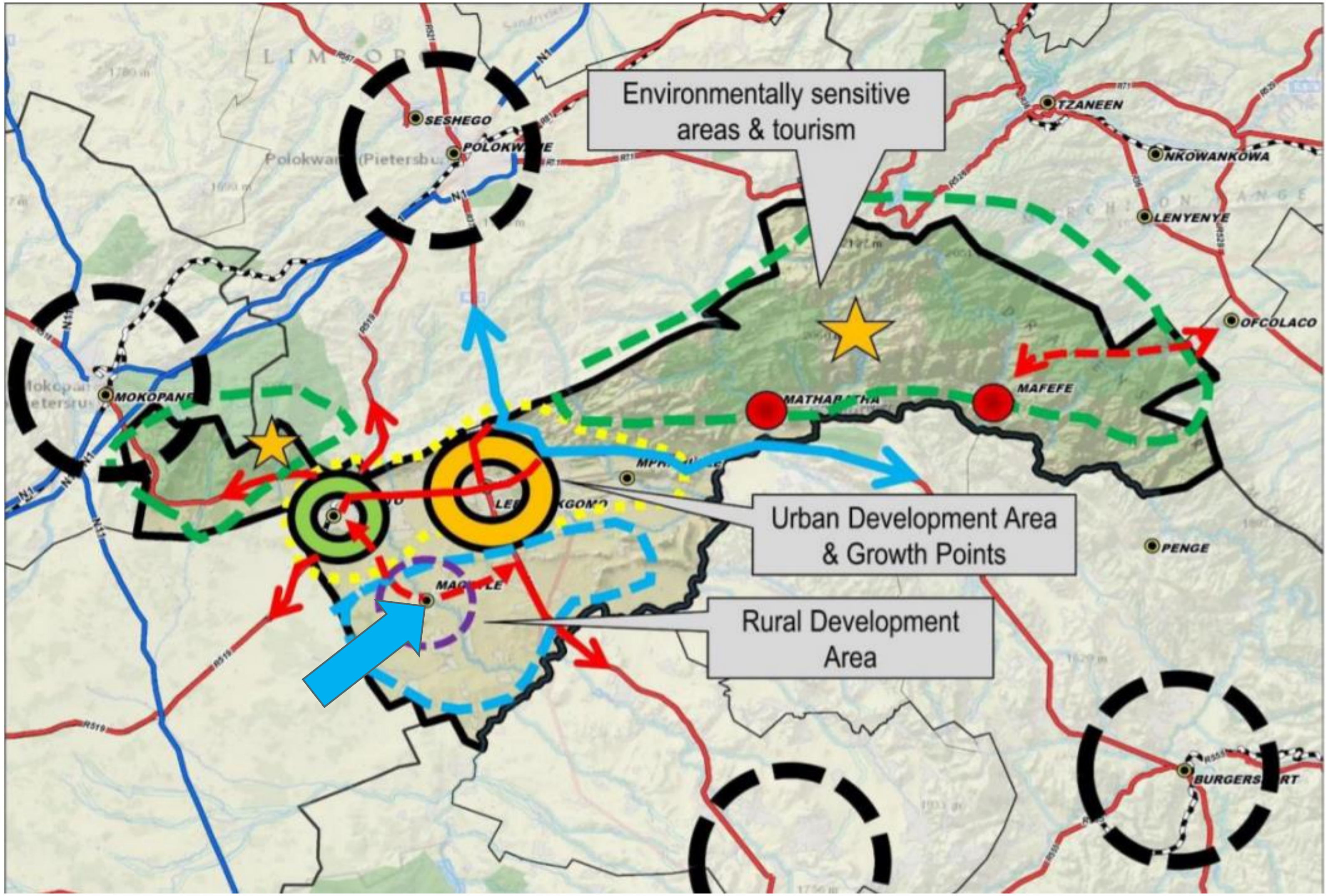
Note the following outstanding aspects of the Magatle/ Mehlareng area:

- The Mehlareng area is ±11 km south of the site in Zebediela. It is dominated by a number of rural settlements scattered across the area;
- The area is expected to remain predominately rural with limited new economic activity;
- To some extend agricultural activities is present along the Olifants River as well as further to the west.
- Mining activity is dominant in the eastern platinum limb that stretches from Apel to Burgersfort;
- The road network system provides good access to the area;
- Additional road development and formalisation is expected. This will further improve the accessibility of the proposed Mehlareng Shopping Centre Development;
- Rural urban migration (urbanisation) can negatively impact the rural market in the Mehlareng area.

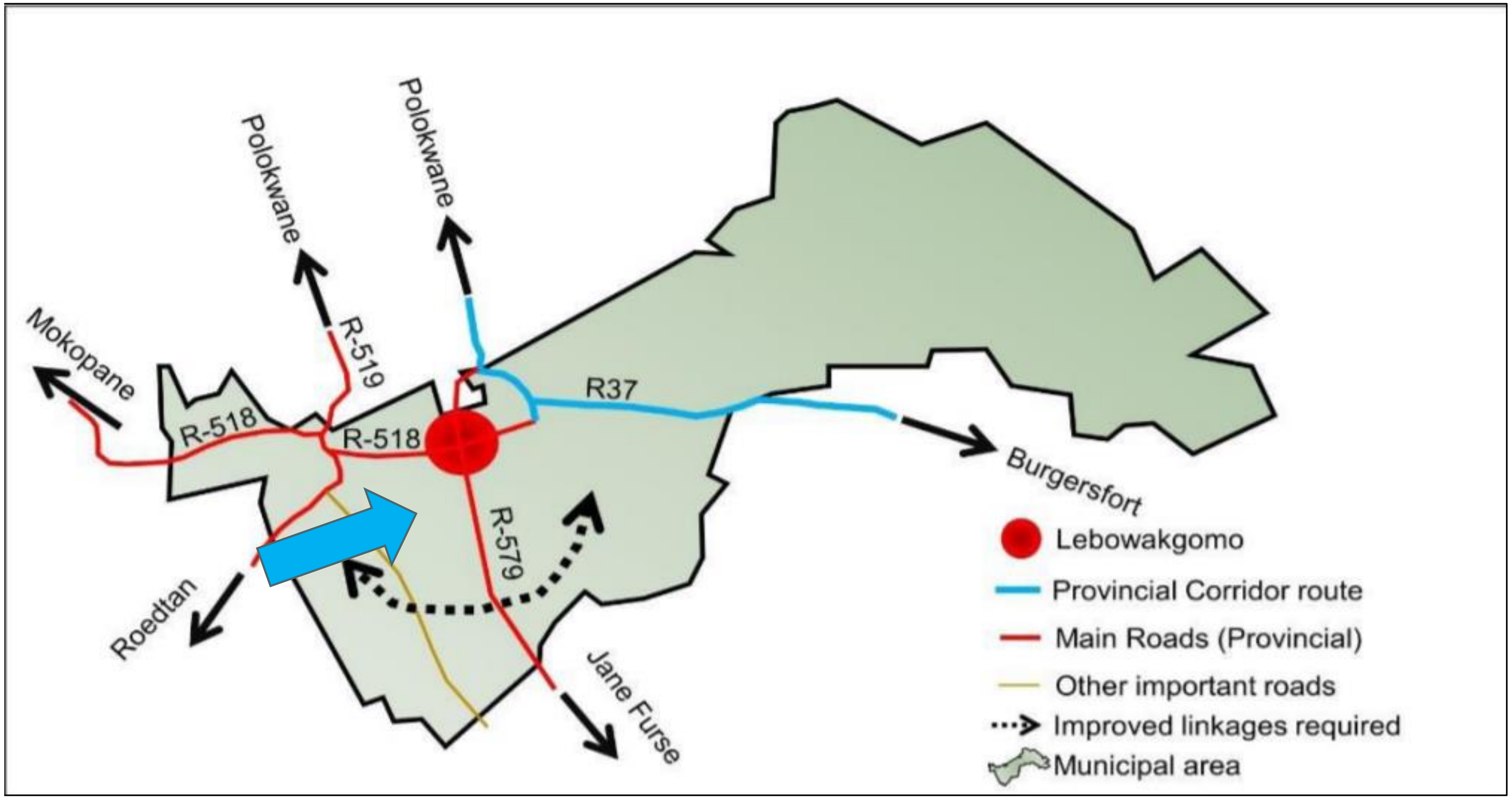
MAP 1: Lepelle-Nkumpi Municipality



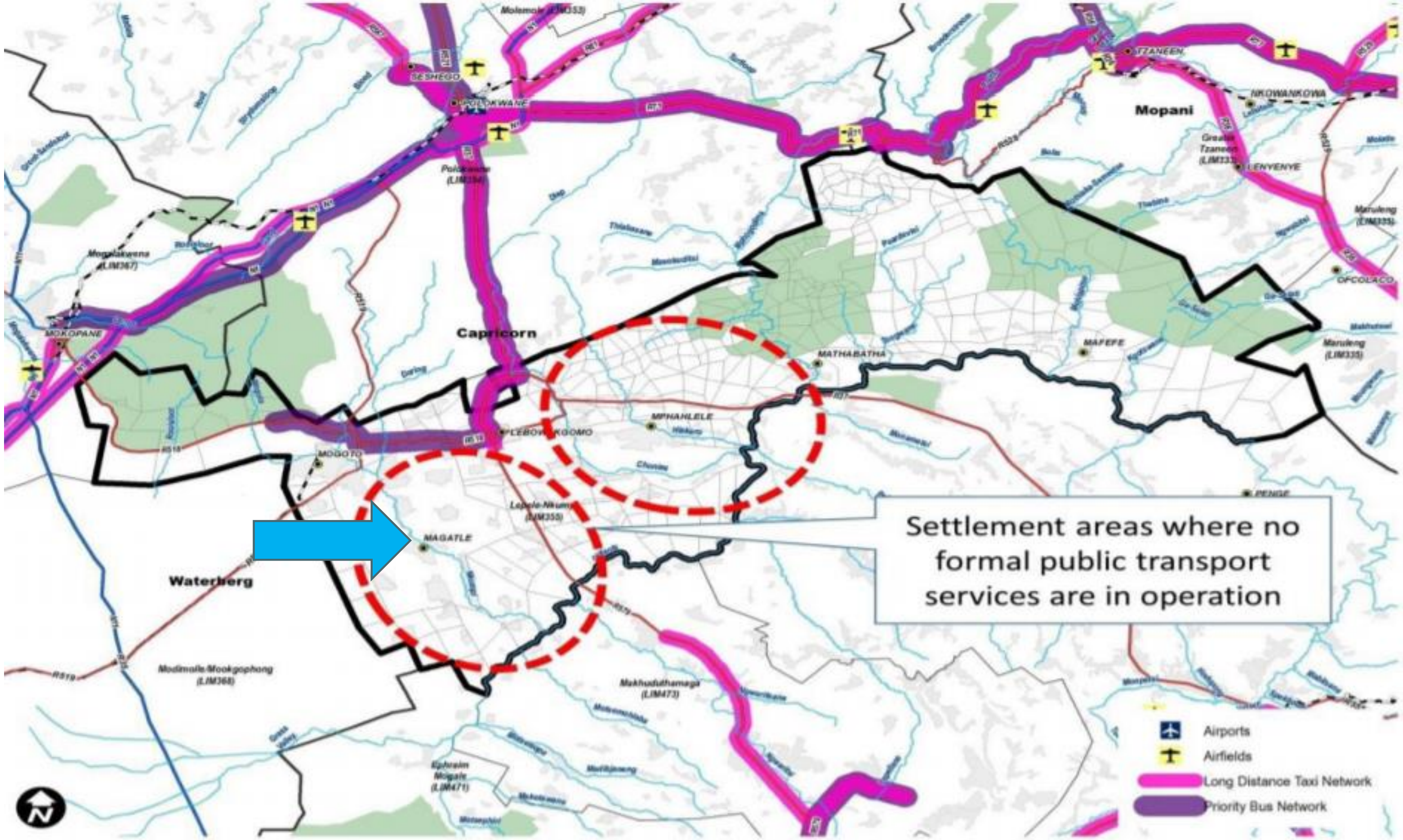
MAP 2: Socio-Economic Analysis



MAP3: SCHEMATIC ILLUSTRATION OF TRANSPORT AND MOVEMENT ROUTE



MAP 4:PUBLIC TRANSPORT SERVICES



URBAN STUDIES

9. SITE EVALUATION

9.1. Filling Station

The following table shows the location rating for the proposed filling station site. The site received a location rating of **57%** and regarded as lower than average filling station site.

Table 9.1: Filling Station Location Rating

Micro Location Rating	Rating
General accessibility	
Main road access	5
Local roads	8
Travel barriers (10 good - no barrier)	7
Internal movement	7
Ingress	7
Egress	7
Visibility	
From what distance	7
Obstruction (10 good - no obstruction)	7
Topography (10 good - no slopes)	7
Type of location	
Rural	2
Adjoining uses	
Complementary	3
Competition (10 good - no competition)	7
Changes over time (medium term)	5
Secure area	6
After hour trade	3
Passing traffic	
Vehicle traffic volumes	6
Convenience factor	6
Character/ type of traffic	6
Average speed	6
Meso Factors	
Number of households	5
LSM Profiles	4
Image of the area	6
Total	**57%**

Quality of rating	
Rating (%)	**Description of quality**
>80	very good
70-80	good
60-70	average
50-60	lower than average
<50	not suitable for development

9.2. Retail

The following table shows the location rating for a small convenience shopping centre development at the proposed site. The site received a location rating of **58%** and regarded as a lower than average retail location.

Table 9.2: Retail Location Rating

Variables	Rating 2019
General accessibility	
Main road access	6
Local road access	8
Micro access	7
Travel barriers (10 good - no barrier)	7
Availability of public transport	6
Visibility	
General visibility	7
Obstruction (10 good - no obstruction)	7
Site specific characteristics	
Shape	7
Topography (10 good - no slopes)	7
Type of location	
Rural	2
Surrounding area	
Complementary	3
Competition (10 good - no competition)	6
Changes over time (medium term)	5
Meso variables	
Number of households	5
LSM profile	4
Image of the area	6
Passing traffic	
Type of traffic	6
Constant traffic flows	6
Total traffic volumes	6
Total	**58%**

Quality of rating	
Rating (%)	**Description of quality**
>80	very good
70-80	good
60-70	average
50-60	lower than average
<50	not suitable for development

Micro Location of the Site in Magatle near Zebediela

10. DEMAND MODEL

10.1. Fuel Demand

Table 10.1 shows the fuel demand for the proposed site for 2019 and 2024. The demand model is based on two different interception rate scenarios. It is expected that the proposed filling station will pump approximately 90 000 to 100 000 litre fuel per month.

Table 10.1: Fuel Demand

Scenario A (@ 4.5% interception rate)	2019	2024
Monthly Traffic Volume (all vehicles)	96 552	106 602
Interception Rate	4,5%	4,5%
Average Litrage per Vehicle	20	20
Total Estimated Litrage (per month)	**86 897**	**95 942**
Scenario B (@ 5% interception rate)	**2019**	**2024**
Monthly Traffic Volume (all vehicles)	96 552	106 602
Interception Rate	5,0%	5,0%
Average Litrage per Vehicle	20	20
Total Estimated Litrage (per month)	**96 552**	**106 602**

10.2. Retail Demand – linked to filling station facility

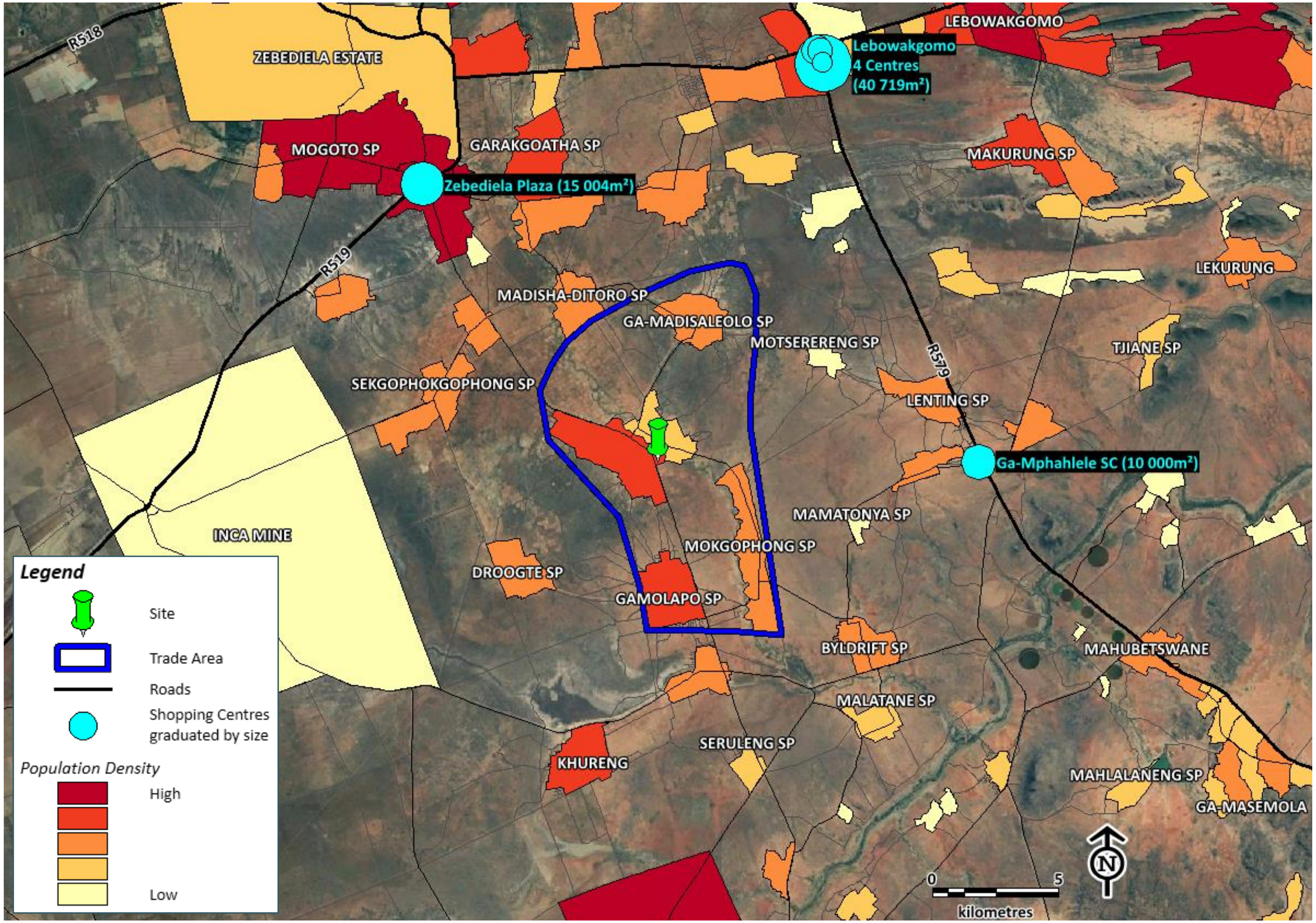
Based on the potential demand for fuel that exists for the proposed filling station – the following table shows the retail turnover potential for a convenience store as part of the filling station. The demand includes secondary inflow from the surrounding household market which is estimated at ±30% of the total retail demand.

Table 10.2: Convenience Retail Demand

Filling Station Retail Demand 2019	Scenario A	Scenario B
Filling Station Fuel per Month	86 897	96 552
Retail Potential (based on various scenarios)		
Moderate	R243 311	R270 346
High	R364 967	R405 518
Warranted Supermarket Size (m²)		
Moderate Scenario	81	90
High Scenario	122	135

The following map shows the population density and retail supply concentration in the area.

Broader Market Population Density and Retail Concentration



10.3. Shopping Centre Demand

It is recommended to focus the retail offering as part of the filling station facility. As the market grows and the demand for additional formal retail increases, a free-standing convenience retail store could be implemented.

11. CONCLUSION AND RECOMMENDATIONS

Note the following recommendations from Urban Studies:

- A small sub-node with a basic convenience retail store and a filling station could be considered;
- The proposed development should incorporate convenience retail linked to the filling station facility;
- It is however important to note that the market is very dispersed and mainly characterised by a low to middle income market;
- The proposed facilities therefore need to cater for the basic needs of the market;
- The proposed filling station is estimated to pump between 90 000 & 100 000 litre fuel per month. These levels will be to low for the branded petroleum companies and it is therefore recommended to consider a local operator with a small operation (2 pumps). The facility could be enlarged once the market grows and the demand for fuel increases.
- It is **not recommended to initially develop a free-standing shopping centre facility** and rather consider this as Phase 2 & 3 of the development.