

# **ANNEXURE K**

## **ENVIRONMENTAL IMPACT ASSESSMENT (EIA) SCOPING REPORT**

# DRAFT ENVIRONMENTAL SCOPING REPORT

## TOWNSHIP FORMALISATION AND VEGETATION CLEARANCE ON PROPOSED PORTION 45 (A PORTION OF PORTION 22) LEEUWFontein 456 JP (PROPOSED REAGILE X9)

KGETLENGRIVIER LOCAL MUNICIPALITY

NORTH WEST PROVINCE

COMPILED BY:



**ENVIROVISION CONSULTING CC**

ENVIRONMENTAL SPECIALISTS

---

**PHYSICAL ADDRESS** 450 Wendy Street, Waterkloof Glen, Pretoria, 0181

**CELL** 082 444 0367 • **FAX** 086 557 9447 • **E-MAIL** [envirovision@lantic.net](mailto:envirovision@lantic.net)

**MEMBER** Cappie Linde M.ENV.DEV (UKN) • CK2003/050777/23

### Recipients:

1. Ms O Skosana  
Directorate: Environmental Quality Management  
North West Department of Economic Development, Environment , Conservation & Tourism  
Agricentre Building, C/O Dr James Moroka Drive & Stadium Road  
Mmabatho
2. Registered Interested and Affected Parties

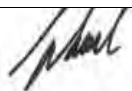
### On behalf of:

Kgetlengrivier Local Municipality

### Date:

6 October 2020

## Document History

Issue / revision	Issue1	Revision 1	Revision 2	Revision 3
Remarks	Scoping			
Date	6 October 2020			
Prepared by	C Linde			
Signature				
File reference	NW/20/37			
Report number	#1			

## Distribution List

Recipient	Capacity	Address
Ms O Skosana	Competent Authority	Agricentre Building C/O Dr James Moroka & Stadium Rd Mmabatho
The Office Head: Hartbeespoort Department of Water Affairs & Sanitation	State Department	DW&S Complex Hartbeespoort Office Hartbeespoort
The Municipal Manager: Kgetlengrivier Local Municipality	Organ of State	C/O Smuts & De Wit Streets Koster
The relevant ward councillor Kgetlengrivier Local Municipality	Organ of State	C/O Smuts & De Wit Streets Koster
The Municipal Manager Bojanala Platinum District M		C/O Beyers Naudé & Fatima Bhayat Roads Rustenburg
Mrs Debbie van den Berg	PDI Wildliferescue NPC	Debbiewildlife5@gmail.com
Miss Michelle Liebenberg	Former member of the African Amphibian Conservation Group	Michellieb17@gmail.com
Mr Mbulelo Dala	Town & Regional Planner ESKOM	dalame@eskom.co.za

# TABLE OF CONTENT

<b>1.</b>	<b>BACKGROUND</b>	<b>8-9</b>
<b>2.</b>	<b>TERMS OF REFERENCE</b>	<b>9-11</b>
<b>3.</b>	<b>DETAILS OF ENVIRONMENTAL SERVICE PROVIDER</b>	<b>12-14</b>
3.1	Legislative requirements for environmental assessment practitioner	12
3.2	Details of relevant environmental assessment practitioner	12-13
3.3	Details of the expertise of the relevant EAP	13-14
<b>4.</b>	<b>BRIEF PROJECT DESCRIPTION</b>	<b>14-16</b>
4.1	Name and address of applicant	14
4.2	Location of activity	14
4.3	Description of activity	15-16
<b>5.</b>	<b>NEED AND DESIRABILITY</b>	<b>16-24</b>
5.1	Municipal background and profile	16-22
5.2	Need	22-23
5.3	Desirability	23-24
<b>6.</b>	<b>ACTIVITY CONTEXT &amp; ENVIRONMENTAL FACTORS</b>	<b>24-30</b>
6.1	The Constitution of South Africa (No. 108 of 1996)	24
6.2	The National Environmental Management Act (No. 107 of 1998)	25-26
6.3	The National Water Act (No. 36 of 1998)	26-27
6.4	National Environmental Management Biodiversity Act (No. 10 of 2004)	27
6.5	National Environmental Management Air Quality Act (No. 39 of 2004)	28
6.6	The National Environmental Management Waste Act (No. 59 of 2008)	29
6.7	National Heritage Resources Act (No. 25 of 1999)	29
6.8	Relevant Guidelines	30
<b>7.</b>	<b>PROCESS FOLLOWED TO SELECT PREFERRED SITE</b>	<b>30-52</b>
7.1	Details of sites considered	30-31
7.2	Public participation process	31-35
7.3	Summary of issues	35-36
7.4	Environmental site attributes	36-43
7.5	Impact identification	43-45
7.6	Proposed impact assessment methodology	45-47
7.7	Significance, advantages, disadvantages, mitigation & residual risks	47-51
7.8	Site selection motivation and considerations	52
<b>8.</b>	<b>SITE MAP</b>	<b>52-53</b>
<b>9.</b>	<b>PROPOSED DURATION OF ENVIRONMENTAL AUTHORISATION</b>	<b>53</b>

<b>10.</b>	<b>INFORMATION REQUIREMENTS</b>	<b>53</b>
<b>11.</b>	<b>PLAN OF STUDY FOR ENVIRONMENTAL IMPACT ASSESSMENT</b>	<b>53-62</b>
11.1	Introduction	53
11.2	Description of alternatives to be considered and assessed	54-57
11.3	Aspects to be assessed as part of EIA	57-58
11.4	Aspects to be assessed by specialists	58-60
11.5	Proposed aspect and alternative assessment methodology	60-61
11.6	Stages at which the competent authority will be consulted	61
11.7	Particulars of public participation process to be conducted	61-62
11.8	Description of tasks to be completed as part of EIA	62
<b>12.</b>	<b>LEVEL OF AGREEMENT WITH I&amp;AP'S</b>	<b>62</b>
<b>13.</b>	<b>BIBLIOGRAPHY</b>	<b>63-64</b>

# Abbreviations and Acronyms

AEL	Atmospheric Emissions Licence
AQIA	Air Quality Impact Assessment
AQMP	Air Quality Management Plans
BA	Basic Assessment
BGIS	Biodiversity Geographic Information System
BPDM	Bojanala Platinum District Municipality
CBD	Convention on Biological Diversity
DEA	Department of Environmental Affairs
DWA	Department of Water Affairs & Sanitation
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
EAPASA	Environmental Assessment Practitioners Association South Africa
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EIR	Environmental Impact Reporting
EMP	Environmental Management Programme
HIA	Heritage Impact Assessment
I&APs	Interested and Affected Parties
IAIA(SA)	International Association of Impact Assessment South Africa
ICB	Interim Certification Board
IDP	Integrated Development Plan
KRLM	Kgetlengrivier Local Municipality
LUDS	Land Use Development Support
mamsl	metres above mean sea level
MAP	Mean Annual Precipitation
M.Env.Dev.	Masters Degree in the Environment and Development
MI	Megaliter
NEM:AQA	National Environmental Management: Air Quality Act (No. 39 of 2004)
NEM:BA	The National Environmental Management Biodiversity Act
NEM:WA	National Environmental Management: Waste Act (No. 59 of 2008)
NHRA	National Heritage Resources Act (No. 25 of 1999)
NWA	National Water Act (No. 36 of 1998)
S&EIR	Scoping and Environmental Impact Reporting
SAHRA	South African Heritage Resources Agency
SANBI	South African National Biodiversity Institute

# List of Appendices

APPENDIX 1:	TERTIARY QUALIFICATIONS OF EAP	65-68
APPENDIX 2:	PROFESSIONAL REGISTRATION OF EAP	69-72
APPENDIX 3:	TOPOGRAPHIC MAP OF AREA	73-74
APPENDIX 4:	CONCEPT SITE PLAN	75-76
APPENDIX 5:	NOTIFICATION OF MUNICIPALITY & WC	77-79
APPENDIX 6:	NOTIFICATION OF NEIGHBOURS	80-82
APPENDIX 7:	NOTIFICATION OF DWS	83-84
APPENDIX 8:	BACKGROUND INFORMATION DOCUMENT	85-91
APPENDIX 9:	BGIS LUDS ECOLOGICAL SENSITIVITY REPORT	92-105
APPENDIX 10:	ON-SITE NOTICE	106-110
APPENDIX 11:	IMPACT SIGNIFICANCE RATING METHODOLOGY	111-113
APPENDIX 12:	I@AP REGISTRATION FORMS	114-116

Although Envirovision Consulting CC exercises due care and diligence in rendering services and preparing documents, Envirovision Consulting CC accepts no liability, and the client, by receiving this document, indemnifies Envirovision Consulting CC and its members, managers, agents and employees against all actions, claims, demands, losses, liabilities, costs, damages and expenses arising from or in connection with services rendered, directly or indirectly by Envirovision Consulting CC and by the use of information contained in this document.



## 1. BACKGROUND

In order to address specific developmental and tenure security needs within the jurisdiction of the Kgetlengrivier Local Municipality, the Municipality intends to obtain environmental authorisation for township establishment and vegetation clearance (Reagile X9) on a portion of 127.2636 hectares of proposed Portion 45 (a portion of Portion 22) of the farm Leeuwfontein 456 JP, Kgetlengrivier Local Municipality (kindly refer to the attached locality plan).

The development implies the following:

1. The clearance of an area of twenty hectares or more of indigenous vegetation (Listing Notice 2, Activity No. 15 of the 2014 EIA Regulations as amended).
2. The development of – (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs (a) within a water course; or (c) if no development setback line exists, within 32 metres of a water course, measured from the edge of a water course (Listing Notice 1, Activity No. 12ii (a&c) of the 2014 EIA Regulations as amended).
3. The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grid, pebbles or rock of more than 10 m<sup>3</sup> from a water course (Listing Notice 1, Activity No. 19 of the 2014 EIA Regulations as amended).
4. Residential, mixed, retail, commercial, industrial or institutional development where such land was used for agriculture on or after 1 April 1998 where such development will occur inside an urban area, when the total land to be developed is bigger than 5 hectares (Listing Notice 1, Activity No. 28ii of the 2014 EIA Regulations as amended).
5. The clearance of an area of 300 square metres or more of indigenous vegetation within critical biodiversity areas identified in bioregional plans (Listing Notice 3 Activity No. 12(h)iv of the 2014 EIA Regulations as amended).

Since the development qualifies as a listed activity in terms of Section 15 of the Environmental Impact Assessment Regulations Listing Notice 2 of 2014 (as amended), environmental authorisation needs to be obtained. It is also stated in Government Notice No. R. 326 dated 7 April 2017 (as amended) that ... “The investigation, assessment and communication of the potential impact of activities must follow the procedure as prescribed in regulations 21 to 24 of the Environmental Impact Assessment Regulations of 2014 as amended (Regulation No. R. 326 of 7 April 2017). This procedure refers to application subject to scoping and environmental impact reporting.

Section 12 (1) of Government Notice 326 dated 7 April 2017 (as amended) stipulates that: “Before submitting an application for environmental authorisation, an applicant must appoint an EAP at own cost to manage the application”. To this extent the applicant appointed “Envirovision Consulting

CC” (CK2003/050777/23) as environmental assessment practitioner to administer the application.

Section 21 of Government Notice No. R. 326 of 7 April 2017 provides for the preparation and submission of a scoping report to the competent authority for consideration.

## **2. TERMS OF REFERENCE**

In terms of Government Notice No. R. 326 of 7 April 2017, Appendix 2(1) a scoping report must contain the information that is necessary for a proper understanding of the site selection process, the scope of the assessment and the consultation process to be undertaken through the environmental impact assessment process, and must include:

- Details of the EAP who prepared the report, and the expertise of the EAP, including a curriculum vitae;
- The location of the activity, including the 21 digit Surveyor General code of each cadastral land parcel, where available, the physical address and farm name (alternatively the coordinates of the boundary of the property or properties on which the activity is to be undertaken), coordinates of the activity on the property or properties and a map at an appropriate scale of the property on which the activity is to be undertaken clearly indicating the location of the activity on the property or properties;

Or, if it is:

- A linear activity, a description and coordinates of the route of the activity and a map at an appropriate scale clearly indicating the route of the activity;
- On land where the property has not been defined, the coordinates within which the activity is to be undertaken and a map at an appropriate scale clearly indicating the area within which the activity is to be undertaken;

On condition that, where coordinates are provided, it is provided in degrees, minutes and seconds using the Hartebeesthoek 94; WGS84 coordinate system.

- A description of the scope of the activity, including:
  - All listed and specified activities triggered;
  - A description of the activities to be undertaken, including associated structures and infrastructure.
- A description of the policy and legislative context within which the development is proposed including an identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning

frameworks and instruments that are applicable to this activity and are to be considered in the assessment process.

- A motivation for the need and desirability for the development including the need and desirability of the activity in the context of the preferred location.
- A full description of the process followed to reach the preferred activity, site and location of the development footprint within the site, including:
  - Details of all the alternatives considered;
  - Details of the public participation process undertaken in terms of regulation 41 of the Regulations, including copies of the supporting documents and inputs;
  - A summary of the issues raised by interested and affected parties, and an indication of the manner in which the issues were incorporated, or the reasons for not including them;
  - The environmental attributes associated with the alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects;
  - The impacts and risks which have informed the identification of each alternative, including the nature, significance, consequence, extent, duration and probability of such identified impacts, including the degree to which these impacts:
    - Can be reversed;
    - May cause irreplaceable loss of resources;
    - Can be avoided, managed or mitigated.
  - The methodology used in identifying and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks associated with the alternatives;
  - Description of the positive and negative impacts that the activity and alternatives will have on the environment and on the community that may be affected focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects;
  - The possible mitigation measure that could be applied and level of residual risk;
  - The outcome of the site selection matrix;
  - If no alternatives, including alternative locations for the activity were investigated, the motivation for not considering such, and
  - A concluding statement indicating the preferred alternatives, including preferred location of the activity.
- A plan of study for undertaking the environmental impact assessment process to be undertaken, including:
  - A description of the alternatives to be considered and assessed within the preferred site, including the option of not proceeding with the activity;

- A description of the aspects to be assessed as part of the environmental impact assessment process;
  - Aspects to be assessed by specialists;
  - A description of the proposed method of assessing the environmental aspects including aspects to be assessed by specialists;
  - A description of the proposed method of assessing duration and significance;
  - An indication of the stages at which the competent authority will be consulted;
  - Particulars of the public participation process that will be conducted during the environmental impact assessment process;
  - A description of the tasks that will be undertaken as part of the environmental impact assessment process; and
  - Identify suitable measures to avoid, reverse, mitigate or manage identified impacts and to determine the extent of the residual risks that need to be managed and monitored.
- An undertaking under oath or affirmation by the EAP in relation to the correctness of the information provided in the report, the inclusion of comments and inputs from stakeholders and interested and affected parties, and any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested or affected parties.
  - An undertaking under oath or affirmation by the EAP in relation to the level of agreement between the EAP and interested and affected parties on the plan of study for undertaking the environmental impact assessment;
  - Where applicable, any specific information required by the competent authority, and
  - Any other matter required in terms of sections 24(4)(a) and (b) of the Act.

The following investigative method was applied:

- Desk study during which available information such as property description, size etc. was collated and evaluated;
- Field work to gather information such as existing land use, physical composites and present condition of the subject property, to put up notice boards etc.;
- Initiating, facilitating and assessing the public participation process that was followed; and
- Report writing.

### **3. DETAILS OF ENVIRONMENTAL SERVICE PROVIDER**

#### **3.1 Legislative requirements for environmental assessment practitioners**

Section 13 of Government Notice No. R. 326 of 7 April 2017 provides the following requirements for environmental assessment practitioners (EAPs):

- An EAP must be independent;
- An EAP must have expertise in conducting environmental impact assessments or undertake specialist work as required, including knowledge of the Act, these Regulations and any guidelines that have relevance to the activity.
- An EAP must ensure compliance with these Regulations;
- An EAP must perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- An EAP must take into account, to the extent possible, the matters referred to in regulation 18 of Government Notice No. R. 326 of 7 April 2017 when preparing the application and any report, plan or document relating to the application; and
- An EAP must disclose to the proponent or applicant, registered interested and affected parties and the competent authority all material information in the possession of the EAP and, where applicable, the specialist, that reasonably has or may have the potential of influencing –
  - any decision to be taken with respect to the application by the competent authority in terms of these Regulations; or
  - the objectivity of any report, plan or document to be prepared by the EAP or specialist in terms of these Regulations for submission to the competent authority.

#### **3.2 Details of relevant environmental assessment practitioner**

Name:	Carel Petrus (Cappie) Linde
Identity number:	6805275073084
Cellular:	0824440367
Fax number:	0865579447
Physical & postal address:	450 Wendy Street, Waterkloof Glen, Pretoria 0181
Employer:	Envirovision Consulting CC
Tertiary Qualifications:	BA (Potchefstroom University 1990)

### **3.3 Details of the expertise of the relevant EAP**

Over a period of ten years starting 1991, Cappie Linde has been closely involved in the regulatory implementation environment at national level attached to the Department of Land Affairs in a final capacity of Deputy Director. In this capacity his focus and experience has been developed in the areas of development, land use, land rights and related environmental matters. In the process he established valuable working relationships and networks at all tiers of government.

He obtained a Masters Degree in the Environment and Development (M.Env.Dev.) from the University of Kwazulu-Natal in 2006 (Appendix 1). His thesis concentrated on the quality of the integrated environmental management system in South Africa based on sectoral case studies.

Over the past seventeen years he has been consulting through Envirovision Consulting CC. During this period he facilitated the issuing of more than two hundred Records of Decision in six different provinces.

He is a founding member of the Environmental Assessment Practitioners Association South Africa (EAPASA) and is an EAPASA registered environmental assessment practitioner. He also serves on EAPASA's external panel of assessors (Appendix 2).

During this period he has proven his skills and abilities in the following fields:

- His ability to be independent;
- His expertise in conducting environmental impact assessments or undertake specialist work as required, including knowledge of the Act, these Regulations and any guidelines that have relevance to the activity;
- His ability to ensure compliance with these Regulations;
- His ability to perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- His ability to take to the extent possible, the matters referred to in regulation 18 of Government Notice No. R. 326 of 7 April 2017 when preparing the application and any report, plan or document relating to the application; and
- His ability to disclose to the proponent, applicant, registered interested and affected parties and the competent authority all material information in the possession of the EAP, and where

applicable, the specialist, that reasonably has or may have the potential of influencing –

- any decision to be taken with respect to the application by the competent authority in terms of these Regulations; or
- the objectivity of any report, plan or document to be prepared by the EAP in terms of these Regulations for submission to the competent authority.

#### **4. BRIEF PROJECT DESCRIPTION**

##### **4.1 Name and address of applicant**

The Kgetlengrivier Local Municipality

P O Box 66  
Koster  
0348

Contact person: Reuben Mavhungu  
Telephone : 076 334 4342  
E-mail address: rrmavhungu@gmail.com /  
mavhungur@kgetlengrivier.gov.za

##### **4.2 Location of activity**

*21 Digit Surveyor General codes*

T0JP00000000045600022

*Physical address and farm names*

Proposed Portion 45 (a portion of Portion 22) of the farm Leeuwfontein 456 JP.

*Coordinates of the centre of the activity (Hartebeesthoek 94, WGS84)*

25°50'56.47" South,  
26°52'4.55" East.

*Locality map*

An extract of the relevant 1:50 000 topographical map indicating the development site has been included as Appendix 3 to this report.

### 4.3 Description of activity

*All listed and specified activities triggered and being applied for*

1. The clearance of an area of twenty hectares or more of indigenous vegetation (Listing Notice 2, Activity No. 15 of the 2014 EIA Regulations as amended).
2. The development of – (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs (a) within a water course; or (c) if no development setback line exists, within 32 metres of a water course, measured from the edge of a water course (Listing Notice 1, Activity No. 12ii (a&c) of the 2014 EIA Regulations as amended).
3. The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grid, pebbles or rock of more than 10 m<sup>3</sup> from a water course (Listing Notice 1, Activity No. 19 of the 2014 EIA Regulations as amended).
4. Residential, mixed, retail, commercial, industrial or institutional development where such land was used for agriculture on or after 1 April 1998 where such development will occur inside an urban area, when the total land to be developed is bigger than 5 hectares (Listing Notice 1, Activity No. 28ii of the 2014 EIA Regulations as amended).
5. The clearance of an area of 300 square metres or more of indigenous vegetation within critical biodiversity areas identified in bioregional plans (Listing Notice 3 Activity No. 12(h)iv of the 2014 EIA Regulations as amended).

#### *Project type*

The activity comprises township establishment consisting of a mixed land use model with residential, business, institutional and open space uses (Appendix 4).

#### *Description of the activity*

If approved, the activity may consist of the following land uses on proposed Portion 45 (a portion of Portion 22) of the farm Leeuwfontein 456 JP, Kgetlengrivier Local Municipality:

- 1794 “Residential 1” erven;
- 16 “Business” erven;
- 2 “Municipal” erven;
- 2 “Taxi rank” erven;
- 2 “Primary school” erven;
- 2 “Community facility” erven;
- 7 “Crèche” erven;
- 7 “Church” erven;
- 18 “Open space” erven; and
- Streets.



Total erven: 1850  
Total property size: 127.2636 hectares.

### *Sector classification*

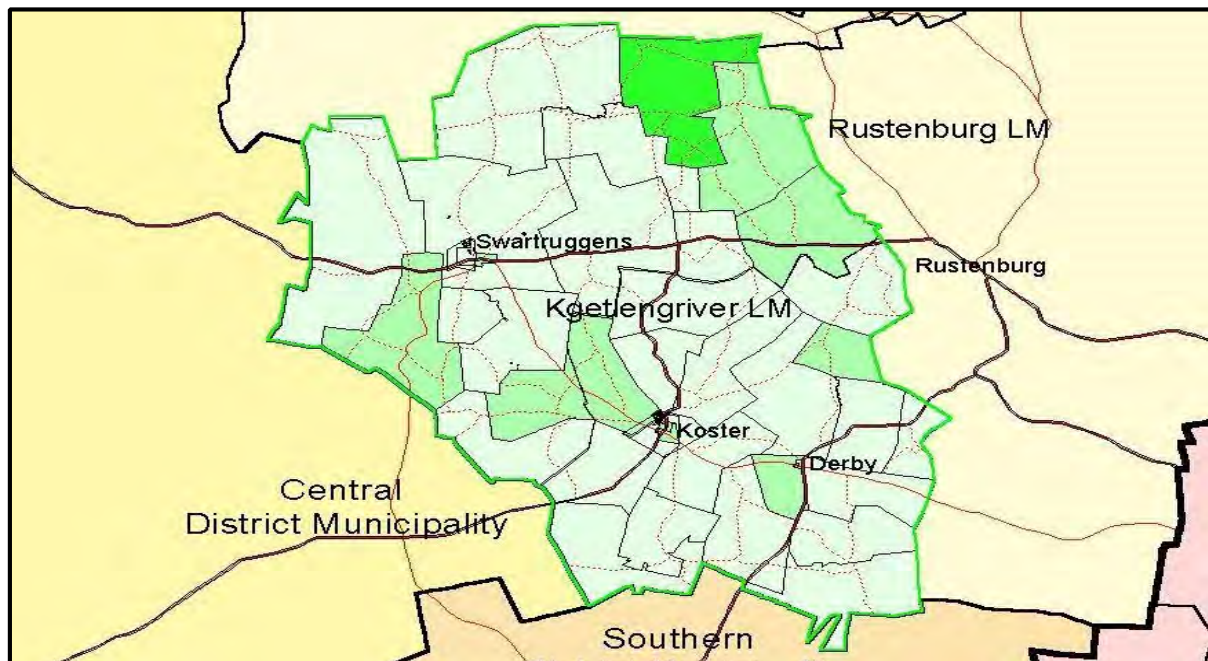
The activity conforms to the following sector classifications as identified in the national electronic register:

Sector 8: Greenfield transformation to urban or industrial form; and  
Sector 10: Township development

## **5. NEED AND DESIRABILITY**

### **5.1 Municipal background and profile (Final IDP 2017-2022)**

:



*Map of Kgetlengrivier Local Municipality*

### *Geography, History and Economy*

The Kgetlengrivier Local Municipality is a Category B municipality located in the south-eastern part of the North West Province and forms part of the Bojanala Platinum District. It borders Moses Kotane in the north and Rustenburg in the west. The municipality is situated on the N4 toll road from Pretoria to Botswana and acts as a gateway from Johannesburg to Botswana. It is one of five municipalities in the district of Bojanala Platinum Municipality.

The area's rich environment and natural resource base provides opportunities for agriculture and slate quarry development. The area's mining activities are those related to diamonds, slate and aggregate sand. It has a strong competitive advantage in terms of its climate, biodiversity and numerous dams. The municipal area is 3 973km<sup>2</sup>. The main towns in the Municipality is Derby, Koster and Swartruggens. Key economic sectors are Agriculture and Mining.

WARDS	SETTLEMENTS
Ward 1	Borolelo
Ward 2	Borolelo, Swartruggens and Neighboring Farms.
Ward 3	Koster, Reagile[Randsave], Old Mabalstad and Farms
Ward 4	Reagile
Ward 5	Reagile
Ward 6	Mazista, and Farms
Ward 7	Reagile
Ward 8	Derby, Redirile and Neighboring Farms.

*Kgetlengrivier Local Municipality wards and nodes*

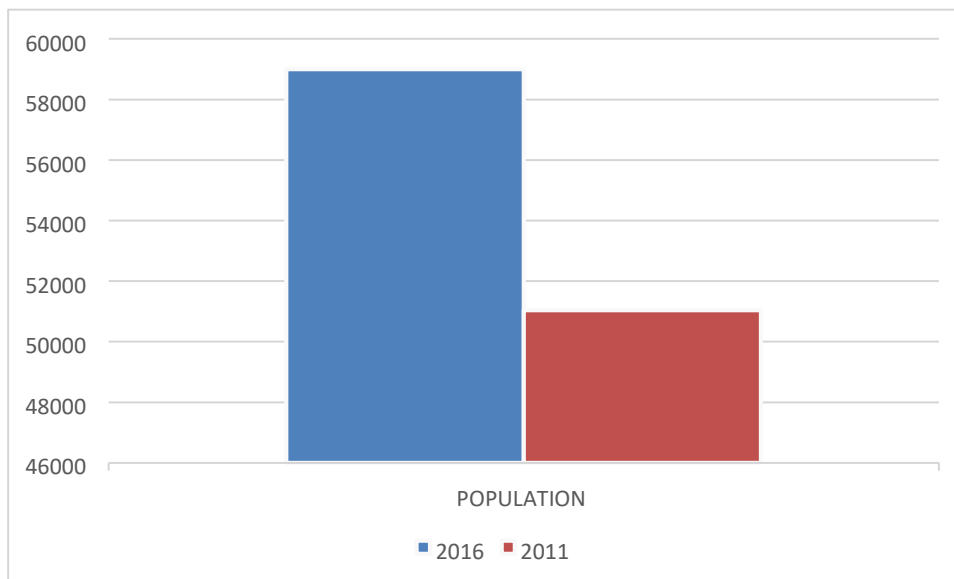
*Population Demographics*

	2016	2011
<b>Population</b>	59 562	51 049
<b>Age Structure</b>		
Population under 15	33.6%	28.5%
Population 15 to 64	61.0%	65.6%
Population over 65	5.4%	5.9%
<b>Dependency Ratio</b>		
Per 100 (15-64)	64.0	52.5
<b>Sex Ratio</b>		
Males per 100 females	115.4	112.6
<b>Population Growth</b>		
Per annum	3.51%	n/a
<b>Labour Market</b>		
Unemployment rate (official)	n/a	20.5%
Youth unemployment rate (official) 15-34	n/a	26.7%
<b>Education (aged 20 +)</b>		
No schooling	8.5%	15.8%
Matric	27.3%	22.7%
Higher education	7.0%	6.3%
<b>Household Dynamics</b>		
Households	18 787	14 673
Average household size	3.2	3.1
Female headed households	30.0%	29.3%
Formal dwellings	67.5%	72.0%
Housing owned	65.5%	39.6%
<b>Household Services</b>		
Flush toilet connected to sewerage	62.5%	51.9%
Weekly refuse removal	27.5%	44.5%
Piped water inside dwelling	27.7%	34.8%
Electricity for lighting	87.0%	78.0%

Source: STATS SA Sensus 2011 & Community Survey 2016

### *Population Growth*

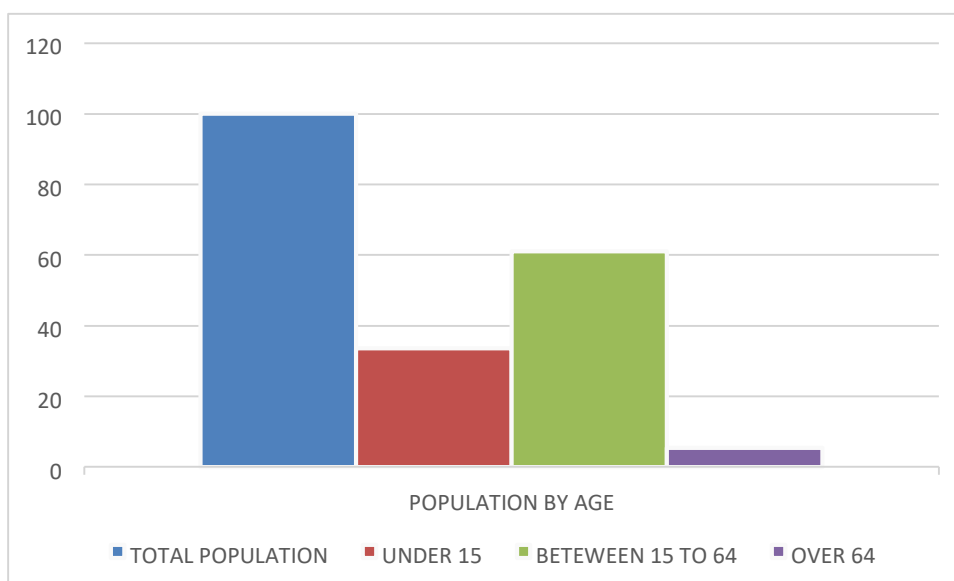
The following table illustrates population growth within the municipality.



Source: STATS SA Community Survey 2016

It is being stated in the Municipality's Final IDP 2017-2022 that its population continues to grow significantly, and that it has an impact on service delivery provisioning. It is further stated that the municipality must improve planning in order to meet the new challenges that has manifested itself from the population growth. The average growth of the municipality is 3.51% per annum.

### *Age of Population*

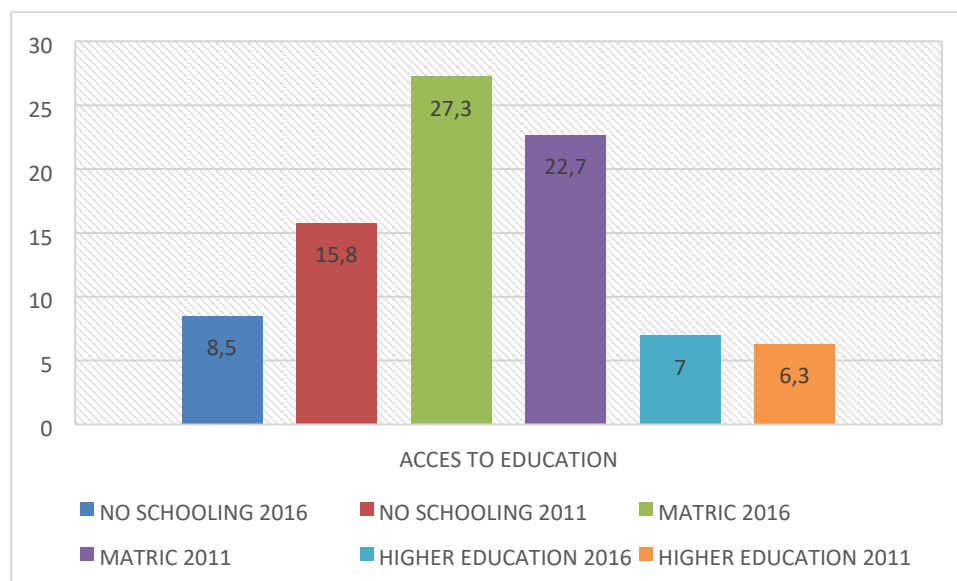


Source: STATS SA Community Survey 2016

### *HIV/AIDS Status*

It is stated in the Municipality's Final IDP 2017-2022 that the prevalence of HIV/AIDS within the municipal area is likely to impact on economic development of the area in the future. It has increased from 6% in 1996 to 11% in 1999 and indicates a sharp increase in the year 2000 to 16%. Current estimations suggest that more than 3000 people are receiving Anti-retroviral treatment in Kgetlengrivier LM.

### *Level of Education*



Source: STATS SA Community Survey 2016

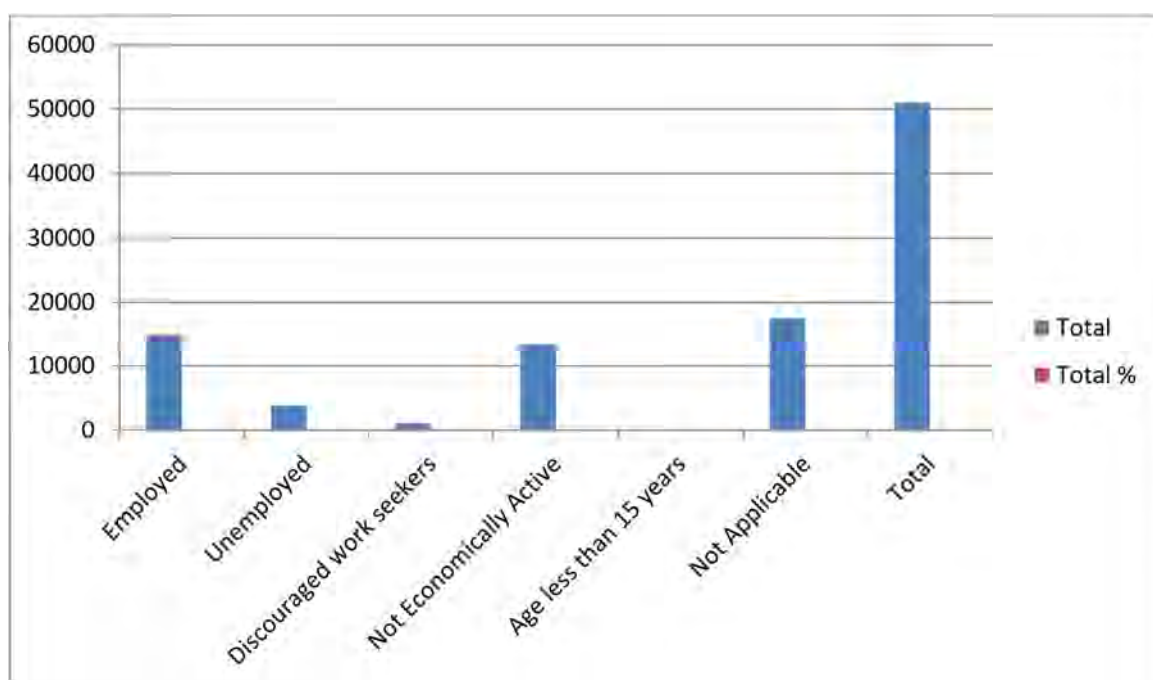
It is stated in the Municipality's Final IDP 2017-2022 that it has a number of schools within its jurisdiction and one resource centre. The lack of a technical college within the municipality has a serious negative impact on the education system within the municipality. The education profile per person for the Kgetlengrivier local municipality is reflected in the above table which indicates that a large amount of people within the municipality are attending ordinary school from grade 1 to grade 12.

It is further stated that according to the Department of Education, the number of schools in an area should relate to its population. The municipal area has 11 primary schools, 3 secondary schools and 1 combined school. However, serious problems are experienced in many of these schools including overcrowding and high failure rates that could be attributed to poor infrastructure and facilities.

During consultations with the community there has been an outcry regarding scholar transport for children in Derby to Koster and Borolelo to Swartruggens. Engagements with the Provincial Department of Education does not yield the expected results.

### Employment Status

Labour Force	Total	Total %
Employed	14997	29.38%
Unemployed	3862	7.57%
Discouraged work seekers	1110	2.17%
Not Economically Active	13502	26.45%
Age less than 15 years	-	0.00%
Not Applicable	17578	34.43%
Total	51049	100.00%
<b>Source: Stats SA 2011</b>		

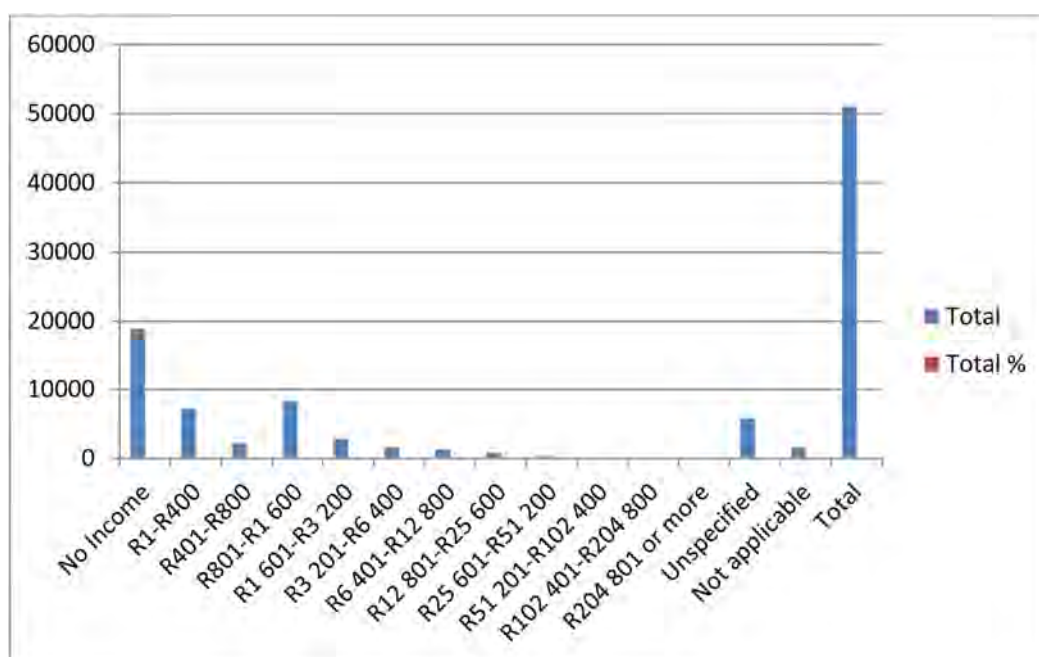


The data above from census 2011 indicates that 26% are not economically active, 29% of the population is employed and 7.5% are unemployed. The implication is that more needs to be done with regard to sustainable job creation and skills transfer to the not economic active category need to be highly intensified. Even though Stats SA is officially recognized to provide stats, the opinion is being expressed in the It is stated in the Municipality's Final IDP 2017-2022 that the current situation has worsened since 2011.

### Monthly Income

Individually Monthly Income	Total	Total %
No Income	18913	37.05%
R1-R400	7222	14.15%
R401-R800	2207	4.32%
R801-R1 600	8281	16.22%
R1 601-R3 200	2838	5.56%
R3 201-R6 400	1627	3.19%

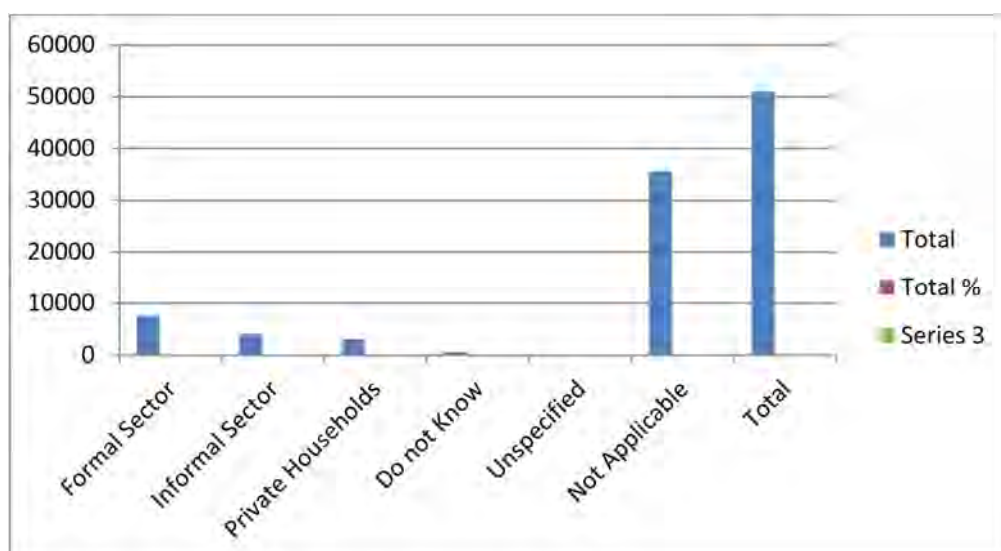
Individually Monthly Income	Total	Total %
R6 401-R12 800	1297	2.54%
R12 801-R25 600	787	1.54%
R25 601-R51 200	292	0.57%
R51 201-R102 400	104	0.20%
R102 401-R204 800	70	0.14%
R204 801 or more	16	0.03%
Unspecified	5807	11.38%
Not applicable	1587	3.11%
Total	51049	100.00%
<b>Source: stats SA 2011</b>		



The monthly income profile within the municipality's jurisdiction is reflected above. It is stated in the Municipality's Final IDP 2017-2022 that the data indicates that most of people within the municipality boundaries earn less than R3 500.00 per month which increases the demand for free basic service delivery and housing. This implies a need to close the wage gap.

#### *Type of Employment Sector*

Type of Sector	Total	Total %
Formal Sector	7575	14.84%
Informal Sector	4158	8.15%
Private Households	3077	6.03%
Do not Know	609	1.19%
Unspecified	-	0.00%
Not Applicable	35630	69.80%
Total	51049	100.00%
<b>Source: stats SA 2011</b>		



It is stated in the Municipality's Final IDP 2017-2022 that the municipal LED strategy is currently under review with the assistance of BPDM. While the economic drives of the municipality are agriculture, tourism, small scale mining, trade and government services, anecdotal evidence suggests that the current employment and improve the rate payers base for the municipality. The current economic activities are not maximizing the potential of the area which could create more job opportunities and improve the rate payer's base for the municipality.

## 5.2 Need

It is being acknowledged by the Kgetlengrivier Local Municipality in its Housing Sector Plan dated February 2011 (KLRM: 2011, pp.10-11) that some of its communities stay in informal settlements. It should be recognized that many of these informal settlements offer shelter to the poor and destitute but that it creates undesirable urban environments due to lack of services and security of tenure.

It is for this reason that the policy aims to address the following:

- To contain and prevent land invasion and the spread of informal settlements.
- To plan for sustainable human settlements through rapid release of land for development.

It has been ascertained that the Municipality is making every endeavour to address the issue of informal settlements but is solely dependent on external funding in the form of grants.

It is further stated in the document that the backlog of approximately 5300 houses that remained as at 2005, still exists and has now (in 2011) risen to approximately 15 521 taking into account the current informal settlement figures, houses built and current backlog.



The municipal area shows that the layout of houses on a separate stand (approx.300sq/m) is still a dominant typology in the municipality. This is followed by the informal backyard houses. Flats and townhouses are in the minority. More emphasis needs to be given to the higher density housing provision, especially in the economic centres and along the transportation routes. The continuous arrival and mushrooming of informal dwellings exacerbates the situation and imposes on the municipality to act speedily, notwithstanding the constraints confronting the municipality.

The most important spatial features as far as the housing stock in Kgetlengrivier is concerned, include the following:

- The majority of households in the Kgetlengrivier Local Municipality resides within housing structures on separate stands (approximately 55% of all households).

The occurrence of informal structures is mainly concentrated to certain parts of Derby, Koster/Reagile and Swartruggens/Borolelo within which more than 40% of households in certain are residing in informal structures. According to the Kgetlengrivier Integrated Development Plan (IDP) for 2010/11, more than 11 792 households are residing within informal structures. This includes approximately 960 informal structures in Borolelo, 1550 in Reagile 430 in Derby.

- The total proportion of households living in backyard structures is estimated to be roughly 15% of the total households.

It is being contended that the activity can contribute towards this stated need backlog by providing land for housing and security of tenure in the exact location where it is needed.

### **5.3 Desirability**

The activity's conformation to the following sectoral classifications as identified in the national electronic register enhances its desirability:

- Sector 8: Greenfield transformation to urban or industrial form; and
- Sector 10: Township development.

The activity is also desirable in that it represents a joint initiative by the relevant district municipality local municipality and the Department of Local Government and Human Settlements to provide in the relevant community's housing needs.

It is further believed that the proposed activity is desirable in that it will contribute towards the following key performance indicators as identified in the Municipalities final Five Year Integrated Development Plan (IDP):

- Key performance indicator: Basic Service Delivery and Infrastructure
  - To provide sustainable services to communities).
- Key performance indicator: Spatial rationale planning & housing



- Finalization of new township proclamations.
- Provision of Land and sites for Human Settlement Development of Township establishment for affordable housing
- Development of RDP sites for low cost housing

In view of the above it is submitted that substantial motivation exists in support of the need and desirability of the development, and that no considerations were identified during the assessment that points towards the contrary.

## **6. ACTIVITY CONTEXT AND ENVIRONMENTAL FACTORS**

Compliance of the activity to the following legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks and instruments that are applicable to the activity has been considered in the preparation of the report:

### **6.1 The Constitution of South Africa (No. 108 of 1996)**

Since 1994, South African legislation (including environmental legislation), has undergone a significant transformation and various laws and policies were promulgated with a strong emphasis on environmental concerns and the need for sustainable development. The Constitution of South Africa (No. 108 of 1996) (The Constitution) provides environmental rights (contained in the Bill of Rights, Chapter 2 (section 24)) and includes implications for environmental management. The environmental rights are guaranteed in section 24 of the Constitution, and states that:

“Everyone has the right –

To an environment that is not harmful to their health or well-being; and

To have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:

- i. Prevent pollution and ecological degradation;
- ii. Promote conservation; and
- iii. Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.”

The Constitution cannot manage environmental resources as a stand-alone piece of legislation hence additional legislation has been promulgated in order to manage the various spheres of both the social and natural environment. Each promulgated act and associated regulations are designed to focus on various industries or components of the environment to ensure that the objectives of the Constitution are effectively implemented and upheld on an on-going basis throughout the country. In terms of section 7, a positive obligation is placed on the State to give effect to the environmental rights.

## 6.2 The National Environmental Management Act (No. 107 of 1998)

The NEMA is South Africa's overarching environmental legislation and has, as its primary objective, to provide for co-operative governance by establishing principles for decision making on matters affecting the environment, institutions that will promote co-operative governance and procedures for co-ordinating environmental functions exercised by organs of state and to provide for matters connected therewith. The NEMA provides for the Constitutional right to an environment that is not harmful to the health and well-being of South African citizens, the equitable distribution of natural resources, sustainable development, environmental protection and the formulation of environmental management frameworks.

In terms of the NEMA the Minister of the Department of Environmental Affairs (DEA) may identify activities which may not commence without prior authorisation from the Minister or member of the Executive Committee (MEC) and may also identify geographical areas in which specified activities may not commence without prior authorisation from the Minister or MEC. The Minister of the DEA thus published GNR 983 (Listing Notice 1), 984 (Listing Notice 2), 985 (Listing Notice 3) and 986 (Listing Notice 4) (4 December 2014) listing activities that may not commence prior to authorisation from the Minister or MEC. These Regulations have been amended on 7 April 2017. Listing Notice 1 (as amended) identifies activities that require a Basic Assessment (BA) process to be undertaken, in terms of the EIA Regulations, prior to commencement of that activity. Listing Notice 2 (as amended) identifies activities that require a S&EIR process to be undertaken, in terms of the EIA Regulations, prior to commencement of that activity. Listing Notice 3 (as amended) identifies activities within specific areas that require a BA process to be undertaken, in terms of the EIA Regulations, prior to commencement of that activity whilst Listing Notice 4 (as amended) provides for the use of spatial development tools adopted in the prescribed manner.

A detailed analysis was undertaken of the listed activities contained in Listing Notices 1, 2, 3 & 4 (as amended) in order to ascertain which of the project components trigger any listed activities. The result of the analysis indicated that the respective project components implies the following listed activities:

1. The clearance of an area of twenty hectares or more of indigenous vegetation (Listing Notice 2, Activity No. 15 of the 2014 EIA Regulations as amended).
2. The development of – (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs (a) within a water course; or (c) if no development setback line exists, within 32 metres of a water course, measured from the edge of a water course (Listing Notice 1, Activity No. 12ii (a&c) of the 2014 EIA Regulations as amended).
3. The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grid, pebbles or rock of more than 10 m<sup>3</sup> from a water course

- (Listing Notice 1, Activity No. 19 of the 2014 EIA Regulations as amended).
4. Residential, mixed, retail, commercial, industrial or institutional development where such land was used for agriculture on or after 1 April 1998 where such development will occur inside an urban area, when the total land to be developed is bigger than 5 hectares (Listing Notice 1, Activity No. 28ii of the 2014 EIA Regulations as amended).
  5. The clearance of an area of 300 square metres or more of indigenous vegetation within critical biodiversity areas identified in bioregional plans (Listing Notice 3 Activity No. 12(h)iv of the 2014 EIA Regulations as amended).

The proposed activity therefore requires environmental authorisation by means of a full scoping and environmental impact reporting process.

### **6.3 The National Water Act (No. 36 of 1998)**

The NWA provides for fundamental reformation of legislation relating to water resources and use. The preamble to the NWA recognises that the ultimate aim of water resource management is to achieve sustainable use of water for the benefit of all users and that the protection of the quality of water resources is necessary to ensure sustainability of the nation's water resources in the interests of all water users. In terms of the NWA, the national government, acting through the Minister of the DEA, is the public trustee of South Africa's water resources, and must ensure that water is protected, used, developed, conserved, managed and controlled in a sustainable and equitable manner for the benefit of all persons. The Minister of the DEA is responsible to ensure that water is allocated equitably and used beneficially in the public interest, while promoting environmental values. The national government, acting through the Minister of the DEA, has the power to regulate the use, flow and control of all water in South Africa.

The majority of the provisions of the NWA came into effect on 1 October 1998 and at the same time various provisions of the Water Act (No. 54 of 1956) (WA) were repealed. The remaining provisions of the NWA commenced on 1st January 1999 and 1 October 1999 (and the remaining provisions of the WA were repealed).

The most fundamental departure from the WA is the removal of the concept of water as private property. Instead, water will be made available through user licences, which may be issued for a maximum period of forty years, subject to renewal. A priority of users has been established for the allocation of licences, with the environment near the top of the list.

Section 21 of the NWA indicates that "water use includes":

- Taking water from a water resource;
- Storing water;
- Impeding or diverting the flow of water in a water course;
- Engaging in a stream flow reduction activity referred to in section 36;
- Engaging in a controlled activity which has either been declared as

- such or is identified in section 37(1);
- Discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit;
- Disposing of waste in a manner which may detrimentally impact a water resource;
- Disposing in any manner of water which contains waste from, or which has been heated in, any industrial or power generation process;
- Altering the bed, banks, course or characteristics of a water course;
- Removing, discharging or disposing of water found underground if it is necessary for the efficient continuation of an activity or for the safety of people; and
- Using water for recreational purposes.

Specified water uses, in section 21 of the NWA, must be licensed unless listed in Schedule 1; the continuation of an existing lawful water use; is permissible under a general authorisation issued under section 39 of the NWA, or if a responsible authority waives the need for a license.

Based on the information at hand as well as the provisional layout plan it is believed not the activity may require to water crossing that may in turn trigger the following water uses listed in Section 21 of the NWA:

- Impeding or diverting the flow of water in a water course;
- Altering the bed, banks, course or characteristics of a water course;

The necessary licencing application processes in this regard will be initiated once environmental authorisation has been obtained.

The Department of Water Affairs has already been notified in writing about the development (Appendix 7). No feedback has been received to date.

#### **6.4 National Environmental Management Biodiversity Act (No. 10 of 2004)**

The National Environmental Management Biodiversity Act (No. 10 of 2004) (NEM:BA), in line with the Convention on Biological Diversity (CBD), aims to legally provide for biodiversity conservation, sustainable use and equitable access and benefit sharing. The NEM:BA creates a basic legal framework for the formation of a national biodiversity strategy and action plan and the identification of biodiversity hotspots and bio-regions which will then be given legal recognition. The NEM:BA imposes obligations on landowners (state or private) governing alien invasive species as well as regulating the introduction of genetically modified organisms. The South African National Biodiversity Institute (SANBI) was established to enforce the objectives as set out in the NEM:BA.

It is the finding of this report that the National Environmental Management Biodiversity Act (No. 10 of 2004) (NEM:BA) does not apply. It needs to be recorded that certain portions of the subject site fall within critical biodiversity areas.

## **6.5 National Environmental Management Air Quality Act (No. 39 of 2004)**

The National Environmental Management: Air Quality Act (No. 39 of 2004) (NEM:AQA) allows for national, provincial and local air quality standards to be established as well as the declaration of priority areas. In addition the NEM:AQA requires that Air Quality Management Plans (AQMP) form part of the environmental implementation plan or environmental management plans to be prepared by national departments or the province as required by Chapter 3 of the NEMA. Furthermore the NEM:AQA requires municipalities to include an AQMP into its integrated development plan (IDP).

Key features of the NEM:AQA include:

- A decentralisation of air quality management responsibilities;
- The identification and quantification of significant emission sources that then need to be addressed;
- The development of ambient air quality targets as goals for driving emission reductions;
- The use of source-based (command-and-control) measures in addition to alternative measures, including market incentives and disincentives, voluntary programmes, and education and awareness;
- The promotion of cost-optimised mitigation and management measures;
- Air quality management planning by authorities, and emission reduction and management planning by sources; and
- Access to information and public consultation.

The overall objectives of the NEM: AQA include the following:

- The protection of the environment by providing reasonable measures for the protection of the quality of the air in the country;
- Protection of the environment by the prevention of air pollution and ecological degradation;
- Protecting the environment by securing ecologically sustainable development while promoting justifiable economic and social development; and
- To give effect to the constitution in order to enhance the quality of ambient air in order to secure an environment that is not harmful to the health and well-being of the people of South Africa.

The NEM:AQA requires the Minister of the DEA to publish a list of activities which results in atmospheric emissions which may have a detrimental effect on the environment, including health, social conditions, economic conditions, ecological conditions, ecological conditions or cultural heritage. The NEM:AQA requires that an Atmospheric Emissions Licence (AEL) be obtained for such listed activities. Such a list of activities was published in GNR 248 (31 March 2010).

Following a detailed analysis of the proposed project against the activities listed in GNR 248, it was concluded that these activities will not be triggered.

## **6.6 The National Environmental Management Waste Act (No. 59 of 2008)**

The National Environmental Management: Waste Act (No. 59 of 2008 (NEM:WA) serves to reform the law regulating waste management in order to protect human health and the environment. This is managed by providing reasonable measures for the prevention of pollution and ecological degradation. The NEM:WA aims to secure ecologically sustainable development while promoting justifiable economic and social development. The NEM:WA provides national norms and standards for regulating the management of waste by all spheres of government, for specific waste management measures and for matters incidental thereto. In terms of the NEM:WA the Minister of the DEA may publish a list of waste management activities that have, or are likely to have, a detrimental effect on the environment. Furthermore, the NEM:WA prohibits any person to commence, undertake or conduct a waste management activity except in accordance with the requirements or standards determined in terms of the NEM:WA for that activity or where a waste management licence (WML) has been issued in respect of that activity.

Following a detailed analysis of the proposed project, it was concluded that the proposed project components will not trigger any activity that will require an application for a WML.

## **6.7 National Heritage Resources Act (No. 25 of 1999)**

The National Heritage Resources Act (No. 25 of 1999) (NHRA) aims to protect heritage resources of national significance. The South African Heritage Resources Agency (SAHRA) was thus established in 1999 to fulfil the objectives of the NHRA. In terms of section 38 of the NHRA a heritage impact assessment (HIA) is required for any development or other activity which will change the character of the site:

- Exceeding 5 000m<sup>2</sup> in extent;
- Involving three or more existing erven or subdivisions thereof;
- Involving three or more erven or divisions thereof which have been consolidated within the past five years;
- The costs of which will exceed a sum set in terms of regulations by the SAHRA or a provincial heritage resource authority;
- The re-zoning of a site exceeding 10 000m<sup>2</sup> in extent;
- Any other category of development provided for in regulations by the SAHRA is a provincial heritage resource agency, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

The proposed project implies the following in terms of section 38 of the NHRA, thus an HIA is required:

- It will change the character of a site exceeding 5 000m<sup>2</sup> in extent;
- It requires the rezoning of a site exceeding 10 000m<sup>2</sup> in extent.

## 6.8 Relevant guidelines

- The Guideline Document EIA Regulations (DEAT 1998)
- Overview of Integrated Environmental Management, Information Series 0 (DEAT 2004a)
- Screening, Integrated Environmental Management, Information Series 1 (DEAT 2002)
- Scoping, Integrated Environmental Management, Information Series 2, (DEAT 2002a)
- Stakeholder Engagement, Integrated Environmental Management, Information Series 3 (DEAT 2002b)
- Specialist Studies, Information Series 4. (DEAT 2002c)
- Impact Significance, Integrated Environmental Management, Information Series 5 (DEAT 2002d)
- Ecological Risk Assessment, Integrated Environmental Management, Information Series 6 (DEAT 2002e)
- Cumulative Effects Assessment, Integrated Environmental Management, Information Series 7 (DEAT 2004b)
- Cost Benefit Analysis, Integrated Environmental Management, Information Series 8 (DEAT 2004c)
- Criteria for determining alternatives in EIA, Integrated Environmental Management, Information Series 11 (DEAT 2004d)
- Environmental Management Plans, Integrated Environmental Management, Information Series 12 (DEAT 2004e)
- Review in Environmental Impact Assessment, Integrated Environmental Management, Information Series 13 (DEAT 2004f)
- Environmental Impact Reporting, Integrated Environmental Management, Information Series 15 (DEAT 2004g)

## 7. DESCRIPTION OF PROCESS FOLLOWED TO SELECT PREFERRED SITE

### 7.1 Details of sites considered, including maps and coordinates

Only the following site was considered as a single development proposal:

*21 Digit Surveyor General code*

T0JP00000000045600022

*Physical address and farm names*

Proposed Portion 45 (portion of Portion 22) of the farm Leeuwfontein 456 JP.

*Coordinates of the centre of the activity (Hartebeesthoek 94, WGS84)*

25°50'56.47" South,  
26°52'4.55" East.

### *Locality map*

An extract of the relevant 1:50 000 topographical map indicating the development site has been included as Appendix 3 to this report.

## **7.2 Public participation process**

Chapter 6 of Government Notice No. R. 326 dated 7 April 2017 provides for a public participation process.

It is further stipulated that the person conducting a public participation process must take into account any guidelines applicable to public participation and must give notice to all potential interested and affected parties of the application which is subjected to public participation by:

- Fixing a notice board at a place conspicuous to the public at the boundary or on the fence of the site where the activity to which the application relates is or is to be undertaken; and any alternative site mentioned in the application;
- Giving written notice to:
  - The occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
  - The owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
  - The municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represents the community in the area;
  - The municipality which has jurisdiction in the area; and
  - Any organ of state having jurisdiction in respect of any aspect of the activity;
  - Any other party as required by the competent authority;
- Placing an advertisement in one local newspaper; **or** any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations; and
- Placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or local municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official *Gazette*;
- Using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desiring of but unable to participate in the process due to illiteracy, disability or any other disadvantage.

The main purpose of the public participation process that was undertaken in this regard, over and above giving effect to the relevant regulations, was to obtain information through a process of informing and involving interested and



affected parties (I&AP's). The aim was for potential I&AP's to become aware of the positive and negative effects that the development may bring about in their living environments. The identification and consideration of negative effects can also serve as basis for the developer to effect changes in the course of action, either through mitigation of undesirable or unaccepted impacts, or through the introduction of alternatives.

The following objectives were pursued through the public participation process:

- To inform potential I&AP's of the development;
- To allow potential I&AP's to raise issues, concerns and suggestions;
- To promote transparency and an understanding of the project;
- To direct the focus of the EIA towards the most pertinent issues ;
- It was **not** one of the objectives of the public participation process to quell opposition or to foster consensus among role players.

This section of the report focuses on the issues and comments raised by I&AP's, if any. These inputs will be used to determine the anticipated impacts that such a development can have on the environment and highlight particular issues related to the project. The perceived impacts can assist individuals, communities as well as government to understand and anticipate the possible consequences (positive and negative) of the project.

#### *Notification of potential I&AP's*

In terms of Subsection (6) of Section 41 of Government Notice No. R. 326 of 7 April 2017 the person conducting the public participation process must ensure that information containing all relevant facts in respect of the application is made available to potential or registered interested and affected parties; and that participation by potential interested and affected parties is facilitated in such a manner that all potential interested and affected parties are provided with a reasonable opportunity to comment on the application.

Where an environmental authorisation is required in terms of these Regulations and an authorisation, permit or licence is required in terms of a specific environmental management Act, the public participation process may be combined with any public participation process prescribed in terms of a specific environmental management Act, on condition that all relevant authorities agree to such combination of processes.

In order to comply with this requirement as well as other related requirements stated in the relevant regulations, written notice of the development together with the opportunity to comment was given to the following persons and / or institutions:

Written notice was given to the Kgetlengrivier Local Municipality as local municipality, landowner and adjacent landowner (Appendix 5). No written response was received to date.

Written notice was given to the relevant municipal councillor of Ward 6, Councillor George Naledi through the Office of the Municipal Manager (Appendix 5). No written response was received to date.

Written notice was given to the Department of Public Works as custodian of adjacent State owned land as well as the trustees of the Fanie Coetzee Trust in its capacity as an adjacent landowner (Appendix 6). No written response was received to date.

Written notice was given to the Office Manager: Hartbeespoort, Department of Water Affairs and Sanitation (Appendix 7). No written response was received to date.

Recipient	Capacity	Address
The Office Head: Hartbeespoort Department of Water Affairs & Sanitation	State Department	theunissenc@dws.gov.za
The Municipal Manager: Kgetlengrivier Local Municipality	Organ of State, landowner & adjacent landowner	rrmavhungu@gmail.com / mavhungur@kgetlengrivier.gov.za
Councillor George Naledi (Ward 6), Kgetlengrivier Local Municipality	Ward representative	rrmavhungu@gmail.com / mavhungur@kgetlengrivier.gov.za
DG: Department of Public Works	Adjacent landowner (Portion 21)	dg.pa@dpw.co.za
The Trustees, Fanie Coetzee Trust	Adjacent landowner (Portion 3)	info@alldog.co.za

No written response was received to date.

#### *Proof of notice board*

In terms of Subsection (4) of Section 41 of Government Notice No. R. 326 of 7 April 2017 the required notice board must:

- Give details of the application which is subjected to public participation; and
- State that the application has been submitted to the competent authority in terms of these Regulations, as the case may be; whether basic assessment or scoping procedures are being applied to the application, in the case of an application for environmental authorisation; the nature and location of the activity to which the application relates; where further information on the application or activity can be obtained; and the manner in which and the person to whom representations in respect of the application may be made;
- Be of a size at least 60cm by 42cm; and

- Display the required information in lettering and in a format as may be determined by the competent authority.

A notice board complying with the stated requirements was placed on the subject property on 29 May 2020 (Appendix 10).

#### *Proof of newspaper advertisement*

In terms of Subsection (2) of Section 41 of Government Notice No. R. 326 of 7 April 2017 an advertisement must be placed in one local newspaper; **or** any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations; the required advertisement must:

- Give details of the application; and
- State that the application has been or is to be submitted to the competent authority in terms of these Regulations, as the case may be; whether basic assessment or scoping procedures are being applied to the application, in the case of an application for environmental authorisation; the nature and location of the activity to which the application relates; where further information on the application or activity can be obtained; and the manner in which and the person to whom representations may be made.

An advertisement complying with the stated requirements has been placed in the Rustenburg Herald newspaper of 10 July 2020 (Appendix 10).

#### *Proof of advertisement in Gazette*

In terms of Subsection (2) of Section 41 of Government Notice No. R. 326 of 7 April 2017 an advertisement must be placed in one local newspaper; **or** any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations; the required advertisement must:

- Give details of the application; and
- State that the application has been or is to be submitted to the competent authority in terms of these Regulations, as the case may be; whether basic assessment or scoping procedures are being applied to the application, in the case of an application for environmental authorisation; the nature and location of the activity to which the application relates; where further information on the application or activity can be obtained; and the manner in which and to whom representations in respect of the application may be made.

Since an advertisement has already been placed in the Rustenburg Herald a notice has not been placed in the Provincial Gazette as well.

### *I&AP Register*

In terms of Section 42 of Government Notice No. R. 326 of 7 April 2017 an applicant must ensure the opening and maintenance of a register which contains the names and addresses of all persons who, as a consequence of the public participation process, have submitted written comments or attended meetings with the applicant or EAP; all persons who, after completion of the public participation process have requested the applicant, in writing, for their names to be placed on the register; and all organs of state which have jurisdiction in respect of the activity to which the application relates.

Based on the above the following I&AP register was opened (Appendix 12):

<b>I&amp;AP</b>	<b>Capacity</b>	<b>Address</b>
The Office Head: Hartbeespoort Department of Water Affairs & Sanitation	State Department	theunissenc@dws.gov.za
The Municipal Manager: Kgetlengrivier Local Municipality	Organ of State, landowner & adjacent landowner	rrmavhungu@gmail.com / mavhungur@kgetlengrivier.gov.za
Councillor George Naledi (Ward 6), Kgetlengrivier Local Municipality	Ward representative	rrmavhungu@gmail.com / mavhungur@kgetlengrivier.gov.za
The Municipal Manager Bojanala Platinum District M		C/O Beyers Naudé & Fatima Bhayat Roads Rustenburg
Mrs Debbie van den Berg	PDI Wildliferescue NPC	Debbiewildlife5@gmail.com
Miss Michelle Liebenberg	Former member of the African Amphibian Conservation Group	Michellieb17@gmail.com
Mr Mbulelo Dala	Town & Regional Planner ESKOM	dalame@eskom.co.za

### **7.3 Summary of issues raised**

In terms of Subsection 1 of Section 43 of Government Notice No. R. 326 of 7 April 2017 a registered interested and affected party is entitled to comment, in writing, on all written submissions made to the competent authority by the applicant, and to bring to the attention of the competent authority any issues which that party believes may be of significance to the consideration of the application, provided that comments submitted within the relevant timeframes or any extension, and the interested and affected party discloses any direct business, financial, personal or other interest which that party may have in the approval or refusal of the application.

- Conservation concerns for birds and amphibians.
- The conservation of the dam and environment.
- The distribution of protected or vulnerable species of birds and amphibians.
- Nesting and breeding area for various birds
- Habitat for amphibians
- Habitat for various reptiles.

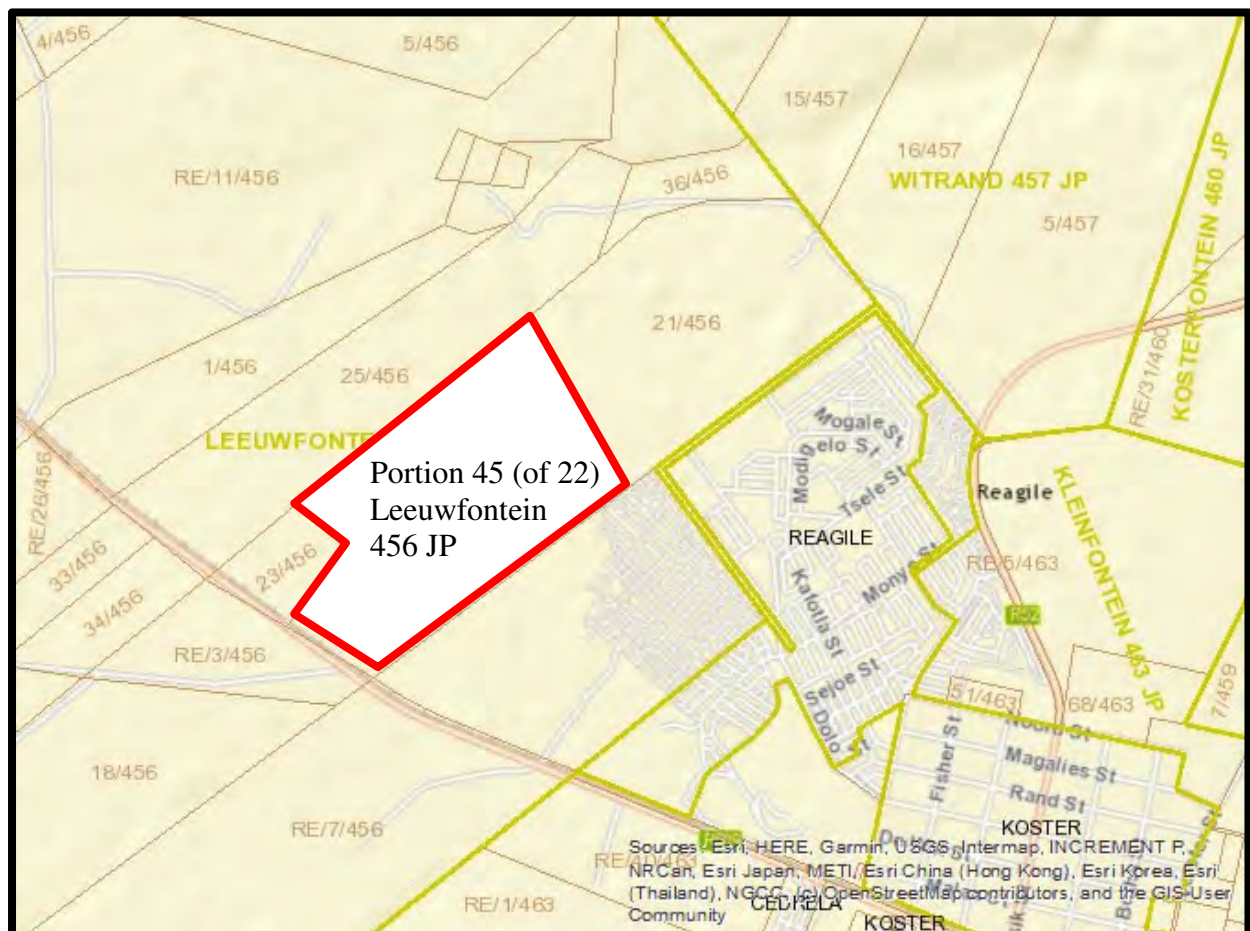
A copy of a draft version of this report will be distributed to the registered Interested and Affected Parties for comment.

#### 7.4 Environmental site attributes

The development site is situated on proposed Portion 45 (a portion of Portion 22) of the farm Leeuwfontein 456 JP, Kgetlengrivier Local Municipality, North West Province.

It is located on the north western outskirts of the town of Koster to the north of Road R509 to Swaruggens. The land falls under Ward 6 in the jurisdictional area of the Kgetlengrivier Local Municipality.

The subject site consists of land that has been improved with a dwelling house, outbuildings and sheds.



*Cadastral map of subject site and surrounding farms (Office of the Surveyor General)*



## *Physical*

### Climate

The area is characterised by strongly seasonal summer-rainfall, warm-temperate conditions, with very dry winters. Mean annual precipitation (MAP) is 654 mm, ranging between 570 mm and 730 mm, slightly lower in the western regions. The coefficient of variation of MAP is 28% in the west and 26-27% in the east, and varies only slightly from 25% to 29% across the unit. The incidence of frost is higher in the west (30-40 days) than in the east (10-35 days). (Mucina & Rutherford: 2006).



*View from subject site towards the north*

### Topography and drainage

The development site is situated at approximately 1565 m to 1238 m above mean sealevel on land that is slightly sloping towards the northwest (Google Earth 2020).

The subject site is located within Water Management Area 3: Crocodile (West) & Marico, Tertiary Drainage Region A22D. It is being dissected by two drainage lines draining in a north westerly direction.

The relevant 1:100 year floodlines have been determined and incorporated in the provisional layout plan (Appendix 4).





*View from the subject site towards the north east*



*View from the subject site towards the east*





*View from the subject site towards the south east*



*View from the subject site towards the south*





*View from the subject site towards the south*



*View from the subject site towards the south west*





*View from the subject site towards the west*



*View from the subject site towards the north west*

### Geology & soils

Quartzite ridges of the Witwatersrand Supergroup and the Pretoria Group as well as the Selons River Formation of the Rooiberg Group (last two are of the Transvaal Supergroup)' supporting soils of various quality (shallow Glenrosa and Mispah forms especially on rocky ridges, typical of Ba, Bc, Bb and Ib land types (Mucina & Rutherford: 2006).

It is not envisaged that the proposed development will affect the above referred to physical aspects of the proposed development site or its immediate receiving environment.

### *Biological*

According to Mucina & Rutherford (2006) the subject property falls within the Gm11 Rand Highveld Grassland Vegetation Unit, Mesic Highveld Grassland Bioregion, Grassland Biome.

This unit features highly variable landscapes with extensive sloping plains and a series of ridges slightly elevated over undulating surrounding plains. The vegetation is species-rich, wiry, sour grassland alternating with low, sour shrubland on rocky outcrops and steeper slopes. Most common grasses on the plains belong to the genera *Themeda*, *Eragrostis*, *Heteropogon* and *Elionurus*. High diversity of herbs, many of which belongs to Asteraceae, is also a typical feature. Rocky hills and ridges carry sparse (savannoid) woodlands with *Protea caffra* subsp. *Caffra*, *P. welwitschii*, *Acacia caffra* and *Celtis Africana*, accompanied by a rich suite of shrubs among which the genus *Rhus* (especially *R. magaliesmonata*) is most prominent (Mucina & Rutherford, 2006).

The following information on the ecological sensitivity and state of biodiversity on the subject site is being contained in the relevant BGIS LUDS Biodiversity Sensitivity Report (Appendix 9):

- Threatened ecosystems: 1
- Forest patches: 0
- Wetland units: 4
- Wetland clusters: 0
- River units: 0
- Formal protected areas: 0
- Informal protected areas: 0
- NPAES focus areas patches: 0
- Critical Biodiversity Area units (2): 4
- Ecological Support Area units: 0

Sightings of the blue crane (*Anthropoides paradiseus*) have also been recorded during the public participation process.

In view of the above referred to report information it can be concluded that the subject site may display moderate overall biodiversity levels and that the proposed development may have a significant negative impact on the subject

site or receiving environment. The exact significance and extent to which these areas may be affected will be considered during the prescribed environmental impact assessment process to follow the scoping process. Findings will be contained in the prescribed environmental impact assessment report. Mitigation measures may also form part of the prescribed environmental impact assessment report.

#### *Social and land use characteristics*

Land use in the vicinity predominantly consists of the following:

##### Residential

The town of Reagile and its extensions are located to the east of the subject property.

##### Municipal

The subject property is being bordered to the east by municipally owned land that also displays informal settlement patterns.

In view of the above considerations the area in question can no longer be described as a traditionally agricultural node but rather a mixed land use area

Since the receiving environment is already being characterised by mixed land uses, it is not envisaged that the development will significantly affect the social characteristics of the immediate environment.

#### *Economic*

The subject property is not at present being utilised for any specific economic gain.

The development will in all probability lead to employment opportunities especially during the construction phase, the strengthening of the local business sector during the construction and operational phases as well as increased municipal revenue during the operational phase.

#### *Cultural*

The extent to which the development will affect the cultural attributes of the surrounding environment will receive consideration during the subsequent environmental impact assessment (EIA) process as part of the assessment of impact significance. The need for any mitigating measures will also receive consideration during that process.

## **7.5 Impact identification**

The identification of potential impacts is based on the listing of so-called environmental aspects or issues. This is a term used for actions during the construction and operational stages of the project that may have an impact to some degree or another on one or more environmental components.

The prescribed public participation process led to the identification and listing of the following environmental issues:

- Conservation concerns for birds and amphibians.
- The conservation of the dam and environment.
- The distribution of protected or vulnerable species of birds and amphibians.
- Nesting and breeding area for various birds
- Habitat for amphibians
- Habitat for various reptiles.

These potential key environmental aspects have also been augmented with other potential key environmental aspects that have been identified by the independent consultant and applicant at the start of the scoping process that are based on previous experience and environmental best practice principles.

It is the purpose with this section to identify potential key environmental aspects and to translate it into issues and potential impacts that may be encountered as a result of the development.

These issues may be augmented or elaborated on during the prescribed environmental impact reporting process based on findings and recommendations contained in specialist reports or other relevant sources.

Environmental aspect Phase 1: Planning Phase 2: Construction Phase 3: Operational	Impact category	Impact description
<b>SOCIO-ECONOMIC COMPONENT</b>		
Employment of workers (Phases 1, 2 & 3)	Employment generation	The development will lead to the employment of construction workers during the construction phases.
Increased municipal revenue (Phase 3)	Economic growth	The development will lead to increased rates and taxes accruing to the local municipality.
General construction activities (Phases 1 & 2)	Increased safety risk	Construction activities such as open trenches will increase safety risks for local residents, motorists and passengers.
Establishment of construction camp and on-site accommodation of workers. (Phase 1)	Social disruption	Where sourcing of local labour is not possible, "outsiders" may need to be employed in order to address skills shortages. On-site accommodation may lead to social disturbances in the area and will also require additional service provisioning measures.
Construction activities (Phases 1 & 2)	Increased noise, dust levels, disruption of traffic.	Construction will disrupt local communities as a result of digging, dust and the presence of construction vehicles.
Construction activities (Phases 1 & 2)	Archaeological & heritage resources	The construction phase may lead to the destruction of valuable heritage resources.
<b>GEO-PHYSICAL COMPONENT (LAND, WATER &amp; ATMOSPHERE)</b>		
Movement of construction vehicles (Phases 1&2)	Dust generation  Sub-surface soil contamination	The movement of construction vehicles will generate dust. Leakage of oil and other mechanical fluids may lead to sub-surface soil contamination.
Construction activities & road	Surface soil	Poor maintenance of roads as well as



Environmental aspect Phase 1: Planning Phase 2: Construction Phase 3: Operational	Impact category	Impact description
maintenance (Phases 2 & 3)	conditions	construction activities disturbing surface soils and the natural ground cover may increase the possibility of erosion.
Service provisioning (sanitation) (Phase 3)	Sub-surface soil contamination	The use of indiscriminate sanitation systems may lead to subsoil and underground water contamination.
Soils stability (Phases 1, 2 & 3)	Geological composition	Soils movement may impact negatively on structures and services.
<b>BIOPHYSICAL COMPONENT (MICRO-ORGANISMS, PLANT &amp; ANIMAL LIFE)</b>		
Site preparation & operational structures (Phases 1, 2 & 3)	Disturbance of natural vegetation & animal life	<p>Disturbances of soils and vegetation cover will occur during construction and operation and may have a detrimental impact on ecologically sensitive areas.</p> <p>The proposed activity may also impact negatively on the following biological aspects:</p> <ul style="list-style-type: none"> <li>• Conservation concerns for birds and amphibians.</li> <li>• The conservation of the dam and environment.</li> <li>• The distribution of protected or vulnerable species of birds and amphibians.</li> <li>• Nesting and breeding area for various birds (sightings of the blue crane (<i>Anthropoides paradiseus</i>) have been recorded during the public participation process).</li> <li>• Habitat for amphibians</li> <li>• Habitat for various reptiles.</li> </ul>

## 7.6 Proposed impact assessment methodology

It is the purpose of the prescribed EIA process to *inter alia* conduct an assessment of each identified potentially significant impact including cumulative impacts, the nature of the impact, the extent and duration of the impact, the probability of the impact occurring, the degree to which the impact can be reversed, the degree to which the impact may cause irreplaceable loss of resources and the degree to which the impact can be mitigated.

The Integrated Environmental Management Information Series: Impact Significance (DEAT 2002d) state that predictions are based on simplified conceptual models of how natural processes function. Models range in complexity from those that are very intuitive to those based on explicit assumptions about environmental processes. Criteria that can be used to describe the nature of an impact include:

- Spatial extent;
- Duration of the impact;
- Intensity or severity of impact;

- Status of the impact (i.e either positive, negative or neutral);
- Reversibility (i.e. reversible or permanent);
- Degree of certainty; and
- Mitigatory potential.

A multitude of impact prediction models exist. For purposes of the study a systematic generic and judgemental criteria model (refer to Appendix 11) will be used. As is the case with other models, this specific model has implicit strengths and weaknesses. In the absence of standards set by law or scientific knowledge, the description of significance is largely judgemental, subjective and variable. This may be seen as an intrinsic weakness. However, generic criteria can be used systematically to identify, predict, evaluate and determine the significance of impacts resulting from project construction, operation and decommissioning. This may be seen as an intrinsic strength.

The impact prediction model that has been used for purposes of this study (Appendix 11) provides for the following assessment criteria:

#### *Spatial extent*

This criteria provides an indication of the spatial impact of the activity, *i.e.* local, regional, provincial, national or international.

#### *Significance & mitigation*

The significance rating provides guidance on the formulation of a final recommendation with regard to the approval or not of a activity as well as the need for mitigation in the case of approval. The extent to which a potential impact can be mitigated is further determined through a process of impact assessment.

#### *Probability*

This criteria provides an indication of the likelihood of the impact occurring.

#### *Duration & reversibility*

This criteria provides an indication of the projected duration of an activity, as well as the degree to which the impact can be reversed, if at all.

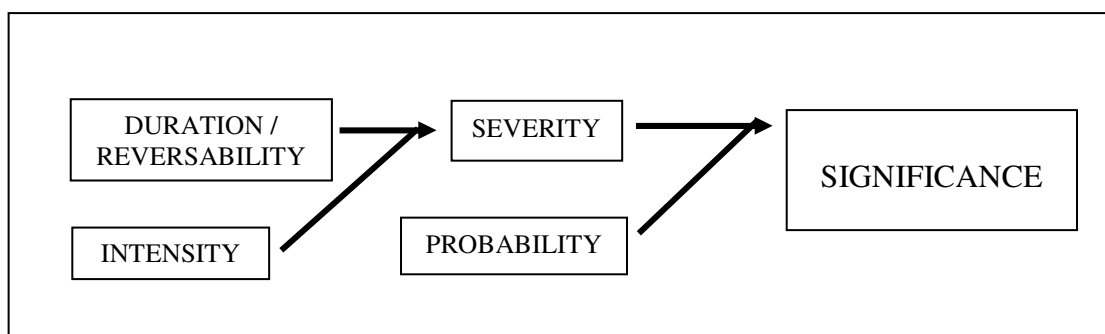
#### *Intensity*

This criteria reflects on the degree to which an activity may cause irreplaceable loss of resources.

#### *Severity*

This factor represents the product of duration / reversibility and intensity.

The diagram overleaf provides a schematic depiction of the interrelationship between the respective criteria in the determination of significance.



*The impact significance rating process*

Potential cumulative impacts do not represent a separate criteria in terms of this assessment model but are being assessed as a specific potential impact category in the section dealing with impact assessment.

## 7.7 Significance, advantages, disadvantages, mitigation & residual risk

This section involves a preliminary significance rating of potential impacts. This rating will be verified during the prescribed environmental impact assessment process. The table also provides an indication of advantages (potentially positive impacts) and disadvantages (potentially negative impacts), mitigation measures as well as residual risk (significance levels after mitigation) that the activity on the subject property may pose to the receiving environment.

### *Socio- economic impact*

#### Employment generation

The development will generate employment during the construction phase (builders, other contract workers etc.) as well as its operational phase (maintenance workers, domestic workers etc.). This is considered to represent a positive impact on the environment that need not be mitigated.

#### Impact evaluation:

Extent	Duration	Intensity	Severity	Probability	Significance	
					Unmitigated	Mitigated
Local	Permanent	Low	Medium	High	Medium positive	Medium positive

#### Economic growth (increased municipal revenue)

The development will lead to increased rates and taxes accruing to the local municipality. This is considered to represent a potentially positive contribution to the environment that does not require mitigating measures.

#### Impact evaluation:

Extent	Duration	Intensity	Severity	Probability	Significance	
					Unmitigated	Mitigated
Local	Permanent	Low	Medium	High	Medium positive	Medium positive

#### Increased safety risk

Construction activities will result in increased traffic in the area, particularly from heavy vehicles, as well as disruptions to traffic flow along affected roads.



This increase in traffic together with construction activities such as open trenches will lead to an increase in safety risks for local residents, motorists and passengers. Increased traffic during the operational phase will also represent an additional traffic load on existing access routes. This is considered to represent a potentially negative impact on the environment and mitigation measures are proposed.

Mitigation measures:

- Ensure that strict safety measures are employed around open trenches and excavations.
- Implement regulated traffic safety procedures.
- Minimise extent of roadside disruptions on adjoining roads where possible in order to allow for normal traffic flow.

Impact evaluation

<i>Extent</i>	<i>Duration</i>	<i>Intensity</i>	<i>Severity</i>	<i>Probability</i>	<i>Significance</i>	
					<i>Unmitigated</i>	<i>Mitigated</i>
Local	Medium term	Medium	Low	Probable	Medium negative	Low negative

#### Social disruption

Where sourcing of local labour is not possible, “outsiders” will need to be employed in order to provide necessary skills. These employees may be accommodated in a construction camp. Historically, such camps create social impacts by introducing new people to an area. Changes can be both positive and negative – positive in that people exchange ideas and backgrounds, and negative in terms of conflict that these differences may evoke.

The construction camp may also attract women who may use the opportunity to generate income. This may increase the potential for family disintegration as well increased incidences of sexually transmitted diseases.

On-site accommodation also requires specific services such as water, sanitation and housing.

Mitigation measures:

- Maximise local labour to allow employees to be closer to their homes and families, thereby limiting the need to accommodate employees.
- Wherever people from other areas are employed and accommodated on site, strict access control measures will be implemented with only authorised personnel allowed at the camping site.
- Chemical toilets will be placed on site for the duration of the construction period.

Impact evaluation:

<i>Extent</i>	<i>Duration</i>	<i>Intensity</i>	<i>Severity</i>	<i>Probability</i>	<i>Significance</i>	
					<i>Unmitigated</i>	<i>Mitigated</i>
Local	Short term	Medium	Low	Probable	Low negative	Low negative

#### Increased noise levels

It is being envisaged that noise levels may increase on the development site especially during the construction phase.

#### Mitigation measures:

- The applicant must inform adjacent residents of any unusually noisy activities that will be undertaken during the construction phase.
- Contractors shall comply with local by-laws with regard to working hours and should also restrict construction hours to:
  - 6h30 – 18h30 on weekdays;
  - 7h00 – 17 h 00 on Saturdays; and
  - No operations on Sundays and public holidays.
- Noise generating methods such as mechanical excavations and piling will be limited to a minimum during the construction phase;
- Construction vehicles must be kept in a good state of repair.

#### Impact evaluation:

<i>Extent</i>	<i>Duration</i>	<i>Intensity</i>	<i>Severity</i>	<i>Probability</i>	<i>Significance</i>	
					<i>Unmitigated</i>	<i>Mitigated</i>
Local	Short term	Medium	Low	H probable	Medium negative	Low negative

#### Archaeological & heritage resources

If unmitigated, the construction process may lead to the destruction of valuable heritage resources.

#### Mitigation measures:

- In the event of uncovering any material of archaeological or cultural significance, all further construction work must be stopped until an Archaeologist had investigated the material and has given approval for the work to be continued.
- No archaeological material may be removed from the site without prior approval from the Archaeologist.

#### Impact evaluation:

<i>Extent</i>	<i>Duration</i>	<i>Intensity</i>	<i>Severity</i>	<i>Probability</i>	<i>Significance</i>	
					<i>Unmitigated</i>	<i>Mitigated</i>
Local	Short term	Medium	Low	H probable	Medium negative	Low negative

#### *Geophysical impact (land, water & atmosphere)*

#### Dust generation

It is being envisaged that dust levels may increase on the subject properties during the construction phase.

#### Mitigation measures:

- Dust control measures such as watering of work areas, must be implemented to reduce dust arising from construction activities.

#### Impact evaluation:

<i>Extent</i>	<i>Duration</i>	<i>Intensity</i>	<i>Severity</i>	<i>Probability</i>	<i>Significance</i>	
					<i>Unmitigated</i>	<i>Mitigated</i>
Local	Short term	Medium	Low	Probable	Low negative	Low negative

#### Disturbance of surface soil

Poor maintenance of roads as well as construction activities disturbing surface soils and the vegetation cover may increase the possibility of erosion.

Mitigation measures:

- No surface soil is to be permanently removed.
- Surface soil will only be removed as a temporary measure in order to allow for the building of foundations and service roads.
- The surface soil thus removed will be kept in small piles under conditions that will not cause erosion.
- None of these piles of surface soil will remain for longer than two months before it will be returned to the original position.

Impact evaluation:

<i>Extent</i>	<i>Duration</i>	<i>Intensity</i>	<i>Severity</i>	<i>Probability</i>	<i>Significance</i>	
					<i>Unmitigated</i>	<i>Mitigated</i>
Local	Short term	Medium	Low	Probable	Low negative	Low negative

#### Sub-soil and underground water contamination (sanitation systems)

The use of indiscriminate sanitation systems may in principle lead to subsoil and underground water contamination

Mitigation measures:

- An engineering services investigation report has been commissioned and will form part of the prescribed EIA Report.
- In order to contribute towards environmental sustainability it is paramount that a water borne sewage connection that does not interfere with the underground water table will be installed.
- The development will only commence once a services agreement that has been informed by an engineering services report has been formalised in terms of the set requirements.

Impact evaluation:

<i>Extent</i>	<i>Duration</i>	<i>Intensity</i>	<i>Severity</i>	<i>Probability</i>	<i>Significance</i>	
					<i>Unmitigated</i>	<i>Mitigated</i>
Local	Short term	Medium	Low	Probable	Low negative	Low negative

#### Soils stability / geological suitability

The geological composites of the development site may in principle be unsuitable for the construction of services and / or top structures. This may pose an adverse environmental impact on the development.

General geological information for the area in question as documented in Mucina & Rutherford (2006) does not reveal geological anomalies such as dolomite that could have an adverse negative impact.

The above referred to observations will be augmented in the prescribed EIA Report by an engineering geological investigation report that was commissioned as part of the planning process.

Mitigation measures:

- All foundation strengthening measures that may be proposed in an engineering geological investigation report to be compiled as part of the township establishment process must be adhered to.
- Requirements for surface drainage must be adhered to.

Impact evaluation:

Extent	Duration	Intensity	Severity	Probability	Significance	
					Unmitigated	Mitigated
Local	Medium term	Medium	Low	Probable	Medium negative	Low negative

*Biophysical impact (micro-organisms, plant & animal life)*

The activity may in principle impact negatively on vegetation and animal life whilst the following specific biological concerns have been raised during the public participation process:

- Conservation concerns for birds and amphibians.
- The conservation of the dam and environment.
- The distribution of protected or vulnerable species of birds and amphibians.
- Nesting and breeding area for various birds (sightings of the blue crane (*Anthropoides paradiseus*) have been recorded during the public participation process).
- Habitat for amphibians and various reptiles.

In order to ensure that the potential impact of the proposed activity on the ecological attributes of the subject site is being adequately captured and reported on, an ecological fauna and flora habitat survey report will be commissioned for purposes of this assessment and included in the EIA report.

Certain mitigation measures in this regard may already be proposed and may be supplemented based on the findings of the relevant ecological fauna and flora habitat survey report.

Mitigation measures:

- Should wildlife be encountered during the construction phase, these should be relocated to natural grassland areas in the vicinity.
- All litter from the site needs to be removed and measures implemented to prevent littering and dumping within the sensitive areas on site following development.
- Only indigenous plant species, preferably species that are indigenous to the natural vegetation of the area, should be used for landscaping in communal areas.
- Areas within the demarcated floodlines must be designated as “no-go” areas both during construction and operation.
- Water use licences need to be obtained for water crossings.

Impact evaluation:

Extent	Duration	Intensity	Severity	Probability	Significance	
					Unmitigated	Mitigated
Local	Long term	Medium	Medium	H Probable	Medium negative	Low negative

## 7.8 Site selection considerations and motivation

No alternative sites were considered for purposes of this study to date.

The following motivation is being provided for having selected the preferred site and for not having considered other site alternatives:

- Ownership has already been secured.
- The project intends to address an articulate need for housing and tenure security next to an existing residential development.
- No objections to the development were received during the prescribed public participation process.
- No potentially adverse negative impacts were identified during an initial assessment of the significance, probability and duration of potential impacts.

## 8. SITE MAP

The map below provides a satellite image of the area in question with the activity site depicted in red.



*Satellite image (Office of the Surveyor General) (not to scale)*

An extract of the relevant 1:50 000 topographical map depicting the activity site has been included as Appendix 3 to this report.

A provisional layout plan has been included as Appendix 4 to this report.

## **9. PROPOSED DURATION OF ENVIRONMENTAL AUTHORISATION**

If granted, the environmental authorisation is required for a period of at least five years.

It is envisaged that the construction period will be concluded and post construction monitoring requirements will be finalised approximately five years after commencement of the activity. At present a commencement date has not been finalised.

## **10. INFORMATION REQUIREMENTS**

No specific information requests were received from the competent authority or stakeholders to date.

Information requirements will however be addressed in subsequent reports if and when received.

## **11. PLAN OF STUDY FOR ENVIRONMENTAL IMPACT ASSESSMENT**

### **11.1 Introduction**

In terms of Appendix 2 of Government Notice No. R. 326 of 7 April 2017 a scoping report must *inter alia* contain a plan of study that sets out the proposed approach to the environmental impact assessment of the application. This plan of study must include the following:

- A description of the alternatives to be considered and assessed, including the option of not proceeding with the activity;
- A description of the aspects to be assessed as part of the environmental impact assessment process;
- Aspects to be assessed by specialists;
- A description of the proposed method of assessing the environmental impacts including a description of the proposed method of assessing alternatives including alternatives to be assessed by specialists;
- A description of the proposed method of assessing significance;
- An indication of the stages at which the competent authority will be consulted;
- Particulars of the public participation process that will be conducted during the environmental impact assessment process; and
- A description of the tasks that will be undertaken as part of the environmental impact assessment process.

## 11.2 Description of the alternatives to be considered and assessed

### *Introduction*

According to DEAT 2004d, “The role of alternatives is to find the most effective way of meeting the need and purpose of the proposal, either through enhancing the environmental benefits of the activity, and or through avoiding potentially significant negative impacts”.

The above description emphasises the importance of impact significance in the identification of alternatives in that it should *inter alia* be aimed at avoiding potentially significant negative impacts.

DEAT 2004d identifies the following types or categories of alternatives:

- Activity alternatives
- Location alternatives
- Process alternatives
- Demand alternatives
- Scheduling alternatives
- Input alternatives
- Routing alternatives
- Site layout alternatives
- Scale alternatives
- Design alternatives
- “No go” alternatives

For purposes of contextualisation and elucidation a brief description of each alternative in relation to its potential relevance and applicability is being provided.

### Activity alternatives

*“These are sometimes referred to as project alternatives, although the term activity can be used in a broad sense to embrace policies, plans and programmes as well as projects. Consideration of such alternatives requires a change in the nature of the activity. An example is incineration of waste rather than disposal in a landfill, or the provision of public transport rather than increasing the capacity of roads. In view of the substantive differences in the nature of the activities, it is likely that this category is most appropriate at a strategic decision-making level, such as in a Strategic Environmental Assessment” (DEAT:2004d).*

The activity does not take place at a strategic decision-making level. Activity alternatives therefore do not apply to this activity.

### Location alternatives

*“Location alternatives could be considered for the entire proposal or for a component of the proposal, for example the location of a processing plant. The latter is sometimes considered under site layout alternatives. A distinction should also be drawn between alternative locations that are geographically quite separate, and alternative locations that are in close proximity. In the case*

*of the latter, alternative locations in the same geographic area are often referred to as alternative sites. This tends to be the more common application” (DEAT: 2004d).*

During the pre-planning phase various location alternatives were considered. All of these alternatives were discarded by the applicant in favour of the development due to the following considerations:

- Ownership has already been secured;
- Services can be secured (to be informed by engineering services availability report);
- The project intends to address an articulate need for housing and tenure security next to an existing residential development.
- No geological anomalies have been recorded (to be informed by engineering geological investigation report);
- No potentially adverse negative impacts were identified during an initial assessment of the significance, probability and duration of potential impacts.

#### Process alternatives

*“This type of alternative is particularly relevant to industrial projects. Due to the technical nature of the alternatives, the proponent is expected to play a major role in the identification of alternatives. For this reason transparency in identification and evaluation of alternatives is crucial” (DEAT:2004d).*

Due to the non-industrial nature of the activity, process alternatives do not apply to the development.

#### Demand alternatives

*“Demand alternatives arise when a demand for a certain product or service can be met by some alternative means. Thus, for example, the demand for electricity could be met by supplying more energy or through using energy more efficiently by managing demand” (DEAT:2004d).*

Energy efficient alternatives may pose feasible and reasonable alternatives that will be considered during the subsequent prescribed environmental impact assessment process.

#### Scheduling alternatives

*“These are sometimes known as sequencing or phasing alternatives. In this case an activity may comprise a number of components, which can be scheduled in a different order or at different times and as such produce different impacts. For example, activities that produce noise could be scheduled during the day to minimize impacts, and activities that may impact on birds could be scheduled to avoid the migratory season. Such alternatives could be incorporated into the project proposal and so be part of the project description, and hence need not necessarily be evaluated as separate alternatives” (DEAT:2004d).*



Scheduling alternatives may pose feasible and reasonable alternatives that will be considered during the subsequent prescribed environmental impact assessment process.

#### Input alternatives

*“By their nature, input alternatives are most applicable to industrial applications that may use different raw materials or energy sources in their processes. For example, an industry may consider using either high sulphur coal or natural gas as a source of fuel. Again, such alternatives could be incorporated into the project proposal and so be part of the project description, and need not necessarily be evaluated as separate alternatives” (DEAT:2004d).*

Due to the non-industrial nature of the activity, input alternatives do not apply.

#### Routing alternatives

*“Consideration of alternative routes generally applies to linear developments such as power lines, transport and pipeline routes. In route investigations, various corridors are investigated and compared in terms of their impacts” (DEAT:2004d).*

The activity does not represent a linear development and routing alternatives were thus not considered.

#### Site layout alternatives

*“Site layout alternatives permit consideration of different spatial configurations of an activity on a particular site. This may include particular components of a proposed development or may include the entire activity. For example, siting of a noisy plant away from residences, and secondly, siting of a particular structure either prominently to attract attention or screened from view to minimise aesthetic impacts” (DEAT:2004d).*

The issues that have been identified as potential impacts may necessitate the consideration of site layout alternatives during the prescribed environmental impact assessment phase subject to the outcome, findings and recommendations of the respective specialist studies.

#### Scale alternatives

*“In some cases, activities that can be broken down into smaller units can be undertaken on different scales. For example, in a housing development there could be the option of 100, 150 or 200 housing units. Each of these scale alternatives may have different impacts” (DEAT:2004d).*

The scale of the project proposal has been determined in accordance with perceived needs. Scale alternatives as such were therefore not pursued. It needs to be mentioned that a phased approach to be informed by budgetary considerations may be followed. This approach may influence the eventual scale of the development.

#### Design alternatives

*“Consideration of various designs for aesthetic purposes or different construction materials in an attempt to optimise local benefits and sustainability*

would constitute design alternatives. Appropriate applications of design alternatives are communication towers. In such cases, all designs are assumed to have different impacts. Generally, the design alternatives could be incorporated into the project proposal and so be part of the project description, and need not be evaluated as separate alternatives” (DEAT: 2004d).

Design alternatives that will enhance the aesthetic character of the area will be embedded into the development’s building designs. No specific design alternatives are thus proposed.

#### “No-go” alternatives

*“The “no-go” alternative ... assumes that the activity does not go ahead, implying a continuation of the current situation or the status quo. In a situation where the negative environmental impacts have high significance, the “no-go” alternative takes on particular importance” (DEAT:2004d).*

The “no-go” alternative normally receives consideration when an activity poses adverse negative impacts to the environment that cannot be successfully mitigated. A preliminary significance assessment did not reveal any potentially adverse negative impacts, either in unmitigated or mitigated form.

#### *Alternatives to be considered*

Based on the preceding discussion the following possible alternatives have been identified for purposes of detailed comparative assessment:

- Demand alternatives (e.g. energy efficient alternatives);
- Scheduling alternatives (e.g. construction during non-raining months);
- Site layout alternatives if so necessitated by specialist studies; and the
- “No Go” alternative.

### **11.3 Aspects to be assessed as part of EIA**

<b>Environmental aspect</b> Phase 1: Planning Phase 2: Construction Phase 3: Operational	<b>Impact category</b>	<b>Impact description</b>
<i>SOCIO-ECONOMIC COMPONENT</i>		
Employment of workers (Phases 1, 2 & 3)	Employment generation	The development will lead to the employment of construction workers during the construction phases.
Increased municipal revenue (Phase 3)	Economic growth	The development will lead to increased rates and taxes accruing to the local municipality.
General construction activities (Phases 1 & 2)	Increased safety risk	Construction activities such as open trenches will increase safety risks for local residents, motorists and passengers.
Establishment of construction camp and on-site accommodation of workers. (Phase 1)	Social disruption	Where sourcing of local labour is not possible, “outsiders” may need to be employed in order to address skills shortages. On-site accommodation may lead to social disturbances in the area and will also require additional service provisioning measures.
Construction activities	Increased noise,	Construction will disrupt local communities

Environmental aspect Phase 1: Planning Phase 2: Construction Phase 3: Operational	Impact category	Impact description
(Phases 1 & 2)	dust levels, disruption of traffic.	as a result of digging, dust and the presence of construction vehicles.
Construction activities (Phases 1 & 2)	Archaeological & heritage resources	The construction phase may lead to the destruction of valuable heritage resources.
<b>GEO-PHYSICAL COMPONENT (LAND, WATER &amp; ATMOSPHERE)</b>		
Movement of construction vehicles (Phases 1&2)	Dust generation  Sub-surface soil contamination	The movement of construction vehicles will generate dust. Leakage of oil and other mechanical fluids may lead to sub-surface soil contamination.
Construction activities & road maintenance (Phases 2 & 3)	Surface soil conditions	Poor maintenance of roads as well as construction activities disturbing surface soils and the natural ground cover may increase the possibility of erosion.
Service provisioning (sanitation) (Phase 3)	Sub-surface soil contamination	The use of indiscriminate sanitation systems may lead to subsoil and underground water contamination.
Soils stability (Phases 1, 2 & 3)	Geological composition	Soils movement may impact negatively on structures and services.
<b>BIOPHYSICAL COMPONENT(MICRO-ORGANISMS, PLANT &amp; ANIMAL LIFE)</b>		
Site preparation & operational structures (Phases 1, 2 & 3)	Disturbance of natural vegetation & animal life	Disturbances of soils and vegetation cover will occur during construction and operation and may have a detrimental impact on ecologically sensitive areas.  The proposed activity may also impact negatively on the following biological aspects: <ul style="list-style-type: none"> <li>• Conservation concerns for birds and amphibians.</li> <li>• The conservation of the dam and environment.</li> <li>• The distribution of protected or vulnerable species of birds and amphibians.</li> <li>• Nesting and breeding area for various birds (sightings of the blue crane (<i>Anthropoides paradiseus</i>) have been recorded during the public participation process).</li> <li>• Habitat for amphibians</li> <li>• Habitat for various reptiles.</li> </ul>

## 11.4 Aspects to be assessed by specialists

### *Geological suitability*

The assessment of the geological suitability of the development will be informed by a Phase 1 Engineering Geological Investigation comprising of the following *as per* draft SANS634:2012 (Geotechnical Specification for Housing Developments) and the GFSH-2 (Generic Specification for Housing Developments):

- Test pit excavation, soil profiling and sampling of key horizons for relevant laboratory analyses;
- Evaluation of excavatability of site soils;
- Assessment of geological, hydrological and geomorphological constraints potentially influencing the development;
- Demarcation of site into zones with similar anticipated geological, hydrological and geomorphological constraints based on results of field work phase;
- potentially influencing the development;
- Addressing potential geological concerns and formulating appropriate foundation recommendations.

#### *Services provisioning*

The assessment of this aspect of the activity will be informed by an engineering services availability report that will focus on the proposed demand and availability of the following engineering services:

- Bulk water;
- Sewer;
- Storm water;
- Roads; and
- Electrical engineering services.

#### *Archaeological impact*

The assessment of this aspect of the activity will be informed by a heritage impact assessment. The terms of reference for this assessment will be to:

- Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the portion of land that will be impacted upon by the development;
- Assess the significance of the cultural resources in terms of their archaeological,
- historical, scientific, social, religious, aesthetic and tourism value;
- Describe the possible impact of the development on these cultural remains, according to a standard set of conventions;
- Propose suitable mitigation measures to minimize possible negative impacts on the cultural resources; and
- Review applicable legislative requirements.

#### *Ecological impact*

The assessment of this aspect will be informed by an ecological habitat survey of flora and fauna that will focus on the possibility that fauna or flora of conservation concern, which include threatened species, known to occur in North West Province are likely to occur within the study area or not.

The objectives of the habitat study will be to provide:

- A detailed fauna and flora habitat survey;
- A detailed habitat survey of possible threatened or localised plant species, vertebrates and invertebrates;
- Literature surveys that are integrated with the findings of the habitat survey;
- An evaluation of the sensitivity of habitats that in particular relate to current status of threatened species and conspicuous key biodiversity aspects; and
- Identification of potential ecological impacts on fauna and flora that could occur as a result of the development.

The scope of the study will include:

- A survey consisting of two visits to investigate key elements of habitats on the site, relevant to the conservation of fauna and flora;
- Recording of any sightings and signs of existing fauna and flora;
- Recording of possible significant biological interactions of importance to conserve habitats of species;
- The selective and careful collecting of voucher specimens of invertebrates where deemed necessary; and
- Literature studies and integration of existing knowledge with the findings of the surveys in the field.

## **11.5 Proposed aspect and alternative assessment methodology**

It is the purpose of the prescribed EIA process to *inter alia* allocate a certain level of significance to potential impacts that have been identified, to determine the possibility and need for mitigation and to propose appropriate mitigating measures where applicable.

The Integrated Environmental Management Information Series: Impact Significance (DEAT 2002d) state that predictions are based on simplified conceptual models of how natural processes function. Models range in complexity from those that are very intuitive to those based on explicit assumptions about environmental processes. Criteria that can be used to describe the nature of an impact include:

- Spatial extent;
- Duration of the impact;
- Intensity or severity of impact;
- Status of the impact (i.e. either positive, negative or neutral);
- Reversibility (i.e. reversible or permanent);
- Degree of certainty; and
- Mitigatory potential.

A multitude of impact prediction models exist. For purposes of the study a systematic generic and judgemental criteria model (refer to Appendix 10) will be used. As is the case with other models, this specific model has implicit strengths and weaknesses. In the absence of standards set by law or

scientific knowledge, the description of significance is largely judgemental, subjective and variable. This may be seen as an intrinsic weakness. However, generic criteria can be used systematically to identify, predict, evaluate and determine the significance of impacts resulting from project construction, operation and decommissioning. This may be seen as an intrinsic strength.

Alternatives will be assessed by comparing the respective ratings in a numerical fashion and calculating percentages.

#### **11.6 Stages at which the competent authority will be consulted**

Consultation with the competent authority will take place throughout the process if and when the need arises.

#### **11.7 Particulars of public participation process**

Chapter 6 of Government Notice No. R. 326 of 7 April 2017 provides for a public participation process.

It is further stipulated that the person conducting a public participation process must take into account any guidelines applicable to public participation and must give notice to all potential interested and affected parties of the application which is subjected to public participation by:

- Fixing a notice board at a place conspicuous to the public at the boundary or on the fence of the site where the activity to which the application relates is or is to be undertaken; and any alternative site mentioned in the application;
- Giving written notice to:
  - The occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
  - The owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
  - The municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represents the community in the area;
  - The municipality which has jurisdiction in the area; and
  - Any organ of state having jurisdiction in respect of any aspect of the activity;
  - Any other party as required by the competent authority;
- Placing an advertisement in one local newspaper; **or** any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations; and
- Placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or local municipality in which it is or will be undertaken: Provided that this

- paragraph need not be complied with if an advertisement has been placed in an official *Gazette*;
- Using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desiring of but unable to participate in the process due to illiteracy, disability or any other disadvantage.

It should be noted that this public participation process is not intended to present a replication of the public participation process that was followed during the scoping phase. It should rather be seen as a continuation and enhancement of the process where activities will only be repeated if so dictated by process.

## **11.8 Description of tasks for EIA process**

- Continuous liaison with competent authority;
- Facilitation of public participation process;
- Facilitation of site inspection;
- Co-ordination of specialist studies;
- Compilation of EIA report:
  - Consideration of need & desirability;
  - Comparative assessment of identified alternatives;
  - Integration of specialist input;
  - Description of environmental issues, potential significance and mitigation;
  - Assessment of potentially significant impacts;
  - Description of assumptions, uncertainties and gaps in knowledge;
  - Formulation of opinion as to whether the activity should or should not be authorised;
  - Compilation of environmental impact statement;
  - Compilation of draft environmental management plan;
- Submission of EIA report to competent authority.

## **12 LEVEL OF AGREEMENT WITH INTERESTED AND AFFECTED PARTIES**

It is herewith affirmed by the relevant Environmental Assessment Practitioner that no comments regarding possible inclusions in a plan of study for scoping has to date been received from interested and affected parties despite due written notifications having been issued.



C P Linde (M.Env.Dev: UKZN; EAPASA Registered)  
Member: Envirovision Consulting CC

### 13. BIBLIOGRAPHY

DEAT. 1998. The Guideline Document EIA Regulations. Department of Environmental Affairs and Tourism (DEAT), Pretoria.

DEAT. 2002. Screening, Information Series 1, Department of Environmental Affairs and Tourism (DEAT), Pretoria.

DEAT. 2002a. Scoping, Integrated Environmental Management, Information Series 2, Department of Environmental Affairs and Tourism (DEAT), Pretoria.

DEAT. 2002b. Stakeholder Engagement, Integrated Environmental Management, Information Series 3. Department of Environmental Affairs and Tourism (DEAT), Pretoria.

DEAT. 2002c. Specialist Studies, Information Series 4. Department of Environmental Affairs and Tourism (DEAT), Pretoria.

DEAT. 2002d. Impact Significance, Integrated Environmental Management, Information Series 5. Department of Environmental Affairs and Tourism (DEAT), Pretoria.

DEAT. 2002e. Ecological Risk Assessment, Integrated Environmental Management, Information Series 6. Department of Environmental Affairs and Tourism (DEAT), Pretoria.

DEAT. 2004a. Overview of Integrated Environmental Management, Information Series 0, Department of Environmental Affairs and Tourism (DEAT), Pretoria.

DEAT. 2004b. Cumulative Effects Assessment, Integrated Environmental Management, Information Series 7. Department of Environmental Affairs and Tourism (DEAT), Pretoria.



DEAT. 2004c. Cost Benefit Analysis, Integrated Environmental Management, Information Series 8. Department of Environmental Affairs and Tourism (DEAT), Pretoria.

DEAT. 2004d. Criteria for determining alternatives in EIA, Integrated Environmental Management, Information Series 11. Department of Environmental Affairs and Tourism (DEAT), Pretoria.

DEAT. 2004e. Environmental Management Plans, Integrated Environmental Management, Information Series 12. Department of Environmental Affairs and Tourism (DEAT), Pretoria.

DEAT. 2004f. Review in Environmental Impact Assessment, Integrated Environmental Management, Information Series 13, Department of Environmental Affairs and Tourism (DEAT), Pretoria.

DEAT. 2004g. Environmental Impact Reporting, Integrated Environmental Management, Information Series 15. Department of Environmental Affairs and Tourism (DEAT), Pretoria.

KLRM. 2011. Housing Sector Plan. February 2011. Kgetlenrivier Local Municipality (KRLM), Koster.

MUCINA, L. & RUTHERFORD, M.C. (eds.) 2006. The vegetation of South Africa, Lesotho & Swaziland. *Strelitzia* 19. South African National Biodiversity Institute. Pretoria.

## **APPENDIX 1:      TERTIARY QUALIFICATIONS OF EAP**



POTCHEFSTROOMSE UNIVERSITEIT  
VIR CHRISTELIKE HOËR ONDERWYS

## BACCALAUREUSGRAAD

kragtens die bevoegdheid aan die Universiteit verleer  
word hiermee aan

\*\* CAREL PETRUS LINDE \*\*

die graad

## Baccalaureus Artium

toegeken

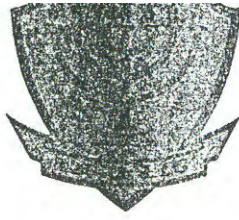
nadat aan die vereistes vir die graad voldoen is

POTCHEFSTROOM 19 Maart 1990

Vise-kanselier

Registrateur

Geseëlde as 'n ware afskrif van die oorspronklike. Geteken Certified as a true and correct copy of the original. Signed	
te Pta	hierdie 26 dag van Maart 1990
at	this day of
Kommissaris van Ede vir die Republiek van Suid-Afrika Commissioner of Oaths for the Republic of South Africa	
Distrik van Pretoria District of Pretoria	
Ex Officio: Rang	SAB
Ex Officio: Rank	



POTCHEFSTROOMSE UNIVERSITEIT  
VIR CHRISTELIKE HOËR ONDERWYS

## HONNEURSGRAAD

Kragtens die bevoegdheid aan die Universiteit verleen  
word hiermee aan

**\*\* CAREL PETRUS LINDE \*\***

die graad

## Honneurs Baccalaureus Artium

toegeken

nadat aan die vereistes vir die graad voldoen is

POTCHEFSTROOM 22 April 1991

*[Signature]*  
Vise-kanselier

Gesertifiseer as 'n ware afskrif van die oorspronklike. Geteken  
Certified as a true and correct copy of the original. Signed

at *Pta* hierdie *26* dag van *Maart* 19*91*  
on this day of

*[Signature]*  
Kommissaris van Ede vir die Republiek van Suid-Afrika  
Commissioner of Oaths for the Republic of South Africa  
Distrik van Pretoria  
District of Pretoria

Ex Officio: Rang *SAB*  
Ex Officio: Rank

*[Signature]*  
Registrateur



# UNIVERSITY OF KWAZULU-NATAL

The Universities of Durban-Westville and Natal merged  
to become the University of KwaZulu-Natal on 1 January 2004

This is to certify that

**Carel Petrus Linde**

was admitted this day  
at a congregation of the University  
to the degree of

**Master of Environment and Development**

having satisfied the conditions prescribed for the degree.



M W Makgoba  
Vice-Chancellor

E Mueney  
Registrar

J A Cooke  
Dean

9 October 2006

## **APPENDIX 2: PROFESSIONAL REGISTRATION OF EAP**





The Interim Certification Board  
for  
Environmental Assessment Practitioners  
of  
South Africa

Carel Petrus Linde

was certified as an

**ENVIRONMENTAL ASSESSMENT  
PRACTITIONER**

on this 8th day of August 2012

Chairperson

Secretary

EAP REGISTER - as per Section 24H Registration Authority Regulations  
28-Aug-18

SHEET 1 - Registered EAPs

30

Surname	Name	Race	1	Gender	1	Sector	1	Experience (years)	Town	Province
Behrens	Lucille	W	1	F	1	C	1	12	Uitenhage	Eastern Cape
Brownlie	Susie	W	1	F	1	C	1		Cape Town	Western Cape
Davids	Rashieda	C	1	F	1	A/C	1	11	Pietermaritzburg	Kwazulu-Natal
Fredericks	Malcolm	C	1	M	1	O	1	16	George	Western Cape
Gabriel	Alvan	C	1	M	1	O	1	11	Cape Town	Western Cape
Geeringh	John	W	1	M	1	Para	1	18	Johannesburg	Gauteng
Gerber	Gerhard	W	1	M	1	O	1	15	Cape Town	Western Cape
Hardcastle	Paul	W	1	M	1	O	1		Cape Town	Western Cape
James	Barry	W	1	M	1	C/O	1	18	Howick	Kwazulu-Natal
King	Vicky	C	1	F	1	C	1	26	Durban	Kwazulu-Natal
Lane	Sue	W	1	F	1	C	1		Cape Town	Western Cape
Lawson	Brett	W	1	M	1	C	1		Cape Town	Western Cape
Liber	Briony	W	1	F	1	C	1			Gauteng
Linde	Carel	W	1	M	1	C	1	12	Pretoria	Gauteng
Mbanjwa	Sibonelo	B	1	M	1	O	1		Pretoria	Gauteng
Moses	Malcolm	1	1	M	1	O	1		Durban	Kwazulu-Natal
Musetsho	Khangwelo Desmond	B	1	M	1	C	1		Potokwane	Limpopo



## Cappie Linde

---

**From:** Carmen du Toit <carmen.dutoit@eapasa.org>  
**Sent:** 07 November 2016 07:51 PM  
**To:** carmen.dutoit@eapasa.co.za  
**Cc:** 'Karen Shippey'  
**Subject:** Panel of Assessors for EAPASA  
**Attachments:** EAPASA Applicant Guideline Manual 260916.pdf

Dear Candidate

Congratulations. If you are receiving this email, you have been selected to form part of our 'Panel of Assessors' for EAPASA.

As noted in the previous email to you, EAPASA submitted an application to DEA requesting to be appointed as the Registration Authority in response to the S24H Regulations. We do not know the outcome yet.

The training on the principles and methodology that we will be expecting you to use as an assessor (Recognition of Prior Learning" principles), should occur early next year. It will probably only be for one day, and may be undertaken in-house due to financial constraints. We will ensure that you receive the invitation for the RPL training session 5-6 weeks in advance.

Just a reminder again:

You will need to formally apply to become a Registered Environmental Assessment Practitioner when EAPASA is appointed by the Minister as the Registration Authority. However, for some of you it will be a mere formality and nothing more than some minor tweaking. For others, who will receive feedback from us, you will need to do a little / or much more than that. However, the online application has been revised and is hopefully less ambiguous. Besides a number of technical changes to the online system, the core competencies are clearer and repetition has been removed. We have also tried to be more specific about what is expected in your submission. I have attached the latest version of the Applicant Guideline Manual for your perusal in the meantime.

To make it easier for you, we have asked the developers of the online application system to "clone" your application for the new system so that you will not need to redo everything.

Kind regards

**Carmen du Toit**

Registrar

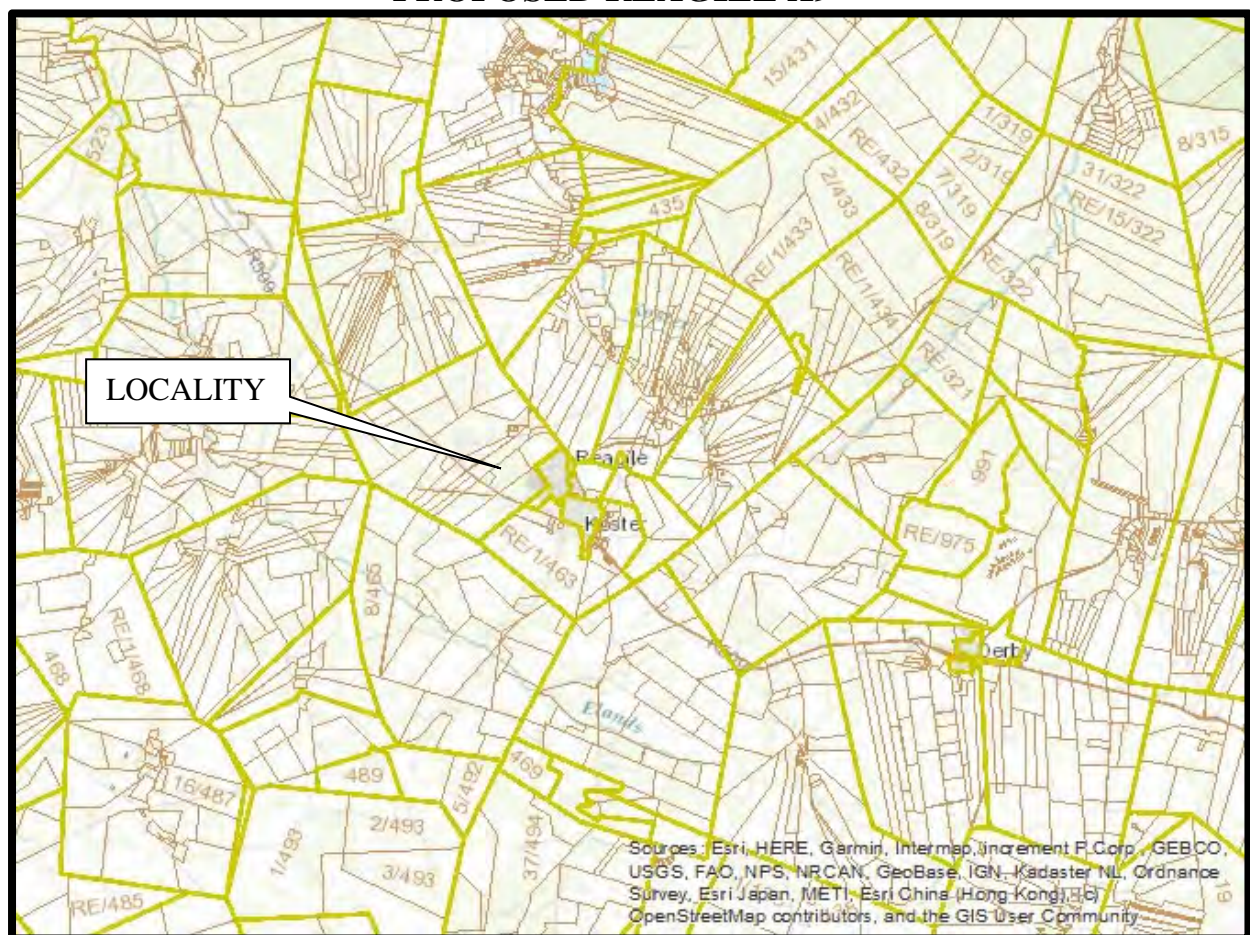
Email [registrar@eapasa.org](mailto:registrar@eapasa.org)  
Postal EAPASA, PO Box 945, Cape Town 8000  
Web [www.eapasa.org](http://www.eapasa.org)

**Environmental Assessment  
Practitioners Association  
of South Africa**  
*Advancing environmental assessment  
practice in South Africa*



## **APPENDIX 3: TOPOGRAPHIC MAP OF AREA**

**LOCALITY PLAN (TOPOMAP NOT TO SCALE):  
PROPOSED REAGILE X9**



## **APPENDIX 4: SITE PLAN**





**APPENDIX 5: NOTIFICATION OF MUNICIPALITY/LANDOWNER/ADJACENT  
LANDOWNER/WARD COUNCILLOR/OCCUPANTS**





**ENVIROVISION CONSULTING CC**  
ENVIRONMENTAL SPECIALISTS

29 May 2020

The Municipal Manager  
Kgetlengrivier Local Municipality  
Attention: Mr Rueben Mavhungu  
E-mail address: [rmavhungu@gmail.com](mailto:rmavhungu@gmail.com) / [mavhungu@kgetlengrivier.gov.za](mailto:mavhungu@kgetlengrivier.gov.za)

*ELECTRONIC TRANSMISSION*

Dear Mr Mavhungu

**WRITTEN NOTICE TO APPLY FOR ENVIRONMENTAL AUTHORISATION FOR TOWNSHIP ESTABLISHMENT ON PORTION 22 OF THE FARM LEEUWFontein 456 JP (REAGILE X9), KGETLENGRIVIER LOCAL MUNICIPALITY, NORTH WEST PROVINCE**

The Kgetlengrivier Local Municipality intends to apply for environmental authorisation for township establishment (Reagile X9) on Portion 22 of the farm Leeuwfontein 456 JP, Kgetlengrivier Local Municipality (kindly refer to the attached provisional layout plan for purposes of elucidation).

The development implies the following:

1. The clearance of an area of twenty hectares or more of indigenous vegetation (Listing Notice 2, Activity No. 15 of the 2014 EIA Regulations as amended).
2. The development of – (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs (a) within a water course; or (c) if no development setback line exists, within 32 metres of a water course, measured from the edge of a water course (Listing Notice 1, Activity No. 12ii (a&c) of the 2014 EIA Regulations as amended).
3. The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grid, pebbles or rock of more than 10 m<sup>3</sup> from a water course (Listing Notice 1, Activity No. 19 of the 2014 EIA Regulations as amended).
4. Residential, mixed, retail, commercial, industrial or institutional development where such land was used for agriculture on or after 1 April 1998 where such development will occur inside an urban area, when the total land to be developed is bigger than 5 hectares (Listing Notice 1, Activity No. 28ii of the 2014 EIA Regulations as amended).
5. The clearance of an area of 300 square metres or more of indigenous vegetation within critical biodiversity areas identified in bioregional plans (Listing Notice 3 Activity No. 12(h)iv of the 2014 EIA Regulations as amended).

Your Municipality is herewith being notified in terms of Government Regulation No. R. 326 of 7 April 2017 of the application for scoping and EIA in the above regard in its capacity as local authority, adjacent landowner and owner of the subject site. It would also be appreciated if you could bring this notification to the attention of your Councillor Naledi as well as any occupants on the subject site.

Please do not hesitate to forward any comments with regard to the proposed development to the writer within the next 30 (thirty) days or any other reasonable and agreed upon period.

Kind regards

Cappie Linde (EAPASA registered environmental assessment practitioner)





**ENVIROVISION CONSULTING CC**  
ENVIRONMENTAL SPECIALISTS

29 May 2020

The Municipal Manager  
Bojanala Platinum District Municipality

E-mail address: [pogisos@bojanala.gov.za](mailto:pogisos@bojanala.gov.za) / [tsholofelod@bojanala.gov.za](mailto:tsholofelod@bojanala.gov.za)

*ELECTRONIC TRANSMISSION*

Dear Mr Shikwane

**WRITTEN NOTICE TO APPLY FOR ENVIRONMENTAL AUTHORISATION FOR TOWNSHIP ESTABLISHMENT ON PORTION 22 OF THE FARM LEEUWFontein 456 JP (REAGILE X9), KGETLENGRIVIER LOCAL MUNICIPALITY, NORTH WEST PROVINCE**

The Kgetlengrivier Local Municipality intends to apply for environmental authorisation for township establishment (Reagile X9) on Portion 22 of the farm Leeuwfontein 456 JP, Kgetlengrivier Local Municipality (kindly refer to the attached provisional layout plan for purposes of elucidation).

The development implies the following:

1. The clearance of an area of twenty hectares or more of indigenous vegetation (Listing Notice 2, Activity No. 15 of the 2014 EIA Regulations as amended).
2. The development of – (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs (a) within a water course; or (c) if no development setback line exists, within 32 metres of a water course, measured from the edge of a water course (Listing Notice 1, Activity No. 12ii (a&c) of the 2014 EIA Regulations as amended).
3. The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grid, pebbles or rock of more than 10 m<sup>3</sup> from a water course (Listing Notice 1, Activity No. 19 of the 2014 EIA Regulations as amended).
4. Residential, mixed, retail, commercial, industrial or institutional development where such land was used for agriculture on or after 1 April 1998 where such development will occur inside an urban area, when the total land to be developed is bigger than 5 hectares (Listing Notice 1, Activity No. 28ii of the 2014 EIA Regulations as amended).
5. The clearance of an area of 300 square metres or more of indigenous vegetation within critical biodiversity areas identified in bioregional plans (Listing Notice 3 Activity No. 12(h)iv of the 2014 EIA Regulations as amended).

Your Municipality is herewith being notified in terms of Government Regulation No. R. 326 of 7 April 2017 of the application for scoping and EIA in the above regard.

Please do not hesitate to forward any comments with regard to the proposed development to the writer within the next 30 (thirty) days or any other reasonable and agreed upon period.

Kind regards

Cappie Linde (EAPASA registered environmental assessment practitioner)

## **APPENDIX 6:           NOTIFICATION OF NEIGHBOURS**



**ENVIROVISION CONSULTING CC**  
ENVIRONMENTAL SPECIALISTS

29 May 2020

The Trustees  
The Fanie Coetzee Trust  
E-mail address: [info@alldog.co.za](mailto:info@alldog.co.za)

*ELECTRONIC TRANSMISSION*

Dear Jaco and Coreen

**WRITTEN NOTICE TO APPLY FOR ENVIRONMENTAL AUTHORISATION FOR TOWNSHIP ESTABLISHMENT ON PORTION 22 OF THE FARM LEEUWFontein 456 JP (REAGILE X9), KGETLENGRIVIER LOCAL MUNICIPALITY, NORTH WEST PROVINCE**

The Kgetlengrivier Local Municipality intends to apply for environmental authorisation for township establishment (Reagile X9) on Portion 22 of the farm Leeuwfontein 456 JP (kindly refer to the attached provisional layout plan for purposes of elucidation).

The development implies the following:

1. The clearance of an area of twenty hectares or more of indigenous vegetation (Listing Notice 2, Activity No. 15 of the 2014 EIA Regulations as amended).
2. The development of – (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs (a) within a water course; or (c) if no development setback line exists, within 32 metres of a water course, measured from the edge of a water course (Listing Notice 1, Activity No. 12ii (a&c) of the 2014 EIA Regulations as amended).
3. The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grid, pebbles or rock of more than 10 m<sup>3</sup> from a water course (Listing Notice 1, Activity No. 19 of the 2014 EIA Regulations as amended).
4. Residential, mixed, retail, commercial, industrial or institutional development where such land was used for agriculture on or after 1 April 1998 where such development will occur inside an urban area, when the total land to be developed is bigger than 5 hectares (Listing Notice 1, Activity No. 28ii of the 2014 EIA Regulations as amended).
5. The clearance of an area of 300 square metres or more of indigenous vegetation within critical biodiversity areas identified in bioregional plans (Listing Notice 3 Activity No. 12(h)iv of the 2014 EIA Regulations as amended).

As the registered owner of the adjacent Portion 3 your trust is herewith being notified in terms of Government Regulation No. R. 326 of 7 April 2017 of the application for scoping and EIA in the above regard.

Please do not hesitate to forward any comments with regard to the proposed development to the writer within the next 30 (thirty) days or any other reasonable and agreed upon period.

Kind regards

Cappie Linde (EAPASA registered environmental assessment practitioner)





## ENVIROVISION CONSULTING CC

### ENVIRONMENTAL SPECIALISTS

29 May 2020

The Director General  
Department of Public Works

E-mail address: [dg.pa@dpw.gov.za](mailto:dg.pa@dpw.gov.za)

#### ELECTRONIC TRANSMISSION

Dear Mr Vukela

#### **WRITTEN NOTICE TO APPLY FOR ENVIRONMENTAL AUTHORISATION FOR TOWNSHIP ESTABLISHMENT ON PORTION 22 OF THE FARM LEEUWFontein 456 JP (REAGILE X9), KGETLENGRIVIER LOCAL MUNICIPALITY, NORTH WEST PROVINCE**

The Kgetlengrivier Local Municipality intends to apply for environmental authorisation for township establishment (Reagile X9) on Portion 22 of the farm Leeuwfontein 456 JP, Kgetlengrivier Local Municipality (kindly refer to the attached provisional layout plan for purposes of elucidation).

The development implies the following:

1. The clearance of an area of twenty hectares or more of indigenous vegetation (Listing Notice 2, Activity No. 15 of the 2014 EIA Regulations as amended).
2. The development of – (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs (a) within a water course; or (c) if no development setback line exists, within 32 metres of a water course, measured from the edge of a water course (Listing Notice 1, Activity No. 12ii (a&c) of the 2014 EIA Regulations as amended).
3. The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grid, pebbles or rock of more than 10 m<sup>3</sup> from a water course (Listing Notice 1, Activity No. 19 of the 2014 EIA Regulations as amended).
4. Residential, mixed, retail, commercial, industrial or institutional development where such land was used for agriculture on or after 1 April 1998 where such development will occur inside an urban area, when the total land to be developed is bigger than 5 hectares (Listing Notice 1, Activity No. 28ii of the 2014 EIA Regulations as amended).
5. The clearance of an area of 300 square metres or more of indigenous vegetation within critical biodiversity areas identified in bioregional plans (Listing Notice 3 Activity No. 12(h)iv of the 2014 EIA Regulations as amended).

The adjacent Portion 21 of the farm Leeuwfontein 456 JP has been registered in the name of the National Government of the Republic of South Africa in terms of Deed of Transfer No. T4238/2017. As representative of the registered landowner your Department is therefore being notified in terms of Government Regulation No. R. 326 of 7 April 2017 of the application for scoping and EIA in the above regard.

Please do not hesitate to forward any comments with regard to the proposed development to the writer within the next 30 (thirty) days or any other reasonable and agreed upon period.

Kind regards

Cappie Linde (EAPASA registered environmental assessment practitioner)

## **APPENDIX 7: NOTIFICATION OF WATER & SANITATION**



**ENVIROVISION CONSULTING CC**  
ENVIRONMENTAL SPECIALISTS

29 May 2020

The Office Manager  
Hartbeespoort Office  
Department of Water & Sanitation  
E-mail address: [theunissenc@dws.gov.za](mailto:theunissenc@dws.gov.za)

*ELECTRONIC TRANSMISSION*

Dear sir / madam

**WRITTEN NOTICE TO APPLY FOR ENVIRONMENTAL AUTHORISATION FOR TOWNSHIP ESTABLISHMENT ON PORTION 22 OF THE FARM LEEUWFontein 456 JP (REAGILE X9), KGETLENGRIVIER LOCAL MUNICIPALITY, NORTH WEST PROVINCE**

The Kgetlengrivier Local Municipality intends to apply for environmental authorisation for township establishment (Reagile X9) on Portion 22 of the farm Leeuwfontein 456 JP (kindly refer to the attached provisional layout plan for purposes of elucidation). The subject site is located within WMA3: Crocodile (West) & Marico, Tertiary Drainage Region A22D.

The development implies the following:

1. The clearance of an area of twenty hectares or more of indigenous vegetation (Listing Notice 2, Activity No. 15 of the 2014 EIA Regulations as amended).
2. The development of – (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs (a) within a water course; or (c) if no development setback line exists, within 32 metres of a water course, measured from the edge of a water course (Listing Notice 1, Activity No. 12ii (a&c) of the 2014 EIA Regulations as amended).
3. The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grid, pebbles or rock of more than 10 m<sup>3</sup> from a water course (Listing Notice 1, Activity No. 19 of the 2014 EIA Regulations as amended).
4. Residential, mixed, retail, commercial, industrial or institutional development where such land was used for agriculture on or after 1 April 1998 where such development will occur inside an urban area, when the total land to be developed is bigger than 5 hectares (Listing Notice 1, Activity No. 28ii of the 2014 EIA Regulations as amended).
5. The clearance of an area of 300 square metres or more of indigenous vegetation within critical biodiversity areas identified in bioregional plans (Listing Notice 3 Activity No. 12(h)iv of the 2014 EIA Regulations as amended).

Your Department is herewith being notified in terms of Government Regulation No. R. 326 of 7 April 2017 of the application for scoping and EIA in the above regard.

Please do not hesitate to forward any comments with regard to the proposed development to the writer within the next 30 (thirty) days or any other reasonable and agreed upon period.

Kind regards

Cappie Linde (EAPASA registered environmental assessment practitioner)

## **APPENDIX 8:            BACKGROUND INFORMATION DOCUMENT**



# ENVIRONMENTAL IMPACT ASSESSMENT

## Background Information Document

ENVIRONMENTAL IMPACT ASSESSMENT (SCOPING AND EIA)  
FOR THE PROPOSED DEVELOPMENT OF PORTION 22 OF THE  
FARM LEEUWFontein 456 JP  
(PROPOSED REAGILE X9)

KGETLENGRIVIER LOCAL MUNICIPALITY

NORTH WEST PROVINCE

May 2020



**ENVIROVISION CONSULTING CC**

ENVIRONMENTAL SPECIALISTS

---

**PHYSICAL ADDRESS** 450 Wendy Street, Waterkloof Glen, Pretoria, 0181  
**CELL** 082 444 0367 • **FAX** 086 557 9447 • **E-MAIL** [envirovision@lantic.net](mailto:envirovision@lantic.net)  
**MEMBER** Cappie Linde M.ENV.DEV (UKN) • CK2003/050777/23

## WHAT DOES THIS DOCUMENT TELL YOU?

This document aims to provide you, as a potential Interested and/or Affected Party (I&AP), with background information regarding the application for Environmental Authorisation for the proposed development of Portion 22 of the farm Leeuwfontein 456 JP, Kgetlengrivier Local Municipality, North West Province (Refer to Appendix A: Locality Map), as well as the required environmental studies to be undertaken. Any person, company, authority or other entities that might be directly or indirectly affected by the proposed activity can register as an Interested or Affected Party (I&AP). This includes, but is not limited to landowners, tenants, municipal and provincial authorities, interest groups, Non-Government Organisations and conservation groups.

This document further indicates how you can become involved in the project, receive information, or raise issues which may concern and/or interest you. The sharing of information forms the basis of the Public Participation Process and offers you the opportunity to become actively involved in the project from the outset. Input from I&APs ensures that all potential environmental issues are considered within the context of the proposed development.

## STUDY AREA

The proposed development is situated on Portion 22 of the farm Leeuwfontein 456 JP, Kgetlengrivier Local Municipality, North West Province. The property is approximately 128,6 ha in extent and is abutted by residential developments (Reagile extensions) to the east.

## SITE DESCRIPTION

The proposed development site predominantly consists of grazing land with drainage lines. It also consists of a dwelling house and outbuildings.

## PROJECT DESCRIPTION

The project applicant, Kgetlengrivier Local Municipality has appointed Envirovision Consulting CC, as an Independent Environmental Assessment Practitioner (EAP), to undertake environmental studies to identify and assess all potential environmental impacts associated with the proposed project. The applicant proposes to develop the site for residential and associated use. Existing drainage lines will form part of public open spaces on the site. A provisional layout plan is hereto being attached for purposes of elucidation.

The layout of the proposed development as well as engineering service requirements including sewage, water, electricity, refuse disposal and stormwater management will be further defined and assessed during the EIA Process.

## POTENTIAL ENVIRONMENTAL IMPACTS ASSOCIATED WITH THE PROPOSED PROJECT

Potential environmental impacts associated with the proposed development have been identified and are still being augmented through a process of public participation. These impacts will be assessed in the Environmental Impact Assessment (EIA) study. Specialist inputs which will form part of the EIA study include:

- Heritage impact assessment;
- Engineering services report;
- Engineering geological investigation.

## ENVIRONMENTAL STUDIES

An Environmental Impact Assessment (EIA) is an effective planning and decision-making tool, which allows for the identification of potential environmental consequences of a proposed project.



Listed activities to be applied and assessed in the EIA study will include:

1. The clearance of an area of twenty hectares or more of indigenous vegetation (Listing Notice 2, Activity No. 15 of the 2014 EIA Regulations as amended).
2. The development of – (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs (a) within a water course; or (c) if no development setback line exists, within 32 metres of a water course, measured from the edge of a water course (Listing Notice 1, Activity No. 12ii (a&c) of the 2014 EIA Regulations as amended).
3. The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grid, pebbles or rock of more than 10 m<sup>3</sup> from a water course (Listing Notice 1, Activity No. 19 of the 2014 EIA Regulations as amended).
4. Residential, mixed, retail, commercial, industrial or institutional development where such land was used for agriculture on or after 1 April 1998 where such development will occur inside an urban area, when the total land to be developed is bigger than 5 hectares (Listing Notice 1, Activity No. 28ii of the 2014 EIA Regulations as amended).
5. The clearance of an area of 300 square metres or more of indigenous vegetation within critical biodiversity areas identified in bioregional plans (Listing Notice 3 Activity No. 12(h)iv of the 2014 EIA Regulations as amended).

The EIA application and assessments are submitted to the North West Department of Economic Development, Environment, Conservation & Tourism (NWDEDECT) for review and approval.

As part of this EIA process all I&APs will be actively involved through a Public Participation Process.

The process consists of three major phases as illustrated in Figure 1:

- 1) Phase1: Public Participation Process;
- 2) Phase 2: Environmental Scoping Phase; and
- 3) Phase 3: Environmental Impact Phase Study and Environmental Management Programme (EMPr).

These three phases will culminate in the approval or rejection of the project i.e. positive or negative Record of Decision.



**Figure 1: Project timeline**

## WHAT IS YOUR ROLE?

If you consider yourself an I&AP for the proposed project, we encourage you to make use of the opportunities created by the Public Participation Process to become involved in the process and raise the issues and concerns which affect and/or interest you, and about which you require more information.

By completing and submitting the accompanying registration form, we will ensure that you are registered as an I&AP for the project, and that your concerns or queries regarding the project will be noted and assessed as part of the process. We will also ensure that you are provided with future information pertaining to the project as well as the availability of the draft and final Environmental Reports (i.e. Scoping and EIR) for comment.

## COMMENTS AND QUERIES

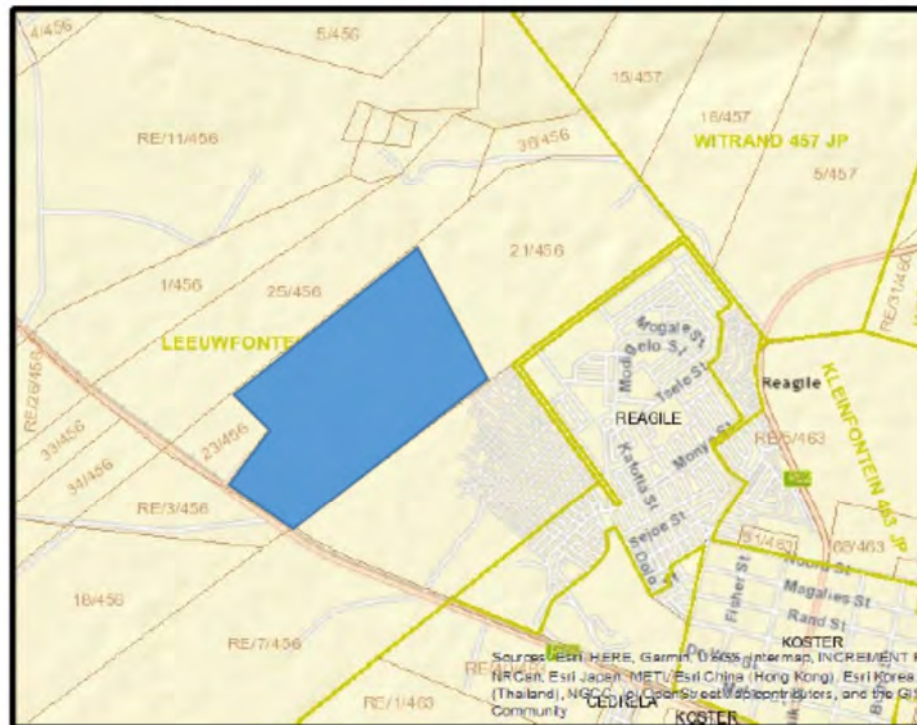
Please direct all comments, queries or issues to:

Cappie Linde  
Envirovision Consulting

Physical & postal address:  
450 Wendy Street, Waterkloof Glen 0181

Cellular number: 0824440367  
Fax number: 0865579447  
E-mail address: [envirovision@lantic.net](mailto:envirovision@lantic.net)

## Appendix A: Locality Map





**ENVIRONMENTAL IMPACT ASSESSMENT (SCOPING & EIA) FOR THE PROPOSED  
DEVELOPMENT OF PORTION 22 OF THE FARM LEEUWFontein 456 JP,  
KGETLENGRIVIER LOCAL MUNICIPALITY, NORTH WEST PROVINCE**

**REGISTRATION AND COMMENT FORM**

KINDLY COMPLETE THIS FORM IN DETAIL AND RETURN IT TO:

Cappie Linde  
Envirovision Consulting CC  
450 Wendy Street  
Waterkloof Glen, Pretoria  
0181

Telephone: 0824440367  
Fax: 0865579447  
E-mail: [envirovision@tanc.net](mailto:envirovision@tanc.net)

WHERE APPLICABLE TICK THE CORRECT BOX

**PERSONAL DETAILS**

Title: ..... First name: .....

Surname: ..... E-mail: .....

Telephone: ..... Fax: .....

Organisation (if applicable): .....

Capacity (e.g. Chairperson, member etc.): .....

Physical address: .....

Town: ..... Code: .....

1. What is your main area of interest with regards to the proposed project?

.....  
.....

2. Do you have any points of concern or support with regard to the proposed project? 

Yes	No
-----	----

  
If "yes", please briefly list these in point form.

.....  
.....  
.....  
.....  
.....  
.....

*Please add more pages if necessary*

.....  
Signature

.....  
Date

## **APPENDIX 9: SANBI ECOLOGICAL SENSITIVITY REPORT**





## BGIS Land Use Decision Support (LUDS) Report

Generated on the BGIS website: 5-30-2020

### Disclaimer:

The Land-Use Decision Support (LUDS) Tool has been developed to facilitate and support biodiversity planning and land-use decision-making at a national and provincial level. Its primary objective is to serve as a guide for biodiversity planning and should not replace specialist ecological assessments.

While SANBI endeavours to keep the information on BGIS up-to-date and makes reasonable efforts to ensure that the data it publishes are accurate, SANBI makes no representations or warranties of any kind, express or implied, about the completeness, accuracy, reliability, suitability or availability with respect to the information contained on the website for any purpose. SANBI will not be liable for any loss or damage; including without limitation, indirect or consequential loss or damage, or any loss or damage whatsoever arising from loss of data or profits arising out of, or in connection with, the use of this tool.

**Please note:** that the spatial information incorporated into the LUDS Tool was mapped at various scales, with much of the spatial information mapped at a scale of 1:250 000 (i.e. 1 cm on the map = 2,5 km on the ground) or greater. To ensure maximum accuracy, always check the map against actual conditions on the ground when undertaking planning and decision-making, or contact the relevant conservation authority for additional assistance.

Please forward any queries or concerns to [BGIShelp@SANBI.org.za](mailto:BGIShelp@SANBI.org.za).

## 1. Information extracted from national datasets

The information below is extracted for the analysed area from national datasets available on BGIS. There is a short description of the dataset under each heading and the URLs to the webpage on BGIS with further information.

### 1.1. National terrestrial information

#### 1.1.1. National list of threatened terrestrial ecosystems

**BGIS source:** National list of threatened terrestrial ecosystems for South Africa (2011) – original extents

A list of all threatened ecosystem patches which original extent intersects the analysed area. Note: the data represents the **original extents** of the threatened ecosystems; in other words, natural areas which have been converted to agriculture, mining and urban areas have been **included**. Please view the area using the BGIS online map viewer Bing maps or Google maps tool in order to see whether any natural vegetation may still exist.

Ecosystem Name	Code	Status
Rand Highveld Grassland	Gm 11	VU
# threatened ecosystems: 1		

#### 1.1.2. National vegetation types

**BGIS source:** Vegetation Map of South Africa, Lesotho and Swaziland (Mucina & Rutherford 2006)

A list of all the national vegetation types the corresponding number of patches of each which original extents covered the analysed area. Note that this list is based on the estimated original extents of the vegetation types prior to any transformation. Please view the area using the BGIS online map viewer Bing maps or Google maps tool in order to see whether any natural vegetation may still exist.

BGIS project overview and report: <http://bgis.sanbi.org/Projects/Detail/60>

The **map code** below refers to the short code used on the wall map and BGIS interactive maps which helps to accurately identify a vegetation type given the complexity of the map's legend colours.

Vegetation type name	Map code	Biome
Gold Reef Mountain Bushveld	SVcb 9	Savanna Biome
Rand Highveld Grassland	Gm 11	Grassland Biome

### 1.1.3. Indigenous forest patches (DWAF)

BGIS source: DWAF Indigenous Forest Patches (2005)

A list of all the indigenous forest patches found within the analysed area.

Forest name	Forest group	Patch Size
# forest patches: 0		

### 1.1.4. National soil classes

BGIS source: General soils and soil classes

A list of all the dominant soil classes the extents of which cover the analysed area. Please note that these soil classes were developed for agricultural use.

Soil Class	Soil Class ID
Freely drained, structureless soils	S2

## 1.2. National aquatic information

### 1.2.1. Wetlands (NFEPA Wetlands/National Wetlands Map 4)

**BGIS source:** National Freshwater Ecosystem Priority Areas (NFEPA) Wetland Map/National Wetlands Map 4 and NFEPA wetland clusters

A list of all Wetland units found within the analysed area, should these belong to a wetlands cluster its information is also included. Wetlands and wetland clusters which were selected as freshwater ecosystem priority areas (FEPAs) are indicated. A key to the information codes used is given below.

BGIS project overview and report (National Wetlands 4/Wetland clusters):

<http://bgis.sanbi.org/Projects/Detail/48>

#### Wetlands

Wetland type	Description	Condition	NFEPA rank	FEPA status
Central Bushveld Group 1_Seep	<i>Artificial</i>	Z3	6	No status
Central Bushveld Group 1_Seep	<i>Natural</i>	Z2	6	No status
Central Bushveld Group 1_Seep	<i>Natural</i>	Z2	6	No status
Central Bushveld Group 1_Seep	<i>Natural</i>	Z2	6	No status
# wetland units: 4				

#### Wetland clusters

Wetland cluster ID	Vegetation type	Wetland units	FEPA status
# wetland clusters: 0			

#### Key for NFEPA wetlands condition information codes

NFEPA condition	Description	% of total wetland area
AB	Percentage natural land cover $\geq$ 75%	47
D	Percentage natural land cover 25-75%	18
DEF	Riverine wetland associated with a D, E, F or Z ecological category river	2
Z1	Wetland overlaps with a 1:50 000 'artificial' inland water body from the Department of Land Affairs: Chief Directorate of Surveys and Mapping (2005-2007)	7



Z2	Majority of the wetland unit is classified as 'artificial' in the wetland locality GIS layer	4
Z3	Percentage natural land cover < 25%	20

\* This percentage excludes unmapped wetlands, which includes those that have been irreversibly lost due to draining, ploughing and concreting

#### Key for NFEPA wetlands rank codes 1-6

Rank	Criterion
1	Wetlands that intersect with a Ramsar site
2	Wetlands within 500 m of a IUCN threatened frog point locality
2	Wetlands within 500 m of a threatened waterbird point locality
2	Wetlands (excluding dams) with the majority of its area within a sub-quaternary catchment that has sightings or breeding areas for threatened Wattled Cranes, Grey Crowned Cranes and Blue Cranes
2	Wetlands (excluding dams) within a sub-quaternary catchment identified by experts at the regional review workshops as containing wetlands of exceptional biodiversity importance, with valid reasons documented
2	Wetlands (excluding dams) within a sub-quaternary catchment identified by experts at the regional review workshops as containing wetlands that are good, intact examples from which to choose
3	Wetlands (excluding dams) within a sub-quaternary catchment identified by experts at the regional review workshops as containing wetlands of biodiversity importance, but with no valid reasons documented
4	Wetlands (excluding dams) in A or B condition AND associated with more than three other wetlands (both riverine or non-riverine wetlands were assessed for this criterion)
4	Wetlands in C condition AND associated with more than three other wetlands (both riverine or non-riverine wetlands were assessed for this criterion)
5	Wetlands (excluding dams) within a sub-quaternary catchment identified by experts at the regional review workshops as containing impacted Working for Wetland sites
6	Any other wetland (excluding dams)

#### 1.2.2. Sub-quaternary catchments and rivers (NFEPA)

**BGIS source:** National rivers and sub-quaternary catchment FEPA status (NFEPA)

A list of all NFEPA sub-quaternary catchments and their FEPA status followed by the river units they contain with various parameters and indicators. A sub-quaternary catchment and its river indicated as FEPA are fresh water ecosystem priority areas, A blank FEPA status indicates that NFEPA did not give the sub-quaternary catchment or river

priority status. A key to the other information codes used is given below.

BGIS project overview and report (NFEPA river FEPAs and NFEPA rivers):

<http://bgis.sanbi.org/Projects/Detail/48>

### Sub-quaternary catchments (river FEPAs)

NFEPA ID	FAPA status
1014	FishFSA
# sub-quaternary catchments: 1	

### NFEPA river units

River name	FAPA status	River type	Condition	Mainstem	Flagship
# river units: 0					

#### Key for NFEPA sub-quaternary catchment and river units information codes

FAPA status	River types	River condition
Summarized FAPA status using a text description, where:  <b>FAPA</b> = freshwater ecosystem priority area <b>FISHFSA</b> = fish support area <b>FISHCORRID</b> = corridor critical for movement of threatened Fish between habitats <b>PHASE2FAPA</b> = phase 2 freshwater ecosystem priority area <b>UPSTREAM</b> = upstream management area  In instances where several of these map categories overlapped, the status took the following order of precedence: "FAPA", "PHASE2FAPA", "FISHFSA" or "FISHCORRID", and then "upstream management area"	Used by NFEPA which comprises:  the level 1 ecoregion number hyphen (-)  <i>followed by</i> the flow <b>N</b> = not,permanent/flashy <b>P</b> = permanent or seasonal hyphen (-)  <i>followed by</i> the geomorphological zone <b>M</b> = mountain stream <b>U</b> = upper foothills <b>L</b> = lower foothills <b>F</b> = lowland river	Used by NFEPA, A or B is considered intact and able to contribute towards river ecosystem biodiversity targets.  <b>A</b> = unmodified, natural <b>B</b> = largely natural with few modifications <b>AB</b> = A or B above <b>C</b> = moderately modified <b>D</b> = largely modified <b>E</b> = seriously modified <b>F</b> = critically extremely modified <b>EF</b> = E or F above <b>Z</b> = Tributary condition modeled as not intact, according to natural land cover



### 1.3. National protected area information

**BGIS source:** Protected areas formal and informal (NBA 2011 and NPAES 2010)

A list of all protected areas the extents of which intersect with the analysed area. The formal protected areas were updated by the National Biodiversity Assessment (NBA 2011) whereas the informal protected areas were updated by the National Protected Areas Expansion Strategy (NPAES 2010).

Also included is a list of any NPAES 2010 focus areas that were intersected by the analysed area.

BGIS NBA 2011 project overview and report:

<http://bgis.sanbi.org/Projects/Detail/46>

BGIS NPAES 2010 project overview and report:

<http://bgis.sanbi.org/Projects/Detail/144>

Protected area name	Category	Management agent
---------------------	----------	------------------

#### Formal protected areas

# Formal protected areas: 0

#### Informal protected areas

# Informal protected areas: 0

#### NPAES focus area name

# NPAES focus areas: 0

## 2. Information from the most relevant biodiversity conservation plan for the North West Province

The information below is extracted for the analysed area from the most relevant and up to date biodiversity conservation plan available on BGIS. There is a short description of the dataset under each heading and the URLs of the webpage on BGIS with further information.

### 2.1. Terrestrial information for the North West Province

**BGIS source:** North West Province Biodiversity Conservation Assessment – terrestrial CBAs

A list of Critical Biodiversity Area (CBA) and Ecological Support Area (ESA) units that intersect with the analysed area. Included are the units CBA or ESA category and the biodiversity features used to classify it (possible values in brackets next to each feature). If the feature is present its value is indicated next to it if it is not present “No” is shown. Each unit’s overall category reflects the highest category of the biodiversity features it contains CBA1 above CBA2 above ESA. Descriptions of the biodiversity features and the land management objectives of CBA’s and ESA’s in the North West Province are also given below

Note that the protected areas of the North West Province are not included and the CBA and protected area boundaries are not mutually exclusive.

BGIS project overview and report: <http://bgis.sanbi.org/Projects/Detail/19>

List of CBA or ESA units

<b>CBA 2</b>		<b>Unit size (Ha): 46607,57</b>
<b>Biodiversity feature information</b>		
Biodiversity corridors (CBA2) : No	Ecosystem status of SA veg type (CR&EN=CBA1 VU=CBA2) : No	
Protected Areas Development Zones/Corridors (CBA2):No	Endemism of vegetation patch (CBA2): No	
Hills and ridges (CBA2): No	PA buffers 1km (Type 1 only) (ESA1): No	
Biodiversity corridor linkages (CBA1): No	Biodiversity areas id'd by experts (CBA1): No	
Biodiversity features id'd in previous studies (CBA2): No		
Biodiversity nodes (CBA2) : No		
<b>CBA 2</b>		<b>Unit size (Ha): 5,176</b>
<b>Biodiversity feature information</b>		
Biodiversity corridors (CBA2) : No	Ecosystem status of SA veg type (CR&EN=CBA1 VU=CBA2) : Yes VU	
Protected Areas Development		

Zones/Corridors (CBA2): No  
 Hills and ridges (CBA2): No  
 Biodiversity corridor linkages (CBA1): No  
 Biodiversity features id'd in previous studies (CBA2): No  
 Biodiversity nodes (CBA2) : No

Endemism of vegetation patch (CBA2): No  
 PA buffers 1km (Type 1 only) (ESA1): No  
 Biodiversity areas id'd by experts (CBA1): No

**CBA 2****Unit size (Ha): 47,897****Biodiversity feature information**

Biodiversity corridors (CBA2) : No  
 Protected Areas Development  
 Zones/Corridors (CBA2): No  
 Hills and ridges (CBA2): No  
 Biodiversity corridor linkages (CBA1): No  
 Biodiversity features id'd in previous studies (CBA2): No  
 Biodiversity nodes (CBA2) : No

Ecosystem status of SA veg type (CR&EN=CBA1 VU=CBA2) : Yes VU  
 Endemism of vegetation patch (CBA2): No  
 PA buffers 1km (Type 1 only) (ESA1): No  
 Biodiversity areas id'd by experts (CBA1): No

**CBA 2****Unit size (Ha): 182,618****Biodiversity feature information**

Biodiversity corridors (CBA2) : No  
 Protected Areas Development  
 Zones/Corridors (CBA2): No  
 Hills and ridges (CBA2): Yes  
 Biodiversity corridor linkages (CBA1): No  
 Biodiversity features id'd in previous studies (CBA2): No  
 Biodiversity nodes (CBA2) : No

Ecosystem status of SA veg type (CR&EN=CBA1 VU=CBA2) : No  
 Endemism of vegetation patch (CBA2): No  
 PA buffers 1km (Type 1 only) (ESA1): No  
 Biodiversity areas id'd by experts (CBA1): No

**# CBA or ESA units: 4****Description of the biodiversity feature information included for each terrestrial CBA or ESA unit**

Biodiversity feature	Description
Biodiversity corridors (CBA2)	Provincial-level biodiversity corridor network aimed at retaining connectivity between all geographic areas in the province. Corridor network identified, following a least cost path analysis.
Protected Areas Development Zones/Corridors (CBA2)	Existing protected area development corridors identified in previous studies: (1. Heritage Park, 2. Highveld Grassland corridor, 3. Vredefort Dome World Heritage Site, 4. Kalahari Transfrontier Protected Area, 5. Magaliesberg Protected Environment).



Hills and ridges (CBA2)	Hills and ridges identified as sensitive habitats in the existing provincial SDF dataset. The hill and ridges layer was developed to address the special biodiversity significance of these topographic features in the North West Province.
Biodiversity corridor linkages (CBA1):	Critical linkages in the provincial biodiversity corridor network where existing conversion of natural landscapes to other uses has severely restricted options for maintaining connectivity in the natural landscape.
Biodiversity features id'd in previous studies (CBA2):	Important natural features (habitats, springs, scenic landscapes) identified in the existing SDF data
Biodiversity nodes (CBA2) :	Potential biodiversity or nature-based industry development nodes identified through the systematic biodiversity assessment. Nodes coincide with areas of important remaining or intact biodiversity that contribute significantly towards achieving biodiversity conservation goals (e.g. achieving targets, economic development).
Ecosystem status of SA veg. type (CR&EN=CBA1 VU=CBA2) :	Remaining patches larger than 3ha of provincially critically endangered (CE) ecosystems (vegetation types). Any further transformation of these sites should be avoided. Remaining patches larger than 5ha of provincially endangered (EN) and vulnerable (VU) ecosystems (vegetation types). Any further transformation of these sites should be limited.
Endemism of vegetation patch (CBA2):	Remaining vegetation patches larger than 10ha of Endemic to the North West Province or Near-Endemic (>80% in province) with a global distribution of less than 50 000ha. These are vegetation types whose conservation target can only be achieved in the North West Province.
PA buffers 1km (Type 1 only) (ESA1):	The 1km radius buffer around all Type 1 protected areas
Biodiversity areas id'd by experts (CBA1):	Areas in the terrestrial environments less than 10 000 ha in extent identified by experts as being important for biodiversity conservation.

#### Land management objectives for CBAs and ESAs in the North West Province

Category	Land management object
CBA 1 and protected areas (PAs are not in the list above see national information)	Natural landscapes: Ecosystems and species fully intact and undisturbed . These are areas with high irreplaceability or low flexibility in terms of meeting biodiversity pattern targets. If the biodiversity features targeted in these areas are lost then targets will not be met. These are landscapes that are at or past their limits of acceptable change
CBA 2	Near-natural landscapes: Ecosystems and species largely intact and undisturbed. Areas with intermediate irreplaceability or some flexibility in terms of area required to meet biodiversity targets. There are options for loss of some components of biodiversity in these landscapes without compromising our ability to achieve targets. These are landscapes that are approaching but have not passed their limits of acceptable change.
ESA	Functional landscapes: Ecosystems moderately to significantly disturbed but still able to maintain basic functionality. Individual species or other biodiversity indicators may be severely disturbed or reduced. These are areas with low irreplaceability with respect to biodiversity pattern targets only.
Other natural area and transformed areas (not in list above)	Production landscapes: manage land to optimize sustainable utilization of natural resources.

## 2.2. Aquatic Information for the North West Province

BGIS source: North West Province Biodiversity Conservation Assessment – aquatic CBAs

A list of aquatic Critical Biodiversity Area (CBA) and Ecological Support Area (ESA) units that intersect with the analysed area. Included are the units CBA or ESA category, the reasons for its classification. Each unit's overall category reflects the highest category of the biodiversity features it contains CBA1 above CBA2 above ESA1 above ESA2. Descriptions of the biodiversity features are given below.

BGIS project overview and report: <http://bgis.sanbi.org/Projects/Detail/19>

List of aquatic CBA or ESA units

# CBA or ESA units: 0

Description of the biodiversity feature information included for each aquatic CBA or ESA unit

Aquatic biodiversity features	Description
Expert identified wetlands (CBA 1):	Areas in the aquatic environments less than 10 000 ha in extent identified by experts as being important for biodiversity conservation.
Priority wetlands and pans (CBA 1 or 2):	Irreplaceable wetlands of highest conservation importance or clusters of wetlands (including pans) based on estimated ecological integrity of features using the NW land cover (CBA1). All other wetlands and pans (CBA 2). No differentiation is made between high conservation importance wetlands or others as there is no biodiversity information on this at present.
Wetland buffers (ESA 1 or 2):	The terrestrial habitats adjacent to wetlands are important ecological support areas for the aquatic systems. The 500m radius buffer around all wetlands and pans. ESA 1 refers to buffers around irreplaceable wetlands (CBA 1) whereas ESA 2 are buffers for all remaining wetlands and pans (CBA 2)
Priority sub-quaternary catchments (CBA 1 or 2):	River sub-Quaternary catchments identified by the CSIR national assessment as being highest priority or most irreplaceable river catchments (CBA 1). Other important sub-Quaternary catchments identified by the CSIR national assessment (CBA 2).
Dolomitic areas (ESA 2):	Areas of dolomite and their associated aquifers identified in the existing SDF data



### 3. Municipal and cadastral information

#### 3.1. Province and municipality

The Municipal Demarcation Board's 2009 boundaries are used for the BGIS LUDS tool as these correspond with the municipal biodiversity summaries. The boundaries in the LUDS tool will be updated along with the next municipal biodiversity summaries update.

Municipal biodiversity summary information can be on BGIS by going to the following link

<http://bgis.sanbi.org/LUDS/Home>.

and following the steps i.e. choose a province and then a municipality on the map or from the dropdown box. These steps also constitute STEP 1: *Find the appropriate BGIS map (LUDS Map) for your municipality*. Please contact [SANBI municipal programme](http://www.sanbi.org/programmes/working-country-wide/municipal-programme) <<http://www.sanbi.org/programmes/working-country-wide/municipal-programme>> for more information about the Municipal Biodiversity Summaries Project.

Note: the LUDS tool does not allow analyses to cut cross municipal and provincial boundaries i.e. any analysis must fall within a single province and municipality.

**Province (code):** North West(NW)

**Municipality (Cat B):** Kgetlengrivier (NW374)

#### 3.2. Cadastral information

A list of all cadastral units (parent farm and sub-unit properties only) which intersect the analysis area.

SG 21 code	Parcel number	Size (Ha)
T0JP00000000045600003	3/456	39,193
T0JP00000000045600022	22/456	135,75
T0JP00000000045600023	23/456	18,981
T0JP00000000045600025	25/456	128,001
T0JP00000000045600039	39/456	129,879
T0JP00000000045600007	7/456	208,184

# properties: 6

### 4. Envisaged development information

**Development type:** Residential, business & industrial

**Additional information:**

## 5. Analysis area information

Below are the size (Ha) and location (centroid and extents) in degrees, minutes and seconds of the analysis area, shown in red on the map.

*Unfortunately a map of the analysis area cannot at this stage be included in these LUDS reports. If you wish to have a map of the analysis area please use the print map button provided on the LUDS toolbar.*

**Analysis area centroid (decimal degrees):** 26,8572949981021,-25,8506468174552

**Analysis area extents (decimal degrees):** 26.8572949981021,-25.8554357200582,26.8772935485171,  
-25.8394462074659

**Analysis area size (Ha):** Cannot be calculated, please use area tool

## **APPENDIX 10:     ON-SITE NOTICE & NEWSPAPER ADVERTISEMENT**



## ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

NOTICE IS GIVEN IN TERMS OF THE REGULATIONS PUBLISHED IN GOVERNMENT NOTICE NO. R. 326 OF 7 APRIL 2017 UNDER SECTION 44 OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT NO. 107 OF 1998) OF THE SUBMISSION OF AN APPLICATION FOR THE ENVIRONMENTAL SCOPING AND IMPACT ASSESSMENT REPORTING OF THE FOLLOWING ACTIVITY TO THE NORTH WEST DEPARTMENT OF ECONOMIC DEVELOPMENT, ENVIRONMENT, CONSERVATION & TOURISM: TOWNSHIP ESTABLISHMENT (REAGILE X9) ON PORTION 22 OF THE FARM LEEUWFontein 456 JP, KGETLENRIVIER LOCAL MUNICIPALITY, NORTH WEST PROVINCE.

### NATURE OF ACTIVITY:

1. THE CLEARANCE OF AN AREA OF TWENTY HECTARES OR MORE OF INDIGENOUS VEGETATION (LISTING NOTICE 2, ACTIVITY NO. 15 OF THE 2014 EIA REGULATIONS AS AMENDED);
2. THE DEVELOPMENT OF INFRASTRUCTURE OR STRUCTURES WITH A PHYSICAL FOOTPRINT OF 100 SQUARE METRES OR MORE; WHERE SUCH DEVELOPMENT OCCURS WITHIN A WATER COURSE OR, IF NO DEVELOPMENT SETBACK LINE EXISTS, WITHIN 32 METRES OF A WATER COURSE, MEASURED FROM THE EDGE OF A WATER COURSE (LISTING NOTICE 1, ACTIVITY NO. 12ii(a&c) OF THE 2014 EIA REGULATIONS AS AMENDED);
3. THE INFILLING OR DEPOSITING OF ANY MATERIAL OF MORE THAN 10 CUBIC METRES INTO, OR THE DREDGING, EXCAVATION, REMOVAL OR MOVING OF SOIL, SAND, SHELLS, SHELL GRID, PEBBLES OR ROCK OF MORE THAN 10 CUBIC METRES FROM A WATER COURSE (LISTING NOTICE 1, ACTIVITY NO. 19 OF THE 2014 EIA REGULATIONS AS AMENDED);
4. RESIDENTIAL, MIXED, RETAIL, COMMERCIAL, INDUSTRIAL OR INSTITUTIONAL DEVELOPMENT WHERE SUCH LAND WAS USED FOR AGRICULTURE ON OR AFTER 1 APRIL 1998 WHERE SUCH DEVELOPMENT WILL OCCUR INSIDE AN URBAN AREA, WHEN THE TOTAL LAND TO BE DEVELOPED IS BIGGER THAN 5 HECTARES (LISTING NOTICE 1, ACTIVITY NO. 28i OF THE 2014 EIA REGULATIONS AS AMENDED);
5. THE CLEARANCE OF AN AREA OF 300 SQUARE METRES OR MORE OF INDIGENOUS VEGETATION WITHIN CRITICAL BIODIVERSITY AREAS IDENTIFIED IN BIOREGIONAL PLANS AS LISTED IN TERMS OF LISTING NOTICE 3 ACTIVITY NO. 12(h)(vi) OF THE 2014 EIA REGULATIONS AS AMENDED.

PROPERTY CO-ORDINATES: 25°50'56.47" SOUTH; 26°52'4.55" EAST.  
PROPONENT: KGETLENRIVIER LOCAL MUNICIPALITY

FURTHER INFORMATION CAN BE OBTAINED FROM AND REPRESENTATIONS CAN BE MADE TO THE FOLLOWING PERSON WITHIN 30 (THIRTY) DAYS OF DATE OF THIS NOTICE OR ANY OTHER REASONABLE AGREED UPON PERIOD:

C P LINDE  
ENVIROVISION CONSULTING CC  
CELLULAR PHONE: 0824440367  
FAX NUMBER: 0865579447  
E-MAIL: ENVIROVISION@LANTIC.NET  
POSTAL ADDRESS: 450 WENDY STREET, WATERKLOOF GLEN, 0181

DATE OF NOTICE: 28 MAY 2020







## Vakatures Vacancies



INTERNAL & EXTERNAL VACANCY:  
SECTION MANAGER (D4)  
(1 POSITION)  
REF: DCM/IN/SM

Seize this opportunity to join Dwarsrivier Chrome Mine, a values-driven Company that unconditionally cares for its people. Dwarsrivier Chrome Mine is a wholly owned subsidiary of Assore Limited.

Our mine, situated in the Limpopo Province about 60 kilometers from Lydenburg and 40 kilometers from Burgersfort, and is a world-class producer of Chrome Ore. The successful applicant will report to the Mining Manager or nominee.

### MINIMUM EDUCATIONAL REQUIREMENTS:

- Degree in Mining Engineering.
- Mine Manager's Certificate of Competence.
- Code 08 (EB) Driver's Licence.
- **Advantageous:** Registration with ECSA (Engineering Council of South Africa).
- **Advantageous:** AMMSA (Association of Mine Managers of South Africa) Membership.

### EXPERIENCE (including but not limited to):

- Previous 3.1 (a) Appointment.
- 8 -10 years extensive practical experience in a Plant/ Production operation.
- 3 years management experience in a Production operation (included in above).

### DUTIES (including but not limited to):

- Ensure the production team produce the right quality and quantity of product in a safe and cost effective manner and co-ordinating resources to meet targets.
- Manage budget and cost control.
- Manage the production processes to ensure optimised production and achievement of targets. Ensure timely delivery of in-spec. products that meet quality and customer standards.
- Compile production plans that are aligned with operation strategy and manage approved plans to ensure targets are met, take remedial action where necessary.
- Ensure optimised plant / underground operation efficiencies are adhered to.

Selection will take place according to the Dwarsrivier Chrome Mine Recruitment Operating Procedure. A strong consideration will be the individual's fit with the Dwarsrivier Chrome Mine Values. The successful candidate will be appointed on the Dwarsrivier Chrome Mine Conditions of Employment, which includes being certified medically fit as per the Mine Health and Safety Act 29/1996. Dwarsrivier Chrome Mine is an equal opportunity employer, and due consideration will be taken in terms of the Company's Employment Equity Plan and Mining Charter objectives.

CV's may be submitted to: Dwarsrivier Recruitment, via e-mail: [recmin1@dwarsrivier.co.za](mailto:recmin1@dwarsrivier.co.za) or fax: 086 528 7507. Please clearly indicate the reference number on your application or on the subject line of your email. All candidates must ensure that all relevant certified (certified by SAPS) qualifications, certificates, and licences are attached to their application. Shortlisted candidates will be required to authenticate information provided in their C.V.s. Correspondence will be entered into with shortlisted candidates only. Candidates may be required to undergo psychometric and other relevant assessments. Please note that criminal and credit checks may be conducted on the successful candidate.

If a candidate fails to provide information or submit proof of qualifications as per the minimum requirements above the application will not be considered.

No late or unsolicited applications will be considered. No recruitment agency C.V.s will be accepted.

**CLOSING DATE: 26 July 2020**



Visit [DwarsrivierChromeMine.co.za](http://DwarsrivierChromeMine.co.za)



<https://www.facebook.com/DwarsrivierChromeMine>

## SPCA AGM/DBV-vergadering

RUSTENBURG HERALD - RUSTENBURG -  
The Rustenburg SPCA will hold its Annual  
General Meeting (AGM) at the SPCA  
premises, 11 Eskom Street Rustenburg on 31  
July 2020 at 15:00 for all interested parties.



RUSTENBURG  
HERALD -  
RUSTENBURG  
- Die  
Rustenburgse  
Diere-  
beskermings-  
vereniging  
(DBV) se

Algemene Jaar-  
vergadering  
vind op 31  
Julie 2020 om  
15:00 by die  
DBV-perseel in  
Eskomstraat  
11 plaas.  
Alle belang-  
stellendes  
word genooi  
om hierdie  
baie belangrike  
vergadering  
by te woon  
en die Diere-  
beskermings-  
vereniging te  
ondersteun.

### ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

Notice is given in terms of the regulations published in Government Notice No. R. 326 OF 7 April 2017 under Section 44 of the National Environmental Management Act (ACT No. 107 of 1998) of the submission of an application for the environmental scoping and impact assessment reporting of the following activity to the North West Department of Economic Development, Environment, Conservation and Tourism: Township establishment (Roagile X9) on Portion 22 of the farm Laeuwfontein 456 JP, Kgsetengrivier Local Municipality, North West Province.

#### Nature of activity:

1. The clearance of an area of twenty hectares or more of indigenous vegetation (Listing Notice 2, Activity No. 15 of the 2014 EIA Regulations as amended);
2. The development of infrastructure or structures with a physical footprint of 100m² or more, where such development occurs within a water course or, if no development setback line exists, within 32 metres of a water course, measured from the edge of a water course (Listing Notice 1, Activity No. 12(a)&(c) of the 2014 EIA Regulations as amended);
3. The infilling or depositing of any material or more than 10m³ into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grid, pebbles or rock of more than 10m³ from a water course (Listing Notice 1, Activity No. 19 of the 2014 EIA Regulations as amended);
4. Residential, mixed, retail, commercial, industrial or institutional development where such land was used for agriculture on or after 1 April 1998 where such development will occur inside an urban area, where the total land to be developed is bigger than 5 hectares (Listing Notice 1, Activity No. 28 of the 2014 EIA Regulations as amended);
5. The clearance of an area of 300m² or more of indigenous vegetation within critical biodiversity areas identified in bioregional plans (Listing Notice 3, Activity No. 12(H)(iv) of the 2014 EIA Regulations as amended).

Property co-ordinates: 25°50'56.47" South; 26°52'4.55" East.

Proprietor: Kgsetengrivier Local Municipality

Further information can be obtained from and representations can be made to the following person within 60 (sixty) days of date of notice: CP Linde, Envirovision Consulting CC, Cellular phone: 0824440367, Fax number: 0865579447, E-mail: [envirovision@lantic.net](mailto:envirovision@lantic.net), Postal address: 450 Wendy Street, Waterkloof Glen 0181.



## IMPALA PLATINUM LIMITED

JOB TITLE: SENIOR PMA OFFICER

Situated near Rustenburg in the North West Province, Impala Platinum is an equal opportunity mining company, combined to transformation, excellence and recruitment of individuals who have the potential, attributes and passion to thrive in a changing and goal-orientated environment.

### PURPOSE OF THE JOB:

To monitor and control the effective and efficient scheduling of Planned Maintenance Activities

**DEPARTMENT AND LOCATION:** Engineering Department

### MINIMUM QUALIFICATIONS AND REQUIREMENTS:

- Grade 12 certificate (NQF Level 4)
- Trade Certificate will be advantageous
- Tertiary Qualification in Engineering/Planning would be Advantageous
- A minimum of three years working experience as a PMA Officer is essential
- Valid Medical certificate is essential or must be medically fit in order to obtain such certificate

### COMPETENCIES:

- Computer literacy (MS Office Package + SAP)
- Knowledge of processing machinery & equipment
- English literate with good communication skills
- Must be able to work under pressure

### DUTIES AND RESPONSIBILITIES:

- Update and maintain master data and warranties in SAP
- Assist with placing orders and creating notification on SAP
- Update and maintain maintenance schedules (incl. Weekend labour)
- Compile and update routine maintenance task lists.
- Compile management data and reports.
- Carry out Environmental and Waste co-ordination duties
- Notify responsible persons of changes in Planned Maintenance activities
- Monitor and Supervise individual and team performances.
- Supervise and monitor capturing clerks

Applications can be sent to: The Recruitment Centre, Impala Platinum Limited, PO Box 5683, Rustenburg 0300, Fax: (014) 569-9513 Email: [Recruitment.Mining3@implats.co.za](mailto:Recruitment.Mining3@implats.co.za)

Applications from agencies will not be accepted. If you have not heard from us within 30 days of the closing date, please regard your application as unsuccessful. In addition to challenging opportunities, the Company offers a competitive remuneration package and the normal large company IMPORTANT: CV's without copies of Short listed candidates may be subjected to a psychometric assessment. Preference will be given to candidates from the designated groups in line with the provisions of the Employment Equity Act, the Company's Recruitment Policy and Employment Equity Plan.

**CLOSING DATE: 16 July 2020**

RESPECT CARE  
AND DELIVER

## ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

Notice is given in terms of the regulations published in Government Notice No. R. 326 OF 7 April 2017 under Section 44 of the National Environmental Management Act (ACT No. 107 of 1998) of the submission of an application for the environmental scoping and impact assessment reporting of the following activity to the North West Department of Economic Development, Environment, Conservation and Tourism: Township establishment (Reagile X9) on Portion 22 of the farm Leeuwfontein 456 JP, Kgetlengrivier Local Municipality, North West Province.

### **Nature of activity:**

1. The clearance of an area of twenty hectares or more of indigenous vegetation (Listing Notice 2, Activity No. 15 of the 2014 EIA regulations as amended);
2. The development of infrastructure or structures with a physical footprint of 100m<sup>2</sup> or more, where such development occurs within a water course or, if no development setback line exists, within 32 metres of a water course, measured from the edge of a water course (Listing Notice 1, Activity No. 12ii(a&c) of the 2014 EIA Regulations as amended);
3. The infilling or depositing of any material or more than 10m<sup>3</sup> into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10m<sup>3</sup> from a water course (Listing Notice 1, Activity No. 19 of the 2014 EIA Regulations as amended);
4. Residential, mixed, retail, commercial, industrial or institutional development where such land was used for agriculture on or after 1 April 1998 where such development will occur inside an urban area, when the total land to be developed is bigger than 5 hectares (Listing Notice 1, Activity No. 28i of the 2014 EIA Regulations as amended);
5. The clearance of an area of 300m<sup>2</sup> or more of indigenous vegetation within critical biodiversity areas identified in bioregional plans (Listing Notice 3, Activity No. 12(H)(iv) of the 2014 EIA Regulations as amended).

**Property co-ordinates:** 25°50'56.47" South; 26°52'4.55" East.

**Proponent:** Kgetlengrivier Local Municipality

Further information can be obtained from and representations can be made to the following person within 60 (sixty) days of date of notice: CP Linde, Envirovision Consulting CC, Cellular phone: 0824440367, Fax number: 0865579447, E-mail: [envirovision@lantic.net](mailto:envirovision@lantic.net). Postal address: 450 Wendy Street, Waterkloof Glen 0181.

## **APPENDIX 11:     IMPACT SIGNIFICANCE RATING METHODOLOGY**



## ENVIROVISION CONSULTING CC

ENVIRONMENTAL SPECIALISTS

### SIGNIFICANCE ASSESSMENT METHODOLOGY

**The significance of environmental impacts was assessed in accordance with the following method:**

Significance is the product of probability and severity. Probability describes the likelihood of the impact actually occurring, and is rated as follows:

PROBABILITY RATING	DETERMINATION OF RATING	VALUE OF RATING
Improbable	Low possibility of impact occurring either because of design or historical experience.	2
Probable	Prominent possibility that impact will occur.	3
Highly probable	Most likely that impact will occur.	4
Definite	Impact will occur regardless of any prevention measures.	5

The severity rating is calculated from the factors given to intensity and duration. Intensity and duration factors are awarded to each impact as described below.

The intensity factor is awarded to each impact according to the following method:

INTENSITY FACTOR	DETERMINATION OF FACTOR	VALUE OF FACTOR
Low intensity	Nature and / or man made functions not affected and a minor impact may occur.	1
Medium intensity	Environment affected but natural functions and processes can continue though often in a slightly altered manner.	2
High intensity	Environment affected to the extent that natural functions are altered to the extent that it will temporarily or permanently cease.	4

Duration is assessed and a factor awarded in accordance with the following:

DURATION FACTOR	DETERMINATION OF FACTOR	VALUE OF FACTOR
Short term	≤ 1-5 years	2
Medium term	5-15 years	3
Long term	Impact will only cease after the operational life of the activity, either because of natural process or by human intervention.	4
Permanent	Mitigation, either by natural process or by human intervention, will not occur in such a way or such a time span that the impact can be considered transient.	5

The severity rating is obtained from calculating a severity factor, and comparing the severity factor to the rating in the table below, for example:

$$\begin{aligned}
 \text{The severity factor} &= \text{Intensity factor} \times \text{Duration factor} \\
 &= 2 \times 3 \\
 &= 6
 \end{aligned}$$

A severity factor of 6 (six) equals a severity rating of medium severity (Rating 3) *as per* the table below:

RATING	FACTOR
Low severity (Rating 2)	Calculated values 2 to 4
Medium severity (Rating 3)	Calculated values 5-8
High severity (Rating 4)	Calculated values 9-12
Very high severity (Rating 5)	Calculated values 13-16 and more
Severity factors below 3 indicate no impact	

A significance rating is calculated by multiplying the severity rating & probability rating.

SIGNIFICANCE RATING	VALUE OF RATING	POSITIVE IMPACT	NEGATIVE IMPACT
Low significance	4-6	Impacts should have no influence on the proposed development project.	
Medium significance	≥ 7 to 12	Should indicate that the proposed project should be approved	Should be mitigated or mitigation measures should be formulated before approval of the proposed project.
High significance	≥ 13-18	Should point towards a decision for the project to be approved and should be enhanced in final design.	Should weigh towards a decision to terminate proposal, or mitigation should be formulated and implemented to reduce significance to a low significance rating.
Very high significance	≥ 19 to 25 and more	Positive indication that the project should be approved.	This weighs towards the termination of the proposal if mitigation cannot be effectively implemented.



## **APPENDIX 12: I&AP REGISTRATION FORMS**

**ENVIRONMENTAL IMPACT ASSESSMENT (SCOPING & EIA) FOR THE PROPOSED  
DEVELOPMENT OF PORTION 22 OF THE FARM LEEUWFontein 456 JP,  
KGETLENGRIVIER LOCAL MUNICIPALITY, NORTH WEST PROVINCE**

**REGISTRATION AND COMMENT FORM**

KINDLY COMPLETE THIS FORM IN DETAIL AND RETURN IT TO:

Cappie Linde  
Envirovision Consulting CC  
450 Wendy Street  
Waterkloof Glen, Pretoria  
0181

Telephone: 0824440367  
Fax: 0865579447  
E-mail: envirovision@iantic.net

WHERE APPLICABLE TICK THE CORRECT BOX

**PERSONAL DETAILS**

Title: Mrs First name: Debbie  
Surname: Van den Berg E-mail: debbiewildlife5@gmail.com  
Telephone: 0721375267/0828435465 Fax: /  
Organisation (if applicable): P.D.I. Wildliferescue NPC  
Capacity (e.g. Chairperson, member etc.): Direkteur  
Physical address: Groenfontein  
Town: Koster Code: 0835

1. What is your main area of interest with regards to the proposed project?

Die bewaring van die dammetjie en omgewing.

2. Do you have any points of concern or support with regard to the proposed project?  
If "yes", please briefly list these in point form.

Yes No

1. Broeiarea vir verskeie voëls
2. Habitat vir amfibieë
3. Habitat vir verskeie reptiele.

*Please add more pages if necessary*

[Signature]  
Signature

30/6/2020  
Date

**ENVIRONMENTAL IMPACT ASSESSMENT (SCOPING & EIA) FOR THE PROPOSED  
DEVELOPMENT OF PORTION 22 OF THE FARM LEEUWFontein 456 JP,  
KGETLENGRIVIER LOCAL MUNICIPALITY, NORTH WEST PROVINCE**

**REGISTRATION AND COMMENT FORM**

KINDLY COMPLETE THIS FORM IN DETAIL AND RETURN IT TO:

Cappie Linde  
Envirovision Consulting CC  
450 Wendy Street  
Waterkloof Glen, Pretoria  
0181

Telephone: 0824440367  
Fax: 0865579447  
E-mail: envirovision@lantic.net

WHERE APPLICABLE TICK THE CORRECT BOX

**PERSONAL DETAILS**

Title: Miss First name: Michelle  
Surname: Liebenberg E-mail: michellelieb17@gmail.com  
Telephone: 082 643 8591 Fax: \_\_\_\_\_  
Organisation (if applicable): Former member of the African Amphibian Conservation Group  
Capacity (e.g. Chairperson, member etc.): \_\_\_\_\_  
Physical address: Farm Vlaknek  
Town: Koster Code: 0348

1. What is your main area of interest with regards to the proposed project?

Conservation concerns for bird and amphibian life

2. Do you have any points of concern or support with regard to the proposed project?  
If "yes", please briefly list these in point form.

Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
---	-----------------------------

The distribution of protected or vulnerable species of birds and amphibians

*Please add more pages if necessary*

  
Signature

25/06/2020  
Date