



SCOPING AND PLAN OF STUDY

PROPOSED FORMALISATION OF PORTION 23 OF THE
NIETGEDACHT FARM NO 242JQ IN THE NORTHWEST
PROVINCE

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ENVIRONMENTAL ASSESSMENT PRACTITIONER

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EXECUTIVE SUMMARY

GKM Consulting Services PTY LTD was appointed by Snethemba – Magoda Joint Venture to undertake Environmental Impact Assessment on behalf of Madibeng District Municipality. Proposed activity triggers the National Environmental Management Act, National Water Act and National Heritage Act. Relevant listed activities are described in detail under section 2.

The subject property is located along the N11 in the Ladysmith town within Ward 22 at the following coordinates: -28.530156, 29.81622. The subject property is known as Modelkloof Township Extension 18 and is situated to the north-east of the Ladysmith town. It is surrounded by the Limit Hill Township and Danskraal Township.

Two (2) possible alternatives were considered, these are:

Alternative	Type of Alternative	Description
Preferred	Layout	There is a wetland within the proposed development, the engineers will design a layout i.e., sewer, water, storm water pipelines that avoids the wetland.
Alternative	Layout	Alternative, routes that cut through the wetland will prove to be cheaper and cost effective because the distances are shortened.

Specialist opinion was included in this assessment and the specialist assessments included in this report are wetland and terrestrial biodiversity assessment, heritage impact assessment. All specialist's assessment done thus far, indicate that they recommend the proposed development, and that the developer must adhere to proposed mitigation measures as provided in the report.

Public participation undertaken thus far include:

- Posting Site Notices – notices in English were posted in ten (10) different areas on the 6th of February 2022,
- Newspaper Advertisement – newspaper advertisement was posted in the government gazette and published on the 4th of February 2022.

- Stakeholder engagement – the ward councillor, Mr. Thami, requested that we focus on implementation and indicated that there is no need for a formal meeting if we keep the community leaders i.e., Mr. Mike Vhusuto Maselesele in the know.

Possible risks identified in this scoping report will be addressed in the Environmental Impact Report (EIR) and Environmental Management Plan (EMPr).

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REPORT STRUCTURE

Report content requirements in terms of Regulation 21 of GN 982 (Appendix 2)

Regulatory Requirements	Reference Page
a) Details of:	
i. The EAP who prepared the report	Details of the EAP and Specialist Studies ¹⁴
ii. The expertise of the EAP who prepared the report; CV	Appendix G
b) The location of the activity, including:	
i. The 21-digit surveyor general code of the cadastral land parcel	12
ii. Where available physical address and farm name	12
iii. Where the required information in items (i) and (ii) is not available, the coordinates of the boundary of the property or properties	12
c) A plan which located the proposed activity or activities applied for at an appropriate scale, or, if it is –	
i. A linear development, a description and coordinates of the corridor in which the proposed activity or activities is to be undertaken	N/A
ii. On land where the property has been defined, the coordinates within which the activity is to be undertaken	12
d) A description of the scope of the proposed activity, including	
i. All listed and specified activities triggered	24
ii. A description of the activities to be undertaken, including associated structures and infrastructure.	11
e) 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	24
f) A motivation for the need and desirability for the proposed development including the need and desirability of the activity in the context of the preferred location	33
g) Full description of the process followed to reach the proposed preferred activity, site, and location within the site, including –	

i.	details of all the alternatives considered:	30
ii.	details of the public participation process undertaken in terms of regulation 41 of the Regulations, including copies of the supporting documents and inputs	
iii.	a summary of the issues raised by interested and affected parties, and an indication of the way the issues were incorporated, or the reasons for not including them	47
iv.	the environmental attributes associated with the alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects	16
v.	the impacts and risks identified for each alternative, including the nature, significance, consequence, extent, duration, and probability of the impacts, including the degree to which these impacts – <ul style="list-style-type: none"> - can be reserved - may cause irreplaceable loss of resources - can be avoided, managed, or mitigated 	37
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v.	a description of the proposed method of assessing duration and significance	51
vi.	an indication of the stages at which the competent authority will be consulted	53
vii.	particulars of the public participation process that will be conducted during the environmental impact assessment process	53
viii.	a description of the tasks that will be undertaken as part of the environmental impact assessment process	54
ix.	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	54
i)	an undertaking under oath or affirmation by the EAP in relation	
i.	the correctness of the information provided in the report	55
ii.	the inclusion of comments and inputs from stakeholders and interested and affected parties	55
iii.	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	55
j)	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	55
k)	where applicable, any specific information required by the competent authority	Error! Bookmark not defined.

SECTION 1 - INTRODUCTION

1.1 Background Information

Madibeng District Municipality intends to formalise the informal settlement into a formal township. Currently the area is being overrun by informal settlement, there are settlement ponds within the proposed development, there is a river that runs to the east of the property.

The Madibeng Local Municipal area and more specifically Brits has been challenged by increasing urbanization, population, and land invasions. These lead to booming of informal settlements and need for infrastructure expansion. In recognizing that living conditions within informal settlements are not of acceptable standard, Government initiated the National Upgrading Support Program (NUSP). The NUSP was subsequently launched by the Department of Human Settlements (DOHS). Madibeng Local Municipality (MLM) consequently adopted an Informal Settlements Upgrading Plan (ISUP) to address challenges concerned with the booming of informal settlements.

MLM subsequently appointed the firm Snethemba Consultants (Pty) Ltd and its Joint Venture Partner Magoda Development Planners (Pty) Ltd to provide Professional Services in line with various statutory requirements and development framework for the formalization of Lethlabile Block-D **which consists of approximately 4000 Units**. Snethemba – Magoda in turn appointed GKM Consulting PTY LTD to undertake the required environmental impact assessment before projects commences.

1.2 Scope of Work

Madibeng Local Municipality appointed Snethemba Consulting Engineers to provide bulk services as part of formalising the Lethlabile informal settlement. The services include:

1. Water
2. Sewer
3. Storm water, and
4. Electricity

1.3 Locality Description

The Madibeng Local Municipality is a Category B municipality located in the Northwest Province within the Bojanala Platinum District. It is situated between the Magaliesberg and Witwatersrand, 60km from Rustenburg and 50km north of Pretoria. It is one of five municipalities in the district. It is strategically located in relation to Gauteng, Limpopo, Harare, and the Maputo Harbour, and is positioned along the Heritage Route, linking the World Heritage Site with the Pilanesberg and Madikwe Game Reserves.

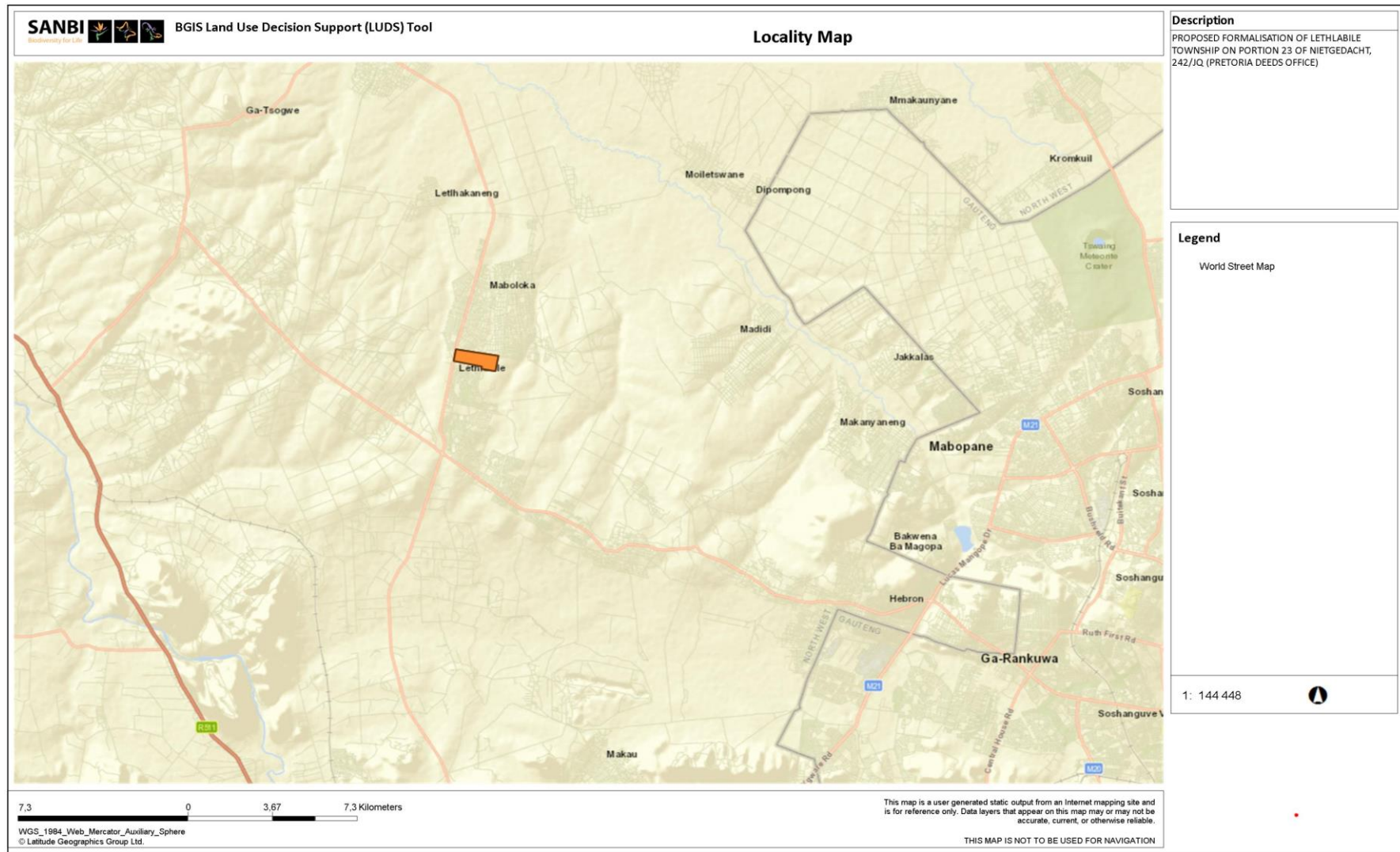
The subject property is in Lethlabile township within Brits towns. The property is 207 hectares in size and the central coordinate for this property is 25°27'19.42"S, 27°50'56.97"E.

The project under the following Jurisdiction:

Table 1 - Jurisdiction

Competent Authority	Department of Economic Development, Environment, Conservation and Tourism - Northwest
District Municipality	Bojanala District Municipality
Locality Municipality	Madibeng Local Municipality
Province	Northwest
Town	Brits
Property Details	Portion 23 of Nietgedacht, Farm No 242JQ in Pretoria
Closest Town	Rabokala
SG Details	T0JQ00000000024200023
Coordinates	1. 25°27'7.82"S, 27°49'56.37"E
	2. 25°26'52.52"S, 27°49'59.39"E
	3. 25°27'1.11"S, 27°50'58.46"E
	4. 25°27'21.25"S, 27°50'54.23"E
	5. 25°27'18.28"S, 27°50'34.77"E

Figure 1 – Locality Map



1.4 Purpose of the Draft Scoping Report

Scoping is an important part of the EIA process, as it helps to ensure that the impact assessment is appropriately focused. The focus of the Scoping is:

- To engage with stakeholders at an early stage of the proposed development so that they may contribute their views with regards to the proposed project.
- To identify potential issues and impacts associated with the proposed development.
- To identify the relevant policies and legislation relevant to the activity.
- Motivate the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the preferred location.
- To define the scope of the Environment Impact Assessment.
- To define the methodology that is required for the EIA, and
- To describe the plan of study for the EIA.

In terms of NEMA, the Scoping report is submitted to the competent authority as part of the decision-making process about the proposed township development. The Scoping is also intended to provide sufficient background information to other Organs of State, non-statutory bodies, the public, organisation, and local communities to obtain their commentary and input on the proposed development. The Scoping Phase of the EIA process identifies and describes the potential issues associated with the proposed project and defines the extent of the studies required within EIA Phase of the project. The EIA will assess those identified potential environmental impacts and benefits associated with all phases of the project including design, construction, operation, and decommissioning, and will recommend appropriate measures for potentially significant environment impacts.

1.5 Details of the EAP and Specialist Studies

1.5.1 Environmental Consultant

Mrs Grace Magaya the author of this report is a Registered Environmental Assessment Practitioner with EAPASA (Reg No 2018/129) she obtained her bachelor's degree in environmental management at the University of South Africa in 2014. She has been practising and conducting environmental impact assessment and other related license application since 2012 and has been engaged with both large

and small corporation which has exposed her to projects both large and small. For detailed experience, reference is made to Appendix G1.

1.5.2 Wetland, Aquatic and Biodiversity Specialist

Joppie has obtained an MSc. in Aquatic Science from the North-West University, Potchefstroom. His Master's thesis involved studying the relationship between the biology and ecology of fishes of the Senqu River in the Lesotho Highlands as part of the Lesotho Highland Water Scheme. This study focused primarily on the impact of flow alterations on fish communities and fish habitat associated with the phase 2 of the Lesotho Highlands Water Project, namely the construction of the Polihali Dam Wall. He has presented at various national conferences. He is affiliated as a professional scientist (*Pri Sci Nat 115553*) to the South African Council for Natural Scientific Professions (SACNASP). He is also a River Health accredited practitioner with the Department of Water and Sanitation (DWS). Joppie has experience in environmental management and rehabilitation, faunal and floral assessments, wetland assessments and wetland rehabilitation projects and aquatic ecology. He is also a member of the International Association for Impact Assessment (IAIASa) as well as the Southern African Society of Aquatic Scientists (SASAS). For detailed experience, reference is made to Appendix G2.

1.5.3 Heritage Impact Specialist

Ms Leoni Marais is an accredited member of the SA Cultural History. She holds two degrees i.e., cultural history and archaeology and cultural history obtained at the University of Pretoria. Reference is made to Appendix G3.

1.6 Description of the receiving environment

1.6.1 Climate

Summer rainfall with very dry winters. Effectively three seasons, namely a cool dry season from May to mid-August, a hot dry season from mid-August to about October and a hot wet season from about November to April. MAP ranges between 500 mm to 700 mm. Mean monthly maximum and minimum temperatures for Goedeheop (in the northern part of this vegetation unit) 35.3°C and –3.1°C for November and June, respectively.

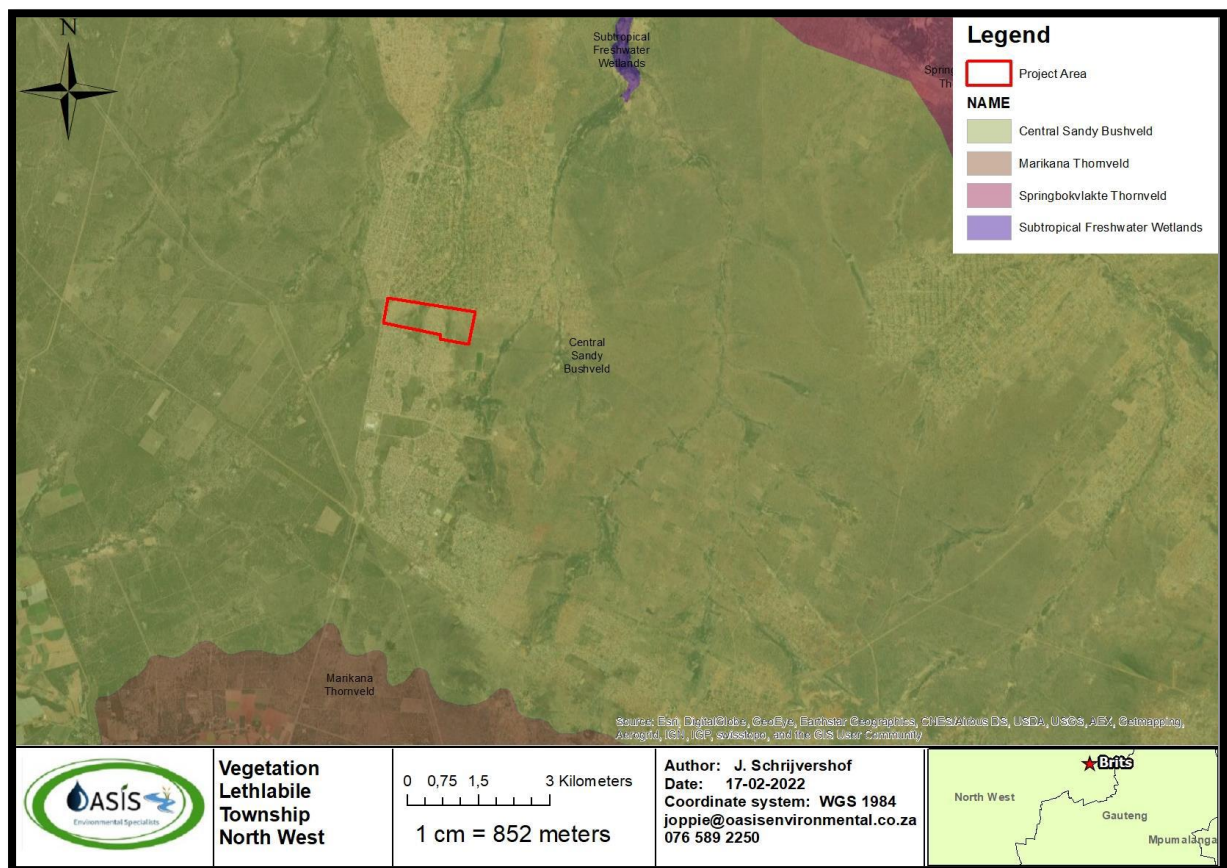
1.6.2 Geology and Soils

The large southern and eastern parts of this area are underlain by granite of the Lebowa Granite Suite and some granophyre of the Rasheop Granophyre Suite (both Bushveld Complex, Vaalian). In the north, the sedimentary rocks of the Waterberg Group (Mokolian Erathem) are most important. Specifically, sandstone, conglomerate and siltstone of the Alma Formation and sandstone, siltstone, and shale of the Vaalwater Formation. Well-drained, deep Hutton or Clovelly soils often with a catenary sequence from Hutton at the top to Clovelly on the lower slopes; shallow, skeletal Glenrosa soils also occur. Land types of mainly Bb, Fa, Ba, Bd and Ac.

1.6.3 Vegetation and Landscape Features

Low undulating areas, sometimes between mountains, and sandy plains and catenas supporting tall, deciduous *Terminalia sericea* and *Burkea africana* woodland on deep sandy soils (with the former often dominant on the lower slopes of sandy catenas) and low, broad-leaved *Combretum* woodland on shallow rocky or gravelly soils. Species of *Vachellia* and *Senegalia*, *Ziziphus* and *Euclea* are found on flats and lower slopes on eutrophic sands and some less sandy soils. *V. tortilis* may dominate some areas along valleys. Grass-dominated herbaceous layer with relatively low basal cover on dystrophic sands.

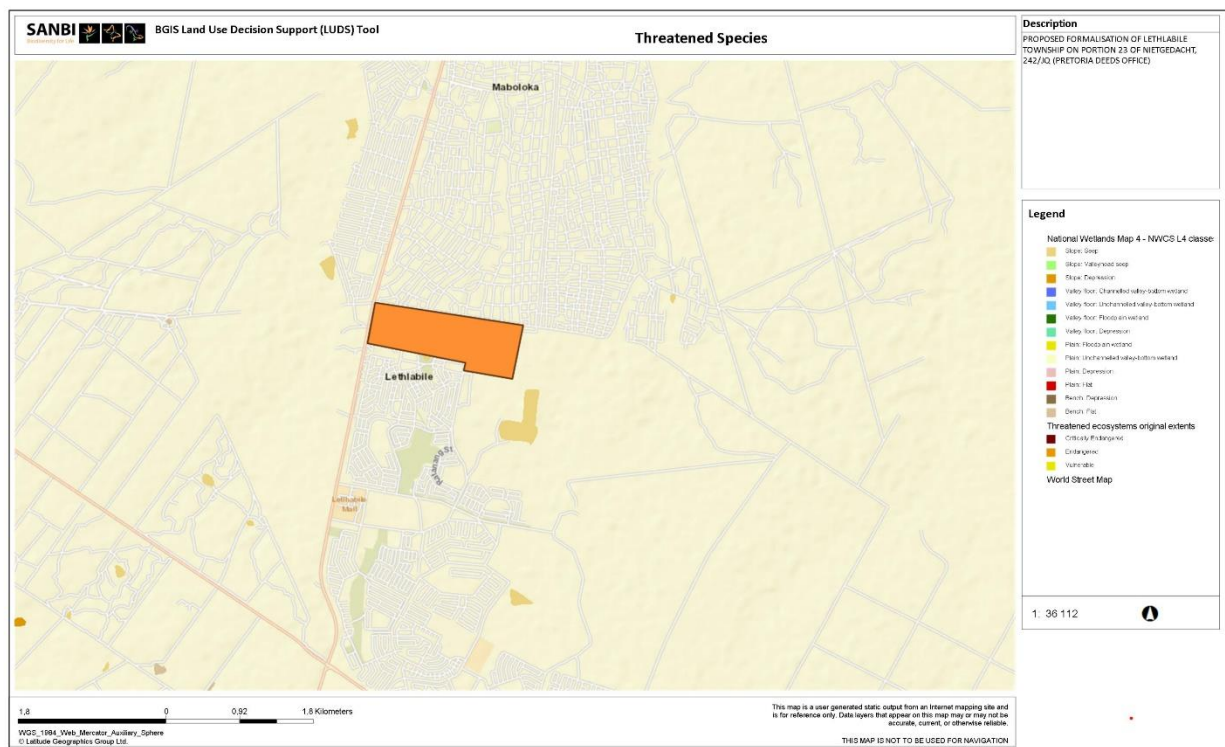
Figure 2 – Vegetation Map



1.6.4 Threatened or Protected ecosystem

The proposed prospection project overlaps a tiny bit of the threatened ecosystems and/or protected areas. According to the specialist findings, much of it was cleared through informal settlement.

Figure 3 – Threatened Species



1.6.5 Faunal Species

Mammal species that were identified onsite only included the yellow mongoose (*Cynictis penicillata*) and ground squirrel (*Xerus spp.*). Bird species observed within the area Indian myna (*Acridotheres tristis*), Crowned lapwing (*Vanellus coronatus*), (*Euplectes orix*), Southern masked weaver (*Ploceus velatus*), Blue waxbill (*Uraeginthus angolensis*) and Laughing dove (*Spilopelia senegalensis*) No red listed faunal species were observed during the site visit and no red listed species are expected to be found within this area.

1.6.6 Important Bird Species

The proposed prospection project does not fall within/close to any Important Bird Areas.

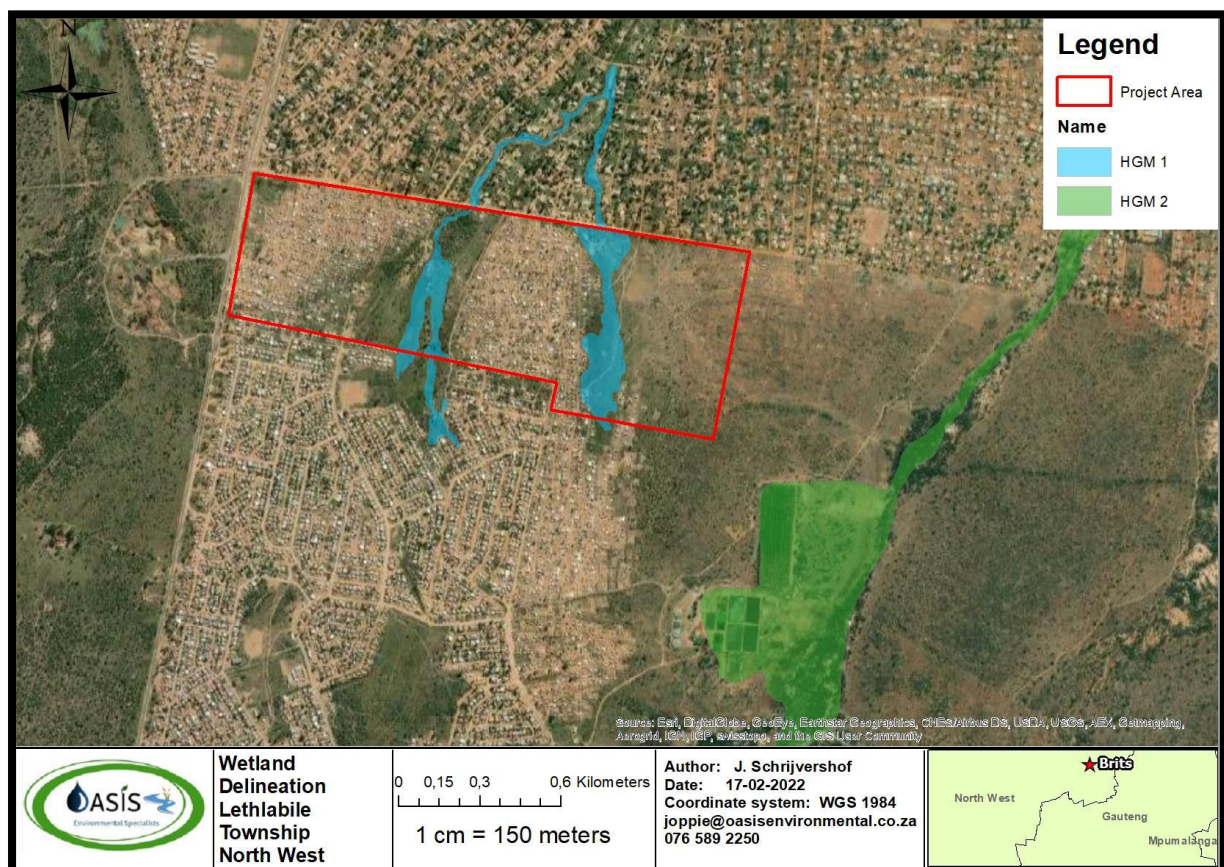
1.6.7 Wetland Assessment

The wetlands identified on the sites were categorized according to the National Wetland Classification System for South Africa (Ollis *et al.*, 2013). Wetland areas were classified as a hydrogeomorphic (HGM) unit. An HGM unit is a recognizable

physiographic wetland-unit based on the geomorphic setting, water source of the wetland and the water flow patterns (MacFarlane *et al.*, 2009).

Two channelled valley bottom wetlands were identified within the 500 m buffer of the proposed development. The channelled valley bottom wetlands are depicted as HGM 1 and HGM 2 (**Figure 10**). Channelled valley bottom wetlands are characterized by their location on valley floors and the presence of a channel flowing through the wetland. Dominant water inputs to these wetlands are from/into a channel, in this instance an upstream source, flowing through the wetland either as surface flows resulting from flooding or as subsurface flow. Water generally moves through the wetland as diffuse surface flow although occasionally as short-lived concentrated flows during flood events (Kotze *et al.*, 2008; Ollis *et al.*, 2013).

Figure 4 – Wetland Map

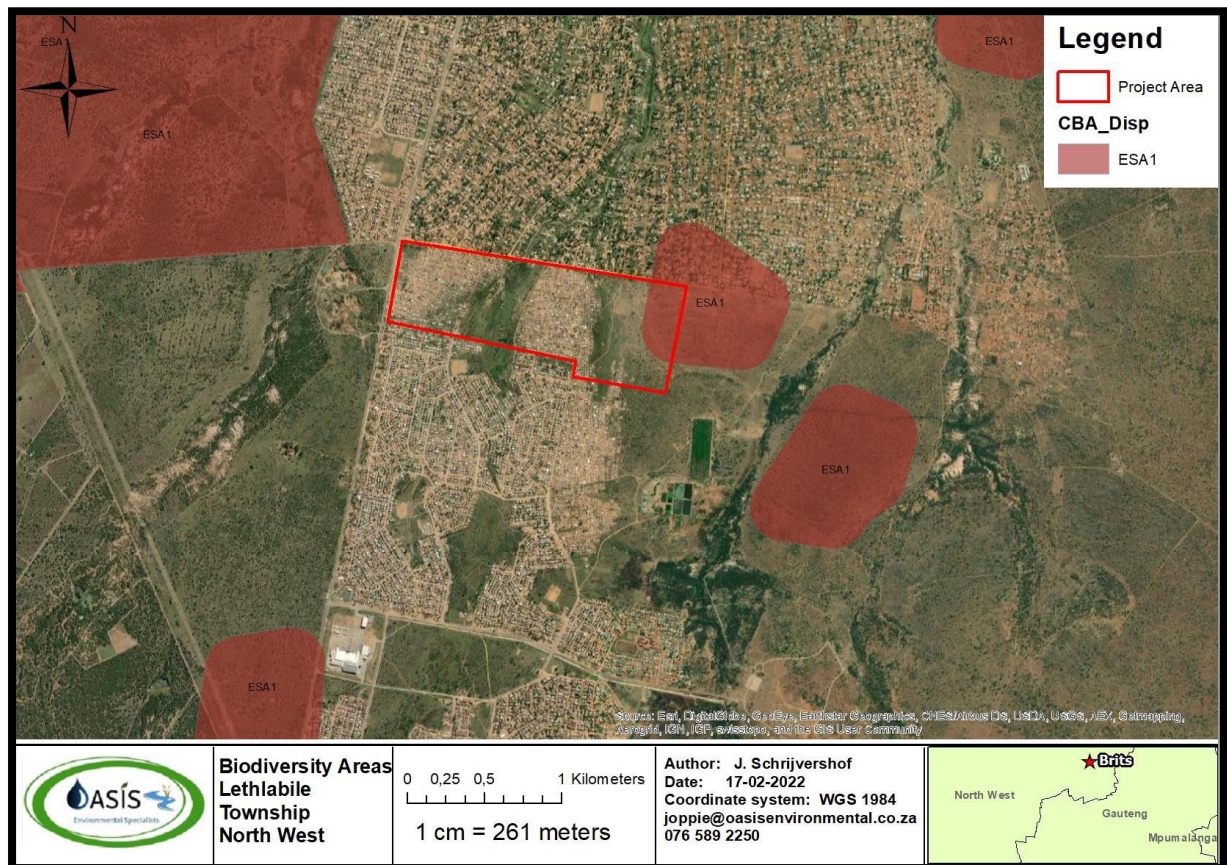


1.6.8 Critical Biodiversity Area

According to the Critical Biodiversity Areas datasets provided by SANBI (2022); the application area overlaps with two Critical Biodiversity Areas as seen in the figure

below. The remainder of the application area falls within transformed and urban areas. These areas have been altered by anthropogenic activities as observed by the site survey.

Figure 5 – CBA Map



1.5.8 Social Economic Status

The following figures and data were taken from the Madibeng Local Municipality Spatial Development Plan that was issued on the 10th of June 2015.

Madibeng Local Municipality, in particular Brits Town is a more formal urban area which has vibrant economic nodes. The Municipality area of Madibeng is characterized by a various economy, including vibrant agriculture, mining, and manufacturing as well as tourism sectors. Nonetheless, these sectors at present contribute a huge percentage to the total Gross Geographic Product (GGP), they are capable and have potential to encourage and accommodate economic growth and development. Madibeng is the world's third largest chrome producer and includes the richest Platinum Group Metals Reserve (situated on the Merensky Reef).

Manufacturing is the dominant sector, with motor industry related activities predominant.

1.5.8.1 Demographic Profile

According to Stats SA 2011 Madibeng Local Municipality has population of 477 381 people growth rate of 3, 2% from 2001 to 2011. Therefore, it is tabulated that the Municipality has a population density of 124 persons/km².

Table 2 – Municipal Area

Municipality	Total area of Municipality	Total area of settlement	Area of Settlement as % of municipal area
Madibeng Local Municipality	3.839km ²	63 639ha	5%

1.5.8.2 Age and gender distribution

The table below (Stats SA, 2011), illustrates age and gender distributions of the Madibeng Local Municipality from 1996, 2001 and 2011. From the grand totals provided in the table below table, it is evident that the population of the municipality is growing. Further analysis shows that the number of males against that of female is higher at lower (less than 64 old) ages and becomes lesser at higher (65 and above) ages.

Table 3 – Gender Age Trends

	1996			2001			2011		
Grand Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
	161	155	316	178	169	347	253	223	477
	321	394	715	163	415	578	991	390	381

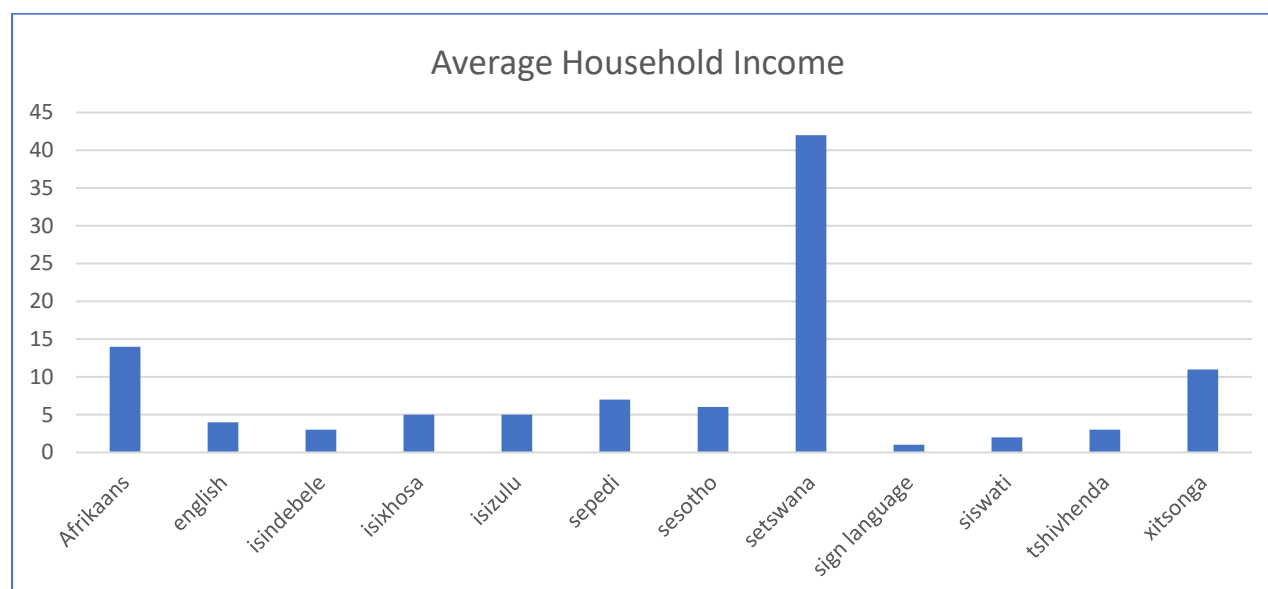
The figures above indicate that the male population is higher than the female population.

1.5.8.3 Household income

The chart below illustrates average household income brackets per annum for the population of Madibeng Local Municipality. The R 19, 601 –R38, 200, R38, 201 –R76,

400, and the R9, 601-R19, 600 income brackets are respectively the most contributing income levels. However, there is approximately 16% of the population that has no form of income.

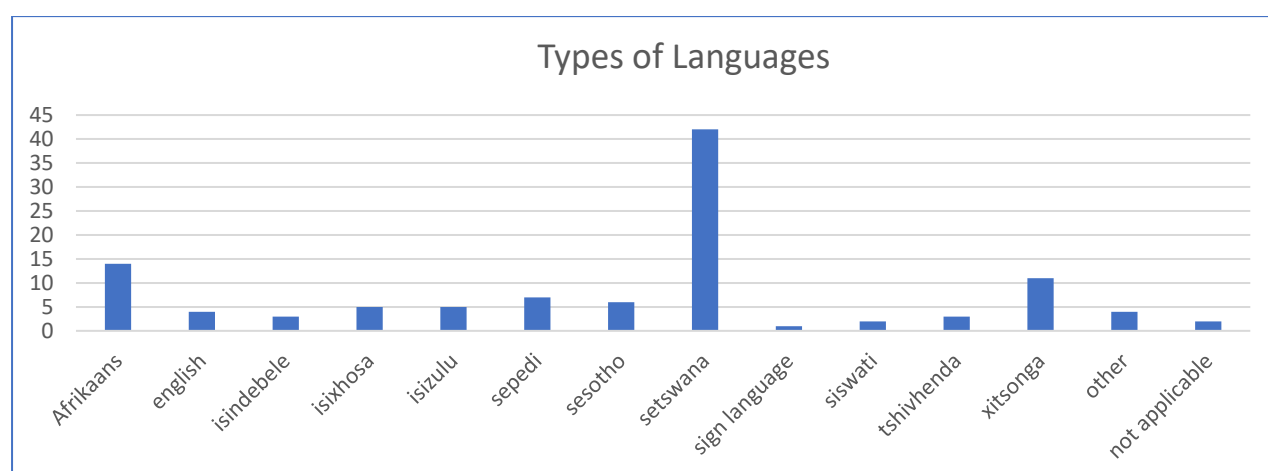
Table 4 – average household income



1.5.8.4 Language

It is vastly clear that the Madibeng Local Municipality is dominated by Setswana speaking people. This is attributed to the fact that the Northwest province is dominated by Batswana due to its history and proximity to the country of Botswana. From a local context and lesser extent, there are traces of Afrikaans, Xitsonga, Sepedi, and Sesotho speaking people which each of them contributes less than 15%.

Table 5 – Types of Languages (stats 2011)



1.5.8.5 Population groups

Complementing the languages graph, the racial groups' pie chart below indicates that 89% of the population in Madibeng are black Africans. These are followed by white, coloured, and Indian/Asian to a lesser extent.

SECTION 2 – LEGISLATIVE REQUIREMENTS

A scoping report must contain the information that is necessary for a proper understanding of the process, informing all preferred alternatives, including location alternatives, the scope of the assessment, and the consultation process to be undertaken through the environmental impact assessment process, and must include:

2(e) 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.

This section provides an overview of the governing legislation identified which may relate to the proposed project. In addition, there are numerous other pieces of legislation governed by many acts, regulations, standards, guidelines, and treaties on an international, national, provincial, and local level, which should be considered to assess the potential applicability of these for the proposed activity.

2.1 National Environmental Management Act

NEMA is the national legislation that provides for the authorisation of “listed activities”. In terms of Section 24 (1) of NEMA, the potential impact on the environment associated with these activities must be considered, investigated, assessed, and reported on to the competent authority that has been charged by NEMA with the responsibility of granting environmental authorisations. The competent authority for this application is GDARD and other stakeholders such as the Department of Water and Sanitation, SAHRIS, City of Tshwane Development will be considered for commenting. An application for Environmental Authorisation was submitted while this draft Scoping was handed in for comments, therefore reference number will be in the Final Scoping Report.

In terms of Section 24 and 24D of NEMA as read with Government Notices R543 and R546, a Scoping and EIA process is required for the proposed project. a table with listed activities and applicability is shown below:

Table 6 – NEMA Relevant Listed Activity

Regulation	Activity Number	Description	Relevance
GNR Listing No 1	19 (i)	The infilling or depositing of any material of more than 10 cubic metres into, or the	Proposed development will encroach the into a wetland identified by the

		dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles, or rock of more than 10 cubic metres from a watercourse;	wetland specialist. A method statement will be requested from the contractor to details the nature of work and how it can be mitigated during the construction phase.
GNR Listing No 2	15	The clearance of an area of 20 hectares or more of indigenous vegetation.	Site development is 495 hectares and the area that has not been cleared yet is 307 hectares of dominated by indigenous grass.
GNR Listing No 3	12(h)(iv) (vi)	<p>The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.</p> <p>(vi) Areas within a watercourse or wetland, or within 100 meters from the edge of a watercourse or wetland.</p>	Proposed development is within 100 meters of a river as measured from the watercourse.

2.2 National Water Act

Project must also be subjected to Water Use License in terms of the National Water Act because there are 2 depressions within the proposed development that will be altered during implementation if the project is approved. The competent authority is Department of Water and Sanitation. Relevant sections of the NWA Act are as follows:

Table 7 – NWA Listed Activity

Relevance Notice	Activity	Description	Applicability to Project
21	C	Altering of the banks of the watercourse	Banks of the wetland within site
21	I	Impending of watercourse	Watercourse is already cut by the establishment of informal settlement in the area.

2.3 National Heritage Resources Act 25 of 1999

The National Heritage Resources Act 25 of 1999 was introduced to ensure protection of South Africa's important heritage features. Section 38 of the Act requires that: *any person who intends to undertake a development categorised as: The construction of a road, wall, road, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length; 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.*

Table 8 – National Heritage Resources Act, 1999 (No 25 of 1999)

Section	Description	Relevance
38 (c)	(c) any development or other activity which will change the character of a site— (i) exceeding 5 000 m ² in extent	Proposed development will alter 75 hectares of virgin land

2.4 Constitution of the Republic of South Africa

The Constitution of the Republic of South Africa, 1996 has major implications for environmental management. The main effects are the protection of environmental and property rights, the drastic change brought about by the sections dealing with administrative law such as access to information, just administrative action and broadening of the *locus standi* of litigants. These aspects provide general and overarching support and are of major significance in the effective implementation of the environmental management principles and structures of the Environment Conservation Act and NEMA.

Section 24 of the Constitution therefore places a duty on all spheres of government to take reasonable steps, including making laws, preventing pollution, promoting conservation, and ensuring sustainable development.

Table 8 – Application to the South African Constitution

The Madibeng Local Municipality as the applicant will be expected to ensure that the proposed development does not infringe on the rights of neighbouring citizens and for those that will take occupancy

2.5 The National Environmental Management: Air Quality Act 39 of 2004

The National Environmental Management: Air Quality Act 39 of 2004 provides for the setting of national norms and standards for regulating air quality monitoring, management and control and describes specific air quality measures to protect the environment and human health or well-being by: preventing pollution and ecological degradation; and promoting sustainable development through reasonable resource use. It also includes reference to the control of offensive odours whereby reasonable steps to prevent the emission of any offensive odours caused by activities on a premises are required.

Table 9 – NEMA : Air Quality

The proposed activity does not trigger need for license, however, at operational level, dust is expected. Applicant should ensure that levels of dust are kept to a minimum during construction through consistent use of dust suppressions measures.

2.6 The Conservation of Agricultural Resources Act 43 of 1983

The Act provides for control over the utilization of the natural agricultural resources of the Republic to promote the conservation of the soil, the water sources and the vegetation and the combating of weeds and invader plants; and for matters connected therewith.

2.7 Integrated Environmental Management (IEM)

IEM is a philosophy for ensuring that environmental considerations are fully integrated into all stages of the development process. This philosophy aims to achieve a desirable balance between conservation and development (DEAT, 1992). The IEM

guidelines intend encouraging a pro-active approach to sourcing, collating, and presenting information in a manner that can be interpreted at all levels. The DEA Integrated Environmental Management Information Series guidelines are also considered during this S&EIR application process.

2.8 National Environmental Management: Waste Act 59 of 2008

The National Environmental Management: Waste Act was promulgated in 2008 with the

following objectives in mind:

To protect health, well-being, and the environment by providing reasonable measures for:

- Minimisation of consumption of natural resources.
- Avoiding and minimising the generation of waste.
- Reducing, reusing, recycling, and recovering of waste.
- Treating and safely disposing of waste as last resort.
- Preventing pollution and ecological degradation.
- Securing ecological sustainable development while promoting justifiable.
- economic and social development.
- Promoting and ensuring the effective delivery of waste services.
- Remediating land where contamination is present, or may be present, a
- significant risk of harm to health or the environment; and
- Achieving integrated waste management reporting and planning.

Table 10 – NEMA: Waste

Conditions will be included in the Environmental Management Plan on how the contractor will practice sustainable waste management. At operational level the municipal will have to enforce environmentally friendly waste management technical e.g., recycling

2.9 Land Use Planning Legislation

Legislation that regulates Land Use Planning has led to “spatial planning tools” that are contained in Municipal and District Strategic Management Frameworks (SMFs), Strategic Development Initiatives (SDIs) and Municipal By-laws.

2.10 The Development Facilitation Act

Contains development facilitation regulations under the Regulations under Development facilitation Act 3. The Act is directed at provincial and local spheres of

government; and serves to re-address the imbalances of the past and to ensure that there is equity in the application of spatial development planning and land use management systems.

2.11 Bojanala District Municipality IDP

The purpose of integrated development planning is a faster and more appropriate delivery of services and providing a framework for economic and social development in a municipality. The integrated development planning is aimed at contributing towards eradicating the development legacy of the past, making the notion of developmental local governmental work, and fostering co-operative governance

SECTION 3 – MOTIVATION FOR PROPOSED OVER THE PREFERRED

3.1 Details of alternatives considered

A scoping report must contain the information that is necessary for a proper understanding of the process, informing all preferred alternatives, including location alternatives, the scope of the assessment, and the consultation process to be undertaken through the environmental impact assessment process, and must include details of all the alternatives considered:

(h) a full description of the process followed to reach the proposed preferred activity, site, and location within the site, including:

(i) details of all the alternatives considered.

The identification of alternatives is a key aspect of the success of the EIA process. All reasonable and feasible alternatives must be identified and screened to determine the most suitable alternatives to consider and assess in the EIA phase. There are, however, some significant constraints that must be considered when identifying alternatives for a project of this scope. Such constraints include social, financial, and environmental issues, which will be discussed in the evaluation of the alternatives. Alternatives can typically be identified according to:

- a) property on which or location where the activity is proposed to be undertaken.
- b) type of activity to be undertaken.
- c) design or layout of the activity.
- d) technology to be used in the activity.
- e) operational aspects of the activity; and
- f) the option of not implementing the activity.

3.1.1 Location

The purpose of this alternative is to provide competent authority with alternative site to make a decision that will result in the least amount of impact on the environment. The option of a different location could not be considered with this proposed development because the purpose of this application is to formalise an **existing** informal settlement.

3.1.2 Type of activity to be undertaken

Consideration of this alternatives requires a change in the nature of the proposed 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.

The applicant can consider a change in the type of activity because the purpose of this application is to provide services to an existing informal settlement. There are no options to the provision of water, sewer, roads, and electricity for the formalisation.

3.1.3 Design and Layout alternative

Consideration of different designs for aesthetic purposes or different construction materials to optimize local benefits and sustainability would constitute design alternatives. Site layout alternatives permit consideration of different spatial configurations of an activity on a particular site. This may include components of a proposed development or may include the entire activity.

Alternative layouts are being considered. There is a wetland within the subject property and the intention is to avoid the wetland to protect its unique features and importance. The other alternative will encroach on the wetland because it is cost effective.

3.1.4 Technology to be used in the activity

The purpose of considering such alternatives is to include the option of achieving the same goal by using a different method or process.

This option was not considered because of the nature of activity being proposed and location.

3.1.5 Operational aspects of the activity

The purpose of this option is to give the applicant an opportunity to access potential alternative operational use as which might be more environmentally friendly or sustainable.

This could not be considered because the purpose of this application is to provide an existing informal settlement with bulk services. These facilities cannot be changed for another purpose because the community will suffer again.

3.1.6 The option of not implementing the activity

The “**no-go**” option, assumes that the activity does not go ahead, implying a continuation of the current situation or the status quo. The ‘no-go’ alternative provides the means to compare the impacts of project alternatives with the scenario of a project not going ahead. The no-go option will provide the following advantages:

- The approximately 200 hectares of land will remain undisturbed.

On the other hand, if the project is approved the following will be realised:

- There is no guarantee that the currently open land will remain unoccupied. From the current activity assessment, the 200 hectares will be cleared illegally in an unsustainable manner
- Job opportunities that will arise at construction level, will not be realised
- The lack of sewer and water means the informal settlers are currently living in unsanitary condition
- The need for electricity will remain and the residence will continue with illegal connection that does not result with any financial benefit to the formal sector.

3.2 Site Matrix

Purpose of site matrix is to provide all the factors that were taken into consideration in deciding on the most suitable site to be used. This was not done for this proposed application because there were no alternative sites to assess. The applicant only one location, with existing informal settlement.

3.3 Concluding Statement

Preferred alternative entails layout entails routes that avoid the wetland within the proposed development. Wetlands acts as flooding buffers; they are a unique habitat to some plants and animal species. Wetlands are also tools for research projects. It is vital then, that wetlands be preserved and protected all the time.

3.4 Need and Desirability of the proposed development

A scoping report must contain the information that is necessary for a proper understanding of the process, informing all preferred alternatives, including location alternatives, the scope of the assessment, and the consultation process to be undertaken through the environmental impact assessment process, and must include:

- *2(f) a motivation for the need and desirability for the proposed development including the need and desirability of the activity in the context of the preferred location.*

(As per notice 792 of 2012, or the updated version of this guideline)

3.4.1 Need

QUESTIONS AS PER GUIDELINE	EAP'S RESPONSE
Is the land use considered within the timeframe intended by the existing spatial development framework (SDF) agreed to by the relevant environmental authority?	According to the SDP 2020-2022 - Bojanala Platinum District Municipality has a total number of 118000 (19.79% of total households) very formal dwelling units, a total of 320000 (53.62% of total households) formal dwelling units and a total of 99800 (16.73% of total households) informal dwelling units. In 2008 the number of households not living in a formal dwelling were 131 000 within Bojanala Platinum District Municipality. From 2008 this number increased annually at 1.95% to 159 000 in 2018. The proposed development entails formalising informal settlement which will address the increase in informal settlement experienced in the district.
Should development, or if applicable, expansion of the town / area concerned	Yes. There is current informal settlement that has already taken over a big percentage of the area. The residence is

in terms of this land use occurs here at this point time?	living with no resources. The quicker the development is formalised, the better the ability to manage environmental degradation.
Does the community / area need the activity and associated land use concerned	Yes. The community is desperate for the services. There are cases of people dying from illegal electricity connection. Women could be seen making illegal connections in the area.
Are necessary services with adequate capacity currently available or must additional capacity be created to cater for the development	There are currently no services, the municipality is seeking to install all the necessary services in the area.
Is this development provided for in the infrastructure planning of the municipality, and if not what will the implications be on the infrastructure planning of the municipality	Yes, the applicant is the same as the municipality. This development is part of the municipality's plan to ensure the residence have services
Is this project part of a national program to address an issue of national concern or importance?	Yes.

3.4.2 Desirability

QUESTIONS AS PER GUIDELINE	EAP'S RESPONSE
Is the project the best practicable environmental option for this land / site?	Yes, there is already an extensive destruction of the environment from the illegal settlement. Formalising the development will ensure that the rest of the settlement is done in a sustainable manner.

Will the approval of this application compromise the integrity of the existing approved and credible municipal IDP, and SDF as agreed to by the relevant authorities?	No
Would this approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can be justified in terms of sustainability considerations?	No
Do locations factors favour this land use at this place?	Yes, if the applicant stays outside the flood line zone and wetland buffer.
How will the activity or land use have associated with the activity applied for, impact on sensitive natural and cultural areas?	<p>According to the wetland and vegetation assessment done in February of 2022, it indicates the following:</p> <ul style="list-style-type: none"> - No red listed floral species were found to occur within this area. - No red listed faunal species were observed during the site visit and no red listed species are expected to be found within this area. - The proposed prospection project does not overlap with any threatened ecosystems and/or protected areas. The proposed prospection project does not fall within/close to any Important Bird Areas.
How will this development impact on people's health and wellbeing	It will improve people's health because currently there is no proper ablution facilities. The implementation of sewer system will take away the threat of health

	risks associated with use of bush as toilets.
Will the proposed activity or land use associated with the activity applied for, result in unacceptable opportunity costs?	No, all potential risks will be identified in the environmental impact report and mitigation measures provided. If the applicant adheres to proposed mitigation measures, the opportunity costs will be eliminated.
Will the proposed land use result in unacceptable cumulative impacts?	No. all anticipated cumulative impacts if the mitigation measures proposed are implemented, will be eliminated.

SECTION 4 – POSSIBLE RISK, IMPACTS AND PROPOSED MITIGATION MEASURES

4.1 Potential Risk and Impacts

Possible risks associated with preferred, and alternative includes the following:

1. Possible sedimentation and erosion,
2. Impact on water quality and quantity
3. Loss of indigenous vegetation
4. Disturbance of faunal species
5. Potential impact on cultural and archaeological items
6. Socio and economic impact
7. Potential dust and noise pollution
8. Impact on sense of place

4.2 Methodology

As a means of determining the significance of the various impacts that can occur or may be associated with the proposed development, a series of assessment criteria were used for each impact. The assessment of impact has been done according to a synthesis of the following assessment criteria in terms of the EIA Regulations Guideline Document, April 1998:

4.2.1 Nature of the impact

This is an appraisal of the type of effect the activity would have on the affected environment. This description includes what is being affected and how.

4.2.2 Extent

The extent refers to whether the impact will be:

- Site – 1
- Local – 2
- Regional – 3
- National – 4
- International – 5

4.2.3 Probability

This describes the likelihood of the impact occurring indicated as:

- Improbable, chances of this impact are 0 - 1
- Improbable: low likelihood, the chance of this impact occurring is between 0 and 25%. However, mitigation measures might be needed in the event of this impact occurring - 2
- Probable: a distinct possibility, the chance of this impact occurring is approximately 50% and therefore it needs to be mitigated - 3
- Highly probable: the impact is most likely to occur, and the planning phase must address the relevant mitigation measures to limit the impact - 4
- Definite: this impact will occur regardless of any prevention measures or is currently occurring. Mitigation measures or contingency plans must be implemented to contain the impact - 5.

4.2.4 Intensity

This indicates the degree to which the impact changes or could change the conditions or quality of the environment. This was qualified as:

- No impact - 2
- Low: the impact alters the affected environment in such a way that the natural processes or functions are not affected - 4
- Medium: the affected environment is altered, but functions and processes continue, albeit in a modified way - 6
- High: function or process of the affected environment is disturbed to the extent where it temporarily or permanently ceases - 8; and
- Very high: process will cease - 10.

4.2.5 Duration

This indicates whether the lifetime of the impact will be:

- Short term: the impact will disappear with mitigation or will be mitigated through a natural process in a period shorter than that of the construction phase, rating of 1.
- Short to Medium: the impact will be relevant to the end of a construction phase, rating of 2.
- Medium term: the impact will last up to the end of the development phases, where after it will be entirely negated, rating of 3.

- Long term: the impact will continue or last for the entire operational lifetime of the development but will be mitigated by direct human action or by natural processes thereafter, rating of 4.
- Permanent: this impact is not reversible and human intervention e.g., rehabilitation, is unlikely to negate the impact sufficiently (e.g., acid mine drainage), rating of 5.

4.2.6 Significance

As a means of determining the significance of the various impacts that can occur or may be associated with the proposed development, a series of assessment criteria were used for each impact. The assessment of impact has been done according to a synthesis of the following assessment criteria in terms of the EIA Regulations Guideline Document, April 1998:

The significance will establish whether the impact is destructive is indicated as:

- Low, where the impact affects the environment in such a way that natural, cultural, and social functions and processes are not affected.
- Medium, where the affected environment is altered but natural, cultural, and social functions and processes continue albeit in a modified way.
- High, where natural, cultural, or social functions or processes are altered to the extent that it will permanently cease.

The significance impact is indicated per Construction Phase (C) and Operational Phase (O)

Table 11: Positive / Negative Significance Rating

Significance Rating	Value	Definition	Positive Impact Management Recommendation
High	101-150	Critically consider the viability of proposed projects. Improve current management of existing projects significantly and immediately	Maintain current management
Medium	51-100	Comprehensively consider the viability of proposed projects.	Maintain current management

		Improve current management of existing projects significantly	
Low	0-50	Consider the viability of proposed projects. Improve current management of existing projects	Maintain current management

4.3 Proposed Mitigation Measures

Mitigation measures will be provided in the Environmental Impact Report.

SECTION 5 – PUBLIC PARTICIPATION

A scoping report must contain the information that is necessary for a proper understanding of the process, informing all preferred alternatives, including location alternatives, the scope of the assessment, and the consultation process to be undertaken through the environmental impact assessment process, and must include:

- *2(h)(ii) details of the public participation process undertaken in terms of regulation 41 of the Regulations, including copies of the supporting documents and inputs.*
- *2(h)(iii) a summary of the issues raised by interested and affected parties, and an indication of the way the issues were incorporated, or the reasons for not including them.*

5.1 Approach

Public Participation is the cornerstone of any EIA. The principles of NEMA as well as the EIA Regulations govern the EIA process, including public participation. These include provision of sufficient and transparent information on an on-going basis to stakeholders to allow them to comment, and ensuring the participation of previously disadvantaged people, women, and the youth.

The public participation process is primarily based on two factors; firstly, on-going interaction with the environmental specialists and the technical teams to achieve integration of technical assessment and public participation throughout. Secondly, to obtain the bulk of the issues to be addressed early in the process, with the latter half of the process designed to provide environmental and technical evaluation of these issues. These findings are presented to stakeholders for verification that their issues have been captured and for further comment. Input into the public participation process by members of the public and stakeholders can be given at various stages of the EIA process. Registration on the project can take place at any time during the EIA process up until the final EIA report is submitted to Department of Environmental Affairs (DEA). There are however set periods in which comments are required from Interested and / or Affected Parties (I&APs) to ensure that these are captured in time for the submission of the various reports. The comment periods during the Scoping phase were implemented according to NEMA EIA Regulations.

5.1.1 Aims of the Public Participation Process (PPP)

The primary aims of the PPP are:

- To inform interested and affected parties (I&APs) and key stakeholders of the proposed development.
- To initiate meaningful and timeous participation of I&APs.
- To identify issues and concerns of key stakeholders and I&APs with regards to the proposed development
- To promote transparency and an understanding of the proposed project and its potential environmental impacts.
- To provide information used for decision-making.
- To provide a structure for liaison and communication with I&APs and key stakeholders.
- To assist in identifying potential environmental impacts associated with the proposed development.
- To ensure inclusivity (the views, needs, interests and values of I&APs must be considered in the decision-making process).
- To focus on issues relevant to the project and issues considered important by I&APs and key stakeholders.
- To provide responses to I&AP queries.
- To encourage co-regulation, shared responsibility, and a sense of ownership.

In addition to the guidance of the PPP in the EIA Regulations, every effort was also made to conform to the requirements of the Promotion of Administrative Justice Act 2000 (Act 3 of 2000), which ensures that the client acts in the best interests of the public to make sure that the public has free access to information regarding developments that may have an impact on I&APs.

5.1.2 The Role of Registered Interested and Affected Parties

The EIA regulations emphasise the importance of public participation. In terms of the EIA regulations, registered interested and/or affected parties:

- May participate in the application process.
- May comment on any written communication submitted to the competent authority by the applicant or environmental consultant.
- Must comment within the timeframes as stipulated by the EIA Regulations.

- Must send a copy of any comments to the applicant or Environmental Assessment Practitioner (EAP) if the comments were submitted directly to the competent authority, and
- Must disclose any direct business, financial, personal, or other interests that the person has in the application being granted or refused.

5.1.3 The Role of the EAP

In terms of the EIA regulations, the EAP is responsible for:

- Managing the public participation process,
- Remain independent from the process, this means, the Reg. EAP must undertake the work objectively even if this results in views and findings that are not favourable to the applicant.
- Must disclose material information that may influence the decision; and

The following actions will be taken upon receiving comments/queries/issues:

- The contact details provided will be entered into the project database for use in future notifications.
- Confirmation of receipt of comments will be done by email, text, letter, or any method that will ensure the registered interested and affected party receives a confirmation.
- Issues raised will be addressed comments in the Issues & Response Report.

5.2 Overview of the Public Participation Process to Date

5.2.1 Authority Consultation

To date, no consultation with authority has been undertaken. It is our view that the process to date does not require a pre-application meeting. Should that become necessary as the process continues, all consultation will be on record and minutes. Records of such meetings will be included to this report as Appendix E.

5.2.2 Site Notifications

Chapter 6 of the NEMA Act

41(2) The person conducting a public participation process must consider any relevant guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of an application or proposed application which is subjected to public participation by-

(a) fixing a notice board at a place conspicuous to and accessible by the public at the boundary, on the fence or along the corridor of-

(i) the site where the activity to which the application or proposed application relates is or is to be undertaken; and

(ii) any alternative site.

41(3) A notice, notice board or advertisement referred to in sub regulation (2) must:

- a. give details of the application or proposed application, which is subjected to public participation, and
- b. (b) state-
 - i. whether basic assessment or S&EIR procedures are being applied to the application.
 - ii. the nature and location of the activity to which the application relates.
 - iii. where further information on the application or proposed application can be obtained; and
 - iv. the manner in which and the person to whom representations in respect of the application or proposed application may be made.

41(4) A notice board referred to in sub regulation (2) must:

- a. be of a size at least 60cm by 42cm; and
- b. display the required information in lettering and in a format as may be determined by the competent authority.

Ten notices were posted on residence fences, public shops, and posts in and around the Lethlabile informal settlement. There is no alternative notice, so all the notices were posted in the preferred location. The site notices clearly state that the application is for a scoping and environmental impact report. Site notices are in colour and A2 in size clearly stating the subject property location and to whom residence should direct their comments. Reference is made to Appendix E1, for photographic evidence of the site notices that were posted on the 7th of February 2022. The table below, includes a few of the notices that were posted in Lethlabile informal settlement.

Table 12 – Proof of Site Notification



5.2.3 Newspaper Advertisement

Chapter 6 of the NEMA Act, 41(c) placing an advertisement in:

- i. one local newspaper, or
- ii. 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.

In line with Regulation 41, a legal notice was placed in the **government gazette** and was published on the **4th of February 2022**. A copy of this notice is included to this application as Appendix E3.

5.2.4 Background Information Document

Chapter 6 of the NEMA Act

The person conducting a public participation process must consider any relevant guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of an application or proposed application which is subjected to public participation by-

41(2)(b) giving written notice, in any of the manners provided for in section 47D of the Act, to:

- i. the occupiers of the site and, if the proponent or applicant is not the owner or person in control of the site on which the activity is to be undertaken, the owner or person in control of the site

where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken.

- ii. owners, persons in control of, 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.
- iii. the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area.
- iv. the municipality which has jurisdiction in the area.
- v. any organ of state having jurisdiction in respect of any aspect of the activity; and
- vi. any other party as required by the competent authority;

The purpose of a written notification is to break the project details down for all interested and affected members to understand the scope of work. Further, a written notice includes the process of how the public participation will be undertaken. To address the requirements stipulated in NEMA Act, the following activities were undertaken:

- i. There was no need to notify the owner of the land because the land is managed by the applicant i.e., Madibeng Local Municipality.
- ii. Those residing on the proposed site were notified by means of the site notices and through the community leaders, through the ward councillor. The community is aware and waiting for the implementation of the proposed development.
- iii. The subject property falls under ward 11. The ward councillor is Mr. Thami. He was contacted on the 7th of February 2022 via a telephone call. A written notice was further sent to him via WhatsApp on the 24th of February 2022. The ward councillor indicated that he would prefer that communication to do with the application be handled by the community leaders i.e., Mr Mike Vhusuto Maselesele. As such all key correspondence has been forwarded to Mr. Mike Vhusuto Maselesele.
- iv. Written notices will continue to be shared with all potential interested and affected members.
- v. A notification was sent to the Northwest Provincial Authority on the 24th of February 2022.
- vi. Any other stakeholders that were identified included the department of Water and Sanitation. A written notification was sent out on the 24th of February 2022. Reference is made to Appendix E4.

4.2.1 Summary of Issues raised by IAPs

Chapter 6 of the NEMA Act

Section 44(1) The applicant must ensure that the comments of interested and affected parties are recorded in reports and plans and that such written comments, including responses to such comments and records of meetings, are attached to the reports and plans that are submitted to the competent authority in terms of these Regulations.

Comments and Response Sheet will be included in the Final Scoping Report. This draft scoping and plan of study forms the first report to be subjected to a commenting period of 30 days and thus allow competent authority, stakeholders and all registered and interested members to provide comments. A summary of comments will be made available in the Final Scoping Report as Appendix E6.

5.2.5 Registration of Interested and Affected Members

Chapter 6 of the NEMA Act

A proponent or applicant must ensure the opening and maintenance of a register of interested and affected parties and submit such a register to the competent authority, which register must contain the names, contact details, and addresses of:

all persons who, because of the public participation process conducted in respect of that application, have submitted written comments, or attended meetings with the proponent, applicant, or EAP.

all persons who have requested the proponent or 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.

All persons who will request to participate in the process will be entered on a register. The register will not be limited to those that have expressed interest only, it will also automatically include all organs of state with jurisdiction of the subject property. A Copy of the register is included to this application as Appendix E9 - IAP Register.

SECTION 6 – PLAN OF STUDY

In compliance with section (i) of Appendix 2 of regulation 982, the following plan of study for undertaking the Environmental Impact Assessment Report is provided. In terms of these regulations the following must be included in this plan of study:

- i. A description of the alternatives to be considered and assessed within the preferred site, including the option of not proceeding with the activity
- ii. A description of the aspects to be assessed as part of the environmental impact assessment process
- iii. Aspects to be assessed by specialists
- iv. A description of the proposed method of assessing the environmental aspects
- v. A description of the proposed method of assessing duration and significance
- vi. An indication of the stages at which the competent authority will be consulted
- vii. Particulars of the public participation process that will be conducted during the environmental impact assessment process
- viii. A description of the tasks that will be undertaken as part of the environmental impact assessment process
- ix. 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

6.1 A description of the alternatives to be considered and assessed within the preferred site, including the option of not proceeding with the activity

Alternatives that were chosen for this project are based on layout. Alternative layouts were considered that seek to avoid the wetland. In the Environmental Impact Assessment, the impact for each alternative will be considered and mitigation measures will be proposed.

6.2 A description of the aspects to be assessed as part of the environmental impact assessment process

To date, the following specialist assessment have been done:

- Heritage impact assessment,
- Wetland assessment
- Terrestrial biodiversity

From these assessments and the qualified view of the Environmental Assessment practitioner, the following aspects will be assessed in the Environmental Impact Report:

7 Possible sedimentation and erosion,

- 8 Impact on water quality and quantity
- 9 Loss of indigenous vegetation
- 10 Disturbance of faunal species
- 11 Potential impact on cultural and archaeological items
- 12 Socio and economic impact
- 13 Potential dust and noise pollution
- 14 Impact on sense of place

6.3 Aspects to be assessed by specialists

The choice of which specialists to undertake an assessment on the site is based on the screening report provided by the Department of Environmental Affairs. The following table indicates specialists that have already been undertaken and the ones that must be undertaken during the Environmental Impact Report phase.

Table 13 – Screening Report

Specialist	Sensitivity	Status	Protocol
Agricultural Theme	High	In progress	Appendix 6
Aquatic Biodiversity	Very High	Done, refer to Appendix C1	Appendix 6
Archaeological and Cultural Heritage Theme	Low	Refer to Appendix C2	Appendix 6 of the EIA Regulations
Civil Aviation	High	Excluded, reference is made to Appendix C4	Appendix 6
Defence System	Low	N/A	Appendix 6
Palaeontology	Medium	N/A	Appendix 6
Plant Species Theme	Low	Appendix C5	Appendix 6
Terrestrial Biodiversity	Very High	Refer to Appendix C1	Appendix 6

6.4 A description of the proposed method of assessing the environmental aspects

As a means of determining the significance of the various impacts that can occur or may be associated with the proposed development, a series of assessment criteria were used for each impact. The assessment of impact has been done according to a synthesis of the following assessment criteria in terms of the EIA Regulations Guideline Document, April 1998:

6.4.1 Nature of the impact

This is an appraisal of the type of effect the activity would have on the affected environment. This description includes what is being affected and how.

6.4.2 Extent

The extent refers to whether the impact will be:

- Site – 1
- Local – 2
- Regional – 3
- National – 4
- International – 5

6.4.3 Probability

This describes the likelihood of the impact occurring indicated as:

- Improbable, chances of this impact are 0 - 1
- Improbable: low likelihood, the chance of this impact occurring is between 0 and 25%. However, mitigation measures might be needed in the event of this impact occurring - 2
- Probable: a distinct possibility, the chance of this impact occurring is approximately 50% and therefore it needs to be mitigated - 3
- Highly probable: the impact is most likely to occur, and the planning phase must address the relevant mitigation measures to limit the impact - 4
- Definite: this impact will occur regardless of any prevention measures or is currently occurring. Mitigation measures or contingency plans must be implemented to contain the impact - 5.

6.4.4 Intensity

This indicates the degree to which the impact changes or could change the conditions or quality of the environment. This was qualified as:

- No impact - 2
- Low: the impact alters the affected environment in such a way that the natural processes or functions are not affected - 4
- Medium: the affected environment is altered, but functions and processes continue, albeit in a modified way - 6
- High: function or process of the affected environment is disturbed to the extent where it temporarily or permanently ceases - 8; and
- Very high: process will cease - 10.

6.5 A description of the proposed method of assessing duration and significance

As a means of determining the significance of the various impacts that can occur or may be associated with the proposed development, a series of assessment criteria were used for each impact. The assessment of impact has been done according to a synthesis of the following assessment criteria in terms of the EIA Regulations Guideline Document, April 1998:

6.5.1 Duration

This indicates whether the lifetime of the impact will be:

- Short term: the impact will disappear with mitigation or will be mitigated through a natural process in a period shorter than that of the construction phase, rating of 1.
- Short to Medium: the impact will be relevant to the end of a construction phase, rating of 2.
- Medium term: the impact will last up to the end of the development phases, where after it will be entirely negated, rating of 3.
- Long term: the impact will continue or last for the entire operational lifetime of the development but will be mitigated by direct human action or by natural processes thereafter, rating of 4.
- Permanent: this impact is not reversible and human intervention e.g., rehabilitation, is unlikely to negate the impact sufficiently (e.g., acid mine drainage), rating of 5.

6.5.2 Significance

The significance will establish whether the impact is destructive is indicated as:

- Low, where the impact affects the environment in such a way that natural, cultural, and social functions and processes are not affected.
- Medium, where the affected environment is altered but natural, cultural, and social functions and processes continue albeit in a modified way.
- High, where natural, cultural, or social functions or processes are altered to the extent that it will permanently cease.

The significance impact is indicated per Construction Phase (C) and Operational Phase (O)

Table 14: Positive / Negative Significance Rating

Significance Rating	Value	Definition	Positive Impact Management Recommendation
High	101-150	Critically consider the viability of proposed projects. Improve current management of existing projects significantly and immediately	Maintain current management
Medium	51-100	Comprehensively consider the viability of proposed projects. Improve current management of existing projects significantly	Maintain current management
Low	0-50	Consider the viability of proposed projects. Improve current management of existing projects	Maintain current management

6.6 An indication of the stages at which the competent authority will be consulted

- Stage 1 – competent authority will be given an opportunity to comment on this draft scoping report and plan of study
- Stage 2 – competent authority will decide on the final scoping report and plan of study
- Stage 3 – competent authority will be given an opportunity to comment on the draft environmental impact report
- Stage 4 – competent authority will be given an opportunity to decide on the final environmental impact report

6.7 Particulars of the public participation process that will be conducted during the environmental impact assessment process

- **Task 1 entails the review of Draft EIA and EMPr** – upon receipt of approval to proceed with the EIR, draft EIR will be compiled and subjected to a 30-day I&AP and stakeholder commenting period.
- **Task 2 entails capturing comments and responses** - A key component of the EIA Process is documenting and responding to the comments received from I&APs and the authorities. One-on-one meetings with key authorities and/or I&APs (if required). The comments received during the 30-day review of the Draft EIR Report will be compiled into a Comments and Responses sheet for inclusion in an appendix to the Draft EIR Report that will be submitted to the competent authority in terms of Regulation 23 (1) (a) for decision-making. The Comments and Responses Trail will indicate the nature of the comment, as well as when and who raised the comment. The comments received will be considered by the EIA team and appropriate responses provided by the relevant member of the team and/or specialist. The response provided will indicate how the comment received has been considered in the EIR Reports for submission to the competent authority and in the project design or EMPr.
- **Task 3 entails the appeal period** - After the decision-making phase, all registered I&APs and stakeholders on the project database will receive notification of the competent authority's decision and an opportunity to appeal. The 2014 EIA Regulations (as amended on 07 April 2017) (i.e., Regulation 4 (1)) states that after the Competent Authority has reached a

decision, it must inform the Applicant of the decision, in writing, within 5 days of such decision. Regulation 4 (2) of the EIA Regulations stipulates that I&APs need to be informed of the EA and associated appeal period within 14 days of the date of the decision. All registered I&APs will be informed of the outcome of the EA and the appeal procedure and its respective timelines. All I&APs on the project database will be notified of the outcome of the appeal period in writing.

6.8 A description of the tasks that will be undertaken as part of the environmental impact assessment process

From the time that we receive a decision from the competent authority, as the appointed EAP, we will undertake the following tasks:

1. Compile draft Environmental Impact Report (EIR). At this stage, all recommended specialist as indicated under section 7.3 will be included in this assessment. Further, an Environmental Management Plan (EMP) will be compiled.
2. Circulate draft EIR, inclusive of draft EMPr to all registered interested and affected members for a period of 30-days for review and comments.
3. Compile Final EIR and EMPr. Final EIR and EMP will take into consideration all comments raised during the commenting. Submit final report to competent authority and allow 107 days for review and decision.
4. Upon receipt of decision, all registered interested and affected members will be given an opportunity to appeal the decision. After which, the EAP we will hand over the application to the manager including all supporting documents.

6.9 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

SECTION 7 - OATH / AFFIRMATION BY EAP

7.1 The correctness of the information provided in the report

I **Grace Magaya** herewith undertake that the information provided in the foregoing report is correct, and that the level of agreement with Interested and Affected Parties and stakeholders has been correctly recorded and reported herein.

Signature of the EAP : _____

Date : _____

7.2 The inclusion of comments and inputs from stakeholders and interested and affected parties

I **Grace Magaya** herewith undertake that the information provided in the foregoing report is correct, and that the level of agreement with Interested and Affected Parties and stakeholders has been correctly recorded and reported herein.

Signature of the EAP : _____

Date : _____

7.3 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

I **Grace Magaya** herewith undertake that the information provided in the foregoing report is correct, and that the level of agreement with Interested and Affected Parties and stakeholders has been correctly recorded and reported herein.

Signature of the EAP : _____

Date : _____

7.4 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

I **Grace Magaya** herewith undertake that the information provided in the foregoing report is correct, and that the level of agreement with Interested and Affected Parties and stakeholders has been correctly recorded and reported herein.

Signature of the EAP : _____

Date : _____

7.5 Other Information

Not applicable, should there be additional information as requested by the authority, these will be included in the Final Scoping and Plan of Study Report.