CONSULTATION SCOPING REPORT FOR THE PROPOSED TOWNSHIP ESTABLISHMENT TO BE SITUATED ON THE REMAINDER OF THE FARM MATABULA 701 JU, NKOMAZI LOCAL MUNICIPALITY, MPUMALANGA PROVINCE.

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ABBREVIATIONS

MDARDLEA	Mpumalanga Department of Agriculture, Rural Development, Land and Environmental
	Affairs
CSR	Consultation Scoping Report
PPP	Public Participation Process
MPHRA	Mpumalanga Provincial Heritage Resources Authority
SAHRA	South African Heritage Resource Agency
EDM	Ehlanzeni District Municipality
NLM	Nkomazi Local Municipality
EAP	Environmental Assessment Practitioner
EMP	Environmental Management Plan
NEMA	National Environmental Management Act
Ha	Hectares
CA	Competent Authority
EIM	Environmental Impact Management
EA	Environmental Authorisation
RoD	Record of Decision
ΜΤΡΑ	Mpumalanga Tourism and Parks Agency
I&AP's	Interested and Affected Parties
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
S&EIR	Scoping and Environmental Impact Reporting

I. INTRODUCTION

Leago Environmental Solutions has been appointed by Nkanivo Development Consultants on behalf of Nkomazi Local Municipality as Independent Environmental Assessment Practitioners (EAP) to undertake a Scoping and Environmental Impact Assessment (EIA) for the proposed township establishment to be situated on the Remainder of the Farm Matabula 701 JU, in Sikhwahlane Area, Mpumalanga Province. The project area measures 260 hectares in extent.

I.I PURPOSE OF THE REPORT

This Consultation Scoping Report and has been prepared in accordance with the EIA Regulations published in Government Notice No. R 326 of 2017 read with Section 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998 as amended) (NEMA).

NEMA Section 24(5) stipulates that "listed activities" (i.e., those activities that have been recognised as having a detrimental effect on the environment) require environmental authorization from the competent authority.

NEMA EIA Regulations, 2017 identifies the following listed activities associated with the proposed project that requires environmental authorisation by means of a full EIA process:

(a) Government Notice No. R325, Listing Notice 2: Activity 15

"The Clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for-

- (i) The undertaking of a linear activity; or
- (ii) Maintenance purposes undertaken in accordance with a maintenance management plan"

(b) Government Notice No. R327, Listing Notice I: Activity 28

Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development:

(i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or
 (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare;
 excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.

I.2 EIA PROCESS

The EIA process is controlled through Regulations published under Government Notice No. R. 325 and associated guidelines promulgated in terms of Chapter 5 of the National Environmental Management Act (Act 107 of 1998 as amended in 2014).

Three phases in the EIA process are typically recognised:

- Application Phase;
- Scoping Phase; and the
- EIA Phase.

I.2.1 Application Phase

The Application Phase consists of completing the EIA application form from the relevant competent authority by the Environmental Assessment Practitioner (EAP), the proponent and the subsequent submission and registration of the project with the competent authority. An application is completed and will be submitted as well as the screening report, to the Mpumalanga Department of Agriculture, Rural Development, Land and Environmental Affairs (MDARDLEA).

(a) Details of Authority

Queries will be directed to the Directorate: Mpumalanga Department of Agriculture, Rural Development Land and Environmental Affairs (Ehlanzeni District).

Environmental Impact Management

Riverside Office Park Aqua Street (opposite Audi) Building 4, East Tower Nelspruit 1200

Tel: 013 759 4000

I.2.2 Scoping Phase

The Scoping Phase aims to identify the key environmental issues associated with the project, in part through public consultation; consideration of project alternatives; and provide focus for the EIA Phase. At the end of the Scoping Phase a report is compiled, known as a Scoping Report. As per the EIA Regulations, a consultation Scoping Report shall be compiled and it shall be circulated amongst the interested and affected parties to provide them with an opportunity to comment on the proposed activity.

(a) Consultation Scoping Report

The aim of this Consultation Scoping Report is to document the following:

- Details of the Environmental Assessment Practitioner undertaking the EIA
- Details of the project proposal
- Details of alternatives considered in formulating the project proposal
- Description of the legislation and guidelines applicable to the proposed activity
- A description of the receiving environment
- Documentation of the process and drafting of the public participation
- An identification of environmental issues and impacts associated with the project proposal and alternatives
- A description biophysical and environmental issues that require investigation
- A description of the methodology to be used in the assessment of impacts
- A Plan of Study for Environmental Impact Assessment that will include a description of the public participation process.

This Consultation Scoping Report shall be sent to I&AP's for observation and comments.

(b) Final Scoping Report

Once this report (consultation scoping report) has been reviewed by I&APs, comments will be collected, the report will be amended as appropriate and finalised. The Final Scoping Report will then be submitted together with the Plan of Study for Environmental Impact Assessment to the Competent Authority; MDARDLEA. Once the Scoping Report and the Plan of Study for EIA have been accepted by MDARDLEA, the project will proceed into its detailed EIA Phase.

I.2.3 EIA Phase

During the EIA phase, a consultation Environmental Impact Assessment Report (EIAR), which takes into consideration all the identified key issues and associated impacts from the scoping phase, together with a draft Environmental Management Programme, which specifies the way proposed mitigation measures are to be implemented, will be produced by Leago Environmental Solutions.

The consultation/ draft EIAR will be made available to the registered I&APs for review and comment for a period of 30 days. Once the I&AP comments have been integrated into the EIAR it will be submitted to MDARDLEA for decision making.

2. PROPOSED ACTIVITY

2.1 Location of the Proposed Activity

The proposed activity is situated in Sikhwahlane Village. The site can be accessed via the existing D2945 road. Additionally, the subject property is also in closer proximity to the Tonga Mall.

The site is located roughly at the following coordinates:

Longitude: 31°46'21,502"E Latitude: 25°46'49,663"S



Figure 1: Locality map of the proposed development site

2.2 Description of Proposed Activity

The proposed activity is a township establishment to be situated on the remainder of the Farm Matabula 701 JU, Sikhwahlane, in the jurisdiction of Nkomazi Local Municipality, Mpumalanga Province. The proposed site estimated 260 hectares in area extent.

The land-uses are as follows:

- 809 Residential (dwelling unit)
- 15 Business sites (retail)
- 7 Institutional (crèche, school, church)
- 4 Community facilities (clinic, library, sports and recreation ground)
- 3 Government sites (Thusong centre, municipal, cemetery)

• 5 Public open spaces (park)



Figure 2: Layout plan of the proposed development.

2.3. CIVIL SERVICES

2.3.1. Roads

There is an existing functioning D2945 road network that can be used to access the proposed development site.

2.3.2. Water

The proposed township is within the Sibange Regional Bulk Water Scheme.

2.3.3. Sewer Services

There is no existing waste water treatment works in Sikhwahlane. Sewer is currently handled through septic tanks and pit toilets.

2.3.4. Solid Waste

A regional landfill situated next to the site will be used to dispose the solid waste. The local municipality will be responsible for collecting and disposing the solid waste.

Please note that the applicant of the proposed development is the local municipality itself, therefore it is believed that no written confirmation is required from the municipality regarding the above.

2.3.5 Storm Water Drainage

The storm water generated onsite can be channelled to follow the natural slope of the ground.

2.3.6. Electricity

There is existing electricity supply infrastructure in the area and adjacent to the site. The proposed development can therefore be connected to the existing electrical infrastructures. An electrical services report is compiled and will form part of the specialist reports.

3. ALTERNATIVES

The EIA Regulations stipulate that a requirement of the Scoping Process is to investigate feasible and reasonable alternatives to the project proposal.

The EIA Regulations define "Alternatives", in relation to a proposed activity, as "different means of meeting the general purpose and requirements of the activity, which may include alternatives to –

- (a) The property on which or location where it is proposed to undertake the activity
- (b) The type of activity to be undertaken
- (c) The design or layout of the activity
- (d) The technology to be used in the activity
- (e) The operational aspects of the activity

The concept of alternatives is aimed at ensuring that the best among all possible options in all aspects (environmental, economic, etc.) is selected. The option of not carrying out the proposed actions (no-go option) or developments is discussed to demonstrate environmental conditions without the project.

This means that for any project that is proposed, there should be a number of possible proposals or alternatives for accomplishing the same objectives or meeting the same need. Alternatives that would still meet the objective of the original proposal, but which would also have an acceptable impact on the environment (referring to physical, biological, aesthetic/visual) must be considered.

Kindly note there is no other alternative for the activity as the proposed development area/ site is the only land available, however there is a possibility of a layout alternative that will still meet the objective of the project scope.

3.1. FEASIBLE AND REASONABLE ALTERNATIVES CONSIDERED FOR THE PROPOSED ACTIVITY

3.1.1. Site Alternatives:

Due to land availability, the proposed development site is the only site that has been identified for establishing the proposed township. Therefore, site alternatives are not applicable for this project.

3.1.2. Activity Alternatives:

The current preferred activity is deemed to be the only feasible activity alternative as this activity will result in improved housing which can accommodate more people. No other activities were considered in this application due to the assessed need and feasibility of the proposed activity.

3.1.3. Design Alternatives:

The unique character and appeal of Sikhwahlane were taken into consideration with the design philosophy. Various layout alternatives were considered, also taking terrain and environmental constraints into account, hence the current design/ layout plan being the result, however there is a possibility of a layout alternative that will still meet the objective of the project scope.

3.1.4. Operational Aspects

The operational aspects of the activity relate to the improved housing for the local community. No other alternatives were deemed feasible other than the proposed activity.

4. NO-GO ALTERNATIVES

This option would come into effect if this assessment reveals fatal flaws in the process. To date no fatal flaws have been revealed. The no-go alternative of not developing the proposed site would leave the environment in the current state.

5. LEGISLATION AND POLICY GUIDELINES CONSIDERED

 Table 1: The following table presents the most pertinent relevant legislation for the proposed development.

	ACT	SUMMARY	RELEVANCE TO DEVELOPMENT
5.1	Constitution (Act 108 of 1996)	Everyone has the right to an unharmful environment	Ensure conservation principles are promoted,
		which must be protect for the benefit of future	that the proposed activity is ecologically
		generations. This is achieved through measures such as;	sustainable and will not result in pollution and
		preventing pollution and degradation, promoting	ecological degradation.
		conservation, promoting sustainable development and	
		sustainable use of natural resources.	
5.2	The National Forest Act (No. 84	The purposes of this Act is to promote the sustainable	The developer will be responsible for
	of 1998)	management and development of forests for the benefit	minimizing the destruction of indigenous trees
		of all and also to provide special measures for the	including the protected trees found within the
		protection of certain forests and trees.	proposed development site.
5.3	National Veld and Forest Fires	This act provides for the control of veld fires. It also	The developer will be responsible for
	Act (No. 101 of 1998)	describes the compulsory making of firebreaks to control	emergency preparedness for the control of
		veld fires that originates on the owner's property as well	veld fires.
		as on adjacent properties.	
5.4	National Environment	NEMA creates the legal framework that ensures that	The proposed development should be in
	Management Act (No 107 of	environmental rights are guaranteed. The core principal	accordance with the NEMA principals, where
	1998)	relates to promoting sustainable development. The duty	this is not possible, reasons for deviation must
		of care concept extends to prevent, control and	be strongly motivated.
		rehabilitate pollution and degradation. Failure to perform	
		these duties may lead to criminal prosecution. NEMA	
		also introduces the EIA Regulations.	
5.5	National Water Act (No. 36 of	The purpose of this Act is to ensure that the nation's	Any water use must be investigated, specified,
	1998) and pollution prevention	water resources are protected, managed and controlled	registered and licensed. Developers are
		in an environmentally sustainable way. Also, relevant to	responsible for taking measures to prevent
		the proposed activity is Section 19 of the Act which deals	pollution of water resources, undertaking
		with pollution prevention.	necessary clean up procedures and controlling

			waste.
5.6	National Environmental	Listed activities require Environmental Authorisation in	The proposed development falls below
	Management: Waste	the form of a Basic Assessment or full Scoping and EIA.	thresholds.
	Management Act (No.95 of 2008)		
5.7	National Heritage Resources Act	The protection of archaeological and paleontological sites	Any artifacts uncovered during the
	(No 25 of 1999)	and material is the responsibility of a provincial heritage	construction Phase must be reported to
		resources authority and all archaeological objects are	SAHRA.
		property of the state.	
5.8	National Environment	The purpose of this Act is to provide for the	The developer will be responsible for the
	Management Biodiversity Act	management and conservation of South Africa's	application of appropriate environmental
	(No.10 of 2004)	biodiversity within the framework of the National	management tools in order to ensure
		Environmental Management Act, 1998; and the	integrated environmental management of
		protection of species and ecosystems that warrant	activities thereby ensuring that all
		national protection; the sustainable use of indigenous	developments within the area are in line with
		biological resources; the fair and equitable sharing of	ecological sustainable development and
		benefits arising from bio prospecting involving indigenous	protection of biodiversity.
		biological resources; the establishment and functions of a	
		South African National Biodiversity Institute; and for	
		matters connected therewith.	

6. DESCRIPTION OF RECEIVING ENVIRONMENT

6.1. PHYSICAL ENVIRONMENT

6.1.1 Climate

Sikhwahlane area is a semi-arid climate. The annual average temperature in Sikhwahlane is 25°C and receive about 353mm of precipitation annually.

6.1.2 Geology

According to literatures and geological maps of the site, it can be confirmed that the site falls under Mpuluzi granite. Details of the geology of the area will be explicitly discussed in the geotechnical report that will form part of the specialist reports.



Figure 3: Geological map of grid reference 253 IDD

6.1.3 Hydrology

Geotechnical investigation report will reveal the extent of groundwater seepage on site. There is a non-perennial river/ stream across the proposed development site.

6.1.4 Topography

The topography of the proposed development site is generally flat.

6.1.5. Cultural Sites

The Heritage Impact assessment will be conducted to obtain a comprehensive understanding of the site. Any new discovery or previously of heritage features must be reported to the archaeologist and SAHRA and may require further mitigation measures.

7. DESCRIPTION OF ENVIRONMENTAL ISSUES AND IMPACTS IDENTIFIED

7.1. Direct habitat destruction

The clearance of vegetation will result in loss of flora and fauna.

Destruction or loss of floral diversity or vegetation communities

- The physical removal of the vegetation;
- Construction activities can impact on surrounding vegetation by dust and altered surface run-off patterns; and
- Disturbance of the area could lead to an increase in the growth of alien vegetation.

Loss of faunal diversity and decline in animal numbers

- Installation of services by heavy vehicles and back-actors could cause fauna mortalities;
- Habitat loss and construction activities will force animals out of the area and animal numbers will decrease.

Mitigation measures

- Damage to large indigenous trees/shrubs should be kept to a minimum.
- Where there is a possible safety risk to fauna, precautions should be put in place to prevent this.
- Peripheral impacts around the township on the surrounding vegetation of the area should be avoided and a monitoring programme should be implemented to ensure the impacts are kept at a minimum.
- Advice should be sought when using any sort of poisons or pesticides.
- Construction impact should be kept at minimal and must not exceed the footprint of buildings as outline in the layout plan.

7.2 Habitat fragmentation

Natural movement patterns will be disrupted and could result in the fragmentation of natural populations.

Mitigation measures

- Use existing facilities where possible
- Ensure as little disturbance as possible during the construction phase.

7.3 Soil and water pollution

The development will always carry a risk of soil and water pollution, with large construction vehicles contributing substantially due to oil and fuel spillages. If such impacts are not promptly dealt with, spillages or accumulation of waste matter can contaminate the soil and surface or ground water, leading to potential medium/long-term impacts on fauna and flora.

During the constructional phase heavy machinery and vehicles as well as sewage and domestic waste from workers would be the main contributors to potential pollution problems.

Mitigation measures

- Water falling on areas polluted with oil/ diesel or other hazardous substances must be contained.
- Any excess or waste material or chemicals should be removed from the site and discarded in an environmental friendly manner.
- All construction vehicles should be inspected for oil and fuel leaks regularly, and any vehicle showing signs of leaking should be serviced immediately.

7.4 Spread and establishment of alien invasive species

Habitat disturbance provides an opportunity for alien species to spread.

Continued movement of personnel and vehicles, will result in a risk of importation of alien species.

Mitigation measures

- Weeds and invader plants must be controlled.
- Alien invasive species should be eradicated.
- Rehabilitate disturbed areas as quickly as possible.
- Institute a monitoring programme.
- Institute an eradication/control programme for early intervention.

7.5 Negative effect of human activities

- An increase in human activity is anticipated.
- The risk of snaring, killing and hunting of certain faunal species is increased.
- For construction sites, pollution could increase because of litter and inadequate sanitation and the introduction of invasive fauna and flora are increased.
- The increase in the number of people will result in increased risk of uncontrolled fires arising from cooking fires and improperly disposed cigarettes etc.

Mitigation measures

• Maintain proper firebreaks around entire development footprint.

- Construction activities must remain within defined construction areas and the road servitudes. No construction / disturbance should occur outside these areas.
- Construction activities should be restricted to working hours.
- Workers should be educated on the importance of conservation issues.
- Camp fires at construction sites must be strictly controlled to ensure that no veld fires are caused

7.6 Visual Environment and Noise

Visual environment will be in line with the developments in the surrounding area. All structures and lights will cause a visual impact. During the construction and operational phases of the proposed development, noise and dust will be a factor. These impacts and mitigation measures will be addressed in detail in the Environmental Management Plan report (EMPr).

7.7 Air Quality

During the construction and especially when clearing the site, dust particles will be dispersed into the atmosphere which will have an impact to the air quality in the area.

These impacts and mitigation measures will be addressed in the impact table hereunder as well as in the Environmental Management Plan report.

7.9 Archaeological and Historical Attributes

Heritage Impact Assessment will be conducted to evaluate the archaeological sensitivity of the study area.

Should any previously heritage remains be discovered on the terrain during construction, it must be immediately reported to the South African Heritage Resource Agency (SAHRA) and may require further mitigation measures.

8. NEED AND DESIRABILITY

- The proposed development area is strategically located adjacent to the current boundaries of the existing villages/ township of Sihlangu and Mgobode.
- Improvement of the socio-economic status of the area.
- The proposed development will contribute towards improving the housing stock of the area and general livelihood of the residents.
- The proposed township will aid eliminating the informal settlements/ land invasions.
- There is an existing functioning road network that can be used to access the proposed development site.

The development's location is therefore desirable due to its location in terms of:

- The existing road leading to the existing village, which will provide access to the proposed development area.
- The township will have long-term positive impacts on the local residents as the layout does not only make provision for residential units, but also for business, educational, recreational and health facilities.
- Furthermore, the development will eventually be integrated with the environment, have proper service provision and it will be well planned.
- It will create job opportunities (permanent and temporary) of the area.
- The proposed development will not have a significant detrimental impact on the surrounding areas and is in line with the adjacent land uses.

9. PUBLIC PARTICIPATION PROCESS

As an important component of the EIA process, the public participation process involves public inputs from interested and affected parties. The public participation process would therefore ensure that the views of the I&APs would be reflected and considered by the applicant and the authorities.

The key objectives of the public participation process are to:

- Identify a broad range of I & APs, and inform them about the proposed project;
- Provide sufficient background information regarding the proposed development to ensure informed participation;
- Understand and clearly document all issues, underlying concerns and suggestions raised by the I & APs

9.1. Methodology

The public participation process will be undertaken in terms of provisions of the EIA Regulations 2014 of the National Environmental Management Act 107 of 1998 as amended.

9.1 Newspaper advertisement

The proposed project will be advertised in the local newspaper to inform people about the project and request them to register their names and comment on the proposed development.

9.2 Site Notices

Laminated site notices will be placed at key points around the proposed development site.

Notices regarding the background information of the proposed development activity will also be hand delivered to the landowners located adjacent/ next to the proposed development site.

9.3 Consultation with Stakeholders

The draft/ consultation scoping report will be given to the stakeholders and all interested and affected parties upon request.

9.4. Issues and Responses

No comments or issues that need to be addressed by the EAP have been raised so far.

10. ENVIRONMENTAL IMPACT DETERMINATION AND EVALUATION

An environmental impact is defined as a change in the environment, be it the physical/chemical, biological, cultural and or socio-economic environment. Any impact can be related to certain aspects of human activities in this environment and this impact can be either positive or negative. It could also affect the environment directly or indirectly and the effect of it can be cumulative.

10.1 Methodology to assess the impacts

To assess the impacts on the environment, the process has been divided into two main phases namely the Construction phase and the Operational phase. The activities, products and services present in these two phases have been studied to identify and predict all possible impacts.

In any process of identifying and recognising impacts, one must recognise that the determination of impact significance is inherently an anthropocentric concept. Duinker and Beanlands, (1986) in DEAT 2002, Thompson (1988), (1990) in DEAT 2002 stated that the significance of an impact is an expression of the cost or value of an impact to society.

However, the tendency is always towards a system of quantifying the significance of the impacts so that it is a true representation of the existing situation on site. This has been done by using wherever possible, legal and scientific standards which are applicable.

The significance of the aspects/impacts of the process have been rated by using a matrix derived from Plomp (2004) and adapted to some extent to fit this process. These matrixes use the consequence and the likelihood of the different aspects and associated impacts to determine the significance of the impacts.

The consequence matrix use parameters like severity, duration and extent of impact as well as compliance to standards. Values of 1-5 are assigned to the parameters that are added and averaged to determine the overall consequence. The same process is followed with the likelihood that consists of two parameters namely frequency and probability. The overall consequence and the

overall likelihood are then multiplied to give values ranging from 1 to 25. These values as shown in the following table are then used to rank the significance.

Table 2: Significance ratings

Significance	Low	Low-	Medium	Medium-	High
		Medium		High	
Overall Consequence X	1-4.9	5-9.9	10-14.9	15-19.9	20-25
Overall Likelihood					

Table 3: Description of the parameters used in the Matrixes

SEVERITY	
Low	Low cost/high potential to mitigate. Impacts easily reversible, non – harmful insignificant change/deterioration or disturbance to natural environments.
Low-medium	Low cost to mitigate small/ potentially harmful moderate change/deterioration or disturbance to natural environment.
Medium	Substantial cost to mitigate. Potential to mitigate and potential to reverse impact. Harmful Significant change/ deterioration or disturbance to natural environment.
Medium-high	High cost to mitigate. Possible to mitigate great/very harmful, very significant change/deterioration or disturbance to natural environment.
High	Prohibitive cost to mitigate. Little or no mechanism to mitigate. Irreversible. Extremely harmful Disastrous change/deterioration or disturbance to natural environment.

DURATION	
Low	Up to one month
Low-medium	One month to three months
Medium	Three months to one year
Medium-high	One to ten years
High	Beyond ten years

EXTENT	
Low	Project area
Low-medium	Surrounding area
Medium	Within Nkomazi Local Municipal area of jurisdiction
Medium-high	Within Ehlanzeni District Municipality area
High	Regional, National and International

FREQUENCY	
Low	Once a year or once during operation
Low-medium	Once in 6 months
Medium	Once a month
Medium-high	Once a week
High	Daily

PROBABILITY	
Low	Almost never/almost impossible
Low-medium	Very seldom/highly unlikely
Medium	Infrequent/unlikely/seldom
Medium-high	Often/Regularly/Likely/Possible
High	Daily/Highly likely/definitely

COMPLIANCE		
The following criteria are used during the rating of possible impacts.		
Low	Best practise	
Low-medium	Compliance	
Medium	Non-compliance/conformance to Policies etc. – Internal	
Medium-high	Non-compliance/conformance to Legislation etc. – External	
High	Directive, prosecution of closure or potential for non-renewal of	
	licences or rights	

II. KEY ENVIRONMENTAL IMPACTS

Table 4: The following environmental impacts were identified

Environmental	Possible cause	Potential impacts	
issues			
	Air Pollution and Noise		
Smoke	- Vehicle emissions.	- Health problems.	
	- Fires.	- Air pollution.	
Dust	- During construction.	- Public nuisance.	
	- Vehicle operation on roads.	- Noise pollution.	
	- Vegetation clearing.		
Fumes	- Fumes from vehicles.		
	- Fumes from machinery.		
Noise	- Construction machinery and vehicles.		
	- Presence of construction camp.		
	- Operation noise (music and people).		
Environmental	Possible cause	Potential impacts	
issues			
	Water Quality		
Pollution of water	- Spillage of fuel & oil from vehicles.	- Pollution of surface and	
sources	- Spillage of building material e.g. cement etc.	groundwater.	
	- Migration of contaminants off the site.	- Health risk.	
	- Solid waste in storm water.	- Lower water quality.	
	- Littering.	- Soil degradation.	
Silt deposition in	- Erosion risk due to increased run-off from built	- Erosion.	
surface water	up area.	- Siltation.	
	- Erosion from cleared areas during construction.		
Pollution from	- Leakages of system and incorrect management of		
sanitation system	sanitation system.		
	- Inadequate measures to prevent sewage spillages.		
	- Overflow of sewage to groundwater.		
Environmental	Possible cause	Potential impacts	
issues			
	Water Quantity		
Impact on amount	Over-utilisation of available water.	- Lose scarce resource	
of water resources		- Increased pressure on	

Available		ground water supply sources.
Environmental	Possible cause	Potential impacts
issues		
	Land/Soil Degradation	
Soil contamination	- Spillages of oil, chemicals from machinery &	- Soil degradation
and degradation	vehicles.	- Loss of topsoil
	- Removal of vegetation during clearing for	- Dust formation
	construction.	- Erosion
	- Sewerage spillages.	
	- Erosion due to increased runoff from built-up	
	areas.	
	- Increased erosion of drainage channels.	
	-Site clearing during construction.	
Environmental	Possible cause	Potential impacts
issues	Piodiversity	
Doclino in fauna	Clearing of site for construction	Loss of biodiversity
and flora divorsity	Pollution of soil	- Loss of biblitat
and nor a diversity	- Pollution of water resources	- Loss of habitat.
	- Physical establishment of development	hiodiversity
	- Loss of habitat due to establishment of	- Negative impact on
	development	rare /endangered/
		endemic species and
		habitats.
Environmental	Possible cause	Potential impacts
issues		
	Cultural/Heritage	
Possible loss of	- Damage / loss during construction.	- Possible loss of cultural
Possible loss of heritage sites	- Damage / loss during construction. - Damage / loss during operation.	- Possible loss of cultural heritage.
Possible loss of heritage sites	- Damage / loss during construction. - Damage / loss during operation.	- Possible loss of cultural heritage.
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Possible loss of heritage sites Environmental issues Impact of the proposed development of sense of place. Visual impact	- Damage / loss during construction Damage / loss during operation. Possible cause Visual Impact - The physical existence of the development. - Construction site and buildings Lights at night Presence of new development Overhead power lines	 Possible loss of cultural heritage. Potential impacts Potential impact on landscape quality character. Negative impact on sense of place. Obstruction. Visual intrusion. Public nuisance.
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Possible loss of heritage sites Environmental issues Impact of the proposed development of sense of place. Visual impact Environmental issues Security Fires	 - Damage / loss during construction. - Damage / loss during operation. - Possible cause Visual Impact - The physical existence of the development. - The physical existence of the development. - Construction site and buildings. - Lights at night. - Presence of new development. - Overhead power lines. Possible cause Health and Safety - Influx of people to area including construction workers and others after completion. - Accidental fires. - Burning of waste. 	 Possible loss of cultural heritage. Potential impacts Potential impact on landscape quality character. Negative impact on sense of place. Obstruction. Visual intrusion. Public nuisance. Potential impacts Loss of safe and secure environment. Threat to health. Danger to human life.
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Socio-Economic Impacts				
Impact from change of land use from agriculture to	- Change of land use to residential, business, institutional, educational, public open spaces and streets.	 Impact negatively on agricultural production. Land will no longer be 		
township.		used for agriculture.		
Impact of the residential and other development on adjacent	 Noise from construction activities, Dust generated by construction vehicles and from site preparation. The visual impact of lights. 	- Nuisance and disruption. - Noise pollution. - Air pollution.		
landowners	-The visual impact of residential and other units (business, institutional etc.)	- Negative visual impact.		
Impacts related to the establishment of a construction camp with accommodation	 Location of construction camp. Environmental impacts of construction activities e.g. spillage of hazardous liquids such as oil and fuel onto the soil surface. Accommodation of construction teams on site Littering, accidental fires, collecting of firewood and poaching. Undesirable visitors to the area. 	Adverse impact on the environment. - Resentment from neighbouring residents.		
Impact ground and water pollution from littering and waste disposal during construction and	 The presence of a large work force and equipment and machinery during construction causing littering and dumping refuge and builder's rubble on site. Construction activities from heavy vehicles and machinery. 	- Soil and water pollution		
operational phases	- The construction of structures such as open trenches and earth heaps might also hold safety risks for people.	- Safety risks for motorists, passengers, pedestrians and residents of the area		
	- A lack of proper ablution facilities for temporary workers during construction.	- Soil and water pollution - Unhygienic conditions - Health risk.		
Impact from the provision of structures and infrastructure services	- The development, construction and provision of infrastructure services.	 Pollution from sanitation systems Pollution of water resources. Negative visual impact of overhead power lines and electricity supply and waste removal. Soil erosion as a result of the construction of internal roads and water reticulation networks. 		
Impact on archaeological /cultural / social features	 The development of structures and infrastructure services for residential and other sites. Clearing of construction sites. Construction of access roads. Excavation of trenches for the installation of underground pipelines and cables. 	- Negative impact on cultural or heritage resources.		
Job creation Ownership	 Temporary jobs during construction phase. Permanent jobs during operation. New housing. 	- Positive impact – job Creation.		

- New businesses.	
- New schools.	

These key areas of impacts are further explored and described below to detail the impacts, the impact ratings and mitigation measures.

The following specialist investigations have/ will be conducted and used in assessing the environmental impacts of the different activities that form part of the development.

- Ecological/Biodiversity Study
- Heritage Assessment Report
- Geo-technical Investigation.
- Wetland Study
- Traffic Impact Assessment Study
- Engineering Services Report (roads, water, etc)
- Electrical Services Report
- Flood line Report

12. ENVIRONMENTAL IMPACT STATEMENT

Summary of Key Findings

Heritage Aspects

There are no national monuments, battlefields, or historical cemeteries are known to occur within the proposed development site, or within 100m of its boundaries. No graves were identified within the proposed site.

Ecology

The proposed development will be located on the on a savannah biome of Lowveld Bushveld which is having low species composition with shrubs and trees. Main land use in the area is agriculture.

Geotechnical Investigation

The proposed development site is underlain by top soils of sand, including residual soils derived from the in-situ weathering of granite. A detailed geotechnical report will be included as part of the specialist reports in the Environmental Impact Assessment Report.

Flood Line

According to the flood line report, the proposed development site is partially affected by flood water within the 1:100 period from the stream / river.

Visual

Clearing of areas will result in a change of the visual attributes of the site.

Technical

Materials and methods of construction must all be based on the "Guidelines for Human Settlement planning and design" Redbook, as well as "SABS Standard specifications and Codes of Practice" as applicable.

A detailed geotechnical site investigation will be undertaken to identify potentially adverse geotechnical conditions at the site in order to facilitate and inform the planning phase of the proposed development.

13. COMPARATIVE ASSESSMENT OF THE IMPLICATIONS OF PROPOSED ACTIVITY AND IDENTIFIED ALTERNATIVES:

13.1. Advantages of the proposed activity and alternatives

- The proposed development will provide housing and services for the local community who need these facilities.
- The development will provide direct and indirect job opportunities.
- The development will have direct benefits to the local economy during the construction and operation phases.

13.2. Disadvantages of the proposed activity and alternatives

• The cumulative impacts that the development will have in terms of water use, waste, sanitation and other impacts can lead to extra environmental degradation, especially if not managed correctly.

14. CONCLUSION

The purpose of this draft report is to provide the competent authority with preliminary information regarding the potential impacts and scope of the development. It must be noted that this document is submitted as a Consultation Scoping Report and the Final Comprehensive Scoping Report will be prepared upon receiving comments from the competent authority. The Department is therefore respectfully requested to evaluate and consider this Scoping report, as part of an application that will be lodged in terms of section 24(5) of the National Environment Management Act, 1989, (Act no 107 of 1998), in respect of the following listed activities:

- (i) GN R325, Listing Notice 2: Activity 15
- (ii) GN R327, Listing Notice 1: Activity 28

CONSULTATION SCOPING REPORT FOR THE PROPOSED TOWNSHIP ESTABLISHMENT TO BE SITUATED ON THE REMAINDER OF THE FARM MATABULA 701 JU, NKOMAZI LOCAL MUNICIPALITY, MPUMALANGA PROVINCE.

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MAY 2021

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QON

EAP Signature:

Appendix I Plan of Study of EIA

PLAN OF STUDY OF EIA FOR THE PROPOSED TOWNSHIP TO BE SITUATED ON THE REMAINDER OF THE FARM MATABULA 701 JU, NKOMAZI LOCAL MUNICIPALITY, MPUMALANGA PROVINCE.

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MAY 2021

DOCUMENT CONTROL

PLAN OF STUDY OF EIA FOR THE FOR THE PROPOSED TOWNSHIP TO BE SITUATED ON THE REMAINDER OF THE FARM MATABULA 701 JU, NKOMAZI LOCAL MUNICIPALITY, MPUMALANGA PROVINCE.

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ABBREVIATIONS

EIA	Environmental Impact Assessment
S&EIR	Scoping and Environmental Impact Reporting
NLM	Nkomazi Local Municipality
EDM	Ehlanzeni District Municipality
S& EIR	Scoping and Environmental Impact Report
EMP	Environmental Management Plan
MDARDLEA	Mpumalanga Department of Agriculture and Rural Development, Land and Environmental
	Affairs
NEMA	National Environmental Management Act
NEMA I&APs	National Environmental Management Act Interested and Affected Parties
NEMA I&APs CA	National Environmental Management Act Interested and Affected Parties Competent Authority

I. INTRODUCTION

I.I. PROJECT BACKGROUND

Leago Environmental Solutions has been appointed by Nkanivo Development Consultants on behalf of Nkomazi Local Municipality as Independent Environmental Assessment Practitioners (EAP) to undertake a Scoping and Environmental Impact Assessment (EIA) for the proposed township establishment to be situated on the Remainder of the Farm Matabula 701 JU, in Sikhwahlane Nkomazi Local Municipality, Mpumalanga Province. and is expected to yield 843 stands.

This plan of study for the Environmental Impact Assessment is prepared to meet the requirements for a plan of study as prescribed in Appendix 2(2)(i) of Government Notice R 326; a plan of study for undertaking the environmental impact assessment process to be undertaken, including-

(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, including a description of the proposed method of assessing the environmental aspects including aspects to be assessed by specialists;

(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; and

(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.

1.2. DESCRIPTION OF ALTERNATIVES

The National Department of Environmental Affairs stresses that the no-go option be considered as a base case against which to measure the relative performance of the other alternatives. The impacts of other alternatives are expressed as changes to the base case or status quo. If considered viable the decision not to act may be considered in the Plan of Study EIA.

The EIA Regulations stipulate that a requirement of the Scoping Process is to investigate feasible and reasonable alternatives to the project proposal.

The EIA Regulations define "Alternatives", in relation to a proposed activity, as "different means of meeting the general purpose and requirements of the activity, which may include alternatives to –

(a) The property on which or location where it is proposed to undertake the activity

- (b) The type of activity to be undertaken
- (c) The design or layout of the activity
- (d) The technology to be used in the activity
- (e) The operational aspects of the activity

The concept of alternatives is aimed at ensuring that the best among all possible options in all aspects (environmental, economic, etc.) is selected. The option of not carrying out the proposed actions (nogo option) or developments is discussed to demonstrate environmental conditions without the project.

This means that for any project that is proposed, there should be a number of possible proposals or alternatives for accomplishing the same objectives or meeting the same need. Alternatives that would still meet the objective of the original proposal, but which would also have an acceptable impact on the environment (referring to physical, biological, aesthetic/visual) must be considered.

1.2.1. FEASIBLE AND REASONABLE ALTERNATIVES CONSIDERED FOR THE PROPOSED ACTIVITY

I.2.I.I. Site Alternatives:

Due to land availability, the proposed development site is the only site that has been identified for establishing a township. Therefore, site alternatives are not applicable for this project.

I.2.I.2. Activity Alternatives:

The current preferred activity is deemed to be the only feasible activity alternative as this activity will result in improved housing which can accommodate more people. No other activities were considered in this application due to the assessed need and feasibility of the proposed activity.

I.2.I.3. Design Alternatives:

The unique character and appeal of Sikhwahlane was taken into consideration with the design philosophy. Various layout alternatives were considered by the applicant and town planners, also taking terrain and environmental constraints into account, the current design plan being the result, however there is a possibility of a layout alternative that will still meet the objective of the project scope.

1.2.1.4. Operational Aspects

The operational aspects of the activity relate to the improved housing for the local community. No other alternatives were deemed feasible other than the proposed activity.

I.2.I.5. No-Go Alternatives

This option would come into effect if this assessment reveals fatal flaws in the process. To date no fatal flaws have been revealed. The no-go alternative of not developing the proposed site would leave the environment in the current state.

I.3. SPECIALIST STUDY REPORTS

The identification and assessment of environmental impacts during the Scoping Phase reveals the following potentially significant environmental aspects which require further detailed assessment:

• Geotechnical Study:

The purpose of this study is to identify potentially adverse geotechnical conditions at the site in order to facilitate and inform the planning phase of the proposed development.

• Ecological Study:

A specialist flora/fauna study will be undertaken to determine sensitive areas and impacts on red listed plant and faunal species on site.

Heritage Impact Assessment:

The purpose of this study is to identify heritage resources within a proposed development area, assess their significance, the impact of the development on the heritage resources and to provide relevant mitigation measures to alleviate impacts to the heritage resources.

• Civil Engineering Services (Bulk Infrastructure Services):

A report on the civil services, including solid waste, sewage, and water options is compiled in order to demonstrate the provision of infrastructure required to service the proposed development/ activity.

• Electrical Services Report

An electrical report is compiled in order to demonstrate the provision of services required for the proposed development/ activity.

• Floodline:

The main objective of the floodline assessment is to check if the whether the proposed development/ activity is affected by any floodline.

• Traffic Impact Study:

A traffic impact study is undertaken to assess the traffic impact of the proposed development on the adjacent road network around the proposed development.

Wetland Assessment

The aim of the study is to the identify, delineate and assess wetland areas that may be directly impacted on by the proposed development.

I.3.I. Geotechnical Study

This study evaluates the geotechnical characteristics associated with the underlying geology and any geotechnical constraints that might affect structural integrity of the subject property. However, it is also essential to identify engineering properties" potential influence on the design, construction and operation of the intended infrastructures.

The following are some of the objectives of the geotechnical investigation:

- To determine the geology of the site
- To establish in broad terms, the nature and relevant engineering properties of the upper soil and rock strata underlying the site.
- To ascertain the soil chemistry including pH determination and electrical conductivity tests.
- To comment on suitable excavation procedures for the installation of services.
- To present general foundation recommendations for the proposed development.
- To comment on any other geotechnical aspects as these may affect the development.
- Potential geotechnical limiting factors by determining the behaviour and suitability of soil/rocks and their effects on the intended development;
- Assess excavation conditions
- Determine the presence or occurrence of groundwater from the surface to a maximum depth of 3 meters.
- Classification of the site material according to the TRH14 classification system

Methodology

The geotechnical investigation will commence with a desktop study using the existing geotechnical databases and maps pertaining, structural engineer specifications of the site were reviewed.

The following information will be reviewed and consulted during the site investigation:

- Geological Map of the GSO: Scale 1: 100 000 Sheet Geological series 2528BD
- National Home Builders Registration Council: Home Builders Manual 2015

- Construction Materials by the National Institute for Transport and road research of the Council for Scientific and Industrial Research, (1985)
- SAICE's Guidelines for Urban Engineering Geological Investigations
- Schwartz, K. (1985). Collapsible soils. The Civil Engineer in South Africa, July
- Site/ layout plans provided by the client

I.3.2. Ecological Study

The objectives of the ecological/ biodiversity study are:

- To identify and comment on ecologically sensitive areas
- Identify the flora and fauna conservation important species that need to be avoided.
- Provide baseline data on habitat and species on and adjacent to the site
- Investigate potential impacts that may occur during construction and/or operational stages of the development
- Provide advice on legislative framework relating to habitats and species on site.
- Suggest mitigation measures to be employed during the construction and operational stage; and
- Identify and assess the possible impacts that are likely to be caused by the development.
- To provide a list of fauna which occur or might occur, and to identify species of conservation importance

Methodology

A site visit will be conducted during which the observed presence of flora and fauna associated with the recognised habitat types will be recorded.

Data recorded will include a list of the fauna and flora species present, including trees, shrubs, and grasses. A species list will therefore be derived for each plant community /ecosystem present on the site. Notes will additionally be made of any other features that might be of ecological importance.

1.3.3. Cultural / Historical Heritage

The purpose of this study is to identify heritage resources within a proposed development area, assess their significance, the impact of the development on the heritage resources and to provide relevant mitigation measures to alleviate impacts to the heritage resources.

The objectives of the study are to also define the heritage component of the Environmental Impact Assessment process. It is described as a first phase Heritage Impact (HIA). The report will evaluate both the accumulated heritage knowledge of the area as well as information derived from direct physical observations.

Methodology:

A Heritage Impact Assessment will be conducted to determine the impacts on heritage resources within the study area.

The following will be required to perform the assessment:

- A desk--top investigation of the area;
- A site visit to the proposed development site;
- Identify possible archaeological, cultural, historic, built and paleontological sites within the proposed development area;
- Evaluate the potential impacts of construction and operation of the proposed development on archaeological, cultural, historical resources; built and paleontological resources; and
- Recommend mitigation measures to ameliorate any negative impacts on areas of archaeological, cultural, historical, built and paleontological importance.

1.3.4. Civil Engineering Services (Bulk Infrastructure Services)

A report on the civil services, including solid waste, electricity and water options to demonstrate the provision of infrastructure required to service the proposed activity/ development.

Methodology:

The study will look at the extent of the development to determine the availability of basic bulk infrastructure services required for the proposed development.

1.3.5. Electrical Services Report

An electrical report is compiled in order to demonstrate the provision of services required for the proposed development/ activity.

Methodology:

The study will look at the extent of the development to determine the availability of electrical services required for the proposed development.

I.3.6. Floodline

The main objective of the floodline assessment is to check if the whether the proposed development/ activity is affected by any floodline.

Methodology

- Determination of the catchment characteristics.
- Calculating floor peaks, using a minimum of three methods.

- Determine flood lines.
- Determine the extent of developable areas through diagrammatic representation.
- Provide a floodline report and plans / drawings

1.3.7. Traffic Impact Assessment

Traffic Impact Assessment Study is aimed at assessing the traffic impact of the proposed development on the adjacent road network around the proposed development.

Methodology:

- Determine the existing, pre-development traffic volumes and patterns near the development site;
- Assess the land use of the proposed development to establish the expected trips to be generated;
- Assess any Public Transport operations in and around the proposed development;
- Determine the post-development, projected traffic volumes and assess its impact on the existing road network;
- Provide recommendations on the suitability and safety of the proposed access arrangements;
- Recommend infrastructure improvements, if deemed necessary, to accommodate the expected development traffic.

1.3.8. Wetland Assessment

The aim of the study is to the identify, delineate and assess wetland areas that may be directly impacted on by the proposed development.

Methodology

- Verify the occurrence and typology of wetlands on the study site as delineated through desktop methods, and to correct the delineation based on field-based assessment, thus enabling all wetlands on the study site to be mapped.
- Assess all wetland areas on the study site in the field
- Conduct a field assessment to gain an understanding of the characteristics of the wetland
- Assess the impacts of the proposed development on the wetland, and suggest suitable mitigation measures, if relevant, to ameliorate or remove these predicted impacts.
- Conduct Wet-Health for the determination of Present Ecological State (PES) of the wetland
- Conduct Wet-Eco Services for determination of ecosystem services.

2. IMPACT ASSESSMENT METHODOLOGY

An environmental impact is defined as a change in the environment, be it the physical/chemical, biological, cultural and or socio-economic environment. Any impact can be related to certain aspects of human activities in this environment and this impact can be either positive or negative. It could also affect the environment directly or indirectly and the effect of it can be cumulative.

2.1. Methodology to Assess the Impacts

To assess the impacts on the environment, the process has been divided into two main phases namely the Construction phase and the Operational phase. The activities, products and services present in these two phases have been studied to identify and predict all possible impacts.

In any process of identifying and recognising impacts, one must recognise that the determination of impact significance is inherently an anthropocentric concept. Duinker and Beanlands, (1986) in DEAT 2002, Thompson (1988), (1990) in DEAT 2002 stated that the significance of an impact is an expression of the cost or value of an impact to society.

However, the tendency is always towards a system of quantifying the significance of the impacts so that it is a true representation of the existing situation on site. This has been done by using wherever possible, legal and scientific standards which are applicable.

The significance of the aspects/impacts of the process have been rated by using a matrix derived from Plomp (2004) and adapted to some extent to fit this process. These matrixes use the consequence and the likelihood of the different aspects and associated impacts to determine the significance of the impacts.

The consequence matrix use parameters like severity, duration and extent of impact as well as compliance to standards. Values of 1-5 are assigned to the parameters that are added and averaged to determine the overall consequence. The same process is followed with the likelihood that consists of two parameters namely frequency and probability. The overall consequence and the overall likelihood are then multiplied to give values ranging from 1 to 25. These values as shown in the following table are then used to rank the significance.

Significance	Low	Low- Medium	Medium	Medium- High	High
Overall Consequence X Overall Likelihood	1-4.9	5-9.9	10-14.9	15-19.9	20-25

Table I: Significance ratings

Table	2: I	Description	of the	parameters	used	in	the matrixes	5
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SEVERITY	
Low	Low cost/high potential to mitigate. Impacts easily reversible, non – harmful insignificant change/deterioration or disturbance to natural environments.
Low-medium	Low cost to mitigate small/ potentially harmful moderate change/deterioration or disturbance to natural environment.
Medium	Substantial cost to mitigate. Potential to mitigate and potential to reverse impact. Harmful Significant change/ deterioration or disturbance to natural environment.
Medium-high	High cost to mitigate. Possible to mitigate great/very harmful, very significant change/deterioration or disturbance to natural environment.
High	Prohibitive cost to mitigate. Little or no mechanism to mitigate. Irreversible. Extremely harmful Disastrous change/deterioration or disturbance to natural environment.

DURATION	
Low	Up to one month
Low-medium	One month to three months
Medium	Three months to one year
Medium-high	One to ten years
High	Beyond ten years

EXTENT	
Low	Project area
Low-medium	Surrounding area
Medium	Within Nkomazi Local Municipality
Medium-high	Within Ehlanzeni District Municipality
High	Regional, National and International

FREQUENCY	
Low	Once a year or once during operation
Low-medium	Once in 6 months
Medium	Once a month
Medium-high	Once a week
High	Daily

PROBABILITY	
Low	Almost never/almost impossible
Low-medium	Very seldom/highly unlikely
Medium	Infrequent/unlikely/seldom
Medium-high	Often/Regularly/Likely/Possible
High	Daily/Highly likely/definitely

COMPLIANCE

The following criteria are used during the rating of possible impacts.

Low	Best practise
Low-medium	Compliance
Medium	Non-compliance/conformance to Policies etc. – Internal
Medium-high	Non-compliance/conformance to Legislation etc. – External
High	Directive, prosecution of closure or potential for non-renewal of
	licences or rights

A combination of the above methodologies will be used during the EIA phase of the project to determine the significance of the potential impacts associated with the proposed development as well as the alternatives investigated.

3. CONSULTATION WITH THE COMPETENT AUTHORITY: MPUMALANGA DEPARTMENT OF AGRICULTURE RURAL DEVELOPMENT, LAND AND ENVIRONMENTAL AFFAIRS.

The competent authority will be consulted during the following steps in the EIA:

i. Application:

- Lodge the EIA application
- Applicant receive confirmation of application (acknowledgement letter) from MDARDLEA.

ii. Scoping Phase

- Public participation
- Site inspection with competent authority
- Submit Scoping Report including Plan of Study for EIA. The authority to consider the Scoping Report and the Plan of Study for EIA.
- The Environmental Assessment Practitioner to receive confirmation of acceptance of Scoping Report and/or the Plan of Study for EIA.

iii. Environmental Impact Assessment

- Public participation
- Submit EIA (consultation/ draft and final) Report
- Record of Decision from the Authority.

4. PUBLIC PARTICIPATION PROCESS

4.1 Objectives

The main objectives of the public participation process are to:

- Inform the interested and affected parties (I&APs) of the EIA process;
- Provide sufficient background information regarding the proposed development to ensure informed participation;

• Create networks and feedback mechanisms whereby I& APs could participate and raise their views (issues, comments and concerns) with regard to the proposed development/ activity.

The public participation process would therefore ensure that the views of the I&APs would be reflected and considered by the applicant and the authorities.

4.2. METHODOLOGY:

The proposed public participation process for the EIA phase of the project will consist of:

4.2.1 Finalisation of Public Participation Report

The Public Participation Report would be completed and finalised at the end of the public review period. The report will consist of the following:

- Background to the proposed project;
- A description of the public participation process followed;
- A list of issues, comments and concerns raised during the public participation process;
- a list of the registered I&APs
- Minutes of meeting (if applicable) and written comments received during the public participation
- process; and
- Conclusions and recommendations

4.2.2 Making the Draft and Final EIA Report Available for Public Comment

The consultation EIA report will be made available to the public for their perusal and to comment. All registered I&APs will be notified of the availability of the report. A 30-day review period is recommended for each of the reports. On completion of the review period, the EAP will update the report in respect of comments received. The draft and final reports will be made available in the office or couriered and emailed to registered I&APs.

The final report will then be submitted to the authorities and will also be made available to the public.

4.2.3 Notification of Environmental Authorisation

Once an environmental authorisation has been issued by the authorities, the I&APs on the database will be notified of the decision within 14 calendar days. The full environmental authorisation will be made available on request. The public will also be informed of their right to appeal and the process to follow.

5. CONCLUSION

During the Environmental Impact Assessment phase there are different alternatives considered, and, will be compared in terms of the potential environmental impacts associated with the alternative. Specialist studies will be undertaken during the EIA phase. All the specialist's recommendations and comments from the I&APs will be used to determine the final layout of the proposed development so that it has the least environmental impacts.

Appendix 2 Locality Map



Appendix 3 Layout Plan



LOCALITY MAP



ZONING	LAND USES	NO. OF ERF	AREA (HA)	AREA (%)	NOTATION
RESIDENTIAL	DWELLING UNIT	809	102.21	39.31	
BUSINESS	RETAIL	15	6.38	2.45	
INSTITUTIONAL	CHURCH/SCHOOL/ CRECHE	7	10.83	4.2	
COMMUNITY	CLINIC	1	0.91	0.35	
GOVERNMENT	THUSONG CENTRE	1	0.64	0.25	
COMMUNITY	LIBRARY	1	0.83	0.32	
GOVERNMENT	MUNICIPAL	1	0.72	0.28	
COMMUNITY	SPORTS & RECREATION GROUND	2	13.61	5.23	
PUBLIC 2	PARK	5	67.90	26.12	
GOVERNMENT	CEMETERY	1	22.68	8.72	
STREETS			33.29	12.80	
TOTAL DEVELOPABLE AREA		843	260	100%	

NOTES:

Represents Proposed Township Boundary.
 All areas and distances are approximate and subject to final survey

SURVEY NOTES:





Appendix 4

Details and Expertise of EAP

1. DETAILS AND EXPERTISE OF THE EAP

Company Name	Leago Environmental Solutions
Physical Address	66 Graham Rd, Lombardy Business Park, Block 5, Unit 79, Pretoria
Contact Person	Magoro M.M
Designation	Environmental Assessment Practitioner/ Managing Director
Contact Number	081 428 6116
Email Address	Mankaleme@leagoenviro.co.za
Qualifications	Bachelor of Earth Sciences in Mining and Environmental Geology
Professional Registration	Registered as a Candidate Natural Scientist (Cand.Nat.Sci.) in the field of
	Earth Sciences- South African Council for Natural Scientific Professions
	(Reg No. 120970)

2. ENVIRONMENTAL IMPACT ASSESSMENT EXPERIENCE

2.1. REVIEWED

- Draft basic assessment report for the proposed construction of a telecommunication mast for Mtn (Pty) Ltd Waterkloof site newsite 3, City of Tshwane Metropolitan Municipality. Gaut 002/17-18/E0076.
- Draft basic assessment report for the proposed construction of eight poultry houses on Puntlyf farm no 520-jr, portion 11 Bronkospruit. City of Tshwane Metropolitan Municipality. Gaut 002/17-18/E2052
- Final Environmental Impact Assessment (EIA) report for a new waste management license for the Waste Group (Pty) Itd for the recovery of hazardous waste on the premises of the Bon Accord waste treatment site, City of Tshwane Metropolitan Municipality. DEA 12/9/11/L72568/3
- Draft basic assessment report for the proposed MBT filling station on erf 389 Wapadrand extension 8 in Lynnwood, City of Tshwane Metropolitan Municipality. Gaut 002/17-18/E0076
- Draft Environmental Impact Assessment report application for upgrade of road D620 and D621, Winterveld area, City of Tshwane Metropolitan Municipality. Gaut 002/17-18/0081)
- Draft consultation basic assessment report for a prospecting right, portion 29 of the farm Uitvalgrond 434-JQ, City of Tshwane Metropolitan Municipality. Gaut 002/17-18/E0076
- Draft basic assessment report for the proposed application of environmental authorisation for the proposed expansion of the existing Soshanguve shopping centre located on Buitekant road, Soshanguve, City of Tshwane Metropolitan Municipality. Gaut 002/17-18/E0076
- Draft basic assessment report application for waste management license for Heaven Renewable Energy (Pty) Itd-waste tyre pyrolysis plant in Rosslyn, City of Tshwane Metropolitan Municipality. Gaut 002/17-18/E0074
- Draft basic assessment report for an establishment of an ATC (Pty) Itd telecommunications mast on the remaining extent of portion 41 of the farm Doornkloof 391-JR, City of Tshwane Metropolitan Municipality. Gaut 002/17-18/E0114.
- Draft basic assessment report for the proposed augmentation of the 132kv electricity supply infrastructure for the Nokeng Fluorspar Mining project on portion 5 and 11 of the Farm Kromdraai 209 JR and Naaupoort 208 JR Re in the City of Tshwane Metropolitan Municipality. Gaut 002/17-18/E0076.

- Draft basic assessment report for the proposed construction of four chicken houses on portion 40 of the farm Kloppersbos 128-JR in the City of Tshwane Metropolitan Municipality. Gaut 002/17-18/E0076.
- Draft impact assessment report for the proposed environmental authorisation amendment: duplication of the Vlakfontein (Benoni) Mamelodi water supply pipeline within the existing servitude phase 2 from the southern boundary of the Rietvlei nature reserve to Mamelodi, City of Tshwane Metropolitan Municipality. Gaut 002/13-14/ E8845
- Final environmental impact assessment (EIA) report for the proposed township establishment and associated infrastructure to be known as Blue Hills extension 95 on portions 33, 34, 35, 36 and 37 of the farm blue hills 397-JR, City of Tshwane Metropolitan Municipality. Gaut 002/17-18/E0098
- Draft basic assessment report for an establishment of an ATC (PTY) LTD telecommunications mast on the remaining extent of portion 41 of the farm Doornkloof 391-JR, City of Tshwane Metropolitan Municipality. Gaut 002/17-18/E0114
- Draft basic assessment report for the proposed construction of a new boundary wall, Sefako Makgato Health Sciences University, Ga-rankuwa, City of Tshwane Municipality.
- Final Basic Assessment report for an application for the proposed township establishment on portion 573 of the farm Willow 340-jr to be known as Willow Park manor X58, City of Tshwane Metropolitan Municipality. Gaut 002/17-18/ E0236
- Basic Assessment report for the proposed expansion of a cemetery on remainder of portion 3 of the farm Brakfontein 390-JR, City of Tshwane Metropolitan Municipality
- Basic Assessment report for the proposed filling station on portion 15 of the farm Waterval 273-JR, City
 of Tshwane Metropolitan Municipality
- Environmental Impact Assessment for the Gilgamesh mineral beneficiation plant in Pretoria West, City of Tshwane Metropolitan Municipality. Gaut 002/17-18/E0064
- Final Scoping Report for the proposed mixed-use establishments on the remaining extent of Erf 8873, Ga-Rankuwa Unit 5, City of Tshwane Metropolitan Municipality. Gaut 002/18-19/E0060.
- Nema query for the proposed diesel depot on erf 500, Willow Park Manor Extension 5, Gauteng Province, City of Tshwane Metropolitan Municipality.

2.2. COMPILED

- Nema query for the proposed development of a filling station on erf 16029, Embalenhle extension 15, Mpumalanga Province, Govan Mbeki Local Municipality.
- Nema query for the proposed development of a filling station in Doornveld, Jane Furse, Limpopo Province, Makhuduthamaga Local Municipality.
- Nema query for the proposed development of a diesel depot on portion 21 of the farm Jachtkraal 339, North West Province, Tswaing Local Municipality
- Nema query for the proposed development of a filling station on portion 50 of the farm Benoni 77 IR, Gauteng Province, City of Johannesburg Metropolitan Municipality.
- Nema query for the proposed development of a diesel depot on erf 1042,on the remaining extent of portion 97 of the farm Witklip 232 IR, Delmas, Mpumalanga Province, Victor Khanye Local Municipality
- Nema query for the proposed development of a diesel depot on erf 1232, Delmas ext 14, Mpumalanga Province, Victor Khanye Local Municipality

- Nema query for the proposed development of a filling station on portion 23 of the farm Mimosa 61, North West Province, Mamusa Local Municipality.
- The proposed development of R510 Thabazimbi Filling Station with a total tank storage capacity of 184 m3 on the remainder of the Farm Honingvley No. 99 K.Q, Thabazimbi, Thabazimbi Local Municipality, Limpopo Province
- The proposed development of a diesel depot with the total tank storage capacity of 498 m3 on portion of the remainder of portion 11 of the farm Krelingspost No.425-JQ, North West Province, Madibeng Local Municipality
- The proposed development of the filling station with the total tank storage capacity of 320m3 on portion 19 of farm Aangewys 81/JS, Kriel, Emalahleni Local Municipality, Mpumalanga province.

2.3. CURRENT PROJECTS

- The proposed Development of a school on the remainder of the farm Molenje 204 LT, Dovheni Village Collins Chabane Local Municipality, Limpopo Province.
- The proposed demarcation of 100 sites in Jilongo Village, Collins Chabane Local Municipality, Limpopo Province. The proposed demarcation of 200 sites in Khombo Village, Collins Chabane Local Municipality, Limpopo Province.
- The proposed demarcation of 200 sites in Plange Village, Collins Chabane Local Municipality, Limpopo Province.
- The proposed demarcation of 300 sites in Xidumedzana Village, Collins Chabane Local Municipality, Limpopo Province.
- Environmental screening and desktop geotechnical study for the proposed township establishment on portion 13 of the farm Leeuwpoort 205 IR, Victor Khanye Local Municipality, Mpumalanga Province.
- Environmental screening and desktop geotechnical study for the proposed township establishment on the farm Witklip 229 IR, Victor Khanye Local Municipality, Mpumalanga Province.
- Environmental screening and desktop geotechnical study for the proposed township establishment on the remainder of portion 3 of the farm Hekpoort 207 IR, Victor Khanye Local Municipality, Mpumalanga Province.
- The proposed Development of a school on the remainder of the farm Molenje 204 LT, Dovheni Village Collins Chabane Local Municipality, Limpopo Province.
- The proposed township establishment on the remaining extent of portion 859 and 609 of the farm Roodekopjes of Zwartkopjes 427 JQ.
- The proposed township establishment on portion 658 of the farm Roodekopjes of Zwartkopjes 427 JQ.
- The proposed formalisation and proclamation of Saselamani CBD, Remainder of Tshikundu's Location 262 MT, and the remainder of portion 1 of Tshikundu's Location 262 MT, Saselamani.
- The proposed township establishment on the remainder of portion 8 of the farm Boschoek 103 JQ, within the Rustenburg Local Municipality, North West Province.
- The proposed township establishment on Portion 1 of the Farm Newington 255 KU, Bushbuckridge Local Municipality, Mpumalanga Province.
- The proposed township to be situated on the remainder of the farm Dwarsloop 248 KU in the Bushbuckridge Local Municipality within the Ehlanzeni District Municipality, Mpumalanga Province.
- The proposed township establishment on to be situated on the remainder of the farm Matabula 701 JU, Nkomazi Local Municipality.

The proposed township establishment on portion of the farm De Put 298, Matwabeng, Free State Province.

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Appendix 5

List of Authorities Identified



LIST OF AUTHORITIES IDENTIFIED

Name of Authority/ Department	Contact Person	Postal Address	Email Address	Tel/Cell no.
Mpumalanga Provincial Heritage Resources	Mr. Benjamin	Ist and 2nd floor, Building 5	<u>bmoduka@mpg.gov.za</u>	013 766 5198
Authority (MPHRA)	Moduka	Government Complex, 7		
		Government Boulevard Riverside		
		Park, Nelspruit		
		1200		
South African Heritage Resource Agency			www.sahris.co.za	
Mpumalanga Department of Public Works, Roads	Mr. J Mojapelo	Rhino Building, No. 7 Government	jmojapelo@mpg.gov.za	013 759 2356
and Transport		Boulevard, Riverside Park, Extension		079 124 7820
		2, Mbombela, I 200		
Mpumalanga Tourism and Parks Agency	Ms. Phumla Nkosi	N4 Hall's Gateway,	Phumla.Nkosi@mtpa.co.za	013 759 5300/01
		Mattafin, Nelspruit, 1200		
Ehlanzeni District Municipality (EIA Section)		8 Van Niekerk Street,		013 759 4000
		Mbombela, I 200		
Nkomazi Local Municipality (Roads Section)		9 Park Street, Malalane, I 320	weekend.nhlambo@nkomazi.gov.za	

Unit 79, Block 5 Lombardy Business Park 66 Graham Road Pretoria, 0084

> mankaleme@leagoenviro.co.za leagoenviro.co.za

Mobile (+27) 81 428 6116



Nkomazi Local Municipality (EIA Section)		9 Park Street, Malalane, 1320		
Mpumalanga Department of Agriculture	Mr. Love Shabane	P. O. Box 8806, Nelspruit, 1200	LoveS@nda.agric.za	013 754 0734
Fisheries and Forestry				
Council for Geoscience (Head Office)	Ms Rethabile	280 Pretoria Street, Silverton,	makwarela@geoscience.org.za	012 841 1911
	Makwarela	Pretoria		



Unit 79, Block 5 Lombardy Business Park 66 Graham Road Pretoria, 0084

Mobile (+27) 81 428 6116

mankaleme@leagoenviro.co.za leagoenviro.co.za

Appendix 6

Public Participation Process

Appendix 6.1

Communication to Interested and Affected Parties

From:	Leago Environmental Solutions <info@leagoenviro.co.za></info@leagoenviro.co.za>
Sent:	Thursday, 13 May 2021 13:44
То:	'makwarela@geoscience.org.za'
Subject:	INVITATION TO REGISTER AS AN INTERESED OR AFFECTED PARTY FOR THE PROPOSED TOWNSHIP ESTABLISHMENT ON THE REMAINDER
	OF THE FARM MATABULA 701 JU
Attachments:	REGISTRATION FORMS.pdf; INVITATION LETTER.pdf

Good day,

I hope you are well.

We kindly invite you (Council for Geoscience) to register as an interested or affected party for the proposed the proposed township establishment to be situated on the Remainder of the Farm Matabula 701 JU in Sikhwahlane, Nkomazi Local Municipality, Mpumalanga Province.

Kindly see the attached letter and the registration form.

Hoping to hear from you soon.



From:	Leago Environmental Solutions <info@leagoenviro.co.za></info@leagoenviro.co.za>
Sent:	Thursday, 13 May 2021 13:43
То:	'LoveS@nda.agric.za'
Subject:	INVITATION TO REGISTER AS AN INTERESED OR AFFECTED PARTY FOR THE PROPOSED TOWNSHIP ESTABLISHMENT ON THE REMAINDER
	OF THE FARM MATABULA 701 JU
Attachments:	REGISTRATION FORMS.pdf; INVITATION LETTER.pdf

Good day,

I hope you are well.

We kindly invite you (Mpumalanga Department of Agriculture, Fisheries and Forestry) to register as an interested or affected party for the proposed the proposed township establishment to be situated on the Remainder of the Farm Matabula 701 JU in Sikhwahlane, Nkomazi Local Municipality, Mpumalanga Province.

Kindly see the attached letter and the registration form.

Hoping to hear from you soon.



From:	Leago Environmental Solutions <info@leagoenviro.co.za></info@leagoenviro.co.za>
Sent:	Thursday, 13 May 2021 13:37
То:	'bmoduka@mpg.gov.za'
Subject:	INVITATION TO REGISTER AS AN INTERESED OR AFFECTED PARTY FOR THE PROPOSED TOWNSHIP ESTABLISHMENT ON THE REMAINDER
	OF THE FARM MATABULA 701 JU
Attachments:	REGISTRATION FORMS.pdf; INVITATION LETTER.pdf

Good day,

I hope you are well.

We kindly invite you (Mpumalanga Provincial Heritage Resources Authority) to register as an interested or affected party for the proposed the proposed township establishment to be situated on the Remainder of the Farm Matabula 701 JU in Sikhwahlane, Nkomazi Local Municipality, Mpumalanga Province.

Kindly see the attached letter and the registration form.

Hoping to hear from you soon.



From:	Leago Environmental Solutions <info@leagoenviro.co.za></info@leagoenviro.co.za>
Sent:	Thursday, 13 May 2021 13:40
То:	'Phumla.Nkosi@mtpa.co.za'
Subject:	INVITATION TO REGISTER AS AN INTERESED OR AFFECTED PARTY FOR THE PROPOSED TOWNSHIP ESTABLISHMENT ON THE REMAINDER
	OF THE FARM MATABULA 701 JU
Attachments:	REGISTRATION FORMS.pdf; INVITATION LETTER.pdf

Good day,

I hope you are well.

We kindly invite you (Mpumalanga Tourism and Parks Agency) to register as an interested or affected party for the proposed the proposed township establishment to be situated on the Remainder of the Farm Matabula 701 JU in Sikhwahlane, Nkomazi Local Municipality, Mpumalanga Province.

Kindly see the attached letter and the registration form.

Hoping to hear from you soon.



From:	Leago Environmental Solutions <info@leagoenviro.co.za></info@leagoenviro.co.za>
Sent:	Thursday, 13 May 2021 13:41
То:	'weekend.nhlambo@nkomazi.gov.za'
Subject:	INVITATION TO REGISTER AS AN INTERESED OR AFFECTED PARTY FOR THE PROPOSED TOWNSHIP ESTABLISHMENT ON THE REMAINDER
	OF THE FARM MATABULA 701 JU
Attachments:	REGISTRATION FORMS.pdf; INVITATION LETTER.pdf

Good day,

I hope you are well.

We kindly invite you (Nkomazi Local Municipality : Roads Section) to register as an interested or affected party for the proposed the proposed township establishment to be situated on the Remainder of the Farm Matabula 701 JU in Sikhwahlane, Nkomazi Local Municipality, Mpumalanga Province.

Kindly see the attached letter and the registration form.

Hoping to hear from you soon.



From:	Leago Environmental Solutions <info@leagoenviro.co.za></info@leagoenviro.co.za>
Sent:	Thursday, 13 May 2021 13:39
То:	'jmojapelo@mpg.gov.za'
Subject:	INVITATION TO REGISTER AS AN INTERESED OR AFFECTED PARTY FOR THE PROPOSED TOWNSHIP ESTABLISHMENT ON THE REMAINDER
	OF THE FARM MATABULA 701 JU
Attachments:	REGISTRATION FORMS.pdf; INVITATION LETTER.pdf

Good day,

I hope you are well.

We kindly invite you (Mpumalanga Department of Public Works, Roads and Transport) to register as an interested or affected party for the proposed the proposed township establishment to be situated on the Remainder of the Farm Matabula 701 JU in Sikhwahlane, Nkomazi Local Municipality, Mpumalanga Province.

Kindly see the attached letter and the registration form.

Hoping to hear from you soon.

