mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

SCOPING REPORT

PROSPECTING RIGHT APPLICATION OF DIAMOND ALLUVIAL, DIAMOND GENERAL AND DIAMOND KIMBERLITE NEAR KIMBERLEY ON A CERTAIN PORTION OF THE FARM ROOIFONTEIN 1722 (PREVISOUSLY KNOWN AS A PORTION OF THE FARM DUTOITSPAN 119), REGISTRATION DIVISION: BOSHOF, FREE STATE PROVINCE.

SUBMITTED FOR ENVIRONMENTAL AUTHORIZATIONS IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 AND THE NATIONAL ENVIRONMENTAL MANAGEMENT WASTE ACT, 2008 IN RESPECT OF LISTED ACTIVITIES THAT HAVE BEEN TRIGGERED BY APPLICATIONS IN TERMS OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (MPRDA) (AS AMENDED).

NAME OF APPLICANT	**Matolo Trade and Investment Pty Ltd**
COMPILED BY	**Milnex 189 CC**
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FILE REFERENCE NUMBER SAMRAD:	**FS30/5/1/1/2/10462PR**

CLAUSE

This report has been compiled by Milnex 189 CC, using information provided by **Matolo Trade and Investment Pty Ltd** the client as well as third parties, which information has been presumed to be correct. While Milnex 189 CC have made every endeavour to supply accurate information, and exercised all care, skill and diligence in the drafting of this report, errors and omissions may occur. Accordingly, Milnex 189 CC does not warrant the accuracy or completeness of the materials in this report. Milnex 189 CC does not accept any liability for any loss or damage which may directly or indirectly result from any advice, opinion, information, representation or omission, whether negligent or otherwise, contained in this report. Milnex 189 CC does not accept any liability for any loss or damage, whether direct, indirect or consequential, arising out of circumstances beyond the control of Milnex 189 CC, including the use and interpretation of this report by the client, its officials or their representatives or agents. This document contains information proprietary to Milnex 189 CC and as such should be treated as confidential unless specifically identified as a public document by law. Milnex 189 CC owns all copyright and all other intellectual property rights in this report. The document may not be copied, reproduced in whole or in part, or used for any manner without prior written consent from Milnex 189 CC. Copyright is specifically reserved in terms of the Copyright Act 98 of 1987 including amendments thereto. By viewing this disclaimer and by accepting this document, you acknowledge that you have read and accepted these Terms of Use and undertake to keep the information contained herein confidential and not to do any act or allow any act which is in breach of these Terms of Use.

IMPORTANT NOTICE

In terms of the Mineral and Petroleum Resources Development Act (Act 28 of 2002 as amended), the Minister must grant a prospecting or mining right if among others the mining "will not result in unacceptable pollution, ecological degradation or damage to the environment".

Unless an Environmental Authorisation can be granted following the evaluation of an Environmental Impact Assessment and an Environmental Management Programme report in terms of the National Environmental Management Act (Act 107 of 1998) (NEMA), it cannot be concluded that the said activities will not result in unacceptable pollution, ecological degradation or damage to the environment.

In terms of section 16(3)(b) of the EIA Regulations, 2014, any report submitted as part of an application must be prepared in a format that may be determined by the Competent Authority and in terms of section 17 (1) (c) the competent Authority must check whether the application has taken into account any minimum requirements applicable or instructions or guidance provided by the competent authority to the submission of applications.

It is therefore an instruction that the prescribed reports required in respect of applications for an environmental authorisation for listed activities triggered by an application for a right or permit are submitted in the exact format of, and provide all the information required in terms of, this template. Furthermore, please be advised that failure to submit the information required in the format provided in this template will be regarded as a failure to meet the requirements of the Regulation and will lead to the Environmental Authorisation being refused.

It is furthermore an instruction that the Environmental Assessment Practitioner must process and interpret his/her research and analysis and use the findings thereof to compile the information required herein. (Unprocessed supporting information may be attached as appendices). The EAP must ensure that the information required is placed correctly in the relevant sections of the Report, in the order, and under the provided headings as set out below, and ensure that the report is not cluttered with un-interpreted information and that it unambiguously represents the interpretation of the applicant.

OBJECTIVE OF THE SCOPING PROCESS

1) The objective of the scoping process is to, through a consultative process—

(a) identify the relevant policies and legislation relevant to the activity;
(b) motivate the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the preferred location;
(c) identify and confirm the preferred activity and technology alternative through an impact and risk assessment and ranking process;
(d) identify and confirm the preferred site, through a detailed site selection process, which includes an impact and risk assessment process inclusive of cumulative impacts and a ranking process of all the identified alternatives focusing on the geographical, physical, biological, social, economic, and cultural aspects of the environment;
(e) identify the key issues to be addressed in the assessment phase;
(f) agree on the level of assessment to be undertaken, including the methodology to be applied, the expertise required as well as the extent of further consultation to be undertaken to determine the impacts and risks the activity will impose on the preferred site through the life of the activity, including the nature, significance, consequence, extent, duration and probability of the impacts to inform the location of the development footprint within the preferred site; and
(g) identify suitable measures to avoid, manage, or mitigate identified impacts and to determine the extent of the residual risks that need to be managed and monitored.

_____

SCOPING REPORT

2) Contact Person and correspondence address

a) Details of:

i) The EAP who prepared the report

Name of Practitioner: Danie Labuschagne

Tel No.: (018) 011 1925

Fax No. : (053) 963 2009

e-mail address: danie@milnex-sa.co.za

Name of Practitioner: Percy Sehaole

Tel No.: (018) 011 1925

Fax No. : (053) 963 2009

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Name of Practitioner: Lizanne Esterhuizen

Tel No.: (018) 011 1925

Fax No. : (053) 963 2009

e-mail address: lizanne@milnex-sa.co.za

ii) Expertise of the EAP.

(1) **The qualifications of the EAP**
(With evidence attached as **Appendix 1**).

Danie Labuschagne holds a Master's Degree in Environmental Management and Geography (refer to **Appendix 1**)

Percy Sehaole holds a Master's Degree in Environmental Science (refer to **Appendix 1**)

Lizanne Esterhuizen holds an Honours Degree in Environmental Science (refer to **Appendix 1**)

(2) **Summary of the EAP's past experience**.
(Attach the EAP's curriculum vitae as **Appendix 2**)

Milnex 189 CC was contracted by Matolo Trade and Investment Pty Ltd as the independent environmental consultant to undertake the Scoping and EIA process for a Prospecting Right of Diamond Alluvial, Diamond General and Diamond Kimberlite near Kimberley on a certain portion of the farm

Rooifontein 1722 (previously known as a portion of the farm Dutoitspan 119), Registration Division: Boshof, Free State province. Milnex 189 CC does not have any interest in secondary developments that may arise out of the authorisation of the proposed project.

Milnex 189 CC is a specialist environmental consultancy with extensive experience in the mining industry which provides a holistic environmental management service, including environmental assessment and planning to ensure compliance with relevant environmental legislation. Milnex 189 CC benefits from the pooled resources, diverse skills and experience in the environmental and mining field held by its team that has been actively involved in undertaking environmental studies for a wide variety of mining related projects throughout South Africa. The Milnex 189 CC team has considerable experience in environmental impact assessment and environmental management, especially in the mining industry.

Danie Labuschagne, Percy Sehaole & Lizanne Esterhuizen have experience consulting in the environmental field. Their key focus is on environmental assessment, advice and management and ensuring compliance to legislation and guidelines. They are currently involved in undertaking EIAs for several projects across the country (refer to **Appendix 2** for CV)

b) Description of the property.

Farm Name:	1) A certain portion of the farm Rooifontein 1722 (previously known as a portion of the farm Dutoitspan 119
Application area (Ha)	324.7035 ha
Prospecting area (HA)	24 ha
Magisterial district:	Boshof
Distance and direction from nearest town	The proposed prospecting area is situated South East of De Beers Kimberley Mines not so far from the Slimes dam. The city of Kimberley lies ±9 km northwest of the proposed prospecting area.
21 digit Surveyor General Code for each farm portion	1) F00400000000172200000

c) Locality map

(show nearest town, scale not smaller than 1:250000 attached as **Appendix 3).**

A Locality map is attached in **Appendix 3** and on figure 1 below.

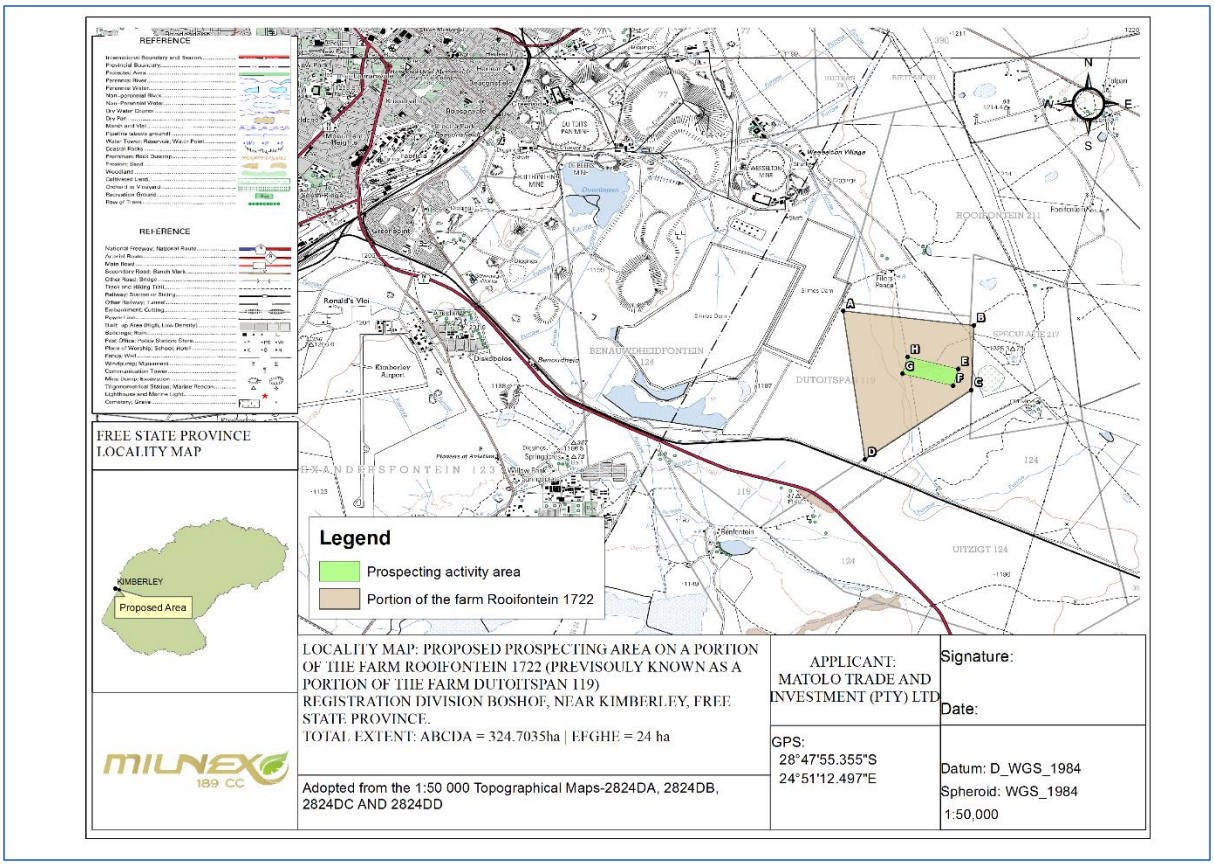


Figure 1: Locality Map

Farms Co-ordinates:

Farms	Longitude	Latitude
1) A certain portion of the farm Rooifontein 1722 (previously known as a portion of the farm Dutoitspan 119	28°47'22.157"S	24°50'25.760"E
	28°47'30.236"S	24°51'39.560"E
	28°48'6.633"S	24°51'38.070"E
	28°48'45.841"S	24°51'39.560"E
2) Prospecting activity area	28°47'54.859"S	24°51'30.580"E
	28°48'4.269"S	24°51'27.700"E
	28°47'57.512"S	24°50'59.220"E
	28°47'48.103"S	24°51'2.090"E

d) Description of the scope of the proposed overall activity.

i) Listed and specified activities

Provide a plan drawn to a scale acceptable to the competent authority but not less than 1: 10 000 that shows the location, and area (hectares) of all the aforesaid main and listed activities, and infrastructure to be placed on site and attach as **Appendix 4**

Refer to Site Plan included within **Appendix 4**.

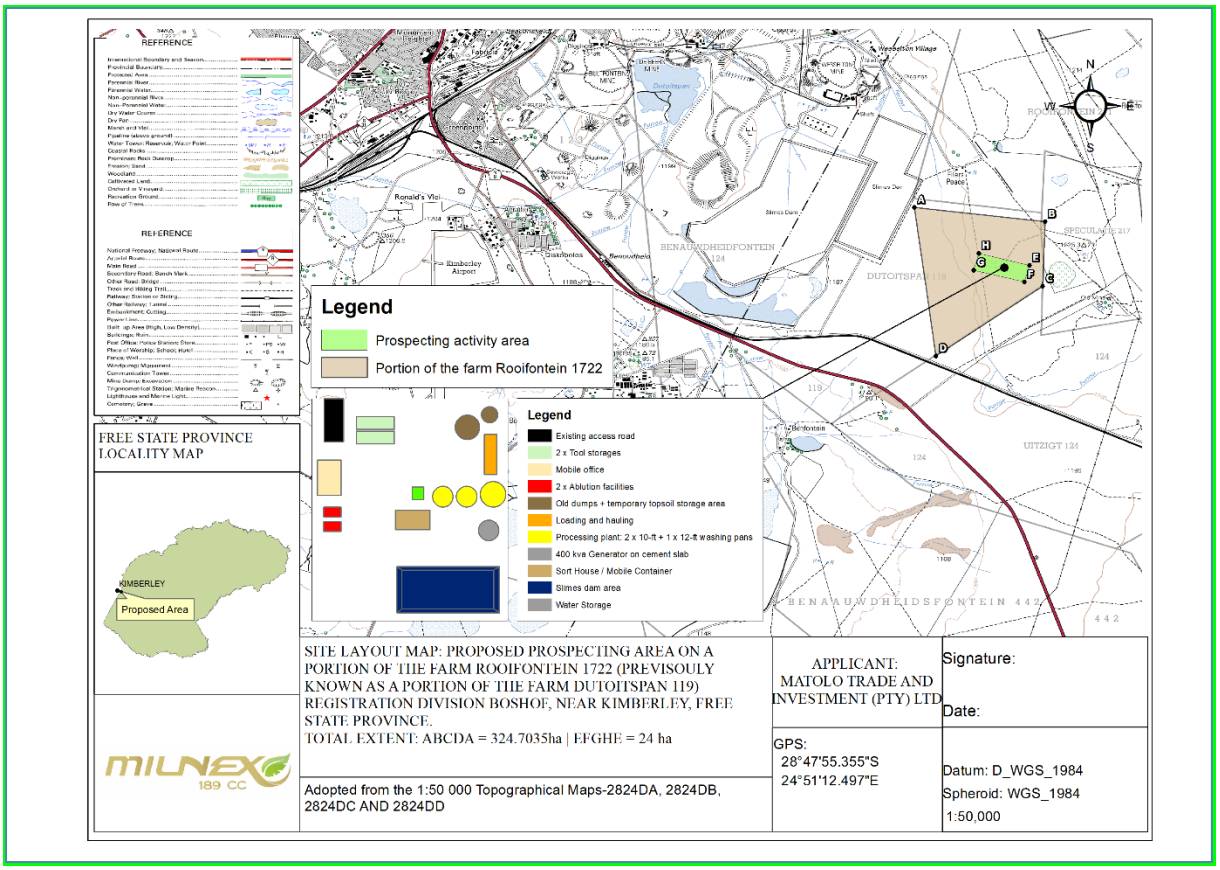


Figure 2: Site Layout Map

NAME OF ACTIVITY (All activities including activities not listed) **(E.g. Excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc…etc…etc.)**	**Aerial extent of the Activity** **Ha or m²**	**LISTED ACTIVITY** **Mark with an X where applicable or affected.**	**APPLICABLE LISTING NOTICE** ***(GNR 983, GNR 984 or GNR 985)/NOT LISTED***
Clearance of indigenous vegetation	324.7035 ha- only 24ha of indigenous vegetation will be cleared.	X	GNR. 984
Office and Workshop	50m²	-	-
Roads	+- 4 km	-	-
Stockpiling op topsoil	24 ha – 100m x 50m x 5m x 2 = 50 000 m³	-	-
Prospecting of Diamond Alluvial, Diamond General and Diamond Kimberlite - Excavations	24 ha – 100m x 50m x 50m (2 pit/trenches),	X	GNR. 984
Processing Plant	2 x 10 Ft Pan and 1 x 12 Ft Pan – 450 000m³ to be washed	X	-

Listing Notices:

Description of the overall activity. **(Indicate Mining Right, Mining Permit, Prospecting right, Bulk Sampling, Production Right, Exploration Right, Reconnaissance permit, Technical co-operation permit, Additional listed activity)**	***1***. **Listing Notice GNR 984, Activity 15:** *"The clearance of an area of 20 hectares or more, of indigenous vegetation."* – *Random indigenous vegetation clearance of over a 24 hectares area.* 2. **Listing Notice GNR 984, Activity 19:** *"The removal and disposal of minerals contemplated in terms of section 20 of the Mineral and Petroleum Resource4s Development Act (Act No. 28 of 2002), including associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource, including activities for which an exemption has been issued in terms of section 106 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002)"* – Prospecting right with bulk samples for the mining of Diamond Alluvial (DA), Diamond General (D) and Diamond Kimberlite including associated infrastructure, structures and earthworks. 3. **Listing Notice GNR 984, Activity 21:** "*Any activity including the operation of that activity associated with the primary processing of a mineral resource including winning, reduction, extraction, classifying, concentrating, crushing, screening and washing but excluding the smelting, beneficiation, refining, calcining or gasification of the mineral resource in which case activity 6 in this Notice applies."* 4. **Listing Notice GNR 983, Activity 20:** "*"Any activity including the operation of that activity which requires a prospecting right in terms of section 16 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), including associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource…"* – Prospecting right with bulk samples for the mining of Diamond Alluvial (DA), Diamond General (D) and Diamond Kimberlite including associated infrastructure, structure and earthworks.

ii) Description of the activities to be undertaken

(Describe Methodology or technology to be employed, and for a linear activity, a description of the route of the activity

The entire proposed prospecting area will be conducted in four phases as described below over a period of 36 months. This prospecting will consist of non-invasive and invasive (Bulk Sampling) activities. The review of available information that exists over the area of interest will be undertaken by means of conducting a literature review from satellite images and other available information.

Description of Planned Non-Invasive Activities:

(These activities do not disturb the land where prospecting will take place e.g. aerial photography, desktop studies, aeromagnetic surveys, etc)

PHASE 1

Literature Review (Month 1-2)

In order to direct the exploration programme in an efficient manner, there will be a review of all information and data gathered during previous exploration. A site investigation of the target areas will be undertaken to identify infrastructure and determine any potential problems that may need to be addressed.

Literature review of all available data for the area will be performed in order to accumulate as much regional and historical data around the area as possible. This includes published geological reports, infrastructure mapping, satellite imagery and existing geophysical information if available, both primary (Kimberlite or Lamproite) and secondary (alluvial) diamond deposits will be targeted.

Imagery Analysis & Geological Mapping (Month 3-5)

High-resolution satellite images will be studied and used to geologically map the application area. Contacts between various lithologies will be mapped and specific attention will be given to delineate and define areas underlain by alluvial gravels and kimberlite.

A. Progress report (Month 6-7)

When the literature review, geological mapping survey is complete, comprehensive report will be drafted as part of the annual report for the Department of Mineral and Resource plus the shareholders.

Description of Planned Invasive Activities:

(These activities result in land disturbances e.g. sampling, drilling, bulk sampling, etc)

PHASE 2

Invasive Prospecting Drilling and excavations (Month 8-17)

Invasive Prospecting boreholes is estimated to be positioned within the 20 ha region marked as mining area on the image below.

Reverse or Percussion circulation drill holes (usually up to 165mm in diameter) will be positioned at targets identified during geological mapping and geophysical survey.

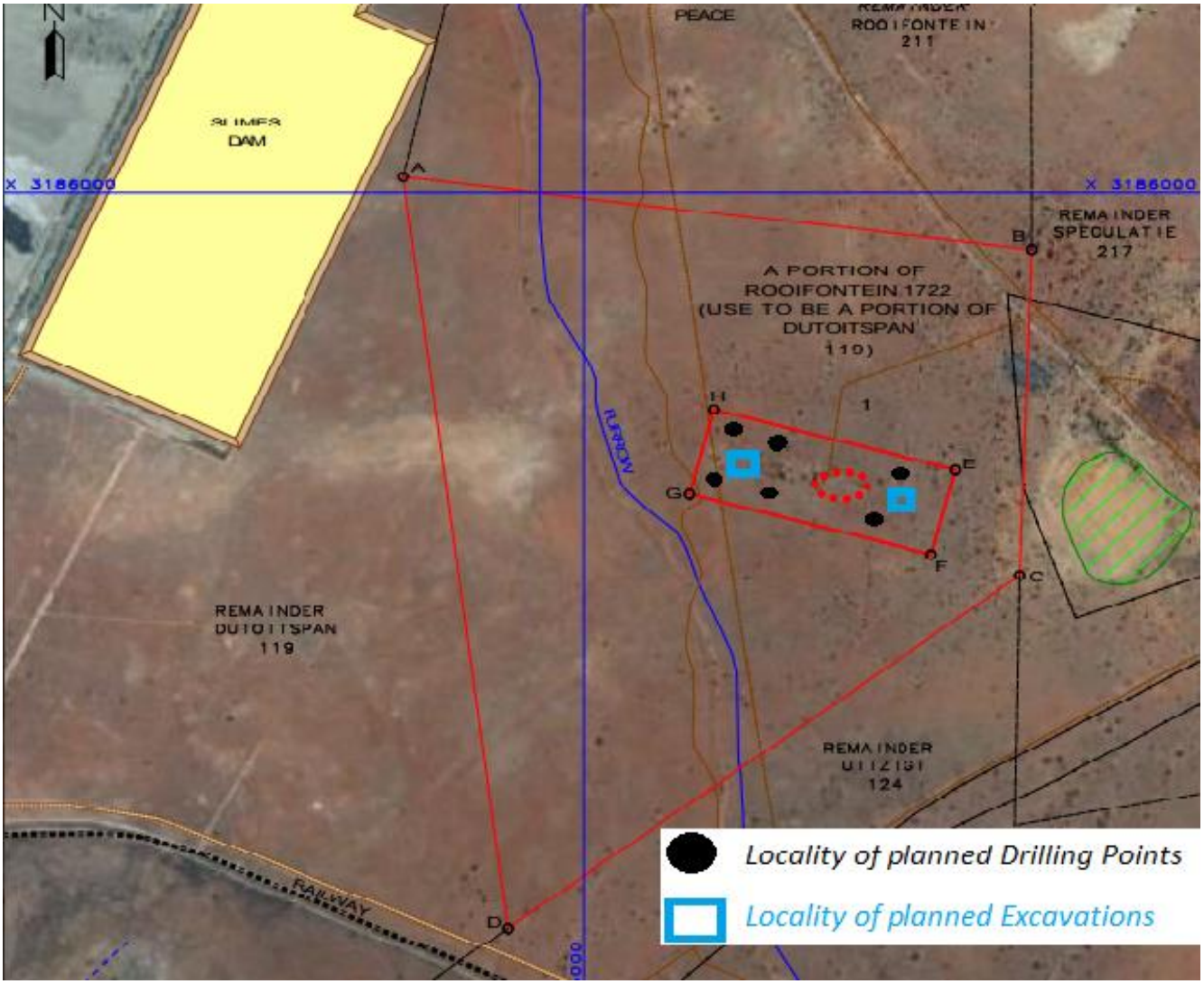
The exact location of the boreholes to be drilled is unknown since this stage is controlled by information from phase 1.

The first phase of drilling will require the drilling of approximately 6 boreholes to be drilled within the prospecting area. Drilling program will be put into practice where the grid spacing will be set to 50 M x 50 M with an average depth of 100 m, followed by a second round of infill drilling as to whether to continue with the prospecting programme or not. The collar position of all boreholes will be surveyed.

During this drilling programme samples are collected every meter and logging will be done by a qualified geologist who will record the lithology. Apart from ore resources calculations the drilling information will be used to construct ore thickness, overburden thickness and basement elevation contour plans.

Each drill borehole and sample site will be rehabilitated as prospecting proceeds.

Invasive prospecting excavations will be positioned in the region of the blue square shape as estimated on the image listed above.



Plan of the application area map found in the PWP as Figure 1

PHASE 3

Bulk Sampling (Month 12-31)

Should delineation and initial evaluation of the deposit indicate a sufficient size and grade to warrant further evaluation, an appropriate bulk sampling program will be undertaken in order to establish grade and confirm its viability for mining.

Description of Pre-/Feasibility Studies

(Activities in this section includes but are not limited to: initial, geological modeling, resource determination, possible future funding models, etc)

PHASE 4

Analytical Desktop Study

The project geologist monitors the programme, consolidates and processes the data and amends the programme depending on the results. This is a continuous process throughout the programme and continues even when no prospecting is done on the ground.

Each physical phase of prospecting is followed by desktop studies involving interpretation and modelling of all data gathered. These studies will determine the manner in which the work programme is to proceed in terms of activity, quantity, resources, expenditure and duration.

A GIS based database will be constructed capturing all exploration data.

Description of Bulk Sampling Activities

Only 2 pit/trenches will be dug (100m x 50m x ± 50m). No more than 2 trenches will be dug.

The total area to be disturbed for the duration of the activity will be- 2 trenches x (100m x 50m) = 1ha

ACTIVITY		**DETAILS**		
Number of pits/trenches planned		**2 Pits/Trenches**		
	Number of pits/trenches	**Length**	**Breadth**	**Depth**
	2	100m	50m	+/_ 50m
Locality		See figure 3 (estimated)		
Volume Overburden (Waste)		+/_ 50 000 m3		
Volume Ore		+/_ 450 000m3		
Density Overburden				
Density Ore				
Phase(s) when bulk sampling will be required		Phase 3		
Timeframe(s)		From time-to-time during Months 12 to 31		

e) Policy and Legislative Context

APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT (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);	**REFERENCE WHERE APPLIED**
The Constitution of South Africa (Act No. 108 of 1996)	-
The National Environmental Management Act (Act No. 107 of 1998)	S24(1) of NEMA S28(1) of NEMA
The National Water Act (Act No. 36 of 1998)	S21 (a)(b) of NWA
Management: Air Quality Act (Act No. 39 of 2004)	S21
The National Heritage Resources Act (Act No. 25 of 1999)	-
Conservation of Agricultural Resources Act (Act No. 85 of 1983)	-
Mineral and Petroleum Resources Development Act (Act No. 28 of 2002)	-
National Infrastructure Plan	-
National Forests Acts, Act 84 of 1998	Chap 3 (Part 1) 1998 S12(1) S15(1) S58(1)
Department of Environmental and Nature Conservation	-
Department of Agriculture, Forestry and Fisheries	-
National Veld & Forest Fires Act (Act 101 of 1998)	-
Lejweleputswa District Municipality Integrated Development Plan (IDP)	-
Tokologo Local Municipality Integrated Development Plan (IDP)	-
National Environmental Management: Waste Act, (No. 59 of 2008) (NEM:WA)	-
Occupational Health and Safety Act as amended, (No.181 of 1993)	-

f) Need and desirability of the proposed activities.

(Motivate the need and desirability of the proposed development including the need and desirability of the activity in the context of the preferred location).

Prospecting rights have been applied for in the vicinity of the proposed area, around Kimberley.

The proposed prospecting right application is next to the Kimberley Ekapa Mining Joint Venture, previously known as De Beers Kimberley Mines.

In June 2016 De Beers Consolidated Mines (DBCM) announces that it has completed the sale of Kimberley Mines (all assets, including the tailings mineral resource) to Ekapa Minerals (Pty) Limited – an investor consortium comprising Ekapa Mining (Pty) Ltd (50.1%) and Petra Diamonds Limited (49.9%).

In July 2016 Petra Diamonds Limited announced the completion of a joint venture agreement with Ekapa Mining (Pty) Ltd, whereby the two companies would combine their respective operations in Kimberley. This resultant entity, Kimberley Ekapa Mining Joint Venture ("KEM JV"), now houses the Kimberley Underground mine, numerous tailings retreatment programmes and the Central Treatment Plant.

Thus, from the above mentioned it can be assumed that diamond bearing gravel might be present on the proposed area.

The Northern Cape Province is an important supplier of rough diamonds to the international market and is a large corner stone of the South African economy.

g) Period for which the environmental authorisation is required.

The environmental authorisation is required for a minimum period of 10 years.

h) Description of the process followed to reach the proposed preferred site.

NB!! – This section is not about the impact assessment itself; It is about the determination of the specific site layout having taken into consideration (1) the comparison of the originally proposed site plan, the comparison of that plan with the plan of environmental features and current land uses, the issues raised by interested and affected parties, and the consideration of alternatives to the initially proposed site layout as a result.

The entire proposed prospecting area will be conducted in four phases over a period of 36 months. This prospecting will consist of non-invasive and invasive (Bulk Sampling) activities. The review of available information that exists over the area of interest will be undertaken by means of conducting a literature review from satellite images and other available information.

The location and extent of soil sampling, and possible diamond bulk sampling can therefore not be determined at this stage. Mapping of the prospecting activities could thus not be undertaken. For the purposes of this report, the overall prospecting area is presented in **Appendix 3**.

i) Details of all alternatives considered.

With reference to the site plan provided as Appendix 4 and the location of the individual activities on site, provide details of the alternatives considered with respect 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; and
(f) the option of not implementing the activity.

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

As discussed in the previous section, based on outcomes of previous studies in the vicinity of the proposed site and previous prospecting on the proposed site, the possibility to encounter further Diamond Reserves on a certain portion of the farm Rooifontein 1722 (previously known as a portion of the farm Dutoitspan 119), were identified.

(b) The type of activity to be undertaken

In terms of the technologies proposed, these have been chosen based on long term success in terms of their prospecting history. The prospecting activities proposed in the Prospecting Work Programme is dependent on the preceding phase, therefore no alternatives are indicated, but rather a phased approach of trusted prospecting techniques.

(c) The design or layout of the activity

The location of the activities will be determined based on the location of the prospecting activities, which will only be determined during phase 1 of the Prospecting Work Programme (see **Appendix 9** for the Programme).

Identified on the proposed area by using a topographical map, were the following: a furrow, secondary road, track- and/or hiking trail, as well as diggings. Where applicable a Water Use License Application will be launched for conducting prospecting operations. All infrastructure will be temporary and/or mobile.

(d) The technology to be used in the activity

In terms of the technologies proposed, these have been chosen based on the long term success of their prospecting history. The prospecting activities proposed in the Prospecting Works Programme (**Appendix 9**) is dependent on the preceding phase as previously discussed, therefore no alternatives are indicated, but rather a phased approach of trusted prospecting techniques.

The preferred technology for the proposed prospecting activity, will be to drill boreholes for sample collection, which will be used to calcultate the ore resources, construct ore thickness, overburden thickness and basement elevation contour plans. Should delineation and initial evaluation of the deposit indicate a sufficient size and grade to warrant further evaluation, an appropriate bulk sampling program will be undertaken in order to establish grade and confirm its viability for mining. If it is feasible the preferred technology for the latter will be to remove the diamond bearing gravel with an excavator, depositing it in the 10 – 18 feet rotary pan(s) to be washed and sorted. Please find the Prospecting Work Programme attached as **Appendix 9**.

Reverse Circulation Drilling (RC drilling)

Drill Structure
RC drilling is usually a large piece of apparatus, that requires a lot of space, not just for the rig itself, but the supporting vehicles and the pit for collecting waste runoff.

The drill cutting is transferred to the surface inside drill rods, which are linked together to create a 'drill string'. Drill bits attached to the end of the hammer are made from tungsten-steel, and are usually around 13-20cm in diameter. These also have metal nodules attached at the end to allow cutting through particularly tough rock. Most RC drilling uses a dual-tube drill rods, with one tube inside another. The tubes inside overlap and provide a path for drilled rock from the ground to the surface. Inner tubes can be sealed together, meaning that the RC drill can sample up to very large depths, often around 500m.

Another type of RC drilling is 'centre sample' drilling. This is a modern variation, in which a central hammer, with a hollow centre, allows the sample to immediately enter the drill pipe, without the need to travel past the hammer (AZOMining, 2012)

Sample Extraction
The samples produced from RC drilling are dry chips of the drilled rock. To create the sample, the hammer acts like a pneumatic piston and pushes a tungsten-steel drill bit on to the rock, breaking it up. Before the drill bit hits the rock, it is dried out using an air compressor, so that the rock chips are dry at the surface.

Water is often used down the hole to cool the drill bit and reduce dust, as well as assisting with the transportation of sample bits to the surface. Air is blown down the drill rods to create a pressure difference, allowing the sample chips and water to rise through the inner tube. The sample then reaches a bell at ground level, which transports the sample to a cyclone where it dries out and is deposited into sacks (AZOMining, 2012).

Applications
RC drilling is a technique used in most stages of mine development.

As it is cheaper than diamond core drilling, it is often used in first stage exploration mining to delineate a potentially extractable ore body. It is also preferable to RAB or air-core drilling when trying to reach great depths, but RC drilling is slower and more expensive than either of these two methods.

RC drilling is also consistently used during in-pit grade control and the development stage of an ore body (AZOMining, 2012).

Pros & Cons of the alternative RC drilling

Advantages	**Disadvantages**
Direct drilling cost reductions in the range of 25% to 40%.	Less geological information from sample.
Faster completion of drill programs with quicker delivery of results.	Holes can deviate (Spiral Stabiliser Subs keep holes straighter)
Reduced man-hours at the drill with decreased exposure to potential accidents.	Diamond drill can usually drill to greater depth although depths up to 800m have been achieved with.
Reduced contractor activity in the mine reduces mine support burden.	
Indirect cost reductions gained from a simplified sampling process.	

Pros & Cons of the alternative **Dense Media Separation (DMS)**

Advantages	**Disadvantages**
DMS plants is used mostly for kimberlite deposits	10 times more expensive than Rotary pan
	Water consumption is high
	Operating costs are expensive

In a Dense Media Separation (DMS) plant, powdered ferrosilicon (an alloy of iron and silicone) is suspended in water to form a fluid near the density of diamond (3.52 g/cm3), to which the diamond bearing material is added to begin the separation process of the heavier minerals from the lighter material. Additional separation of the denser material occurs by centrifuge in “cyclones” that swirl the mixture at low and high speeds, forcing the diamonds and other dense minerals to the walls and then out the bottom of the cyclone. Waste water rises at the centre of the cyclones and is sucked out and screened to remove waste particles. The DMS process results in a concentrate that generally weighs less than one percent of the original material fed into the plant at the beginning of the process.

Pros & Cons of the alternative **Rotary Pan Plants**

Advantages	**Disadvantages**
More cost effective	The industry perception that Rotary Pan Plants yield poorer diamond recoveries
Readily available	
Generate more work opportunities	
Consume less water	
Rotary Pan Plants are most often used when mining alluvial deposits	

In a Rotary Pan plant, crushed ore, when mining kimberlite, or alluvial gravel and soil is mixed with water to create a liquid slurry called “puddle” which has a density in the 1.3 to 1.5 g/cm3 range. The mix is stirred in the pan by angled rotating “teeth”. The heavier minerals, or “concentrate”, settle to the bottom and are pushed toward an extraction point, while lighter waste remains suspended and overflows out of

the centre of the pan as a separate stream of material. The concentrate, representing just a small percentage of the original kimberlite ore or alluvial gravels, is drawn off for final recovery of the diamonds.

Both methods are in actual fact used for bulk material reduction and require a further process for the final diamond recovery however, for this project the Rotary Pan will be used.

When it comes to dust suppression two main methods were considered, namely molasses stillage and the wetting (water) of roads. The table below provides a short summary of the advantages and disadvantages of each.

Water	Molasses stillage
More cost effective	Much more expensive
Could lead to the depleting of water resources	Requires less water
No damage (only if used excessively)	The product may be toxic to aquatic organisms. (As this product could have physical effects on aquatic organisms for e.g. floating, osmotic damage)
No harm to humans or animals (Only a high quantity will have harm to humans or animals)	Not Hazardous or toxic. Could cause irritation to eyes, skin or when ingested and inhaled.
Non-flammable	Non-flammable
Eye-wash fountains not needed	Eye-wash fountains in the work place are strongly recommended
	Working procedures should be designed to minimize worker exposure to this product.
Basic storing methods	Storing methods are a bit more complicated. Should be stored in a plastic, plastic lined or stainless steel, tight closed containers between 5 and 40 degrees Centigrade.

Considering the above mentioned information, water will be used for dust suppression purposes.

(e) The operational aspects of the activity

Due to the nature of the prospecting activities, no permanent services in terms of water supply, electricity, or sewerage services are required.

The activities will commence with a site investigation and desktop studies, which will comprise of non-invasive techniques. This manner of survey will ensure that the applicant can clearly delineate areas which are suitable for further investigation and no unnecessary surface disturbance will be undertaken.

Based on the outcome of the desktop studies and site investigation, boreholes will be drilled for the purpose of soil sampling. If gravel is found, the applicant will determine the composition and quality of the gravel.

The applicant will proceed with this way of prospecting by means of the open cast/trenching method, simultaneously or after pitting depending on the information obtained from the earlier work done. The trenches will be dug to remove and wash the gravel. It will be washed by a washing pan to determine diamond proceeds per 100 tons of gravel.

All data will be consolidated and processed to determine the diamond bearing resources on the property. This will be a continuous process throughout the prospecting work programme.

No feasible alternatives to the pitting and trenching method currently exists. Impacts associated with the prospecting operations will be managed through the implementation of a management plan, developed as part of the application for authorisation.

(f) The option of not implementing the activity

The option of not approving the activities will result in a significat loss of valuable information regarding the mineral status (in terms of diamonds) present on these properties. In addition to this, should economical reserves be present and the applicant does not have the opportunity to prospect, the opportunity to utalize these reserves for future phases will be lost.

ii) Details of the Public Participation Process Followed

Describe the process undertaken to consult interested and affected parties including public meetings and one on one consultation. NB the affected parties must be specifically consulted regardless of whether or not they attended public meetings. (Information to be provided to affected parties must include sufficient detail of the intended operation to enable them to assess what impact the activities will have on them or on the use of their land.

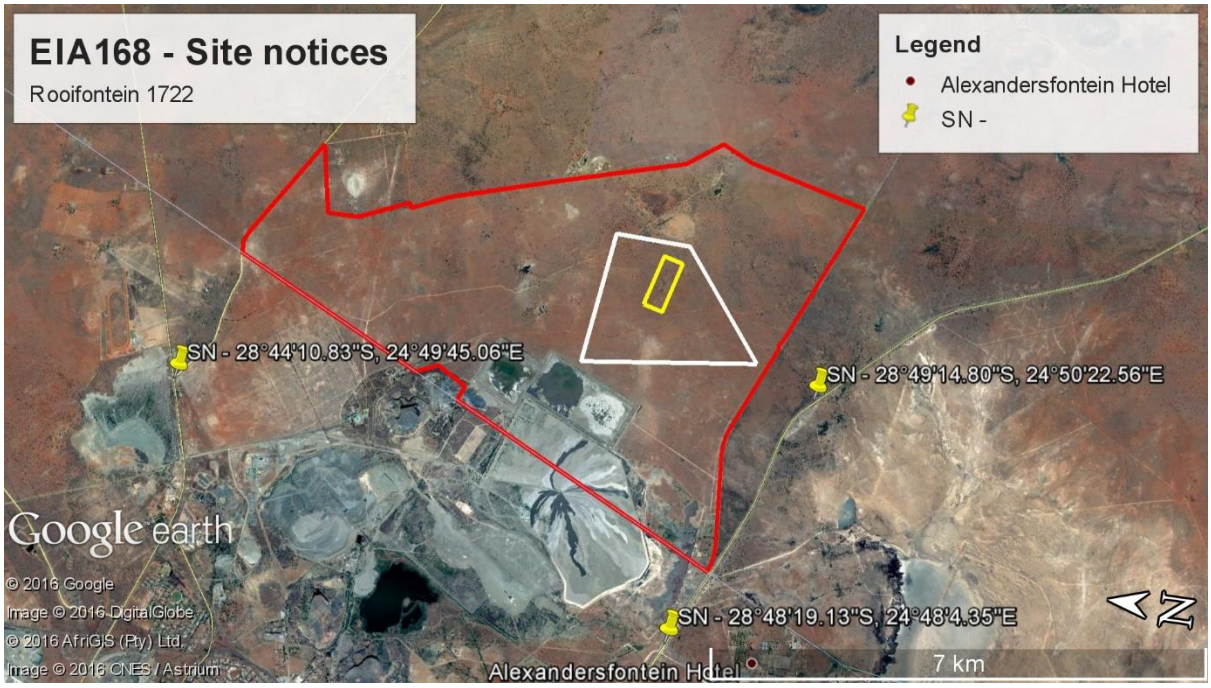
1. Advertisement and Notices

Newspaper advertisement

An advertisement will be placed in English in the local newspaper (Bloem-news) on 30 Maart 2017 (see **Appendix 6**) notifying the public of the EIA process and requesting Interested and Affected Parties (I&APs) to register with, and submit their comments to Milnex 189 CC. I&APs were given the opportunity to raise comments within 30 days of the advertisement.

Site notices

Site notices will be placed on site in English on the 04 April 2017 to inform surrounding communities and immediately adjacent landowners of the proposed development. I&APs were given the opportunity to raise comments. Photographic evidence of the site notices is included in **Appendix 6**. Below is a picture depicting were site notices were placed



Site Notices coordinates

Direct notification and circulation of Scoping Report to identified I&APs

Identified I&APs, including key stakeholders representing various sectors, are directly informed of the proposed development and the availability of the Scoping Report via registered post on 27 March 2017 and were requested to submit comments by 02 May 2017. A copy of this report is also available at the Milnex offices in Schweizer-Reneke, 4 Botha Street, Schweizer-Reneke and Potchefstroom (Waterberry Street, Waterberry Square, 1st floor, Office 5B, Potchefstroom), between 7:30AM and 5PM, Monday to Thursdays and between 7:30AM and 4PM on Fridays. For a complete list of stakeholder details and for proof of registered post see **Appendix 6**. The consultees included:

- Department of Economic Small Business Development, Tourism and Environmental Affairs
- Department of Water and Sanitation
- Free State Department of Mineral Resources
- Department of Agriculture and Rural Development
- Department of Police, Roads and Transport
- Department of Public Works and Infrastructure
- Free State Provincial Heritage Resources Authority
- Wildlife and Environment Society of South Africa (Free State)
- South African National Roads Agency Limited
- Lejweleputswa District Municipality District Municipality
- Municipal Manager at the Tokologo Local Municipality
- Local Councilor at the Tokologo Local Municipality

It is expected from I&APs to provide their inputs and comments within 30 days after receipt of the notification or Scoping Report.

Direct notification of surrounding land owners and occupiers

Written notices and the availability of the Scoping Report are also provided to all surrounding land owners and occupiers on 27 March 2017. The surrounding land owners are given the opportunity to raise comments by 02 May 2017. For a list of surrounding land owners see **Appendix 6**.

2) Consultation

All I&AP's are invited to attend the public meeting scheduled for the **25th of April 2017 at 11:00am–12:00pm** at the turnoff from N8 onto the Modderrivier gravel road. at the coordinates mentioned below.

Coordinates
28°48'19.80"S,
24°48'3.11"E

On the day of the public meeting, Milnex 189 CC consultants waited for attendees at the above mentioned coordinates. After everyone arrived at the location the public meeting was moved to the Horseshoe Centre.

The public meeting is an opportunity to share information regarding the proposed development and provide I&APs with an opportunity to raise any issues and provide comments.

The following key stakeholders and surrounding land owners are also directly informed of the public meeting via registered post 27 March 2017.

- Department of Economic Small Business Development, Tourism and Environmental Affairs
- Department of Water and Sanitation
- Free State Department of Mineral Resources
- Department of Agriculture and Rural Development
- Department of Police, Roads and Transport
- Department of Public Works and Infrastructure
- Free State Provincial Heritage Resources Authority
- Wildlife and Environment Society of South Africa (Free State)
- South African National Roads Agency Limited
- Lejweleputswa District Municipality District Municipality
- Municipal Manager at the Tokologo Local Municipality
- Local Councilor at the Tokologo Local Municipality
- Land Owner 1: Ekapa Mining (Pty) Ltd and Petra Diamonds Limited
- Surrounding Land Owner: Zuikerkop Country & Game Lodge Pty Ltd
- Surrounding Land Owner: AAA Mining CC
- Surrounding Land Owner: Jan Johannes Reichert
- Surrounding Land Owner: Mr. Stalin King and Mrs. Constance Louise King
- Surrounding Land Owner: Butinyane William Mopharing
- Surrounding Land Owner: Karreeboom Kimberly Pty Ltd
- Surrounding Land Owner: South African National Roads Agency Ltd
- Surrounding Land Owner: Transnet Ltd
- Surrounding Land Owner: De Beers Consolidated Mines Pty Ltd
- Surrounding Land Owner: Crown Resources Pty Ltd
- Surrounding Land Owner: Ekapa Minerals Pty Ltd
- Surrounding Land Owner: Alan James Thompson

Public meeting

The stakeholders & interested and affected parties were informed about the proposed project with the use of site notices, press advertisement and registered letters.

The meeting is scheduled for the **25th of April 2017 at 11:00am–12:00pm** at the turnoff from N8 onto the Modderrivier gravel road, with the I&AP and stakeholders as represented by the figure below.

Directions from Kimberley to the public meeting's original location

The public meeting was held at the Horseshoe Centre. Milnex 198 CC personnel waited at the original public meeting location for all the attendees, before driving to the Horseshoe Centre followed by the attendees.

Directions from the original location of the public meeting to the new location of the public meeting.

Comments received will be included in the comments and response table/form (See Appendix 6 for comments and response form)

The meeting was attended by the following 20 (twenty) people, as attached in the attendance register:

1. Lionel Pieters
2. Alfred van Zyl
3. Angus Slamat
4. Wiekus Riet
5. Kelonale Tshoey
6. Joyceline Brooks
7. Maritha van Sckalkwyk
8. Ernest van Sckalkwyk
9. Bennie Toubie
10. Christo Moses
11. Luckas Brits
12. Itumeleng
13. Erica Richards
14. Hein Knoke
15. Ester van der Westhuizen-Coetser
16. M.L. Weenih
17. M. Rantho
18. J.P. Squier
19. C. van der Merwe
20. Siphiwe Makhaye

As well as Milnex Representatives: Ms. Lizanne Esterhuizen, Mr. Danie Labuschagne and Mr. Mandi Sibanyoni

Attached as appendix 6 is the attendance register and the minutes of the meeting. Below is an extraction of the minutes of the meeting.

Attendee/s made the following statements and raised questions:	**Milnex 189 CC consultants noted the statements and/or questions and answered some questions as follow:**
Me. Ester van der Westhuizen-Coetzer (KEM representative)	
1) The area is a historical heritage area. 2) Is the application for prospecting or mining? 3) Is it for Alluvial or Kimberlite? 4) There is already a licensed application on the area. 5) After prospecting, will mining continue 6) Where will the treating of material take place? 7) What is going to happen with the effluent / tailings? 8) Will a waste license be applied for? 9) There was no waste facility on the presentation.	1) Statement is noted 2) Prospecting 3) Diamonds Alluvial, Diamonds in General and Diamonds Kimberlite 4) Asked that KEM representative provide this information to Milnex 189 CC. On which she replied, yes she will. 5) If it is feasible, a mining right or mining permit might be applied for.

10) Will desktop studies or physical studies be used? 11) If access roads are going to be constructed, how big will they be? Will the road/s be part of the 24ha area?	6) Treating of material will occur on site. 7) Question is noted 8) Question is noted 9) Statement is noted 10) Desktop and physical studies will be used. 11) Questions is noted.
Rooifontein Wildlife Club	
1) Where did Milnex 189 CC receive the information provided in the presentation? 2) Where did you receive the PWP? 3) From the information you are giving us, it means the applicant must have been on site. When was the applicant on the farm? Because if they were on site then it means there was a breach in security. 4) Old dumps were mentioned in the presentation, there is no old mine dumps. 5) How is access to the site going to be acquired during the prospecting activities? 6) The farm size in the presentation is incorrect. 7) If no dust suppression is implemented at the proposed prospecting plant, it will have an effect on the flora around the proposed prospecting area. 8) How do you plan to keep the game safe from the proposed prospecting area? 9) Will the game be affected by the water that the proposed prospecting activity is going to use? 10) How many cubic meters of topsoil will be removed?	1) In the PWP 2) From the applicant 3) Questions is noted 4) We would like to visit the proposed farm to see for ourselves, if the landowner will give us access to the farm? 5) Access roads will be used. 6) Statement is noted. 7) Statement is noted. 8) Question is noted 9) Question is noted 10) The amount of topsoil can only be determined after phase 2, after drilling took place.
Community members	
1) Was there research done which determines the effect of the prospecting activity on the community's water? 2) Is the main road which goes to Bloemfontein, going to be used? If so, will it be maintained? Because it is used by agricultural- and motor vehicles	1) Question is noted 2) Questions is noted.

3. Issues Raised by Interested and Affected Parties

When the comment period ends, comments received will be included in the comments and response table/form (See Appendix 6 for comments and response form).

iii) Summary of issues raised by I&APs

(Complete the table summarising comments and issues raised, and reaction to those responses)

Interested and Affected Parties List the names of persons consulted in this column, and Mark with an X where those who must be consulted were in fact consulted.		Date Comments Received	Issues raised	EAPs response to issues as mandated by the applicant	Section and paragraph reference in this report where the issue and or response where incorporated
Organisation	**Contact person**				
Land Owner					
Rooifontein RE/1722 (previously known as a portion of the farm Dutoitspan 119)	Ekapa Mining (Pty) Ltd and Petra Diamonds Limited				
	Ester van der Westhuizen-Coetzer Kimberley Ekapa Mining: Environmental Specialist	10/04/2017	Email received on 10/04/2017 stating that as per telephonic conversation with Danie Labuschagne she asks that the Scoping report, Map of area to be mined including GPS co-ordinates and the annexures will be uploaded onto the dropbox today or early tomorrow. She must also be included in future communication regarding this project and Milnex 189 CC should let her know when there is a public meeting and registration as I & AP. Furthermore, she confirmed that KEM is the new owners of this property.		
		21/04/2017	Email correspondence on the 21/04/2017 at different times of the day is as follows:		
			Email received at 8:50 AM requesting the 3 full pages of the meeting that Milnex 189 CC want to hold in connection with this application	Email sent at 10:38 AM states the following: Note that you are registered as an I&AP. The Public Meeting is scheduled for the 25th of April 2017 at 11:00am–12:00pm, at the turnoff from N8 onto the	

				Modderrivier gravel road. Please see attached letter posted to your South African office, containing all the details regarding the public meeting. All project information, which include the appendices, can be found on the dropbox link below, however if you prefer a CD we can post you one. https://www.dropbox.com/sh/60zmsc4y3tdj1kn/AAC4i6VDmPhrvLPYwDbHINwca?dl=0 May you please explain to me what you mean with "3 full pages of your meeting", do you want the Agenda for the public meeting?	
			Email received at 12:41 PM explains the 3 page that indicated the date, area and time of the meeting. She asked if she may get the Agenda of the public meeting.	Email sent 12:41 PM states please find the attached Agenda as well as Google earth shape files for the proposed area.	
		04/05/2017		Email sent on 04/05/2017 with attached letter is a formal request for the following: We would like to formally request the following from Kimberley Ekapa Mining: 1. To give access to the property. 2. To provide the documents regarding the existing application. 3. What is the existing status of the current land uses and the socio-	

				economic environment that may be affected on the proposed area? 4. What is the existing status of the cultural environment that may be affected on the proposed area? 5. What is the existing status of the heritage environment that may be affected on the proposed area? 6. What is the existing status of the infrastructure that may be affected on the proposed area? 7. What is the existing status of the biophysical environment that may be affected on the proposed area? 8. What is the potential cumulative impacts with other land uses? 9. Is there any alternative land uses that may be affected on the relevant property or adjacent or non-adjacent properties? Please elaborate Kimberley Ekapa Mining is asked to respond to the above before or on the 18th of May 2017.	
	Aletta Anderson	11/04/2017	Email received by Mr. D. Labuschagne (Milnex 189 CC consultant) on 11/04/2017 asking that a copy of the Section 10 notice wherein the DMR accepts the application and confirmation of the Applicant and due date for comments to be submitted.		
		28/04/2017	Email received by Mr. D. Labuschagne (Milnex 189 CC consultant) on 28/04/2017 stating the following:		

			"*Kindly advise as a matter of urgency as we need to establish who the applicant is*"		
		02/05/2017	Email received by Mr. D. Labuschagne (Milnex 189 CC consultant) on 02/05/2017 states that the Section 10 has not been received and Milnex 189 CC should respond to email aletta.anderson@petradiamonds.com.	Email sent by Mr. D. Labuschagne on 02/05/2017 with attached DMR acceptance letter.	
		04/05/2017		Email sent 04/05/2017 states: "*During our telephonic conversation, I explained to you the situation with Danie's email address* *Please find the attached email he sent to you with the requested document.* *May you please forward me any future correspondence to avoid any miscommunication, because of the problems Danie is experiencing with his email address*."	
Landowners or lawful occupiers on adjacent properties					
Olifantsfontein 0/1719	Zuikerkop Country & Game Lodge Pty Ltd				
	Duncan & Rothman Inc. Mr. I. Potgieter	19/04/2017	Mr. Izak Potgieter called Milnex 189 CC on 19/04/2017 requesting project information.	Email with project information attached sent 19/04/2017 stating that a CD will all project information will be posted to him via registered post.	Appendix 6(iii): Proof of CD posted on 20/04/2017
		20/04/2017	Email received on 20/04/2017 states the annexures referred to in the documents are not attached. Please provide the annexures.	Email sent on 20/04/2017 states that he must just note that the appendices are too big to send with email and a CD with project information, which include the appendices, was posted to his office via registered post. He can also follow the dropbox link:	

				https://www.dropbox.com/sh/60zmsc4y3tdj1kn/AAC4i6VDmPhrvLPYwDbHINwca?dl=0	
		04/05/2017	Email received on the 04/05/2017 stating that the letter sent to Milnex 189 CC is attached to the letter DMR letter and we should just scroll further down.	Email sent 04/05/2017 states that we received an email from DMR on the 28th of April 2017, with regards to Duncan and Rothman's objection to the application. In the letter addressed to DMR, Duncan and Rothman refer to a letter sent to our office. However, we have no record of this letter. We only saw it attached to the DMR letter. We asked that Duncan and Rothman to please forward the email that was sent to us.	
			Email received on the 04/05/2017 with attached letter dated 25/04/2017 which states the follows: **1.** We act on behalf of Zuikerkop Country & Game Lodge (Pty) Ltd. **2.** Your letter of request dated 27 March 2017 addressed to our client has reference. **3.** Our instructions are as follows: 3.1. To request you to register Zuikerkop as an interested and affected party. 3.2. To refer all future correspondence and consultations to the writer hereof and to Duncan & Rothman Inc. 3.3. Our client conducts extensive cattle farming operations on the farm Olifantsfontein 1719, District Boshof together with the surrounding agricultural properties owned by Zuikerkop. 3.4. Zuikerkop is concerned about the effect which the drilling of boreholes will have on the underground	After a telephonic conversation on 04/05/2017, explaining to Mr. Potgieter that we did not receive their email with the attached letter, he said he will send it to us.	

			water resources especially in view of the fact that the draft Scoping Report contains no mitigation factors to address the concern of our client. **4.** We further wish to record the no consultation processes have been conducted in person by your client with Zuikerkop. **5.** Please also be advised that Zuikerkop will under no circumstances allow any access routes over the properties of Zuikerkop in order to enable your client to access the property upon which the proposed mining area is identified. **6.** The rights of our client are reserved.		
Speculatie 1/217	AAA Mining CC				
Rooifontein 1/211	Jan Johannes Reichert				
New Klippiespan 8/1635	Mr. Stalin King				
	Mrs. Constance Louise King				
New Klippiespan 2/1635 & 10/1635	Butinyane William Mopharing				
Kareeboom 0/1716	Karreeboom Kimberly Pty Ltd				
Dutoitspan 2/119	South African National Roads Agency Ltd				
Benauwdheidefontein 1/124	Transnet Ltd				
Benauwdheidefontein 0/124	De Beers Consolidated Mines Pty Ltd				

Benauwdheidefontein 8/124	Crown Resources Pty Ltd				
Rietpan 0/212	Ekapa Minerals Pty Ltd				
Karreeboom 0/211	Alan James Thompson				
New Klippiespan 3/1635	Kadri Trust Josef Adriaan de Klerk Karin de Klerk Werner Hauptfleisch				
Uitzigt 0/1717	Zuikerkop Trust				
The Municipality in which jurisdiction the development is located					
Tokologo Local Municipality	Municipal Manager: Mr Kelehile J Motlhale				
Municipal councilor of the ward in which the site is located					
Tokologo Local Municipality	Ward 3 Councilor				
Organs of state having jurisdiction					
Department of Economic Small Business Development, Tourism and Environmental Affairs (DESTEA)	Head of Department: Mr. G. Brown	26/04/2017	Call received on 26/04/2017 acknowledging receipted of the letter requesting comments and stated Milnex 189 CC must just note that the head of department is no longer Ms. M Gasela, but Mr. G. Brown.		
Department of Mineral Resources, Free State (DMR)	B.S. Mthombeni	31/03/2017	Letter dated 31/03/2017 states that the application is accepted. Please note that in terms of section 17(1) MPRDA, you are required to give effect to the objects referred to at section 2(d) of the MPRDA. Therefore, please submit on or before 18 May 2017 to this office any documentation proving such including but not limited to:		

			2.1. Certified copies of share certificates and shareholders register 2.2. Certified copies of shareholders agreements 2.3. Certified copies articles and memorandum of association of the company. 2.4. Trust deed documents and letters of authority for any trust holding shares. 2.5. Details relating to funding (all relevant agreements) Any other information that may be necessary to explain and serve as evidence that the applicant meets the appropriate HDSA ownership and/or compliance requirements of the MPRDA and Mining Charter.		
		12/04/2017	Email received on 12/04/2017 stating please find the attached letter. Letter dated 11/04/2017 acknowledges receipt of the application.	Email sent 12/04/2017 acknowledges receipt of email.	
	Mineral Regulation: Mathapelo Mosikidi	28/04/2017	Email received on 28/04/2017 stating an objection letter against the application was received by the department and the application will be kept on hold until the objection is finalised. Milnex 189 CC are advised to get in contact with the objector and address their concerns. The objection letter from Duncan and Rothman Attorneys was attached to the email and states the following: **1.** Duncan and Rothman Attorneys understand that Matolo Trade & Investment (Pty) Ltd. is in process of applying for a prospecting right in respects of the farm Rooifontein 1722, District Boshof. **2.** Zuikerkop Country & Game Lodge (Pty) Ltd has been asked for comments by the applicant in respect of the draft Scoping Report prepared by the applicant. **3.** Zuikerkop Country & Game Lodge (Pty) Ltd. is the registered owner of the farm Olifantsfontein 1719, District Boshof. **4.** The said property is adjacent to the farm Rooifontein 1722, District Boshof, which last mentioned property constitute the property upon which the application wished to establish a prospecting operation.		

			5. Attached hereto please find a copy of our letter addressed to Milnex 189 CC, the contents of which is self-explanatory. **6.** On behalf of Zuikerkop Country & Game Lodge (Pty) Ltd we hereby on its behalf lodge its formal objection to the application for a prospecting right lodged under DMR reference FS30/5/1/1/2/10462PR. In support of our client's objection we on its behalf record the following: 6.1. Zuikerkop Country & Game Lodge (Pty) Ltd has not been consulted in any way by the applicant. 6.2. Zuikerkop Country & Game Lodge (Pty) Ltd in its capacity as the owner of the adjacent property will under no circumstances grant any right of way over the property for the purposes of enabling the applicant to gain access to the farm Rooifontein 1722, District Boshof. 6.3. The draft Scoping Report contains no mitigation factors addressing the possibility of the diminishing of the underground water resource in the event of a water resource being negatively affected as a result of the drilling activities to be conducted by the applicant. **7.** On behalf of our client we kindly request that you favour our offices with the following: 7.1. The letter of acceptance issued to Matolo Trade & Investment (Pty) Ltd. in terms of Section 16(4) of the Mineral and Petroleum Resources Development Act 28 of 2002 and 7.2. The notice prescribed in Regulation 3 of the Regulations to the MPRDA. **8.** Duncan and Rothman Attorneys reserve the right of their client. Letter sent to Milnex 189 CC on 25 April 2017 according to Duncan and Rothman Attorneys, states the following: **1.** We act on behalf of Zuikerkop Country & Game Lodge (Pty) Ltd. **2.** Your letter of request dated 27 March 2017 addressed to our client has reference.		

			3. Our instructions are as follows: 3.5. To request you to register Zuikerkop as an interested and affected party. 3.6. To refer all future correspondence and consultations to the writer hereof and to Duncan & Rothman Inc. 3.7. Our client conducts extensive cattle farming operations on the farm Olifantsfontein 1719, District Boshof together with the surrounding agricultural properties owned by Zuikerkop. 3.8. Zuikerkop is concerned about the effect which the drilling of boreholes will have on the underground water resources especially in view of the fact that the draft Scoping Report contains no mitigation factors to address the concern of our client. **4.** We further wish to record the no consultation processes have been conducted in person by your client with Zuikerkop. **5.** Please also be advised that Zuikerkop will under no circumstances allow any access routes over the properties of Zuikerkop in order to enable your client to access the property upon which the proposed mining area is identified. **6.** The rights of our client are reserved.		
Department of Water & Sanitation (DWS)	Mr. Abe Abrahams	19/04/2017.		A draft Scoping Report was couriered to the Department on 19/04/2017.	
FS Department of Agriculture and Rural Development	Head of Department: Mr MP Thabethe				
FS Department of Police, Roads and Transport	Head of Department: Mr S Msibi				
FS Department of Public Works and Infrastructure	Head of Department Mr M Seoke				
Free State Provincial Heritage Resources Authority (PHRA)	Heritage Coordinator: Ntando PZ Mbatha				

Free State Department of Rural Development & Land Reform, Land Claims Commissioner: Regional Offices	Chief Director: Me. Lezzane Naran Khomotso Bernard Mahlatji' Rachel Taole	27/03/2017		Email sent 27/03/2017 is proof of land claims consultation.	
Other–					
Lejweleputswa District Municipality	Municipal Manager: Ms Palesa Kaota				
WESSA (Free State)	To whom it may concern				
SANRAL	To whom it may concern				
I & AP	Hein Knoke				
I & AP	M.L Weenih Rooifontein Wildlife Club				
I & AP	Rooifontein Wildlife Club J.P. Squier				
I & AP	C. van der Merwe				
I & AP	Hunger and Thirst Foundation: Mrs. Lize Pretorius	03/05/2017	Email received 03/05/2017, states please find the attached letter and kindly confirm receipt thereof. The letter states the following: Following the ''Notice of Application for a Prospecting Right and Subsequent Environmental Impact Assessment'', that was put up at the entrance to land the Foundation uses as offices and training facility (copy included for reference purposes), the following: Hunger and Thirst Foundation leases the 'Boma' land from De Beers Consolidated Mines in terms of a lease agreement signed in 2010. The 'Boma' land forms part of portions of the farms Alexanderfontein no 123 and Benaudheidsfontein no 124, Northern Cape.	Email sent 03/05/2017 acknowledges receipt of the email.	

			The land on which the proposed diamond prospecting activities are intended by Matolo Trade and Investment (Pty) Ltd, are thus adjacent to the land the Foundation operates from. We need to be informed about/ considered in the impact of noise, dust, water consumption, entrance/ servitude roads with heavy vehicles, security, etc that such open-cast mine poses. The Foundation is therefore an affected party in this matter and in terms of the included notice the Foundation wish to receive all notices and/or correspondence intended for affected parties.		
		04/05/2017	Email received 04/05/2017 saying thank you for the quick response		
Community representatives	Angus Slamat				
Community representatives	Wiekus Riet				

The Environmental attributes associated with the sites

(1) Baseline Environment

The baseline environment is described with specific reference to geotechnical conditions, ecological habitat and landscape features, Soil, land capability and agricultural potential, climate and the visual landscape.

(a) Type of environment affected by the proposed activity.

(its current geographical, physical, biological, socio- economic, and cultural character).

Geology and Soils

The proposed prospecting area is located on a flat Plateau with an average altitude of just over 1 200 m above mean sea level. The area around Greenpoint is therefore relatively flat due to the nature of the underlying strata.

The basement rocks consist of Andesitic Ventersdorp lavas and related pyroclastics overlying the Witwatersrand Strata. These lavas are covered by younger shale of the Ecca group of the Karoo Supergroup.

Regional Geology

The proposed prospecting area is situated South East of De Beers Kimberley Mines not so far from the Slimes dam. The city of Kimberley lies ±9 km to the South East of the proposed prospecting area.

The proposed prospecting area is located on a flat Plateau with an average altitude of just over 1 200 m above mean sea level. The area around Greenpoint is therefore relatively flat due to the nature of the underlying strata.

Kimberlite could be seen in historical workings at the sites of the blows, but these had been fully exposed, and there are accessible reports of them in the literature. The south-western blow was however investigated by De Beers in the 1980s and found to be lamproite, or lamproitic kimberlite (P. Zweistra pers. comm.). The fact that it is lamproite, rather than true kimberlite, now appears to be quite generally known among miners and prospectors in the area.

Local Geology

The basement rocks consist of Andesitic Ventersdorp lavas and related pyroclastics overlying the Witwatersrand Strata. These lavas are covered by younger shale of the Ecca group of the Karoo Supergroup. These lavas are covered by younger shale of the Ecca group of the Karoo Supergroup. A thin layer of less than 5 m of red soils and calcrete is present on the immediate surface.

The proposed prospecting area is underlain by rocks of the Karoo Supergroup, with a sequence comprising of a sedimentary succession of mainly Karoo shales and dolerite. These successions vary between 10 – 125 m. The sedimentary succession overlies a sequence of Ventersdorp lavas and quartzites, which vary in thickness from ± 900 m below surface at Wesselton Mine to ± 500 m below surface at Joint Shaft and De Beers Mine. The Ventersdorp rock overlies the basement granite gneisses with amphibolites and schists in varying amounts.

Kimberlite tailings resources are located in many locations over the surrounding area mining property of De Beers and are likely to influence water quality due to the high sodium and sulphate content and the high silt load contained in the runoff water. An assessment on groundwater impacts was conducted by Golder Associates Africa (Pty) Ltd. The results of this assessment were documented in the report titled "De Beers Kimberley Mines, Assessment of groundwater impacts from tailings storage facilities and proposed backfilling of open pits.

The shale overlies the late Archaean Ventersdorp Lavas. This unit is dominantly hard grey-green amygdaloidal lava. The historical mining of the kimberlite dykes around this area passed downwards from shale to lava country rock, and it is estimated that the shale may be around 200 – 300 m thick.

Ecological habitat and landscape features

It is noted that protected tree species under the National Forests Act No. 84 of 1998 are listed in Table 4.9. In terms of a part of section 15(1) of Act No. 84 of 1998, no person may cut, disturb, damage or destroy any protected tree or possess, collect, remove, transport, export, purchase, sell, donate or in any other manner acquire or dispose of any protected tree, except under a license granted by the Minister.

In cases where the trees will need to be cut, disturbed, damaged or destroyed or possessed, collected, removed, transported, exported, purchased, sold or donated a flora permit and/or NFA License will be applied for with the Department of Environmental and Nature Conservation and Department of Agriculture, Forestry and Fisheries.

The proposed area falls within vegetation unit SVk 4, which is known as the Kimberley Thornveld. The Kimberly Thornveld is part of the Eastern Kalahari Bushveld Bioregion, which is a sub-bioregion for the Savanna Biome.

According to Mucina and Rutherford (2006:516), the Kimberley Thornveld vegetation covers the North West, Free State and Northern Cape Provinces: Most of the Kimberley, Hartswater, Bloemhof and Hoopstad Districts as well as substantial parts of the Warrenton, Christiana, Taung, Boshof and to some extent the Barkley West District. This thornveld is situated on an altitude of 1050m – 1400m.

The area often has slightly irregular plains with a well-developed tree layer with *Acacia Erioloba*, *A. tortillis, A. karoo* and *Boscia albitrunca* and a well-developed shrub layer with occasional dense stands of *Tarchonanthus camphoratus* and *A. mellifera*. Grass layer open with much uncovered soil.

Mucina and Rutherford (2006:517) also states that the conservation of this thornveld type, is Least Threatened with a target of 16%. Only 2% of this thornveld is statutorily conserved in Vaalbos National Park and in Sanveld, Bloemhof Dam and S.A. Lombard Nature Reserve. As much as 18% is already transformed, mostly by cultivation. Low erosion is associated with this type of thornveld. The area is mostly used for cattle farming or game ranching. Overgrazing leads to encroachment of *Acacia mellifera* subsp. *detinens*.

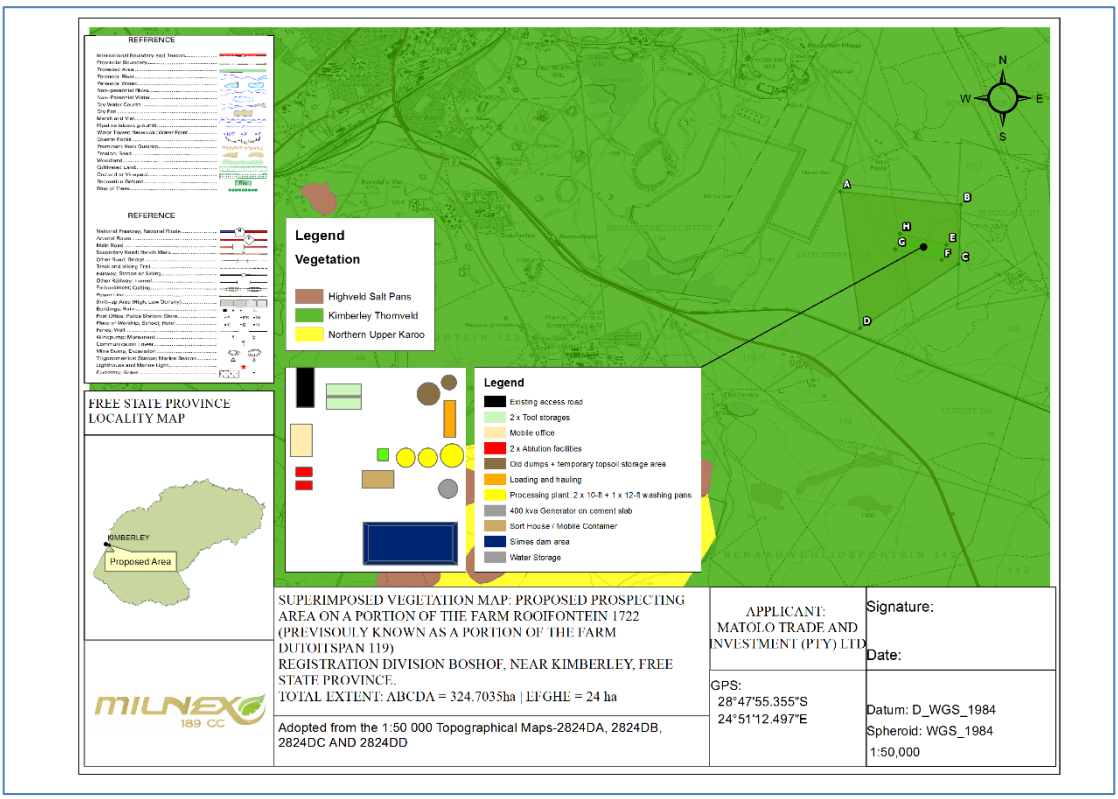


Figure 3: Vegetation Unit Map

Protected Areas

According to the data for protected areas the portion do not fall within a formally protected Area, nor threatened ecosystems.

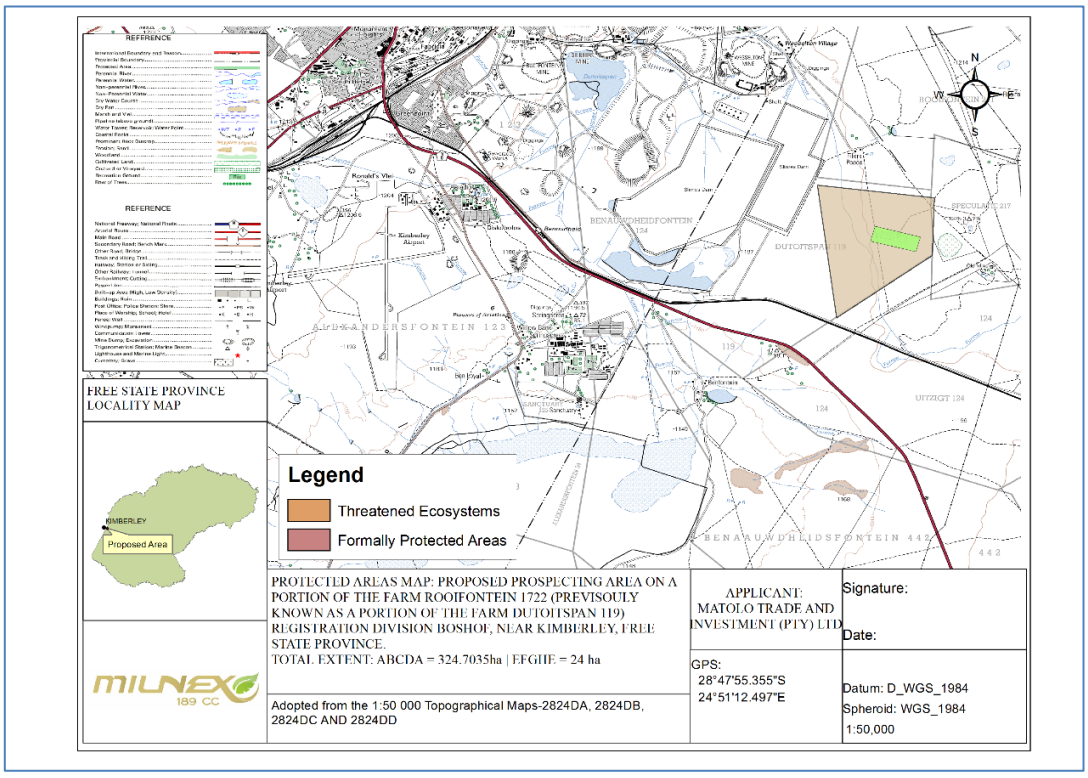


Figure 4: Protected Areas Map

Critical Biodiversity Area

According to READ (2015) "Critical biodiversity areas (CBAs) are terrestrial and aquatic areas of the landscape that need to be maintained in a natural or near-natural state in order to ensure the continued existence and functioning of species and ecosystems and the delivery of ecosystem services. In other words, if these areas are not maintained in a natural or near natural state then biodiversity targets cannot be met.

According to the data for Critical Biodiversity Areas, the proposed portions fall within Ecological Support Area (ESA) type 1 and type 2.

ESA is defined as an area that plays an important role in supporting the ecological functioning of a protected area or Critical Biodiversity Area, or in delivering ecosystem services. In most cases ESAs are currently in at least fair ecological condition, and should remain in at least fair ecological condition.

ESA1 (Ecological Support Area: Natural)

Planning units identified to be ESAs and of which <= 10 percent of the surface has been transformed or degraded. Pus belonging to this category are mostly natural and are considered to represent prime corridor areas.

ESA2 (Ecological Support Area: Other)

Planning units identified to be ESAs and of which <= 50 percent of the surface has been transformed. It follows that PUs of which 100% of their area has been degraded are included in this class. Degraded areas mostly consist of old lands on which some form of natural vegetation has established and are therefore considered to be suitable areas to facilitate animal movement

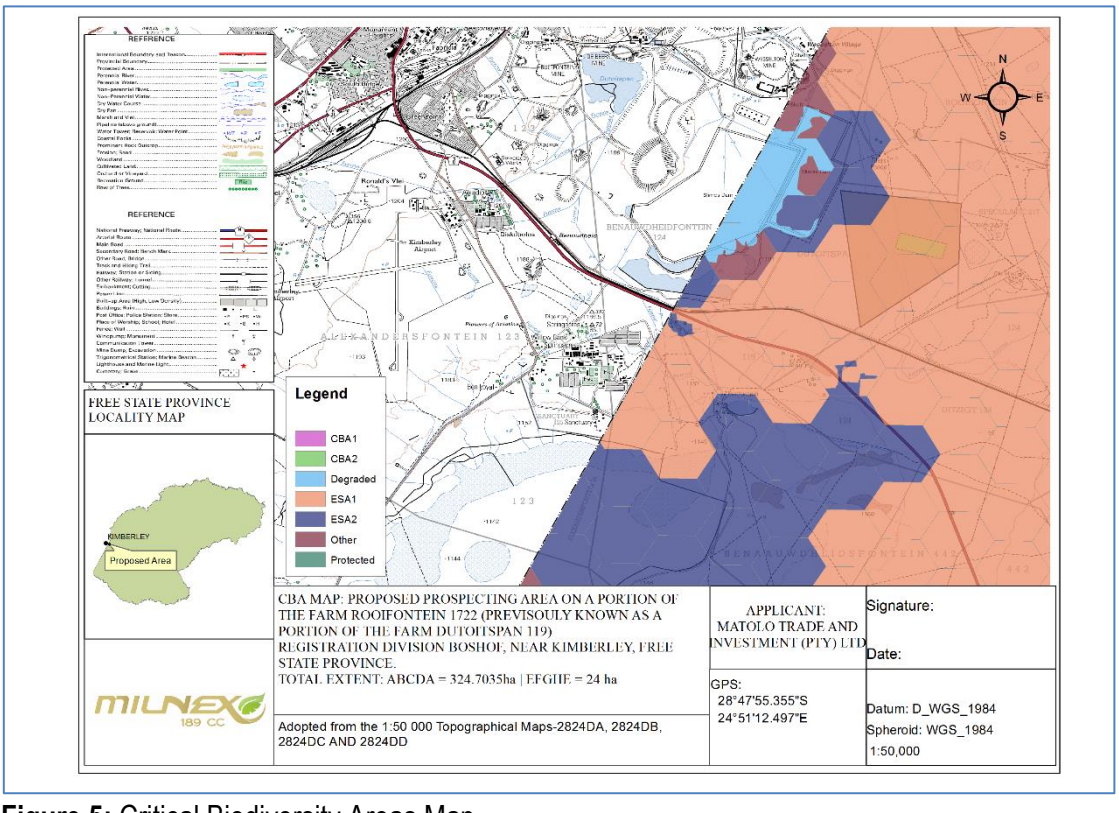


Figure 5: Critical Biodiversity Areas Map.

Sensitive area for Mine

A certain area of the proposed portion falls within the Highest (Class B) biodiversity importance area at risk for mining.

Highest biodiversity importance (B)

These areas are viewed as necessary to ensure protection of biodiversity, environmental sustainability, and human well-being. The Biodiversity priority areas is as follows:

- Critically endangered and endangered ecosystems
- Critical Biodiversity Areas (or equivalent areas) from provincial spatial biodiversity plans
- River and wetland Freshwater Ecosystem Priority Areas (FEPAs), and a 1km buffer around these FEPAs
- Ramsar Sites

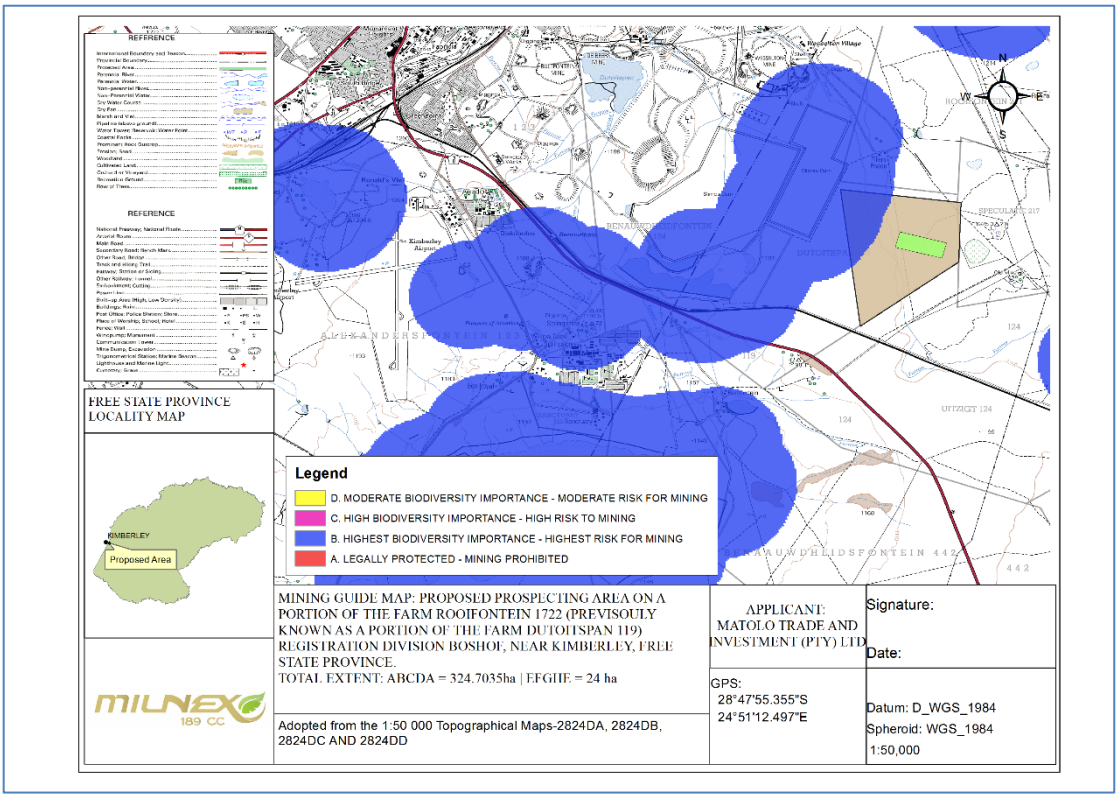


Figure 6: Sensitive area for mine

Wetland Areas

Wetland is defined as land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soil (from the South African National Water Act; Act No. 36 of 1998).

The maps below depict all wetland areas on the proposed area. The proposed area consists of not wetlands. The wetland vegetation type falls within the Eastern Kalahari Bushveld Group 3.

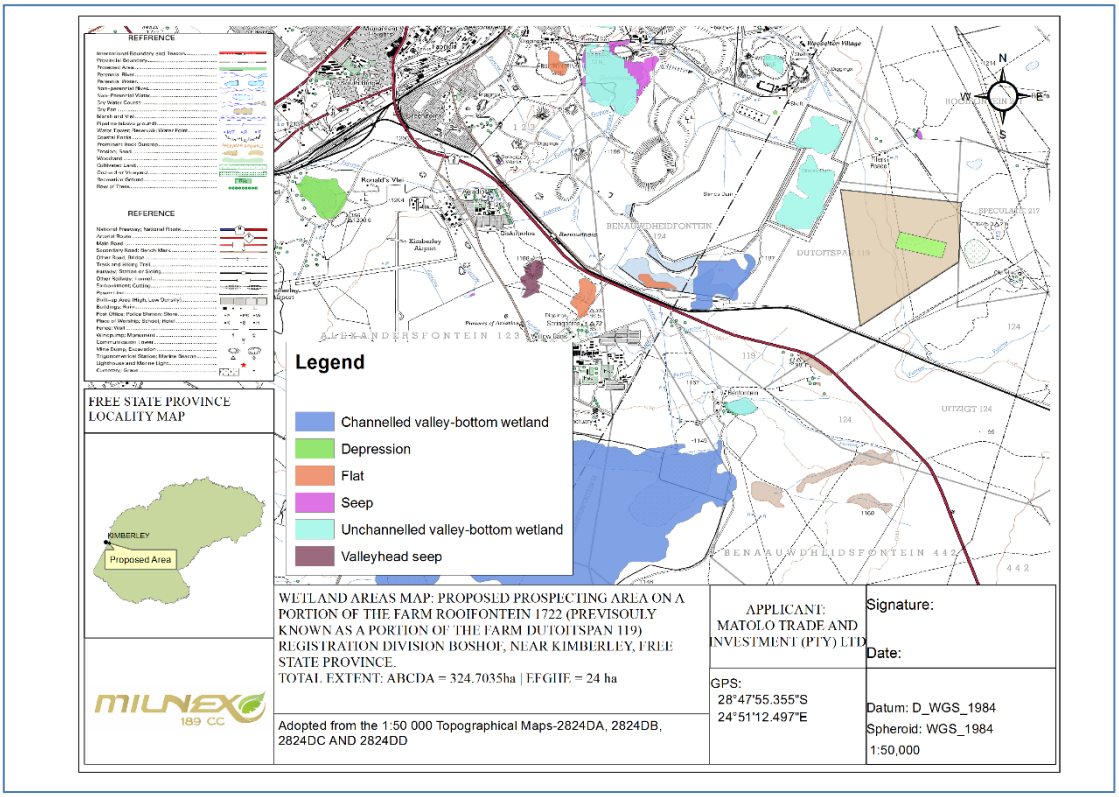


Figure 7: Wetland types present on site

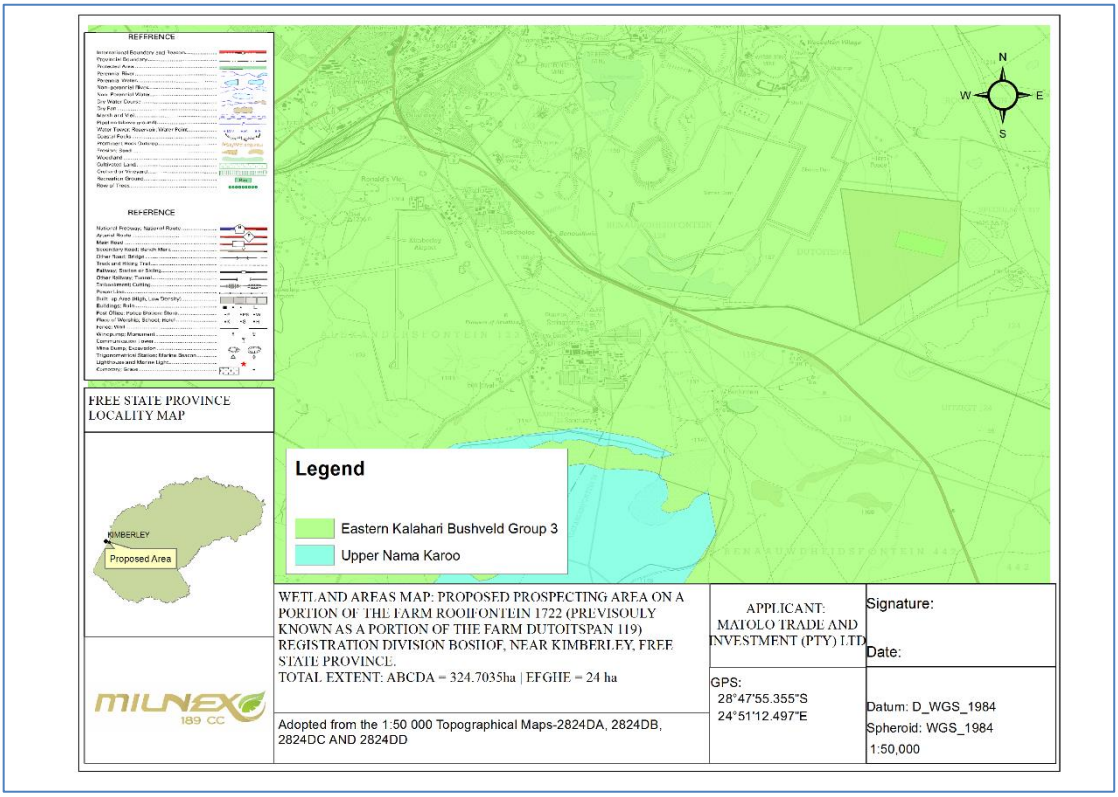
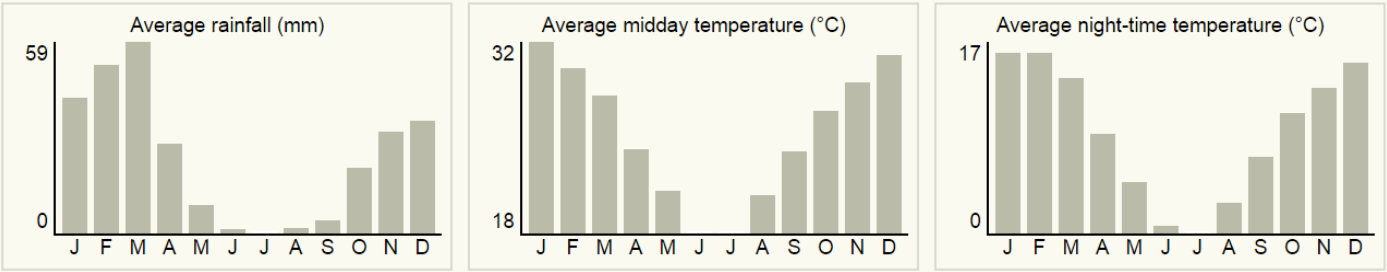


Figure 8: Wetland vegetation types

Land capability and agricultural potential

- Climate and water availability

Kimberley normally receives about 283mm of rain per year, with most rainfall occuring mainly during summer. The chart below (lower left) shows the average rainfall values for Kimberley per month. It receives the lowest rainfall (0mm) in July and the highest (59mm) in March. The monthly distribution of average daily maximum temperatures (centre chart below) shows that the average midday temperatures for Kimberley range from 18°C in June to 32°C in January. The region is the coldest during July when the mercury drops to 0.3°C on average during the night. Consult the chart below (lower right) for an indication of the monthly variation of average minimum daily temperatures. (SAexplorer:2014).



- Agricultural / land capability

Land capability is the combination of soil suitability and climate factors. The site and surrounds has a land capability classification, on the 8-category scale, of Class V (5) – which falls under Non-Arable land. Land in Class 5 has little or no erosion hazard but have other limitations impractical to remove that limit its use largely to pasture, range, woodland or wildlife food and cover. These limitations restrict the kind of plants that can be grown and prevent normal tillage of cultivated crops. Pastures can be improved and benefits from proper management can be expected. It is nearly level. Some occurrences are wet or frequently flooded. Other are stony, have climatic limitations, or have some combination of these limitations. (refer to Land capability map on figure 9 and attached as Appendix 5).

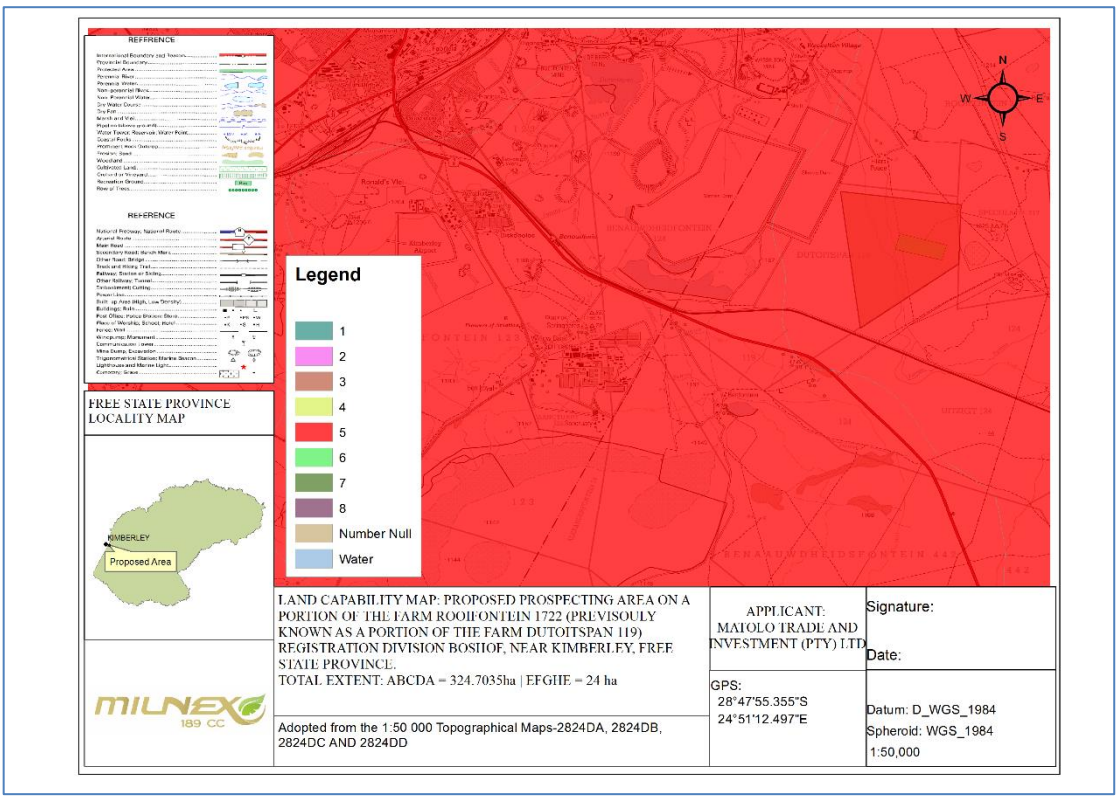


Figure 9: Land capability Map

Description of the socio-economic environment

Socio-economic conditions

According to the 2016/2017 Tokologo Local Municipality's IDP second draft (2016/2017:12) the Tokologo Local Municipality area covers 9326km^2. Tokologo Local Municipality area covers 9326 km^2 and consists of three former Transitional Local Councils namely, Boshof, Dealesville and Hertzogville ,as well as a portion of a former Transitional Rural Council(Modderval) which contained approximately 1480 farms.

Boshof is the capital town and is situated in the centre whilst Dealesville is further Boshof east, and Hertzogville is situated in the north of the municipal area. Dealesville is the smallest town within Tokologo Local Municipality.

According to Census 1996, Census 2001 and Census 2011 it shows that the working age group 15-64 years increased gradually from 60.6% in 1996 to 62.9% in 2011 whereas the young population group decreased gradually from 33.8 in 1996 to 31.2 in 2011. The dependence ration of Tokologo local municipality over the three consecutive censuses shows there is a decline from 64.9% in 1996 to 58.9% in 2011. This implies that, the working age group (15-65 years) is increasing whereas the young (0-14 years) and the elderly (15-65 years) is decreasing gradually.

Gender is distributed almost evenly in the Tokologo Local Municipality, but there are slightly more females than males. The population consist mostly of Black Africans with 84.5% in 2011, Whites are second with 9.9% followed by Coloured (4.6%), Indian or Asian (0.7) and Other (03).

Unemployment in this municipality for age 15-64 years, range from 22.8% in 1996, 26.9% in 2001 and 27.4% in 2011. The school attendance percentage in 2011 shows that 66.5% were attending school whereas 33.5% were not. Males were found to be attending school more than females with 67.7% and 65.3% respectively. Since 1996 to 2011 people attaining matric certification increased from 5.4% in 1996 to 12.6% in 2011.

In 1996, total number of household were 6616 which contributed 4.1% to the total number of households in Lejweleputswa whereas in 2001 and 2011 Tokologo contributed 4.8% and 4.7% to the total number of households in Lejweleputswa respectively. The number of households in formal dwelling increased from 66.7% in 1996 to 83.8%5 in 2011 whereas those in informal and traditional dwellings decreased from 25.3% and 7.7% to 14.8% and 0.5% respectively.

In 1996, 55.4% of households were using electricity for lighting and the number increased in 2001 and 2011 to 73.0% and 84.4% respectively. The number of households with usage of candles for lighting decreased from 32.1% in 1996 to 14.3% in 2011. Accesses to piped water in dwelling/yard increased from 31.9% in 1996 to 87.0% whereas access to piped water on community stands decreased from 58.8% in 1996 to 10.7% in 2011. As for households without water access decreased from 9.3% in 1996 to 2.3%.

The economy Tokologo Local Municipality rests largely on agriculture and the necessary support sectors for these economic drivers such as manufacturing. To a certain extent, the municipality proximity to Kimberly and Bloemfontein meant that there will be less local demand for higher order services from those wealthier residents able to travel to the nearest large town or city.

Cultural and heritage aspects

Special attention will be given to the identification of possible cultural or heritage resources on site. Proof of such aspects did not occur. However, heritage resources including archaeological and paleontological sites over 100 years old, graves older than 60 years, structure older than 60 years are protected by the National Heritage Resources Act no 25 of 1999. Therefore, if such resources are found during the prospecting or development activities, they will not be disturbed without a permit from the relevant heritage resource Authority, which means that before such sites are disturbed by development, the developer will ensure that a heritage impact assessment is done and the Provincial Heritage Resources Authority and SAHRA will be contacted immediately.

(b) Description of the current land uses.

The site survey revealed that land cover on and in the immediate vicinity of the proposed area are essentially comprised of natural cover. Below is the land cover of the farm.

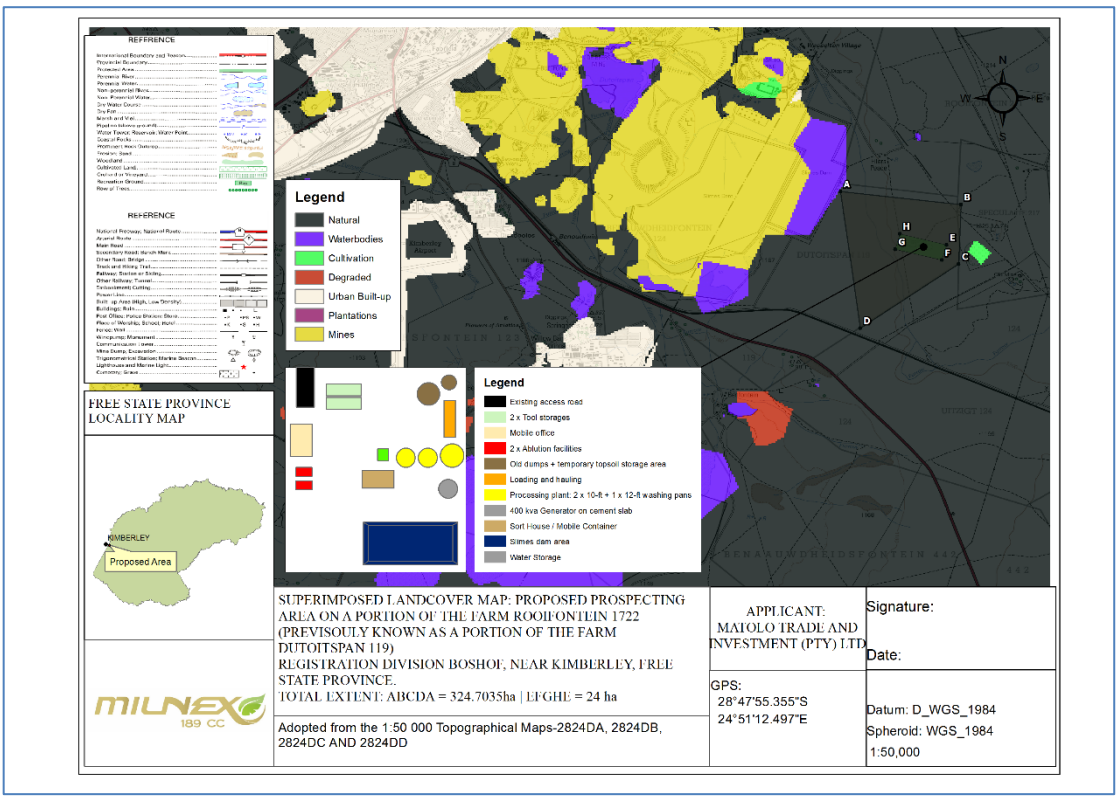


Figure 10: Land cover

(c) Description of specific environmental features and infrastructure on the site.

According to the topographic map the proposed area consists of a furrow, a secondary road, track and/or hiking track and natural cover. When permission is granted from the landowner, a site inspection will be conducted in the future.

(d) Environmental and current land use map.

(Show all environmental, and current land use features)

A Locality map is attached in **Appendix 3**.

iv) Impacts identified

(Provide a list of the potential impacts identified of the activities described in the initial site layout that will be undertaken, as informed by both the typical known impacts of such activities, and as informed by the consultations with affected parties together with the significance, probability and duration of the impacts

- Impacts during construction phase:
  - Impacts on the fauna and flora
  - Impacts on the soil
  - Impacts associated with the geology of the site
  - Impacts on existing services infrastructure
  - Impacts on surface water (wetlands/pans)
  - Temporary employment and other economic benefits
  - Impacts on heritage resources
- Impacts during the operational phase:

- Impacts on the soil
- Impacts associated with the geology of the site
- Impacts on surface water (wetlands/pans)
- Increase in employment and other economic benefits
- Visual impacts
- Generation of income to the Local Community
- Pressure on existing services infrastructure and water sources.

➢ Impacts during the decommissioning / mine closure phase:
- Loss of permanent employment & the creation of temporary employment

v) Methodology used in determining the significance of environmental impacts

(Describe how the significance, probability, and duration of the aforesaid identified impacts that were identified through the consultation process was determined in order to decide the extent to which the initial site layout needs revision).

Scoping methodology

The contents and methodology of the scoping report aims to provide, as far as possible, a user-friendly analysis of information to allow for easy interpretation.

➢ Checklist: The checklist consists of a list of structured questions related to the environmental parameters and specific human actions. They assist in ordering thinking, data collection, presentation and alert against the omission of possible impacts.
➢ Matrix: The matrix analysis provides a holistic indication of the relationship and interaction between the various activities, development phases and the impact thereof on the environment. The method aims at providing a first order cause and effect relationship between the environment and the proposed activity. The matrix is designed to indicate the relationship between the different stressors and receptors which leads to specific impacts. The matrix also indicates the specialist studies, which will be submitted as part of the Environmental Impact Report in order to address the potentially most significant impacts.

Checklist analysis

The site visit was conducted to ensure a proper analysis of the site specific characteristics of the study area. The table below provides a checklist, which is designed to stimulate thought regarding possible consequences of specific actions and so assist scoping of key issues. It consists of a list of structured questions related to the environmental parameters and specific human actions. They assist in ordering thinking, data collection, presentation and alert against the omission of possible impacts. The table highlights certain issues, which are further analysed in matrix format.

Table: Environmental checklist

QUESTION	YES	NO	Un-sure	Description
1. Are any of the following located on the site earmarked for the development?				
I. A river, stream, dam or wetland	✕			According to the topographic map a furrow runs through the proposed area.
II. A conservation or open space area			✕	
III. An area that is of cultural importance			✕	Unsure, but if such objects should be found while prospecting, the prospecting activities will stop immediately and a specialist will be appointed to conduct further studies.

IV. Site of geological significance		✕		None.
V. Areas of outstanding natural beauty			✕	
VI. Highly productive agricultural land			✕	According to the land capability map the proposed portions fall within Class 5, which means it has little or no erosion hazard but have other limitations impractical to remove that limit its use largely to pasture, range, woodland or wildlife food and cover.
VII. Floodplain		✕		None
VIII. Indigenous forest		✕		None
IX. Grass land		✕		None.
X. Bird nesting sites			✕	
XI. Red data species			✕	
XII. Tourist resort			✕	The proposed area falls within the Rooifontein Wildlife Club.
2. Will the project potentially result in potential?				
I. Removal of people		✕		None.
II. Visual Impacts			✕	The proposed portion is approximate 1km from the N8 and 170m for a railroad. The R64 tar road is approximately 6km for the proposed portion. The visual impact will be managed by placing stockpiles on the boundaries closer to the railroad.
III. Noise pollution		✕		The noise impact is unlikely to be significant.
IV. Construction of an access road		✕		None. Access will be obtained from the gravel road off the N8 tar road or the R64 tar road.
V. Risk to human or valuable ecosystems due to explosion/fire/discharge of waste into water or air.			✕	In cases where explosives will be used, mitigation measures will be implemented
VI. Accumulation of large workforce (>50 manual workers) into the site.		✕		Approximately 15 employment opportunities will be created during the construction and operational phase of the project.
VII. Utilisation of significant volumes of local raw materials such as water, wood etc.	✕			1 x 12 Ft washing pan and 2 x 10 Ft washing pans which utilise approximately 13000- and 11000 L/per hour each (22000L/per hour for 2 x 10 Ft washing pan), from which 30% is re-used.
VIII. Job creation	✕			Approximately 15 employment opportunities will be created during the construction and operational phase of the project.
IX. Traffic generation		✕		None.
X. Soil erosion		✕		Only areas earmarked for prospecting will be cleared. The prospecting will be phased and the topsoil stockpiled separately. Concurrent rehabilitation will take place. The soil also has little or no erosion hazard.
XI. Installation of additional bulk telecommunication transmission lines or facilities		✕		None.
3. Is the proposed project located near the following?				

I. A river, stream, dam or wetland		×		There is a slime/tailing dams from Kimberley Ekapa Mine which appears as Unchannelled valley-bottom wetland on the Wetland Areas map
II. A conservation or open space area			×	The proposed area is adjacent the Zuikerkop Country & Game Lodge Pty Ltd.
III. An area that is of cultural importance			×	
IV. A site of geological significance		×		None.
V. An area of outstanding natural beauty			×	Most of the area around the proposed farm is covered in natural vegetation and it is also adjacent Kimberley Ekapa Mine and Zuikerkop Country & Game Lodge Pty Ltd.
VI. Highly productive agricultural land		×		According to the land capability map the area around the proposed portions fall within Class 5, which states its non-arable land. According to the landcover map there is only a small area east of the proposed area used for cultivation.
VII. A tourist resort			×	
VIII. A formal or informal settlement	×			The Greenpoint community is approximately 7km west of the proposed area.

5.1 Matrix analysis

The matrix describes the relevant listed activities, the aspects of the development that will apply to the specific listed activity, a description of the environmental issues and potential impacts, and the significance and magnitude of the potential impacts. The matrix also highlights areas of particular concern for more in depth assessment during the EIA process. Each cell is evaluated individually in terms of the nature of the impact, duration and its significance – should no mitigation measures be applied. This is important since many impacts would not be considered insignificant if proper mitigation measures were implemented. The matrix also provides an indication if mitigation measures are available.

In order to conceptualise the different impacts the matrix specify the following:

- **Stressor**: Indicates the aspect of the proposed activity, which initiates and cause impacts on elements of the environment.
- **Receptor**: Highlights the recipient and most important components of the environment affected by the stressor.
- **Impacts**: Indicates the net result of the cause-effect between the stressor and receptor.
- **Mitigation**: Impacts need to be mitigated to minimise the effect on the environment.

Matrix Analysis

LISTED ACTIVITY (The Stressor)	ASPECTS OF THE DEVELOPMENT /ACTIVITY	POTENTIAL IMPACTS			SIGNIFICANCE AND MAGNITUDE OF POTENTIAL IMPACTS			MITIGATION OF POTENTIAL IMPACTS	SPECIALIST STUDIES / INFORMATION
			Receptors	Impact description	Minor	Major	Duration	Possible Mitigation	
CONSTRUCTION PHASE									
Listing Notice GNR 984, Activity 15:"The clearance of an area of 20 hectares or more, of indigenous vegetation."	Site clearing and preparation Areas earmarked for prospecting will need to be cleared, topsoil will be stockpiled separately.	BIOPHYSICAL ENVIRONMENT	Fauna & Flora	• Loss or fragmentation of indigenous natural vegetation. • Loss of sensitive species. • Loss or fragmentation of habitats.		-	L	Yes	-
			Air	• Air pollution due to the increase of traffic of construction vehicles.	-		S	Yes	-
			Soil	• Soil degradation, including erosion. • Loss of topsoil. • Disturbance of soils and existing land use (soil compaction).		-	S	Yes	-
			Geology	• It is not foreseen that the removal of indigenous vegetation will impact on the geology or vice versa.		-	S	Yes	-
			Existing services infrastructure	• Generation of waste that need to be accommodated at a licensed landfill site. • Generation of sewage that need to be accommodated by the local sewage plant.	-		S	Yes	-
			Ground water	• Pollution due to construction vehicles.	-		S	Yes	-
			Surface water	• Increase in storm water run-off. • Pollution of water sources due to soil erosion. • Destruction of watercourses (pans/dams/streams).		-	S	Yes	-
		SOCIAL/ECONOMIC ENVIRONMENT	Local unemployment rate	• Job creation. • Business opportunities. • Skills development.		+	S	Yes	-
			Visual landscape	• Potential visual impact on residents of farmsteads and motorists in close proximity to proposed facility.	-		S	Yes	-
			Traffic volumes	• Increase in construction vehicles.	-		S	Yes	-
			Health & Safety	• Air/dust pollution. • Road safety. • Increased risk of veld fires.		-	S	Yes	-

			Noise levels	• The generation of noise as a result of construction vehicles, the use of machinery such as drills and people working on the site.	-		S	Yes	-
			Tourism industry	• Since there are no tourism facilities in close proximity to the site, the proposed activities will not have an impact on tourism in the area.	-		M	N/A	-
			Heritage resources	• Removal or destruction of archaeological and/or paleontological sites. • Removal or destruction of buildings, structures, places and equipment of cultural significance. • Removal or destruction of graves, cemeteries and burial grounds.		-	S	Yes	-
Listing Notice GNR 984, Activity 15:"The clearance of an area of 20 hectares or more, of indigenous vegetation."	Site clearing and preparation Areas earmarked for prospecting will need to be cleared, topsoil will be stockpiled separately. This will inevitably result in the removal of indigenous vegetation located on the site.	BIOPHYSICAL ENVIRONMENT	Fauna & Flora	• Loss or fragmentation of indigenous natural vegetation. • Loss of sensitive species. • Loss or fragmentation of habitats.		-	L	Yes	-
			Air quality	• Air pollution due to the increase of traffic.	-		S	Yes	-
			Soil	• Soil degradation, including erosion. • Disturbance of soils and existing land use (soil compaction). • Loss of agricultural potential	-		S	Yes	-
			Geology	• It is not foreseen that the removal of indigenous vegetation will impact on the geology or vice versa.	N/A	N/A	N/A	N/A	-
			Existing services infrastructure	• Generation of waste that need to be accommodated at a licensed landfill site. • Generation of sewage that need to be accommodated by the local sewage plant.	-		S	Yes	-
			Ground water	• Pollution due to construction vehicles.	-		S	Yes	-
			Surface water	• Increase in storm water run-off. • Pollution of water sources due to soil erosion. • Destruction of watercourses (pans/dams/streams).	-		S	Yes	-
		SOCIAL/ECONOMIC ENVIRONMENT	Local unemployment rate	• Job creation. • Skills development.		+	S	N/A	-
			Visual landscape	• Potential visual impact on residents of farmsteads and motorists in close proximity to proposed facility due to dust.	-		S	Yes	-
			Traffic volumes	• Increase in construction vehicles.	-		S	Yes	-

			Health & Safety	• Air/dust pollution. • Road safety.		-	S	Yes	-
			Noise levels	• The generation of noise as a result of construction vehicles, and people working on the site.	-		S	Yes	-
			Tourism industry	• Since there are no tourism facilities in close proximity to the site, the proposed activity will not have an impact on tourism in the area.	-		M	N/A	-
			Heritage resources	• Removal or destruction of archaeological and/or paleontological sites. • Removal or destruction of buildings, structures, places and equipment of cultural significance. • Removal or destruction of graves, cemeteries and burial grounds.	N/A	N/A	N/A	N/A	-
OPERATIONAL PHASE									
Listing Notice GNR 984, Activity 19: "The removal and disposal of minerals contemplated in terms of section 20 of the Mineral and Petroleum Resource4s Development Act (Act No. 28 of 2002), including associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource, including activities for which an exemption has been issued in terms of section 106 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002)" Listing Notice GNR 984, Activity 21: "Any activity including the operation of that activity associated with the primary processing of a mineral resource including winning, reduction, extraction, classifying, concentrating, crushing, screening and washing but excluding the smelting, beneficiation, refining, calcining or gasification of the mineral resource in which case activity 6 in this Notice applies." Listing Notice GNR 983, Activity 20: "Any activity including the operation of that activity which requires a prospecting right in terms of section 16 of the Mineral	The key components of the proposed project are described below: • Supporting Infrastructure - A control facility with basic services such as water and electricity will be constructed on the site and will have an approximate footprint 50m² or less. Other supporting infrastructure includes a site office and workshop area. • Roads – Access will be obtained from the gravel roads off the N8- and R64 tar road. All site roads will require a width of approximately 10m. • Fencing - For health, safety and security reasons, the facility will be required to be fenced off from the surrounding farm.	BIOPHYSICAL ENVIRONMENT	Fauna & Flora	• Fragmentation of habitats. • Establishment and spread of declared weeds and alien invader plants (operations).		-	L	Yes	-
			Air quality	• Air pollution due to the mining activity, crusher plant and transport of the gravel to the designated areas.	N/A	N/A	N/A	N/A	-
			Soil	• Soil degradation, including erosion. • Disturbance of soils and existing land use (soil compaction). • Loss of agricultural potential (low significance relative to agricultural potential of the site).		-	L	Yes	-
			Geology	• Collapsible soil. • Seepage (shallow water table). • Active soil (high soil heave). • Erodible soil. • The presence of undermined ground. • Instability due to soluble rock. • Steep slopes or areas of unstable natural slopes. • Areas subject to seismic activity. • Areas subject to flooding.		-	S	Yes	-
			Existing services infrastructure	• Generation of waste that need to be accommodated at a licensed landfill site. • Generation of sewage that need to be accommodated by the municipal sewerage system and the local sewage plant. • Increased consumption of water. Approximately 11 000- and 13 000 L per hour for a 10 Ft- and 12Ft washing pan.		-	L	Yes	-
			Ground water	• Leakage of hazardous materials. The machinery on site require oils and fuel to function. Leakage of these oils and fuels can contaminate water supplies.	-		L	Yes	-
			Surface water	• Increase in storm water runoff. The development will potentially result in an increase in storm water run-off that needs to be managed to prevent soil erosion.		-	L	Yes	-

and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), including associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource…" – Prospecting right with bulk samples for the mining of Diamond Alluvial (DA), Diamond General (D), including associated infrastructure, structure and earthworks.				• Destruction of watercourses (pans/dams/streams). • Leakage of hazardous materials. The machinery on site require oils and fuel to function. Leakage of these oils and fuels can contaminate water supplies.					
		SOCIAL/ECONOMIC ENVIRONMENT	Local unemployment rate	• Job creation. Security guards will be required for 24 hours every day of the week and general laborers will also be required for the cleaning of the panels. • Skills development.		+	S	Yes	-
			Visual landscape	• Change in land-use/sense of place. The proposed area is used for game farm	-		S	Yes	-
			Traffic volumes	• Increase in vehicles collecting gravel for distribution.	-		S	Yes	-
			Health & Safety	• Air/dust pollution. • Road safety.	N/A	N/A	N/A	N/A	-
			Noise levels	• The proposed development will result in noise pollution during the operational phase.	-		S	Yes	-
			Tourism industry	• Since there are no tourism facilities in close proximity to the site, the decommissioning activities will not have an impact on tourism in the area.	-		M	N/A	-
			Heritage resources	• It is not foreseen that the proposed activity will impact on heritage resources or vice versa.	N/A	N/A	N/A	N/A	-
DECOMMISSIONING PHASE									
-	<u>Mine closure</u> During the mine closure the Mine and its associated infrastructure will be dismantled. <u>Rehabilitation of biophysical environment</u> The biophysical environment will be rehabilitated.	BIOPHYSICAL ENVIRONMENT	Fauna & Flora	• Re-vegetation of exposed soil surfaces to ensure no erosion in these areas.	+		L	Yes	-
			Air quality	• Air pollution due to the increase of traffic of construction vehicles.	-		S	Yes	-
			Soil	• Backfilling of all voids • Placing of topsoil on backfill	+		L	Yes	-
			Geology	• It is not foreseen that the decommissioning phase will impact on the geology of the site or vice versa.	N/A	N/A	N/A	N/A	-
			Existing services infrastructure	• Generation of waste that need to be accommodated at the local landfill site. • Generation of sewage that need to be accommodated by the municipal sewerage system and the local sewage plant. • Increase in construction vehicles.	-		S	Yes	-
			Ground water	• Pollution due to construction vehicles.	-		S	Yes	-
			Surface water	• Increase in storm water run-off. • Pollution of water sources due to soil erosion. • Destruction of watercourses (pans/dams/streams).	-		S	Yes	-
		SOCIAL/ECONOMIC ENVIRONMENT	Local unemployment rate	• Loss of employment.		-	L	Yes	-
			Visual landscape	• Potential visual impact on visual receptors in close proximity to proposed facility.	-		S	Yes	-
			Traffic volumes	• Increase in construction vehicles.	-		S	Yes	-
			Health & Safety	• Air/dust pollution. • Road safety.		-	L	Yes	-

				• Increased crime levels. The presence of mine workers on the site may increase security risks associated with an increase in crime levels as a result of influx of people in the rural area.					
			Noise levels	• The generation of noise as a result of construction vehicles, the use of machinery and people working on the site.	-		S	Yes	-
			Tourism industry	• Since there is a tourism facilities in close proximity to the site, the decommissioning activities will have an impact on tourism in the area.			S	N/A	-
			Heritage resources	• It is not foreseen that the decommissioning phase will impact on any heritage resources.	N/A	N/A	N/A	N/A	-

(N/A) No impact (+) Positive Impact (-) Negative Impact (S) Short Term (M) Medium Term (L) Long Term

vi) The positive and negative impacts that the proposed activity (in terms of the initial site layout) and alternatives will have on the environment and the community that may be affected.

(Provide a discussion in terms of advantages and disadvantages of the initial site layout compared to alternative layout options to accommodate concerns raised by affected parties)

- Increased ambient noise levels resulting from geophysic surveys site fly-overs and increased traffic movement during all prospecting phases.
- Potential water and soil pollution impacts resulting from hydrocarbon spills and soil erosion which may impact on environmental resources utilized by communities, landowners and other stakeholders.
- Potential water and soil pollution impacts resulting from hydrocarbon spills and soil erosion which may impact on ecosystem functioning.
- Increased vehicle activity with in the area resulting in the possible destruction and disturbance of fauna and flora.
- Poor access control to farms which may impact on cattle movement, breeding and grazing practices.
- Influx of persons (job seekers) to site as a result of increased activity and the possible resultant increase in opportunistic crime.
- Potential visual impacts caused by prospecting activities.
- Prospecting will be undertaken by specialist sub - contractors and it is not anticipated that employment opportunities for local and / or regional communities will result from the prospecting activities.

vii) The possible mitigation measures that could be applied and the level of risk.

(With regard to the issues and concerns raised by affected parties provide a list of the issues raised and an assessment/ discussion of the mitigations or site layout alternatives available to accommodate or address their concerns, together with an assessment of the impacts or risks associated with the mitigation or alternatives considered).

(See Appendix 6 for comments and response form).

viii) The outcome of the site selection Matrix. Final Site Layout Plan

(Provide a final site layout plan as informed by the process of consultation with interested and affected parties)

Refer to the proposed site layout map below and attached as **Appendix 5**.

ix) Motivation where no alternative sites were considered.

As discussed in the previous section, based on outcomes of previous studies in the vicinity of the proposed site and previous prospecting on the proposed site, the possibility to encounter further Diamond Reserves on a certain portion of the farm Rooifontein 1722 (previously known as a portion of the farm Dutoitspan 119), were identified.

x) Statement motivating the preferred site.

(Provide a statement motivation the final site layout that is proposed)

The site is preferred due to its possibility of having diamond reserves. There is a big diamond mine adjacent the proposed area and the area is known to be diamond bearing.

(i) Plan of study for the Environmental Impact Assessment process

i. Description of alternatives to be considered including the option of not going ahead with the activity.

The option of not approving the activities will result in a significat loss of valuable information regarding the mineral status (in terms of diamonds) present on these properties. In addition to this, should economical reserves be present and the applicant does not have the opportunity to prospect, the opportunity to utilize these reserves for future phases will be lost.

ii. Description of the aspects to be assessed as part of the environmental impact assessment process

(The EAP must undertake to assess the aspects affected by each individual mining activity whether listed or not, including activities such as blasting, Loading, hauling and transport, and mining activities such as Excavations, stockpiles, discard dumps or dams, water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc…etc…etc.).

Table: Aspects to be assessed

Aspects / potential impacts	Description of the aspect	Specialist studies / technical information
Biophysical Environment		
Impacts on the fauna and flora	Refer to Matrix table	EAP assessment (using desktop studies, GIS, site visits and the book written by Mucina and Rutherford (The Vegetation of South Africa, Lesotho and Swaziland)
Impacts on the air quality	Refer to Matrix table	EAP assessment (using desktop studies, GIS using BGIS data, site visits)
Impacts on the soil	Refer to Matrix table	EAP assessment (using desktop studies, GIS using BGIS data, site visits)
Impacts associated with the geology of the site	Refer to Matrix table	EAP assessment (using desktop studies, GIS using BGIS data, site visits)
Impacts on existing services infrastructure	Refer to Matrix table	EAP assessment (using desktop studies, GIS using BGIS data, site visits)
Impacts on ground and surface water	Refer to Matrix table	EAP assessment (using desktop studies, GIS using BGIS data, site visits)
Socio / Economic Environment		
Impacts on local employment rate	Refer to Matrix table	EAP assessment (using desktop studies, IDP's and SDF's)
Impacts on visual landscape	Refer to Matrix table	EAP assessment (using desktop studies, GIS using BGIS data, site visits)
Impacts on traffic volumes	Refer to Matrix table	EAP assessment (using desktop studies, GIS using BGIS data, site visits)
Impacts on health & safety	Refer to Matrix table	EAP assessment (desktop studies, site visits)

iii. Description of aspects to be assessed by specialists

iv. Proposed method of assessing the environmental aspects including the proposed method of assessing alternatives

The environmental assessment aims to identify the various possible environmental impacts that could results from the proposed activity. Different impacts need to be evaluated in terms of its significance and in doing so highlight the most critical issues to be addressed.

Significance is determined through a synthesis of impact characteristics which include context and intensity of an impact. Context refers to the geographical scale i.e. site, local, national or global whereas intensity is defined by the severity of the impact e.g. the magnitude of deviation from background conditions, the size of the area affected, the duration of the impact and the overall probability of occurrence. Significance is calculated as shown in the table below.

Significance is an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required. The total number of points scored for each impact indicates the level of significance of the impact.

v. The proposed method of assessing duration significance

Impact Rating System

Impact assessment must take account of the nature, scale and duration of impacts on the environment whether such impacts are positive or negative. Each impact is also assessed according to the project phases:

- planning
- construction
- operation
- decommissioning

Where necessary, the proposal for mitigation or optimisation of an impact should be detailed. A brief discussion of the impact and the rationale behind the assessment of its significance should also be included. The rating system is applied to the potential impacts on the receiving environment and includes an objective evaluation of the mitigation of the impact. In assessing the significance of each impact the following criteria is used:

Table: The rating system

NATURE		
Include a brief description of the impact of environmental parameter being assessed in the context of the project. This criterion includes a brief written statement of the environmental aspect being impacted upon by a particular action or activity.		
GEOGRAPHICAL EXTENT		
This is defined as the area over which the impact will be experienced.		
1	Site	The impact will only affect the site.

2	Local/district	Will affect the local area or district.
3	Province/region	Will affect the entire province or region.
4	International and National	Will affect the entire country.
PROBABILITY		
This describes the chance of occurrence of an impact.		
1	Unlikely	The chance of the impact occurring is extremely low (Less than a 25% chance of occurrence).
2	Possible	The impact may occur (Between a 25% to 50% chance of occurrence).
3	Probable	The impact will likely occur (Between a 50% to 75% chance of occurrence).
4	Definite	Impact will certainly occur (Greater than a 75% chance of occurrence).
DURATION		
This describes the duration of the impacts. Duration indicates the lifetime of the impact as a result of the proposed activity.		
1	Short term	The impact will either disappear with mitigation or will be mitigated through natural processes in a span shorter than the construction phase (0 – 1 years), or the impact will last for the period of a relatively short construction period and a limited recovery time after construction, thereafter it will be entirely negated (0 – 2 years).
2	Medium term	The impact will continue or last for some time after the construction phase but will be mitigated by direct human action or by natural processes thereafter (2 – 10 years).
3	Long term	The impact and its effects will continue or last for the entire operational life of the development, but will be mitigated by direct human action or by natural processes thereafter (10 – 30 years).
4	Permanent	The only class of impact that will be non-transitory. Mitigation either by man or natural process will not occur in such a way or such a time span that the impact can be considered indefinite.
INTENSITY/ MAGNITUDE		
Describes the severity of an impact.		

1	Low	Impact affects the quality, use and integrity of the system/component in a way that is barely perceptible.
2	Medium	Impact alters the quality, use and integrity of the system/component but system/component still continues to function in a moderately modified way and maintains general integrity (some impact on integrity).
3	High	Impact affects the continued viability of the system/ component and the quality, use, integrity and functionality of the system or component is severely impaired and may temporarily cease. High costs of rehabilitation and remediation.
4	Very high	Impact affects the continued viability of the system/component and the quality, use, integrity and functionality of the system or component permanently ceases and is irreversibly impaired. Rehabilitation and remediation often impossible. If possible rehabilitation and remediation often unfeasible due to extremely high costs of rehabilitation and remediation.
REVERSIBILITY		
This describes the degree to which an impact can be successfully reversed upon completion of the proposed activity.		
1	Completely reversible	The impact is reversible with implementation of minor mitigation measures.
2	Partly reversible	The impact is partly reversible but more intense mitigation measures are required.
3	Barely reversible	The impact is unlikely to be reversed even with intense mitigation measures.
4	Irreversible	The impact is irreversible and no mitigation measures exist.
IRREPLACEABLE LOSS OF RESOURCES		
This describes the degree to which resources will be irreplaceably lost as a result of a proposed activity.		
1	No loss of resource	The impact will not result in the loss of any resources.
2	Marginal loss of resource	The impact will result in marginal loss of resources.
3	Significant loss of resources	The impact will result in significant loss of resources.
4	Complete loss of resources	The impact is result in a complete loss of all resources.
CUMULATIVE EFFECT		

This describes the cumulative effect of the impacts. A cumulative impact is an effect which in itself may not be significant but may become significant if added to other existing or potential impacts emanating from other similar or diverse activities as a result of the project activity in question.		
1	Negligible cumulative impact	The impact would result in negligible to no cumulative effects.
2	Low cumulative impact	The impact would result in insignificant cumulative effects.
3	Medium cumulative impact	The impact would result in minor cumulative effects.
4	High cumulative impact	The impact would result in significant cumulative effects
SIGNIFICANCE		
Significance is determined through a synthesis of impact characteristics. Significance is an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required. The calculation of the significance of an impact uses the following formula: (Extent + probability + reversibility + irreplaceability + duration + cumulative effect) x magnitude/intensity. The summation of the different criteria will produce a non-weighted value. By multiplying this value with the magnitude/intensity, the resultant value acquires a weighted characteristic which can be measured and assigned a significance rating.		
Points	Impact significance rating	Description
6 to 28	Negative low impact	The anticipated impact will have negligible negative effects and will require little to no mitigation.
6 to 28	Positive low impact	The anticipated impact will have minor positive effects.
29 to 50	Negative medium impact	The anticipated impact will have moderate negative effects and will require moderate mitigation measures.
29 to 50	Positive medium impact	The anticipated impact will have moderate positive effects.
51 to 73	Negative high impact	The anticipated impact will have significant effects and will require significant mitigation measures to achieve an acceptable level of impact.
51 to 73	Positive high impact	The anticipated impact will have significant positive effects.
74 to 96	Negative very high impact	The anticipated impact will have highly significant effects and are unlikely to be able to be mitigated adequately. These impacts could be considered "fatal flaws".
74 to 96	Positive very high impact	The anticipated impact will have highly significant positive effects.

vi. The stages at which the competent authority will be consulted

Consultation with the competent and commenting authorities will continue throughout the duration of impact assessment phase. The authorities will also comment on whether they deem it necessary to conduct any specialist studies. On-going consultation will include:

- Submission of the Scoping following a 30 day public review period (and consideration of comments received).
- Submission of the EIR following a 30 day public review period (and consideration of comments received).
- Arrangements will be made to discuss the report with the Environmental Officer responsible for the project during the review period.
- An opportunity to visit and inspect the site.

vii. Particulars of the public participation process with regard to the Impact Assessment process that will be conducted

1. Steps to be taken to notify interested and affected parties.

(These steps must include the steps that will be taken to ensure consultation with the affected parties identified in (h) (ii) herein).

All registered I&APs and relevant State Departments will be given the opportunity to review the Scoping, EIR and EMP in accordance with Regulation R982. A minimum of 30 days commenting period will be allowed and all stakeholders and I&APs will be given an opportunity to forward their written comments within that period. All issues identified during this public review period will be documented and compiled into a Comments and Response Report to be included as part of the Final EIR to be submitted to the Free State Department of Mineral Resources.

2. Details of the engagement process to be followed.

(Describe the process to be undertaken to consult interested and affected parties including public meetings and one on one consultation. NB the affected parties must be specifically consulted regardless of whether or not they attended public meetings and records of such consultation will be required in the EIA at a later stage).

The public participation process will be conducted strictly in accordance with Regulations 39-44. The following three categories of variables will take into account when deciding the required level of public participation:

- The scale of anticipated impacts.
- The sensitivity of the affected environment and the degree of controversy of the project.
- The characteristics of the potentially affected parties.

the following public participation mechanisms will be used:

- Newspaper advertisement in local newspaper
- Site notices
- Direct notification of surrounding land owners and occupiers
- Circulation of scoping report
- Circulation of EIR
- Public participation meeting
- Direct notification to all stakeholders of the Environmental Authorisation given

3. Description of the information to be provided to Interested and Affected Parties.

(Information to be provided must include the initial site plan and sufficient detail of the intended operation and the typical impacts of each activity, to enable them to assess what impact the activities will have on them or on the use of their land).

The letter provided to I&APs comprises of a activity, extent and location description, including a locality map of the proposed activity and a Dropbox link to the full Scoping report and Appendices. It also indicates where a hard copy of the report can be viewed or if the need arises for a copy of the report a request can be sent to the relevant EAP who will forward a CD containing all the relevant information.

viii. Description of the tasks that will be undertaken during the environmental impact assessment process

Tasks to be undertaken

The following sections describe the tasks that will be undertaken as part of the EIA process.

- **Project Description**

Further technical and supporting information will be gathered to provide a more detailed project description. This will include a detailed site layout plan that will be compiled once the low – medium areas of sensitivity have been indicated.

- **Location alternatives**

This alternative asks the question, if there is not, from an environmental perspective, a more suitable location for the proposed activity. The site is preferred due to its possibility of having diamond reserves.

- **Activity alternatives**

The Scoping process also needs to consider if the development of a Diamond Alluvial, Diamond General and Diamond Kimberlite mine would be the most appropriate land use for the particular site.

Mining of other commodities –from the surface and desktop assessment there are no indications that there are other commodities to be mined on the site, except Diamond Alluvial, Diamond General and Diamond Kimberlite

Agriculture – the proposed area falls within non-arable land. According to the landcover map the proposed area is mostly covered in natural cover vegetation. The proposed area is used as a game farm.

- **Design and layout alternatives**

Design alternatives were considered throughout the planning and design phase (i.e. where is the diamond bearing gravel located?). In this regard discussions on the design were held between the EAP and the developer. The layout follows the limitations of the site and aspects such as, roads, site offices and workshop area as well as fencing– refer **Appendix 3**.

- **No-go alternative**

This alternative considers the option of 'do nothing' and maintaining the status quo. The description provided in section H of this report could be considered the baseline conditions (status quo) to persist should the no-go alternative be preferred. The proposed area is used as a game farm.

- Compilation of Environmental Impact Report

An EIR will be compiled to meet the content requirements as per Appendix 3 of GNR982 of the EIA Regulations (4 December 2014) and will also include a draft Environmental Management Programme containing the aspects contemplated in Appendix 4 of GNR982.

(ix) 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.

ACTIVITY whether listed or not listed. **(E.g. Excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc…etc…etc.).**	**POTENTIAL IMPACT** **(e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc….etc…)**	**MITIGATION TYPE** **(modify, remedy, control, or stop) through (e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc. etc)** **E.g. Modify through alternative method. Control through noise control Control through management and monitoring through rehabilitation..**	**POTENTIAL FOR RESIDUAL RISK**
Impacts on the fauna and flora	Surface disturbance	Monitor through rehabilitation	Medium
Impacts on the air quality	dust	Dust Control	low
Impacts on the soil	Erosion	Storm water control	low
Impacts associated with the geology of the site	Fly rock	Blasting controls	Medium
Impacts on ground and surface water	Ground and surface water contamination	Storm water control, avoidance	medium
Impacts on visual landscape	dust	Dust control measures	low
Impacts on traffic volumes	dust	Dust control measures	low

l) Other Information required by the competent Authority

i) Compliance with the provisions of sections 24(4)(a) and (b) read with section 24 (3) (a) and (7) of the National Environmental Management Act (Act 107 of 1998). the EIA report must include the:-

(1) Impact on the socio-economic conditions of any directly affected person. (Provide the results of Investigation, assessment, and evaluation of the impact of the mining, bulk sampling or alluvial diamond prospecting on any directly affected person including the landowner, lawful occupier, or, where applicable, potential beneficiaries of any land restitution claim, attach the investigation report as **Appendix 2.19.1** and confirm that the applicable mitigation is reflected in 2.5.3; 2.11.6.and 2.12.herein).

The prospecting will not impact directly on any socio-economic aspects. Indirect socio-economic benefits are expected to be associated with the creation of employment in the Free State Province and or the Northern Cape province.

2) Impact on any national estate referred to in section 3(2) of the National Heritage Resources Act.

(Provide the results of Investigation, assessment, and evaluation of the impact of the mining, bulk sampling or alluvial diamond prospecting on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) with the exception of the national estate contemplated in section 3(2)(*i*)(vi) and (vii) of that Act, attach the investigation report as **Appendix 2.19.2** and confirm that the applicable mitigation is reflected in 2.5.3; 2.11.6.and 2.12.herein).

In terms of the National Heritage Resource Act no 25 of 1999. Heritage resources including archaeological and paleontological sites over 100 years old, graves older than 60 years, structure older than 60 years are protected. They may not be disturbed without a permit from the relevant heritage resource Authority, which means that before such sites are disturbed by development it is incumbent on the developer to ensure that a heritage impact assessment is done and the Provincial Heritage Resources Authority and SAHRA will be contacted immediately and work will stop.

If permission is granted from the landowner, a site inspection will be conducted in the future. At this stage, it is not known if any heritage resources are present on the site.

m) Other matters required in terms of sections 24(4)(a) and (b) of the Act.

(the EAP managing the application must provide the competent authority with detailed, written proof of an investigation as required by section 24(4)(b)(i) of the Act and motivation if no reasonable or feasible alternatives, as contemplated in sub-regulation 22(2)(h), exist. The EAP must attach such motivation as **Appendix 4)**.

From a local perspective, a certain portion of the farm Rooifontein 1722 (previously known as a portion of the farm Dutoitspan 119), Registration Division: Boshof, Free State province. are preferred due to the sites mineral resources. The specific site has been chosen for its mineral resources thus making an alternative site selection null and void.

j) UNDERTAKING REGARDING CORRECTNESS OF INFORMATION

I Lizanne Esterhuizen herewith undertake that the information provided in the foregoing report is correct, and that the comments and inputs from stakeholders and Interested and Affected parties has been correctly recorded in the report.

Signature of the EAP
DATE: 04-05-2017

k) UNDERTAKING REGARDING LEVEL OF AGREEMENT

I Lizanne Esterhuizen 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: 04-05-2017

-END-