April 26, 2018

mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

ENVIRONMENTAL IMPACT ASSESSMENT REPORT

and

ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

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: **Bila Civil Contractors (PTY) Ltd**
TEL NO: **011 – 261 0241/083 967 7369**
FAX NO: **011 – 261 2061**
POSTAL ADDRESS: **P.O. Box 6995, Halfway House, 1685**
FILE REFERENCE NUMBER SAMRAD: **NW30/5/1/3/2/12236 PR**

1. IMPORTANT NOTICE

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

Unless an Environmental Authorization 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 authorization for listed activities triggered by an application for a right or a 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 Authorization 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.

2. OBJECTIVE OF THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

The objective of the environmental impact assessment process is to, through a consultative process—

(a) determine the policy and legislative context within which the activity is located and document how the proposed activity complies with and responds to the policy and legislative context;

(b) describe 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 the location of the development footprint within the preferred site based on an impact and risk assessment process inclusive of cumulative impacts and a ranking process of all the identified development footprint alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects of the environment;

(d) determine the—

  (i) nature, significance, consequence, extent, duration and probability of the impacts occurring to inform identified preferred alternatives; and

  (ii) degree to which these impacts—

    (aa) can be reversed;

    (bb) may cause irreplaceable loss of resources, and

    (cc) can be avoided, managed or mitigated;

(e) identify the most ideal location for the activity within the preferred site based on the lowest level of environmental sensitivity identified during the assessment;

(f) identify, assess, and rank the impacts the activity will impose on the preferred location through the life of the activity;

(g) identify suitable measures to manage, avoid or mitigate identified impacts; and

(h) identify residual risks that need to be managed and monitor

PART A

SCOPE OF ASSSSMENT AND ENVIRONMENTAL IMPACT ASSESSMENT REPORT

1. Contact Person and correspondence address

a) Details of

(i) Details of the EAP

Name of the Practitioner: **DERA Environmental Consultants** - Mr. Daan Erasmus
Tel No.:018 468 5355
Fax No.:018 468 4015
E-mail address:daane@dera.co.za

(ii) Expertise of the EAP.

(1) The qualifications of the EAP
(with evidence).

See next page for copy of qualification, **Figure 1**.

Figure 1 – Copy of Qualification

TECHNIKON PRETORIA

BACCALAUREUS TECHNOLOGIAE

LANDBOU: VOORLIGTING **AGRICULTURE: EXTENSION**

Toegeken aan Awarded to

DANIEL ELARDUS ERASMUS

9100**1437** 1970-09-07

met ingang van with effect from

1997-01-01

Registrateur (Akademies)
Registrar (Academic)

Rektor/Rector

No. 97/206

TECHNIKON PRETORIA

TECHNIKON PRETORIA

NASIONALE NATIONAL DIPLOMA

LANDBOU: HULPBRONBENUTTING AGRICULTURE: RESOURCE UTILIZATION

Toegeken aan Awarded to

DANIEL ELARDUS ERASMUS

91004437 7009075033088

met ingang van with effect from

1994-01-01

Die volgende is voltooi The following were completed

Landbou-ekonomie I, II en III	Agricultural Economics I, II and III
Voorligtingsmetodiek I en II	Extension Method I and II
Akkerbou I, II en III	Field Husbandry I, II and III
Weidingkunde A	Pasture Science A
Bodembeplanning I en II	Land Use Planning I and II
Bodembewaring I	Soil Conservation I
Grondkunde I en II	Soil Science I and II
*Meganisasie	Mechanisation*
Fisiese Wetenskap	Physical Science
Melkproduksietegnologie	Milk Production Technology
Vleisbeesproduksietegnologie	Beefer Production Technology
Kleinveeproduksietegnologie	Small Stock Production Technology
Grondklassifikasie III	Soil Classification III

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Minimum Opleidingstydperk: 3 Jaar
Minimum Training Period : 3 Years

SERTEC
Uitvoerende Direkteur/
Executive Director

Nr./No. ND1117/94

TECHNIKON
Rektor/Rector

(2) Summary of the EAP's past experience.

(In carrying out the Environmental Impact Assessment Procedure)

See **Figure 2** below Curriculum Vitae of D. E. Erasmus.

27 Lewis Street
Wilkoppies
Klerksdorp

Phone +2718-468-5355
Fax +2718-468-4015
E-mail: dera@iafrica.com

DAAN ERASMUS

Curriculum Vitae
Daniël Elardus Erasmus

February 2015

Personal Information

Name:	Daniël Elardus Erasmus
Date of Birth:	7 September 1970
Place of Birth:	Ottosdal, North West Province, South Africa
Marital Status:	Married with two children

Secondary & Post Secondary Education

1983-1988	Wolmaransstad High School, North West, SA Higher School Certificate – with Full Exemption
Subjects:	English Afrikaans Mathematics Science Geography Accounting
1989-1990	Military Service, Potchefstroom, SA Artillery Division **Officers Course: II Lieutenant**
1991-1994	Technikon Pretoria, Pretoria, SA **National Diploma** Agriculture: Resource Utilization
Subjects:	Agricultural Economics I, II and III Extension Method I, II and III Field Husbandry I, II and III Pasture Science A Land Use Planning I and II Soil Conservation I Soil Science I and II Mechanization Physical Science Milk Production Technology Beef Production Technology Small Stock Production Technology Soil Classification III Computer Application I
1996	Technikon Pretoria, Pretoria, SA **Baccalaureus Technologiae** Agriculture: Extension

Subjects:	Agricultural Communication I Agricultural Extension IV Crop Production IV Research Methodology
1998-1999	Orange Free State University, Bloemfontein, SA Completed all subjects as part of the **Masters Degree in Sustainable Agriculture**, but have not yet completed the script.
Subjects:	Conservation of agricultural resources and the Environment Soil-, climate and water use and soil and water Management Plant and energy utilization and management Economics of sustainability and development Scrip – project proposal Sustainable plant production systems Farm management for sustainable agriculture Strategic management, marketing and planning Communication and technology transfer
Courses	Computer training Dbase IV Seminar in public speaking Veld assessment course Resource Identification and utilization course ArcView GIS course Persuasion Skills course Wetlands identification course Rehabilitation of Wetlands course Management skills course Agricultural Law course

Professional Experience

1991-2002	Commenced professional career as resource conservation inspector at the National Department of Agriculture – Directorate: Land Resource Management in 1991. The main activities was veld inspecting in order to monitor correct utilization of natural resources and where necessary take steps according to Act. Day to day activities included discussions and lectures at farmers unions; municipalities and other institutions in order to promulgate the Act. During 1998, I was appointed as Chief Resource Conservation Inspector, with duties being: manage the administration of Act 43 of 1983, Agricultural Resource Conservation Act in the North West Province of SA; management of personnel and personnel related matters; management of budget of regional office in Potchefstroom; monitoring mine rehabilitation and environmental management out of agricultural point of view; management and control of declared weeds and invader species.
2003-Present	Began own company – DERA Environmental Consultants. Main scope of business: Compiling and submission of mining related applications; Manage and compile legal environmental documents. Further doing monitoring work to evaluated compliance to environmental legislation; evaluating outstanding rehabilitation liabilities for mining companies. Assist legal companies in determining environmental damage. Do assessment for closure applications. Give guidance in rehabilitation practices. Compile applications and basic assessment reports for chicken broilers and feed lots based on experience form management of the natural resources and the mitigation of impacts.

b) Location of the overall Activity

Farm Name:	Lennokskraal 943 KP ✓ **(Portion 0)** ✓ **(Portion 1)** ✓ **(Portion 2)**
Application area (Ha)	2011,1143 ha
Magisterial district:	Rustenburg
Distance and direction from nearest town	Approximately 98 km north-west of Rustenburg
21 digit Surveyor General Code for each farm portion	T0KP00000000094300000 T0KP00000000094300001 T0KP00000000094300002

c) Locality map

(Show nearest town, scale not smaller than 1:250000).

Locality Map, see **Appendix 1(a).**

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

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 attached as **Appendix 1.**

(i) Listed and specified activities

Appendix 1(b) – Infrastructure Map.

NAME OFACTIVITY (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 m^2	LISTEDACTIVITY Mark with an "X" where applicable or affected.	APPLICABLELISTING NOTICE(GNR544,GNR 545 or GNR546)/NOT LISTED
Bulk sampling (Activity 21, Listing 2)	1 ha	X	GNR 325
Prospecting with processing (Activity 20 Listing 1)	0.5 ha	X	GNR 327
Clearing of an area more than 1 ha (Activity 27 Listing 1)	1.5	x	GNR 327

(ii) Description of the activities to be undertaken

(Describe Methodology or technology to be employed, including the type of commodity to be prospected/mined and for a linear activity, a description of the route of the activity)

ITEM	DESCRIPTION
Environmental attributes. Describe how the Environmental attributes associated with the development footprint will be determined.	The site will be visited and a proper foot survey will be conducted The activities that will be conducted by the applicant will be discussed on site as described in the Prospecting Works Programme. The environmental setting on site and surrounding with the experience of the EAP will give an idea and lead to environmental attributes.
Identification of impacts and risks. Describe the process that will be used to identify impacts and risks.	The activities will take place according to the Prospecting Works Programme will be discussed in detail with the applicant on site. With the specific environmental setting in mind and more specifically, the type of soil, soil depth, land use, vegetation type, and distances to open water and structures, the EAP will be able to identify potential impact areas where significant impacts might occur and the risks thereof. The methods of rehabilitation that need to be done, in order to meet the objective of the final land use will also be taken in consideration.
Consideration of alternatives. Describe how alternatives, and in particular the alternatives to the proposed site layout and possible alternative methods or technology to be applied will be determined.	The prospecting will be done in 3 phases namely: Phase 1 - Geological surveys Phase 2 - Test pits & drilling Phase 3 - Bulk sampling through trenching. The site will be visited before the EMP/EIA is compiled. The different site alternatives will be discussed with the applicant on site. The entire application area will be visited and areas that might be environmentally sensitive will be identified. The proposed impacts and mitigations will also be discussed.
Process to assess and rank impacts. Describe the process to be undertaken to identify, assess and rank the impacts and risks each individual activity,	The site will be visited again before the EMP/EIA is compiled. The different site alternatives will be discussed with the applicant on site. The entire application area will be visited and areas that might be environmentally sensitive will be identified. The proposed impacts and mitigations will also be discussed. The EAP (with 21 years' experience in prospecting and mining activities) will assess the specific site for possible impacts. The assessment of impacts will be done according to a synthesis of the following assessment criteria: - Nature of the impact - Extent (spatial scale) - Duration - Magnitude or intensity of the impact (severity) - Probability The criteria that will be used to determine significance as described below. Nature of the impact: This is an appraisal of the type of effect the activity would have on the affected environment. The description includes how and what is being affected, whether it is positive or negative, as well as whether it is direct or indirect.

Contribution of specialist reports. Describe how specialist reports, if required, will be taken into consideration and inform the impact identification, assessment and remediation process.	No specialist reports required at this stage, unless specifically requested.
Determination of impact management objectives and outcomes. Describe how impact management objectives will be determined for each activity to address the potential impact at source, and how the impact management outcomes will be aligned with standards.	The Nature of the impact: This is an appraisal of the type of effect the activity would have on the affected environment. The description includes how and what is being affected, whether it is positive or negative, as well as whether it is direct or indirect. Each impact will be assessed and quantified, and management objectives according to the first two steps, will be set. The management of the objectives will be aligned with the significance of the impact, as well as to ensure a positive outcome. The outcomes will be aligned with standards on environmental management and rehabilitation of mining areas according to Department Mineral Resources.

A. 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)

See Appendix 1 (b) – Site Pan

The prospecting area was identified through aerial photographs. The extent of the prospecting area will be 2011 hectares. Information from Geological surveys will be used in order to determine where the drilling and test pits will take place. This will in turn help to determine the boundaries of the proposed prospecting area for more detailed surveying.

- **PHASE 1**

  Geological surveys will be undertaken by means of desktop studies and available geological maps. **6 months area needed for this phase.**

B. DESCRIPTION OF PLANNED INVASIVE ACTIVITIES:

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

TECHNICAL DETAIL REGARDING THE PROSPECTING METHODS

- **PHASE 2**

  Phase 2 consists of reconnaissance drilling. The proposed drilling program consisting of 15 holes. Using a variety of drilling rigs, rods and bits, the ore body can be evaluated by drilling intersecting holes at locations predetermined by the Geologist. Drilling is done in phases, over anomalous target areas, using reconnaissance lines or a grid of 250x250m depending on the level of confidence in the targets and the level of information required. The holes will be approximately 30 meters deep depending on local depth to bedrock. The core will be drilled using a Diamond drilling rig, with a rotating diamond cutting head that will cut the core. The core will be drilled with NQ rods, and will be extracted every 3m. Water will be pumped into the core barrel to ensure the quality of the recovery of the core. Thereafter it will be packed out in core trays, marked and sampled to retrieve the necessary information. The ore body model will be generated in Surpac or Minesight software – further prospecting requirements and sampling will be based on this model. The drilling will take 12 months. In Phase 2 test pits will be made (3 m x 3 m x ± 10m deep), on a grid of 100 x 100meters and where necessary on a 50 x 50 meters grid where the gravel outcrops. This test pits are made with a 30 ton excavator, to determine if any sample or manganese ore does occur. This test pits will be closed up immediately before the excavator move on to the next one. It is envisaged that at least 100 test pits will be excavated. **12 Months are needed for Phase 2.**

- **PHASE 3**

  In order to determine the grade of the manganese and sample the ore needs to be taken out and tested, by putting it through the washing/sampling process. Trenching will be used to open the ore in order to get a representative sample for testing. The trenches will be 10 x 40 x ± 10 m (deep). In one trench ± 4000m³ (8000ton) ore will be exposed and tested with a plant at a rate of 6m³ (10 ton) an hour. The total prospecting area is 2011 hectares, thus it is anticipated that a total of 50 000m³ (100 000ton) will be tested by making trenches on different locations over the whole prospecting area, where the possibility of ore were identified with the test pits. Taken at an 8 hour working day, 5 days a week and 20 days a month, the applicant will be able to process 960m³ a month. **The processing of 50 000m³ will take about 42 months for Phase 3.**

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 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	HOW DOES THIS DEVELOPMENT COMPLIY WITH AND RESPOND TO THE LEGISLATION AND POLICY CONTEXT. (E.g. In terms of the National Water Act a Water Use License has/ has not been applied for)
Mineral and Petroleum Resources Development Act, 2004 (Act 28 of 2004) (MPRD)	Mineral and Petroleum Resources Development Act, 2004 (Act 28 of 2004) (MPRD)	Application for prospecting right
National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA)	National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA)	Application for Environmental Authorization
National Environmental Management Act, 1998 (Act 107 of 1998): Environmental Impact Assessment Regulations, 2014 (G38282 – R982-985)	National Environmental Management Act, 1998 (Act 107 of 1998): Environmental Impact Assessment Regulations, 2014 (G38282 – R982-985)	Submitting of scoping report and EIA/EMP
National Water Act, 1998 (Act 36 of 1998)	National Water Act, 1998 (Act 36 of 1998)	Submitting of water license.

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).

The farm portions over which the application is applied for is currently utilized as natural grazing for cattle. There are signs of cultivated field, but this also looks like it was withdrawn form cultivation. The structures found on site are various entrance roads, livestock water points, the Vlakplaas community and dry riverbed (in which cultivation was done and earth dam. See **Figure 3** for Google Earth Images below. Access to the application area is gained by the various existing roads from the Christiana tar road. Only a small portion of the grazing land will be impacted upon at any given time and land use on the rest of the area can proceed normally. The prospecting focus area will be clearly demarcated. The area applied for is over the entire portions but the main prospecting focus area will be on the grazing land area. After prospecting the land will be used for grazing.

See Figure 3: Google Earth Images

g) Motivation for the preferred development footprint within the approved site including a full description of the process followed to reach the proposed development footprint within the approved site.

NB!! — This section is about the determination of the specific site layout and the location of infrastructure and activities on site, having taken into consideration the issues raised by interested and affected parties, and the consideration of alternatives to the initially proposed site layout.

The application area show potential for the applied minerals thus these specific areas need to be prospected. The farm portions over which the application was applied for is showing signs of cultivated field, but it also looks like it was withdrawn form cultivation and furthermore it's most probably used as communal grazing land.

The structures found on site are various entrance roads, livestock water points, the Vlakplaas community and dry riverbed (in which cultivation was done and earth dams. Only a small portion of the land will be impacted upon at any given time and land use on the rest of the area can proceed normally.

The area will be bulk sampled and rehabilitated. The prospecting focus area will be clearly demarcated. The area applied for is over the entire portions but the main prospecting focus area will be on the grazing land area. After prospecting the land will be used for grazing again.

i. Details of the development footprint alternatives considered.

With reference to the site plan provided as **Appendix 1** and the location of the individual activities on site, provide details of the alternatives considered with respect to:

Alternative is not applicable. The specific land applied for is the area to believe that minerals can be explored. The current land is used as grazing land for cattle farming and cultivation. The option to explore the possibility for mining is already in itself an alternative land use. The applicant, ***Bila Civil Contractors (Pty) Ltd*** is not interested in any other alternative land use over this land aside of the exploration of ***Platinum Group Metals (PGM), Phosphate ore, Nickel ore, Chrome ore, Manganese Ore & Vanadium***, or any other activity, or method use other than mining for sand in the conventional way, which is the most cost effective.

the property on which or location where it is proposed to undertake the activity
There are no alternative for the property as the application is for these farm portions.

(b) the type of activity to be undertaken
The type of activity is in line with the submitted Prospecting Programme.

(c) the design or layout of the activity
The layout of the activity will and can only be on the application area as per sketch plan.

(d) the technology to be used in the activity
The technology used in the activity will as described in the Prospecting Programme and the best options will be determined by the applicant.

(e) the operational aspects of the activity, and
The operational aspect is only the prospecting of sample ore on this specific area.

(f) the option of not implementing the activity
This option might only be possible if the applicant decide to abandon the project.

ii) Details of the Public Participation Process Followed

Describe the process undertaken to consult interested and affected parties including public meetings and one on 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.

The process as described by NEMA for Environmental Authorization was followed. See **Table 3** below for the identification of Interested and Affected Parties to be consulted with. The landowner (Republic of South Africa) and the direct neighbours and community were consulted personally and through a letter that was given to them by hand. A site notice will be placed at the entrance gate of the farm. With this site notice all passers-by are requested to submit any written comments to be forwarded to the consultant (still awaiting response). See confirmation of advertisement attached in **Appendix 2**.

Appendix 2 – Proof of consultation.

Table 3: Description of process to be undertaken to consult interested and affected parties

IDENTIFICATION CRITERIA	Mark with an X where applicable	
	YES	NO
Will the landowner be specifically consulted?	X	
Will the lawful occupier on the property other than the Landowner be consulted?	X	
Will a tribal authority or host community that may be affected be consulted?		X
Will recipients of land claims in respect of the area be consulted?	X	
Will the landowners or lawful occupiers of neighbouring properties been identified?	X	
Will the local municipality be consulted?	X	
Will the Authority responsible for power lines within 100 meters of the area be consulted?		X
Will Authorities responsible for public roads or railway lines within 100 meters of the area applied for be		X
Will authorities responsible for any other infrastructure within 100 meters of the area applied for be consulted? (Specify)		X
Will the Provincial Department responsible for the environment be consulted?	X	
Will all of the parties identified above be provided with a description of the proposed mining /prospecting operation as referred above?	X	
Will all the parties identified above be requested in writing to provide information as to how their interests (whether it be socio-economic, cultural, heritage or environmental) will be affected by the proposed mining project?	X	

Other, Specify

Table 4: Furthermore the details of the engagement process to be followed are as reflected below.

Steps to be taken to notify interested and affected parties (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. Photographs of notice and copies of advertisements and notices notifying potentially interested and affected parties of the proposed application are attached as **Appendix 2**).	**PROVIDE DESCRIPTION HERE** The landowner will be consulted with in person and a surface lease agreement will be signed between the applicant and parties to set the terms of reference. The neighbours will be informed personally, consulted by the applicant and confirmed in the writing. A consultation letter will be sent to the Local Municipality.
Information to be provided to Interested and Affected Parties.	**Compulsory** The site plan. List of activities to be authorized Scale and extent of activities to be authorized Typical impacts of activities to be authorized (e.g. surface disturbance, dust, noise, drainage, fly rock etc.) The duration of the activity. 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)
	Other, specify: a prospecting works programme
Information to be required from Interested and Affected Parties.	**Compulsory** To provide information on how they consider that the proposed activities will impact on them or their socio-economic conditions To provide written responses stating their suggestions to mitigate the anticipated impacts of each activity To provide information on current land uses and their location within the area under consideration To provide information on the location of environmental features on site to make proposals as to how and to what standard the impacts on site can be remedied. requested to make written proposals To mitigate the potential impacts on their socio economic conditions to make proposals as to how the potential impacts on their infrastructure can be managed, avoided or remedied).
	Other, Specify

iii) Summary of issues raised by I&Aps

(Complete the table summarizing 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 sent and/or Comments Received	Issues raised	EAP's response to the applicant
AFFECTED PARTIES				
Rep of South Africa Moses Kotane Local Municipality Moses Kotane Local Municipality Mr. M.V. Mokopane Private Bag X1011, Mogwase, 0314 Tel: 014 555 1307 Fax: 014 555 6368 E-mail: municipalmanager@moseskotane.gov.za	X	27 Nov 2017 16 Jan 2018 17 Jan 2018 5 Feb 2018	Consultation still in process – awaiting written response No objection as long as legislated procedures and regulations are adhered to	
Lawful occupier/s of the land				
Landowners or lawful occupiers on adjacent properties	X			
Municipal councilor				
Municipality	X			
Rustenburg Local Municipality LED Manager: Innocent Sirovha, fax 014 597 0306 E-mail: innocents@bonjala.gov.za Municipal Manager: Ms Nqobile Sithole Tel: ;014 590 3551 e-mail: munman@rustenburg.gov.za		27 Nov 2017 18 Jan 2018 10 May 2018	Fax sent – no response E-mail sent – awaiting response	
Organs of state (Responsible for infrastructure that may be affected Roads Department, Eskom, Telkom, DWA.				
Eskom				
Communities				
Dept. Land Affairs	X			
Mr. KeatbesweMothupi, Office of the Regional Land Claims Commissioner, N W Province; Private Bag X08, Mmabatho, 2735; Fax: 018 389 9641		27 Nov 2017	E-mail sent	
Traditional Leaders				
N/A				
Dept. Rural, Environment and Agricultural Development	X			
Ouma Skosana Agricentre Building, Cnr James Moroka & Stadium Road, Mmabatho, 2735 E-mail: oskosana@nwpg.gov.za		11 Dec 2017 26 April 2018	Scoping Report was sent with Fastway couriers for comments EMP/EIA sent with Fastway couriers for comments	Objects on farm Vlakplaats – Comments received 5 March 2018. The farm Vlakplaats is now excluded from the application. No objection on Lennokskraal
Dept. Water and Sanitation	X			

Cornia Theunissen Private Bag X357, Hartebeespoort, 0216 Tel: 012 253 1026 E-mail: theunissenc@dwa.gov.za		11 Dec 2017 26 April 2018	Scoping Report was sent with registered post for comments. EMP/EIA was sent with Fastway couriers for comments	Acknowledgement received 22 Jan 2018
Dept. Agriculture, Forestry and Fisheries	X			
Maurice Vuyega Louis le Grange Building, Cnr Peter Mokaba & Wolmarans street,3rd Floor, Office nr 318, Potchefstroom, 2520		11 Dec 2017 26 April 2018	Scoping Report was sent with Fastway couriers for comments. EMP/EIA was sent with Fastway for comments	No comments received
Other Competent Authorities	X			
Provincial Heritage Resources Agency J.Dipale Corner Tillard & Warren Street, Mafikeng, 2745 Tel: 018 381 2032 E-mail: jdipale@nh.sahra.org.za		11 Dec 2017 18 Jan 2018 19 Jan 2018	Scoping Report was sent with Fastway couriers for comments. Case ID: 12134	Comments received 19 Jan 2018
OTHER AFFECTED PARTIES				
SAHRIS P.O. Box 4637, Cape Town, 8000 Tel: 021 202 8643 E-mail: info@sahra.org.za		April 2018	SAHRIS Website technical problem and not working. Will do consultation as soon as it is running again.	
INTERESTED PARTIES				

iv) The Environmental attributes associated with the alternatives. (The

(environmental attributed described must include socio-economic, social, heritage, cultural, geographical, physical and biological aspects)

(1) Baseline Environment

Introduction:

The purpose of this section is to provide information on the environment in which the proposed prospecting activities will take place, with a view to identify sensitive issues/areas, which need to be considered when conducting the impact assessment.

The application is over ***the farm: the Remaining Extent, Portion 1 and Portion 2 of the farm Lennokskraal 943 KP***. This area consists of 100% natural veld, withdrawn cultivated land.

Magisterial District:

Rustenburg.

Longitude (approximate center of mining site):

26.896760 E

Latitude (approximate center of mining site):

-24.964931S

Existing Surface Infrastructure:

The structures found on site are various entrance roads, livestock water points and dry riverbed (in which cultivation was done and earth dams.

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

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

Climate:

Summer rainfall with very dry winters. MAP ranges from about 500-600 mm. This unit has the highest mean annual potential evaporation of savanna vegetation units outside the two Kalahari bioregions. Frost is fairly frequent in winter.

Geology and Soils:

Vertic black ultramafic clays which developed from norite and gabbro, also locally in small depressions along streams. Some areas have less clay. Some with high base status and eutrophic red soils. Underlying geology is an Archaean granite-gneiss terrane of the Swazian Erathem that is covered in parts by the mainly clastic as well as chemical sediments and volcanics of the Rayton and Silverton Formation, both of the Pretoria Group (Transvaal Supergroup). Mafic intrusive rocks of the Rustenburg Layered Suite, Bushveld Igneous Complex (Late Vaalian) are present in the east and include the Bierkraal Manetite Gabbro. Bronzite, harzburgite, norite and anorthosite are the major mafic rocks of the Rustenburg Suite. Land types mainly Ea and Ae.

Vegetation [Flora] and Landscape Features:

Distribution: Limpopo and North-West Provinces: Flats north of the Dwarsberge and associated ridges mainly west of the Crocodile River in the Dwaalboom area but including a patch around Sentrum. South of the ridges it extends eastwards from the Nietverdiend area, north of the Pilanesberg to the Northam area. Altitude 900-1 200 m.

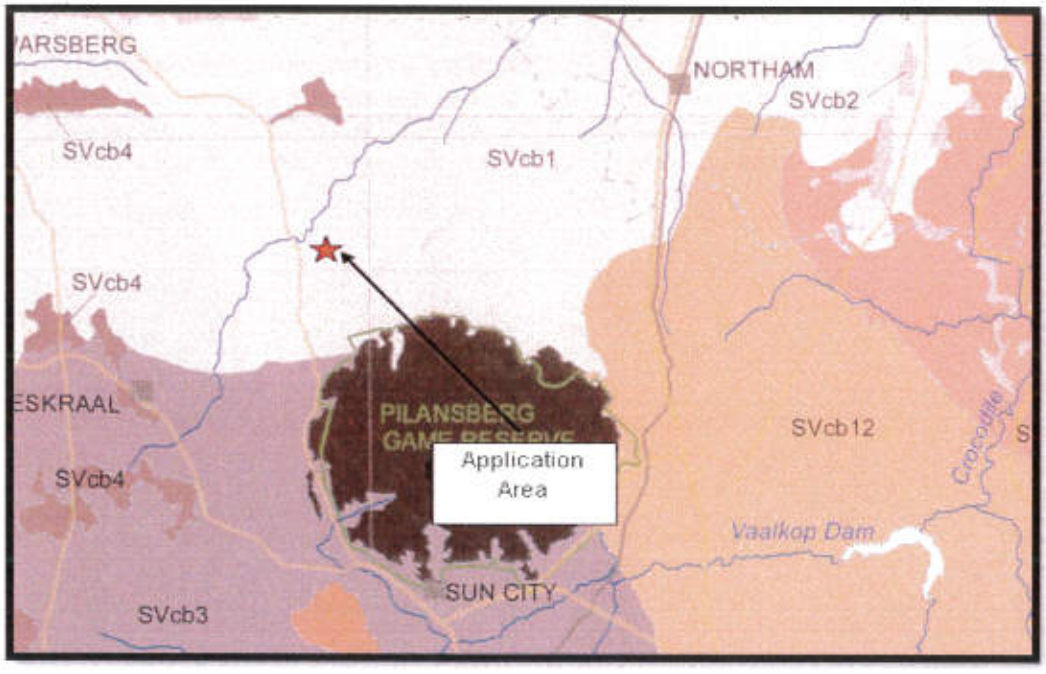
Vegetation & Landscape Features: VEGMAP (2006) classified this area as part of the Central Bushveld, (SVcb 1) Dwaalboom Thornveld. VT 13 Other Turf Thornveld (58%) (Acocks 1953). LR 14 Clay Thorn Bushveld

(48%), LR 18 Mixed Bushveld (43%) (Low & Rebelo 1996). Plains with layer of scattered, low to medium high, deciduous microphyllous trees and shrubs with a few broad-leaved tree species, and an almost continuous herbaceous layer dominated by grass species. *Acacia tortilis* and *A. nilotica* dominate on the medium clays (at least 21% clay in the upper soil horizon but high in the lower horizons). On particularly heavy clays (>55% clay in all horizons) most other woody plants are excluded and the diminutive *A. tenuispina* dominates at a height of less than 1 m above ground. On the sandy clay loam soils (with not more than 35% clay in the upper horizon but high in the lower horizons) *A. erubescens* is the most prominent tree (Pauw 1 988). The alternation of these substrate types creates a mozaic of patches typically 1-5 km across, for example in the unit west of Thabazimbi.

Important Taxa - Tall Tree: *Acacia erioloba*. Small Trees: *Acacia erubescens* (d), *A. nilotica* (d), *A.tortilis* subsp. *heteracantha* (d), *A. fleckii*, *A. mellifera* subsp. *detinens*, *Combretum imberbe*, *Rhus lancea*, *Ziziphus mucronata*. Tall Shrubs: *Acacia hebeclada* subsp. *hebeclada*, *Combretum hereroense*, *Diospyros lycioides* subsp. *lycioides*, *Euclea undulata*, *Grewia flava*, *Tarchonanthus camphoratus*. Low Shrubs: *Acacia tenuispina* (d), *Abutilon austro-africanum*, *Aptosimum elongaturn*, *Hirpicium bechuanense*, *Pavonia burchellii*, *Solanum delagoense*. Succulent Shrubs: *Kalanchoe rotundifolia*, *Talinum caffrum*. Herbaceous Climber: *Rhynchosia minima*. Graminoids: *Aristida bipartita* (d), *Bothriochloa inscuipta* (d), *Digitaria eriantha* subsp. *eriantha* (d), *Ischaemum afrum* (d), *Panicum maximum* (d), *Cymbopogon pospischilii*, *Eragrostis curvula*, *Sehima galpinii*, *Setaria incrassata*. Herbs: *Heliotropium ciliatum*, *Kohautia caespitosa* subsp. *brachyloba*, *Nidorella hottentotica*. [See **Figure 4** below].

Remarks: Contains some very clayey soils that swell when wet and shrink when dry. On the clays, woody plant biomass is generally low and productivity of woody plants is usually lower than that of herbaceous plants. These areas with ultramafic soils are, contrary to Sekhukhuneland, low in species diversity and in endemic species. References Coefzee (1971), Morris (1972), Van der Meulen (1 :Van der Meulen & Westfall (1980), Pauw (1988), Rutherford (1993), Winterbach (1998).

Figure 4: The VEGMAP classification: Western Highveld Sandy Grassland [Gh 14]



Conservation status:
Least threatened. Target 19%. Some 6% statutorily conserved, mostly within the Madikwe Game Reserve in the west. About 14% transformed mainly by cultivation. Erosion is very low to low. Main use is extensive cattle grazing.

Animal Life [Fauna]:
Small animals common in this area are: Steenbuck, Duiker, Jackal and Meer cats.

Topography:
The mine site has one terrain type, which is characterized as being plains with layer of scattered, low to medium high. The slope varies around <0.1% to not more than 3%.

Surface Water:
This application area fall within the water management area of the Crocodile (West) and Marico (3) and secondary catchment area A22 and tertiary drainage region A22F. Mining on this site are not foreseen to have any direct influence of impact on this surface water body. There are some seasonal dams and stream note on the rest of the application area.

Ground Water:
There is one borehole on the application area used for stock watering by the landowner. The water uses will be $10m^3$ a day for the cooling of the drills in the bulk sampling phase.

Air Quality:
The impact on air quality will only start with the bulk sample where dust from excavating and from the roads will occur. This impact will be low and will be monitored and mitigated trough wetting of the roads.

Noise:
The impact of noise will only start with the bulk sample where noise from the mining equipment will be generated. This operation will only be in day time working hours and will have a low impact on current surroundings.

Sites of Archaeological and Cultural Interest:
If any graveyard was identified on the application area but also within the envisaged bulk sample area. The graves are currently fenced off and all activities will be 20m away from the graves and the fence will be maintained at all times.

According to Section 36(3) of the National Heritage Resources Act 25 of 1999 no person may, without a permit issued by SAHRA or a provincial heritage resources authority—

(a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;

(b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or

(b) bring onto or use at a burial ground or grave referred to in paragraph *(a)* or *(b)* any excavation equipment, or any equipment which assists in the detection or recovery of metals.

It is recommended that the graveyard is included in the overall management plan of the mine development. Preservation of the site will require that the area is properly demarcated with at least a

20m buffer zone placed around the graveyard in order to avoid potential damage during mining activities. It will be necessary to ensure that the graveyard is accessible to the relatives of the deceased.
There are no major archaeological grounds to halt the proposed development. However, the potential occurrence of unmarked graves or subsurface finds not recorded during this survey can never be excluded, so it is advised that SAHRA and a qualified archaeologist are informed immediately if archaeological objects are uncovered.

Sensitive Landscapes:
There were no sensitive landscapes identified on the site visit.

Visual Aspects:
These prospecting activities will not be partly visible from the community.

Social:
The proposed activity will employ 5 people, of which a few are resident around the operation. Various social amenities are available close to the operation. These include schools, hospitals churches, recreation facilities as well as a Police Station at Rustenburg, which is located approximately 97 km south, south-east of the operation.

(b) Description of the current land uses.

The current land use is natural grazing for cattle. There are signs of cultivated field, but this also looks like it was withdrawn form cultivation. The majority of the application area is used for grazing; however the natural grasslands and biodiversity have been affected and altered by other mining activities.

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

Please refer to Section 2 (d)(ii)Table 2 for a description of the activities and the infrastructure which are foreseen to form part of the proposed activity. The structures found on site are various entrance roads, livestock water points, the Vlakplaas community and dry riverbed (in which cultivation was done and earth dam.

(d) Environmental and current land use map.

(Show all environmental and current land use features)

Current land use of the application area consists of natural veld. The land is mostly utilized as communal grazing land. See **Figure 3 [Google Earth Images]** for more detail.

v) Impacts and risks identified including the nature, significance consequence, extent, duration and probability of the impacts, including the degree to which these impacts

(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. Please indicate the extent to which they can be reversed, the extent to which they may cause irreplaceable loss of resources, and can be avoided, managed or mitigated).

The proposed project is anticipated to impact on a range of biophysical and socio-economic aspects of the environment. The main purpose of the Scoping Report is to identify and evaluate the significance of these potential impacts and determine how they can be minimized or mitigated.

It should be noted that a comprehensive Environmental Management Program (EMPr) will be developed and implemented to regulate and minimize the direct, indirect and cumulative impacts during the construction and operational phases. The potential environmental impacts identified during the Scoping Phase, which will be investigated further in the Impact Assessment Phase of the project are summarized in **Table 5** on the next page.

TABLE 5: IMPACT SIGNIFICANCE IDENTIFICATION MATRIX FOR LENNOKSKRAAL 943 KP

			A	B	C	D	E	F	E	F	G	H	I	J	K	L	M	N
		Components	ABIOTIC									BIOTIC			VISUAL	SOCIO-ECONOMIC		
	PHASE	Impacts	Geology	Topography	Soil	Land capability	Land use potential	Surface water	Ground water	Air quality	Noise	Vegetation	Wildlife	Sensitive landscapes	Visual impact	Archaeological & cultural sites	Socio-economic impacts	Affected parties
		Activity, Product or Service																
1	Construction	Demarcation of mine focuses area.			L	M	L						M		M			
2		Establishment (site preparation, vegetation clearance, topsoil removal and stockpiling) of proper access roads (upgrade existing road), site workshop & storage area (temporary containers), mineral processing plant conveyor/ mobile screen generator, etc.) Initial vegetation clearance, topsoil removal & stockpiling next to first opencast/pit/trench within the mine focus area.		M	H	H			M	H	H	H	H	L	M		L	M
3		Establishment of bunded diesel and oil/chemical storage facilities, chemical toilets.		M	M	H		M	M			M			M			
4		Provision of storage tanks for potable (drinking water) and process water (dust suppression).		H	H	H	H	L	M	M	H	H	H	M	L	L		
5		Provision of waste handling/disposal facilities (domestic & industrial waste bins.			L			L	L					L				
6		Fencing –off active mining site in as required in terms of the MHSA. Ensure access control (gate), etc.				M							M		M			H+
7	Operational	Vegetation clearance, topsoil removal & stockpiling net to opencast/pit/trench within the mine focus area (1 ha of surface area disturbed at any given time).		M	H	H	M	L		L		H	L		L		M	H
8		Mechanically excavating overburden with an excavator and stockpile separately from topsoil dump. Remove gravel with excavator and stockpile on side of trench/pit to load onto trucks.	H	M+	H	H	H	L	M	L	L	H	L		L+		M	H
9		Transport with trucks to mineral processing plant (conveyor, screen for processing and sorting of concentrate at set intervals.			H			L	H	L	L	H			M		M	H
10		The wet waste tailings coming out of the pans will be pumped to open excavations & pomel dam, from where excess water is re-cycled. Backfilling of excavations (as part of concurrent rehabilitation): the coarse gravel (rough) sifted from the pans will be transported back by front-end-loaders towards all open pits from backfilling.	M	H+	H	H	H	H	M	L	L						M	H

			A	B	C	D	E	F	E	F	G	H	I	J	K	L	M	N
		Components	ABIOTIC									BIOTIC			VISUAL	SOCIO-ECONOMIC		
	PHASE	Impacts	Geology	Topography	Soil	Land capability	Land use potential	Surface water	Ground water	Air quality	Noise	Vegetation	Wildlife	Sensitive landscapes	Visual impact	Archaeological & cultural sites	Socio-economic impacts	Affected parties
		Activity, Product or Service																
11		Final backfilling of all voids/trenches/pits and loping of overburden dumps (excess material as the result of swell factor).	H+	H+	H+	H+	H+	H+	H+	L	L				L		H+	H±
12		Compaction of backfilled sites		H+	H+	H+	H+	H+	H+		L						H+	H+
13	Decommissioning and closure	Replace and spread all topsoil evenly over backfilled sites.			H+	H+	H+	H+	H+	H+	L	H+	H+		H+		H+	H+
14		Establishment of vegetation cover.			H+	H+	H+	H+	H+	H+		H+	H+		H+		H+	H+
15		Removal of all temporary & demolition of all permanent structures (Section 44 of the MPRDA).			H+	H+	H+	H+	H+	H+	L	H+	H+		H+		H+	H+
16		Rehabilitation of all access roads, compacted areas, etc.			H+	H+	H+	H+	H+	H+	L	H+	H+		H+		H+	H+

vi) Methodology used in determining and ranking the nature , significance, consequences, extent, duration and probability of potential environmental impacts and risks;

(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).

I. Introduction:

Table 6 describes and evaluates the effects of the different prospecting projects and the associated activities on the natural and social environments. The different environmental components, on which the project (can/may) have an impact, are:

1. Geology
2. Topography
3. Soil
4. Land Capability
5. Land Use
6. Vegetation
7. Wildlife
8. Surface Water
9. Ground Water
10. Air Quality
11. Noise
12. Archaeological and Cultural sites
13. Sensitive Landscapes
14. Visual Aspects
15. Socio-economic Structure
16. Interested and Affected Parties

IMPACT ASSESSMENT

Before the impact assessment could be done the different project activities were identified:

ACTIVITIES:

1. Access Roads (Existing farm roads to be upgraded)
2. Temporary office, workshops, ablution facility, water tanks, diesel tanks and other temporary buildings
3. Prospecting equipment (conveyor, crusher/ screen, generator)
4. Stockpiles
5. Overburden dumps
6. Opencast trenches (as part of bulk sampling)

II. Environmental Impact Assessment Summary:

- **Environment likely to be affected by the prospecting operation. (See Appendix 1 for location)**

Environmental aspect	Affected		Not affected
	Negligible	Substantial	
1. GEOLOGY		X	
2. TOPOGRAPHY	X		
3. SOIL		X	
4. LAND CAPABILITY		X	
5. LAND USE	X		
6. VEGETATION		X	
7. WILDLIFE	X		
8. SURFACE WATER			X
9. GROUND WATER	X		
10. AIR QUALITY	X		
11. NOISE	X		
12. SENSITIVE LANDSCAPES			X
13. VISUAL ASPECTS	X		
14. SOCIO ECONOMICS	X		
15. INTERESTED &	X		
16. ARCHAEOLOGICAL			X

- **Environment likely to be affected by the alternative land use**

Prospecting will be a new land use over this area. The site that is earmarked for prospecting represents ± 1 % of the total area applied for. And it is further not foreseen that prospecting activities would disturbed an area of more than 1 ha at any given time. The rest of the terrain would continue to be used for agriculture purposes by the landowner.

- **Assessment of the impacts created by the prospecting activity**

Before any assessment can be made the following evaluation criteria need to be described:

*Explanation of **probability** of impact occurrence*

Probability of	Explanation of probability
Very low	<20% sure of particular fact or likelihood of impact occurring.
Low	20 to 39% sure of particular fact or likelihood of impact occurring.
Moderate	40 to 59% sure of particular fact or likelihood of impact occurring.
High	60 to 79% sure of particular fact or likelihood of impact occurring.
Very high	80 to 99% sure of particular fact or likelihood of impact occurring.
Definite	100% sure of particular fact or likelihood of impact occurring.

*Explanation of **extent** of impact*

Extend of impact	Explanation of extend
Site specific	Direct and indirect impacts limited to site of impact only.
Local	Direct and indirect impacts affecting environmental elements within the Rustenburg area.
Regional	Direct and indirect impacts affecting environmental elements within North West Province.
National	Direct and indirect impacts affecting environmental elements on a national level.
Global	Direct and indirect impacts affecting environmental elements on a global level.

*Explanation of **duration** of impact*

Duration of	Explanation of duration
Very short	Less than 1 year
Short	1 to 5 years
Medium	6 to 12 years
Long	13 to 50 years
Very long	Longer than 50 years
Permanent	Permanent

*Explanation of impact **significance***

Impact	Explanation of significance
No impact	There would be no impact at all - not even a very low impact on the system or any of its parts.
Very low	Impact would be negligible. In the case of negative impacts, almost no mitigation and/or remedial activity would be needed, and any minor steps, which might be needed, would be easy, cheap and simple. In the case of positive impacts, alternative means would almost all likely to be better, in one or a number of ways, than this means of achieving the benefit.
Low	Impact would be of a low order and with little real effect. In the case of negative impacts, mitigation and/or remedial activity would be either easily achieved or little would be required, or both. In case of positive impacts, alternative means for achieving this benefit would likely be easier, cheaper, more effective, less time-consuming, or some combination of these.
Moderate significance	Impact would be real but not substantial within the bounds of those which could occur. In the case of negative impacts, mitigation and/or remedial activity would be both feasible and fairly easily possible. In the case of positive impacts, other means of achieving these benefits would be about equal in time, cost and effort.
High significance	Impacts of a substantial order. In the case of negative impacts, mitigation and/or remedial activity would be feasible but difficult, expensive, time-consuming or some combination of these. In the case of positive impacts, other means of achieving this benefit would be feasible, but these would be more difficult, expensive, time-consuming or some combination of these.
Very high significance	Of the highest order possible within the bounds of impacts which could occur. In the case of negative impacts, there would be no possible mitigation and/or remedial activity to offset the impact at the spatial or time scale for which it was predicted. In the case of positive impacts, there is no real alternative to achieving the benefit.

III. **Assessment of the nature, extent, duration, probability and significance of the potential environmental, social and cultural impacts of the proposed prospecting operation, including the cumulative environmental impacts.**

ASPECT	IMPACTS				CUMULATIVE IMPACTS
1. GEOLOGY					
Nature of the impact	Geology will be destroyed during the opencast prospecting operation. During operation which will be for the next 5 years, the mineral resource (various minerals) will be extracted. Waste rock material/overburden material is disposed off/backfilled in existing excavations as part of the prospecting process.				
Extent	Site				Activity causing the impact
Duration	Permanent				An opencast prospecting method will be used to extract bulk samples. Therefore the original geology will be totally destroyed.
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
2. TOPOGRAPHY					
Nature of the impact	* **Change in landform** : * The prospecting site is situated on: level plains some relief. * **Disturbance of the surface drainage:** The prospecting of the Sample ore will result in the creation of trenches (3x3 m or less), that act as depressions in the environment that captures run-off. Prospecting activities will be concentrated as indicated on **Appendix 1** on the application area (approximately 10 m depth). Normal surface drainage will be disturbed at a given point. Run-off if any will be diverted away from the specific site.				
Extent	Site				Activity causing the impact
Duration	Very long to Permanent				Bulk sampling trough trenches, etc.
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

3. SOIL	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact	The surface area is characterized by various soil depths. Any construction of infrastructure should be preceded by the removal of all available topsoil.				
Extent	Site				Activity causing the impact
Duration	Long				In the process of removing topsoil the soil layers are mixed and the structure may be disturbed.
Probability	High				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

3. SOIL	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact	The establishment, construction, operation and eventually rehabilitation (demolition) of listed structures such as the access roads, stockpiles /tailings dumps, cause compaction of soil. All prospecting activities will be concentrated on the identified prospecting focus area where sample deposits could be found. In the same time a certain surface area is therefore alienated. The active prospecting surface area (alienated) would be restricted within the ±0.7 ha at any given time (in relation to area of application of the prospecting right of 2011 ha) for the next 5 years.				
Extent	Site				Activity causing the impact
Duration	Long				Site preparation for additional prospecting sites and the construction, operation of listed infrastructure.
Probability	High				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	IMPACTS				CUMULATIVE IMPACTS
3. SOIL					
Nature of the impact	Soil erosion: Due to the fact that certain surface areas would become compacted and this would lead to lesser infiltration of rainwater and more run-off that could cause erosion on bare disturbed surfaces. Erosion would always be possible until such time a vegetation cover is provided during rehabilitation phase.				
Extent	Site				Activity causing the impact
Duration	Very short				When removing topsoil during site preparation, little storm water control structures are in place. If a severe storm hits the area, it may lead to erosion on site. Topsoil stockpiles may be prone to erosion due to lack of vegetation cover. Water control structures may fail or severe rainstorms may cause excessive run-off. Surface compaction due to activities taking place.
Probability	Very low				
Significance	Low				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT 3. SOIL	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact	Potential of soil contamination.				None.
Extent	Site				Activity causing the impact
Duration	Long				Vehicle/equipment breakages and oil/lubricant /diesel spills may contaminate soil.
Probability	Moderate				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT 3. SOIL	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact	Loss of soil structure				None
Extent	Site				Activity causing the impact
Duration	Long				In the process of removing topsoil the soil layers are mixed and the structure may be disturbed.
Probability	High				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT 3.SOIL	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact	Loss of soil fertility				None
Extent	Site				Activity causing the impact
Duration	Short				The mixing of soil during site preparation, compaction and potential pollution (spillages form oil etc.) all may cause this situation.
Probability	Definite				
Significance	Low				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT 4.LAND CAPABILITY	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact	**Temporary loss of land capability to support grazing**. The small area (0.7 ha) where the active prospecting activities occur (trenches, stock piles, prospecting equipment) etc. will thus be temporary alienated, until the area is rehabilitated. All trenches would be rehabilitated as part of the prospecting process during which trenches are back-filled. The rest of the application area will still be used by the landowner as agricultural land.				
Extent	Site				Activity causing the impact
Duration	Long				Site preparation for additional prospecting sites and the construction, operation of listed infrastructure, the land capability of the active prospecting area will be totally destroyed.
Probability	Definite				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT 5. LAND USE	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact	This is a new prospecting operation and therefore will lose its land use to support grazing on a certain portion of the 2011 ha during the next 5 years. Only a small portions of land (0.7 ha at a time) would be affected by the prospecting operation relation to the total prospecting right application area of 2011 ha. All trenches would be rehabilitated as part of the prospecting process during which excavations are back-filled.				
Extent	Site				Activity causing the impact
Duration	Long to permanent				Site preparation for prospecting and the construction, operation of listed infrastructure
Probability	Definite				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
6.VEGETATION					
Nature of the impact	Vegetation clearance, disturbance and trampling. Destruction of habitats for vegetation. Due to a disturbed ecosystem, bare ground and spreading of exotics can follow.				
Extent	Site				Activity causing the impact
Duration	Long				The site preparation for new sites, construction of listed infrastructure will cause destruction of habitats for vegetation. Due to a disturbed ecosystem, bare ground and invasion of exotics could further spread. The vegetation needs to be cleared to remove the topsoil.
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
6.VEGETATION					
Nature of the impact	Habitat change, loss of species, spread of alien and invasive species.				
Extent	Site				Activity causing the impact
Duration	Permanent				The change in the current habitat will be mitigated during final rehabilitation.
Probability	High				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
6.VEGETATION					
Nature of the impact	Dust coverage of plants.				None
Extent	Site				Activity causing the impact
Duration	Long				Heavy trucks and other vehicles on dirt roads, stockpiling, dumping of tailings are mainly responsible for this impact.
Probability	High				
Significance	Low				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
7. WILDLIFE					
Nature of the impact	Wildlife or wildlife habitat destruction /change / disturbance.				None
Extent	Site				Activity causing the impact
Duration	Permanent				The flora which normally serves as habitat for animals would be destroyed during site preparation. The increase in activity will temporarily scare other animals. The area will serve as a new habitat after rehabilitation.
Probability	Very High				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
7. WILDLIFE					
Nature of the impact	Injury and death to wildlife.				None
Extent	Site				Activity causing the impact
Duration	Short				The movement of vehicles may kill certain insects, rodents and possible birds. Most of the remaining animal life will however move away due to noise.
Probability	Very low				
Significance	Low				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
7. WILDLIFE					
Nature of the impact	Restoration of habitat.				None
Extent	Site				Activity causing the impact
Duration	Short				As rehabilitation progresses the habitat of certain species will be restored/created (Closure objective) Animals will probably only move back when human movement is limited.
Probability	Low				
Significance	Low				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	IMPACTS				CUMULATIVE IMPACTS
8. SURFACE WATER					
Nature of the impact	Increased silt load. Clearing topsoil for footprint areas can increase infiltration rates of water to the groundwater system and decrease buffering capacity of soils to absorb contaminants from spills on surface. This can increase the risk of contamination of the groundwater system (increases aquifer vulnerability.				
Extent	Local				Activity causing the impact
Duration	Short				The clearance of vegetation and the traffic on access roads will all contribute to an increase in the silt load on the prospecting area.
Probability	Moderate				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	IMPACTS				CUMULATIVE IMPACTS
8. SURFACE WATER					
Nature of the impact	Change in surface water quality. Spillages from vehicles and also surface water run-off that is not adequately diverted away from the active prospecting excavations could end-up in the excavations creating problems regarding water quality and hindering the prospecting process. Surface run-off from active prospecting sites (overburden dumps & tailings dam/dump) if not adequately contained on site could end-up in the adjacent undisturbed natural veld. If the natural surface run-off is not adequately diverted in the case of the dry-water course area, prospecting sections it could become silted-up.				
Extent	Local				Activity causing the impact
Duration	Short				"Dirty / Clean" water systems at facilities like the overburden dumps, roads, trenches, etc. may impact on the quality of the surface water. The water should be contained in the surface runoff control measures provided therefore.
Probability	Moderate				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
8. SURFACE WATER					
Nature of the impact	Change in surface water quantity: **Water management area (3) : Crocodile (West) and Marico** **Stream name: The mine falls under the primary drainage region C22 and in quaternary sub-catchment C22F.** Notwithstanding the above-mentioned facts, it is not expected that prospecting operations will have any effect on the boundaries or the general water flow of the catchment. Standing water in trenches could as the result of rain/ surface run-off ending up in shallow depressions.				
Extent	Site				Activity causing the impact
Duration	Long				It is an operational objective to contain or divert all surface run-offs from the active prospecting trenches area mainly due to pollution (sediment) potential. This will reduce the run-off quantity, although small in comparison with the drainage area in total.
Probability	High				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
9. GROUND WATER					
Nature of the impact	Reduction of groundwater quality Prospecting activities are not likely to impact on local ground-water quality. No chemicals area used during the prospecting process. Handling of waste and transport of building material can cause various types of spills (domestic waste, pit latrines, hydrocarbons) which can infiltrate and contaminate of the groundwater system.				
Extent	Site				Activity causing the impact
Duration	Long				
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

9. GROUND WATER					
Nature of the impact	Even though abstraction is likely to have a minimal effect on the surrounding groundwater users, this is a new use, and groundwater levels are expected to continue current trends. Groundwater will be abstracted for potable water supply and prospecting processes. The volume of water needed is small (12 000 Lit/hr) in comparison to other water use and will have a small impact on the surrounding aquifer.				
Extent	Site				Activity causing the impact
Duration	Long				Opencast prospecting operation.
Probability	Low				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	IMPACTS				CUMULATIVE IMPACTS
10. AIR QUALITY					
Nature of the impact	Dust will be generated during the prospecting operation (loading with an excavator on to a dump truck) and transportation to the plant (conveyor, drum screen/crusher) and on gravel/dirt/farm roads. The processing of the gravel is a wet process and therefore minimum dust is generated.				
Extent	Site				Activity causing the impact
Duration	Long				Initial construction work with regard to infrastructure (roads) that involves earth moving equipment. During the phase 2, dust could be generated as indicated during prospecting.
Probability	Moderate				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	IMPACTS				CUMULATIVE IMPACTS
11. NOISE POLLUTION					
Nature of the impact	Noise will be generated during the prospecting operation (loading with an excavator on to a dump truck) and transportation to the plant (conveyor, drum screen/crusher). The mine itself is located in rural landscape. The impact would be of more importance regarding the direct worker environment that should adhere to the requirements in terms of the Mine Health and Safety Act.				
Extent	Local				Activity causing the impact
Duration	Long				Earth moving equipment and vehicles (trucks).
Probability	Definite				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	IMPACTS				CUMULATIVE IMPACTS
12. ARCHAEOLOGICAL AND CULTURAL SITES					
Nature of the impact	The terrain is not archaeologically vulnerable. It is unlikely that the proposed development will result in any significant archaeological impact at the site.				
Extent	Site				Activity causing the impact
Duration	Permanent				
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X			

ASPECT	IMPACTS				CUMULATIVE IMPACTS
13. SENSITIVE LANDSCAPE					
Nature of the impact	No sensitive landscapes identified.				
Extent	Not applicable				Activity causing the impact
Duration	Not applicable				
Probability	Not applicable				
Significance	Not applicable				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	

ASPECT	IMPACTS				CUMULATIVE IMPACTS
14.VISUAL ASPECTS					
Nature of the impact	Prospecting will only be visible to the neighbours living there. The operation is not visible to from any tourist road.				
Extent	Site				Activity causing the impact
Duration	Long				Diamond prospecting operation.
Probability	Definite				
Significance	Low				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	IMPACTS				CUMULATIVE IMPACTS
15. SOCIO ECONOMICS					
Nature of the impact	Increase in Socio – economic activity at local level. The project in itself would ensure that approximately 5 workers would be assured of a job for some time. Job creation plays a major role in increasing the economic wellbeing of employees and their dependants in the Rustenburg district. Once all prospecting operations have ceased it would definitely have a negative impact.				The increase in socio-economic activity will add to the current growth and development in Rustenburg already created by industry and prospecting.
Extent	Local				Activity causing the impact
Duration	Long				Additional employment opportunities created.
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	IMPACTS				CUMULATIVE IMPACTS
15. SOCIO ECONOMICS					
Nature of the impact	The main impact on the landowners is visual impact and the small area of 0.7 ha at a time that will not be available for agricultural activities at any given time for 5 years. The applicant is also the landowner.				The economic benefits in terms of investment and the delivery of services in the North West province will get an additional benefit from the project.
Extent	Regional				Activity causing the impact
Duration	Very Long				
Probability	High				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT 16. INTERESTED & AFFECTEDPARTIES	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact	Impact of activities on I&AP's Temporary loss of utilization of the prospecting focus areas for agricultural purposes. The long-term benefits far out-weight the current benefits from the current use. Loss of cattle due to falling of animals in mine workings if not fenced. No negative impact is expected that could be appropriately mitigated, such as the eventual rehabilitation of the excavations.				
Extent	Local				Activity causing the impact
Duration	Long				
Probability	High				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

vii) 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)

In terms of the EIA regulations, consideration must be given to alternatives. Alternatives are different approaches and ways of meeting the need, purpose and objectives of a proposed activity. Alternatives may include a location site alternative, activity alternatives, processes or technology alternatives, temporal alternatives etc. the no-go alternative or option is also considered, as it provides the baseline against which the impacts or other alternatives may be compared. However, for this specific project, no alternatives have been investigated, with the exception of the no-go alternative. The reason for this being that the prospecting right is being applied for the sole purpose of mining Sample ore. The no-go option entails the continuation of the current land use (natural grazing) on the study site. The project will contribute towards providing continued jobs for current staff. Should the proposed project therefore not be authorized to proceed, it is anticipated that current employment opportunities will be terminated once the mineral reserves have been depleted.

The no-go option is therefore not a feasible option in this case, as it suggests that the mineral reserves should not be exploited and current employment opportunities should not materialize or be prolonged.

See **Point vi)** for more detail.

viii) 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).

Refer to the results of consultation contained as **Appendix 2** for the issues that were raised by I&AP's and stakeholders during the review period of the Consultation phase of the Scoping Report, as well as the response to those issues made by the Environmental Assessment Practitioner.

The mitigation measures and technical management action plans which address potential impacts are discussed below.

Environmental Component	Geology
Environmental Management/Mitigation Measures/Action Plans/Commitments	
• No mitigation exists except to backfill the excavations with the rock waste material and fine tailings. • As prospecting progressed and the excavation has been back-filled, a certain amount of overburden material and topsoil would be placed on these areas. This will not restore the geology, but will mitigate the impact. • Planned, systematic and thorough prospecting of the mineral resource (PGM's, Phosphates, Nickel, Chrome, Manganese & Vanadium) should take place. • Optimal utilization of the mineral resource should take place within the boundaries of the prospecting terrain. • Strip, remove and store soil and overburden as far as practical in an orderly fashion and replace as far as possible on back-filled areas, in the reverse order once decision have been taken that no further prospecting would take place in a particular section or which might still be traversed by vehicles and disturbed in the process. Cognisance should be taken of the fact that bulk sampling would take place by means of an opencast mining method until such level is reach / cut-off point is reach where rehabilitation could begin. • Care must be taken that the removal of alluvial deposits by means of earthmoving equipment is restricted to what is really necessary to achieve the objective.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
Optimal exploration of the mineral resource in order to ensure to facilitate better rehabilitation planning. The overburden and topsoil (where available) must be replaced in a responsible and planned manner in order to achieve some conformity with the surrounding undisturbed area.	

Environmental Component	Topography
Environmental Management/Mitigation Measures/Action Plans/Commitments	
• All trenches should be back-filled with waste tailings material and eventually overburden material, covered with a shallow layer of topsoil (if available). • Access to all active bulk sampling excavation areas should be controlled. The active bulk sampling area should be fenced off. The necessary warning signs should be put in place. All prospecting activities should be restricted to the fenced-off area. • Surface run-off control should be put in place at active trenches (preventing water from entering) and also rehabilitated tailings dumps and overburden dumps in order to prevent the loss of growth medium on top of the dumps. Prospecting would be done according to a definite PWP (only disturbing an area that is really necessary). As part of the PWP the handling of tailings material, overburden material, construction of dumps and back-filling of trenches should also form part of it. Rehabilitation of the new topographical landscape in such a way that it would blend in with the surrounding landscape and allow normal surface drainage to continue. As soon as a section of the prospecting site would not be explored anymore it should be rehabilitated (planned and phased manner).	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
Rehabilitation of the new topographical landscape in such a way that it would blend in with the surrounding landscape and allow normal surface drainage to continue. Rehabilitation in such a way that the new landscape features would be stable and would not pose any safety hazard to human and animal anymore.	

Environmental Component	Soil (topsoil & access roads)
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Handling of topsoil as a natural resource: Any future expansion of the trenches or construction of infrastructure should be preceded by the removal of all available topsoil. The surface of any new areas to be disturbed must be kept to a minimum. All available topsoil/overburden material should be removed and stockpiled for rehabilitation purposes. **Access roads, etc:** The clearing of soil surface areas would be restricted to what is really necessary for the construction of infrastructure. Wherever possible all topsoil should be removed and stockpiled for rehabilitation purposes. Overburden material should also be stockpiled separately if practically possible. Topsoil and overburden material should be transported to an area earmarked for rehabilitation.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
The topsoil removed in the site preparation process should be replaced during the rehabilitation exercise.	

Environmental Component	Soil (soil compaction)
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Soil compaction: The prospecting operation should only be restricted to what is really required (demarcated area of exploitation) within the fenced-off area. **Access roads** towards the sites would be restricted only to the roads (exiting farm roads & roads established in consultation with the surface owner). No land would be disturbed unnecessarily. Prospecting& rehabilitation should be done in a well-planned manner (according to a PWP) and in the process ensuring that activities are only restricted to surface areas really required.	

Compaction of soil surface areas would be alleviated once rehabilitation of certain area starts. Certain roads would probably remain for access (in consultation with the surface owner). Those that would not be required would be ripped and rehabilitated.
EMP Performance Assessment & Monitoring Reporting
To be included in EMP/EIA.
Closure Objective
Alleviation of compaction of soils would be done during rehabilitation of the prospecting terrain, including roads.

Environmental Component	**Soil (Soil erosion)**
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Soil Erosion: To take preventive steps against land disturbance like erosion. Implement and maintain cut-off trenches/berms to prevent erosion. **Re-vegetation of exposed soil surfaces** (man-made surfaces on tailings dumps, overburden dumps, disturb surfaces in excavated sites, roads, etc) should happen as soon as a particular activity has ceased in order to act as a sufficient erosion prevention measure.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
No soil erosion must be visible and no potential for soil erosion must be present at closure.	

Environmental Component	**Soil (Soil contamination)**
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Potential for soil contamination: Vehicles to be inspected to ensure no oil and hydraulic fluid leaks occur. All oil spills on soil to be removed and bio-remediate immediately (certain commercial products are available such as Terrasorb or it could be rehabilitated by means of the application of fertilizer and turn with a spade from time to time in order to enhance the natural occurring soil microbial activity). No servicing of vehicles must occur except on a concrete floor or over PVC lined area in an area allocated for that. Training w.r.t pollution hazards and their impact on the environment must be given as part of induction training. An incidence register for this purpose must be kept. Drip trays must be available and used where emergency repairs is done.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
No soil contamination must be visible or known before closure can be given.	

Environmental Component	**Soil (Soil structure)**
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Change in Soil structure: Ensure that all available (if any) topsoil is carefully removed in different areas. The soil must also be compacted as backfilling is done. No unnecessary driving outside the active prospecting area is allowed due to soil compaction that may occur. Use organic material e.g. manure to restore the soil structure during rehabilitation. Ensure that the rehabilitation plan makes provision for ripping of roads and spreading of organic material and that this is used during rehabilitation.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
No compaction of any roads or any other area must be present during closure. If the soil structure is disturbed mitigation measures e.g. the use of organic material, lime and fertilizers must be implemented to restore the soil structure.	

Environmental Component	**Soil (Soil fertility)**
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Soil fertility: Little can be done to preserve the moisture status of the soil once it is exposed. The soil must be used for rehabilitation as quickly as possible. The soil on the rehabilitated area must be analysed to determine the deficiencies and fertilizer and lime must be ploughed into the soil to restore its fertility, if necessary. Ensure that stockpiled soil is kept clean and where possible ensure that the topsoil is treated with organic material and fertilized. Do not use stockpiled soil for any other purpose but for rehabilitation.	

Do not use topsoil to construct roads. Ensure the rehabilitation plan makes provision for fertiliser. Make sure rehabilitated topsoil is analysed in a laboratory. The type of fertilizer would depend on a soil analyses and fertilizer recommendation.
EMP Performance Assessment & Monitoring Reporting
To be included in EMP/EIA.
Closure Objective
The soil must be fertile enough to sustain vegetation.

Environmental Component	**Land Capability**
Environmental Management/Mitigation Measures/Action Plans/Commitments	
The disturbance of land must be restricted (kept to a minimum) to the planned fenced-off, active prospecting site only. Remove topsoil where it is available. Take care that roads needed are restricted to one entry to the area for prospecting purposes. If new land is used for roads to enter the area it must be done in consultation with the surface owner. All rehabilitation will be done according to the final rehabilitation plans after approval by the Department of Mineral Resources (DMR). Topsoil will be placed in areas where it was removed and the areas will be re-vegetated accordingly. Ensure that the rehabilitation plan is implemented.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
Rehabilitated to the state that it is suitable for the predetermined and agreed land capability.	

Environmental Component	**Land Use**
Environmental Management/Mitigation Measures/Action Plans/Commitments	
The disturbance of land must be restricted (kept to a minimum) to the planned active, fenced-off prospecting site only. Remove topsoil where it is available. Take care that roads are the only areas used to enter the area for prospecting purposes. If new land is used for roads to enter the area it must be done in consultation with surface owner. All rehabilitation will be done according to the final rehabilitation plans after approval by the Department of Mineral Resources (DMR). Topsoil will be placed in areas where it was removed and the areas will be re-vegetated accordingly. Ensure that the rehabilitation plan is implemented.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
The opencast section requires the land to be totally disturbed. The replacement of tailings material, overburden and topsoil would ensure that the land is able to support some grazing.	

Environmental Component	**Vegetation**
Environmental Management/Mitigation Measures/Action Plans/Commitments	
No mitigation exists except to replace the vegetation by reseeding of grasses and natural growth. Prospecting should be done in a well-planned manner (according to a PWP) and in the process ensuring that activities are only restricted to surface areas really required.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
During rehabilitation indigenous vegetation cover comprising of local plant species should be established in order to ensure a well-adapted sustainable plant cover that would be able to prevent erosion of the replaced topsoil on the disturbed prospecting site exposed surfaces, tailings dumps, etc.).	

Environmental Component	**Vegetation**
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Habitat change, loss of species, spread of alien and invasive species: No mitigation exists except to replace the vegetation by reseeding of grasses. Prospecting should be done in a well-planned manner (according to a PWP) and in the process ensuring that activities are only restricted to surface areas really required. ***Develop and implement an invasive and alien control programme to control the spread of weeds and other invasive species.*** Eradicate exotic weeds and invader species if it invades the terrain. All illegal invader plants and weeds shall be eradicated as required in terms of Regulation 15 & 16 of the Act on the Conservation of Agricultural Resources, 1983 (Act no. 43 of 1983) which list the plants. An invasive and alien control programme must be implemented by the mine.	

EMP Performance Assessment & Monitoring Reporting
To be included in EMP/EIA.
Closure Objective
No invasive and alien species must be present after closure. A post-closure control program must also be implemented.

Environmental Component	Vegetation
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Ensure that all roads on the prospecting site (utilized by prospecting vehicles) are daily sprayed with water to control dust. Site inspections to ensure the spraying are done.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
No excessive dust must be present during the normal growth season after closure.	

Environmental Component	Wildlife (habitat)
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Wildlife or wildlife habitat destruction /change / disturbance : To take care that no new or unnecessary destruction of habitats, other than the demarcated prospecting site should take place. **Restoration of habitat:** Ensure the rehabilitation plan is implemented.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
The animal life habitat must be restored after decommissioning. Success will be measured against the extent to which the animals return to the area.	

Environmental Component	Wildlife (injury and death)
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Injury and death to wildlife: Re-establish trees and grass cover as soon as possible during and after prospecting. Fence area off to ensure that no person can enter without permission. Ensure that the rehabilitation plan is compiled and executed. Keep incidence register on killings and disturbances.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
The animal life habitat must be restored after decommissioning. Success will be measured against the extent to which the animals return to the area.	

Environmental Component	Wildlife
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Make game catching, traps, snares, poaching and any other unnecessary disturbance of animals a disciplinary offence. All staff must undergo basic environmental awareness lecture during induction training. Machine operators and drivers to undergo appropriate level of environmental impact training to ensure they understand their impact on the environment. Ensure all staff working on the opencast section undergo basic lecture during induction phase. Introduce the actions as listed above into disciplinary code as offence.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
The post-closure phase must be suitable for further restoration of the newly man-made animal habitat. The area must be stable and acceptable for the return of animal- and plant life.	

Environmental Component	Surface Water (quality)
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Change in surface water quality:	

Storm water control measures must be implemented to divert clean water away from the active prospecting site and keep contaminated water contained. Water control structures must be well designed and constructed to ensure a minimum down wash of topsoil. Vegetation disturbance must be as little as possible. The PWP must be strictly adhered to. Re-vegetation to be done as quickly as possible. Final re-vegetation to be done as per rehabilitation plan.
EMP Performance Assessment & Monitoring Reporting
To be included in EMP/EIA.
Closure Objective
The post closure water run-off may in no circumstance impact negatively on the water quality.

Environmental Component	**Surface Water (quantity)**
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Change in surface water quantity: Once the area is rehabilitated the surface run-off will be restored and normal clean water run-off will end-up in the drainage system. Once the area is rehabilitated the normal surface run-off drainage will be restored according to rehabilitation plan. The disturbed surface area must be rehabilitated to ensure some normal drainage. Minimal run-off should end-up in trenches. Final rehabilitation will be done according to the final rehabilitation plans after approval by the Department of Mineral Resources.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
Ultimately rehabilitation of the disturbed prospecting site and the construction of run-off control structures in a planned and phased manner would ensure normal drainage and stability of rehabilitated site.	

Environmental Component	**Ground Water (quality)**
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Reduction of groundwater quality: Storm water control measures must be implemented to divert clean water away from the site and keep (silt) contaminated water contained. Vehicles to be inspected to ensure no oil and hydraulic fluid leaks occur. All oil spills on soil to be removed and bio-remediate immediately. No servicing of vehicles must occur except at the workshops. Training w.r.t pollution hazards and their impact on the environment must be given as part of induction training. Storage of fuel and oil should be done according to best practices, within a bunded area and in containers of which the integrity is sound. The prospecting processes will not introduce any harmful or toxic substances and the most likely sources of pollution to the groundwater system would be associated with the infrastructure and / or workshop area. The most likely contaminants is therefore nitrate and bacteria (from sewage / pit latrines), as well as hydrocarbons (from vehicle accidents, diesel storage and the workshop area). An incidence register for this purpose must be kept. Drip trays must be available and used where emergency repairs is done. All waste must be stored according to best practices and disposed at an authorized waste disposal facility.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
Post water quality need to indicate a positive trend/improvement.	

Environmental Component	**Ground Water (quantity)**
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Reduction of groundwater quantity, lowering of groundwater level: Water levels in the boreholes that are used for prospecting activities should be recorded monthly. Water volumes should be recorded continuously to ensure compliance with the water use authorization for abstraction.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
Post water quality need to indicate a positive trend/improvement.	

Environmental Component	Air Quality
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Dust: The prospecting method will serve as mitigation measure because prospecting will limit dust to the active prospecting area (area where the excavator and the trucks are operating). Daily spraying of roads with water. Inspection should be done on a daily basis. If new roads are constructed, in coordination with surface owner, dust pollution must be mitigated by means of spraying the roads with water.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
Dust count must be the same as before prospecting. Rehabilitation of the bulk sampling site would ensure that no dust is generated from exposed surfaces.	

Environmental Component	Noise
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Ensure the required silencers are placed on all engines and compressors. No mitigation to reverse hooters is allowed due to safety standards. Inspection of vehicles and machinery to ensure silencers are fitted. Ensure that a complaints register is created, managed and maintained. Vehicles and earthmoving equipment should be equipped with the necessary silencers and regularly maintained in a good working condition.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
No noise attributed to prospecting will be generated from the site after closure anymore. During decommissioning and closure phase some earth moving equipment and trucks would be utilized for rehabilitation.	

Environmental Component	Archaeological and Cultural Sites
Environmental Management/Mitigation Measures/Action Plans/Commitments	
No graves were identified on site. All grave yards need to be avoided if found. However, the potential occurrence of unmarked graves or subsurface finds not recorded during this survey can never be excluded, so it is advised that SAHRA and a qualified archaeologist are informed immediately if archaeological objects are uncovered.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
No site of archaeological importance should be disturbed or damaged until the necessary permit from SAHRA has been issued.	

Environmental Component	Sensitive Landscapes
Environmental Management/Mitigation Measures/Action Plans/Commitments	
None	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	

Environmental Component	Visual Aspects
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Visual impact would be addressed by means of; * re-vegetation of disturbed areas with grasses; * Removal of any temporary building, scrap, domestic waste, etc. that would otherwise contribute to a negative visual impact. Concurrent rehabilitation should be done simultaneously as prospecting activities progress.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	

Closure Objective
No residual visual impacts will remain after closure. The terrain should blend in with the surrounding landscape.

Environmental Component	Socio-Economics
Environmental Management/Mitigation Measures/Action Plans/Commitments	
There will be a very small increase in Socio – economic activity at local level, because of the size of this prospecting activity.	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
The economic development must deliver a multiplier effect that will contribute to the local economy long after closure.	

Environmental Component	Interested and Affected Parties
Environmental Management/Mitigation Measures/Action Plans/Commitments	
Access control should always be a priority. Active prospecting site should be fenced off and also any deep water holes. If any problem should arise, meetings will be held with the landowners and affected parties to consult them on certain matters like permission to prospect and pollution. No prospecting should be conducted under or near Eskom power line (10 m distance should be kept) *(Permission of Inspector of Mines should be obtained.)*	
EMP Performance Assessment & Monitoring Reporting	
To be included in EMP/EIA.	
Closure Objective	
Not to be an economic, social or environmental liability to the local community or the state now or in the future. The company will ensure that the interest of all interested and affected parties will be considered.	

ix) Motivation where no alternative sites were considered.

Alternative is not applicable. The current land use is agricultural and is being utilized as natural grazing by the landowner. The option to explore the possibility for mining is already in itself an alternative land use. The applicant, **Bila Civil Contractors (Pty) Ltd**, is not interested in any other alternative land use over this land aside of sample exploration, or any other activity, or method use other than prospecting for sample ore in the conversional way, which is the most cost effective.

Please note that no additional infrastructure will be established, and therefore no alternatives for the location of infrastructure were identified.

x) Statement motivating the alternative development location within the overall site. (Provide a statement motivating the final site layout that is proposed)

The prospecting operation will not be a static operation, the mobile plant will move as prospecting progress, thus the whole application is to determine a potential site for when the mining phase is reached. The feasibility of mining the diamond material from an environmental, social and economic perspective also plays a role.

h) Full description of the process undertaken to identify, assess and rank the impacts and risks the activity will impose on the preferred site (In respect of the final site layout plan) through the life of the activity.

(Including (i) a description of all environmental issues and risks that are identified during the environmental impact assessment process and (ii) an assessment of the significance of each issue and risk and an indication of the extent to which the issue and risk could be avoided or addressed by the adoption of mitigation measures.)

ASPECT	**IMPACTS**				**CUMULATIVE IMPACTS**
1. GEOLOGY					
Nature of the impact	Geology deposits will be destroyed during the opencast prospecting operation. During operation which will be for the next 5 years, the mineral resource (***various minerals)*** will be extracted from alluvial deposits. Waste rock material/overburden material is disposed off/backfilled in existing excavations as part of the prospecting process.				
Extent	Site				Activity causing the impact
Duration	Permanent				An opencast prospecting method will be used to extract bulk samples. Therefore the original geology will be totally destroyed.
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
2. TOPOGRAPHY					
Nature of the impact	* **Change in landform :** * The prospecting site is situated on: level plains some relief. * **Disturbance of the surface drainage:** The prospecting of the minerals will result in the creation of trenches (3 x 3 m or less), that act as depressions in the environment that captures run-off. Prospecting activities will be concentrated as indicated on **Appendix** 1 on the application area (approximately 10 m depth). Normal surface drainage will be disturbed at a given point. Run-off if any will be diverted away from the specific site.				
Extent	Site				Activity causing the impact
Duration	Very long to Permanent				Bulk sampling trough trenches, etc.
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

3. SOIL	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact	The surface area is characterized by various soil depths. Any construction of infrastructure should be preceded by the removal of all available topsoil.				
Extent	Site				Activity causing the impact
Duration	Long				In the process of removing topsoil the soil layers are mixed and the structure may be disturbed.
Probability	High				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

3. SOIL	**IMPACTS**	**CUMULATIVE IMPACTS**
Nature of the impact	The establishment, construction, operation and eventually rehabilitation (demolition) of listed structures such as the access roads, stockpiles /tailings dumps, cause compaction of soil. All prospecting activities will be concentrated on the identified prospecting focus area where alluvial deposits could be found. In the same time a certain surface area is therefore alienated. The active prospecting surface area (alienated) would be restricted within the ±0.7 ha at any given time (in relation tp area of application of the prospecting right of 2011 ha) for the next 5 years.	
Extent	Site	Activity causing the impact
Duration	Long	Site preparation for additional prospecting sites and

Probability	High				the construction, operation of listed infrastructure.
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	
ASPECT	**IMPACTS**				**CUMULATIVE IMPACTS**
3. SOIL					
Nature of the impact	Soil erosion: Due to the fact that certain surface areas would become compacted and this would lead to lesser infiltration of rainwater and more run-off that could cause erosion on bare disturbed surfaces. Erosion would always be possible until such time a vegetation cover is provided during rehabilitation phase.				
Extent	Site				Activity causing the impact
Duration	Very short				When removing topsoil during site preparation, little storm water control structures are in place. If a severe storm hits the area, it may lead to erosion on site. Topsoil stockpiles may be prone to erosion due to lack of vegetation cover. Water control structures may fail or severe rainstorms may cause excessive run-off. Surface compaction due to activities taking place.
Probability	Very low				
Significance	Low				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	**IMPACTS**				**CUMULATIVE IMPACTS**
3. SOIL					
Nature of the impact	Potential of soil contamination.				None.
Extent	Site				Activity causing the impact
Duration	Long				Vehicle/equipment breakages and oil/lubricant /diesel spills may contaminate soil.
Probability	Moderate				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	**IMPACTS**				**CUMULATIVE IMPACTS**
3. SOIL					
Nature of the impact	Loss of soil structure				None
Extent	Site				Activity causing the impact
Duration	Long				In the process of removing topsoil the soil layers are mixed and the structure may be disturbed.
Probability	High				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	**IMPACTS**				**CUMULATIVE IMPACTS**
3.SOIL					
Nature of the impact	Loss of soil fertility				None
Extent	Site				Activity causing the impact
Duration	Short				The mixing of soil during site preparation, compaction and potential pollution (spillages form oil etc.) all may cause this situation.
Probability	Definite				
Significance	Low				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	**IMPACTS**	**CUMULATIVE IMPACTS**
4.LAND CAPABILITY		
Nature of the impact	**Temporary loss of land capability.** The small area (0.7 ha) where the active prospecting activities occur (trenches, stock piles, prospecting equipment) etc. will thus be temporary alienated, until the area is rehabilitated. All trenches would be rehabilitated as part of the prospecting process during which trenches are back-filled. The rest of the application area will still be used by the landowner as agricultural land.	
Extent	Site	Activity causing the impact

Duration	Long				Site preparation for additional prospecting sites and the construction, operation of listed infrastructure, the land capability of the active prospecting area will be totally destroyed.
Probability	Definite				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	
ASPECT	**IMPACTS**				**CUMULATIVE IMPACTS**
5. LAND USE					
Nature of the impact	This is a not a new prospecting operation and therefore will not really loose its land use as it has already been disturbed by mining activities on the applied portions of the 2011 ha during the next 5 years. Only a small portions of land (0.7 ha at a time) would be affected by the prospecting operation relation to the total prospecting right application area of 2011 ha. All trenches would be rehabilitated as part of the prospecting process during which excavations are back-filled.				
Extent	Site				Activity causing the impact
Duration	Long to permanent				Site preparation for prospecting and the construction, operation of listed infrastructure
Probability	Definite				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	**IMPACTS**				**CUMULATIVE IMPACTS**
6.VEGETATION					
Nature of the impact	Vegetation clearance, disturbance and trampling. Destruction of habitats for vegetation. Due to a disturbed ecosystem, bare ground and spreading of exotics can follow.				
Extent	Site				Activity causing the impact
Duration	Long				The site preparation for new sites, construction of listed infrastructure will cause destruction of habitats for vegetation. Due to a disturbed ecosystem, bare ground and invasion of exotics could further spread. The vegetation needs to be cleared to remove the topsoil.
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	**IMPACTS**				**CUMULATIVE IMPACTS**
6.VEGETATION					
Nature of the impact	Habitat change, loss of species, spread of alien and invasive species.				
Extent	Site				Activity causing the impact
Duration	Permanent				The change in the current habitat will be mitigated during final rehabilitation.
Probability	High				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	**IMPACTS**				**CUMULATIVE IMPACTS**
6.VEGETATION					
Nature of the impact	Dust coverage of plants.				None
Extent	Site				Activity causing the impact
Duration	Long				Heavy trucks and other vehicles on dirt roads, stockpiling, dumping of tailings are mainly responsible for this impact.
Probability	High				
Significance	Low				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	**IMPACTS**				**CUMULATIVE IMPACTS**
7. WILDLIFE					
Nature of the impact	Wildlife or wildlife habitat destruction /change / disturbance.				None
Extent	Site				Activity causing the impact
Duration	Permanent				The flora which normally serves as habitat for animals would be destroyed during site preparation. The increase in activity will temporarily scare other animals. The area will serve as a new habitat after rehabilitation.
Probability	Very High				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
7. WILDLIFE					
Nature of the impact	Injury and death to wildlife.				None
Extent	Site				Activity causing the impact
Duration	Short				The movement of vehicles may kill certain insects, rodents and possible birds. Most of the remaining animal life will however move away due to noise.
Probability	Very low				
Significance	Low				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
7. WILDLIFE					
Nature of the impact	Restoration of habitat.				None
Extent	Site				Activity causing the impact
Duration	Short				As rehabilitation progresses the habitat of certain species will be restored/created (Closure objective) Animals will probably only move back when human movement is limited.
Probability	Low				
Significance	Low				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	IMPACTS				CUMULATIVE IMPACTS
8. SURFACE WATER					
Nature of the impact	Increased silt load. Clearing topsoil for footprint areas can increase infiltration rates of water to the groundwater system and decrease buffering capacity of soils to absorb contaminants from spills on surface. This can increase the risk of contamination of the groundwater system (increases aquifer vulnerability.				
Extent	Local				Activity causing the impact
Duration	Short				"Dirty / Clean" water systems at facilities like the overburden dumps, roads, trenches, etc. may impact on the quality of the surface water. The water should be contained in the surface runoff control measures provided therefore.
Probability	Moderate				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
8. SURFACE WATER					
Nature of the impact	Change in surface water quality. Spillages from vehicles and also surface water run-off that is not adequately diverted away from the active prospecting excavations could end-up in the excavations creating problems regarding water quality and hindering the prospecting process. Surface run-off from active prospecting sites (overburden dumps & tailings dam/dump) if not adequately contained on site could end-up in the adjacent undisturbed natural veld. If the natural surface run-off is not adequately diverted in the case of the dry-water course area, prospecting sections it could become silted-up.				
Extent	Local				Activity causing the impact
Duration	Short				"Dirty / Clean" water systems at facilities like the overburden dumps, roads, trenches, etc. may impact on the quality of the surface water. The water should be contained in the surface runoff control measures provided therefore.
Probability	Moderate				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS	CUMULATIVE IMPACTS
8. SURFACE WATER		
Nature of the impact	Change in surface water quantity: **Water management area (3) : Crocodile (West) and Marico. Stream name: The mine falls under the primary drainage region C22 and in quaternary sub-catchment C22F.** Notwithstanding the above-mentioned facts, it is not expected that prospecting operations will have any effect on the boundaries or the general water flow of the catchment. Standing water in trenches could as the result of rain/ surface run-off ending up in shallow depressions.	
Extent	Site	Activity causing the impact
Duration	Long	It is an operational objective to contain or divert all

Probability	High				surface run-offs from the active prospecting trenches area mainly due to pollution (sediment) potential. This will reduce the run-off quantity, although small in comparison with the drainage area in total.
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X		

ASPECT	IMPACTS				CUMULATIVE IMPACTS
9. GROUND WATER					
Nature of the impact	Reduction of groundwater quality Prospecting activities are not likely to impact on local ground-water quality. No chemicals area used during the prospecting process. Handling of waste and transport of building material can cause various types of spills (domestic waste, pit latrines, hydrocarbons) which can infiltrate and contaminate of the groundwater system.				
Extent	Site				Activity causing the impact
Duration	Long				
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

9. GROUND WATER					
Nature of the impact	Even though abstraction is likely to have a minimal effect on the surrounding groundwater users, this is a new use, and groundwater levels are expected to continue current trends. Groundwater will be abstracted for potable water supply and prospecting processes. The volume of water needed is small (12 000 Lit/hr) in comparison to other water use and will have a small impact on the surrounding aquifer.				
Extent	Site				Activity causing the impact
Duration	Long				Opencast prospecting operation.
Probability	Low				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	IMPACTS				CUMULATIVE IMPACTS
10. AIR QUALITY					
Nature of the impact	Dust will be generated during the prospecting operation (loading with an excavator on to a dump truck) and transportation to the plant (conveyor, drum screen/crusher) and on gravel/dirt/farm roads. The processing of the gravel is a wet process and therefore minimum dust is generated.				
Extent	Site				Activity causing the impact
Duration	Long				Initial construction work with regard to infrastructure (roads) that involves earth moving equipment. During the phase 2, dust could be generated as indicated during prospecting.
Probability	Moderate				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT	IMPACTS				CUMULATIVE IMPACTS
11. NOISE POLLUTION					
Nature of the impact	Noise will be generated during the prospecting operation (loading with an excavator on to a dump truck) and transportation to the plant (conveyor, drum screen/crusher). The mine itself is located in rural landscape. The impact would be of more importance regarding the direct worker environment that should adhere to the requirements in terms of the Mine Health and Safety Act.				
Extent	Local				Activity causing the impact
Duration	Long				Earth moving equipment and vehicles (trucks).
Probability	Definite				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT 12. ARCHAEOLOGICAL AND CULTURAL SITES	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact	The terrain is not archaeologically vulnerable. It is unlikely that the proposed development will result in any significant archaeological impact at the site.				
Extent	Site				Activity causing the impact
Duration	Permanent				
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X			

ASPECT 13. SENSITIVE LANDSCAPE	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact	No sensitive landscapes identified.				
Extent	Not applicable				Activity causing the impact
Duration	Not applicable				
Probability	Not applicable				
Significance	Not applicable				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	

ASPECT 14.VISUAL ASPECTS	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact	Prospecting will only be visible to the neighbours living there. The operation is not visible to from any tourist road.				
Extent	Site				Activity causing the impact
Duration	Long				Diamond prospecting operation.
Probability	Definite				
Significance	Low				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT 15. SOCIO ECONOMICS	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact	Increase in Socio – economic activity at local level. The project in itself would ensure that approximately 5 workers would be assured of a job for some time. Job creation plays a major role in increasing the economic wellbeing of employees and their dependants in the Rustenburg district. Once all prospecting operations have ceased it would definitely have a negative impact.				The increase in socio-economic activity will add to the current growth and development in Rustenburg already created by industry and prospecting.
Extent	Local				Activity causing the impact
Duration	Long				Additional employment opportunities created.
Probability	Definite				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT 15. SOCIO ECONOMICS	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact	The main impact on the landowners is visual impact and the small area of 0.7 ha that will not be available for agricultural activities at any given time for 5 years. The applicant is also the landowner.				The economic benefits in terms of investment and the delivery of services in the North West province will get an additional benefit from the project.
Extent	Regional				Activity causing the impact
Duration	Very Long				
Probability	High				
Significance	Moderate				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

ASPECT 16. INTERESTED & AFFECTEDPARTIES	IMPACTS				CUMULATIVE IMPACTS
Nature of the impact	Impact of activities on I&AP's Temporary loss of utilization of the prospecting focus areas for agricultural purposes. The long-term benefits far out-weight the current benefits from the current use. Loss of cattle due to falling of animals in mine workings if not fenced. No negative impact is expected that could be appropriately mitigated, such as the eventual rehabilitation of the excavations.				
Extent	Local				Activity causing the impact
Duration	Long				
Probability	High				
Significance	High				
Phase responsible for the impact	Phase 1	Phase 2	Phase 3	Closure	
		X	X	X	

i) Assessment of each identified potentially significant impact and risk

(This section of the report must consider all the known typical impacts of each of the activities (including those that could or should have been identified by knowledgeable persons) and not only those that were raised by registered interested and affected parties).

NAME OF ACTIVITY (E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc...etc...etc E.g. For mining ,- 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 (Including the potential impacts for cumulative impacts) (e.g. dust, noise, drainage, surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc. etc...)	ASPECTS AFFECTED	PHASE In which impact is anticipated	SIGNIFICANCE if not mitigated	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)	SIGNIFICANCE if mitigated
Excavations for gravel and stone	1.1 Removal of the sample ore up to 10m. Disturbance of 0.5 hectare at any given time.	Geology & soil	Operational	High -	The bulk of the material mined will be sold. The impact will be mitigated by sloping the sides and stabilizing the soil to prevent erosion	Low +
	1.2 Change in landform. The entire prospecting area will be lowered by 10m and normal surface drainage will be disturbed at this specific point. The pit will be backfilled	Topography	Operational and closure	Moderate -	The pit will be backfilled. The sides will be sloped and top soiled and vegetated. A surface water cut-off trench should be put in place around the active prospecting site in order to prevent surface run-off water on the prospecting site. Rehabilitation of the new sloped landscape in such a way that it would blend in with the surrounding landscape.	Moderate +
	1.3 Stripping of all available topsoil and stockpiled. Stockpile and plant area of 0.5 hectare at any given time.	Soil	Construction and Operational	Low -	Any area on the prospecting area where disturbance will take place the top soil must be removed and stockpiled for rehabilitation purposes in a demarcated area.	Low +
	1.4 Soil erosion: Due to the fact that certain surface areas would become devoid of any vegetation cover and compacted this would lead to lesser infiltration of rain water and more run-off that could cause erosion on bare disturbed areas and side slopes	Soil	Construction	Low-	To take preventive steps against erosion. Implement and maintain cut-off trenches and or berms around the prospecting area to prevent water entering that can cause erosion. Concurrent rehabilitation and re-vegetation of mined areas must happen as soon as the particular area is mined out. Rehabilitated areas must be inspected and managed in such a way that any signs of erosion can be mitigated immediately.	Low +
	1.5 Land capability and land use. Loss of land to support grazing.	Land capability & Land use	Operational and closure	Low-	As this is only a very small area of 1 hectare, the impact is not so big. As the excavation will be backfilled and vegetated the rehabilitated area must be treated as sensitive when grazed as overgrazing can trigger erosion and infiltration of declares weeds.	
	1.6 Generation of dust by excavating and vehicle movement	Air quality	Operational	Low -	The prospecting method will serve as mitigation measure because it will limit dust to the active prospecting area, where the excavator and trucks operating. Daily spraying of the roads with water	

j) Summary of specialist reports.

(This summary must be completed if any specialist reports informed the impact assessment and final site layout process and must be in the following tabular form):-

LIST OF STUDIES UNDERTAKEN	RECOMMENDATIONS OF SPECIALIST REPORTS	SPECIALIST RECOMMENDATIONS THATHAVE BEEN INCLUDED IN THE EIA REPORT (Mention X where applicable)	REFERENCE TO APPLICABLE SECTION OF REPORT WHERE SPECIALIST RECOMMENDATIONS HAVE BEEN INCLUDED.
Heritage Resources	N/A already disturbed by agriculture.	X	See page 16 & 17
Biodiversity/Ecological Impact	See vegetation report attached **as Appendix 4. No recommendations**	X	See appendix 4
Wetland Delineation	N/A no open water or wetlands within 2km radius.	X	See page 16 & 17

k) Environmental impact statement

(i) Summary of the key findings of the environmental impact assessment;

The small scale sample ore prospecting operation is definitely going to have an impact on the environment.
The main impact relates to topography, geology, soil, vegetation, and land use and land capability.

The mineral resource will be prospected over a period of 5 years.
The existing land-use is agriculture, grazing land and previously disturbed.
This is a small operation and for the next 5 years only a small portion of the farm will be temporarily alienated.

The conservation of topsoil is of utmost importance and therefore in order to ensure a sustainable land use again on the 1 ha, the top at least 30 cm topsoil need to be removed prior to mining of the underlying alluvial gravel (up to 10 m depth). This will be used again as growth medium during the rehabilitation phase of the quarry. Topsoil will be stored in berm walls on the border of the quarry in order to divert any surface run-off during a rainfall event.

Other environmental impacts relates to the day to day operation that could easily be managed, such as dust and noise.

(ii) Final Site Map

Provide a map at an appropriate scale which superimposes the proposed overall activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers.

Attach **as Appendix 1 (a) –** Infrastructure Map.

(iii)Summary of the positive and negative impacts and risks of the proposed activity and identified alternatives;

The site is selected in such a way that farming (grazing of cattle) will still be possible on the rest of the farm. The loss of land use and land capability will be temporary as the site will be rehabilitated in such a way that it allows the establishment of a grass cover again. The rest of the farm will still be continued to be used for grazing for cattle.

Although this is small alluvial gravel mining operation it would also add to the increased economic activity within the farming and exiting mining community around Rustenburg. Jobs for 5 permanent laborers will be created.

Negative impacts on the area are expected to be temporary and can be mitigated to a large extent if the recommendations of the EMP are adhered to e.g. rehabilitation.

No concerns have been raised as yet by any I & AP.

The specific occurrence of the alluvial gravel deposit dictates the selection of the specific prospecting site.

l) Proposed impact management objectives and the impact management outcomes for inclusion in the EMPr;

Based on the assessment and where applicable the recommendations from specialist reports, the recording of proposed impact management objectives, and the impact management outcomes for the development for inclusion in the EMPr as well as for inclusion as conditions of authorization.

The main closure objective of ***Bila Civil Contractors (Pty) Ltd***. is to rehabilitate the entire prospecting site in such a way to ensure that the new man-made topographical landscape would blend in with the surrounding landscape, not pose a safety hazard to humans and animals, while at the same time allow for alternative land uses. Establish a self-sustaining and stable vegetation cover in order to mitigate the visual impact, to control erosion and to create some habitat for animals. The rehabilitated environment also needs to be aesthetically acceptable according to the principle of BPEO. The applicant will ensure that the Operation/Sites are:

- Neither a danger to public health and safety nor to animal health and safety;
- Not a source of any pollution;
- Stable (ecological and geophysical);
- Rehabilitated to the state that is suitable for the predetermined and agreed land use (grazing);
- Compatible with the surrounding biophysical environment;
- A sustainable environment;
- Aesthetically acceptable;
- Not an economic, social or environmental liability to the local community or the state now or in the future.

m) Final proposed alternatives.

(Provide an explanation for the final layout of the infrastructure and activities on the overall site as shown on the final site map together with the reasons why they are the final proposed alternatives which respond to the impact management measures, avoidance, and mitigation measures identified through the assessment)

None.

n) Aspects for inclusion as conditions of Authorization.

Any aspects which have not formed part of the EMPr that must be made conditions of the Environmental Authorisation

All important aspect was included in the EMPR and there are no aspects that need to be special conditions.

o) Description of any assumptions, uncertainties and gaps in knowledge.

(Which relate to the assessment and mitigation measures proposed)

With the site visit and rating of the impacts there are no uncertainties and gaps in knowledge that need to be noted.

p) Reasoned opinion as to whether the proposed activity should or should not be authorized

None

h) Reasons why the activity should be authorized or not.

This activity will have only low and very low impacts and no significant impacts were identified. No concerns were raised by the interested parties. These prospecting activities will have no significant impacts on them or their surrounding environment.

ii) Conditions that must be included in the authorization

None.

(1) Specific conditions to be included into the compilation and approval of EMPr

None.

(2) Rehabilitation requirements

Normal rehabilitation.

q) Period for which the Environmental Authorization is required.

5years.

r) Undertaking

Confirm that the undertaking required to meet the requirements of this section is provided at the end of the EMPr and is applicable to both the Basic assessment report and the Environmental Management Programme report.

The Environmental Management Programme will, should it comply with the provisions of section 39 (4) (a) of the Act and the right be granted, be approved and become an obligation in terms of the right issued. As part of the proposed Environmental Management Programme, the applicant is required to provide an undertaking that it will be executed as approved and that the provisions of the Act and regulations thereto will be complied with.

UNDERTAKING BY APPLICANT TO COMPLY WITH THE PROVISIONS OF THE ACT AND THE REGULATIONS THERETO

UNDERTAKING

I, D. E. Erasmus, the undersigned and duly authorised thereto by *Bila Civil Contractors (Pty) Ltd.*, have studied and understand the contents of the Environmental Management Programme and duly undertake to adhere to the conditions as set out therein, unless specifically or otherwise agreed to.

Signed at Klerksdorp on this day.....of.....2018.

.....

Signature of Mine Manager

s) Financial Provision

State the amount that is required to both manage and rehabilitate the environment in respect of rehabilitation.

R95 774.00 for rehabilitation. See quantum attached as **Appendix 3**.

Appendix 3 – Quantum of Rehabilitation

i) Explain how the aforesaid amount was derived.

The amount was determined through the quantum tables provided by DMR.

ii) Confirm that this amount can be provided for from operating expenditure.

(Confirm that the amount, is anticipated to be an operating cost and is provided for as such in the Mining work programme, Financial and Technical Competence Report or Mining Work Programme as the case may be).

Yes it is hereby confirmed that the amount will be provided from operating expenditure.

t) Specific 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 mining 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 an **Appendix**

The applicant will remunerate the occupier for the land used as agreed upon. No other person will be directly affected by this activity.

(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 mining 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 2.12herein).

There is no graveyard within the application area.

According to Section 36(3) of the National Heritage Resources Act 25 of 1999 no person may, without a permit issued by SAHRA or a provincial heritage resources authority—

(a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;

(b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or

(c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.

It is recommended that the graveyard is included in the overall management plan of the mine

development. Preservation of the site will require that the area is properly demarcated with at least a 20m buffer zone placed around the graveyard in order to avoid potential damage during mining activities. It will be necessary to ensure that the graveyard is accessible to the relatives of the deceased.

u) 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 1**).

There are no alternatives, as the application area applied for is the area where the applicant believes is potential for alluvial gravel deposits.

PART B

ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

1) Draft environmental management programme.

a) Details of the EAP, (Confirm that the requirement for the provision of the details and expertise of the EAP are already included in PART A, section 1(a) herein as required).

The EAP Mr. Daan Erasmus has a National Diploma in Agriculture Resource Utilization and a Baccalaureus Technologiae degree in Agricultural Extension.

Yes see **Part A.**

b) Description of the Aspects of the Activity (Confirm that the requirement to describe the aspects of the activity that are covered by the draft environmental management programme is already included in PART A, section (I)(h) herein as required).

Yes see **Part A.**

c) Composite Map

(Provide a map (Attached as an **Appendix 4 (a)** at an appropriate scale which superimposes the proposed activity, its associated structures, and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that any areas that should be avoided, including buffers)

See Appendix 1

d) Description of Impact management objectives including management statements

i) Determination of closure objectives. (ensure that the closure objectives are informed by the type of environment described)

The main closure objective of ***Bila Civil Contractors (Pty) Ltd***.is to rehabilitate the entire prospecting site in such a way to ensure that the new man-made topographical landscape would blend in with the surrounding landscape, not pose a safety hazard to humans and animals, while at the same time allow for alternative land uses. Establish a self-sustaining and stable vegetation cover in order to mitigate the visual impact, to control erosion and to create some habitat for animals. The rehabilitated environment also needs to be aesthetically acceptable according to the principle of BPEO. Another main objective is to manage the surface water in such way that an acceptable water standard is achieved when a closure certificate is issued.
As this area was disturbed before there is not top soil available on all the areas but on the non-disturbed area all available top soil will be stripped and stockpiled.

***Bila Civil Contractors (Pty) Ltd*. will ensure that the Operation/Sites are:**
Neither a danger to public health and safety nor to animal health and safety;
Not a source of any pollution;
Stable (ecological and geophysical);
Rehabilitated to the state that is suitable for the predetermined and agreed land use;
Compatible with the surrounding biophysical environment;
A sustainable environment;
Aesthetically acceptable;
Not an economic, social or environmental liability to the local community or the state now or in

the future.

***Bila Civil Contractors (Pty) Ltd*. will furthermore:**
ensure that the physical and chemical stability of the rehabilitated site will be such that risk to the environment is not increased by naturally occurring forces to the extent that such increased risk cannot be contended with by the installed measures;
subscribe to the optimal exploitation and utilization of South Africa's mineral resources (***PGM's, Phosphate, Nickel, Chrome, Manganese and Vanadium***);
ensure that the prospecting site is closed efficiently and cost effectively.
ensure that the operation is not abandoned but closed in accordance with the relevant requirements;
ensure that the interest of all interested and affected parties will be considered;
ensure that the all-relevant legislation regarding mine closure will be adhered to, and all relevant application procedures followed.

ii) **Volumes and rate of water use required for the operation.**
2 000 liters a day will be used for screening plant.

iii) **Has a water use license has been applied for?**
Application will be submitted. It will be amended for prospecting.

iv)Impacts to be mitigated in their respective phases

Measures to rehabilitate the environment affected by the undertaking of any listed activity

ACTIVITIES (E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc...etc...etc E.g. For mining,- 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.)	**PHASE** (of operation in which activity will take place: State; Planning and design, Pre-Construction' Construction, Operational, Rehabilitation, Closure, Post closure)	**SIZE AND SCALE of disturbance** (volumes, tonnages and hectares or m²)	**MITIGATION MEASURES** (describe how each of the recommendations in herein will remedy the cause of pollution or degradation and migration of pollutants)	**COMPLIANCE WITH STANDARDS** (A description of how each of the recommendations herein will comply with any prescribed environmental management standards or practices that have been identified by competent Authorities)	**TIME PERIOD FOR IMPLEMENTATION** Describe the time period when the measures in the environmental management programme must be implemented. Measures must be implemented when required. With regard to Rehabilitation specifically this must take place at the earliest opportunity. With regard to Rehabilitation, therefore state either: Upon cessation of the individual activity or, Upon the cessation of mining, bulk sampling or alluvial diamond prospecting as the case may be.
1. Excavations	Operational	0.3 hectare at any stage	Concurrent rehabilitation by sloping the sides of the excavation to be stable/sustainable and covered with topsoil and vegetate.	The pit will be backfilled with puddle for stability and providing a base for the replacement of topsoil.	As part of concurrent rehabilitation.
2. Ore Stockpile area	Operational	0.2 hectares at any stage	Keep this area as small as possible within the demarcated area. Prevent spillages of fuels by machines	Immediate cleaning of spillages	Concurrent with prospecting
3. Screening of ore	Operational	0.3 hectares at any stage	Keep this area as small as possible. Prevent spillages of fuels by equipment.	Immediate cleaning of spillages	Concurrent with the prospecting

e) Impact Management Outcomes

(A description of impact management outcomes, identifying the standard of impact management required for the aspects contemplated in paragraph ():

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 ..)	ASPECTS AFFECTED	PHASE In which impact is anticipated (e.g. Construction, commissioning, operational, Decommissioning, closure, post-closure)	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 activities, etc), E.g.] Modify through alternative method.] Control through noise control] Control through management andmonitoring] Remedy through rehabilitation.	STANDARD TO BE ACHIEVED (Impact avoided, noise levels, dust levels, rehabilitation standards, end use objectives) etc.
1. Excavations for alluvial gravel	1.1 Removal of the sample ore up to 10 m	Geology & soil	Operational	The bulk of the material removed will be sold. The impact will be mitigated be sloping the sides of the excavation and stabilizing the soil to prevent soil erosion.	Stable slopes that can sustain erosion without excessive erosion.
	1.2 Change in landform. The entire prospecting area will be lowered by 10m and normal surface drainage will be disturbed at this specific point. The pit will be backfilled	Topography	Operational and closure	The side of pit will be sloped and the soil stabilized to prevent erosion. A surface water cut-off trench should be put in place around the active prospecting site I order to prevent surface water on the prospecting site. Rehabilitation of the new sloped landscape in such a way that it would blend in with the surrounding landscape.	Gentle stable slopes.
	1.3 Stripping of all available topsoil and stockpiled	Soil	Construction and operational	The top soil must be removed before any disturbance take place. The top soil must be removed and stockpile in a demarcated area for rehabilitation purposes.	Enough topsoil for rehabilitation to ensure sustainable vegetation.
	1.4 Soil erosion due to the fact that certain surface areas would become devoid of any vegetation cover and compacted. This would lead to lesser infiltration of rain water and more run-off that could cause erosion on bare disturbed areas and side slopes.	Soil	Construction and operational	To take preventive steps against erosion. Implement and maintain cut-off trenches and or berms around the prospecting area to prevent water entering that can cause excessive erosion.	No excessive erosion that cannot be stabilized.
	1.5. Loss of Land capability & land use.	Land capability & land use	Operational and closure	As this is only a very small area of 1 hectare, the impact is low. As the sides will be sloped and vegetated, the rehabilitated area must be treated as sensitive when grazed as overgrazing can trigger erosion and infiltration of declared weeds.	Sustainable rehabilitated area.
	1.6 Generation of dust by excavating and vehicle movement	Air quality	Operational	The generation of dust will only be localized at the prospecting site. Daily spraying of roads with water	No excessive dust that can be harmful to the environment and humans.

f) Impact Management Actions

(A description of impact management actions, identifying the manner in which the impact management objectives and outcomes contemplated in paragraphs (c) and (d) will be achieved).

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 activities, etc) E.g. Modify through alternative method. Control through noise control Control through management and monitoring Remedy through rehabilitation.	TIME PERIOD FOR IMPLEMENTATION Describe the time period when the measures in the environmental management programme must be implemented Measures must be implemented when required. With regard to Rehabilitation specifically this must take place at the earliest opportunity. With regard to Rehabilitation, therefore state either:- Upon cessation of the individual activity or Upon the cessation of mining bulk sampling or alluvial diamond prospecting as the case may be.	COMPLIANCE WITH STANDARDS (A description of how each of the recommendations in 2.11.6 read with 2.12 and 2.15.2 herein will comply with any prescribed environmental management standards or practices that have been identified by Competent Authorities)
Excavations for alluvial gravel	1.1 Removal of the sample ore up to 10 m	The bulk of the material removed will be screened and the waste material to the excavation. The impact will be mitigated by backfilling the excavation and stabilizing the soil to prevent soil erosion.		
	1.2 Change in landform. The entire prospecting area will be lowered by 10m and normal surface drainage will be disturbed at this specific point. The pit will be backfilled	The pit will be backfilled and the soil stabilized to prevent erosion. A surface water cut-off trench should be put in place around the active prospecting site I order to prevent surface water on the prospecting site. Rehabilitation of the new rehabilitated landscape in such a way that it would blend in with the surrounding landscape.		
	1.3 Stripping of all available topsoil and stockpiled	The top soil must be removed before any disturbance take place. The top soil must be removed and stockpile in a demarcated area for rehabilitation purposes		
	1.4 Soil erosion due to the fact that certain surface areas would become devoid of any vegetation cover and compacted. This would lead to lesser infiltration of rain water and more run-off that could cause erosion on bare disturbed areas and side slopes.	To take preventive steps against erosion. Implement and maintain cut-off trenches and or berms around the prospecting area to prevent water entering that can cause excessive erosion.		
	1.5 Loss of Land capability & land use	As this is only a very small area of 1.5 ha, the impact is low. As the sides will be sloped and vegetated, the rehabilitated area must be treated as sensitive when grazed as overgrazing can trigger erosion and infiltration of declared weeds.		
	1.6 Generation of dust by excavating and vehicle movement	The generation of dust will only be localized at the prospecting site. Daily spraying of roads with water		

j Financial Provision

(1) Determination of the amount of Financial Provision.

(a) Describe the closure objectives and the extent to which they have been aligned to the baseline environment described under the Regulation.

The main closure objective of ***Bila Civil Contractors (Pty) Ltd***.to rehabilitate the entire prospecting site in such a way to ensure that the new man-made topographical landscape would blend in with the surrounding landscape, not pose a safety hazard to humans and animals, while at the same time allow for alternative land uses. Establish a self-sustaining and stable vegetation cover in order to mitigate the visual impact, to control erosion and to create some habitat for animals. The rehabilitated environment also needs to be aesthetically acceptable according to the principle of BPEO. Another main objective is to manage the surface water in such way that an acceptable water standard is achieved when a closure certificate is issued.

Bila Civil Contractors (Pty) Ltd. will ensure that the Operation/Sites are:

- Neither a danger to public health and safety nor to animal health and safety;
- Not a source of any pollution;
- Stable (ecological and geophysical);
- Rehabilitated to the state that is suitable for the predetermined and agreed land use;
- Compatible with the surrounding biophysical environment;
- A sustainable environment;
- Aesthetically acceptable;
- Not an economic, social or environmental liability to the local community or the state now or in the future.

Bila Civil Contractors (Pty) Ltd. will furthermore:

- ensure that the physical and chemical stability of the rehabilitated site will be such that risk to the environment is not increased by naturally occurring forces to the extent that such increased risk cannot be contended with by the installed measures;
- subscribe to the optimal exploitation and utilization of South Africa's mineral resources (***PGM's, Phosphate, Nickel, Chrome, Manganese and Vanadium***);
- ensure that the prospecting site is closed efficiently and cost effectively.
- ensure that the operation is not abandoned but closed in accordance with the relevant requirements;
- ensure that the interest of all interested and affected parties will be considered;
- ensure that the all-relevant legislation regarding mine closure will be adhered to, and all relevant application procedures followed.

(b) Confirm specifically that the environmental objectives in relation to closure have been consulted with landowner and interested and affected parties.

Yes, the disturbance that will take place and the rehabilitation thereof were discussed on the site visit with the landowner.

(c) Provide a rehabilitation plan that describes and shows the scale and aerial extent of the main mining activities, including the anticipated mining area at the time of closure.

a. Rehabilitation:

The clearing of soil surface areas would be restricted to what is really necessary for the construction of infrastructure/crushing plant. During rehabilitation of these sites, or where vegetation is lacking or compacted, the areas would be ripped or ploughed and leveled in order to re-establish a growth medium and if necessary appropriately fertilized to ensure the re-growth of vegetation and the soil ameliorated based on a fertilizer recommendation (soil sample analyzed).

Rehabilitation of access roads

Whenever a prospecting right is suspended, cancelled or abandoned or if it lapses and the holder does not wish to renew the permit or right, any access road or portions thereof, constructed by the holder and which will no longer be required by the landowner/tenant, shall be removed and/or rehabilitated to the satisfaction of the Regional Manager.

Any gate or fence erected by the holder which is not required by the landowner/tenant, shall be removed and the situation restored to the pre-prospecting situation.

Roads shall be ripped or ploughed, and if necessary, appropriately fertilized (based on a soil analysis) to ensure the re-growth of vegetation. Imported road construction materials which may hamper re-growth of vegetation must be removed and disposed of in an approved manner prior to rehabilitation.

If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analyzed and any deleterious effects on the soil arising from the prospecting operation be corrected and the area be seeded with a seed mix to the Regional Manager's specification.

Rehabilitation of the surface mining site

On completion of operations, all buildings, structures or objects on the camp/office site shall be dealt with in accordance with section 44 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002), which states:

(1) When a prospecting right, mining right, retention permit or mining permit lapses, is cancelled or is abandoned or when any prospecting or mining operation comes to an end, the holder of any such right or permit may not demolish or remove any building, structure, object -

(A & B) which may not be demolished in terms of any other law;
(C) Which has been identified in writing by the Minister for purposes of this section; or
(c) Which is to be retained in terms of an agreement between the holder and the owner or occupier of the land, which agreement has been approved by the Minister in writing.

(2) The provision of subsection (1) does not apply to bona fide mining equipment which may be removed

The quarry surface area shall be ripped or ploughed to a depth of at least 300mm and the topsoil previously stored adjacent the site, shall be spread evenly to its original depth over the whole area.

After all the foreign matter has been removed from the mining sites, the side slopes and the quarry floor area will be sloped and leveled and the previously stored topsoil replaced.

The area shall then be fertilized if necessary (based on a soil analysis). The site shall be seeded with a vegetation seed mix (section C) adapted to reflect the local indigenous flora. Where the site has been rendered devoid of vegetation/grass or where soils have been compacted owing to traffic, the surface shall be scarified or ripped.
Photographs of the site, before and during the mining operation and after rehabilitation, shall be taken at selected fixed points and kept on record for the information of the Regional Manager.
Rehabilitation of the new topographical landscape in such a way that it would blend in with the surrounding landscape and allow normal (controlled) surface drainage to continue.
Implement water control systems in order to prevent erosion. Seed the area (see C. (below) for recommended seed mixture).
Visual impact would be addressed by means of;
- re-vegetation (grasses);
- removal of any building, scrap, domestic waste, etc. that would otherwise contribute to a negative visual impact.

Fertilizing of Areas to be rehabilitated
If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analyzed and any deleterious effects on the soil arising from the prospecting operation be corrected and the area be seeded with a seed mix to his or her specification.

Seeding of Grass Seed Mixture and planting of Woody Species
The eventual seed mixture takes into account the availability of seed, different soil situations and the prevailing climatic conditions of the area. The following mixture will be applicable to the borehole prospecting site:

Cenchrusciliaris
Cynodondactylon
Digitariaeriantha
Heteropogoncontortus
Panicum maximum

b. Demolition of infrastructure/buildings
On completion of operations, all buildings, structures or other on the prospecting terrain shall be dealt with in accordance with section 44 of the Mineral and Petroleum Resources Development Act,2002 (Act No. 28 of 2002). There will be no permanent buildings.

c. Invasive and alien control programme
Develop and implement an invasive and alien control programme to control the spread of weeds and other invasive species. Eradicate exotic weeds and invader species if it invades the terrain. All illegal invader plants and weeds shall be eradicated as required in terms of Regulation 15 & 16 of the Act on Conservation of Agricultural Resources, 1983 (Act no. 43 of 1983) which list the plants.

(d) **Explain why it can be confirmed that the rehabilitation plan is compatible with the closure objectives.**

The excavations will be backfilled as far as possible and sloped and top soil will be placed back. This site can be rehabilitated. The historic rehabilitation onsite will be part of the rehabilitation if the new bulk sampling area going over the existing disturbances. Most of the old heaps are vegetated and stable thus no rehabilitation required. Deep excavations that are unsafe will be sloped.

(e) **Calculate and state the quantum of the financial provision required to manage and rehabilitate the environment in accordance with the applicable guideline.**

R 95 774.00 See **Appendix 3** – Quantum Table.

(f) **Confirm that the financial provision will be provided as determined.**

The financing for this project will be done from the account ***Bila Civil Contractors (Pty) Ltd***, the applicant himself out of own funds. The guarantee will be provided in the form of Bank Guarantee after confirmation of the amount.

Mechanisms for monitoring compliance with and performance assessment against the environmental management programme and reporting thereon, including

g) Monitoring of Impact Management Actions
li) Monitoring and reporting frequency
l) Responsible persons

SOURCE ACTIVITY	IMPACTS REQUIRING MONITORING PROGRAMMES	FUNCTIONAL REQUIREMENTS FOR MONITORING	ROLES AND RESPONSIBILITIES (FOR THE EXECUTION OF THE MONITORING PROGRAMMES)	MONITORING AND REPORTING FREQUENCY and TIME PERIODS FOR IMPLEMENTING IMPACT MANAGEMENT ACTIONS
Prospecting site/Soil	Possible spillages of petrochemicals. Stripping of topsoil	Checking for spillages on daily basis. Checking correct stripping and stockpiling of topsoil	Manager and Applicant	Daily checking and reporting with Performance Assessment
Prospecting site/Topography	Concurrent backfilling of excavations.	Checking stability of slope and erosion preventive measures	Manager and applicant	Quarterly
Prospecting site/Air quality	Dust pollution from mining activities.	Regular wetting of roads and stockpile area where loading take place.	Manager and applicant	Daily
Prospecting site	Chemical toilet	Make sure that it is used and hygienic.	Manager and Applicant	Weekly.

l) Indicate the frequency of the submission of the performance assessment/ environmental audit report.

An EMP Performance Assessment will be submitted to the Management and the DMR on an annual basis.

m) Environmental Awareness Plan

(1) Manner in which the applicant intends to inform his or her employees of any environmental risk which may result from their work.

Bila Civil Contractors (Pty) Ltd, will contract DERA Environmental Consultants to inform the employees after the EMP was approved.
The following guidelines will be used:

Communication
Urge
Leadership
Teamwork
Understanding
Recognition
Empowerment (CULTURE)

(2) Manner in which risks will be dealt with in order to avoid pollution or the degradation of the environment.

The risks will be dealt with by proper management actions as described in table below

ACTIVITIES (E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc...etc...etc E.g. For mining,- 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.)	PHASE (of operation in which activity will take place. State; Planning and design, Pre-Construction' Construction, Operational, Rehabilitation, Closure, Post closure).	SIZE AND SCALE of disturbance (volumes, tonnages and hectares or m^2)	MITIGATION MEASURES (describe how each of the recommendations in herein will remedy the cause of pollution or degradation and migration of pollutants)	COMPLIANCE WITH STANDARDS (A description of how each of the recommendations herein will comply with any prescribed environmental management standards or practices that have been identified by competent Authorities)	TIME PERIOD FOR IMPLEMENTATION Describe the time period when the measures in the environmental management programme must be implemented Measures must be implemented when required. With regard to Rehabilitation specifically this must take place at the earliest opportunity. With regard to Rehabilitation, therefore state either: Upon cessation of the individual activity or, Upon the cessation of mining, bulk sampling or alluvial diamond prospecting as the case may be.
4. Excavations	Operational	0.3 hectare at any stage	Concurrent rehabilitation by sloping the sides of the excavation to be stable/sustainable and covered with topsoil and vegetate.	The pit wills backfilled with puddle for stability and providing a base for the replacement of topsoil.	As part of concurrent rehabilitation.
5. Ore Stockpile area	Operational	0.2 hectares at any stage	Keep this area as small as possible within the demarcated area. Prevent spillages of fuels by machines	Immediate cleaning of spillages	Concurrent with prospecting
6. Screening of ore	Operational	0.3 hectares at any stage	Keep this area as small as possible. Prevent spillages of fuels by equipment.	Immediate cleaning of spillages	Concurrent with the prospecting

n) Specific information required by the Competent Authority

(Among others, confirm that the financial provision will be reviewed annually).

The quantum for rehabilitation liability will be reviewed with the performance assessment on annual basis.

See Table 7 below:

Table 7: Monitoring Plan

Action	Frequency	Method	Period
1.Monitoring of perimeter fence	Monthly and following any heavy rainfall.	Foot or vehicle patrol. Record	Until closure.
2.Monitoring of re-vegetation Mined out and rehabilitated areas Leveled and Rehabilitated Dumps Mine residue dam walls Old roads Covered over waste pits Rehabilitation plots	Every 6 months	Foot inspection Initiate set up of test plots Photograph. Transect / Quadrant Get consultants in if necessary.	Until closure.
3.Monitoring of erosion Roads Mine residue dam walls Rehabilitated mined out areas Dumps Pumps and pipelines Any other areas	Every 6 months and following any heavy rainfall	Visual inspection Walk over rehabilitated areas Drive along roads. Check pipelines and pumps: mine residue dams, dumps. Photographic records.	Until closure
4 Monitoring of alien plants over the whole site.	On-going until under control - then every 6 months.	Visual inspection on foot patrol. Map presence of invasive plants. Plan removal, remove and document area covered on monthly basis. Verify Photograph.	On-going until closure
5 Monitoring of Water Quality from selected points	Every 6 months	Chemical and bacteriological tests at identified boreholes as recommended in Figure 23 designated points. Build up database and graph the results. Compare with limits and take action on non-conformances.	Until closure.
6. Monitoring of All Rehabilitation Areas. Check compliance with gradients and variation in topography	Every 6 months.	Survey- map new rehabilitated areas. Plot on map and calculate area treated. Get rehab consultants in if necessary.	Until closure.
7. Monitoring of stability of mine Residue dams and water Storage facilities.	Monthly and summarize every 6 months	Follow specifications in mandatory code of practice for puddle dams	Until closure
8.Monitoring of disposal of metal scrap, old oil, oil filters, old oil drums, oily cloths, batteries, fluorescent tubes, tyres and contaminated soil (Hazardous waste)	Monthly and summarize every 6 months.	Record each load sent off the site. Give used oils to Oilkol Ensure safe disposal certificates are obtained from suppliers if the material is given back to them.	Until closure.
9.Monitoring of maintenance of general waste disposal	All loads of waste to be recorded and quantity extrapolated. Covering of waste pit - Monthly.	Running total of loads of waste taken Record of waste taken to Wolmaransstad waste disposal site Keeping record of waste taken to disposal site	Until closure
10.Monitoring of condition of septic tanks	Every six months	Visual inspection. Record condition.	Until closure
11. Monitoring of condition of bunded Areas around diesel fuel tanks, Refueling area, old oil tank; and underground petrol tank.	Every six months.	Visual inspection	Until closure
12. Monitoring of water use.	Monthly	Record total water use and water use at different plants by recording flow meters. Ensure compliance with license.	Until closure

2) UNDERTAKING

The Environmental Assessment Practitioner

I, **DE Erasmus**

General declaration:

- I act as the independent environmental practitioner in this application
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant
- I declare that there are no circumstances that may compromise my objectivity in performing such work;

- I have expertise in conducting environmental impact assessments, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, regulations and all other applicable legislation;
- I will take into account, to the extent possible, the matters listed in regulation 8 of the regulations when preparing the application and any report relating to the application;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- I will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- I will keep a register of all interested and affected parties that participated in a public participation process; and
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favorable to the applicant or not
- all the particulars furnished by me in this form are true and correct;
- will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I realize that a false declaration is an offence in terms of regulation 71 and is punishable in terms of section 24F of the Act.

Disclosure of Vested Interest (delete whichever is not applicable)

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2010;
- I have a vested interest in the proposed activity proceeding, such vested interest being:

_____

The EAP herewith confirms

a) the correctness of the information provided in the reports ☐

b) the inclusion of comments and inputs from stakeholders and I&APs;

c) the inclusion of inputs and recommendations from the specialist reports where relevant; and

d) that the information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties are correctly reflected herein.

Signature of the environmental assessment practitioner

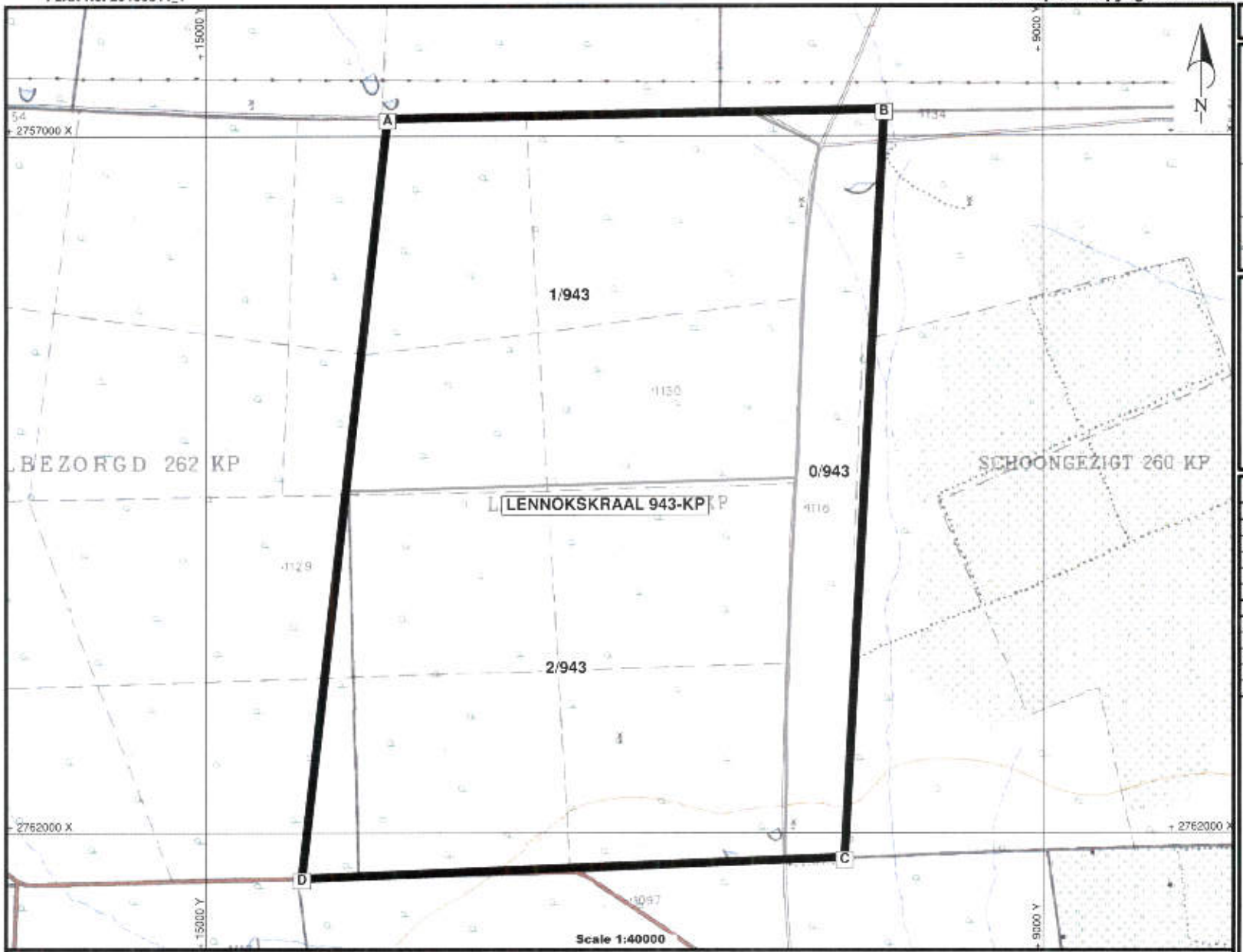
DERA Omgewingskonsultante (Pty) Ltd.
Name of company

26/04/2018
Date

-END

JERRY DEAN MENIN
OFFICE MANAGER / AUDITOR
COMMISSIONER OF OATHS / KOMMISSARIS VAN EDE
Appointed in terms of Section 5(1) of Act 16 of 1963
Aangestel in terme van Artikel 5(1) van Wet 16 van 1963
Centrallaan 32 Central Avenue, Flamwood, Klerksdorp
Appointed/Aangestel: 23 Oktober 2012
Reference/Verwysing: 9/1/8/2 Klerksdorp

PLAN No. 20180511_1



The area lettered (A, B, C, D, A) approximately 2011,1143 ha in extent, applicable to a prospecting right over the the REMAINING EXTENT, PORTION 1 ans PORTION 2 of the farm LENNOKSKRAAL 943-KP, situated in the RUSTENBURG DISTRICT, NORTH-WEST PROVINCE, granted in terms of Section 16 of the Mineral and Petroleum Resources Development Act, No. 28 of 2002,

to BILLA CIVIL CONTRACTORS (PTY) LTD, (2011/004885/07)

OFFICIAL PURPOSES
DMR REF. No.: NW 30/5/1/1/2(.....) PR

SurvMap cc
Survey and Mapping
Engineering Survey
REG. No.: SD626
Cell : 082 933 3223
Tel. : 015 297 6850
Fax : 086 559 6592
79 Plein Street
POLOKWANE
0699
J.H. Venter
11/05/2018
Date

DMR: .....

DATE: .....

APPLICANT: .....

DATE: .....

CO-ORDINATE LIST WG 27°

NAME	Y	X
A	13702.11	2756869.55
B	10139.87	2756805.21
C	10424.99	2762173.45
D	14315.77	2762323.74
A	13702.11	2756869.55

NAME	LAT	LONG
A	-24.917023	26.864359
B	-24.916470	26.899623
C	-24.964931	26.896760
D	-24.966256	26.858228
A	-24.917023	26.864359

APPENDIX 2 – PROOF OF CONSULTATION

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 sent and/or Comments Received	Issues raised	EAP's response to the applicant
AFFECTED PARTIES				
RSA Moses Kotane Local Municipality Moses Kotane Local Municipality Mr. M.V. Mokopane Private Bag X1011, Mogwase, 0314 Tel: 014 555 1307 Fax: 014 555 6368 e-mail: municipalmanager@moseskotane.gov.za	X	27 Nov 2017 16 Jan 2018 17 Jan 2018 5 Feb 2018	No objection as long as legislated procedures and regulations are adhered to	
Lawful occupier/s of the land				
Landowners or lawful occupiers on adjacent properties	X			
Municipal councilor				
Municipality	X			
Rustenburg Local Municipality LED Manager: Innocent Sirovha, fax 014 597 0306 e-mail: innocents@bonjala.gov.za Municipal Manager: Ms Nqobile Sithole Tel: ;014 590 3551 e-mail: munman@rustenburg.gov.za		27 Nov 2017 18 Jan 2018 10 May 2018	Fax sent – no response E-mail sent – awaiting response	
Organs of state (Responsible for infrastructure that may be affected Roads Department, Eskom, Telkom, DWA.				
Eskom				
Communities				
Dept. Land Affairs	X			
Mr. KeatbesweMothupi, Office of the Regional Land Claims Commissioner, N W Province; Private Bag X08, Mmabatho, 2735; Fax: 018 389 9641		27 Nov 2017	E-mail sent	
Traditional Leaders				
N/A				
Dept. Rural, Environment and Agricultural Development	X			
Ouma Skosana Agricentre Building, Cnr James Moroka & Stadium Road, Mmabatho, 2735 E-mail: oskosana@nwpg.gov.za		11 Dec 2017 26 April 2018	Scoping Report was sent with Fastway couriers for comments EMP/EIA was sent with Fastway couriers for comments	Comments received 5 March 2018
Dept. Water and Sanitation	X			
Cornia Theunissen Private Bag X357, Hartebeespoort, 0216 Tel: 012 253 1026 E-mail: theunissenc@dwa.gov.za		11 Dec 2017 26 April 2018	Scoping Report was sent with registered post for comments. EMP/EIA was sent with Fastway couriers for comments.	Acknowledgement received 22 Jan 2018
Dept. Agriculture, Forestry and Fisheries	X			

APPENDIX 2 – PROOF OF CONSULTATION

Maurice Vuyega Louis le Grange Building, Cnr Peter Mokaba & Wolmarans street,3rd Floor, Office nr 318, Potchefstroom, 2520		11 Dec 2017 26 April 2018	Scoping Report was sent with Fastway couriers for comments. EMP/EIA was sent with Fastway couriers for comments.	No comments received
Other Competent Authorities	X			
Provincial Heritage Resources Agency J.Dipale Corner Tillard & Warren Street, Mafikeng, 2745 Tel: 018 381 2032 E-mail: jdipale@nh.sahra.org.za		11 Dec 2017 18 Jan 2018 19 Jan 2018	Scoping Report was sent with Fastway couriers for comments. Case ID: 12134	Comments received 19 Jan 2018
OTHER AFFECTED PARTIES				
SAHRIS P.O. Box 4637, Cape Town, 8000 Tel: 021 202 8643 E-mail: info@sahra.org.za		26 April 2018	SAHRIS Website technical problem and not working. Will do consultation as soon as it is running again.	
INTERESTED PARTIES				

P O Box 6499
Flamwood
2572
Fax2Mail: 086 5783 085
Mobile: 082 895 3516
E-mail: dera.office@dera.co.za
daane@dera.co.za

DERA

Environmental Consultants

27 November 2017

To whom it may concern

CONSULTATION WITH INTERESTED AND AFFECTED PARTIES WITH REGARD TO AN APPLICATION FOR A PROSPECTING RIGHT IN TERMS SECTION 16 OF THE MINERALS AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT 28 OF 2002) AND NEMA, EIA 2014 OVER: THE FARM VLAKPLAATS 283 KP AND LENNOKSKRAAL 943 KP, MAGISTERIAL DISTRICT OF RUSTENBURG.

You are herewith informed that **Bila Civil Contractors (Pty) Ltd.** has submitted an application in terms of Section 16 of the Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002), and NEMA, EIA 2014 to the Regional Manager: Mineral Regulation, Northern West Region in respect of **Platinum Group Metal (PGM), Phosphate ore, Nickel ore, Chrome ore, Manganese ore and Vanadium** in the magisterial district of Rustenburg.

Bila Civil Contractors (Pty) Ltd. is in the process of compiling the Scoping Report, which needs to be submitted at the Regional Office of DMR. After acceptance of the application is received an Environmental Management Programme (EMP) & Environmental Impact Report need to be submitted at the Regional Office of DMR within 106 days from date of acceptance of the Scoping Report. The above documents will be available on request for I&AP's for comments.

In terms of Section 10 of the Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002), and in terms of Regulation 39(1) of the regulations published in the Government Notice No. R10328 (of 4 December 2014) under Chapter 6 of the NEMA, EIA 2014, the landowner or legal occupier of the land, as well as any other interested party must be notify and must be consulted with in terms of the proposed project.

Bila Civil Contractors (Pty) Ltd. deem it necessary to consult with inter alia yourself / your company/ your organization, and you are therefore kindly requested to comment very clearly and unambiguously with regard to the proposed prospecting project. You are requested to put in writing any interest/ objection and/or comments you may have and send it back to the appointed consultants (**Reference no. NW30/5/1/1/2/12236PR**) within 30 days from the date of receipt of this letter. If no correspondence is received from you within the mentioned period, the applicant shall accept that you have no objection in the proposed prospecting activities.

Please call me if any further information is needed.

Your co-operation will be appreciated.

Yours faithfully

Daan Erasmus
DERA Environmental Consultants

REGISTRATION FORM AND COMMENT FOR THE PUBLIC PARTICIPATION PROCESS
PROPOSED PROSPECTING RIGHT APPLICATION ON THE FARM VLAKPLAATS 283 KP & LENNOKSKRAAL 943 KP, MAGISTERIAL DISTRICT OF RUSTENBURG.

Daan Erasmus
P.O. Box 6499
KLERKSDORP
2572

Tel. 018-468 5355
Fax: 018-468 4015
Mobile: 082 895 3516
E-mail: dera.office@dera.co.za or daane@dera.co.za

PERSONAL INFORMATION:

Title/Titel: Mr. Initials/Voorletters: M.V. First Name/Eerste naam: Mokapane

Surname/Van: Letsoalo

E-mail/E-pos: municipalmanager@moseskotane.gov.za

Telephone/Telefoon: 014 555 1307 Fax/Faks: 014 555 6368

Organisation (if applicable)/Organisasie(indien van toepassing: Moses Kotane Municipality

Capasity (member, etc.)/Kapasiteit (lid ens): Municipal Manager

Landowner/Grondeienaar/Neighbour/Buurman/Interested and/or affected party on the farm/op die plaas.....

Postal Address/ Posadres: Private Bag X1011

Town/City/Dorp/Stad: Mogwase Code/Kode: 0314

COMMENT/OBJECTION:

1. What is the nature of your interest in the proposed project/Wat is u belang in die voorgenome projek?

Local Authority

2. Do you have any ground for objection or do you support the proposed project/Het u enige gronde tot beswaar of ondersteun u die bogenoemde projek?

No objection as long as legislated procedures and regulations are adhered to.

YES/NO JA/NEE

If "Yes", please list shortly/Indien 'JA', lys asseblief kortliks.

3. Do you foresee that this activity will have a negative impact on yourself or the environment/Voorsien u dat die voorgenome projek 'n negatiewe inpak kan he op uself of die omgewing?

YES(NO) JA/NEE

If "Yes", please descibe shortly/Indien 'JA', verduidelik asseblief kortliks.

Filled in on/Ingevul op..... day of /dag van..... (month)/(maand) 2017

MV LETSOALO

Name and Surname/ Company
Naam en Van/Maatskappy

Letsoalo.

Signature/Handtekening

Office

From: Office <dera.office@dera.co.za>
Sent: Thursday, May 10, 2018 3:33 PM
To: munman@rustenburg.gov.za
Subject: Consultation letter - Bila Civil Contractors - Prospecting
Attachments: Scan_20180510_150922.pdf

Good day Ms. Sithole

Please see attached the consultation letter for Bila Civil Contractors regarding the Prospecting Right application on the farms Valkplaats & Lennokskraal in the Rustenburg district.

It will be highly appreciated if you can forward the letter to the relevant person at LED office as the fax is not working.

Kind regards.

Ns/pp Gerda Els
Daan Erasmus
Dera Environmental Consultants/Dera Omgewingskonsultante P.O. Box 6499, Flamwood 2572 VAT No: 464 020 4881
Tel: 018 468 5355
Fax: 018 468 4015
Cell: 082 895 3516
Fax2mail: 086 578 3085
e-mail: dera.office@dera.co.za or daane@dera.co.za

Scan_20180510_150922.pdf;

FLAMWOOD
2572

Cell. 082 895 3516
Tel. 018-468 5355
Fax. 018-468 4015
Fax2mail. 086 578 3085
E-mail: dera@xsinet.co.za

DERA

Environmental Consultants

To:	**Rustenburg Local Municipality : LED Manager – Innocent Sirovha**	Fax:	**014 590 3006/3481**
From:	**Daan Erasmus**	Date:	**27 November 2017**
Re:	**Proposed Prospecting Right application**	Pages:	**1 + 2**
CC:			

☑ Urgent ☐ For Review ☐ Please Comment Please Reply ☐ Please Recycle

Please find attached the consultation letter of Bila Civil Contractors for a Prospecting Right application on the farms Vlakplaats 283 KP & Lennokskraal 943 KP, in the Rustenburg district.

The Departement of Mineral Resources requested that we inform the Rustenburg Local Municipality of the proposed prospecting right as part of the Public Participation process with interested and/or affected parties.

It would be highly appreciated if you could sign the attached consultation letter and return it to Dera Environmental Consultants at fax: 018 468 4015 or e-mail it to daane@dera.co.za or dera.office@dera.co.za.

Should you have any questions regarding the above, please call Mr. Erasmus at 082 895 3516

Thank you.
P.P.
Daan Erasmus

P O Box 6499
Flamwood
2572
Fax2Mail: 086 5783 085
Mobile: 082 895 3516
E-mail: dera.office@dera.co.za
daane@dera.co.za

DERA

27 November 2017

Environmental Consultants

To whom it may concern

CONSULTATION WITH INTERESTED AND AFFECTED PARTIES WITH REGARD TO AN APPLICATION FOR A PROSPECTING RIGHT IN TERMS SECTION 16 OF THE MINERALS AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT 28 OF 2002) AND NEMA, EIA 2014 OVER: THE FARM VLAKPLAATS 283 KP AND LENNOKSKRAAL 943 KP, MAGISTERIAL DISTRICT OF RUSTENBURG.

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Bila Civil Contractors (Pty) Ltd. is in the process of compiling the Scoping Report, which needs to be submitted at the Regional Office of DMR. After acceptance of the application is received an Environmental Management Programme (EMP) & Environmental Impact Report need to be submitted at the Regional Office of DMR within 106 days from date of acceptance of the Scoping Report. The above documents will be available on request for I&AP's for comments.

In terms of Section 10 of the Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002), and in terms of Regulation 39(1) of the regulations published in the Government Notice No. R10328 (of 4 December 2014) under Chapter 6 of the NEMA, EIA 2014, the landowner or legal occupier of the land, as well as any other interested party must be notify and must be consulted with in terms of the proposed project.

Bila Civil Contractors (Pty) Ltd. deem it necessary to consult with inter alia yourself / your company/ your organization, and you are therefore kindly requested to comment very clearly and unambiguously with regard to the proposed prospecting project. You are requested to put in writing any interest/ objection and/or comments you may have and send it back to the appointed consultants (**Reference no. NW30/5/1/1/2/12236PR**) within 30 days from the date of receipt of this letter. If no correspondence is received from you within the mentioned period, the applicant shall accept that you have no objection in the proposed prospecting activities.

Please call me if any further information is needed.

Your co-operation will be appreciated.

Yours faithfully
P.P.
Daan Erasmus
DERA Environmental Consultants

REGISTRATION FORM AND COMMENT FOR THE PUBLIC PARTICIPATION PROCESS
PROPOSED PROSPECTING RIGHT APPLICATION ON THE FARM VLAKPLAATS 283 KP & LENNOKSKRAAL 943 KP, MAGISTERIAL DISTRICT OF RUSTENBURG.

Daan Erasmus
P.O. Box 6499
KLERKSDORP
2572

Tel. 018-468 5355
Fax: 018-468 4015
Mobile: 082 895 3516
E-mail: dera.office@dera.co.za or daane@dera.co.za

PERSONAL INFORMATION:

Title/Titel:..... Initials/Voorletters: ..... First Name/Eerste naam:.....

Surname/Van.....

E-mail/E-pos.....

Telephone/Telefoon..... Fax/Faks.....

Organisation (if applicable)/Organisasie(indien van toepassing: .....

Capasity (member, etc.)/Kapasiteit (lid ens): .....

Landowner/Grondeienaar/Neighbour/Buurman/Intersted and/or affected party on the farm/op die plaas.....

Postal Address/ Posadres .....

Town/City/Dorp/Stad:..... Code/Kode: .....

COMMENT/OBJECTION:

1. What is the nature of your interest in the proposed project/Wat is u belang in die voorgenome projek?

2. Do you have any ground for objection or do you support the proposed project/Het u enige gronde tot beswaar of ondersteun u die bogenoemde projek?

YES/NO JA/NEE

If "Yes", please list shortly/Indien 'JA', lys asseblief kortliks.

3. Do you foresee that this activity will have a negative impact on yourself or the environment/Voorsien u dat die voorgenome projek 'n negatiewe inpak kan he op uself of die omgewing?

YES/NO JA/NEE

If "Yes", please descibe shortly/Indien 'JA', verduidelik asseblief kortliks.

Filled in on/Ingevul op..... day of /dag van..... (month)/(maand) 2017

Name and Surname/ Company
Naam en Van/Maatskappy

Signature/Handtekening
. . . . . .

TRANSACTION REPORT

18/JAN/2018/THU 09:03

FAX(TX)

#	DATE	START T.	RECEIVER	COM.TIME	PAGE	TYPE/NOTE	FILE
001	18/JAN	09:00	0145903481			MEMORY NO RESPONSE	1891

THE FOLLOWING DATA COULD NOT BE SENT.
PLEASE GIVE THIS TRANSACTION REPORT TO SENDER.

FLAMWOOD
2572

Cell. 082 895 3516
Tel. 018-468 5355
Fax. 018-468 4015
Fax2mail. 086 578 3085
E-mail: dera@xsinet.co.za

DERA

Environmental Consultants

To: **Rustenburg Local Municipality : LED Manager – Innocent Sirovha** Fax: **014 590 3006/3481**

From: **Daan Erasmus** Date: **27 November 2017**

Re: **Proposed Prospecting Right application** Pages: **1 + 2**

CC:

☑Urgent ☐ For Review ☐ Please Comment Please Reply ☐ Please Recycle

Please find attached the consultation letter of Bila Civil Contractors for a Prospecting Right application on the farms Vlakplaats 283 KP & Lennokskraal 943 KP, in the Rustenburg district.

The Departement of Mineral Resources requested that we inform the Rustenburg Local Municipality of the proposed prospecting right as part of the Public Participation process with interested and/or affected parties.

It would be highly appreciated if you could sign the attached consultation letter and return it to Dera Environmental Consultants at fax: 018 468 4015 or e-mail it to daane@dera.co.za or dera.office@dera.co.za.

Should you have any questions regarding the above, please call Mr. Erasmus at 082 895 3516

Thank you.
P.P.
Daan Erasmus

TRANSACTION REPORT

18/JAN/2018/THU 09:02

FAX(TX)

#	DATE	START T.	RECEIVER	COM.TIME	PAGE	TYPE/NOTE	FILE
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THE FOLLOWING DATA COULD NOT BE SENT.
PLEASE GIVE THIS TRANSACTION REPORT TO SENDER.

FLAMWOOD
2572

Cell. 082 895 3516
Tel. 018-468 5355
Fax. 018-468 4015
Fax2mail. 086 578 3085
E-mail: dera@xsinet.co.za

DERA

Environmental Consultants

To: **Rustenburg Local Municipality : LED Manager – Innocent Sirovha** Fax: **014 590 3006/3481**

From: **Daan Erasmus** Date: **27 November 2017**

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CC:

☑ Urgent ☐ For Review ☐ Please Comment Please Reply ☐ Please Recycle

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It would be highly appreciated if you could sign the attached consultation letter and return it to Dera Environmental Consultants at fax: 018 468 4015 or e-mail it to daane@dera.co.za or dera.office@dera.co.za.

Should you have any questions regarding the above, please call Mr. Erasmus at 082 895 3516

Thank you.
P.P.
Daan Erasmus

P O Box 6499
Flamwood
2572
Fax. 018-468 4015
Fax2mail. 086 578 3085
Cell. 082 895 3516
E-mail:dera.office@dera.co.za
daane@dera.co.za

DERA

Environmental Consultants

27 November 2017

Departement of Land Affairs & Rural Development

Attention: Keabetswe Mothupi

Re: Verification of Land Claims

We are Environmental Consultants situated in Klerksdorp and has applied on behalf of Bila Civil Contractors (Pty) Ltd. for a prospecting right on the following farm in the Rustenburg district.

- **Vlakplaats 283 KP**
- **Lennokskraal 943 KP**

Could you please be so kind to verify if there are any land claims over the farms as mentioned above?

It would be highly appreciated if you could help us in this matter as soon as possible.

Please feel free to contact the office of Dera Environmental Consultants or Mr. Erasmus on his cell: 082 895 3516 for any further information.

Yours truly.

p.p.

Daan Erasmus

SAHRIS

Heritage Cases *Application for prospecting rights over the farm Vlakplaats 283 KP and Lennokskraal 943 KP, magisterial district of Rustenburg, North West Province* has been created.

Heritage Cases

Application for prospecting rights over the farm Vlakplaats 283 KP and Lennokskraal 943 KP, magisterial district of Rustenburg, North West Province

CaseHeader | LocationInfo | Admin

ProposalDescription:
Application for prospecting rights over the farm Vlakplaats 283 KP and Lennokskraal 943 KP, magisterial district of Rustenburg, North West Province

ApplicationDate: Thursday, January 18, 2018 - 10:48

CaseID: 12134

Applicants: Bila Civil Contractors (Pty) Ltd

Consultants/Experts: Daan E Erasmus

OtherReferences:

Dept	CaseReference	DueDate	FinalDecision
	NW30/5/1/1/2/12236PR		

ReferenceList:

AdditionalDocuments

1. Scoping Report

(http://www.sahra.org.za/sahris/sites/default/files/additionaldocs/Bila%20Civil%20Contractors%20%28Pty%29%20Ltd,%20-%20Vlakplaats%20%26%20Lennokskraal%20-%20Scoping%20Report.pdf)

Back to Top

South African Heritage Resources Agency
(SAHRA)
Head Office
111 Harrington Street
CAPE TOWN
8001

PO Box 4637
Cape Town, 8000
Tel 021 462 4502/Fax 021 462 4509
Email info@sahra.org.za
Web www.sahra.org.za (http://www.sahra.org.za)

Jana

From: Office <dera.office@dera.co.za>
Sent: 19 January 2018 08:51 AM
To: dera.office2@dera.co.za
Subject: FW: SAHRIS Case ID 12134

From: Natasha Higgitt [mailto:nhiggitt@sahra.org.za]
Sent: Friday, January 19, 2018 8:25 AM
To: dera office
Subject: SAHRIS Case ID 12134

Good morning,

Please note that an Interim Comment has been issued on SAHRIS Case ID 12134. Please see link below:

http://sahra.org.za/sahris/cases/application-prospecting-rights-over-farm-vlakplaats-283-kp-and-lennokskraal-943-kp-magisterial

Kind Regards,

Natasha Higgitt
Heritage Officer: Archaeology, Palaeontology and Meteorites Unit

South African Heritage Resources Agency
- A nation united through heritage -

T: +27 21 462 4502 | F: +27 21 462 4509 | C: +27 82 507 0378
E: nhiggitt@sahra.org.za | 111 Harrington Street | Cape Town

www.sahra.org.za

Natasha Higgitt
Heritage Officer: Archaeology, Palaeontology and Meteorites Unit

South African Heritage Resources Agency
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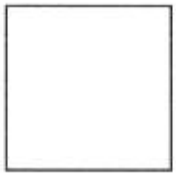
T: +27 21 462 4502| C:+27 82 507 0378| F:+27 21 462 4509
E: nhiggitt@sahra.org.za | 111 Harrington Street | Cape Town | 8001

www.sahra.org.za



Application for prospecting rights over the farm Vlakplaats 283 KP and Lennokskraal 943 KP, magisterial district of Rustenburg, North West Province

Our Ref:

an agency of the
Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za
South African Heritage Resources Agency | 111 Harrington Street | Cape Town
P.O. Box 4637 | Cape Town | 8001
www.sahra.org.za

Enquiries: Natasha Higgitt
Tel: 021 462 4502
Email: nhiggitt@sahra.org.za
CaseID: 12134

Date: Friday January 19, 2018

Interim Comment

In terms of Section 38(3), 38(8) of the National Heritage Resources Act (Act 25 of 1999)

Attention: Bila Civil Contractors (Pty) Ltd

Application for prospecting rights over the farm Vlakplaats 283 KP and Lennokskraal 943 KP, magisterial district of Rustenburg, North West Province

Thank you for notifying SAHRA of the Environmental Authorisation (EA) and Prospecting Right Application on the farm Vlakplaats 283 KP and Lennokskraal 943 KP, magisterial district of Rustenburg, North West Province.

As the proposed development is undergoing an EA Application process in terms of the National Environmental Management Act, No 107 of 1998 (NEMA), NEMA Environmental Impact Assessment (EIA) Regulations for activities that trigger the Mineral and Petroleum Resources Development Act, No 28 of 2002 (MPRDA)(As amended), it is incumbent on the developer to ensure that a **Heritage Impact Assessment** (HIA) is done as per section 38(3) and 38(8) of the National Heritage Resources Act, Act 25 of 1999 (NHRA). This must include an archaeological component, palaeontological component and any other applicable heritage components. The HIA must be conducted **as part of the** EA Application in terms of NEMA and the NEMA EIA Regulations.

It is noted on page 17 of the Scoping Report, that a graveyard is located within the development area. The HIA, to be conducted as part of the EIA phase of the project as stated on page 36 of the report, must assess the impact to these graves and provide relevant mitigation measures. SAHRA does not accept the section in the Scoping Report regarding heritage resources as it does not comply with section 38(3) of the NHRA.

The quickest process to follow for the archaeological component would be to contract a specialist (see www.asapa.org.za or www.aphp.org.za to provide an Archaeological Impact Assessment (AIA). The AIA must comply with the SAHRA 2007 Minimum Standards: Archaeological and Palaeontological Component of Impact Assessments.

A Palaeontological Desktop Assessment must be undertaken to assess whether or not the development will impact upon palaeontological resources as the area is located within moderate to highly sensitive geological formations (see www.palaeontologicalsociety.co.za for qualified paleontologists). The PIA must comply with the SAHRA 2012 Minimum Standards: Palaeontological Component of Heritage Impact Assessments.

an agency of the
Department of Arts and Culture

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South African Heritage Resources Agency | 111 Harrington Street | Cape Town
P.O. Box 4637 | Cape Town | 8001
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Any other heritage resources as defined in section 3 of the NHRA that may be impacted, such as maritime archaeology, built structures over 60 years old, sites of cultural significance associated with oral histories, burial grounds and graves, graves of victims of conflict, and cultural landscapes or viewscapes must also be assessed.

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

Natasha Higgitt
Heritage Officer
South African Heritage Resources Agency

Phillip Hine
Acting Manager: Archaeology, Palaeontology and Meteorites Unit
South African Heritage Resources Agency

ADMIN:
Direct URL to case: http://www.sahra.org.za/node/488010
(, Ref: NW30/5/1/1/2/12236PR)

CaseDecisions

CaseReference:

Application for prospecting rights over the farm Vlakplaats 283 KP and Lennokskraal 943 KP, magisterial district of Rustenburg, North West Province

DecisionDate:

Friday, January 19, 2018 - 08:15

CaseDiscussion:

Thank you for notifying SAHRA of the Environmental Authorisation (EA) and Prospecting Right Application on the farm Vlakplaats 283 KP and Lennokskraal 943 KP, magisterial district of Rustenburg, North West Province.

As the proposed development is undergoing an EA Application process in terms of the National Environmental Management Act, No 107 of 1998 (NEMA), NEMA Environmental Impact Assessment (EIA) Regulations for activities that trigger the Mineral and Petroleum Resources Development Act, No 28 of 2002 (MPRDA)(As amended), it is incumbent on the developer to ensure that a **Heritage Impact Assessment** (HIA) is done as per section 38(3) and 38(8) of the National Heritage Resources Act, Act 25 of 1999 (NHRA). This must include an archaeological component, palaeontological component and any other applicable heritage components. The HIA must be conducted **as part of the** EA Application in terms of NEMA and the NEMA EIA Regulations.

It is noted on page 17 of the Scoping Report, that a graveyard is located within the development area. The HIA, to be conducted as part of the EIA phase of the project as stated on page 36 of the report, must assess the impact to these graves and provide relevant mitigation measures. SAHRA does not accept the section in the Scoping Report regarding heritage resources as it does not comply with section 38(3) of the NHRA.

The quickest process to follow for the archaeological component would be to contract a specialist (see **www.asapa.org.za (http://www.asapa.org.za)** or **www.aphp.org.za (http://www.aphp.org.za)** to provide an Archaeological Impact Assessment (AIA). The AIA must comply with the SAHRA 2007 Minimum Standards: Archaeological and Palaeontological Component of Impact Assessments.

A Palaeontological Desktop Assessment must be undertaken to assess whether or not the development will impact upon palaeontological resources as the area is located within moderate to highly sensitive geological formations (see **www.palaeontologicalsociety.co.za (http://www.palaeontologicalsociety.co.za)** for qualified paleontologists). The PIA must comply with the SAHRA 2012 Minimum Standards: Palaeontological Component of Heritage Impact Assessments.

Any other heritage resources as defined in section 3 of the NHRA that may be impacted, such as maritime archaeology, built structures over 60 years old, sites of cultural significance associated with oral histories, burial grounds and graves, graves of victims of conflict, and cultural landscapes or viewscapes must also be assessed.

OfficialDocs:

Attachment	Size
Case 12134 - Interim Comment.pdf (http://sahra.org.za/sahris/sites/default/files/casedecisions/Case%2012134%20-%20Interim%20Comment.pdf)	96.15 KB

Back to Top

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CALCULATION OF THE QUANTUM

Applicant:	**Bila Civils**	**Ref No.:**	**12236 PR**
Evaluators:	**DERA**	**Date:**	**Apr-18**

No.	Description	Unit	A Quantity	B Master Rate	C Multiplication factor	D Weighting factor 1	E=A*B*C*D Amount (Rands)
1	Dismantling of processing plant and related structures (including overland conveyors and powerlines)	m3	0	14.05	1	1	0
2 (A)	Demolition of steel buildings and structures	m2	0	195.76	1	1	0
2(B)	Demolition of reinforced concrete buildings and structures	m2	0	288.49	1	1	0
3	Rehabilitation of access roads	m2	0	35.03	1	1	0
4 (A)	Demolition and rehabilitation of electrified railway lines	m	0	340.01	1	1	0
4 (A)	Demolition and rehabilitation of non-electrified railway lines	m	0	185.46	1	1	0
5	Demolition of housing and/or administration facilities	m2	0	391.53	1	1	0
6	Opencast rehabilitation including final voids and ramps	ha	0.3	205242.16	0.52	1	32017.77696
7	Sealing of shafts adits and inclines	m3	0	105.09	1	1	0
8 (A)	Rehabilitation of overburden and spoils	ha	0	136828.1	1	1	0
8 (B)	Rehabilitation of processing waste deposits and evaporation ponds (non-polluting potential)	ha	0	170416.93	1	1	0
8 (C)	Rehabilitation of processing waste deposits and evaporation ponds (polluting potential)	ha	0	494971.55	1	1	0
9	Rehabilitation of subsided areas	ha	0	114572.93	1	1	0
10	General surface rehabilitation	ha	0.3	108390.94	1	1	32517.282
11	River diversions	ha	0	108390.94	1	1	0
12	Fencing	m	0	123.64	1	1	0
13	Water management	ha	0	41213.28	1	1	0
14	2 to 3 years of maintenance and aftercare	ha	0.3	14424.65	1	1	4327.395
15 (A)	Specialist study	Sum	0			1	0
15 (B)	Specialist study	Sum				1	0
					Sub Total 1		68862.45396

1	Preliminary and General	8263.494475	**weighting factor 2** 1	8263.494475
2	Contingencies	6886.245396		6886.245396
			Subtotal 2	84012.19
			VAT (14%)	11761.71
			Grand Total	**95774**