

**PROPOSED PROSPECTING RIGHT ON PORTION 3 OF
THE FARM WELVERDIEND NO 511 MAGISTERIAL
DISTRICT OF VANRHYNSDORP WESTERN CAPE
PROVINCE**

FINAL BASIC ASSESSMENT REPORT



OCTOBER 2021

REFERENCE NUMBER: WC 30/5/1/1/2/10375 PR

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EXECUTIVE SUMMARY

Paramon (Pty) Ltd (“hereinafter referred to as “the Applicant”), applied for environmental authorisation (EA) and a prospecting right for all forms of Marble (Dimension Stone), Limestone, Dimension Stone (General) on portion 3 and the remaining extent of the farm Welverdiend no 511 magisterial district of Vanrhynsdorp Western Cape province.

The proposed project triggers listed activities in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) and the Environmental Impact Assessment Regulations 2014 (as amended 2017) and therefore requires an environmental impact assessment (basic assessment process) that assess project specific environmental impacts and alternatives, consider public input, and propose mitigation measures, to ultimately culminate in an environmental management programme that informs the competent authority (Department of Mineral Resources and Energy) when considering the environmental authorisation. This report, the Draft Basic Assessment Report, forms part of the departmental requirements, and presents the first report of the EIA process.

Project Description:

The proposed prospecting footprint applied for was approximately 35 km² over portion 3 and the remaining extent of the farm Welverdiend no 511 magisterial district of Vanrhynsdorp Western Cape province. However, after consultation with the land owners the remaining extent of the farm Welverdiend no 511 magisterial district of Vanrhynsdorp Western Cape province was removed from this application and will only continue on portion 3 of the farm Welverdiend no 511 magisterial district of Vanrhynsdorp Western Cape province in which case the land owner is the applicant.

The proposed prospecting footprint will now be reduced to approximately 70.077 ha over the above mentioned property and will be performed over a period of one (1) week over the entire prospecting period. Prospecting will involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity.

The non-invasive activities will consist out of the following:

- Traversing the entire farm, and/or identified target areas on foot
- Geological mapping and characterisation of the surface material and mineralisation
- Geotechnical and structural orientation mapping
- Collection of rock samples (loose) which is representative of the mineralisation
- Verification of all relevant site, geological and mining data

The aim of the exploration activity is to verify the geology, historical data and any and all site data for the project, as well as to produce a most up-to-date current surface geological and geotechnical map of the mineralised zone.

The land surface rights of this application area is owned by the applicant.

Land access and site visit will be communicated prior to commencement of activities.

Access to the proposed prospecting area will be via the N7, making use of the existing internal/haul roads to access the prospecting area.

Site Alternative 1 (Preferred and Only Site Alternative going forward):

Site Alternative 1, which entails the prospecting area with a footprint of approximately 70.077 ha over portion 3 of the farm Welverdiend no 511 magisterial district of Vanrhynsdorp Western Cape province (hereafter referred to as the application property) and will be performed over a period of one (1) week over the entire prospecting period. Prospecting will involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity.

Prospecting sites can be moved to various area depending on sensitivity and accessibility. However, the proposed prospecting area was identified as the preferred and only viable site alternative. S1 was identified during the assessment phase of the environmental impact assessment, by the Applicant and project team due to the following:

- The land surface rights of this application area is owned by the applicant.
- The geological setting of the area of interest is mainly underlain by superficial sediments of Late Cenozoic age.
- Availability of all forms of Marble (Dimension Stone), Limestone, Dimension Stone (General) (hereafter referred to as mineral resource) will only be determined should the prospecting right be granted and prospecting activities can take place.

Site Alternative 2 (Not viable and will not be further assessed and excluded from the application):

Site Alternative 2, which entails the prospecting area with a footprint of approximately 35 km² over portion 3 and the remaining extent of the farm Welverdiend no 511 magisterial district of Vanrhynsdorp Western Cape province and will be performed over a period of one (1) week. Prospecting will involve

non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity.

Prospecting sites can be moved to various positions in consultation with the land owner depending on sensitivity and accessibility. However, the proposed prospecting area was not found viable as the as the land owner did not give consent for prospecting on this property. As non-invasive surface exploration will be done which generally leaves little to no evidence of exploration activity in order to assess the impacts for this alternative, S2 was not found viable to be assessed during the assessment phase of the environmental impact assessment by the Applicant and project team.

No-go Alternative:

The no-go alternative was not deemed to be the preferred alternative as:

- The applicant will not be able to prospect for any possible mineral resource;
- The application, if approved, would allow the applicant to determine the available mineral resource as well as provide possible future employment opportunities to local employees. Should the no-go alternative be followed these opportunities will be lost to the applicant, potential employees and clients; and
- The applicant will not be able to diversify the income of the property.

Not proceeding with the proposed operation will entail that a mineral which if found will contribute towards the local and provincial social and economic structures of the area, will not be mined, and that this opportunity will be lost.

Public Participation Process:

During the initial public participation process the stakeholders and I&AP's were informed of the project by means of background information documents that were sent directly to the contact persons. An advertisement that was placed in Ons Kontrei on the 30th of July 2021, and four on-site notices were placed one at the entrance to the farm, one at the local Spar in town, one at the public library and one at Vanrhynsdorp Magistrates Court. A 30-days commenting period was allowed which expired on the 13th September 2021. Thus far, only the landowner of the remaining extent of the farm Welverdiend no 511 magisterial district of Vanrhynsdorp Western Cape province and stakeholders registered on the project; no other comments or objections have been received. In accordance with the timeframes stipulated in the EIA Regulations, as amended, the Draft Basic Assessment Report was compiled and will be distributed for comment and perusal to the I&AP's and stakeholders. A 30-day commenting period, ending 15 October 2021, was allowed for perusal of the documentation and submission of comments. The comments received on the Draft Basic Assessment Report (DBAR), were incorporated into the Final Basic Assessment Report (FBAR), which report will be submitted to the

competent authority (CA) for final decision making. Proof of such consultation, which proof includes personal information of Interested & Affected Party (“participants”), is limited to documentation intended for the CA only. Said personal information shall not be distributed as part of the public documentation, for public comment, in terms of this application process. The above is to ensure the protection of personal information of participants, in line with the Protection of Personal Information Act 4 of 2013 (“POPIA”), including the lawful processing of said personal information by Greenmined Environmental (Pty) Ltd (“Greenmined”), to which processing of personal information all participants consented to upon registration as participant. Participants that would like to inquire regarding specific information can do so by contacting Greenmined and by providing the necessary consent that authorises such an individual to obtain said specific information.

Basic Assessment Report:

The Basic Assessment Report identifies the potential positive and negative impacts that the proposed activity will have on the environment and the community as well as the aspects that may impact on the socio-economic conditions of directly affected persons, and proposes possible mitigation measure that could be applied to modify / remedy / control / stop the identified impacts.

The key finding of the environmental impact assessment entail the following:

Topography:

The project area is mainly flat or only slightly undulating by superficial sediments of Late Cenozoic age. The thickness of the superficial sediment overburden overlying Precambrian bedrocks here varies from between 0 – 2 meters. A small area in the east is covered by fine-grained aeolian sands (Q-s) that cover large portions of the coastal plain to the north and south of Vanrhynsdorp, where they are often underlain by older calcareous or loamy soils, and that often appear distinctly orange on satellite images. The reddish sands are derived from pale alluvial sands that were accumulated near the coast by the palaeo-Olifants River system and then blown inland by prevailing south-westerly winds. They are mainly of Pleistocene to Recent age. The majority of the study area is mantled by calcareous and gypsiferous soils (Q-r2) that cover large areas of the Knersvlake region around Vanrhynsdorp and are often capped by a reddish, well-consolidated calcareous or siliceous hardpan or dorbank. The soils comprise a spectrum of gravally conglomerates, grit, sand and finer sediment showing a variable degree of calcretisation (i.e. pedogenic limestone formation typical of semi-arid climates). Pleistocene to Holocene alluvial deposits such as silts and gravels occur along the Widouw River but these are small in extent. The altitude varies between 113-134 m.

Visual Characteristics:

The viewshed analysis showed that the visual impact of the proposed prospecting operation will be of low significance. Prospecting will mainly involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity thus the visual exposure is seen to be insignificant. Therefore, the proposed activities will not have a visual impact on the area.

Air and Noise Quality:

The proposed activity will have no contribution to air and noise quality since prospecting activities will mainly involve non-invasive surface exploration. Thus the potential impact on the noise ambiance of the receiving environment is expected to be of low significance.

Geology and Soil:

The project area is largely underlain by superficial sediments of Late Cenozoic age. The thickness of the superficial sediment overburden overlying Precambrian bedrocks here varies from between 0 – 2 meters. A small area in the east is covered by fine-grained aeolian sands (Q-s) that cover large portions of the coastal plain to the north and south of Vanrhynsdorp, where they are often underlain by older calcareous or loamy soils, and that often appear distinctly orange on satellite images. The reddish sands are derived from pale alluvial sands that were accumulated near the coast by the palaeo-Olifants River system and then blown inland by prevailing south-westerly winds. They are mainly of Pleistocene to Recent age. The majority of the study area is mantled by calcareous and gypsiferous soils (Q-r2) that cover large areas of the Knersvlake region around Vanrhynsdorp and are often capped by a reddish, well-consolidated calcareous or siliceous hardpan or dorbank. The soils comprise a spectrum of gravally conglomerates, grit, sand and finer sediment showing a variable degree of calcretisation (i.e. pedogenic limestone formation typical of semi-arid climates). Pleistocene to Holocene alluvial deposits such as silts and gravels occur along the Widouw River but these are small in extent.

Hydrology:

The proposed site falls within the Olifants/ Doorn Water Management Area, in the E33G quaternary catchment area. According to the National Freshwater Ecosystem Priority Areas (NFEPA) map as presented by SANBI, a NFEPA river intersects with the proposed prospecting footprint falls but is partially modified in which a large loss of natural habitat, biota and basic ecosystem function have occurred.

Prospecting will mainly involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity thus the impact on the hydrology of the area for this activity is seen to be insignificant.

Mining, Biodiversity and Groundcover:

The prospecting activities does not require the removal of any large trees or vegetation of significance. Prospecting will mainly involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity thus the impact on the mining, biodiversity and groundcover of the area for this activity is seen to be insignificant.

Fauna:

Various small mammals and reptiles occur are likely to on the property. Small mammals, reptiles and insects will occur in the area. The fauna at the site will not be impacted by the proposed prospecting activity as they will not be disturbed by the prospecting activities. Since prospecting will mainly involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area. Field workers and specialist should be educated and managed to ensure that no fauna at the site is harmed. At this stage no resident protected or red data faunal species were identified within the earmarked footprint, and the project is expected to have a negligible impact in this regard as prospecting activities will be done by non-invasive activities.

HUMAN ENVIRONMENT:

Cultural and Heritage Environment:

The prospecting programme will consist of non-invasive surface exploration. The non-invasive prospecting activity is implemented to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity. The non-invasive exploration programme will consist of a surface geotechnical mapping programme of around three (3) days geological field work on Portion 3 of the farm Welverdiend No 511 situated in the magisterial district of Vanrhynsdorp, Western Cape Province.

Heritage Western Cape will be contacted for their perusal and commenting. A specialist should be consulted prior to any further invasive activities or mining. However, should artefacts archaeological items be observed during the prospecting activities, then all activity should cease immediately, the area marked off activity and a specialists consulted prior to any further activity. This also includes if

any graves are observed on site during activity progress then all activity should have ceased and the area demarcated as a no-go zone.

Site Specific Infrastructure:

The prospecting site will contain the following:

- Surveying Equipment;
- Geophysical logging equipment;
- Field Vehicles;
- Sample Analysis equipment; and
- Other relevant field equipment.

During the Environmental Impact Assessment process the feasibility of the proposed site was assessed to identify fatal flaws that are deemed as severe as to prevent the activity continuing, or warrant a site or project alternative. The outcome of the assessment showed that should the mitigation measures and monitoring programmes proposed in this document be implemented, no fatal flaws could be identified that prevents the activity continuing.

Environmental Management Programme (EMPR)

The EMPR provides a description of the impact management outcomes and closure objectives. It presents the impacts to be mitigated in their respective phases as well as stipulates the mitigation measures to be applied on site.

The prospecting will involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity. In light of the above the amount that will be necessary for the rehabilitation of damages caused by the operation, both sudden closures during the normal operation of the project and at final, planned closure gives a sum total of **R 8000.00**

LIST OF ABBREVIATIONS

BID	Background Information Document
BGIS	Biodiversity GIS
CARA	Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983)
CBA	Critical Biodiversity Area
DBAR	Draft Basic Assessment Report
FBAR	Final Basic Assessment Report
DMRE	Department of Mineral and Resources and Energy
DoT	Department of Transport
DWS	Department of Water and Sanitation
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EIA Regulations	Environmental Impact Assessment Regulations, 2014 (as amended 2017)
EISC	Ecological Importance and Sensitivity Category
EMPR	Environmental Management Programme
FBAR	Final Basic Assessment Report
WCDARD	Western Cape Department of Agricultural and Rural Development
GDP	Gross Domestic Product
WCBSP	Western Cape Biodiversity Spatial Plan
GNR	Government Notice
I&AP's	Interested and Affected Parties
MHSA	Mine Health and Safety Act, 1996 (Act No. 29 of 1996)
MPRDA	Minerals and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002)
Mineral Resource	All forms of Limestone CaCO ₃ and MgCO ₃ , Dimension stone and Marble (Marble (Dimension Stone), Limestone, Dimension Stone (General)
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
NEM:AQA	National Environmental Management: Air Quality Control Act, 2004 (Act No. 39 of 2004)
NEM:BA	National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)
NEM:WA	National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)
NFEPA	National Freshwater Ecosystem Priority Areas
NHRA	National Heritage Resources Act, 1999 (Act No 25 of 1999)

NRTA	National Road Traffic Act, 1996 (Act No. 93 of 1996)
NWA	National Water Act, 1998 (Act No. 36 of 1998)
PCB's	Polychlorinated Biphenyl
PCO	Pest Control Officer
PES	Present Ecological State
PPE	Personal Protective Equipment
PR	Prospecting Right
PSM	Palaeontological Sensitivity Map
RA	Risk Assessment
S1	Site Alternative 1
S2	Site Alternative 2
SAHRA	South African Heritage Resources Agency
SAHRIS	South African Heritage Resources Information System
SAMBF	South African Mining and Biodiversity Forum
WMA	Water Management Area
WULA	Water Use Licence Application

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BASIC ASSESSMENT REPORT

And

ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

SUBMITTED FOR ENVIRONMENTAL AUTHORIZATION IN TERMS OF THE NATIONAL ENVIRONMENTAL 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:	Paramon (Pty) Ltd
CELL NO:	072 809 1949
FAX NO:	N/A
POSTAL ADDRESS:	6 Lingfield Close, Milnerton Ridge, Cape Town, 7441
FILE REFERENCE NUMBER SAMRAD:	WC 30/5/1/1/2/10375 PR

IMPORTANT NOTICE

In terms of the Mineral and Petroleum Resources Development Act (Act 29 of 2002) as amended), the Minister must grant a prospecting or mining right if among others the mining “will not result in unacceptable pollution, ecological degradation or damage to the environment”.

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

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

It is therefore an instruction that the prescribed reports required in respect of applications for an environmental authorisation for listed activities triggered by an application for a right or 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 Authorisation being refused.

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

OBJECTIVE OF THE BASIC ASSESSMENT PROCESS

The objective of the basic assessment process is to, through a consultative process–

- (a) determine the policy and legislative context within which the proposed activity is located and how the activity complies with and responds to the policy and legislative context;
- (b) identify the alternatives considered, including the activity, location, and technology alternatives;
- (c) describe the need and desirability of the proposed alternatives,
- (d) through the undertaking of an impact and risk assessment process inclusive of cumulative impacts which focused on determining the geographical, physical, biological, social, economic, heritage, and cultural sensitivity of the sites and locations within sites and the risk of impact of the proposed activity and technology alternatives on these aspects to determine:
 - (i) the nature, signification, consequence, extent, duration, and probability of the impacts occurring to; and
 - (ii) the degree to which these impacts –
 - (aa) can be reversed;
 - (bb) may cause irreplaceable loss of resources; and
 - (cc) can be managed, avoided or mitigated;
- (e) through a ranking of the site sensitivities and possible impacts the activity and technology alternatives will impose on the sites and location identified through the life of the activity to –
 - (i) identify and motivate a preferred site, activity and technology alternative;
 - (ii) identify suitable measures to manage, avoid or mitigate identified impacts; and
 - (iii) identify residual risks that need to be managed and monitored.

PART A

SCOPE OF ASSESSMENT AND BASIC ASSESSMENT REPORT

1. CONTACT PERSON AND CORRESPONDENCE ADDRESS

a) Details of: Greenmined Environmental

In terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) the proponent must appoint an independent Environmental Assessment Practitioner (EAP) to undertake the environmental impact assessment (EIA) of any activities regulated in terms of the aforementioned Act. Paramon (Pty) Ltd appointed Greenmined Environmental to undertake the study needed. Greenmined Environmental has no vested interest in Paramon (Pty) Ltd or the proposed project and declares its independence as required by the Environmental Impact Assessment Regulations, 2014 (as amended April 2017) (EIA Regulations).

i) Details of the EAP

Name of the Practitioner: Mrs Sonette Smit (Senior Environmental Specialist)
Tel No.: 021 851 2673
Fax No.: 086 546 0579
E-mail address: sonette.s@greenmined.co.za

ii) Expertise of the EAP.

(1) The qualifications of the EAP

(with evidence).

Mrs. S Smit has fourteen years of experience in environmental legal compliance audits, (GIS) geographic information system, mining right and permit applications and applications for environmental authorisations & Water use applications.. Please find full CV attached in Appendix L.

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

(In carrying out the Environmental Impact Assessment Procedure)

Sonette Smit is an Environmental Consultant with 14 years' experience in the environmental sector. She specialized the last 8 years in the mining sector where she conducted the mining related report and programs. She has also been involved in a number of other environmental and water use application projects where she compiled environmental management plans, environmental impact assessments, environmental audits, IWULA's/IWWMP's.

b) Location of the overall Activity.

Table 1: Location of the proposed project.

Farm Name:	Portion 3 of the farm Welverdiend no 511
Application area (Ha)	70.077 ha
Magisterial district:	Vanrhynsdorp
Distance and direction from the nearest town	Portion 3 of the farm Welverdiend no 511 is situated approximately 8 km South of Vanrhynsdorp.
21 digit Surveyor General Code for each farm portion	📍 C07800000000051100003

c) Locality map

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

The requested map is attached as Appendix F.

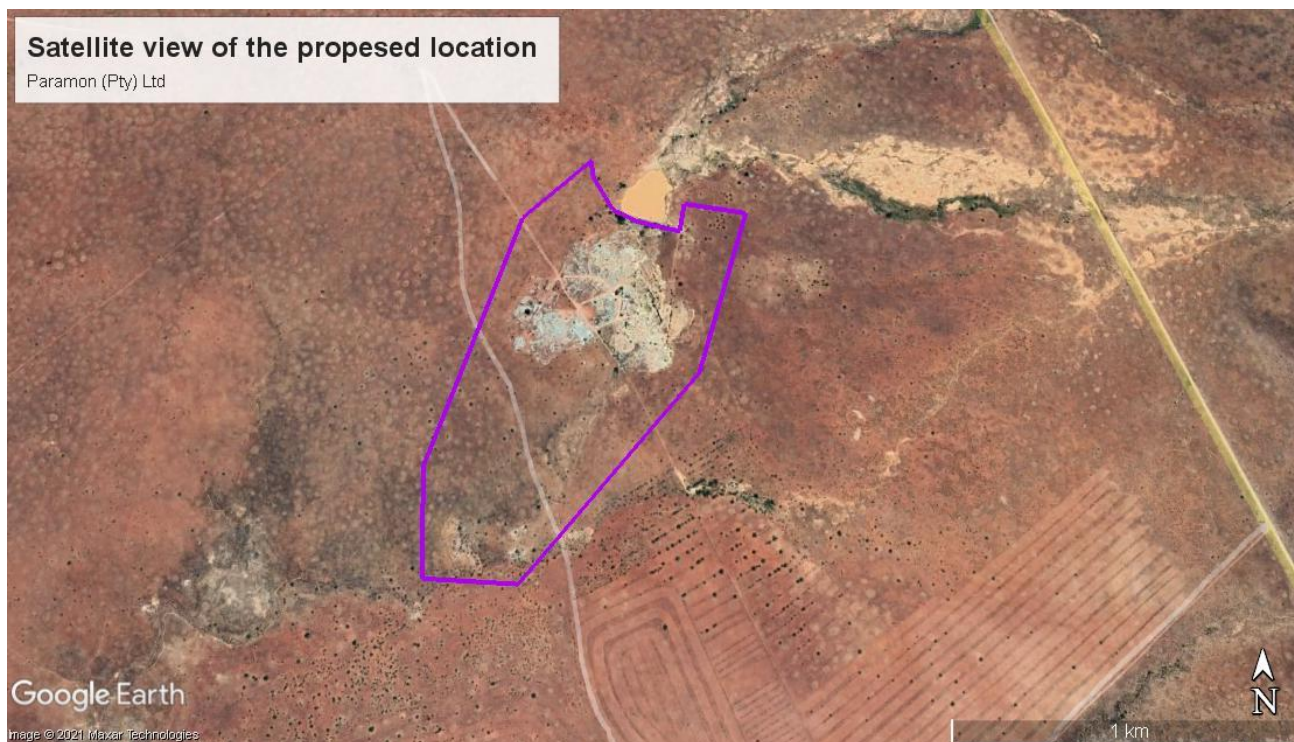


Figure 1: Satellite view of the proposed prospecting right area of Paramon (Pty) Ltd (image obtained from Google Earth).

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 aforesaid main and listed activities, and infrastructure to be placed on site

Paramon (Pty) Ltd (“hereinafter referred to as “the Applicant”) applied for a prospecting right on Portion 3 of the farm Welverdiend no 511 (70.077ha), which falls in Magisterial District of Vanrhynsdorp Western Cape province.

The proposed prospecting area is a natural area. The planned activities for the proposed site’s is detailed below under point ii.

All activities will be contained within the boundaries of the site.

i) Listed and specified activities

Table 2: Listed and specified activities triggered by the associated prospecting activities

NAME OF ACTIVITY (E.g. For prospecting – drill site, site camp, ablution facilities, 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.)	Aerial extent of the activity Ha or m ²	LISTED ACTIVITY Mark with an X where applicable or affected	APPLICABLE LISTING NOTICE (GNR 324, GNR 325, GNR 326 OR GNR 327)
SITE VISITS BY VARIOUS SPECIALIST	70.077 ha	N/A	Not Listed
DEMARCATON OF SITE WITH VISIBLE BEACONS.	70.077 ha	N/A	Not Listed
PROSPECTING (NON INVASIVE)	70.077 ha	X	GNR 327 Listing Notice 1: Activity 20
OVERALL FINAL REHABILITATION ACTIVITIES	70.077 ha	X	GNR 327 Listing Notice 1: Activity 20

ii) Description of the activities to be undertaken

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

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.)

The proposed prospecting footprint is approximately 70.077 ha over the above mentioned property and will be performed over a period of one (1) week over the entire prospecting period. Prospecting will involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity.

The non-invasive activities will consist out of the following:

- Traversing the entire farm, and/or identified target areas on foot
- Geological mapping and characterisation of the surface material and mineralisation
- Geotechnical and structural orientation mapping
- Collection of rock samples (loose) which is representative of the mineralisation
- Verification of all relevant site, geological and mining data

The aim of the exploration activity is to verify the geology, historical data and any and all site data for the project, as well as to produce a most up-to-date current surface geological and geotechnical map of the mineralised zone.

The land surface rights owned by the applicant of this application area. Access to the proposed prospecting area will be via the N7, making use of the existing internal/haul roads to access the prospecting area.

DESCRIPTION OF PRE-/FEASIBILITY STUDIES:

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

The pre-/feasibility studies team will comprise of a diverse team of technical expertise in the field of mineral projects, including, geologists, mining engineers, metallurgical engineers, civil engineers, mechanical engineers, environmental scientists, marketing professionals and mineral project finance professionals. The list of activities under pre-/feasibility studies includes the following:

- Geological modelling and resource estimation;
- Mineral reserve estimation;
- Mine design and scheduling;
- Metallurgical processing;
- Market development;
- Infrastructure design
- Engineering development
- Human resourcing
- Project development and operational costing

The prospecting site will contain the following:

- Surveying Equipment;
- Geophysical logging equipment;
- Field Vehicles;
- Sample Analysis equipment; and
- Other relevant field equipment.

See attached as Appendix C a copy of the site activities map for the proposed project.

The table below lists the GPS coordinates of the proposed prospecting area as shown on the Regulation 2(2) Mine Plan attached as Appendix A.

Table 3: GPS Coordinates of the proposed prospecting footprint.

Name	DECIMAL DEGREES	
	LONG (E)	LAT (S)
A	18.7299°	31.6873°
B	18.7328°	31.6802°
C	18.7351°	31.6784°
D	18.7362°	31.6789°
E	18.7357°	31.6799°
F	18.7367°	31.6802°
G	18.7381°	31.6805°
H	18.7383°	31.6797°
I	18.7403°	31.6800°
J	18.7387°	31.6848°
K	18.7328°	31.6906°
L	18.7300°	31.6905°

EXCLUDED AREA COORDINATES:		
1	18.73463405	31.68090923
2	18.73548888	31.68105775
3	18.73556951	31.68201846
4	18.73525287	31.68264037
5	18.73515361	31.68358612
6	18.73392223	31.68432032
7	18.73305574	31.68401916

Should the PR be issued and the prospecting for the mineral resource will be allowed, the proposed project will comprise of activities as discussed in more detail below:

Phase	Activity (what are the activities that are planned to achieve optimal prospecting)	Skill(s) required (refers to the competent personnel that will be employed to achieve the required results)	Timeframe (in months) for the activity)	Outcome (what is the expected deliverable, e.g. geological report, analytical results, feasibility study, etc)	Timeframe for outcome (deadline for the expected outcome to be delivered)	What technical expert will sign off on the outcome? (e.g. geologist, mining engineer, surveyor, economist, etc)
1	Non-Invasive prospecting - Geotechnical Mapping	Geologist (s)	1 week	Site Access and Geological Map	Week 1	Geologist/ MRM
1	Non-invasive prospecting - Reporting	Geologist (s)	1 week	Scoping and Verification Report, Geological Field Report and Exploration Recommendations (Mineralisation Range analysis – if needed)	Week 2	Geologist/ MRM

e) Policy and Legislative Context

Table 4: Policy and Legislative Context.

APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT (a description of the policy and legislative context within which the development is proposed including an identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks and instruments that are applicable to this activity and are to be considered in the assessment process)	REFERENCE WHERE APPLIED	HOW DOES THIS DEVELOPMENT COMPLY 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)
Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983).	Part A(1)(h)(iv)(1)(a) Type of environment affected by the proposed activity: <i>Physical Environment – Geology and Soil.</i>	The mitigation measures proposed for the site includes specifications of the CARA, 1983.
Mine Health and Safety Act, 1996 (Act No 29 of 1996) read together with applicable amendments and regulations thereto including relevant OHSA regulations.	Part A(1)(h)(viii) The possible mitigation measures that could be applied on the level of risk – <i>Management of Health and Safety Risks.</i>	The mitigation measures proposed for the site includes specifications of the MHSA, 1996
Mineral and Petroleum Resources Development Act, 2002, (Act No. 28 of 2002) read together with applicable amendments and regulations thereto. ■ Section 16	Part A(1)(d) Description of the scope of the proposed overall activity	Application for a prospecting right submitted to DMRE-WC. Ref No: WC 30/5/1/1/2/10375 PR
National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2014 as amended, and the Environmental Impact Assessment Regulations Listing Notice 1; Listing Notice 2 and Listing Notice 3, as amended ■ G44701-GoN517: Listing Notice 1 Activity 20	Part A(1)(d)(i) Listed and specified activities.	Application for environmental authorisation submitted to DMRE-WC Ref No: WC 30/5/1/1/2/10375 PR
Financial Provisioning Regulations, 2015 (as amended),	Part A(1)(h)(i)(l) Closure phase of the proposed activity	Application for environmental authorisation submitted to DMRE-WC to be applied throughout the EIA assessment, Closure phase. Ref No: WC 30/5/1/1/2/10375 PR
National Environmental Management Act: Biodiversity Act, 2004 (Act No. 10 of 2004) read together with applicable amendments and regulations thereto.	Part A(1)(h)(iv)(1)(a) Type of environment affected by the proposed activity - <i>Biological Environment</i>	The mitigation measures proposed for the site includes specifications of the NEM:BA, 2004.

APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT (a description of the policy and legislative context within which the development is proposed including an identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks and instruments that are applicable to this activity and are to be considered in the assessment process)	REFERENCE WHERE APPLIED	HOW DOES THIS DEVELOPMENT COMPLY 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)
National Environmental Management: Waste Act, 2008 (Act No 59 of 2008) read together with applicable amendments and regulations thereto. NEM:WA, 2008: National norms and standards for the storage of waste (GN 926)	Part A(1)(d)(ii) Description of the activities to be undertaken	The mitigation measures proposed for the site take into account the NEM:WA.
National Dust Control Regulations (GN No. R. 827 of 1 November 2013) promulgated in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004).	Part A(1)(h)(iv)(1)(a) Type of environment affected by the proposed activity	The mitigation measures proposed for the site includes prohibit a person from conducting any activity in such a way as to give rise to dust in such quantities and concentrations that the dust, or dust fallout, has a detrimental effect on the environment, including human health.
Western Cape Noise Control Regulations (Provincial Notice 200/2013) of 20 June 2013	Part A(1)(h)(iv)(1)(a) Type of environment affected by the proposed activity	The mitigation measures proposed for the site take into account the noise regulations
National Heritage Resources Act. 1999 (Act No 25 of 1999).	Part A(1)(h)(iv)(1)(a) Type of environment affected by the proposed activity – <i>Human Environment</i>	The mitigation measures proposed for the site includes specifications of the NHRA, 1999.
Government Notice No 704 dated 4 June 2004	Part A(1)(h)(iv)(1)(a) Type of environment affected by the proposed activity – <i>Hydrology</i> . Part A(1)(h)(viii) The possible mitigation measures that could be applied on the level of risk.	The mitigation measures proposed for the site take into account all requirements in the Regulations on use of water for mining and related activities aimed at the protection of water resources
The National Water Act (NWA) 1998(Act No. 36 of 1998)	Part A(1)(h)(iv)(1)(a) Type of environment affected by the proposed activity – <i>Hydrology</i> . Part A(1)(h)(viii) The possible mitigation measures that could be applied on the level of risk.	The mitigation measures proposed for the site take into account all requirements in the Regulations on use of water for mining and related activities aimed at the protection of water resources

APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT (a description of the policy and legislative context within which the development is proposed including an identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks and instruments that are applicable to this activity and are to be considered in the assessment process)	REFERENCE WHERE APPLIED	HOW DOES THIS DEVELOPMENT COMPLY 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)
Guideline on Need and Desirability	Part A(1)(f) Need and desirability of the proposed activities.	The need and desirability of the project was assessed in accordance with these guidelines.
Section 28 of the NEMA, 1998 which states that “Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment.”	Implied throughout the document	The “ <i>general duty of care towards the environment</i> ” to be upheld throughout the EIA assessment, planning-, construction-, operational- and decommissioning phases.
The South African Constitution	Implied throughout the document	To be upheld throughout the EIA assessment, planning-, construction-, operational- and decommissioning phases.
Public Participation Guideline in terms of the NEMA EIA Regulations	Part A(1)(h)(ii) Details of the Public Participation Process Followed	Public participation was conducted in accordance with the guidelines published in terms of the NEMA EIA Regulations

f) Need and desirability of the proposed activities.

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

Table 5: Need and desirability determination.

1. SECURING ECOLOGICAL SUSTAINABLE DEVELOPMENT AND USE OF NATURAL RESOURCES		
<u>How will this development impact on the ecological integrity of the area?</u>		
Question	Response	Level of Desirability
How were ecological integrity considerations taken into account?	<p>As discussed under <i>Part A(1)(g)(iv)(1)(a) Type of environment affected by the proposed activity</i>, prospecting of the proposed area will be performed over a period of one (1) week. The prospecting programme will consist of non-invasive surface exploration. The non-invasive prospecting activity is implemented to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity. The non-invasive exploration programme will consist of a surface geotechnical mapping programme of around three (3) days geological field work. The proposed project will not necessitate the loss of any natural area.</p> <p>Also refer to:</p> <ul style="list-style-type: none"> ■ Part A(1)(g)(i) Details of the development footprint alternatives considered; ■ Part A(1)(g)(iv)(1)(c) Description of specific environmental features and infrastructure on the site – Site Specific Vegetation; ■ Part A(1)(g)(viii) The possible mitigation measures that could be applied and the level of risk. 	Desirable
How will this development disturb or enhance ecosystems and/or result in the loss or protection of biological diversity?		
How will this development pollute and/or degrade the biophysical environment?	<p>As mentioned above prospecting of the proposed area will be performed over a period of one (1) week over the entire prospecting period. The prospecting programme will consist of non-invasive surface exploration. The non-invasive prospecting activity is implemented to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity. The non-invasive exploration programme will consist of a surface geotechnical mapping programme of around three (3) days geological field work. The proposed project will not necessitate the loss of any natural area, thereby keeping the impact on the receiving environment as low as possible.</p>	

1. SECURING ECOLOGICAL SUSTAINABLE DEVELOPMENT AND USE OF NATURAL RESOURCES

How will this development impact on the ecological integrity of the area?

Question	Response	Level of Desirability
What waste will be generated by this development?	The general waste generated by the prospecting activities mainly consist of items such as food wrappers of the geologists and field workers. This is kept within the site vehicles and daily removed from site. As mentioned earlier, hazardous waste is mainly the result of accidental spillages/breakdowns of field vehicles. Such contaminated areas are immediately (within first hour of the occurrence) cleaned and the contaminated soil is contained in a designated hazardous waste container that is daily (when applicable) removed, from where it is disposed of as hazardous waste at the nearest hazardous waste disposal site. Ablution facilities will be by means of a chemical toilet which will be serviced by an accredited contractor. No waste is/will be disposed of or treated on site.	Highly Desirable
How will this development disturb or enhance landscapes and/or sites that constitute the nation's cultural heritage?	<p>The prospecting programme will consist of non-invasive surface exploration. However, should artefacts archaeological items be observed during the prospecting activities, then all activity should cease immediately, the area marked off activity and a specialists consulted prior to any further activity. This also includes if any graves are observed on site during activity progress then all activity should have ceased and the area demarcated as a no-go zone.</p> <p>The Applicant will implement a chance-find protocol on site for the duration of the planning and design / site establishment, operational- and decommissioning phase”</p>	Could not be determined
How will this development use and/or impact on non-renewable natural resources?	As per the prospecting work programme (PWP) The area of interest is situated approximately 8 km South of Vanrhynsdorp. The project area is largely underlain by superficial sediments of Late Cenozoic age. The majority of the study area is mantled by calcareous and gypsiferous soils (Q-r2) that cover large areas of the Knersvlake region around Vanrhynsdorp and are often capped by a reddish, well-consolidated calcareous or siliceous hardpan or dorbank. Within the study area just to the east of the N7 these comprise metamorphosed, deformed carbonate and other metasedimentary rocks of the Widouw Formation (Nwi). The Widouw succession, here in its type area, mainly consists of recrystallized, greyish limestones (marbles) and dolostones but also includes subordinate bodies of meta-greywacke, quartzite and phyllite. The following useful description of the Maskam	Could not be determined

1. SECURING ECOLOGICAL SUSTAINABLE DEVELOPMENT AND USE OF NATURAL RESOURCES

How will this development impact on the ecological integrity of the area?

Question	Response	Level of Desirability
	limestone ore body has been extracted from an original report entitled “Geological Report of the Maskam Limestone Deposit on the farm Welverdiend 511 in the Vanrhynsdorp District” (DW Rees in July 2008). The ore is covered by 5 -20 m of overburden which comprises clay, silt and sand as well as hard silcrete bands. No obvious faults, discontinuities or abnormalities were encountered. A unique feature of the deposit is the consistent high calcium carbonate values obtained in historical boreholes (no date) along strike, down-dip and in vertical depth from the sub-outcrop to the foot-wall contact. Therefore, only should this prospecting right be approved the applicant will be able to prospect for any possible mineral resource and can a reserve be determined.	
How will this development use and/or impact on renewable natural resources and the ecosystem of which they are part?	The prospecting activities does not make use of electricity and no water is needed to allow the operation of the activity.	Highly Desirable
How were a risk-averse and cautious approach applied in terms of ecological impacts?	As mentioned above the application is for non-invasive activities therefore the environmental footprint experienced within the prospecting area will be negligible. If the proposed mitigation measures and monitoring programs, as proposed in this document, is implemented, it is believed that ecological impacts should be fully mitigated.	Highly Desirable
How will the ecological impacts resulting from this development impact on people’s environmental right?	As mentioned above the application is for non-invasive activities therefore the environmental footprint experienced within the prospecting area will be negligible. If the proposed mitigation measures and monitoring programs, as proposed in this document, is implemented, it is believed that no environmental rights of the surrounding residents/public will be affected by the ecological impacts associated with the proposed activity.	Highly Desirable
Describe the linkages and dependencies between human wellbeing, livelihoods and		Highly Desirable

1. SECURING ECOLOGICAL SUSTAINABLE DEVELOPMENT AND USE OF NATURAL RESOURCES

How will this development impact on the ecological integrity of the area?

Question	Response	Level of Desirability
ecosystem services applicable to the area in question and how the development’s ecological impacts will result in socio-economic impacts.	At this stage no resident protected or red data species could be identified within the earmarked footprint, and the project is expected to have a negligible impact in this regard as prospecting activities will be non-invasive activities therefore the environmental footprint experienced within the prospecting area will be negligible. Prospecting will be done in consultation with the landowner / landowners. Should this prospecting right be granted farm owners will be consulted prior to commencement of any activities to ensure that safety of animals and workers.	
Based on all of the above, how will this development positively or negatively impact on ecological integrity objectives/targets/considerations of the area?		
Considering the need to secure ecological integrity and a healthy biophysical environment, describe how the alternatives identified, resulted in the selection of the “best practicable environmental option” in terms of ecological considerations		

2. PROMOTING JUSTIFIABLE ECONOMIC AND SOCIAL DEVELOPMENT		
<u>What is the socio-economic context of the area?</u>		
Question	Response	Level of Desirability
What is the socio-economic context of the area?	Please refer to Heading 2(h)(iv)(1)(a) Socio-economic Environment.	Highly Desirable
Considering the socio-economic context, what will the socio-economic impacts be of the development, and specifically also on the socio-economic objectives of the area?	As mentioned earlier, should this prospecting right be approved the applicant will be able to, <ul style="list-style-type: none"> ➤ Prospect for any possible mineral resource; ➤ Determine the available mineral resource as well as provide employment or possible future opportunities to local employees. ➤ It will also diversify the income of the property as well as potential employees and clients. 	
How will this development address the specific physical, psychological, developmental, cultural and social needs and interests of the relevant communities?	As mentioned above the application is for non-invasive activities therefore the specific physical, psychological, developmental, cultural and social needs and interests of the relevant communities within the prospecting area will be negligible at this stage. If the proposed mitigation measures and monitoring programs, as proposed in this document, is implemented, it is believed that the prospecting activities will not affect the physical, psychological, cultural or social needs of the community in a negative manner nor will the it impact negatively on the socio-economic status of the area.	Highly Desirable
Will the development result in equitable impact distribution, in the short- and long-term?	The prospecting activities proposes to operate in a socially and economically sustainable manner during both the short- and long term.	Highly Desirable
In terms of location, describe how the placement of the proposed development will contribute to the area.	As per the prospecting work programme (PWP) The area of interest is situated approximately 8 km South of Vanrhynsdorp The project area is largely underlain by superficial sediments of Late Cenozoic age The majority of the study area is mantled by calcareous and gypsiferous soils (Q-r2) that cover large areas of the Knersvlake region around Vanrhynsdorp and are often capped by a reddish, well-consolidated calcareous or siliceous hardpan or dorbank. Within the study area just to the east of	Highly Desirable

2. PROMOTING JUSTIFIABLE ECONOMIC AND SOCIAL DEVELOPMENT

What is the socio-economic context of the area?

Question	Response	Level of Desirability
	<p>the N7 these comprise metamorphosed, deformed carbonate and other metasedimentary rocks of the Widouw Formation (Nwi). The Widouw succession, here in its type area, mainly consists of recrystallized, greyish limestones (marbles) and dolostones but also includes subordinate bodies of meta-greywacke, quartzite and phyllite. The following useful description of the Maskam limestone ore body has been extracted from an original report entitled “Geological Report of the Maskam Limestone Deposit on the farm Welverdiend 511 in the Vanrhynsdorp District” (DW Rees in July 2008). The ore is covered by 5 -20 m of overburden which comprises clay, silt and sand as well as hard silcrete bands. The sub-outcrop is uniformly flat with no karsts penetrating into the ore body. The body does not outcrop but on the central western side it lies 1 - 2m below the land surface. The entire western part of the body is overlain by low-grade carbonate-rich hanging wall rock which gradually deepens eastward. The body is underlain by siliceous graphitic and phyllitic waste rock and the contact between the body and foot-wall schist is sharp. The true thickness of the deposit varies between 20 m in the west and 66 m in the east. The ore body has been identified for 1000m along the strike. The southern part terminates in deep weathering adjacent to the Wiedou River but the body extends northwards along strike over its full width beyond the prospected area. No obvious faults, discontinuities or abnormalities were encountered. A unique feature of the deposit is the consistent high calcium carbonate values obtained in historical boreholes (no date) along strike, down-dip and in vertical depth from the sub-outcrop to the foot-wall contact. No lenses of dolomite or siliceous limestone were encountered in the any of the samples taken from the 39 boreholes which were drilled into the ore body. The overburden gradually increases in thickness in a northerly direction to 20m. Therefore, should the proposed prospecting be approved and minerals be found it will contribute to the diversification of activities on the property, extending it from agriculture to include small scale mining. It will also diversify the income of the property as well as potential employees and clients within the immediate area.</p>	
How were a risk-averse and cautious approach applied in terms of socio-economic impacts?	No negative socio-economic impacts could, at this stage, be identified that cannot be managed through the implementation of mitigation measures.	Highly Desirable

2. PROMOTING JUSTIFIABLE ECONOMIC AND SOCIAL DEVELOPMENT		
<u>What is the socio-economic context of the area?</u>		
Question	Response	Level of Desirability
How will the socio-economic impacts resulting from this development impact on people's environmental right?	As mentioned above the application is for non-invasive activities therefore the specific physical, psychological, developmental, cultural and social needs and interests of the relevant communities within the prospecting area will be negligible at this stage. If the proposed mitigation measures and monitoring programs, as proposed in this document, is implemented, it is believed that the prospecting activities will not affect the physical, psychological, cultural or social needs of the community in a negative manner nor will the it impact negatively on the socio-economic status of the area. If the proposed mitigation measures and monitoring programs, as proposed in this document, is implemented, it is believed that no environmental rights of the surrounding residents/public will be affected by the socio-economic impacts associated with the proposed activity.	Highly Desirable
Considering the linkages and dependencies between human wellbeing, livelihoods and ecosystem services, describe the linkages and dependencies applicable to the area in question and how the development's socio-economic impacts will result in ecological impacts?	As mentioned above should the prospecting activities be approved the potential visual-, dust-, and noise impacts associated with the proposed activity will be of negligible. If the proposed mitigation measures and monitoring programs, as proposed in this document, is implemented, it is believed that no environmental rights of the surrounding residents/public will be affected by the socio-economic impacts associated with the proposed activity.	Highly Desirable
What measures were taken to pursue the selection of the "best practicable environmental option" in terms of socio-economic considerations?	Please refer to: <ul style="list-style-type: none"> ■ Part A(1)(g)(vii) The positive and negative impacts that the proposed activity and alternatives will have on the environmental and the community that may be affected. 	Highly Desirable
What measures were taken to pursue environmental justice so that adverse		

2. PROMOTING JUSTIFIABLE ECONOMIC AND SOCIAL DEVELOPMENT		
<u>What is the socio-economic context of the area?</u>		
Question	Response	Level of Desirability
environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons?		
<p>What measures were taken to pursue equitable access to environmental resources, benefits and services to meet basic human needs and ensure human wellbeing, and what special measures were taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination?</p> <p>What measures were taken to ensure that the responsibility for the environmental health and safety consequences of the development has been addressed throughout the development's life cycle?</p>	<p>The prospecting site will (if approved) operate in accordance with, amongst others, the following:</p> <ul style="list-style-type: none"> ■ CARA, 1983 – to ensure agriculture related compliance; ■ Financial Provision Regulations, 2015 – to ensure compliance in terms of rehabilitation; ■ Mine Health and Safety Act, 1996 (as amended) – to ensure employee safety; ■ MPRDA, 2002 (as amended) – to ensure prospecting related compliance; ■ NEM:AQA, 2004 – to ensure air quality related compliance; ■ NEM:BA, 2004 – to ensure biodiversity related compliance; ■ NEM:WA, 2008 – to ensure waste related compliance; ■ NEMA, 1998 (as amended) – to ensure environmental related compliance; 	Highly Desirable
Considering the interests, needs and values of all the interested and affected parties, describe how the development will allow for opportunities for all	The proposed prospecting will also contribute to the diversification of activities on the property, extending it from agriculture to include small scale mining. The need is to find an applicable mineral resource, qualify and quantify to develop a business model.	Highly Desirable

2. PROMOTING JUSTIFIABLE ECONOMIC AND SOCIAL DEVELOPMENT		
<u>What is the socio-economic context of the area?</u>		
Question	Response	Level of Desirability
the segments of the community that is consistent with the priority needs of the local area.		
What measures have been taken to ensure that current and/or future workers will be informed of work that potentially might be harmful to human health or the environment or of dangers associated with the work, and what measures have been taken to ensure that the right of workers to refuse such work will be respected and protected.	The prospecting right activities will be in accordance with the specifications of the Mine Health and Safety Act, 1996. All specialist and field workers will be inducted in order to inform them of work that potentially might be harmful to human health or the environment or of dangers associated with the work, and what measures have been taken to ensure that the right of workers to refuse such work will be respected and protected. Grievances/concerns can be lodged during the induction meetings.	Highly Desirable
Describe how the development will impact on job creation in terms of, amongst other aspects?	As mentioned earlier, should this prospecting right be approved the applicant will be able to, <ul style="list-style-type: none"> ➤ Prospect for any possible forms of Marble (Dimension Stone), Limestone, Dimension Stone (General); ➤ Determine the available forms of Marble (Dimension Stone), Limestone, Dimension Stone (General) resources as well as provide possible future employment opportunities to local employees. ➤ It will also diversify the income of the property as well as potential employees and clients. 	Highly Desirable
What measures were taken to ensure that the environment will be held in public trust for the people, that the beneficial use of environmental resources will serve the public interest, and that	Should the prospecting right be approved the activities will operate under a valid prospecting right issued by the DMRE. Compliance of the mine with the approval conditions can be reported on as per the departmental specifications and also be managed in accordance with all the mining and environmental related legislations.	Highly Desirable

2. PROMOTING JUSTIFIABLE ECONOMIC AND SOCIAL DEVELOPMENT		
<u>What is the socio-economic context of the area?</u>		
Question	Response	Level of Desirability
the environment will be protected as the people's common heritage.		
Are the mitigation measures proposed realistic and what long-term environmental legacy and managed burden will be left.	It is believed that the mitigation measures proposed in this document is realistic and can be implemented (when needed) by the proposed activities. If the proposed mitigation measures and monitoring programs, as proposed in this document, is implemented, the residual impact on the environment is of low significance.	Highly Desirable
What measures were taken to ensure that the costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution environmental damage or adverse health effects will be paid for by those responsible for harming the environment.	In terms of Section 41 of the MPRDA, 2002 a prospecting right holder must submit a financial provision to the DMRE that is sufficient to rehabilitate or manage the negative environmental impacts related to the prospecting activity.	Highly Desirable
Considering the need to secure ecological integrity and a healthy bio-physical environment, describe how the alternatives identified, resulted in the selection of the best practicable environmental option in terms of socio-economic considerations	Please refer to: <ul style="list-style-type: none"> ∞ Part A(1)(g)(i) Details of the development footprint alternatives considered; ∞ Part A(1)(g)(iv)(1)(c) Description of specific environmental features and infrastructure on the site – Site Specific Socio-Economic Environment; ∞ Part A(1)(g)(vii) The positive and negative impacts that the proposed activity and alternatives will have on the environmental and the community that may be affected. 	Highly Desirable

2. PROMOTING JUSTIFIABLE ECONOMIC AND SOCIAL DEVELOPMENT

What is the socio-economic context of the area?

Question	Response	Level of Desirability
Describe the positive and negative cumulative socio-economic impacts bearing in mind the size, scale, scope and nature of the project in relation to its location and other planned developments in the area.	If the proposed mitigation measures and monitoring programs, as proposed in this document, is implemented, it is believed that the prospecting activities will not cause a cumulative socio-economic impact should the prospecting right application be approved, seeing that this is only a non-invasive activity and will not affect any other related activities in the vicinity.	Highly Desirable

g) Motivation for the overall preferred site, activities and technology alternative.

The proposed prospecting footprint is approximately 70.077ha over the above mentioned property and will be performed over a period of one (1) week over the entire prospecting period. Prospecting will involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity.

The non-invasive activities will consist out of the following:

- Traversing the entire farm, and/or identified target areas on foot
- Geological mapping and characterisation of the surface material and mineralisation
- Geotechnical and structural orientation mapping
- Collection of rock samples (loose) which is representative of the mineralisation
- Verification of all relevant site, geological and mining data

The aim of the exploration activity is to verify the geology, historical data and any and all site data for the project, as well as to produce a most up-to-date current surface geological and geotechnical map of the mineralised zone.

The land surface rights are partially owned by the applicant of this application area.

The Environmental Impact Assessment process assessed the feasibility of the proposed site alternative to identify fatal flaws that are deemed as severe as to prevent the activity continuing, or warrant another site or project alternative. The outcome of the assessment showed that should the mitigation measures and monitoring programmes proposed in this document be implemented, no fatal flaws could be identified that prevents the activity continuing. In light of the above, the prospecting proposal was updated to incorporate the project related mitigation measures and monitoring programmes identified during the assessment process. The preferred development footprint was subsequently finalized and is depicted on the attached site activities plan (Appendix C).

h) Full description of the process followed to reach the proposed preferred alternatives within the 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.

i) Details of the development footprint alternatives considered.

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

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

The proposed prospecting area is a natural area. The planned activities for the proposed site's is detailed below.

All activities will be contained within the boundaries of the site.

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)

The proposed prospecting footprint is approximately 70.077 ha over the above mentioned property and will be performed over a period of one (1) week over the entire prospecting period. Prospecting will involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity as well.

The non-invasive activities will consist out of the following:

- Traversing the entire farm, and/or identified target areas on foot
- Geological mapping and characterisation of the surface material and mineralisation
- Geotechnical and structural orientation mapping
- Collection of rock samples (loose) which is representative of the mineralisation
- Verification of all relevant site, geological and mining data

The aim of the exploration activity is to verify the geology, historical data and any and all site data for the project, as well as to produce a most up-to-date current surface geological and geotechnical map of the mineralised zone.

The proposed project will not require any additional electricity connections. No diesel storage will be required for the prospecting phase.

Access to the proposed prospecting area will be via the N7, making use of the existing internal/haul roads to access the prospecting area.

DESCRIPTION OF PRE-/FEASIBILITY STUDIES:

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

The pre-/feasibility studies team will comprise of a diverse team of technical expertise in the field of mineral projects, including, geologists, mining engineers, metallurgical engineers, civil engineers, mechanical engineers, environmental scientists, marketing professionals and mineral project finance professionals. The list of activities under pre-/feasibility studies includes the following:

- Geological modelling and mineral resource estimation;
- Mineral resource reserve estimation;
- Mine design and scheduling;
- Metallurgical processing;
- Market development;
- Infrastructure design
- Engineering development
- Human resourcing
- Project development and operational costing

The prospecting site will contain the following:

- Surveying Equipment;
- Geophysical logging equipment;
- Field Vehicles;
- Sample Analysis equipment; and
- Other relevant field equipment.

Site Alternative 1 (S1) (Preferred and Only Site Alternative): Site Alternative 1 entails the prospecting area for all forms of Marble (Dimension Stone), Limestone, Dimension Stone (General) within the GPS coordinates as listed in the table below.

Name	DECIMAL DEGREES	
	LONG (E)	LAT (S)
A	18.7299°	31.6873°
B	18.7328°	31.6802°
C	18.7351°	31.6784°
D	18.7362°	31.6789°
E	18.7357°	31.6799°
F	18.7367°	31.6802°
G	18.7381°	31.6805°
H	18.7383°	31.6797°
I	18.7403°	31.6800°
J	18.7387°	31.6848°
K	18.7328°	31.6906°
L	18.7300°	31.6905°
EXCLUDED AREA COORDINATES:		
1	18.73463405	31.68090923
2	18.73548888	31.68105775
3	18.73556951	31.68201846
4	18.73525287	31.68264037
5	18.73515361	31.68358612
6	18.73392223	31.68432032
7	18.73305574	31.68401916

Table 6: GPS Coordinates of Site Alternative 1 (preferred and only site alternative)

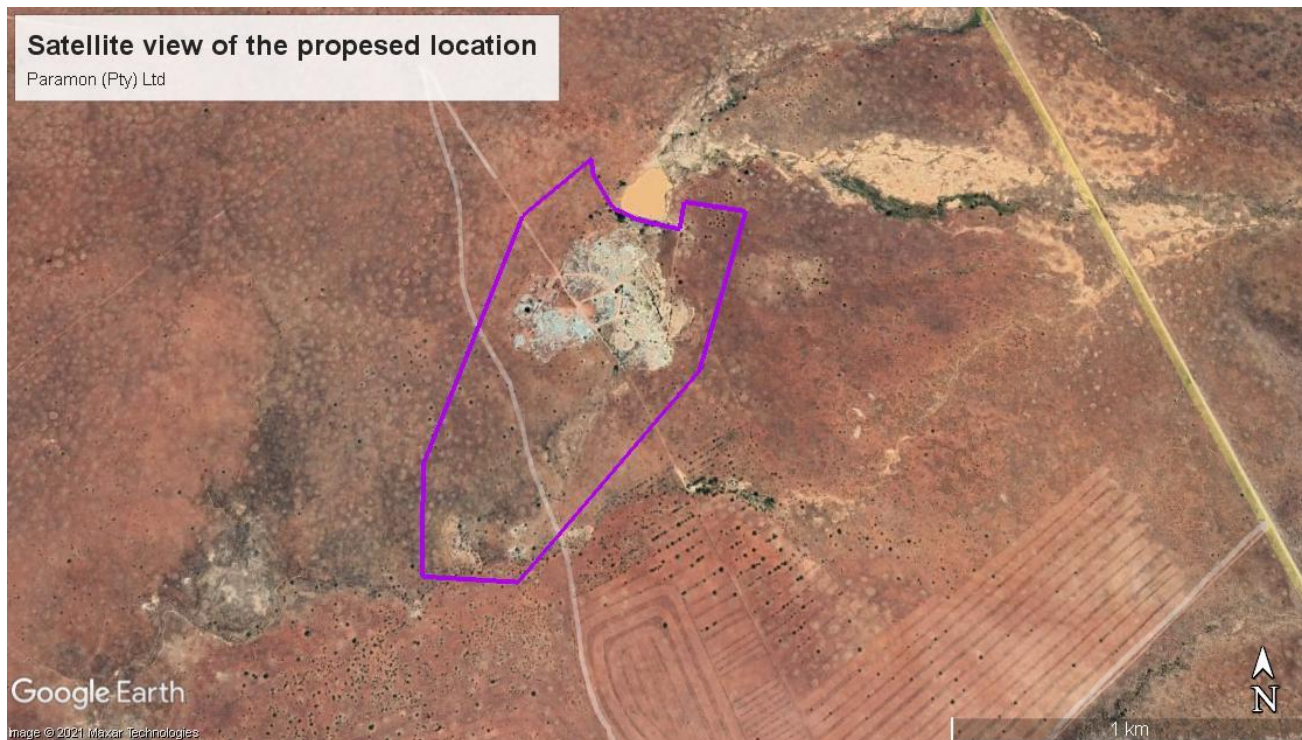


Figure 2: Satellite view showing the position of Site Alternative 1 (purple polygon) within the surrounding landscape.

No-go Alternative: The no-go alternative entails no change to the *status quo* and is therefore a real alternative that must be considered.

- The applicant will not be able to prospect for any possible mineral resource;
- The application, if approved, would allow the applicant to determine the available mineral resource as well as provide employment opportunities to local employees.
- Should the no-go alternative be followed these opportunities will be lost to the applicant, potential employees and clients; and the applicant will not be able to diversify the income of the property.

Not proceeding with the proposed operation will entail that a mineral which if found will contribute towards the local and provincial social and economic structures of the area, will not be mined, and that this opportunity will be lost.

In light of this, the no-go alternative was no deemed to be the preferred alternative.

ii) Details of the Public Participation Process Followed

Describe the process undertaken to consult interested and affected parties including public meetings and one on one consultation. NB the affected parties must be specifically consulted regardless of whether or

not they attended public meetings. (Information to be provided to affected parties must include sufficient detail of the intended operation to enable them to assess what impact the activities will have on them or on the use of their land.

During the initial public participation process the stakeholders and I&AP's were informed of the project by means of background information documents that were sent or hand delivered directly to the contact persons. A 30-days commenting period was allowed which expired on 13th September 2021. The following I&AP's and stakeholders were informed of the project:

Table 7: List of the I&AP's and stakeholders that were notified of the proposed prospecting right project.

SURROUNDING LANDOWNERS & INTERESTED AND AFFECTED PARTIES	STAKEHOLDERS
<ul style="list-style-type: none"> ■ Sindiswa - Oracle Trust (Portion 32 of Farm 246) ■ Sybrand Abraham van der Westhuizen (Portion 1 of Farm Welverdiend nr 511) ■ Nicholas Alexander Helme (Portion 0 of the Farm OP DIE BERG nr 314) ■ Elankor Drie (Pty) Ltd (Portion 31 of Farm 246) ■ Nawelskloof Boerdery (Pty) Ltd (Portion 1 of Farm 313) ■ Nuwedam Boerdery CC (Portion 2 of Farm 256 and Portion 27 of Farm 246) ■ Riaan Vermaak - Vleikraal Beleggings Trust (Remaining extent of Farm Widouw) ■ Willa van Niekerk (Portion 308 of Farm Vaderlandsche Rietkuil (Aties)) ■ Nicolaas Albertus Heyns (Land owner of Portion 3) ■ Jacobus Johannes van der westhuizen (Land owner of the remaining extent of farm 511) ■ Natasha Mouton – Cape Lime (Pty) Ltd ■ Van Niekerk – SANRAL (Portion 4 of Farm Vaderlandsche Rietkuil (Aties)) ■ Johannes Josef Teubes (Porton of the remaining extent of Farm 256) 	<ul style="list-style-type: none"> ■ West Coast District Municipality Development Planning; ■ Matzikama Local Municipality; ■ Matzikama Local Municipality Ward Number: 7; ■ Heritage Western Cape Heritage Resource Council; ■ Cape West Coast Biosphere Reserve; ■ Cape Nature; ■ Department of Agriculture; ■ Department of Water and Sanitation; ■ Department of Economic Development and Tourism; ■ Department of Environmental Affairs and Development; ■ Department of Transport and Public Works; ■ Department of Agriculture Forestry and Fisheries; ■ Department of Labour; ■ Department of Rural Development and Land Reform; ■ SANRAL; ■ Eskom; ■ South African Heritage Resource Agency
I&AP'S AND STAKEHOLDERS THAT REGISTERED/COMMENTED DURING THE INITIAL NOTIFICATION PERIOD	
<ul style="list-style-type: none"> ■ Ismat Adam (Cape Nature) ■ Adri La Meyer (Department of Environmental Affairs and Development Planning) 	

An advertisement was placed in Ons Kontrei on the 30th July 2021, and three on-site notices were placed one at the entrance to the farms, one at the local Spar in town, one at the public library and one at Vanrhynsdorp Magistrates Court. A 30-days commenting period was allowed which expired on 13th September 2021. During this process, only the landowner of the remaining extent of the farm Welverdiend no 511 magisterial district of Vanrhynsdorp Western Cape province and stakeholders registered on the project; no other comments or objections have been received.

In accordance with the timeframes stipulated in the EIA Regulations of December 2014 (as amended) the Draft Basic Assessment Report (DBAR) was compiled and again distributed for comment and perusal to all the I&AP's and stakeholders listed above. A 30-day commenting period, ending 15 October 2021, was allowed for perusal of the documentation and submission of comments. The comments received on the Draft Basic Assessment Report (DBAR), were incorporated into the Final Basic Assessment Report (FBAR), which report will be submitted to the competent authority (CA) for final decision making. Proof of such consultation, which proof includes personal information of Interested & Affected Party ("participants"), is limited to documentation intended for the CA only. Said personal information shall not be distributed as part of the public documentation, for public comment, in terms of this application process. The above is to ensure the protection of personal information of participants, in line with the Protection of Personal Information Act 4 of 2013 ("POPIA"), including the lawful processing of said personal information by Greenmined Environmental (Pty) Ltd ("Greenmined"), to which processing of personal information all participants consented to upon registration as participant. Participants that would like to inquire regarding specific information can do so by contacting Greenmined and by providing the necessary consent that authorises such an individual to obtain said specific information.

iii) Summary of issues raised by I&APs

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

Table 8: Summary of issues raised by IAPs

Interested and Affected Parties List the name of persons consulted in this column, and Mark with an X where those who must be consulted were in fact consulted		Date Comments Received	Issues raised	EAPs response to issues as mandated by the applicant	Section and paragraph reference in this report where the issues and or response were incorporated.
AFFECTED PARTIES	X				
Landowner/s					
Nicolaas Albertus Heyns (Land owner of Portion 3)	X				
As above		N/A	N/A	N/A	
Landowners or lawful occupiers on adjacent properties	X	-	-	-	-
Jacobus Johannes van der Westhuizen (Land owner of the Remaining extent of farm 511)	X	16 August 2021	<p>U e-pos aan Mnr Cobus van der Westhuizen is aan my oorhandig vir aandag.</p> <p>Mnr Van der Westhuizen is die eienaar van die plaas waar aansoek gedoen word vir die beoogde prospekter permit.</p> <p>Mnr Van der Westhuizen het alreeds tydens die besoek van die verteenwoordiger van Paramon aan hom te kenne gegee dat hy gekant is teen enige verdere myn/prospekterregte op sy eiendom. My instruksies is dus om enige sodanige aansoek te opponeer.</p> <p>Ek sal dit waardeer indien u my van die kontak besonderhede van die persoon by Paramon wie hierdie aangeleentheid hanteer, sal voorsien ten einde direk met hom kontak te maak.</p> <p>Translated for review purposes: Your e-mail to Mr Cobus van der Westhuizen has been referred to me for attention.</p>	<p>Your email dated 16 August 2021 has reference.</p> <p>We have consulted with the applicant regarding your objection has and they have decided to remove from the application area.</p> <p>We will notify you as soon as the updated documents are available for comments should you have any further comments in this regard.</p>	<p>Comments and Response Report – Appendix G (for distribution to DMRE only)</p>

Interested and Affected Parties List the name of persons consulted in this column, and Mark with an X where those who must be consulted were in fact consulted	Date Comments Received	Issues raised	EAPs response to issues as mandated by the applicant	Section and paragraph reference in this report where the issues and or response were incorporated.
		<p>Mr Van der Westhuizen is the owner of the farm where the proposed prospecting permit is being applied for.</p> <p>Mr Van der Westhuizen had already indicated to him during the visit of the representative of Paramon that he was opposed to any further mining / prospecting rights on his property. My instructions are therefore to oppose any such application.</p> <p>I would appreciate it if you would provide me with the contact details of the person at Paramon who is handling this matter in order to contact him directly.</p>		
Municipal councillor				
Matzikama Local Municipality Ward Number: 7	X	No comments received	N/A	N/A
Municipality				
Matzikama Local Municipality	X	No comments received	N/A	N/A
West Coast District Municipality Development Planning	X	No comments received	N/A	N/A
Organs of state (Responsible for infrastructure that may be affected Roads Department, Eskom, Telkom, DWA e				
Department of Infrastructure Development	X	No comments received	N/A	N/A
Eskom	X	No comments received	N/A	N/A

Interested and Affected Parties		Date Comments Received	Issues raised	EAPs response to issues as mandated by the applicant	Section and paragraph reference in this report where the issues and or response were incorporated.
List the name of persons consulted in this column, and					
Mark with an X where those who must be consulted were in fact consulted					
SANRAL	X	No comments received	N/A	N/A	N/A
Communities	No community were identified within the study area.				
Dept. Land Affairs					
Department of Rural Development and Land Reform	X	No comments received	N/A	N/A	N/A
Traditional Leaders	N/A				
Dept. Environmental Affairs		No comments received	N/A	N/A	N/A
Western Cape Department of Agricultural, Forestry and Fisheries	X	No comments received	N/A	N/A	N/A
Directorate: Development Facilitation Environmental Affairs and Development Planning Western Cape Government	X	13 August 2021	Dear Marlene and Sonette, I hope you are well. Thank you for the notification and BID. Please register the Department of Environmental Affairs and Development Planning as a commenting authority for the BA application. You may add me as the Department's contact person for the application. Would you please notify me when the Draft BAR is released for public consultation please? Just for clarity – I note that only loose samples will be collected. Please confirm that no drilling or trenching will be required?	Hi Adri, We are very well thank you for asking, We will let you know as soon as die DBAR is available for comments. Correct, only non-invasive prospecting is planned at this stage.	Comments and Response Report – Appendix G (<u>for distribution to DMRE only</u>)

Interested and Affected Parties		Date Comments Received	Issues raised	EAPs response to issues as mandated by the applicant	Section and paragraph reference in this report where the issues and or response were incorporated.
<p>List the name of persons consulted in this column, and</p> <p>Mark with an X where those who must be consulted were in fact consulted</p>					
Other Competent Authorities affected					
Department of Labour	X	No comments received	N/A	N/A	N/A
Department of Transportation and Public Works	X	No comments received	N/A	N/A	N/A
Department of Rural Development and Agrarian Reform	X	No comments received	N/A	N/A	N/A
Department of Economic Development and Tourism	X	No comments received			
Department of Water and Sanitation	X	No comments received	N/A	N/A	N/A
South African Heritage Resources Agency	X	No comments received	N/A	N/A	N/A
Department of Water and Sanitation	X	No comments received	N/A	N/A	N/A
Cape Nature Land-Use Scientist Landscape West Conservation Operations	X	23 August 2021	Please register me as I&AP for future reference, please use the attached contact details for notifications. See also attached our application document requirements. Please send on the DBAR and all relevant documents, it is not available on the website as per the notification, unless I have missed it.	Good day Mr Adams, I trust this email finds you well, The DBAR will be available from the 13th of September, we are currently in initial PPP, please see below as per the BID. Please contact Sonette Smit at the contact details as presented in the letterhead or at sonette.s@greenmined.co.za through any means should you need more information, have concerns or comments that need to be considered or if you want to be registered as an interested and / or affected party and would like to receive a copy of the Draft Basic Assessment Report (DBAR). If we do not receive any comments from you within 30 days of receipt of this notice (on or before 13 September 2021), it will be accepted that you do not have any objections / comments with regard to the project. You are registered on this project and will receive notice of the availability of the DBAR as soon as it is available for comments.	Comments and Response Report – Appendix G (for distribution to DMRE only)

Interested and Affected Parties List the name of persons consulted in this column, and Mark with an X where those who must be consulted were in fact consulted	Date Comments Received	Issues raised	EAPs response to issues as mandated by the applicant	Section and paragraph reference in this report where the issues and or response were incorporated.
			We trust that you find the above in order, please do not hesitate to contact me should require any further clarity,	
	9 Sept 2021	<p>Cape Nature would like to thank you for the opportunity to comment on this application. Herewith our revised comments. These comments replace those made in our letter dated 08 September 2021.</p> <p>1. Based on the information in the BID it is understood that this prospecting application is for non-invasive prospecting. It is understood that the entire prospecting activity on site will comprise traversing the farm on foot and collecting rock samples for analysis. It is understood that this method will have negligible impact on biodiversity. We object to the prospecting application considering that prospecting applications ultimately lead to mining applications, and considering that the proposed prospecting area targets an area that has bearing on the Greater Cederberg Biodiversity Corridor and has been identified as an area for protected area expansion via proactive stewardship.</p> <p>2. Note that should invasive prospecting after this activity be required, that we will object to such an application as per point 1, and considering that the prospecting area is highly sensitive from a biodiversity perspective as the majority of the area is ESA, contains watercourses as well as CBA areas. Furthermore, part of the area contains critically endangered Klauer Sandy Shrubland.</p> <p>3. Although we understand that the impacts of prospecting are usually less than that of mining, prospecting often leads to mining and we do not support mining</p>	<p>We thank you for your valuable participation and submitting comments,</p> <p>Please note that we will only include the revised comments in our report in order to avoid confusion. You will be notified of the availability of the DBAR as soon as the BID comment period closed.</p> <p>We trust you find this in order and we look forward to your future participation in this project,</p>	<p>Comments and Response Report – Appendix G (<u>for distribution to DMRE only</u>)</p>

Interested and Affected Parties		Date Comments Received	Issues raised	EAPs response to issues as mandated by the applicant	Section and paragraph reference in this report where the issues and or response were incorporated.
List the name of persons consulted in this column, and Mark with an X where those who must be consulted were in fact consulted					
			activities in the prospecting application area, as the environmental damage to ecological pattern and process is often irreparable, as the receiving environment is unlikely to be rehabilitated to its ecological state prior to mining. Cape Nature reserves the right to revise initial comments and request further information based on any additional information that may be received.		
South African Heritage Resource Agency	X	No comments received	N/A	N/A	N/A
Heritage Western Cape Heritage Resource Council;	X	No comments received	N/A	N/A	N/A
Cape West Coast Biosphere Reserve	X	No comments received	N/A	N/A	N/A
Department of Water and Sanitation	X	No comments received	N/A	N/A	N/A
Department of Water and Sanitation	X	No comments received	N/A	N/A	N/A
<u>OTHER AFFECTED PARTIES</u>					
N/A					
<u>INTERESTED PARTIES</u>					

Table 9: Summary of issues raised by IAPs during the DBAR phase

Interested and Affected Parties		Date	Issues raised	EAPs response to issues as mandated by the applicant	Section and paragraph reference in this report where the issues and or response were incorporated.
List the name of persons consulted in this column, and		Comments Received			
Mark with an X where those who must be consulted were in fact consulted					
AFFECTED PARTIES	X				
Landowner/s					
Nicolaas Albertus Heyns (Land owner of Portion 3)	X				
As above		N/A	N/A	N/A	
Landowners or lawful occupiers on adjacent properties	X	-	-	-	-
Jacobus Johannes van der Westhuizen (Land owner of the Remaining extent of farm 511)	X	No comments received			
Municipal councillor					
Matzikama Local Municipality Ward Number: 7	X	No comments received	N/A	N/A	N/A
Municipality					
Matzikama Local Municipality	X	No comments received	N/A	N/A	N/A
West Coast District Municipality Development Planning	X	No comments received	<p>Ref: 13/2/12/2/3</p> <p>1. I refer to your email dated 14 September 2021 and the Draft BAR and EMPr for the proposed prospecting on Portion 3 of Farm 511, Vanrhynsdorp.</p> <p>2. The following comments have been submitted by the Environmental Officer of the West Coast District Municipality:</p> <p>2.1 The application is for non-invasive prospecting, that will have little or no impact on biodiversity. Only R8000 is made available for rehab and closure which is considered very limited. The West Coast District Municipality would prefer that this amount be increased and a breakdown be given how this will be used to perform any rehab and closure work.</p>	N/A	Comments and Response Report – Appendix G (for distribution to DMRE only)

<p>Interested and Affected Parties</p> <p>List the name of persons consulted in this column, and</p> <p>Mark with an X where those who must be consulted were in fact consulted</p>	<p>Date Comments Received</p>	<p>Issues raised</p>	<p>EAPs response to issues as mandated by the applicant</p>	<p>Section and paragraph reference in this report where the issues and or response were incorporated.</p>
		<p>2.2 Successful prospecting applications ultimately lead to mining applications. Mining will have a high impact on the sensitive biodiversity and CBA's within the area.</p> <p>2.3 The area includes watercourses and CBA areas (critically endangered Klawer Sandy Shrubland) are also present. These areas should be avoided - any disturbance or impacts should be highlighted in detail in the BAR. No area where prospecting will not take place or any no-go areas are indicated or highlighted in the maps. Said CBA's and sensitive areas must be indicated as no-go areas that will be excluded during the prospecting phase.</p> <p>2.4 With reference to the amended EIA Regulations dated the 11th of June 2021, any new applications for an EA for mining activities where an applicant for an EA is not the owner or the person in control of the land on which the activity is to be undertaken must, before applying for the EA, obtain the written consent of the landowner or person in control of the land to undertake such activities. Said landowner consent must be attached to the application for the EA.</p> <p>3. The West Coast District Municipality reserves the right to provide further comments on the Final BAR.</p> <p>4. Your attention is drawn to the provisions of the Matzikama Municipal Bylaw on Land Use Planning whereby an application for</p>		

Interested and Affected Parties List the name of persons consulted in this column, and Mark with an X where those who must be consulted were in fact consulted		Date Comments Received	Issues raised	EAPs response to issues as mandated by the applicant	Section and paragraph reference in this report where the issues and or response were incorporated.
			prospecting must be approved prior to any prospecting taking place.		
Organs of state (Responsible for infrastructure that may be affected Roads Department, Eskom, Telkom, DWA e					
Department of Infrastructure Development	X	No comments received	N/A	N/A	N/A
Eskom	X	No comments received	N/A	N/A	N/A
SANRAL	X	No comments received	N/A	N/A	N/A
Communities	No community were identified within the study area.				
Dept. Land Affairs					
Department of Rural Development and Land Reform	X	No comments received	N/A	N/A	N/A
Traditional Leaders	N/A				
Dept. Environmental Affairs		No comments received	N/A	N/A	N/A
Western Cape Department of Agricultural, Forestry and Fisheries	X	No comments received	N/A	N/A	N/A

Interested and Affected Parties List the name of persons consulted in this column, and Mark with an X where those who must be consulted were in fact consulted	Date Comments Received	Issues raised	EAPs response to issues as mandated by the applicant	Section and paragraph reference in this report where the issues and or response were incorporated.
Directorate: Development Facilitation Environmental Affairs and Development Planning Western Cape Government	X No comments received	<ol style="list-style-type: none"> 1. Directorate:Development Management (Region 1) <ol style="list-style-type: none"> 1.1. Based on the information contained in the Draft BAR, it appears that a screening tool report was generated for the proposed prospecting area. Please note that if the screening tool report was not provided with the application for environmental authorisation, it must be included with the Final BAR to be submitted to the competent authority. 1.2. In addition, in accordance with the “Procedures for the assessment and minimum criteria for reporting on identified environmental themes in terms of sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for environmental authorisation (“the Protocols”) published in Government Notice (“GN”) No. 320 of 20 March 2020 and 	<p>The above matter as well as letter received from you dated 15 October 2021 refers. Please see responses to your comments listed below:</p> <ul style="list-style-type: none"> ■ Comment noted, this report has been attached to the FBAR as Appendix M ■ Comment noted, this report has been attached to the FBAR as Appendix N 	<p>Comments and Response Report – Appendix G (<u>for distribution to DMRE only</u>)</p> <p>Part A(1)(h)(iv)(1)(a) Type of environment affected by the proposed activity</p> <p>Part A(1)(h)(viii) The possible mitigation measures that could be applied on the level of risk.</p>

<p>Interested and Affected Parties</p> <p>List the name of persons consulted in this column, and</p> <p>Mark with an X where those who must be consulted were in fact consulted</p>	<p>Date Comments Received</p>	<p>Issues raised</p>	<p>EAPs response to issues as mandated by the applicant</p>	<p>Section and paragraph reference in this report where the issues and or response were incorporated.</p>
		<p>GN No. 1150 of 30 October 2020, a site sensitivity verification report is required. The site sensitivity verification report was not included in the Draft BAR and must therefore be appended to the Final BAR.</p> <p>1.3. It is noted that “Heritage Western Cape will be contacted for their perusal and commenting.” Please note that comments from Heritage Western Cape (“HWC”) must be included in the Final BAR. Note that should HWC request any specialist assessments, a Revised Draft BAR with the required specialist assessment(s) will need to be circulated to registered interested and affected parties (“I&APs”) for commenting purposes.</p> <p>1.4. Proof of the public participation process conducted must be included in the Final BAR.</p> <p>1.5. The following comments regarding the EMPr (Part B of the Draft BAR) are offered:</p> <p>1.5.1. It is advised that the EMPr be</p>	<ul style="list-style-type: none"> ■ Comment was requested from HWC but not yet received by the printing of this document, as soon as comments are received it will be forwarded to DMRE ■ Comment noted, this report has been attached to the FBAR as Appendix G1&2 ■ Comment noted this will be implemented and adhered to 	

<p>Interested and Affected Parties</p> <p>List the name of persons consulted in this column, and</p> <p>Mark with an X where those who must be consulted were in fact consulted</p>	<p>Date Comments Received</p>	<p>Issues raised</p>	<p>EAPs response to issues as mandated by the applicant</p>	<p>Section and paragraph reference in this report where the issues and or response were incorporated.</p>
		<p>dated and contain a cover page, which includes the property description and the competent authority's reference number, since the EMPr must be kept on the proposed prospecting area.</p> <p>1.5.2. All areas outside of the prospecting area must be regarded as "no-go" areas.</p> <p>1.5.3. Appropriate penalties for transgressions should be stipulated in the EMPr.</p> <p>2. Directorate:Pollution and Chemicals Management</p> <p>2.1. It is noted that prospecting activities involve non-invasive surface exploration only. The potential pollution related impacts are therefore anticipated to be limited, on the assumption that activities are restricted</p>	<ul style="list-style-type: none"> ■ Comment noted this will be implemented and adhered to, please also refer to page 21 and 39 of the Draft BAR where it is clearly stated that "All activities will be contained within the boundaries of the site" ■ Comment noted this will be implemented and adhered to ■ Comment noted this will be implemented and adhered to 	

<p>Interested and Affected Parties</p> <p>List the name of persons consulted in this column, and</p> <p>Mark with an X where those who must be consulted were in fact consulted</p>	<p>Date Comments Received</p>	<p>Issues raised</p>	<p>EAPs response to issues as mandated by the applicant</p>	<p>Section and paragraph reference in this report where the issues and or response were incorporated.</p>
		<p>as indicated, and do not include drilling or equipment being brought onto site.</p> <p>2.2. Notwithstanding the above, it is nonetheless imperative that where vehicles are used to traverse the prospecting area, that refuelling is undertaken off-site, or within the yard of the existing mine on-site, in an area that makes use of unplasticized polyvinyl chloride lining and drip trays.</p> <p>2.3. The presence of a non-perennial watercourse on-site is noted. Page 58 of the Draft BAR states the following: “The proposed site falls within the Olifants/ Doorn Water Management Area, in the E33G quaternary catchment area. According to the National Freshwater Ecosystem Priority Areas (NFEPAs) map as presented by SANBI, a NFEPAs river intersects with the proposed prospecting footprint falls but <i>is partially modified in which a large loss of natural habitat, biota and basic</i></p>	<ul style="list-style-type: none"> ■ Invasive prospecting was planned during the initial phases of the project but excluded during the EIA basic process/ EIA process of the application, therefore no further specialist assessments were required to be undertaken. ■ With reference to point 2.3 -2.8) As per the Freshwater Statement compiled by Enviroworks dated October 2021 (attached as appendix O2 to FBAR) – Considering the specific project description above (as provided to the specialist by the Consultant) and the non-invasive prospecting method proposed, it is not anticipated that the prospecting activities will generate a noteworthy impact on the non-perennial watercourses (please refer to Appendix O2 Figure 2) during the one week of prospecting work. The 	

<p>Interested and Affected Parties</p> <p>List the name of persons consulted in this column, and</p> <p>Mark with an X where those who must be consulted were in fact consulted</p>	<p>Date Comments Received</p>	<p>Issues raised</p>	<p>EAPs response to issues as mandated by the applicant</p>	<p>Section and paragraph reference in this report where the issues and or response were incorporated.</p>
		<p><i>ecosystem function have occurred. The conservation status of the area will be further assessed and discussed during the Basic Assessment process of this application.” Page 107 further states that “The conservation status of the area will be further assessed and discussed during the EIA process of this application.”</i></p> <p>2.4. Please clarify if a suitably qualified and experienced freshwater specialist provided input to the assessment or to confirm the EAP’s characterisation of the identified river.</p> <p>2.5. The above paragraph indicates that the conservation status of the area will be further assessed during the basic assessment or environmental impact assessment (“EIA”) process of this application, although it is not apparent that this potential impact has been assessed in any detail within the application.</p>	<p>prospecting will involve driving vehicles on existing unpaved access roads and traversing the area on foot, while also collecting loose surface rock samples. Even though this statement does not constitute a full specialist assessment and characterization of the non-perennial watercourses, it is the opinion of the specialist, that this detailed freshwater study will not be necessary at this stage, considering the current prospecting description. Even though this statement does not constitute a full specialist assessment and characterization of the non-perennial watercourses, it is the opinion of the specialist, that this detailed freshwater study will not be necessary at this stage, considering the current prospecting description. A portion of the non-perennial watercourse has been transformed by an old marble mine, just downstream of the artificial dam. There is also evidence of past mining and disturbance in the</p>	

<p>Interested and Affected Parties</p> <p>List the name of persons consulted in this column, and</p> <p>Mark with an X where those who must be consulted were in fact consulted</p>	<p>Date Comments Received</p>	<p>Issues raised</p>	<p>EAPs response to issues as mandated by the applicant</p>	<p>Section and paragraph reference in this report where the issues and or response were incorporated.</p>
		<p>2.6. The EMPr omits any reference to impact management measures or outcomes relating to protection of water resources, despite the prospecting area including a defined and mapped watercourse.</p> <p>2.7. It is recommended that the watercourse and a suitable buffer area on either side is excluded from prospecting activities. The potential identification of future mining activities across the river corridor is not supported.</p>	<p>watercourse downstream from the old mine. This was confirmed by a site visit on 07 October 2021. It should be noted that the purpose of this site visit did not include assessing the watercourses over the entire prospecting right, nor did it include assessing potential impacts of the proposed prospecting.</p> <p>Watercourses are nevertheless important ecological features in the landscape, therefore:</p> <ul style="list-style-type: none"> ○ Should this prospecting description change, the need for a more detailed freshwater study should be re-evaluated. ○ Should the prospecting right be followed by a mining permit/mining application, it is recommended that a more detailed freshwater study be commissioned. <p>It is recommended that disturbance</p>	

<p>Interested and Affected Parties</p> <p>List the name of persons consulted in this column, and</p> <p>Mark with an X where those who must be consulted were in fact consulted</p>	<p>Date Comments Received</p>	<p>Issues raised</p>	<p>EAPs response to issues as mandated by the applicant</p>	<p>Section and paragraph reference in this report where the issues and or response were incorporated.</p>
			<p>and damage to vegetation and the soil surface or channel morphology be avoided in the mapped (see appendix MO - Figure 2) non-perennial watercourses (this includes their bed and banks).</p> <p>Even though it is not anticipated that the current planned prospecting activities will have a noteworthy impact on watercourses, it is noted that the Department will not support the potential identification of future mining activities across the river corridor.</p> <p>The applicant should be aware that prospecting within the watercourse corridor does not mean that the Department will support potential identification of future mining activities across the river corridor.</p> <p>Should this prospecting description change, the need for a more detailed freshwater study should be re-</p>	

<p>Interested and Affected Parties</p> <p>List the name of persons consulted in this column, and</p> <p>Mark with an X where those who must be consulted were in fact consulted</p>	<p>Date Comments Received</p>	<p>Issues raised</p>	<p>EAPs response to issues as mandated by the applicant</p>	<p>Section and paragraph reference in this report where the issues and or response were incorporated.</p>
			<p>evaluated.</p> <p>Should the prospecting right be followed by a mining permit/mining application, it is recommended that a more detailed freshwater study be commissioned. This study should, amongst the other requirements of a freshwater specialist study, recommend a suitable buffer for watercourses.</p> <p>It is recommended that the Consultant and the Applicant take note of the following comments from DEA&DP:</p> <p>6. The applicant is reminded of its “general duty of care towards the environment” as prescribed in section 28 of the NEMA, 1998 which states that “Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring,</p>	

<p>Interested and Affected Parties</p> <p>List the name of persons consulted in this column, and</p> <p>Mark with an X where those who must be consulted were in fact consulted</p>	<p>Date Comments Received</p>	<p>Issues raised</p>	<p>EAPs response to issues as mandated by the applicant</p>	<p>Section and paragraph reference in this report where the issues and or response were incorporated.</p>
		<p>2.8. Pages 121 and 126 of the EMPr refer to section 30 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (“NEMA”) in terms of waste management. Please amend the EMPr to reference section 30 of the NEMA, 1998 in terms of the control of incidents and any accidental release of a hazardous substance. In the event of a significant spill or leak of hazardous substances (e.g. petrol, diesel, etc.) used during the proposed activities, such an incident(s) must be reported to the relevant authorities, including the Directorate: Pollution and Chemicals Management, in accordance with section 30 of the NEMA, 1998.</p>	<p>continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment”.</p> <p>Comment noted, this has been amended in to the EMPr</p>	

<p>Interested and Affected Parties</p> <p>List the name of persons consulted in this column, and</p> <p>Mark with an X where those who must be consulted were in fact consulted</p>	<p>Date Comments Received</p>	<p>Issues raised</p>	<p>EAPs response to issues as mandated by the applicant</p>	<p>Section and paragraph reference in this report where the issues and or response were incorporated.</p>
		<p>3. Directorate: Waste Management</p> <p>3.1. As clearly indicated in the Draft BAR, the proposed prospecting activities are unlikely to pose any significant environmental risks, as only non-invasive surface exploration will be undertaken, the duration of prospecting is proposed to be very short, and the original area to be surveyed has been reduced from 35km² to 70.1ha. No excavation or core drilling is proposed.</p> <p>3.2. No waste management activity listed in terms of GN No. 921 of 29 November 2013 (as amended), promulgated in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) will be triggered. This Directorate has no further comments on the Draft BAR.</p> <p>4. Directorate: Development Facilitation</p> <p>4.1. Per paragraph 2.3. above, this</p>	<p>Comment noted and I thank you for taking part in the commenting process.</p>	

<p>Interested and Affected Parties</p> <p>List the name of persons consulted in this column, and</p> <p>Mark with an X where those who must be consulted were in fact consulted</p>	<p>Date Comments Received</p>	<p>Issues raised</p>	<p>EAPs response to issues as mandated by the applicant</p>	<p>Section and paragraph reference in this report where the issues and or response were incorporated.</p>
		<p>Directorate requires clarity on the statement in the Draft BAR pertaining to specialist assessments that will be undertaken to assess the hydrology and surface water resources of the prospecting area. It is stated on pages 6, 58, 77, 93 and 107 of the Draft BAR that the conservation status of the area will be further assessed and discussed during the basic process/ EIA process of the application. Please note that specialist assessments must be undertaken <u>prior</u> to the release of a Draft BAR for public participation. Should any surface water assessment be undertaken for the prospecting right application, then said assessment must be made available to registered I&APs via the release of a Revised Draft BAR. This Directorate further requires clarity whether the EAP is referring to specialist assessments that will be undertaken as part of a (separate) EIA process that will be lodged for a mining right or permit application should the results</p>	<ul style="list-style-type: none"> ■ Invasive prospecting was planned during the initial phases of the project but excluded during the EIA basic process/ EIA process of the application, therefore no further specialist assessments were required to be undertaken. 	

<p>Interested and Affected Parties</p> <p>List the name of persons consulted in this column, and</p> <p>Mark with an X where those who must be consulted were in fact consulted</p>	<p>Date Comments Received</p>	<p>Issues raised</p>	<p>EAPs response to issues as mandated by the applicant</p>	<p>Section and paragraph reference in this report where the issues and or response were incorporated.</p>
		<p>of prospecting activities be deemed favourable.</p> <p>4.2. The EAP is advised that final comment from HWC must be obtained prior to the submission of the Final BAR to the competent authority.</p> <p>5. Directorate: Air Quality Management</p> <p>5.1. It is noted in the Draft BAR that dust pollution is predicted to have a negligible impact as the proposed prospecting activities are deemed to be non-invasive. Dust may be created from vehicles traversing the prospecting area and this must be monitored to not cause a nuisance. Dust generated from vehicles must comply with the National Dust Control Regulations (GN No. R. 827 of 1 November 2013) promulgated in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004). These regulations prohibit a person from</p>	<ul style="list-style-type: none"> ■ Comment was requested form HWC but not yet received by the printing of this document, as soon as comments are received it will be forwarded to DMRE ■ Comment noted this will be implemented and adhered to ■ As per the Air Quality Statement compiled by Enviroworks dated October 2021 (attached as appendix O1 to FBAR) - Considering the specific project description above (as provided to the specialist by the Consultant), the rural receiving environment and low population density in the immediate surrounds, it is not anticipated that the prospecting activities will generate a significant dust nuisance from driving the two Light Duty Vehicles during the one 	

<p>Interested and Affected Parties</p> <p>List the name of persons consulted in this column, and</p> <p>Mark with an X where those who must be consulted were in fact consulted</p>	<p>Date Comments Received</p>	<p>Issues raised</p>	<p>EAPs response to issues as mandated by the applicant</p>	<p>Section and paragraph reference in this report where the issues and or response were incorporated.</p>
		<p>conducting any activity in such a way as to give rise to dust in such quantities and concentrations that the dust, or dust fallout, has a detrimental effect on the environment, including human health.</p> <p>5.2. It is noted that noise generated by the proposed activities will have a negligible impact. It is expected that</p>	<p>week of prospecting work on unpaved existing access roads. Further to this, fugitive dust emissions due to vehicles driving on unpaved roads are often limited close to the source, and temporary in nature (being restricted to the one week of prospecting).</p> <ul style="list-style-type: none"> ○ A Complaints register should be kept on site during the prospecting activities. If any complaints regarding dust nuisance are received, additional dust control and monitoring measures should be investigated and implemented. ○ Reduce driving speed of vehicles during prospecting, as increased vehicle speeds result in increased quantities of fugitive dust. <p>Comment noted this will be implemented and adhered to</p>	

<p>Interested and Affected Parties</p> <p>List the name of persons consulted in this column, and</p> <p>Mark with an X where those who must be consulted were in fact consulted</p>	<p>Date Comments Received</p>	<p>Issues raised</p>	<p>EAPs response to issues as mandated by the applicant</p>	<p>Section and paragraph reference in this report where the issues and or response were incorporated.</p>
		<p>any potential noise generated on-site by vehicles must comply with the Western Cape Noise Control Regulations (Provincial Notice 200/2013) of 20 June 2013.</p> <p>5.3. Air emission impacts have been noted to have a negligible impact. All potential air pollutants on-site must be monitored and if causing significant emissions, must be strictly managed as per the recommendations stipulated in the EMPr.</p> <p>5.4. Kindly be advised that the Air Quality Officer for Matzikama Municipality must also be engaged with regarding the application. The designated official is [REDACTED] and can be contacted on telephone [REDACTED] or on e-mail: thesme@matzikama.gov.za</p> <p>5.5. The applicant is reminded of its "general duty of care towards the environment" as prescribed in section</p>	<p>Comment noted this will be implemented and adhered to</p> <p>Comment was requested form Matzikama Municipality - Air Quality Officer but not yet received by the printing of this document, as soon as comments are received it will be forwarded to DMRE</p> <p>Comment noted this will be implemented and adhered to</p>	

Interested and Affected Parties List the name of persons consulted in this column, and Mark with an X where those who must be consulted were in fact consulted		Date Comments Received	Issues raised	EAPs response to issues as mandated by the applicant	Section and paragraph reference in this report where the issues and or response were incorporated.
			<p>28 of the NEMA, 1998 which states that <i>“Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment.”</i></p> <p>Please direct all enquiries to the officials indicated in this correspondence should you require any clarity on any of the comments provided.</p> <p>The Department reserves the right to revise or withdraw its comments and request further information based on any new information received.</p>	<p>All comments received for you as well as our response will be incorporated in the Final Basic Assessment Report to be submitted to DMRE for their consideration.</p> <p>We trust you will find this in order. Please do not hesitate to contact us in the event of any uncertainties</p>	
Other Competent Authorities affected					
Department of Labour	X	No comments received	N/A	N/A	N/A

Interested and Affected Parties		Date Comments Received	Issues raised	EAPs response to issues as mandated by the applicant	Section and paragraph reference in this report where the issues and or response were incorporated.
List the name of persons consulted in this column, and Mark with an X where those who must be consulted were in fact consulted					
Department of Transportation and Public Works	X	No comments received	N/A	N/A	N/A
Department of Rural Development and Agrarian Reform	X	No comments received	N/A	N/A	N/A
Department of Economic Development and Tourism	X	No comments received			
Department of Water and Sanitation	X	No comments received	<p>Reference is made to the above-mentioned document dated 14 September 2021 with a Reference No: WC 30/5/1/1/2/10375 PR. The Department has no objections at this stage to the prospecting right application submitted to DMR by Paramon (Pty) Ltd subject to compliance to the following conditions:</p> <ol style="list-style-type: none"> 1. Any development within 1:100-year floodline or within the riparian habitat constitutes a water use licence in terms of section 21 (c) and (i) of the National Water Act, 1998 (Act 36 of 1998) and will require authorisation before any development may commence. 2. If any portable toilets would be used on-site during construction and/or operational phase of the development; such toilet facilities must be located outside of the 1:100-year floodline and must be regularly emptied at a municipal wastewater treatment works. 3. Solid and chemical waste generated from construction and operational phases of the development must be kept away from drainage line. 4. No abstraction of surface water or ground water may take place without the prior authorization from this Department unless it is a Schedule 1 use or an Existing Lawful Use. 5. Where solid waste disposal is to take place on site, ensure that only non-toxic 	<p>The above matter as well as comments received from you dated 18 October 2021 refers.</p> <p>These comments are noted and will be implemented and adhered to,</p> <p>All comments received for you as well as our response will be incorporated in the Final Basic Assessment Report to be submitted to DMRE for their consideration.</p> <p>We trust you will find this in order. Please do not hesitate to contact us in the event of any uncertainties</p>	<p>Comments and Response Report – Appendix G (<u>for distribution to DMRE only</u>)</p> <p>Part A(1)(h)(iv)(1)(a) Type of environment affected by the proposed activity</p> <p>Part A(1)(h)(viii) The possible mitigation measures that could be applied on the level of risk.</p>

Interested and Affected Parties List the name of persons consulted in this column, and Mark with an X where those who must be consulted were in fact consulted	Date Comments Received	Issues raised	EAPs response to issues as mandated by the applicant	Section and paragraph reference in this report where the issues and or response were incorporated.
		<p>materials which have no risk of polluting the groundwater, are buried in designated approved areas at acceptable depths below ground level.</p> <p>6. No surface, ground or storm water may be polluted as a result of any activities on the site.</p> <p>7. The person who owns, controls, occupies, or uses the land in question is responsible for taking measures to prevent any occurrence of pollution to water resources.</p> <p>8. Rehabilitation plan must be formulated and submitted to this Department for comments. If the rehabilitation of the site will include the storage of water, authorization will be required before any water is stored.</p> <p>9. The rehabilitation of the site must ensure that the final condition of the site is environmentally acceptable and that there will be no adverse long-term effects on the surrounding environment especially the water resources post mining activities.</p> <p>All requirements in the Regulations on use of water for mining and related activities aimed at the protection of water resources as contained in Government Notice No 704 dated 4 June 2004 must be adhered to.</p> <p>11. Please note that all requirements as stipulated in the National Water Act (NWA) 1998(Act No. 36 of 1998) must be adhered to.</p> <p>12. This Department reserves the right to amend and / or add to the comments made above in the light of subsequent information received.</p>		
South African Heritage Resources Agency	X	No comments received	N/A	N/A
Department of Water and Sanitation	X	16 September 2021	Good Day	Good day Sipiwo, Comments and Response Report –

Interested and Affected Parties List the name of persons consulted in this column, and Mark with an X where those who must be consulted were in fact consulted	Date Comments Received	Issues raised	EAPs response to issues as mandated by the applicant	Section and paragraph reference in this report where the issues and or response were incorporated.
		<p>We have received a request for comment on the attached application for a prospective mining in Vanrhynsdorp area, as this Department we would like to do a site visit to where this prospective mining will occur or take place, we would like to come out on site on the 22 September 2021 @12h00 in the afternoon, kindly confirm if this is all in order for you.</p>	<p>Mr Tristan Stuck will accompany you to site, please see his contact details below. Please do not hesitate to contact me should you require any further assistance.</p>	<p>Appendix G (for distribution to DMRE only)</p>
<p>Cape Nature Land-Use Scientist Landscape West Conservation Operations</p>	<p>X</p> <p>12 October 2021</p>	<p>Cape Nature would like to thank you for the opportunity to comment on this application. Herewith our revised comments. These comments replace those made in our letter dated 08 September 2021.</p> <p>1.It is understood that this prospecting application is for non-invasive prospecting. It is understood that the entire prospecting activity on site will comprise traversing the farm on foot and collecting rock samples for analysis, and that vehicles will not be used to drive through vegetation. It is understood that this method will have negligible impact on biodiversity.</p> <p>2.We object to the prospecting application considering that prospecting applications ultimately lead to mining applications and considering that the proposed prospecting area targets an area that has bearing on the Greater Cederberg Biodiversity Corridor and has been identified as an area for protected area expansion via proactive stewardship.</p> <p>3.Note that should invasive prospecting after this activity be required, that we will object to such an application as per point 1, and considering that the prospecting area is highly sensitive from a biodiversity perspective as the majority of the area is</p>	<p>We thank you for your valuable participation and submitting comments,</p> <p>We take note of your objection sent 12 October 2021, it will be included in our FBAR and submitted to DMRE for their decision making. It will be recommended based on the comments received by you that any future invasive activities and or mining should be limited to existing mining and already disturbed areas in order to prevent the loss of natural vegetation or disturbance to water courses.</p> <p>I trust you find this in order,</p>	<p>Comments and Response Report – Appendix G (for distribution to DMRE only)</p>

Interested and Affected Parties List the name of persons consulted in this column, and Mark with an X where those who must be consulted were in fact consulted	Date Comments Received	Issues raised	EAPs response to issues as mandated by the applicant	Section and paragraph reference in this report where the issues and or response were incorporated.
		ESA, contains watercourses as well as CBA areas. Furthermore, part of the area contains critically endangered Klaver Sandy Shrubland. 4. Although we understand that the impacts of prospecting are usually less than that of mining, prospecting often leads to mining and we do not support mining activities in the prospecting application area, as the environmental damage to ecological pattern and process is often irreparable, as the receiving environment is unlikely to be rehabilitated to its ecological state prior to mining. Cape Nature reserves the right to revise initial comments and request further information based on any additional information that may be received.		
South African Heritage Resource Agency	X	No comments received	N/A	N/A
Heritage Western Cape Heritage Resource Council;	X	No comments received	N/A	N/A
Cape West Coast Biosphere Reserve	X	No comments received	N/A	N/A
Department of Water and Sanitation	X	No comments received	N/A	N/A
Department of Water and Sanitation	X	No comments received	N/A	N/A
<u>OTHER AFFECTED PARTIES</u>				
N/A				
<u>INTERESTED PARTIES</u>				

iv) The Environmental attributes associated with the alternatives.

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

(1) Baseline Environment

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

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

This section describes the biophysical, cultural and socio-economic environment that may be affected and the baseline conditions, which are likely to be affected by the proposed prospecting activity.

PHYSICAL ENVIRONMENT

CLIMATE

According to the meteoblue website, Vanrhynsdorp area normally receives about 224 mm of rain per year, with most rainfall occurring mainly during winter. The chart below (middle) shows the average rainfall values for Vanrhynsdorp area per month. It receives the lowest rainfall (5 mm) in December - February and the highest (20-55 mm) in June / July. The monthly distribution of average daily maximum temperatures (centre chart below) shows that the average midday temperatures for Vanrhynsdorp area range from >10.0°C in May to > 35°C in January. The region is the coldest during July when the mercury drops to 10°C on average during the night.

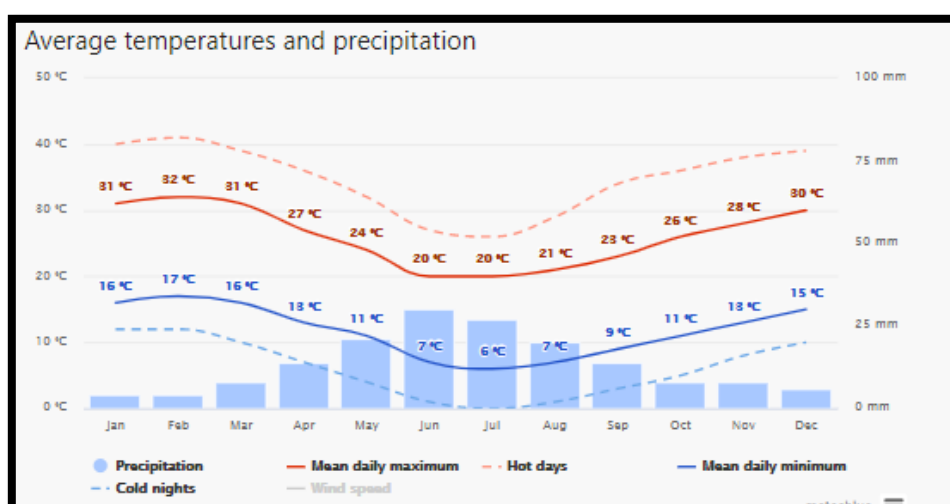


Figure 3: Statistical representation of the average rainfall, maximum temperatures and wind speed for the Vanrhynsdorp region (Chart obtained from meteoblue).

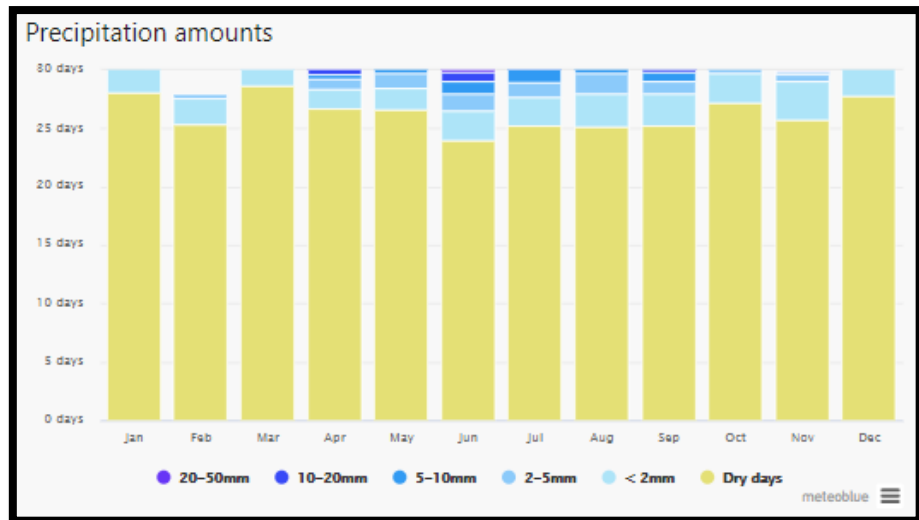


Figure 4: Statistical representation of the average rainfall, maximum temperatures and wind speed for the Vanrhynsdorp region (Chart obtained from meteoblue).

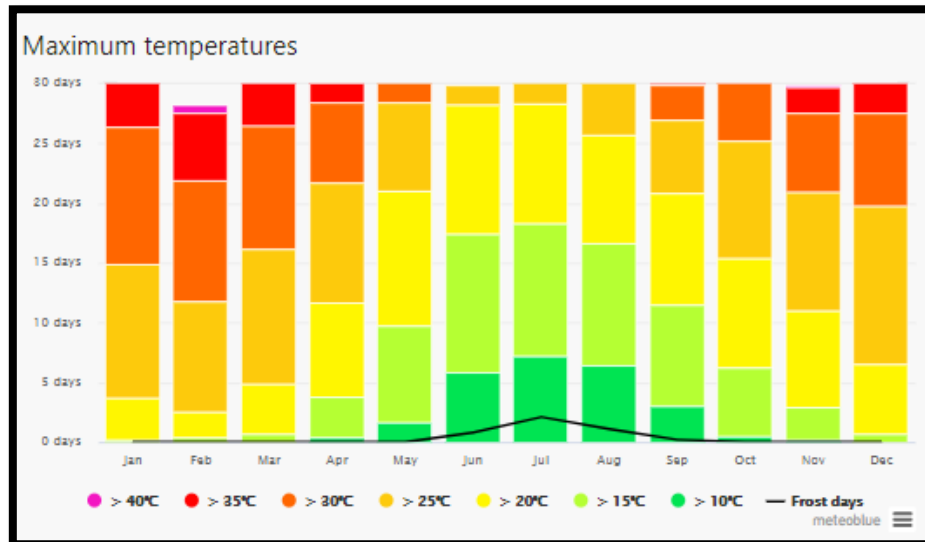


Figure 5: Statistical representation of the average rainfall, maximum temperatures and wind speed for the Vanrhynsdorp region (Chart obtained from meteoblue).

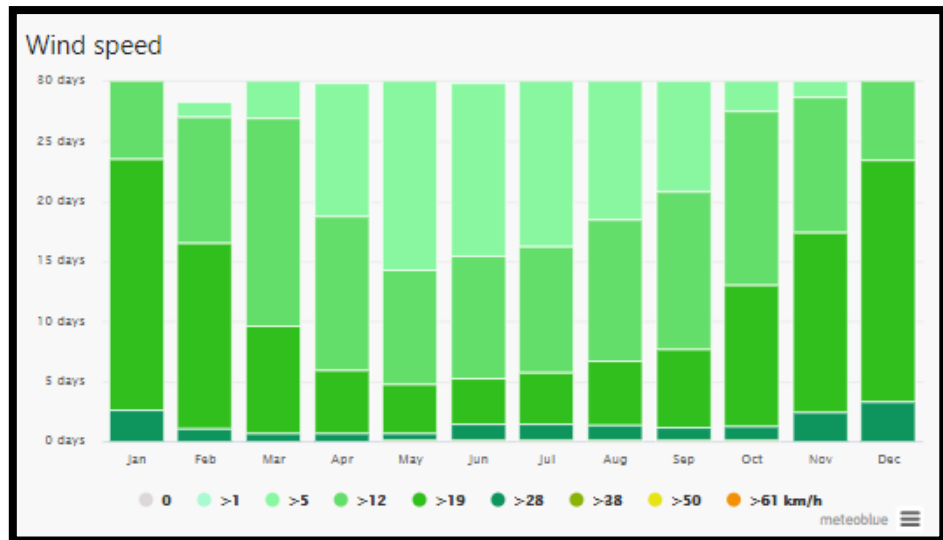


Figure 6: Statistical representation of the average rainfall, maximum temperatures and wind speed for the Vanrhynsdorp region (Chart obtained from meteoblue).

The dominant wind direction of Vanrhynsdorp ranges from East-North-East to West for most of the year. The figure below presents the wind direction distribution in % for the greater Vanrhynsdorp area.

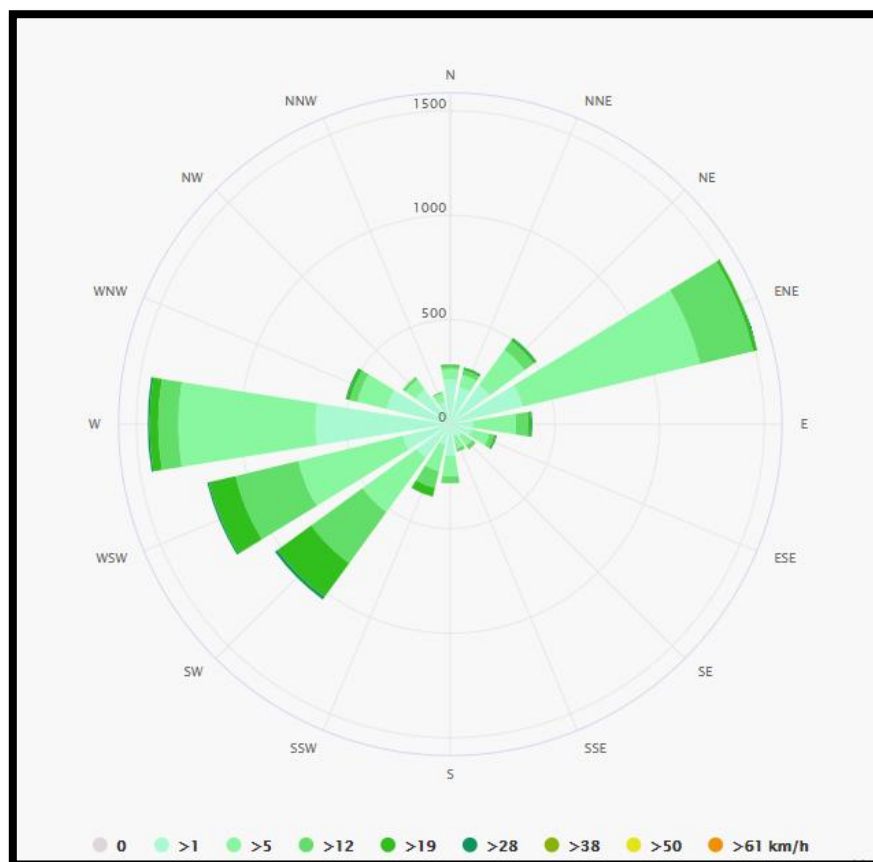


Figure 7: Annual wind direction distribution for the Vanrhynsdorp area, (Image obtained from www.meteoblue.com)

TOPOGRAPHY

The project area is mainly flat or only slightly undulating by superficial sediments of Late Cenozoic age. The thickness of the superficial sediment overburden overlying Precambrian bedrocks here varies from between 0 – 2 meters. A small area in the east is covered by fine-grained aeolian sands (Q-s) that cover large portions of the coastal plain to the north and south of Vanrhynsdorp, where they are often underlain by older calcareous or loamy soils, and that often appear distinctly orange on satellite images. The reddish sands are derived from pale alluvial sands that were accumulated near the coast by the palaeo-Olifants River system and then blown inland by prevailing south-westerly winds. They are mainly of Pleistocene to Recent age. The majority of the study area is mantled by calcareous and gypsiferous soils (Q-r2) that cover large areas of the Knersvlake region around Vanrhynsdorp and are often capped by a reddish, well-consolidated calcareous or siliceous hardpan or dorbank. The soils comprise a spectrum of gravally conglomerates, grit, sand and finer sediment showing a variable degree of calcretisation (i.e. pedogenic limestone formation typical of semi-arid climates). Pleistocene to Holocene alluvial deposits such as silts and gravels occur along the Widouw River but these are small in extent. The altitude varies between 113-134 m.

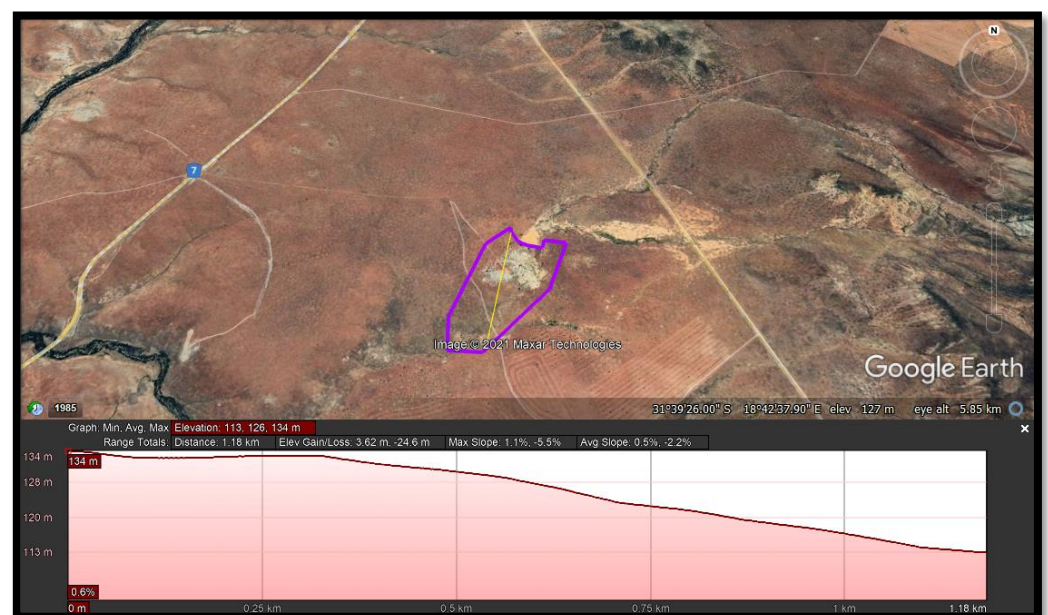


Figure 8: Elevation profile of the proposed prospecting footprint (Image obtained from Google Earth).

VISUAL CHARACTERISTICS

The viewshed analysis showed that the visual impact of the proposed prospecting operation will be of low significance. Prospecting will mainly involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity thus the visual exposure is seen to be insignificant. Therefore, the proposed activities will not have a visual impact on the area.

AIR AND NOISE QUALITY

The proposed activity will have no contribution to air and noise quality since prospecting activities will mainly involve non-invasive surface exploration. Thus the potential impact on the noise ambiance of the receiving environment is expected to be of low significance.

GEOLOGY AND SOIL

The geology of the study area near Vanrhynsdorp is shown on the 1: 250 000 geology map 3118 Calvinia (Council for Geoscience, Pretoria) below in Figure

2. A comprehensive sheet explanation for this map has been published by De Beer et al. (2002).

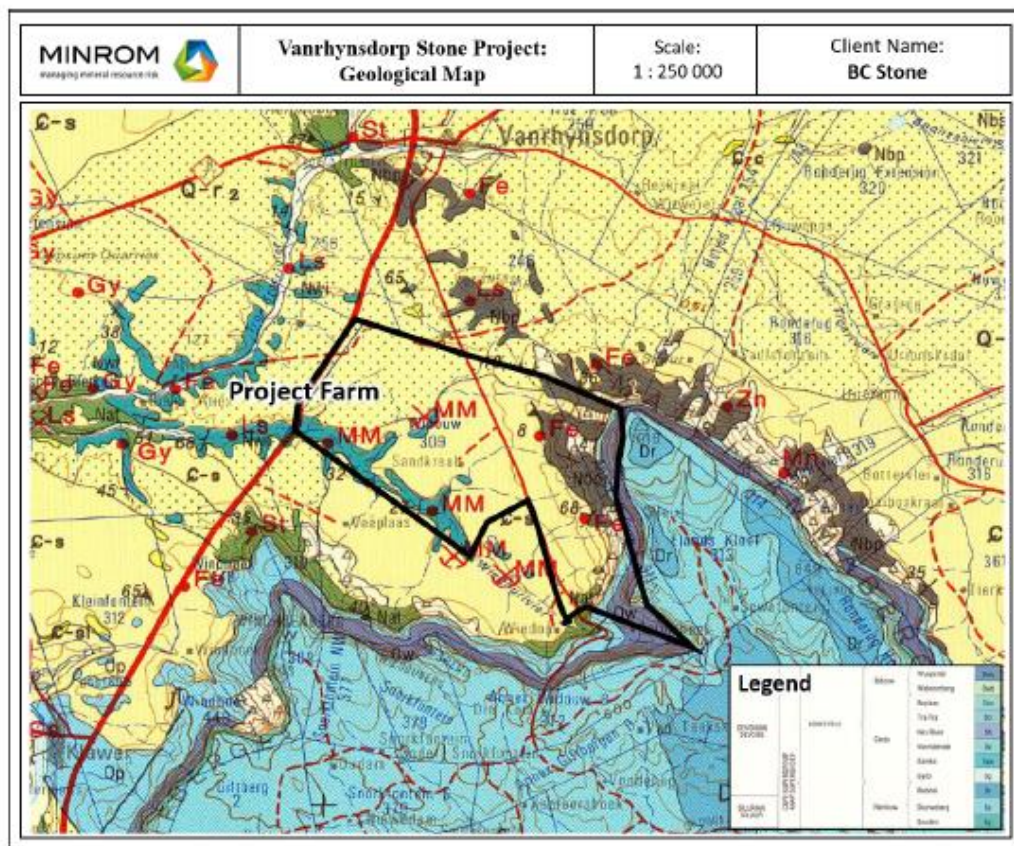


Figure 9: : Geological map retrieved from the Prospecting Work Programme prepared by Minrom Consulting (Pty) Ltd.

According to the 1: 250 000 geology map the project area is largely underlain by superficial sediments of Late Cenozoic age. The thickness of the superficial sediment overburden overlying Precambrian bedrocks here varies from between 0 – 2 meters. A small area in the east is covered by fine-grained aeolian sands (Q-s) that cover large portions of the coastal plain to the north and south of Vanrhynsdorp, where they are often underlain by older calcareous or loamy soils, and that often appear distinctly orange on satellite images. The reddish sands are derived from pale alluvial sands that were accumulated near the coast by the palae-Olifants River system and then blown inland by prevailing south-westerly winds. They are mainly of Pleistocene to Recent age. The majority of the study area is mantled by calcareous and gypsiferous soils (Q-r2) that cover large areas of the Knersvlake region around Vanrhynsdorp and are often capped by a reddish, well-consolidated calcareous or siliceous hardpan or dorbank. The soils comprise a spectrum of gravally conglomerates, grit, sand and finer sediment showing a variable degree of calcretisation (i.e.

pedogenic limestone formation typical of semi-arid climates). Pleistocene to Holocene alluvial deposits such as silts and gravels occur along the Widouw River but these are small in extent.

Late Precambrian metasediments of the Gifberg Group forming the Vredendal Inlier of the Neoproterozoic Gariep Supergroup crop out along the bed and banks of the Widouw River. Within the study area just to the east of the N7 these comprise metamorphosed, deformed carbonate and other metasedimentary rocks of the Widouw Formation (Nwi). The Widouw succession, here in its type area, mainly consists of recrystallized, greyish limestones (marbles) and dolostones but also includes subordinate bodies of meta-greywacke, quartzite and phyllite (De Beer et al., 2002, Gresse et al., 2006, Frimmel 2008).

The carbonate rocks can reach over 200m in thickness, but this has probably been exaggerated by tectonic reduplication. The target carbonate rock is likely a light grey, massive, fine- to medium/coarse-grained, crystalline, exceptionally homogenous, very high-grade calcium carbonate / marble rock. The “limestone” ore body at the site dips gently eastwards at between 5 and 15° and is overlain by schistose, often highly pyritic metasediments of the Aties Formation (Nat). The latter subunit of the Gifberg Group is not mapped at surface in the study area but is well exposed to the west of the N7 as well as in road cuts along the Olifants River Valley.

The following useful description of the Maskam limestone ore body has been extracted from an original report entitled “Geological Report of the Maskam Limestone Deposit on the farm Welverdiend 511 in the Vanrhynsdorp District” (DW Rees in July 2008). The ore is covered by 5 -20 m of overburden which comprises clay, silt and sand as well as hard silcrete bands. The sub-outcrop is uniformly flat with no karsts penetrating into the ore body. The body does not outcrop but on the central western side it lies 1 - 2m below the land surface. The entire western part of the body is overlain by low-grade carbonate-rich hanging wall rock which gradually deepens eastward. The body is underlain by siliceous graphitic and phyllitic waste rock and the contact between the body and foot-wall schist is sharp. The true thickness of the deposit varies between 20 m in the west and 66 m in the east. The ore body has been identified for 1000m along the strike. The southern part terminates in deep weathering adjacent to the Wiedou River but the body extends northwards along strike over

its full width beyond the prospected area. No obvious faults, discontinuities or abnormalities were encountered. A unique feature of the deposit is the consistent high calcium carbonate values obtained in historical boreholes (no date) along strike, down-dip and in vertical depth from the sub-outcrop to the foot-wall contact. No lenses of dolomite or siliceous limestone were encountered in any of the samples taken from the 39 boreholes which were drilled into the ore body. The overburden gradually increases in thickness in a northerly direction to 20m.

HYDROLOGY

The proposed site falls within the Olifants/ Doorn Water Management Area, in the E33G quaternary catchment area. According to the National Freshwater Ecosystem Priority Areas (NFEPA) map as presented by SANBI, a NFEPA river intersects with the proposed prospecting footprint falls but is partially modified in which a large loss of natural habitat, biota and basic ecosystem function have occurred.

Table 10: Aquatic characteristics of the greater study area

Water Management Area	Olifants/Doorn
Sub Water Management Area	Olifants D
Quaternary Catchment	E33G
FEPA Status	Largely Modified

BIOLOGICAL ENVIRONMENT

MINING AND BIODIVERSITY

(Information extracted from the Mining and Biodiversity Guideline: Mainstreaming Biodiversity into the Mining Sector, Department of Environmental Affairs, Department of Mineral Resources, Chamber of Mines, 2013)

The Mining and Biodiversity Guideline, compiled by the South African Mining and Biodiversity Forum (SAMBF) provides the mining sector with a practical, user-friendly manual for integrating biodiversity considerations into planning processes and managing biodiversity during the developmental and operational phases of a mine, from exploration through to closure.

When the prospecting footprint is layered over the Mining and Biodiversity Map, as shown in the figure below, it falls over an area of high biodiversity importance with a corresponding rating of highest risk for mining. The Mining

and Biodiversity Guideline's describes areas of highest biodiversity importance as: "these areas are viewed as necessary to ensure protection of biodiversity, environmental sustainability, and human well-being." The guideline notes that environmental screening, the EIA and specialists should focus on confirming the presence and significance of biodiversity features, and provide a site-specific basis on which to apply the mitigation hierarchy to inform regulatory decision-making.

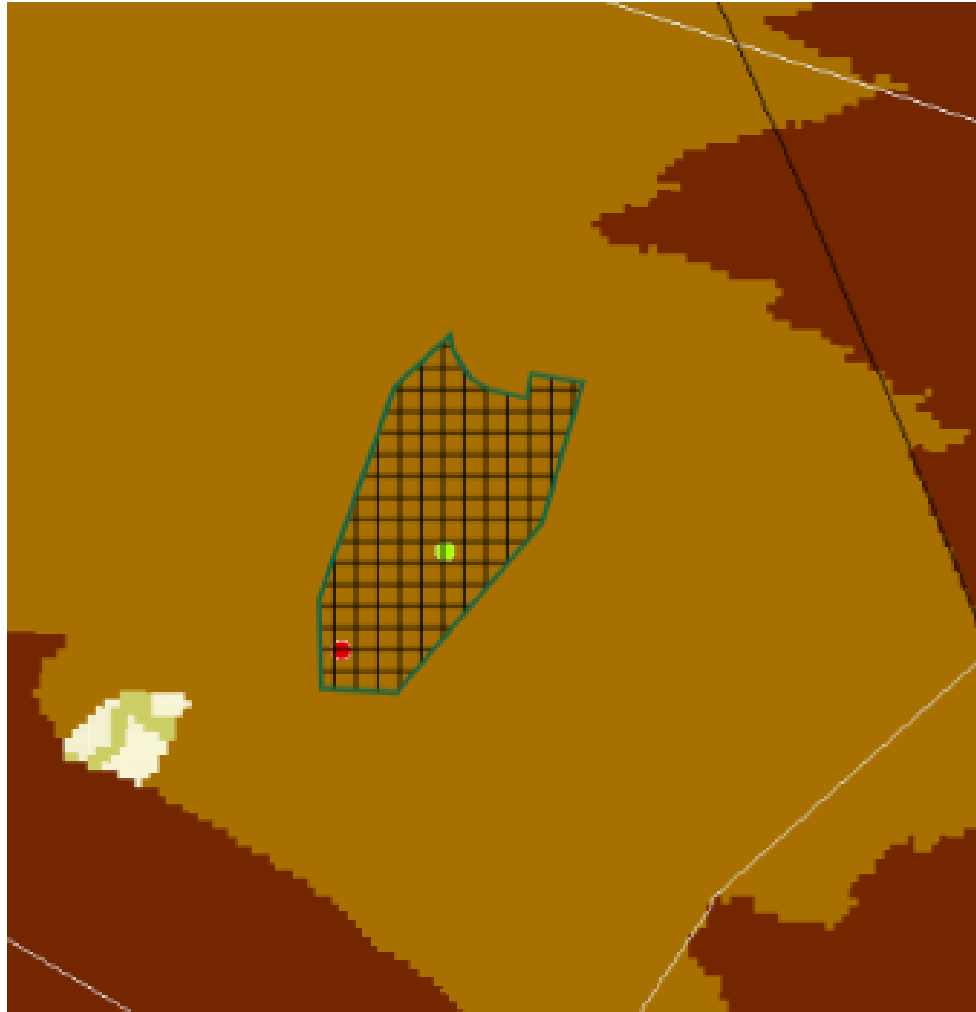


Figure 10: The Mining and Biodiversity importance map with the proposed mining footprint indicated by the blue polygon. Light brown – High biodiversity importance, (image obtained from the BGIS Map Viewer – Mining Guidelines).

BIODIVERSITY CONSERVATION AREAS

According to the Western Cape Biodiversity Spatial Plan, sections of the proposed site falls within an Ecological Support Area.

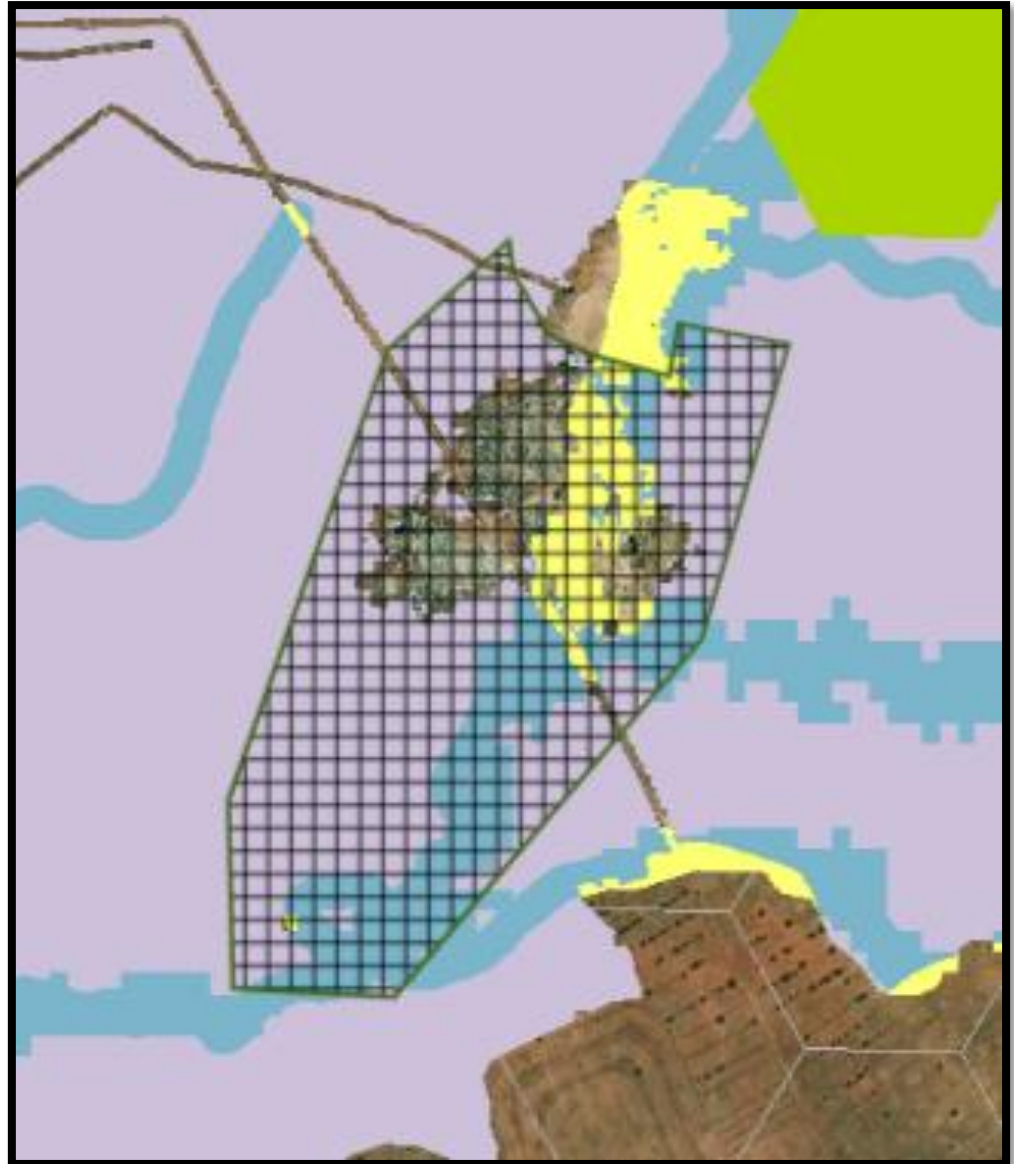


Figure 11: View of the proposed prospecting right area of Paramon (Pty) Ltd- Western Cape Biodiversity Spatial Plan.

GROUND COVER

According to Mucina and Rutherford (2012) the proposed area extends over various vegetation types known as SKk 5 Vanrhynsdorp Gannabosveld; SKk 9 Kobee Succulent Shrubland; SKs 13 Klawer Sandy Shrubland and FRs 1 Vanrhynsdorp Shale Renosterveld. The vegetation type that dominates the area is the SKk 5 Vanrhynsdorp Gannabosveld that is mainly flat or only slightly undulating landscape supporting succulent shrubland dominated by *Salsola* (over large stretches), *Drosanthemum*, *Ruschia* and some disturbance indicators such as (mainly) short-lived Aizoaceae, including representatives of the genera *Galenia*, *Psilocaulon*, *Caulipsolon* and *Mesembryanthemum*. In the

south, the shale plains can acquire a grassland appearance through seasonal dominance of *Bromus pectinatus* and *Stipa capensis*. Spectacular annual and geophyte flora can appear in spring after good winter rains.

FAUNA

Various small mammals and reptiles occur are likely to on the property. Small mammals, reptiles and insects will occur in the area. The fauna at the site will not be impacted by the proposed prospecting activity as they will not be disturbed by the prospecting activities. Since prospecting will mainly involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area. Field workers and specialist should be educated and managed to ensure that no fauna at the site is harmed. At this stage no resident protected or red data faunal species were identified within the earmarked footprint, and the project is expected to have a negligible impact in this regard as prospecting activities will be done by non-invasive activities.

HUMAN ENVIRONMENT:

CULTURAL AND HERITAGE ENVIRONMENT

The prospecting programme will consist of non-invasive surface exploration. The non-invasive prospecting activity is implemented to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity. The non-invasive exploration programme will consist of a surface geotechnical mapping programme of around three (3) days geological field work. A specialist should be consulted prior to any further invasive activities or mining. However, should artefacts archaeological items be observed during the prospecting activities, then all activity should cease immediately, the area marked off activity and a specialists consulted prior to any further activity. This also includes if any graves are observed on site during activity progress then all activity should have ceased and the area demarcated as a no-go zone. The Applicant will implement a chance-find protocol on site for the duration of the site establishment, operational- and decommissioning phase.

The South African Heritage Resources Agency (SAHRA) compiled the Palaeontological (fossil) Sensitivity Map (PSM) to guide developers, heritage officers and practitioners in screening paleontologically sensitive areas at the

onset of a project. When the footprint of the earmarked mining area is placed on the PSM, it shows the study area to extend over an area of low insignificant (blue) concern as presented in the figure below.

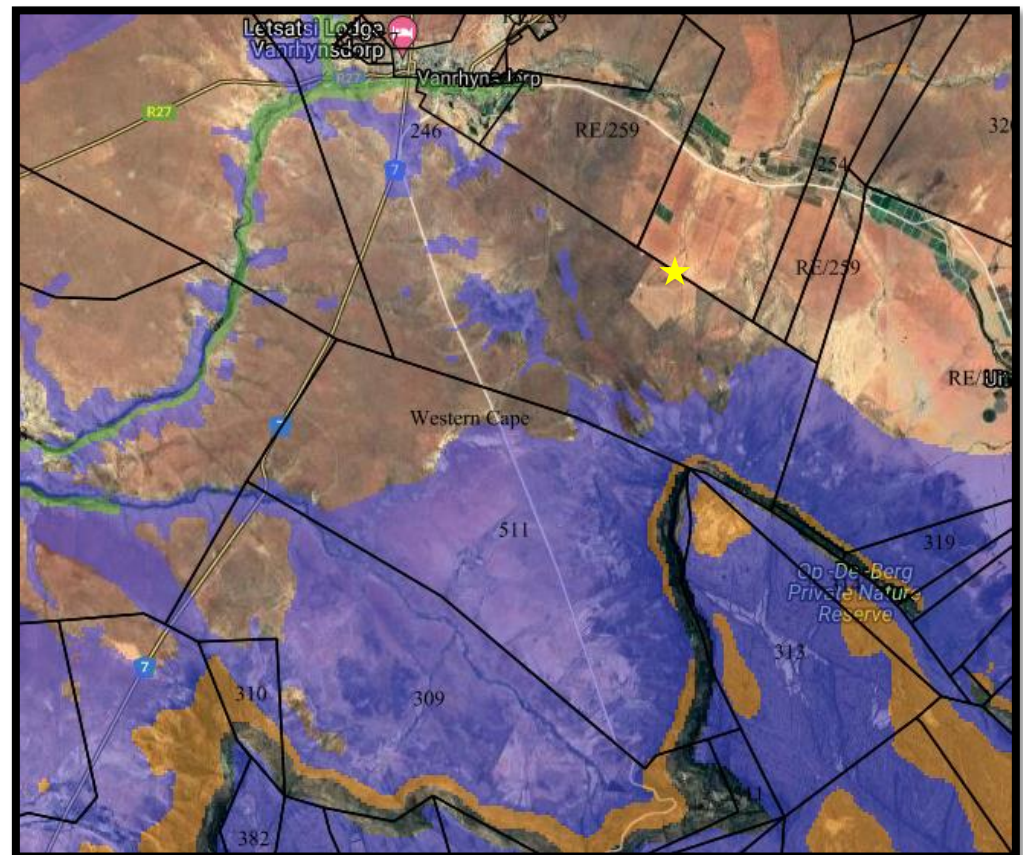


Figure 12: The SAHRA palaeontological sensitivity map shows the proposed prospecting footprint falls in an area of low insignificant (blue) concern.

SOCIO-ECONOMIC ENVIRONMENT

(Information extracted from the Matzikama Municipality Integrated Development Plan 2017/22)

The proposed prospecting area is located within ward 7 of the Matzikama municipal area. The Matzikama Municipality is a category B municipality proclaimed in terms of Provincial Notice No 481/2000 of September 2000. As of May 2011 the previous district managed area to the north (showing in purple on the map) of Matzikama Municipality has been incorporated as per notice in the Provincial Gazette Extraordinary 6825. As a result, the geographical area of the Municipality increased from roughly 8000 km² to 12900 km². The municipal area comprises 18 towns and or villages. These towns and villages include Doring Bay, Strandfontein, Papendorp, Ebenaeser, Lutzville-West, Lutzville, Koekenaap, Olifantsrivier settlement, Vredendal, Klawer, Vanrhynsdorp, Nuwerus, Bitterfontein, Kliprand, Put-se-Kloof, Rietpoort, Molsvlei and Stofkraal.

Vanrhynsdorp is the most southern and oldest town in Namaqualand. It exists since 1661. The town is also the gate way to the Western Cape, Upington, Johannesburg, Namibia, Vredendal and the coastal towns. Vanrhynsdorp is located 300km north of Cape Town on the intersection to Cape Namibia, Namakwari and West Coast Karoo tourism routes. The economic base comprises the service and agriculture industries.

Population and Gender Profile

As of 2020, Matzikama Municipality has an estimate of 73 066 persons, making it the second least populated municipal area in the WCD. This total is expected to grow to 74 696 by 2024, equating to an average annual growth rate of 0.6 per cent.

In 2020, the population density of the West Coast District (WCD) was 15 persons per square kilometer with Matzikama recording a figure of 6 persons per square kilometer.

Population

The table below reveals the total population in the municipal area for the past five years.

Table 11: Socio-economic Profile: Matzikama Municipality (extracted from Matzikama Final Intergrated Development Plan 2021-2022)

2015/2016	2016/2017	2017/2018	2018/2019	2019/2020
71 045	72565	71403	74636	73 066

According to the 2020 Matzikama Municipality Socio-Economic Profile, Matzikama is 73 066 people in 2020, making it the second least populated municipal area in the WCD. This total is expected to growth to 74 696 by 2024, equating to an average annual growth rate of 0.6 per cent. The estimated population growth rate of Matzikama is the lowest in the WCD. The graph below indicate the District average annual growth rate is 1.7 percent.

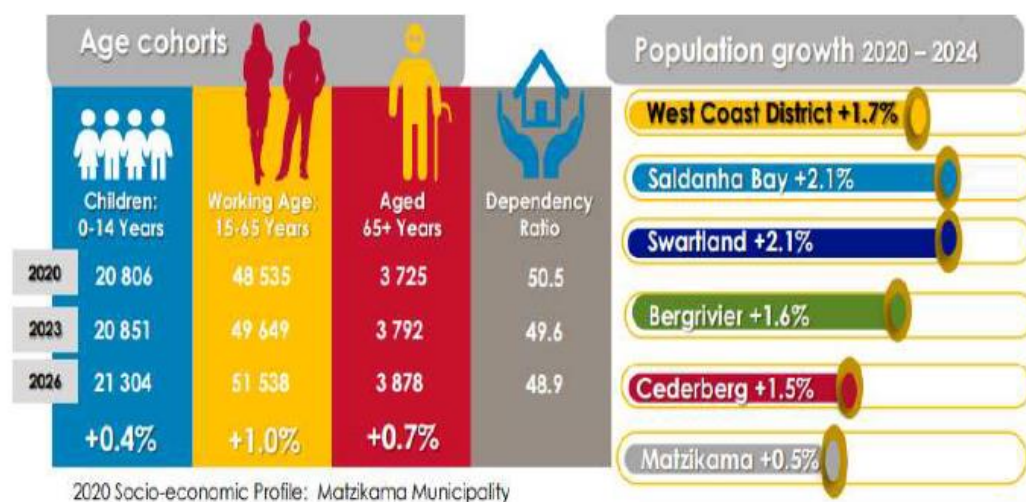


Figure 13: Socio-economic Profile: Matzikama Municipality (extracted from Matzikama Final Intergrated Development Plan 2021-2022)

Sex Ratio

The overall sex ratio (SR) depicts the number of males per 100 females in the population. The data indicates that there are slightly more females than males in the Matzikama municipal area with a ratio of 99.7 per cent of males per 100 females in 2020, rising marginally to 101.5 per cent of males per 100 females in 2024. The SR increases slightly year on year towards 2024 which could be attributed to a wide range of factors such as a decrease in female mortality rates as well as the potential outflow of working males from the municipal area.

Economic Profile

Between seventy and eighty percent of the revenue of the Matzikama Municipality is generated by the local economy therefore, economic growth at the municipal level is essential for the growth of municipal revenue, attainment of economic development, reduction of poverty and improved accessibility. Fostering this growth requires an in-depth understanding of the economic landscape within which each respective municipality operates.

The Matzikama was valued at R4.4 billion (current prices) in 2018, with 28 635 people. The estimate for 2019 indicates the municipal area had a GDP of R4.5 billion and employed 28 609 people. The growth indicates that the economy of the municipal area contracted in real terms, resulting in job losses in the Matzikama municipal area. The main contributor to GDP in the

Matzikama municipal area in 2018 was the agriculture, forestry and fishing sector, with a contribution of 22.7 per cent, whereas the electricity, gas and water sector was the smallest, contributing 2.9 per cent to GDP in the municipal area. Other prominent contributors to GDP in the Matzikama municipal area include the wholesale and retail trade, catering and accommodation sector and the manufacturing sector, contributing 16.8 percent and 13.8 per cent respectively. The agriculture, forestry and fishing sector is also the largest source of employment, contributing 39.7 per cent to total employment. The significant contribution of the agriculture, forestry and fishing sector indicates that the sector is labour-intensive. Another important source of employment in the municipal area is the wholesale and retail trade, catering and accommodation sector, which contributed 18.1 percent to total employment in the municipal area.

The Matzikama municipal area experienced a net loss of 26 jobs in 2019, which was largely due to the primary and secondary sectors both shedding jobs. Furthermore, estimates for 2019 show that the wholesale and retail trade, catering and accommodation sector continued to be the main contributor to total employment with 87 jobs, followed by the general government sector (60 jobs) for the same period. Despite the strong growth, the finance, insurance, real estate and business services sector is also estimated to have shed 20 jobs in 2019. Sectors within the Matzikama municipal economy are expected to be severely impacted by the COVID-19 pandemic. Some of the key challenges

that were identified as a result of COVID-19 and the national lockdown include: a reduction in municipal revenue, unemployment in the private sector, land grabs for informal housing and the stagnation of development programmes.

The development of the proposed private hospital in Vredendal can be a valuable injection into the local economy. Although temporary, the construction of the development will generate new activity and jobs in the construction sector, while the operation of the hospital can have direct and indirect benefits in the tertiary sector.

The table below indicates Matzikama's Economy and Labour Market Performance.

Table 12: Matzikama's Economy and Labour Market (extracted from Matzikama Final Intergrated Development Plan 2021-2022)

Economy and Labour Market Performance

SECTOR	GDP			Employment		
	R million value 2018	Trend 2014 - 2018	Real GDP growth 2019e	Number of jobs 2018	Average annual change 2014 - 2018	Net change 2019e
PS Primary Sector	1 203.7	3.1	-7.4	11 661	192	-10
Agriculture, forestry & fishing	999.0	3.7	-7.8	11 357	198	5
Mining & quarrying	204.7	0.6	-5.3	304	-6	-15
SS Secondary sector	944.6	0.6	-2.9	3 049	80	-115
Manufacturing	609.4	1.5	-2.4	1 818	41	-23
Electricity, gas & water	126.3	-5.8	-6.2	95	-1	0
Construction	208.8	1.7	-3.1	1 136	40	-92
TS Tertiary sector	2 261.1	0.9	0.5	13 925	273	99
Wholesale & retail trade, catering & accommodation	741.0	1.2	-0.1	5 189	131	87
Transport, storage & communication	321.6	-2.3	-3.7	658	-5	5
Finance, insurance, real estate & business services	423.6	2.3	2.5	2 089	44	-20
General government	487.7	0.7	1.3	2 822	40	60
Community, social & personal services	287.2	1.9	1.1	3 167	63	-33
Matzikama	4 409.4	1.5	-2.5	28 635	545	-26

Skill Levels Formal employment	Skill Level Contribution 2019 (%)	Average growth (%) 2015 - 2019	Number of Jobs	
			2018	2019
Skilled	14.1	1.9	3 032	3 072
Semi-skilled	32.8	1.6	7 066	7 126
Low-skilled	53.1	0.9	11 345	11 533
TOTAL	100.0	1.2	21 443	21 731

Informal Employment	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Number of informal jobs	7 754	6 793	6 641	6 786	7 259	7 193	8 122	7 457	7 538	7 192	6 878
% of Total Employment	30.8	28.5	27.9	27.4	28.0	27.9	28.2	26.1	26.3	25.1	24.0

Unemployment rates	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Bergvriev	4.0	4.8	5.0	4.8	4.5	4.8	4.0	4.5	4.9	5.1	5.6
Matzikama	9.3	10.7	11.1	10.7	10.1	10.7	9.2	10.2	11.1	11.2	12.2
Swartland	7.5	8.7	9.2	9.0	8.6	9.2	8.2	9.1	9.9	10.1	11.0
Saldanha Bay	11.8	13.7	14.4	13.9	13.1	13.9	12.9	14.3	15.6	15.9	17.5
Cederberg	5.6	6.7	7.1	6.8	6.3	6.8	5.7	6.4	7.0	7.2	7.9
West Coast	8.3	9.7	10.1	9.8	9.3	9.9	8.7	9.7	10.6	10.8	11.9
Western Cape	14.2	15.5	15.7	15.8	15.7	16.0	16.1	17.3	18.1	18.0	19.4

GDPR Per Capita

An increase in real GDPR per capita, i.e. GDPR per person, is experienced only if the real economic growth rate exceeds the population growth rate. Even though real GDP per capita reflects changes in the overall well-being of the population, not everyone within an economy will earn the same amount of money as estimated by the real GDPR per capita indicator. At R39 000.00 in 2018, Matzikama's real GDPR per capita is below the West Coast District figure of R44,000.00, while also ranking bottom when compared to that of neighbouring municipalities (WCD). Furthermore, Matzikama's per capita income ranks well below that of the Western Cape Figure of R59 000.00.

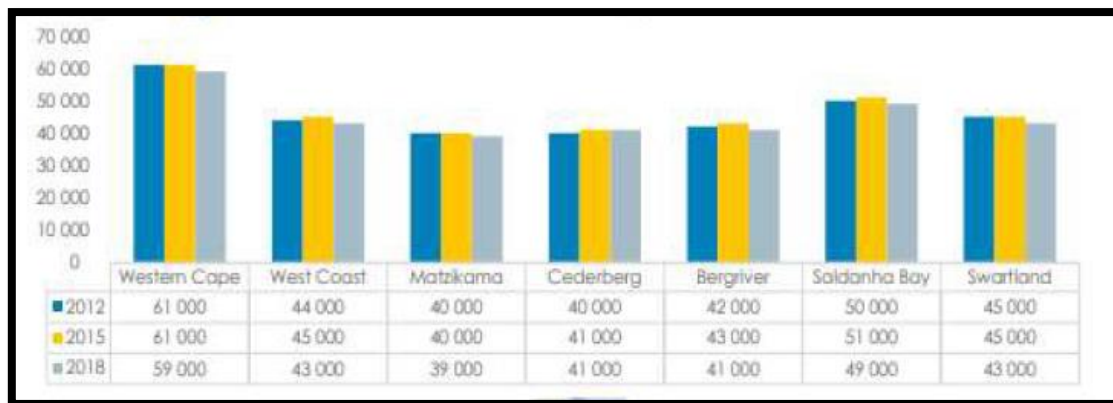


Figure 14: GDP per Capita (extracted from Matzikama Final Intergrated Development Plan 2021-2022)

Income Inequality

It is estimated that Matzikama’s total labour force will in 2019 amount to 28 609 workers of which 21 731 (76.0 per cent) are in the formal sector while 6 878 (24.0 per cent) are informally employed. The National Development Plan (NDP) has set a target of reducing income inequality in South Africa from a Gini coefficient of 0.7 in 2010 to 0.6 by 2030. Income inequality has increased steadily in Matzikama between 2012 and 2018 (0.58 to 0.59) with the exception of 2015, when it dropped to 0.54.

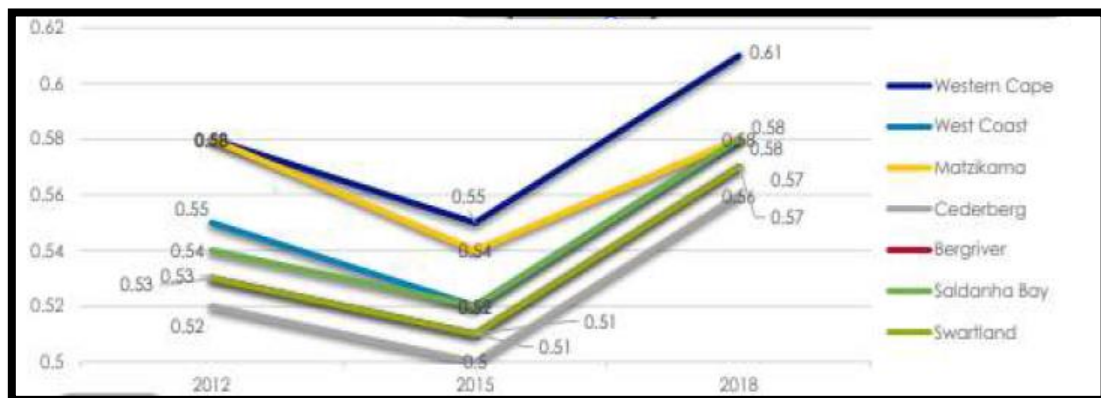


Figure 15: Income inequality (extracted from Matzikama Final Intergrated Development Plan 2021-2022)

Human Development

The United Nations uses the Human Development Index (HDI) to assess the relative level of socio-economic development in countries. Indicators that measure human development are education, housing, access to basic services and health. There has been a general increase in the HDI in

Matzikama from 0.75 in 2012 to 0.80 in 2018. The trend for the West Coast District and the Western Cape in general has been similar between 2012 and 2018. Naturally, per capita income as per definition is expected to mimic the trend of HDI and this is clearly displayed in the graphic above. In short, what this graphic illustrates is that for the most part an increase in GDP per capita across a particular region is generally accompanied by an improvement in HDI levels with a short lag. The HDI is a composite indicator reflecting education levels, health, and income. It is a measure of peoples' ability to live a long and healthy life, to communicate, participate in the community and to have sufficient means to be able to afford a decent living. The HDI is represented by a number between 0 and 1, where 1 indicates a high level of human development and 0 represents no human development

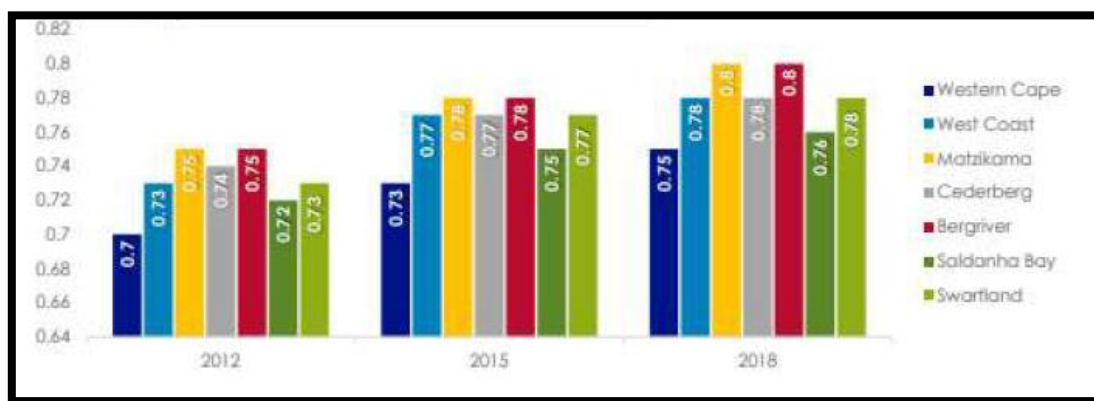


Figure 16: Human development (extracted from Matzikama Final Intergrated Development Plan 2021-2022)

Education Levels

Education remains one of the key avenues through which the state is involved in the economy. In preparing individuals for future engagements in the broader market, policy decisions and choices in the sphere of education play a critical role in determining the extent to which future economy and poverty reduction plans can be realised. The table below measures the matric pass rate within the Matzikama municipal area compared with other municipalities within WCD.

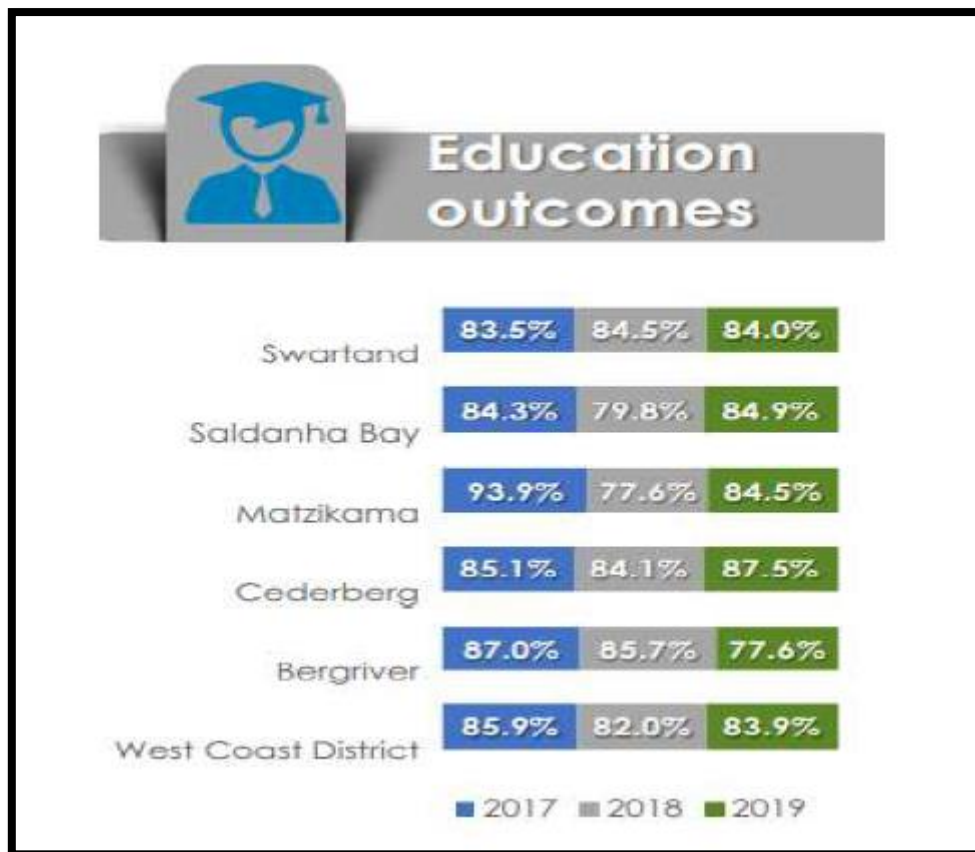


Figure 17: Education outcomes in and around the Matzikama municipality (extracted from Matzikama Final Intergrated Development Plan 2021-2022)

The matric pass rate in Matzikama regressed from 93.9% in 2017 to 84.5% in 2019. Higher matric pass rates could improve access for learners to higher education to broaden their opportunities. The regression of the matric pass rate within the Matzikama area remains a serious concern.

Employment Profile

In Matzikama Local Municipality the economic sectors that recorded the largest number of employment in 2019 were the agriculture sector with a total of 15 800 employed people or 51.6% of total employment in the local municipality. The trade sector with a total of 3 980 (13.0%) employs the second highest number of people relative to the rest of the sectors. The electricity sector with 88.4 (0.3%) is the sector that employs the least number of people in Matzikama Local Municipality, followed by the mining sector with 414 (1.3%) people employed.

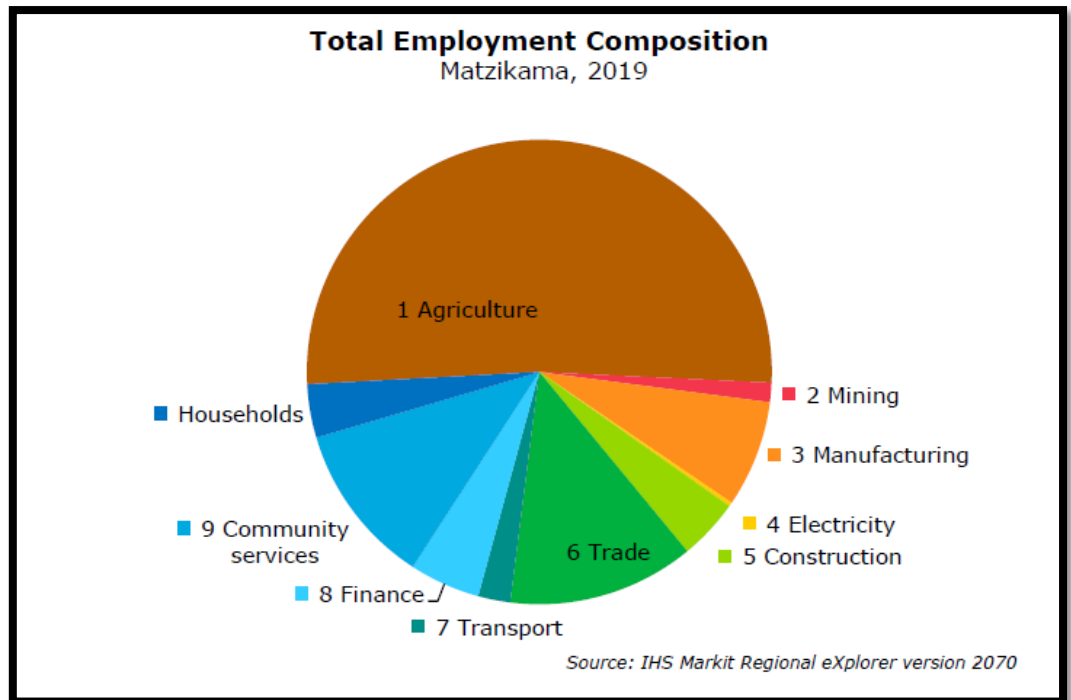


Figure 18: Total employment composition in the Matzikama municipality (extracted from Matzikama Final Intergrated Development Plan 2021-2022)

(b) Description of the current land uses

The current surrounding land uses can be classified as agricultural land, existing mining and tourism.

Table 13: Land uses and/or prominent features that occur within 500 m radius of S1

LAND USE CHARACTER	YES	NO	DESCRIPTION
Natural area	YES	-	The study area is surrounded by natural areas used for agricultural purposes.
Low density residential	-	NO	
Medium density residential	-	NO	
High density residential	-	NO	
Informal residential	-	NO	
Retail commercial & warehousing	-	NO	
Light industrial	-	NO	
Medium industrial	-	NO	
Heavy industrial	-	NO	
Power station	-	NO	
High voltage power line	-	NO	
Office/consulting room	-	NO	
Military or police base / station / compound	-	NO	
Spoil heap or slimes dam	-	NO	
Quarry, sand or borrow pit	YES		Existing Quarry used for previous Dimension Stone mining
Dam or reservoir		NO	
Hospital/medical centre	-	NO	
School/ crèche	-	NO	

LAND USE CHARACTER	YES	NO	DESCRIPTION
Tertiary education facility	-	NO	
Church	-	NO	
Old age home	-	NO	
Sewage treatment plant	-	NO	
Train station or shunting yard	-	NO	
Railway line	-	NO	
Major road (4 lanes or more)	-	NO	
Airport	-	NO	
Harbour	-	NO	
Sport facilities	-	NO	
Golf course	-	NO	
Polo fields	-	NO	
Filling station	-	NO	
Landfill or waste treatment site	-	NO	
Plantation		NO	
Agriculture	YES		The proposed footprint forms part of areas used for agricultural purposes
River, stream or wetland		NO	An existing river flows approximately 1.7 km south-west of the proposed site and falls within the Olifants/ Doorn Water Management Area, in the E33G quaternary catchment area.
Nature conservation area	-	NO	
Mountain, hill or ridge	YES		
Museum	-	NO	
Historical building	-	NO	
Protected Area	-	NO	The area adjacent to the application property is protected. However the Op De Berg Private Nature reserve is more than 5km away from the proposed site.
Graveyard	-	NO	
Archaeological site	-	NO	
Other land uses (describe)		NO	There is a guest house (Maskam Guest) about 1.7km from the proposed site.

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

SPECIFIC ENVIRONMENTAL FEATURES

SITE SPECIFIC TOPOGRAPHY

The project area is mainly flat or only slightly undulating by superficial sediments of Late Cenozoic age. The thickness of the superficial sediment overburden overlying Precambrian bedrocks here varies from between 0 – 2 meters. A small area in the east is covered by fine-grained aeolian sands (Q-s) that cover large portions of the coastal plain to the north and south of Vanrhynsdorp, where they are often underlain by older calcareous or loamy soils, and that often appear distinctly orange on satellite images. The reddish sands are derived from pale alluvial sands that were accumulated near the

coast by the palaeo-Olifants River system and then blown inland by prevailing south-westerly winds. They are mainly of Pleistocene to Recent age. The majority of the study area is mantled by calcareous and gypsiferous soils (Q-r2) that cover large areas of the Knersvlake region around Vanrhynsdorp and are often capped by a reddish, well-consolidated calcareous or siliceous hardpan or dorbank. The soils comprise a spectrum of gravally conglomerates, grit, sand and finer sediment showing a variable degree of calcretisation (i.e. pedogenic limestone formation typical of semi-arid climates). Pleistocene to Holocene alluvial deposits such as silts and gravels occur along the Widouw River but these are small in extent. The topography of the greater study area is shown in the figure below with elevations generally at about 124 amsl. The altitude varies between 113-134 m.

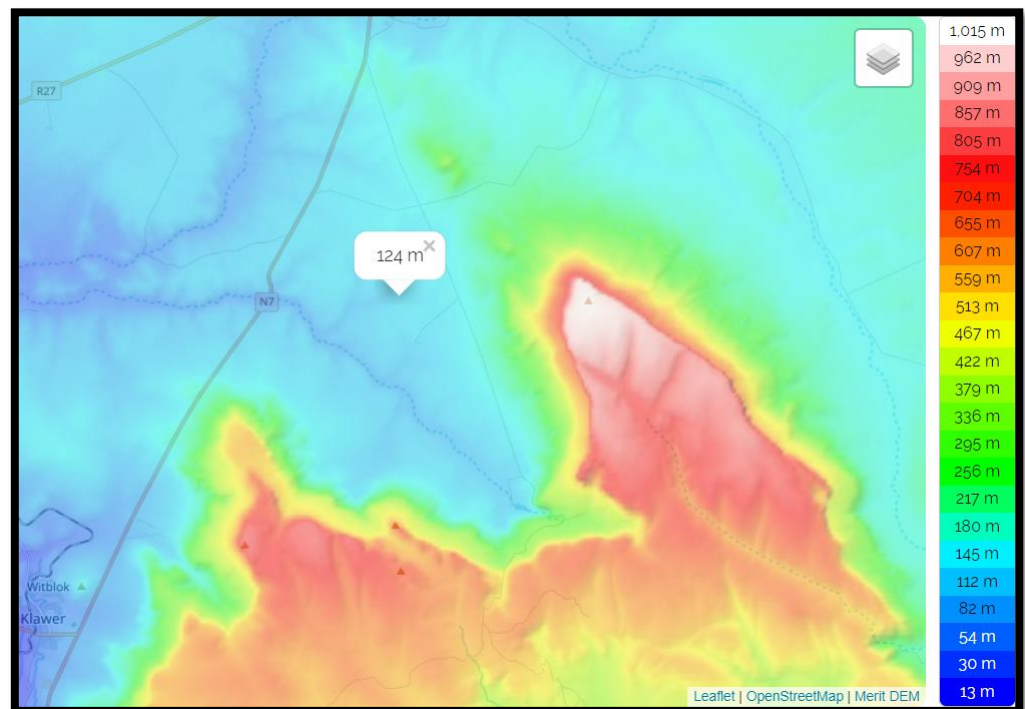


Figure 19: Map showing the topography of the Vanrhynsdorp area (image obtained from www.en-za.topographic-map.com/maps/gwpq/South-Africa/).

SITE SPECIFIC VISUAL CHARACTERISTICS

The figure below shows the viewshed analysis for the footprint. The green shaded areas show the positions from where the prospecting area will be visible. From this analysis it is proposed that the visual impact of the proposed prospecting right operation will be of low significance. As prospecting activities will mainly involve non-invasive surface exploration. Thus the potential impact on the visual characteristics of the receiving environment is expected to be of low significance. Should the Applicant successfully follow the mitigation measures as set out in this document the prospecting areas (upon closure), no residual visual impact is expected upon closure of the prospecting activities.

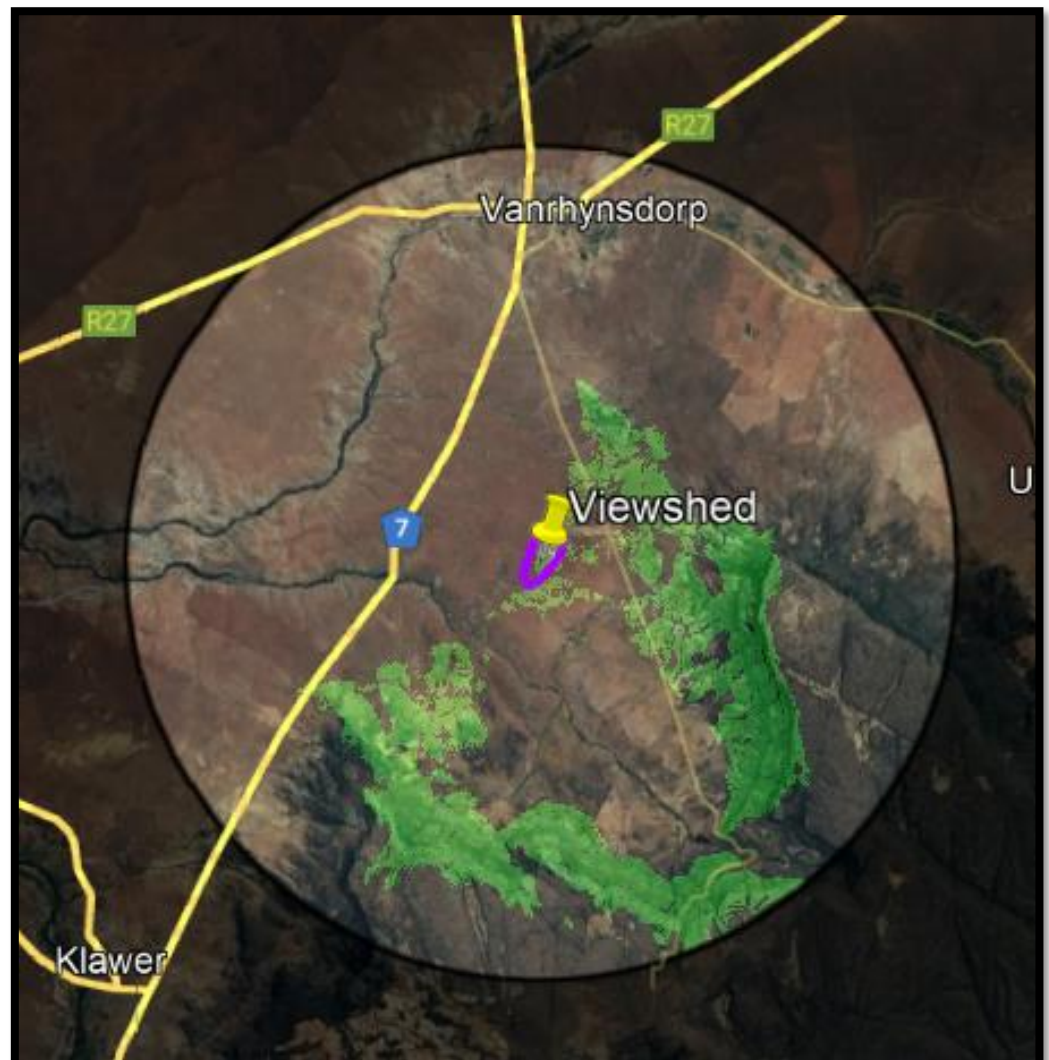


Figure 20.1-2: Viewshed of the proposed prospecting footprint where the green shaded areas shows the positions from where the prospecting area (purple polygon) will be visible. (Image obtained from Google Earth).

SITE SPECIFIC AIR AND NOISE QUALITY

The proposed activity will have no contribution to air and noise quality since prospecting activities will mainly involve non-invasive surface exploration. Thus the potential impact on the noise ambiance of the receiving environment is expected to be of low significance

SITE SPECIFIC GEOLOGY AND SOIL

(Information extracted from the Prospecting Work Programme (PWP) for the proposed prospecting right)

As mentioned earlier, within the study area just to the east of the N7 these comprise metamorphosed, deformed carbonate and other metasedimentary rocks of the Widouw Formation (Nwi). The Widouw succession, here in its type area, mainly consists of recrystallized, greyish limestones (marbles) and dolostones but also includes subordinate bodies of meta-greywacke, quartzite and phyllite (De Beer et al., 2002, Gresse et al., 2006, Frimmel 2008).

The carbonate rocks can reach over 200m in thickness, but this has probably been exaggerated by tectonic reduplication. The target carbonate rock is likely a light grey, massive, fine- to medium/coarse-grained, crystalline, exceptionally homogenous, very high-grade calcium carbonate / marble rock. The “limestone” ore body at the site dips gently eastwards at between 5 and 15° and is overlain by schistose, often highly pyritic metasediments of the Aties Formation (Nat). The latter subunit of the Gifberg Group is not mapped at surface in the study area but is well exposed to the west of the N7 as well as in road cuts along the Olifants River Valley.

The following useful description of the Maskam limestone ore body has been extracted from an original report entitled “Geological Report of the Maskam Limestone Deposit on the farm Welverdiend 511 in the Vanrhynsdorp District” (DW Rees in July 2008). The ore is covered by 5 -20 m of overburden which comprises clay, silt and sand as well as hard silcrete bands. The sub-outcrop is uniformly flat with no karsts penetrating into the ore body. The body does not outcrop but on the central western side it lies 1 - 2m below the land surface. The entire western part of the body is overlain by low-grade carbonate-rich hanging wall rock which gradually deepens eastward. The body is underlain by siliceous graphitic and phyllitic waste rock and the contact between the body and foot-wall schist is sharp. The true thickness of the deposit varies between

20 m in the west and 66 m in the east. The ore body has been identified for 1000m along the strike. The southern part terminates in deep weathering adjacent to the Wiedou River but the body extends northwards along strike over its full width beyond the prospected area. No obvious faults, discontinuities or abnormalities were encountered. A unique feature of the deposit is the consistent high calcium carbonate values obtained in historical boreholes (no date) along strike, down-dip and in vertical depth from the sub-outcrop to the foot-wall contact. No lenses of dolomite or siliceous limestone were encountered in the any of the samples taken from the 39 boreholes which were drilled into the ore body. The overburden gradually increases in thickness in a northerly direction to 20m.

SITE SPECIFIC HYDROLOGY

The proposed site falls within the Olifants/ Doorn Water Management Area, in the E33G quaternary catchment area. According to the National Freshwater Ecosystem Priority Areas (NFEPA) map as presented by SANBI, a NFEPA river intersects with the proposed prospecting footprint falls but is partially modified in which a large loss of natural habitat, biota and basic ecosystem function have occurred.



Figure 21: Map showing the proposed prospecting footprint (blue polygon). The dotted blue line represents rivers and the light blue area dams. (Image obtained from CapeFarmMapper ver 2.6.1 - <https://gis.elsenburg.com/apps/cfm/#>)

SITE SPECIFIC MINING AND BIODIVERSITY CONSERVATION AREAS

The prospecting activities does not require the removal of any large trees or vegetation of significance. Since prospecting will mainly involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity the impact of the prospecting operation on the vegetation cover of the receiving environment is deemed to be of Low significance. The Applicant will make use of the existing access roads. It is proposed that should the Applicant implement the mitigation measures proposed in the EMPr the impact of the proposed activity on the vegetation and groundcover in general is deemed to be of low significance.

SITE SPECIFIC GROUNDCOVER

The site specific groundcover of the prospecting area consists of low shrub (karoo succulent) (purple area), open woodland (green area), and mines: extraction pits and quarries as per the figure below.

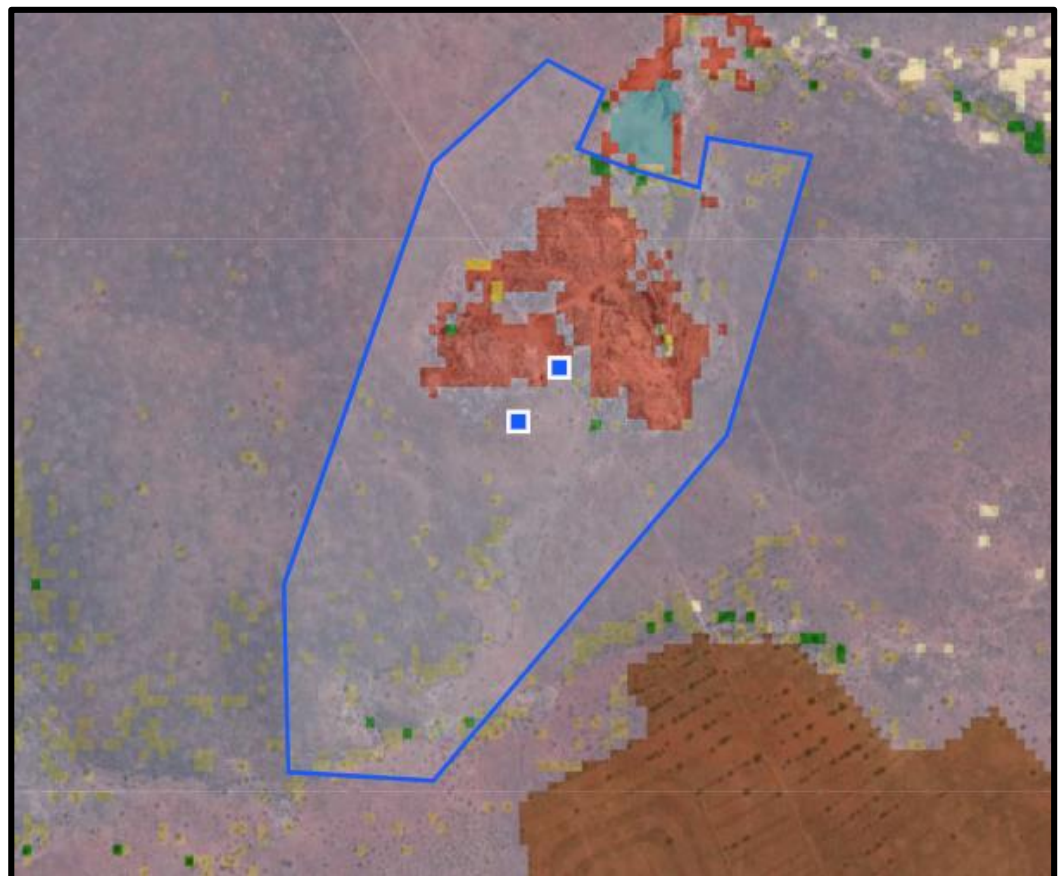


Figure 22: Land Cover 73-class (DEA, 2018)

SITE SPECIFIC FAUNA

Various small mammals and reptiles occur are likely to on the property. Small mammals, reptiles and insects will occur in the area. The fauna at the site will not be impacted by the proposed prospecting activity as they will not be disturbed by the prospecting activities. Since prospecting will mainly involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area. Field workers and specialist should be educated and managed to ensure that no fauna at the site is harmed. At this stage no resident protected or red data faunal species were identified within the earmarked footprint, and the project is expected to have a negligible impact in this regard as prospecting activities will be done by non-invasive activities.

SITE SPECIFIC CULTURAL AND HERITAGE ENVIRONMENT

As mentioned earlier, the programme will only consist of non-invasive surface exploration A specialist should be consulted prior to any further invasive activities or mining. However, should artefacts archaeological items be observed during the prospecting activities, then all activity should cease immediately, the area marked off activity and a specialists consulted prior to any further activity. This also includes if any graves are observed on site during activity progress then all activity should have ceased and the area demarcated as a no-go zone. The Applicant will implement a chance-find protocol on site for the duration of the site establishment, operational- and decommissioning phase.

The South African Heritage Resources Agency (SAHRA) compiled the Palaeontological (fossil) Sensitivity Map (PSM) to guide developers, heritage officers and practitioners in screening paleontologically sensitive areas at the onset of a project. When the footprint of the earmarked mining area is placed on the PSM, it shows the study area to extend over an area of low insignificant (blue) concern as presented in the figure below.

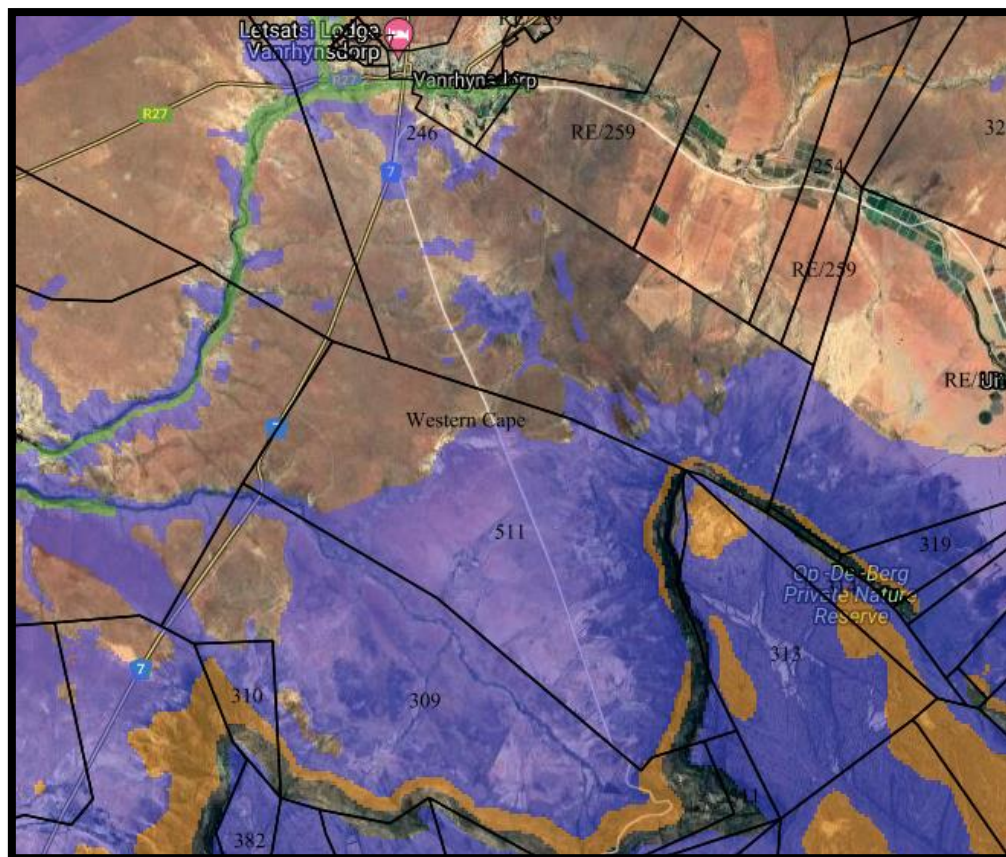


Figure 23: The SAHRA palaeontological sensitivity map shows the proposed prospecting footprint falls in an area of low insignificant (blue) concern.

(d) Environmental and current land use map.

(Show all environmental and current land use features)

The environmental and current land use map is attached as Appendix D.

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.)

As the prospecting will involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity in order to assess the impacts for this alternative only the following potential impacts was deemed the only pertinent impacts that could be assessed:

- Potential impact associated with littering and hydrocarbon spills
- Disturbance to fauna within the footprint area
- The potential impact that prospecting may have on the area/infrastructure of cultural or heritage concern was deemed the only pertinent impact that could be assessed.
- Safety and security on properties due to trespassing of field workers

No other impacts could be identified that could have an adverse effect on the receiving environment.

The following potential impacts were identified of each main activity in each phase of the proposed project. The significance rating was determined using the methodology as explained under *vi) Methodology Used in Determining and Ranking the Significance*. The impact rating listed below was determined for each impact **prior** to bringing the proposed mitigation measures into consideration. The degree of mitigation indicates the possibility of partial, full or no mitigation of the identified impact.

PLANNING AND DESIGN PHASE

No impact could be identified as these activities will be conducted of site

OPERATIONAL PHASE

Potential impact associated with littering and hydrocarbon spills

Severity	Duration	Extent	Consequence			Likelihood	Significance
				Probability	Frequency		
Rating: Low -Medium						Degree of Mitigation: Full	
3	1	1	1.6	3	5	4	6.4

Disturbance to fauna within the footprint area

Severity	Duration	Extent	Consequence			Likelihood	Significance
				Probability	Frequency		
Rating: Low						Degree of Mitigation: Full	
2	1	1	1.3	2	5	3.5	4.5

Potential impact on areas/infrastructure of heritage or cultural concern

Severity	Duration	Extent	Consequence			Likelihood	Significance
				Probability	Frequency		

Rating: Low-Medium						Degree of Mitigation: Full	
2	1	1	1.3	2	5	3.5	4.5

Safety and security on properties due to trespassing of field workers.

			Consequence			Likelihood	Significance
Severity	Duration	Extent		Probability	Frequency		
Rating: Low -Medium						Degree of Mitigation: Full	
3	1	4	2.6	2	5	3.5	9.1

CLOSURE OF THE PROSPECTING AREA

Potential impact associated with litter/hydrocarbon spills left at the decommissioning activities

Potential impact associated with littering and hydrocarbon spills

			Consequence			Likelihood	Significance
Severity	Duration	Extent		Probability	Frequency		
Rating: Low -Medium						Degree of Mitigation: Full	
3	1	1	1.6	3	5	4	6.4

Disturbance to fauna within the footprint area

			Consequence			Likelihood	Significance
Severity	Duration	Extent		Probability	Frequency		
Rating: Low						Degree of Mitigation: Full	
2	1	1	1.3	2	5	3.5	4.5

Potential impact on areas/infrastructure of heritage or cultural concern

			Consequence			Likelihood	Significance
Severity	Duration	Extent		Probability	Frequency		
Rating: Low-Medium						Degree of Mitigation: Full	
2	1	1	1.3	2	5	3.5	4.5

Safety and security on properties due to trespassing of field workers.

			Consequence			Likelihood	Significance
Severity	Duration	Extent		Probability	Frequency		
Rating: Low -Medium						Degree of Mitigation: Full	
3	1	4	2.6	2	5	3.5	9.1

Return of the prospecting area to agricultural use **(Positive Impact)**

			Consequence			Likelihood	Significance
Severity	Duration	Extent		Probability	Frequency		
Rating: Medium - High						Degree of Mitigation: N/A	
4	5	5	4.6	5	5	5	23

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.)

Methodology for the assessment of the potential environmental, social and cultural impacts

DEFINITIONS AND CONCEPTS:

Environmental significance:

The concept of significance is at the core of impact identification, evaluation and decision-making. The concept remains largely undefined and there is no international consensus on a single definition. The following common elements are recognised from the various interpretations:

- Environmental significance is a value judgement
- The degree of environmental significance depends on the nature of the impact
- The importance is rated in terms of both biophysical and socio-economic values
- Determining significance involves the amount of change to the environment perceived to be acceptable to affected communities.

Significance can be differentiated into impact magnitude and impact significance. Impact magnitude is the measurable change (i.e. intensity, duration and likelihood). Impact significance is the value placed on the change by different affected parties (i.e. level of acceptability) (DEAT (2002) Impact Significance, Integrated Environmental Management, Information Series 5).

The concept of risk has two dimensions, namely the consequence of an event or set of circumstances, and the likelihood of particular consequences being realised (Environment Australia (1999) Environmental Risk Management).

Impact

The positive or negative effects on human well-being and / or the environment.

Consequence

The intermediate or final outcome of an event or situation OR it is the result, on the environment, of an event.

Likelihood

A qualitative term covering both probability and frequency.

Frequency

The number of occurrences of a defined event in a given time or rate.

Probability

The likelihood of a specific outcome measured by the ratio of a specific outcome to the total number of possible outcomes.

Environment

Surroundings in which an organisation operates, including air, water, land, natural resources, flora, fauna, humans and their interrelation (ISO 14004, 1996).

Methodology that will be used

The environmental significance assessment methodology is based on the following determination:

$$\text{Environmental Significance} = \text{Overall Consequence} \times \text{Overall Likelihood}$$

Determination of Overall Consequence

Consequence analysis is a mixture of quantitative and qualitative information and the outcome can be positive or negative. Several factors can be used to determine consequence. For the purpose of determining the environmental significance in terms of consequence, the following factors were chosen: **Severity/Intensity, Duration and Extent/Spatial Scale**. Each factor is assigned a rating of 1 to 5, as described in the tables below.

Determination of Severity / Intensity

Severity relates to the nature of the event, aspect or impact to the environment and describes how severe the aspects impact on the biophysical and socio-economic environment.

The table below will be used to obtain an overall rating for severity, taking into consideration the various criteria.

Table 14: Table to be used to obtain an overall rating of severity, taking into consideration the various criteria.

Type of criteria	Rating				
	1	2	3	4	5
Quantitative	0-20%	21-40%	41-60%	61-80%	81-100%
Qualitative	Insignificant / Non-harmful	Small / Potentially harmful	Significant/ Harmful	Great/ Very harmful	Disastrous Extremely harmful
Social/ Community response	Acceptable / I&AP satisfied	Slightly tolerable / Possible objections	Intolerable/ Sporadic complaints	Unacceptable / Widespread complaints	Totally unacceptable / Possible legal action
Irreversibility	Very low cost to mitigate/ High potential to mitigate impacts to level of insignificance/ Easily reversible	Low cost to mitigate	Substantial cost to mitigate/ Potential to mitigate impacts/ Potential to reverse impact	High cost to mitigate	Prohibitive cost to mitigate/ Little or no mechanism to mitigate impact Irreversible
Biophysical (Air quality, water quantity and quality, waste production, fauna and flora)	Insignificant change / deterioration or disturbance	Moderate change / deterioration or disturbance	Significant change / deterioration or disturbance	Very significant change / deterioration or disturbance	Disastrous change / deterioration or disturbance

Determination of Duration

Duration refers to the amount of time that the environment will be affected by the event, risk or impact, if no intervention e.g. remedial action takes place.

Table 15: Criteria for the rating of duration.

Rating	Description
1	Up to ONE MONTH
2	ONE MONTH to THREE MONTHS (QUARTER)
3	THREE MONTHS to ONE YEAR
4	ONE to TEN YEARS
5	Beyond TEN YEARS

Determination of Extent/Spatial Scale

Extent or spatial scale is the area affected by the event, aspect or impact.

Table 16: Criteria for the rating of extent / spatial scale.

Rating	Description
1	Immediate, fully contained area
2	Surrounding area
3	Within Business Unit area of responsibility
4	Within the farm/neighbouring farm area
5	Regional, National, International

Determination of Overall Consequence

Overall consequence is determined by adding the factors determined above and summarized below, and then dividing the sum by 3.

Table 17: Example of calculating overall consequence.

Consequence	Rating
Severity	Example 4
Duration	Example 2
Extent	Example 4
SUBTOTAL	10
TOTAL CONSEQUENCE: (Subtotal divided by 3)	3.3

Determination of Likelihood:

The determination of likelihood is a combination of Frequency and Probability. Each factor is assigned a rating of 1 to 5, as described below and in tables 6 and 7.

Determination of Frequency

Frequency refers to how often the specific activity, related to the event, aspect or impact, is undertaken.

Table 18: Criteria for the rating of frequency.

Rating	Description
1	Once a year or once/more during operation
2	Once/more in 6 Months
3	Once/more a Month
4	Once/more a Week
5	Daily

Determination of Probability

Probability refers to how often the activity or aspect has an impact on the environment.

Table 19: Criteria for the rating of probability.

Rating	Description
1	Almost never / almost impossible
2	Very seldom / highly unlikely
3	Infrequent / unlikely / seldom
4	Often / regularly / likely / possible
5	Daily / highly likely / definitely

Overall Likelihood

Overall likelihood is calculated by adding the factors determined above and summarised below, and then dividing the sum by 2.

Table 20: Example of calculating overall likelihood.

Consequence	Rating
Frequency	Example 4
Probability	Example 2
SUBTOTAL	6
TOTAL LIKELIHOOD (Subtotal divided by 2)	3

Determination of Overall Environmental Significance:

The multiplication of overall consequence with overall likelihood will provide the environmental significance, which is a number that will then fall into a range of **LOW**, **LOW-MEDIUM**, **MEDIUM**, **MEDIUM-HIGH** or **HIGH**, as shown in the table below.

Table 21: Determination of overall environmental significance.

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

Qualitative description or magnitude of Environmental Significance

This description is qualitative and is an indication of the nature or magnitude of the Environmental Significance. It also guides the prioritisations and decision making process associated with this event, aspect or impact.

Table 22: Description of environmental significance and related action required.

Significance	Low	Low-Medium	Medium	Medium-High	High
Impact Magnitude	Impact is of very low order and therefore likely to have very little real effect. Acceptable.	Impact is of low order and therefore likely to have little real effect. Acceptable.	Impact is real, and potentially substantial in relation to other impacts. Can pose a risk to company	Impact is real and substantial in relation to other impacts. Pose a risk to the company. Unacceptable	Impact is of the highest order possible. Unacceptable. Fatal flaw.
Action Required	Maintain current management measures. Where possible improve.	Maintain current management measures. Implement monitoring and evaluate to determine potential increase in risk.	Implement monitoring. Investigate mitigation measures and improve management measures to reduce risk, where possible.	Improve management measures to reduce risk.	Implement significant mitigation measures or implement alternatives.

Significance	Low	Low-Medium	Medium	Medium-High	High
		Where possible improve			

Based on the above, the significance rating scale has been determined as follows:

- High** 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.
- Medium-High** 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.
- Medium** 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 case of positive impacts; other means of achieving these benefits would be about equal in time, cost and effort.
- Low-Medium** 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.
- 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 be better, in one or a number of ways, than this means of achieving the benefit
- Insignificant** There would be a no impact at all – not even a very low impact on the system or any of its parts.

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)

Site Alternative 1, which entails the prospecting area with a footprint of approximately 70.077 ha over portion 3 of the farm Welverdiend no 511 magisterial district of Vanrhynsdorp Western Cape province (hereafter referred to as the application property) and will be performed over a period of one (1) week over the entire prospecting period. Prospecting will involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity.

Prospecting sites can be moved to various area depending on sensitivity and accessibility. However, the proposed prospecting area was identified as the preferred and only viable site alternative. S1 was identified during the assessment phase of the environmental impact assessment, by the Applicant and project team due to the following:

The land surface rights of this application area is owned by the applicant.

The geological setting of the area of interest is mainly underlain by superficial sediments of Late Cenozoic age.

Availability of all forms of Marble (Dimension Stone), Limestone, Dimension Stone (General) (hereafter referred to as mineral resource) will only be determined should the prospecting right be granted and prospecting activities can take place.

PROJECT ASSOCIATED POSITIVE IMPACTS:

- Work opportunities to local residents should prospecting be successful contributing to the socio-economic status of the area;
- No infrastructure on site
- Return of the prospecting area to agricultural use upon closure of the project; and
- Diversification of the land use of the property.

POTENTIAL NEGATIVE IMPACTS:

OPERATIONAL PHASE (Non Invasive Prospecting)

- Potential impact associated with litter on the footprint area;
- Potential hydrocarbon contamination from leaks or spills leeching into the water table;
- Potential impact on fauna within the footprint area;
- Potential impact on areas/infrastructure of heritage or cultural concern
- Safety and security on properties due to trespassing of contractors / workers;

CLOSURE OF THE PROSPECTING AREA

- Potential impact associated with litter/hydrocarbon spills left at the footprint area;
- Disturbance to fauna within the footprint area;
- Safety and security on properties due to trespassing of field workers;

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 mitigation 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)

The following mitigation measures are proposed to address/minimize the impact of the proposed activity on the surrounding environment:

GENERAL

Waste Management:

The risk of uncontrolled waste generation having a negative impact on the surrounding environment can be reduced to being Low through the implementation of the mitigation measures listed below:

- No vehicle maintenance, repairs and services may take place on site. When a breakdown occurs in on site, the prospecting right holder must arrange for the removal of the vehicle, within 6 hours, to a recognised workshop where it can be mended.
- Ablution facilities must be provided in the form of a chemical toilet. The chemical toilet must be placed outside the 1:100 year floodline of any open water source, and must be serviced by a recognised and reputable contractor.
- The use of any temporary, chemical toilet facilities may not cause any pollution to water sources or pose a health hazard. In addition, no form of secondary pollution should arise from the disposal of refuse or sewage from the temporary, chemical toilets. Any pollution problems arising from the above are to be addressed immediately by the prospecting right holder.

- Should spillage occur, such as oil or hydrocarbons leaking from a burst pipe, the contaminated soil must, within the first hour of occurrence, be collected in a suitable receptacle and removed from the site, either for resale or for appropriate disposal at a recognized facility. Proof must be filed.
- General waste must be removed from the prospecting area on a daily basis.
- No waste may be buried or burned on the site.
- No chemicals or hazardous materials may be stored at the prospecting area.
- It is important that any significant spillage of chemicals, fuels etc. during the lifespan of the prospecting activities is reported to the Department of Water and Sanitation and other relevant authorities.

HYDROLOGY

Protection of water resources

- Any future development within 1:100-year floodline or within the riparian habitat constitutes a water use licence in terms of section 21 (c) and (i) of the National Water Act, 1998 (Act 36 of 1998) and will require authorisation before any development may commence.
- Any portable toilets would be used on-site during construction and/or operational phase of the development; such toilet facilities must be located outside of the 1:100-year floodline and must be regularly emptied at a municipal wastewater treatment works.
- Solid and chemical waste generated from construction and operational phases of the development must be kept away from drainage line.
- No abstraction of surface water or ground water may take place without the prior authorization from this Department unless it is a Schedule 1 use or an Existing Lawful Use.
- Where solid waste disposal is to take place on site, ensure that only non-toxic materials which have no risk of polluting the groundwater, are buried in designated approved areas at acceptable depths below ground level.
- No surface, ground or storm water may be polluted as a result of any activities on the site.
- The person who owns, controls, occupies, or uses the land in question is responsible for taking measures to prevent any occurrence of pollution to water resources.

- Rehabilitation plan must be formulated and submitted to the Department of Water Affairs and Sanitation for comments. If the rehabilitation of the site will include the storage of water, authorization will be required before any water is stored.
- The rehabilitation of the site must ensure that the final condition of the site is environmentally acceptable and that there will be no adverse long-term effects on the surrounding environment especially the water resources post mining activities.
- All requirements in the Regulations on use of water for mining and related activities aimed at the protection of water resources as contained in Government Notice No 704 dated 4 June 2004 must be adhered to.
- All requirements as stipulated in the National Water Act (NWA) 1998(Act No. 36 of 1998) must be adhered to.

FAUNA

Protection of Fauna:

The risk resulting from the proposed prospecting activity on terrestrial fauna of the footprint area as well as the surrounding environment, can be reduced to Low through the implementation of the mitigation measures listed below:

- The project manager must ensure no fauna is caught, killed, harmed, sold or played with.
- Field workers must be instructed to report any animals that may be trapped in the working area.
- No snares may be set or nests raided for eggs or young.

Management of Health and Safety Risks:

The following mitigation measures are proposed to minimise the potential health and safety impacts:

- Adequate ablution facilities and water for human consumption must daily be available on site.
- Workers must have access to the correct personal protection equipment (PPE) as required by law.
- All operations must comply with the Mine Health and Safety Act, 1996 (Act No 29 of 1996).
- No trespassing on private property outside the approved area will be allowed

ix) Motivation where no alternative sites were considered.

As mentioned previously, the prospecting sites can be moved to various area depending on sensitivity and accessibility. However, the proposed prospecting area was identified as the preferred and only viable site alternative. S1 was identified during the assessment phase of the environmental impact assessment, by the Applicant and project team due to the following:

- The land surface rights of this application area is owned by the applicant.
- The geological setting of the area of interest is mainly underlain by superficial sediments of Late Cenozoic age.
- Availability of all forms of Marble (Dimension Stone), Limestone, Dimension Stone (General) (hereafter referred to as mineral resource) will only be determined should the prospecting right be granted and prospecting activities can take place.

x) Statement motivating the alternative development location within the overall site.

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

Site Alternative 1 was identified during the assessment phase of the environmental impact assessment as the preferred and only site alternative. The following matters contributed to the identification of the preferred development footprint:

1. **Topography** – The project area is mainly flat or only slightly undulating by superficial sediments of Late Cenozoic age. The thickness of the superficial sediment overburden overlying Precambrian bedrocks here varies from between 0 – 2 meters. A small area in the east is covered by fine-grained aeolian sands (Q-s) that cover large portions of the coastal plain to the north and south of Vanrhynsdorp, where they are often underlain by older calcareous or loamy soils, and that often appear distinctly orange on satellite images. The reddish sands are derived from pale alluvial sands that were accumulated near the coast by the palaeo-Olifants River system and then blown inland by prevailing south-westerly winds. They are mainly of Pleistocene to Recent age. The majority of the study area is mantled by calcareous and gypsiferous soils (Q-r2) that cover large areas of the Knersvlake region around Vanrhynsdorp and are often capped by a reddish, well-consolidated calcareous or siliceous hardpan or dorbank. The soils comprise a spectrum of gravally conglomerates, grit, sand and finer sediment showing a variable degree of calcretisation (i.e. pedogenic limestone formation typical of semi-arid climates). Pleistocene to Holocene alluvial deposits such as silts and

gravels occur along the Widouw River but these are small in extent. The altitude varies between 1100–1 217 m. The altitude varies between 123–793 m.

2. **Visual Characteristics** – The viewshed analysis showed that the visual impact of the proposed prospecting operation will be of low significance. Prospecting will mainly involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity thus the visual exposure is seen to be insignificant
3. **Air and Noise Quality** – The proposed activity will have no contribution to air and noise quality since prospecting activities will mainly involve non-invasive surface exploration. Thus the potential impact on the noise ambiance of the receiving environment is expected to be of low significance.
4. **Geology and Soil** – The project area is largely underlain by superficial sediments of Late Cenozoic age. The thickness of the superficial sediment overburden overlying Precambrian bedrocks here varies from between 0 – 2 meters. A small area in the east is covered by fine-grained aeolian sands (Q-s) that cover large portions of the coastal plain to the north and south of Vanrhynsdorp, where they are often underlain by older calcareous or loamy soils, and that often appear distinctly orange on satellite images. The reddish sands are derived from pale alluvial sands that were accumulated near the coast by the palaeo-Olifants River system and then blown inland by prevailing south-westerly winds. They are mainly of Pleistocene to Recent age. The majority of the study area is mantled by calcareous and gypsiferous soils (Q-r2) that cover large areas of the Knersvlake region around Vanrhynsdorp and are often capped by a reddish, well-consolidated calcareous or siliceous hardpan or dorbank. The soils comprise a spectrum of gravally conglomerates, grit, sand and finer sediment showing a variable degree of calcretisation (i.e. pedogenic limestone formation typical of semi-arid climates). Pleistocene to Holocene alluvial deposits such as silts and gravels occur along the Widouw River but these are small in extent.
5. **Hydrology** – The proposed site falls within the Olifants/ Doorn Water Management Area, in the E33G quaternary catchment area. According to the National Freshwater Ecosystem Priority Areas (NFEPA) map as presented by SANBI, a NFEPA river intersects with the proposed prospecting footprint falls but is partially modified in which a large loss of natural habitat, biota and basic ecosystem function have occurred.

6. **Mining, Biodiversity and Groundcover** – The prospecting activities does not require the removal of any large trees or vegetation of significance. Prospecting will mainly involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity thus the impact on the mining, biodiversity and groundcover of the area for this activity is seen to be insignificant. It is proposed that should the Applicant implement the mitigation measures proposed in the EMPr the impact of the proposed activity on the vegetation and groundcover in general is deemed to be of low significance.
7. **Fauna** - Various small mammals and reptiles occur are likely to on the property. Small mammals, reptiles and insects will occur in the area. The fauna at the site will not be impacted by the proposed prospecting activity as they will not be disturbed by the prospecting activities. Since prospecting will mainly involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area. Field workers and specialist should be educated and managed to ensure that no fauna at the site is harmed. At this stage no resident protected or red data faunal species were identified within the earmarked footprint, and the project is expected to have a negligible impact in this regard as prospecting activities will be done by non-invasive activities.
8. **Cultural and Heritage Environment** - The prospecting programme will consist of non-invasive surface exploration. The non-invasive prospecting activity is implemented to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity. The non-invasive exploration programme will consist of a surface geotechnical mapping programme of around three (3) days geological field work on Portion 3 of the farm Welverdiend No 511 situated in the magisterial district of Vanrhynsdorp, Western Cape Province.

Heritage Western Cape will be contacted for their perusal and commenting. A specialist should be consulted prior to any further invasive activities or mining. However, should artefacts archaeological items be observed during the prospecting activities, then all activity should cease immediately, the area marked off activity and a specialists consulted prior to any further activity. This also includes if any graves are observed on site during activity progress then all activity should have ceased and the area demarcated as a no-go zone.

i) 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 were 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)

During the impact assessment process the following potential impacts were identified of each main activity in each phase. An initial significance rating (listed under *v) Impacts and Risks Identified*) was determined for each potential impact should the mitigation measures proposed in this document not be implemented on-site. The impact assessment process then continued in identifying mitigation measures to address the impact that the proposed prospecting activity may have on the surrounding environment.

The significance rating was again determined for each impact using the methodology as explained under *vi) Methodology Used in Determining and Ranking the Significance*. The impact ratings listed below was determined for each impact **after** bringing the proposed mitigation measures into consideration and therefore represents the final layout/activity proposal.

PLANNING AND DESIGN PHASE

No impact could be identified as these activities will be conducted of site

OPERATIONAL PHASE

Potential impact associated with littering and hydrocarbon spills

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	Significance
Rating: Low			Degree of Mitigation: Full				
1	1	1	1	2	4	3	3

Disturbance to fauna within the footprint area

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	Significance
Rating: Low			Degree of Mitigation: Full				
1	1	1	1	2	4	3	3

Potential impact on areas/infrastructure of heritage or cultural concern

Severity	Duration	Extent	Consequence			Likelihood	Significance
				Probability	Frequency		
Rating: Low						Degree of Mitigation: Full	
1	1	1	1	2	4	3	3

Safety and security on properties due to trespassing of contractors / workers.

Severity	Duration	Extent	Consequence			Likelihood	Significance
				Probability	Frequency		
Rating: Low						Degree of Mitigation: Full	
1	1	4	2	2	4	3	3

CLOSURE OF THE PROSPECTING AREA

Potential impact associated with litter/hydrocarbon spills left at the decommissioning activities

Potential impact associated with littering and hydrocarbon spills

Severity	Duration	Extent	Consequence			Likelihood	Significance
				Probability	Frequency		
Rating: Low -Medium						Degree of Mitigation: Full	
1	1	1	1	2	4	3	3

Disturbance to fauna within the footprint area

Severity	Duration	Extent	Consequence			Likelihood	Significance
				Probability	Frequency		
Rating: Low						Degree of Mitigation: Full	
1	1	1	1	2	4	3	3

Safety and security on properties due to trespassing of contractors / workers.

Severity	Duration	Extent	Consequence			Likelihood	Significance
				Probability	Frequency		
Rating: Low						Degree of Mitigation: Full	
1	1	4	2	2	4	3	3

Return of the prospecting area to agricultural use **(Positive Impact)**

Severity	Duration	Extent	Consequence			Likelihood	Significance
				Probability	Frequency		
Rating: Medium - High						Degree of Mitigation: N/A	
1	5	5	3.6	5	5	5	18

j) 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).

Table 23: Assessment of each identified potentially significant impact and risk

ACTIVITY	POTENTIAL IMPACT	ASPECTS AFFECTED	PHASE	SIGNIFICANCE	MITIGATION TYPE	SIGNIFICANCE
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.)	(E.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, air pollution, etc...etc...etc.)		In which impact is anticipated. (E.g. Construction, commissioning, operational Decommissioning closure, post closure.)	If not mitigated.	(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.) E.g. Modify through alternative method Control through noise control Control through management and monitoring through rehabilitation.	If mitigated.
<ul style="list-style-type: none"> ■ Demarcation of site with visible beacons. 	<ul style="list-style-type: none"> ■ No impact could be identified other than the beacons being outside the boundaries of the approved prospecting area. 	N/A	Planning and design phase	N/A	Control through management and monitoring.	N/A
<ul style="list-style-type: none"> ■ Planning and design phase 	<ul style="list-style-type: none"> ■ No impact could be identified as these activities will be conducted of site. 	N/A	Planning and design phase	N/A	Control through management and monitoring.	N/A
<ul style="list-style-type: none"> ■ Prospecting activities ■ Closure of the prospecting area. 	<ul style="list-style-type: none"> ■ Potential impact on fauna within the footprint area. 	This will impact on the biodiversity of the receiving environment.	Operational and Closure Phase	<ul style="list-style-type: none"> ■ Low ■ Low 	<u>Control & Stop:</u> Implementing good management practices.	<ul style="list-style-type: none"> ■ Low ■ Low

ACTIVITY	POTENTIAL IMPACT	ASPECTS AFFECTED	PHASE	SIGNIFICANCE	MITIGATION TYPE	SIGNIFICANCE
<ul style="list-style-type: none"> ■ Prospecting activities ■ Closure of the prospecting area 	<ul style="list-style-type: none"> ■ Soil contamination from hydrocarbon spills. ■ Potential impact associated with litter left at the prospecting area. 	Contamination of the footprint area will negatively impact the soil, surface runoff and potentially the groundwater. It will also incur additional costs to the prospecting right holder.	Operational and Closure Phase	<ul style="list-style-type: none"> ■ Low - Medium ■ Low - Medium 	<u>Control & Remedy:</u> Proper housekeeping and implementation of an emergency response and waste management procedures.	<ul style="list-style-type: none"> ■ Low ■ Low
<ul style="list-style-type: none"> ■ Prospecting activities ■ Closure of the prospecting area 	<ul style="list-style-type: none"> ■ Potential impact on area/infrastructure of heritage or cultural concern. 	Impact on area/infrastructure of heritage or cultural concern	Operational and Closure Phase	<ul style="list-style-type: none"> ■ Low - Medium ■ Low - Medium 	<u>Control & Remedy:</u> Proper housekeeping and implementation of an emergency response and waste management procedures.	<ul style="list-style-type: none"> ■ Low
<ul style="list-style-type: none"> ■ Prospecting activities ■ Closure of the prospecting area 	<ul style="list-style-type: none"> ■ Safety and security on properties due to trespassing of contractors / workers. 	Trespassing will negatively affect the landowner due to possible loss of fauna.	Planning and design, Operational and Decommissioning Phase	<ul style="list-style-type: none"> ■ Low - Medium ■ Low - Medium 	<u>Control:</u> Proper site management.	<ul style="list-style-type: none"> ■ Low ■ Low

The supporting Impact Assessment conducted by the EAP must be attached as an appendix, marked Appendix H

k) 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):

SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORISATION AS REQUIRED BY THE 2014 EIA REGULATIONS:

The report identified the following list of specialist assessment for inclusion in the assessment report:

- Agricultural Impact Assessment;
- Archaeological and Cultural Heritage Impact Assessment;

- Palaeontology Impact Assessment;
- Terrestrial Biodiversity Impact Assessment;
- Aquatic Biodiversity Impact Assessment;
- Noise Impact Assessment;
- Radioactivity Impact Assessment;
- Plant Species Assessment;
- Animal Species Assessment.

Table 24: Summary of specialist reports

<p>LIST OF STUDIES UNDERTAKEN</p>	<p>RECOMMENDATIONS OF SPECIALIST REPORTS</p>	<p>SPECIALIST RECOMMENDATIONS THAT HAVE BEEN INCLUDED IN THE EIA REPORT</p> <p>(Mark with X if applicable)</p>	<p>REFERENCE TO APPLICABLE SECTION OF REPORT WHERE SPECIALIST RECOMMENDATIONS HAVE BEEN INCLUDED</p>
<p>The screening report identified the following list of specialist assessment for inclusion in the assessment report:</p> <ul style="list-style-type: none"> ■ Agricultural Impact Assessment; ■ Archaeological and Cultural Heritage Impact Assessment; ■ Paleontology Impact Assessment; ■ Terrestrial Biodiversity Impact Assessment; ■ Aquatic Biodiversity Impact Assessment; ■ Hydrology Assessment; ■ Noise Impact Assessment; ■ Radioactivity Impact Assessment; ■ Traffic Impact Assessment; ■ Geotechnical Assessment; ■ Socio-economic Assessment; ■ Plant Species Assessment; ■ Animal Species Assessment. 			
<ul style="list-style-type: none"> ■ Agricultural Impact Assessment (AIA): <p>Prospecting of the proposed area will be performed over a period of one (1) week. The prospecting programme will consist of non-invasive surface exploration. The non-invasive prospecting activity is implemented to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of</p>			

<p>LIST OF STUDIES UNDERTAKEN</p>	<p>RECOMMENDATIONS OF SPECIALIST REPORTS</p>	<p>SPECIALIST RECOMMENDATIONS THAT HAVE BEEN INCLUDED IN THE EIA REPORT</p> <p>(Mark with X if applicable)</p>	<p>REFERENCE TO APPLICABLE SECTION OF REPORT WHERE SPECIALIST RECOMMENDATIONS HAVE BEEN INCLUDED</p>
<p>exploration activity. The non-invasive exploration programme will consist of a surface geotechnical mapping programme of around three (3) days geological field work on Portion 3 of the farm Welverdiend No 511 situated in the magisterial district of Vanrhynsdorp, Western Cape Province. The agricultural potential of the farm was assessed as part of the EIA, however, after consultation with the land owner Greenmined is of the opinion that a specialist AIA is not needed as the prospecting involve non-invasive activities. The proposed project will not necessitate the loss of any agricultural field, centre pivot or similarly operated agricultural area.</p> <p>Air Quality Statement:</p> <ul style="list-style-type: none"> ■ As per the Air Quality Statement compiled by Enviroworks dated October 2021 (attached as appendix O1 to FBAR) - Considering the specific project description above (as provided to the specialist by the Consultant), the rural receiving environment and low population density in the immediate surrounds, it is not anticipated that the prospecting activities will generate a significant dust nuisance from driving the two Light Duty Vehicles during the one week of prospecting work on unpaved existing access roads. Further to this, fugitive dust emissions due to vehicles driving on unpaved roads are often limited close to the source, and temporary in nature (being restricted to the one week of prospecting). <ul style="list-style-type: none"> ○ A Complaints register should be kept on site during the prospecting activities. If any complaints regarding dust nuisance are received, additional dust control and monitoring measures should be investigated and implemented. ○ Reduce driving speed of vehicles during prospecting, as increased vehicle speeds result in increased quantities of fugitive dust. ■ Archaeological and Cultural Heritage Impact Assessment (HIA) & Paleontology Impact Assessment (PIA): <p>The prospecting programme will consist of non-invasive surface exploration. The non-invasive prospecting activity is implemented to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity. The non-invasive exploration programme will consist of a surface</p>			

LIST OF STUDIES UNDERTAKEN	RECOMMENDATIONS OF SPECIALIST REPORTS	SPECIALIST RECOMMENDATIONS THAT HAVE BEEN INCLUDED IN THE EIA REPORT (Mark with X if applicable)	REFERENCE TO APPLICABLE SECTION OF REPORT WHERE SPECIALIST RECOMMENDATIONS HAVE BEEN INCLUDED
<p>geotechnical mapping programme of around three (3) days geological field work on Portion 3 of the farm Werverdiend No 511 situated in the magisterial district of Vanrhynsdorp, Western Cape Province. Heritage Western Cape will be contacted for their perusal and commenting.</p> <ul style="list-style-type: none"> <p>■ Terrestrial Biodiversity Impact Assessment (TBIA) & Animal Species Assessment (ASA):</p> <p>Prospecting of the proposed area will be performed over a period of one (1) week. The prospecting programme will consist of non-invasive surface exploration. The non-invasive prospecting activity is implemented to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity. The non-invasive exploration programme will consist of a surface geotechnical mapping programme of around three (3) days geological field work on Portion 3 of the farm Werverdiend No 511 situated in the magisterial district of Vanrhynsdorp, Western Cape Province. The impact on Biodiversity was assessed as part of the EIA, however, Greenmined is of the opinion that a TBIA and ASA specialist assessments are not needed as the activities will be non-invasive. The proposed project will not necessitate the loss of any natural area.</p> <p>■ Aquatic Biodiversity Impact Assessment (ABIA) & Hydrology Assessment (HA):</p> <p>The proposed project does not require a Water Use Authorisation in terms of Section 39 of the National Water Act, 1998 (Act No 36 of 1998). Non-invasive activities will take place. Existing water authorisation is in place should water be required for the implementation of the project will be bought and transported to site. Therefore, in light of the consultation on this stage there is no need for a ABIA & HA.</p> <ul style="list-style-type: none"> <p>■ As per the Freshwater Statement compiled by Enviroworks dated October 2021 (attached as appendix O2 to FBAR) – Considering the specific project description above (as provided to the specialist by the Consultant) and the non-invasive prospecting method proposed, it is not anticipated that the prospecting activities will generate a noteworthy impact on the non-perennial watercourses (please refer to Appendix O2 Figure 2) during the one week of prospecting work. The prospecting</p> 			

<p>LIST OF STUDIES UNDERTAKEN</p>	<p>RECOMMENDATIONS OF SPECIALIST REPORTS</p>	<p>SPECIALIST RECOMMENDATIONS THAT HAVE BEEN INCLUDED IN THE EIA REPORT</p> <p>(Mark with X if applicable)</p>	<p>REFERENCE TO APPLICABLE SECTION OF REPORT WHERE SPECIALIST RECOMMENDATIONS HAVE BEEN INCLUDED</p>
<p>will involve driving vehicles on existing unpaved access roads and traversing the area on foot, while also collecting loose surface rock samples. Even though this statement does not constitute a full specialist assessment and characterization of the non-perennial watercourses, it is the opinion of the specialist, that this detailed freshwater study will not be necessary at this stage, considering the current prospecting description. Even though this statement does not constitute a full specialist assessment and characterization of the non-perennial watercourses, it is the opinion of the specialist, that this detailed freshwater study will not be necessary at this stage, considering the current prospecting description. A portion of the non-perennial watercourse has been transformed by an old marble mine, just downstream of the artificial dam. There is also evidence of past mining and disturbance in the watercourse downstream from the old mine. This was confirmed by a site visit on 07 October 2021. It should be noted that the purpose of this site visit did not include assessing the watercourses over the entire prospecting right, nor did it include assessing potential impacts of the proposed prospecting.</p> <p>Watercourses are nevertheless important ecological features in the landscape, therefor:</p> <ul style="list-style-type: none"> ○ Should this prospecting description change, the need for a more detailed freshwater study should be re-evaluated. ○ Should the prospecting right be followed by a mining permit/mining application, it is recommended that a more detailed freshwater study be commissioned. <p>It is recommended that disturbance and damage to vegetation and the soil surface or channel morphology be avoided in the mapped (see appendix MO - Figure 2) non-perennial watercourses (this includes their bed and banks).</p> <p>Even though it is not anticipated that the current planned prospecting activities will have a noteworthy impact on watercourses, it is noted that the Department will not support the potential identification of future mining activities across the river corridor.</p> <p>The applicant should be aware that prospecting within the watercourse corridor does not mean that the Department will support potential identification of future mining activities across the river corridor.</p>			

<p>LIST OF STUDIES UNDERTAKEN</p>	<p>RECOMMENDATIONS OF SPECIALIST REPORTS</p>	<p>SPECIALIST RECOMMENDATIONS THAT HAVE BEEN INCLUDED IN THE EIA REPORT</p> <p>(Mark with X if applicable)</p>	<p>REFERENCE TO APPLICABLE SECTION OF REPORT WHERE SPECIALIST RECOMMENDATIONS HAVE BEEN INCLUDED</p>
<p>Should this prospecting description change, the need for a more detailed freshwater study should be re-evaluated.</p> <p>Should the prospecting right be followed by a mining permit/mining application, it is recommended that a more detailed freshwater study be commissioned. This study should, amongst the other requirements of a freshwater specialist study, recommend a suitable buffer for watercourses.</p> <p>It is recommended that the Consultant and the Applicant take note of the following comments from DEA&DP:</p> <p>“The applicant is reminded of its “general duty of care towards the environment” as prescribed in section 28 of the NEMA, 1998 which states that “Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment”.</p> <p>■ Noise Impact Assessment (NIA):</p> <p>The potential impact on the noise ambiance of the receiving environment is expected to be of low significance and representative of the vehicles already operational at the property. Due to the small scale of the operation a NIA is not deemed applicable.</p> <p>■ Radioactivity Impact Assessment</p> <p>A radioactivity impact assessment is not deemed necessary for the proposed mining operation that will not store any chemicals on site, perform activities of radioactive nature or generate hazardous waste of radioactive nature.</p> <p>■ Traffic Impact Assessment (TIA):</p>			

<p>LIST OF STUDIES UNDERTAKEN</p>	<p>RECOMMENDATIONS OF SPECIALIST REPORTS</p>	<p>SPECIALIST RECOMMENDATIONS THAT HAVE BEEN INCLUDED IN THE EIA REPORT</p> <p>(Mark with X if applicable)</p>	<p>REFERENCE TO APPLICABLE SECTION OF REPORT WHERE SPECIALIST RECOMMENDATIONS HAVE BEEN INCLUDED</p>
<p>The Applicant will use the existing road to access the prospecting area. No upgrading of the road is needed prior to commencement. In light of the small scale of the proposed operation a TIA is not deemed necessary, should the Applicant implement the mitigation measures to be proposed in the EMPR.</p> <p>■ Geotechnical Assessment:</p> <p>No reason for a geotechnical assessment could be identified as no permanent infrastructure will be established at the proposed prospecting area.</p> <p>■ Socio-economic Assessment (SEA):</p> <p>The application is for a prospecting right as the aim of the exploration activity is to verify the geology, historical data and any and all site data for the project, as well as to produce a most up-to-date current surface geological and geotechnical map of the mineralised zone. Results of this will determine if future mining activities will be feasible. In light of this a SEA is not deemed applicable to this project.</p> <p>■ Plant Species Assessment:</p> <p>According to Mucina and Rutherford (2012) the proposed area extends over various vegetation types known as SKk 5 Vanrhynsdorp Gannabosveld; SKk 9 Kobee Succulent Shrubland; SKs 13 Klaver Sandy Shrubland and FRs 1 Vanrhynsdorp Shale Renosterveld. The vegetation type that dominates the area is the SKk 5 Vanrhynsdorp Gannabosveld that is mainly flat or only slightly undulating landscape supporting succulent shrubland dominated by <i>Salsola</i> (over large stretches), <i>Drosanthemum</i>, <i>Ruschia</i> and some disturbance indicators such as (mainly) short-lived <i>Aizoaceae</i>, including representatives of the genera <i>Galenia</i>, <i>Psilocaulon</i>, <i>Caulipsolon</i> and <i>Mesembryanthemum</i>. In the south, the shale plains can acquire a grassland appearance through seasonal dominance of <i>Bromus pectinatus</i> and <i>Stipa capensis</i>. Spectacular annual and geophyte flora can appear in spring after good winter rains</p> <p>The prospecting programme will consist of non-invasive surface exploration. The non-invasive prospecting activity is implemented to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity. The non-invasive exploration programme will consist of a surface</p>			

LIST OF STUDIES UNDERTAKEN	RECOMMENDATIONS OF SPECIALIST REPORTS	SPECIALIST RECOMMENDATIONS THAT HAVE BEEN INCLUDED IN THE EIA REPORT (Mark with X if applicable)	REFERENCE TO APPLICABLE SECTION OF REPORT WHERE SPECIALIST RECOMMENDATIONS HAVE BEEN INCLUDED
<p>geotechnical mapping programme of around three (3) days geological field work on Portion 3 of the farm Welverdiend No 511 situated in the magisterial district of Vanrhynsdorp, Western Cape Province. The impact on Plant and Animal species was assessed as part of the EIA, however, Greenmined is of the opinion that a PIA and AIA specialist assessments are not needed as non-invasive activities will be conducted and no new areas will be opened. The proposed project will not necessitate the loss of any natural area.</p>			

I) Environmental impact statement

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

The key findings of the environmental impact assessment entail the following:

Project Proposal

Paramon (Pty) Ltd (hereafter referred to as the applicant) applied for a prospecting for all forms of Marble (Dimension Stone), Limestone, Dimension Stone (General) on Portion 3 of the farm Welverdiend No 511 magisterial district of Vanrhynsdorp Western Cape Province.

Portion 3 of the farm Welverdiend No 511 is situated approximately 8 km South of the town of Vanrhynsdorp along the N7 national road making use of the existing internal/haul roads to access the prospecting area. The proposed prospecting footprint is approximately 70.077 ha over the above mentioned property and will be performed over a period of approximately one (1) week of the entire prospecting right period. Prospecting will involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity

The non-invasive activities will consist out of the following:

- Traversing the entire farm, and/or identified target areas on foot
- Geological mapping and characterisation of the surface material and mineralisation
- Geotechnical and structural orientation mapping
- Collection of rock samples (loose) which is representative of the mineralisation
- Verification of all relevant site, geological and mining data

The aim of the exploration activity is to verify the geology, historical data and any and all site data for the project, as well as to produce a most up-to-date current surface geological and geotechnical map of the mineralised zone.

The land surface rights are owned by the applicant of this application area. Access to the proposed prospecting area will be via the N7, making use of the existing internal/haul roads to access the prospecting area. Existing water authorisation is in place should water be required for the implementation of the project.

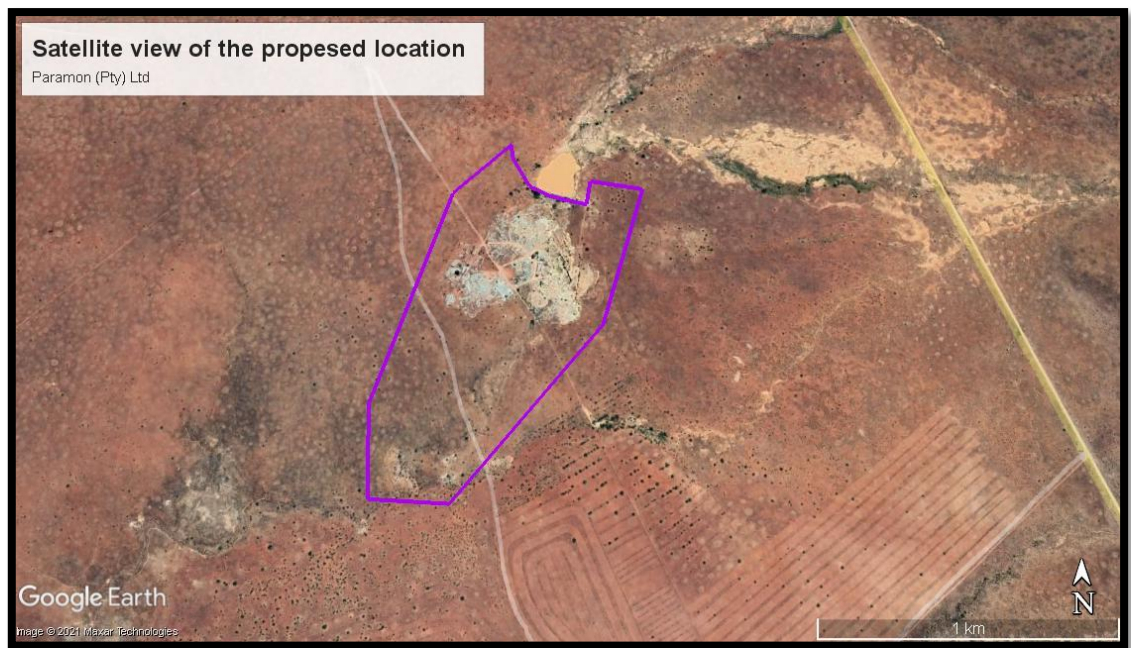


Figure 24: Satellite view of the proposed prospecting footprint of Paramon (Pty) Ltd.

LAND USE

Paramon (Pty) Ltd - Prospecting will mainly involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity. Therefore, the proposed activities will not have to compete with other land uses at the site.

Due to the remote location of the proposed project very little to no negative impacts on the community could be identified that were deemed to be of significant importance. The dust and noise impacts that may emanate from the prospecting area during the operational phase could have a negative impact on the surrounding community as it can be compared with the existing farming activities providing that the mitigation measures proposed in this document is not implemented and managed on-site.

Topography

The project area is mainly flat or only slightly undulating by superficial sediments of Late Cenozoic age. The thickness of the superficial sediment overburden overlying Precambrian bedrocks here varies from between 0 – 2 meters. A small area in the east is covered by fine-grained aeolian sands (Q-s) that cover large portions of the coastal plain to the north and south of Vanrhynsdorp, where they are often underlain by older calcareous or loamy soils, and that often appear distinctly orange on satellite images.

The reddish sands are derived from pale alluvial sands that were accumulated near the coast by the palaeo-Olifants River system and then blown inland by prevailing south-westerly winds. They are mainly of Pleistocene to Recent age. The majority of the study area is mantled by calcareous and gypsiferous soils (Q-r2) that cover large areas of the Knersvlake region around Vanrhynsdorp and are often capped by a reddish, well-consolidated calcareous or siliceous hardpan or dorbank. The soils comprise a spectrum of gravally conglomerates, grit, sand and finer sediment showing a variable degree of calcretisation (i.e. pedogenic limestone formation typical of semi-arid climates). Pleistocene to Holocene alluvial deposits such as silts and gravels occur along the Widouw River but these are small in extent. The topography of the greater study area is shown in the figure below with elevations generally at about 124 amsl. The altitude varies between 113-134 m.

Visual Characteristics

The viewshed analysis showed that the visual impact of the proposed prospecting operation will be of low significance. Prospecting will mainly involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity thus the visual exposure is seen to be insignificant. Therefore, the proposed activities will not have a visual impact on the area.

Air and Noise Quality

The proposed activity will have no contribution to air and noise quality since prospecting activities will mainly involve non-invasive surface exploration. Thus the potential impact on the noise ambiance of the receiving environment is expected to be of low significance.

Geology and Soil

The project area is largely underlain by superficial sediments of Late Cenozoic age. The thickness of the superficial sediment overburden overlying Precambrian bedrocks here varies from between 0 – 2 meters. A small area in the east is covered by fine-grained aeolian sands (Q-s) that cover large portions of the coastal plain to the north and south of Vanrhynsdorp, where they are often underlain by older calcareous or loamy soils, and that often appear distinctly orange on satellite images. The reddish sands are derived from pale alluvial sands that were accumulated near the coast by the palaeo-Olifants River system and then blown inland by prevailing south-westerly

winds. They are mainly of Pleistocene to Recent age. The majority of the study area is mantled by calcareous and gypsiferous soils (Q-r2) that cover large areas of the Knersvlake region around Vanrhynsdorp and are often capped by a reddish, well-consolidated calcareous or siliceous hardpan or dorbank. The soils comprise a spectrum of gravally conglomerates, grit, sand and finer sediment showing a variable degree of calcretisation (i.e. pedogenic limestone formation typical of semi-arid climates). Pleistocene to Holocene alluvial deposits such as silts and gravels occur along the Widouw River but these are small in extent.

Hydrology

The proposed site falls within the Olifants/ Doorn Water Management Area, in the E33G quaternary catchment area. According to the National Freshwater Ecosystem Priority Areas (NFEPA) map as presented by SANBI, a NFEPA river intersects with the proposed prospecting footprint falls but is partially modified in which a large loss of natural habitat, biota and basic ecosystem function have occurred.

Mining, Biodiversity and Groundcover

The prospecting activities does not require the removal of any large trees or vegetation of significance. Prospecting will mainly involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity thus the impact on the mining, biodiversity and groundcover of the area for this activity is seen to be insignificant. The Applicant will make use of the existing access roads. It is proposed that should the Applicant implement the mitigation measures proposed in the EMPr the impact of the proposed activity on the vegetation and groundcover in general is deemed to be of low significance.

Fauna

Various small mammals and reptiles occur are likely to on the property. Small mammals, reptiles and insects will occur in the area. The fauna at the site will not be impacted by the proposed prospecting activity as they will not be disturbed by the prospecting activities. Since prospecting will mainly involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area. Field workers and specialist should be educated and managed to ensure that no fauna at the site is harmed. At this stage no resident protected or red data faunal species were identified within the earmarked footprint, and the project is expected to have a

negligible impact in this regard as prospecting activities will be done by non-invasive activities.

Cultural and Heritage Environment

The prospecting programme will consist of non-invasive surface exploration. The non-invasive prospecting activity is implemented to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity. The non-invasive exploration programme will consist of a surface geotechnical mapping programme of around three (3) days geological field work on Portion 3 of the farm Welverdiend No 511 situated in the magisterial district of Vanrhynsdorp, Western Cape Province.

Heritage Western Cape will be contacted for their perusal and commenting. A specialist should be consulted prior to any further invasive activities or mining. However, should artefacts archaeological items be observed during the prospecting activities, then all activity should cease immediately, the area marked off activity and a specialists consulted prior to any further activity. This also includes if any graves are observed on site during activity progress then all activity should have ceased and the area demarcated as a no-go zone.

ii) Final Site Map

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

See the map indicating site activities attached as Appendix C.

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

PROJECT ASSOCIATED POSITIVE IMPACTS:

- Work opportunities to local residents should prospecting be successful contributing to the socio-economic status of the area;
- No infrastructure on site
- Return of the prospecting area to agricultural use upon closure of the project; and
- Diversification of the land use of the property.

POTENTIAL NEGATIVE IMPACTS:***OPERATIONAL PHASE (Non Invasive Prospecting)***

- Potential impact associated with litter on the footprint area;
- Potential hydrocarbon contamination from leaks or spills leeching into the water table;
- Potential impact on fauna within the footprint area;
- Potential impact on areas/infrastructure of heritage or cultural concern
- Safety and security on properties due to trespassing of contractors / workers;

CLOSURE OF THE PROSPECTING AREA

- Potential impact associated with litter/hydrocarbon spills left at the footprint area;
- Disturbance to fauna within the footprint area;
- Safety and security on properties due to trespassing of field workers;

No negative impacts associated with the project was deemed to have a Low-Medium or higher significance

m) 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 condition of authorisation.

Table 25: Proposed impact management objectives and the impact management outcomes for inclusion in the EMPr

MANAGEMENT OBJECTIVES	ROLE	MANAGEMENT ACTION	MANAGEMENT OUTCOME	PENALTY FOR NON-CONFORMANCE	
				BOTTOM RANGE	BOTTOM RANGE
<p>FAUNA</p> <p>Mitigating the fauna component.</p>	<p>Project Manager to ensure compliance with the guidelines as stipulated in the EMPr.</p> <p>Compliance to be monitored by the Environmental Control Officer.</p>	<ul style="list-style-type: none"> ➤ Ensure no fauna is caught, killed, harmed, sold or played with. ➤ Instruct field workers to report any animals that may be trapped or injured in the prospecting area. ➤ Ensure no snares are set or nests raided for eggs or young. ➤ Prospecting areas should be done in consultation with the land owner in order to insure the safety and security of animals that might occur in the prospecting areas. 	<ul style="list-style-type: none"> ➤ Disturbance to fauna is minimised. 	<ul style="list-style-type: none"> ➤ R 500 	<ul style="list-style-type: none"> ➤ R 3 000
<p>CULTURE/HERITAGE</p> <p>Mitigating cultural/heritage aspects.</p>	<p>Site Manager to ensure compliance with the guidelines as stipulated in the EMPr.</p> <p>Compliance to be monitored by the Environmental Control Officer.</p>	<ul style="list-style-type: none"> ➤ Confine all prospecting to the approved footprint area. ➤ Implement the following change find procedure when discoveries are made on site: <ul style="list-style-type: none"> ▪ If during the pre-construction phase, construction, operations or closure phases of this project, any person employed by the developer, one of its subsidiaries, contractors and subcontractors, or service provider, finds any artefact of cultural significance or heritage site, this 	<ul style="list-style-type: none"> ➤ Impact to cultural/heritage resources is avoided or at least minimised. 	<ul style="list-style-type: none"> ➤ R 1 000 	<ul style="list-style-type: none"> ➤ R 5 000

MANAGEMENT OBJECTIVES	ROLE	MANAGEMENT ACTION	MANAGEMENT OUTCOME	PENALTY FOR NON-CONFORMANCE	
				BOTTOM RANGE	BOTTOM RANGE
		<p>person must cease work at the site of the find and report this find to their immediate supervisor, and through their supervisor to the senior on-site manager.</p> <ul style="list-style-type: none"> ▪ It is the responsibility of the senior on-site Manager to make an initial assessment of the extent of the find, and confirm the extent of the work stoppage in that area. ▪ The senior on-site Manager will inform the ECO of the chance find and its immediate impact on operations. The ECO will then contact a professional archaeologist for an assessment of the finds who will notify SAHRA. ▪ Work may only continue once the go-ahead was issued by SAHRA. 			
<p>GENERAL</p> <p>Waste management</p>	<p>Project Manager to ensure compliance with the guidelines as stipulated in the EMPR.</p> <p>Compliance to be monitored by the Environmental Control Officer.</p>	<ul style="list-style-type: none"> ➤ Ensure no vehicle maintenance, repairs and services takes place on site. When a breakdown occurs in the prospecting area, arrange for the removal of the machine within 6 hours to a recognised workshop where it can be mended. ➤ Provide ablution facilities in the form of a chemical toilet. The chemical toilet must be placed outside the 1:100 year floodline of any open water source, and must be serviced by a recognised and reputable contractor. 	<ul style="list-style-type: none"> ➤ Wastes are appropriately stored, handled and safely disposed of at a recognised waste facility. 	<ul style="list-style-type: none"> ➤ R 1 000 	<ul style="list-style-type: none"> ➤ R 5 000

MANAGEMENT OBJECTIVES	ROLE	MANAGEMENT ACTION	MANAGEMENT OUTCOME	PENALTY FOR NON-CONFORMANCE	
				BOTTOM RANGE	BOTTOM RANGE
		<ul style="list-style-type: none"> ➤ Ensure that the use of any temporary, chemical toilet facilities does not cause any pollution to water sources or pose a health hazard. In addition, that no form of secondary pollution arises from the disposal of refuse or sewage from the temporary, chemical toilets. Any pollution problems arising from the above must be addressed immediately by the prospecting right holder. ➤ Collect any effluents containing oil, grease or other industrial substances in a suitable receptacle and removed from the site, either for resale or for appropriate disposal at a recognized facility. ➤ Collect the contaminated soil from spillage that occurred, such as oil or diesel leaking from a burst pipe, within the first hour of occurrence, in a suitable receptacle and removed from the site, either for resale or for appropriate disposal at a recognized facility. File proof. ➤ Ensure that general waste is removed from the prospecting area on a daily basis. ➤ Prevent the burning or burying of waste on site. ➤ Report any significant spillage of chemicals, fuels etc. during the lifespan of the prospecting activities to the Department of Water and 			

MANAGEMENT OBJECTIVES	ROLE	MANAGEMENT ACTION	MANAGEMENT OUTCOME	PENALTY FOR NON-CONFORMANCE	
				BOTTOM RANGE	BOTTOM RANGE
		Sanitation and other relevant authorities.			
<p>GENERAL</p> <p>Water Resource Management</p>	<p>Project Manager to ensure compliance with the guidelines as stipulated in the EMPR.</p> <p>Compliance to be monitored by the Environmental Control Officer.</p>	<ul style="list-style-type: none"> ■ Any future development within 1:100-year floodline or within the riparian habitat constitutes a water use licence in terms of section 21 (c) and (i) of the National Water Act, 1998 (Act 36 of 1998) and will require authorisation before any development may commence. ■ Any portable toilets would be used on-site during construction and/or operational phase of the development; such toilet facilities must be located outside of the 1:100-year floodline and must be regularly emptied at a municipal wastewater treatment works. ■ Solid and chemical waste generated from construction and operational phases of the development must be kept away from drainage line. ■ No abstraction of surface water or ground water may take place without the prior authorization from this Department unless it is a Schedule 1 use or an Existing Lawful Use. ■ Where solid waste disposal is to take place on site, ensure that only non- 	<ul style="list-style-type: none"> ■ Impact to water resources is minimised 	<ul style="list-style-type: none"> ■ R 300 	<ul style="list-style-type: none"> ■ R 3 000

MANAGEMENT OBJECTIVES	ROLE	MANAGEMENT ACTION	MANAGEMENT OUTCOME	PENALTY FOR NON-CONFORMANCE	
				BOTTOM RANGE	BOTTOM RANGE
		<p>toxic materials which have no risk of polluting the groundwater, are buried in designated approved areas at acceptable depths below ground level.</p> <ul style="list-style-type: none"> ➤ No surface, ground or storm water may be polluted as a result of any activities on the site. ➤ The person who owns, controls, occupies, or uses the land in question is responsible for taking measures to prevent any occurrence of pollution to water resources. ➤ Rehabilitation plan must be formulated and submitted to the Department of Water Affairs and Sanitation for comments. If the rehabilitation of the site will include the storage of water, authorization will be required before any water is stored. ➤ The rehabilitation of the site must ensure that the final condition of the site is environmentally acceptable and that there will be no adverse long-term effects on the surrounding environment especially the water resources post mining activities. ➤ All requirements in the Regulations on use of water for mining and related activities aimed at the protection of 			

MANAGEMENT OBJECTIVES	ROLE	MANAGEMENT ACTION	MANAGEMENT OUTCOME	PENALTY FOR NON-CONFORMANCE	
				BOTTOM RANGE	BOTTOM RANGE
		<p>water resources as contained in Government Notice No 704 dated 4 June 2004 must be adhered to.</p> <ul style="list-style-type: none"> ■ All requirements as stipulated in the National Water Act (NWA) 1998(Act No. 36 of 1998) must be adhered to. 			
<p>GENERAL</p> <p>Health and safety aspects.</p>	<p>Project Manager to ensure compliance with the guidelines as stipulated in the EMPr.</p> <p>Compliance to be monitored by the Environmental Control Officer.</p>	<ul style="list-style-type: none"> ■ Ensure adequate ablution facilities and water for human consumption is daily available on site. ■ Ensure that workers have access to the correct PPE as required by law. ■ Manage all operations in compliance with the Mine Health and Safety Act, 1996 (Act No 29 of 1996). 	<ul style="list-style-type: none"> ■ Employees work in a healthy and safe environment. 	<ul style="list-style-type: none"> ■ R 1 000 	<ul style="list-style-type: none"> ■ R 5 000

n) Aspects for inclusion as conditions of Authorisation.

Any aspects which must be made conditions of the Environmental Authorisation

The management objectives listed in this report under *Part A(1)(m) Proposed impact management objectives and the impact management outcomes for inclusion in the EMPR* above should be considered for inclusion in the environmental authorisation.

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

(Which relate to the assessment and mitigation measures proposed)

The assumptions made in this document which relate to the assessment and mitigation measures proposed, stem from site specific information gathered from site inspections, desktop studies as well as the specialist study. No uncertainty regarding the proposed project or the receiving environment could be identified.

p) Reasoned opinion as to whether the proposed activity should or should not be authorised**i) Reasons why the activity should be authorised or not.**

Should the mitigation measures and monitoring programmes proposed in this document be implemented on site, no fatal flaws could be identified that were deemed as severe as to prevent the activity continuing.

We take note of the objection sent by Cape Nature 12 October 2021, It is therefore recommended based on these comments that any future invasive activities and or mining should be limited to existing mining and already disturbed areas in order to prevent the loss of natural vegetation or disturbance to water courses.

ii) Conditions that must be included in the authorisation

The management objectives listed in this report under *Part A(1)(m) Proposed impact management objectives and the impact management outcomes for inclusion in the EMPR* should be considered for inclusion in the environmental authorisation.

q) Period for which the Environmental Authorisation is required.

The Applicant requests the Environmental Authorisation to be valid for a five-year period to correspond with the validity of the prospecting right.

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 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.

s) Financial Provision

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

i) Explain how the aforesaid amount was derived

The prospecting will involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity. In light of the above the amount that will be necessary for the rehabilitation of damages caused by the operation, both sudden closures during the normal operation of the project and to manage and rehabilitate the environment at final, planned closure gives a sum total of **R 8000.00**.

ii) Confirm that this amount can be provided 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 Prospecting Work Programme as the case may be).

Paramon (Pty) Ltd will be responsible for the financial and technical aspects of the proposed prospecting project. The operating expenditure is provided for as such in the Prospecting Work Programme attached as Appendix J to this report.

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 prospecting on any directly affected person including the landowner, lawful occupier, or, where applicable, potential beneficiaries of any land restitution claim, attach the investigation report as an Appendix)

As mentioned above the application is for non-invasive activities therefore the specific physical, psychological, developmental, cultural and social needs and interests of the relevant communities within the prospecting area will be negligible at this stage. If the proposed mitigation measures and monitoring programs, as proposed in this document, is implemented, it is believed that the prospecting

activities will not affect the physical, psychological, cultural or social needs of the community in a negative manner nor will it impact negatively on the socio-economic status of the area.

The following potential impacts were identified that may impact on socio-economic conditions of directly affected persons should prospecting be successful and future mining activities may arise from this application:

- Work opportunities to local residents contributing to the socio-economic status of the area;
- Equipment and supplies will be purchased locally, and wages are spent at local businesses, generating both jobs and income in the area. Although the employees are not resident on the site, they will be from the surrounding community.

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

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

The prospecting programme will consist of non-invasive surface exploration. The non-invasive prospecting activity is implemented to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity. The non-invasive exploration programme will consist of a surface geotechnical mapping programme of around three (3) days geological field work on Portion 3 of the farm Welverdiend No 511 situated in the magisterial district of Vanrhynsdorp, Western Cape Province.

Heritage Western Cape will be contacted for their perusal and commenting. A specialist should be consulted prior to any further invasive activities or mining. However, should artefacts archaeological items be observed during the prospecting activities, then all activity should cease immediately, the area marked off activity and a specialists consulted prior to any further activity. This also includes if any graves are observed on site during activity progress then all activity should have ceased and the area demarcated as a no-go zone.

u) Other matters required in terms of section 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)

Site Alternative 1 (Preferred and Only Site Alternative going forward):

Site Alternative 1, which entails the prospecting area with a footprint of approximately 70.077 ha over portion 3 of the farm Welverdiend no 511 magisterial district of Vanrhynsdorp Western Cape province (hereafter referred to as the application property) and will be performed over a period of one (1) week over the entire prospecting period. Prospecting will involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity.

Prospecting sites can be moved to various area depending on sensitivity and accessibility. However, the proposed prospecting area was identified as the preferred and only viable site alternative. S1 was identified during the assessment phase of the environmental impact assessment, by the Applicant and project team due to the following:

- The land surface rights of this application area is owned by the applicant.
- The geological setting of the area of interest is mainly underlain by superficial sediments of Late Cenozoic age.
- Availability of all forms of Marble (Dimension Stone), Limestone, Dimension Stone (General) (hereafter referred to as mineral resource) will only be determined should the prospecting right be granted and prospecting activities can take place.

Site Alternative 2 (Not viable and will not be further assessed and excluded from the application):

Site Alternative 2, which entails the prospecting area with a footprint of approximately 35 km² over portion 3 and the remaining extent of the farm Welverdiend no 511 magisterial district of Vanrhynsdorp Western Cape province and will be performed over a period of one (1) week. Prospecting will involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity.

Prospecting sites can be moved to various positions in consultation with the land owner depending on sensitivity and accessibility. However, the proposed prospecting area was not found viable as the as the land owner did not give consent for prospecting on this property. As non-invasive surface exploration will be done which generally leaves little to

no evidence of exploration activity in order to assess the impacts for this alternative, S2 was not found viable to be assessed during the assessment phase of the environmental impact assessment by the Applicant and project team.

No-go Alternative: The no-go alternative entails no change to the *status quo* and is therefore a real alternative that must be considered.

- The applicant will not be able to prospect for any possible mineral resource;
- The application, if approved, would allow the applicant to determine the available mineral resource as well as provide employment opportunities to local employees.
- Should the no-go alternative be followed these opportunities will be lost to the applicant, potential employees and clients; and the applicant will not be able to diversify the income of the property.

Not proceeding with the proposed operation will entail that a mineral which if found will contribute towards the local and provincial social and economic structures of the area, will not be mined, and that this opportunity will be lost.

In light of this, the no-go alternative was no deemed to be the preferred alternative.

**PROPOSED PROSPECTING RIGHT ON PORTION 3 OF
THE FARM WELVERDIEND NO 511 MAGISTERIAL
DISTRICT OF VANRHYNSDORP WESTERN CAPE
PROVINCE**

PART B

ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT



OCTOBER 2021

REFERENCE NUMBER: WC 30/5/1/1/2/10375 PR

PART B

ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

1. FINAL ENVIRONMENTAL MANAGEMENT PROGRAMME.

a) Details of the EAP,

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

The details and expertise of Sonette Smit of Greenmined Environmental that acts as EAP on this project has been included in Part A Section 1(a) as well as Appendix M as required.

b) Description of the Aspects of the Activity

(Confirm that the requirements to describe the aspects of the activity that are covered by the final environmental management programme is already included in PART A, section (1)(h) herein as required).

The aspects of the activity that are covered by the final environmental management programme has been described and included in Part A, section (1)(h).

c) Composite Map

(Provide a map (Attached as an Appendix) 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)

As mentioned under Part A, section (1)(l)(ii) this map has been compiled and is attached as Appendix C to this document.

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 in 2.4 herein)

The end objective is for the prospecting area to remain the same as the current land use being mixed agricultural and existing mining. No buildings/infrastructure, other than the chemical toilet, need to be removed.

The decommissioning activities will consist of the following:

- Removal of any litter/waste that might occur;
- Removal of the chemical toilet from the prospecting area;

The Applicant will comply with the minimum closure objectives as prescribed DMRE and detailed below:

■ Final Rehabilitation:

All equipment, plant and other items used during the prospecting period will be removed from site (section 44 of the MPRDA, 2002). Waste material of any description will be removed entirely from the prospecting area and disposed of at a recognized landfill facility. It will not be permitted to be buried or burned on the site. Final rehabilitation shall be completed within a period specified by the Regional Manager.

Upon closure of the prospecting operation, the entire footprint area will be rehabilitated so as to allow the affected area to return to mixed agricultural and existing mining use. At this stage the following baseline closure objectives are proposed:

- Any infrastructures, equipment, and other items used during the prospecting period will be removed from the site in accordance with section 44 of the MPRDA, 2002.
- Final rehabilitation shall be completed within a period specified by the Regional Manager.

A site-specific rehabilitation plan drawn to a suitable scale will be provided in the EMPr to be submitted together with the BAR.

ii) Volume and rate of water use required for the operation

No water will be required during this operation

iii) Has a water use licence has been applied for?

The Applicant will not require water use authorisation in terms of the NWA, 1998.

iv) Impacts to be mitigated in their respective phases

Table 26: Impact to be mitigated in their respective phases

ACTIVITIES (as listed in 2.11.1)	PHASE of operation in which activity will take place. State; Planning and design, Pre-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 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.
Demarcation of site with visible beacons.	Planning and design / Site establishment phase	70 ha	Demarcation of the site will ensure that all employees are aware of the boundaries of the prospecting area, and that work stay within the approved area.	Prospecting of all forms of Marble (Dimension Stone), Limestone, Dimension Stone (General) is only allowed within the boundaries of the approved area. <ul style="list-style-type: none"> ■ MPRDA, 2008 ■ NEMA, 1998 	Beacons need to be in place throughout the life of the activity.
■ Prospecting activities	Planning and design -, operational-, and closure phase	70.0771 ha	<p>Protection of Fauna:</p> <ul style="list-style-type: none"> ■ The site manager must ensure no fauna is caught, killed, harmed, sold or played with. ■ Workers must be instructed to report any animals that may be trapped in the working area. 	Fauna must be managed in accordance with the: <ul style="list-style-type: none"> ■ NEM:BA 2004 	Throughout the planning and design -, operational-, and closure phase.

ACTIVITIES	PHASE	SIZE AND SCALE OF DISTURBANCE	MITIGATION MEASURES	COMPLIANCE WITH STANDARDS	TIME PERIOD FOR IMPLEMENTATION
<ul style="list-style-type: none"> ■ Closure of the prospecting area 			<ul style="list-style-type: none"> ■ No snares may be set or nests raided for eggs or young. ■ Prospecting areas should be done in consultation with the land owner in order to insure the safety and security of animals that might occur in the prospecting areas. 		
<ul style="list-style-type: none"> ■ Prospecting activities ■ Closure of the prospecting area 	Planning and design -, operational-, and closure phase	70.0771 ha	<p><u>Waste Management:</u></p> <ul style="list-style-type: none"> ■ No vehicle maintenance, repairs and services may take place at the prospecting area. When a breakdown occurs, the prospecting right holder must arrange for the removal of the machine, within 6 hours, to a recognised workshop where it can be mended. ■ Ablution facilities must be provided in the form of a chemical toilet. The chemical toilet must be placed outside the 1:100 year floodline of any open water source, and must be serviced by a recognised and reputable contractor. ■ The use of any temporary, chemical toilet facilities may not cause any pollution to water sources or pose a health hazard. In addition, no form of secondary pollution should arise from the disposal of refuse or sewage from the temporary, chemical toilets. Any pollution problems arising from the above are to be addressed immediately by the prospecting right holder. ■ If a diesel bowser is used on site, it must be equipped with a drip tray at all times. Drip trays must be used during each and every refuelling event. The nozzle of the bowser needs to rest in a sleeve to prevent dripping after refuelling. 	<p>Prospecting related waste must be managed in accordance with the:</p> <ul style="list-style-type: none"> ■ NWA, 1998 ■ NEM:WA, 2008 ■ NEM:WA, 2008: National norms and standards for the storage of waste (GN 926) ■ NEMA, 1998 (Section 30) ■ in terms of the control of incidents and any accidental release of a hazardous substance. 	Throughout the planning and design -, operational-, and closure phase.

ACTIVITIES	PHASE	SIZE AND SCALE OF DISTURBANCE	MITIGATION MEASURES	COMPLIANCE WITH STANDARDS	TIME PERIOD FOR IMPLEMENTATION
			<ul style="list-style-type: none"> ■ Site management must ensure drip trays are cleaned after each use. No dirty drip trays may be used on site. ■ A spill kit must be available on-site which can be operated by trained employees for the adhoc remediation of minor chemical and hydrocarbon spillages. ■ In the event of a significant spill or leak of hazardous substances (e.g. petrol, diesel, etc.) used during the proposed activities, such an incident(s) must be reported to the relevant authorities, including the Directorate: Pollution and Chemicals Management, in accordance with section 30 of the NEMA, 1998. ■ Any effluents containing oil, grease or other industrial substances must be collected in a suitable receptacle and removed from the site, either for resale or for appropriate disposal at a recognized facility. ■ Should spillage occur, such as oil or diesel leaking from a burst pipe, the contaminated soil must, within the first hour of occurrence, be collected in a suitable receptacle and removed from the site, either for resale or for appropriate disposal at a recognized facility. Proof must be filed. ■ General waste must be removed from the prospecting area on a daily basis. ■ No waste may be buried or burned on the site. ■ No chemicals or hazardous materials may be stored at the prospecting area. ■ It is important that any significant spillage of chemicals, fuels etc. during the lifespan of the prospecting activities is reported to the 		

ACTIVITIES	PHASE	SIZE AND SCALE OF DISTURBANCE	MITIGATION MEASURES	COMPLIANCE WITH STANDARDS	TIME PERIOD FOR IMPLEMENTATION
			<p>Department of Water and Sanitation and other relevant authorities.</p> <ul style="list-style-type: none"> ■ To lower the risk of accidental hydrocarbon spillages all machinery must be parked at the prospecting area with drip trays placed underneath stationary vehicles. 		
<ul style="list-style-type: none"> ■ Prospecting activities ■ Closure of the prospecting area 	<p>Planning and design -, operational-, and closure phase</p>	<p>70.0771 ha</p>	<p><u>Water Resource Management</u></p> <ul style="list-style-type: none"> ■ Any future development within 1:100-year floodline or within the riparian habitat constitutes a water use licence in terms of section 21 (c) and (i) of the National Water Act, 1998 (Act 36 of 1998) and will require authorisation before any development may commence. ■ Any portable toilets would be used on-site during construction and/or operational phase of the development; such toilet facilities must be located outside of the 1:100-year floodline and must be regularly emptied at a municipal wastewater treatment works. ■ Solid and chemical waste generated from construction and operational phases of the development must be kept away from drainage line. 	<p>Prospecting related activities aimed at the protection of water resources must be managed in accordance with the:</p> <ul style="list-style-type: none"> ■ Government Notice No 704 dated 4 June 2004 must be adhered to. ■ National Water Act (NWA) 1998(Act No. 36 of 1998) must be adhered to. 	<p>Throughout the planning and design -, operational-, and closure phase.</p>

ACTIVITIES	PHASE	SIZE AND SCALE OF DISTURBANCE	MITIGATION MEASURES	COMPLIANCE WITH STANDARDS	TIME PERIOD FOR IMPLEMENTATION
			<ul style="list-style-type: none"> ■ No abstraction of surface water or ground water may take place without the prior authorization from this Department unless it is a Schedule 1 use or an Existing Lawful Use. ■ Where solid waste disposal is to take place on site, ensure that only non-toxic materials which have no risk of polluting the groundwater, are buried in designated approved areas at acceptable depths below ground level. ■ No surface, ground or storm water may be polluted as a result of any activities on the site. ■ The person who owns, controls, occupies, or uses the land in question is responsible for taking measures to prevent any occurrence of pollution to water resources. ■ Rehabilitation plan must be formulated and submitted to the Department of Water Affairs and Sanitation for comments. If the rehabilitation of the site will include the storage of water, authorization will be required before any water is stored. ■ The rehabilitation of the site must ensure that the final condition of the site is environmentally 		

ACTIVITIES	PHASE	SIZE AND SCALE OF DISTURBANCE	MITIGATION MEASURES	COMPLIANCE WITH STANDARDS	TIME PERIOD FOR IMPLEMENTATION
			<p>acceptable and that there will be no adverse long-term effects on the surrounding environment especially the water resources post mining activities.</p> <ul style="list-style-type: none"> ■ All requirements in the Regulations on use of water for mining and related activities aimed at the protection of water resources as contained in Government Notice No 704 dated 4 June 2004 must be adhered to. ■ All requirements as stipulated in the National Water Act (NWA) 1998(Act No. 36 of 1998) must be adhered to. 		
<ul style="list-style-type: none"> ■ Prospecting activities ■ Closure of the prospecting area 	Operational Phase	70.0771 ha	<p><u>Archaeological, Heritage and Palaeontological Aspects:</u></p> <ul style="list-style-type: none"> ■ All prospecting must be confined to the development footprint area. ■ If during the pre-construction phase, construction, operations or closure phases of this project, any person employed by the developer, one of its subsidiaries, contractors and subcontractors, or service provider, finds any artefact of cultural significance or heritage site, this person must cease work at the site of the find and report this find to their immediate supervisor, and through their supervisor to the senior on-site manager. ■ It is the responsibility of the senior on-site Manager to make an initial assessment of the 	<p>Cultural/heritage aspects must be managed in accordance with the:</p> <ul style="list-style-type: none"> ■ NHRA, 1999 	Throughout the operational phase.

ACTIVITIES	PHASE	SIZE AND SCALE OF DISTURBANCE	MITIGATION MEASURES	COMPLIANCE WITH STANDARDS	TIME PERIOD FOR IMPLEMENTATION
			<p>extent of the find, and confirm the extent of the work stoppage in that area.</p> <ul style="list-style-type: none"> ■ The senior on-site Manager must inform the ECO of the chance find and its immediate impact on operations. The ECO must then contact a professional archaeologist for an assessment of the finds who must notify SAHRA. ■ Work may only continue once the go-ahead was issued by SAHRA. 		
<ul style="list-style-type: none"> ■ Prospecting activities ■ Closure of the prospecting area. 	Planning and design / Site establishment -, Operational-, and Decommissioning phase	70.0771 ha	<p><u>Management of Health and Safety Risks:</u></p> <ul style="list-style-type: none"> ■ Adequate ablution facilities and water for human consumption must daily be available on site. ■ Workers must have access to the correct personal protection equipment (PPE) as required by law. ■ All operations must comply with the Mine Health and Safety Act, 1996 (Act No 29 of 1996). 	Health and safety aspects must be managed in accordance with the: <ul style="list-style-type: none"> ■ MHSA, 1996 ■ OHSA, 1993 ■ OHSAS, 18001 	Throughout the planning and design / site establishment -, operational and decommissioning phase.

e) Impact Management Outcomes

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

Table 27: Impact Management Outcomes

ACTIVITY	POTENTIAL IMPACT	ASPECTS AFFECTED	PHASE	MITIGATION TYPE	STANDARD TO BE ACHIEVED
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.)	(e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc...etc..)		In which impact is anticipated (e.g. Construction, commissioning, operational Decommissioning, closure, post-closure))	(modify, remedy, control, or stop) through (e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc... etc.) E.g. <ul style="list-style-type: none"> • Modify through alternative method. • Control through noise control • Control through management and monitoring Remedy through rehabilitation.	(Impact avoided, noise levels, dust levels, rehabilitation standards, end use objectives) etc.
<ul style="list-style-type: none"> ■ Demarcation of site with visible beacons. 	<ul style="list-style-type: none"> ■ No impact could be identified other than the beacons being outside the boundaries of the approved prospecting area. 	N/A	Planning and design / Site establishment phase	Control through management and monitoring.	Prospecting of all forms of Marble (Dimension Stone), Limestone, Dimension Stone (General) is only allowed within the boundaries of the approved area. <ul style="list-style-type: none"> ■ MPRDA, 2008 ■ NEMA, 1998
<ul style="list-style-type: none"> ■ Prospecting activities ■ Closure of the prospecting area. 	<ul style="list-style-type: none"> ■ Potential impact on fauna within the footprint area. 	This will impact on the biodiversity of the receiving environment.	Planning and design / Site establishment & Operational Phase - and Decommissioning phase	<u>Control & Stop:</u> Implementing good management practices.	Fauna must be managed in accordance with the: <ul style="list-style-type: none"> ■ NEM:BA 2004
<ul style="list-style-type: none"> ■ Prospecting activities ■ Closure of the prospecting area. 	<ul style="list-style-type: none"> ■ Potential impact on area/infrastructure of heritage or cultural concern. 	This could impact on the cultural and heritage legacy of the receiving environment.	Operational Phase	<u>Control & Stop:</u> Implementing good management practices, as well as the chance-find protocol.	Cultural/heritage aspects must be managed in accordance with the: <ul style="list-style-type: none"> ■ NHRA, 1999

f) Impact Management Actions

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

Table 28: Impact Management Actions

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE	TIME PERIOD FOR IMPLEMENTATION	COMPLIANCE WITH STANDARDS
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.)	(e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc...etc..)	(modify, remedy, control, or stop) through (e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc... etc.) E.g. <ul style="list-style-type: none"> • Modify through alternative method. • Control through noise control • Control through management and monitoring Remedy through rehabilitation.	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.	(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)
<ul style="list-style-type: none"> ■ Demarcation of site with visible beacons. 	<ul style="list-style-type: none"> ■ No impact could be identified other than the beacons being outside the boundaries of the approved prospecting area. 	Demarcation of the site will ensure that all employees are aware of the boundaries of the prospecting area, and that work stay within the approved area.	Beacons need to be in place throughout the life of the activity.	Prospecting of all forms of Marble (Dimension Stone), Limestone, Dimension Stone (General) is only allowed within the boundaries of the approved area. <ul style="list-style-type: none"> ■ MPRDA, 2008 ■ NEMA, 1998

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE	TIME PERIOD FOR IMPLEMENTATION	COMPLIANCE WITH STANDARDS
<ul style="list-style-type: none"> ■ Prospecting activities ■ Closure of the prospecting area. 	<ul style="list-style-type: none"> ■ Potential impact on fauna (terrestrial) within the footprint area. 	<p><u>Protection of Fauna:</u></p> <ul style="list-style-type: none"> ■ The site manager must ensure no fauna is caught, killed, harmed, sold or played with. ■ Workers must be instructed to report any animals that may be trapped in the working area. ■ No snares may be set or nests raided for eggs or young. ■ Prospecting areas should be done in consultation with the land owner in order to insure the safety and security of animals that might occur in the prospecting areas. 	<p>Throughout the site establishment-, operational-, and decommissioning phase.</p>	<p>Fauna must be managed in accordance with the:</p> <ul style="list-style-type: none"> ■ NEM:BA 2004
<ul style="list-style-type: none"> ■ Prospecting activities ■ Closure of the prospecting area. 	<ul style="list-style-type: none"> ■ Soil contamination from hydrocarbon spills. ■ Potential impact associated with littering and hydrocarbon spills. 	<p><u>Waste Management:</u></p> <ul style="list-style-type: none"> ■ No vehicle maintenance, repairs and services may take place at the prospecting area. When a breakdown occurs, the prospecting right holder must arrange for the removal of the machine, within 6 hours, to a recognised workshop where it can be mended. ■ Ablution facilities must be provided in the form of a chemical toilet. The chemical toilet must be placed outside the 1:100 year floodline of any open water source, and must be serviced by a recognised and reputable contractor. ■ The use of any temporary, chemical toilet facilities may not cause any pollution to water sources or pose a health hazard. In addition, no form of secondary pollution should arise from the disposal of refuse or sewage from the temporary, chemical toilets. Any pollution problems arising from 	<p>Throughout the site establishment-, operational-, and decommissioning phase.</p>	<p>Prospecting related waste must be managed in accordance with the:</p> <ul style="list-style-type: none"> ■ NWA, 1998 ■ NEM:WA, 2008 ■ NEM:WA, 2008: National norms and standards for the storage of waste (GN 926) ■ NEMA, 1998 (Section 30)

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE	TIME PERIOD FOR IMPLEMENTATION	COMPLIANCE WITH STANDARDS
		<p>the above are to be addressed immediately by the prospecting right holder.</p> <ul style="list-style-type: none"> ■ Any effluents containing oil, grease or other industrial substances must be collected in a suitable receptacle and removed from the site, either for resale or for appropriate disposal at a recognized facility. ■ Should spillage occur, such as oil or diesel leaking from a burst pipe, the contaminated soil must, within the first hour of occurrence, be collected in a suitable receptacle and removed from the site, either for resale or for appropriate disposal at a recognized facility. Proof must be filed. ■ General waste must be removed from the prospecting area on a daily basis. ■ No waste may be buried or burned on the site. ■ No chemicals or hazardous materials may be stored at the prospecting area. ■ It is important that any significant spillage of chemicals, fuels etc. during the lifespan of the prospecting activities is reported to the Department of Water and Sanitation and other relevant authorities. 		
<ul style="list-style-type: none"> ■ Prospecting activities ■ Closure of the prospecting area. 	<ul style="list-style-type: none"> ■ Potential impact on water resources. 	<p><u>Water Resource Management</u></p> <ul style="list-style-type: none"> ■ Any future development within 1:100-year floodline or within the riparian habitat constitutes a water use licence in terms of section 21 (c) and (i) of the National Water Act, 1998 (Act 36 of 1998) and will require 	<p>Throughout the site establishment-, operational-, and decommissioning phase.</p>	<ul style="list-style-type: none"> ■ Government Notice No 704 dated 4 June 2004 must be adhered to. ■ National Water Act (NWA) 1998(Act No. 36 of 1998) must be adhered to.

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE	TIME PERIOD FOR IMPLEMENTATION	COMPLIANCE WITH STANDARDS
		<p>authorisation before any development may commence.</p> <ul style="list-style-type: none"> ■ Any portable toilets would be used on-site during construction and/or operational phase of the development; such toilet facilities must be located outside of the 1:100-year floodline and must be regularly emptied at a municipal wastewater treatment works. ■ Solid and chemical waste generated from construction and operational phases of the development must be kept away from drainage line. ■ No abstraction of surface water or ground water may take place without the prior authorization from this Department unless it is a Schedule 1 use or an Existing Lawful Use. ■ Where solid waste disposal is to take place on site, ensure that only non-toxic materials which have no risk of polluting the groundwater, are buried in designated approved areas at acceptable depths below ground level. 		

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE	TIME PERIOD FOR IMPLEMENTATION	COMPLIANCE WITH STANDARDS
		<ul style="list-style-type: none"> <li data-bbox="882 284 1400 389">■ No surface, ground or storm water may be polluted as a result of any activities on the site. <li data-bbox="882 443 1400 587">■ The person who owns, controls, occupies, or uses the land in question is responsible for taking measures to prevent any occurrence of pollution to water resources. <li data-bbox="882 641 1400 874">■ Rehabilitation plan must be formulated and submitted to the Department of Water Affairs and Sanitation for comments. If the rehabilitation of the site will include the storage of water, authorization will be required before any water is stored. <li data-bbox="882 928 1400 1161">■ The rehabilitation of the site must ensure that the final condition of the site is environmentally acceptable and that there will be no adverse long-term effects on the surrounding environment especially the water resources post mining activities. <li data-bbox="882 1216 1400 1391">■ All requirements in the Regulations on use of water for mining and related activities aimed at the protection of water resources as contained in Government Notice No 704 dated 4 June 2004 must be adhered to. 		

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE	TIME PERIOD FOR IMPLEMENTATION	COMPLIANCE WITH STANDARDS
		<p>All requirements as stipulated in the National Water Act (NWA) 1998(Act No. 36 of 1998) must be adhered to.</p>		
<ul style="list-style-type: none"> ■ Prospecting activities ■ Closure of the prospecting area. 	<ul style="list-style-type: none"> ■ Potential impact on area/infrastructure of heritage or cultural concern. 	<p><u>Archaeological, Heritage and Palaeontological Aspects:</u></p> <ul style="list-style-type: none"> ■ All prospecting must be confined to the application footprint area. ■ If during the planning and design, operations or closure phases of this project, any person employed by the developer, one of its subsidiaries, contractors and subcontractors, or service provider, finds any artefact of cultural significance or heritage site, this person must cease work at the site of the find and report this find to their immediate supervisor, and through their supervisor to the senior on-site manager. ■ It is the responsibility of the senior on-site Manager to make an initial assessment of the extent of the find, and confirm the extent of the work stoppage in that area. ■ The senior on-site Manager must inform the ECO of the chance find and its immediate impact on operations. The ECO must then contact a professional archaeologist for an assessment of the finds who must notify SAHRA. ■ Work may only continue once the go-ahead was issued by SAHRA. 	<p>Throughout the operational phase.</p>	<p>Cultural/heritage aspects must be managed in accordance with the:</p> <ul style="list-style-type: none"> ■ NHRA, 1999
<ul style="list-style-type: none"> ■ Prospecting activities ■ Closure of the prospecting area.. 	<ul style="list-style-type: none"> ■ Potential health and safety risk to employees. 	<p><u>Management of Health and Safety Risks:</u></p> <ul style="list-style-type: none"> ■ Adequate ablution facilities and water for human consumption must daily be available on site. 	<p>Throughout the planning and design / site establishment-, operational and decommissioning phase.</p>	<p>Health and safety aspects must be managed in accordance with the:</p> <ul style="list-style-type: none"> ■ MHSA, 1996 ■ OHSA, 1993

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE	TIME PERIOD FOR IMPLEMENTATION	COMPLIANCE WITH STANDARDS
		<ul style="list-style-type: none"><li data-bbox="882 252 1402 341">■ Workers must have access to the correct personal protection equipment (PPE) as required by law.<li data-bbox="882 347 1402 434">■ All operations must comply with the Mine Health and Safety Act, 1996 (Act No 29 of 1996).		<ul style="list-style-type: none"><li data-bbox="1789 252 2002 277">■ OHSAS, 18001

i) 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 primary objective is to obtain a closure certificate at the end of the life of the mine at minimum cost and in as short a time period as possible whilst still complying with the requirements of the Minerals and Petroleum Resources Development Act. To realise this, the following objectives must be achieved:

- Clear all carbonaceous material from site;
- Remove all waste from site;
- Future public health and safety are not compromised;
- Ensure that no threat to surface and underground water quality remains;
- Rehabilitate all disturbed areas in compliance with the EMPr and of the Provincial Department of Mineral Regulation;
- The applicant will comply with the minimum closure objectives as prescribed by DMRE;
- Any adverse socio-economic impacts are minimised; and
- All socio-economic benefits are maximised

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

This report, the Final Basic Assessment Report, includes all the environmental objectives in relation to closure and will be made available for perusal by the landowner, registered I&AP's and stakeholders over a 30-days commenting period.

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

The requested rehabilitation plan is attached as Appendix E.

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

The decommissioning phase will entail the final rehabilitation of the prospecting site. Final landscaping, levelling and top dressing will be done.

The rehabilitation of the prospecting area as indicated on the rehabilitation plan attached as Appendix E will comply with the minimum closure objectives as prescribed by DMRE and detailed below, and therefore is deemed to be compatible:

- Waste material of any description, will be removed entirely from the prospecting area and disposed of at a recognized landfill facility, proof of this removal will be kept on file at the applicant’s office. It will not be permitted to be buried or burned on the site.
- Final rehabilitation shall be completed within a period specified by the Regional Manager.

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

The calculation of the quantum for financial provision was according to Section B of the working manual.

Mine type and saleable mineral by-product

According to Tables B.12, B.13 and B.14

Mine type	All forms of Marble (Dimension Stone), Limestone, Dimension Stone (General)
Saleable mineral by-product	None

Risk ranking

According to Tables B.12, B.13 and B.14

Primary risk ranking (either Table B.12 or B.13)	C (Low risk).
Revised risk ranking (B.14)	N/A

Environmental sensitivity of the mine area

According to Table B.4

Environmental sensitivity of the mine area	Low
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Level of information

According to Step 4.2:

Level of information available	Limited
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Identify closure components

According to Table B.5 and site-specific conditions

Component No.	Main description	Applicability of closure components (Circle Yes or No)	
1	Dismantling of processing plant and related structures (including overland conveyors and power lines)	-	NO
2(A)	Demolition of steel buildings and structures	-	NO
2(B)	Demolition of reinforced concrete buildings and structures	-	NO
3	Rehabilitation of access roads	-	NO
4(A)	Demolition and rehabilitation of electrified railway lines	-	NO
4(B)	Demolition and rehabilitation of non-electrified railway lines	-	NO
5	Demolition of housing and facilities	-	NO
6	Opencast rehabilitation including final voids and ramps	-	NO
7	Sealing of shafts, adits and inclines	-	NO
8(A)	Rehabilitation of overburden and spoils	-	NO
8(B)	Rehabilitation of processing waste deposits and evaporation ponds (basic, salt-producing)	-	NO
8(C)	Rehabilitation of processing waste deposits and evaporation ponds (acidic, metal-rich)	-	NO
9	Rehabilitation of subsided areas	-	NO
10	General surface rehabilitation, including grassing of all denuded areas		-NO
11	River diversions	-	NO
12	Fencing	-	NO
13	Water management (Separating clean and dirty water, managing polluted water and managing the impact on groundwater)	-	NO
14	2 to 3 years of maintenance and aftercare		

Unit rates for closure components

According to Table B.6 master rates and multiplication factors for applicable closure components.

Component No.	Main description	Master rate	Multiplication factor
1	Dismantling of processing plant and related structures (including overland conveyors and power lines)	-	-
2(A)	Demolition of steel buildings and structures	-	-
2(B)	Demolition of reinforced concrete buildings and structures	-	-
3	Rehabilitation of access roads	-	-
4(A)	Demolition and rehabilitation of electrified railway lines	-	-

Component No.	Main description	Master rate	Multiplication factor
4(B)	Demolition and rehabilitation of non-electrified railway lines	-	-
5	Demolition of housing and facilities	-	-
6	Opencast rehabilitation including final voids and ramps	-	-
7	Sealing of shafts, adits and inclines	-	-
8(A)	Rehabilitation of overburden and spoils	-	-
8(B)	Rehabilitation of processing waste deposits and evaporation ponds (basic, salt-producing)	-	-
8(C)	Rehabilitation of processing waste deposits and evaporation ponds (acidic, metal-rich)	-	-
9	Rehabilitation of subsided areas	-	-
10	General surface rehabilitation, including grassing of all denuded areas		
11	River diversions	-	-
12	Fencing	-	-
13	Water management (Separating clean and dirty water, managing polluted water and managing the impact on groundwater)	-	-
14	2 to 3 years of maintenance and aftercare	18849	1.00

Determine weighting factors

According to Tables B.7 and B.8

Weighting factor 1: Nature of terrain/accessibility	1.00 (Flat)
Weighting factor 2: Proximity to urban area where goods and services are to be supplied	1.05

Calculation of closure costs

Table B.10 Template for Level 2: "Rules-based" assessment of the quantum for financial provision

Table 29: Calculation of closure cost

CALCULATION OF THE QUANTUM							
Mine:	Paramon (Pty) Ltd- Vanrhynsdorp			Location:	Vanrhynsdorp		
Evaluators:	Sonette Smit			Date:	13 September 2021		
No	Description	Unit	A Quantity	B Master rate	C Multiplication factor	D Weighting factor 1	E=A *B*C*D Amount (Rand)
			Step 4.5	Step 4.3	Step 4.3	Step 4.4	
1	Dismantling of processing plant and related structures (including overland conveyors and power lines)	m ²	0	17	1.00	1.00	R 0.00
2(A)	Demolition of steel buildings and structures	m ²	0	241	1.00	1.00	R 0.00
2(B)	Demolition of reinforced concrete buildings and structures	m ²	0	356	1.00	1.00	R 0.00
3	Rehabilitation of access roads	m ²	0	43	1.00	1.00	R 0.00
4(A)	Demolition and rehabilitation of electrified railway lines	m	0	419	1.00	1.00	R 0.00
4(B)	Demolition and rehabilitations of non-electrified railway lines	m	0	229	1.00	1.00	R 0.00
5	Demolition of housing and/or administration facilities	m ²	0	483	1.00	1.00	R 0.00
6	Opencast rehabilitation including final voids and ramps	ha	0	253 019	0.52	1.00	R 0.00
7	Sealing of shaft, audits and inclines	m ³	0	130	1.00	1.00	R 0.00
8(A)	Rehabilitation of overburden and spoils	ha	0	168 679	1.00	1.00	R 0.00
8(B)	Rehabilitation of processing waste deposits and evaporation ponds (basic, salt-producing waste)	ha	0	210 087	1.00	1.00	R 0.00
8(C)	Rehabilitation of processing waste deposits and evaporation ponds (acidic, metal-rich waste)	ha	0	610 192	0.51	1.00	R 0.00
9	Rehabilitation of subsided areas	ha	0	141 244	1.00	1.00	R 0.00
10	General surface rehabilitation	ha	0	133 622	1.00	1.00	R 0.00
11	River diversions	ha	0	133 622	1.00	1.00	R 0.00

12	Fencing	m	0	152	1.00	1.00	R 0.00
13	Water Management	ha	0	50 807	0.17	1.00	R 0.00
14	2 to 3 years of maintenance and aftercare	ha	0	17782	1.00	1.00	R 0.00
15(A)	Specialists study	Sum	0				R 0.00
15(B)	Specialists study	Sum	0				R 0.00
Sum of items 1 to 15 above							R 0.00
Multiply Sum of 1-15 by Weighting factor 2 (Step 4.4)		1.05				Sub Total 1	R 0.00

1	Preliminary and General	6% of Subtotal 1 if Subtotal 1 <R100 000 000.00					R 0.00
		12% of Subtotal 1 if Subtotal 1 >R100 000 000.00					-
2	Contingency	10.0% of Subtotal 1					R 0.00
						Sub Total 2	
						(Subtotal 1 plus management and contingency)	R 0.00
						Vat (15%)	R0.00
						GRAND TOTAL	
						(Subtotal 3 plus VAT)	R 0.00

The prospecting will involve non-invasive surface exploration to limit the environmental footprint experienced within the prospecting area and generally leaves little to no evidence of exploration activity. In light of the above the amount that will be necessary for the rehabilitation of damages caused by the operation, both sudden closures during the normal operation of the project and at final, planned closure gives a sum total of **R 8000.00**

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

Herewith I, the person, whose name is stated below confirm that I am the person authorised to act as representative of the Applicant in terms of the resolution submitted with the application. I herewith confirm that the company will provide the amount that will be determined by the Regional Manager in accordance with the prescribed guidelines.

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

- g) Monitoring of Impact Management Actions**
- h) Monitoring and reporting frequency**
- i) Responsible persons**
- j) Time period for implementing impact management actions**
- k) Mechanisms for monitoring compliance**

Table 30: Mechanisms for monitoring compliance with and performance assessment against the EMPR and reporting thereon.

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
<ul style="list-style-type: none"> Demarcation of site with visible beacons 	<p>Maintenance of beacons</p>	<ul style="list-style-type: none"> Visible beacons need to be placed at the corners of the prospecting area. 	<p><u>Role:</u></p> <ul style="list-style-type: none"> Project Manager to ensure day-to-day compliance with the guidelines as stipulated in the EMPR during the prospecting period. <p><u>Responsibility:</u></p> <ul style="list-style-type: none"> Ensure beacons are in place throughout the life of the prospecting activities. 	<p>Applicable throughout planning and design / -, operational-, and closure phases.</p> <ul style="list-style-type: none"> Daily compliance monitoring by site management during the prospecting period.
<ul style="list-style-type: none"> Prospecting activities Closure of the prospecting area. 	<p>Fauna:</p> <ul style="list-style-type: none"> Potential impact on fauna within the footprint area. 	<ul style="list-style-type: none"> Toolbox talks to educate field workers how to handle fauna that enter the prospecting area. 	<p><u>Role:</u></p> <ul style="list-style-type: none"> Project Manager to ensure day-to-day compliance with the guidelines as stipulated in the EMPR during the prospecting period. <p><u>Responsibility:</u></p> <ul style="list-style-type: none"> Ensure no fauna is caught, killed, harmed, sold or played with. Instruct workers to report any animals that may be trapped in the working area. Ensure no snares are set or nests raided for eggs or young. Prospecting areas should be done in consultation with the land owner in order to insure the safety and 	<p>Applicable throughout planning and design / -, operational-, and closure phases.</p> <ul style="list-style-type: none"> Daily compliance monitoring by site management during the prospecting period.

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
			security of animals that might occur in the prospecting areas.	
<ul style="list-style-type: none"> ■ Prospecting activities ■ Closure of the prospecting area. 	<p><u>Waste Management:</u></p> <ul style="list-style-type: none"> ■ Potential impact associated with littering and hydrocarbon spills. 	<ul style="list-style-type: none"> ■ Toolbox talks to educate field workers how to handle waste in the prospecting area 	<p>Role:</p> <ul style="list-style-type: none"> ■ Project Manager to ensure day-to-day compliance with the guidelines as stipulated in the EMPR during the prospecting period. <p>Responsibility:</p> <ul style="list-style-type: none"> ■ Ensure no vehicle maintenance, repairs and services takes place on site. When a breakdown occurs in the prospecting area, arrange for the removal of the machine within 6 hours to a recognised workshop where it can be mended. ■ Provide ablution facilities in the form of a chemical toilet. The chemical toilet must be placed outside the 1:100 year floodline of any open water source, and must be serviced by a recognised and reputable contractor. ■ Ensure that the use of any temporary, chemical toilet facilities does not cause any pollution to water sources or pose a health hazard. In addition, that no form of secondary pollution arises from the disposal of refuse or sewage from the temporary, chemical toilets. Any pollution problems arising from the above must be addressed immediately by the prospecting right holder. ■ Collect any effluents containing oil, grease or other industrial substances in a suitable receptacle and removed from the site, either for resale or for appropriate disposal at a recognized facility. ■ Collect the contaminated soil from spillage that occurred, such as oil or diesel leaking from a burst pipe, within the first hour of occurrence, in a suitable receptacle and removed from the site, either for resale or for appropriate disposal at a recognized facility. File proof. 	<p>Applicable throughout planning and design / -, operational-, and closure phases.</p> <ul style="list-style-type: none"> ■ Daily compliance monitoring by site management during the prospecting period.

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
			<ul style="list-style-type: none"> ■ Ensure that general waste is removed waste from the prospecting area on a daily basis. ■ Prevent the burning or burying of waste on site. ■ Report any significant spillage of chemicals, fuels etc. during the lifespan of the prospecting activities to the Department of Water and Sanitation and other relevant authorities. 	
<ul style="list-style-type: none"> ■ Prospecting activities ■ Closure of the prospecting area 	<p>Potential impact on water resources</p>	<ul style="list-style-type: none"> ■ Toolbox talks to educate field workers how to handle water resources in the prospecting area 	<p><u>Role:</u></p> <ul style="list-style-type: none"> ■ Project Manager to ensure day-to-day compliance with the guidelines as stipulated in the EMPR during the prospecting period. <p><u>Responsibility:</u></p> <ul style="list-style-type: none"> ■ Any future development within 1:100-year floodline or within the riparian habitat constitutes a water use licence in terms of section 21 (c) and (i) of the National Water Act, 1998 (Act 36 of 1998) and will require authorisation before any development may commence. ■ Any portable toilets would be used on-site during construction and/or operational phase of the development; such toilet facilities must be located outside of the 1:100-year floodline and must be regularly emptied at a municipal wastewater treatment works. ■ Solid and chemical waste generated from construction and operational phases of the development must be kept away from drainage line. ■ No abstraction of surface water or ground water may take place without the prior authorization from this 	<p>Applicable throughout planning and design / -, operational-, and closure phases.</p> <p>Daily compliance monitoring by site management during the prospecting period.</p>

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
			<p>Department unless it is a Schedule 1 use or an Existing Lawful Use.</p> <ul style="list-style-type: none"> ■ Where solid waste disposal is to take place on site, ensure that only non-toxic materials which have no risk of polluting the groundwater, are buried in designated approved areas at acceptable depths below ground level. ■ No surface, ground or storm water may be polluted as a result of any activities on the site. ■ The person who owns, controls, occupies, or uses the land in question is responsible for taking measures to prevent any occurrence of pollution to water resources. ■ Rehabilitation plan must be formulated and submitted to the Department of Water Affairs and Sanitation for comments. If the rehabilitation of the site will include the storage of water, authorization will be required before any water is stored. ■ The rehabilitation of the site must ensure that the final condition of the site is environmentally acceptable and that there will be no adverse long-term effects on the surrounding environment especially the water resources post mining activities. ■ All requirements in the Regulations on use of water for mining and related activities aimed at the protection of water resources as contained in Government Notice No 704 dated 4 June 2004 must be adhered to. 	

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
			<ul style="list-style-type: none"> ■ All requirements as stipulated in the National Water Act (NWA) 1998(Act No. 36 of 1998) must be adhered to. 	
<ul style="list-style-type: none"> ■ Prospecting activities ■ Closure of the prospecting area. 	<ul style="list-style-type: none"> ■ Potential impact on areas/infrastructure of heritage or cultural concern. 	<ul style="list-style-type: none"> ■ Contact number of an archaeologist that can be contacted when a discovery is made on site. 	<p><u>Role:</u></p> <ul style="list-style-type: none"> ■ Project Manager to ensure day-to-day compliance with the guidelines as stipulated in the EMPR during the prospecting period. <p><u>Responsibility:</u></p> <ul style="list-style-type: none"> ■ Confine all prospecting to the development footprint area. ■ Implement the following change find procedure when discoveries are made on site: <ul style="list-style-type: none"> ▪ If during the pre-construction phase, construction, operations or closure phases of this project, any person employed by the developer, one of its subsidiaries, contractors and subcontractors, or service provider, finds any artefact of cultural significance or heritage site, this person must cease work at the site of the find and report this find to their immediate supervisor, and through their supervisor to the senior on-site manager. ▪ It is the responsibility of the senior on-site Manager to make an initial assessment of the extent of the find, and confirm the extent of the work stoppage in that area. ▪ The senior on-site Manager will inform the ECO of the chance find and its immediate impact on operations. The ECO will then contact a professional archaeologist for an assessment of the finds who will notify SAHRA. ▪ Work may only continue once the go-ahead was issued by SAHRA. 	<p>Applicable throughout planning and design / site establishment -, operational-, and decommissioning phases.</p> <ul style="list-style-type: none"> ■ Daily compliance monitoring by site management during the prospecting period.

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
<ul style="list-style-type: none"> ■ Prospecting activities ■ Closure of the prospecting area. 	<ul style="list-style-type: none"> ■ Potential health and safety risks to employees. 	<ul style="list-style-type: none"> ■ Stocked first aid box. ■ Level 1 certified first aider. ■ All appointments in terms of the Mine Health and Safety Act, 1996. 	<p><u>Role:</u></p> <ul style="list-style-type: none"> ■ Project Manager to ensure day-to-day compliance with the guidelines as stipulated in the EMPR during the prospecting period. <p><u>Responsibility:</u></p> <ul style="list-style-type: none"> ■ Ensure adequate ablution facilities and water for human consumption is daily available on site. ■ Ensure that workers have access to the correct PPE as required by law. ■ Manage all operations in compliance with the Mine Health and Safety Act, 1996 (Act No 29 of 1996). 	<p>Applicable throughout planning and design / -, operational-, and closure phases.</p> <ul style="list-style-type: none"> ■ Daily compliance monitoring by site management during the prospecting period.

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

The Environmental Audit Report in accordance with Appendix 7 as prescribed in Regulation 34 of the EIA Regulations, 2014 (as amended) will annually be submitted to DMRE for compliance monitoring purposes or in accordance with the time period stipulated by the Environmental Authorisation.

m) Environmental Awareness Plan

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

Once the Applicant received the prospecting right and may commence with the proposed activity, a copy of the Environmental Management Programme will be handed to the project manager for his / her perusal. Issues such as the prospecting boundaries, fire principals and waste handling will be discussed.

An induction meeting will be held with all the field workers to inform them of the Basic Rules of Conduct with regard to the environment.

ii) Manner in which risk will be dealt with in order to avoid pollution or the degradation of the environment.

The project manager must ensure that he/she understands the EMPr document and its requirement and commitments before any prospecting takes place. An Environmental Control Officer needs to check compliance of the prospecting activity to the management programmes described in the EMPr.

The following list represents the basic steps towards environmental awareness, which all participants in this project must consider whilst carrying out their tasks.

Site Management:

- Stay within boundaries of site – do not enter adjacent properties.
- Keep tools and material properly stored.
- Smoke only in designated areas.
- Use toilets provided – report full or leaking toilets.

 **Waste Management:**

- Take care of your own waste
- Remove any waste materials from site on a daily basis.
- Don't burn waste.
- Pick-up any litter laying around.

 **Hazardous Waste Management (Petrol, Oil, Diesel, Grease)**

- Never mix general waste with hazardous waste.
- Use only sealed, non-leaking containers.
- Keep all containers closed and store only in approved areas.
- Always put drip trays under vehicles and machinery.
- Empty drip trays after rain.
- Stop leaks and spills, if safe:
 - ✓ Keep spilled liquids moving away.
 - ✓ Immediately report the spill to the site manager/supervision.
 - ✓ Locate spill kit/supplies and use to clean-up, if safe.
 - ✓ Place spill clean-up wastes in proper containers.
 - ✓ Label containers and move to approved storage area.

 **Discoveries:**

- Stop work immediately.
- Notify project manager/supervisor.
- Includes – archaeological finds, cultural artefacts, contaminated water, pipes, containers, tanks and drums, any buried structures.

 **Driving and Noise:**

- Use only approved access roads.
- Respect speed limits.
- Only use turn-around areas – no crisscrossing through undisturbed areas.
- Avoid unnecessary loud noises.
- Report or repair noisy vehicles.

 **Vegetation and Animal life:**

- Do not remove any plants or trees without approval of the site manager.
- Do not collect fire wood.

- Do not catch, kill, harm, sell or play with any animal, reptile, bird or amphibian on site.
- Report any animal trapped in the work area.
- Do not set snares or raid nests for eggs or young.

 **Fire Management:**

- Do not light any fires on site, unless contained in a drum at demarcated area.
- Put cigarette butts in a rubbish bin.
- Do not smoke near gas, paints or petrol.
- Know the position of firefighting equipment.
- Report all fires.
- Don't burn waste or vegetation.

n) Specific information required by the Competent Authority

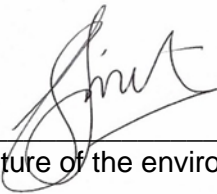
(Among others, confirm that the financial provision will be reviewed annually)

The Applicant undertakes to annually review and update the financial provision calculation, upon which it will be submitted to DMRE for review and approved as being sufficient to cover the environmental liability at the time and for closure of the mine at that time.

2. UNDERTAKING

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&AP's
- 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 response by the EAP to comments or inputs made by interested and affected parties are correctly reflected herein



Signature of the environmental assessment practitioner:

Greenmined Environmental (Pty) Ltd

Name of Company:

15 October 2021

Date:

-END-

APPENDIX A

REGULATION 2(2) MINE MAP



APPENDIX B

LOCALITY MAP



APPENDIX C

PROSPECTING ACTIVITIES PLAN



APPENDIX D

LAND USE MAP



APPENDIX E

REHABILITATION / CLOSURE PLAN

APPENDIX F LOCALITY MAP



APPENDIX G1 & G2

COMMENTS AND RESPONSE REPORT

&

PROOF OF PUBLIC PARTICIPATION

The comments received on the Draft Basic Assessment Report (DBAR), were incorporated into the Final Basic Assessment Report (FBAR), which report will be submitted to the competent authority (CA) for final decision making. Proof of such consultation, which proof includes personal information of Interested & Affected Party (“participants”), is limited to documentation intended for the CA only. Said personal information shall not be distributed as part of the public documentation, for public comment, in terms of this application process. The above is to ensure the protection of personal information of participants, in line with the Protection of Personal Information Act 4 of 2013 (“POPIA”), including the lawful processing of said personal information by Greenmined Environmental (Pty) Ltd (“Greenmined”), to which processing of personal information all participants consented to upon registration as participant. Participants that would like to inquire regarding specific information can do so by contacting Greenmined and by providing the necessary consent that authorises such an individual to obtain said specific information.



APPENDIX H

SUPPORTING IMPACT ASSESSMENT



APPENDIX I

PHOTOGRAPHS OF THE PROPOSED SITE



APPENDIX J

PROSPECTING WORK PROGRAMME



APPENDIX K1&2

DMRE ACCEPTANCE AND ACKNOWLEDGEMENT LETTERS



APPENDIX L CV AND PROOF OF EXPERIENCE OF THE EAP

