

BASIC ASSESSMENT REPORT

For the proposed Mining of Aggregate over Portion of portion 4 of Duiker
Kranse 45, situated in the Magisterial District of Beaufort West,
Western Cape Province.

DMRE Ref No: WC30/5/1/3/2/10383EM

Prepared by:

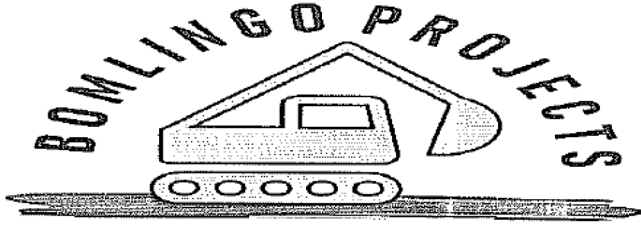


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February 2026



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

BASIC ASSESSMENT REPORT and ENVIRONMENTAL MANAGEMENT PROGRAMME

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

GASFONTEIN QUARRY

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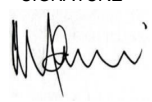
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DATE: February 2026	SIGNATURE 

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1. IMPORTANT NOTICE

In terms of the Mineral and Petroleum Resources Development Act (Act 28 of 2008 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 environmental”.

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

In terms of section 16(3) (b) of the EIA Regulation, 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 been 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 application 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.

2. OBJECTIVES 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 the these aspects to determine:
 - (i) the nature, significance, 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.

ABBREVIATIONS

DEDEAT	Department of Economic Development, Environmental Affairs and Tourism
DEA	Department of Environmental Affairs
DWS	Department of Water and Sanitation
DMRE	Department of Mineral Resources & Energy
LEC	Lwethuma Environmental Consultant
NEMA	National Environmental Management Act, 107 of 1998
MPRDA	Mineral and Petroleum Resources Development Act, 28 of 2002
ECO	Environmental Control Officer
EMC	Environmental Monitoring Committee
DBAR	Draft Basic Assessment Report
FBAR	Final Basic assessment Report
EMP	Environmental Management Plan
PM	Project Manager
RE	Resident Engineer
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
ECO	Environmental Control Officer
EO	Environmental Officer
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
EPRP	Emergency Preparedness and Response Plan
HSE	Health, Safety and Environment
I&AP	Interested and Affected Party
ISO	International Standards Organization
NFA	National Forests Act (Act 84 of 1998)
MPRDA	Mineral & Petroleum Resources Development Act
NEMA	National Environmental Management Act (Act No. 107 of 1998)
NEMAQA	National Environmental Management: Air Quality Act (Act No. 39 of 2004)
NEMBA	National Environmental Management: Biodiversity Act (Act No. 10 of 2004)
NEMWA	National Environmental Management: Waste Act (Act No. 59 of 2008)
NWA	National Water Act (Act No. 36 of 1998)
GLM	Great Local Municipality
OHSA	Occupational Health and Safety Act (Act No. 85 of 1993)
SACNASP	South African Council for Natural Scientific Professions
SABS	South African Bureau of Standards
SANAS	South African National Accreditation System
SWMP	Storm Water Management Plan
TOPS	Threatened or Protected Species
GDP	Gross Domestic Product

EXECUTIVE SUMMARY

Bomlingo Projects (Pty) Ltd has applied for an Environmental Authorisation for proposed mining of stone aggregate and gravel within a 4.9ha area on portion 4 of Farm Duiker Kranse No. 45, magisterial district of Beaufort West District in the Western Cape Province, South Africa. The proposed project area is accessible through N1 towards Beaufort West. It is about 70 km from Beaufort West CBD and about 45 km from Three sisters. Its central coordinates are Latitude -31. 892898, Longitude 22. 475496.

Lwethuma Environmental Consultant has been appointed to undertake the EIA process and facilitation of a mining permit application. The application has been lodged in terms of Section 27 of the Mineral and Petroleum Resources Development Act (MPRDA), 2008 (Act No. 23 of 2008) to the Department of Mineral Resources & Energy (DMRE), Eastern Cape Province (Eastern Cape Regional Department). See APPENDIX A: maps for the Regulation 2(2) plan for this proposed mining permit application.

In terms of the NEMA (Act 107 of 1998) and EIA regulations of 2014 as amended, the proposed mining activities triggers a Listed Activity 21 (a)(b) and Activity 27 of Listing Notice 1 (GNR 327), and the applicant cannot commence the proposed mining activity without an Environmental Authorisation for the mentioned listed activities. The purpose of the studies is to identify and assess all the possible impacts that may arise from the implementation of the proposed development and to find the most effective ways of enhancing environmental benefits and mitigating potential impacts to encourage sustainable development within the area. A heritage impact assessment specialist study has been conducted based on the environmental sensitivity of the identified project area. The most common negative impacts associated with the proposed mining activity were amongst others;

- Alteration of Topography
- Dust emission
- Noise emission
- Loss of vegetation cover
- Visual impact

While typical positive impacts includes;

- Creation of employment opportunities for the locals,
- Increase of the District GDP,
- Increased local economic growth
- Skills development for locals.

The Public Participation Process was conducted in terms of chapter 6 of the EIA NEMA Regulation. The following was undertaken;

- Publishing of newspaper on Daily Newspaper on the 19 July 2019.
- Erecting of site notices within the project site, entrance point to Mhlahlane village, local shop.
- Notifying of landowner
- Notifying of neighbours & Lawful occupiers
- Public meeting with the Interested & Affected Parties.

The proposed mining activities will be undertaken over a period of two (2) years with an option to renew it annually for three consecutive periods. The proposed activity entails mining of stone aggregate and gravel commodity through open cast mining methodology. The scope of work will involve site

establishment, drilling and blasting, excavation, crushing and screening stockpiling and dispatch to market. A site clearance will be undertaken by removal of vegetation cover and topsoil that will be stockpiled at a designated area to be utilised for rehabilitation process.

Potential risks and key issues identified will be based on consultation with I&APs, through an internal process based on similar projects, current state of the environment of the site, and a site visit. A summarised description of the surrounding land use is provided to ensure that all environmental aspects are highlighted. A description of the biophysical and social environment is also included in the report, to ensure that all potential risks and issues are taken into consideration in all phases of the proposed project.

All environmental data (i.e., surface and ground water qualities and quantities, topographical analyses, soil, vegetation, wetland, and geological conditions including socio-economic aspects) including the historic land uses that has been used in this report has been obtained through desktop studies and physical site assessment. Weather data was acquired from the Climate Data Online, 2018. The data accumulated and analysed is therefore deemed sufficient to gain a baseline indication of the present state of the environment.

The impacts that could arise during and after the proposed mining activities will be determined and ranked according to their significance. The findings and conclusions of this document (BAR and EMPr), which concerns assessment of environmental impacts and a programme for management of the impacts for the proposed mining activities at the Contrarians Project site, was compiled in terms of the EIA Regulations of 2014 for review by interested and affected parties including the competent authority. Based on the desktop study in respect of impact assessment, several recommendations are already made to mitigate significant negative impacts as well as to maximize positive impacts that will result from the proposed project.

Upon completion of the mining operation, the permit holder will have to lodge an application for closure certificate in terms of section 43 of the Mineral and Petroleum Resources Development Act, 28 of 2002. It is of crucial importance for applicant to secure a closure certificate as section 43(1) of the MPRDA, 28 OF 2002 states that "The holder of a prospecting right, mining right, retention permit or mining permit remains responsible for any environmental liability, pollution or ecological degradation, and the management thereof, until the Minister has issued a closure certificate to the holder concerned".

PART A
SCOPE OF ASSESSMENT AND BASIC ASSESSMENT REPORT

3. CONTACT PERSON AND CORRESPONDENCE ADDRESS

3.1. Details of the EAP

Name of the Practitioner: McDonald Mdhuli

Tel No.: 043 111 0654 / 079 242 1312

Fax No.: (086) 668 3192

E-mail address: info@lwethuma.com

3.2. Expertise of the EAP:

3.2.1. The qualifications of the EAP

Postgraduate Diploma in Social Impact Assessment

BSc Honours in Environmental Management

Bachelor of Environmental Sciences

ISO14001: Environmental Management System

3.2.2. Summary of EAP's past experience.

McDonald Mdhuli have over 14 years experience in the field of Environmental Management. He started his career in private sector, where he spent two years working for consulting firm as a Junior Environmental Consultant. He later joined the public sector, where he spent over four years working for the then DMR as Environmental officer and later as an Assistant Director: Environment. McDonald is now managing an Environmental consulting firm focusing on Environmental Management and Archaeology.

4. LOCATION OF THE OVERALL ACTIVITY

Farm Name:	Portion 4 of Farm Duiker Kranse 45
Application area (Ha)	4.94Ha
Magisterial district:	Beaufort West
Distance and direction from nearest town	The proposed mining area is located 50km North of Beaufort West CBD
21-digit surveyor general code for each farm portion	C00900000000004500000

The proposed Gasfontein Quarry is located about 50km north of Beaufort West and about 90km Southeast of Loxton (Northern Cape Province). Coming from Beaufort west, it can be accessed by turning left from the N12 into a district dirt road and travelling about 50km Northeast of Beaufort West, driving pass the De Jagers Mountain Pass.

Longitude: 22.475496

Latitude: -31.892898

5. LOCALITY MAP

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

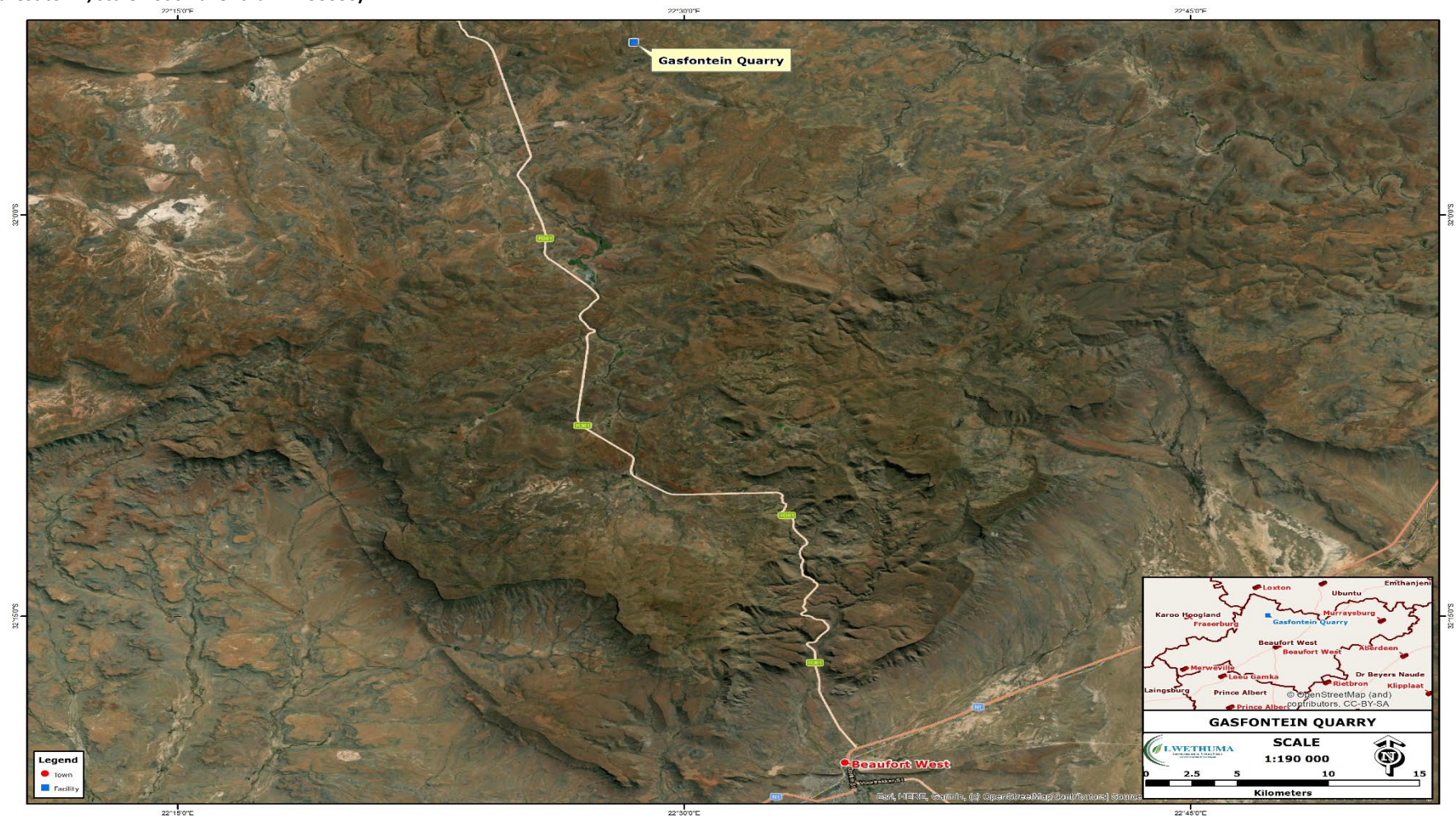


Figure1: Locality Map of Gasfontein Quarry

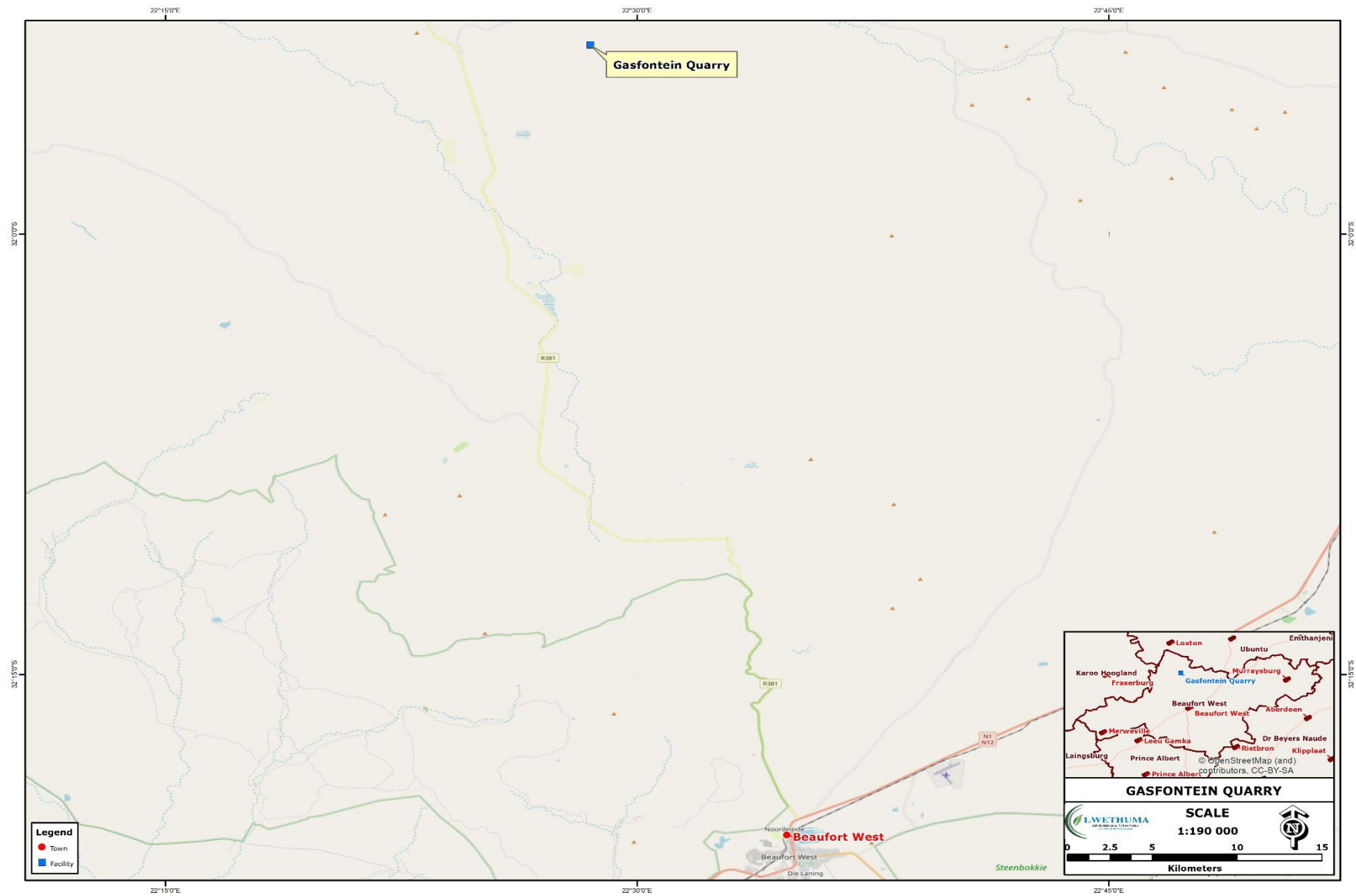


Figure 2: Topographic Locality Map of Gasfontein Quarry

6. DESCRIPTION OF THE SCOPE OF THE PROPOSED OVERALL ACTIVITY

6.1. Listed and specified activities

Table 1: Listed and specified activities

NAME OF ACTIVITY (E.g. For prospecting – drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route 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)	Aerial extent of the Activity Ha or m ²	LISTED ACTIVITY Mark with an X where applicable or affected.	APPLICABLE LISTING NOTICE (GNR 544, GNR 545 or GNR 546)
Mining Permit: Mining Operation Site Clearance stockpiling	4.94 Ha	X	GNR 327, LN1, Activity 21(a)(b)

7. DESCRIPTION OF THE ACTIVITIES TO BE UNDERTAKEN

Bomlingo Projects (Pty) Ltd proposes to undertake mining operation that will take place within a privately owned property, on portion 4 of Farm Duiker Kranse No. 45 in Beaufort West District, division of Laingsburg in the Laingsburg Local Municipality, Western Cape Province. An open cast mining methodology will be employed where the following activities will be undertaken; site clearance, drilling and blasting, excavation, hauling of material, crushing and screening, stockpiling.

➤ Site clearance

Site clearance will be undertaken for site establishment as mining commences. This will involve vegetation clearance and removal of topsoil in accordance with the mine plan. Vegetation clearance will be limited to approved mine boundaries and search and rescue will be conducted to prior to this activity to protect and safe flora and fauna species of concern.

➤ Drilling and blasting

Before actual mining may commence, drilling blasting will take place to loosen the hard dolerite rock. Suitable blasting service provider will be brought in to ensure that a safe and risk-free blasting is undertaken.

➤ Hauling of material

Once the hard dolerite rock has been loosened through drilling and blasting, excavation will take place, by aid of excavator with large bucket and loader.

➤ Crushing and Screening

Mined material will be crushed through a jaw crusher and screened on a processing plant into various product sizes as per the market demand.

➤ **Stockpiling**

Ready material will be stockpiled according to grades for dispatch to market. Stockpiles of ready material will be kept at reasonable height and watered to minimise dust emission. For better management of stockpiles, hauled material will have to be regularly dispatched to market.

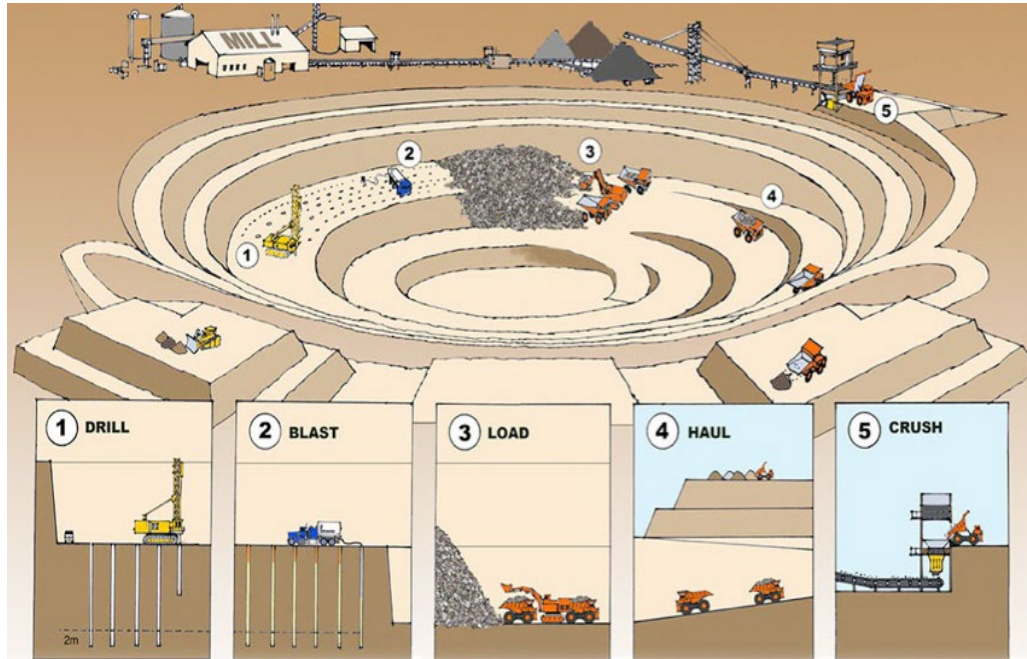


Figure 3: illustration of Open cast mining methodology to be adopted

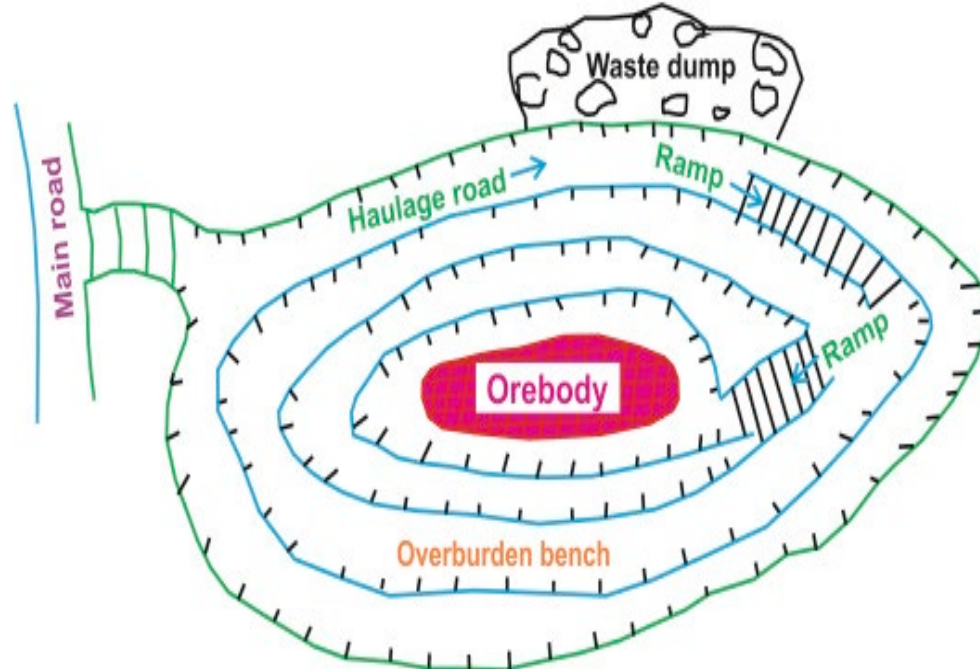


Figure 3: Typical mine layout of an open cast mining methodology

8. POLICY AND LEGISLATIVE CONTEXT

Table 2: 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 WITH AND RESPOND TO THE LEGISLATION AND POLICY CONTEXT. (E.g., In terms of the National Water Act a water Use License has/ has not been applied for)
The Constitution of the Republic of South Africa (Act 108 of 1996) Section 2 of the Constitution of the Republic of South Africa (Act 108 of 1996) (CA) states that: "This Constitution is the supreme law of the Republic; law or conduct inconsistent with it is invalid, and the obligations imposed by it must be fulfilled." Section 24 of the CA, states that everyone has the right to an environment that is not harmful to their health or well-being and to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that: • prevent pollution and ecological degradation; • promote conservation; and • secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development. • Section 24 guarantees the protection of the environment through reasonable legislative (and other measures) and such legislation is continuously in the process of being promulgated. Section 33(1) concerns administrative justice which includes the constitutional right to administrative action that is lawful, reasonable and procedurally fair.		The BAR was accordingly prepared, submitted and considered within the constitutional framework set by inter alia section 24 and 33 of the Constitution.
The National Environmental Management Act (107 of 1998) and the Environmental Impact Assessment Regulations, 2014: The overarching principle of the National Environmental Management Act 1998 (Act 107 of 1998) (NEMA) is sustainable development. It defines sustainability as meaning the integration of social, economic and environmental factors into planning, implementation and decision making so as to ensure the development serves present and future generations. Section 2 of NEMA (Act no 107 of 1989) provides for National Environmental Management Principles. These principles include:	NEMA and the associated EIA Regulations are directly relevant to this application for environmental authorization.	The NEMA and the EIA Regulations and associated Listed Activities identified are the key national legislation underpinning Environmental Authorizations in South Africa.

• Environmental management must place people and their needs at the forefront of its concern. • Development must be socially, environmentally and economically sustainable. • Environmental management must be integrated, acknowledging that all elements of the environment are linked and interrelated. • Environmental justice must be pursued. • Equitable access to environmental resources, benefits and services to meet basic human needs and ensure human wellbeing must be pursued. • Responsibility for the environmental health and safety consequences of a policy, programme, project, product, process, service or activity exists throughout its life cycle. • The participation of all Interested and Affected Parties (I&APs) in environmental governance must be promoted. • Decisions must take into account the interests, needs and values of all I&APs. • The social, economic and environmental impacts of activities, including disadvantages and benefits, must be considered, assessed and evaluated, and decisions must be appropriate in the light of such consideration and assessment. • Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law. • The environment is held in public trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people's common heritage. • 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 must be paid for by those responsible for harming the environment. The Environmental Impact Assessment (EIA) process to be undertaken in respect of the authorization process of the proposed mining operations is in compliance with the MPRDA, as well as the NEMA read with the Environmental Impact Assessment Regulations of 2017 (Government Notice No's R327, 325, 324 of 2017). The proposed development involves 'listed activities', as identified in terms of the NEMA and in terms of section 24(1),		
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the potential consequences for or impacts on the environment of inter alia listed activities must be considered, investigated, assessed and reported on to the Minister of Mineral Resources or to the relevant office of the Department responsible for mineral resources, except in respect of those activities that may commence without having to obtain an environmental authorisation in terms of the NEMA.		
Mineral and Petroleum Resources Development Act, 2002 (Act No 28 of 2002) Previously South African mineral rights were owned either by the State or the private sector. This dual ownership system represented an entry barrier to potential new investors. The current Government's objective is for all mineral rights to be vested in the State, with due regard to constitutional ownership rights and security of tenure. The MPRDA was passed in order to make provision for equitable access to and sustainable development of the nation's mineral and petroleum resources, and to provide for matters connected therewith. The Preamble to the MPRDA inter alia affirms the State's obligation to: • protect the environment for the benefit of present and future generations; • ensure ecologically sustainable development of mineral and petroleum resources; and • promote economic and social development. The aforesaid preamble affirms the general right to an environment provided for in section 24 of the Constitution (as set out hereinabove).	All matters relating to any mining activities must be authorized in accordance with the requirements of this Act.	The Mining permit Application was prepared and submitted according to the provisions of this legislation. The legislation will be heeded throughout the proposed mining operation and has been considered in the compilation of the EMP.
Integrated Development Plans It is notable that there is very high unemployment rate in the Laingsburg LM and the majority of the people are very poor. Consequently, there is a serious reliance on various categories of government grants by both adults and children within the District area. New investment opportunities that will improve the livelihoods of the people by creating opportunities are needed. The following business sectors have potential to offer future employment: • Agriculture (Livestock farming, crop farming), Forestry, Tourism (Eco, Agricultural, Adventure tourism) • Construction and mining, Trade and business services, Catering, Accommodation (Beaufort West Local Municipality IDP 20/2021).		The project is a mining application and therefore can be considered to be in line with the IDP which states mining as a business sector that could offer future employment.
National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) ("NEM: WA").	Waste generation must be well managed through the NEM:WA	The proposed mining operation will produce minimal waste and will not require a waste license.

	and Norms and Standards	
National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)	The proposed mining activity will not trigger the NEMBA requirements as the vegetation cover already removed from previous mining. Additionally, the vegetation is classified as LEAST THREATENED, according to Mucina and Rutherford 20006.	Reintroduction of local vegetation during rehabilitation process is encouraged
National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) (NEM: AQA)	A minimal air pollution is anticipated to come from mining equipment's, such as excavator, loader, processing plant. The air quality of the project area will not be compromised.	Mitigation measures have been proposed in the EMP to protect air quality of the project area.
National Dust Control Regulations Promulgated in GN No. R.827 of 1 November 2013 in terms of one of the NEM: AQA, 2004.	A minimal air pollution is anticipated to come from mining equipment's, such as excavator, loader, processing plant. The air quality of the project area will not be compromised.	Mitigation measures have been proposed in the EMP to protect air quality of the project area.
National Water Act, 1998 (Act No. 36 of 1998)	Service of a suitable water service provider will be acquired for both potable water and for quarry use. The project is do not trigger any requirements of the NWA, i.e. section 21 C&I, AS there will be nor interference with the water resources.	The EMP emphasize protection of water resources.
Western Cape Noise Control Regulations published in Prosocial Notice (PN) 200/2013 of 20 June 2013	Overall noise emission will be within the levels of the ambient level.	provide mitigation measure that will prevent excessive and unnecessary noise emission.
National Heritage Resources Act, 1999 (Act No. 25 of 1999)	Protection of all artifacts of heritage significance. Palaeontologist confirmed less presence of significant artifacts.	Provide measures under impact rating of the EMP to mitigate and manage possible impacts on heritage resources.

Mine Health and Safety Act, 1996 (Act No. 29 of 1996)	Mining operation will be undertaken inline with the requirements of MH&S Act.	All MH&S requirements shall be met before commencement of mining operation.
Land Use Planning Act, 2014 (ACT No. 3 of 2014)	The proposed mining operation will be inline with the Land use planning act.	Mining operation to adhere to provision of the LUPA.
Laingsburg Municipality Land Use Planning Bylaw of 3 July 2015.	The proposed mining operation to operate in line with the municipal planning requirements and bylaws.	Mining operation to adhere to provision of the Municipal land use
Guideline on Need and Desirability, 2017	Need and Desirability of the proposed activity to be adequately addressed.	Need and Desirability of the proposed activity to be adequately addressed.

9. NEED AND DESIRABILITY OF THE PROPOSED ACTIVITIES

The (Census: 2011) describe Beaufort West is one of the poverty-stricken regions of the Western Cape characterised by high unemployment. This resulted from amongst other things, limited economic activities in the area, and woman and youth are the most affected. Introduction of stone dimension mining in Beaufort West will enhance economic opportunities for local community. Dimension Stone commodity is one of the sought after resource for both domestic and industrial use. It is a raw material for tombstone manufacturing, tiles and kitchen tops, as well as industrial equipment in the metrology industry. According to metrologists the determination of any object's accuracy and the precision of the process used to manufacture it requires a system of universally accepted standards. Metrology industry is big in Europe, thus there's opportunity for export of mined dimension stone from Beaufort West. This will bring in foreign currency in the current and stability in local development in the area and in return stimulate the local economic growth of the area.

Therefore, the proposed mining activity will contribute to local economic development by creating jobs for skilled, semi-skilled and unskilled, which in return enhance the local economic growth of the area and prevent increase of poverty levels. Additionally, the proposed mining activity can be regarded as soft mining if not green mining given its potential environmental impacts as it possesses less impacts. The identified mining area is secluded from household and is within a less sensitive environment therefore the proposed mining activity will contribute to the economic enhancement of the area without posing detrimental impact to the environment.

10. MOTIVATION FOR THE OVERALL PREFERRED SITE, ACTIVITIES AND TECHNOLOGY ALTERNATIVE.

This project site is located within a state-owned farm that its geology is characterised by the massive dolerite sheet intruded into the Teekloof Formation consisting of brownish-red and greenish-grey mudstone with subordinate siltstones and sandstones. The proposed site was found to be ideal due to its abundance of the rock material of interest. Dimension Stone is important for the buildings, monuments, paving, furniture, and decorative objects, it is a high demand in the construction industry, meaning this mining will benefit the construction sector as well as the retailers around the

area. The proposed project will contribute to job creation for the local community of Beaufort West and surrounding areas.

Additionally, Dimension Stone commodity is one of the sought after resource for both domestic and industrial use. It is a raw material for tombstone manufacturing, tiles and kitchen tops, as well as industrial equipment in the metrology industry. According to metrologists the determination of any object's accuracy and the precision of the process used to manufacture it requires a system of universally accepted standards. Metrology industry is big in Europe, thus there's opportunity for export of mined dimension stone from Beaufort West. This will bring in foreign currency in the current and stability in local development in the area and in return stimulate the local economic growth of the area. Therefore, the proposed mining activity will contribute to local economic development by creating jobs for skilled, semi-skilled and unskilled, which in return enhance the local economic growth of the area and prevent increase of poverty levels. The mined area will be rehabilitated post mining and acquire a closure certificate from the DMRE.

11. FULL DESCRIPTION OF THE PROCESS FOLLOWED TO REACH THE PROPOSED PREFERRED ALTERNATIVES WITHIN THE SITE.

A desktop survey was undertaken to assess the environmental sensitivity of the identified project site, which included running of a DEA screening tool. This was followed by the field survey to verify and confirm the desktop information. The site was found to be ideal for the proposed mining due to the abundance of the sought after commodity. Its secluded location from the households coupled with the rocky outcrop topography, also allows the proposed mining to take place as it will result in less impacts for the environment and human beings. The following specialist studies were identified as relevant and necessary to enable the competent authority to take an informed decision. They include Groundwater, terrestrial, wetland and Agricultural impact assessment studies. The findings of these specialist studies came to the similar conclusion to that of the DEA screening tool exercise as they all found the identified site not to have sensitive species, as well as less groundwater impacts.

a. The property on which or location where it is proposed to undertake the activity;

The proposed mining will take place on portion 2 of the farm Grasplaats, magisterial district of Beaufort West, in the Western Cape.

b. Type of activity to be undertaken;

Opencast Mining of Dimension Stone commodity.

c. The design or layout of the activity;

See ANNEXURE B: Regulation 2(2) plan and mining plan for a detailed plan of the mine and its layout.

d. The technology to be used in the activity;

The Dimension Stone commodity will be mined using diesel powered frontend loader.

e. The operational aspects of the activity;

It is a small-scale operation to employ at most 10 employees with one processing plant.

11.1. Details of the Public Participation Process followed

The PPP will be conducted in accordance with the NEMA EIA Regulations. The following steps were undertaken as part of public participation process:

a. Newspaper Advertisement

An advertisement will be placed on the Die Burger newspaper to notified the public of the proposed activity and to invite all Interested and Affected Parties to make comments and / or raise concerns regarding the application.

b. Site notices

Site Notices were also placed at the site entrance.

c. Information Provided

A Background Information Document (BID) was sent to stakeholders as accompanying information for them to comment upon. The last page of such BID document contained a reply form for them to comment upon to be sent back to the applicant's consultant. BID documents were sent to all I&APs including relevant state departments with invitation to send comments.

d. Notify I&APs

Notification letters were sent to the landowners, neighboring landowner and lawful occupiers, to notify them of the proposed development.

11.2. Summary of issues raised by I&APs

Table 3: Issues raised by I&APs

Interested and Affected Parties 2.7.1.1. List the names of persons consulted in this column, and Mark with an X where those who must be consulted were in fact consulted.		Date comments received	Issues raised	EAPs response to issues as mandated by the applicant	Section and paragraph reference in this report where the issues and or response were incorporated
<u>AFFECTED PARTIES</u>					.
Landowner/s	X	No comments received			
Lawful occupier/s of the land		No comments received			
Landowners or lawful occupiers on adjacent properties	X	No comments received			
Beaufort West Farmers Association	X	No comments received			
Municipal councillor	X	No comments received			
Municipality	X	No comments received			
Beaufort West Local Municipality	X	No comments received			

Organs of state (Responsible for infrastructure that may be affected Roads Department, Eskom, Telkom, DWA etc.)	X	No comments received			
Amathole District Municipality	X	No comments received			
DWS	X	10 July 2024	COMMENTS ON THE DRAFT BASIC ASSESSMENT REPORT FOR THE PROPOSED MINING OF DIMENSION STONE ON PORTION 2 OF FARM GRASPLAATS 113, MAGISTERIAL DISTRICT OF BEAUFORT WEST IN THE WESTERN CAPE PROVINCE. 1. Background The Department of Water and Sanitation (DWS) in Gqeberha Office received a Draft Basic Assessment Report with reference DMRE Ref No: WC30/5/1/3/2/10344EM from Lwethuma Environmental Consultants appointed by Bomlingo (Pty) Ltd. The proposed Beaunero Stone Dimension mine is located about 50km north of Beaufort West and about 90km south-east of Loxton (Northern Cape Province). Coming from Beaufort west, it can be accessed by turning left from the N12 into a district dirt road and travelling about 50km north-east of Beaufort West, driving pass the De Jagers Mountain Pass. The project description entails mining of dimension stones from the Karoo dolerite, the mine will follow		

			an open pit mining method whereby a stone will be cut using a diamond edged block saw. The following technical documents have been noted and considered in making DWS comments: i. Draft Basic Assessment Report ii. Groundwater Impact Assessment Study iii. Wetland Impact Assessment Study 2. Water Use and Authorisation The proposed development does not trigger water use(s) in terms of Section 21 (e, f, g, h & j) of the National Water Act (NWA), (Act no. 36 of 1998). 3. Water Resources Management From a water resource management perspective, the associated impacts/risks linked with the proposed activity include surface water and groundwater pollution. However, this Office has no objections towards the development and operation of the proposed mine, provided the following will be taken into consideration into the Final Basic Assessment and implementation thereof:		
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|--|--|--|---|--|--|
| | | | <ul style="list-style-type: none">• The proposed impact management objectives as highlighted in the Environmental Management Plan shall be adhered to during the course of the activities, and where there are shortcomings and possibly non-compliances, an appointed Environmental Control Officer must promptly liaise with the affected and interested stakeholders within 24 hours;• Construction of stormwater channels or diversion berm will be necessary to divert surface runoff into the mining area, which will assist in limiting the ponding of water in the mined-out zone. Additionally, the topsoil conserved for later rehabilitation shall be placed at gentle slopes where surface runoff would be minimal, in so doing, to prevent any potential sedimentation or siltation of nearby watercourses.• It has been highlighted that workers will be provided with portable ablution facilities which will be serviced by the contractor on daily basis and the content will be disposed of | | |
|--|--|--|---|--|--|

			at a suitable wastewater treatment works. The utilisation principle of one (1) facility for every fifteen (15) persons must be adhered to. Additionally, ablution facilities shall not be located within highly or moderately sensitive areas; • Wetting of roads and the mining area has been suggested as a control measure for dust and the water will be provided by service provider. For this reason, this office hereby acknowledges that cause and it must be further noted should there be any other alternative, be it, wastewater reclamation or groundwater use thereof, the Department must be consulted prior exercising the water use; • This Office reserves the right to revise its initial comments and request additional information that may arise from further correspondence.		
ESKOM	X	No comments received			
SANRAL: Southern Region	X	No comments received			
ECPHRA	X	No comments received			
EC Parks & Tourism Agency	X	No comments received			
Department of Agriculture Forestry and Fisheries	X	No comments received			

(DAFF)					
Western Cape Government	X	No comments received			
Dpt. Roads & Public Works		No comments received			
Communities	X	No comments received			
		No comments received			
Dept. Land Affairs	X	No comments received			
		No comments received			
Traditional Leaders	N/A	No comments received			
		No comments received			
Dept. Environmental Affairs	X	No comments received			
		No comments received			
Other Competent Authorities affected	X	No comments received			
	X	No comments received			
<u>OTHER AFFECTED PARTIES</u>					
<u>INTERESTED PARTIES</u>		No comments received			
RED CAP		02 August 2024	Comments on the Proposed Gasfontein Quarry and request for information on blasting activities Red Cap Nuweveld North has received Environmental Authorisation in 2021 for a ~100 km gridline corridor from our approved Nuweveld Wind Farms to the existing Droërivier Substation located in Beaufort West. The gridline connection will enable the energy produced by the wind farms to be integrated into	Dear Surina Thank you for your comments. Please note that the proposed mining will not involve drilling and blasting. A diamond wire cutter will be utilised to cut out the large slabs of rocks. This process results in a lesser environmental impact such as minimal noise emission, and dust emission. It is vital to not compromise the rock formation as stone dimension mining one of the delicate mining activities.	

		the National Grid and will be owned and maintained by Eskom, following construction. Our proposed projects have the potential to contribute to the socio-economic upliftment in the area and welcome other businesses that can also responsibly contribute to this. The proposed Gasfontein Quarry application is partially located within our approved gridline corridor and therefore has the potential to impact our proposed infrastructure. It is unclear from the mining application assessment reports whether blasting will be undertaken, and if so, what type of blasting will occur. Given this, we do want to raise our concerns specifically relating to the blasting and dust emissions and <u>request that we are provided with more detailed information on the type of blasting that will occur and how dust management will be implemented.</u> Furthermore, given that this gridline will be transferred to Eskom, it is deemed necessary to also inform you of Eskom's building line restrictions, servitude widths, line separations, and clearances from powerlines which states that "no mining operations or blasting	ESKOM has been consulted and we can confirm that there is no interference with their infrastructure. I hope you receive the above response in order. Kind regards McDonald Mdluli	
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		activities shall be carried out within 500 m of the centreline of the powerline, without the prior written permission from Eskom". Given this, <u>we request that the project's EMP includes the requirement of notifying Eskom of any blasting activities within 500 m of the gridline (once constructed) and to obtain Eskom's permission prior to undertaking such an activity.</u> Given the proximity of the proposed mine to our current proposed gridline alignment within the corridor, we do not anticipate that if the above is carefully managed, that there will be any direct impacts on our proposed gridline. However, should the mine's location shift further west into the gridline corridor and/or following receipt of the information on the proposed blasting activities that may form part of your operation, we may need to reconsider whether we would be affected. Please confirm receipt of our comments. Kind regards		
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		Surina		
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11.3. The environmental attributes associated with the alternatives.

11.3.1. Baseline Environment

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

❖ Topography

The project site is located on a gently sloping area with rocky outcrops and a rocky hillslope on the east. It varies in elevation from about 1 664 in the northernmost corner to about 1 629 m at the rocky hillslope in the southernmost corner. The existing access road starting from the district road at an elevation of about 1 641 m crosses for the most part over undulating terrain. It crosses for the most part relatively flat terrain and increases moderately in elevation towards the project site.

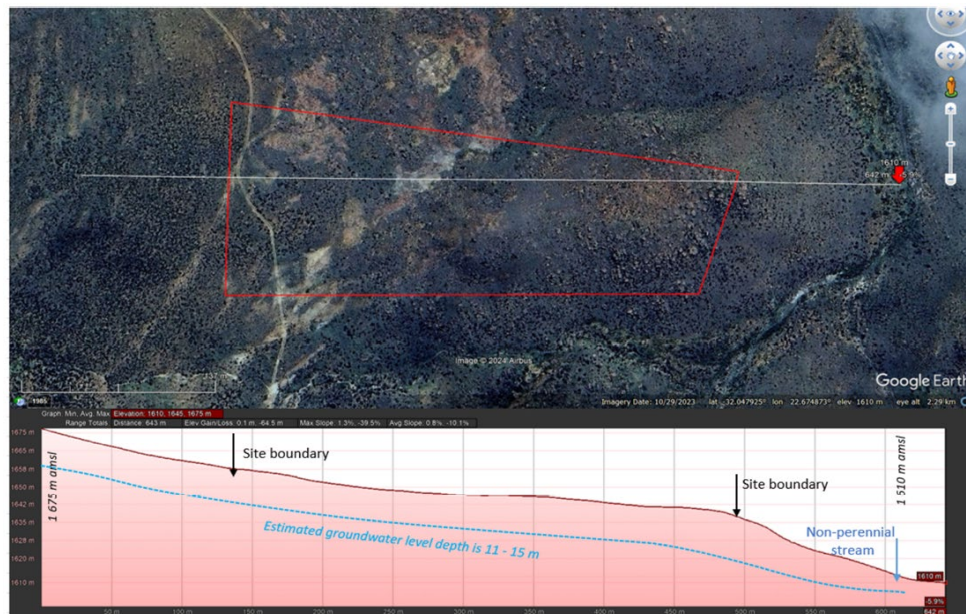


Figure 3: Elevation profile of the proposed site

Source: Google 2023

❖ Climate

The project site lies 1625m above sea level, its regional rainfall occurs mainly in autumn and summer, peaking in March. Mean annual precipitation ranges from about 180 mm in the west to 430 mm in the east. The incidence of frost is relatively high but ranging widely from <30 days (in the lower-altitude Cradock area) to >80 days of frost per year (bordering the Upper Karoo Hardeveld on the Compassberg and mountains immediately to the west). the mean maximum and minimum monthly temperatures in Middelburg (Grootfontein) are 36.1°C and –7°C for January and July, respectively. Corresponding values are 37°C and –8°C for Victoria West and 36.6°C and –4.2°C for Hofmeyr (Mucina & Rutherford, 2006).

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Avg. Temp °C	24 °C	23.8 °C	21.8 °C	18 °C	14.8 °C	11.3 °C	11.1 °C	12.6 °C	15.6 °C	18.6 °C	20.5 °C	22.7 °C
Min. Temp °C	16.2 °C	16.6 °C	14.8 °C	11.4 °C	8.4 °C	4.9 °C	4.4 °C	5.4 °C	7.7 °C	10.6 °C	12.5 °C	15 °C
Max. Temp °C	31.7 °C	31.3 °C	28.8 °C	24.7 °C	21.6 °C	18.1 °C	18 °C	19.8 °C	23.2 °C	26.2 °C	28.3 °C	30.6 °C
Rainfall mm (in)	50	52	57	32	20	15	15	21	17	31	38	44
Humidity (%)	42%	44%	47%	49%	48%	51%	47%	41%	37%	39%	38%	40%
Rainy days (d)	6	6	6	5	3	2	2	3	3	4	4	4
Avg. Sun hours (hours)	11.2	10.5	9.6	8.8	8.4	7.8	8.1	8.6	9.4	10.1	11.0	11.4

Figure 4: Showing average Weather and average temperature of the project site.

The variation in precipitation between the months with the lowest and highest levels of rainfall is 42 mm, as observed. The average temperatures vary during the year by 12.9 °C. The month with the highest relative humidity is June (51.13 %). The month with the lowest relative humidity is September (36.91 %). The month with the highest number of rainy days is February (7.77 days). The month with the lowest number of rainy days is June (2.93 days).

❖ Flora

The vegetation of the project site is that of the upper Karoo and characterized by low open shrubland. Grasses are more common in depressions and on sandy soils. The most dominant species included the shrubs *Chrysocoma ciliata*, *Dicrothamnus rhinocerotis*, *Euryops lateriflorus*, and graminoids by *Aristida* spp., *Eragrostis obtusa* and *Sporobolus ioclados*.

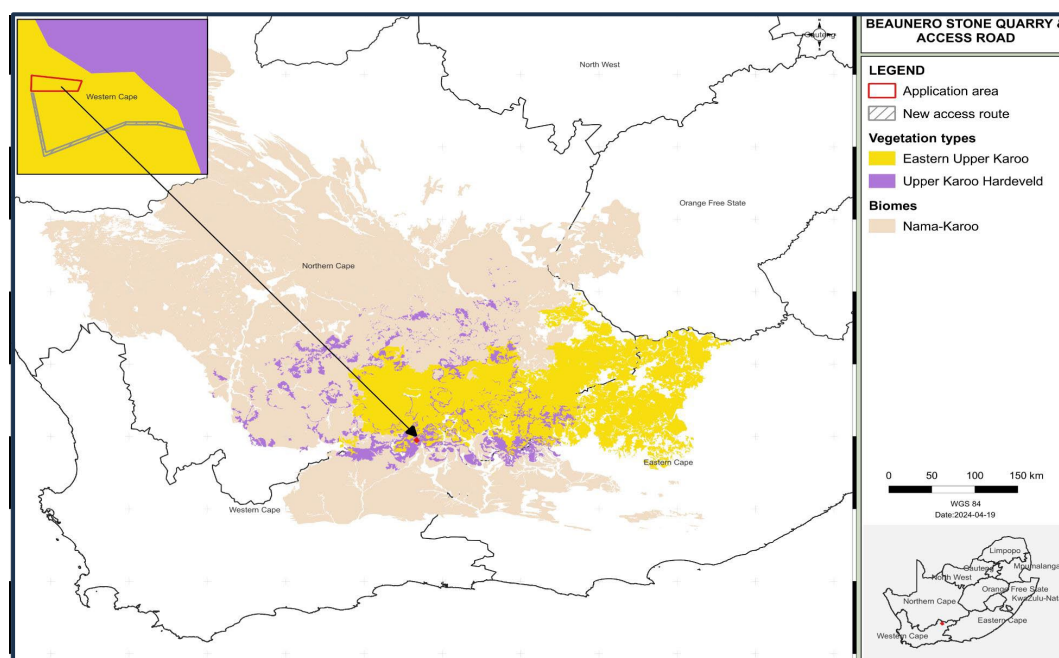


Figure 4: Vegetation of the proposed site

Furthermore, in terms of the Western Cape Biodiversity spatial plan, the project site falls outside the Critical Biodiversity Areas or Ecological Supported Areas as shown in figure 5 below;

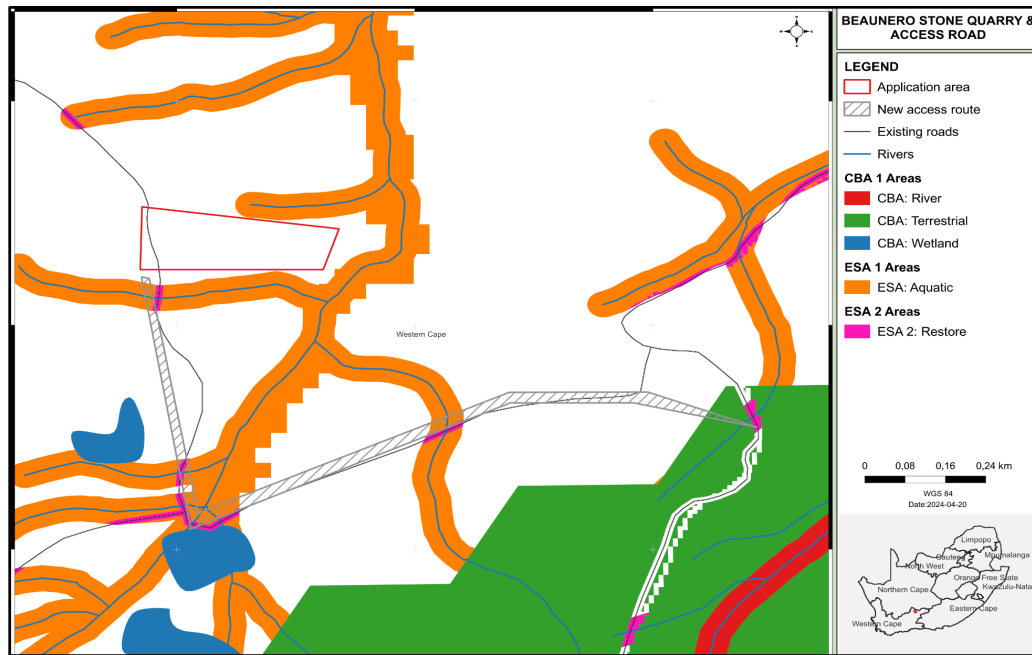


Figure 5: Terrestrial CBA map of the Western Cape

Source: ECBCP



Figure 6: overview of the vegetation of the project site

❖ Fauna

The proposed mine area is within an active livestock farm currently in use by the lease to farm sheep. There are no wild animals identified onsite, however, as per the findings of the terrestrial assessment presence of wild animals may not be ruled out, given its area extent of 392.6857H. The mine area will be fenced to restrict access thus there will be no interference with the current livestock farming or wild animals. Vegetation disturbance will be limited to the 5Ha demarcated mining area and along the access road, leaving the rest of the faunal habitat intact. The integrity of the natural ecosystem and biodiversity will not be lost.

❖ Geology and soils

The Project Area is located on a massive dolerite sheet intruded into the Teekloof formation consisting of brownish-red and greenish-grey mudstone with subordinate siltstones and sandstones. The inclined dolerite sheets tend to form crescent-shaped or concentric intrusions. The Site is located on the northeastern part of such a concentric structure. The primitive, skeletal soils in rocky areas developing over sedimentary rocks such as mudstone and arenites of the Adelaide Subgroup of the Karoo Supergroup and to a lesser extent also the Ecca Group (Waterford and Volkrust Formations) as well as Jurassic dolerite sills and dykes and subsummit positions of mesas and butts with dolerite boulder slopes.

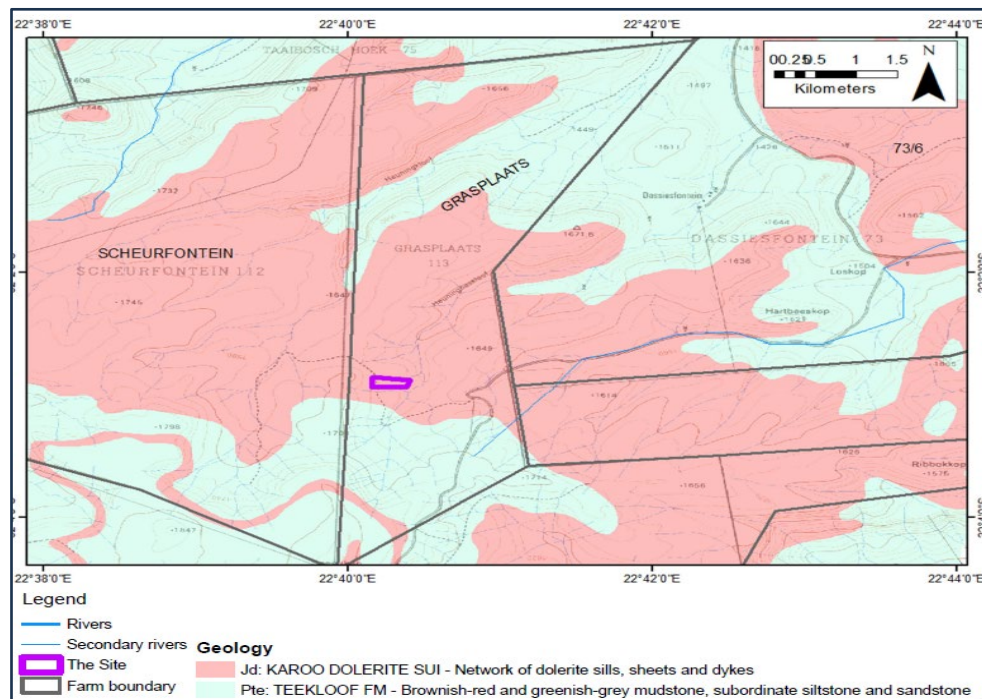


Figure 7: Geological Map of the project site

❖ Surface Water

Beaufort West region falls under the Breede-Gouritz Water Management Area and located on quaternary catchment L11D. a non-perennial river runs through east south of the project area, about 65m away. It is within the 500 m regulated area in terms of the National water Act 36 of 1998 as per the findings of the specialist assessment. Disturbance of surface water sources is unlikely to occur during operational phase.

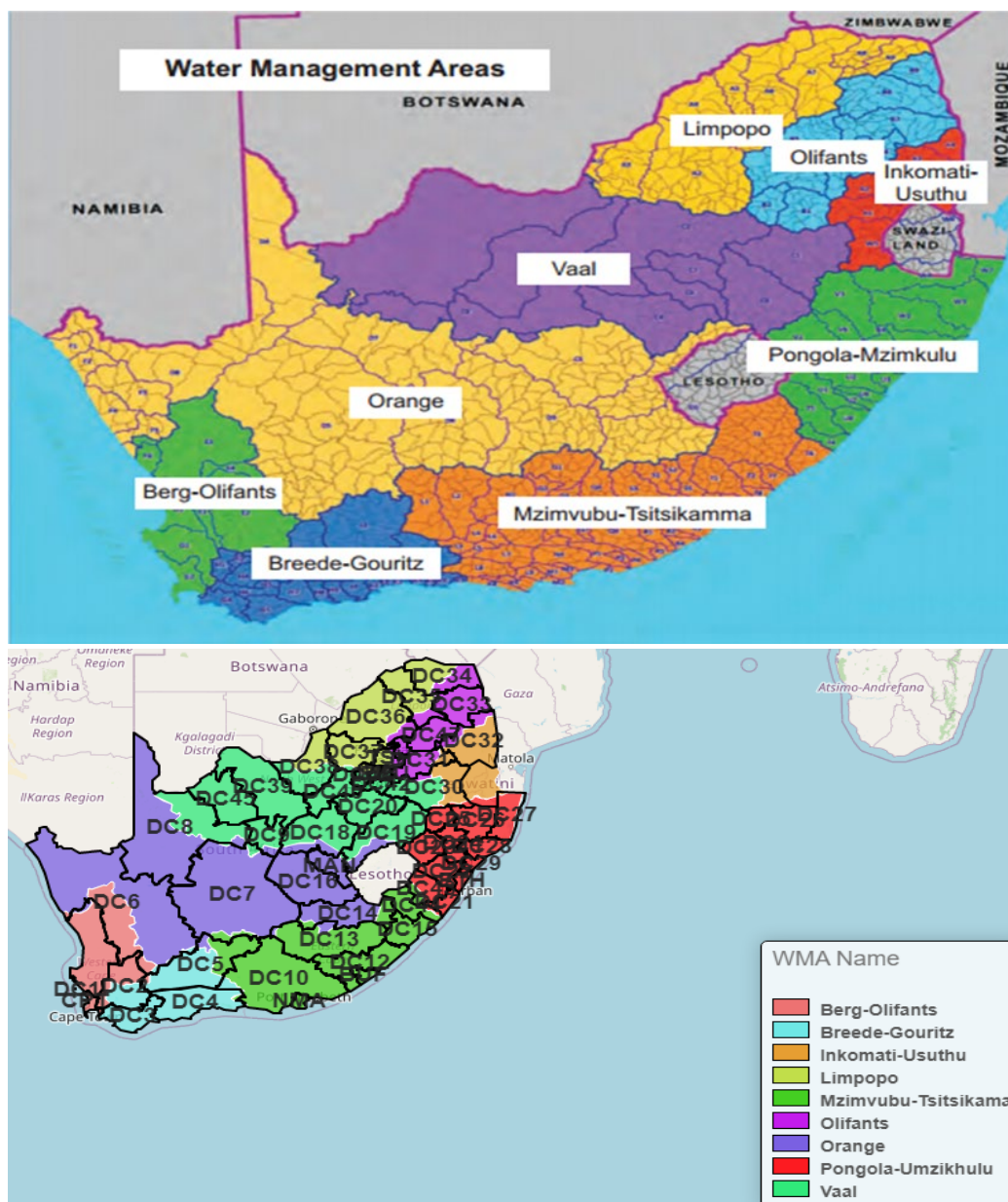


Figure 8: Water Management Areas of South Africa

❖ Groundwater

Beaufort West region falls under the Breede-Gouritz Water Management Area. It is located in the L11D quaternary catchment. The Nuweveldberge form a true continental watershed, with each side draining to different oceans. The Site is in the southeastern parts of the mountain range with water draining towards the Indian Ocean. The area falls in the upper parts of the L11D quaternary drainage region just north of the boundary of the L11F quaternary boundary. Non-perennial streams originate around the Site. Surface and groundwater flow is anticipated to be east northeast from the Site, joining the Krom River, a perennial river that is flowing eastwards then joins the Sout River that flows south.

❖ Population

According to Census 2011, the Afrikaans language is spoken by more than 40 000 people, i.e. 80% plus, of the people residing in the municipal area, with IsiXhosa spoken by about 5000 residents. In 2001, the number of Afrikaans speaking residents were 37 000 which is about 85% of the total population. The languages most spoken in the household are; Afrikaans (83.0%), IsiXhosa (13.1%) and English (1.9%). Afrikaans has remained the predominant language spoken.

Based on the data as per the Community Survey (2016), the dominant language most spoken in households within Beaufort West Municipality is Afrikaans (83,0%) with 42 376 people speaking the language. The second language most spoken in the household in the municipality is IsiXhosa (13, 1%) with 6 712; and English being third with 977 (1, 9%) of persons speaking the language. The aforementioned language distribution has consistently been the trend since Census 2001.

Population group	Total
Black African	11447
Coloured	56455
Indian or Asian	274
White	3612
Other	1021
Unspecified	163
Total	72972

Figure 9: Population distribution of Beaufort West Local Municipality

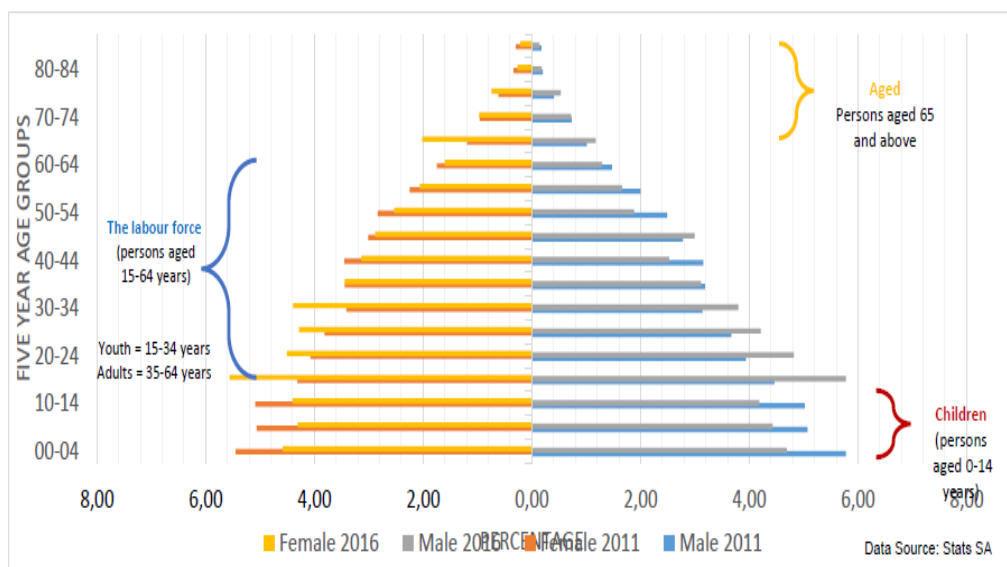


Figure 10: Population by age pyramid

❖ Level of education

The Beaufort West municipal area experienced fluctuations in education outcomes, recording a decline from 83.5 per cent recorded in 2021 to 79.0 per cent in 2022. This number should also be read in conjunction with the dropout rates as many students dropped out of the education system which will have an impact on the future prospect of finding jobs which will further worsen the youth unemployment rate. Unfavorable outcomes have been recorded for Mathematical literacy and Physical Science with 56.5 per cent fail and 48.9 fail respectively in 2022. On the hand, English recorded a 100 per cent pass rate and Mathematics pass rates were better at 62.2 per cent.

❖ Socio-Economy

According to the Beaufort West Municipality IDP (2021/22) high unemployment rate in the municipality, which was at 24.5% (2011 Census); and the unemployment rate for young people is alarmingly high, which is mainly influenced by the lack of economic opportunities in the municipal area. We are still waiting for the release of the Census 2022 data to see whether this situation has worsened or whether there was decrease in the real unemployment rate.

Municipality	Employed			Unemployed			Unemployment Rate		
	2001	2011	2016	2001	2011	2016	2001	2011	2016
Central Karoo	13 520	17 332	No data	7 684	5 210	No data	36,2	23,1	No data
Beaufort West	9 106	10 932	No data	5 644	3 731	No data	38,3%	25,4	No data

Figure 11: Unemployment status of Beaufort West municipality

❖ Archaeo-Heritage

There are no resources of heritage importance identified on site. However, it is of importance to note that should any archaeological remains or artefacts be uncovered during the operational phase, all works should stop, and the matter be reported to Heritage Western Cape for further investigation. An archaeologist should be brought to site to perform salvage work.

(b) Description of the current land uses.

The current land use of this proposed site include agriculture and livestock farming and there is an access road in the area, it is surrounded by rural settlement.

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

The proposed site is within privately owned land that is being utilised for agriculture and livestock farming and there is no infrastructure on the site, the only environmental features is the open land with gentle slopes.

(d) Environmental and current land use map.

See figure 10 below:

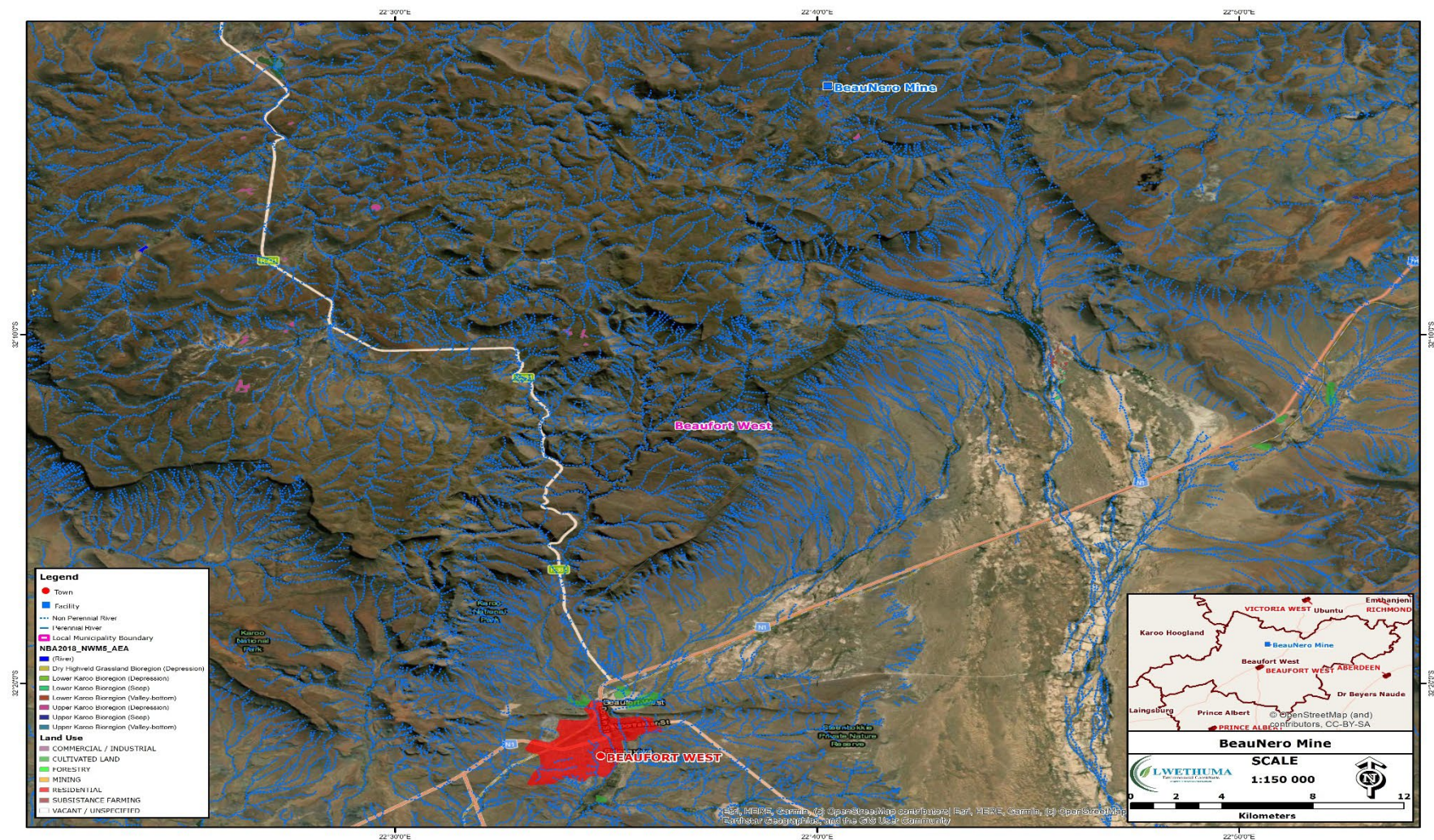


Figure 12: Current land use of the project site

12. METHODOLOGY USED IN DETERMINING AND RANKING THE NATURE, SIGNIFICANCE, CONSEQUENCES, EXTENT, DURATION AND PROBABILITY OF POTENTIAL ENVIRONMENTAL IMPACTS AND RISKS;

An impact is defined as any change in the physical-chemical, biological, cultural and/or socio-economic environmental system that can be attributed to human activities related to alternatives under study for meeting a project need. Assessment of impacts will be based on the Department of Environmental Affairs Guideline Document: EIA Regulations 2010. The significance of the aspects/impacts of the process will be rated by using a matrix derived from Plomp (2004) and adapted to some extent to fit this process. These matrixes use the consequence and the likelihood of the different aspects and associated impacts to determine the significance of the impacts. The definitions of each of the Assessment Criteria are provided below:

i. Extent of impact :

A spatial indication of the area impacted (i.e., how far from activity the impact is realised).

ii. Duration of impact :

A temporal indication of how long the effects of the impact will persist, assuming the activity creating the impact ceases. For example, the impact of noise is short lived (impact ceases when activity ceases) whereas the impact of removing topsoil exists for a much longer period of time.

iii. Probability of impact occurring:

An estimated indication of the potential for an impact to occur.

iv. Intensity of the impact:

The magnitude of the impact in relation to the sensitivity of the receiving environment, taking into consideration the degree to which the impact may cause irreplaceable loss of resources.

v. Significance of an impact:

Considering the factors defined above, Significance is an indication of how serious a negative impact is anticipated to be and how beneficial a positive impact may be.

CATEGORY	CATEGORY	RATING	DESCRIPTION
Extent	Site only	1	Project site
	Local	2	Effects immediate surrounding areas
	Municipal	3	Effects municipal area
	Regional	4	Effects regional area
	National	5	Effects R.S.A.
Duration	Very short term	1	Less than 1 year
	Short term	2	1 to 5 years
	Medium term	3	5 to 20 years
	Long term	4	Longer than 20 years
	Permanent	5	Permanent
Probability / Likelihood	Improbable	0	Less than 30% chance
	Possible	1	30 to 50% chance
	Probable	2	50 to 75% chance
	Definite	3	Greater than 75% chance
Intensity	Very low	1	No effect on natural, cultural or social conditions
	Low	2	Marginal effect on natural, cultural or social conditions
	Moderate	3	Modification of natural, cultural or social conditions
	High	4	Temporary threat to existence of natural, cultural or social conditions
	Very high	5	Permanent Threat to existence of natural, cultural or social conditions
Significance	Very low	0 to 24	The Significance is a measurement of the product of the individual ratings of the Extent, Duration, Probability and Intensity.
	Low	25 to 47	
	Medium	48 to 94	
	High	95 to 188	
	Very high	189 to 375	

i) **Identified impacts:**

Direct and indirect impacts	
Description of Impact	Mitigation measures
Loss of vegetation cover: Excavation of Dimension Stone commodity will result in vegetation clearance, within the demarcated mine area. Vegetation clearance will also result in potential loss of habitat for fauna species	Search and rescue exercise to be undertaken prior to the commencement of mining operation onsite. Clearance of vegetation to be limited only within the approved mine boundaries.
Loss of topsoil:	

The nutritious topsoil that holds vegetation will be lost through excavation of Dimension Stone commodity.	Topsoil is to be removed and stored at designated site for use during rehabilitation of the impacted environment.
Soil erosion: Excavation of Dimension Stone commodity will result in soil erosion from storm water	Mining to be limited at a maximum depth of not more than 2m and avoid steep slopes.
Noise pollution: Mining machineries to emit noise pollution during the life of the quarry mining operation.	All mining machineries onsite to be fitted with exhaust filters to reduce noise emission. All mining machineries to be kept at good condition in order to prevent excessive noise emission. Mining works to commence from 07:00am to 17:00pm, weekdays only.
Air pollution: Smoke coming from mining machineries to cause air pollution during the life of the quarry mining operation.	All mining machineries to be kept at good condition in order to prevent excessive smoke emission. Dust fallout must be monitored by an independent consultant, in compliance with the Mine Health and Safety Act.
Visual impact: Untidy mining site will result in visual impact, and loss of sense of place.	Housekeeping must be kept at high compliance level.
Littering of solid waste: Littering of solid waste to generate from workers onsite.	Waste collection bins must be placed at strategic positions within the mine area, storing of all generated waste onsite.
Hydrocarbon spillage: Hydrocarbon spillage will result in contamination of surface water through seepage.	All mining machineries onsite must be inspected for possible oil leaks timely. Drip trails to be made available for emergency onsite
Introduction of invasive alien species: Interference with the vegetation cover will give opportunity to invasive alien species.	Rehabilitation process must focus on introduction of local vegetation species.
Cumulative impact:	
Soil erosion: Ongoing soil erosion is imminent along the worked areas if managed poorly.	Mining area and access roads are to be kept at minimal size during operation and be rehabilitated once mining is complete.

13. IMPACT AND RISKS IDENTIFIED INCLUDING THE NATURE, SIGNIFICANCE, CONSEQUENCE, EXTENT, DURATION AND PROBABILITY OF THE IMPACTS, INCLUDING THE DEGREE TO WHICH THESE IMPACTS

Table 5: Impacts and Mitigation Measures

DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY / LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION / MANAGEMENT MEASURES
<u>Geology:</u>							
Extraction of mineral(s)	Dimension Stone within the permitted mine area will be removed during mining operation.	Site only (1)	Short Term (2)	Definite (3)	High (4)	High (95)	Extraction of Minerals to be limited within approved mine area.
<u>Topography:</u>							
Change in topography	The mining process may alter the topography.	Site only (1)	Short Term (2)	Definite (3)	Moderate (3)	High (95)	- During mining, work will be carried out in such a way that it does not drastically alter the topography. - No high or dangerously steep slopes will be created, and slope stability will continuously be monitored. Mined areas will be backfilled and gentle sloped and hydro seeded to return to its pre mining state of livestock grazing.
<u>Soils:</u>							
Loss of soil fertility	Soils in this area are loamy soils. The Beaufort West LM IDP indicates that this area has poor soil conditions.	Site only (1)	Short term (2)	Possible (1)	Moderate (3)	Medium (55)	- The mining operation will only be limited to the approved mine area. Soil potential is unlikely to be affected as the impacted areas will be rehabilitated post mining. - Prior to commencement of mining, topsoil is to be removed and stored in designated area to be used for rehabilitation purpose.

DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY / LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION / MANAGEMENT MEASURES
Increase in soil erosion	The proposed mine area has gentle and undulating sections and this may result in soil erosion as mining progresses.	Site only (1)	Short term (2)	Possible (1)	Moderate (3)	Medium (50)	- A phased mining approach to be adopted in order to reduce vegetation clearance that would encourage soil erosion. - Mining to take place concurrently with rehabilitation process. - All vehicles must remain within the designated roads to prevent soil erosion. - Develop working relation with the local authority responsible of road maintenance to maintain the district road. - Develop proper stormwater infrastructure along the access road and mine area.
Flora:							
Loss of vegetation cover	The proposed area is within the karoo and characterized by rocky outcrop thus having limited vegetation cover.	Site only (1)	Short term (2)	Definite (3)	Moderate (3)	Low (45)	- Topsoil must be kept safe so it can be used for rehabilitation to re-establish indigenous vegetation - Indigenous vegetation would be re-introduced through rehabilitation. - A search and rescue exercise must be undertaken by a qualified botanist prior to commencement of the mining activity - All species of conservation concern must be relocated to outside the development footprint prior to the commencement of the mining activity
Spread of alien species	Further disturbance of the area due to mining activity could create opportunities for increased infestation by alien plant species.	Site only (1)	Short term (2)	Possible (1)	Moderate (3)	Low (45)	- The mining area must be monitored for the occurrence of alien plant species on regular basis and such alien species must be continuously removed. - Rehabilitated areas must be monitored on a continuous basis for the occurrence of alien

DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY / LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION / MANAGEMENT MEASURES
							plant species until 90% of the natural vegetation cover is established.
<u>Fauna:</u>							
Loss of habitat	Loss of habitat will occur within the mine site due fragmentation.	Site only (1)	Short term (2)	Probable (2)	Low (2)	Low (47)	- Implement concurrent rehabilitation. - Disturbance should be limited to the approved mining area. Indigenous plant species must be re-planted during rehabilitation to attract indigenous fauna back to the area.
<u>Surface water resources:</u>							
Contamination of water through spillage of diesel or hydrocarbon chemicals.	Proposed mine area is located within 500m of NWA regulated; therefore caution should be taken against contamination of aquatic resources.	site only (1)	short term (2)	possible (1)	low (2)	low (46)	- Wetlands are considered no-go area and a 50m buffer should be maintained along the mine and access road. - Mining machineries to be inspected for leaks at all times. - Dip tray to be made available onsite to handle emergency spillage
<u>Groundwater resources:</u>							
Dewatering / Decanting of the aquifer	The mining operation is not expected to have any significant impacts on the aquifers, as it will not exceed 3m in depth	Site only (1)	Short term (2)	Possible (1)	Low (2)	Low (45)	The mining operation involve sophisticated cutting out of large slabs, thus it is not expected to have any significant impacts on the aquifers.

DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY / LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION / MANAGEMENT MEASURES
Hydrocarbon contamination during mining operations	Diesel and oil spillages might occur in the event of a burst hydraulic pipe / hose or leaking machinery.	Site only (1)	Short term (2)	Possible (1)	Low (2)	low (40)	- Appropriate spill response kits and plans must be in place to react appropriately and timeously in the case of an accidental spill. - Wall/floor on the area around Diesel tank/pump must be bound
<u>Air Quality:</u>							
Increase in dust emissions	Dust emission is likely to occur from the mine area and the access road.	Local (2)	Short term (2)	Definite (3)	Moderate (3)	Medium (55)	- Phased mining approach to be adopted to manage vegetation clearance. - Appropriate dust suppression measures such as wetting of the roads must be used to reduce dust on site. - Dust fallout must be monitored by an independent consultant, in compliance with the Mine Health and Safety Act.
Increase in gaseous emissions	Increased gaseous emissions may result at a local level from vehicles operating at the site and from movement to and from the site.	Local (2)	Short term (2)	Definite (3)	Moderate (3)	Medium (55)	- Vehicles must be maintained in a road worthy condition in order to limit the emissions to air, and - Be fitted with filters to reduce noise emission. - The mine is to operate from 07:00 to 17:00 weekdays, and from 07:00am to 13:00 on Saturdays - No mining should take place on Sunday and after working hours.

DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY / LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION / MANAGEMENT MEASURES
Noise:							
Increase in ambient noise levels in the surrounding areas	Noise is expected to occur from activities being undertaken as part of the mining operation.	Local (2)	Short term (2)	Definite (3)	Moderate (3)	Medium (60)	- Mining machineries on site must be maintained in a good condition in order to minimize noise emissions. Also to be fitted with noise filters where possible. - The mine is to operate from 07:00 to 17:00 weekdays, and from 07:00am to 13:00 on Saturdays - No mining should take place on Sunday and after working hours. Unless special permission is granted by the DMRE
Sanitation:							
Waste generation	Generation of organic and inorganic waste during life of mine.	Local (2)	Short term (2)	Probable (2)	Moderate (3)	Medium (48)	- Workers and clients visiting the mine to be work shopped in environmental management applicable in the mining area. - Waste bins to be provided within the mine area. - To install sign boards that discourage littering - Truck drivers to avoid littering of waste along the district road.
Lack of Ablution facility	Public indecency due to lack of proper ablution facilities.	Site only (1)	Short term (2)	Possible (1)	Low (2)	Medium (48)	Ablution facilities to be provided onsite.
Visual impacts	Proposed mining in situated at a rural setting and within farming lands. Therefore, this proposed mining activity may	Local (2)	Short term (2)	Possible (1)	Low (2)	Low (45)	- Housekeeping to be kept at acceptable level. - Machineries on site must be neatly placed

DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY / LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION / MANAGEMENT MEASURES
	pose nuisance to neighbors and passerby.						All waste generated onsite to be collected on waste bins to disposal at licensed landfill site.
<u>Archaeological , cultural and heritage sites:</u>							
Loss of sites of archaeological, cultural or historical importance.	There were no archaeological sites and resources identified on site.	Site only (1)	Short term (2)	Improbable (0)	Very Low(1)	Very Low (24)	Mining must continually monitor the mine workings for any encountering of archaeological findings
<u>Socio-economic:</u>							
<u>Positive Impacts</u>							
Increase in employment / financial status of the local communities.	Permanent employment of approximately 5 people may occur increasing their financial status. Indirect employment opportunities to be created through multiplier effect of the proposed mining activity	POSITIVE	POSITIVE	POSITIVE	POSITIVE	POSITIVE	No mitigation required
Benefits to the local economy	There is a high demand of Dimension Stone in the area. The mine will therefore supply these building materials which will ensure lower transport costs to the customers. This is considered to have a positive impact on the local economy.	POSITIVE	POSITIVE	POSITIVE	POSITIVE	POSITIVE	No mitigation required

DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY / LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION / MANAGEMENT MEASURES
Safety and security for local populations	Upon mine closure the mine excavations could pose a safety hazard to animals if not well rehabilitated.	Site only(1)	Long term(4)	Possible(1)	Low(2)	Very low(24)	- Rehabilitation must ensure that no dangerous excavations are left in an unsafe condition. - Access control to the mining area must be controlled. - No fires will be allowed on the mine area. - The required heavy vehicle signs must be erected at the access to the mining area as per the Road Traffic Act in order to ensure road safety.

14. 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

Advantages

The proposed mining area was selected based on the availability of Dimension Stone commodity in the area. The proposed site has sufficient minerals that can be mined for at least 5 years. In terms of Beaufort West Local Municipality, IDP (2022-2023) it is stated that for the period 2006-2016 the GVA in the construction sector had the highest average annual growth rate in Beaufort West at 3.53%. The industry with the second highest average annual growth rate is finance sector averaging at 2.96% per year.

Notably, mining sector had an average annual growth rate of 4.05%. overall, a positive growth existed for all the industries in 2016 with an annual growth rate of 0.53% since 2015. Beaufort West Local Municipality, IDP (2020-2021) further indicates that Beaufort West Municipal area does not have a lot of mining activities, mining is operational in Beaufort West Ward 6 though at a minimum level. Therefore, this quarry mining will contribute towards increasing the mining operation in this area and increase the number of employments by creating job opportunities for people living in that area.

Disadvantages

The proposed quarry mining is associated with environmental and social impacts, for example, mining can affect the natural landscape of the proposed area. It is therefore encouraged that both the applicant and the community work closely together in order to manage if not overcoming the negative impacts. All the identified social and environmental impacts can be managed through implementation of an Environmental Management Plan.

15. THE POSSIBLE MITIGATION MEASURES THAT COULD BE APPLIED AND THE LEVEL OF RISK

PLEASE SEE TABLE 5: IMPACTS AND MITIGATION MEASURES

16. MOTIVATION WHERE NO ALTERNATIVE SITES WERE CONSIDERED

16.1. Statement motivating the alternative development location within the overall site

No alternative sites were considered since the identified site is in a private land, rocky, and has minimal agricultural production than other surrounding plots. As the proposed site is situated nearby the main road R63 close to Beaufort West CBD and N2 to east London, transportation for the commodity will not be a challenge. In addition, the project site is located within an open space of a privately owned commercial farm that is owned by the applicant, and not close to households. Based on the rock formation of the Beaufort West area, alternative site would be found in unideal areas either close to the households or occupied farmlands.

16.2. 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

The ranking of impacts / determination of significance is estimated consider the factors / criteria listed in the EIA Regulations 2010. The definitions of each of the Assessment Criteria are provided below:

i. Extent of impact :

A spatial indication of the area impacted (i.e., how far from activity the impact is realised).

ii. Duration of impact :

A temporal indication of how long the effects of the impact will persist, assuming the activity creating the impact ceases. For example, the impact of noise is short lived (impact ceases when activity ceases) whereas the impact of removing topsoil exists for a much longer period of time.

iii. Probability of impact occurring:

An estimated indication of the potential for an impact to occur.

iv. Intensity of the impact:

The magnitude of the impact in relation to the sensitivity of the receiving environment, taking into consideration the degree to which the impact may cause irreplaceable loss of resources.

v. Significance of an impact:

Considering the factors defined above, Significance is an indication of how serious a negative impact is anticipated to be and how beneficial a positive impact may be.

CATEGORY	CATEGORY	RATING	DESCRIPTION
Extent	Site only	1	Project site
	Local	2	Effects immediate surrounding areas
	Municipal	3	Effects municipal area
	Regional	4	Effects regional area
	National	5	Effects R.S.A.
Duration	Very short term	1	Less than 1 year
	Short term	2	1 to 5 years
	Medium term	3	5 to 20 years
	Long term	4	Longer than 20 years
	Permanent	5	Permanent
Probability / Likelihood	Improbable	0	Less than 30% chance
	Possible	1	30 to 50% chance
	Probable	2	50 to 75% chance
	Definite	3	Greater than 75% chance
Intensity	Very low	1	No effect on natural, cultural or social conditions
	Low	2	Marginal effect on natural, cultural or social conditions
	Moderate	3	Modification of natural, cultural or social conditions
	High	4	Temporary threat to existence of natural, cultural or social conditions
	Very high	5	Permanent Threat to existence of natural, cultural or social conditions
Significance	Very low	0 to 24	The Significance is a measurement of the product of the individual ratings of the Extent, Duration, Probability and Intensity.
	Low	25 to 47	
	Medium	48 to 94	
	High	95 to 188	
	Very high	189 to 375	

17. ASSESSMENT OF EACH IDENTIFIED POTENTIAL SIGNIFICANT IMPACT AND RISK

Table 6: Assessment of Potential Impacts

NAME OF ACTIVITY (E.g. For prospecting – drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc...etc...etc (E.g. For mining,- excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc.).	POTENTIAL IMPACT (Including the potential impacts for cumulative impacts) (e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc.)	ASPECTS AFFECTED	PHASE In which impact is anticipated (e.g. Construction, commissioning, operational Decommissioning, closure, post-closure)	SIGNIFICANCE if not mitigated	MITIGATION TYPE (modify, remedy, control, or stop) through (e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc. etc) E.g. Modify through alternative method. Control through noise control Control through management and Monitoring through rehabilitation..	SIGNIFICANCE if mitigated
SITE ESTABLISHMENT & ACCESS ROAD CONSTRUCTION						
Access & haul road upgrade	Land degradation	-Air Quality -Fauna -Flora	Pre-Construction	Medium (48)	Planning and design of access & haul roads to limit or prevent the destruction of vegetation and natural habitats.	Low 25
	Noise pollution	-Fauna	Pre-Construction	Medium (48)	Silencers on vehicles. Vehicles to be maintained and kept in good working condition.	Low 25
	Degradation of air quality	-Air quality -Fauna	Pre-Construction	Medium (48)	Water spraying Seize work during extremely windy Conditions Installation of fallout dust buckets and quarterly monitoring.	Low 25

MINING						
Rock cutting	Soil erosion	-Geology -Fauna -Flora	Operational	High (95)	Optimise mineral extraction through effective mine planning, which results in the reduction of geological waste and the minimisation of the footprint of the mining area	Medium (48)
Rock cutting	Destruction of ecosystem functioning	-Fauna -Flora	Operational	High (95)	Mine planning in line with surrounding character of the area	Medium (50)
Rock cutting	Soil erosion	-Fauna -Flora -Geology	Operational	High (95)	Topsoil should be removed to its full depth and stockpiled to preserve its functionality.	Medium (48)
Rock cutting	Loss of natural vegetation	-Fauna -Flora	Operational	High (95)	Mine area to be designed in a way that impact to the natural vegetation will be minimal	Medium (50)
Rock cutting	Loss of vegetation cover and natural habitat for fauna and flora species	-Sense of place -Fauna -Flora	Operational	High (95)	Implement concurrent rehabilitation plan. Disturbance should be limited to minimum mining footprint. Species of conservation concern must be relocated outside the development area prior to the commencement of the mining activity.	Medium (50)

TRANSPORT AND HAULING						
	Visual impacts	-Air Quality -Sense of place -Fauna and Flora	Operational	High (95)	- subsequent water spraying - use cutting machine water spraying option -Seize work during windy conditions.	Low (40)
	-Noise pollution -Migration of animal species	-Sense of place -Fauna -Flora	Operational	High (95)	Equipment operating on site must be maintained in a workable condition in order to minimise noise emissions.	Low (47)
ABLUSION						
	Groundwater contamination	- Ground water -Fauna -Flora	Operational	Medium (48)	Portable ablution facilities will be provided and maintained. The contents will be discarded on a regular basis, by an appointed sub-contractor.	Very Low (25)

18. SUMMARY OF SPECIALIST REPORTS.

Biodiversity Specialist study, the DEA Digital Screening Tool Report also suggested the required specialists studies. However, the site assessment by the EAP has shown that the area will not require all the specialist studies suggested by the DEA Digital Screening Tool Report.

Table 7: Specialist Reports

LIST OF STUDIES UNDERTAKEN	RECOMMENDATIONS OF SPECIALIST REPORTS	SPECIALIST RECOMMENDATIONS THAT HAVE BEEN INCLUDED IN THE EIA REPORT (Mark with an X where applicable)	REFERENCE TO APPLICABLE SECTION OF REPORT WHERE SPECIALIST RECOMMENDATION INCLUDED.
Groundwater Impact Assessment	According to the WRC report, the dolerite at the Site location is regarded as a major aquifer and groundwater is reportedly found in intergranular and fracturing networks. It is however expected that the dolerite at the Site, earmarked for mining, will have limited fracturing for the purpose of cutting solid blocks from the formation, therefore will have an expected low groundwater potential. Dolerite The Site is also located topographically high (on the boundary of a watershed) therefore recharge to the Site can be expected to be limited. This is evident in the GRA2 and the hydrogeological map series of DWS that the reported groundwater potential has an expected low borehole yield of 0.1 – 0.5 L/s. The groundwater quality is reported as generally moderate with electrical conductivity between 70 – 300 mS/m. Three existing boreholes are reported to be located at the Site and in use for domestic purposes. One borehole is located c. 900 m upgradient from the planned mining site, and the remaining two boreholes are reported to be further than 1 km from the proposed mining site. Nine boreholes were also reported on the NGA, located > 5 km downgradient from the site. It is expected that no impact will be experience at the existing boreholes located > 5 km from the Site. The groundwater levels of these boreholes range from 5 to 39 m in depth with the average being 18 m bgl. The inferred groundwater flow direction on the Site should be from a west direction flowing eastward and will join in the regional groundwater flow direction of the Krom River in an easterly direction. The expected impact on groundwater from the proposed dimension	X	Impact Rating

	stone mining will be VERY LOW, if the mitigation measures are implemented. Monitoring of the groundwater levels and quality at the boreholes located on the Site is recommended and any changes should be addressed.		
Terrestrial Biodiversity, Fauna, and Flora Assessments	The development footprints fall mostly within the Eastern Upper Karoo vegetation type, with a small section of the new access route extending into Upper Karoo Hardeveld vegetation. Both vegetation types are endemic to South Africa and listed as of 'Least Concern' but are currently inadequately protected (Protected Level = Poorly Protected) in South Africa's protected areas network. The DFFE screening tool and the 2017 Western Cape Spatial Biodiversity Plan identified the non-perennial rivers close to the application area and intersecting with the new access route as areas of Very High sensitivity for aquatic biodiversity. These non-perennial rivers provide important habitats for fauna and flora species and act as movement corridors for fauna species. No terrestrial CBA, formally protected areas, IBAs or NPAES focus areas intersect with the proposed development footprints. The vegetation of the development footprints is still largely intact, with low to moderate levels of soil erosion along the existing access road, and with low to moderate levels of densification of indigenous weedy species in lower lying areas along the existing road and adjacent habitat. Only minor habitat fragmentation is caused by the existing road, and natural habitats are thus well connected across the entire landscape. The DFFE screening tool also identified the application area and access route as falling in an area of medium sensitivity for selected plant species, and of medium to high sensitivity for selected animal species. No Red Listed flora was identified, but the presence of two provincial protected species, <i>Boophone disticha</i> and <i>Gethyllis longistyla</i> were confirmed but were present at very low abundance. Individuals of the species may not be removed or destroyed without permit authorisation from the relevant conservation authorities. No declared invasive flora species were present. SCC fauna species confirmed to be present included one species (<i>Orycteropus afer</i>) that is protected under TOPS regulations, and two provincial protected species, <i>Proteles cristata</i> and <i>Homopus femoralis</i>. <i>H. femoralis</i> is also listed on Appendix II of CITES which regulates the international	X	Impact Rating

	commercial trade of the species. Red Listed species listed as potential occurrences included three flora species, and ten fauna species. The precautionary approach is to assume that all species listed as potential occurrences are present until their absence/presence can be verified. The final site SEI indicated that rupicolous habitats in particular is of high ecological importance and highly sensitive. Rupicolous habitat is very well represented in the development footprints and the entire area is therefore regarded as of high ecological importance. Pre-mitigation impact significance ratings for the proposed developments ranged from high to low but very small in scale and can therefore be reduced to acceptable levels through the implementation of the avoidance and minimization measures set out in this report and in the Wetland assessment report (separate report). VECs identified for the cumulative effects assessment included the poorly protected and endemic Eastern Upper Karoo ecosystem and the SCC fauna and flora species that inhabit the ecosystem. Given the small size of the development footprints of the Gasfontein Quarry project, it is unlikely to contribute significantly to the ecosystem and species loss. When combined with future development pressure, significant ratings varied from low for the ecosystem to high for SCC species. These results should however be interpreted with caution as the evaluation was based on insufficient data, and highly likely to be a vast underestimation of risk status. Cumulative effects assessments that are typically addressed through project-based EIAs is limited in scope and unable to effectively address cumulative environmental change within regional environments. A strategic level approach (SEA) to cumulative effects will be more suitable to identify and minimize potential cumulative effects on ecosystems and the SCC fauna and flora that inhabit these ecosystems. Authorities responsible for strategic planning are in a better position to quantify and evaluate the cumulative effects of the gradual environmental degradation over time within the context of the remaining ecosystem extent. Given that the direct destruction of habitats is the primary driver of species declines, it should be at the centre of any efforts to slow or stop the declines. Failure to adequately prioritize and address habitat destruction will invariably result in a failure to protect threatened species and result in large-scale biodiversity declines.		
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		From a terrestrial biodiversity, fauna and flora perspective, no justifiable reason could be found to object against the proposed development, and the development may be considered acceptable provided that the mitigation measures as set out in this report and in the Wetland assessment report are incorporated into the Environmental Management Programme and stipulated as part of the environmental authorisation.		
Wetland Assessment	Impact	The wetland survey was conducted on the 3rd of April 2024 which was during the wet season. The regulated area for the mining area as well as the access roads did not show any wetland indicators. The dominant feature was drainage lines located on shallow rocky soils. the project area is located in a climate that only has 295mm of rain per annum. Coupled with shallow conditions the dominant hydrological flow driver is runoff. This is evident in the drainage lines located within the project area. there are several zones of sediment accumulation in the valley bottom landscape positions, however wetland features were not evident enough to classify wetlands. The drainage lines are however important as they provide habitat for fauna and flora within the region. These drainage lines must be avoided where possible and the impacts are to be limited. As a result of no wetlands being identified, the assessment cannot conduct any functional assessments. Therefore there is no present ecological (PES) and Eco-Services assessments in the subsequent sections. The protection of the drainage lines is important, and a buffer is imposed to minimise and mitigate the impacts. The mining area will not be located with 15m of the drainage lines. And the road must remain at least 10m from the drainage lines where possible. This does not include crossing points. The mining area will potentially have the largest impact on the drainage lines. These impacts include; • Increased runoff leading to erosion; • Erosion carrying sediment into drainage lines and potentially further downstream; • The runoff may carry contaminants into drainage systems; and • Alteration of catchment flows feeding valley bottom units. The access road could potentially lead to impacts on the drainage lines. These impacts include; • Increased runoff leading to erosion; • Erosion carrying sediment into drainage lines and potentially further downstream; and	X	Impact Rating

	Alteration of catchment flows feeding valley bottom units. These impacts must be avoided or mitigated by following the mitigation measures provided. <i>The Specialist therefor concludes that the development will qualify for a General Authorization (GA) in terms of the water use activities based on the fact that there is a no risk to the wetlands.</i>		
Soil & Agricultural Impact Assessment	The potential impacts from the mining operation on the access road include; - Erosion of exposed soil surfaces; - Hydrocarbon contamination by heavy machinery; - Contamination from human waste, both organic and inorganic; - Proliferation of alien vegetation in disturbed areas; and - Increased runoff and altered surface and sub-surface flow dynamics. These aspects are to be managed to minimise any potential impacts; - Erosion control; - Ablution blocks; - Stormwater management; and - Risks from oil/hydrocarbon spills from vehicles should be mitigated. <i>The access road must stick to the existing road structure to reduce any further degradation of the area.</i> The specialist opinion is that the proposed project be considered favourably as the DFFE screening tool value of Low sensitivity was verified to be Low for the project by confirming the project was not within any crop farming boundaries. This was further strengthened by the detailed in-field survey confirming the land potential to have a low land potential that is not conducive to economically viable agricultural practises.	X	Impact rating

Attach copies of Specialist Report as appendices

19. ENVIRONMENTAL IMPACT STATEMENT

19.1. Summary of the key findings of the environmental impact assessment;

ACTIVITIES	PHASE	SIZE AND SCALE	TYPICAL MITIGATION MEASURES
SITE ESTABLISHMENT & ACCESS ROAD CONSTRUCTION			
Access & haul road construction	Pre-Construction	80m long x 4m width	Existing road tracks will be upgraded in contrast to disturbing a virgin land.
Noise	Pre-Construction	N/A	Maintaining machinery and vehicles in a good operating condition.
Dust	Pre-Construction	N/A	• Water spraying • Seize work during extremely windy conditions. • Installation of fallout dust buckets and quarterly monitoring.
MINING			
Removal of stone commodity	Operational	5Ha	• Optimise mineral extraction through effective mine planning, which results in the reduction of geological waste and the minimisation of the footprint of the mining area.
Altered topography	Operational	5Ha	• Mine planning in line with surrounding character of the area.
Disturbance of Topsoil	Operational	5Ha will be disturbed during operational phase.	• Topsoil should be removed to its full depth and stockpiled to preserve its functionality.
Impacts on fauna	Operational	0Ha	• No hunting or collecting should be allowed. Game will be restricted from entering mine area by means of a well-maintained fence.
Loss of Natural Vegetation & Disturbance of faunal habitat	Operational	5Ha	• Implement concurrent Rehabilitation • Apply a buffer zone of 50m around wetlands.

ACTIVITIES	PHASE	SIZE AND SCALE	TYPICAL MITIGATION MEASURES
			• There will be no loss of Natural Vegetation because the area is dominated by grass and alien vegetation • Removal of exotic vegetation. • Disturbance should be limited to minimum mining footprint.
Surface water / wetlands Non-perennial water courses	Operational	0Ha	• Wetlands are considered no-go area and a 50m buffer should be maintained. Water use license will be acquired from the DWS for mining 500m within a wetland area
Heritage	Operational	0 ha	• No Cultural - or Heritage Features have been identified. • If any, known heritage resources would be demarcated and a 50m buffer zone around the areas implemented. However, this site is further away from a watercourse
Noise	Operational	N/A	• Mining machinery to be maintained and kept in good working condition.
TRANSPORT & HAULING			
Dust	Operational	N/A	• Water spraying • Seize work during windy conditions.
NOISE			
Due to the remote location of the mine, it is not expected to impact on anyone.	Operational	N/A	• Mining machinery to be maintained and kept in good working condition.
Carbon dioxide emissions	Operational	On average two trucks per day	• Proper maintenance of all mining machinery

ACTIVITIES	PHASE	SIZE AND SCALE	TYPICAL MITIGATION MEASURES
Oil spillages / leakages	Operational	N/A	• Maintenance of vehicles • Good housekeeping • Suitable emergency spill kit will be available at all times to soak up spills. • Placement of plastic tarpaulins under breakdown vehicles.
Concurrent Rehabilitation of Mined out areas	None	5Ha	• Phased mining approach will be adopted.
Ablution	Operational	10 m ²	• Portable ablution facilities will be provided and maintained. • The contents will be discarded on a regular basis by the appointed sub-contractor.
Fuel storage	Operational	0 m ²	• Good housekeeping. Fuel will be brought on site using a mobile fuel tank trailer. Suitable emergency spill kit will be available at all times to remedy spills during refuelling.
General Waste generation	Operational	9 m ²	• Good housekeeping • All general waste will be disposed at a licenced landfill site.
Hazardous Waste generation	Operational	10 m ²	• Good housekeeping • Disposal at a registered hazardous waste disposal site • All hazardous waste will be kept in rodent proof robust containers with attached lids.
Vehicle maintenance	Operational	0 m ²	• Vehicles will be serviced and maintained off-site. • Only daily pre-use checks and lubrication would be performed.

19.2. Final Site Map

Please see attached Reg 2.2. Plan APPENDIX B

20. SUMMARY OF THE POSITIVE AND NEGATIVE IMPACTS AND RISKS OF THE PROPOSED ACTIVITY AND IDENTIFIED ALTERNATIVES;

The proposed area was chosen because of its sufficient minerals that can be mined for at least 5 years, and its contribution towards improving the local economic growth as permanent employment may occur from the proposed mining operation. The environmental and social impacts that will come with the proposed quarry mining will be monitored or managed through an Environmental Management Plan.

Table 9: Positive Impacts

Socio-Economy	
Activity	Impact
Increase in employment / financial status of the local communities.	Permanent employment of approximately 5 people may occur, increasing their financial status and social upliftment in the process.
Benefits to the local economy	The mine will support local livestock farming in nearby plots through feed lots support.

Table 10: Negative Impacts

GEOLOGY	
Extraction of mineral(s)	All the material within the permitted mine area will be removed during mining.
Change in topography	As the topography is undulating, the mining process will alter the topography of the land.
Loss of soil fertility	Soils in this area range are mostly loamy soils.
Increase in soil erosion	Soils of this area are considered to be in poor condition.
LAND CAPACITY	
Reduction in the agricultural potential of the area.	The fertile topsoil will be stockpiled and be returned for rehabilitation purposes.
FAUNA AND FLORA SPECIES	
Loss of Red Data, protected or sensitive flora species	No Red Data Book species occurs on the mining site.
Removal of alien species	There are alien species identified on site and further disturbance of the area would create opportunities for more infestation by alien plant species (as these are generally pioneer species).

Loss of habitat	Habitat loss will occur within the mine area. .
Loss of Red Data, protected or sensitive flora species	No Red Data Book species occurs on the mining site.
SURFACE WATER RESOURCES	
Contamination of surface water through spillage of diesel or hydrocarbon chemicals.	This impact is unlikely to occur at a close proximity to the mining area as the mining area is outside the extent of the watercourse.
Contamination of surface water through waste / grey water	The mining operation does not use water in its process and no wastewater will be produced.
Contamination of surface water as a result of inappropriate management of waste	Inappropriate management of waste on site has the potential to impact on surface water resources.
Dewatering / Decanting of the aquifer	The mining operation is not expected to have any significant impacts on the aquifers as the anticipated maximum mine depth will not be more than 10m.
Potential increase in recharge to the lower aquifer due to excavations	As a result of the mining activities, topsoil and minerals will be removed. This will however, not lead to a significant increase in recharge to the aquifer from direct rainfall into the area.
GROUND WATER RESOURCES	
Potential contamination of groundwater from poor quality leachate	The mining process does not utilise water and no leachate are expected to occur. Additionally, no blasting activities will take place. Stone dimension mining requires solid intact rock formation.
AIR QUALITY - DUST	
Increase in dust emissions	An increase in dust emission is likely to result from mining activities and from increased vehicular traffic.
Increase in gaseous emissions	Increased gaseous emissions may result at a local level from vehicles operating at the site and from those moving to and from the site.
NOISE	
Increase in ambient noise levels in the surrounding areas	Noise is expected to be generated during mining operation activities such as loading & hauling.

21. PROPOSED IMPACT MANAGEMENT OBJECTIVES AND THE IMPACT MANAGEMENT OUTCOMES FOR INCLUSION IN THE EMPR;

Table 11: Impacts Management

DESCRIPTION OF IMPACT	MITIGATION / MANAGEMENT MEASURES
Geology:	
Extraction of mineral(s)	• Mining operation to be limited within approved mine area. • Conduct mining concurrently with rehabilitation process.
Topography:	
Change in topography	• During mining, work will be carried out in a way that slopes are not dangerously steep. • The general character of the area will be consistent with the surrounding area. No high or dangerously steep slopes will be created.
Loss of soil fertility	• The mining operation will not influence the potential of the current land use as the topsoil will be stockpiled for rehabilitation purposes and it will not be tempered with.
Increase in soil erosion	• Steep slopes must be battered and stabilised. • Wind erosion must be monitored. • Road surfaces must be stabilised and maintained during the mining operations. • All vehicles must remain within the designated roads to prevent soil erosion.
Flora:	
Loss of indigenous vegetation cover	• Topsoil must be kept safe to be used for rehabilitation to re-establish indigenous vegetation
Removal of alien species	• The mining area must be monitored for the occurrence of alien plant species on regular basis and such alien species must be appropriately removed. • Rehabilitated areas must be monitored on a continuous basis for the occurrence of alien plant species until 90% of the natural vegetation cover is established in the affected riparian zones.
Fauna:	
Loss of habitat	• Implement concurrent rehabilitation. • Apply a buffer zone of 120m around wetlands. • Removal of exotic vegetation. • Disturbance should be limited to minimum mining footprint. • Indigenous plant species must be planted during rehabilitation to attract indigenous fauna back to the area.

Loss of Red Data, protected - or sensitive fauna species	- No faunal species are allowed to be collected, hunted or killed on the site. - Illegal poaching and hunting must be addressed through an Environmental Awareness Plan
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Surface water resources:

Contamination of surface water through spillage of diesel or hydrocarbon chemicals.	- Wetlands are considered no-go area and a 50m buffer should be maintained. - No disposal of wastewater will be allowed in the nearby streams - Diesel / hydrocarbons stored onsite must be managed. - No significant impacts on the water courses are expected to occur as the mining area falls outside the extent of the watercourse. - Drip trays must be used during refuelling of machineries on site.
Contamination of surface water through waste / grey water	- Wetlands are considered no-go area and a 50m buffer should be maintained. - The mining operation does not utilise water in its process, therefore no wastewater would be generated on site.
Contamination of surface water as a result of inappropriate management of waste	- Waste must be stored, transported and disposed at a registered waste disposal site. - Waste handling/ storage areas must be restricted to a designated waste handling area. - Waste bins must be securely closed with the lids to avoid waste overflows.

Groundwater resources:

Dewatering / Decanting of the aquifer	The mining operation is not expected to have any significant impacts on the aquifers.
Potential increase in recharge to the lower aquifer due to excavations	The mining operation is not expected to have any significant impacts on the aquifers.
Potential contamination of groundwater from poor quality leachate	The mining operation is not expected to have any significant impacts on the aquifers.
Hydrocarbon contamination during mining operations	Appropriate spill response kits and plans must be in place to react appropriately and timeously in the case of an accidental spill. Wall/floor on the area around Diesel tank/pump must be bounded.

Air Quality:

Increase in dust emissions	- Dust from gravel roads can be reduced through the use of appropriate dust suppression measures, such as wetting of the roads. - Dust fallout must be monitored by an independent consultant, in compliance with the Mine Health and Safety Act. - Work must cease during extreme windy conditions when excessive dust is liberated
Increase in gaseous emissions	Vehicles must be maintained in a road worthy condition so as to limit the emissions to air.

Noise:

Increase in ambient noise levels in the surrounding areas	- Mining to take place during weekdays only, from 07:00am to 05:00pm, and Saturday only from 07:00 to 13:00 - Equipment operating on site must be maintained in a workable condition in order to minimise noise emissions.
Visual impacts	- Unnecessary lighting must be avoided - Machineries on site must be neatly placed - High standard of housekeeping onsite is to be practice.

Archaeological and cultural sites:

Loss of sites of archaeological, cultural or historical importance.	Mining must continually monitor the mine workings for any encountering of archaeological artefacts
Post mitigation	Removal of artefacts with significant conservation prior to mining

Socio-economic:

Safety and security for local inhabitants	- Rehabilitation must ensure that no dangerous excavations are left in an unsafe condition. - Entry and exist to the mining area must be controlled. - No fires will be allowed on the mine area. - The required heavy vehicle signs must be erected at the access to the mining area as per the Road Traffic Act in order to ensure road safety.
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22. ASPECTS FOR INCLUSION AS CONDITIONS OF AUTHORISATION

The Applicant must comply with all environmental legislation. Specific aspects to be adhered to environmental legislation such as the National Environmental Management Act , Act 107 of 1998 (NEMA) ; Minerals and Petroleum Resources Development Act, Act 28 of 2002 (MPRDA) ; National Water Act, 36 of 1998 (NWA), Conservation of Agricultural Resources Act , Act No. 43 of 1983 (CARA) and Mine Health and Safety Act, 1996 (Act 26 of 1996).

23. DESCRIPTION OF ANY ASSUMPTIONS, UNCERTAINTIES AND GAPS IN KNOWLEDGE

No assumptions, uncertainties and gaps occur in the knowledge. All mitigation measures that have been recommended are possible and practical.

24. REASONED OPINION AS TO WHETHER THE PROPOSED ACTIVITY SHOULD OR SHOULD NOT BE AUTHORISED

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

The proposed mining operation will play a significant role in the upliftment of the construction sector in the surrounding areas. It will directly create employment opportunities, during its operational phase and improve the living conditions of unemployed residents in the areas.

ii) Conditions that must be included in the authorisation

- Mining to take place during weekdays only, from 07:00am to 05:00pm and Saturday only from 07:00 to 13:00
- A 120m buffer zone must be observed
- Mine area must be properly fenced to restrict unauthorized access.
- Vegetation clearance must be limited to mine area only.
- Search and rescue are to be undertaken before commencement of mining or surface disturbance.

25. PERIOD FOR WHICH THE ENVIRONMENTAL AUTHORISATION IS REQUIRED

5 YEARS

26. UNDERTAKING

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 herein.

27. FINANCIAL PROVISION

An amount of **R 218 724,12** has been proposed for the rehabilitation of the mined area within the first two years of mining operation. This amount was derived from the quantum calculation for financial provision. During the first application for renewal of the mining permit, a quantum calculation for the paid financial provision as stipulated above will be conducted to determine applicable amount for upgrade of the existing financial provision. An Environmental Audit will play a pivotal role in achieving the above and monitoring of rehabilitation conducted onsite. The applicant commits to comply with the above proposal.

CALCULATION OF THE QUANTUM							
Applicant: Gondwana Mining & Exploration (Pty)Ltd Evaluator: Lwethuma EnvironmentalConsultant				Ref No.: WC30/5/1/3/2/10337MP Date: 30 April 2024			
No.	Description	Unit	A Quantity	B Master Rate	C Multiplication factor	D Weighting factor 1	E=A*B*C*D Amount (Rands)
1	Dismantling of processing plant and related structures (including overland conveyors and powerlines)	m3	0	19,14	1	1	-
2 (A)	Demolition of steel buildings and structures	m2	0	266,67	1	1	-
2(B)	Demolition of reinforced concrete buildings and structures	m2	0	392,98	1	1	-
3	Rehabilitation of access roads	m2	0	47,72	1	1	-
4 (A)	Demolition and rehabilitation of electrified railway lines	m	0	463,16	1	1	-
4 (A)	Demolition and rehabilitation of non-electrified railway lines	m	0	252,63	1	1	-
5	Demolition of housing and/or administration facilities	m2	0	533,33	1	1	-
6	Opencast rehabilitation including final voids and ramps	ha	0,2	271 438,81	1	1	54 287,76
7	Sealing of shafts adits and inclines	m3	0	143,16	1	1	-
8 (A)	Rehabilitation of overburden and spoils	ha	0,2	186 386,11	0,52	1	19 384,16
8 (B)	Rehabilitation of processing waste deposits and evaporation ponds (non-polluting potential)	ha	0	232 140,53	1	1	-
8 (C)	Rehabilitation of processing waste deposits and evaporation ponds (polluting potential)	ha	0	674 246,13	1	1	-
9	Rehabilitation of subsided areas	ha	0	156 070,30	1	1	-
10	General surface rehabilitation	ha	0,3	147 649,24	1	1	44 294,77
11	River diversions	ha	0	147 649,24	1	1	-
12	Fencing	m	0	168,42	1	1	-
13	Water management	ha	0	56 140,39	1	1	-
14	2 to 3 years of maintenance and aftercare	ha	2	19 649,14	1	1	39 298,28
15 (A)	Specialist study	Sum	0			1	-
15 (B)	Specialist study	Sum				1	-
Sub Total 1							157 264,97
1	Preliminary and General		18871,79633		weighting factor 2		18 871,80
					1		
2	Contingencies			15726,49694			15 726,50
Subtotal 2							191 863,26
VAT (15%)							26 860,86
Grand Total							218 724,12

i) Explain how the aforesaid amount was derived.

The aforesaid amount was derived according to the guideline Revision 1.5 issued by the then Department of Minerals and Energy on the 23rd of April 2004 for the determination of the pecuniary value for the evaluation of the quantum of closure – related financial provision provided by a mine.

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

The EAP hereby confirms that the amount is anticipated to be an operating cost and is provided for as such in the Financial and Technical Competence Report.

28. 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:-

i. Impact on the socio-economic conditions of any directly affected person.

The impact assessment indicated that the proposed mining activity will not have detrimental impact to the environment and the local communities and most impacts are rated low and medium. The proposed mitigation measures are capable to minimise the identified impacts. Current land uses (open communal grazing land) within the project area may be temporarily impacted through the presence of the localised fenced areas and vegetation clearance. However, the area will be returned to its pre-mining state through rehabilitation process upon completion of mining work.

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

The impact assessment indicated that there are no sites of potential heritage or archaeological importance.

29. OTHER MATTERS REQUIRED IN TERMS OF SECTIONS 24(4) (A) AND (B) OF THE ACT.

The requirements of section 24 (4)(a)(b) were adhered to and the Department of Mineral Resources & Energy is the only competent authority to this application and consultation with other organs of state has been undertaken.

“Procedures for the investigation, assessment and communication of the potential consequences or impacts of activities on the environment –

(a) must ensure, with respect to every application for an environmental authorisation—

(i) coordination and cooperation between organs of state in the consideration of assessments where an activity falls under the jurisdiction of more than one organ of state;

(ii) that the findings and recommendations flowing from an investigation, the general objectives of integrated environmental management laid down in this Act and the principles of environmental management set out in section 2 are taken into account in any decision made by an organ of state in relation to any proposed policy, programme, process, plan or project;

- (iii) that a description of the environment likely to be significantly affected by the proposed activity is contained in such application;
 - (iv) investigation of the potential consequences for or impacts on the environment of the activity and assessment of the significance of those potential consequences or impacts; and
 - (v) public information and participation procedures which provide all interested and affected parties, including all organs of state in all spheres of government that may have jurisdiction over any aspect of the activity, with a reasonable opportunity to participate in those information and participation procedures; and
- (b) must include, with respect to every application for an environmental authorisation and where applicable—
- (i) investigation of the potential consequences or impacts of the alternatives to the activity on the environment and assessment of the significance of those potential consequences or impacts, including the option of not implementing the activity;
 - (ii) investigation of mitigation measures to keep adverse consequences or impacts to a minimum;
 - (iii) investigation, assessment and evaluation of the impact of any proposed listed or specified activity on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999), excluding the national estate contemplated in section 3(2)(i)(vi) and (vii) of that Act;
 - (iv) reporting on gaps in knowledge, the adequacy of predictive methods and underlying assumptions, and uncertainties encountered in compiling the required information;
 - (v) Investigation and formulation of arrangements for the monitoring and management of consequences for or impacts on the environment, and the assessment of the effectiveness of such arrangements after their implementation;
 - (vi) consideration of environmental attributes identified in the compilation of information and maps contemplated in subsection (3); and
 - (vii) provision for the adherence to requirements that are prescribed in a specific environmental management Act relevant to the listed or specified activity in question.”

PART B
ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

30. ENVIRONMENTAL MANAGEMENT PROGRAMME

30.1. Details of the EAP,

Company name: Lwethuma Environmental Consultants

Name of the Practitioner: McDonald Mdhluli

Tel No.: 079 242 1312/ 060 371 6877

Fax No.: (086) 668 3192

E-mail address: info@lwethuma.com / madalamdluli@gmail.com

30.2. Description of the Aspects of the Activity

Description of the Aspects of the activity already included in PART A, Section 1

30.3. Composite Map

See Appendix B: Regulation 2 (2) Plan

30.4. Description of the Aspects of the Activity

Description of the Aspects of the activity already included in PART A, Section 1

30.5. Composite Map

See Appendix B: Regulation 2 (2) Plan

31. DESCRIPTION OF IMPACT MANAGEMENT OBJECTIVES INCLUDING MANAGEMENT STATEMENTS

i) Determination of closure objectives.

The closure objective for the mine is to rehabilitate the mined area to restore all the ecosystem services and return it to its pre-mining land use of livestock grazing.

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

The proposed mining operation will not require water during operation phase.

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

The proposed site does not trigger the NWA requirements, as it is not situated close to a watercourse. Therefore, a water use licence application is not required.

iv) Impacts to be mitigated in their respective phases

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

ACTIVITIES (E.g. For prospecting- drill site, site camp, ablution facility, storage, sample storage, site office, access route etc....E.g. For mining- excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc...etc...etc.).	PHASE (of operation in which activity will take place. State; Planning and design, Pre-Construction, Construction, Operational, Rehabilitation, Closure, Post Closure).	SIZE AND SCALE of disturbance (volumes, tonnages and hectares or m ²)	MITIGATION MEASURES describe how each of the recommendations in herein will remedy the cause of pollution or degradation and mitigation 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 when required. With regard to rehabilitation specifically this must take place at the earliest opportunities. 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.
Rock cutting (Mining)	Mining	5ha	Implementation of proper housekeeping, management and monitoring	Impact on the surrounding environment mitigated through proper management and compliance with MPRDA and NEMA regulations	Throughout mining phase
Rock cutting (Mining)	Mining	5ha	Optimise mineral extraction through effective mine planning by constructing benches and slopes. Mining activity to be conducted concurrently with rehabilitation process.	Mine Plan	Throughout mining phase
Vegetation clearance	Pre-Operation	5ha	Search and rescue to be conducted prior to removal of riparian vegetation. Vegetation clearance to be limited within demarcated mine area as per the approved mine plan.	Approved mine plan to be adhered to at all times.	Throughout mining phase

Stockpiling	Operation	50m ²	Storage of processed mined material to be at an acceptable height. Not more than 3m high	Comply with EA conditions	Throughout mining phase
Fuel Storage	Operational	0 m ²	Good housekeeping. Suitable emergency spill kit will be available at all times to remedy spills during refuelling. Fuel will be brought in on a tank mounted on trailer.	Comply with EA conditions	Throughout mining phase
Vehicle Maintenance	Operational	0 m ²	Vehicles will be serviced and maintained off-site. Daily pre-use checks and lubrication would be performed.	Vehicle maintenance	Throughout mining phase
General Waste management	Operational	9 m ²	Good housekeeping All general waste will be kept in rodent proof robust containers with attached lids. Disposal at a registered waste disposal site. No waste will be buried or burned on site.	National Environmental Management: Waste Act, 59 of 2008. No listed activities in terms of the National Environmental Management: Waste Act, 59 of 2008 are triggered.	Throughout mining phase
Hazardous waste generation	Operational	10 m ²	Good housekeeping All hazardous waste will be kept in rodent proof robust containers with attached lids.	Minimum Requirements for the Handling and Disposal of Hazardous Waste, 2nd Edition, 1998	Operation

			Disposal at a registered hazardous waste disposal site.		
Decommissioning and closure	Closure	5ha	Compliance with the MPRDA and NEMA mine closure requirements, submission of closure plan	MPRDA, 2002; NEMA, 1998	Closure

32. IMPACT MANAGEMENT ACTIONS

ACTIVITIES	POTENTIAL IMPACT	ASPECTS AFFECTED	SE	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 anticipate (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. • 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.
SITE ESTABLISHMENT & ACCESS ROAD CONSTRUCTION					
Access & haul road construction	Land degradation	-Air Quality -Fauna -Flora -Sense of place	Pre-Construction	Planning and design of access & haul roads to limit or prevent the destruction of vegetation and natural habitats.	Existing earth tracks to be prioritised for access road development, in contrast to developing access round on virgin land.
	Noise pollution	-Fauna -Sense of place	Pre-Construction	Silencers on vehicles to be maintained and kept in good working condition.	National Environmental Management : Air Quality Act, 39 of 2004 - Section 34: Control of Noise

	Disturbance of air quality	-Air Quality -Fauna -Flora -Sense of place	Pre-Construction	Dust suppression Seize work during extremely windy conditions Installation of fallout dust buckets and quarterly monitoring.	National Environmental Management: Air Quality Act, 39 of 2004-Section 32: Control of Dust Government Notice 827 - National Dust Control Regulations
MINING					
	Soil erosion	-Fauna -Flora -Geology	Operational	Optimise mineral extraction through effective mine planning which results in the reduction of geological waste and the minimisation of the footprint of the mining area	Mine Plan
	Destruction of ecosystem functioning	-Fauna -Flora	Operational	Mine planning in line with surrounding character of the area	Mine Plan
	Soil erosion	-Fauna -Flora -Sense of place	Operational	Topsoil must be removed to its full depth and stockpiled to preserve its functionality. Adopt phased mining approach to reduce vegetation clearance.	Topsoil Management Plan
	Loss of biodiversity	Fauna and Flora	Operational	Search and rescue to be conducted prior to removal of vegetation. Vegetation clearance to be limited within demarcated mine area as per the approved mine plan	Rehabilitation Plan

	Loss of vegetation cover and natural habitat for fauna and flora species	-Fauna -Flora	Operational	Search and rescue to be conducted prior to removal of vegetation. Implement concurrent rehabilitation Disturbance should be limited to minimum mining footprint	Rehabilitation Plan Mine Plan
	Infestation by alien invasive plant species	-Fauna and Flora	Operational	Clearing activities should be kept within the mining area and care should be taken to avoid the introduction of alien plant species to the site and surrounding areas. The mining area will be monitored for the occurrence of Invasive alien species and such species will be continually removed from site.	Rehabilitation Plan Mine Plan
TRANSPORT AND HAULING					
	Visual impacts	-Fauna -Flora -Sense of place	Operational	Water spraying to suppress dust Seize work during windy conditions Undertake mining activity during week days only, from 07:00am to 05:00pm.	National Environmental Management: Air Quality Act, 39 of 2004 - Section 32: Control of Dust Government Notice 827 - National Dust Control Regulations
	Noise pollution Migration of animal species	-Fauna -Flora -Sense of place	Operational	Silencers on vehicles to be maintained and kept in good working condition. Undertake mining activity during week days only, from 07:00am to 05:00pm.	National Environmental Management: Air Quality Act, 39 of 2004 - Section 34: Control of Noise

	Air pollution	-Air Quality -Fauna -Flora -Sense of place	Operational	Proper maintenance of all vehicles	National Environmental Management: Air Quality Act, 39 of 2004
	Loss of Biodiversity	Fauna and Flora	Operational	Maintenance of vehicles Good housekeeping Suitable emergency spill kit will be available at all times to soak up spills. Placement of plastic tarpaulins under breakdown vehicles	Rehabilitation Plan
ABLUTION					
	groundwater contamination	-Ground water -Fauna -Flora	Operational	Portable ablution facilities will be provided and maintained A local service provider will be appointed to collect the content for disposal at a licensed site.	Mineral and Petroleum Resource Development Act, 28 of 2002 National Water Act, 36 of 1998

33. FINANCIAL PROVISION

33.1. Determination of the amount of Financial Provision

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

The environment affected by the mining operations shall be rehabilitated by the applicant, **Bomlingo Projects (Pty) Ltd** on an ongoing basis, as far as it is practicable to its predetermined and agreed end use. An amount of **R 218 724,12** has been proposed for the rehabilitation of the mined area within the first two years of mining operation. This amount was derived from the quantum calculation for financial provision. During the first application for renewal of the mining permit, a quantum calculation for the paid financial provision as stipulated above will be conducted to determine applicable amount for upgrade of the existing financial provision. An Environmental Audit will play a pivotal role in achieving the above and monitoring of rehabilitation conducted onsite. The applicant commits to comply with the above proposal.

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

The environmental objectives in relation to closure have been discussed with all Interested & Affected Parties and neighbouring landowners.

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

The requested rehabilitation plan is explained below, upon closure of the mine all machinery and equipment will be removed to ensure safety and no permanent structures will remain on site upon closure of the mining activity. The area will be rehabilitated according to the requirements of the Environmental Management Programme that would apply throughout the life of the mine. Stockpiled soil will be used for rehabilitation purposes.

- ❖ The main closure objective will be to return the impacted environment to its pre-mining state by reintroducing the vegetation endemic to the site.
- ❖ Waste materials such as receptacles, scrap, rubble and tyres will not be permitted to be buried or burned on site. It will be removed entirely from the mining area and disposed of at a registered landfill site.
- ❖ The extent of disturbed areas requiring remedial measures of maintenance in the post mining scenario will be limited
- ❖ The mine will continue with required aspects of environmental monitoring until closure.
- ❖ Measures to control erosion of soil will be installed and maintained during the decommissioning phase and up to closure. Requirement will be determined at cessation of mining.
- ❖ On closure, the mine will strive to find an acceptable use for the remaining infrastructure, should there be a need.

- ❖ Vegetation will be monitored and maintained until such a time as a suitable cover has been achieved and a closure certificate can be issued.
- ❖ Vegetation will be monitored and maintained until closure conditions have been met.
- ❖ Alien plants/weeds growing on site must be manually removed on site
- ❖ All roads that will not be used by the local people post mining activities must be closed and vegetated. This practice will be reviewed after two years should closure not have been obtained.
- ❖ The closed site must not pose any safety issues
- ❖ Final rehabilitation must be completed within a specified period by the Regional Manager
- ❖ Closure must comply with the MPRDA (Act 28 of 2002), NEMA (Act 107 of 1998) and NEMA Regulations (2014) for requirements of mine closure
- ❖ Closure plan must be compiled using the guidelines described in Appendix 5 of the NEMA Regulations (2014) and submitted to DMRE within the stipulated timeframes
- ❖ A closure certificate must be obtained from the Minister of the DMRE.

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

The decommissioning phase will entail the rehabilitation of the mining site. Upon cessation of the mining activities, the area will be fully rehabilitated. The rehabilitation of the mining area will comply with the minimum closure objectives as prescribed by the DMRE. The maintenance program will continue for two years after cessation of the mining activities or until a closure certificate is issued.

33.1.5. Mechanisms for monitoring compliance with and performance assessment against the environmental management programme and reporting thereon:

33.1.6. Monitoring of Impact Management Actions

i. Noise monitoring

Ambient noise levels would be measured by an independent consultant before the mining operations commence to establish the base level conditions prior to the mining venture.

ii. Air quality monitoring (Dust fall-out)

Fallout dust buckets will be installed in the 4 directions away from the mine area, but within a 2km radius, and not closer than 150m from the mining area as soon as this mining authorisation is granted.

iii. Water quality monitoring

Water monitoring will be implemented on any water body that the mine may impact on. The parameters to be monitored will be selected, based on the elements within the operation and / or DWS requirements.

iv. EA & EMP Performance Assessments

The EA & EMP would be assessed on an annual basis for compliance from the date of issuing of the mining permit. The EA & EMP performance assessment will include assessment of the

scheduled monitoring results. A performance assessment to the EMP will be conducted annually by a suitably qualified independent professional. This performance assessment will be available to the DMR and other regulatory authorities for their inspection as required.

33.1.7. Monitoring and reporting frequency

The following impacts would require monitoring on a scheduled basis:

- i. Noise monitoring
The appointed **Environmental Control Officer** will monitor noise levels in the mine on a quarterly basis and / or when complaints have been received. The results will be reported to the Mine Manager for management action.
- ii. Air quality monitoring (Dust fall-out)
An independent contractor will monitor dust fall-out at the mine on a quarterly basis and / or when complaints have been received. The results will be reported to the Mine Manager for management action.
- iii. Visual Intrusion of Mining Activities
Site manager to ensure compliance with the guidelines as stipulated in the EMPr throughout the operational phase of the mine. Annual audits will be undertaken by an independent person with the relevant environmental expertise.
- iv. Spillages of any hazardous substances such as fuel and chemicals
Site manager to ensure compliance with the guidelines as stipulated in the EMPr throughout the operational phase of the mine. Annual audits will be undertaken by an independent person with the relevant environmental expertise.
- v. Inadequate Storm water and erosion
Site manager to ensure compliance with the guidelines as stipulated in the EMPr throughout the operational phase of the mine. Annual audits will be undertaken by an independent person with the relevant environmental expertise.

33.1.8. Responsible persons

- i. Noise monitoring
The appointed Environmental Control Officer will monitor noise levels in the mine on a quarterly basis and / or when complaints have been received. The results will be reported to the Mine Manager for management action.
- ii. Air quality monitoring (Dust fall-out)
Appointed Environmental Control Officer will monitor dust fall-out at the mine on a quarterly basis and / or when complaints have been received. The results will be reported to the Site Manager for management action.

iii. Visual Intrusion of Mining Activities

Site manager to ensure compliance with the guidelines as stipulated in the EMPr throughout the operational phase of the mine. Annual audits will be undertaken by an independent person with the relevant environmental expertise.

iv. Spillages of any hazardous substances such as fuel and chemicals

Site manager to ensure compliance with the guidelines as stipulated in the EMPr throughout the operational phase of the mine. Annual audits will be undertaken by an independent person with the relevant environmental expertise.

v. Inadequate Storm water and erosion

Site manager to ensure compliance with the guidelines as stipulated in the EMPr throughout the operational phase of the mine. Annual audits will be undertaken by an independent person with the relevant environmental expertise.

33.1.9. Time period for implementing impact management actions

All impact management actions, and monitoring will continue to be implemented throughout the operational phase and annual audit will be undertaken by an Independent person with an Environmental expertise.

33.1.10. Mechanism for monitoring compliance

i. Noise monitoring

The Appointed Occupational Hygienist will measure the noise levels and such readings are then compared to charts indicating acceptable levels of noise.

ii. Air quality monitoring (Dust fall-out)

The dust buckets measure fall-out dust by placed on a pedestal 2m above the ground. The locations of the dust buckets are discretely selected to measure impacts most probably caused by the dust created by the mining activities not closer than 150m from and not further than 4 km from the mine workings. The dust buckets are located to measure impacts of all 4 wind directions.

iii. Water quality monitoring

Water monitoring will be implemented on any water body that the mine may impact on. The parameters to be monitored will be selected, based on the elements within the operation, and DWS requirements.

33.2. EA & EMP Performance Assessments

The EA & EMPr would be assessed on an annual basis for compliance from the date of issuing of the mining permit. The EA & EMPr will be measured against the latest changes in any new legislation that could affect it. The Mitigating measures would be evaluated to establish if they still address the impacts and compared with latest technology of world best practices. The actual mine workings and mining practices will be

evaluated to determine if it does comply with the EA & EMPr. Any shortcomings or non-compliances would be highlighted as an action plan to be rectified.

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
Mining operation	Noise Monitoring	Mandatory Occupational Hygiene Noise Level monitoring	The Owner and the Mine Manager must comply with NEMA and MPRDA and MHSA	Quarterly
	Air Quality Monitoring	Fall-out Dust Buckets installed at strategic locations	The dust fall-out results would be analysed at an accredited laboratory against SANS 1929: 2005	Quarterly
	Water Quality Monitoring	Clean / Sterile water bottles for samples	The Owner and the Mine Manager must comply with NEMA and NWA	Quarterly where applicable
	EA & EMP Performance Assessments	Evaluation of suitability of EMPr and EA to latest changes in legislation. Evaluation of mitigating measures to latest technology and world's best practices. Evaluation of mine workings and mining activities to the EA & EMPr.	The ECO conducts the assessment and report to the Mine Manager and Mine Owner for action	Annually

i. **Indicate frequency of the submission of performance assessment/environmental audit**

An independent competent person with relevant environmental expertise will conduct the environmental audit and the report thereof, will be submitted to the DMR on an annual basis.

ii. **Environmental Awareness Plan**

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

The applicant, **Bomlingo Projects (Pty) Ltd** undertakes to make every person entering the mine aware of the potential environmental impacts associated with their roles and how they can be mitigated through the implementation of the correct management procedures. This training should reduce the potential of occurrence of environmental negative incidents.

Responsibility: The Mine Manager is responsible for ensuring that the environmental awareness training is implemented to all employees and sub-contractors on the site. Environmental awareness training needs should be identified before the project commences, based on the available and existing capacity of site and project personnel (including the applicant and Contractors) to undertake the required EMP management actions and monitoring activities. It is vital that all personnel are adequately trained to perform their designated tasks to an acceptable standard. In addition to these parties, general environmental awareness must be fostered among the general workforce to encourage the implementation of environmentally sound practices. This ensures that environmental accidents are minimized and environmental compliance maximized. Environmental awareness could be fostered by induction course for all workers on site, before commencing work on site, as well as during regular “toolbox talks”. Workers should also be alerted to particular environmental concerns associated with their tasks for the area/habitat in which they are working. Courses must be given by suitably qualified personnel and in a language and medium understood by workers/employees.

❖ **Manner in which risks will be dealt with in order to avoid pollution or the degradation of the environment.**

Employees will undertake an environmental awareness training programme which will focus on the following specific aspects and be undertaken monthly in “Tool box talk” topics in order to deal with the risks :

- ✓ Protected – and exotic vegetation
- ✓ Fauna: All employees will be informed that poaching is illegal and taught to recognise snares, which are to be removed if and when found.

- ✓ Hazardous chemicals: All employees will be trained on the handling, use and disposal of the chemicals / hazardous substances used, and also the actions and reactions in the event of an accident.
- ✓ Soil contamination / pollution and remediation: All employees will be trained how to clean and dispose of accidental spillages.
- ✓ Water contamination / pollution and remediation
- ✓ Dust management;
- ✓ Noise nuisance;

34. SPECIFIC INFORMATION REQUIRED BY THE COMPETENT AUTHORITY

The application undertakes to review and update the financial provision annually indicating work that would have been completed and the money used for rehabilitation for review and approval by the DMR.

35. UNDERTAKING BY EAP

The EAP herewith confirms:

- a) The correctness of the information provided in the reports
- b) The inclusion of comments and inputs from stakeholders and I&APs ;
- c) The inclusion of inputs and recommendations from the specialist reports where relevant and
- d) The acceptability of the project in relation to the finding of the assessment and level of mitigation proposed;



Signature of the Environmental Assessment Practitioner (EAP):

LWETHUMA ENVIRONMENTAL CONSULTANTS

Name of Company:

15 June 2024

Date:

36. UNDERTAKING BY APPLICANT

I, **PATRICK DAVIDSON**, The undersigned and duly authorized, hereby undertake to implement all the aspects contained in the BAR and ~~EIR~~/EIA and EMP and accept full responsibility therefore.

(Delete whichever is not applicable)

SIGNED at BEAUFORT WEST this 15th JANUARY day 2026

SIGNATURE

WITNESSES:

1.

2.

Official use

APPROVAL

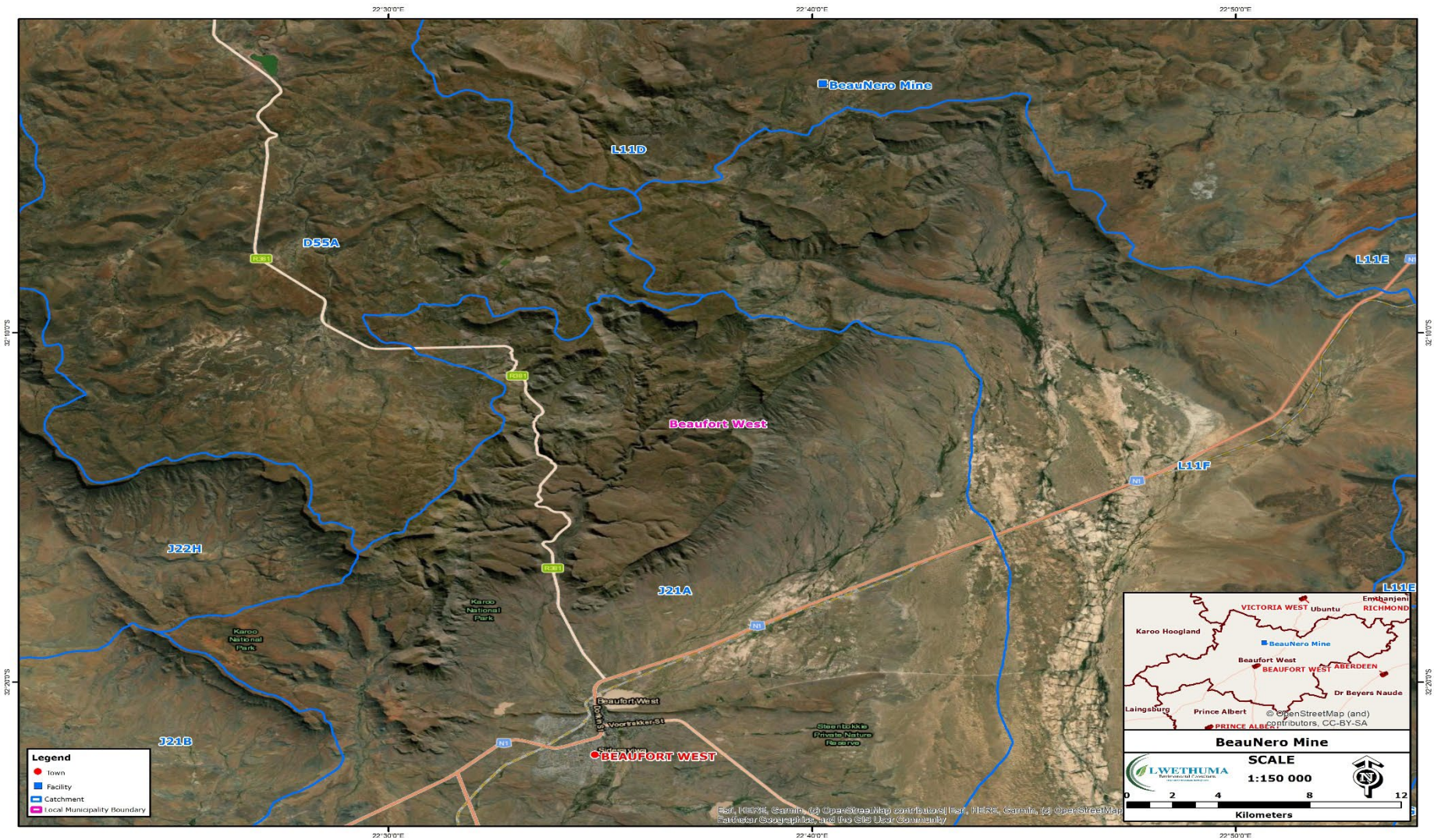
Approved in terms of the *National Environmental Management Act* (NEMA) 1998 (Act 107 of 1998), as amended; and the Amended NEMA *Environmental Impact Assessment* (EIA) 2017 Regulations.

SIGNED at this day 20.....

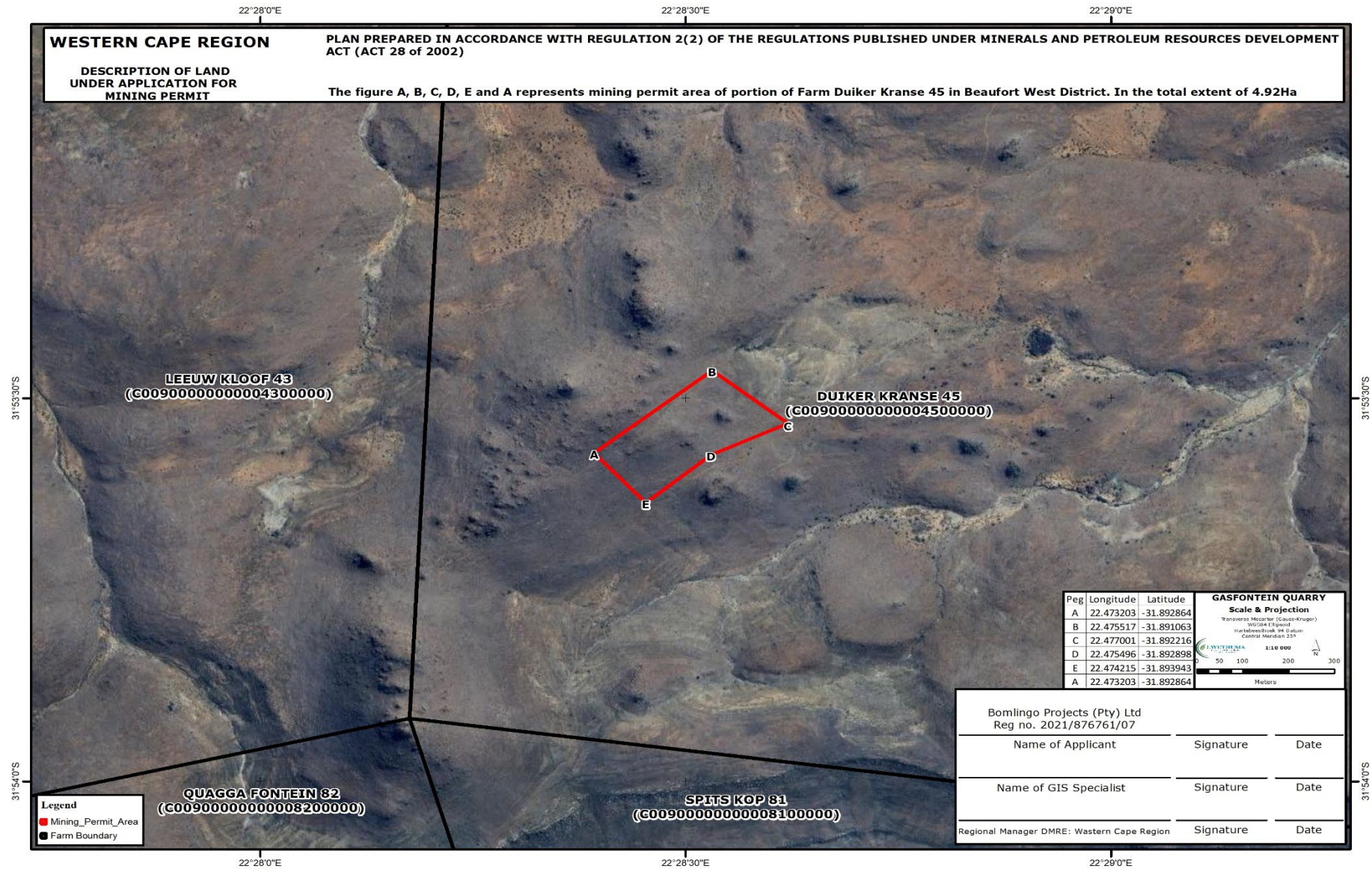
REGIONAL MANAGER

WESTERN CAPE PROVINCE

37. LIST OF APPENDICES**37.1. APPENDIX A: LOCALITY MAP**



37.2. APPENDIX B: REGULATION 2.2 PLAN



37.3. APPENDIX C: RESULT OF CONSULTATION

37.3.1. BACKGROUND INFORMATION DOCUMENT (BID)

BACKGROUND INFORMATION DOCUMENT (BID) FOR THE PROPOSED MINING ON PORTION 4 OF FARM DUIKER KRANSE NO. 45 IN BEAUFORT WEST DISTRICT WITHIN BEAUFORT WEST LOCAL MUNICIPALITY, WESTERN CAPE.

Prepared By Lwethuma Environmental Consultant for Bomlingo Projects (Pty) Ltd.

Ref No: WC 30/5/1/3/2/10375MP

January 2026

PURPOSE OF THIS DOCUMENT

This background information (BID) has been prepared to provide information to potential interested and affected parties (I&APs), with respect to the proposed mining operation activity as described above. It also seeks to meet the consultation requirements of the Mineral and Petroleum Resources Development Act, 28 of 2002 and the EIA Regulation of 07 April 2017, as promulgated in terms of the National Environmental Management Act, 107 of 1998 respectively. This BID will provide information pertaining to the proposed project, identified site/location, information on the legal requirements as well as procedure of I&APs participation thereof.

APPOINTMENT OF ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)

Lwethuma Environmental Consultant has been appointed as independent EAP by Gondwana Mining and Exploration (Pty) Ltd, to undertake the EIA process and application for a Mining permit with the Department of Mineral Resources and Energy (DMRE). The EIA process for this project requires Basic Assessment study. The proposed mining operation will take place within a privately owned farm, that is currently not in use. The area is surrounded by commercial farms that mainly specialises in livestock farming and game farming.

PROJECT SITE DESCRIPTION

Bomlingo projects (Pty) Ltd proposes to mine dimension stone on portion 4 of Duiker Krans

45, division of Beaufort West, under the Beaufort West Local Municipality, in the Western Cape Province. The original characteristics of the project site is that of Gamka Karoo and patches of Southern Karoo Riviere of the Nama-Karoo Biome.

The geology of the project area is dominated by the occurrence of mainly sandstone with intercalated finer-grained silt- and mudstone of Permian (Karoo) age of the Beaufort group (Karoo).

Beaufort West characterised by a local steppe climate. During the year, there is little rainfall in Beaufort West. This location is classified as BSk by Köppen and Geiger. The average temperature in Beaufort West is 17.9 °C.

The identified project site is located on portion 2 of Grasplaats 113, magisterial district of Beaufort West in the Western Cape province.

It is about 79km north of Beaufort West and about 55km Southeast from Loxton (Northern Cape Province). Coming from Beaufort west, it can be accessed through R381 towards Loxton, by turning right into a district dirt road and travel about 9km to the site on the right-hand side from the dirt road.

The project site falls within the Breede-Gouritz Water Management Area (WMA) on quatenanry catchment D55A. It borders Krom River on the Northern side. The project site is not regarded as critical biodiversity area as the species found on site are not listed as critically endangered, vulnerable or protected species as per the RED Data List and National Environmental

Management: Biodiversity Act, 2004 (Act No. 10 of 2004). Given the history of the Western Cape, it is of vital importance to undertake heritage and archaeological impact assessment study, to verify presence of any heritage significance artifacts in the area. The central GPS co-ordinates are:

Longitude: 22.66923⁰

Latitude: -32.04876⁰

PROPOSED PROJECT SCOPE OF WORK

The proposed mining activity entails mining of dolerite hard rock for the stone dimension production within an area extent of 5Ha. Mining methodology will include removal of topsoil to be used during rehabilitation stage, cutting of the rock into large blocks or slabs of the required size by a circular diamond edged block saw (working on the same principle as the wire saw in quarries), or single or multibladed frame or gangsaws using either abrasive grit or diamond tipped blades. The type of saw used depends on the speed and type of finish required. Once the hard rock is cut into slabs or blocks, it is then cut into smaller slabs and/or trimmed to shape. Modern trimming machines automatically measure and cut the slabs to size with great precision. The proposed project area does already have an access road that will be used during the mining operation and may be maintained during throughout the life of the mine.

The proposed mining operation triggers GNR 327 Listing Notice 1, Activities No; 21(a)(b), 22(i), (ii), 24 and 27 of the 07 April 2017 EIA Regulation promulgated in terms of the National Environmental Management Act, 107 of 1998. The triggered activities require a Basic Assessment Process.

Triggered Listed Activities:

GN R.327:

Activity 21(a)(b):

Any activity including the operation of that activity which requires a mining permit in terms of section 27 of the Mineral and Petroleum Resources Development Act, 2002

(Act No. 28 of 2002), including —

(a) associated infrastructure, structures and earthworks, directly related to the extraction of a mineral resource.

(b) the primary processing of a mineral resource including winning, extraction, classifying, concentrating, crushing, screening or washing; but excluding the secondary processing of a mineral resource, including the smelting, beneficiation, reduction, refining, calcining or gasification of the mineral resource in which case activity 6 in Listing Notice 2 applies.

An application for Mining Permit and Environmental Authorisation for Mining, has been lodged with the Department of Mineral Resources and Energy (DMRE), and issued the following reference number; **Reference Number: WC30/5/1/3/2/10337MP**

The proposed mining methodology will be open cast mining where the following will be undertaken;

- **Site Establishment:**

Pegging of approved mine area, removal of topsoil and vegetation clearance.

- **Operation phase:**

- Primary extraction of material by aid of circular diamond edged block saw (working on the same principle as the wire saw in quarries), or single or multibladed frame or gangsaws using either abrasive grit or diamond tipped blades.
- **Decommissioning phase:**
- Upon completion of mining operation, applicant will finalise rehabilitation process and apply for closure certificate to the DMR.

BASIC ASSESSMENT PROCESS AND TIMEFRAME

As in flow chart **Appendix C**, Public participation is the basis of any Environmental Impact Assessment (EIA) process. The principles of the National Environmental Management Act, NEMA, 107 of 1998, govern most aspects of the EIA process, including public participation process.

These include the ongoing provision by the EAP of any relevant information throughout the duration of the project to all registered interested and affected parties (I&APs). During the Public Participation Process, input from the proponent, technical expert, Government authorities, and the general public will be gathered to foster a better understanding of the project for all involved and facilitate better-informed decision-making throughout the process.

The key objective Public Participation during the EIA process is for I&APs to raise issues of concern and suggestions that need to be considered in the EIA process.

I&APs will be provided with a 14-calender day comment period in which to raise issues or concerns in response to the content of the

Background Information Document (BID). A draft Basic

Assessment Report and final Basic Assessment Report, before it is submitted to the DMR for consideration.

HOW TO GET INVOLVED

All potential interested and affected parties (I&APs) are invited to register in order to participate in this project. Please note that communications regarding the process and the availability of reports will only be sent to register I&APs. To receive further communication regarding this project, please register by sending the signed registration sheet attached herein, together with your contact details and nature of interest, to Lwethuma Environmental Consultant.

APPENDIX A –Locality Map

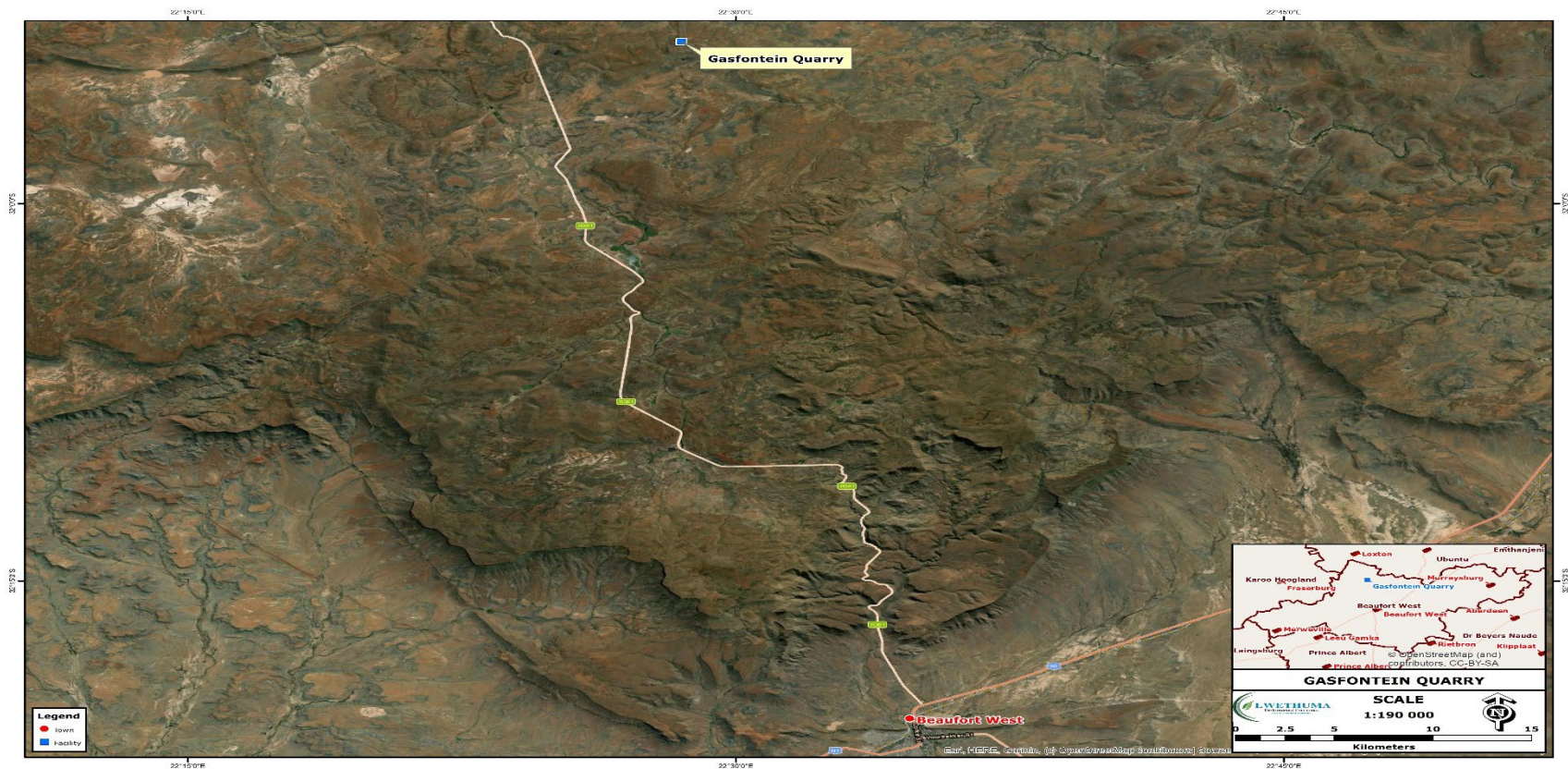
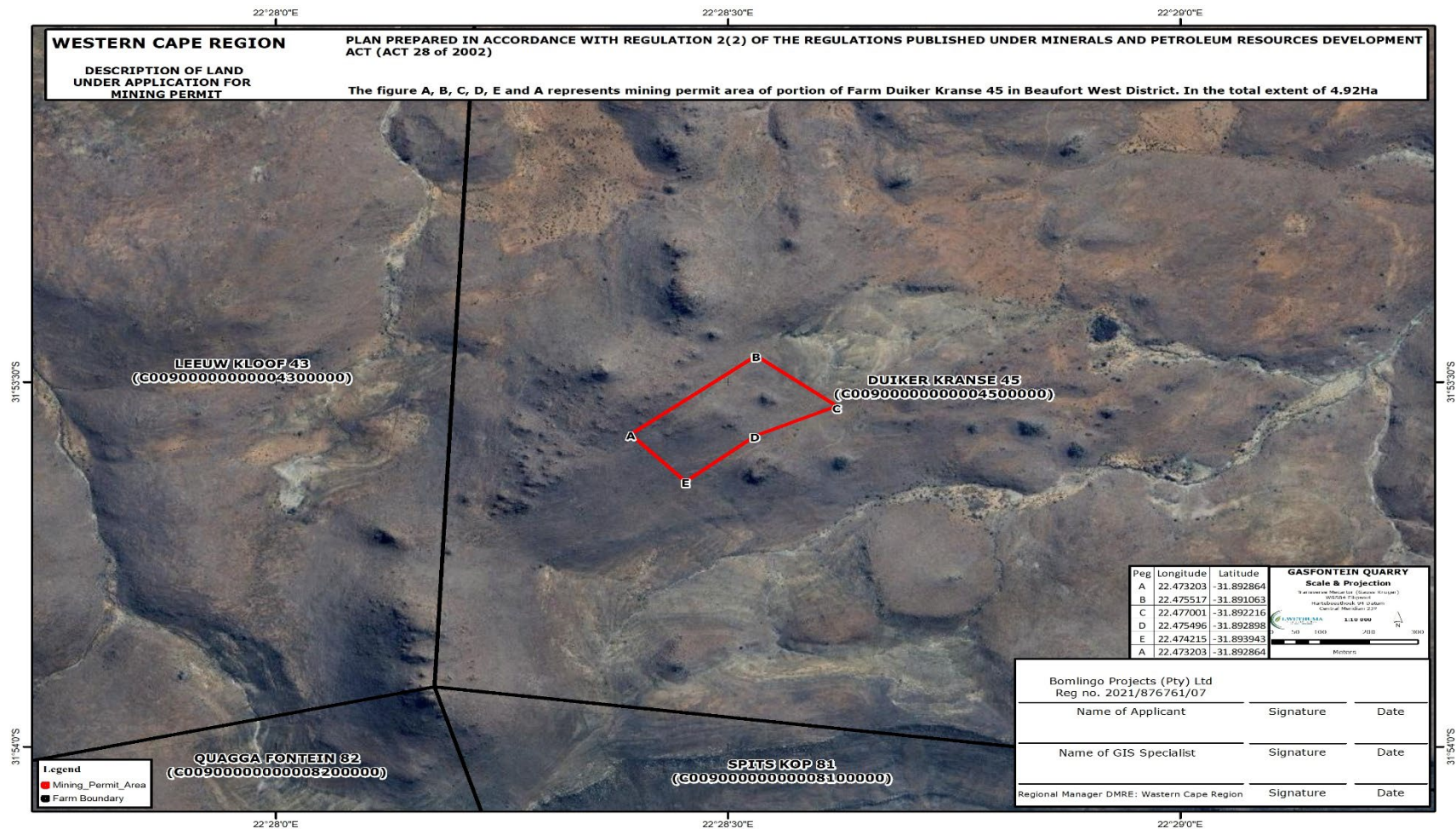


Figure 1: Gasfontein Quarry



APPENDIX B- EIA process flow chart

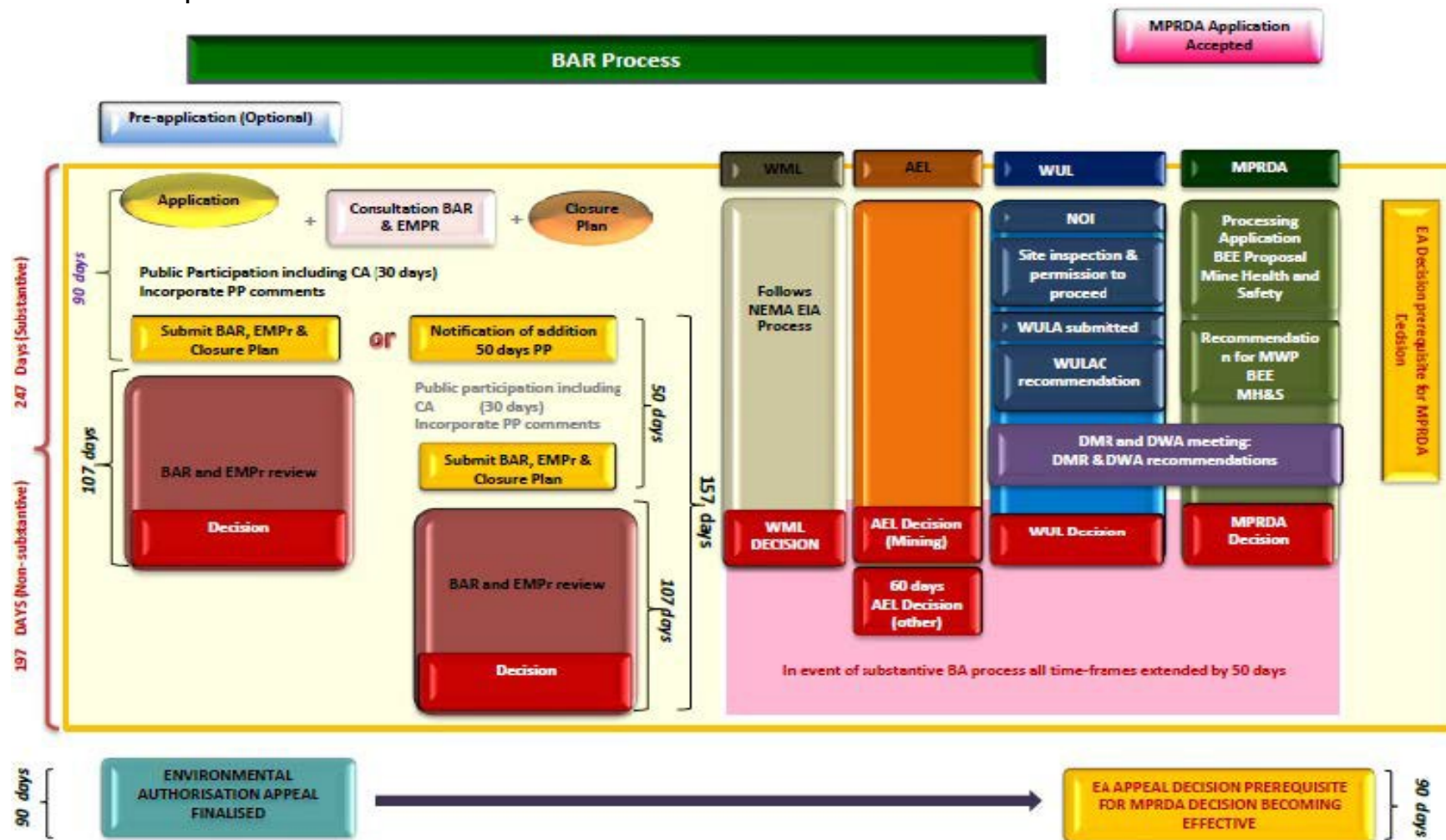


Figure 3: EIA flow chart process.

REGISTRATION & COMMENT SHEET

Proposed Gasfontein Quarry portion 4 of the farm Duiker Kranse 45, Division of Beaufort West, within Beaufort West Local Municipality, Western Cape.

I want to register as an interested and affected party (I&AP)/ or bring to the attention of Lwethuma Environmental Consultant the following comments. (please use additional sheet of paper if required)

Attention: McDonald Mdluli

Fax: 086 710 1099

Email: info@lwethuma.com

Name and Surname		Title	
Company/Organisation			
Nature of Interest			
Postal Address			
Telephone No			
Fax			
Cell Number			
Email Address			

Comments:

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Signature:.....

Date:.....

37.3.2. NEWSPAPER ADVERT

37.3.3. SITE ADVERT

37.3.4. LANDOWNER'S CONSENT

37.3.5. PROOF OF CONSULTTAION WITH I&APs

37.3.6. PROOF OF CONSULTATION WITH ORGANS OF STATE

37.4. EAP CV

CURRICULUM VITAE: McDonald Mdhuli

McDonald is an Environmentalist with over 14 years' experience. He has an interest in various Environmental Management spectrums that ranges from Environmental Impact Assessment (EIA), Integrated Environmental Management (IEM), Social Impact Assessment (SIA), etc. He currently holds a Postgrad Diploma in Social Impact Assessment, BSc Honours in Environmental Management and Bachelor's degree in Environmental Sciences respectively. He also has a special interest in Heritage management, thus he is currently reading for BA Honours in Archaeology to become a professional archaeologist.

He was involved in various archaeology projects during his undergrad studies; this includes participating in the Heritage Impact Assessment for Coal of Africa, Musina in 2009 and excavations for the Mapungubwe Cultural Landscape in Mapungubwe World Heritage site in 2009 and 2010 respectively. McDonald worked for the Department of Mineral Resources as an Assistant Director, within the sub-directorate mine environmental management, where he was responsible of evaluating applications for environmental authorization for mining. He also worked for a consulting firm before joining the DMR as a senior environmentalist where he was responsible of executing EIA projects.

McDonald has been mentored by great and respected professionals in both Environmental management and Archaeology field. He is currently registered as a Certificated Natural Scientist (*Cert.Sci.Nat.119046*) with the South African Council for Natural and Scientific Profession (SACNASP) and with the International Association for Impact Assessment South Africa (IAIASa. 6304).

Personal information

Name	: McDonald
Surname	: Mdhuli
Sex	: Male
Marital Status	: Married
D.O.B	: 25 May 1986
Nationality	: South Africa
Languages	: English, Afrikaans, IsiXhosa, isiZulu, SiSwati, Sesotho, and Xitsonga.
Health	: Excellent
Office Address	: 12 Tainton Avenue Bonnie Doon East London 5241
Cell numbers	: 079 242 1312 060 371 6877
E-mail	: mcdonald@lwethuma.com / madalamdluli@gmail.com

ACADEMIC AND PROFESSIONAL QUALIFICATIONS

- ✓ **UNISA**
2019 (In progress)
BA Honours in Archaeology
- ✓ **University of Johannesburg**
Completed: 2018

✓ **UNISA**

Completed: 2017

BSc Honours in Environmental Management

Research Topic: Evaluating the environmental management process (EIA) as applied in small scale mining in Mthatha, Western Cape Province.

✓ **University of Venda**

Bachelor of Environmental Sciences

Completed: 2010

✓ **Rhodes University**

2006

Bachelor of Science (Foundation)

OTHER TRAINING COMPLETED

✓ **Institution:** South African Bureau of Standards [SABS]

Course: ISO 14001:2014:

Completed: 2016

✓ **Institution:** University of Pretoria

Course: Environmental Mineral Resources Inspector [EMRI]

Completed: 2016

MEMBERSHIPS OF PROFESSIONAL ASSOCIATIONS

✓ South African Council for Natural and Scientific Profession (SACNSP)

✓ Certificated Natural Scientist (*Cert.Sci.Nat.119046*)

WORK EXPERIENCES

✓ **Employer:** Department of Mineral Resources [2016 February to 2017 June]

Position: Acting Deputy Director: Mine Environmental Management (whenever DD: MEM is not available)

✓ **Employer:** Department of Mineral Resources [2014 December to 2017 June]

Position: Assistant Director: Mine Environmental Management

✓ **Employer:** Department of Mineral Resources [2012 November to 2014 November]

Position: Environmental Officer

✓ **Employer:** All Green Environmental Consultants [2010 September – 2012 November]

Position: Environmental Consultant

✓ **Employer:** University of Venda [2009 September - December 2009]

Position: Assistant Heritage impact Assessor (HIA) for the Vele Colliery Mine.

✓ **Employer:** University of Venda, Library Department [2008 – 2010]

Position: Library Assistant

LIST OF WORK UNDERTAKEN THAT BEST ILLUSTRATE CAPACITY TO HANDLE TASKS ASSIGNED

List of various EIA Projects that I have conducted

SKILLS AND ATTRIBUTES

- Outstanding computer skills, proficient in Microsoft Project, Word, Excel, PowerPoint, Internet, E-mail/outlook and Ms Access.
 - Proven aptitude for community-based work, good team player and team builder
 - Experience in capacity building, training, and community mobilization
 - Good identification skills for flora/environmental botany
 - Excellent public speaking, presentation and group facilitation skills.
 - Self-starter requiring minimum or no supervision
 - Good leadership skills
 - Determined, dedicated and disciplined sports person
-

37.5. APPENDIX D: SPECIALIST STUDIES

- Groundwater Impact Assessment Study
- Terrestrial impact Assessment Study
- Wetland Impact Assessment Study
- Soil & Agricultural Assessment Study
- Paleontology Assessment Study

37.6. APPENDIX E: OTHER INFORMATION

- Screening Tool Report
- Species Sensitivity Verification Report