WANSLEY SIYAKHULA (PTY) LTD

PORTION 1 OF FARM NO 652

EAST LONDON MUNICIPAL DISTRICT

EASTERN CAPE PROVINCE

DRAFT SCOPING REPORT

DEPARTMENTAL REFERENCE NUMBER:

EC 30/5/1/2/2/228 MR

NOVEMBER 2020

PREPARED FOR:

Wansley Siyakhula (Pty) Ltd

P.O. Box 769

Gonubie

5256

Contact Person: Mr J Coetzer

Tel: 043 730 7162

E-mail: jason@wansley.co.za

PREPARED BY:

Greenmined Environmental

Unit MO1, No 36 AECI site

Baker Square, Paardevlei

De Beers Avenue, Somerset West

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EXECUTIVE SUMMARY

Wansley Quarry has been a trusted suppliers of weathered dolerite in the greater East London area for the past 20 years. A mining licence was issued to David Peter Coetzer (trading as Wansley Quarries) on 23 March 2000 that was converted to a new order mining right in 2016. In 2020, the mining right was ceded, in terms of Section 11 of the MPRDA, 2002, to Wansley Siyakhula (Pty) Ltd that is the current mining right holder. The mining right is valid until 16 June 2026, with an approved footprint of 5.2149 ha over an area of Portion 1 of Farm No 652, in the East London magisterial district of the Eastern Cape Province.

Wansley Siyakhula (Pty) Ltd submitted a Section 102 ("S102") amendment application to:

- align the mining documentation with the Section 11 approval,
- comply with the latest departmental and legislative requirements,
- add blasting and processing of material to the EMPR,
- add dolerite as a commodity to the mining right, and
- expand the mining footprint to 37.8575 ha.

The S102 application necessitates an application for a Part 2 amendment of the mine's EMPR in terms of GNR 326 Section 31 (NEMA). The S102 application further constitute listed/specified activities in terms of the NEMA: EIA Regulations, 2014 (as amended) and therefore requires an environmental impact assessment (EIA) that informs the competent authority (Department of Mineral Resources and Energy) when considering the environmental authorisation.

The proposed extension area will be developed over a portion of the property that was historically used for pineapple cultivation extending towards the north-west of the current mining area. Presently, it is proposed that should the S102 application be approved, mining will gradually advance into the extension area as the current mining footprint (±5.2 ha) is mined-out. The mining method will make use of blasting in order to loosen the hard rock, the material will then be loaded and hauled out of the excavation to the crushing and screening plant. The dolerite/gravel will be screened to various sized stockpiles from where it will be transported to clients with trucks and trailers. The MR Holder will continue to use the offices, workshops, and store rooms of the farm yard, as well as the processing plant in the mining area.

Alternatives:

Project/site alternatives does not apply to the current Wansley operation, as the mine has been in operation since 2000.

For the Section 102 amendment application, the project team (thus far) identified one site alternative with a possibility of various layout alternatives that must be assessed during the EIA process and discussed in the

EIAR. The layout of the mining area within the footprint of S1, or other site alternative (if identified), will be determined during the EIA process upon receipt of the specialist's input. Sensitive areas, if identified by the specialist, will be portrayed on a map, of the proposed footprint, to deduce the allowable mining areas. Once the no-go (sensitive) areas were demarcated various layout alternatives will be investigated to identify the best possible option for the proposed activity.

Public Participation Process:

During the initial public participation process, of this S102 application, the stakeholders and I&AP's were informed of the project by means of background information documents that were sent directly to the contact persons. An advertisement was placed in Go & Express and on-site notices were placed at the turn-off from the N6 onto W Road, the R102 and B Road intersection, and the W Road and B Road T-junction. A 30 days commenting period was allowed that expired 13 October 2020.

In accordance with the timeframes stipulated in the EIA Regulations, 2014 (as amended by GNR 326 effective 7 April 2017) the Draft Scoping Report (DSR) was compiled to allow perusal of the report by the I&AP's and stakeholders listed above. A 30-day commenting period, ending 08 January 2021, will be allowed for perusal of the documentation and submission of comments. Comments or response received on the DSR will be incorporated into the Final Scoping Report to be submitted to DMRE for decision making.

Scoping Report:

The scoping report identifies the potential positive and negative impacts that the proposed extension of the mining area may have on the environment and the community as well as the aspects that may impact on the socio-economic conditions of directly affected persons, and proposes possible mitigation measure that could be applied to modify / remedy / control / stop the identified impacts. The impacts and mitigation measures noted in the scoping report must be assessed and elaborated on as part of the EIA process, and the findings discussed in the Environmental Impact Assessment Report.

Plan of Study for the Environmental Impact Assessment Process:

The aspects to be assessed as part of the environmental impact assessment process will include, but not be limited to, the following:

1. Various alternatives (site (if applicable), layout etc.) that will in turn dictate the design and layout of the proposed project.
2. Upon deciding on the preferred alternatives, the applicability of the listed activities identified in terms of the NEMA EIA Regulations, 2014 (as amended) will be confirmed and aligned with the most recent proposal.

3. The need and desirability of the proposed activity will be discussed in detail and weighed against the no-go option of upholding the *status quo* at the study area.
4. The inputs received during the public participation process (first- and second phase) will be assessed and considered by the project team during the EIA process.
5. The findings, recommendations and management measure proposed in the specialist studies will be assessed during the EIA process and incorporated into the DEIAR.
6. The impact of the proposed project on the physical-, biological-, and human environments will be assessed.
7. Mitigation measures will be proposed to control, modify, remedy or stop the impacts associated with the proposed activity on the surrounding environment.
8. Any additional requirements submitted by the DMRE will be incorporated into the DEIAR and treated accordingly.

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LIST OF ACRONYMS

AIA	Archaeological Impact Assessment
ASTM	American Society for Testing and Materials
BCMM	Buffalo City Metropolitan Municipality
BID	Background Information Document
CARA	Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983)
CBA	Critical Biodiversity Areas
CRR	Comments and Response Report
DEDEAT-EC	Department of Economic Development, Environmental Affairs and Tourism – Eastern Cape Province
DEIAR	Draft Environmental Impact Assessment Report
DMRE	Department of Mineral Resources and Energy
DoT	Department of Transport
DPW	Department of Public Works
DRDAR	Department of Rural Development and Agrarian Reform
DRDLR	Department of Rural Development and Land Reform
DSR	Draft Scoping Report
DWS	Department of Water and Sanitation
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
EAR	Environmental Audit Report
EC	Eastern Cape
ECBCP	Eastern Cape Biodiversity Conservation Plan
ECO	Environmental Control Officer
ECNEO	Eastern Cape Nature and Environmental Ordinance, 1974 (No 19 of 1974)
EIA	Environmental Impact Assessment
EMPR	Environmental Management Programme

FEIAR	Final Environmental Impact Assessment Report
FEPA	Freshwater Ecosystem Priority Area
FSR	Final Scoping Report
GNR	Government Notice Number
GVA	Gross Value Added
HIA	Heritage Impact Assessment
I&AP	Interested and Affected Party
IDP	Integrated Development Plan
LN	Listing Notice
MHSA	Mine Health and Safety Act, 1996 (Act No 29 of 1996)
MPRDA	Minerals and Petroleum Resources Development Act, 2002 (Act No 28 of 2002)
MR	Mining Right
MWP	Mine Works Programme
NEM:AQA	National Environmental Management: Air Quality Control Act, 2004 (Act No 39 of 2004)
NEM:BA	National Environmental Management: Biodiversity Act, 2004 (Act No 10 of 2004)
NEM:WA	National Environmental Management: Waste Act, 2008 (Act No 59 of 2008)
NEMA	National Environmental Management Act, 1998 (Act No 107 of 1998)
NHRA	National Heritage Resources Act, 1999 (Act No 25 of 1999)
NPAES	National Protected Areas Expansion Strategy
NRTA	National Road Traffic Act, 1996 (Act No 25 of 1999)
NWA	National Water Act, 1998 (Act No 36 of 1998)
OHSA	Occupational Health and Safety Act, 1993 (Act No 85 of 1993)
PCB's	Polychlorinated Biphenyls
PCO	Pest Control Officer
PES	Present Ecological Sensitivity
PIA	Palaeontological Impact Assessment
PPE	Personal Protection Equipment
PSM	Palaeontological Sensitivity Map
S1	Site Alternative 1
S102	Section 102 Amendment Application in terms of the MPRDA, 2002
SAHRA	South African Heritage Resources Agency
SAMBF	South African Mining and Biodiversity Forum
SAMRAD	South African Mining Mineral Resources Administration System
SANBI	South African National Biodiversity Institute
SANRAL	South African National Roads Agency SOC Ltd
SANS	South African National Standards
SLP	Social and Labour Plan

SWD	Stormwater Dam
SWMP	Stormwater Management Plan
TIA	Traffic Impact Assessment
USBM	United States Bureau of Mine
WMA	Water Management Area
WULA	Water Use Licence Application

mineral resources
Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

SCOPING REPORT

FOR LISTED ACTIVITIES ASSOCIATED WITH MINING RIGHT AND/OR BULK SAMPLING ACTIVITIES INCLUDING TRENCHING IN CASES OF ALLUVIAL DIAMOND PROSPECTING

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

NAME OF APPLICANT: Wansley Siyakhula (Pty) Ltd

TEL NO: 043 730 7162
FAX NO: 043 730 7162
POSTAL ADDRESS: P.O. Box 769, Gonubie, 5256
PHYSICAL ADDRESS: Wansley Farm, Old Gonubie road, East London
FILE REFERENCE NUMBER SAMRAD: EC 30/5/1/2/2/228 MR

IMPORTANT NOTICE

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

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

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

It is therefore an instruction that the prescribed reports required in respect of applications for an environmental authorisation for listed activities triggered by an application for a right or permit are submitted in the exact format of, and provide all the information required in terms of this template. Furthermore, please be advised that failure to submit the information required in the format provided in this template will be regarded as a failure to meet 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 order, and under the provided headings as set out below, and ensure that the report is not cluttered with un-interpreted information and that it unambiguously represents the interpretation of the Applicant.

OBJECTIVE OF THE SCOPING PROCESS

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

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

SCOPING REPORT

2. CONTACT PERSON AND CORRESPONDENCE ADDRESS

a) Details of: Greenmined Environmental

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

i) The EAP who prepared the report

Name of the Practitioner: Ms Christine Fouché (Senior Environmental Specialist)

Tel No: 021 851 2673 / 082 811 8514

Fax No: 086 546 0579

E-mail address: christine.f@greenmined.co.za

ii) Expertise of the EAP

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

Ms Fouché has a Diploma in Nature Conservation and a B.Sc. in Botany and Zoology. Full CV with proof of expertise is attached as Appendix 1.

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

Ms Fouché has fifteen years' experience in doing Environmental Impact Assessments and Mining Applications in South Africa. See a list of past project attached as Appendix 2.

b) Description of the property

Farm Name:	Portion 1 of Farm No. 652
Application area (Ha)	♦ Approved MR area: 5.2149 ha ♦ Section 102 Application Area: 32.6426 ha ♦ Total MR area: 37.8575 ha
Magisterial district	East London
Distance and direction from nearest town	Wansley Quarry is approximately 16 km north-east of East London city centre and ±65 km south-east of King William's Town.
21 digit Surveyor General Code for each farm portion	C02300000000652000001

c) Locality map

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

The requested map is attached as Appendix 3.

d) Description of the scope of the proposed overall activity

i) Listed and specified activities

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

Wansley Siyakhula (Pty) Ltd submitted a Section 102 ("S102") amendment application to:

- align the mining documentation with the Section 11 approval,
- comply with the latest departmental and legislative requirements,
- add blasting and processing of material to the EMPR,
- add dolerite as a commodity to the mining right, and
- expand the mining footprint to 37.8575 ha.

The S102 application necessitates an application for a Part 2 amendment of the mine's EMPR in terms of GNR 326 Section 31 (NEMA). The S102 application further constitute listed/specified activities in terms of the NEMA: EIA Regulations, 2014 (as amended) and therefore requires an environmental impact assessment (EIA) that assess project specific environmental impacts and alternatives, consider public input, and propose mitigation measures, to ultimately culminate in an environmental management programme that informs the competent authority (Department of Mineral Resources) when considering the environmental authorisation.

See attached as Appendix 4 a copy of the preliminary site layout plan of the proposed extension area.

Table 1: Listed and specified activities triggered by the proposed S102 amendment application.

NAME OF ACTIVITY (All activities including activities not listed) (E.g. Excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc...etc...etc.)	AERIAL EXTENT OF THE ACTIVITY Ha or m^2	LISTED ACTIVITY Mark with an X where applicable or affected.	APPLICABLE LISTING NOTICE (GNR 544, GNR 545 OR GNR 546)/NOT LISTED
Application for a Section 102 MPRDA, 2002 amendment of the mining right.	37.8575 ha	X	GNR 324 LN 3 Activity 4, 12, 14; GNR 325 LN 2 Activity 15, 17; GNR 327 LN 1 Activity 12, 19, 22, 24, 28.

<u>GNR 324 Listing Notice 3 of 2017 Activity 4:</u>

The development of a road wider than 4 meters with a reserve less than 13.5 meters.

a) Eastern Cape

i) Outside urban area:

(ee) critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.

<u>GNR 324 Listing Notice 3 of 2017 Activity 12:</u>

The clearance of an area of 300 square meters or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.

a) Eastern Cape

ii) Within critical biodiversity areas identified in bioregional plans.

<u>GNR 324 Listing Notice 3 of 2017 Activity 14:</u>

The development of-

(i) dams or weirs, where the dam or weir, including infrastructure and water surface area exceeds 10 square meters; or

(ii) infrastructure or structures with a physical footprint of 10 square metres or more;

where such development occurs-

(a) within a watercourse;

(b) in front of a development setback; or

(c) if no development setback exists, within 32 meters of a watercourse, measured from the edge of a watercourse.

excluding the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour.

a) Eastern Cape

i) Outside urban areas:

(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.

NAME OF ACTIVITY	AERIAL EXTENT OF THE ACTIVITY	LISTED ACTIVITY	APPLICABLE LISTING NOTICE
GNR 325 Listing Notice 2 of 2017 Activity 15: *The clearance of an area of 20 hectare or more of indigenous vegetation, excluding where such clearances of indigenous vegetation is required for –* *(i) the undertaking of a linear activity; or* *(ii) maintenance purposes undertaken in accordance with a maintenance management plan.*			
GNR 325 Listing Notice 2 of 2017 Activity 17: *Any activity including the operation of that activity which requires a mining right as contemplated in section 22 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 resources; or* *(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 this Notice applies.*			
GNR 327 Listing Notice 1 of 2017 Activity 12: *The development of-* *(i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square meters; or* *(ii) infrastructure or structures with a physical footprint of 100 square metres or more;* *where such development occurs-* *(a) within a watercourse;* *(b) in front of a development setback; or* *(c) if no development setback exists, within 32 meters of a watercourse, measured from the edge of a watercourse.* *excluding –* *(aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour;* *(bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;* *(cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies;* *(dd) where such development occurs within an urban area;* *(ee) where such development occurs within existing roads, road reserves or railway line reserves; or* *(ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared.*			
GNR 327 Listing Notice 1 of 2017 Activity 19: *The infilling or depositing of any material of more than 10 cubic meters into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic meters from a watercourse;* *but excluding where such infilling, depositing, dredging, excavation, removal or moving—* *(a) will occur behind a development setback;* *(b) is for maintenance purposes undertaken in accordance with a maintenance management plan;* *(c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;* *(d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or*			

NAME OF ACTIVITY	AERIAL EXTENT OF THE ACTIVITY	LISTED ACTIVITY	APPLICABLE LISTING NOTICE
(e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.			
GNR 327 Listing Notice 1 of 2017 Activity 22: *The decommissioning of any activity requiring –* *(i) a closure certificate in terms of section 43 of the Mineral and Petroleum Resources Development Act, 2002 (Act No 28 of 2002); or* *(ii) a prospecting right, mining right, mining permit, production right or exploration right, where the throughput of the activity has reduced by 90% or more over a period of 5 years excluding where the competent authority has in writing agreed that such reduction in throughput does not constitute closure.* *but excluding the decommissioning of an activity relating to the secondary processing of a –* *(a) mineral resource, including the smelting, beneficiation, reduction, refining, calcining or gasification of the mineral resource; or* *(b) petroleum resource, including the refining of gas, beneficiation, oil or petroleum products; –* *in which case activity 31 in this Notice applies.*			
GNR 327 Listing Notice 1 of 2017 Activity 24: *The development of a road –* *(ii) with a reserve wider than 13.5 meters, or where no reserve exists where the road is wider than 8 meters;* *but excluding a road –* *(a) which is identified and included in activity 27 in Listing Notice 2 of 2014;* *(b) where the entire road falls within an urban area; or* *(c) which is 1 kilometre or shorter.*			
GNR 327 Listing Notice 1 of 2017 Activity 28: *Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development:* *(ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare;* *excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.*			
Demarcation of the extension area with visible beacons.	37.8575 ha	N/A	Not listed
Site establishment and infrastructure development.	±1 ha	X	GNR 324 LN 3 Activity 4, 12, 14; GNR 325 LN 2 Activity 15, 17; GNR 327 LN 1 Activity 12, 24, 28.
Stripping and stockpiling of topsoil and/or overburden.	±32 ha	X	GNR 324 LN 3 Activity 12 GNR 325 LN 2 Activity 15 GNR 327 LN 1 Activity 19, 28
Drilling and blasting of hard rock	±32 ha	X	GNR 325 LN 2 Activity 17 GNR 327 LN 1 Activity 28

NAME OF ACTIVITY	AERIAL EXTENT OF THE ACTIVITY	LISTED ACTIVITY	APPLICABLE LISTING NOTICE
Excavation, loading and hauling to processing area.	±32 ha	X	GNR 325 LN 2 Activity 17 GNR 327 LN 1 Activity 19, 28
Processing, stockpiling and transporting of material.	±2 ha (within disturbed mining footprint – no additional disturbance)	X	GNR 325 LN 2 Activity 17 GNR 327 LN 1 Activity 28
Sloping and landscaping upon closure of the site.	37.8575 ha	X	GNR 327 LN 1 Activity 22
Replacing the topsoil and vegetating the disturbed area.	±32 ha	X	GNR 327 LN 1 Activity 22

ii) Description of the activities to be undertaken

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

Background Information:

Wansley Quarry has been a trusted suppliers of weathered dolerite in the greater East London area for the past 20 years. A mining licence was issued to David Peter Coetzer (trading as Wansley Quarries) on 23 March 2000 that was converted to a new order mining right in 2016. In 2020, the mining right was ceded, in terms of Section 11 of the MPRDA, 2002, to Wansley Siyakhula (Pty) Ltd that is the current mining right holder. The mining right is valid until 16 June 2026, with an approved footprint of 5.2149 ha over an area of Portion 1 of Farm No 652, in the East London magisterial district of the Eastern Cape Province.

To date the mining method entailed removal of the weathered dolerite (gravel) through direct extraction with an excavator. Mining focused on the soft material as blasting was not approved for the mining right approval. Upon excavation of the gravel, a limited stockpile was established as most material was directly loaded onto haul trucks that transported it to the clients. Although Wansley Quarry has been in existence for 20 years, no permanent infrastructure other than the processing plant was established in the mining footprint. The right holder makes use of the existing workshops and storerooms at the farm yard (outside the mining footprint).

Table 2: GPS Coordinates of the approved mining right area.

NUMBER	DEGREES, MINUTES, SECONDS		DECIMAL DEGREES	
	LAT (S)	LONG (E)	LAT (S)	LONG (E)
A	32º54'47.47"	27º55'39.56"	-32.913186º	27.927656º
B	32º54'53.10"	27º55'42.96"	-32.914751º	27.928600º
C	32º54'58.79"	27º55'43.14"	-32.916331º	27.928651º
D	32º54'59.32"	27º55'36.75"	-32.916477º	27.926876º
E	32º54'57.54"	27º55'36.60"	-32.915982º	27.926833º
F	32º54'55.07"	27º55'34.26"	-32.915298º	27.926182º

Figure 1: Satellite view showing the location of the MR area (red polygon) in relation to the surrounding landscape. (Image obtained from Google Earth)

Project Proposal:

As mentioned earlier, the MR Holder submitted an application for consent of the minister to:

- align the mining documentation with the Section 11 approval,
- comply with the latest departmental and legislative requirements,
- add blasting and processing of material to the EMPR,
- add dolerite as a commodity to the mining right, and
- expand the mining footprint to 37.8575 ha.

, in terms of Section 102 of the MPRDA, 2002. The table below lists the GPS coordinates of the proposed extension area as shown on the Regulation 2(2) and Regulation 42 Mine Plans attached as Appendix 3.

Table 3: GPS Coordinates of the proposed S102 extension area.

NUMBER	DEGREES, MINUTES, SECONDS		DECIMAL DEGREES	
	LAT (S)	LONG (E)	LAT (S)	LONG (E)
A	32º54'43.53"	27º55'18.20"	-32.912092º	27.921722º
B	32º54'40.46"	27º55'20.88"	-32.911240º	27.922466º
C	32º54'38.70"	27º55'23.42"	-32.910751º	27.923173º
D	32º54'37.25"	27º55'28.39"	-32.910348º	27.924552º
E	32º54'36.18"	27º55'34.28"	-32.910052º	27.926190º
F	32º54'54.49"	27º55'55.51"	-32.915137º	27.932086º
G	32º54'59.18"	27º55'42.07"	-32.916439º	27.928354º
H	32º54'59.14"	27º55'33.87"	-32.916428º	27.926074º

The satellite image below shows the location of the proposed S102 extension area in relation to the approved MR area and surrounding landscape.

Figure 2: Satellite view showing the location of the proposed S102 extension area (yellow polygon) in relation to the approved MR area (red polygon), and the surrounding landscape. (Image obtained from Google Earth)

The proposed extension area will be developed over a portion of the property that was historically used for pineapple cultivation extending towards the north-west of the current mining area. Presently, it is proposed that should the S102 application be approved, mining will gradually advance into the extension area as the current mining footprint (±5.2 ha) is mined-out. The mining method will make use of blasting by means of explosives in order to loosen the hard rock, the material will then be loaded and hauled out of the excavation to the crushing and screening plant. The dolerite/gravel will be screened to various sized stockpiles from where it will be transported to clients with trucks and trailers.

The MR Holder will continue to use the offices, workshops, and store rooms of the farm yard, as well as the processing plant in the mining area.

In light of this, the Applicant intents to:

- strip and stockpile the topsoil and/or overburden from the mining footprint;
- blast and excavate the mining area;
- crush and screen the loosened material at the processing plant;
- stockpile the product until sold and transported from site;
- slope and landscape the affected areas upon closure; and
- replace the topsoil and vegetate the disturbed area.

Should the S102 amendment application be issued and the mining of dolerite/gravel from the extension area be allowed, the proposed project will comprise of activities that can be divided into three key phases (discussed in more detail below) namely the:

(1) *Site establishment phase*, which will involve the demarcation of the extension area and, if required, buffer no-go zones pertaining to areas of significant importance identified during the environmental impact assessment. Site establishment will also necessitate the clearing of vegetation, the stripping and stockpiling of topsoil, the development of stormwater dams (SWD) and -control measures, and possible road infrastructure that may be required.

(2) *Operational phase* that is presently expected to entail the mining of dolerite/gravel from the approved footprint area through conventional open cast mining methods. The mining method will make use of blasting in order to loosen the hard rock; upon which the loosened material will be transported to the crushing and screening processing plant where it will be screened to various sized stockpiles, before it is sold and transported from site to clients.

(3) *Decommissioning phase* which entails the rehabilitation of the affected environment prior to the submission of a closure application to the Department of Mineral Resources and Energy (DMRE). The MR Holder will further be responsible for the seeding of all rehabilitated areas. Once the full mining area is rehabilitated, the MR Holder will be required to submit a closure application to the DMRE in accordance with section 43(4) of the MPRDA, 2002. The Closure Application will be submitted in terms of Regulation 62 of the MPRDA, 2002, and Government Notice 940 of NEMA, 1998 (as amended).

PHASES OF THE PROJECT

(1) Site Establishment Phase:

Site establishment entails the demarcation of the extension area boundaries and identified sensitive areas (if needed), clearance of vegetation, stripping and stockpiling of topsoil (to establish mining related infrastructure) from stockpile areas and the excavation zone as detailed below:

- **Demarcation of Mining Boundaries:**

  Pursuant to receipt of an Environmental Authorisation (EA) and the Section 102 Mining Right (MR) amendment, and prior to mining, the boundary of the amended mining footprint has to be demarcated. Areas to be demarcated within the boundary of the site may include areas of concern identified during the environmental impact assessment phase. Identified buffer zones (if applicable) will clearly be demarcated as "no-go areas".

- **Clearing of Vegetation:**

  (Also refer to Part A(2)(h)(iv)(1)(c) Description of specific environmental features and infrastructure on the site – Site Specific Groundcover)

  The proposed extension footprint falls within a vegetation type known as the Albany Coastal Belt (AT9). It also falls within the Eastern Cape Biodiversity Conservation Plan (ECBCP) – Terrestrial Critical Biodiversity Area (CBA). As the extension of the mining area will necessitate the removal of indigenous vegetation to allow access to the mineral (dolerite/gravel), an ecological study will be conducted of the entire earmarked area. The botanist will assess the sensitivity and conservation status of the earmarked footprint, and proposed buffer zones around areas of high conservation importance. The findings of the botanist will be incorporated into the draft Environmental Impact Assessment Report (EIAR). The final layout of the site will be directed by the findings of the specialist, and clearing of the vegetation will be contained to the allowable areas within the mining footprint.

- **Topsoil Stripping:**

  It is proposed that topsoil removal will be restricted to the exact footprint of areas required during the operational phase of the activity. The topsoil will be stockpiled at a designated signposted area within the mining boundary to be replaced during the rehabilitation of the area. It will be part of the obligations of site management to prevent the mixing of topsoil heaps with overburden/other soil heaps. The complete A-horizon (the top 100 – 200 mm of soil which is generally darker coloured due to high organic matter content) will be

removed. If it is unclear where the topsoil layer ends the top 300 mm of soil will be stripped. The topsoil berm will measure a maximum of 1.5 m in height to prevent compaction and preserve micro-organisms within the topsoil.

- **Access Roads:**

The MR Holder makes use of existing gravel roads (Mn10118 St also known as W Road and the B road)) that leads up to the mining area. To the west the gravel road (Mn10118 St / W Road) joins up with the N6 national road. The gravel road south of the mine (B road) joins up with the R102 provincial road. When mining reaches the most northern part of the proposed extension footprint it may be necessary to divert the road (Mn10118 St / W Road) along the northern mining boundary, this matter will be discussed in detail in the draft Environmental Impact Assessment Report. Should haul roads be needed where no farm roads exist the roads will be extended as mining progress. The footprint of the haul roads will be contained to the approved mining area. A road engineer was contracted to conduct a Traffic Impact Assessment (TIA) on the two access roads (W- & B Road) presently used by the mine. The findings and recommendations of the TIA will be incorporated into the DEIAR.

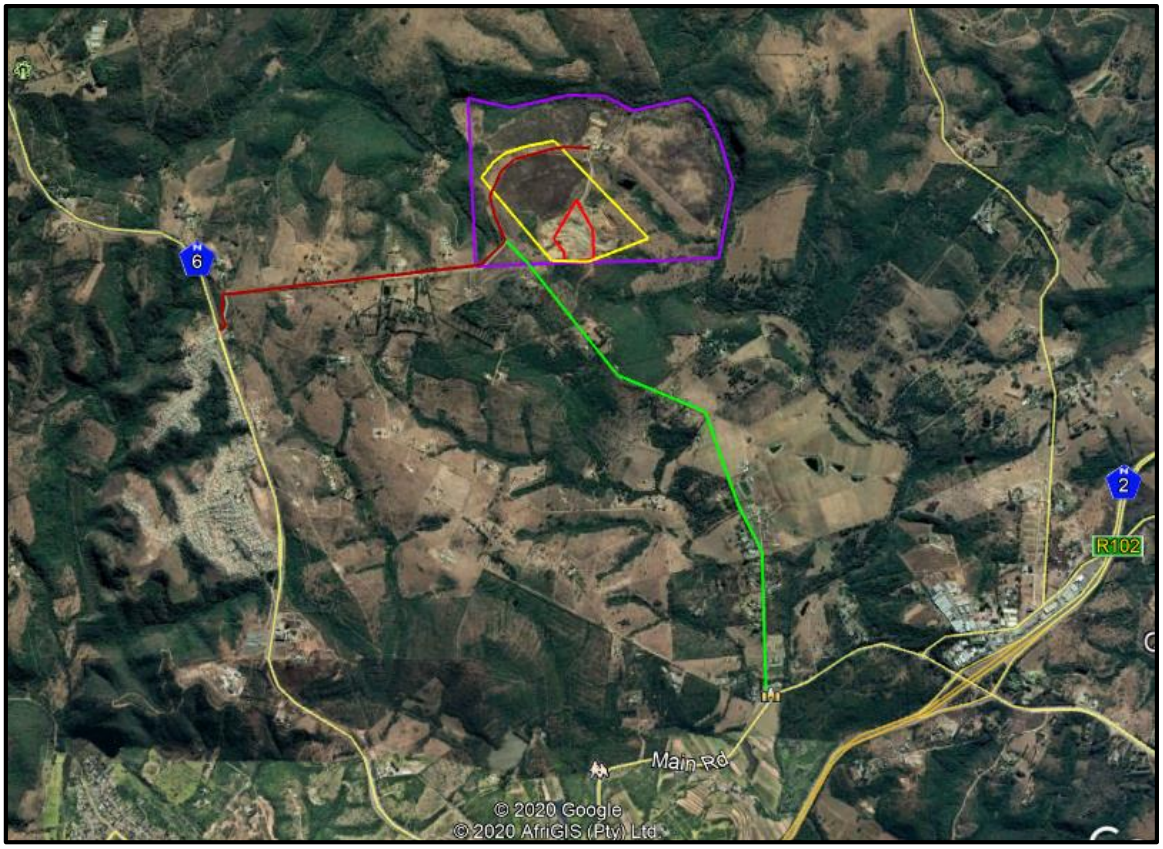


Figure 3: Satellite view showing the access road Mn10118 St / W Road (brown line) to Wansley Quarry (purple polygon) in relation to the N6 national road, as well as the B road (green line) in relation to R102 provincial road (image obtained from Google Earth).

- **Establishment of Site Infrastructure:**

(Also refer to Part A(2)(h)(iv)(1)(c) Description of specific environmental features and infrastructure on the site – Site Specific Hydrology and Geohydrology)

As mentioned earlier, only the processing plant was thus far established in the mining area. Should the S102 application be approved and the mining area be extended the proposed footprint will spread across drainage lines that eventually flows into the Qinira River to the east of the mining area. The presence of the drainage lines within the mining footprint (amongst others) necessitates a water use application in terms of Section 21 of the National Water Act, 1998 (Act No 36 of 1998) (NWA). As part of the water use application a stormwater management plan (SWMP) was compiled that requires the potential development of two stormwater dams (SWD's) as shown in the figure below. The development of the SWD's will be discussed in detail in the draft Environmental Impact Assessment Report once the relevant specialist recommendations were received.

Figure 4: Image showing the drainage lines within the mining footprint (blue lines) as well as the proposed position of the stormwater dams (light yellow polygons) (image obtained from the SWMP).

Mining machinery that currently operates/will operate within the mining footprint consist of at least the following:

- Crushing and screening plant;
- Delivery trucks;
- Drilling equipment;
- Earthmoving machinery;
- Excavation equipment;
- Generator; and
- Water car/s.

(2) Operational Phase

Thus far, the operational phase of the mine involved the removal of the weathered dolerite through direct extraction with an excavator. Upon which a limited stockpile was established as most material was directly loaded onto haul trucks that transported it to the clients. A crushing and screening plant was established to process material when needed.

Should the S102 application be approved, the MR Holder intends to loosen the hard rock of the mining footprint by blasting, upon which it will be mechanically recovered with drilling-, excavating- and earthmoving equipment. Presently, a blasting frequency of two blasts per month (maximum) is proposed. The blasting related matters will be discussed in more detail in the DEIAR upon receipt of the final mine planning report. The loosened rock will then be delivered to the crushing and screening plant where it will be reduced to various sized aggregate. The screened material will be delivered to various size category stockpiles. Transportation of the final product will be from the stockpile area to the end point by means of trucks. The mine will continue to make use of the workshops and storerooms at the farm yard, and the current workforce of twenty-two (22) employees will continue working at the mine.

- **Water Use:**

  The water used at Wansley Quarry is extracted from a borehole on the farm; the MR Holder is in the process of registering the water uses with the Department of Water and Sanitation (DWS). The mining related water requirements mainly consist of water needed for dust suppression on the haul roads and the processing plant.

- **Waste Handling:**

  Due to the nature of the project, and the fact that the workshop and storerooms is located off-site, very little general waste is generated as a direct result of the mining activities. Any

waste generated during the operational phase, will be contained in a sealable refuse bin that will be incorporated into the existing waste disposal system of the farm.

Likewise, very little generation of hazardous waste is applicable to this project. Hazardous waste is mainly the result of accidental spillages or breakdowns. Such contaminated areas will be immediately (within first hour of the occurrence) cleaned and the contaminated soil contained in a designated hazardous waste container that will daily (when applicable) be removed to the MR holder's workshop on the farm, from where it will either be collected by a registered hazardous waste handling contractor, or alternatively transported to a registered hazardous waste handling facility.

Site employees make use of the ablution facilities on the farm. No chemical toilets are/will be placed in the mining area.

- **Servicing and Maintenance:**

When needed, mining equipment is serviced at the workshop on the farm (outside the mining area). No workshop will be established in the proposed extension area. If emergency repairs are needed on equipment not able to move to the workshop, drip trays will be used under the machinery and all waste will be contained and removed from the emergency service area to the workshop to ensure proper disposal. The mining site does not require the storage of diesel, and fuelling of the mining related equipment/vehicles is done at the farm yard.

- **Electricity:**

Presently, the processing plant is powered by a generator until a connection to the Eskom grid can be secured.

(3) Decommissioning phase:

The closure objectives will be detailed in the Environmental Impact Assessment Report and Environmental Management Programme (EMPR), to be submitted as part of the application process for approval by the Department of Mineral Resources and Energy. Due to the nature of the project, no buildings/build structures will have to be demolished upon closure of the mining area. The closure objectives are for the quarry pit to be rendered safe and developed into a landscape feature, with the surrounding areas landscaped and returned to agricultural use. Benches will be built with oversize rock and overburden, top-dressed with topsoil and vegetated with an appropriate grass mix if vegetation does not naturally establish in the area within six months of the replacement of the topsoil.

At this stage the following baseline rehabilitation actions are proposed from which a detailed Closure Plan will be developed (to be approved as part of the EIA process):

- Rehabilitation of all the disturbed surface areas shall entail landscaping, levelling, sloping, top dressing, land preparation, seeding (if required), and weed / alien clearing.
- If applicable, all unwanted infrastructures, equipment, and other items used during the mining period will be removed from the site in accordance with section 44 of the MPRDA, 2002.
- Waste material of any description, including receptacles, scrap, rubble and tyres, will be removed entirely from the mining area and disposed of at a recognized landfill facility. It will not be permitted to be buried or burned on the site.
- The rehabilitation area will be cleared of weeds and invader plant species. Priority will be given to species regarded as Category 1a and 1b invasive species in terms of NEM:BA (National Environmental Management: Biodiversity Act 10 of 2004 and regulations applicable thereto).
- Final rehabilitation shall be completed within a period specified by the Regional Manager.

Once the full mining area was rehabilitated the MR Holder is required to submit a closure application to the Department of Mineral Resources in accordance with section 43(4) of the MPRDA, 2002 that states: *"An application for a closure certificate must be made to the Regional Manager in whose region the land in question is situated within 180 days of the occurrence of the lapsing, abandonment, cancellation, cessation, relinquishment or completion contemplated in subsection (3) and must be accompanied by the prescribed environmental risk report".* The Closure Application will be submitted in terms of Regulation 62 of the MPRDA, 2002, and Government Notice 940 of NEMA, 1998.

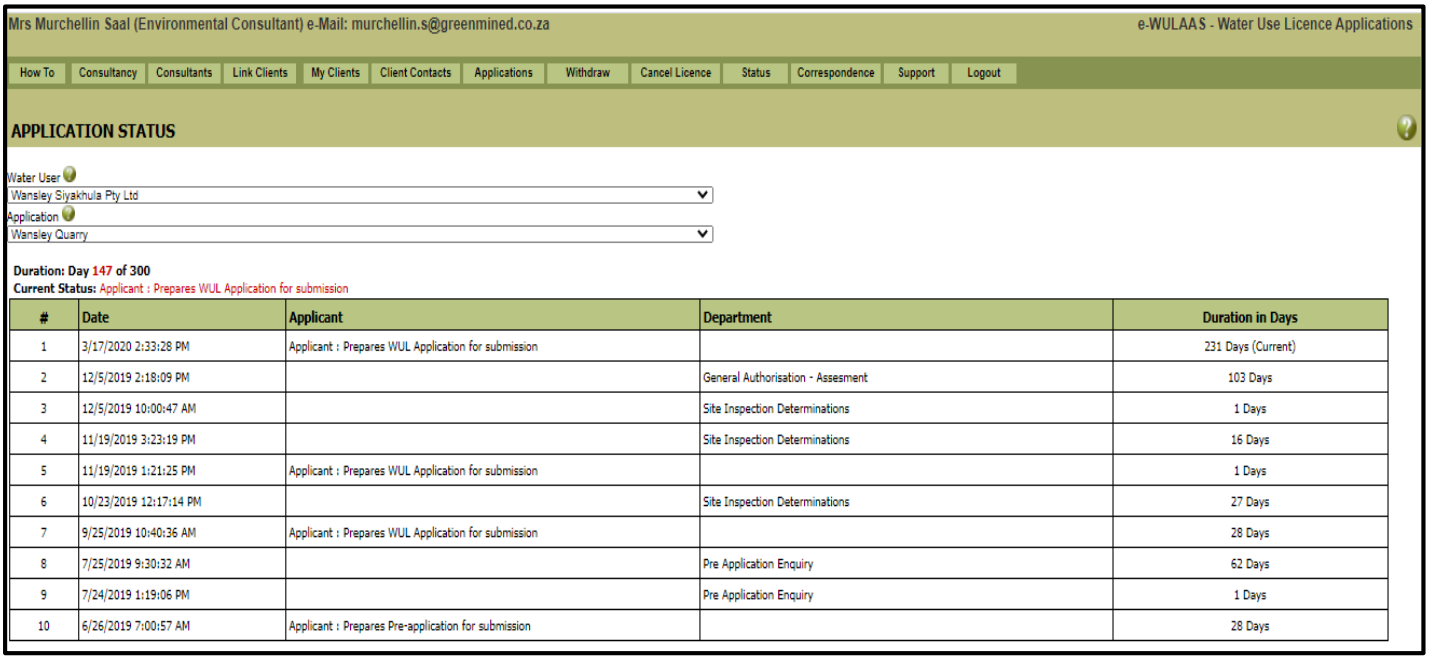
e) Policy and Legislative Context

Table 4: Applicable legislation and guidelines used to compile the report.

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**
Buffalo City Metropolitan Municipality Integrated Development Plan 2016 – 2021 (IDP)	The IDP was used in the assessment of the socio economic profile of the receiving community.
Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983).	The mitigation measures proposed for the site includes specifications of the CARA, 1983.
Eastern Cape Nature and Environmental Ordinance 19 of 1974 (as amended).	The mitigation measures proposed for the site includes specifications of the ECNEO, 1974.
Guideline on Need and Desirability	The need and desirability of the project was assessed in accordance with these guidelines.
Mine Health and Safety Act, 1996 (Act No. 29 of 1996) read together with applicable amendments and regulations thereto including relevant OHSA regulations.	The mitigation measures proposed for the site take into account the MHSA, 1996.
Mineral and Petroleum Resources Development Act, 2002 (Act No 28 of 2002) read together with applicable amendments and regulations thereto. ♦ Section 102 amendment application.	Application for a Section 102 amendment application submitted to the DMRE-EC. Ref No. EC30/5/1/2/2/228MR.
National Environmental Management Act,1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2014 (as amended by GNR 326 effective 7 April 2017): ♦ GNR 324 Listing Notice 3 Activity 4 ♦ GNR 324 Listing Notice 3 Activity 12 ♦ GNR 324 Listing Notice 3 Activity 14 ♦ GNR 325 Listing Notice 2 Activity 15 ♦ GNR 325 Listing Notice 2 Activity 17 ♦ GNR 327 Listing Notice 1 Activity 12 ♦ GNR 327 Listing Notice 1 Activity 19 ♦ GNR 327 Listing Notice 1 Activity 22 ♦ GNR 327 Listing Notice 1 Activity 24	Application for environmental authorisation. Reference number: EC30/5/1/2/2/228MR.

APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT	REFERENCE WHERE APPLIED
♦ GNR 327 Listing Notice 1 Activity 28	
National Environmental Management: Air Quality Control Act, 2004 (Act No. 39 of 2004) read together with applicable amendments and regulations thereto specifically the National Dust Control Regulations, GN No R827.	The mitigation measures proposed for the project take into account the NEM:AQA, 2004 and the National Dust Control Regulations.
National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) read together with applicable amendments and regulations thereto.	The mitigation measures proposed for the site includes specifications of the NEM:BA, 2004. An ecological and surface hydrological study and assessment will be done of the study area.
National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) read together with applicable amendments and regulations thereto. NEM:WA, 2008: National norms and standards for the storage of waste (GN 9260).	The mitigation measures proposed for the site take into account the NEM:WA, 2008.
National Heritage Resources Act, 1999 (Act No. 25 of 1999)	The mitigation measures proposed for the site includes specifications of the NHRA, 1999.
National Road Traffic Act, 1996 (Act No. 93 of 1996)	The mitigation measures proposed for the project take into account the NRTA, 1996.
National Water Act, 1998 (Act No. 36 of 1998) read together with applicable amendments and regulations thereto. Department of Water Affairs and Forestry Best Practice Guideline Series (2007).	The presence of the drainage lines within the mining footprint, and the use of borehole water necessitate a water use application in terms of Section 21 of the National Water Act, 1998 (Act No 36 of 1998) (NWA). The application was submitted and is currently in Phase 1 in the e-WULAAS application process (see figure below). The mitigation measures proposed for the site includes specification of the NWA, 1998.
Public Participation Guideline in terms of the NEMA EIA Regulations.	Public participation was conducted in accordance with the public participation guidelines.

APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT	REFERENCE WHERE APPLIED
The South African Constitution.	To be upheld throughout the EIA assessment, planning-, construction-, operational- and decommissioning phases.



Mrs Murchellin Saal (Environmental Consultant) e-Mail: murchellin.s@greenmined.co.za — e-WULAAS - Water Use Licence Applications

How To | Consultancy | Consultants | Link Clients | My Clients | Client Contacts | Applications | Withdraw | Cancel Licence | Status | Correspondence | Support | Logout

APPLICATION STATUS

Water User: Wansley Siyakhula Pty Ltd

Application: Wansley Quarry

Duration: Day 147 of 300

Current Status: Applicant : Prepares WUL Application for submission

#	Date	Applicant	Department	Duration in Days
1	3/17/2020 2:33:28 PM	Applicant : Prepares WUL Application for submission		231 Days (Current)
2	12/5/2019 2:18:09 PM		General Authorisation - Assesment	103 Days
3	12/5/2019 10:00:47 AM		Site Inspection Determinations	1 Days
4	11/19/2019 3:23:19 PM		Site Inspection Determinations	16 Days
5	11/19/2019 1:21:25 PM	Applicant : Prepares WUL Application for submission		1 Days
6	10/23/2019 12:17:14 PM		Site Inspection Determinations	27 Days
7	9/25/2019 10:40:36 AM	Applicant : Prepares WUL Application for submission		28 Days
8	7/25/2019 9:30:32 AM		Pre Application Enquiry	62 Days
9	7/24/2019 1:19:06 PM		Pre Application Enquiry	1 Days
10	6/26/2019 7:00:57 AM	Applicant : Prepares Pre-application for submission		28 Days

Figure 5: Proof of water use licence application pending at the DWS.

f) Need and desirability of the proposed activities

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

(Information extracted from the approved Environmental Management Programme Report of Wansley Quarry, March 2008)

The approved EMP (2008) of Wansley Quarry mentions that Wansley Quarries is one of the larger suppliers of weathered dolerite in the greater East London area. The mine has been operational for the past 20 years and the mining right is valid until 2026 with the option of renewal. The material mined from the property is sold locally (in and around the Eastern Cape Province) to the building, construction and road maintenance sector. Customers include, but are not limited to:

- Block yards;
- Civil Contractors;
- Local hardware stores; and
- Local Municipalities.

The MR holder identified the need to extend the mining boundary so as to secure a larger portion of the dolerite resource on the property as this will ascertain and prolong the lifespan of the mine. The

increase in building-, construction- and road maintenance projects in the vicinity of the property motivated the continued operation of the mine. The proposed amendment of the mining method to include blasting of the hard rock, will allow the MR Holder to access the more solid dolerite that underlie the weathered dolerite resource.

The mine employs twenty-two staff members that are all from the local community. In addition, thereto the implementation of the Social and Labour Plan (which is obligatory for a mining right holder) contributes positively to the socio-economic environment of the local community.

The need and desirability of the proposed extension operation was assessed in terms of the National Department of Environmental Affairs' Guideline on Need and Desirability (first version published in terms of section 24J of the NEMA in 2014, and second version in 2017)). The following table shows the questions that were considered in this regard.

Table 5: Need and desirability determination.

1. SECURING ECOLOGICAL SUSTAINABLE DEVELOPMENT AND USE OF NATURAL RESOURCES		
How will this development impact on the ecological integrity of the area?		
Question	**Response**	**Level of Desirability**
How were ecological integrity considerations taken into account?	As discussed under Heading *2(h)(iv)(1)(a) Type of environment affected by the proposed activity*, the Mining and Biodiversity Map shows that the proposed footprint extends over an area of high biodiversity importance with a corresponding rating of high risk for mining. The ECBCP-CBA 2 (terrestrial) extends across the earmarked area, and the entire project site is located within an Aquatic CBA3_A3b due to the fact that this area falls within a hydrological primary catchment management area for an Aquatic CBA2_E2 Estuary. According to the National Wetland and NFEPA map of SANBI, the study area does not fall within a River FEPA. According to the NPAES spatial data, the study area is located well outside any Focus Areas. The Lombardy Private Nature Reserve is the nearest protected area (formal and/or informal) approximately 2 km to the east, and the vegetation type of the study area, Albany Coastal Belt (AT9), is classified as Least Threatened. Nkurenkuru Ecology and Biodiversity was appointed to conduct an ecological and surface hydrological study and assessment of the proposed extension footprint. The study will describe the *status quo* with regard to vegetation cover, identify CBA's, NPAES and other areas/species of concern and proposed buffer zones (if needed), mitigation measures, and management actions to be considered during the EIA process. The findings of the study will be collated onto a sensitivity map to be overlain by the footprint of the proposed mining area. The study will be incorporated into the DEIAR.	Need and desirability to be determined during the following EIAR phase.
How will this development disturb or enhance ecosystems and/or result in the loss or protection of biological diversity?	Should the current proposal be approved the project will entail the gradual removal of ±32 ha of vegetation cover from the footprint to allow access to the mineral. The above mentioned botanical study will describe the *status quo* regarding the vegetation cover, identify CBA's, NPAES and other areas/species of concern and proposed buffer zones, mitigation measures, and management actions to be considered during the EIA process. The findings of the study will be collated onto a sensitivity map to be overlain by the footprint of the proposed mining area. The study will be incorporated into the DEIAR.	
How will this development pollute and/or degrade the biophysical environment?	The potential of the proposed extension of the mining footprint degrading the biophysical environment will be determined once the findings of the specialists were received. As mentioned in this report, the SWMP proposes the addition of two SWD's to control the runoff from the mining area. In addition to the SWD's, the specialist	

1. SECURING ECOLOGICAL SUSTAINABLE DEVELOPMENT AND USE OF NATURAL RESOURCES		
How will this development impact on the ecological integrity of the area?		
Question	**Response**	**Level of Desirability**
	also proposed dirty water containment systems to ensure dirty water generated on the site is contained. The final design of the stormwater containment structures will be discussed in more detail in the draft EIAR once the relevant specialist recommendations were received. Apart from possible dirty water that may be generated at the mine, the surrounding environment may also be affected by mining related traffic, dust, noise, and/or weeds/invader plant species that originate from the operational areas. Mitigation measures to manage these impacts will be discussed in the DEIAR once the specialist recommendations were received.	
What waste will be generated by this development?	Due to the nature of the project, and the fact that the workshop and storerooms is located off-site, very little general waste is generated as a direct result of the mining activities. Any waste generated during the operational phase, will be contained in a sealable refuse bin that will be disposed at an appropriately registered waste handling facility. As mentioned earlier, hazardous waste is mainly the result of accidental spillages/breakdowns. Such contaminated areas will be cleaned immediately (within first hour of the occurrence) and the contaminated soil contained in a designated hazardous waste container that will daily (when applicable) be removed to the MR holder's workshop on the farm, from where it will be disposed of at a registered hazardous waste handling facility. Site employees make use of the ablution facilities on the farm, and no chemical toilets are/will be placed in the mining area. No waste will be disposed of or treated on the farm.	Highly Desirable
How will this development disturb or enhance landscapes and/or sites that constitute the nation's cultural heritage?	Wansley Quarry has been operational for the past 20 years as one of the larger suppliers of weathered dolerite in the greater East London area. In light of this, dolerite mining is a known activity on Portion 1 of Farm No 652. However, when the footprint of the proposed extension area is placed on the PSM, it extends over areas of high concern. HCAC (Heritage Contracts and Archaeological Consulting) was appointed to investigate the cultural/heritage sensitivity of the study area. The findings of the specialists (archaeologist & palaeontologist) will be included in the DEIAR.	Need and desirability to be determined during the following EIAR phase.
How will this development use and/or impact on non-renewable natural resources?	Wansley Quarry sells the dolerite/gravel mined from the approved portion of Portion 1 of Farm No 652. Presently, it is believed that the proposed extension area may have an inferred reserve of >25 000 000 m^3	Highly Desirable

1. SECURING ECOLOGICAL SUSTAINABLE DEVELOPMENT AND USE OF NATURAL RESOURCES		
How will this development impact on the ecological integrity of the area?		
Question	**Response**	**Level of Desirability**
	dolerite. Based on the current production rate, the dolerite resource shows a potential life of mine of ±60 years. In light of this, it is believed that the MR holder responsibly consumes the dolerite resource on the property.	
How will this development use and/or impact on renewable natural resources and the ecosystem of which they are part?	Presently, the processing plant is powered by a generator until a connection to the Eskom grid can be secured. The water used at Wansley Quarry is extracted from a borehole on the farm. The mining related water requirements mainly consist of water needed for dust suppression on the haul roads and the processing plant.	Desirable
How were a risk-averse and cautious approach applied in terms of ecological impacts?	The findings of the specialists will be assessed and various layout alternatives will be proposed to minimise the impact of the mining activity on biophysical/heritage sensitive areas.	Need and desirability to be determined during the following EIAR phase.
How will the ecological impacts resulting from this development impact on people's environmental right?	Wansley Quarry has been in existence for the past 20 years, and the mine is therefore managed in accordance with the agricultural practices of the farm. As mentioned in Heading *3(j)(1) Impact on the socio-economic condition of any directly affected person*, the activity may impact the local traffic levels, have a visual impact, affect air quality and noise ambiance, or result in the spreading of weeds/invader plant species from the mining footprint. The degree and significance of the listed impacts will be assessed during the following EIA phase. By nature these impacts require constant monitoring to be implemented throughout the operational-, and decommissioning phases of the project.	
Describe the linkages and dependencies between human wellbeing, livelihoods and ecosystem services applicable to the area in question and how the development's ecological impacts will result in socio-economic impacts.	Gravel mining commenced in the year 2000 on the farm, and the revenue generated by the mine has since then been an important income to the owners. As mentioned earlier, Wansley Quarry is well known in the surrounding community, employing 22 local residents, and contributing to the community as part of its SLP obligations. The proposed extension (if approved) will contribute to the continued existence of the mine as an important dolerite/gravel supplier in the greater East London area.	Highly Desirable

1. SECURING ECOLOGICAL SUSTAINABLE DEVELOPMENT AND USE OF NATURAL RESOURCES		
How will this development impact on the ecological integrity of the area?		
Question	**Response**	**Level of Desirability**
Based on all of the above, how will this development positively or negatively impact on ecological integrity objectives/targets/considerations of the area?	The impact of the proposed extension will be determined once the findings of the specialists were received and the layout alternatives finalised.	Need and desirability to be determined during the following EIAR phase.
Considering the need to secure ecological integrity and a healthy biophysical environment, describe how the alternatives identified, resulted in the selection of the "best practicable environmental option" in terms of ecological considerations	The findings of the specialists will be assessed and various layout alternatives will be proposed to minimise the impact of the mining activity on biophysical/cultural sensitive areas. These findings will be collated in the draft EIAR that will be distributed for public perusal and commenting. Following the commenting period, the project proposal will be finalised.	Need and desirability to be determined during the following EIAR phase.

2. PROMOTING JUSTIFIABLE ECONOMIC AND SOCIAL DEVELOPMENT		
What is the socio-economic context of the area?		
Question	**Response**	**Level of Desirability**
What is the socio-economic context of the area?	Please refer to Heading 2(h)(iv)(1)(a) *Socio-economic Environment*.	Need and desirability to be determined during the
Considering the socio-economic context, what will the socio-economic impacts be of	As mentioned earlier, Wansley Quarry has been operational for the past 20 years. The mine is a known supplier of dolerite/gravel in the greater East London community and contributes directly to the society through the	

2. PROMOTING JUSTIFIABLE ECONOMIC AND SOCIAL DEVELOPMENT		
What is the socio-economic context of the area?		
Question	**Response**	**Level of Desirability**
the development, and specifically also on the socio-economic objectives of the area?	employment of 22 local residents as well as the Local Economic Development (LED) commitments of the mine (stipulated in the SLP). Indirectly, the mine contributes to infrastructure development in the surrounding area (dolerite/gravel supplier) and the spending of wages in the East London area. Further to this, the potential traffic impact of the mine on the socio-economic status of the surrounding area will be determined through a Traffic Impact Assessment to be conducted by BVI Consulting Engineers.	following EIAR phase.
How will this development address the specific physical, psychological, developmental, cultural and social needs and interests of the relevant communities?	The material mined at Wansley Quarry is sold locally (in and around the Eastern Cape Province) to the building, construction and road maintenance sector. Customers include, but are not limited to, the following: ♦ Block yards; ♦ Civil Contractors; ♦ Local hardware stores; and ♦ Local Municipalities In addition, the mine has to meet the commitments of the SLP regarding Human Resources Development, Local Economic Development, and the process pertaining to management of downscaling and retrenchment. Also refer to the discussion under Heading 2(k) *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.*	Highly Desirable
Will the development result in equitable impact distribution, in the short- and long-term?	The proposed extension of the mining area and the addition of hard rock mining (as a result of blasting) will considerably prolong the life of the mine, which will directly (positively) affect the work security of the employees. This is of crucial importance in the BCMM with an unemployment rate of 35.1%. Wansley Quarry has to operate in accordance with the provisions of the Mining Charter, 2018 as well as the Employment Equity Act, 1998 giving preference to historically disadvantaged employees from within the local area	Highly Desirable

2. PROMOTING JUSTIFIABLE ECONOMIC AND SOCIAL DEVELOPMENT		
What is the socio-economic context of the area?		
Question	**Response**	**Level of Desirability**
	in terms of employment. The area to be disturbed as part of the extension is situated on the MR Holders own property (shared directors), and therefore no undisturbed land of another landowner needs to be altered.	
In terms of location, describe how the placement of the proposed development will contribute to the area.	The dolerite resource on the property has been mined since the year 2000, and as mentioned earlier, Wansley Quarry is a well-known dolerite/gravel supplier in the area. The preferred layout of the proposed extension area will be determined during the following EIA phase once the findings of the specialists were received.	Need and desirability to be determined during the following EIAR phase.
How were a risk-averse and cautious approach applied in terms of socio-economic impacts?	The mitigation measures proposed in this report, but more importantly those of the final EIAR and EMPR (to be drafted), are compiled in consultation with the specialists to reduce the potential impact that the proposed activity may have on the receiving environment. Once approved, the management outcomes are legally binding to be implemented by site management for the duration of the site establishment-, operational- and decommissioning phases.	Desirable
How will the socio-economic impacts resulting from this development impact on people's environmental right?	As mentioned in Heading *3(j)(1) Impact on the socio-economic condition of any directly affected person*, the activity may impact the local traffic levels, have a visual impact, affect air quality and noise ambiance, or result in the spreading of weeds/invader plant species from the mining footprint. The degree and significance of the listed impacts will be assessed during the following EIA phase. By nature these impacts require constant monitoring to be implemented throughout the operational-, and decommissioning phases of the project.	Need and desirability to be determined during the following EIAR phase.
Considering the linkages and dependencies between human wellbeing, livelihoods and ecosystem services, describe the linkages and dependencies applicable to the area in question and how the development's socio-	Gravel mining commenced in 2000 on the farm, and the revenue generated by the mine has since then been an important income to the owners. As mentioned earlier, Wansley Quarry is well known in the surrounding community, employing 22 local residents, and contributing to the community as part of its SLP obligations. The proposed extension (if approved) will contribute to the continued existence of the mine as an important dolerite/gravel supplier in the greater East London area.	Need and desirability to be determined during the

2. PROMOTING JUSTIFIABLE ECONOMIC AND SOCIAL DEVELOPMENT		
What is the socio-economic context of the area?		
Question	**Response**	**Level of Desirability**
economic impacts will result in ecological impacts?		following EIAR phase.
What measures were taken to pursue the selection of the "best practicable environmental option" in terms of socio-economic considerations?	The findings of the specialists will be assessed and various layout alternatives will be proposed to minimise the impact of the mining activity on biophysical/cultural sensitive areas. These findings will be collated in the draft EIAR that will be distributed for public perusal and commenting. Following the commenting period, the project proposal will be finalised.	
What measures were taken to pursue environmental justice so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons?		
What measures were taken to pursue equitable access to environmental resources, benefits and services to meet basic human needs and ensure human wellbeing, and what special measures were taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination?	The mine has to operate in accordance with, amongst others, the following: ♦ CARA, 1983 – to ensure agriculture related compliance; ♦ Financial Provision Regulations, 2015 – to ensure compliance in terms of rehabilitation; ♦ Mine Health and Safety Act, 1996 (as amended) – to ensure employee safety; ♦ MPRDA, 2002 (as amended) – to ensure mining related compliance; ♦ NEM:AQA, 2004 – to ensure air quality related compliance; ♦ NEM:BA, 2004 – to ensure biodiversity related compliance; ♦ NEM:WA, 2008 – to ensure waste related compliance; ♦ NEMA, 1998 (as amended) – to ensure environmental related compliance; ♦ NRTA, 1996 – to ensure road and traffic related compliance;	Highly Desirable
What measures were taken to ensure that the responsibility for the environmental health and safety consequences of the		

2. PROMOTING JUSTIFIABLE ECONOMIC AND SOCIAL DEVELOPMENT		
What is the socio-economic context of the area?		
Question	**Response**	**Level of Desirability**
development has been addressed throughout the development's life cycle?	Should the S102 amendment application be approved the operation of the extension area will also be subject to compliance with the above listed.	
Considering the interests, needs and values of all the interested and affected parties, describe how the development will allow for opportunities for all the segments of the community that is consistent with the priority needs of the local area.	The material mined at Wansley Quarry is sold locally to the building, construction and road maintenance sector. In addition, the mine has to meet the commitments of the SLP regarding Human Resources Development, Local Economic Development, and the process pertaining to management of downscaling and retrenchment.	Highly Desirable
What measures have been taken to ensure that current and/or future workers will be informed of work that potentially might be harmful to human health or the environment or of dangers associated with the work, and what measures have been taken to ensure that the right of workers to refuse such work will be respected and protected.	The mine has to operate in accordance with the specifications of the Mine Health and Safety Act, 1996 (MHSA). Site management holds daily discussions with the staff regarding the work to be performed and the environment in which the work will take place. Grievances/concerns can be lodged during the daily site meetings. The MHSA further requires the submission of quarterly occupational hygiene reports that record site specific occupational hygiene exposure assessments.	Highly Desirable
Describe how the development will impact on job creation in terms of, amongst other aspects?	This application is for the extension of the existing mining area and no new job opportunities will be created. However, should the application be successful the job security of the current employees will be extended in accordance with the increased lifespan of the mine.	Highly Desirable
What measures were taken to ensure that the environment will be held in public trust for the people, that the beneficial use of environmental resources will serve the public interest, and that the environment will	Wansley Quarry operates under a valid mining right issued by the DMRE. Compliance of the mine with the approval conditions is reported on as per the departmental specifications. Should the S102 amendment application be approved the extension area will also be managed in accordance with all the mining and environmental related legislations.	Highly Desirable

2. PROMOTING JUSTIFIABLE ECONOMIC AND SOCIAL DEVELOPMENT		
What is the socio-economic context of the area?		
Question	**Response**	**Level of Desirability**
be protected as the people's common heritage.		
Are the mitigation measures proposed realistic and what long-term environmental legacy and managed burden will be left.	It is believed that the preliminary list of mitigation measures proposed in this document is realistic and can be implemented (when needed) by the mine. The final list of mitigation measures will be compiled upon receipt of the specialist findings and recommendations. Likewise, the site specific closure objectives of the mine will be assessed during the following EIA phase and elaborated on in the DEIAR. Thereafter the residual impact of the proposed project will be determined.	Need and desirability to be determined during the EIAR phase.
What measures were taken to ensure that the costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution environmental damage or adverse health effects will be paid for by those responsible for harming the environment.	In terms of Section 41 of the MPRDA, 2002 a mining right holder must submit a financial provision to the DMRE that is sufficient to rehabilitate or manage the negative environmental impacts related to the mining activity. Wansley Quarry has a bank guarantee lodged with the DMRE that is deemed sufficient to cover the financial provision amount needed to rehabilitated the mining footprint. Should the S102 amendment application be approved and the DMRE require a change to the current bank guarantee the document will be amended accordingly.	Highly Desirable
Considering the need to secure ecological integrity and a healthy bio-physical environment, describe how the alternatives identified, resulted in the selection of the best practicable environmental option in terms of socio-economic considerations.	The findings of the specialists will be assessed and various layout alternatives will be proposed to minimise the impact of the mining activity on biophysical/cultural sensitive areas. These findings will be collated in the draft EIAR that will be distributed for public perusal and commenting. Following the commenting period, the project proposal will be finalised.	Need and desirability to be determined during the following EIAR phase.
Describe the positive and negative cumulative socio-economic impacts bearing in mind the size, scale, scope and nature of	Refer to the discussion under Heading 2(k) *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.*	

2. PROMOTING JUSTIFIABLE ECONOMIC AND SOCIAL DEVELOPMENT		
What is the socio-economic context of the area?		
Question	**Response**	**Level of Desirability**
the project in relation to its location and other planned developments in the area.	The cumulative impacts associated with this project will be expanded on in the DEIAR upon receipt of the specialist inputs.	

g) Period for which the environmental authorization is required

The MR holder requests that the Environmental Authorisation (EA) be valid for at least the duration of the mining right.

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

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

i) Details of all alternatives considered

With reference to the site plan provided as Appendix 4 and the location of the individual activities on site, provide details of the alternatives considered with respect to:

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

Current Wansley Quarry:

Project/site alternatives does not apply to the current Wansley operation, as the mine has been in operation since 2000.

Proposed Extension Area:

Thus far, the project team identified one site alternative with a possibility of various layout alternatives that must be assessed during the EIA process and discussed in the EIAR.

Site Alternative 1 (S1) (Preferred Site Alternative): Presently, Site Alternative 1 entails the extension of the current mining footprint (5.2 ha) with 32.6 ha over Portion 1 of Farm No 652, within the boundaries of the following GPS coordinates:

Table 6: GPS coordinates of the proposed mining footprint area.

NUMBER	DEGREES, MINUTES, SECONDS		DECIMAL DEGREES	
	LAT (S)	LONG (E)	LAT (S)	LONG (E)
A	32º54'43.53"	27º55'18.20"	-32.912092º	27.921722º
B	32º54'40.46"	27º55'20.88"	-32.911240º	27.922466º
C	32º54'38.70"	27º55'23.42"	-32.910751º	27.923173º
D	32º54'37.25"	27º55'28.39"	-32.910348º	27.924552º
E	32º54'36.18"	27º55'34.28"	-32.910052º	27.926190º
F	32º54'54.49"	27º55'55.51"	-32.915137º	27.932086º
G	32º54'59.18"	27º55'42.07"	-32.916439º	27.928354º
H	32º54'59.14"	27º55'33.87"	-32.916428º	27.926074º

Figure 6: Satellite view showing the position of Site Alternative 1 within the surrounding landscape, where the red polygon show the current mining footprint, the yellow polygon shows the proposed extension area and the white lines show the access roads. (Image obtained from Google Earth)

Site Alternative 1 was identified during the planning phase by the MR Holder, as the preferred site alternative based on the following:

- The proposed footprint offers the MR holder access to the dolerite deposit on the property.
- The extension of the mining area will prolong the lifespan of Wansley Quarry.
- Access to the proposed mining area is possible from existing roads with a formal (existing) entrance onto either the N6 national road or the R102 provincial road.
- The extension footprint was chosen over an area that was previously used for pineapple cultivation.

Should additional viable site alternatives be identified during the EIA process, the project team will heed the suggestions, and investigate the possible implementation thereof. Such site alternatives (if identified) will be discussed in detail in the draft EIAR to be distributed for public comments.

Layout Alternatives: The layout of the mining area within the footprint of S1, or other site alternative (if identified), will be determined during the EIA process upon receipt of the specialist's input. Sensitive areas, identified by the specialists will be portrayed on a map, of the proposed footprint, to deduce the allowable mining areas. Once the no-go (sensitive) areas were demarcated various layout alternatives will be investigated to identify the best possible option for the proposed activity.

Project Alternatives: Presently, the preferred project alternative is for the MR Holder to mine the dolerite through the opencast mining method that includes blasting of the hard rock, and the crushing and screening of the material to various sizes prior to selling it to clients.

Additional project alternatives can be considered during the EIA process as supplementary information is obtained from the specialist studies, and the stakeholders and I&AP's contribute their knowledge towards the proposed project. Should project alternatives be identified it will be discussed during the EIA process of the application and included in the DEIAR to be distributed for public comments.

No-go Alternative: The no-go alternative entails no change to the *status quo* and is therefore a real alternative that needs to be considered. In the event that the no-go alternative is implemented the land use of the earmarked footprint will remain that of agriculture with the dolerite resource unmined. Amongst others, the impact of mining on current, and future land uses of the study area will be compared to the *status quo* and will be considered as part of the EIA process, and discussed in the DEIAR.

ii) Details of the Public Participation Process Followed

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

During the initial public participation process, of this S102 application, the stakeholders and I&AP's were informed of the project by means of background information documents that were sent directly to the contact persons. A 30 days commenting period was allowed that expired 13 October 2020. The following table provides a list of the I&AP's and stakeholders that were informed of the project:

Table 7: List of the landowners, I&AP's and stakeholders that were supplied with a copy of the background information document.

SURROUNDING LANDOWNERS & INTERESTED AND AFFECTED PARTIES	STAKEHOLDERS
♦ Warren Farms CC Portion 1 of Farm No 653 ♦ Mette Pi La Cour Nielsen Portion 15 of Farm No 652 ♦ Boniface Trust Portion 14 of Farm No 652 ♦ Johan Frank Page Portion 42 of Farm No 821	♦ Amathole District Municipality; ♦ Buffalo City Metro Municipality – Ward 15 ♦ Buffalo City Metro Municipality; ♦ Department of Economic Development, Environmental Affairs and Tourism; ♦ Department of Labour; ♦ Department of Public Works; ♦ Department of Rural Development and Agrarian Reform; ♦ Department of Rural Development and Land Reform;

SURROUNDING LANDOWNERS & INTERESTED AND AFFECTED PARTIES	STAKEHOLDERS
♦ Paul Francis Jonker Portion 44 of Farm No 821 ♦ Penelope Anne Stapleton Portion 45 of Farm No 821 ♦ Bruce Gordon McMillan / Lombardy Private Nature Reserve Portion 0 of Jagger No 656 ♦ Allen Brian Lennard Portion 41 of Farm No 821 ♦ BJ Cilliers Boorkontrakteurs (Pty) Ltd Portion 73 of Farm No 821 ♦ Leon Joubert Portion 74 of Farm No 821 ♦ Alfred Willem Wild Portion 46 of Farm No 821 ♦ Mader van Niekerk	♦ Department of Transport; ♦ Department of Human Settlements, Water and Sanitation; ♦ Eskom; ♦ SANRAL; ♦ South African Heritage Resources Agency (SAHRA).

I&AP'S AND STAKEHOLDERS THAT REGISTERED / COMMENTED DURING THE INITIAL NOTIFICATION PERIOD

- Boniface, Francois & Trevor;
- Boniface, Trevor & Tammy;
- Cilliers, Jaco;
- Dakiso, Judith, Liz and Mteto;
- Department of Water and Sanitation;
- Joubert, Cathy;
- Lennard, Michele Adriana;
- Masters, Robert;
- Mette Pi la Cour Nielsen & Vaughn Bruce;
- Moss, Andrew;
- Reynhardt, Debbie;
- Scheun, EW;
- Scheun, Andre;
- Stapleton, Penny;
- Webber, Dean;
- Wild, Alfred.

An advertisement was placed in Go & Express on 10 September 2020 and on-site notices were placed on 11 September 2020 at the turn-off from the N6 onto W Road, the R102 and B Road intersection, and the W Road and B Road T-junction. The advertisement, background information document (BID) and on-site notices invited the recipients to register/comment on the project on/before 13 October 2020.

In accordance with the timeframes stipulated in the EIA Regulations, 2014 (as amended by GNR 326 effective 7 April 2017) the Draft Scoping Report (DSR) was compiled to allow perusal of the report by the I&AP's and stakeholders listed above. A 30-day commenting period, ending 08 January 2021, will be allowed for perusal of the documentation and submission of comments. Comments or response received on the DSR will be incorporated into the Final Scoping Report to be submitted to DMRE for decision making. Upon approval of the Final Scoping Report the Draft Environmental Impact Assessment Report will be compiled and circulated for public comment for a 30-day commenting period. The comments received on the draft EIA & EMPR will be incorporated into the final EIA & EMPR to be submitted for decision making to DMRE.

See attached as Appendix 5 proof that the I&AP's and stakeholders were contacted.

iii) Summary of issues raised by I&Aps

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

Table 8: Summary of issues raised by I&AP's and stakeholders.

Interested and Affected Parties **List the names of persons consulted in this column, and** **Mark with an X where those must be consulted were in fact consulted**	**Date Comments Received**		**Issues raised**	**EAP's response to issues raised by the Applicant**
AFFECTED PARTIES				
Landowner/s	**X**			
Mr DP Coetzer ♦ Portion 1 of Farm No 652	X	Mr DP Coetzer is aware of the S102 application.		
Lawful occupier/s of the land		No lawful occupiers, other than the landowner and Eskom has access to the property.		
N/A	**-**	-	-	-
Landowners or lawful on adjacent properties	**X**	**-**	**-**	**-**
Warren Farms CC ♦ Portion 1 of Farm No 653	X	To date no comments were received.		
Mette Pi La Cour Nielsen ♦ Portion 15 of Farm No 652	X	08/10/2020	The following comments were submitted by Mette Pi la Cour Nielsen and Vaughn Bruce on the proposed S102 application.	Greenmined acknowledged receipt of the comments on 13 October 2020 and responded as follows.
Comments received during the initial public participation phase: *"As a neighbour to the existing quarry my husband and I are worried about the proposed extension. I have gathered some thoughts and questions regarding the proposed extension and would like more information as the background information seemed vague on many important points. Please know that even with more information we both object to this extension. We bought our farm to live on a small farm surrounded by nature and the proposed size of the quarry will make it impossible. The quarry has been working at odd hours of the day and in weekends. One of my main worries as a neighbour is how and who is going to monitor the operation, since it's already not following its regulations.*				

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant

Please note the following concerns and questions:

1. *The Listed Activities triggered by the proposed extension note the construction of a road, kindly indicate on a plan where the expected roads will be placed/ constructed?*
2. *The Listed Activities triggered by the proposed extension note the construction of dams/ weirs, kindly indicate on a plan where the expected dam/ weirs will be placed/ construct?*
3. *It appears from aerial imagery that the extension area has been recently burnt. Please confirm if this was routine burning or uncontrolled fire? Please describe the circumstances surrounding the fire.*
4. *Please elaborate, if one can at this stage, proposed operational times should the mining right be approved? Further to this, please clarify times that trucks will utilise haul roads, blasting times, crushing and screening times etc?*
5. *Please clarify management measures that are and will be in place to mitigate dust emanating from haul roads and crushing and screening operations?*
6. *Will there be an independent organisation that will routinely monitor compliance with the various approvals? And also, has there been audits done to date on the current mining operations and the associated compliance of such with the current approvals? It must be noted that the BID clearly shows the current mining approved mining area (in red) having been exceeded by the mining operations. It is concerning that the current approved area has been exceeded of which the likelihood of the extended mining area being exceeded is a potential risk that should be addressed with routine compliance audits.*
7. *The BID notes that the extent of the proposed extension area is ±37.8575 ha. This is significantly larger than the current footprint. Has the proponent investigated any alternatives (site and layout)? We would like to propose that the proponent presents alternatives for the extension.*
8. *The activities are taking place on Portion 1 of Farm 652. The extent of the property is approximately 133 ha. The area to be mined will comprise almost 30% of the property. Is there a requirement for the area where the property is to be mined to be rezoned and or/ subdivided for a specific land use? Or a departure from the land use be required for the duration of the mining licence? It is assumed the property has an agricultural zoning and the mining operations on the specific portion of the property don't comprise agricultural zoning activities.*
9. *Whilst we note the 2012 vegetation map used identifies the area as falling within Albany Coastal Belt vegetation type, we are aware that there is a more updated vegetation map available (2018 version). This is the third and latest update to the original 2006 Vegetation Map of South Africa, Lesotho and Swaziland. Changes made in the 2009 and 2012 versions were retained and additional portions of the 2006 map have been mapped at a finer scale, with 47 new vegetation types mapped since 2012. Based on this, the new vegetation type name that the site falls in is the "South Eastern Coastal Thornveld" vegetation type. Please update your information. This vegetation unit has a range of endemic (to South Africa) species that are often found in this vegetation type and the area that was burnt (intentionally or not) may have included such species. It is also noted that the extension area encroaches on "intact" vegetated area and clarification regarding the management/ mitigation of encroaching onto potentially protected (forest or non-forest) plant species is required.*
10. *While it is noted that the various water use approvals/ registration processes are underway, adding more dams and water uses when there is no current valid water use licence in place seems risky when the current water uses have yet been approved. Please advise the stage of water use application phase that the current water use applications are at?*

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant

11. *Given that the BID does not provide a location for the proposed dams, we are assuming the location of the dams are on the same drainage line that two existing dams are located on. Placing additional in stream structures to store water is expected to reduce water further from accessing the catchment downstream and the associated water uses. Clarification regarding the exact size of the dam as well as the locality of the dam is requested.*
12. *The following fauna species are often seen in this area:*
    - *Bushbuck*
    - *Common Duiker*
    - *Blue Duiker*
    - *Blesbok*

    All these species are protected under the Provincial Nature Conservation Ordinance and further investigation regarding the impact of the mining operations on the habitat, breeding and movement of the above species is requested to be investigated, especially since the boundary of the extension area is encroaching on areas where vegetation is relatively thick in some sections. It must be further noted that the first three species are shy and sensitive species. Thank you for taking our worries, questions and objection in to consideration when continuing the report."

Greenmined's response to the above listed comments:

"Greenmined herewith acknowledge receipt of, and thank you for your detailed correspondence received 08 October 2020 on the proposed Section 102 amendment application of Wansley Siyakhula (Pty) Ltd in the East London area. We registered you both as Interested and Affected Parties on the project, and will henceforth keep you posted on the progress of the Environmental Impact Assessment process as well as supply you with a copy of the draft scoping report (DSR) for your perusal.

We acknowledge your concerns and have forwarded it to the project team for consideration and assessment. Our response to your concerns will be discussed in the EIA documents that will follow in due course, that will also be available to you for commenting. All your comments will be included in the Draft Scoping Report and discussed and assessed in the Environmental Impact Assessment Report that will all be available for your perusal and commenting. Further to this, please feel free to send us your suggestions regarding operational hours."

Additional response to the above listed comments:

- <u>Operating hours:</u>
  A proposal regarding the operating hours of the mine (including blasting-, crushing and screening times, and hours trucks will utilise the roads) will be compiled as part of the EIA process, and the outcome will be discussed in the DEIAR that will follow should the DMRE approve the Final Scoping Report.

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant

- Compliance:
  Should the S102 application be approved, compliance with the mitigation measures and conditions approved as part of the EMPR and the Environmental Authorisation (EA) will be compulsory to the Right Holder as both the EMPR and EA are legally binding documents. In terms of Section 34 of the NEMA EIA Regulations, 2014 (as amended 2017) the holder of an EA must: *"(a) ensure that the compliance with the conditions of the environmental authorisation and the EMPR, and where applicable the closure plan, is audited; and (b) submit an environmental audit report to the relevant competent authority".* The regulations further stipulate that the environmental audit report (EAR) must be prepared by an independent person with the relevant environmental auditing expertise; provide verifiable findings on the level of performance against and compliance with the provisions of the requisite EA, EMP and Closure Plan, and the ability of the measures contained in the EMPR and Closure Plan to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking. Within 7 days of the date of submission of an EAR to the competent authority (DMRE) the holder of the EA must notify all potential and registered I&AP's of the submission of that report, and make such report immediately available to anyone on request, and on a publicly accessible website.

  The previous EAR of the mining operation was compiled and submitted to the DMRE in 2018. Should the Section 102 application be approved the areas that were mined outside the boundaries of the current mining right will be incorporated into the amended footprint of the mine.

- Road related listed activities:
  As mentioned earlier, when mining reaches the most northern part of the proposed extension footprint (refer to Figure 2) it may be necessary to divert the road (Mn10118 St / W Road) along the northern mining boundary, this matter will be discussed in detail in the draft Environmental Impact Assessment Report. Should haul roads be needed where no farm roads exist the roads will be extended as mining progress. The footprint of the haul roads will be contained to the approved mining area.

- Dam/weir related listed activities:
  The stormwater management plan proposes the potential development of two stormwater dams (SWD) (refer to Figure 4). The development of the SWD's will be discussed in detail in the draft Environmental Impact Assessment Report once the relevant specialist recommendations were received.

- Burning of veld:
  The veld fire at the property was due to illegal fires set by trespassers that had to be extinguished by the community.

- Dust Management:
  The preliminary mitigation measures regarding the control of fugitive dust emissions are listed in this document under heading *2(l) The possible mitigation measures that could be applied and the level of risk – Fugitive Dust Emission Mitigation.* The mitigation measures will be updated/elaborated on upon receipt of the specialist's recommendations and presented in the DEIAR.

Interested and Affected Parties	Date Comments Received		Issues raised	EAP's response to issues raised by the Applicant
♦ Alternatives: Please refer to heading 2(h)(i) Details of all alternatives considered. ♦ Rezoning: The potential rezoning/temporary departure of the earmarked footprint area from agricultural to industrial use was referred to a town and regional planner. The outcome of the town and regional planner's findings will be included in the DEIAR. ♦ Vegetation description: The comment is noted and sent to the ecologist to incorporate into the ecological and surface hydrological study and assessment. ♦ Water use: The SWD's proposed as part of the stormwater management plan needs to be approved by the DWS prior to construction, and as mentioned earlier, the applicant is in the process of registering the use of the borehole on the farm with the DWS. The Water Use Licence Application (WULA) is presently in phase 1 – Application phase (refer to Figure 5). ♦ Faunal impact: The potential impact of the mining activities on the habitat, breeding and movement of local faunal species will be investigated as part of the EIA process and elaborated on in the DEIAR.				
Boniface Trust ♦ Portion 14 of Farm No 652	X	28/09/2020	Francois and Trevor Boniface objected to the project and am concerned about noise, dust and the speed/number of trucks.	Greenmined acknowledged receipt of the comments on 30 September 2020,and responded as follows.
Response from Greenmined on 30 September 2020: *"Greenmined herewith acknowledge receipt of your objection received 28 September 2020 on the proposed Section 102 amendment application of Wansley Siyakhula (Pty) Ltd in the East London area. We registered you as an Interested and Affected Party on the project, and will henceforth keep you posted on the progress of the Environmental Impact Assessment process as well as supply you with a copy of the draft scoping report (DSR) for your perusal. We acknowledge your concerns regarding the noise, dust and mining related traffic and have forwarded it to the project team. The access road and traffic impact has been identified as a matter of importance and the project team is in the process of investigating the best possible options. All your comments, and the findings of the project team will be discussed in the EIA documents that will follow in due course, on which you will be able to comment."*				

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant
On 05 October 2020 the following additional comments were received: *"Our property was purchased by us for the purpose of not only living out of town for the peace and quiet, but also for our exotic bird business, therefore we cannot accept the plans of extending the size of the quarry. When we first settled down, we had no concerns as the road was well maintained for our vehicles, but now the amount of trucks that are utilizing the W road are not only causing the road to worsen over time, but they are also driving irresponsibly as well as driving up and down late at night to sometimes early morning (this includes Saturdays and Sundays) which breaks our pattern of sleep and we have to work the next day. The noise, dust and no respect from the truck drivers are not acceptable.* *The constant up and down of the trucks are not only making our farm living noisy, but it is also depreciating the value of all of our lands and homes as it is no longer peaceful and well maintained. Apart from my family and I coming in to close contact and almost having accidents with these trucks, we cannot afford any farm animal to be on the road as it is too dangerous. As to Francois birds, they are very sensitive to loud noise as it is, we cannot have any birds stressed out as this will affect his business, we have invested up to R3 million for his birds as well as all the aviaries, we cannot allow any more noise and disruptions as this is a source of income for us. Farm living is supposed to provide us with the peace and tranquility that cannot be found in town, this extension will take the last bit of quiet that we have away from us, we should be looking forward to coming home and relaxing without constant noise and our animals cannot afford to be affected by any more blasting, noise and traffic by the trucks."*			
Additional response regarding the above comments: ♦ <u>Impact of the mining activity on the keeping of birds:</u> The potential impact of the proposed extension of the mining area and the addition of blasting to the mining method on the keeping of exotic birds on a nearby property will be assessed as part of the EIA process and discussed in the DEIAR. ♦ <u>Dust-, noise- and traffic impact caused by mining related trucks:</u> BVI consulting engineers were appointed to conduct a Traffic Impact Assessment (TIA) on both roads (W- & B road) presently used by the mine. The associated impacts, findings and recommendations of the TIA will be discussed in the DEIAR. Upon receipt of the specialist's recommendations, the list of mitigation measures will also be updated and/or elaborated on. ♦ <u>Depreciation of property value:</u> The potential of the proposed extension of the mining area having a depreciating effect on the property value of the surrounding farms will be assessed as part of the EIA process and discussed in the DEIAR.			
Johan Frank Page ♦ Portion 42 of Farm No 821	X	To date no comments were received.	

Interested and Affected Parties	Date Comments Received		Issues raised	EAP's response to issues raised by the Applicant
Paul Francis Jonker ♦ Portion 44 f Farm No 821	X	To date no comments were received.		
Penelope Anne Stapleton ♦ Portion 45 of Farm No 821	X	16/09/2020	Mrs Stapleton submitted the following comments regarding this project.	Greenmined acknowledged receipt of the comments on 02 October 2020,and responded as follows.

Comments received during the initial public participation phase:

"1. As I am the direct neighbour to the right of this quarry how are all these changes i.e. blasting, crushing and general noise etc going to impact on me and to the value of my property? I already hear work going on all hours and weekends.
2. The B Road, always in a shocking state with constant usage of huge trucks, this is a narrow road with many resident's living along it having to put up with a lot of dust, noise, arrogant drivers who have had and caused many accidents in the past and still do, and our vehicles that take huge strain. I want this road closed to these trucks as they have a perfectly good other option, the W road which is much wider and they seem to be able to keep it in a better condition i.e. grading it, and it is shorter and goes directly out on to the N6.
3. Safety and security, has also become a problem because this area has been opened up to many undesirables which also think using these once unknown roads attractive."

Greenmined's response to the comments:

"Greenmined herewith acknowledge receipt of, and thank you for your correspondence received 02 September (should have been October) *2020 on the proposed Section 102 amendment application of Wansley Siyakhula (Pty) Ltd in the East London area. We registered you as an Interested and Affected Party on the project, and will henceforth keep you posted on the progress of the Environmental Impact Assessment process as well as supply you with a copy of the draft scoping report (DSR) for your perusal. We acknowledge your concerns and have forwarded it to the project team. Their findings will be discussed in the EIA documents that will follow in due course, and on which you will be able to comment. Please note that your comments will be included in the Draft Scoping Report and discussed and assessed in the Environmental Impact Assessment Report that will all also be available for your perusal and commenting."*

Additional response to the above listed comments:

- Depreciation of property value:
  The potential of the proposed extension of the mining area having a depreciating effect on the property value of the surrounding farms will be assessed as part of the EIA process and discussed in the DEIAR.

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant
♦ Operating hours: A proposal regarding the operating hours of the mine will be compiled as part of the EIA process, and the outcome will be discussed in the DEIAR that will follow should the DMRE approve the Final Scoping Report. ♦ Traffic impact on the B road: BVI consulting engineers were appointed to conduct a Traffic Impact Assessment (TIA) on both roads (W- & B road) presently used by the mine. The associated impacts, findings and recommendations of the TIA will be discussed in the DEIAR. Upon receipt of the specialist's recommendations, the list of mitigation measures will also be updated and/or elaborated on. ♦ Safety and security: The potential of the proposed extension of the mining area having a negative impact on the safety and security of the surrounding area will be assessed as part of the EIA process and discussed in the DEIAR.			
Bruce Gordon McMillan / Lombardy Private Nature Reserve ♦ Portion 0 of Jagger No 656	X	To date no comments were received.	
Municipal councillor Ward 15	**X**	To date no comments were received from the Ward Councillor.	
Municipality Buffalo City Metro Municipality (BCMM)	**X**	To date no comments were received from the Buffalo City Metro Municipality.	
Organs of state (Responsible for infrastructure that may be affected Roads Department, Eskom, Telkom, DWA etc	**X**	-	-
Department of Transport (DoT)	X	To date no comments were received from DoT.	

Interested and Affected Parties	Date Comments Received		Issues raised	EAP's response to issues raised by the Applicant
Department of Public Works (DPW)	X	To date no comments were received from DPW.		
Department of Water and Sanitation (DWS)	X	14/09/2020	Me Molepo Khuthadzo registered the DWS as an commenting stakeholder on the 14th of September 2020.	Greenmined acknowledged receipt of the registration on 14 September 2020 and will provide the DWS with a copy of the DSR for their perusal.
Eskom	X	To date no comments were received from Eskom.		
SANRAL	X	To date no comments were received from SANRAL.		
Communities		No communities border the mining area or were identified within 100 m from the site.		
-	-	-	-	-
Dept. Land Affairs	-	Not applicable as this is an application for a Section 102 amendment of the approved mining right on the same property.		
-	-	-	-	-
Traditional Leaders		No tradition leaders borders the mining area or were identified within 100 m from the site.		
-	-	-	-	-
Dept. Environmental Affairs	**X**	-		
Department of Economic Development, Environmental Affairs and Tourism (DEDEAT)	X	To date no comments were received from the DEDEAT.		

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant
Other Competent Authorities affected	**-**	**-**	**-**
Amathole District Municipality	X	To date no comments were received from the Amathole District Municipality.	
Department of Labour	X	To date no comments were received from the Department of Labour.	
Department of Rural Development and Agrarian Reform (DRDAR)	X	To date no comments were received from the DRDAR.	
Department of Rural Development and Land Reform (DRDLR)	X	To date no comments were received from the DRDLR.	
South African Heritage Resources Agency (SAHRA)	X	To date no comments were received from SAHRA.	
OTHER AFFECTED PARTIES	-	-	-
-	**-**	**-**	**-**
INTERESTED PARTIES	-	-	-
Allen Brian Lennard ♦ Portion 41 of Farm No 821	04/10/2020	Mrs Lennard objected to the proposed S102 application and listed the following concerns.	Greenmined acknowledged receipt of Mrs Lennard's objection on 13 October 2020 and responded as follows.
Response received during the initial participation process: *"I absolutely object to the plans of extending the size of the quarry. Living on the W road has been nothing short of hell. The amount of crush and sabunga going out from the quarry is going to increase substantially. The amount of trucks using the road is going to increase as well. The trucks do not have any respect for the resident drivers, there have been quite a few near accidents. The speed the trucks drive is dangerous. As the trucks do not belong to the Quarry they do not really care what happens after a truck leaves their property. Even after being assured that matters would be attended to nothing does happen. Even us residents phoning the truck owners has had no effect on the speed limit*			

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant
driven by these trucks. These trucks also operate till late night hours sometimes only ending at 10 or 11pm. They are definitely removing sabunga. Coming in empty and going out full again. Trying to sleep is impossible. The noise and dust is appalling . This area is a lifestyle smallholding area, we live here for peace and quiet, which is just impossible as the quarry has become so busy. We bought our properties for the lifestyle of living on farmland with our horses, ducks, goats, pigs and other farm animals. The first few years of living here were quite pleasant even though there were some rogue drivers we could at least ride our horses around the area. This cannot be done now unless you have a death wish. Our quality of life has gone down the drain. It's not pleasant living here anymore. Regarding the road used by the trucks and I can only comment on the W road as this is where I live. The dust created by these trucks is something terrible. Normal traffic does not travel at that speed so in that instance the dust is not a problem. The Quarry owners have only just recently made an effort to fix the road properly. Before that it resembled a cattle track. We once out of our own pockets paid to have someone grade and camber the road. That cost us R10,000 which I know is nothing but at least the road was good for a while. Once the quarry increases in size I cannot imagine how many trucks are going to be using the road to the N6. I don't need to spell it out to you what a disaster our lives will be. The amount of smallholding owners around the area of the Quarry are going to be badly affected. By the blasting, by the noise, by the traffic caused by the trucks."			
Greenmined's response to the objection received: *"Greenmined herewith acknowledge receipt of, and thank you for your detailed correspondence received 06 October 2020 on the proposed Section 102 amendment application of Wansley Siyakhula (Pty) Ltd in the East London area. We registered you as an Interested and Affected Party on the project, and will henceforth keep you posted on the progress of the Environmental Impact Assessment process as well as supply you with a copy of the draft scoping report (DSR) for your perusal and commenting. We acknowledge your concerns and have forwarded it to the project team for their consideration and assessment. The access road and traffic impact have been identified as a matter of importance and the project team is in the process of investigating the best possible options. Their findings will be discussed in the EIA documents that will follow in due course, and on which you will be able to comment. The rest of your comments will also be included in the Draft Scoping Report and discussed and assessed in the Environmental Impact Assessment Report that will all be available for your perusal and commenting."*			
Additional response to the above listed comments: ♦ <u>Traffic impact on the W road:</u> BVI consulting engineers were appointed to conduct a Traffic Impact Assessment (TIA) on both roads (W- & B road) presently used by the mine. The associated impacts, findings and recommendations of the TIA will be discussed in the DEIAR. Upon receipt of the specialist's recommendations, the list of mitigation measures will also be updated and/or elaborated on. ♦ <u>Operating hours:</u> A proposal regarding the operating hours of the mine will be compiled as part of the EIA process, and the outcome will be discussed in the DEIAR that will follow should the DMRE approve the Final Scoping Report.			

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant
♦ Noise- and Dust Management: The preliminary mitigation measures regarding the control of fugitive dust emissions and noise are listed in this document under heading *2(l) The possible mitigation measures that could be applied and the level of risk – Fugitive Dust Emission Mitigation / Noise Handling.* The mitigation measures will be updated/elaborated on upon receipt of the specialist's recommendations and presented in the DEIAR. ♦ Blasting: The DEIAR will elaborate on the proposed blasting frequency and associated impacts.			
BJ Cilliers Boorkontrakteurs (Pty) Ltd ♦ Portion 37 of Farm No 821	13/10/2020	Mr Jaco Cilliers registered on the project and submitted the following comments.	Greenmined acknowledged receipt of Mr Cilliers registration on 13 October 2020 and responded as follows.

Comments received during the initial public participation process:

"Me and my father live on Farm 73/821 on B Road which is roughly 500m from Wansley Quarry. I have read through the Background Information Document and I would just like to raise some concerns as summarised in my completed I&AP form:

1. *The state of the B Road is of great concern. It is safe to assume that the high volumes of tipper/haulage trucks moving to and from Wansley quarries with their heavy loads, has a great part in the deterioration of the B Road. The road is becoming undriveable and the tipper/haulage trucks moving on it also makes driving difficult and dangerous. The B Road is narrow and has deep erosions next to and on it. Wansley does supply material to fill some of these erosions, but the rain washes it away each time and it is only a short term solution. The only suggestion is for the trucks to drive only on the W Road, which is in a better state and also wider. This suggestion unfortunately, is also dependent if the residents on W Road will accept the trucks driving only on that road.*
2. *We do not border the quarry directly, so a direct concern with blasting would only be the sound/shockwave.*
3. *The noise levels can possibly become a major concerning factor because the quarry operating hours might alter and run throughout the night? Are there any set regulations for the operating hours and types of operation to minimize the noise?*
4. *As for the dust, East London does have notoriously strong and sporadic wind patterns. There is no mention on mitigations for dust and can become problematic if not addressed properly.*
5. *Also a concern to note is that with the possible blasting, dust, noise and unbearable road conditions, the property value might decline. All of these factors can make the property less attractive to any potential buyer in the future.*
6. *Can I also ask for clarification on the actual footprint of the mining size that is allocated? I noticed on Fig 1 of WC 30/5/1/2/2/8/7 that the size of excavations seems to be larger than the allocated size on the red polygon?"*

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant

Response from Greenmined to the above listed comments:

"Greenmined herewith acknowledge receipt of, and thank you for your detailed correspondence received 13 October 2020 on the proposed Section 102 amendment application of Wansley Siyakhula (Pty) Ltd in the East London area. We registered you as an Interested and Affected Party on the project, and will henceforth keep you posted on the progress of the Environmental Impact Assessment process as well as supply you with a copy of the draft scoping report (DSR) for your perusal and commenting. We acknowledge your concerns and have forwarded it to the project team. The access road and traffic impact have been identified as a matter of importance and the project team is in the process of investigating the best possible options. Their findings will be discussed in the EIA documents that will follow in due course, and on which you will be able to comment. The rest of your comments will also be included in the Draft Scoping Report and discussed and assessed in the Environmental Impact Assessment Report that will all be available for your perusal and commenting."

Additional response to the above listed comments:

- Traffic impact on the B road:
  BVI consulting engineers were appointed to conduct a Traffic Impact Assessment (TIA) on both roads (W- & B road) presently used by the mine. The associated impacts, findings and recommendations of the TIA will be discussed in the DEIAR. Upon receipt of the specialist's recommendations, the list of mitigation measures will also be updated and/or elaborated on.

- Blasting:
  The DEIAR will elaborate on the proposed blasting frequency and associated impacts.

- Noise- and Dust Management:
  The preliminary mitigation measures regarding the control of fugitive dust emissions and noise are listed in this document under heading *2(l) The possible mitigation measures that could be applied and the level of risk – Fugitive Dust Emission Mitigation / Noise Handling.* The mitigation measures will be updated/elaborated on upon receipt of the specialist's recommendations and presented in the DEIAR.

- Operating hours:
  A proposal regarding the operating hours of the mine (including blasting-, crushing and screening times, and hours trucks will utilise the roads) will be compiled as part of the EIA process, and the outcome will be discussed in the DEIAR that will follow should the DMRE approve the Final Scoping Report.

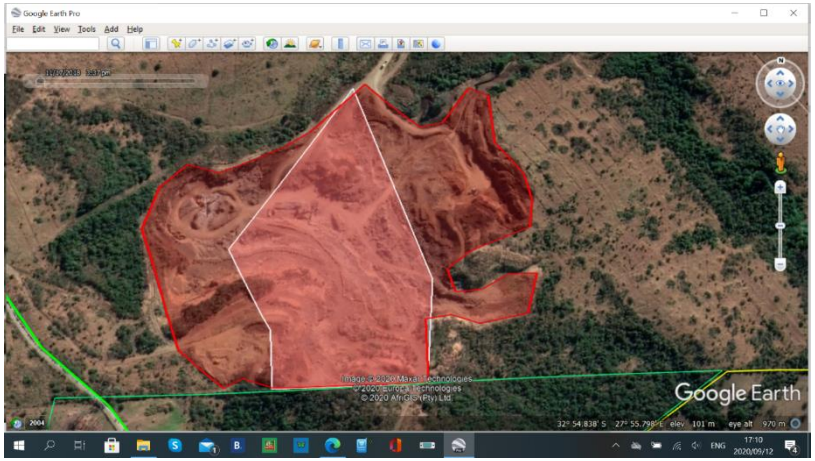
Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant
♦ Depreciation of property value: The potential of the proposed extension of the mining area having a depreciating effect on the property value of the surrounding farms will be assessed as part of the EIA process and discussed in the DEIAR. ♦ Mining footprint: Presently, the approved mining right area is 5.2149 ha. The Section 102 application entails extending the mining area with 32.6426 ha to a total of 37.8575 ha. Should the Section 102 application be approved the areas that were mined outside the boundaries of the current mining right will be incorporated into the amended footprint of the mine.			
Leon Joubert ♦ Portion 74 of Farm No 821	15/09/2020	Mrs Cathy Joubert commented on the S102 application as listed below.	Greenmined acknowledged receipt of the registration and responded as listed below.
Comments received during the initial public participation process: *"Why haven't all the residents living on the B Road not been notified of this study and how it will impact on them living here. This specific road is a "private Servitude" road for the residents living along the road. Surely they also have a say in this matter? Please revert back to me if you are needing e-mail addresses."*			
Greenmined's response to the above sent on 16 September 2020: *"Thus far the publishing of the proposed activity (initial public participation process) included the following:* ♦ *an advertisement in The Rep,* ♦ *three A2 notices that were placed at:* ○ *the turnoff from the N6 onto the MN10118 St,* ○ *the turnoff from the R102 onto the B road,* ○ *the T-junction where the MN10118 St and B road meets.* ♦ *Background Information Documents (BID's) that were send directly to the neighbouring landowners as well as a few additional residents in the area that we were requested to include;* ♦ *BID's that were send to all the relevant State Departments.* *The reasoning behind the initial public participation process is to inform the public of the proposed project and allow a registration and commenting period. Each person that registers his/her interest in the project are listed on a register, and they will be kept informed throughout the entire EIA process that will follow. For ease of reference I have*			

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant
attached a copy of the BID and Project Map to this email. As mentioned on page 12 of the BID, we gladly invite you to provide us with the contact details of persons you feel should be contacted. Therefore, in answer to your question, we would highly appreciate it if you can provide us with the email addresses of the people you feel should be contacted. *Regarding the B road – the use of the road has been highlighted by a few I&AP's (interested and affected parties). The matter has therefore been directed as a priority to the project team that will assess the various possibilities and propose the best possible option. The findings of the project team will be discussed and assessed in the Draft Basic Assessment Report (DBAR) that will be published for public review and commenting over a further 30-days period. The comments received on the DBAR will then be incorporated into the Final Basic Assessment Report that will be submitted to the Department of Mineral Resources and Energy for decision making."* Additional response: *"This project will not have a DBAR and Final Basic Assessment as mentioned earlier. We will incorporate the initial comments into the* ***Draft Scoping Report*** *that will be published for a 30 days commenting period, upon which the additional comments will be added to the Final Scoping Report (FSR). The FSR will then be submitted to the DMRE for decision making. Should DMRE approve the FSR, we will continue with the draft Environmental Impact Assessment Report (DEIAR) that will contain amongst others the findings of the specialists. The DEIAR will again be published for a 30 days commenting period and the comments received on the DEIAR will be incorporated into the Final EIAR that will be submitted to the DMRE for decision making. The matter of the access roads will be added to the DSR and FSR and will be assessed in detail in the DEIAR and FEIAR."*			
Further comments received from Mrs Joubert on 29 September 2020: *"This is our issues regarding the Up grading of the Wansley Quarry* 1. *Blasting, crushing and general noise is going to make a huge impact on our property value? They have already started increasing production as work is going on all hours and weekends which never was the case before….i.e. trucks up and down the B road all the time* 2. *The B Road is in a shocking state with constant usage of huge trucks, The B road was originally a tarred road but due to the constant trucks up and down carrying huge loads the tar has disintegrated and now it is just a huge disaster called a road!!!!!! It is also has become very dangerous because of these trucks speeding up and down and has caused many accidents … to name but a few….writing off a residents vehicle as they were turning out of the driveway, damaging numerous fences due to brake failures, killing pets in the road, almost writing me off a few times just coming out of my driveway……..I can go on and on>* 3. *Safety and security, has also become a problem because this area has been opened up to many undesirables which also think using these once unknown roads attractive."*			
Greenmined responded as listed below on 30 September 2020: *"We will include your comments into the Scoping Report (next report), forward it to the project team (including specialists), and discuss and assess it in the Environmental Impact Assessment Report that will follow once the DMR accepts the Scoping Report and allows the Environmental Impact Assessment Process to continue (this is not an approval of the mining application yet). Both the Scoping Report and the Environmental Impact Assessment Report will be available for your perusal and commenting. I can also confirm that*			

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant
we have contracted the expertise of a road engineer that will be looking at both the B- and W roads and make recommendations regarding the traffic management of the access roads. The findings of the Traffic Impact Assessment will also be incorporated into the Environmental Impact Assessment Report."			
Additional response to the above listed comments: ♦ <u>Depreciation of property value:</u> The potential of the proposed extension of the mining area having a depreciating effect on the property value of the surrounding farms will be assessed as part of the EIA process and discussed in the DEIAR. ♦ <u>Operating hours:</u> A proposal regarding the operating hours of the mine (including blasting-, crushing and screening times, and hours trucks will utilise the roads) will be compiled as part of the EIA process, and the outcome will be discussed in the DEIAR that will follow should the DMRE approve the Final Scoping Report. ♦ <u>Traffic impact on the B road:</u> BVI consulting engineers were appointed to conduct a Traffic Impact Assessment (TIA) on both roads (W- & B road) presently used by the mine. The associated impacts, findings and recommendations of the TIA will be discussed in the DEIAR. Upon receipt of the specialist's recommendations, the list of mitigation measures will also be updated and/or elaborated on. ♦ <u>Safety and security:</u> The potential of the proposed extension of the mining area having a negative impact on the safety and security of the surrounding area will be assessed as part of the EIA process and discussed in the DEIAR.			
Alfred Willem Wild ♦ Portion 46 of Farm No 821	30/09/2020	Mr Wild registered on the project and submitted the following comments.	Greenmined acknowledged receipt of the registration on 02 September 2020 and responded as listed below.
Comments received during the initial public participation process: *"2. The information supplied in the form of headings such as "QNR 324 Activity 4" are extremely vague and do not detail exactly what the intentions of the applicant are. I am concerned about any activity which will affect the water run off quantity and quality. This includes construction of dams / weirs, washing of mined product, movement of material from or into FEPA pronounced waterways. I would like more specific information to be made available.*			

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant

3. It is noted that the existing mining licence gives authority for 5.2149 ha to be mined, but in fact mining is taking place over an area of some 11 plus ha, which surely places Wansley Quarries in serious breach of their mining licence. Your satellite view photo (fig 1) clearly shows the extent of mining in breach of the existing licence. It also shows excavation that has been carried out through one of the two FEPA on the property, which I believe is also a breach of regulations. The photograph below shows the extent of "overmining" if you can call it that, outside the white outlined licenced area.



4. The neighbouring farms (W-6 / B-23 and B-17), and servitude are in the immediate area of the current mining, and proposed extended mining area, and have animals and people moving on them at any time. Blasting at the quarry would therefore pose a physical danger to both people and animals unless restrictions are applied. My understanding is that regulations state no blasting may take place within 500 feet of persons, and so I recommend that a restriction of "no blasting within 500 feet of the Wansley farm boundary may be undertaken", if a blasting licence is granted.

5. The degradation of the "B road" due to the heavy truck traffic to and from Wansley Quarry is of great concern to all residents in the area. Although Wansley do supply Subunga and grade sections of the road occasionally, the danger posed by speeding and inconsiderate truck drivers are a constant danger to pedestrians, motorists, and animals in the area, which is zoned as agricultural. The local municipality and Provincial authority refuse to carry out any maintenance on this road. I believe that all heavy trucks should be routed via the "W road", which is wider, and does not travel through the centre of any owner's farm.

6. Property values in the immediate vicinity of the increase proposed mining will be adversely affected, due to noise, dust, potential blasting dangers.

7. Please register me as I&AP."

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant

Greenmined's response to the above listed comments:

"Greenmined herewith thank you for your participation and acknowledge receipt of your correspondence received 30 September 2020 on the proposed Section 102 amendment application of Wansley Siyakhula (Pty) Ltd in the East London area. We registered you as well as Me Stapleton as Interested and Affected Parties on the project, and will henceforth keep you posted on the progress of the Environmental Impact Assessment process as well as supply you with a copy of the draft scoping report (DSR) for your perusal and commenting. We acknowledge and take note of your concerns regarding the possible impact on water quality, extent of the mining footprint, potential blasting impact, access road and property values and have forwarded your comments to the various specialists that form part of the project team. Further to the above, please note that all your comments will be included in the draft scoping report, and will be discussed and assessed (once feedback from the various specialists were received) in the Environmental Impact Assessment Report that will follow once the Scoping Report was approved by the Department of Mineral Resources and Energy. You will be notified as soon as the above mentioned reports are available for your perusal and commenting."

Additional response to the above listed comments:

- Hydrology / Water use
  Please refer to heading *2(h)(iv)(1)(a) Type of environment affected by the proposed activity – Hydrology and Geohydrology; and*
  Heading 2(h)(iv)(1)(c) Description of specific environmental features and infrastructure on the site – Site Specific Hydrology and Geohydrology.
  All hydrology and water use related matters will be discussed in detail in the DEIAR upon receipt of the specialist's inputs.

- Mining footprint:
  Should the Section 102 application be approved the areas that were mined outside the boundaries of the current mining right will be incorporated into the amended footprint of the mine.

- Blasting:
  The DEIAR will elaborate on the proposed blasting frequency and associated impacts, and will also propose mitigation measures to minimise the potential impact on the receiving environment.

- Traffic impact on the B road:
  BVI consulting engineers were appointed to conduct a Traffic Impact Assessment (TIA) on both roads (W- & B road) presently used by the mine. The associated impacts, findings and recommendations of the TIA will be discussed in the DEIAR. Upon receipt of the specialist's recommendations, the list of mitigation measures will also be updated and/or elaborated on.

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant
♦ Depreciation of property value: The potential of the proposed extension of the mining area having a depreciating effect on the property value of the surrounding farms will be assessed as part of the EIA process and discussed in the DEIAR.			
Mr Mader van Niekerk	To date no comments were received.		
Trevor & Tammy Boniface	12/10/2020	Trevor and Tammy Boniface objected against the project with the following comments.	Greenmined acknowledged the registration on 13 October 2020 and responded as follows.

Response received during the initial public participation process:

"Kindly receive this as an official objection to the expansion of the Wansley Siyakhula (Pty) Ltd quarry. We are direct fence sharing neighbours with Wansley and will be greatly affected should the quarry expand by any degree. We have chosen to live in Holm Hill for the lifestyle benefits of the lower noise levels and quiet surroundings. The wild animal life which we enjoy is already diminishing and will decrease even further if the quarry is given a greater area to mine. Currently the traffic flow on the W road is very high due to the cartage trucks, many of which speed and disregard other vehicles. These heavily loaded trucks are causing damage to the road and create constant dust for the adjacent properties. The noise from these cartage vehicles is also an issue as they often run before and after normal business hours. It is important to note that the W road, as we refer to it, is a private road. It is merely a servitude for Wansley Farm as noted in our title deeds (our boundary is on the other side of the road). Permission has not been granted to Wansley Quarries for their business use and they do have an alternative route available. It is also of concern that as per the aerial image (Figure 1) on your report it seems that the quarry has already exceeded their current approved mining area. Rehabilitation of the land does also not appear to have been done."

Greenmined's response to the above listed comments:

"Greenmined herewith acknowledge receipt of, and thank you for your detailed correspondence received 12 October 2020 on the proposed Section 102 amendment application of Wansley Siyakhula (Pty) Ltd in the East London area. We registered you as an Interested and Affected Party on the project, and will henceforth keep you posted on the progress of the Environmental Impact Assessment process as well as supply you with a copy of the draft scoping report (DSR) for your perusal and commenting. We acknowledge your concerns and have forwarded it to the project team. The access road and traffic impact have been identified as a matter of importance and the project team is in the process of investigating the best possible options. Their findings will be discussed in the EIA documents that will follow in due course, and on which you will be able to comment. The rest of your comments will also be included in the Draft Scoping Report and discussed and assessed in the Environmental Impact Assessment Report that will all be available for your perusal and commenting."

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant
Additional response on the above listed objection: ♦ <u>Faunal impact:</u> The potential impact of the mining activities on the surrounding faunal component will be investigated as part of the EIA process and elaborated on in the DEIAR. ♦ <u>Operating hours:</u> A proposal regarding the operating hours of the mine (including blasting-, crushing and screening times, and hours trucks will utilise the roads) will be compiled as part of the EIA process, and the outcome will be discussed in the DEIAR that will follow should the DMRE approve the Final Scoping Report. ♦ <u>Traffic impact on the W road:</u> BVI consulting engineers were appointed to conduct a Traffic Impact Assessment (TIA) on both roads (W- & B road) presently used by the mine. The associated impacts, findings and recommendations of the TIA will be discussed in the DEIAR. Upon receipt of the specialist's recommendations, the list of mitigation measures will also be updated and/or elaborated on. ♦ <u>Mining footprint:</u> Should the Section 102 application be approved the areas that were mined outside the boundaries of the current mining right will be incorporated into the amended footprint of the mine.			
Liz & Mteto & Judith Dakiso	16/09/2020	An objection against the proposed project was received with the following comments.	Greenmined acknowledged the objection on 18 October 2020 and responded as listed below.
Comments received during the initial public participation process: *"Regarding the study being done and the extension of quarry and Usage of W road to connect to N6, I would like to object to this project as I am the resident and we were never all consultant and given an opportunity to voice out the impact of this to us. The Portion on W road is on my property which I still need to sort out as surveyors recommendation last year. I would like to put it on record we will not approve any extension unless a different route is use not W or C road."*			
Greenmined's response send on the 18th of September 2020: *"Greenmined herewith acknowledge receipt of your correspondence received 16 September 2020 on the proposed Section 102 amendment application of Wansley Siyakhula (Pty) Ltd in the East London area. We registered you as an Interested and Affected Party on the project, and will henceforth keep you posted on the progress of the Environmental Impact Assessment (EIA) process as well as supply you with a copy of the draft scoping report (DSR) for your perusal and commenting. Further to the above, I have also attached*			

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant
a copy of the Background Information Document and Project Map should you like to share it with additional interested parties. Alternatively, please feel free to provide me with the contact detail of the person/s you wish to be included and we will gladly supply them with the documents. We acknowledge your concern regarding the access road and have forwarded it to the project team. The access road and traffic impact have been identified as a matter of importance and the project team is in the process of investigating the best possible options. Their findings will be discussed in the EIA documents that will follow in due course, and on which you will be able to comment."			
Additional response regarding the above listed comments: ♦ <u>Traffic impact on the W road:</u> BVI consulting engineers were appointed to conduct a Traffic Impact Assessment (TIA) on both roads (W- & B road) presently used by the mine. The associated impacts, findings and recommendations of the TIA will be discussed in the DEIAR. Upon receipt of the specialist's recommendations, the list of mitigation measures will also be updated and/or elaborated on.			
Robert Masters ♦ Farm B12A	05/10/2020	Mr Masters objected against the proposed project and listed the following comments.	Greenmined acknowledged receipt of the objection and responded as listed below.
Comments received during the initial public participation process: *"I would like to raise an objection due to the following reasons:* *1. the increased noise & traffic volumes;* *2. the poor maintenance & upkeep of the potholed B Road;* *3. excessive speed limits of the heavy trucks and dust;* *4. for the personal safety/security of our wives and children;* 5. *current maintenance and upkeep of the roads is not satisfactory."*			
Greenmined's response send on the 13th of October 2020: *"Greenmined herewith acknowledge receipt of, and thank you for your correspondence received 05 October 2020 on the proposed Section 102 amendment application of Wansley Siyakhula (Pty) Ltd in the East London area. We registered you as an Interested and Affected Party on the project, and will henceforth keep you posted on the progress of the Environmental Impact Assessment process as well as supply you with a copy of the draft scoping report (DSR) for your perusal. We acknowledge your concerns and have forwarded it to the project team. The access road and traffic impact have been identified as a matter of importance and the project team is in the process of investigating the best possible options. Their findings will be discussed in the EIA documents that will follow in due course, and on which you will be able to comment. Your objection will also be included in the Draft Scoping Report and discussed and assessed in the Environmental Impact Assessment Report that will also all be available for your perusal and commenting."*			

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant
Additional response to the above listed comments: ♦ <u>Noise- and Dust Management:</u> The preliminary mitigation measures regarding the control of fugitive dust emissions and noise are listed in this document under heading *2(l) The possible mitigation measures that could be applied and the level of risk – Fugitive Dust Emission Mitigation / Noise Handling.* The mitigation measures will be updated/elaborated on upon receipt of the specialist's recommendations and presented in the DEIAR. ♦ <u>Traffic impact on the B road:</u> BVI consulting engineers were appointed to conduct a Traffic Impact Assessment (TIA) on both roads (W- & B road) presently used by the mine. The associated impacts, findings and recommendations of the TIA will be discussed in the DEIAR. Upon receipt of the specialist's recommendations, the list of mitigation measures will also be updated and/or elaborated on. ♦ <u>Safety and security:</u> The potential of the proposed extension of the mining area having a negative impact on the safety and security of the surrounding area will be assessed as part of the EIA process and discussed in the DEIAR.			
Debbie Reynhardt	11/10/2020	Me Reynhardt registered as an I&AP on the project and submitted the following comments.	Greenmined registered Me Reynhardt as an I&AP on 13 October 2020 and responded as follows.
Comments received from Me Reynhardt on 13 October 2020: *"I require an extension of the period for comment, as I haven't received the DSR yet. Just briefly though, my objections and concerns are related to loss of sense of place, in holm hill; additional noisy road traffic, (as the truck load bodies and tail gates rattle terribly as they go down the b road) and it makes it unpleasant and unsafe to cycle, run or ride horses on our farm roads. Speeding of the trucks has also been an issue in the past.* *Additionally, the proposed footprint is in a STEP vegetation corridor and Insufficient detail has been given regarding a number of pertinent issues, regarding water, wildlife, blasting magnitudes, frequency, times etc. and other impacts; alternatives, monitoring, compliance, etc.* *I would like to submit more detailed comment. Could you advise if there will be opportunity to do this? And will there be a public meeting regarding this?"*			

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant
Response from Greenmined on the above listed comments: *"We are still in the process of drafting the Scoping Report, and therefore it has not yet been published for comments. As soon as the document is ready we will inform all the registered interested and affected parties (I&AP's) (of which you form part) and stakeholders and allow for another 30-days commenting period.* *We do take note of the concerns you listed below, and will include them in the Scoping Report. Your concerns will also be forwarded to the project specialists (for instance ecologist, road engineer etc.) that will consider and assess them. The outcome of the specialist studies will be included in the Draft Environmental Impact Assessment Report (DEIAR) that will follow should the Department of Mineral Resources and Energy accept the Scoping Report. The DEIAR will once again be distributed to all the registered I&AP's and stakeholders for another 30-days commenting period. You will therefore still have at least two more opportunities to provide us with your comments.* *Due to the uncertainties/difficulties regarding COVID, we do not at the moment plan to hold a community meeting. However, should you wish to meet we are happy to arrange a virtual meeting with you to discuss the project."*			
Additional response to the above listed comments: ♦ <u>Potential impact on the sense of place:</u> The potential impact of the mining activities on the sense of place will be investigated as part of the EIA process and elaborated on in the DEIAR. ♦ <u>Noise Management:</u> The preliminary mitigation measures regarding the control of noise are listed in this document under heading *2(l) The possible mitigation measures that could be applied and the level of risk – Noise Handling.* The mitigation measures will be updated/elaborated on upon receipt of the specialist's recommendations and presented in the DEIAR. ♦ <u>Traffic impact on the B road:</u> BVI consulting engineers were appointed to conduct a Traffic Impact Assessment (TIA) on both roads (W- & B road) presently used by the mine. The associated impacts, findings and recommendations of the TIA will be discussed in the DEIAR. Upon receipt of the specialist's recommendations, the list of mitigation measures will also be updated and/or elaborated on. ♦ <u>Vegetation description:</u> The comment is noted and sent to the ecologist to incorporate into the ecological and surface hydrological study and assessment.			
Eddie Scheun	14/09/2020	Mr Scheun objected against the proposed project as listed below.	Greenmined acknowledged receipt of the objection on 16 September 2020 and responded as follows.

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant
Comments received during the initial public participation process: *"We have been handed the documentation by a neighbour. We are concerned that we are not receiving the documentation from your office directly, and we are further concerned that we may have missed documentation. Kindly and as a matter of urgency register us as interested parties. Please note further that unless we receive an firm undertaking that the road between the quarry and the N6 will not be used in this operation, we will without any doubt oppose the application, and we insist on being granted the opportunity to do so."*			
Response from Greenmined: *"Greenmined herewith acknowledge receipt of your correspondence received 14 September 2020 on the proposed Section 102 amendment application of Wansley Siyakhula (Pty) Ltd in the East London area. We registered you as an Interested and Affected Party on the project, and will henceforth keep you posted on the progress of the Environmental Impact Assessment process as well as supply you with a copy of the draft scoping report (DSR) for your perusal. Please note that you have not missed previous correspondence, and that the attached Background Information Document and Project Map were the first documents that were circulated regarding the proposed project. We acknowledge your concern regarding the access road and have forwarded it to the project team. The access road and traffic impact has been identified as a matter of importance and the project team is in the process of investigating the best possible options. Their findings will be discussed in the EIA documents that will follow in due course, and on which you will be able to comment."*			
Additional comments submitted by Mr Scheun on 16 September 2020: *"The access road is a real concern. Currently, Wansley farm hold a servitude to utilise a road over my land. We will not extend the use of the road to a business being conducted on Wansley farm. Please, we must make this point very clear."*			
Additional comments submitted by Mr Scheun on 30 September 2020: *"We have requested to be included in the list of interested and affected parties. We are the owners of the remainder of portion 2 of farm 652. I note that you refer to " the expertise of a road engineer that will be looking at both the B- and W roads and make recommendations regarding the traffic management of the access". We again confirm that the W road is on private land. It is not a public road. The road engineer would have no business looking at the W road. In terms of our title deed. The quarry does not hold a servitude to use the road. Unless we receive as a matter of urgency confirmation that the quarry will immediately desist from using the road, we will be physically closing the road for all cartage vehicles."*			

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant
Additional response on the above listed comments: ♦ <u>Traffic impact on the W road:</u> BVI consulting engineers were appointed to conduct a Traffic Impact Assessment (TIA) on both roads (W- & B road) presently used by the mine. The associated impacts, findings and recommendations of the TIA will be discussed in the DEIAR. Upon receipt of the specialist's recommendations, the list of mitigation measures will also be updated and/or elaborated on.			
Andre Scheun	01/10/2020	Mr Scheun objected against the project with the following comments.	Greenmined acknowledge the objection and responded as follows.
Comments received from Mr Scheun with the response of Greenmined (02 October 2020) thereon: *"I have 3 questions that I am putting to you to better understand this Wansley issue:* 1. *Are you situated in East London?* *I am situated in Ballito, and the rest of the project team are from various areas including East London, Johannesburg, Bloemfontein, Somerset-West, and Cape Town.* 2. *Did you visit Wansley Farm before compiling the document you sent to Boniface Trust?* *I have visited the farm before.* 3. *Did you consider having a meeting with the residents of Holm Hill, specifically all those on the B and W roads, before compiling the above document?* *The Background Information Document that was send out forms part of the initial public participation phase associated with a Section 102 amendment application (such as this one). The reasoning behind an initial public participation process is to identify and notify the interested and affected parties (I&AP's) and stakeholders and provide the public with a period to register on the EIA process (still to follow). As the initial public participation phase takes place at the onset of the EIA (environmental impact assessment), the technical information regarding the project still needs to be obtained as well as the input of the specialists. Once this information was obtained it is presented in a report (environmental impact assessment report) that is then circulated to the registered I&AP's and stakeholders for their perusal and commenting. In light of this it is (in our opinion) more effective to meet with interested parties once the technical information is available and the recommendations of the specialists were received. However, should you wish so we will gladly set up a virtual meeting with you to discuss the project."*			
Additional comments received from Mr Scheun on 02 October 2020: *"public participation phase? The document that was put up at the entrance to W-road, and most probably at the other entrances to Holm Hill too, was put up on a S-turn in the road at an uphill opposite an informal settlement. There is no way that I would stop to read the notice that, as you know, was small print on a small temporary board. If it were not for the community of Holm Hill spreading the document amongst ourselves, very few members of the public would actually have known about this project and able to participate - that includes immediate neighbours and private road owners. No further response required."*			

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant

"No idea what all the references to roads in your document means. I assume they refer to roads on the premises – Wansley Farm. When do you expect the proposed MR will expire?

1. *I have come to the conclusion that your MR holder has not been acting in good faith over the years and that they are not following good business practice.*
   - *1.1 According to your document and maps it is obvious that the current mining footprint is already far greater than the "approved mining area", which is in violation of the mining rights issued*
   - *1.2 According to your document the distance from city centre to Wansley farm is ± 30 kilometres.*
     - *1.2.1 East London Tourism (Argyle street) to Wansley Quarries via North East Expressway and Lavender Blue is 15,5kms*
     - *1.2.2 East London Tourism to Wansley Quarries via North East Expressway and the N2 and B-road is 16.5kms*
     - *1.2.3 East London Tourism to Wansley Quarries via Vincent, N2, Meiseshalt, and B-road is 18,1kms*
     - *1.2.4 East London Tourism to Wansley Quarries via North East Expressway, the N6, and W-road is 15,4kms.*
     - *1.2.5 Outer edge of Beacon Bay to Wansley Quarries is 6,2 kms and possibly only 5 kms as the crow flies.*
   - *1.3 Blasting has been taking place from time to time which is in violation of the mining rights issued.*
   - *1.4 Promised road maintenance to the private roads being used is not being done properly.*
   - *1.5 Watering the W-road on Mondays, Wednesdays, and Fridays to curb dust as was agreed by the owner of Wansley Farm in 2007 is not being done.*
   - *1.6 Oil spills due to accidents where cartage vehicles overturned on the private road were not attended to in an environmentally friendly way. On one instance the oil spill was covered with soil in a ditch that is a waterway to one of our dams.*
   - *1.7 The MR holder has no concern for the rights and expectations of its neighbours and the local community at large. Complaints, even on WhatsApp groups of which the MR holder and staff are participants, fall on deaf ears. Here they have dropped the ball and the opportunity to involve the community in addressing issues affecting the community.*

2. *<u>Noise Pollution</u>*
   - *2.1 As of late up to 35 cartage trucks have been counted over an hour and a half period using the W-road passing our homesteads that are right next to the road. I have requested records from the MR holder to see how many cartage trucks actually use our private road on average per day, but that has not been forthcoming.*
   - *2.2 The excavators and crushes and blasting can be heard from our property depending on the wind or lack thereof.*
   - *2.3 The operation is not limited to office hours as vehicles could be on the road from sun rise to after 20h00, and even over weekends. It is all dependent on customer demands.*

3. *<u>Dust Pollution</u>*
   - *3.1 The cartage trucks cause dust pollution on/in:*
     - *3.1.1 Grazing to the effect that certain areas next to the road cannot be grazed due to the build-up of dust and dying vegetation.*
     - *3.1.2 Building roofs from where water runs into our water tanks for household use.*

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant

3.1.3 Our homes and other buildings and laundry, as our buildings are right next to the W-road.

4. Traffic

4.1 Excessive speeds by the cartage drivers on our private road
4.2 Reckless driving by the cartage drivers on our private W-road sometimes literally forcing vehicles off the road
4.3 High volumes of cartage trucks
4.4 Long hours of cartage trucks on the road
4.5 Loads are not secured and lost partial loads are not attended to.

5. Other

5.1 When the MR holder does work on the road, they continuously block the under-road drainage pipes to our dam and block the road run-offs to our property.
5.2 When the MR holder has idle cartage trucks, they will dump loads of sabunga on the road surface for later use which is a risk to all road users as these dumped loads could lie there for weeks on end.
5.3 The deteriorating condition of our roads due to the heavy traffic has a very negative effect on our own vehicles.
5.4 *Horse riding on our roads has come to an end due to the cartage truck traffic."*

Additional response to the above listed comments:

- Road related listed activities:
  As mentioned earlier, when mining reaches the most northern part of the proposed extension footprint (refer to Figure 2) it may be necessary to divert the road (Mn10118 St / W Road) along the northern mining boundary, this matter will be discussed in detail in the draft Environmental Impact Assessment Report. Should haul roads be needed where no farm roads exist the roads will be extended as mining progress. The footprint of the haul roads will be contained to the approved mining area.

- Expiry date of mining right:
  The mining right is valid until 16 June 2026, with the option of renewal.

- Traffic impact on, and management of the W road:
  BVI consulting engineers were appointed to conduct a Traffic Impact Assessment (TIA) on both roads (W- & B road) presently used by the mine. The associated impacts, findings and recommendations of the TIA will be discussed in the DEIAR. Upon receipt of the specialist's recommendations, the list of mitigation measures will also be updated and/or elaborated on.

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant
♦ Noise- and Dust Management: The preliminary mitigation measures regarding the control of fugitive dust emissions and noise are listed in this document under heading *2(l) The possible mitigation measures that could be applied and the level of risk – Fugitive Dust Emission Mitigation / Noise Handling.* The mitigation measures will be updated/elaborated on upon receipt of the specialist's recommendations and presented in the DEIAR. ♦ Operating hours: A proposal regarding the operating hours of the mine will be compiled as part of the EIA process, and the outcome will be discussed in the DEIAR that will follow should the DMRE approve the Final Scoping Report."			
Dean Webber ♦ Farm B1	18/09/2020	Dean Webber registered on the project and submitted the following comments.	Greenmined registered Mr Webber on 23 September 2020 and responded as follows.
Comments received during the initial public participation period: *"My family have been living on Farm B1 since the sixties (One of the first families to settle in this area.) Regarding the quarry....* *TRUCKS* *It is blatantly obvious that the quarry trucks that move the earth from the quarry have the following effect on us... Destruction of the B Road (my parents along with Ray Rogers and one or two other residents pooled their hard earned cash together and had a large portion of the B Road tarred. The tar did not last long due to the quarry trucks. It would seem that a fair way to deal with the transport of earth from the quarry by the trucks to the main roads should be controlled by the quarry - / speeding - / what routes the trucks should take etc (Lip service does not do it for me..I am talking about a system in place that is controlled and monitored by the quarry and a third party that has an interest in the community of Holmhill. It is suggested that the trucks delivering to Gonubie use the B road only. Trucks delivering anywhere else, should use the W Road. Why can this not be implemented and monitored by the quarry (+3rd party) since the only people who benefit from the transport of this earth is the quarry. Discipline and control of the drivers from the quarry to the main roads should be monitored and controlled by the quarry (+3rd party). The quarry brushes off any incident or problem caused by the truck drivers and pass the responsibility onto the truck drivers. Once again, the only people benefiting from the trucks is the quarry, so it seems fair that they should be responsible for monitoring and discipline of the truck drivers and also give feedback as to the actions taken regarding any incidence regarding the trucks.* *ROAD (If you can call it that)* *Since the quarry is directly responsible for the majority of destruction of B Road, it is only fair that the quarry does regular maintenance to the B Road. The quarry should not call on the residence to contribute to any repairs.*			

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant
DUST *We already live in a permanent dust cloud caused mainly by the quarry trucks. Should the quarry expand, the dust will increase due to more traffic. Clearly, I am opposed to the quarry expansion.* *NOISE* *Same points as above.* *BLASTING* *Absolutely opposed to this. It will be like a mini earthquake. Noise pollution in a rural setting with a lot of animals and residents living here. Absolutely opposed to this.* *SPEEDING TRUCKS* *Same story...* *Bottom line is that, I have the impression from all that has happened on Holmhill, that the quarry is only focused on activities of the quarry and anything that happens outside of the quarry property is brushed off by putting the blame on the contracted truck drivers and have no interest in anything that outside of that. This has to change. I am not against progress, but when it is done for profit and no consequences for the people dealing with the negative side of that progress, I am highly opposed to any support for that progress and am willing to personally get involved to adjust those dynamics by any means necessary."*			
Response from Greenmined on the above listed comments: *"Greenmined herewith acknowledge receipt of, and thank you for your detailed correspondence received 18 September 2020 on the proposed Section 102 amendment application of Wansley Siyakhula (Pty) Ltd in the East London area. We registered you as an Interested and Affected Party on the project, and will henceforth keep you posted on the progress of the Environmental Impact Assessment process as well as supply you with a copy of the draft scoping report (DSR) for your perusal. We acknowledge your concerns and have forwarded it to the project team. The access road and traffic impact have been identified as a matter of importance and the project team is in the process of investigating the best possible options. Their findings will be discussed in the EIA documents that will follow in due course, and on which you will be able to comment. The rest of your comments will also be included in the Draft Scoping Report and discussed and assessed in the Environmental Impact Assessment Report that will all be available for your perusal and commenting."*			

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant
Additional response to the above listed comments: ♦ <u>Dust-, noise- and traffic impact caused by mining related trucks:</u> BVI consulting engineers were appointed to conduct a Traffic Impact Assessment (TIA) on both roads (W- & B road) presently used by the mine. The associated impacts, findings and recommendations of the TIA will be discussed in the DEIAR. Upon receipt of the specialist's recommendations, the list of mitigation measures will also be updated and/or elaborated on. ♦ <u>Blasting:</u> The DEIAR will elaborate on the proposed blasting frequency and associated impacts.			
Andrew Moss ♦ Portion 13 (Portion of Portion 2) of Farm No 652	06/10/2020	Mr Moss objected against the project as listed below.	Greenmined acknowledged receipt of Mr Moss's comments on 6 October 2020.
Comments received during the initial public participation phase: *"With reference to the Background Information Document dated 11th September 2020, I, Andrew Moss, hereby submit my objections to the project proposal as the property owner of Portion 13 (A Portion of Portion 2) Farm 652 – Farm W8.* *W Road* *With reference to the attached Title Deed for the property, there is a servitude at the top of the property which allows access to Portion 1 Farm 652. This servitude is termed "W Road" and is linked to the servitudes of the two adjacent properties and is in essence a private road. The servitude is intended for access to Portion 1 Farm 652 and not for haulage vehicles belonging to Wansley Siyakhula (WS), which are in breach of the conditions of the Title Deed. The haulage vehicles cause excessive damage to the rural road which is not designed for over usage by heavy vehicles. WS does not adequately maintain the road which is used by the surrounding property owners for access to and from their properties.* *Safety of other road users* *The haulage vehicles and a threat to the safety of other road users. Every road user has a "near miss" storey to tell when avoiding a collision with a haulage vehicle driving at excessive speeds. Mothers transporting young children to and from school activities during the day are the most vulnerable. It is a matter of time before a serious incident does happen, which unfortunately will be too late.* *Groundwater* *Most properties in the area rely on boreholes for their water supply, which are at risk of being damaged due to the proposed blasting activities.*			

Interested and Affected Parties	Date Comments Received	Issues raised	EAP's response to issues raised by the Applicant
Conclusion *W Road and the surrounding properties are already under stress due to the current operations of Wansley Siyakhula, an extension to the project area and the introduction of blasting will have a severe effect on the area and the inhabitants. Wansley Siyakhula have not adhered to any agreements with regards to the safe usage and maintenance of W Road to date and are unlikely to do so in the future. The existing quarry area has already exceeded the approved demarcated boundary, which is a clear indication of Wansley Siyakhula's attitude towards the environment."*			
Additional response to the above listed comments: ♦ <u>Traffic impact on the W road:</u> BVI consulting engineers were appointed to conduct a Traffic Impact Assessment (TIA) on both roads (W- & B road) presently used by the mine. The associated impacts, findings and recommendations of the TIA will be discussed in the DEIAR. Upon receipt of the specialist's recommendations, the list of mitigation measures will also be updated and/or elaborated on. ♦ <u>Potential impact of blasting on the groundwater</u> The potential of blasting activities affecting the surrounding groundwater will be assessed as part of the EIA process and discussed in the DEIAR.			
Unknown	13/10/2020	An email was received from an unknown person with the following comments.	Greenmined acknowledged receipt of the email on 19 October 2020 and requested the contact details of the sender. To date no response was received.
Comments received from unknown sender: *"It is with great concern that I write to you regarding the expansion of Wansley Quarries. We have long had a strained view of the quarry which has a habit of working after reasonable hours, on weekends, on public holidays and with heavy industrial equipment making an extremely loud noise. This noise pollution, dust, constant heavy vehicles traffic as well as the unsightly industrial view only negatively affects our future plans and our property value. We would never have bought our property had we known that this quarry, which is in the middle of a smallholder, residential farming community, would be allowed to expand as such. It is inconceivable that this expansion is even being considered without sufficient review of the environmental and community impacts. We live across the valley and probably have more noise pollution and disruption from quarry as an eyesore than the neighbouring farms and yet we were never consulted. It is through the farming community that we have been alerted of such expansions. The negative impact on the surrounding area and community needs to be thoroughly assessed. Our very own business plan, job creation plan through eco-tourism in the surrounding area will be seriously negatively affected and the very viability of these plans will be in question because of the expansion of such an unsightly, invasive industry on our doorstep."*			

iv) The Environmental attributes associated with the sites

(1) Baseline Environment

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

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

This section describes the general biophysical, cultural and socio-economic environment as well as baseline conditions that may be affected by the proposed extension project. The information provided here was obtained from the current EMP of the mine, and desktop studies and must be treated as preliminary. More detailed information based on site specific conditions, obtained during site assessments and focussed investigations will be collected during the EIA process and elaborated on in the DEIAR.

PHYSICAL ENVIRONMENT

CLIMATE

(Information extracted from the Wansley Siyakhula (Pty) Ltd Mining Rights Areas Storm Water Management Plan)

According to SAExplorer the East London area receives an average of 593 mm of precipitation per year (left chart). The Stormwater Management Plan (SWMP) however reported the MAP (mean annual precipitation) for the study area to be 782 mm/year. According to the SAExplorer data the highest rainfall usually occurs in March averaging 79 mm, while the lowest occurs in July with an average of 16 mm. The monthly distribution of average daily maximum temperatures (centre chart) shows that the average midday temperatures range from 20˚C in July to 26˚C in February. The region is the coldest during July (9.3°C on average). Consult the chart below (right) for an indication of the monthly variation of average night-time temperatures.

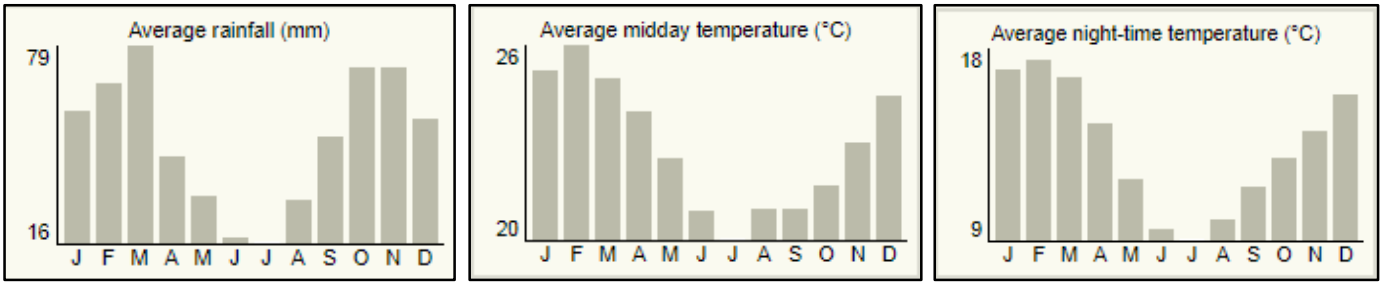


Figure 7: Charts showing the climatic averages of the East London area (information obtained from SAExplorer).

During the summer/spring months the south to south-east wind dominates in the East London area (blowing in a northern/north-western direction), whilst during the winter/autumn months the west to south-western wind is dominant as presented in the figure below. According to the data of windfinder.com the average wind speeds range between 8 - 12 kts during the year.

Figure 8: Dominant wind direction of the East London area (information obtained from windfinder.com).

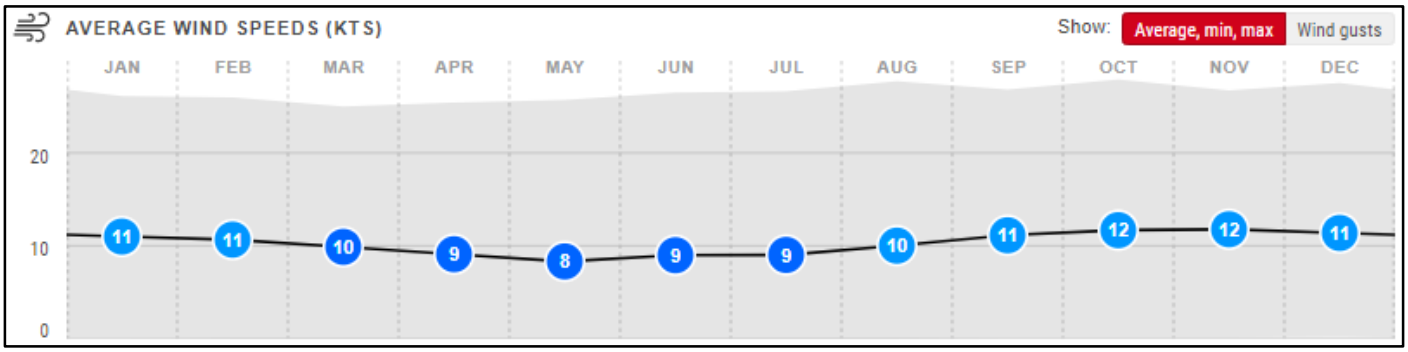
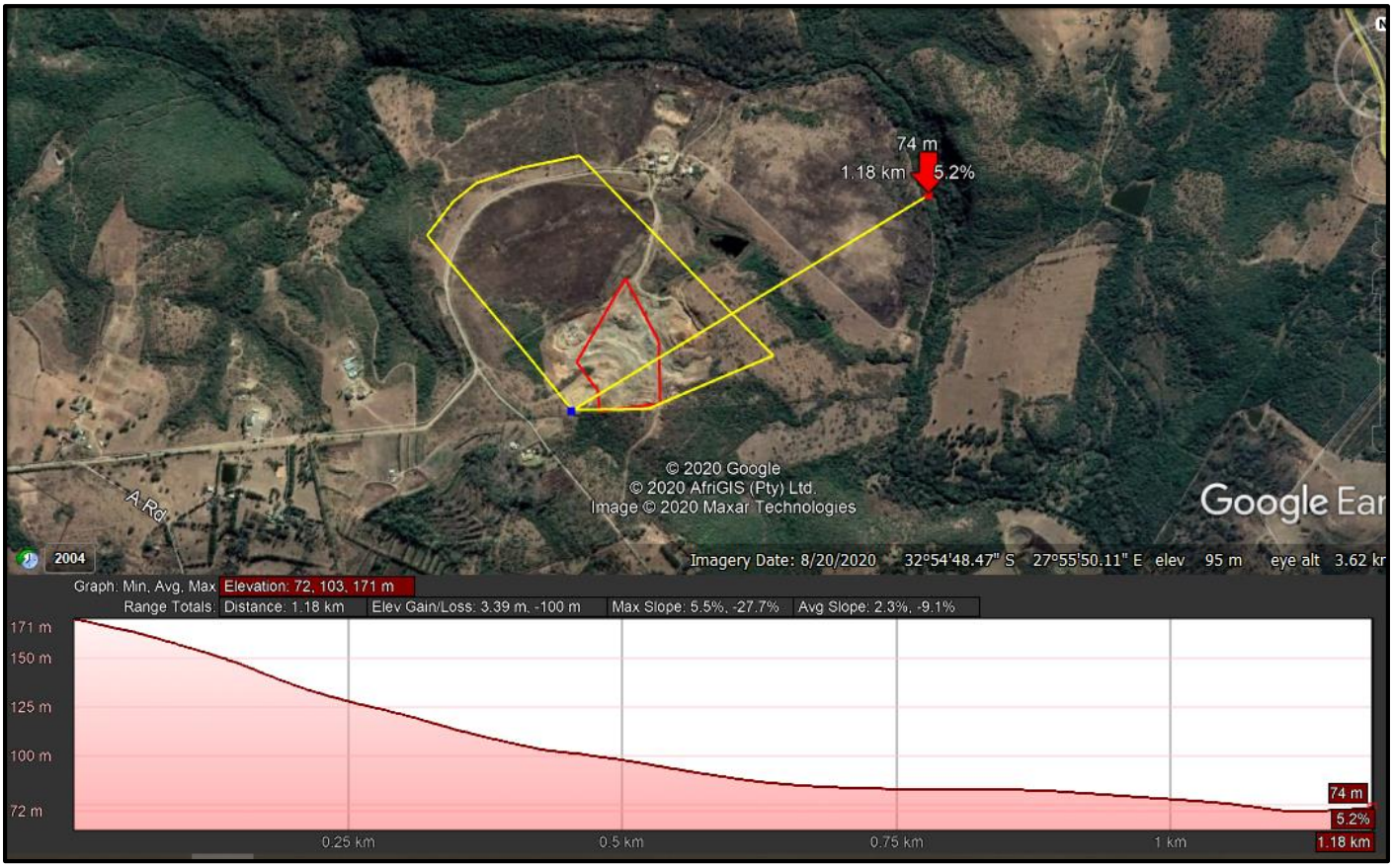
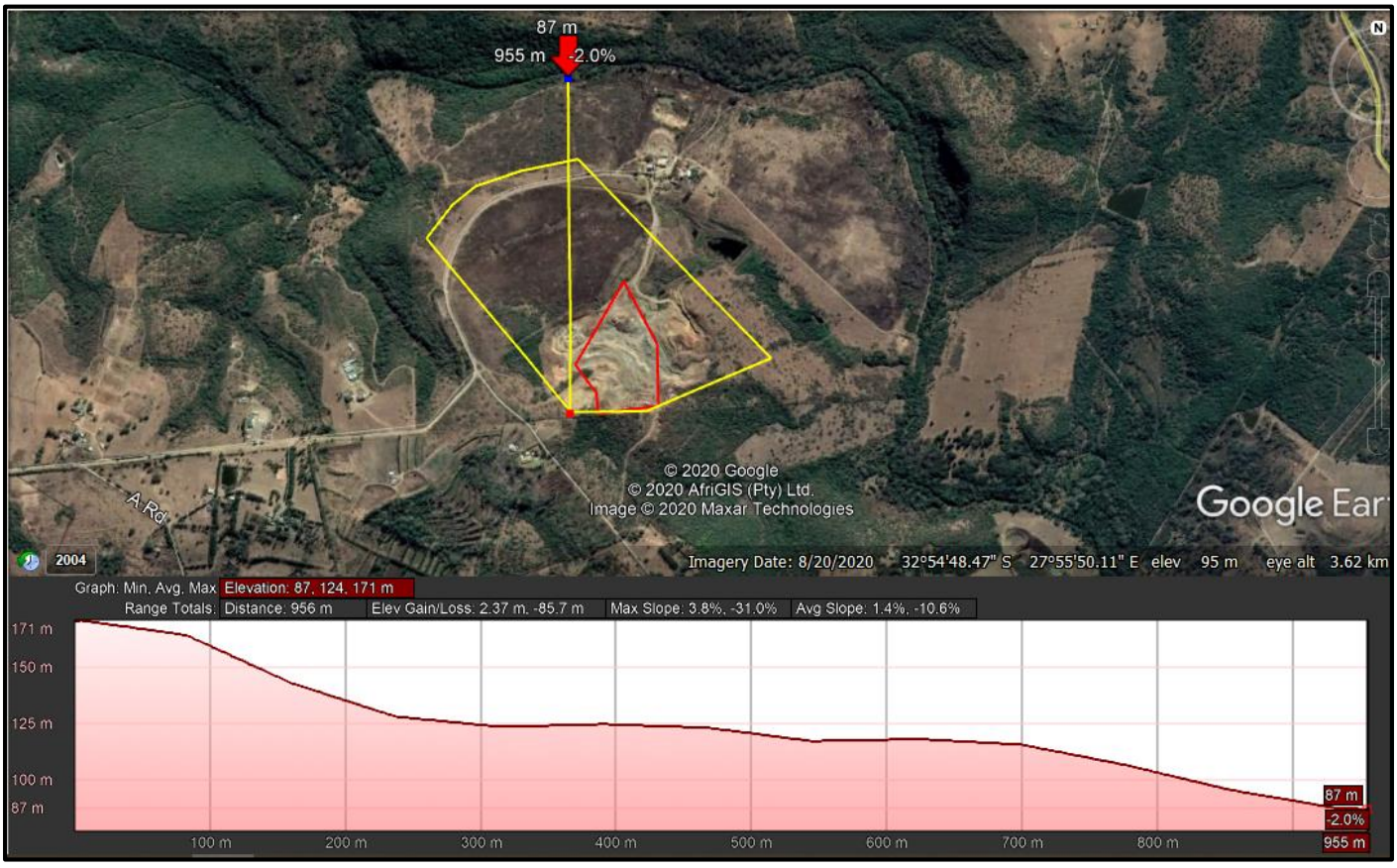


Figure 9: Average wind speeds of the East London area (information obtained from windfinder.com).

TOPOGRAPHY

The topography of the study area is characterized as a highly undulating area with low hills, ridges and moderate to steep slopes. Low lying areas contain short drainage systems which drain into the Qinira River. The altitude of the extension area gradually slopes from the southern corner (±171 masl) of the proposed mining area down the hill towards the lower laying river valley. The eastern corner of the proposed mining area is the lowest point with an altitude of 87 masl.


74 m
1.18 km 5.2%
© 2020 Google
© 2020 AfriGIS (Pty) Ltd.
Image © 2020 Maxar Technologies
Google Ear
A Rd
2004
Imagery Date: 8/20/2020 32°54'48.47" S 27°55'50.11" E elev 95 m eye alt 3.62 kr
Graph: Min, Avg, Max Elevation: 72, 103, 171 m
Range Totals: Distance: 1.18 km Elev Gain/Loss: 3.39 m, -100 m Max Slope: 5.5%, -27.7% Avg Slope: 2.3%, -9.1%
171 m
150 m
125 m
100 m
72 m
74 m
5.2%
0.25 km
0.5 km
0.75 km
1 km
1.18 km


87 m
955 m -2.0%
© 2020 Google
© 2020 AfriGIS (Pty) Ltd.
Image © 2020 Maxar Technologies
Google Ear
A Rd
2004
Imagery Date: 8/20/2020 32°54'48.47" S 27°55'50.11" E elev 95 m eye alt 3.62 km
Graph: Min, Avg, Max Elevation: 87, 124, 171 m
Range Totals: Distance: 956 m Elev Gain/Loss: 2.37 m, -85.7 m Max Slope: 3.8%, -31.0% Avg Slope: 1.4%, -10.6%
171 m
150 m
125 m
100 m
87 m
87 m
-2.0%
100 m
200 m
300 m
400 m
500 m
600 m
700 m
800 m
955 m

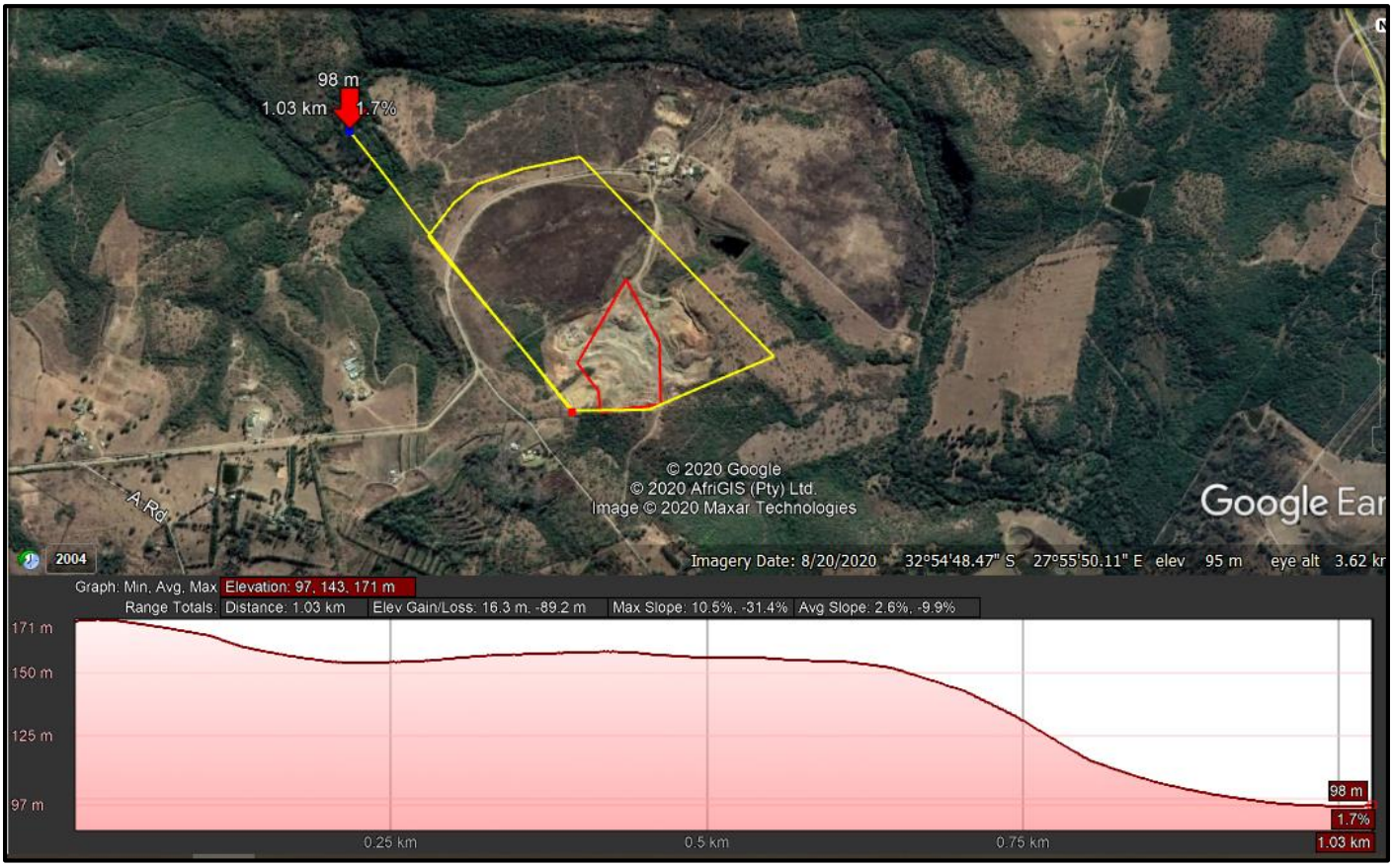


Figure 10: Elevation profiles of the study area. (Image obtained from Google Earth).

Also refer to Part A(1)(h)(iv)(1)(c) *Description of specific environmental features and infrastructure on site – Site Specific Topography*.

VISUAL CHARACTERISTICS

The aesthetic value of the study area is deemed to be of medium to high value. Portion 1 of Farm No 652 is zoned for agricultural use with a well-established vegetation cover over most of the property (excluding the existing mining area). The riparian fringe of the Qinira River has a high aesthetic value, but as one moves towards the operational part of the farm, in particular the mining area, the aesthetic value decreases substantially. Owing to the elevation of the site, most of the farm is visible from the north-east, east, and south-east. In light of this the proposed extension area is expected to be highly visible from the river facing areas, but will be screened to the west/south-west.

Also refer to Part A(1)(h)(iv)(1)(c) *Description of specific environmental features and infrastructure on site – Site Specific Visual Characteristics*.

GEOLOGY AND SOILS

The regional geology is mainly characterised by dark-grey gabbronorite that forms irregular vein-like intrusions as well as plutons, and a network of dolerite sills, sheets and dykes which is mainly intrusive into the Karoo Supergroup (ArcGIS, 2020).

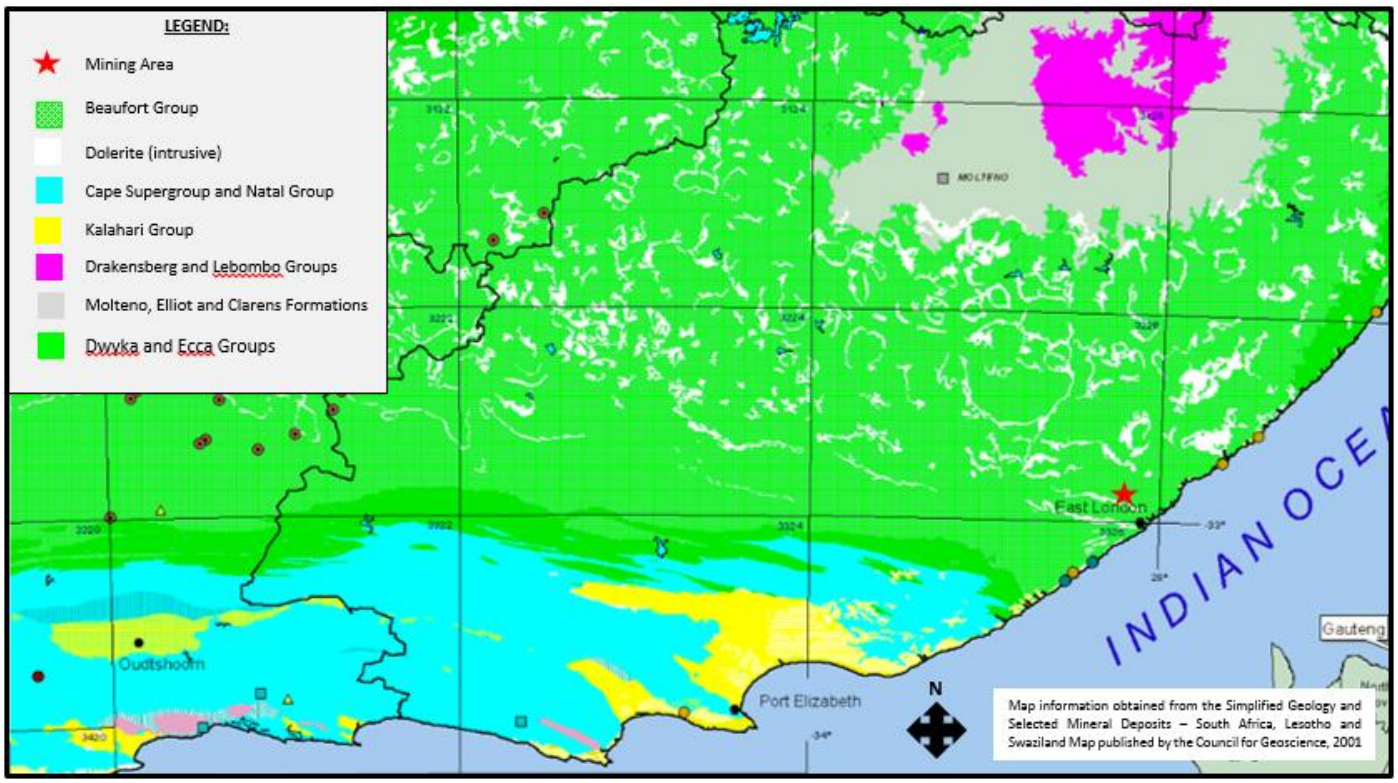


Figure 11: Indication of the simplified geology of the study area, where the checked green represents the Beaufort Group with intrusive dolerite (white) deposits within which the proposed extension area (red star) is situated. (Image obtained from the Council for Geoscience)

Also refer to Part A(1)(h)(iv)(1)(c) *Description of specific environmental features and infrastructure on site – Site Specific Geology and Soils.*

HYDROLOGY AND GEOHYDROLOGY

(Information extracted from the Wansley Siyakhula (Pty) Ltd Mining Rights Areas Storm Water Management Plan)

The study area is located within the Amatola Sub-Water Management Area which is managed as part of the Mzimvubu to Kies Kamma Water Management Area by the Department of Water and Sanitation (DWS). Portion 1 of Farm No 652 falls within the R30F quaternary catchment.

According to the National Wetlands and NFEPA map of SANBI the study area does not fall within a River FEPA (Freshwater Priority Area). The non-perennial Qinira River has

been categorised as a category D (largely modified) river according to its Present Ecological Status (PES), with a moderate (C) Ecological Importance and Sensitivity.

The Lexicon of Biodiversity Planning in South Africa defines a river FEPA as: *"A river reach or wetland that is required to meet biodiversity targets for freshwater ecosystem types."* The Lexicon notes that each river FEPA falls within a sub-quaternary catchment. The FEPA refers to the river reach, not the whole sub-quaternary catchment. As shown in the figure no river FEPA (light green area) or fish support area (dark green area) is associated with the Qinira River (blue shaded area) that passes through the greater study area.

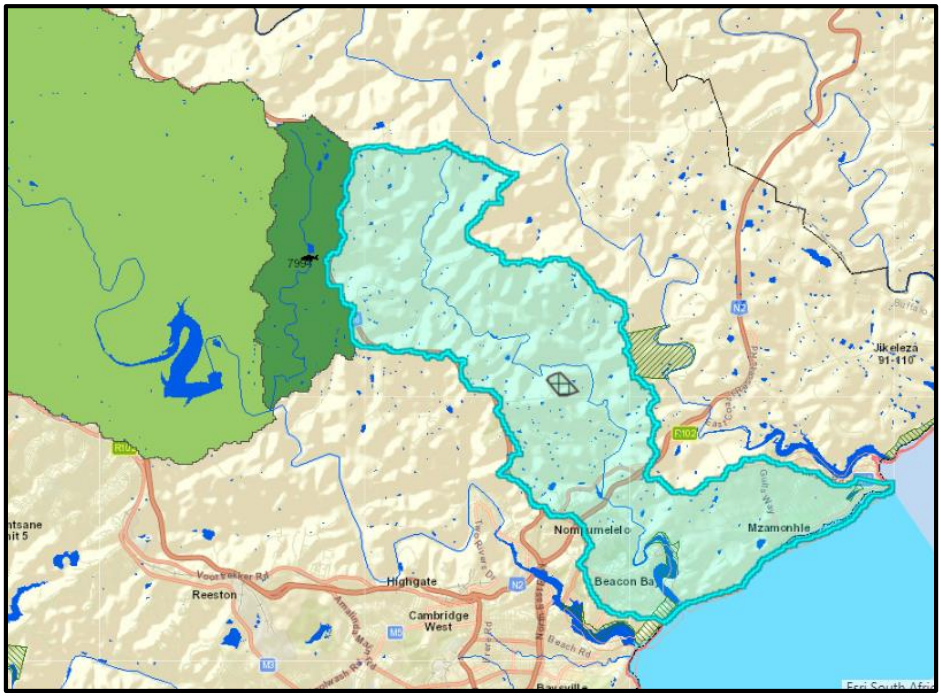


Figure 12: Map showing the position of the nearest river FEPA (light green) and fish support area (dark green) in relation to the proposed extension area (crossed polygon) and the Qinira River (blue shaded area). (Image obtained from the BGIS Map Viewer – National Wetlands and NFEPA)

Broad scale wetland mapping conducted by the National Wetlands and National Freshwater Ecosystem Priority Areas (NFEPA) initiative does not show any wetland within the earmarked extension boundaries (figure below).

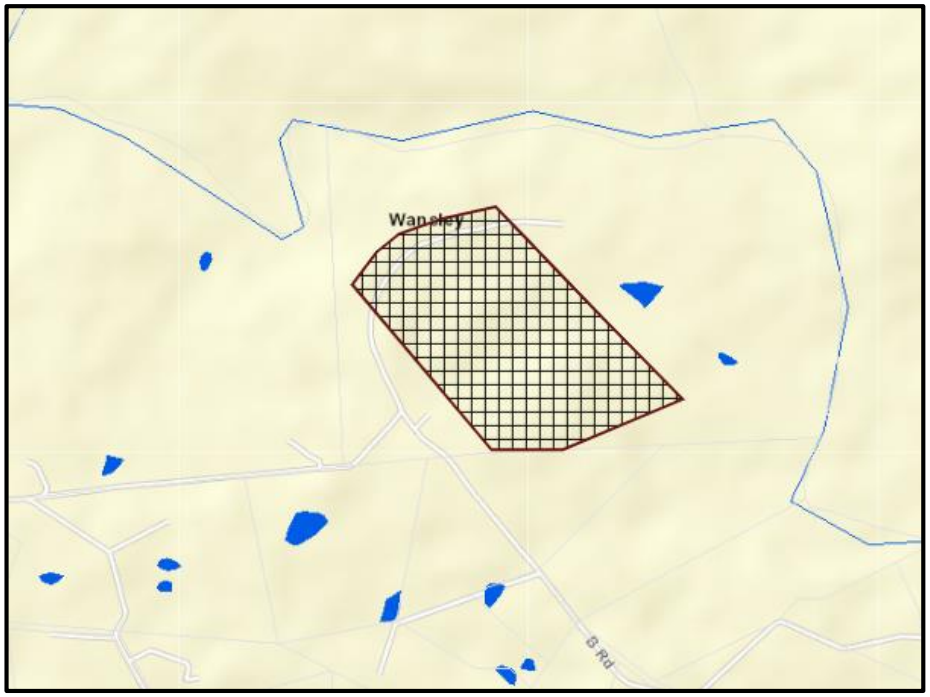


Figure 13: Map on a smaller scale showing the position of known wetlands (blue polygons) in close proximity to the proposed extension area (crossed polygon). (Image obtained from the BGIS Map Viewer – National Wetlands and NFEPA)

Also refer to Part A(1)(h)(iv)(1)(c) *Description of specific environmental features and infrastructure on site – Site Specific Hydrology*.

AIR QUALITY AND NOISE AMBIANCE

The air and noise ambiance of the study area was historically representative of an exclusively agricultural environment in which farming equipment operated with occasional dust emissions from denuded areas. The surrounding area has since been transformed by the introduction of gravel mining and the use of the area for leisure residential purposes. Various roads intersect the area that connects the residents with the N6 national road to the west and/or the R102 provincial road to the south. Although the above mentioned developmental changes affect the air and noise quality of the study area, the current area is still deemed representative of a rural area.

Also refer to Part A(1)(h)(iv)(1)(c) *Description of specific environmental features and infrastructure on site – Site Specific Air and Noise.*

BIOLOGICAL ENVIRONMENT

MINING AND BIODIVERSITY

The Mining and Biodiversity Guideline, compiled by the South African Mining and Biodiversity Forum (SAMBF) provides the mining sector with a practical, user-friendly

manual for integrating biodiversity considerations into planning processes and managing biodiversity during the developmental and operational phases of a mine, from exploration through to closure.

When the study area is layered over the Mining and Biodiversity Map, as shown in the figure below, the entire mining footprint falls within an area of high biodiversity importance with a corresponding rating of high risk for mining. The Mining and Biodiversity Guideline's describes areas of high biodiversity importance as: "*these areas are important for conserving biodiversity, for supporting or buffering other biodiversity priority areas, and for maintaining important ecosystem services for particular communities or the country as a whole".* The guideline notes that environmental screening, the EIA and specialists should focus on confirming the presence and significance of biodiversity features, and provide a site-specific basis on which to apply the mitigation hierarchy to inform regulatory decision-making.

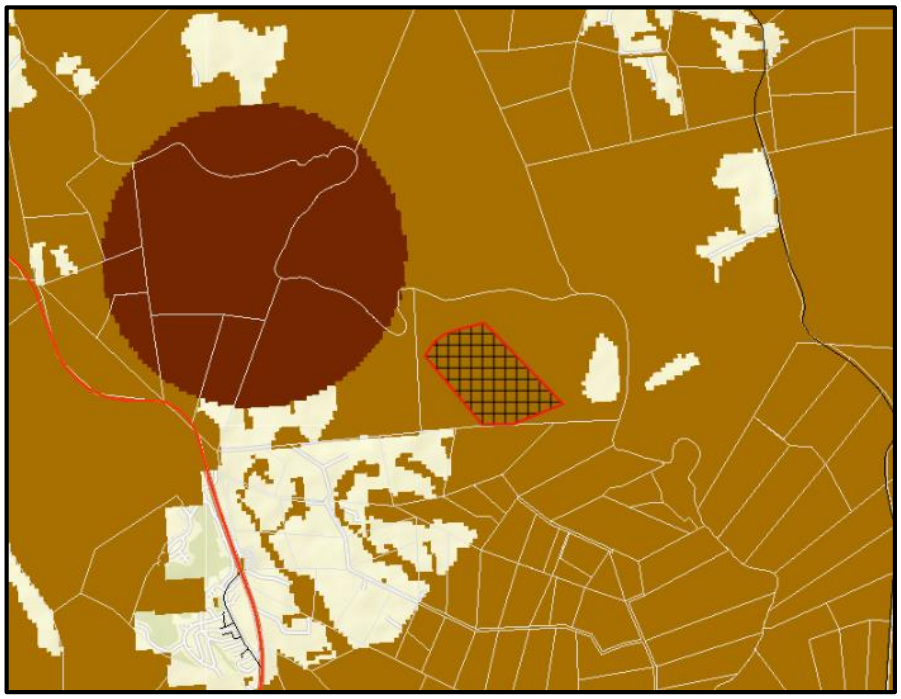


Figure 14: The Mining and Biodiversity importance map overlain by the proposed extension area (red crossed polygon). Brown – high biodiversity importance and high risk for mining, Dark brown – highest biodiversity importance, highest risk for mining. (Image obtained from the BGIS Map Viewer: Mining Guidelines)

Also refer to Part A(1)(h)(iv)(1)(c) *Description of specific environmental features and infrastructure on site – Site Specific Mining and Biodiversity Conservation Areas.*

NATIONAL PROTECTED AREAS EXPANSION STRATEGY & BIODIVERSITY CONSERVATION AREAS

(Information extracted from the draft Ecological and Surface Hydrological Study and Assessment, March 2020)

According to the NPAES spatial data (Holness, 2010), the study area is located well outside of any Focus Area with the closest focus area (Bisho Kei Focus Area) located approximately 14.34 km to the north-west. The nearest Informal Protected Area (Lombardy Private Nature Reserve) is located approximately 1.96 km to the east. Subsequently, no NPAES Focus Areas will be impacted by Wansley Quarry. The closest Formal Protected Area is the Nahoon Point to Gonubie Point Marine Protected Area (MPA) which is located 7.85 km south-east of the proposed Wansley footprint.

According to the Eastern Cape Biodiversity Conservation Plan (ECBCP), the ECBCP-Terrestrial Critical Biodiversity Area 2 (CBA) extends across the earmarked area (refer to following figure). The Lexicon of Biodiversity Planning in South Africa provides the following definition for a CBA:

- Critical Biodiversity Area (CBA): *"an area that must be maintained in a good ecological condition in order to meet biodiversity targets. CBA's collectively meet biodiversity targets for all ecosystem types as well as for species and ecological processes that depend on natural or near-natural habitat, that have not already been met in the protected area network."*

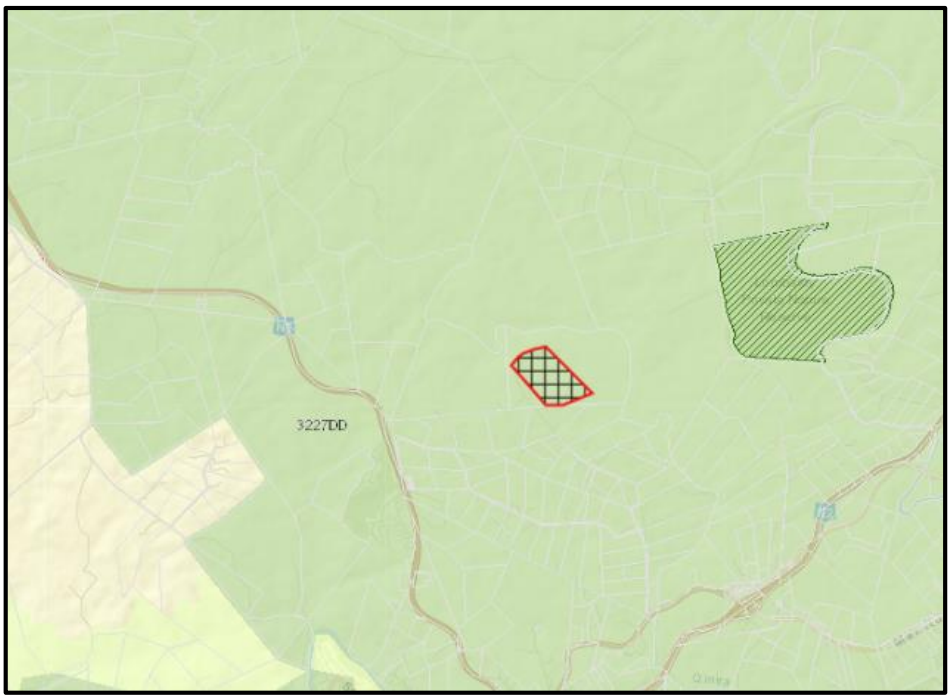


Figure 15: Eastern Cape Biodiversity Conservation Plan showing the footprint of the earmarked extension area (red crossed polygon), in relation to the ECBCP – Terrestrial CBA (green shading).

The Lombardy Private Nature Reserve (green striped polygon) can be seen to the east. (Image obtained from the BGIS Map Viewer: Eastern Cape Biodiversity Conservation Plan).

The entire project site is located within an Aquatic CBA3_A3b due to the fact that this area falls within a hydrological primary catchment management area for an Aquatic CBA2_E2 Estuary.

As seen in the figure above, the Lombardy Private Nature Reserve lays ±2 km east of the study area, on the opposite side of the Qinira River. The reserve borders the western bank of the Gqunube River.

Nkurenkuru Ecology and Biodiversity was appointed to conduct an ecological and surface hydrological study and assessment of the proposed extension area and identify sensitive area that must be protected/conserved within the earmarked footprint (if applicable). The outcome of the specialist's report will be incorporated into the DEIAR to be distributed for public comments.

Also refer to Part A(1)(h)(iv)(1)(c) *Description of specific environmental features and infrastructure on site – Site Specific Mining and Biodiversity Conservation Areas.*

GROUNDCOVER

According to Mucina and Rutherford (2012) the vegetation type of the study area is known as the Albany Coastal Belt (AT9). The Albany Coastal Belt vegetation type is dominated by short grasslands punctuated by scattered bush clumps or solitary *Acacia natalitia* trees (Mucina & Rutherford, 2012). Important taxa includes amongst others: *Erythrina caffra, Euphorbia triangularis, Acacia natalitia (d), Brachylaena elliptica, Canthium spinosum, Cussonia spicata, Ficus sur, Ochna arborea, Sideroxylon inerme, Zanthoxylum capense, Clausena anisata, Clerodendrum glabrum, Coddia rudis, Croton rivularis, Diospyros villosa var. parvifolia, Grewia occidentalis, Gymnosporia heterophylla, Rhynchosia ciliata (d), Carissa bispinosa subsp. bispinosa, Chaetacanthus setiger, Helichrysum asperum var. albidulum, Pelargonium alchemilloides, Asparagus aethiopicus, A. racemosus, Capparis sepiaria var. citrifolia, Clematis brachiata, Brachiaria serrata (d), Cynodon dactylon (d), Dactyloctenium australe (d), Digitaria natalensis (d), Ehrharta calycina (d), Eragrostis capensis (d), E. curvula (d), E. plana (d), Heteropogon contortus (d), Panicum deustum (d), P. maximum (d), Setaria sphacelata (d), Sporobolus africanus (d), Themeda triandra (d), Tristachya leucothrix (d), Cymbopogon marginatus, Ehrharta erecta, Elionurus muticus, Melica racemosa.*

The endemic taxa include: *Bergeranthus concavus*, *Brachystelma franksiae* var. *grandiflorum, Bulbine frutescens* var. nov. *('chalumnensis'* Baijnath ined.), *Faucaria subintegra*, *Haworthia coarctata* var. *tenuis*, *H. cooperi* var. *venusta*, *H. reinwardtii* var. *reinwardtii f. chalumnensis*, *Stapelia praetermissa* var. *luteola*, *S. praetermissa* var. *praetermissa, Bobartiagracilis, Apodolirion amyanum*, *Aspidoglossum flanaganii*, *Drimia chalumnensis, Acmadenia kiwanensis, Monsonia galpinii.*

The conservation status of the vegetation type is Least Threatened with the conservation target set at 19%, with 1% of the unit conserved in local-authority-, provincial- and private conservation areas as well as the Greater Addo Elephant National Park. Mucina and Rutherford reported that ±12% of the vegetation type has been transformed for cultivation, 1% by plantation forestry, and 4% by urbanisation.

Figure 16: National vegetation cover map showing the distribution of AT9 Albany Coastal Belt (green shading) in relation to the proposed extension area (red crossed polygon). (Image obtained from the BGIS Map Viewer – National Vegetation Map)

Nkurenkuru Ecology and Biodiversity was appointed to conduct a vegetation study of the proposed extension area and identify sensitive area that must be protected/conserved within the earmarked footprint (if applicable). The outcome of the specialist's report will be incorporated into the DEIAR to be distributed for public comments.

Also refer to Part A(1)(h)(iv)(1)(c) *Description of specific environmental features and infrastructure on site – Site Specific Groundcover.*

FAUNA

Fauna that may be present on, or visit the study area, comprises of birds such as doves, starlings, and sparrows as well as commonly found insects and reptiles. The area is also frequented by bushbuck (*Trachelaphus scriptus*), common duiker (*Sylvicapra grimmia*), blue duiker (*Philantomba monticola*) and blesbok (*Damaliscus dorcas phillipsi*). To date no protected or red data faunal species were identified to be resident within the approved mining area or proposed extension footprint.

HUMAN ENVIRONMENT

CULTURAL AND HERITAGE ENVIRONMENT

The earmarked area is situated on a farm ±7 km north-west of Bonza Bay, ±6 km north of Beaconhurst, ±2 km east of Ducats, and ±16 km north-east of East London city centre. In 1836, John Bailie surveyed the Buffalo River mouth and founded the town of East London. The city formed around the only river port in South Africa and was elevated to city status in 1914 (http/Wikipedia.org/wiki/East_London_Cape). Beaconhurst developed to the east of East London; the areas name was derived from a dairy farm in the Beacon Bay area known as Beaconhurst Dairy. The Ducats residential area is the nearest formal settlement to the mining area. Portion 1 of Farm No 652 was historically used for pineapple cultivation.

The South African Heritage Resources Agency (SAHRA) compiled the Palaeontological (fossil) Sensitivity Map (PSM) to guide developers, heritage officers and practitioners in screening palaeontological sensitive areas at the onset of a project. When the footprint of the proposed extension area is placed on the PSM, it shows the study area to extend over areas of very high (red) concern as presented in the figure below. In light of this, SAHRA requires a field assessment and protocol for finds.

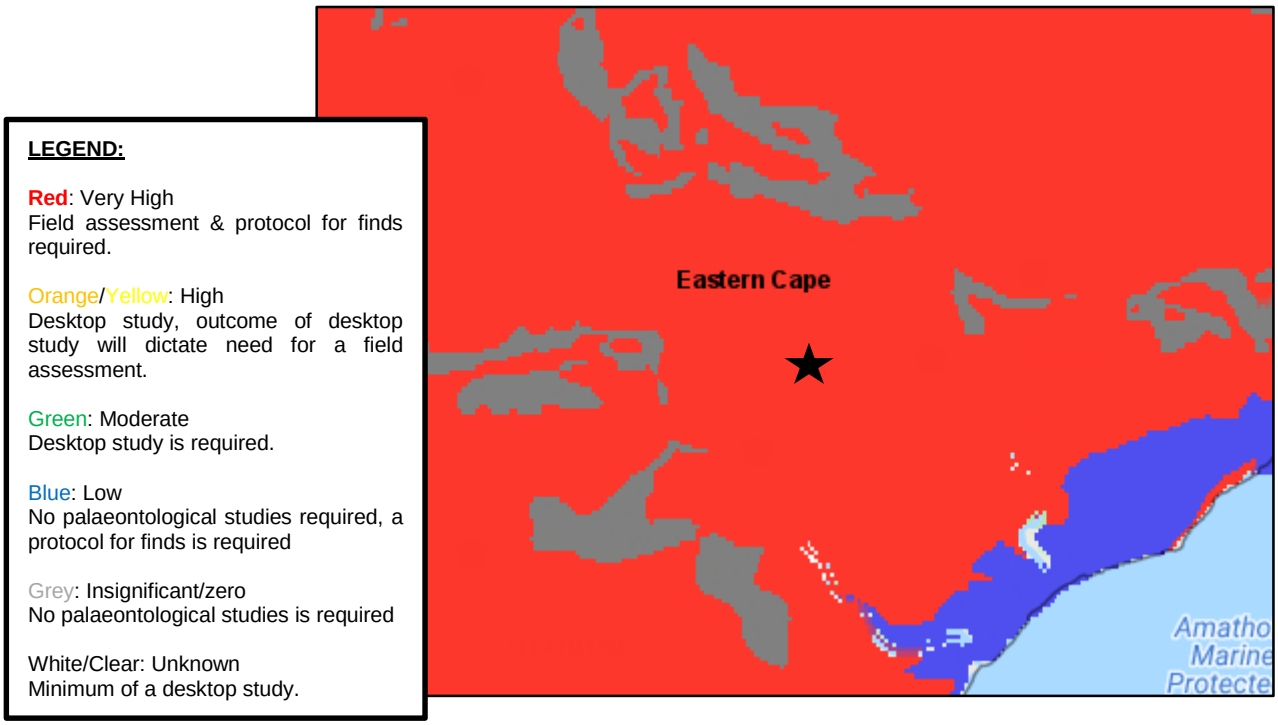


Figure 17: The SAHRA palaeontological sensitivity map shows that the proposed extension footprint (black star) falls in an area of very high concern (red) (image obtained from the PalaeoSensitivity Map on SAHRIS).

SAHRA were informed of the proposed S102 amendment application on 11 September 2020, but to date no feedback was received. HCAC (Heritage Contracts and Archaeological Consulting) was appointed to investigate the cultural/heritage sensitivity of the study area. The findings of the specialists will be included into the DEIAR.

SOCIO-ECONOMIC ENVIRONMENT

(Information extracted from the Social and Labour Plan of Wansley Siyakhula (Pty) Ltd)

Portion 1 of Farm No 652 is situated approximately 16 km north-east of the city centre of East London within the Buffalo City Metropolitan Municipality in ward 15. Buffalo City Metropolitan Municipality (BCMM) is situated relatively centrally in the Eastern Cape Province, and is surrounded by the Great Kei Local Municipality, Amahlati Local Municipality, Nkonkobe Local Municipality and Ngqushwa Local Municipality. It is bounded to the south-east by the long coastline along the Indian Ocean.

The Buffalo City Metropolitan is made up of a significant portion of two Magisterial Districts, as follows:

- East London, including the previous Ciskei Magisterial District(s) of Mdantsane.
- King Williams Town, including the previous Ciskei Magisterial District of Zwelitsha

In line with the local government dispensation in South Africa, the BCMM is categorized as a Category “A” Municipality.

The census 2011 conducted by Stats SA estimates the total population of Buffalo City Metro to be 755 200. In 2013 there were an estimated 785 330 people in the Buffalo City metro. This is a little more than a tenth (11.4%) of the Eastern Cape's population and represents 1.5% of South Africa's population. The sex ration in the BCMM during 2016 was 93.8 males for each 100 females. During 2011 45.9% of all households was female headed, whereas during 2016 the female headed households decreased slightly to 45.3%.

The racial composition of the Buffalo City metro is as follows:

- Asian 0.2%
- Black 92.9%
- Coloured 2.4%
- White 4.5%

The annual rate of population growth since 2005 has been about 0.8%. This is lower than the 1.2% growth rate for South Africa, but higher than the Eastern Cape whose population has grown at 0.5% pa since 2005. The illiteracy rate in Buffalo City is high with over 11% of the population being functionally illiterate.

The area specific number of total persons employed has been increasing marginally since 2002 and jobs have been growing at the rate of 2.15% pa since 2009. In 2001, 246 251 people were employed but this increased to 277 154 in 2013. As a result of the recession, jobs decreased from 293 960 in 2008 to 277 154 in 2013. The percentage of employed people with formal jobs is declining slowly as more people find informal positions. In South Africa formal employment has fallen from 79.57% in 1995 to 70% in 2013. The same trend is evident in the Eastern Cape where 78.29 % formal employment was recorded in 1995 and only 65% in 2013. Buffalo City follows this trend with 77% formally employed in 1995 and only 65% in 2013. It is evident that there are fewer highly skilled and skilled people working in Buffalo City than in South Africa but more than in the Eastern Cape as a whole. In addition, 34% of employed people have found work in the informal sector compared to 34.69% in the Eastern Cape and 29.74% in South Africa. In 2013, total household income for Buffalo City was estimated at R18 421 million, of which 102% was used as household expenditure. Of total income, remuneration (salaries, wages, business proceeds etc.) accounted for 66.3% and whole unearned income accounted for 33.7% of total income, which suggests that more than a third of households in the district are surviving on pensions, government grants and remittances. The percentage of total disposable income that is derived from remuneration is declining; remuneration represented 84.1% of total disposable income in 1995.

The table below shows the key economic activities of the area:

Table 9: Key economic activities of the area.

ACTIVITY	PERCENTAGE OF EMPLOYMENT
Community Services	25%
Finance	24%
Manufacturing	24%
Trade	12%
Transport	12%

Although Buffalo City's economy is relatively small, it is the second largest metropolitan municipality in the Eastern Cape, contributing 1.6% to the South African economy and 20.9% to the Eastern Cape's economy. The economic performance of the Buffalo City area has been relatively stable over the past decade or so, albeit below the national average. The annual average growth rate from 2003 to 2013 was 2.8% and the economy shrank by -1.5% during the 2008–09 recession. This was the same as the national average (-1.5%) but worse than the provincial average (-1%). However, post-recession growth has been slower. In 2013 the growth rate was only 1.3% compared with South Africa's growth rate of 1.9%, although it was the same as that of the Eastern Cape (1.6%).

The tertiary sector is the municipality's largest contributor to its economy with a contribution of 81.7%. This is followed by the secondary sector (17.0%) and the primary sector (1.3%). Mining and quarrying is insignificant (0.19%) in the metro's economy; agriculture therefore contributes the largest share (1.3%) to the primary sector. The municipality contributes 1.2% to South Africa's agricultural output, and 18.1% to the Eastern Cape's agricultural output. The sector has exhibited an average annual growth rate of over 4.0% since 2005. It did, however, slowdown in 2010 (1.10%).

Manufacturing contributes 13.5% to the metro's gross value added. The transport equipment sector is the most important manufacturing sector, contributing 3.0% to the metro's gross value added. The transport equipment sector contributes 4.2% to South Africa's transport sector and has been growing at an annual average rate of 1.5% since 1995. Although the sector shrank by -13.0% during the 2008-09 recession, it increased by a moderate 3.6% in 2013. The second largest contributor to manufacturing is the petroleum products, chemicals, rubber and plastic sector, which contributes 2.7% to the region's GVA. This sector supplies components to the automotive sector. In addition, the food, beverages and tobacco sector contributes 2.1% of the region's GVA.

The tertiary sector is dominated by general government which contributes 25.2% to the local economy. This is followed by business services (13.9%), finance and insurance (8.4%) and wholesale and retail trade (13.3%).

(b) Description of the current land uses

(Information extracted from the draft Ecological and Surface Hydrological Study and Assessment, March 2020)

Portion 1 of Farm No 652 is situated in a rural setting surrounded by other farming properties. The earmarked property is zoned for agricultural use. The farm portion has been extensively transformed in the past for cultivation purposes (commercial pineapple crop production) however these activities have been abandoned in the mid 1980's. Mining (quarrying) activities were initiated 20 years ago and is now the primary activity within this farm portion.

The surrounding land use is predominantly divided in medium to medium-large sized properties, mostly small holdings and small farms used for agricultural (subsistence and commercial) purposes with livestock farming being the primary activity. Some properties are also utilized for crop production (mostly perishable crops and some grains) as well as for agri-industrial purposes. Woodlots and plantations are also a relative common feature within the greater area. Game species have been introduced to some of the properties, but is likely more for esthetical purposes, however game and wild animals form a more prominent feature of the agricultural landscape further to the east with numerous small game farms and reserves, of which Lombardy Private Nature Reserve is the most prominent within the area. The closest built-up area is the township of Ducats situated a little be more than 2 km to the west of the study site.

Various public gravel roads (e.g. Mn10118 St / W road, A road, B road and C road) intersect the area that connects the residents with the N6 national road to the west and/or the R102 provincial road to the south. The following table provides a description of the land uses and/or prominent features that currently occur within a 500 m radius of the study area:

Table 10: Land uses and/or prominent features that occur within 500 m radius of the study area.

LAND USE CHARACTER	YES	NO	DESCRIPTION
Natural area	**YES**	-	The proposed extension footprint is surrounded by natural areas used for agricultural purposes.
Low density residential	**YES**	-	The properties south-west of Wansley Quarry is used for low density residential purposes.

LAND USE CHARACTER	YES	NO	DESCRIPTION
Medium density residential	-	**NO**	-
High density residential	-	**NO**	The Ducats residential area is ±2 km west of the quarry.
Informal residential	-	**NO**	-
Retail commercial & warehousing	-	**NO**	-
Light industrial	-	**NO**	-
Medium industrial	-	**NO**	-
Heavy industrial	-	**NO**	-
Power station	-	**NO**	-
High voltage power line	-	**NO**	A low voltage power line, supplying electricity to the Wansley farm house, traverses the property and the proposed extension area.
Office/consulting room	**YES**	-	The office of Wansley Quarry is on the property.
Military or police base / station / compound	-	**NO**	-
Spoil heap or slimes dam	-	**NO**	-
Quarry, sand or borrow pit	**YES**	-	This application entails the extension of the current mining footprint on the property.
Dam or reservoir	**YES**	-	Various dams of the earmarked property lays within 500 m of the study area.
Hospital/medical centre	-	**NO**	-
School/ crèche	-	**NO**	-
Tertiary education facility	-	**NO**	-
Church	-	**NO**	-
Old age home	-	**NO**	-
Sewage treatment plant	-	**NO**	-
Train station or shunting yard	-	**NO**	-
Railway line	-	**NO**	-
Major road (4 lanes or more)	-	**NO**	-
Airport	-	**NO**	-
Harbour	-	**NO**	-
Sport facilities	-	**NO**	-
Golf course	-	**NO**	-
Polo fields	-	**NO**	-
Filling station	-	**NO**	-
Landfill or waste treatment site	-	**NO**	-
Plantation	-	**NO**	-
Agriculture	**YES**	-	The proposed footprint falls over an agricultural active area.
River, stream or wetland	**YES**	-	The Qinira River borders the proposed extension area to the north, and north-east. Drainage lines extends into the extension area.
Nature conservation area	-	**NO**	The Lombardy Private Nature Reserve lays ±5 km east of the study area, on the opposite side of the Qinira River.

LAND USE CHARACTER	YES	NO	DESCRIPTION
Mountain, hill or ridge	**YES**	-	The study area is undulating and has various hills and ridges.
Museum	-	**NO**	
Historical building	-	**NO**	
Protected Area	-	**NO**	
Graveyard	-	**NO**	
Archaeological site	-	**NO**	
Other land uses (describe)	-	**NO**	

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

SPECIFIC ENVIRONMENTAL FEATURES

SITE SPECIFIC TOPOGRAPHY

As mentioned earlier, the natural topography of application area is undulating with a prominent rise in elevation inside the Qinira River bend. The rise/fall in elevation is illustrated in the figure. The earmarked extension area has an average slope of 9.9%; -11.8% with a maximum slope of 27.9%; -23.0% over a distance of 1.3 km along the path as indicated below.

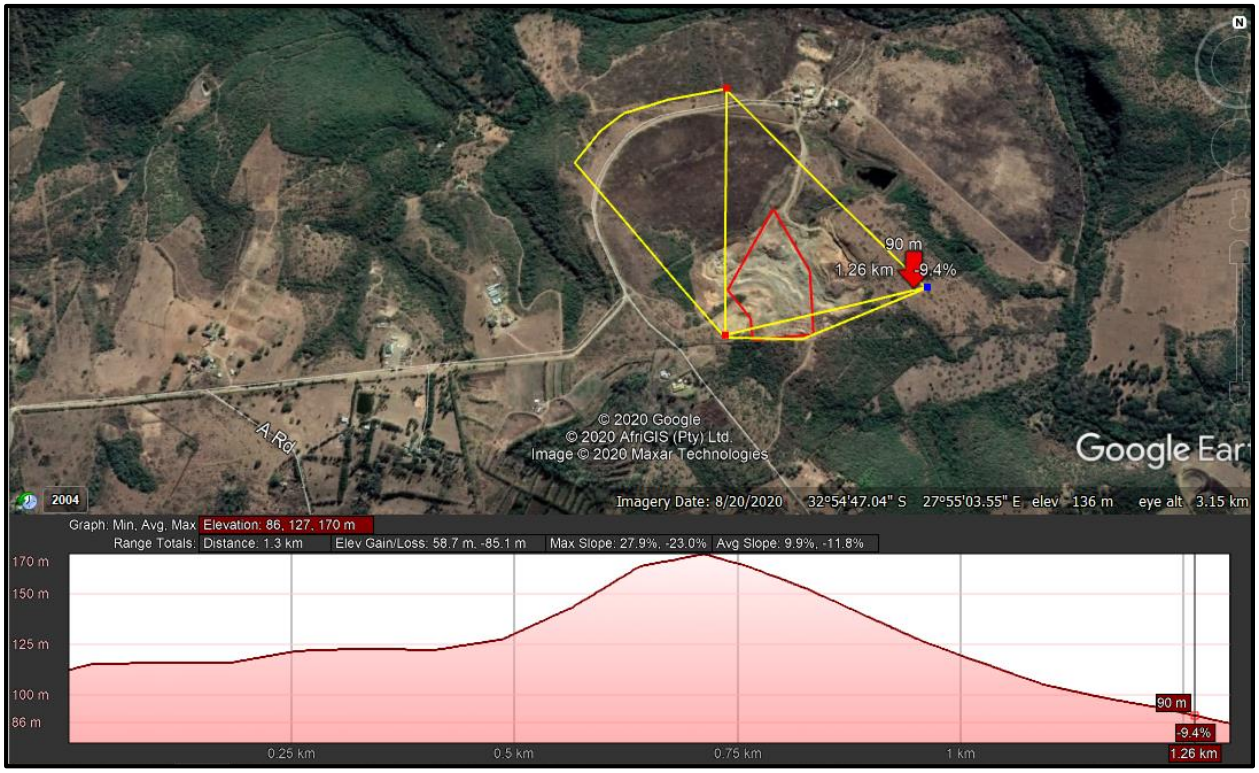


Figure 18: Elevation profile of the proposed extension area (information obtained from Google Earth).

The impact of the proposed extension of Wansley Quarry, in particular regarding the mining of the hard rock, on the topography of the area will be assessed during the EIA

phase and discussed in more detail in the draft EIAR that will follow the approval of the scoping report.

SITE SPECIFIC VISUAL CHARACTERISTICS

The footprint of S1 is mainly visible from the higher laying areas between the north and south-east within an approximate distance of 3 km from the mining area as shown in the image below. Within close proximity (1 km) the mining area is/will mainly be visible within the property boundaries and the far bank of the Qinira River.

The figure below shows the viewshed analysis for the S1 footprint within a ±10 km radius. The green shaded areas show the positions from where the mining extension area will be visible. From this analysis it is shown that the visual impact of the proposed extension (S1) will be of low-medium significance without mitigation. The topography of the landscape, as well as the fact that only the processing plant operates within the mining footprint does however assist in mitigating the visual impact of the proposed development on the surrounding environment.

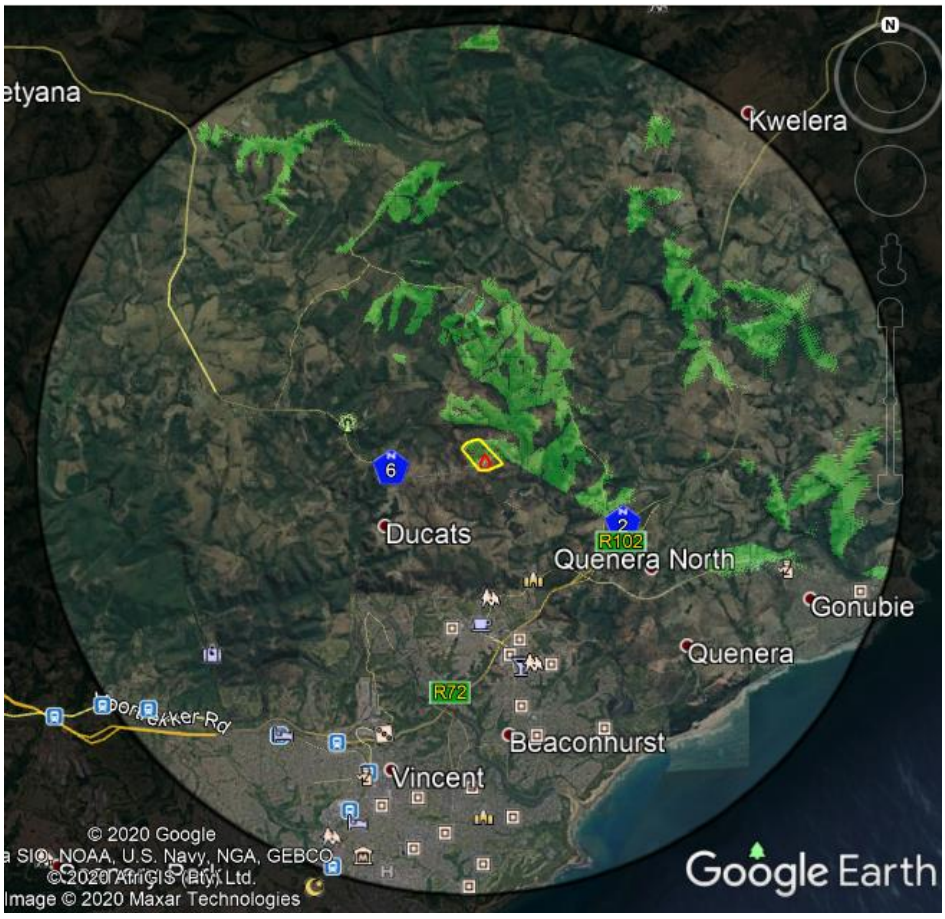


Figure 19: Viewshed analysis of S1 where the green shaded areas show the positions from where the mine is/will be visible (image obtained from Google Earth).

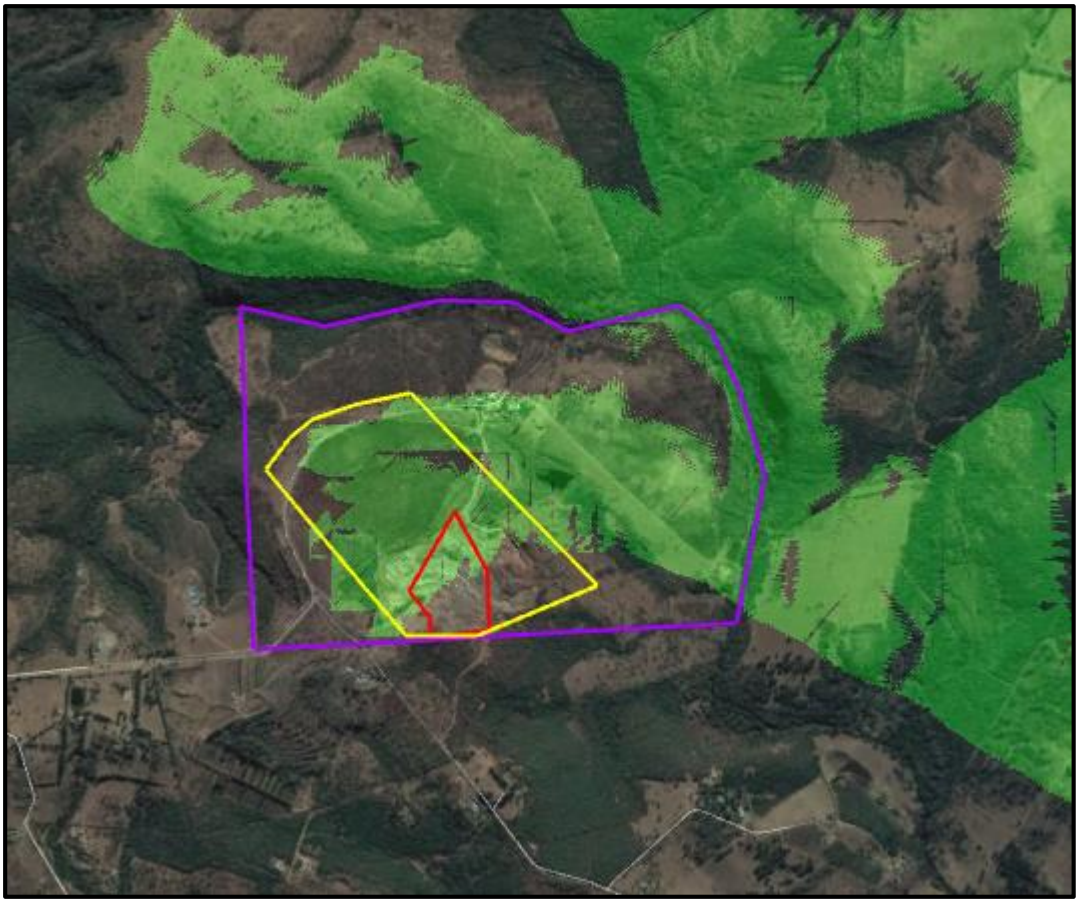


Figure 20: Viewshed analysis of S1 within a 1 km radius where the green shaded areas show the positions from where the mine is/will be visible (image obtained from Google Earth).

SITE SPECIFIC GEOLOGY AND SOILS

(Information extracted from the Wansley Quarry: Mining Plan, 2020)

The site specific geology resembles the geology as described under *Part A(h)(iv)(1)(a) Type of Environment Affected by the Proposed Activity – Geology and Soil*. According to the Mining Plan, Wansley Quarry is a weatherised dolerite and gravel quarry (Wansley Group, 2020). The site is underlain predominantly by an elongated north-south trending, near vertical dolerite dyke. The following figure provides an illustration of the mapped dolerite present in the area.

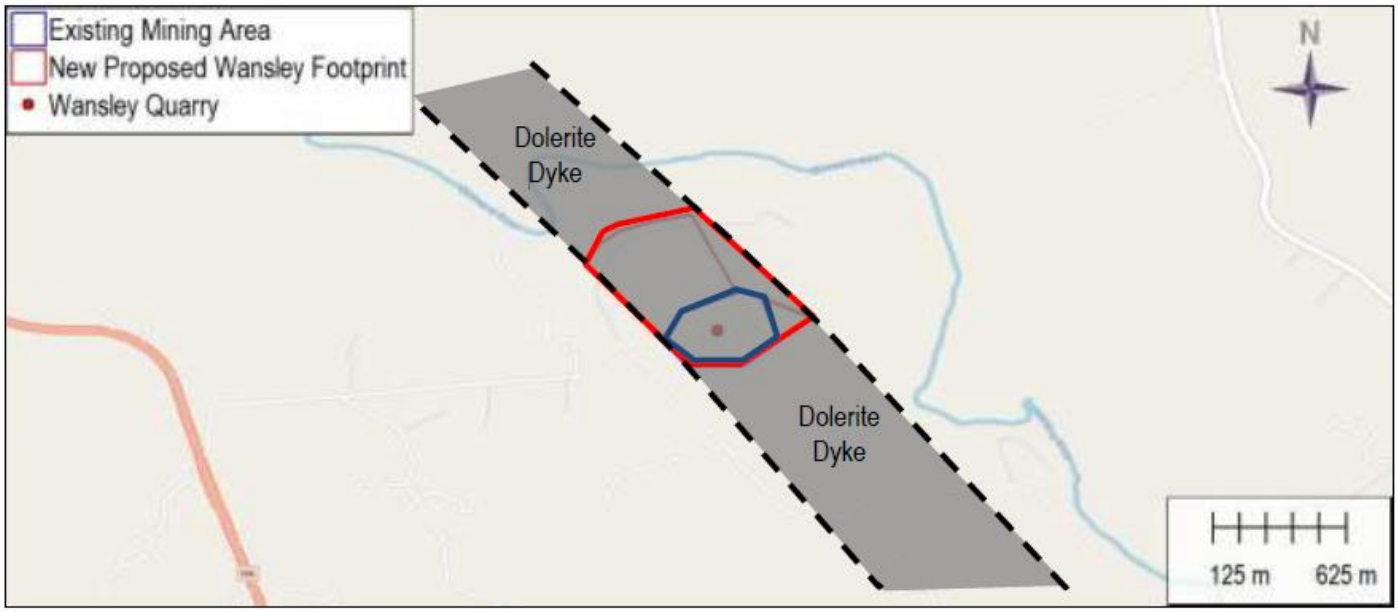


Figure 21: Image showing the dolerite dyke located across the farm (image obtained from the Mining Plan).

The site specific geology and associated impact of the proposed extension on the geology of the area will be assessed during the EIA phase and discussed in more detail (upon receipt of the specialist reports) in the draft EIAR that will follow the approval of the scoping report.

SITE SPECIFIC HYDROLOGY AND GEOHYDROLOGY

(Information extracted from the Wansley Siyakhula (Pty) Ltd Mining Rights Areas Storm Water Management Plan and the Draft Ecological & Surface Hydrological Study and Assessment)

The study area is situated south-west of the Qinira River (middle reach) within a small catchment area that drains into the Qinira River via two small drainage systems. The Qinira River eventually drains into the Qinira River Estuary. The northern drainage line run through two dams and joins the southern drainage line in a third dam. The flow is then directed to the Qinira river by a non-perennial stream.

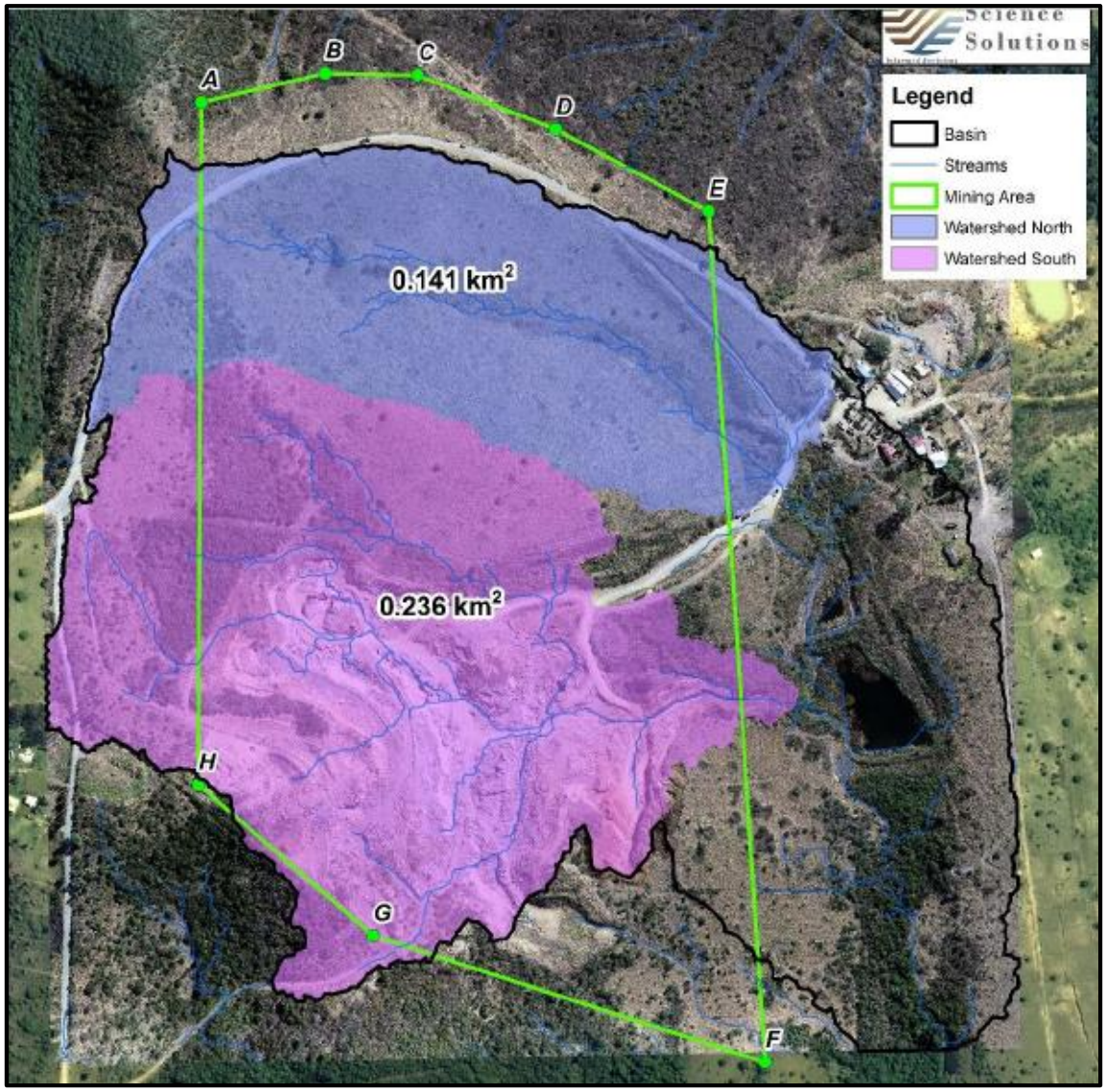


Figure 22: Map showing the two different watersheds (north and south) with associated drainage lines (blue lines) in the proposed extension area (green polygon). (Image obtained from the SWMP)

There are significant surface water users downstream of Wansley Quarry. Due to the small catchment areas associated with Wansley Quarry operation the stormwater specialist concluded that there will be no significant effect on downstream water users if dirty water is contained within the mining area. There are no significant water users on the non-perennial river before joining the Qinira River. As mentioned earlier, the presence of the drainage lines within the mining footprint necessitates a water use application in terms of Section 21 of the NWA, 1998.

Presently, it is proposed that runoff water from the mining area be captured and contained in two unlined SWD's (see Figure 4). For the northern dam, the specialist recommended a storage capacity of 2 680 m³ and for the southern dam a total SWD storage capacity of 5 685 m³ is recommended. In addition to the SWD's the specialist also proposed dirty

water containment systems to ensure dirty water generated on the site is contained. These systems will consist of a lined berm and channel component. The final design of the stormwater containment structures will be discussed in more detail in the draft EIAR once the relevant specialist recommendations were received.

SITE SPECIFIC AIR QUALITY AND NOISE AMBIANCE

Emission into the atmosphere is controlled by the National Environmental Management: Air Quality Act, 2004. Wansley Quarry does not trigger an application in terms of the said act, nor will the proposed extension activity. Emissions generated/to be generated at the mine mainly consist of dust due to the displacement of soil (blasting & excavation), crushing and screening, and transport of the material on and from the mining area.

As with air quality, the current activities on the property and surrounding environment already impact the noise ambiance of the study area. The noise generated at Wansley Quarry contributes/will contribute to these daily noise levels. Should the S102 amendment application be approved, the mining operation will contribute noise generated as a result of blasting, crushing and screening, as well as loading, and transporting of material.

The figure below shows the position of the nearest residences to the proposed extension area:

1. Farm yard of the landowner ±150 m
2. Portion 44 of Farm No 821 ±150 m
3. Portion 42 of Farm No 821 ±470 m
4. Portion 14 of Farm No 652 ±350 m
5. Portion 15 of Farm No 652 ±320 m
6. Portion 15 of Farm No 652 ±300 m

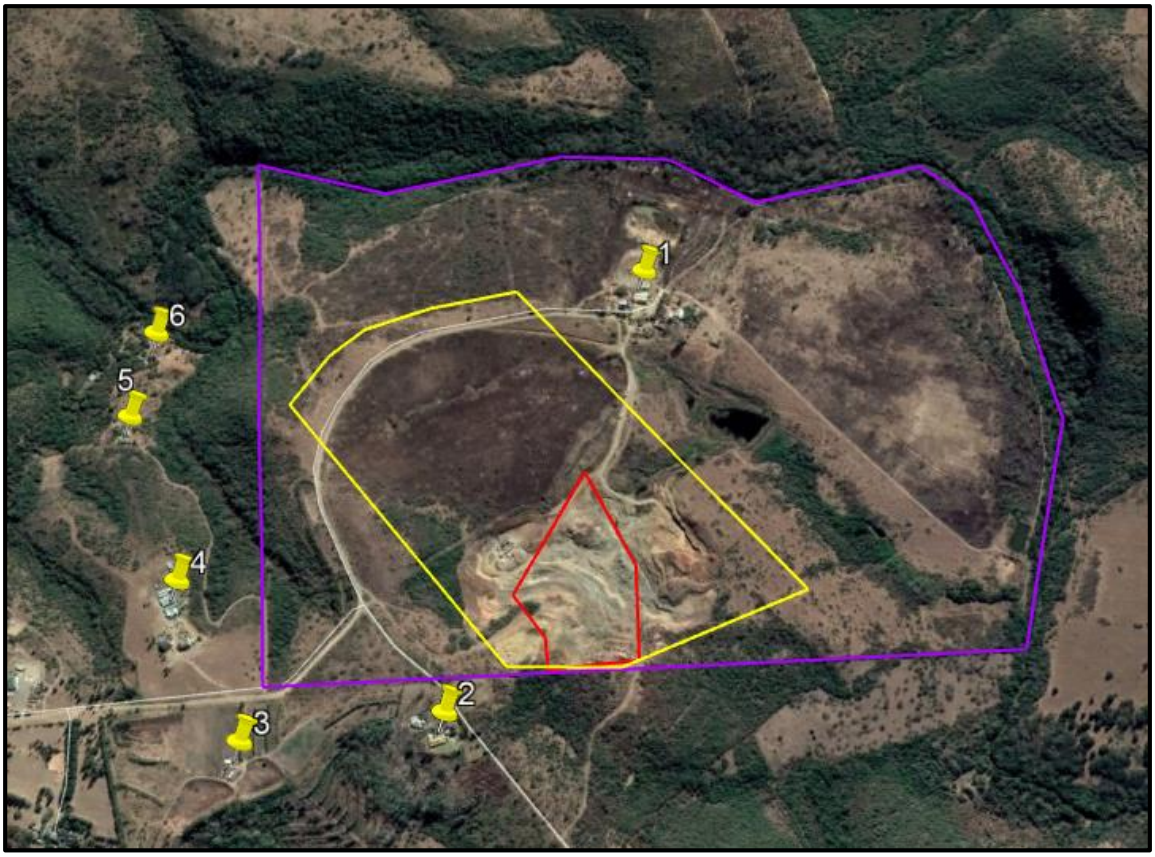


Figure 23: Satellite view showing the position of the nearest residences to the proposed extension area (yellow polygon) where the purple polygon indicates the farm boundary. (Image obtained from Google Earth)

The impact of the proposed extension of the Wansley mining area on the air quality and noise ambiance of the receiving environmental will be assessed during the EIA process and discussed in the DEIAR. The DEIAR report will further proposed mitigation and management measures to address/minimise identified impacts.

SITE SPECIFIC MINING AND BIODIVERSITY CONSERVATION AREAS

Following the earlier discussion in this regard; when the footprint of S1 is layered over the Mining and Biodiversity Guideline Map it falls over an area of high biodiversity importance with a corresponding rating of high risk for mining. The Mining and Biodiversity Guideline notes that EIA's and specialists should focus on confirming the presence and significance of these biodiversity features, identifying features not included in the existing datasets, and on providing site-specific information to guide the application of the mitigation hierarchy. The ECBCP-Terrestrial CBA also extends across the mining footprint.

In light of this, Nkurenkuru Ecology and Biodiversity was appointed to assess the sensitivity and conservation status of the area. The findings of the specialist will be

discussed in detail in the DEIAR. The discussion will also propose mitigation and management measures to address/minimise identified impacts on-site.

SITE SPECIFIC GROUNDCOVER

The groundcover of the proposed extension area consists of a well-established vegetation cover that ranges from grassland on the higher slopes to thick wooded areas along the drainage lines and riparian fringe. Severe invasion by weeds/invader plant species occurs on the disturbed areas of the property. Nkurenkuru Ecology and Biodiversity was appointed to conduct an ecological study of the proposed extension footprint. The study will describe the *status quo* with regard to vegetation cover, identify CBA's, ESA's and other areas/species of concern and proposed buffer zones, mitigation measures, and management actions to be considered during the EIA process. The findings of the study will be collated onto a sensitivity map to be overlain by the footprint of the proposed extension area. The study will be incorporated into the DEIAR to be distributed for public perusal.

Figure 24: Photographs showing the current groundcover of the proposed extension area.

SITE SPECIFIC CULTURAL AND HERITAGE ENVIRONMENT

As mentioned earlier, HCAC was appointed to draft an Archaeological Impact Assessment and Palaeontological Impact Assessment respectively that will be combined into a Heritage Impact Assessment Report (HIA) that will be submitted to SAHRA for perusal and approval. The findings of the HIA will be discussed in the DEIAR.

SITE SPECIFIC SOCIO-ECONOMIC ENVIRONMENT

A Social and Labour Plan (SLP) was submitted as part of the S102 amendment application of the MR Holder and will be discussed in detail in the DEIAR. The SLP forms the basis for the implementation of programmes and projects as key activity drivers of the development and operation of the mining activity in the East London area. It offers the

building blocks for future economic development and growth of the local area. The scope of the document offers the MR holder a platform to engage in the development of the local economy and community through a basis of human resource development, economic delivery, business development and community participation. The nature of the document is therefore aimed at the widest possible comprehension and stimulation for inputs.

As this report forms part of a S102 amendment application to extend the current mining footprint, the number of employees will not increase. However, should the application be approved the lifespan of the mine will be extended that will directly contribute to employment reassurance of the staff members and directors. The Wansley Quarry further indirectly supports the employment of procurement partners, through the payment for local services and suppliers.

SITE SPECIFIC EXISTING INFRASTRUCTURE

A low voltage power line traverses the proposed extension footprint (see figure below). The impact of the proposed extension on the integrity of the power line will be assessed as part of the EIA and discussed in the DEIAR.

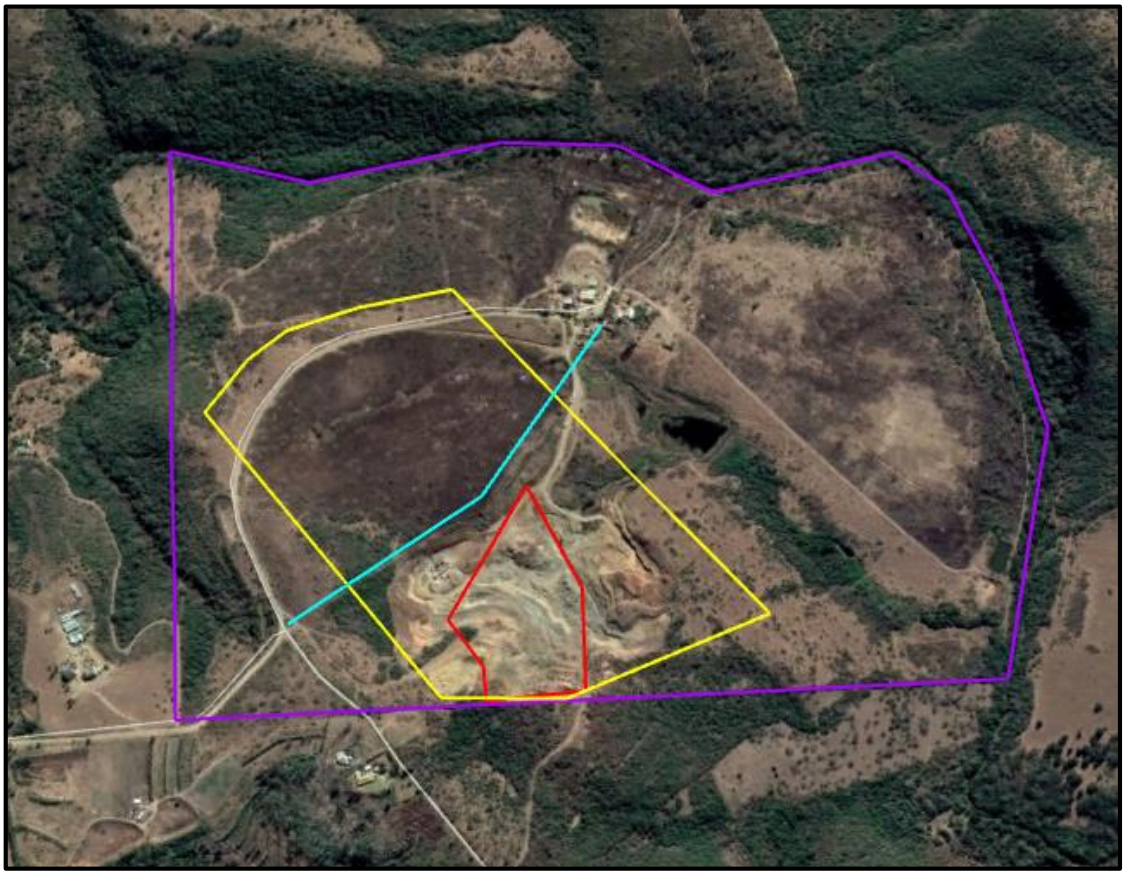


Figure 25: Satellite view showing the position of the power line (blue line) in relation to the proposed extension footprint (yellow polygon). The white line shows the position of the access roads. (Image obtained from Google Earth).

As shown in the figure above, the footprint of the extension area encompasses a section of the current access road (Mn10118 St / W Road) to the farm. The possibility of realigning the access road, alternatively conserving it as part of the mining area will be assessed by the project team during the EIA phase and discussed in the DEIAR. Further to the above, the impact of the proposed extension on the traffic and roads of the surrounding area (in particular the W- and B Road) will be assessed by an appropriately qualified road engineer that will compile a Traffic Impact Assessment of which the findings and recommendations will be incorporated into the DEIAR.

(d) Environmental and current land use map

(Show all environmental, and current land use features)

The environmental and current land use map is attached as Appendix 6.

i) Impacts Identified

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

The following potential impacts were identified for the main activities associated with Site Alternative 1 and each phase of the proposed project. The listed impacts must be treated as preliminary, to be expanded upon proper assessment of the study area during the EIA process. The significance rating was determined using the methodology as explained under *j) Methodology used in determining and ranking the significance of environmental impacts*. The impact rating listed below was determined for each impact **prior** to bringing the proposed mitigation measures into consideration. The degree of mitigation indicates the possibility of partial, full or no mitigation of the identified impact.

SITE ESTABLISHMENT AND INFRASTRUCTURE DEVELOPMENT

Alteration of the agricultural sense of place

			Consequence			Likelihood	**Significance**
Severity	Duration	Extent		Probability	Frequency		
Rating: Medium			**Site Alternative 1**			**Degree of Mitigation: No Mitigation**	
3	5	2	3	4	5	4.5	**14.9**

Loss of agricultural land for duration of mining

			Consequence			Likelihood	**Significance**
Severity	Duration	Extent		Probability	Frequency		
Rating: Medium			**Site Alternative 1**			**Degree of Mitigation: Partial**	
2	5	1	2.6	5	5	5	**13**

Visual intrusion as a result of mining

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium-High			**Site Alternative 1**			**Degree of Mitigation: Partial**	
3	5	2	3.3	5	5	5	**16.5**

Potential impact on the ECBCP-CBA due to mining

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Low-Medium			**Site Alternative 1**			**Degree of Mitigation: Partial**	
4	4	5	4.3	3	5	2	**8.6**

Potential impact on fauna within the footprint area

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Low			**Site Alternative 1**			**Degree of Mitigation: Full**	
2	4	1	2.3	2	2	2	**4.6**

Potential impact on archaeological artefacts or palaeontological finds

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Low-Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
5	5	4	4.6	3	1	2	**9.2**

STRIPPING AND STOCKPILING OF TOPSOIL AND/OR OVERBURDEN

Dust nuisance as a result of the disturbance of soil

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Low-Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
2	2	2	2	4	3	3.5	**7**

Noise nuisance generated by earthmoving machinery

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Low-Medium			**Site Alternative 1**			**Degree of Mitigation: Partial**	
2	2	2	2	3	3	3	**6**

Loss of stockpiled topsoil

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Low-Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
3	4	1	2.6	4	2	3	**7.8**

Potential infestation of the topsoil heaps and mining area with invader plant species

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
4	5	2	3.6	5	2	3.5	**12.6**

Potential erosion of denuded areas

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Low-Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
2	5	1	2.6	4	2	3	**7.8**

Potential contamination of footprint area and surface runoff as a result of hydrocarbon spillages

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Low-Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
4	5	1	3.3	3	2	2.5	**8.3**

Potential damage to the power line.

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Low-Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
5	4	4	4.6	3	1	2	**9.2**

Potential loss of protected or red data plant species.

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Low-Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
5	5	4	4.7	2	1	1.5	**7**

DRILLING AND BLASTING

Health and safety risk posed by blasting activities.

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium-High			**Site Alternative 1**			**Degree of Mitigation: Full**	
5	5	3	4.3	4	3	3.5	**15**

Dust nuisance caused by blasting activities.

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium			**Site Alternative 1**			**Degree of Mitigation: Partial**	
3	5	2	3.3	5	3	4	**13.2**

Noise nuisance as a result of blasting.

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium			**Site Alternative 1**			**Degree of Mitigation: Partial**	
3	5	3	3.6	5	3	4	**14.4**

Potential damage to the power line.

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium			**Site Alternative 1**			**Degree of Mitigation: Partial**	
5	4	4	4.6	4	2	3	**13.8**

Potential impact of blasting on a nearby exotic bird farm.

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium			**Site Alternative 1**			**Degree of Mitigation: Partial**	
3	4	3	3.3	4	3	3.5	**11.6**

Potential impact of blasting on groundwater availability.

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Low-Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
4	5	4	4.3	3	1	2	**8.6**

EXCAVATION, LOADING AND HAULING TO PROCESSING AREA

Visual intrusion associated with the excavation activities.

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium-High			**Site Alternative 1**			**Degree of Mitigation: Partial**	
3	5	2	3.3	5	5	5	**16.5**

Dust nuisance due to excavation and from loading and vehicles transporting the material.

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium-High			**Site Alternative 1**			**Degree of Mitigation: Full**	
3	4	2	3	5	5	5	**15**

Noise nuisance as a result of the mining activities

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium			**Site Alternative 1**			**Degree of Mitigation: Partial**	
2	4	2	2.7	3	5	4	**10.8**

Soil contamination from hydrocarbon spills

			Consequence			Likelihood	**Significance**
Severity	Duration	Extent		Probability	Frequency		
Rating: Low-Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
4	5	1	3.3	3	2	2.5	**8.3**

Potential impact on areas of palaeontological concern

			Consequence			Likelihood	**Significance**
Severity	Duration	Extent		Probability	Frequency		
Rating: Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
5	5	5	5	3	1	2	**10**

Potential damage to the power line.

			Consequence			Likelihood	**Significance**
Severity	Duration	Extent		Probability	Frequency		
Rating: Low-Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
5	4	4	4.6	3	1	2	**9.2**

Unsafe working environment for employees

			Consequence			Likelihood	**Significance**
Severity	Duration	Extent		Probability	Frequency		
Rating: Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
5	5	1	3.6	3	5	4	**14.4**

Mining through the drainage lines in the footprint area

			Consequence			Likelihood	**Significance**
Severity	Duration	Extent		Probability	Frequency		
Rating: Low-Medium			**Site Alternative 1**			**Degree of Mitigation: No Mitigation**	
2	5	1	2.6	5	1	3	**7.8**

Potential impact on the access road (Mn10118 St) to the site

			Consequence			Likelihood	**Significance**
Severity	Duration	Extent		Probability	Frequency		
Rating: Low-Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
3	4	2	3	5	1	3	**9**

PROCESSING, STOCKPILING AND TRANSPORT OF MATERIAL

Dust nuisance generated from the processing plant

			Consequence			Likelihood	**Significance**
Severity	Duration	Extent		Probability	Frequency		
Rating: Medium-High			**Site Alternative 1**			**Degree of Mitigation: Full**	
3	4	2	3	5	5	5	**15**

Noise nuisance stemming from operation of the processing plant

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium			**Site Alternative 1**			**Degree of Mitigation: Partial**	
2	4	2	2.7	3	5	4	**10.8**

Potential contamination of environment due to improper waste management

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Low-Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
4	5	1	3.3	3	2	2.5	**8.3**

Overloading of trucks impacting road infrastructure

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: High			**Site Alternative 1**			**Degree of Mitigation: Full**	
4	5	5	4.6	4	5	4.5	**20.7**

Degradation of the access roads

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium-High			**Site Alternative 1**			**Degree of Mitigation: Full**	
4	4	4	4	4	5	4.5	**18**

Traffic impact on the surrounding gravel roads as a result of the mining activity

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium-High			**Site Alternative 1**			**Degree of Mitigation: Partial**	
3	5	4	4	4	5	4.5	**18**

Potential impact on surrounding area should the SWD's fail.

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Low-Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
3	5	2	3.3	3	1	2	**6.6**

Contribution of mine to local economic development **(Positive Impact)**

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

CUMULATIVE IMPACTS

Potential depreciation of surrounding property values

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium-High			**Site Alternative 1**			**Degree of Mitigation: Full**	
4	5	4	4.3	3	5	4	**17.2**

Expansion of mining area negatively affecting safety and security of the surrounding area

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
4	4	5	4.3	3	2	2.5	**10.8**

Reduced ability to meet conservation obligations and targets

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium-High			**Site Alternative 1**			**Degree of Mitigation: Full**	
5	4	5	4.6	3	5	4	**18.4**

Potential negative impact on the CBA

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium-High			**Site Alternative 1**			**Degree of Mitigation: Full**	
5	4	5	4.6	3	5	4	**18.4**

Impact on existing infrastructure as a direct result of the mining operation.

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
4	5	3	4	4	3	3.5	**14**

Potential impact on water quality of the Qinira River

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Low-Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
4	5	5	4.6	3	1	2	**9.2**

SLOPING AND LANDSCAPING

Safety risk posed by un-sloped areas

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
4	5	1	3.3	4	5	4.5	**14.9**

Erosion of returned topsoil after rehabilitation

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Low-Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
3	5	1	3	4	2	3	**9**

Infestation of the reinstated area with invader plant species

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
4	4	2	3.3	5	2	3.5	**11.5**

Potential impact associated with litter/waste left at the mining area

Severity	Duration	Extent	Consequence	Probability	Frequency	Likelihood	**Significance**
Rating: Medium			**Site Alternative 1**			**Degree of Mitigation: Full**	
3	5	2	3.3	4	5	4.5	**14.9**

Return of the mining area to agricultural use upon closure **(Positive Impact)**

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

j) Methodology used in determining the significance of environmental impacts

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

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

DEFINITIONS AND CONCEPTS:

Environmental Significance:

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

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

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

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

Impact

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

Consequence

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

Likelihood

A qualitative term covering both probability and frequency.

Frequency

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

Probability

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

Environment

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

Methodology that will be used

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

Environmental Significance = Overall Consequence x Overall Likelihood

Determination of Overall Consequence

Consequence analysis is a mixture of quantitative and qualitative information and the outcome can be positive or negative. Several factors can be used to determine consequence. For the purpose of

determining the environmental significance in terms of consequence, the following factors were chosen: Severity/Intensity, Duration and Extent/Spatial Scale. Each factor is assigned a rating of 1 to 5, as described in the tables below.

Determination of Severity / Intensity

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

Table 11: Table to be used to obtain an overall rating of severity, taking into consideration the various criteria.

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

Determination of Duration

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

Table 12: Criteria for the rating of duration.

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

Rating	Description
5	Beyond TEN YEARS

Determination of Extent/Spatial Scale

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

Table 13: Criteria for the rating of extent / spatial scale.

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

Determination of Overall Consequence

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

Table 14: Example of calculating overall consequence.

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

Determination of Likelihood:

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

Determination of Frequency

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

Table 15: Criteria for the rating of frequency.

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

Determination of Probability

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

Table 16: Criteria for the rating of probability.

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

Overall Likelihood

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

Table 17: Example of calculating overall likelihood.

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

Determination of Overall Environmental Significance:

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

Table 18: Determination of overall environmental significance.

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

Qualitative description or magnitude of Environmental Significance

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

Table 19: Description of environmental significance and related action required.

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

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

HIGH Of the highest order possible within the bounds of impacts which could occur. In the case of negative impacts, there would be no possible mitigation and / or remedial activity to offset the impact at the spatial or time scale for which it was predicted. In the case of positive impacts, there is no real alternative to achieving the benefit.

MEDIUM-HIGH Impacts of a substantial order. In the case of negative impacts, mitigation and / or remedial activity would be feasible but difficult, expensive, time-consuming or some combination of these. In the case of positive impacts, other means of achieving this benefit would be feasible, but these would be more difficult, expensive, time-consuming or some combination of these.

MEDIUM Impact would be real but not substantial within the bounds of those, which could occur. In the case of negative impacts, mitigation and / or remedial activity would be both feasible and fairly easily possible. In case of positive impacts; other means of achieving these benefits would be about equal in time, cost and effort.

LOW-MEDIUM Impact would be of a low order and with little real effect. In the case of negative impacts, mitigation and / or remedial activity would be either easily achieved of little would be required, or both. In case of positive impacts alternative means for achieving this benefit would likely be easier, cheaper, more effective, less time-consuming, or some combination of these.

LOW Impact would be negligible. In the case of negative impacts, almost no mitigation and or remedial activity would be needed, and any minor steps, which might be needed, would be easy, cheap and simple. In the case of positive impacts, alternative means would almost all likely be better, in one or a number of ways, than this means of achieving the benefit

INSIGNIFICANT There would be a no impact at all – not even a very low impact on the system or any of its parts.

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

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

As mentioned earlier, the project team identified one site alternative with a possibility of various layout alternatives that must be assessed during the EIA process and discussed in the EIAR

Site Alternative 1 (S1):

Presently, Site Alternative 1 entails the extension of the current mining footprint (5.2 ha) with 32.6 ha over Portion 1 of Farm No 652, within the boundaries of the GPS coordinates listed in Table 3.

Site Alternative 1 was identified during the planning phase by the MR Holder, as the preferred site alternative based on the following:

- The proposed footprint offers the MR holder access to the dolerite deposit on the property.
- The extension of the mining area will prolong the lifespan of Wansley Quarry.
- Access to the proposed mining area is possible from the existing farm road with a formal (existing) entrance onto either the N6 national road or the R102 provincial road.
- The extension footprint was chosen over an area that was previously used for pineapple cultivation.

Layout Alternatives:

The layout of the mining area within the footprint of S1, or other site alternative (if identified), will be determined during the EIA process upon receipt of the specialist's input. Sensitive areas, identified by the specialist, will be portrayed on a map of the proposed footprint to deduce the allowable mining areas. Once the no-go (sensitive) areas were demarcated various layout alternatives will be investigated to identify the best possible option for the proposed activity.

Potential Positive Impacts:

- The MR holder can utilize the dolerite resource on the property;
- The extension of the mining area will prolong the lifespan of Wansley Quarry;
- The operation will contribute to local economic development;
- Return of the mining area to agricultural use upon closure.

Potential Negative Impacts:

SITE ESTABLISHMENT AND INFRASTRUCTURE DEVELOPMENT

- Alteration of the agricultural sense of place;
- Loss of agricultural land for duration of mining;
- Visual intrusion as a result of mining;
- Potential impact on the ECBCP CBA due to mining;
- Potential impact on fauna within the footprint area;
- Potential impact on archaeological artefacts or palaeontological finds;

STRIPPING AND STOCKPILING OF TOPSOIL AND/OR OVERBURDEN

- Dust nuisance as a result of the disturbance of soil;
- Noise nuisance generated by earthmoving machinery;
- Loss of stockpiled topsoil;
- Potential infestation of the topsoil heaps and mining area with invader plant species;
- Potential erosion of denuded areas;
- Potential contamination of footprint area and surface runoff as a result of hydrocarbon spillages;
- Potential damage to the power line;
- Potential loss of protected or red data plant species;

DRILLING AND BLASTING

- Health and safety risk posed by blasting activities;
- Dust nuisance caused by blasting activities;
- Noise nuisance as a result of blasting;
- Potential damage to the power line;
- Potential impact of blasting on a nearby exotic bird farm;
- Potential impact of blasting on groundwater availability;

EXCAVATION, LOADING AND HAULING TO PROCESSING AREA

- Visual intrusion associated with the excavation activities;
- Dust nuisance due to excavation and from loading and vehicles transporting the material;
- Noise nuisance as a result of the mining activities;
- Soil contamination from hydrocarbon spills;
- Potential impact on areas of palaeontological concern;
- Potential damage to the power line;
- Unsafe working environment for employees;
- Mining through the drainage lines in the footprint area;
- Potential impact on the access road (Mn10118 St) to the site;

PROCESSING, STOCKPILING AND TRANSPORT OF MATERIAL

- Dust nuisance generated from the processing plant;
- Noise nuisance stemming from operation of the processing plant;
- Potential contamination of environment due to improper waste management;
- Overloading of trucks impacting road infrastructure;
- Degradation of the access roads;
- Traffic impact on the surrounding gravel roads as a result of the mining activity;
- Potential impact on surrounding area should the SWD's fail;

CUMULATIVE IMPACTS

- Potential depreciation of surrounding property values;
- Expansion of mining area negatively affecting safety and security of the surrounding area;
- Reduced ability to meet conservation obligations and targets;
- Potential negative impact on the CBA;
- Impact on existing infrastructure as a direct result of the mining operation;
- Potential impact on water quality of the Qinira River;

SLOPING AND LANDSCAPING

- Safety risk posed by un-sloped areas;
- Erosion of returned topsoil after rehabilitation;
- Infestation of the reinstated area with invader plant species;
- Potential impact associated with litter/waste left at the mining area.

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

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

In light of the above listed impacts that may have a negative impact on the study area, the following preliminary mitigation measures are proposed to address/minimize the resulting impacts:

TOPOGRAPHY

Landscaping of Mining Area:

- The excavated area must serve as a final depositing area for the placement of overburden.
- Rocks and coarse material removed from the excavation must be dumped into the excavation.
- No waste may be permitted to be deposited in the excavations.
- Once overburden, rocks and coarse natural materials have been added to the excavation and it was profiled with acceptable contours and erosion control measures, the topsoil previously stored must be returned to its original depth over the area.
- The area must be fertilized if necessary to allow vegetation to establish rapidly. The site shall be seeded with a local or adapted indigenous seed mix in order to propagate the locally or regionally occurring flora, should natural vegetation not re-establish within 6 months from closure of the site.
- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed and any deleterious effects on the soil arising from the mining operation be corrected and the area be seeded with a vegetation seed mix to his or her specification.
- The mitigation measures associated with these impacts must be expanded upon as part of the closure plan and EIA process.

VISUAL CHARACTERISTICS

Visual Mitigation:

- The site must have a neat appearance and be kept in good condition at all times.
- Mining equipment must be stored neatly in a dedicated area when not in use.
- The MR Holder must limit vegetation removal, and stripping of topsoil may only be done immediately prior to the mining/use of a specific area.
- The excavation must be contained within the approved footprint of the mining right.
- Upon closure the site must be rehabilitated and landscaped to ensure that the visual impact on the aesthetic value of the area is kept to a minimum.

GEOLOGY AND SOIL

Topsoil Management:

- The upper 300 mm of the soil must be stripped and stockpiled before mining.
- Topsoil is a valuable and essential resource for rehabilitation and it must therefore be managed carefully to conserve and maintain it throughout the stockpiling and rehabilitation processes.
- Topsoil stripping, stockpiling and re-spreading must be done in a systematic way. The mining plan have to be such that topsoil is stockpiled for the minimum possible time.
- The topsoil must be placed on a levelled area, within the mining footprint. No topsoil may be stockpiled in undisturbed areas.
- Topsoil stockpiles must be protected against losses by water- and wind erosion. Stockpiles must be positioned so as not to be vulnerable to erosion by wind and water. The establishment of plants (weeds or a cover crop) on the stockpiles will help to prevent erosion.
- Topsoil heaps may not exceed 1.5 m in order to preserve micro-organisms within the topsoil, which can be lost due to compaction and lack of oxygen.
- The temporary topsoil stockpiles must be kept free of invasive plant species.
- Topsoil heaps to be stored longer than a period of 6 months needs to be vegetated with an indigenous grass seed mix if vegetation does not naturally germinate within the first growth season.
- Storm- and runoff water must be diverted around the stockpile area to prevent erosion.
- The stockpiled topsoil must be evenly spread, to a depth of 300 mm, over the rehabilitated area upon closure of the site.
- The MR holder must strive to re-instate topsoil at a time of year when vegetation cover can be established as quickly as possible afterwards, so that erosion of returned topsoil by both rain and wind, before vegetation is established, is minimized. The best time of year is at the end of the rainy season, when there is moisture in the soil for vegetation establishment and the risk of heavy rainfall events is minimal.
- A cover crop must be planted, irrigated and established immediately after spreading of topsoil, to stabilize the soil and protect it from erosion. The cover crop must be fertilized for optimum biomass production, and any soil deficiencies must be corrected, based on a chemical analysis of the re-spread soil (if deemed necessary). It is important that rehabilitation be taken up to the point of cover crop stabilization. Rehabilitation cannot be considered complete until the first cover crop is well established.
- The rehabilitated area must be monitored for erosion, and appropriately stabilized if any erosion occurs for at least 12 months after reinstatement.

HYDROLOGY

Stormwater Mitigation:

- The recommendations of the SWMP must be implemented and managed on site:
  - Polluting activities including storage of mining fleet, equipment wash down facilities and vehicle maintenance yards must be restricted to the workshop areas and must be undertaken on impermeable hard standing surfaces, which are formally drained to a dirty water drainage system at the site.
  - All fuels and chemicals stored or used on site must be contained within fit for purpose containers and stored within designated storage areas. In order to prevent pollution of the surrounding environment during an accidental spillage, the designated storage areas must be situated on an impermeable surface and must feature a perimeter bund and a drainage sump. The volume of the bund and sump must be sized to contain at least 110% of the total volume of the fuel and chemicals being stored within the designated storage area. The storage areas must feature a roof to prevent inflow of rainwater, which would require the sump to be emptied frequently.
- Soil that are to be removed must be done so at right angles to the slope, as this will slow down surface runoff and help to prevent erosion.
- Stormwater must be diverted around the topsoil heaps and mining areas to prevent erosion.
- During mining, the outflow of run-off water from the mining excavation must be controlled to prevent down-slope erosion.
- Mining must be conducted only in accordance with the Best Practice Guideline for small scale mining that relates to stormwater management, erosion and sediment control and waste management, developed by the Department of Water and Sanitation (DWS), and any other conditions which that Department may impose:
  - Clean water (e.g. rainwater) must be kept clean and be routed to a natural watercourse by a system separate from the dirty water system. You must prevent clean water from running or spilling into dirty water systems.
  - Dirty water must be collected and contained in a system separate from the clean water system.
  - Dirty water must be prevented from spilling or seeping into clean water systems.
  - A stormwater management plan must apply for the entire life cycle of the mining activity and over different hydrological cycles (rainfall patterns).
  - The statutory requirements of various regulatory agencies and the interests of stakeholders must be considered and incorporated into a stormwater management plan.

Loss of the Drainage Lines:

- The recommendations of the SWMP (as listed under Stormwater Mitigation) must be implemented and managed on site.
- The mitigation measures (if any) associated with this impact must be expanded upon as part of the ecological and surface hydrological study and assessment and EIA process.

Potential Seepage of the SWD's:

- The recommendations of the SWMP (as listed under Stormwater Mitigation) must be implemented and managed on site.
- Monthly inspections of the integrity of the pollution control dams must be part of site managements responsibility.
- The mitigation measures associated with this impact must be expanded upon as part of the EIA process.

AIR AND NOISE AMBIANCE

Fugitive Dust Emission Mitigation:

- The liberation of dust into the surrounding environment must be effectively controlled by the use of, inter alia, straw, water spraying and/or environmentally friendly dust-allaying agents that contains no PCB's (e.g. DAS products).
- The site manager must ensure continuous assessment of the dust suppression equipment to confirm its effectiveness in addressing dust suppression.
- Speed on the internal roads must be limited to 20 km/h and 40km/h on the access road to prevent the generation of excess dust.
- Areas devoid of vegetation, which could act as a dust source, must be minimized and vegetation removal may only be done immediately prior to mining.
- The crusher plant must have operational water sprayers to alleviate dust generation from the conveyor belts.
- Fines, blowing from the drop end of the crusher plant, can be minimized by attaching strips of used conveyor belts to the conveyor's end.
- Compacted dust must weekly be removed from the crusher plant to eliminate the dust source.
- The MR Holder must implement a dust management plan and conduct fall-out dust monitoring on site to accurately determine the site specific dust levels;
- Loads must be flattened to prevent spillage and covered during transportation on public roads.
- Weather conditions must be taken into consideration upon commencement of daily operations. Limiting operations during very windy periods would reduce airborne dust and resulting impacts.

- All dust generating activities shall comply with the National Dust Control Regulations, GNR 827 promulgated in terms of NEM:AQA (Act 39 of 2004) and ASTM D1739 (SANS 1137:2012).
- Best practice measures shall be implemented during the stripping of topsoil, blasting, excavating, processing, and transporting of the material from site to minimize potential dust impacts.

Noise Handling:

- The MR holder must ensure that the employee and visitors to the site conduct themselves in an acceptable manner while on site.
- No loud music may be permitted at the mining area.
- All mining vehicles must be equipped with silencers and maintained in a road worthy condition in terms of the National Road Traffic Act, 1996 (Act No 93 of 1996).
- The type, duration and timing of the blasting procedures must be planned with due cognizance of other land users and structures in the vicinity. Surrounding land owners must be notified in writing prior to each blasting occasion.
- A qualified occupational hygienist must be contracted to quarterly monitor and report on the personal noise exposure of the employees working at the mine. The monitoring must be done in accordance with the SANS 10083:2004 (Edition 5) sampling method as well as NEM:AQA, 2004, SANS 10103:2008.
- Best practice measures shall be implemented in order to minimize potential noise impacts.

MINING, BIODIVERSITY AND GROUNDCOVER

Management of Vegetation Removal and Conservation of ECBCP CBA:

- The mining boundaries must be clearly demarcated and all operations must be contained to the approved mining area.
- The area outside the mining boundaries must be declared a no-go area, and all staff must be educated accordingly.
- Any no-go/buffer areas proclaimed by the specialists within the mining footprint must be demarcated, with permanent beacons, and no mining may enter into these areas.
- No plants may be removed without the approval of the ECO.
- If applicable, the MR Holder must apply for a permit for the removal or destruction of any protected and red data listed plants to be affected by the mining activity. This application must be made to the Department of Economic Development, Environmental Affairs and Tourism – Eastern Cape Province (DEDEAT-EC).

Management of Invasive Plant Species:

- An invasive plant species management plan must be implemented at the site to ensure the management and control of all species regarded as Category 1a and 1b invasive species in terms of NEM:BA (National Environmental Management: Biodiversity Act 10 of 2004 and regulations applicable thereto). Weed/alien clearing must be done on an ongoing basis throughout the life of the mining activities.
- All stockpiles (topsoil) must be kept free of invasive plant species.
- Management must take responsibility to control declared invader or exotic species on the rehabilitated areas. The following control methods can be used:
  - The plants can be uprooted, felled or cut off and can be destroyed completely.
  - The plants can be treated chemically by a registered pest control officer (PCO) through the use of an herbicide recommended for use by the PCO in accordance with the directions for the use of such an herbicide.

FAUNA

Protection of Fauna:

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

CULTURAL AND HERITAGE ENVIRONMENT

Archaeological, Heritage and Palaeontological Aspects:

- All mining must be confined to the development footprint area.
- If during the pre-construction phase, construction, operations or closure phases of this project, any person employed by the developer, one of its subsidiaries, contractors and subcontractors, or service provider, finds any artefact of cultural significance or heritage site, this person must cease work at the site of the find and report this find to their immediate supervisor, and through their supervisor to the senior on-site manager.
- It is the responsibility of the senior on-site Manager to make an initial assessment of the extent of the find, and confirm the extent of the work stoppage in that area.
- The senior on-site Manager must inform the ECO of the chance find and its immediate impact on operations. The ECO must then contact a professional archaeologist for an assessment of the finds who must notify SAHRA.
- Work may only continue once the go-ahead was issued by SAHRA.

LAND USE

Loss of agricultural land for duration of mining:

- The MR holder must sign an agreement with the landowner that the loss of agricultural land for the duration of the mining period is acceptable. If needed, mined-out/rehabilitated areas should revert back to agricultural use once the cover crop stabilised.

EXISTING INFRASTRUCTURE

Access Road Mitigation:

- Stormwater must be diverted around the access road to prevent erosion.
- Vehicular movement must be restricted to the existing access road and crisscrossing of tracks through undisturbed areas must be prohibited.
- The speed of all mining equipment/vehicles must be restricted to 40 km/h on the public access roads and 20 km/h on the internal roads.
- Rutting and erosion of the access road caused as a direct result of the mining activities must be repaired by the MR Holder.
- Overloading of the trucks must be prevented and proof of load weights must be filed and be available for auditing by relevant officials.
- The mitigation measures associated with this impact must be expanded upon as part of the EIA process upon receipt of the Traffic Impact Assessment.

Managing the Power Line:

- An adequate no-go buffer should be maintained around the power line as per Eskom standard.
- The mitigation measures associated with this impact must be expanded upon as part of the EIA process.

GENERAL

Waste Management:

- Regular vehicle maintenance, repairs and services may only take place at the off-site workshop and service area. If emergency repairs are needed on equipment not able to move to the workshop, drip trays must be present. All waste products must be disposed of in a closed container/bin to be removed from the emergency service area (same day) to the workshop to ensure proper disposal.

- The MR Holder must ensure that employees make use of the formal ablution facilities at the site offices., alternatively the employees must be provided with a chemical toilet that must be serviced at least once a week by an accredited liquid waste handling contractor.
- The use of any temporary, chemical toilet facilities must not cause any pollution to water sources or pose a health hazard. In addition, no form of secondary pollution should arise from the disposal of refuse or sewage from the temporary, chemical toilets. Any pollution problems arising from the above are to be addressed immediately by the MR holder.
- If a diesel bowser is used on site, it must be equipped with a drip tray at all times. Drip trays must be used during each and every refuelling event. The nozzle of the bowser needs to rest in a sleeve to prevent dripping after refuelling.
- Site management must ensure drip trays are cleaned after each use. No dirty drip trays may be used on site.
- Any effluents containing oil, grease or other industrial substances must be collected in a suitable receptacle and removed from the site, either for resale or for appropriate disposal at a recognized facility.
- Should spillage occur, such or as oil or diesel leaking from a burst pipe, the contaminated soil must, within the first hour of occurrence, be collected in a suitable receptacle and removed from the site, either for resale or for appropriate disposal at a recognized facility. Proof must be filed.
- Suitable covered receptacles must be available at all times and conveniently placed for the disposal of waste.
- Non-biodegradable refuse such as glass bottles, plastic bags, metal scrap etc., must be stored in a container with a closable lid at a collecting point to be collected at least once a month and disposed of at a recognized landfill site. Specific precautions must be taken to prevent refuse from being dumped on or in the vicinity of the mine area;
- Biodegradable refuse must be handled as indicated above;
- No waste may be buried burned on the site.
- Re-use or recycling of waste products must be encouraged on site.
- It is important that any significant spillage of chemicals, fuels etc. during the lifespan of the mining activities is reported to the Department of Water and Sanitation and other relevant authorities.

Management of Health and Safety Risks:

- The type, duration and timing of the blasting procedures must be planned with due cognizance of other land users and structures in the vicinity.
- The surrounding landowners and communities must be informed in writing ahead of any blasting event.
- Measures to limit flyrock must be taken.

- Audible warning of a pending blast must be given at least 3 minutes in advance of the blast.
- The compliance of ground vibration and airblast levels must be monitored to USBM standards with each blasting event.
- A vibro recorder must be used to record all blasts.
- All flyrock (of diameter 150 mm and larger) which falls beyond the working area, together with the rock spill must be collected and removed.
- Adequate ablution facilities and water for human consumption must daily be available on site.
- Workers must have access to the correct personal protection equipment (PPE) as required by law.
- All operations must comply with the Mine Health and Safety Act, 1996 (Act No 29 of 1996).

Cumulative Impacts:

- The mitigation measures associated with these impacts must be expanded on and assessment and the EIA process.

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

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

The most current site activities map was compiled upon assessment of the site specific conditions and contribution of the consultation process and is attached as Appendix 4 to this document.

n) Motivation where no alternative sites were considered

As mentioned earlier, project/site alternatives do not apply to the current Wansley Quarry operation as the mine has been operating since 2000.

For the proposed extension area, the project team identified one site alternative with a possibility of various layout alternatives that will be assessed during the EIA process and discussed in the EIAR.

The position of Site alternative 1 was based on the presence of the dolerite resource, and the location of the approved mining right on the property. The proposed extension area directly borders the southern and western farm boundaries. Moving the mining footprint to the north, will impact the encroaching thicket vegetation between the access road and the riparian fringe of the Qinira River as well as remove the mining footprint from the optimal dolerite resource. The proposed mining footprint cannot move to the east due to the presence of the Qinira River and associated riparian fringe. In light of this, Site Alternative 1 is presently deemed the only viable alternative site.

o) Statement motivating the preferred site

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

S1 was identified during the planning phase by the MR holder as the preferred site alternative based on the availability of the mineral resource. Should additional viable site alternatives be identified during the EIA process, the project team will heed the suggestions, and investigate the possible implementation thereof. Such site alternatives (if identified) will be discussed in detail in the draft EIAR to be distributed for public comments.

The layout of the mining area within the footprint of S1, or other site alternative (if identified), will be determined during the EIA process upon receipt of the specialist's input. Once no-go/sensitive areas (if any) were demarcated various layout alternatives will be investigated to identify the best possible option for the proposed activity.

3. PLAN OF STUDY FOR THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

a) Description of alternatives to be considered including the option of not going ahead with the activity

Site Alternative:

Site Alternative 1 entails the extension of the current mining footprint (5.2 ha) with 32.6 ha over Portion 1 of Farm No 652, within the boundaries of the GPS coordinates as presented in Table 3. Should additional viable site alternatives be identified during the EIA process, the project team will heed the suggestions, and investigate the possible implementation thereof. Such site alternatives (if identified) will be discussed in detail in the draft EIAR to be distributed for public comments

Layout Alternatives

The layout of the mining area within the footprint of S1, or other site alternative (if identified), will be determined during the EIA process upon receipt of the specialist's input. Sensitive areas, identified by the specialists, will be portrayed on a map of the proposed footprint to deduce the allowable mining areas. Once the no-go (sensitive) areas were demarcated various layout alternatives will be investigated to identify the best possible option for the proposed activity.

No-go Alternative

The no-go alternative entails no change to the *status quo* and is therefore a real alternative that needs to be considered. In the event that the no-go alternative is implemented the land use of the earmarked footprint will remain that of agriculture, with the solid dolerite resource unmined. Amongst

others, the impact of mining on current, and future land uses of the study area will be compared to the *status quo* and will be considered as part of the EIA process, and discussed in the DEIAR.

b) Description of the aspects to be assessed as part of the environmental impact assessment process

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

The aspects to be assessed as part of the environmental impact assessment process that will follow upon approval of the Scoping Report by the DMRE will include, but not be limited to, the following:

1. Various alternatives (site (if applicable), layout etc.) will be considered during the EIA process as supplementary information becomes available. Viable preferred alternatives will in turn dictate the design and layout of the proposed project.

2. Upon deciding on the preferred alternatives, the applicability of the listed activities identified in terms of the NEMA EIA Regulations, 2014 (as amended) will be confirmed and aligned with the most recent proposal.

3. The need and desirability of the proposed activity will be discussed in detail and weighed against the no-go option of upholding the *status quo* at the study area.

4. The inputs received during the public participation process (first- and second phase) will be assessed and considered by the project team during the EIA process.

5. The findings, recommendations and management measure proposed in the Ecological and Surface Hydrological Study and Assessment, the Heritage Impact Assessment, as well as the Traffic Impact Assessment will be assessed during the EIA process and incorporated into the DEIAR.

6. The impact of the proposed project on the physical-, biological-, and human environments will be assessed. The nature, probability and significance of the potential impacts associated with the project will be determined through the use of the above mentioned methodology.

7. Mitigation measures will be proposed to control, modify, remedy or stop the impacts associated with the proposed activity on the surrounding environment.

8. Any additional requirements submitted by the DMRE will be incorporated into the DEIAR and treated accordingly.

c) Description of aspects to be assessed by specialists

The following specialist studies will be conducted as part of the EIA process:

Archaeological Impact Assessment:

- The goal of the study will be the compilation of a Phase 1 Heritage Impact Assessment Report (HIA).
- The HIA will incorporate both the AIA and PIA findings and will describe all archaeological and historical artefacts, structures and settlements documented in the area as well as paleontological important finds;
- Establish the level of sensitivity/importance of the archaeological and historical remains in the area;
- Proposed practical mitigation measures for potential impacts;
- Indicate limitations and assumptions; and
- Propose recommendations on the way forward.

Ecological and Surface Hydrology Study and Assessment:

- To conduct an ecological and surface hydrology study of the target area where the expansion of the existing quarry is proposed and provide a professional opinion on ecological and surface hydrological issues pertaining to the target area and potential mitigation and measures to aid in future decisions regarding the proposed project and to minimalize the significance of identified impacts.

Palaeontological Impact Assessment:

- The palaeontologist will conduct a study to determine the sensitivity of the palaeontological environment within the study area.
- Identify any areas of concern and propose recommendations thereof.
- Proposed management and mitigation measure for the proposed project.

Traffic Impact Assessment:

- The road engineer will discuss the road infrastructure of the study area with SANRAL, Department of Transport, and Buffalo City Metropolitan to obtain the departmental requirements and recommendations;
- The impact of mining related traffic on the access roads, in particular W- and B Road will be assessed; and
- The report will make recommendations and proposed mitigation measures regarding the usage of the roads in the study area.

d) Proposed method of assessing the environmental aspects including the proposed method of assessing alternatives

The impact assessment component of the EIA is subdivided into several environmental aspects to be studied as listed below (preliminary list):

- Topography;
- Visual Characteristics;
- Geology and Soils;
- Hydrology and Geohydrology;
- Air Quality and Noise Ambiance;
- Mining, Biodiversity and Groundcover;
- Fauna;
- Cultural and Heritage Environment;
- Socio-economic Environment / Land Use;
- Existing Infrastructure; and
- Site (if applicable) and Layout Alternatives including the No-go Option.

Greenmined will use in-house specialists to review the environmental aspects which will be assessed as part of the environmental impact assessment process. The environmental aspects briefly described in the Scoping Report will be updated, and site and technology specific impacts and mitigation recommendations will be made and be reviewed by the project team, registered stakeholders and I&AP's, and competent authority (DMRE).

The significance of the impacts will be assessed in terms of the methodology described in *Section 2 j) Methodology Used in Determining and Ranking the Significance.*

e) The proposed method of assessing duration significance

The significance of the identified impacts will be determined using the approach outlined in *Section 2 j) Methodology Used in Determining and Ranking the Significance*. The environmental significance assessment methodology is based on the Overall Consequence x Overall Likelihood.

Consequence analysis is a mixture of quantitative and qualitative information and the outcome can be positive or negative. For the purpose of determining the environmental significance in terms of consequence, the following factors were chosen: Severity/Intensity, Duration and Extent/Spatial Scale.

The determination of likelihood is a combination of Frequency and Probability.

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

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

Assessing duration significance forms part of the environmental significance determination of the impacts and will be assessed accordingly.

f) The stages at which the competent authority will be consulted

The Section 102 amendment application in terms of the MPRDA, 2002 was submitted to the DMRE on 23 October 2020. As competent authority the DMRE will be invited to comment on the Draft Scoping Report (DSR), and any comments received will be incorporated into the FSR to be considered for approval.

Should the DMRE approve the Final Scoping Report, the draft EIA report, including all investigations, assessments and the specialist studies, will be circulated for a 30-day commenting period. Any additional requirements received from the DMRE will be added to the Final EIA report to be submitted for approval.

As stipulated in the NEMA EIA Regulations, 2014 (as amended 2017) read together with the MPRDA, 2002, the EIA process will comprise of the following:

1. Application for Environmental Authorization and a Section 102 amendment of the Mining Right uploaded with accompanying documentation to the online SAMRAD system;
2. The DMRE accepts the application;
3. Draft Scoping Report circulated for perusal by I&AP's and stakeholders (including the DMRE);
4. Final Scoping Report (FSR) submitted to the DMRE;
5. The DMRE decision on FSR;
6. If the FSR is approved, the Draft EIA report is circulated for perusal by I&AP's and stakeholders (including the DMRE);
7. Final EIA report submitted to DMRE;
8. The DMRE decision on Final EIA report;
9. If the FEIAR is approved, the DMRE issues the Environmental Authorizations;
10. Appeal period;
11. Submission of the Financial Provision amount;

12. Approval of supporting documentation including, but not limited to, the amended Mine Works Programme, and -Social and Labour Plan; and finally
13. Execution of the Mining Right amendment.

g) Particulars of the public participation process with regard to the Impact Assessment process that will be conducted

i) Steps to be taken to notify interested and affected parties.

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

The aspects to be assessed as part of the environmental impact assessment process was added to the Draft Scoping Report that will be distributed to all registered I&AP's and stakeholders for a 30-day commenting period.

The I&AP's and stakeholders will be notified of the availability of the DSR for their perusal and commenting over a 30-days period. An electronic copy of the document will be available on the Greenmined website.

Any additional comments and recommendations received on the Draft Scoping Report will be added to the Final Scoping Report to be submitted to the DMRE for approval.

ii) Details of the engagement process to be followed

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

Public participation during the impact assessment phase of the EIA will entail a review of the findings of the EIA, presented in the Draft Scoping Report and Draft EIA and EMPR Reports. These reports will be made available for public comment as described above.

I&AP's will be advised of the availability of these reports and how to obtain them. They will be encouraged to comment in writing (mail or email). Any issues, comments or suggestions raised during the comment period will be added to the Comments and Response Report (CRR) that will accompany the Final Scoping Report.

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

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

Upon approval of the Final Scoping Report, the Draft EIA report will be compiled. The Draft EIA & EMPR report will be circulated to the registered I&AP's and stakeholders for their perusal over a 30-days period.

The Environmental Impact Assessment Report and Environmental Management Programme Report templates prescribed by the DMRE in terms of the National Environmental Management Act, 1998 in respect of listed activities that have been trigger by this application will be used to assess the information with regard to the proposed extension of the mining footprint.

The research and analysis regarding the project will be processed and interpreted to compile the information required in the abovementioned template to be distributed for public comment.

h) Description of the tasks that will be undertaken during the environmental impact assessment process

The EIA process for the proposed extension project is depicted below:

1. Application for Environmental Authorization and S102 amendment of the Mining Right to the DMRE;
2. The DMRE accepts the application;
3. Draft Scoping Report circulated for perusal by I&AP's and stakeholders;
4. Final Scoping Report (FSR) submitted to DMRE;
5. The DMRE decision on FSR;
6. Impact Assessment Process:
   - Project description and site environmental baseline;
   - Impact assessment;
   - Mitigation measures and recommendations;
   - EMPR compilation;
7. Draft EIA report circulated for perusal by registered I&AP's and stakeholders;
8. Final EIA report submitted to DMRE;
9. The DMRE decision on Final EIA report;
10. Announcement of Environmental Authorization and Appeal Procedure;
11. Opportunity to Appeal;
12. Submission of Financial Provision amount;
13. Execution of the Mining Right amendment.

i) Measures to avoid, reverse, mitigate, or manage identified impacts and to determine the extent of the residual risks that need to be managed and monitored

Table 20: Table listing the identified impacts, residual risks to be managed and monitored.

ACTIVITY Whether listed or not listed (E.g. Excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply, dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc...etc...etc)	POTENTIAL IMPACT (e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc...etc..)	MITIGATION TYPE (modify, remedy, control or stop) Through (e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc...etc) E.g. Modify through alternative method. Control through noise control Control through management and monitoring through rehabilitation.	POTENTIAL FOR RESIDUAL RISK
♦ Demarcation of site with visible beacons.	♦ No impact could be identified.	Control: Implementation of proper housekeeping and site management.	LOW
♦ Site establishment and infrastructure development. ♦ Cumulative impacts.	♦ Alteration of the agricultural sense of place. ♦ Potential depreciation of surrounding property values.	Control: Implementation of proper housekeeping and rehabilitation to ensure the mining area can be returned to agricultural use.	MEDIUM
♦ Site establishment and infrastructure development.	♦ Loss of agricultural land for duration of mining.	Should the proposed project be approved, the operation will temporarily interrupt the agricultural activities of the footprint area, only to be reversed upon the closure of the mine. The impact could if possible be controlled through progressive rehabilitation.	LOW

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE	POTENTIAL FOR RESIDUAL RISK
♦ Site establishment and infrastructure development. ♦ Excavation, loading and hauling to processing area.	♦ Visual intrusion as a result of mining. ♦ Visual intrusion associated with the excavation activities.	Control: Proper housekeeping and implementation of rehabilitation at the end of the project.	MEDIUM
♦ Site establishment and infrastructure development. ♦ Cumulative Impacts.	♦ Potential impact on the ECBCP-CBA due to mining. ♦ Reduced ability to meet conservation obligations and targets. ♦ Potential negative impact on the CBA.	Control & Modify: Consideration of various layout alternatives, demarcation and management of no-go areas.	LOW
♦ Site establishment and infrastructure development. ♦ Drilling and blasting.	♦ Potential impact on fauna within the footprint area. ♦ Potential impact of blasting on a nearby exotic bird farm.	Control & Modify: Proper housekeeping practices and adherence to blasting regulations.	LOW
♦ Site establishment and infrastructure development. ♦ Excavation, loading and hauling to processing area.	♦ Potential impact on archaeological artefacts or palaeontological finds. ♦ Potential impact on areas of palaeontological concern.	Control & Stop: Implementation of a chance-find procedure.	LOW
♦ Stripping and stockpiling of topsoil and/or overburden. ♦ Drilling and blasting. ♦ Excavation, loading and hauling to processing area. ♦ Processing, stockpiling and transort of material.	♦ Dust nuisance as a result of the disturbance of soil. ♦ Dust nuisance caused by blasting activities. ♦ Dust nuisance due to excavation and from loading and vehicles transporting the material. ♦ Dust nuisance generated from the processing plant.	Control: Dust suppression methods and proper housekeeping.	LOW

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE	POTENTIAL FOR RESIDUAL RISK
♦ Stripping and stockpiling of topsoil and/or overburden. ♦ Drilling and blasting. ♦ Excavation, loading and hauling to processing area. ♦ Processing, stockpiling and transort of material.	♦ Noise nuisance generated by earthmoving machinery. ♦ Noise nuisance as a result of blasting. ♦ Noise nuisance as a result of the mining activities. ♦ Noise nuisance stemming from operation of the processing plant.	Control: Noise suppression methods and proper housekeeping.	LOW
♦ Stripping and stockpiling of topsoil and/or overburden. ♦ Sloping and landscaping.	♦ Loss of stockpiled topsoil. ♦ Potential erosion of denuded areas. ♦ Erosion of returned topsoil after rehabilitation.	Control: Implementation of the proper stormwater control measures.	LOW
♦ Stripping and stockpiling of topsoil and/or overburden. ♦ Sloping and landscaping.	♦ Potential infestation of the topsoil heaps and mining area with invader plant species. ♦ Infestation of the reinstated area with invader plant species.	Control & Remedy: Implementation of an invader plant species management plan.	LOW
♦ Stripping and stockpiling of topsoil and/or overburden. ♦ Excavation, loading and hauling to processing area. ♦ Processing, stockpiling and transort of material. ♦ Sloping and landscaping.	♦ Potential contamination of footprint area and surface runoff as a result of hydrocarbon spillages. ♦ Soil contamination from hydrocarbon spills. ♦ Potential contamination of environment due to improper waste management. ♦ Potential impact associated with litter/waste left at the mining area.	Control & Remedy: Proper housekeeping and implementation of an emergency response plan and waste management plan.	LOW
♦ Stripping and stockpiling of topsoil and/or overburden. ♦ Drilling and blasting.	♦ Potential damage to the power line. ♦ Impact on existing infrastructure as a direct result of the mining operation.	Control: Proper site management and implementation of an emergency response plan.	LOW

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE	POTENTIAL FOR RESIDUAL RISK
♦ Excavation, loading and hauling to processing area. ♦ Cumulative impacts.			
♦ Stripping and stockpiling of topsoil and/or overburden.	♦ Potential loss of protected or red data plant species.	Control: Implementing good management practices.	LOW
♦ Drilling and blasting. ♦ Excavation, loading and hauling to processing area. ♦ Sloping and landscaping. ♦ Cumulative Impacts	♦ Health and safety risk posed by blasting activities. ♦ Unsafe working environment for employees. ♦ Safety risk posed by unsloped areas. ♦ Expansion of mining area negatively affecting safety and security of the surrounding area.	Control: Ensure operation complies with the mine health and safety regulations.	MEDIUM
♦ Excavation, loading and hauling to processing area. ♦ Cumulative impacts.	♦ Mining through the drainage lines in the footprint area. ♦ Potential impact on water quality of the Qinira River.	Control: Mining according to the recommendations of the SWMP.	HIGH
♦ Drilling and blasting.	♦ Potential impact of blasting on groundwater availability.	Control: Adherence to blasting regulations.	LOW
♦ Excavation, loading and hauling to processing area. ♦ Processing, stockpiling and transport of material.	♦ Potential impact on the access road (Mn10118 St) to the site. ♦ Overloading of trucks impacting road infrastructure. ♦ Degradation of the access roads.	Control & Remedy: Maintaining the access road for the duration of the operational phase, as well as leaving it in a representative or better condition than prior to mining.	LOW

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE	POTENTIAL FOR RESIDUAL RISK
	♦ Traffic impact on the surrounding gravel roads as a result of the mining activity.		
♦ Processing, stockpiling and transport of material.	♦ Potential impact on surrounding area should the SWD's fail.	Control & Remedy: Implementing the recommendations of the SWMP and remedy failures.	LOW

j) Other Information required by the competent Authority

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

(1) Impact on the socio-economic conditions of any directly affected person

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

The following potential negative impacts were identified that may have an impact on the socio-economic conditions of directly affected persons:

- **Increased/prolonged traffic on the public access roads:**
  The extension of the mining area will result in an increase in mining related traffic on the access roads. The degree of impact as well as the significance of increased traffic on the W- & B roads will be assessed by the road engineer as part of the TIA that will be incorporated into the DEIAR.

- **Visual intrusion associated with the mining:**
  The presence of mining related infrastructure (i.e. processing plant) as well as the opencast pit to be established will impact on the visual character of the study area. The significance of this impact must be fully assessed during the EIA process taking potential site- and layout alternatives and screening methods into consideration in an attempt to reduce the impact as much as possible.

- **Impact on the air quality and noise ambiance of the study area:**
  The presence of the crushing and screening infrastructure, opencast mining, blasting and the use of earthmoving equipment all increase the possibility of dust and noise generation as a result of the mining activities. The air quality and noise impact must be fully assessed during the EIA process. By nature, these impacts require constant monitoring to be implemented throughout the site establishment-, operational-, and decommissioning phases of a project.

- **Weeds/invader plants spreading from the mining area:**
  The potential of weeds/invader plants spreading from the denuded areas at the mine into the surrounding properties will negatively affect the surrounding landowners. Mitigation measures and management plans will be incorporated into the draft EIAR to control the germination of weeds/invader plant species and minimise the potential impact.

- **Potential depreciation of surrounding property value and/or increased security risk as a result of the mine:**

  The potential of the mine having a negative impact on the property value of the surrounding farms and/or resulting in a security risk to surrounding residents must be must be fully assessed during the EIA process. If applicable mitigation measures and management plans will be incorporated into the draft EIAR to control and/or minimise the potential impacts.

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

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

The presence of national estate as referred to in section 3(2) of the NHRA, 1999 will be assessed by the archaeologist and palaeontologist as part of the phase 1 heritage impact assessment and palaeontological impact assessment to follow during the EIA process. The MR holder indicated that should such areas of importance be identified the recommendations of the specialists will be heeded with changes being made to the design and or layout of the proposed project footprint.

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

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

The alternatives to be considered during the impact assessment process will be done at the hand of information obtained during the site investigation, public participation process, desktop studies as well as the specialist studies conducted of the earmarked area. As discussed earlier the following alternatives will be assessed in the EIAR:

Site Alternatives

Should additional viable site alternatives be identified during the EIA process, the project team will heed the suggestions and investigate the possibility of implementing it. These alternatives (if identified) will be discussed in detail in the draft EIAR to be distributed for public comments.

Layout Alternatives

Various layout alternatives can be considered during the EIA process as supplementary information is obtained, and the stakeholders and I&AP's contribute their knowledge towards the proposed project.

No-go Alternative

Amongst others, the impact of mining on current, and future land uses of the study area will be compared to the *status quo* and will be considered as part of the EIA process, and discussed in the DEIAR.

l) UNDERTAKING REGARDING CORRECTNESS OF INFORMATION

I Christine Fouche **herewith undertake that the information provided in the foregoing report is correct, and that the comments and inputs form stakeholders and Interested and Affected parties has been correctly recorded in the report.**

Signature of the EAP
DATE: 06 November 2020

m) UNDERTAKING REGARDING LEVEL OF AGREEMENT

I Christine Fouche **herewith undertake that the information provided in the foregoing report is correct, and that the level of agreement with interested and Affected Parties and stakeholders has been correctly recorder and reported herein.**

Signature of the EAP
DATE: 06 November 2020

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