

SITE SENSITIVITY VERIFICATION (“SSV”) REPORT: THE PROPOSED AGGREGATE QUARRY, MOBILE CRUSHER PLANT OPERATIONS AND ACCESS ROAD ON PLOT 2372, ALHEIDT NEAR KAKAMAS SOUTH



March 2023

Prepared for: The Witvlei Boerdery Trust
P. O. Box 241
KAKAMAS
8870

Contact person: C. A. Bruwer
E-mail: wbt@witvlei.co.za

Prepared by: EnviroAfrica
P. O. Box 5367
HELDERBERG
7135

Contact person: Bernard de Witt
EAPASA Reg No. 2021/3903
E-mail: bernard@enviroafrica.co.za

INTRODUCTION:

This SSV Report was undertaken in terms of the *Protocols for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes* (hereinafter referred to as “the Protocols”) as per Government Notice No. 320 (published in Government Gazette No. 43110 on 20 March 2020)¹. These Protocols, with effect from 09 May 2020 must be complied with for every new application submitted on the effective date and thereafter. According to the Protocols, the Environmental Assessment Practitioner (“EAP”) must verify the current use of the proposed site for development as well as the environmental sensitivity of the proposed site in terms of the Screening Tool to determine the need for specialist inputs in relation to the Themes (and proposed specialist assessments) included in the Protocols.

METHODOLOGY:

The SSV Report was compiled using desktop studies [that include using the DEA Screening Tool and GoogleEarth) as well as a site visit that was conducted on 07 July 2022 to investigate, identify, and evaluate the potential impacts of the proposed development on the receiving environment. The SSV Report was compiled by the EAP (Mr. Bernard de Witt).

AIM OF THE SSV REPORT:

The aim of the SSV Report is to;

- Verify land use and Theme sensitivities as identified by the Screening Tool;
- Confirm whether or not the need exists for the specialist assessment(s) indicated in the Screening Tool Report; and
- Should the need for a specialist assessment be disputed, provide motivation as to why the proposed specialist assessment is unwarranted for the proposed establishment of an aggregate quarry of less than 5ha on Plot 2372, Alheidt.

This will assist in providing an understanding of the current state of the proposed site.

SITE DESCRIPTION:

The vegetation encountered in the area around the proposed site can be described as a low grassy shrubland dominated by white grasses (after the then recent rains), with a sparse overstory of smaller woody trees and larger shrubs, located on gentle east-sloping plains. Denser and higher growing vegetation is found along the ephemeral drainage lines and watercourses.

The proposed quarry site is partially characterized by large outcrops of exfoliating granite sheets (that the applicant intends to mine and crush into aggregate), with relatively shallow red-yellow, freely drained apedal soils surrounding these sheets. These rocky outcrops are almost devoid of any vegetation, but the surrounding soils typically support the vegetation described above.

The Northern Cape CBA Map (2016) identifies biodiversity priority areas, called Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs), which, together with protected areas, are important for the persistence of a viable representative sample of all ecosystem types and species as well as the long-term ecological functioning of the landscape as a whole (Holness & Oosthuysen, 2016).

According to the NCCBA the proposed site is located within a CBA. The proposed activity will have a long-term impact on the slightly less than 5ha proposed site. The vegetation of the larger footprint is still well connected towards the north and the west. However, towards the south and east, intensive agriculture is practised and so connectivity is lower, but this should not result in a significant additional impact.

The proposed quarry and crusher plant operations will be located between two small drainage lines, with one of the drainage lines located northwards of the proposed site and the other drainage line located southwards. These two drainage lines end up in a sheet wash plain downslope of the proposed quarry, together with a larger drainage line flowing in a north to south direction that is located eastwards of the proposed quarry and crusher plant site. The larger drainage line will be crossed by the proposed access road that will lead in and out of the proposed site of the quarry and crusher plant operations. The sheet wash plain ends up against the main road of the area and the pecan nut orchard that are both located eastwards of the proposed site. It is in this area that the three drainage lines come to an end.

Please see the photographs below:



Photo 1: View of part of the on-site rocky outcrop area from which granite will be extracted



Photo 2: View from north of the proposed site facing south-eastwards



Photo 3: View from north-east of the proposed site towards the disused dam in the east



Photo 4: View from south-eastwards of proposed site facing north

Table 1. Themes and associated sensitivity

No	Theme	Sensitivity as per the Screening Tool	Confirm/ dispute sensitivity rating of Screening Tool	Verification of site sensitivity
1	Agriculture	Low	Dispute	<p>The granite that is to be extracted and crushed into aggregate is located in an on-site area of granite outcrops where very little soil exists. The loss of agricultural land as a result of the extraction of granite on the proposed site is therefore deemed by the EAP as being small and of negligible significance. The areas of Plot 2372, Alheidt that will be occupied by the aggregate stockpiles, mobile crusher plant, trucks and front-end loaders etc will all be rehabilitated to return to a condition similar to the pre-mining condition. The temporary loss of agricultural land from these areas of Plot 2372, Alheidt is therefore also deemed by the EAP as being of negligible significance. The EAP is therefore of the view that the sensitivity rating of Low that has been given by the Screening Tool regarding the Agriculture Theme is incorrect and that a rating of</p>

				insignificant is more appropriate. An agricultural specialist has therefore not been appointed to provide written input on the proposed development. However, the Northern Cape Department of Agriculture, Environmental Affairs, Rural Development and Land Reform will be requested to provide comment on the application.
2	Animal Species	Medium	Confirmed	A Terrestrial Biodiversity Specialist was appointed and the specialist has compiled a Terrestrial Biodiversity Compliance Statement that deals with <i>inter alia</i> , the Animal Species Theme.
3	Aquatic Biodiversity	Very High	Confirm	The proposed site is located within 100m of two smaller drainage lines that are located to the north and south. The EAP is therefore of the opinion that the sensitivity rating of the proposed site concerning the Aquatic Biodiversity Theme is correctly indicated by the Screening Tool as Very High. An Aquatic Biodiversity Specialist was therefore appointed to compile an Aquatic Biodiversity Impact Assessment
4	Archaeological and Cultural Heritage	Very High	Confirm	The proposed aggregate quarry and crusher plant operations will together be more than 5000m ² in size and as a result of this, an Archaeological and Cultural Heritage Impact Assessment is required according to the National Heritage Resources Development Act,

				1999 (Act No. 25 of 1999) and so Archaeological and Cultural Heritage Impact specialist has been appointed to compile an Archaeological and Cultural Heritage Impact Assessment.
5	Civil Aviation	High	Confirm	The EAP is of the opinion that the Screening Tool has given an inaccurate sensitivity rating of High for the Civil Aviation Theme, as the proposed site is on relatively flat terrain and the proposed aggregate quarry and crusher plant operations are unlikely to pose any kind of civil aviation risks.
6	Defence	Low	Confirm	No features on the proposed site nor close to the proposed site were noted during the site visit that would warrant a sensitivity result higher than the Low sensitivity rating given by the Screening Tool Report. The EAP is therefore of the view that the sensitivity rating for the Defence Theme is indeed Low.
7	Palaeontology	High	Confirm	The proposed aggregate quarry and crusher plant operations will together be more than 5000m ² in size and as a result of this, a Palaeontological Impact Assessment is required according to the National Heritage Resources Development Act, 1999 (Act No. 25 of 1999) and so a specialist has been appointed to compile a Palaeontological Impact Assessment.
8	Plant Species	Low	Confirm	A Terrestrial Biodiversity Specialist was appointed and the specialist has compiled a Terrestrial Biodiversity Compliance Statement that deals with <i>inter alia</i> , the Plant Species Theme.
9	Terrestrial Biodiversity	Very High	Confirm	A Terrestrial Biodiversity Specialist was appointed and the specialist has compiled a Terrestrial Biodiversity Compliance Statement that deals with <i>inter alia</i> , the Plant Species Theme.

Table 2. Specialist assessments specified in the Screening Tool Report

No	Proposed Specialist Assessment	Verification of Site Sensitivity And Motivation On The Need For Specialist Investigation
1	Landscape/ Visual Impact Assessment	<p>The proposed aggregate quarry and crusher plant operations are located in a sparsely populated rural area and will not be visible from any major road or other place where onlookers may be gather in numbers and experience any kind of significant visual disturbance.</p> <p>In addition, the on-site areas that will be occupied by the mobile crusher plant, aggregate stockpiles, front-end loaders and tipper trucks will be rehabilitated to a condition similar to the condition of the proposed site prior to the establishment of the aggregate quarry and crusher plant operations.</p> <p>The hole that will remain in the ground where the on-site granite outcrops currently exist will be obscured by the vegetation cover that will occupy the rest of the proposed site when the rehabilitation process has taken place. The EAP is therefore of the view that a Landscape/ Visual Impact Assessment is unwarranted.</p>
2	Archaeological and Cultural Heritage Impact Assessment	An Archaeological and Cultural Heritage Impact specialist has been appointed to compile an Archaeological and Cultural Heritage Impact Assessment for submission to the South African Heritage Resources Agency.
3	Palaeontological Impact Assessment	An Archaeological and Cultural Heritage Impact specialist has been appointed to compile an Palaeontological Impact Assessment for submission to the South African Heritage Resources Agency.
4	Terrestrial Biodiversity Assessment	A Terrestrial Biodiversity Specialist was appointed and the specialist has compiled a Terrestrial Biodiversity Compliance Statement.
5	Aquatic Biodiversity Impact Assessment	An Aquatic Biodiversity Specialist has been appointed to compile an Aquatic Biodiversity Impact Assessment
6	Hydrology Assessment	<p>The proposed quarry and aggregate crusher plant operations will be kept at least 32m away from the drainage line located to the north of the proposed site and also at least 32m away from the drainage line located to the south of the proposed site. Considering that water only flows in the said drainage lines during major rainfall events and that such rainfall events can be several years apart, the distance of at least 32m that will be maintained between the aforesaid drainage lines and the proposed aggregate quarry and crusher plant will keep the proposed development and the aforesaid drainage lines from interacting hydrologically.</p> <p>The larger drainage line that is located eastwards of the proposed site will be crossed by a new road that will be constructed for access to the proposed</p>

		site. The impacts of the proposed new road on the larger drainage line are dealt with in the Aquatic Biodiversity Impact Assessment and therefore a separate Hydrology Assessment is unwarranted.
7	Socio-Economic Assessment	<p>The proposed aggregate quarry and crusher plant is a small operation that will provide only a handful of new employment opportunities as positive socio-economic impacts and no significant negative socio-economic impacts.</p> <p>In light of this, the appointment of a specialist to compile a Socio Economic Assessment for the proposed development is unwarranted.</p>
8	Plant Species Assessment	A Terrestrial Biodiversity Specialist was appointed and the specialist has compiled a Terrestrial Biodiversity Compliance Statement that deals with <i>inter alia</i> , the Plant Species Theme
9	Animal Species Assessment	A Terrestrial Biodiversity Specialist was appointed and the specialist has compiled a Terrestrial Biodiversity Compliance Statement that deals with <i>inter alia</i> , the Animal Species Theme

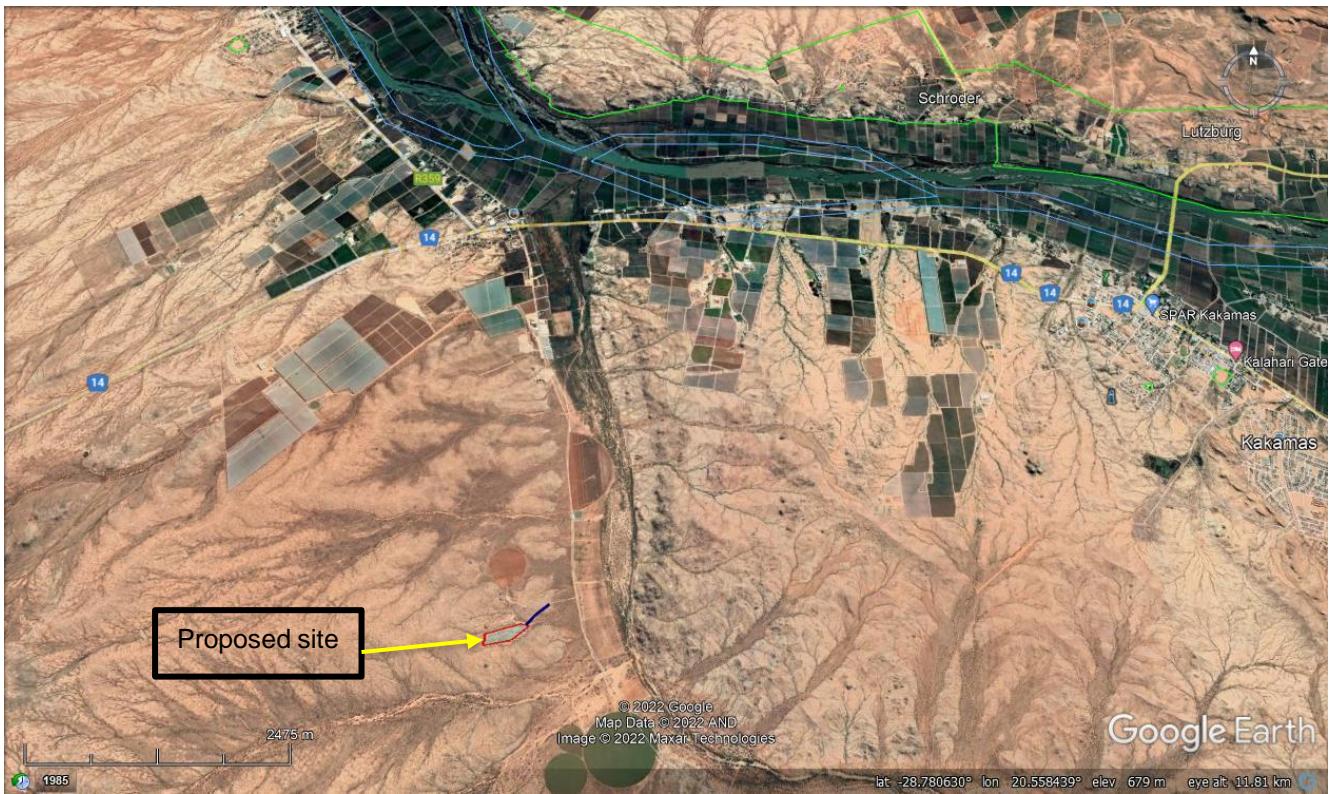


Figure 1: Location of proposed site for the aggregate quarry and crusher plant on Plot 2372, Alheidt

All the Specialist Assessments and Compliance Statements compiled by specialists and the written opinions of other suitably qualified professionals will be appended to the Basic Assessment Report and submitted to the competent authority for review.

Please do not hesitate to contact EnviroAfrica for any further information or clarity regarding the above.

Yours faithfully,

Bernard de Witt



Environmental Assessment Practitioner

EnviroAfrica cc

P: +27 21 851 1616 C: +27 82 448 9991

F: +27 86 512 0154

DECLARATION OF THE EAP

I, Bernard de Witt, EAPASA Registration Number: 2021/3903 as the appointed EAP hereby declare/affirm that:

- the information provided or to be provided as part of this SSV Report, is true and correct:
- in terms of the general requirement to be independent:
 - other than fair remuneration for work performed/to be performed in terms of this non-application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity;
- in terms of the remainder of the general requirements for an EAP, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- I have disclosed/ will disclose, to the proponent, the specialist (if any), the Competent Authority and registered interested and affected parties, all material information that have or may have the potential to influence the decision of the Competent Authority or the objectivity of any report, plan or document prepared or to be prepared as part of this NOI;
- I have ensured/will ensure that information containing all relevant facts in the SSV Report was/will be distributed or was/will be made available to registered interested and affected parties and that participation will be facilitated in such a manner that all interested and affected parties were/will be provided with a reasonable opportunity to participate and to provide comments;
- I have ensured/will ensure that the comments of all interested and affected parties were/will be considered, recorded and submitted to the Competent Authority;
- I have ensured/will ensure the inclusion of inputs and recommendations from any specialists, where relevant;
- I have kept/will keep a register of all interested and affected parties that participate in the public participation process;
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations; and
- All specialist investigations must comment on how the potential impacts relate to climate change concerns.

Signature of the EAP:

Date:

EnviroAfrica CC

Name of company (if applicable):

