

SITE SENSITIVITY VERIFICATION (SSV) REPORT

PROJECT DESCRIPTION: PROPOSED AGRICULTURAL AND DAM EXPANSION ON PORTION 12 OF FARM SCHERPEN HEUVEL NO 481, WORCESTER, WESTERN CAPE

INTRODUCTION:

This Site Sensitivity Verification (SSV) Report was undertaken in terms of the *Protocols for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes* (referred to “the Protocols” hereafter) as per Government Notice No. 320 (published in Government Gazette No. 43110 on 20 March 2020)¹. These Protocols, effected as on the 9th May 2020, must be complied with for every new application submitted after the effective date. According to the Protocols, the EAP must verify the current use of the proposed site for development as well as the site’s environmental sensitivity, in accordance with the DEA Screening Tool (Appendix E – DEA Screening Tool), to determine the need for specialist inputs in relation to the themes (and proposed specialist assessments) included in the Protocols.

METHODOLOGY:

The Site Sensitivity Verification (SSV) report was compiled based on desktop studies [including the Western Cape Biodiversity Spatial Plan, vegetation maps (Vegetation map of SA (Mucina & Rutherford, 2006), NFEPA, land-use map, Google Earth imagery, historical imagery), specialist input (Botanical, Freshwater, and Heritage inputs) in combination with a site visit (conducted during October 2020 and February 2021) to investigate, identify, and evaluate potential impacts, associated with the proposed development, on the receiving environment (namely the proposed site for development). The SSV report was compiled by the EAP (Mr Clinton Geysler).

AIM OF THE SSV REPORT:

The aim of the SSV Report is to;

- Verify land use and theme sensitivities as identified by the DEA Screening Tool;
- Confirm or motivate against the need for a particular specialist assessment(s) as indicated by the DEA Screening Tool; and
- Should the need for a specialist assessment be refuted / challenged, provide a motivation as to why the proposed specialist assessment is not applicable to the proposed development.

Please note: that this SSV report must be read in combination with the Pre-Application Draft Basic Assessment Report (BAR), Botanical Impact Assessment (Appendix G3), Freshwater Report (Appendix G2), Heritage Impact Assessment (Appendix G4) and the Palaeontological Impact Assessment (Appendix G5). This will aid in contextualizing the status of the proposed site for development.

¹ The Protocols are in line with Section 24(5)(a) and (h) and Section 44 of the National Environmental Management Act (NEMA), 1998 (Act No. 107 of 1998).

SITE DESCRIPTION:

As per the site visit, and the specialist reports, part of the expanded dam footprint will be over existing cultivated land. However, approximately 6ha of indigenous vegetation will need to be cleared for the construction of the dam (including areas to be used for borrow material). Large portions of this site are already disturbed resulting from historic construction activities (cut-off trenches and the small dam) in combination with sheet erosion, which might have resulted from the past activities.

An additional area (referred to as the 'waaisand' area) of 0.5ha will be cleared for a borrow area for sand for the filters. According to the Western Cape Biodiversity Spatial Plan, the "Waaisand" area falls within a terrestrial CBA, while the rest of the property is considered an Ecological Support Area. According to the Botanical Impact Assessment (**Appendix G3**), the "waaisand" borrow area overlaps an already disturbed area.

An additional 13ha of land is proposed for potential cultivation for additional crop production. The new irrigated areas assessed are located adjacent to the existing cultivated areas. For reference, these are referred to as Area 1 (Northern section), and Area 2 (Eastern section).

Area 1 is mostly natural, with very little disturbance to the natural vegetation and is covered by succulent dominated natural vegetation in excellent condition.

Area 2 can be divided into two vegetation communities. The top or northern section has deeper sandy soils with vegetation similar to that in Area 1 and the Dam site. The southern section (undisturbed area) is located on a rocky intrusion with shallow shale soils with a very high stone component, supporting a much lower vegetation community.

According to the Freshwater Assessment (**Appendix G2**), the existing dam is indicated as a wetland on the NFEPA overlay. This wetland was created by the berm and is entirely artificial.

Although there are no other watercourses indicated on the NFEPA overlay, there are a number of ephemeral streams crossing the property.

Only two of these ephemeral streams will be impacted by the development. According to the Freshwater Assessment (**Appendix G2**), the two faint drainage lines out of the hills are near-pristine in the upper catchment, with perhaps the occasional farm animal the only impact, apart from the two-track farm roads. The drainage lines are interrupted by the cut-off trench. Further down the sub-catchment, the drainage lines are non-existent and have been entirely replaced by cultivated farm land.

Please see photographs below:



Figure 1. Site overview photographs showing status of proposed agricultural development area (Area1)(within the red dashed polygon). The site is near natural with very little disturbance



Figure 2. Site overview photographs of the existing dam site, to be expanded . Large parts are disturbed, with the remaining natural vegetation showing previous disturbances



Figure 3. Site overview photographs showing status of proposed agricultural development area (Area 2). The site shows more disturbance than Area 1.

Table 1. Themes and associated sensitivity as per the DEA Screening Tool.

No	Theme	DEA Sensitivity	Agree / Disagree	Proposed Sensitivity	Motivation
1	Agriculture Theme	Very High Sensitivity	Agree		<p>The proposed enlargdevelopment is in line with the zoning of the proposed site, namely Agriculture. The proposed development is for the expansion of agricultural activities, in an agricultural area.</p> <p>The activity is supported by the Breede Valley Municipality. "...<i>proposed development is of a bona fide agricultural nature and therefore in accordance with the municipal scheme regulations and spatial planning guidelines for the area and the property in question.</i>"</p>
2	Animal Species Theme	High Sensitivity	Disagree	Medium to Low Sensitivity	<p>The rating of High Sensitivity is on the DEA Screening Tool is due to the presence of potentially sensitive avi-fauna, particularly <i>Circus ranivorus</i> (African Marsh Harrier), <i>Circus maurus</i> (Black Harrier) and <i>Aquila verreauxii</i> (Verreaux Eagle). None of these birds of prey were observed on site.</p> <p>The nature of the development is also not expected to have any significant impact on the birds, their prey items or their nesting/breeding habits.</p>
3	Aquatic Biodiversity Theme	Very High Sensitivity	Disagree	Medium Sensitivity	<p>Although the property is along the Breede River, the development is not expected to have an impact on the Breede River.</p> <p>Due to the nature of the proposed development (i.e. expansion of the Bass Diii dam and agricultural areas) and the presence of drainage lines within the development footprint, a Freshwater Assessment was conducted. Please refer to the Freshwater Report (Appendix G2) of the Draft BAR.</p>
4	Archaeological and Heritage Theme	High Sensitivity	Disagree	Medium Sensitivity	<p>The DEA Screening Tool identifies the area to the south of the property as having a High Sensitivity, although the proposed development will not be in that area. However, the presence of graves near the development footprint will make the Heritage theme a</p>

					potential Medium Sensitivity. A Heritage Assessment has been conducted (Appendix G4 of the Draft BAR).
5	Civil Aviation Theme	High Sensitivity	Disagree	Low Sensitivity	The proposed development is for the expansion of the existing Bass Diii Dam and agricultural areas and will thus will not pose any threat to civil aviation within the area.
6	Defence Theme	Low Sensitivity	Agree		There are no defence related structures or zones on the site or within close proximity to the site. Due to the nature of the proposed project, it is not envisaged that the proposed expansion will impact any defence-related activities.
7	Palaeontological Theme	Very High Sensitivity	Agree		A Palaeontological assessment (Appendix G5 of the Draft BAR) was conducted and found that the footprint of the proposed agricultural developments is underlain by potentially-fossiliferous bedrocks of the Ecca Group (Karoo Supergroup). However, although the sensitivity is very high, the impact is expected to be Low according to the Palaeontological Assessment.
8	Plant Species Theme	Medium Sensitivity	Agree		Although the Plant Species Theme was classified as Medium (see DEA Screening Tool), the proposed site is located within Robertson Karoo , a vegetation type classified as “Least Threatened” (GN 1002, December 2011). A Botanical Assessment was conducted since the proposed development involves the removal of approximately 13ha of natural vegetation
7	Terrestrial Biodiversity Theme	Very High Sensitivity	Disagree	High Sensitivity	According to the Botanical Assessment, according to the WCBSP only the Waaisand area falls within a terrestrial CBA, while the rest of the property is considered an ecological support area.

Table 2. Specialist assessments identified as per the DEA Screening Tool.

No	Proposed Specialist Assessment	Verification of Site Sensitivity And Motivation On The Need For Specialist Investigation
1	Landscape/ Visual Impact Assessment	The proposed project is for the expansion of the existing Bass Diii Dam and Agricultural Areas. The site is zoned for agricultural purposes and the proposed site for dam expansion is surrounded by agricultural land uses. The nature of the proposed development is in line with the surrounding land use and therefore the expected visual impact is expected to be Low. Therefore, it is envisaged that a Visual Impact Assessment will <u>not</u> be required.
2	Archaeological and Cultural Heritage Impact Assessment (HIA)	As per section 38 of the National Heritage Resources Act, 1999 (Act 25 of 1999), a Notice of Intent to Develop (NID) was submitted to HWC. HWC responded that a Heritage Impact Assessment (including an assessment of Archaeological and Palaeontological resources) be conducted.
3	Palaeontological Impact Assessment	As per section 38 of the National Heritage Resources Act, 1999 (Act 25 of 1999), a Notice of Intent to Develop (NID) was submitted to HWC. HWC responded that a Heritage Impact Assessment (including an assessment of Archaeological and Palaeontological resources) be conducted.
4	Terrestrial Biodiversity Assessment	A Botanical Impact Assessment was conducted including the impact on Critical Biodiversity Areas.
5	Aquatic Biodiversity Impact Assessment	A Freshwater Impact Assessment was conducted.
6	Avian Impact Assessment	Due to the nature of the development, an Avian Impact Assessment is not considered necessary
7	Socio-economic Assessment	Due to the nature of the development, a Socio-economic Impact Assessment is not considered necessary. The proposed development is expected to have a positive socio-economic impact in general. All comments received from I&APs will be addressed and responded to by the relevant personnel, namely the EAP, Applicant, and/ or Specialists. <i>Please refer to the Draft BAR for more information.</i>
8	Plant Species Assessment	A Botanical Impact Assessment has been conducted (Appendix G3 of the Draft BAR)
9	Animal Species Assessment	The Sensitivity rating is mostly due to the avi-fauna (see Point 6 above). Due to the nature of the development, an Faunal Impact Assessment is not considered necessary.

Please do not hesitate to contact me should you require any further information or clarity on the above.

EnviroAfrica

Best Regards,

Clinton Geysler



Environmental Assessment Practitioner

EnviroAfrica cc

p: +27 21 851 1616 m: +27 83 309 9211

f: +27 86 512 0154

a: Unit 7, Pastorie Park, Reitz St, Somerset West, 7130
P.O. Box 5367, Helderberg, 7135

w: www.enviroafrica.co.za e: clinton@enviroafrica.co.za