

SITE SENSITIVITY VERITIFICATION (SSV) REPORT: PART 2 AMENDMENT APPLICATION OF THE VANRHYNSDORP SOLAR PHOTOVOLTAIC (PV) FACILITY ON THE PORTION 7 OF THE REMAINDER OF THE FARM DE DUINEN NO. 258 NEAR VANRHYNSDORP WITHIN THE MATZIKAMA LOCAL MUNICIPALITY IN THE WESTERN CAPE PROVINCE

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 DFFE Screening Tool Report, 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 SANBI BGIS Biodiversity Spatial Plan, vegetation maps (Vegetation map of SA (Mucina & Rutherford, 2006, as updated in the 2012 beta version and 2018 Final), NFEPA, land-use map, Google Earth imagery, historical imagery), specialist input in combination with a site visit (conducted during January 2023) 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 Jan-Taljaard Marx).

AIM OF THE SSV REPORT:

The aim of the SSV Report is to;

- Verify land use and theme sensitivities as identified by the DFFE Screening Tool;
- Confirm or motivate against the need for a particular specialist assessment(s) as indicated by the DFFE 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.

<u>Please note:</u> that this SSV report should be read in combination with the Environmental Impact Report (EIR). 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:

The site is located approximately 2.87 km North of Vanrhynsdorp and is adjacent to the N7.

The site is easily accessible from the R101 via the N1 or R45.

The recent ongoing drought changed the veld, and many plants within the study area and surroundings showed signs of being severely affected by the dry spell. The property is undeveloped and supporting a disturbed version of Gannabosveld, dominated by *Salsola zeyheri* (Gannabos), and hardy *Mesembryanthemum* species.

According to the Vegetation map of South Africa, Lesotho and Swaziland (Mucina & Rutherford, 2006, as updated in the 2012 beta version and 2018 Final) only one broad vegetation type is expected on the proposed site, namely Gannabosveld, which is classified as Least Concern

According to biodiversity overlay maps from SANBI BGIS the site does not fall within a Critical Biodiversity Area (CBA) but is in an Ecological Support Areas (ESA & ESA2s).

According to SANBI BGIS (DFFE 2020 Land Cover Map), the site is classified as low shrublands.

From the SANBI National Freshwater Ecosystem Priority Areas map, there no freshwater resources identified within the site. The desktop analysis identified the nearest watercourse as the Droë River, approximately 850m north-north-west of the proposed site.

No other freshwater resources have been identified on the site.

The topography is also ideal, as the property is generally flat, with very little gradient.

Please see photographs below:





Figure 1. Site overview photographs showing the typical low open shrubland encountered, dominated by *Salsola zeyheri* and lower grasses (grazed). Note the Prosopis trees in the far background.



Figure 2. Site overview photograph showing the grassy bottom layer that dominates open patches between the shrubs, caused by grazing and the limited rain.



Figure 3. Site overview photograph showing general view of the site. The photograph is taken from the middle of the site, facing southeast to northwest. Note the agricultural area in the background.



Figure 4. Site overview photograph looking from northwest to southeast from the middle of the site. Note the existing power lines running along the entrance road to the site.





Figure 5. Site overview photograph looking from R27 towards the site 3km east of town.



Figure 6. Site overview photograph looking from the residential area towards the site.

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

No	Theme	DEA Sensitivity	Agree / Disagree	Proposed Sensitivity	Motivation
1	Agriculture Theme	Medium Sensitivity	Disagree	Low Sensitivity	The property is currently zoned Agricultural and part of the property is used for agricultural purposes (grazing). The Agricultural Potential and Soil Assessment concluded that the site has low agricultural potential.
2	Animal Species Theme	High Sensitivity	Disagree	Low Sensitivity	The rating of High Sensitivity on the DFFE Screening Tool is due to the potential presence of sensitive species (See Appendix 4A). No species of significance was found on the site according to the terrestrial biodiversity study.
3	Aquatic Biodiversity Theme	Low Sensitivity	Agree		No aquatic features were found on the site according to the terrestrial biodiversity study
4	Archaeological and Heritage Theme	High Sensitivity	Disagree	Low Sensitivity	Based on the NID submitted January 2023, HWC confirmed that there is no reason to believe that the proposed amendment on Portion 7 of the Remainder of the Farm De Duinen No. 258, Vanrhynsdorp will negatively impact heritage resources and no further action under Section 38 (8) of the National Heritage Resources Act (Act 25 of 1999) is required.
5	Avian Theme	Low Sensitivity	Agree		No species of significance was found on the site according to the terrestrial biodiversity study.
6	Civil Aviation Theme	Medium Sensitivity	Agree		The proposed development is for a solar PV solar facility and will thus will not pose any threat to civil aviation within the area.
7	Defence Theme	Low Sensitivity			Due to the nature of the proposed project, it is not envisaged that the proposed amendment will impact any defence- related activities.
8	Landscape (solar) Theme	Very High Sensitivity	Disagree	Low Sensitivity	The visual impact study concluded that the impact of the proposed amendment will be low.

9	Palaeontological Theme	Medium Sensitivity	Agree		A Palaeontological assessment was conducted and confirmed with a compliance statement.
10	Plant Species Theme	Medium Sensitivity	Disagree	Low Sensitivity	No species of significance was found on the site according to the terrestrial biodiversity study. The loss of pristine Vanrhynsdorp Gannabosveld will be minimal as the area is already degraded due to grazing and the limited rainfall.
11	RFI Theme	Low Sensitivity			
12	Terrestrial Biodiversity Theme	Very High Sensitivity	Disagree	Low Sensitivity	The rating of Very High Sensitivity on the DFFE Screening Tool is due to the area being identified as an Ecological Support Area. The proposed development will be relatively small (<20ha) and will impact only one vegetation type, namely Vanrhynsdorp Gannabosveld. The Vanrhynsdorp Gannabosveld vegetation type is not considered vulnerable or threatened with more 79% still remaining in its natural state. Because of its small size, the proposed footprint is unlikely to have any significant impact on connectivity within the ecological support area.

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

No	Proposed Specialist	Verification of Site Sensitivity and Motivation on The Need For		
	Assessment	Specialist Investigation		
1	Agricultural Impact Assessment	The property is currently zoned Agricultural and part of the property is used for agricultural purposes (grazing). An Agricultural Potential and Soil Assessment with a compliance statement was conducted.		
2	Landscape/ Visual Impact Assessment	A Visual Impact Assessment was conducted		
3	Archaeological and Cultural Heritage Impact Assessment (HIA)	A Heritage Impact Assessment (including an assessment of Archaeological resources) was conducted.		
4	Palaeontological Impact Assessment	A Heritage Impact Assessment (including an assessment of Palaeontological resources) was conducted.		
5	Terrestrial Biodiversity Assessment	The Terrestrial Biodiversity Sensitivity Theme was very high. A Terrestrial Biodiversity including Botanical, animal, avifauna and animals impact assessment was conducted and supported with a compliance statement.		
6	Aquatic Biodiversity Impact Assessment	A Freshwater Impact Assessment was not conducted. The Terrestrial Biodiversity study confirmed that there are no watercourses present on the site.		
7	Civil Aviation Assessment	Due to the nature of the development, a Civil Aviation Assessment is not considered necessary.		
8	Defence Assessment	Due to the nature of the development, a Defence Assessment is not considered necessary.		
9	RFI Assessment	Due to the nature of the development, a RFI Assessment is not considered necessary.		

10	Geotechnical Assessment	A Geotechnical Assessment will be conducted as part of the engineering investigations.
11	Socio-economic Impact Assessment	A Socio-economic Impact Assessment was conducted.
12	Plant Species Assessment	Assessment of the plant species is included in the Terrestrial Biodiversity study.
13	Animal Species Assessment	Assessment of the animal and avifauna species is included in the Terrestrial Biodiversity study.

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

Best Regards,

Jan-Taljaard Marx



Environmental Assessment Practitioner EnviroAfrica cc

- p: +27 21 851 1616 m: +27 79 809 3033
- 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: jan@enviroafrica.co.za