

SITE VERIFICATION REPORT OF THE INGQAYI SOLAR PV FACILITY AND ASSOCIATED GRID INFRASTRUCTURE

January 2024



Details of Role Players

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1 INTRODUCTION

This site verification report is compiled in compliance with Government Notice No. 320, dated 20 March 2020, which includes the requirement for an Initial Site Sensitivity Verification Report to be produced for a development footprint. The outcome of the Initial Site Verification must be recorded in the form of a report that –

- a) Confirms or disputes the current use of the land and environmental sensitivity as identified by the national web based environmental screening tool;
- b) Contains a motivation and evidence of either the verified or different use of the land and environmental sensitivity;
- c) Is submitted together with the relevant reports prepared in accordance with the requirements of the Environmental Impact Assessment Regulations.

1.1 SPECIALIST ASSESSMENTS IDENTIFIED BY THE SCREENING TOOL REPORT

The DFFE screening tool report identified the following specialist assessments to be included in the Scoping and EIA assessment:

- Agricultural Impact Assessment
- Landscape / Visual Impact Assessment
- Archaeological and Cultural Impact Assessment
- Paleontological Impact Assessment
- Terrestrial Biodiversity Impact Assessment
- Aquatic Biodiversity Assessment
- Civil Aviation Assessment
- Defence Assessment
- RFI Assessment
- Geotechnical Assessment
- Socio-Economic Assessment
- Plant Species Assessment
- Animal Species Assessment

Table 1: Specialist studies identified by the DFFE Screening Tool and steps taken

Study identified in the DFFE Screening Tool and sensitivity	Study included as part of the Environmental Impact Assessment	Motivation
Agricultural Impact Assessment: Screening tool noted Low to Medium Sensitivity.	Yes	The site is characterised by natural vegetation and is mainly used for grazing area for sheep. Due to the nature of the site and the Low to Medium sensitivity an Agricultural Compliance Statement will be conducted as part of the assessment process.
Landscape / Visual Impact Assessment: The Screening tool noted a High to Very High sensitivity.	Yes	The study has been included due to the close proximity of rivers and wetlands and a nature reserve.
Archaeological and Cultural Impact Assessment: The Screening tool noted a Low sensitivity.	Yes	Due to the nature of the project and as per requirement of the National Heritage Resources Act, a Phase 1 Heritage Impact Assessment.
Paleontological Impact Assessment: The Screening tool noted Medium to Very High Sensitivity	Yes	As per the desktop study conducted by the specialist the PV array will be very shallow and not disrupt to any fossil beds, thus a compliance statement will form part of the study.
Terrestrial Biodiversity Impact Assessment: The Screening tool noted that CBA 1 areas overlay the site area and Very High	Yes	A Terrestrial Biodiversity Impact Assessment has been included as part of the application due to the CBA 1 areas.

Study identified in the DFFE Screening Tool and sensitivity	Study included as part of the Environmental Impact Assessment	Motivation
Sensitivity. It is also listed the Mountain Zebra-Camdeboo Protected Environment.		
Aquatic Biodiversity Assessment: The Screening tool noted low to Very High Sensitivity	Yes	A wetland and aquatic ecological assessment has been included due to the wetland system identified within the southern portion of the site and the drainage line in the northern portion of the site.
Civil Aviation Assessment: The Screening tool noted low sensitivity.	No	During the site visit it was confirmed that no aerodromes exist close to the site and low sensitivity is confirmed. The Draft Scoping and other reports will be submitted to the Civil Aviation Authority (CAA) for comment.
Defence Assessment: The Screening tool noted low sensitivity.	No	The site verification confirmed that no military operations are located close to the development. The project site is therefore not expected to have an impact on Defence installations.
RFI Assessment The Screening tool noted low sensitivity.	No	No desktop information could be found regarding nearby installations. The site verification concluded that

Study identified in the DFFE Screening Tool and sensitivity	Study included as part of the Environmental Impact Assessment	Motivation
		there are no potential RFI nearby. SARAO will be consulted as part of the process.
Geotechnical Assessment: Screening tool did not indicate sensitivity.	Yes	After discussions with the specialist, it was decided that Pre-feasibility assessment be conducted after which a in-depth assessment will be conducted before construction begins.
Socio-Economic Assessment Screening tool did not indicate sensitivity.	Yes	A social impact assessment has been included as part of the specialist assessments.
Plant Species Assessment: Screening tool noted a Low sensitivity	Yes	As the project will entail the clearance of natural vegetation a Plant species compliance statement will be included due to the Low sensitivity of the site. This was confirmed during an initial site visit.
Animal Species Assessment: Screening tool noted a Medium sensitivity.	Yes	Due to the clearance of vegetation to take place and the fact that some Blue Crane individuals were spotted near the site during the initial site visit an Avifauna and Fauna Impact Assessment is currently underway.

Study identified in the DFFE Screening Tool and sensitivity	Study included as part of the Environmental Impact Assessment	Motivation
		VulPro also informed us of Vulture colonies within a 50km radius.

1.2 DFFE SCREENING TOOL SENSITIVITIES FOR STUDIES TO BE UNDERTAKEN

1.2.1 Agricultural Theme

The figure below indicates that most of the site is Medium Sensitivity with Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate.

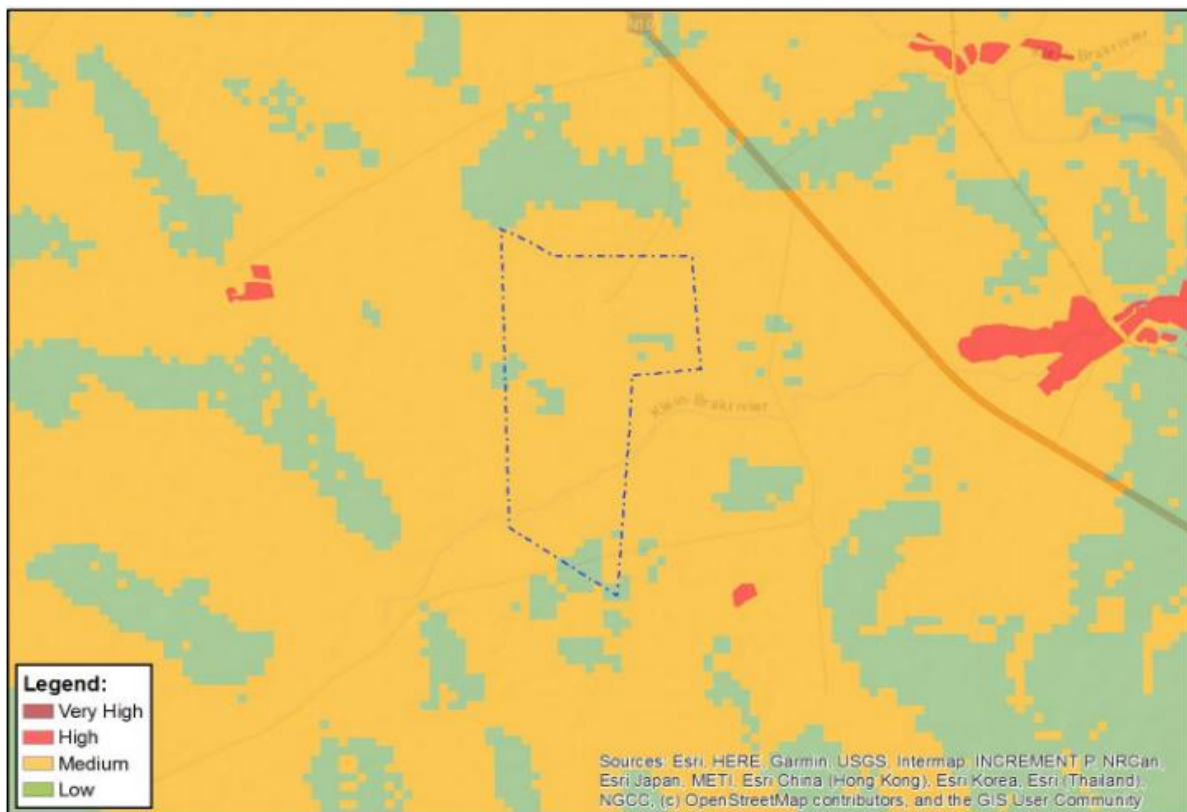


Figure 1: Agricultural Sensitivity as indicated by the DFFE Screening Tool Report

1.2.2 Animal Species Theme

The site footprint is classified as Medium Sensitivity due to the potential occurrence of Aves-Neotis ludwigii, Aves-Circus maurus and Aves-Afrotis afra species.

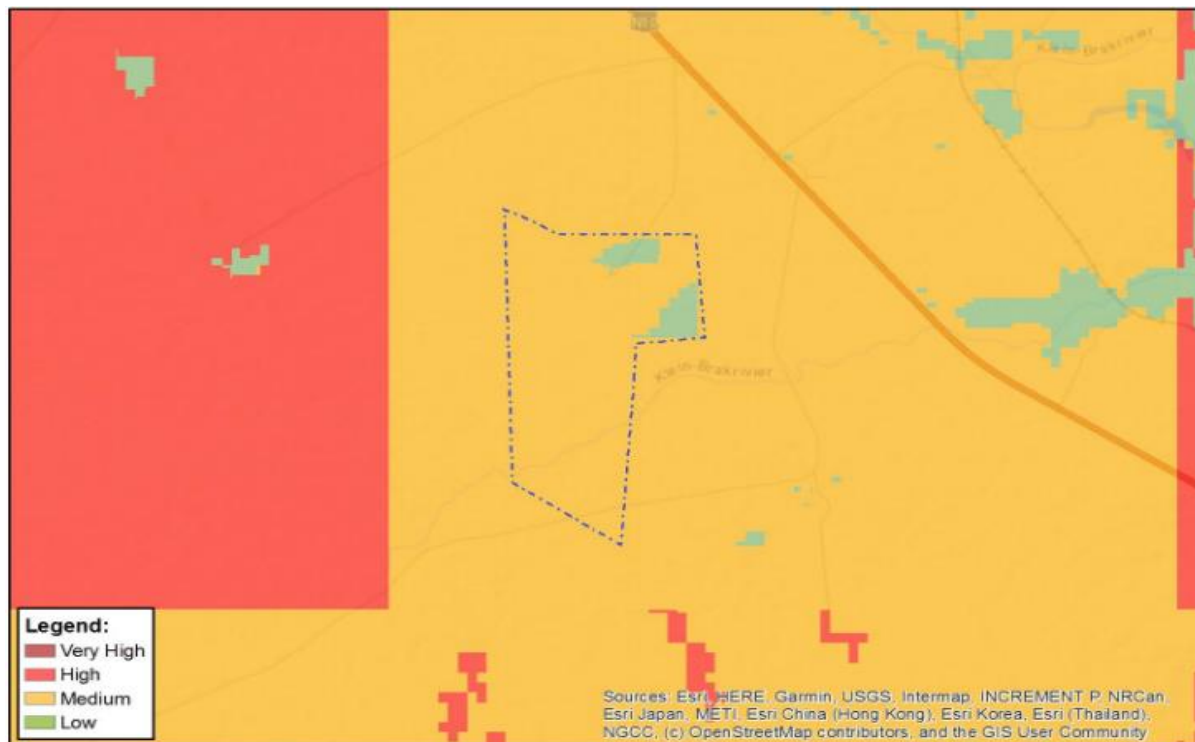


Figure 2: Animal Species Sensitivity as indicated by the DFFE Screening Tool Report.

1.2.3 Aquatic Biodiversity Theme

The site is classified as Low sensitivity with Very High Sensitivity areas in the south and north of the site due to ESA 1 and wetlands.



Figure 3: Aquatic Biodiversity Sensitivity as indicated by the DFFE Screening Tool Report.

1.2.4 Archaeological and Cultural Heritage Theme

The site is classified as low sensitivity as indicated below in Figure 4.



Figure 4: Archaeological and Cultural Heritage Theme Sensitivity as indicated by the DFFE Screening Tool Report

1.2.5 Avian Theme Sensitivity

The site sensitivity is classified as low as indicated in Figure 5 below.



Figure 5: Avian Theme Sensitivity as indicated by the DFFE Screening Tool Report.

1.2.6 Paleontological Theme Sensitivity

The Screening tool indicated a sensitivity classified as Medium to Very High due to the potential to have features with Very High Paleontological sensitivity.

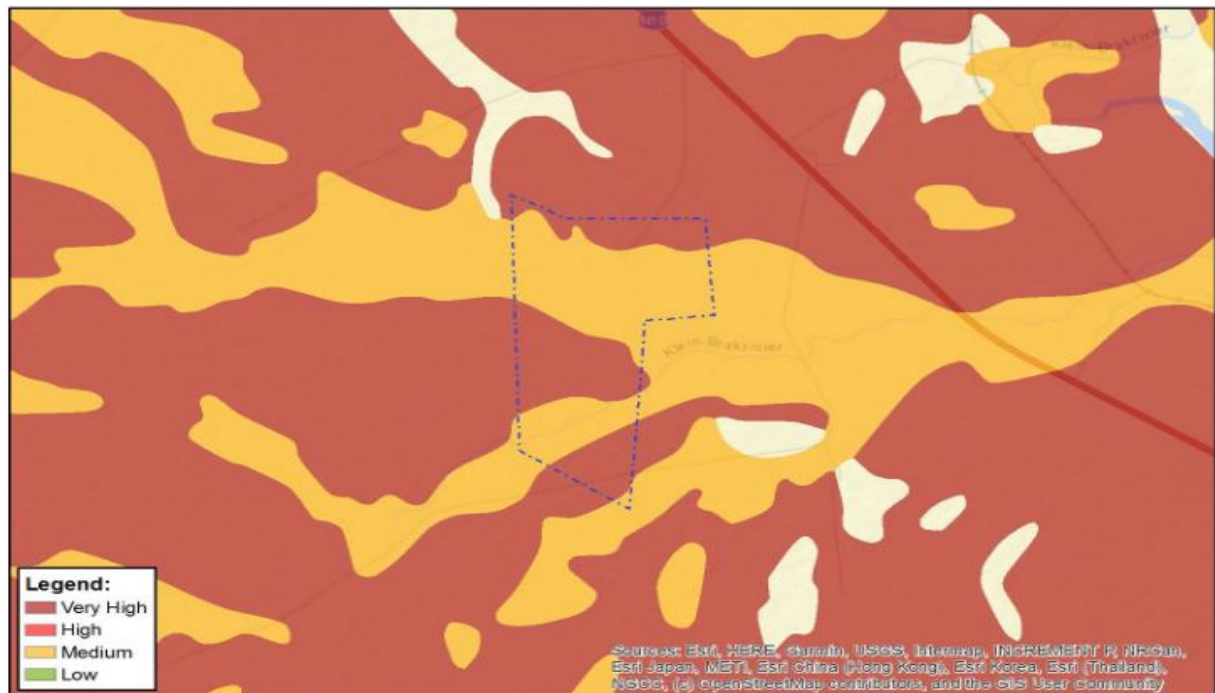


Figure 6: Paleontological Theme Sensitivity as indicated by the DFFE Screening Tool Report.

1.2.7 Plant Species Theme Sensitivity

The Screening Tool indicated a low sensitivity, and this was confirmed during the initial site visit.



Figure 7: Plant Species Theme Sensitivity as indicated by the DFFE Screening Tool Report.

1.2.8 Terrestrial Biodiversity Theme Sensitivity

The site sensitivity is classified as Very High due to the presence of Critical Biodiversity Areas 1.

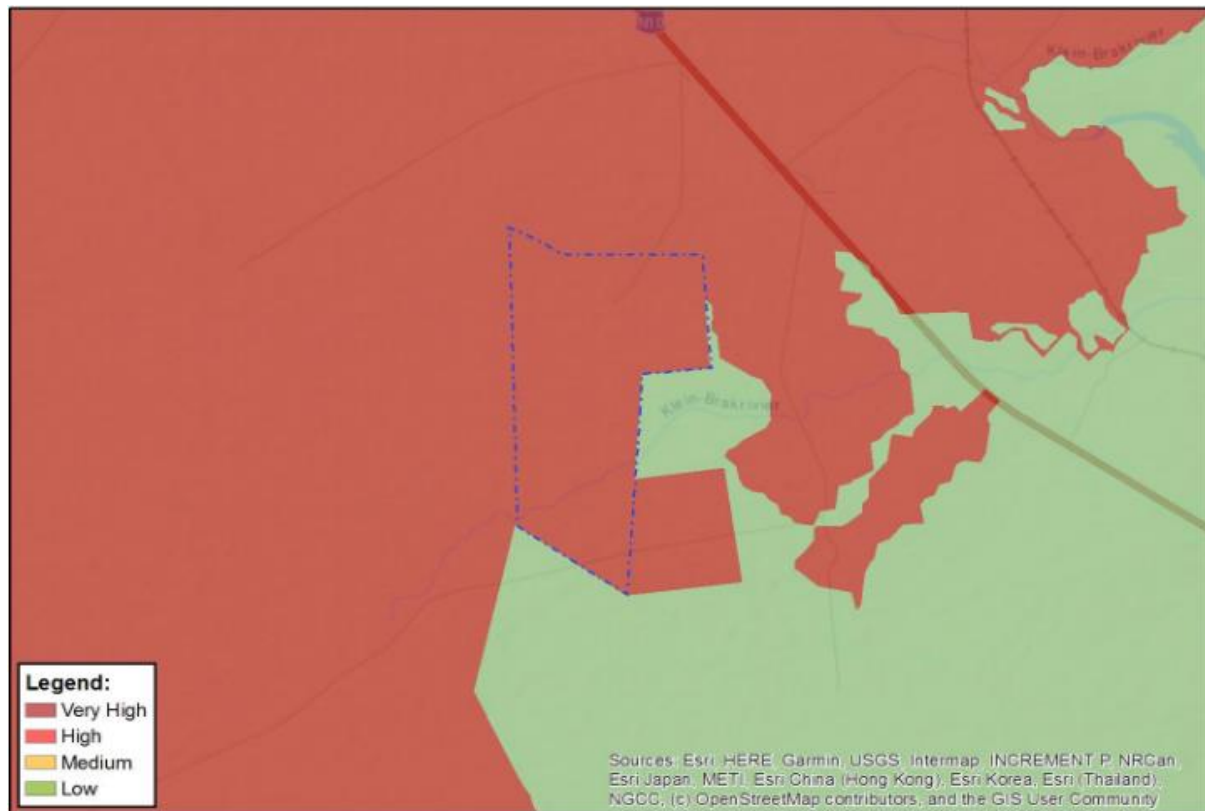


Figure 8: Terrestrial Biodiversity Theme Sensitivity as indicated by the DFFE Screening Tool Report.

1.2.9 Landscape (Solar) Theme Sensitivity

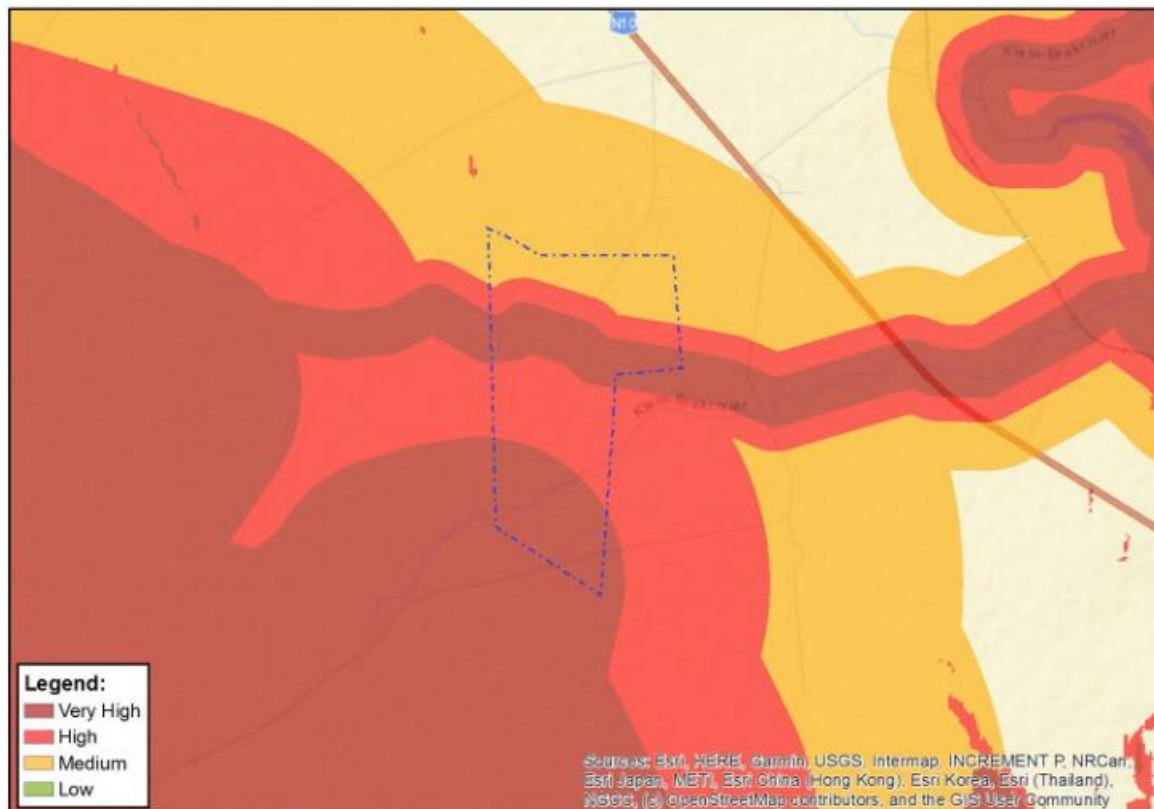


Figure 9: Landscape (Solar) Theme Sensitivity as indicated by the DFFE Screening Tool Report.

1.3 CURRENT VERIFIED LAND-USE

Portion 1 of the Farm Farm Zak Fontyn 267 Middelburg RD is currently utilized as grazing for sheep as part of agricultural activities.

The surrounding region is sparsely populated.

400Kv Grid lines of Eskom is located in the south-western portion of the farm.



Figure 10: General conditions on site.



Figure 11: General conditions on site.



Figure 12: Small drainage line to the north of the site.



Figure 13: Unchanneled Valley Bottom Wetland – Southern portion of the site.

2 SITE VERIFICATION

This section is to evaluate and verify the sensitivity ratings provided by the DFFE Screening Tool Report and provide insights from the EAP.

2.1 AGRICULTURAL THEME

It was depicted that most of the site is Low to Medium Sensitivity with Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate.

Table 2: Verification of DFFE Screening report sensitivity ratings for the Agricultural Theme.

Identified Sensitivity		Comments
DFFE Screening Report Low to Medium Agricultural Compliance Statement must be prepared by a soil scientist or agricultural specialist registered with SACNASP.	EAP Feedback Low	The proposed site is used for grazing and cannot support cultivation due to the close proximity of wetlands and drainage lines. The agriculture compliance statement will be compiled in accordance with the protocols in Government Notice No. 320 of 20 March 2020.

2.2 LANDSCAPE / VISUAL THEME

The Screening tool has identified High to Very High sensitivity areas in most of the site areas and Medium areas in the northern portion of the site.

The study has been included due to the close proximity of the wetlands and drainage lines.

Table 3: Verification of DFFE Screening report sensitivity ratings for the Landscape / Visual Theme.

Identified Sensitivity		Comments
DFFE Screening Report Very High As no specific assessment protocol has been prescribed, the required level of assessment must be based on the findings of the Initial Site Sensitivity Verification and must comply with Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (The Act), where a specialist assessment is required.	EAP Feedback Very High	Due to the close proximity of the wetlands and drainage lines on site the EAP confirmed the High rating. A Visual Impact assessment has been commissioned as part of the application process.

2.3 ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME

Table 4: Verification of DFFE Screening report sensitivity ratings for the Archaeological and Cultural Heritage Theme.

Identified Sensitivity		Comments
DFFE Screening Report Low As no specific	EAP Feedback Low	The identification of the site as low sensitivity considering Archaeological and Cultural Heritage is agreed to by the

Identified Sensitivity		Comments
assessment protocol has been prescribed, the required level of assessment must be based on the findings of the Initial Site Sensitivity Verification and must comply with Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (The Act), where a specialist assessment is required.		EAP. This is based on a desktop assessment and site inspection. A Heritage Impact Assessment will be conducted to ensure that no Cultural or Heritage features are missed on site.

2.4 PALEONTOLOGICAL IMPACT ASSESSMENT

Table 5: Verification of DFFE Screening report sensitivity ratings for the Paleontological Theme.

Identified Sensitivity		Comments
DFFE Screening Report Very High As no specific assessment protocol has been prescribed, the required level of assessment must be	EAP Feedback Low	The palaeontological specialist conducted a desktop assessment and stated the PV array will be very shallow and not disrupt to any fossil beds, thus a

Identified Sensitivity		Comments
based on the findings of the Initial Site Sensitivity Verification and must comply with Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (The Act), where a specialist assessment is required.		compliance statement will form part of the study.

2.5 TERRESTRIAL BIODIVERSITY IMPACT ASSESSMENT

The site sensitivity has been classified as Very High due to the presence of CBA 1 areas. The Mountain Zebra-Camdeboo Protected Environment was also listed as Very High by the Screening tool.

Table 6: Verification of DFFE Screening report sensitivity ratings for the Terrestrial Biodiversity Theme

Identified Sensitivity		Comments
DFFE Screening Report Very High Specialist Assessment must be done in accordance to the Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections	EAP Feedback Medium	The identification of the site as Very High is disputed by the EAP. This is based on the current land-use of the site being used for grazing. A discussion was held with a representative of Mountain Zebra-Camdeboo and they stated that it falls outside of

Identified Sensitivity		Comments
24(5)(a) and (h) and 44 of the National Environmental Management Act 1998, when applying for Environmental Authorization, which were promulgated in Government Notice No. 1150 of 30 October 2020.		their “regulated” area and they have not objections. A Terrestrial Biodiversity assessment does form part of the studies to be conducted in accordance with the Protocols (G. NR 320).

2.6 AQUATIC BIODIVERSITY THEME SENSITIVITY

The Screening tool noted Low to Very High sensitivities on site due to the presence of ESA 1 areas on the eastern boundary.

Table 7: Verification of DFFE Screening report sensitivity ratings for the Aquatic Biodiversity Theme

Identified Sensitivity		Comments
DFFE Screening Report	EAP Feedback	
Very High	Very High	
Specialist Assessment must be done in accordance to the Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act 1998, when applying for Environmental Authorization, which were promulgated in Government Notice No. 1150 of 30 October 2020.		A wetland was identified in the southern portion of the proposed site and a drainage line flows through the northern portion of the site. A wetland and aquatic ecological assessment have been commissioned to determine the current state of the systems and larger system connected to it.

2.7 ANIMAL SPECIES THEME

The Screening tool indicated Medium sensitivity due to the possible presence of certain bird species.

Table 8: Verification of DFFE Screening report sensitivity ratings for the Animal Species Theme

Identified Sensitivity		Comments
DFFE Screening Report Medium Specialist Assessment must be done in accordance to the Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act 1998, when applying for Environmental Authorization, which were promulgated in Government Notice No. 1150 of 30 October 2020 (i.e. protocols for terrestrial plant and animal species.	EAP Feedback Medium	Due to the clearance of vegetation to take place and the fact that some Blue Crane individuals were spotted near the site during the initial site visit an Avifauna and Fauna Impact Assessment is currently underway.

2.8 AVIAN THEME SENSITIVITY

The Screening tool noted a Low sensitivity rating.

Table 9: Verification of DFFE Screening report sensitivity ratings for the Avian Theme

Identified Sensitivity		Comments
DFFE Screening Report Low Specialist Assessment must be done in accordance to the Procedures for the Assessment and Minimum	EAP Feedback Medium	Due to the clearance of vegetation to take place and the fact that some Blue Crane individuals were spotted near the site during the initial site visit an

Identified Sensitivity		Comments
Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act 1998, when applying for Environmental Authorization, which were promulgated in Government Notice No. 1150 of 30 October 2020.		Avifauna and Fauna Impact Assessment is currently underway. VulPro also informed us of Vulture Colonies in a 50km radius of the site.

2.9 PLANT SPECIES THEME SENSITIVITY

Table 10: Verification of DFFE Screening report sensitivity ratings for the Plant Species Theme

Identified Sensitivity		Comments
DFFE Screening Report Low Specialist Assessment must be done in accordance to the Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act 1998, when applying for Environmental Authorization, which were promulgated in Government Notice No. 1150 of 30 October 2020.	EAP Feedback Low	Desktop Assessment indicated that the vegetation type is characterised as Least Concern and the current Land use of grazing. A Terrestrial Plant Species Compliance Statement have been commissioned in accordance with the Protocols (G. NR 1150).

3 CONCLUSION

The DFFE Screening Tool Report identified 13 specialist studies to be conducted as listed on page 6 of this report. Based on the outcomes of this sensitivity verification the following studies were identified as being require:

- Agricultural compliance statement
- Landscape / Visual Assessment
- Archaeological Assessment (Phase 1 HIA)
- Palaeontological compliance statement
- Terrestrial Biodiversity Assessment
- Aquatic and Wetland Assessment
- Geotechnical Assessment (Pre-Feasibility)
- Socio-Economic Assessment
- Plant Species Assessment
- Animal Species Assessment (Including Avi-fauna assessment according to guidelines for Solar PV facilities).
- Stormwater Management Plan and Floodline Assessment has also been added.

All sensitivities have been considered within this report.

The Palaeontological, Terrestrial, and Avian Themes sensitivities are disputed by this report. The Agriculture, Archaeological, Animal, Aquatic and Plant Species sensitivities are agreed to. Specialist assessments are underway and have been commissioned for the required assessments.

The low sensitivity ratings for the Civil Aviation, Defence and RFI theme is confirmed by the site verification report. No specialist studies have been commissioned for these themes as the project will not have unacceptable negative impacts on any of the identified themes. The stakeholders of these themes will be consulted as part of the EIA process.

