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11 August 2023

HERITAGE SITE SENSIVITIY VERIFICATION REPORT – CRECY SOLAR PV CLUSTER 1 – 3, LIMPOPO PROVINCE

Introduction

In accordance with GN 320 and GN 1150 (20 March 2020) of the NEMA EIA Regulations of 2014 (as amended), prior to commencing with a specialist assessment, a site sensitivity verification must be undertaken to confirm the current land use and environmental sensitivity of the proposed project area as identified by the National Web-Based Environmental Screening Tool (i.e., Screening Tool). Beyond Heritage have been commissioned to verify the sensitivity of the proposed project for the Crecy Solar Cluster (Crecy 1 – 3) under these specialist protocols. This report serves as the *Archaeological and Cultural Heritage* Site Sensitivity Verification Report for the proposed project.

DFFE Screening Tool

The environmental sensitivity of the proposed development area for Heritage theme was established by a desktop study and a brief non-intrusive pedestrian survey. This *Archaeological and Cultural Heritage* site sensitivity verification report relates to the Screening Tool Report completed for the site in August 2023. A site visit was conducted by the specialist on *17 – 22 July 2023* to inform the specialist reports required for the proposed project and confirm the site sensitivity.

The table below provides information regarding the outcome of the Screening tool in terms of the Archaeological and Cultural Heritage and Paleontological theme sensitivities associated with the proposed project and the specialist sensitivity verification.

Table 1: Archaeological and Cultural Heritage and Paleontological Assessment theme sensitivity for the Crecy Solar PV Cluster

Environmental Theme	DFFE Screening Tool Sensitivity	Applicable protocol
Archaeological and Cultural Heritage	Low Sensitivity	NHRA Act 25 of 1999
Palaeontology	Very High Sensitivity	Section 7.2. SAHRA Requirements

The study area was subjected to a heritage predictive model to determine heritage potential based on land use paradigms and landscape features as described below.

Heritage Potential based on Land Use Paradigms

A heritage sensitivity predictive model was developed for the study area considering existing Landscape Use paradigms (Table 2), to identify areas with the greatest archaeological potential or sensitivity. Verified heritage sensitivity are overlain on the predictive model.

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Table 2. Brief summary of main Land Use Paradigms

	Focal Point or Land Form	Key Sources
Earlier Stone Age	Standing water	Klein 2000
	Spring eyes & seasonal seeps	Sampson 1998
	Raw material	Kuman 2003
	Raw Material & water	Hallinan & Parkington 2017
	Water (stenotopic)	Deacon 1998
	Focal Points like kopjes for vantage points and shelter and alluvial gravels for raw material	Le Baron *et al.* 2010
	Avoiding Water. Focussing on raw material	Sampson1985 & 2001
	Raised hilltop locations for observing animals or other groups	Candel & Connard 2012
Middle Stone Age	Raw material & accessible supply of water	de la Pena et al., 2016
	Along major Rivers, rocky areas and higher topography	Hallinan & Parkington 2017
	Ephemeral River Bed	Marks 2015
	Spring eyes & seasonal seeps	Sampson 1998
Later Stone Age	Widespread	Deacon 1998
	Ephemeral River Bed	Marks 2015
	On pan or stream-bed margins, near springs, bedrock depressions containing seasonal water, hollows on dunes, and on the flanks or crests of koppies	Beaumont *et al.* 1995
Iron Age	Cultivatable soil, koppies and hills	Huffman 2007

The Predictive sensitivity model for the study area (Graphically represented in Figure 1) based on the landscape use outlined above also took into account the ecological sensitivity maps (that include focal points highlighted in Table 2) for the area and included the following natural criteria (Table 3):

- Elevation;
- Drainage Lines; and
- Local geology.

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Table 3. Natural criteria and GIS Methodology

Criteria	Description and GIS Methodology
Elevation	GIS data sourced from a private third party provided elevation data for the Digital Elevation Model (DEM) with a five-meter accuracy. From a landscape approach, the micro topography for the PV facility is important. Although elevation is mostly flat, elevated areas occur that are archaeologically speaking of interest and the field survey concentrated on these areas.
Pans and Drainage Lines	The importance of water sources is highlighted in Table 1. The ArcGIS "Buffer Wizard" tool was utilised to delineate a 100 m buffer around these features.
Geology	Studies in the area showed that palimpsest of Stone Age Material occur in areas where raw material suitable for knapping occurs. In addition, stone walled settlements in the Iron Age is constructed near building material

Verified Heritage Sensitivity

A brief pedestrian survey of sections of the study area recorded limited heritage resources. Recorded sites include burial sites of high social significance, a farmstead of medium significance, a school building and farm workers' homestead of low significance (although if the homestead is associated with still born graves it will be of high social significance). Figure 1 illustrates the overall heritage sensitivity map of the project area showing areas of low, medium, and high heritage potential. The verified sensitivities are illustrated and shp files were provided to the EAP.

According to the SAHRA palaeontological sensitivity map, the study area is indicated as low to medium palaeontological sensitivity and a desktop study and protocol for finds is required (Figure 2).

Table 4. Results of the SSVR.

ASPECT	SCREENING TOOL SENSITIVITY	VERIFIED SENSITIVITY	OUTCOME STATEMENT/PLAN OF STUDY	RELEVANT SECTION MOTIVATING VERIFICATION
Archaeological and Cultural Heritage	Low	Low to Medium	Phase 1 Heritage Impact Assessment	Section 38 NHRA Requirements
Palaeontology	Very high	Low to medium	Paleontological Impact Assessment	Section 7.2. SAHRA Requirements

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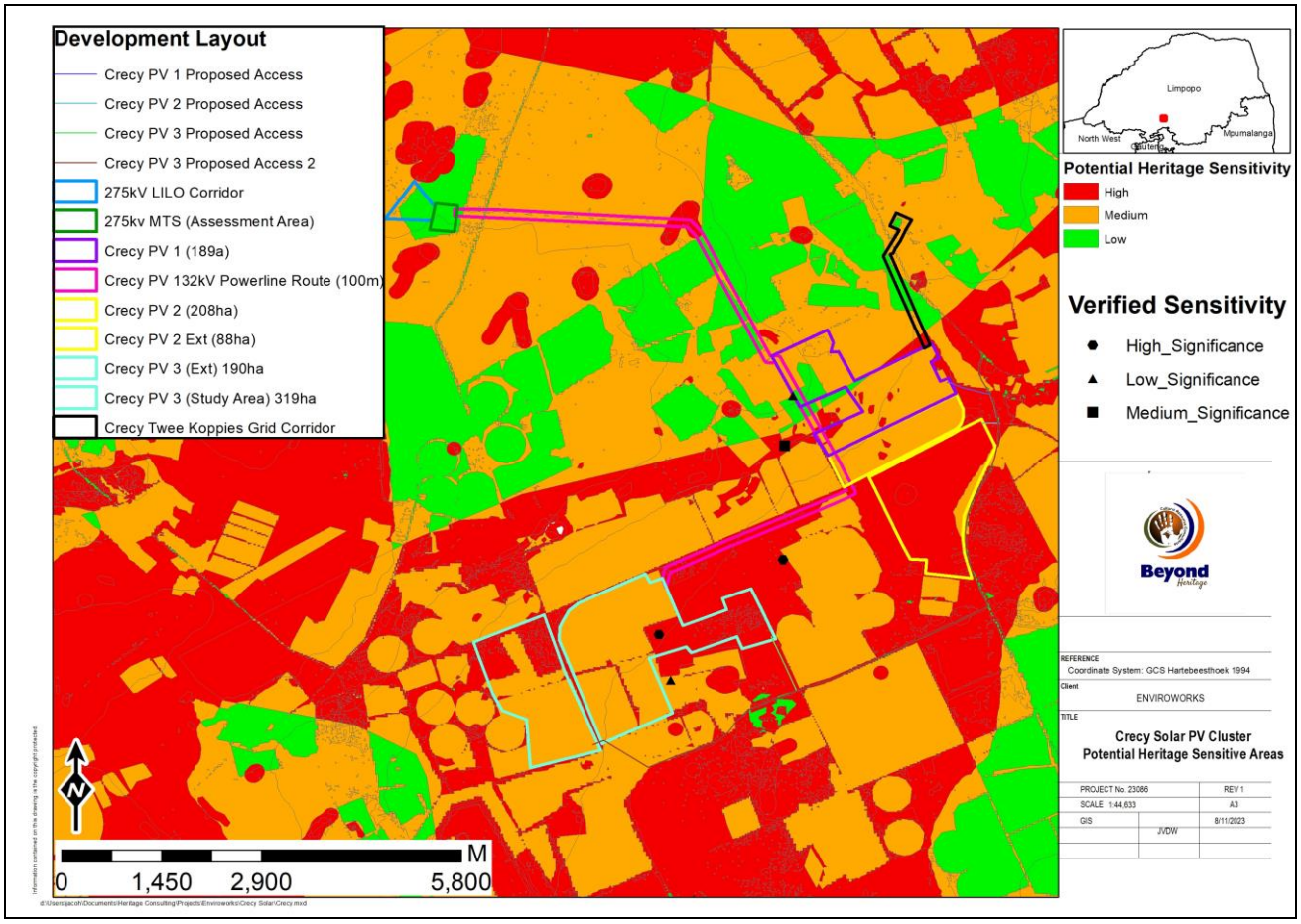

Figure 1. Overall Heritage Sensitivity of the Project.

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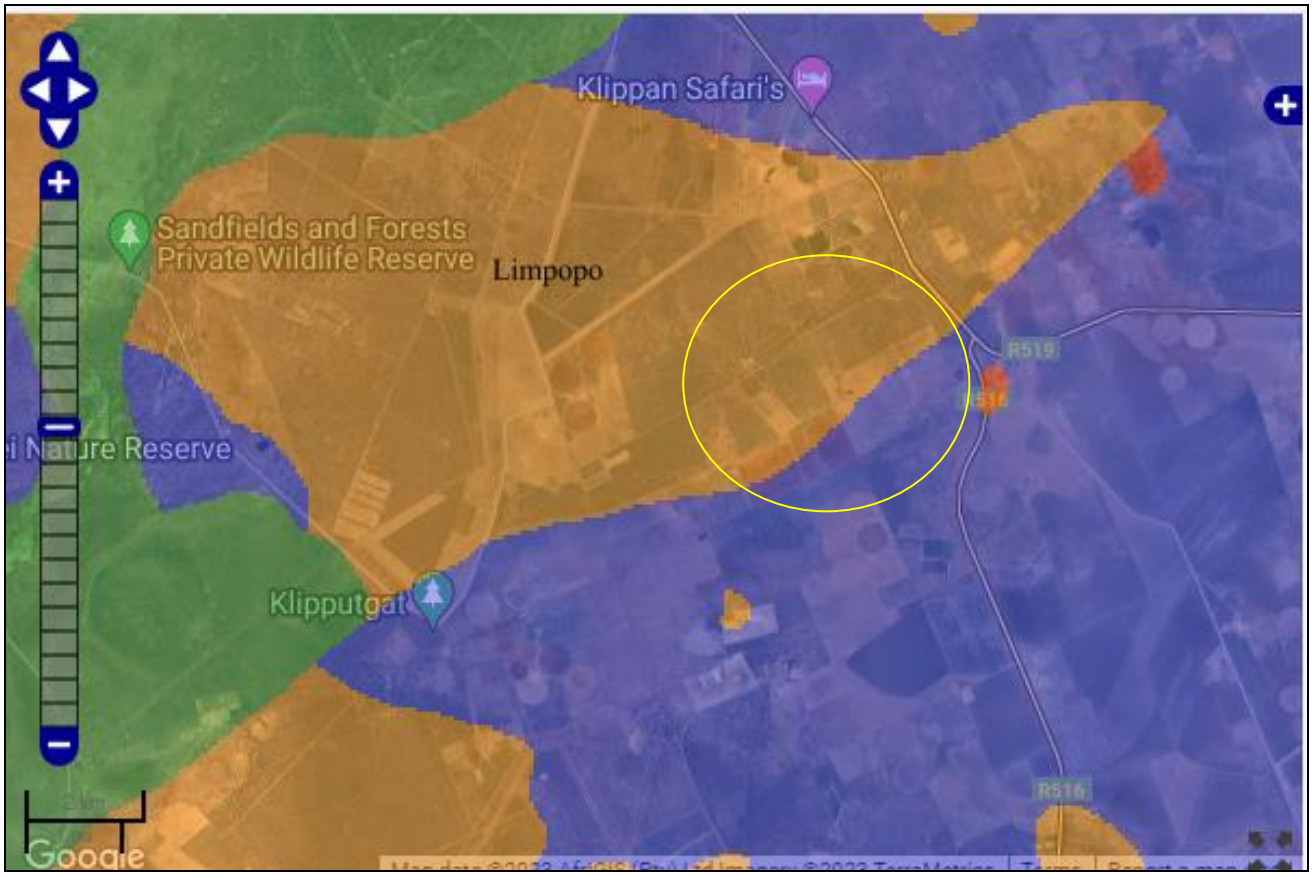

Colour	Sensitivity	Required Action
RED	VERY HIGH	Field assessment and protocol for finds is required
ORANGE/YELLOW	HIGH	Desktop study is required and based on the outcome of the desktop study, a field assessment is likely
GREEN	MODERATE	Desktop study is required
BLUE	LOW	No palaeontological studies are required however a protocol for finds is required
GREY	INSIGNIFICANT/ZERO	No palaeontological studies are required
WHITE/CLEAR	UNKNOWN	These areas will require a minimum of a desktop study. As more information comes to light, SAHRA will continue to populate the map

Figure 2. Paleontological sensitivity of the approximate study area (yellow polygon) as indicated on the SAHRA Palaeontological sensitivity map.

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Kindly contact me with any queries or concerns.

Sincerely

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References

Van der Walt, J. 2021. Heritage Impact Assessment for the Scafell Cluster Project , Free State Province. Unpublished report.

Bamford, M.K. 2021. Palaeontological Impact Assessment for the proposed Scafell Cluster Project, Free State Province. Unpublished report.