BANZAI ENVIRONMENTAL

PALAEONTOLOGICAL VERIFICATION STATEMENT

EMPR AMENDMENT APPLICATION FOR THE AUTHORISED VIRGINIA 1 SOLAR PV PARK

DFFE REF: 14/12/16/3/3/2/2099

(DATED 19 MAY 2022)

July 2023

COMPILED FOR: PGS HERITAGE

CONTENTS

1 INTRODUCTION

Ursa Energy (Proprietary) Limited obtained Environmental Authorisation for Virginia 1 PV Solar Park with associated infrastructure and structures on remainder of the Farm Blomskraal, 216, Registration Division Ventersburg Rd, Matjhabeng Local Municipality, Lejweleputswa District Municipality, Free State Province (Virginia 1 PV Solar Park) on 19 May 2022 (DFFE Ref: 14/12/16/3/3/2/2099). Following receipt of the Environmental Authorisation the developer now requires an update on the Generic Substation EMPR.

A Palaeontological Impact Assessment for the Virginia 1, Virginia 2, Virginia 3 and Power line Corridor were assessed in the following report.

Rubidge, B.S. and Van der Brandt, M., 2021. Palaeontological Impact Assessment for the Virginia 1, Virginia 2, Virginia 3 Solar Parks, and Power Line Corridor on farm Blomskraal 216 and a Power Line Corridor adjacent to the farm, near of the town of Virginia, in the Free State Province.

For the study the whole development footprint was investigated.

The following conclusions were documented.

- The development is underlain by Late Permian sedimentary and potentially fossil bearing rocks that is exposed in isolated areas along the Maselspruit River, the eastern sandstone ridge as well as four erosional guiles/ tributary streams.

- Most of the study area is overlain with Quaternary alluvial deposits, covered by irrigated cropland, grass and bush vegetation.
- It is unlikely that fossils heritage would be uncovered during excavations.
- If fossils were uncovered in either the Quaternary sediments or Karoo rocks the included Chance Find Protocol would be implemented and a qualified palaeontologist would be appointed to assess the fossil finds.
- The development had to be limited to the flat, bushy and grass areas currently utilized by game and cattle farming, and irrigated cropland.

The Virginia 1 PV Solar Park application was authorised on 19 May 2022 (DFFE Ref: 14/12/16/3/3/2/2099).

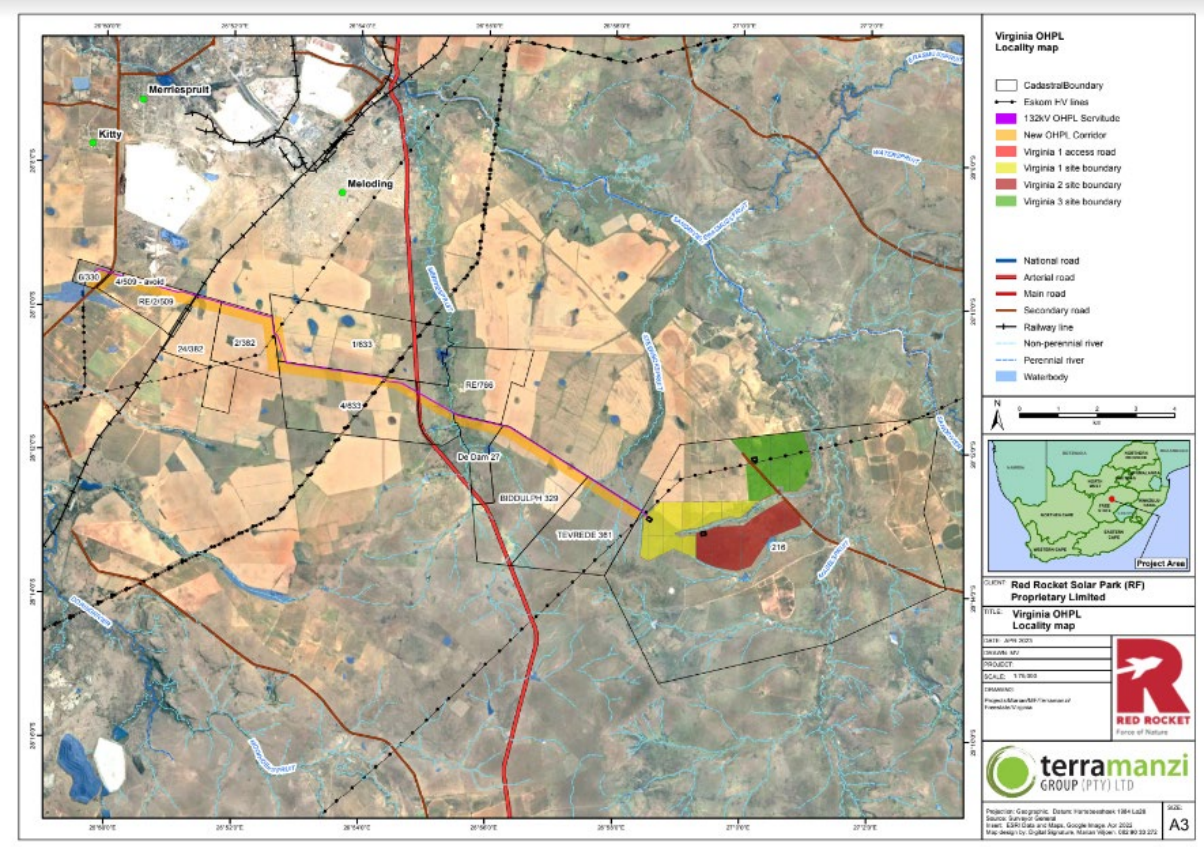

Figure 1: Virginia OHPL Locality Map.

In terms of the National Environmental Management Act (Act 107 of 1998, as amended) (NEMA) Environmental Impact Assessment (EIA) Regulations [4 December 2014, Government Notice (GN) R982, R983, R984 and R985, as amended], various aspects of the proposed developments may have an impact on the environment and are considered to be listed activities. These activities require authorisation from the National Competent Authority (CA), namely the Department of Forestry, Fisheries and the Environment (DFFE), prior to the commencement thereof. Further to this as per GN R. 2313: ***Adoptions of the standard for the development and expansion of powerlines and substation with identified geographical areas and the exclusion of this infrastructure from the requirements to obtain Environmental Authorisation*** , the Standard was adopted in terms of section 24(10)(a) of the Act for the purpose of excluding the activities contemplated in paragraph 5.1 and 5.2 of the Schedule from the requirement to obtain environmental authorisation prior to commencement. In terms of the procedural requirement set out in the standard, screening tool reports have been undertaken for the grid corridor and associated infrastructure and site sensitivity verifications have been undertaken by the relevant specialists in accordance with the sensitivity themes. As per 6.1. of the GNR .2313, "Where any part of the infrastructure occurs on an area for which the environmental sensitivity for any environmental theme is identified as being very high or high by the national web based environmental screening tool and confirmed to be such through the application of the procedures set out in the Standard", the site sensitivity verifications have been performed as per the procedural requirements set out.

In accordance with GN 320 and GN 1150 (20 March 2020)[1] 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 areas as identified by the National Web-Based Environmental Screening Tool (i.e., Screening Tool). Elize Butler, as

[1] GN 320 (20 March 2020): 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 Authorisation

palaeontology specialist, have been commissioned to verify the sensitivity of the project sites under these specialist protocols.

The scope of this report is for an update of the EMPR.

- Update the Generic Substation EMPR

1. SITE SENSITIVITY VERIFICATION METHODOLOGY

The following information sources were consulted to compile this report:
The Palaeontology Sensitivity Verification was undertaken by the following methodology:

- The site sensitivity is established through the National Environmental Web-Based Screening Tool.
- The Site is mapped on the relevant Geological Map to determine the underlying geology of the development.
- Then the site is mapped on the South African Heritage Resources Information System (SAHRIS) PalaeoMap, and the Sensitivity of the proposed development established.
- A Desktop investigation was conducted for this Verification project.
- Other information is obtained by using satellite imagery and the
- Palaeontological Impact Assessment conducted for the Authorised Virginia 1, Virginia 2, Virginia 3 Solar Parks and Power Line corridor in October 2021.

2. OUTCOME OF SITE SENSITIVITY VERIFICATION

According to the DFFE National Environmental Web-based Screening Tool the proposed substation is underlain by sediments with a Very High (dark red) and Medium (orange), Palaeontological Sensitivity.

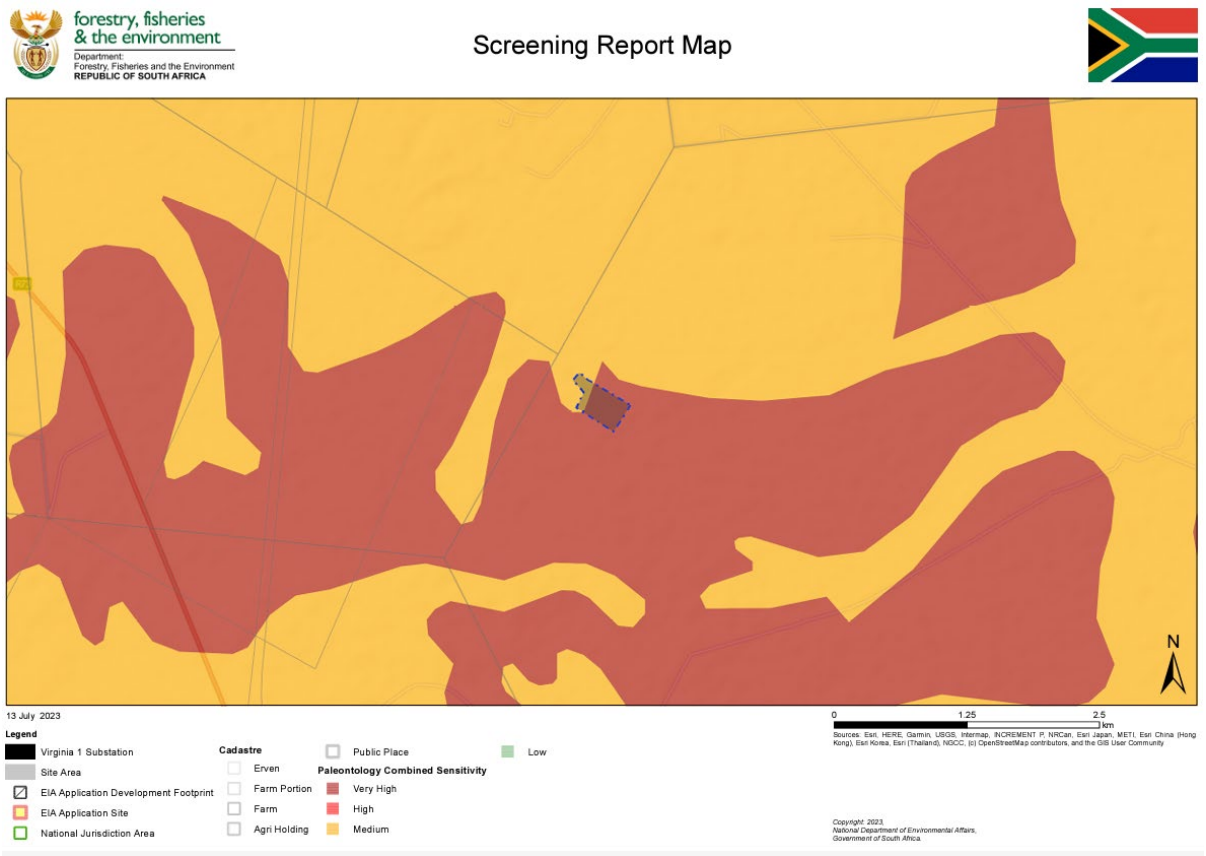

Figure 2: Palaeontological Sensitivity of the Substation of the Virginia 1 PV Solar Park generated by the DFFE National Environmental Web-based Screening Tool.

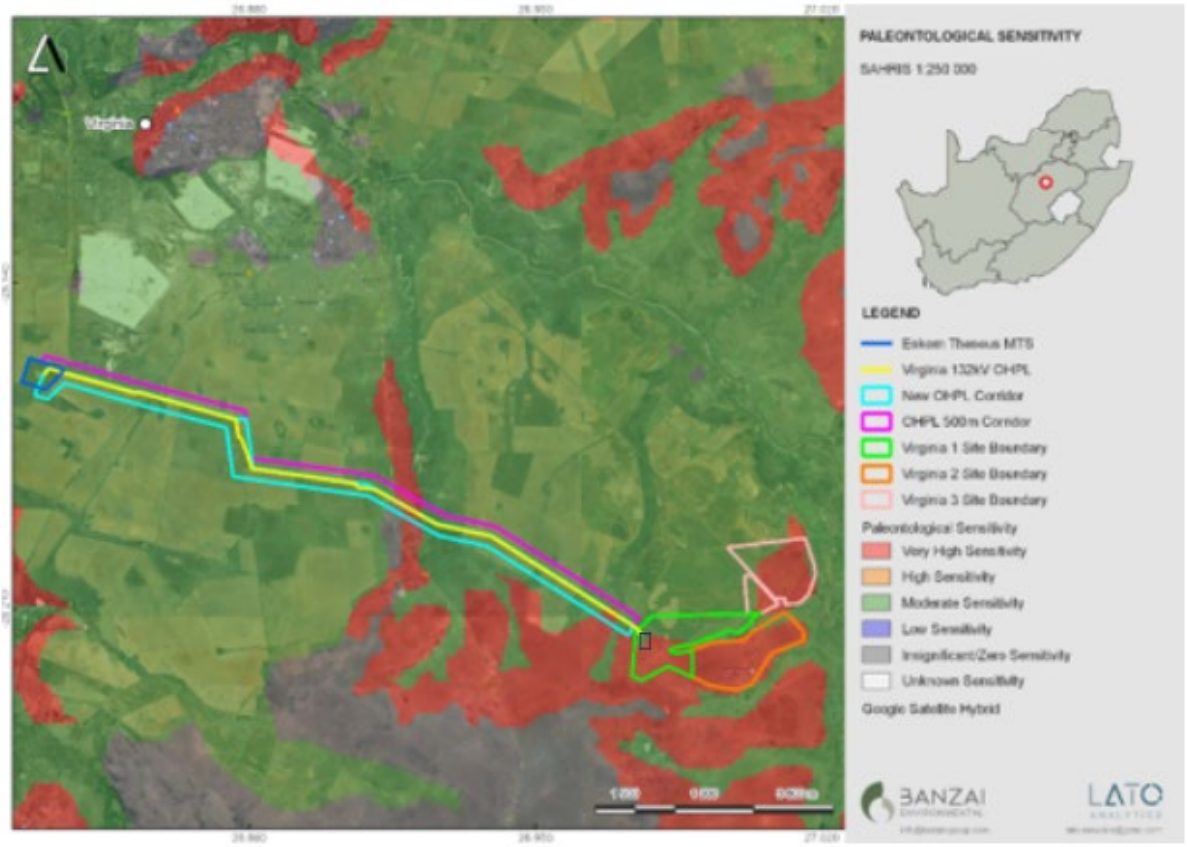

Figure 3: Extract of the SAHRIS Palaeomap (Council of Geosciences, Pretoria) indicating the Virginia 1, Virginia 2, Virginia, 3 and power line corridor. The substation of Virginia 1 Solar PV Park is indicated in black.

According to the SAHRIS Palaeomap the proposed development is underlain by sediments with a Very High (red) and Moderate (green) Palaeontological Sensitivity.

3. CONCLUSION

The DFFE screening tool indicates that the substation is underlain by sediments with a Very High (dark red) Palaeontological Sensitivity. This is confirmed with the SAHRIS Palaeomap indicating that the Palaeontological Sensitivity of the sediments underlying the substation is Very High (red) and Moderate (green). This footprint is thus Very Sensitive from a Palaeontological Point of view. The Palaeontological Impact Assessment (Rubidge and Van Der Brandt, 2021) included a Chance find Protocol. This Protocol and recommendations should be included in the Generic Substation EMPR.