Proposed development of the Rondavel Solar Energy Facilities near Kroonstad, Free State Province

Our Ref: 15828



an agency of the Department of Arts and Culture

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Enquiries: Sityhilelo Ngcatsha Tel: 0212028663 Email: sngcatsha@sahra.org.za CaseID: 15828

Date: Monday May 31, 2021 Page No: 1

### **Final Comment**

#### In terms of Section 38(4), 38(8) of the National Heritage Resources Act (Act 25 of 1999)

Attention: Savannah Environmental (Pty) Ltd

PO Box 148 Sunninghill 2157

South Africa Mainstream Renewable Power Developments (Pty) Ltd is proposing the construction and operation of the 100 MWac Rondavel Photovoltaic (PV) Solar Energy Facility (SEF) and Battery Energy Storage System (BESS), near the town of Kroonstad in the Moqhaka Local Municipality (Fezile Dabi District) of the Free State Province of South Africa. The proposed development traverses four (4) farm parcels namely: » Remaining Extent of the farm Rondavel Noord No. 1475 (main site); and » Remaining Extent of the farm Rondavel No. 627 (main and grid site).

South Africa Mainstream Renewable Power Developments (Pty) Ltd appointed Savannah Environmental (Pty) Ltd to undertake the Environmental Authorisation application for the proposed construction and operation of the 100 MW Rondavel Photovoltaic Solar Energy Facility, Battery Energy Storage System (BESS) and associated infrastructure located within the Remaining extent of the Farm Rondavel Noord No. 1475 and the remaining extent of the farm Rondavel No. 627 near Kroonstad, Moqhaka Local Municipality, Fezile Dabi District, Free State Province.

A Draft Scoping Report (DSR) has been submitted in terms of the National Environmental Management Act (NEMA; Act No. 107 of 1998) and the NEMA 2014 EIA Regulations, as amended. The development area has an extent of 223ha. Rondavel Solar PV facility will be connected to the grid via a separately authorised grid connection solution.

The infrastructure associated with the facility includes solar PV array, inverters and transformers, cabling, on-site facility substation, battery energy storage system (BESS), site offices and maintenance buildings, laydown areas and access roads, fencing around the development area and telecommunication infrastructure, stormwater channels and water pipelines.

CTS Heritage has been appointed to provide heritage specialist input as part of the EA application as required by section 24(4)b(iii) of NEMA and section 38(3) and 38(8) of the National Heritage Resources Act, Act 25 of



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1999 (NHRA).

## Lavin, J. 2020. Heritage Screening Assessment for the Proposed development of the Rondavel Solar Energy Facilities near Kroonstad, Free State Province.

The study area is underlain by the Adelaide Subgroup (Beaufort Group) and Volksrust Formation as well as Jurassic Dolerite intrusions. The areas proposed for development are underlain by sediments of moderate to very high palaeontological sensitivity according to the SAHRIS PalaeoSensitivity Map. Based on other heritage finds in the broader Kroonstad area, potential exists for archaeological resources within the development area.

It is likely that the proposed development will negatively impact on significant archaeological and palaeontological heritage resources, as such, it is recommended that an HIA is required.

An interim Comment dated 15/01/2021 was issued by SAHRA which requested the submission of the Heritage Impact Assessment (HIA) inclusive of an Archaeological and Palaeontological Impact Assessment along with the Final Scoping Report.

The Final Scoping Report was uploaded to the case on the 19/01/2021 which notes that comment from SAHRA. The response on Page 10 and 11 of Appendix C8 states that the Heritage Specialist study will be submitted and the EIA and its appendices will be uploaded to the case at the start of the public review period.

An interim comment dated 26/01/2021 was issued which noted that heritage specialist studies will be submitted along with the EIA report. The EIA, Archaeological Impact Assessment (AIA) and Palaeontological Impact Assessment (PIA) reports along with the Integrated HIA report were submitted to the case on the 30/04/2021.

# Chapelle, K. 2020. Palaeontological Specialist Study: Proposed development of the Vrede and Rondawel Solar Energy Facilities near Kroonstad, Free State Province

The development area for the Rondavel SEF and Grid Connections is underlain by the Adelaide Subgroup and the Volksrust Formation (Karoo Supergroup) along with Jurassic dolerite intrusions of no palaeontological sensitivity. The Adelaide Subgroup is very highly sensitive for palaeontological heritage and forms part of the *Daptocephalus, Dicynodon* and *Lystrosaurus* Assemblage Zones. It is known to include fossils of fish, amphibians, reptiles, therapsids and vertebrate burrows as well as freshwater bivalves, trace fossils along with



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sparse to rich assemblages of vascular plants and insects.

The Volksrust Formation is of high palaeontological sensitivity and is known to include trace fossils, bivalves, temnospondyl amphibians, vertebrate microfossils, insect remains and petrified wood. No fossils were identified except possible fragments of petrified wood on the Rondavel property (RDW\_P07 and RDW\_P15).

#### Recommendations

- All excavations into bedrock are monitored by a suitably qualified palaeontologist and a report on the outcomes of the monitoring activities must be submitted to SAHRA on completion of the development of the facility.
- All other excavation activities are subject to the Palaeontological Chance Finds Procedure (Appendix 1 of this report).

### Lavin, J. Stratford, D, 2021, Archaeological Specialist Study: Proposed development of the Vrede and Rondavel Solar Energy Facilities near Kroonstad, Free State Province

Dense vegetation covered the majority of the landscape which hindered systematic and comprehensive coverage of the ground. Two Later Stone Age scatters (RDW001 and RDW004) and one isolated flake (RDW003) were identified within the area proposed for the Rondavel SEF which have been extensively disturbed with a grading of Grade IIIC. Four (4) stone piles which are potential human burials, were identified (RDW002), and additional examples may have been obscured by the vegetation. These stone piles are graded as Grade IIIA. It is recommended that a no-go area of 100m is implemented around site RDW002 so that these possible burials remain undisturbed.

#### Recommendations

- A 100m no development buffer is implemented around Site RDW002.
- Monitoring of vegetation-clearing activities located in proximity to RDW002 by a professional archaeologist takes place. A monitoring report describing the outcome of the monitoring activities must be submitted to SAHRA.
- Should any previously unrecorded archaeological resources or possible burials be identified during the

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course of construction activities, work must cease in the immediate vicinity of the find, and SAHRA must be contacted regarding an appropriate way forward.

#### **Final Comment**

The following comments are made as a requirement in terms of section 3(4) of the NEMA Regulations and section 38(8) of the NHRA in the format provided in section 38(4) of the NHRA and must be included in the Final EIA report and EMPr:

- 38(4)a The SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit has no objections to the proposed development;
- 38(4)b The recommendations of the specialists are supported and must be adhered to. Further additional specific conditions are provided for the development as follows;
- The monitoring report by the palaeontologist and archaeologist must be submitted upon completion of the construction phase that includes site clearance and excavations.
- 38(4)c(i) If any evidence of archaeological sites or remains (e.g. remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments, charcoal and ash concentrations), fossils or other categories of heritage resources are found during the proposed development, SAHRA APM Unit (Sityhilelo Ngcatsha/Phillip Hine 021 462 5402) must be alerted as per section 35(3) of the NHRA. Non-compliance with section of the NHRA is an offense in terms of section 51(1)e of the NHRA and item 5 of the Schedule;
- 38(4)c(ii) If unmarked human burials are uncovered, the SAHRA Burial Grounds and Graves (BGG) Unit (Thingahangwi Tshivhase/Mimi Seetelo 012 320 8490), must be alerted immediately as per section 36(6) of the NHRA. Non-compliance with section of the NHRA is an offense in terms of section 51(1)e of the NHRA and item 5 of the Schedule;
- 38(4)d See section 51(1) of the NHRA;
- 38(4)e The following conditions apply with regards to the appointment of specialists:
- i) If heritage resources are uncovered during the course of the development, a professional archaeologist or palaeontologist, depending on the nature of the finds, must be contracted as soon as possible to inspect the heritage resource. If the newly discovered heritage resources prove to be of archaeological or palaeontological significance, a Phase 2 rescue operation may be required subject to permits issued by SAHRA;
- The Final EIA Report and EMPr must be submitted to SAHRA for record purposes;
- The decision regarding the EA Application must be communicated to SAHRA and uploaded to the

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SAHRIS Case application.

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

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Sityhilelo Ngcatsha Archaeology, Palaeontology, Meteorite Assistant South African Heritage Resources Agency

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Phillip Hine Manager: Archaeology, Palaeontology and Meteorites Unit South African Heritage Resources Agency

ADMIN: Direct URL to case: https://sahris.sahra.org.za/node/546560