

Proposed Development of a 132 kV Overhead Power Line and Supporting Infrastructure for the Proposed Vhuvhili Solar Photovoltaic Energy Facility, near Secunda in the Mpumalanga Province

Our Ref:



an agency of the
Department of Arts and Culture

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South African Heritage Resources Agency | 111 Harrington Street | Cape Town
P.O. Box 4637 | Cape Town | 8001
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Enquiries: Natasha Higgitt
Tel: 021 462 4502
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CaseID: 20125

Date: Tuesday January 24, 2023
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Final Comment

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

Attention: Vhuvhili Solar (RF) (Pty) Ltd

The Project Applicant is proposing the construction of a 132 kV overhead transmission power line and associated EGI to feed the electricity generated by the proposed Vhuvhili SEF to the switching station at the proposed Mukondeleli WEF. The electricity will be transferred from the proposed on-site substation at the proposed Vhuvhili SEF via a 132 kV power line which extends approximately 12 km in length to the proposed switching station at the proposed Mukondeleli WEF.

CSIR has been appointed by Vhuvhili Solar RF (Pty) Ltd conduct an Environmental Authorisation (EA) Application for the proposed 132kV overhead powerline and associated infrastructure and associated electrical grid infrastructure to support the Vhuvhili Solar Energy Facility near Secunda, Mpumalanga Province.

A draft Basic Assessment Report (DBAR) has been submitted in terms of the National Environmental Management Act, 1998 (NEMA) and the 2017 NEMA Environmental Impact Assessment (EIA) Regulations. The proposed development will include the construction of a 132kV overhead powerline up to 12 km long (four alternative routes) with a 32 m servitude and service roads.

Prof Marion Bamford, ASHA Consulting (Pty) Ltd and Beyond Heritage have been appointed to provide heritage specialist input as required by section 24(4)b(iii) of NEMA and section 38(8) of the National Heritage Resources Act, Act 25 of 1999 (NHRA).

Bamford, M. 2022. Palaeontological Impact Assessment: Proposed Development of a 132 kV Overhead Power Line and Associated Electrical Grid Infrastructure to support the Proposed Vhuvhili Solar Photovoltaic Energy Facility, near Secunda, Mpumalanga Province

The proposed development is underlain by the Vryheid Formation that may contain fossils of the Glossopteris flora. No site visit was undertaken.

Recommendations provided in the report include the following:

- A Fossil Chance Finds Protocol is to be implemented;

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- When the final grid connection route has been determined based on other specialist inputs, and excavations for pole foundations have commenced, and only if fossils are found, then the Vhuvhili substation site grid route should be visited by a palaeontologist and any fossils found should be removed.

Orton, J and Van der Walt, J. 2022. Heritage Impact Assessment: Basic Assessment for a Proposed 132 kV Overhead Power Line and Associated Electrical Grid Infrastructure to support the Proposed Vhuvhili Solar Energy Facility near Secunda, Mpumalanga

No specific site visit was conducted for the proposed powerline route. Data from previous surveys of adjacent development areas and satellite imagery was used. A total of five (5) heritage resources are located in the development footprint. These include one stone feature and historical ruins of low heritage significance and two burial grounds of high heritage significance.

Recommendations provided in the report include the following:

- The graves in the Alternative 3 (waypoint 179) and Alternative 4 (waypoint 182) corridors must be avoided and protected if either of these corridors are used. The powerline and associated service track must be located at least 50 m from the graves;
- If Alternatives 3 or 4 are used, before construction starts, the relevant graveyard must be fenced with a farm-style wire fence with a pedestrian gate to facilitate public access. The fence must be placed a minimum of 5 m away from all graves;
- A pre-construction survey of the final alignment must be carried out once the design is completed as to determine whether there are any further areas requiring intervention;
- A Chance Finds Procedure is recommended to be implemented.

In an Interim Comment issued on the 14/12/2022, SAHRA requested that an archaeological field assessment of the powerline routes be conducted as part of the EA process. The HIA must be revised based on the results of the field assessment.

In a response to the SAHRA comment, the heritage specialist argued that there is enough evidence to confirm the sensitivity, predict the impacts and devise appropriate mitigation measures. Additionally, the conditions on site do not allow for a survey to be conducted (heavy rains). The specialist has requested that the heritage reports be accepted and that a pre-construction survey should be conducted in the dry season.



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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 BAR and EMPr:

- 38(4)a – The SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit and Burial Grounds and Graves (BGG) 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:
- The preconstruction survey must be conducted prior to any ground clearance. The report of the survey must be submitted to SAHRA for comment prior to any ground clearance. No ground clearance of construction may occur on site without comments from SAHRA;
- SAHRA reserves the right to stipulate additional conditions, layout changes or object to the development based on the results of the preconstruction survey;
- BGG Unit conditions: The development footprint must avoid sites 179 and 182 with a buffer-zone of 50m as suggested in the HIA. Should the developer wish to utilize the said sites, a grave exhumation/relocation process which includes public participation as outlined under Chapter XI of the NHRA regulations of 2000 must be initiated to obtain family consent. The exhumation must then be conducted by a qualified Archaeologist after obtaining a section 36 permit;
- 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 (Natasha Higgitt/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/Nggabutho Madida 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 of the NHRA regarding offences;
- 38(4)e – The following conditions apply with regards to the appointment of specialists:
- With reference to the mitigation work noted above, a qualified archaeologist must be appointed to undertake the work in terms of the permit applied for as noted above;

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- 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 BAR 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 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

Natasha Higgitt
Heritage Officer
South African Heritage Resources Agency

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

ADMIN:

Direct URL to case: <https://sahris.sahra.org.za/node/609071>
(DARDLEA, Ref:)

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Terms & Conditions:

1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for proposed work.
2. If any heritage resources, including graves or human remains, are encountered they must be reported to SAHRA immediately.
3. SAHRA reserves the right to request additional information as required.