



an agency of the
Department of Arts and Culture

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CaseID: 10096

Date: Thursday October 20, 2016
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Final Comment

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

Attention: Perception Heritage Planning
PO Box 9995
GEORGE
653

PROPOSED DEVELOPMENT OF THE AMDA ECHO PV (SOLAR ENERGY FACILITY) ON REMAINING EXTENT OF THE FARM KLONDIKE NO 670, AND OVERHEAD POWER LINE GRID CONNECTION TO THE MOOKODI MTS SUB-STATION ACROSS THE REMAINDER OF ERF 506 AND REMAINDER OF THE FARM ROSENDAL 673, VRYBURG DISTRICT, NORTH WEST PROVINCE

Cape Environmental Assessment Practitioners (Pty) Ltd were appointed by AMDA Echo (Pty) Ltd to conduct an Environmental Impact Assessment Process for the proposed AMDA Echo Solar PV Energy Facility and overhead Power Line Grid Connection. The proposed project is located on remaining extent Klondike No 670 and the Remainder of Erf 506 and Remainder of the farm Rosendal 673, Vryburg, Registration Division, North West Province. A Final Scoping Report was completed in term of the National Environmental Management Act, 1998 (NEMA) and the Environmental Impact Assessment (EIA) Regulations 2014. The proposed development will comprise a development footprint of approximately 250 ha with a solar PV field, sub-station, collector sub-station, buildings, roads and an access road, and permanent and construction laydown areas. The proposed 132kV powerline will connect to the Eskom Mookodi MTS Substation with a confirmed capacity of 485MW and will be 5.88 km in length. Additional infrastructure will include possible pipelines and powerlines, and a sewage system.

Perception Planning was appointed to conduct the Heritage Impact Assessment (HIA) as part of the EIA process. Dr Peter Nilssen and Dr John Almond were appointed to provide the Archaeological Impact Assessment (AIA) and Palaeontological Impact Assessment (PIA) for the project respectively.

Nilssen, P. 2016. Phase 1a Archaeological Impact Assessment: Proposed development of the AMDA Echo PV (Solar Energy Facility) on Remaining Extent Klondike No 670, and Overhead Power Line Grid Connection to the Mookodi MTS Sub-Station across Remainder of Erf 506 and Remainder of the Farm Rosendal 673, Vryburg, Registration Division, North West Province.

Low density background scatters of isolated stone artefacts of various Stone Age periods were identified within the SEF study area, and were rated as sites of low significance. A Stone Age Pan site (Site 103) was located within the proposed SEF footprint area. This site was considered to be of medium significance and required



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conservation. It is noted that the development layout has been amended to allow for a protective buffer between the site and the surrounding environment. Scattered surface Stone Age lithics were identified along the proposed grid connection route, and were rated as sites of low significance. An extensive Stone Age site located at a pan, and two Stone Age quarry sites were identified within the proposed grid connection route. These sites were rated as medium significance and should be avoided by the development.

Recommendations provided in the report include the following:

- Site 103 (Stone Age Pan Site) must be conserved and enclosed with a fence during the construction phase of the development;
- Site 87 & 89 (Stone Age Pan site) must be conserved and enclosed with a fence during the construction phase of the development;
- Sites 94, 95, 96, 98 & 99 (Stone Age quarry and pan sites) must be conserved and enclosed with a fence during the construction phase of the development;
- The above recommendations must be included in the Construction and Operational Environmental Management Plan (C&OEMP);
- The C&OEMP must make provision for archaeological training of the Environmental Control Officer (ECO), so the ECO can recognize archaeological material if exposed during construction. The ECO must alert the authorities or a suitably accredited archaeologist, who should be called to the site to assess the finds and determine mitigation measures if necessary. Such work will be at the expense of the developer;
- In the event that excavation and earthmoving activities expose significant archaeological resources or heritage resources, such activities must stop and SAHRA must be notified immediately. Such resources must be handled in accordance with the National Heritage Resources Act (No 25 of 1999) and at the expense of the developer;
- In the event of exposing human remains during construction, the matter will fall into the domain of the South African Heritage Resources Agency and will require a professional archaeologist to undertake mitigation if needed. Such work will be at the expense of the developer.

Almond, J. 2016. Recommended Exemption from Further Palaeontological Studies: Proposed AMDA Echo Solar PV Development on the Remaining Extent of Klondike No. 670-IN, Naledi Local Municipality, North West Province.

This report was discussed in the Interim Comment issued on the 10 October 2016 and will not be discussed further. Comments regarding this report in the Interim Comment are still valid and apply to the proposed development.



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De Kock, S and Narainne, G. 2016. Integrated Heritage Impact Assessment in terms of Section 38(8) of the National Heritage Resources Act, 1999 (Act 25 of 1999): Proposed Development of The AMDA Echo PV (Solar Energy Facility) On Remaining Extent Klondike No 670, And Overhead Power Line Grid connection to the Mookodi Mts Sub-Station across Remainder of Erf 506 and Remainder of the Farm Rosendal 673, Vryburg, Registration Division, North West Province.

The Integrated HIA discussed the results of the AIA and Palaeontological Letter of Exemption. The Integrated HIA included all recommendations provided in AIA and Palaeontological Letter of Exemption.

Final Comment

SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit accepts and promotes the recommendations of the AIA, Palaeontological Letter of Exemption and Integrated HIA. No further Palaeontological Specialist studies are required for the proposed development. The recommendations provided in the Heritage Reports and the following conditions must be included in the EMP for project:

- Archaeological sites 103, 87, 89, 94, 95, 96, 98 and 99 must be avoided with a 30 m buffer. The sites must be clearly defined during all phases of development;
- A Conservation Management Plan (CMP) must be developed for the in-situ preservation of all significant identified heritage resources located within the development footprint;
- Should it not be possible to avoid the above sites, permit applications in terms of section 35 of the NHRA must be applied for by a qualified archaeologist in order for mitigation measures to be implemented. This must be completed should the proposed development receive a positive Environmental Authorization and must be complete prior to the construction phase;
- The final EIA and all appendices must be submitted to SAHRA and uploaded to the case file;
- 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/John Gribble 021 462 5402) must be alerted. If unmarked human burials are uncovered, the SAHRA Burial Grounds and Graves (BGG) Unit (Itumeleng Masiteng/Mimi Seetelo 012 320 8490), must be alerted immediately. A professional archaeologist or palaeontologist, depending on the nature of the finds, must be contracted as soon as possible to inspect the findings. If the newly discovered heritage resources prove to be of archaeological or palaeontological significance, a Phase 2 rescue operation may be required;
- Should the proposed development be granted an Environmental Authorisation, SAHRA must be informed and the decision letter must be uploaded to the case file.

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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

John Gribble
Manager: Maritime and Underwater Cultural Heritage Unit / Acting Manager: Archaeology, Palaeontology and Meteorites Unit
South African Heritage Resources Agency

ADMIN:

Direct URL to case: <http://www.sahra.org.za/node/369354>
(DEA, Ref: 14/12/16/3/3/2/960)

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.