AIA FOR THE PROPOSED VIRGINIA 1 SOLAR PARK EIA PROJECT, LEJWELEPUTSWA DISTRICT MUNICIPALITY, FREE STATE PROVINCE

Our Ref:



an agency of the Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

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CaseID: 17400

Date: Monday November 22, 2021

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Interim Comment

In terms of Section 38(3), 38(8) of the National Heritage Resources Act (Act 25 of 1999)

Attention: Neels Kruger

ARCHAEOLOGICAL IMPACT ASSESSMENT (AIA) ON PORTIONS OF THE FARM BLOMSKRAAL 216 FOR THE PROPOSED VIRGINIA 1 SOLAR PARK EIA PROJECT, LEJWELEPUTSWA DISTRICT MUNICIPALITY, FREE STATE PROVINCE

AGES Limpopo (Pty) Ltd was appointed by Ursa Energy (Pty) Ltd to undertake the Environemtal Authorisation (EA) Application for the establishment of a Photovoltaic (PV) Power Plant with a maximum generation capacity up to 100 MW and associated infrastructure and structures (Virginia 1 Solar Park) on the Farm Blomskraal 216 and Ventersburg Road, located within the Matjhabeng Local Municipality, Free State Province (14/12/16/3/3/2/2099).

The Final Scoping Report (FSR) was submitted in terms of the National Environmental Management Act (Act no. 107 of 1998) and the NEMA EIA Regulations 2014. The footprint (fenced area) of the proposed development is approximately 245 ha in extent.

Exigo Sustainability, Prof Bruce Rubidge and Dr Marc Van den Brandt were 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 1999 (NHRA).

Rubidge, B and Van den Brandt, M. 2021. Palaeontological Impact Assessment (PIA) Blomskraal 216, Lejweleputswa District Municipality, Free State Province (Virginia 1, Virginia 2, Virginia 3 Solar Parks, and Power Line Corridor)

The development area is underlain by the Adelaide Subgroup of the Lower Beaufort Group and Jurassic dolerite intrusions and overlain mostly by Quaternary alluvial deposits. Outcroppings of the Beaufort Group and the Quaternary alluvial deposits did not reveal any fossils and it is therefore recommended from a palaeontological perspective, that the proposed development should proceed. A Chance Find protocol is attached to be applied if fossils are exposed in the process of development.

Recommendations



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- The proposed development must be constrained to the flat, non-irrigated grassland, that covers the majority of the farm, currently serving as cattle and game farming land and the irrigated cropland in the northwest and northeast sections of the farm, currently growing maize/corn.
- No go areas due to palaeontological sensitivity includes the north-south Maselspruit River, the three east-west erosional gullies or tributary streams, west of the Maselspruit River and the south-east running erosional gully or tributary stream, east of the Maselspruit River.

Kruger, N. 2021. Ages Limpopo: Proposed Virginia 1, 2 & 3 Solar Parks EIA Project On Portions Of The Farm Blomskraal 216, Lejweleputswa District Municipality, Free State Province Archaeological Impact Assessment

A number of sites were identified during the site visit like Iron Age Farmer Representations (Exigo-VSP-IA01), historical period sites (Exigo-VSP-HP01, Exigo-VSP-HP02, Exigo-VSP-HP03, Exigo-VSP-HP04, Exigo-VSP-HP05, Exigo-VSP-HP06) of medium significance, and burial sites (Exigo-VSP-BP01, Exigo-VSP-BP02, Exigo-VSP-BP03) of high significance. Site Exigo-VSP-BP02 occurs some distance from the proposed project development areas and impact on the site is unlikely but potential indirect impacts to the site should be monitored.

Recommendations

- Sites Exigo-VSP-IA01, Exigo-VSP-HP01, Exigo-VSP-HP05, Exigo-VSP-HP06 must be monitored by an informed ECO in order to avoid long-term and indirect impacts on the sites or the destruction of previously undetected heritage remains.
- Sites Exigo-VSP-BP01 and Site Exigo-VSP-BP03 must be closely monitored by an informed ECO in order to detect direct or indirect impact on these sites. A conservation buffer of 50m should be observed around the sites and a Site Management Plan (SMP) should be implemented, detailing these conservation measures and indicating responsible parties in this regard. In addition, it is advisable to erect fences around the burial sites and to implement access control to the sites.
- As burials have been located on the project property, it is recommended that the EIA public
 participation and social consultative process address the possibility of further graves occurring in the
 project area.
- Considering the localised nature of heritage remains, the general monitoring of the development progress by an ECO or by the heritage specialist is recommended for all stages of the project. Should

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any subsurface palaeontological, archaeological or historical material, or burials be exposed during construction activities, all activities should be suspended and the archaeological specialist should be notified immediately.

- It should be stated that it is likely that further undetected archaeological remains might occur elsewhere in the Study Area along water sources and drainage lines, fountains and pans would often have attracted human activity in the past. Also, since Stone Age material seems to originate from below present soil surfaces in eroded areas, the larger landscape should be regarded as potentially sensitive in terms of possible subsurface deposits. Burials and historically significant structures dating to the Colonial Period occur on farms in the area and these resources should be avoided during all phases of construction and development, including the operational phases of the development.
- As Palaeontological remains occur where bedrock has been exposed, all geological features should be regarded as sensitive.
- Water sources such as drainage lines, fountains and pans would often have attracted human activity in the past. As Stone Age material occur in the larger landscape, such resources should be regarded as potentially sensitive in terms of possible subsurface deposits.

Interim Comment

The SAHRA Archaeology. Palaeontology, Meteorite (APM) Unit notes the Heritage Impact Assessment (HIA) and the Palaeontological Impact Assessment (PIA) along with the recommendations provided therein.

Further comments will be issued upon the submission of the draft Environmental Impact Assessment (DEIA).

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

Yours faithfully

Sityhilelo Ngcatsha

Ligeas W

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/587807