



an agency of the
Department of Arts and Culture

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South African Heritage Resources Agency | 111 Harrington Street | Cape Town
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CaseID: 21032

Date: Friday May 05, 2023
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Final Comment

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

Attention: Landscape Dynamics Environmental Consultants

Landscape Dynamics Environmental Consultants (Pty) Ltd was appointed by Mulilo Renewable Project Developments (Pty) Ltd to obtain Environmental Authorisation for the Mercury Cluster Solar PV Project and associated gridline infrastructure. The project will involve the development of five Photo Voltaic (PV) solar facilities on privately owned land in the vicinity of Viljoenskroon in the Free State Province, together with associated grid connections (power lines) to connect the solar farms to the existing Mercury Transmission Substation (MTS).

Zaaiplaats Solar PV1 (Pty) Ltd appointed Landscape Dynamics Environmental Consultants (Pty) Ltd to undertake the Environmental Authorisation (EA) Application for the construction of the 120MW Zaaiplaats Solar PV1 project on the Remainder of Zaaiplaats No 190 Remainder of Fraai Uitzicht No 189 Portion 2 of Fraai Uitzicht No 189, near Viljoenskroon in the Moqhaka Local Municipality, Free State Province.

The Draft Basic Assessment Report has been submitted in terms of the National Environmental Management Act (Act No. 107 of 1998) and the NEMA EIA Regulations, 2014 (as amended). The extent of the development area is approximately 281 hectares (ha).

CTS Heritage was 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).

Lavin, J. 2022. Heritage Screener: Proposed development of the Mercury Solar PV Cluster near Orkney in the Free State

Archaeological sites spanning the Earlier, Middle and Later Stone Age have been found in the region despite the extensive agricultural transformation of the area. There are Middle to Later Stone Age artefacts located within the region. The development region is underlain by the underlain by Quaternary deposits and the Malmani subgroup along with the Allanridge Formation. It is therefore recommended that an archaeological and palaeontological assessment of the proposed development area be undertaken.

Lavin, J. 2022. Heritage Impact Assessment In Terms Of Section 38(8) Of The NHRA For The Proposed



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Mercury Solar PV Cluster (North and South) near Orkney in the Free State

Isolated individual artefacts along with a site of a small concentration of artefacts were documented within the development footprint along with one isolated historic burial and a historic burial ground. It is extremely unlikely that fossils would be preserved in the overlying deep soils and sands of the Quaternary. In the northernmost section (Kleinfontein PV1 only north of the grid connection), there is a very small chance that fossils may occur in the shales below ground of the early Permian Vryheid Formation. The impact on the palaeontological heritage would be low, therefore, as far as the palaeontological is concerned, the projects should be authorised.

Lavin, J. 2022. Archaeological Specialist Study In Terms Of Section 38(8) Of The NHRA For A Proposed The Mercury Solar PV Cluster And Associated Grid Connection Infrastructure Near Orkney In The Free State

Six heritage resources were identified with the development footprint and three of those are of scientific value. Sites VK1 – VK3 are out of context individual artefacts and Site CVK100 along with CVK 101 are historic burial sites. Sites VK4 is a LSA site that consists of surface finds in addition to a possibility of insitu deposits in a dateable context.

Recommendations

- A no development buffer of 20m must be implemented around site VK4.
- A no-development buffer of 40m is recommended around the isolated burial (CVK100) and a no-development buffer of 100m is recommended around the burial ground (CVK101) to ensure that no impact takes place and that the sense of place associated with the burials is retained.
- Ongoing community access to these burials, as well as their conservation into the future, must be ensured. This can be managed through the development of a Heritage Management Plan for the burials to be implemented for the duration of the project.
- A pre-construction archaeological walkdown is recommended to identify any unmarked or hidden burials or significant archaeological resources within the development area.
- Should any buried archaeological resources or human remains or burials be uncovered during the course of development activities, work must cease in the vicinity of these finds. The South African Heritage Resources Agency (SAHRA) must be contacted immediately in order to determine an appropriate way forward.

Proposed development of the Mercury Solar PV Cluster for Zaaiplaats Solar PV1 near Orkney

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Bamford, M. 2022. Desktop Study: Palaeontological Impact Assessment The Proposed Mercury PV Cluster And Grid Connection, Viljoenskroon, Free State Province

The proposed development area is covered by Quaternary sands and alluvium the northernmost part of Zaaiplaats PV 1 and Biesiesfontein PV 1 are underlain by very highly sensitive rocks of the Vryheid Formation, however the study area has been disturbed by agricultural activities and there are no palaeo-pans or palaeo-springs visible in the satellite imagery. A Fossil Chance Find Protocol should be added to the EMPr.

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 Report and EMPr:

- 38(4)a – The SAHRA Development Application Unit (DAU) and the 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 conditions are recommended for the development:
- A Heritage Management Plan must be developed for the maintenance of the identified burial sites. In the event that Grave relocation is deemed feasible, the prescribed 60 days consultation process must be initiated to obtain consent for from the next of kin(s);
- 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/Natasha Higgitt 021 202 8660) 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/Ngqabutho 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:
- If heritage resources are uncovered during the course of the development, a professional archaeologist

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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 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 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

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

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

ADMIN:

Direct URL to case: <https://sahrissahra.org.za/node/615921>

Terms & Conditions:

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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.