Our Ref:



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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

Enquiries: Natasha Higgitt Date: Friday March 18, 2016

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Email: nhiggitt@sahra.org.za

CaseID: 8383

Final Comment

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

Attention: Gunstfontein Wind Farm (Pty) Ltd

The Oval

2nd Floor, Fernwood House

1 Oakdale Road

Project Name: Gunstfoated Wind Energy Facility, Northern Cape Province. Applicant: Gunstfontein Wind Farm (Pty) Ltd Proposed Activity: The development of a wind energy facility with a contracted capacity of up to 2000W and associated infrastructure including Wind turbines, concrete foundations to support the turbines, Cabling between the turbines, laydown areas, internal access roads, an on-site, buildings and dedicated areas for workshops, control systems, maintenance and storage with parking areas where required, and temporary construction compound and temporary site offices. Project Location: The proposed site is located ~20km south of Sutherland within the Karoo Hoogland Local Municipality, of the Namakwa District Municipality. The site development envelope includes the farms: Portion 1 of the farm Gunstfontein 131; Remainder of the farm Gunstfontein 131; Farm Boschmans Hoek 177, and Remainder of the farm Wolven Hoek 182.

Savannah Environmental (Pty) Ltd was appointed by Gunstfontein Wind Farm (Pty) Ltd to undertake an Environmental Impact Assessment (EIA) process for the proposed Gunstfontein Wind Energy Facility (WEF). A Draft EIA Report was completed in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) and the Environmental Impact Assessment (EIA) Regulations 2014. The proposed project will consist of 68 wind turbines and associated infrastructure i.e. 132kV substation, laydown yards, workshop area and offices, access roads, temporary construction camp, underground cables and an overhead transmission line. The project area covers four farm portions, Portion 1 of Gunstfontein 131, the remainder of Gunstfontein 131, Boschmans Hoek 177 and the remainder of Wolven Hoek 182 farm near Sutherland, Northern Cape Province. Infrastructure will only be constructed on the farm Gunstfontein 131.

Savannah contracted Jaco van der Walt and John Almond to undertake the Heritage and Palaeontological Impact Assessments for the project.

Van der Walt, 2016. Archaeological Impact Assessment Report for the Proposed Gunstfontein Wind Energy Facility, Northern Cape.

A total of eight heritage resources were identified. These included a rock art site, a stone cairn (possible grave site), farm labourer house ruins and five Anglo Boer War fortifications. Of these heritage resources, one of the



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Anglo Boer War fortifications (feature 5) would be indirectly impacted by the proposed development. Feature 5 is located 20 m from a proposed access road and 48 m from wind turbine 014. The remaining heritage resources will not be directly impacted by the proposed development.

Recommendations provided in the report are as follows:

- The position of the wind turbine 14 and the proposed access road must be micro adjusted to ensure a buffer of 60 m is maintained from Feature 5. The site must be demarcated to prevent accidental damage during the construction phase;
- The remaining identified heritage resources must be marked on development plans and preserved in-situ;
- The responsible Environmental Control Officer (ECO) must ensure that identified heritage resources are protected from damage and that no artefacts are collected and removed from the sites;
- · Any deviation from the current footprint must be assessed by an archaeologist; and
- If during construction, any heritage resources are uncovered; all work must cease at the site of the find and a qualified archaeologist must be contacted to assess the finds.

Almond, 2015. Palaeontological Heritage Assessment: Combined Desktop and Field-Based Study for the Proposed Gunstfontein Wind Energy Facility Near Sutherland, Karoo Hoogland Local Municipality, Northern Cape Province.

The project area is underlain by the Lower Beaufort Group and the significant Abrahamskraal Formation, known for diverse Permian vertebrate fauna, most notably therapsid fossils and in addition fossilised plant materials, such as *Glossopteris* flora. Five occurrences of uranium ore deposits were recorded in the proposed development area. Fossils are often associated with such deposits and may be located in close proximity. Vertebrate fossils identified within the proposed development area include reworked bones and disarticulated fish scales within ferruginised channel lag conglomerates. Low-diversity trace fossil assemblages and fragmentary plant fossil remains including horsetail ferns, *Glossopteris* leaf impressions and woody plant material were also identified within the project area.

The location of these resources is unclear as no map providing the location of the identified palaeontological sites in relation to the proposed development was supplied, with the exception of the uranium ore deposits.

Recommendations provided in the report include the following:

• A 30 m buffer zone around the uranium ore deposits and the concentration of woody plant fossils (Loc

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114) must be maintained from project activities; and

Bedrock excavations deeper than 1 m should be monitored for fossil remains by the responsible ECO.
Should any fossil material be uncovered, the excavations should be halted and the find must be safeguarded by the ECO and be reported to SAHRA.

Final Comment

It must be noted that the Visual Impact Assessment conducted for the proposed development identified a high visual impact to the R354 Upper Plateau and a medium impact to the R354/R356 Buffels Valley. With regards to several other nearby Wind Farm developments, this road has been previously identified as a scenic route. Recommendations with regards to the impact on this road have included that no turbines must be constructed within 3 km of the R354 (See Case ID: 473). The R354/R356 adjacent to the proposed project area contains the Verlatenkloof Pass which was designed and built by Thomas Baines (http://mountainpassessouthafrica.co.za/find-a-pass/northern-cape/item/389-verlatenkloof-pass.html) and is marketed as a scenic tourist route. In terms of section 3 (3) h of the National Heritage Resources Act, 1999 (NHRA), the road can be considered as a heritage place with a strong association with the life or work of a person of importance in the history of South Africa i.e. Thomas Baines.

Regarding archaeological and palaeontological heritage resources, the SAHRA Archaeology, Palaeontology and Meteorites Unit accepts the submitted Integrated AIA and PIA and their respective recommendations. The following additional conditions must be adhered to and must form part of the final EIA and Environmental Management Programme (EMPr) for the project:

- A bufferzone of 60 m must be maintained from all identified heritage and palaeontological resources. Micro adjustment of all relevant proposed infrastructure must occur in order to achieve this;
- The stone cairn/possible grave (Feature 4), should be demarcated and fenced off with a perimeter buffer zone of 60m;
- No turbines may be located within three (3) kilometers from the R354/R356. This is in line with comments issued on surrounding Wind Farm projects;
- A Conservation Management Plan must be developed to ensure the on-going conservation of identified heritage resources during the life of the development. The report must include a map of all identified heritage and palaeontological resources with buffer zones of 60 m in relation to the proposed development. This report must be submitted to SAHRA if the EA has been approved and must form part of the final EMPr; and
- On-site monitoring of excavations deeper than 1 m must be conducted by a qualified palaeontologist

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during the construction phase of any infrastructure located within the Abrahamskraal formation. Site monitoring reports must be submitted to SAHRA upon completion.

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. If unmarked human burials are uncovered, the SAHRA Burial Grounds and Graves (BGG) Unit (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 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

SAHRA Head Archaeologist (Acting)

South African Heritage Resources Agency

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ADMIN:

Direct URL to case: http://www.sahra.org.za/node/329604

(DEA, Ref: 14/12/16/3/3/2/826)

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.