

Our Ref:



an agency of the
Department of Arts and Culture

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Enquiries: Natasha Higgitt
Tel: 021 462 4502
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CaseID: 11967

Date: Thursday May 16, 2019
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Final Comment

In terms of Section 35 of the National Heritage Resources Act (Act 25 of 1999)

Attention: Ms Andrea van Gensen
Eskom Holdings SOC Ltd
Eskom Centre
120 Henry Street
P.O.Box 356
Bloemfontein

Proposed upgrading of the 66kv network to 132kv network in the Hotazel, Kuruman And Kathu area, including the construction of new substation and switching station and upgrading of existing substations, Northern Cape Province

Thank you for informing SAHRA about the current construction of the 66kV Powerline near Kuruman, Northern Cape Province. It is further noted that the Letter issued on the 15/12/2017 stated that a Palaeontological Walk-Down should have been conducted before construction commenced.

In the letter submitted by Zitholele Consulting on the 19/01/2018, dated 18/01/2018, details have been provided regarding possible mitigations measures and the way forward discussed telephonically with the SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit Case Officer Ms Natasha Higgitt on the 17/01/2018.

These mitigation measures include:

- Immediate appointment of a qualified palaeontologist to monitor current excavations associated with the construction of the powerline pylons;
- The appointed palaeontologist would also undertake a walk-down of the remaining powerline route;
- A report detailing the findings of the construction monitoring and walk-down will be uploaded to SAHRIS for SAHRA assessment upon completion.

In a Letter issued on 08/02/2018, SAHRA accepted the above recommendations and provided additional conditions such as:

- No further excavations should occur in areas where the palaeontological walk down has not yet been



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conducted;

- The report pertaining to the monitoring of current excavations must be submitted as soon as possible.

Eskom was reminded that the following conditions in the Letter issued on 15/12/2017 still apply and must be addressed as soon as possible:

- A no-go buffer zone of 30 m should be demarcated around the identified heritage sites, with monitoring procedures in place. Monitoring reports must be submitted to SAHRA upon completion of the construction phase;
- With regards to Site K12, the occupied/in use historical structures, and the Provincial Heritage Site, the Northern Cape Provincial Heritage Resources Authority must be contacted to provide comments/decision on these sites;
- 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 (Thingahangwi Tshivhase/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 subject to permits issued by SAHRA.

Since the issuing of the previous comment on 08/02/2018, a Palaeontological Walk down report has been submitted.

Heidi, F. 2018. Palaeontological Impact Assessment Phase 1 Field Study for the Proposed upgrading of the 66kV network to a 132kV network in the Hotazel, Kuruman and Kathu area, Northern Cape Province.

The development is currently taking place on the Kalahari Group with underlying Griqualand West Basin rocks of the Transvaal Supergroup. The Griqualand West rocks are moderately sensitive in terms of palaeontological remains, while the Kalahari Group is highly sensitive.

No fossils were identified as part of the walk-through. No map of the area surveyed with accompanying track logs was provided.



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A recommendation included in the report notes that the EMP be updated to include the involvement of a palaeontologist/archaeozoologist during digging and excavation phase of the development and the Environmental Control Officer (ECO) to visit the site bi-weekly during construction and keep a photographic record.

In an interim Comment issued on the 21/05/2018, SAHRA requested that the Palaeontological Walk-down be revised to clearly indicate through maps with the route of the powerlines and the areas that were surveyed, either by highlighting the relevant sections or providing the track logs of the areas surveyed. Additionally, the excavated powerline route that has been monitored must be shown on a map that will also show the sections that still require monitoring to be conducted.

Fourie, H. 2018. Palaeontological Impact Assessment: Addendum Report.

The Addendum Report provides details regarding areas of the powerline that were monitored and surveyed, as well as additional information on the excavations that occur prior to monitoring. Several sections were not surveyed as construction had yet to occur in these areas or had occurred and had been cleared of excavated material.

In an Interim Comment issued on the 07/09/2018, SAHRA accepted the submitted report and awaited the monitoring reports (from either the ECO or appointed palaeontologist) of the areas that require monitoring as per the map on page 2 (red lines) and on page 5 of the report (i.e. SS footprint monitoring required highlighted in pink, and servitude monitoring required highlighted in yellow). These areas must be surveyed prior to construction.

Since the issuing of the Interim Comment, a Final Palaeontological Impact Assessment (PIA) Field Survey report has been submitted to the application.

Almond, J. E. 2019. Palaeontological heritage: combined desktop and field-based assessment of the proposed upgrading of the 66kV network to a 132kV network between Hotazel, Kuruman and Kathu, Northern Cape.

Several occurrences of well-preserved biosedimentary structures including a range of different types of stromatolites were identified within excellent exposures of limestones and dolomites of the Campbell Rand Subgroup. These occurrences, however, are located outside of the project footprint and will not be impacted. Stromatolite-rich Campbell Rand Subgroup carbonates lie at or near-surface within several sectors of the

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distribution line corridor, notably close to Moffat Substation on the outskirts of Kuruman. However, due to extensive weathering, well preserved stromatolite beds are uncommon.

The existing powerline servitude and substation areas are generally disturbed as the surface, with occasional float blocks of stromatolitic carbonates have been recorded near the Moffat Substation that have been damaged by vehicle or construction activities.

Excavations for the 132KV monopoles will mainly impact unfossiliferous Late Caenozoic superficial sediments and it is concluded that the study areas are generally of low palaeontological sensitivity and the impact of the proposed development will be low. None of the sparse fossil occurrences recorded within the development footprint is considered to be especially conservation worthy, and no specialist palaeontological monitoring or mitigation is recommended for this electrical infrastructure project.

Recommendations provided in the report include the following:

- Should substantial fossil remains –such as well-preserved stromatolitic beds, mammalian bones and teeth -be encountered at surface or exposed during the construction phase, the ECO should safeguard these, preferably in situ. They should then alert the South African Heritage Resources Agency as soon as possible. This is to ensure that appropriate action (i.e. recording, sampling or collection of fossils, recording of relevant geological data) can be taken by a professional palaeontologist at the proponent's expense;
- A Chance Fossil Finds Procedure is tabulated in Appendix 2;
- These recommendations must be incorporated in the Environmental Management Programme for the 132 kV electrical infrastructure project.

In a cover letter associated with the report, it is noted that Dr Almond provided palaeontological training and environmental awareness to the appointed ECO and other relevant staff. It is furthermore noted that the ECO will be submitting monitoring reports to SAHRA going forward. Dr Almond has additionally been appointed to provide on-site assessment of potential palaeontological finds on an ad-hoc basis for the construction period.

Final Comment

The SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit accepts the submitted report with the recommendations by the specialist and awaits the monitoring reports from the ECO. The previous comments issued on the case on the 15/12/2017 and 08/02/2018 with the exception of the conditions relating to the

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palaeontological studies still apply. Please see these conditions below:

- *A no-go buffer zone of 30 m should be demarcated around the identified heritage sites, with monitoring procedures in place. Monitoring reports must be submitted to SAHRA upon completion of the construction phase;*
- *With regards to Site K12, the occupied/in use historical structures, and the Provincial Heritage Site, the Northern Cape Provincial Heritage Resources Authority must be contacted to provide comments/decision on these sites;*
- *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 (Thingahangwi Tshivhase/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 subject to permits issued by SAHRA.*

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

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

ADMIN:

Direct URL to case: <http://www.sahra.org.za/node/449493>
(DEA, Ref: 14/12/16/3/3/1/1376)

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.