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Enquiries: Ragna Redelstorff Date: Friday February 22, 2019

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# **Final Comment**

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

Attention: NGT Consulting (Pty) Ltd

No. 2 Windsor Place Princesses Avenue Randburg 2194

# Heritage Impact Assessment (HIA) for the proposed Sorata-Witsieshoek 132 Power Transmission Line, in Phutadithjaba, Free State Province

The proposed project entails the construction of a new 30km long 132kV distribution powerline from the existing Sorata Switching Station to Witsies Substation, located within Phuthaditjhaba in the Free State Province. Two different route options are suggested in the BAR. An HIA was submitted with the application. In an interim comment from 20 July 2018, SAHRA reviewed the HIA and requested an amendment thereof, to include more detailed maps that mark the precise locations of each of the identified heritage sites, the tracklog from the survey and detailed mapping for all the stone walled sites. In addition, SAHRA requested a Heritage Management Plan (HMP) and monitoring plans to be developed and submitted to SAHRA once the layout is finalised, as well as a field-based Palaeontological Impact Assessment (PIA). A PIA was uploaded and commented on by SAHRA in an interim comment dated 21/11/2018. An addendum to the original HIA was subsequently submitted in place of the outstanding amended HIA. CTS amended the HIA in consultation with NGT, the consultant of the original HIA.

GROENEWALD, G. 2017. PHASE 1 PALAEONTOLOGICAL ASSESSMENT AND "CHANCE FIND PROTOCOL" FOR THE PROPOSED SORATA –WITSIESHOEK (ESKOM HOLDINGS (PTY) LTD) POWER LINE CONSTRUCTION, MALUTI-A-PHOFUNG LOCAL MUNICIPALITY, THABO MOFUTSANYANE DISTRICT MUNICIPALITY, FREE STATE PROVINCE.

The proposed area is underlain by sedimentary rocks of the Normandien Formation (Adelaide Subgroup), the Katberg and Burgersdorp Formations (Tarkastad Subgroup, Beaufort Group) as well as unfossiliferous igneous dolerite of the Drakensberg Group (Karoo Supergroup). They are mantled by Quaternary alluvium.

Significant plant, vertebrate and invertebrate trace fossils are known to occur in the study area and a survey



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revealed the presence of highly significant trackways of fossils. The potential for finding significant fossils in the Normandien, Katberg and Burgersdorp Formations is very high, and moderate in the Quaternary alluvium.

#### Recommendations:

The EAP and ECO must be informed of the very high and moderate Palaeontological in the respective sections of the development A short information session must be arranged to inform the site managers and ECO of the fossils that might be expected.

A professional palaeontologist must be appointed to inspect the site during the very first week of construction and then at least once a month during the on-going weeks of excavation for the infrastructure and a "Chance Find Protocol" document (CFP, included with this report) must be updated on a monthly basis for the duration of the excavation activities.

If fossils are recorded, the appointed palaeontologist must inspect all areas where excavation of deeper than 1,5m is made into sediments of Normandien, Katberg and Burgersdorp Formations.

These recommendations must be included in the EMPr of this project.

## LAVIN, J. 2018. ADDENDUM TO HIA SORATA-WITSIESHOEK 132KV LINE.

The addendum lists the sites that were identified in the original HIA and provided gradings thereof based on the original author's significance ratings. A total of 29 sites had been identified within three proposed corridors, of which three sites occur in Corridor 1, eleven sites in Corridor 2 and 16 sites in Corridor 3.

### Corridor 1:

- 1 historical structure of medium significance (Grade IIIB) (QWAC1-1)
- 1 historical structure of low significance (Grade IIIC) (QWAC1-3)
- 1 graveyard of high significance (Grade IIIA) (QWAC1-5)



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#### Corridor 2:

- 5 historical structures of medium significance (Grade IIIB) (QWAC2-1; QWAC2-3; QWAC2-4; QWAC2-6; QWAC2-7)
- 4 historical structures of high significance (Grade IIIA) (QWAC2-2; QWAC2-9 may include graves; QWAC2-10; QWAC2-11)
- 1 historical structure of low significance (Grade IIIC) (QWAC2-5)
- 1 graveyard of high significance (Grade IIIA) (QWAC2-12)

Corridor 3: It must be noted the addendum lists the sites incorrectly as QWAC1-# instead of QWAC3-#; however, using the original HIA the gradings were adjusted as follows:

- 8 historical structures of medium significance (Grade IIIB) (QWAC3-1; QWAC3-2; QWAC3-3; QWAC3-4; QWAC3-5; QWAC3-9a & b; QWAC3-12)
- 5 historical structures of high significance (Grade IIIA) (QWAC3-7 includes 3 graves; QWAC3-8 includes 4 graves; QWAC3-11; QWAC3-14; QWAC3-15). It must be noted that CTS gave QWAC3-14 (in CTS list as QWAC1-14) a low significance grading (Grade IIIC); however, as CTS had not done a field assessment as opposed to the original HIA's author the significance "high" given by the author of the original HIA remains.
- 1 possible graveyard of high significance (Grade IIIA) (QWAC3-10)
- 1 scatter of ceramic fragments of low significance (Grade IIIC) (QWAC3-13)
- 1 farm fence of low significance (NCW) (QWAC3-16)

Sites QWAC1-5 and QWAC2-12 are the same site as Corridors 1 and 2 coincide on the same servitude. Corridor 1 is the least heritage sensitive corridor; corridor 3 the most sensitive one. It is recommended that the graveyard sites be fenced off and a cemetery management plan be developed to manage this site prior, during and post the construction phase. The other identified heritage sites should be avoided and a monitoring plan be developed.

It is noted that tracklogs from the field assessment done in 2013 are not available anymore. Detailed maps of the stone walled sites in relation to the development were provided by CTS.

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The following recommendations were made:

- Corridor 1/2 (i.e. combination of Corridor 1 and Corridor 2) is the preferred and recommended corridor from a heritage management point of view. Meaning that the power line will start at Sorata Substation using Corridor 2 and where Corridor 2 and Corridor 1 splits (i.e. at GPS Coordinates S28o 20' 22.3" E028o 52' 43.6"), the line will follow Corridor 1 up to where it rejoins Corridor 2 again (i.e. at GPS Coordinates: S28o 25' 15.5" E028o 49' 46.6") until it reached Witsieshoek Substation (Figure 106);
- The second alternative to Corridor 1/2 is Corridor 2. The reason for this preference is that a combination of Corridor 2 and Corridor 3, if Corridor 3 was to be considered as second alternative corridor based on the fact that it has the second least heritage sensitive and high impact significance sites as compared to Corridor 2, will result in an increased number of heritage sensitive and high impact significant sites. Corridor 3 has more sensitive and impact significant sites towards Witsieshoek Substation while Corridor 2 has more sensitive and high impact significant sites north-east of where it splits to form Corridor 3 on the mountainous area towards Wilge River. And Corridor 2 is less, but still highly sensitive toward Witsieshoek Substation. Therefore, a combination of Corridor 2 and Corridor 3 is not advisable as it would increase the impact significance levels of the power line on heritage resources. Thus, the choice to recommend Corridor 2, but with alternation or deviations from the current proposed servitude.
- A special recommendation is made about QWAC2-12. This site should be fenced off from the rest of construction activities during the construction phase of the project and a cemetery management plan should be developed to manage this site prior, during and post the construction phase of the project.

In addition, it is recommended that a Heritage Management Plan (HMP) be drafted once the final alignment is approved to ensure the long-term management of the heritage resourcesidentified that will be impacted by the final alignment. This HMP must focus on the conservation of the significant heritageresources identified within the selected alignment. Detailed mapping of the significant stone-walled sites that fall within the selected alignment must form part of this HMP.

## **Final comment**

The SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit has reviewed the PIA and endorses the

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recommendations therein in a previous comment. The addendum of the HIA is endorsed within this comment and the recommendations listed in the addendum as well as the original HIA must strictly be adhered to and must form part of the EMP. The recommendations form the conditions of this final comment. As long as they are adhered to, the SAHRA APM Unit has no objections against the development.

For comments on the built environment, please contact the Provincial Heritage Authority Heritage Free State (Ms. Loudine Philip: <a href="mailto:loudinep@gmail.com">loudinep@gmail.com</a>).

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

Yours faithfully

Ragna Redelstorff

Heritage Officer

South African Heritage Resources Agency

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/405420

(DEA, Ref: 14/12/16/3/3/1/795)

# Sorata-Witsieshoek 132kV Line

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#### 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.