

31 May 2021

Mr G, Raath Savannah Environmental (Pty) Ltd Email: <u>gideon@savannahsa.com</u>

Dear Mr Raath,

RE: DESKTOP ASSESSMENT OF IMPACTS TO HERITAGE RESOURCES ANTICIPATED BY THE PROPOSED DEVELOPMENT OF THE NYALA OVERHEAD LINE, THE ELAND ELECTRICAL LINE AND PROPOSED ACCESS ROAD, NEAR WELKOM, FREE STATE PROVINCE

In February and April 2020, CTS Heritage and Dr M. Bamford drafted updated palaeontological impact assessments (PIA's) for the proposed development of the Eland Solar PV and substation, the Nyala Solar PV and substation as well as the Rietpan Power Connection and switching substation. The Heritage Impact Assessment for these proposed developments was completed by HCAC Heritage Consultants (Van der Walt, 2020). Subsequently, it has been determined that the PIAs drafted and the HIA completed do not cover the full extent of the proposed development.

The Nyala Overhead Line, the Eland Electrical Line and a proposed access road fall outside of the areas previously assessed for heritage impacts by van der Walt (2020) and Lavin and Bamford (2020). This includes an ~2km section of the overhead power line which follows the routing of the regional road and which was therefore most likely previously disturbed by human activity. In addition, the access road portion considered now falls within the existing Harmony Gold mining property and was therefore also likely subject to historical disturbance.

This letter is drafted in order to provide a desktop assessment of the possible impacts to heritage resources anticipated by the additional infrastructure. This letter must be read in conjunction with the HIA completed by HCAC (van der Walt 2020) and Lavin and Bamford (2020).

Potential Impacts to Archaeological Heritage (van der Walt, 2020)

It is important to note that the areas proposed for the additional infrastructure were not assessed by van der Walt (2020) in his field assessment. However, we can use the results of the HCAC HIA (2020) to infer likely impacts to archaeological heritage.



Van der Walt (2020) noted that "No standing buildings occur in the study area and no heritage sites or artefacts of significance were recorded. The lack of Stone Age material can be attributed to the local geology that consist mostly of quaternary sands with no raw material suitable for knapping and the study area is located outside of the known distribution of Iron Age Sites in this part of the Free State." Other than the possible location of a cemetery in the south western portion of the Nyala PV area. This possible cemetery location is situated well away from the proposed additional infrastructure.

Van der Walt (2020) concludes that "The chances of impacting unknown archaeological sites in the study area is considered to be negligible." Van der Walt (2020) further notes that "The lack of surface indicators of heritage resources in these areas concurs with similar finds in the surrounding area [Dreyer (2004), Dreyer (2008), Coetzee (2008) and Van der Walt (2013)]." This finding can therefore be extended to the areas proposed for the additional infrastructure with some confidence.

Potential Impacts to Palaeontological Heritage (Lavin and Bamford, 2020)

It is important to note that the areas proposed for the additional infrastructure were not assessed in the PIAs completed previously, however, we can use the results of the PIAs to infer likely impacts to palaeontological heritage.

According to the geological map (Figure 2), the proposed sites for development fall within Quaternary Aeolian sands (Qs). The Quaternary Sands in the area are relatively recent deposits. These sediments have been reworked over the last 2 Ma. From a palaeontological standpoint these sediments are of low concern. However, in close proximity to the proposed infrastructure development are sediments of the Permian Volksrust Formation which could contain coal deposits.

The poor quality coal deposits of the Volksrust Formation in this area are the most palaeontological sensitive sediments within close proximity to the proposed development area. These sediments are located well below the surface, and are overlaid with aeolian Quaternary sand sediments. The proposed infrastructure consists of a 44kV single -circuit power line, substation and two step-up facilities to connect the authorised Nyala PV Solar Facility to the Eskom grid. This infrastructure will have foundations of a few meters depth only, and as per the recommendations included in Bamford (2015), it is very unlikely that the project will impact on any significant palaeontological material.



Based on the information available, it is very unlikely that significant heritage resources will be impacted by the additional infrastructure. However, the following recommendations are made:

- Should any palaeontological remains be found during construction activities, work must immediately stop in that area and the ECO must be informed. The attached Chance Finds Procedure must be implemented.
- The ECO must inform the South African Heritage Resource Agency (SAHRA) and contact a palaeontologist, to assess the importance of these finds and rescue them if necessary (with the relevant SAHRA permit). No work may be resumed in this area without the permission from the ECO and SAHRA

Please feel free to contact me should you have any further questions or concerns in this regard.

Yours sincerely

fami

Jenna Lavin



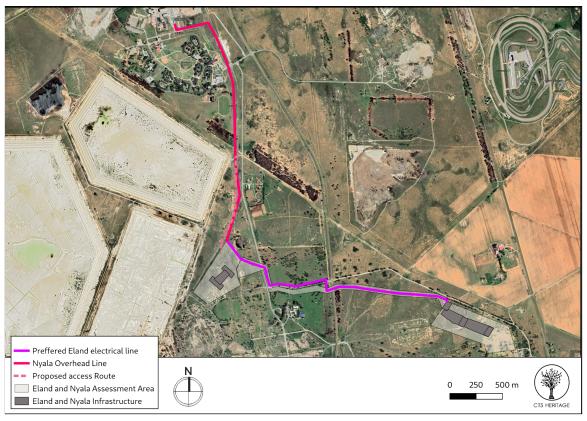


Figure 1: Area proposed for the additional infrastructure

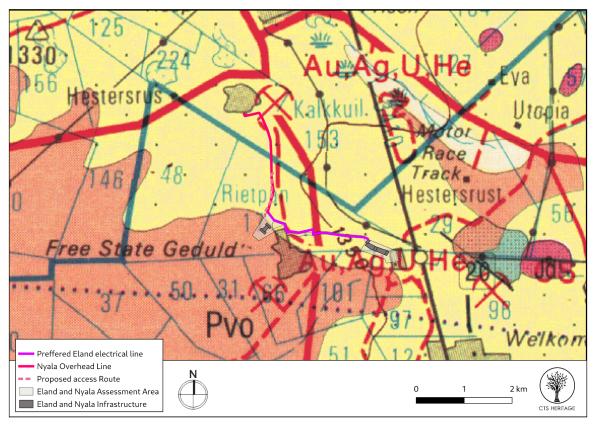


Figure 2: Geology underlying the area proposed for the additional infrastructure