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**Date:** 30 July 2024  
**Ref:** Khoe WEF change

The Great Westerford  
240 Main Road  
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Cape Town

**Attention: Ms. Sadiya Salie**

Dear Sadiya

**SPECIALIST OPINION – ADDENDUM TO NOISE IMPACT ASSESSMENT: CHANGES TO THE LAYOUT OF THE FE KHOE WIND ENERGY FACILITY**

The above-mentioned issue as well as the Environmental Noise Impact Assessment report, ref.: ERM-KWEF/ENIA/202405-Rev 2 dated May 2024 is of relevance.

**Introduction and Background**

Enviro-Acoustic Research cc was commissioned by Environmental Resources Management South Africa (Pty) Ltd (the EAP) to identify and assess the potential noise impact from the construction, operation and decommissioning of the proposed FE Hugo Wind Energy Facility (WEF) and associated infrastructure south-east of De Doorns, Western Cape province on the surrounding soundscape.

This study considers the potential noise impact on the surrounding environment due to the construction, operational and future decommissioning activities associated with the Khoe WEF. It makes use of conceptual scenarios to develop noise propagation models to estimate potential noise levels. It was determined that the potential noise impacts, without mitigation, would be:

- of a **medium significance** for the daytime construction of the access roads (access roads are far from verified NSR). While this significance may be due to the strict EIA criteria considered, mitigation measures are available that could reduce this significance to **low**;
- of a **medium significance** for the daytime construction traffic passing NSR (access roads are far from verified NSR). While this significance may be due to the strict EIA criteria considered, mitigation measures are available that could reduce this significance to **low**;
- of a **low significance** for the daytime construction activities (hard standing areas, excavation and concreting of foundations and the erecting of the WTG and other infrastructure) at the Khoe WEF;
- of a **medium significance** for the night-time construction activities (such as the pouring of concrete, erecting the WTG) at the Khoe WEF. Mitigation is available to reduce the significance of the noise impact to **low**;
- of a **low significance** for the daytime operational activities at the Khoe WEF;
- of a **medium significance** for operational activities (noises from wind turbines) at the Khoe WEF when considering the worst-case PWL. Mitigation measures are available and were recommended that would reduce this significance to **low**.

There is no potential for a cumulative noise impact.

The proposed layout (turbine placement) was considered acceptable from a noise perspective (subject total noise levels are less than 45 dBA at all NSR locations used for residential purposes). There is no restriction in the WTG that the applicant could use, though the applicant must monitor noise levels, the response of receptors to the noise levels and ensure that night-time noise levels are less than 45 dBA at all receptors (structures used for permanent residential purposes).

**Potential Changes to WTG Layout**

Considering the feedback and findings of various specialist studies, the client updated the layout, only eliminating a number of WTG. The proposed layout is depicted in Figure 2. Considering the latest layout:

- There are two less WTG within 2,500m from NSRs K-3 and K-4 which will result in a slight reduction in noise levels at these NSR. This will not change the findings of the noise report; and
- There is one less WTG within 2,500m from NSRs K-6 to K-11 as well as K-15, though WTG 19 was moved approximately 90m close to these NSR. The removal of the one WTG will definitely decrease the noise levels, though the relocation of WTG19 will increase noise levels. This change was modelled indicating that these changes will result in similar noise levels at these NSR. This will not change the findings of the noise report.

Therefore, the changes in the layout are minor in terms of acoustics, and while it may result in a slight reduction in noise levels at some NSR, the changes in noise levels will be minor and will not result in a change of the findings or recommendations of the May 2024 Noise Study. No additional acoustic studies would be required and the findings and recommendations of the May 2024 Noise Study for FE Khoe WEF should remain as recommended, including the recommended mitigation measures.

Should you require any further details, or have any additional questions, please do not hesitate to call me on the above numbers.

Yours Faithfully,

  
Morné de Jager  
Enviro-Acoustic Research cc

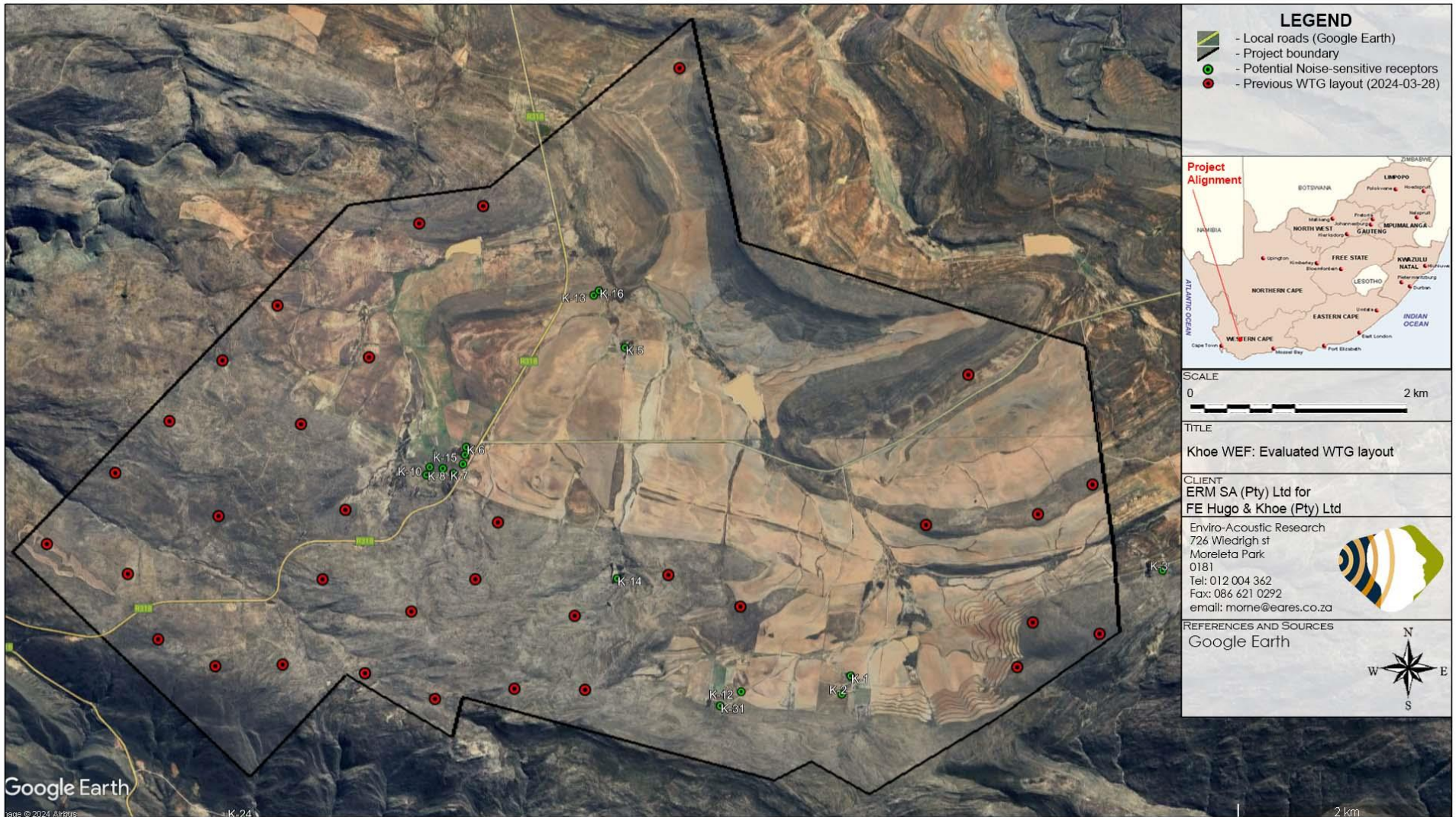


Figure 1: Old layout as evaluated in the May 2024 Noise Impact Assessment



Figure 2: New proposed WTG layout (2024 – 05 – 27)