

***NATURA VIVA cc***  
***Palaeontological Impact Assessments & Heritage Management,***  
***Natural History Education, Tourism, Research***

**Attn: Ms Caroline Evans**  
**EOH Coastal & Environmental Services**  
**67 African Street**  
**Grahamstown, RSA**

**Date: 3 October 2019**

**PALAEONTOLOGICAL HERITAGE RESOURCES COMMENT:**

**Umsobomvu 1 Wind Energy Facility near Middelburg, Pixley ka Seme & Chris  
Hani District Municipalities, Northern and Eastern Cape**  
**(DEA Reference Number: 14/12/16/3/3/1/2040)**

Dear Ms Evans,

An initial combined desktop and field-based palaeontological heritage assessment of the original Umsobomvu Wind Energy Facility (WEF) near Middelburg, Eastern Cape, was submitted by Almond (2015). A palaeontological assessment for the revised Umsobomvu 1 WEF was subsequently submitted by Almond (2018). This second report, which addressed the specific infrastructure for the Umsobomvu 1 WEF, concluded that:

- Due to (1) the general scarcity of fossil remains, especially in the upland areas where the majority of the infrastructure will be situated, (2) the moderately high levels of near-surface bedrock weathering and baking of sediments by dolerite intrusions, as well as (3) the extensive superficial sediment cover observed within most of the study area, the overall impact significance of the construction phase of the proposed alternative energy project is assessed as LOW.
- Given the low impact significance of the proposed Umsobomvu 1 WEF near Middelburg as far as palaeontological heritage is concerned, no further specialist palaeontological heritage studies or mitigation are considered necessary for this project, pending the potential discovery or exposure of substantial new fossil remains during development. There are no objections on palaeontological heritage grounds to authorization of the amended WEF development.

**This letter is to confirm that these conclusions also apply to the revised infrastructure for the Umsobomvu 1 WEF, as depicted in the latest kmz files provided by EOH and addressed in the most recent report by Almond (2018).** These infrastructural developments include the following components:

- Creating a new access point and upgrading existing jeep tracks and farm roads of approximately 5.7 km in length to create new access road routes. These roads will be expanded to 12 m in

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width during the construction phase and rehabilitated to 5 m in width during the operational phase;

- The construction of two (2) concrete batching plants, temporary laydown areas and construction areas. Each will consist of a concrete and/or steel batching plant of approximately 11 250 m<sup>2</sup>, a temporary laydown area of approximately 22 500 m<sup>2</sup> and a construction compound area of approximately 11 250 m<sup>2</sup>. The combined total area to be cleared for these two (2) concrete batching plants, temporary laydown areas and construction areas is approximately 90 000 m<sup>2</sup> (9 ha);
- The construction of internal overhead lines with a 33 kV switching station of approximately 30 m x 30 m. The total area to be cleared for the switching station is approximately 900 m<sup>2</sup> (0.09 ha); and
- The construction of a collector substation of up to 100 m x 100 m (1 ha).

*John E. Almond*

**Dr John E. Almond**  
**Palaeontologist**  
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#### **KEY REFERENCES**

ALMOND, J.E. 2015. Umsobomvu Wind Energy Facility near Middelburg, Pixley ka Seme & Chris Hani District Municipalities, Northern and Eastern Cape. Palaeontological specialist assessment: combined desktop and field-based study, 77 pp. Natura Viva cc, Cape Town.

ALMOND 2018. Umsobomvu 1 Wind Energy Facility near Middelburg, Pixley ka Seme & Chris Hani District Municipalities, Northern and Eastern Cape. Palaeontological specialist assessment: combined desktop and field-based study, 79 pp. Natura Viva cc, Cape Town.