

**AIA FOR THE PROPOSED BERG-EN-DAL MONUMENT ENTRANCE
ALTERATION PROJECT AS PART OF THE N4 UPGRADE, MPUMALANGA
PROVINCE**

Our Ref: 14314



an agency of the
Department of Arts and Culture

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South African Heritage Resources Agency | 111 Harrington Street | Cape Town
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Enquiries: Nokukhanya Khumalo

Tel: 021 462 4502

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CaseID: 14314

Date: Friday July 31, 2020

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Final Comment

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

Attention: Mr Neels Kruger

Exigo Sustainability

Eulophia Corner Building 1

38 Gen. Van Reyneveld St

Perseuor Park

ARCHAEOLOGICAL IMPACT ASSESSMENT (AIA) ON BERG-EN-DAL 378JT FOR THE PROPOSED BERG-EN-DAL MONUMENT ENTRANCE ALTERATION PROJECT AS PART OF THE N4 UPGRADE, NKANGALA DISTRICT MUNICIPALITY, MPUMALANGA PROVINCE

WHO Construction (Pty) Ltd have been appointed to alter the entrance to the Berg-en-Dal Monument by relocating it away from the N4 road and the entrances current location. They are proposing to relocate it due to the widening of the N4 between Belfast and the Machadadorp tool plaza. The Berg-en-Dal monument entrance is located on the farm Berg-en-Dal 378 JT, in local municipality of the Mpumalanga Province.

Exigo Sustainability (Pty) Ltd have submitted to SAHRA an approved EMPr and the HIA submitted for the Belfast to Machadadorp N4 road upgrades. As well as a new HIA from the Exigo's in-house heritage specialist for the alteration of the entrance to the Berg-en-Dal Monument complex. This application is made in terms of section 38(1) of the National Heritage Resources Act, no 25 of 1999 (NHRA).

Kruger, N. September 2019. Archaeological Impact Assessment (AIA) on Berg-En-Dal 378JT for the Proposed Berg-en-Dal Monument Entrance Alteration Project as Part of the N4 Upgrade, Nkangala District Municipality, Mpumalanga Province.

The author undertook a field survey of the proposed new entrance area and of the surrounding Berg-en-Dal Monument complex area, and did not identify any heritage resources other than those that form part of the Berg-en-Dal Monument complex. The author recommends the following:

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- A permit application must be submitted to SAHRA for the alteration of the Berg-en-Dal Monument.
- A conservation buffer of 100 metres is created and maintained around the entire Berg-en-Dal Monument complex including the farmhouse, monument, and cemeteries.
- Construction must be monitored by a heritage specialist or ECO throughout the construction phase.
- Due to the very sensitive heritage known in the greater region, greater care and caution must be exercised during construction.
- Any activity near river banks, pans and fountains should be monitored due to these areas being sensitive for the occurrence of stone aged materials.
- All exposed bedrock should be monitored for any fossil bearing rocks like shale and sandstone as the area is sensitive to the occurrence of palaeontological resources.

SAHRA issued a comment dated 13/10/2019 requesting that a suitably qualified palaeontologist is appointed to assess the area proposed for development for any potential impacts to the palaeontological resources. Dr J.F. Durand was appointed and a PIA report has been submitted to the case for commenting.

Durand, J.F. June 2020. Palaeontological Impact Assessment for relocation of the entrance of the Berg-en-Dal Reserve, Mpumalanga.

The area is underlain by very highly fossiliferous Permian aged shale and sandstone rocks of the Vryheid Formation, Ecca Group, Karoo Supergroup, that may be exposed during future maintenance of the road or the current proposed project. The fossils found in this formation are *Glossopteris* Flora, insects and bivalves. The author determines that the potential impact to this formation is low, as the Vryheid Formation in this area is overlain by thick soil layer. The field assessment did not identify any exposed shale or sandstone outcrops. As such, the author recommends that the ECO ensures the implementation of the Fossil Chance Finds procedure found on page 16 and 17 of the PIA report.

Final Comment

South African Heritage Resources Agency (SAHRA) Archaeology, Palaeontology and Meteorites (APM) Unit accepts the HIA and the PIA reports submitted to the case for commenting and has no objection to the development going ahead on the following conditions;

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The Chance Finds Fossil Procedure as detailed in the PIA must be included in the EMPr.

1. A section 35 permit application must be applied for in terms of Chapter VI of the NHRA Regulations, 2000, for the amendment of the entrance gate.
2. All construction around the gate of the Berg-en-dal monument must be monitored by a heritage specialist, and the monitoring report must be submitted to SAHRA after construction. A monitoring schedule must be drawn up between the heritage specialist, contractor and ECO to allow for the presence of the heritage specialist on site on the days that they work on the relocation of the entrance gate.
3. In the event that fossils are uncovered during construction then construction must cease within the immediate vicinity, a buffer of 30 m must be established, and a palaeontologist called in to inspect the finds. The palaeontologist must obtain a section 35(4) permit in terms of NHRA and Chapter IV NHRA Regulations, before any fossils are collected.
4. If there are any new heritages resources are discovered during construction and operation phases of the proposed development, then a professional archaeologist or palaeontologist, depending on the nature of the finds, must be contracted as soon as possible to inspect the findings at the expense of the developer.
5. If the newly discovered heritage resources prove to be of archaeological or palaeontological significance, a Phase 2 rescue operation may be required at the expense of the developer. Mitigation will only be carried out after the archaeologist or palaeontologist obtains a permit in terms of section 35 of the NHRA (Act 25 of 1999). You may contact SAHRA APM Unit for further details: (Nokukhanya Khumalo/Phillip Hine 021 202 8654).
6. If any unmarked human burials are uncovered and the archaeologist called in to inspect the finds and/or the police find them to be heritage graves, then mitigation may be necessary and the SAHRA Burial Grounds and Graves (BGG) Unit must be contacted for processes to follow (Thingahangwi Tshivase/Mimi Seetelo 072 802 1251).

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

Yours faithfully

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Nokukhanya Khumalo
Heritage Officer
South African Heritage Resources Agency

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

ADMIN:

Direct URL to case: <http://www.sahra.org.za/node/528317>

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.