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Attention Ms. Khanyi Zondi

**Heritage Response Report of the
Upgrade of the N2 Section 26: Mt Edgecombe Interchange to Tongaat Toll Plaza
eThekwini Metro, KwaZulu-Natal**

Project Area and Project Description¹

In 2010 Terratest (Pty) Ltd was appointed by Vela VKE Consulting Engineers on behalf of the South African National Roads Agency Limited (SANRAL) to undertake the environmental work necessary for the application for environmental authorization (EA) from the National Department of Environmental Affairs (DEA) for the proposed upgrade of the National Road 2 Section 26 (N2/ 26) from km 2.0 to km 21.0, Mt Edgecombe Interchange to Tongaat Toll Plaza. See Fig.1.

eThembeni Cultural Heritage in turn was appointed by Terratest (Pty) Ltd to undertake a heritage impact assessment of the proposed road upgrades, in terms of the National Heritage Resources Act No 25 of 1999. Two eThembeni staff members inspected the area on 17 August 2010 and completed a controlled-exclusive surface survey. An HIA report was submitted to Amafa on 23 August 2010. See HIA Report loaded to SAHRIS Case File with this submission.

Observations

The heritage resources that were observed and assessed in 2010, are summarised below:

1. A Shembe place of worship (*isonto*) was located at 29°35'1.24"S; 31° 8'37.00"E, on the southbound side of the Tongaat toll plaza, just outside the proposed development area. This place has high heritage significance at all levels for its social, cultural, and spiritual values.

¹ Information provided by the then-appointed EAP, Terratest (Pty) Ltd.

2. An Iron Age smelting site was located within the northbound road reserve just before the proposed road upgrade starts at -29.738941° S; 31.046827° E. (Figure 2). It extended down the westward slope tailing onto the adjacent Mt. Edgecombe residential estates. Its significance was unknown at the time.

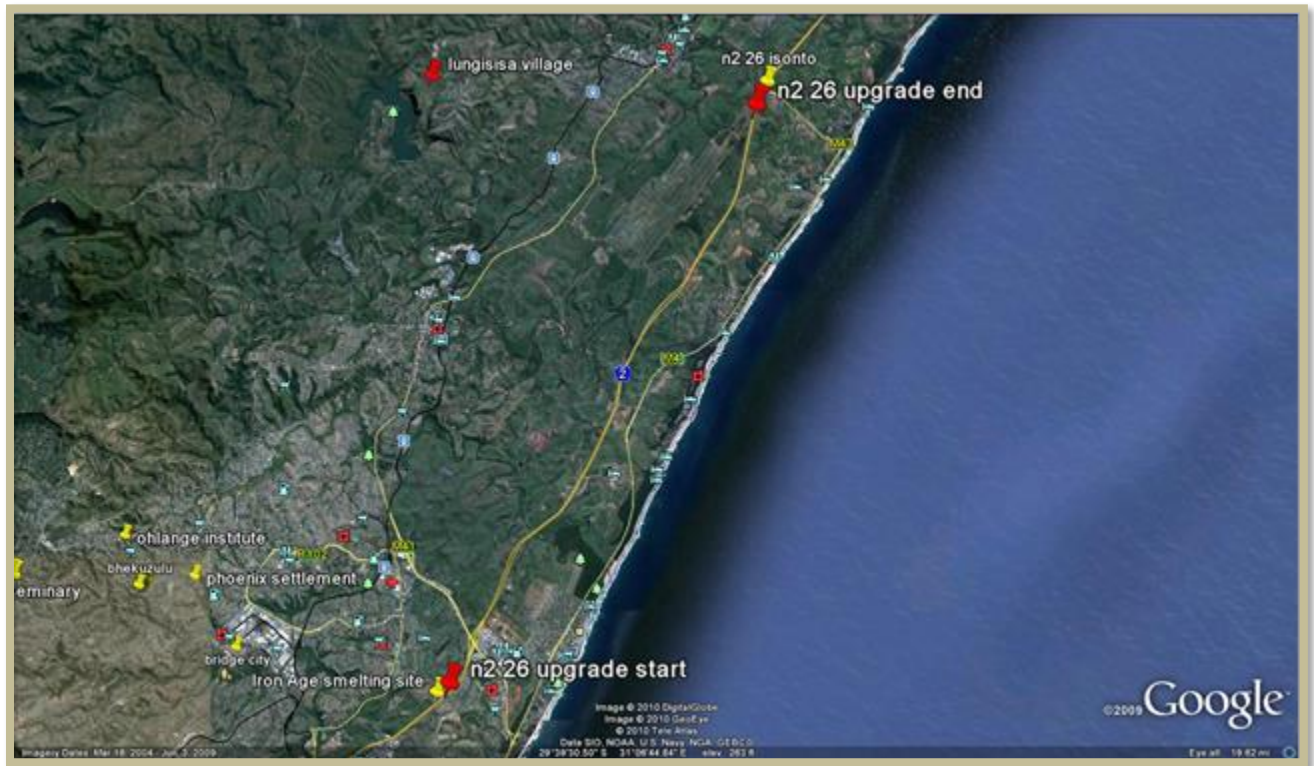


Figure 1. Location of N2 Section 26 road upgrade, eThekweni Municipality.

Mitigation Measures recommended at the time:

1. The *isonto* may not be altered in any way without the permission of church leadership and a permit from Amafa.
2. The smelting site may not be altered in any way without prior investigation by an archaeologist using subsurface sampling techniques to determine its heritage significance, under the auspices of a permit from Amafa.
3. The locations of both heritage resources should be recorded in the relevant SANRAL database to ensure that their management requirements are met during future road construction and maintenance.



Figure 2. Google Earth image of smelting site location (date of imagery 2010).

(see also Images and kml. loaded to SAHRIS Case file).

Environmental approval was granted by the DEA and the Mhlanga / Phoenix/ Mt. Edgecombe / Cornubia Interchange was subsequently constructed. An extra Feeder Lane to the Interchanges is now being planned for implementation.

In compliance with the DEA RoD (See excerpt below), the DECO, Greenmined Environmental, and the Consultant Engineers, Raubex (KZN), appointed eThembeni CHM in 2022 to undertake the necessary heritage mitigation as stipulated.

Heritage Impact Assessment (HIA):

The HIA identified (amongst others) an iron age smelting site within the northbound road reserve (GPS coordinate: 29°44'19.40"S; 31°02'49.44"E), extending onto surrounding residential estates, and recommended that: *"the smelting site may not be altered in any way without prior investigation by an archaeologist using subsurface sampling techniques to determine its heritage significance, under the auspices of a permit from AMAFA"*.

The Shembe *isonto* was found to be within the designated SANRAL road reserve and after engagement with the church leaders by SANRAL and its agents **the church locale was moved some years ago.**

eThembeni staff inspected the iron smelting *locale* on 16 August 2022, accessing the site from the N2, prior to being moved on by the Durban Metro Police. It was however now clearly observable that the original construction of the N2 (N) had truncated the hilltop on which the smelting site had been located, and that iron smelting residue observable on the surface in 2010 was in fact extending along the boundary fence and to within a subsequently developed node, The Links, of the Mount Edgecombe golf and residential estate. On 21 August 2022, access was obtained to the estate, and a survey was conducted within and adjacent to the estate's security boundary fence. (See Figures 3 – 5 below).

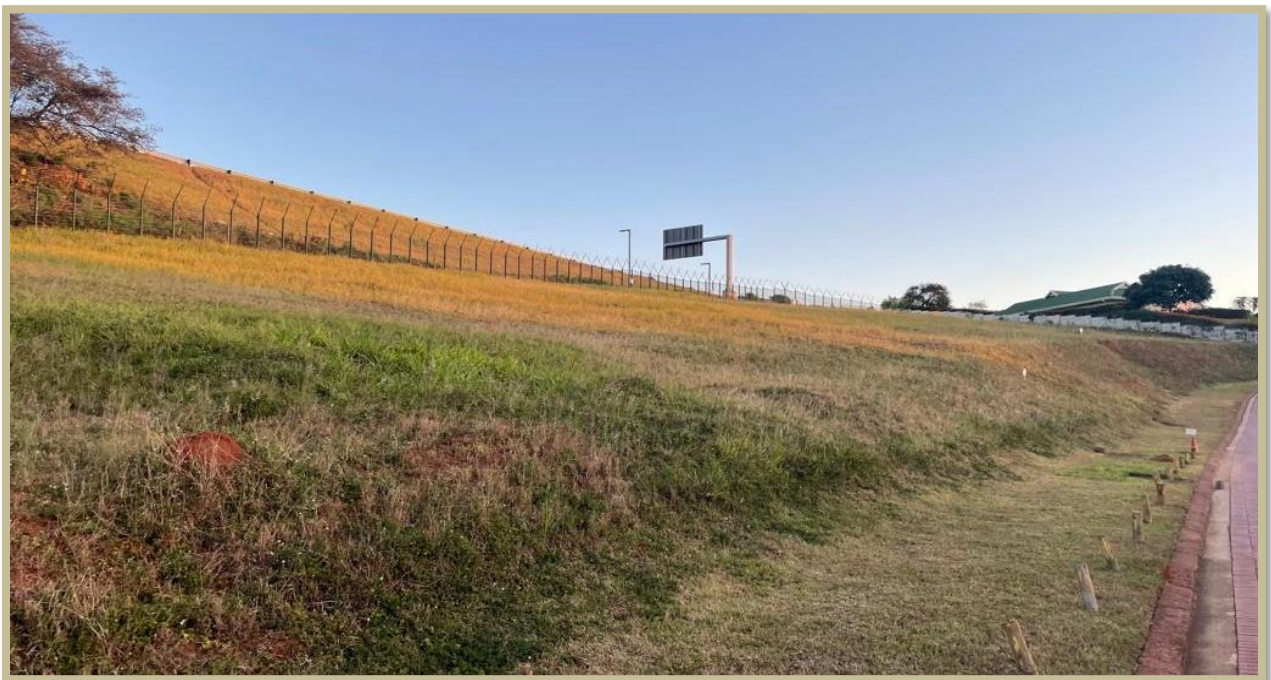


Figure 3. Google Earth image of smelting site location (date of imagery July 2022)

Construction of the said fence, the establishment of a service track, landscape maintenance, and earthworks in anticipation of further stand layouts have obliterated any archaeological material that may have been *in situ*. Only random scatters of slag (< 5 pieces/m²) were observed and no furnace debris or vitrified tuyere pieces were present, as observed in 2010. **No site of any archaeological integrity remains.**



Figures 4 & 5. West-facing N2 (N) freeway embankment and Mt. Edgecombe Estate security boundary fence, and the location where the original smelting residues were observed. Dated 21 August 2022.



The immediate study area comprises secondary dunes of the Umkwelane Formation (Berea Red Sands). This is Mid-Miocene to Pliocene (14 - 4 million years ago (Ma) in age. It is an ancient dune cordon, composed of fossil aeolian coastal dunes. These soils are a characteristic red colour and have been deeply disturbed by prehistorical, historical, and current agricultural and urban development practices. The chance of encountering palaeontological material is low. (Dr. Alan Smith². pers. comm).

Recommendations

In the absence of any residual heritage resources of scientific significance we accordingly request that Amafa allow the proposed freeway development to proceed with no further heritage resource mitigation; suffice that the protocols in Appendices 1 are made binding to any Heritage Authorisations issued.

Please can you notify us timeously, via the loaded SAHRIS Case File, as to the decision of Amafa in this regard?

Yours sincerely



Len van Schalkwyk
Principle Investigator.

² Palaeontologist. Honorary Research Fellow: Discipline of Geology, School of Agriculture, Earth and Environmental Sciences, University of KwaZulu-Natal, Durban.

Appendix 1

Protocol for the Identification, Protection, and Recovery of Heritage Resources During Construction and Operation

It is possible that sub-surface heritage resources could be encountered during the construction phase of this project. The Environmental Control Officer and all other persons responsible for site management and excavation should be aware that indicators of sub-surface sites could include:

- Ash deposits (unnaturally grey appearance of soil compared to the surrounding substrate);
- Bone concentrations, either animal or human.
- Ceramic fragments, including potsherds.
- Stone concentrations that appear to be formally arranged (may indicate the presence of an underlying burial, or represent building/structural remains); and
- Fossilised remains of fauna and flora, including trees.

In the event that such indicator(s) of heritage resources are identified, the following actions should be taken immediately:

- All construction within a radius of at least 20 m of the indicator should cease. This distance should be increased at the discretion of supervisory staff if heavy machinery or explosives could cause further disturbance to the suspected heritage resource.
- This area must be marked using clearly visible means, such as barrier tape, and all personnel should be informed that it is a no-go area.
- A guard should be appointed to enforce this no-go area if there is any possibility that it could be violated, whether intentionally or inadvertently, by construction staff or members of the public.
- No measures should be taken to cover up the suspected heritage resource with soil, or to collect any remains such as bone or stone.
- If a heritage practitioner has been appointed to monitor the project, s/he should be contacted, and a site inspection arranged as soon as possible.
- If no heritage practitioner has been appointed to monitor the project, the Head of Compliance at Amafa Heritage and Research Institute (AHRI), Pietermaritzburg office, should be contacted; by telephone at 033 3946 543 or via email at khanyi.zondi@amafainstitute.org.za
- The South African Police Services should be notified by an AHRI staff member or an independent heritage practitioner if human remains are identified. No SAPS official may disturb or exhume such remains, whether of recent origin or not.
- All parties concerned should respect the potentially sensitive and confidential nature of the heritage resources, particularly human remains, and refrain from making public statements until a mutually agreed time.
- Any extension of the project beyond its current footprint involving vegetation and/or earth clearance should be subject to prior assessment by a qualified heritage practitioner, considering all information gathered during the initial assessment.