PHASE 1 HERITAGE IMPACT ASSESSMENT REPORT ON FIVE BORROW PITS ADJACENT TO THE R383 AND R386 ROADS SOUTH OF POSTMASBURG, SIYANDA DISTRICT MUNICIPALITY, NORTHERN CAPE PROVINCE.

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#### **EXECUTIVE SUMMARY**

The purpose of this study was to establish if any heritage sites were present near five extant borrow pits next to the R383 and R386 to the south of Postmasburg in the Siyanda District Municipality of the Northern Cape. All of these had been used for the extraction of calcrete, a material that is extensively used in this region for the surfacing of untarred roads. Modest lithic densities were noted in the thin surface sands overlying the calcrete, but nowhere in the inspected area were there any actual sites, fossil bones or graves. The conclusion is therefore that the proposed extensions of these borrow pits for road construction, relating to the development of the nearby Sishen South Mine, will have no significant impact on the heritage resources of the Northern Cape.

#### **BACKGROUND INFORMATION**

Assmang's Beeshoek Mine, situated some 6 km WNW of Postmasburg has been a mainstay of the town's economy for decades. Many there are hoping that the impact of its imminent closure will be offset by the development of the Sishen South Mine, a similar distance to the south – west. However, Kumba has not yet made a final decision in that regard, pending an agreement with Transnet regarding tariffs on the mooted link between there and the Sishen – Saldanha line.

This study is part of an EIA that is being prepared by Kerry Fairley of Synergistics Environmental Services, acting on behalf of Kumba Iron Ore.

## LOCAL ARCHAEOLOGY

In the Postmasburg vicinity there are LSA – linked specularite workings at Blinkklipkop (Tsantsabane) and Doornfontein (Beaumont & Morris 1990), as also engravings at Beeshoek.

#### PROPERTY DESCRIPTION

Borrow pit locations are shown in Fig. 1, with further details being as follows:

Borrow Pit 1: East of the R386, at 1309 m elevation, with co-ordinates of 28° 22' 25.8" S, 23° 03' 11.7" E, on the farm Sandfontein 491, owned by Albertus Viljoen.

Borrow Pit 2: West of the R383, at 1273 m elevation, with co-ordinates of 28° 22' 08.4" S, 23° 02' 16.8" E, on the farm Sandfontein 491, owned by Albertus Viljoen.

Borrow Pit 3: East of the R383, at 1260 m elevation, with co-ordinates of 28° 23' 16.5" S, 23° 01' 16.8" E, on the farm Ploeg Fontein 487, owned by Kumba Iron Ore.

Borrow Pit 4: West of the R383, at 1228 m elevation, with co-ordinates of 28° 26' 20.9" S, 22° 58' 29.7" E, on the farm Klip Bankfontein 489, owned by D. Bredenkamp.

Borrow Pit 5: East of the R383, at 1222 m elevation, with co-ordinates of 28° 26' 25.0" S, 22° 58' 32.8" E, on the farm Klip Bankfontein 489, owned by D Bredenkamp.

A total of four hours was spent examining the orange – marked surrounds (Fig. 1) of Borrow Pits 1 – 5 on the afternoon of Friday 31 August 2007 and the morning of Saturday 1 September 2007.

# SUPERFICIAL GEOLOGY

Typically, thin (0 – 10 cm deep) beige sand with an admixture of fine calcrete rubble overlies subhorizontal calcrete, comprising a compact surface crust above much softer material, that is at least 4 m thick in Borrow Pit 2 (Fig. 2). Underlying bedrock was nowhere seen, but has been mapped as belonging to the Makganyene and Ongeluk Formations, which lie at the upper end of the Griqualand West Sequence, at before 2 billion years ago (Kent 1988). A scatter of subrounded – rounded cobbles on the low rise to the west of Borrow Pit 4 may represent vestiges of an old gravel of the Groenwaterspruit, which runs southwards a few hundred metres to the east (Fig. 3).

#### HERITAGE FINDINGS

Foot surveys around Borrow Pits 1-5 produce modest lithic samples (Figs. 4-8) that most probably reflect a slow accretion postdating the calcretes. Artefacts are mainly based on banded ironstone and brown jasper, vary from fresh to lightly worn and are entirely comprised of smallish irregular flakes, and cores which include some of radial form. These latter, as also the absence of blades and convergent points, are taken to suggest, despite the lack of bifaces, that much of this material relates to the ESA. Nowhere did I see any actual sites, fossil bones, or early graves.

# **CONCLUSIONS**

The investigated borrow pit surrounds are bereft of significant cultural material and their further use as a source of road – building aggregate will consequently have no impact on the heritage resources of the Northern Cape.

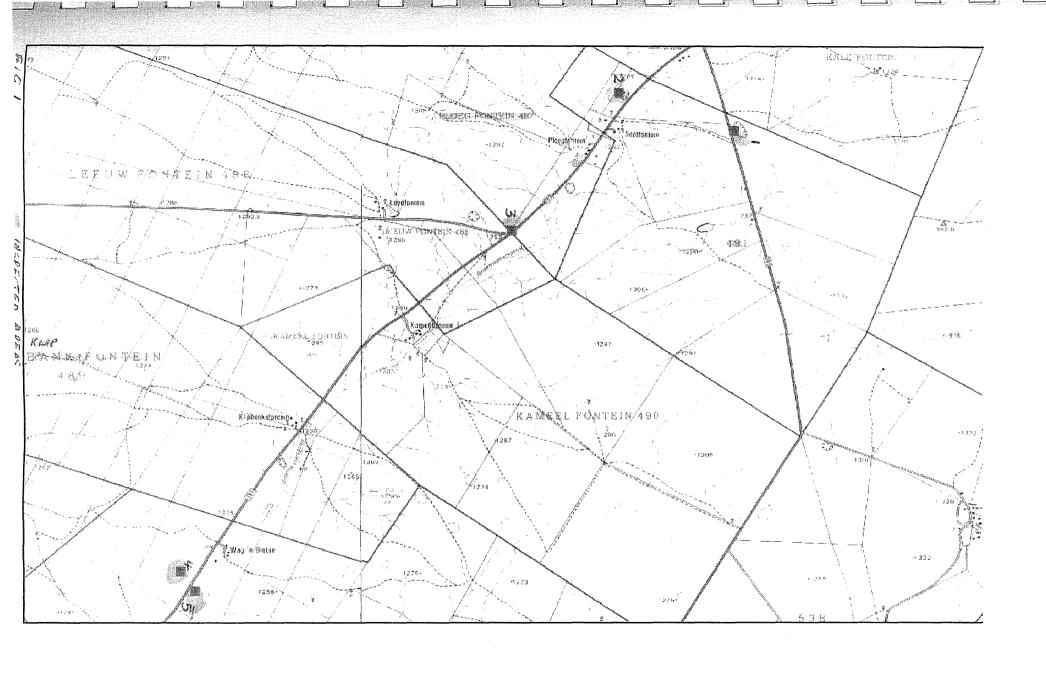
# REFERENCES

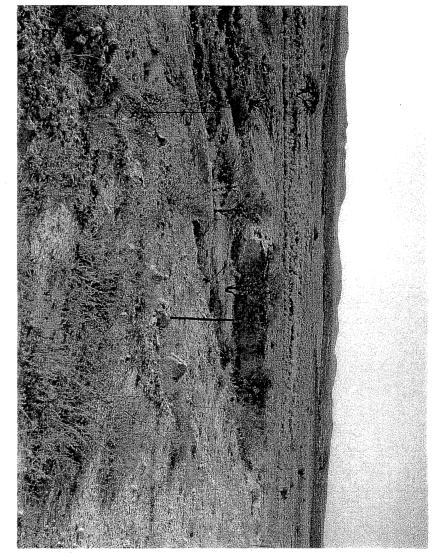
Beaumont, P. & Morris, D. 1990. *Guide to the archaeological sites in the Northern Cape*. Kimberley: McGregor Museum.

Kent, L.E. (ed) 1980. Stratigraphy of South Africa. Part 1. *Geol. Surv. S. Afr. Handbook* **8**, 1 – 690.

## **NOTES**

- A copy of the locality map and all appended Figures must accompany this report to SAHRA.
- Applications to SAHRA will not be processed unless accompanied by payment of R150 per application. SAHRA banking details are: ABSA, Branch Code: 312109; Current Account no.: 360 680 606.





TIG 2 VIEW TO WEST FROM BORROW PITZ

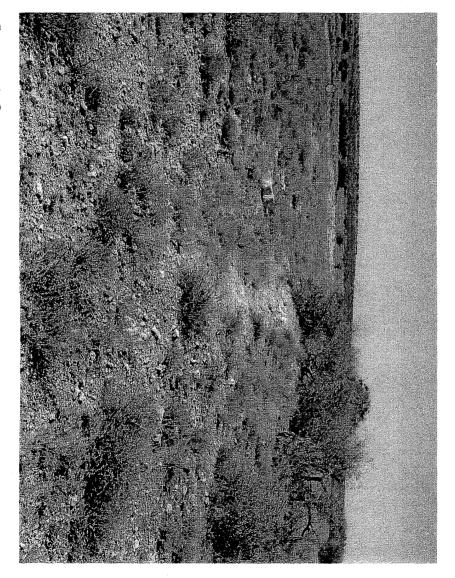
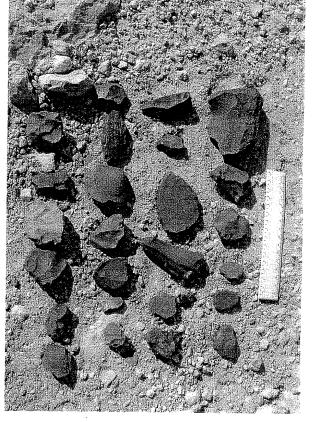


FIG 3 VIEW TO EAST FROM BORROW PITS

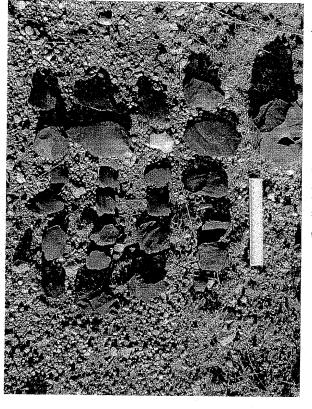




TIG 4: BORROW PIT I LITHIC



FIGE BORROW PIT 3 LITHICS



15 7: BERROW PIT & LITHICS

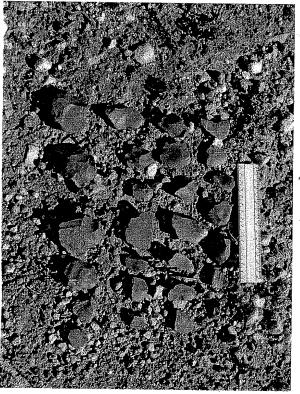


FIG 8: BOAROW PITS LITHICS