Agency for Cultural Resource Management

Specialists in Archaeological Studies and Heritage Resource Management

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20 July, 2008

Att: Ms Jessica Christie Hilland Associates PO Box 590 George 6530

Dear Ms Christie,

ARCHAEOLOGICAL IMPACT ASSESSMENT PROPOSED AIRSTRIP ON PORTION 4 OF BERGPLAATS 296 BEAUFORT WEST CENTRAL KAROO

1. Introduction

Heritage Western Cape (HWC) requested that an Archaeological Impact Assessment (AIA) of the proposed construction of an airstrip on Portion 4 of the Farm Bergplaats No. 296, near Beaufort West in the Central Karoo, be undertaken (Figure 1)¹.

The proposed project comprises the construction of a 1.2 km long, 20 m wide graded, gravel, light aircraft airstrip.

A Palaeontological Impact Assessment (PIA) desk top study was also requested. The PIA will be undertaken by consulting palaeontologist Dr John Almond of Nature Viva cc, on his return from overseas.

2. Terms of reference

The Terms of Reference for the archaeological assessment were to:

- Identify and map any archaeological resources on the proposed site;
- Determine the importance of archaeological resources on the proposed site;
- Determine and asses the potential impacts of the proposed project on archaeological resources, and
- Recommend mitigation measures to minimise impacts associated with the proposed project.

¹ HWC letter dated 24 June, 2009 Ref: HM/CENTRAL KAROO/BEAUFORT WEST/BERGPLAATS 296 PORTION 4

3. The study site

The proposed site (S 32° 21 81.7 E 21° 59 72.7 on map datum wgs 84), a private game farm, is located on the Farm Bergplaats, about 60 kms south west of the Central Karoo town of Beaufort West, in the Western Cape (Figure 2). The property is zoned Agriculture. The proposed airstrip will be located on an expansive, exposed, flat piece of ground, which is covered in large amounts of broken and shattered, baked shale (Figures 3-9). Portions of the site are covered in low bush, scrub and grasses. A recent storm in March of this year dumped more than 240 mm of rain on the farm, in less than two hours, causing widespread damage to fencing, farm dams and nearby streams and rivers (Mr Willie Esterhuizen pers. comm.). The site for the proposed airstrip was also heavily impacted by the rain storm, resulting in erosion of nearby stream beds and extensive sheet wash over the proposed site (refer to Figures 5-7 & 10).

4. Approach to the study

The proposed airstrip site was searched for archaeological remains. Ground visibility was reasonably high and most of the proposed site was easily covered on foot.

A GPS track path of the archaeological study was created.

All archaeological finds were plotted (and photographed) in situ, using a Garmin Oregon 300 GPS unit, set on map datum wgs 84². Unfortunately, waypoints of the first seven artefacts (BP A-G) documented were not property captured, but thereafter each artefact was assigned a waypoint.

The site visit took place on 03rd July, 2009.

5. Findings

More than 70 stone tools were located during the archaeological baseline study. These are spread very thinly and unevenly over the proposed site. The majority of finds are assigned to the Later Stone Age, but some obvious, Middle Stone Age (MSA) tools were also identified. The MSA tools are characterised by larger and thicker, triangular-shaped flakes including blades with prepared platforms.

Most of the tools documented were single, isolated finds, with only a few occurrences of more than one or two tools being located. No concentration or clusters of tools were noted. It is very likely that the recent heavy rain storm on farm displaced any likely clusters that may have been present.

The tools comprise mainly utilised and miscellaneous retouched flakes, blades and points. At least seven of the flakes and blades found are either snapped and/or broken. Two small round cores were found. Two scrapers (one on a re-used MSA flake) were found. No Natural Backed Knives (NBKs) or large duck-billed end-scrapers were found

² The GPS walk path and spreadsheet tabling all the GPS co-ordinates have been saved to CD and submitted with this report. A folder containing all of the photographs linked to GPS waypoints have also been saved to CD

which are known to occur fairly widely in the Central Karoo region³. No pottery or ostrich eggshell was found.

Save for three quartzite flakes, all the tools recorded are in fine grained indurated shale (or hornfels).

One of the difficulties in identifying MSA and LSA variants is that more than 99% of the tools are highly weathered and/or patinated. Quite a few of the artefacts are also braided and rolled, suggesting they have been moved around as a result of natural processes such as flooding.

As indicated, all the tools have been photographed and recorded with GPS waypoints and copied to CD, but a few of the more interesting finds are illustrated in this report (Figures 9-15).

6. Impact statement

The impact of the proposed project on important pre-colonial archaeological remains is likely to be **low**, as all the tools documented most likely occur in a secondary (i.e. disturbed) context. The site is fairly severely degraded due to recent heavy flooding in the area. Sheet wash is clearly visible over the site, while erosion also occurs alongside several nearby stream beds.

7. Recommendations

The Archaeological Impact Assessment of the proposed construction of a light aircraft airstrip on Portion 4 of the Farm Bergplaats No. 296 near Beaufort West has identified no significant impacts to pre-colonial archaeological material that will need to mitigated, prior to proposed development activities.

A photographic record of all the finds has been included on a CD, and this is considered to be a representative sample and record of the archaeological remains on the site and probably in the immediate surrounding area as well.

Yours sincerely

Jonathan Kaplan

³ Parkington, J.E. 1980. Time and place: some observations on spatial and temporal patterning in the Late Stone Age sequence in southern Africa. South African Archaeological Bulletin 35:73-83.

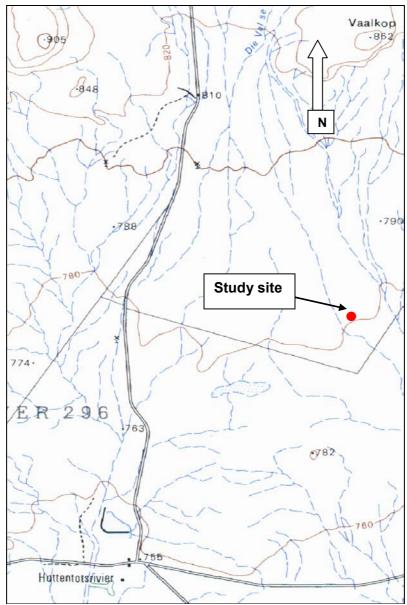


Figure 1. Locality Map: 3221 BD Petrusrust

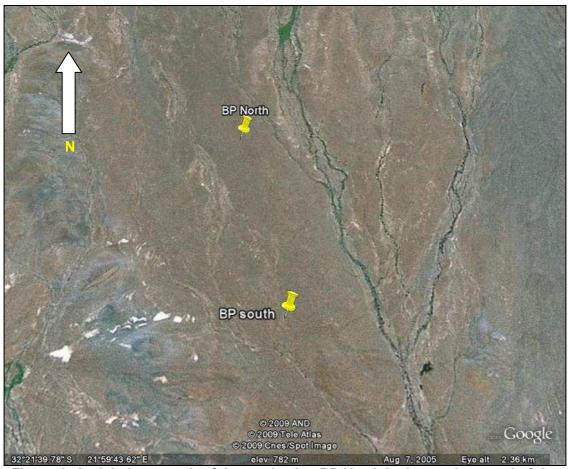


Figure 2. Aerial photograph of the study site. BP North is the northern end of the proposed airstrip while BP south is the southern end of the airstrip



Figure 3. BP South (facing north)



Figure 4. BP North (facing south)



Figure 5. View of the site facing south



Figure 6. View of the site facing south



Figure 7. View of the site facing north



Figure 8. View of the site facing south



Figure 9. View of the site facing south



Figure 10. View of the site facing north



Figure 11. BP- 34: re-used scraper. Scale in cm



Figure 12. BP- 48: retouched blade. Scale in cm



Figure 13. BP- 49: end scraper. Scale in cm



Figure 14. BP A: retouched blade. Scale in cm



Figure 15. BP- 05: MRP. Scale in cm



Figure 16. BP- 16: MRP and flakes. Scale in cm