

**ARCHAEOLOGICAL IMPACT ASSESSMENT
OF THE PROPOSED EXTENSION OF A BORROW PIT ON
PLATTEKLOOF (BELLAIR 13),
BARRYDALE AREA, CAPE WINELANDS DISTRICT,
WESTERN CAPE**

(Assessment conducted under Section 38 (8) of the National Heritage Resources Act as part
of a Heritage Impact Assessment)

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EXECUTIVE SUMMARY

Natura Viva cc was appointed by Vidamemoria Heritage Consultants on behalf of Aurecon South Africa (Pty) Ltd to undertake an Archaeological Impact Assessment (AIA) of the proposed extension of an existing borrow pit, DR1381/11.3/0.3R (Vidamemoria pit no.132), to the northeast of Barrydale in the Cape Winelands District of the Western Cape. The proposed extension site is situated to the north of the Warmwaterberg. Material excavated from the proposed extension will be used for the maintenance of gravel roads in the region. Access to the affected area will be by an existing farm track. The existing pit will be expanded to form a larger floodwater attenuation pond and the existing and new cut faces of the excavation will be smoothed and neatly finished off.

This study forms part of the Heritage Impact Assessment triggered by the development. The brief for the study was a field visit and short report identifying and assessing archaeological resources and any impact on them, an assessment of significance and recommendations regarding any mitigation required.

The field assessment was conducted on foot on 2 December 2012. Archaeological visibility was generally good on the alluvial outwash plain and the southwest-facing hill slope.

No archaeological remains, including signs of possible graves in the alluvium, were observed in the affected area itself. However, some 25 to 30 Stone Age quartzite artefacts were noted to the southeast of the polygon. One flake of CCS (cryptocrystalline silica) was seen. Some of the flaked material is of indeterminate age, probably Middle Stone Age (MSA) and/or Later Stone Age (LSA), but some clearly MSA artefacts were recorded. This material appears to have been washed down the slope from higher up. A single glass bottle bottom was observed close to the attenuation pond outside the affected area and is likely to be of modern origin.

The absence of archaeological remains in the polygon itself, as well as the fairly low density of stone artefacts in a secondary context outside the affected area, indicate that the proposed extension of the existing borrow pit is of low archaeological heritage significance. No significant impact on such resources is expected if the proposed extension is developed. No further archaeological studies or mitigation are recommended.

If any human remains are found during the development of the proposed pits, work in that area must cease and the South African Heritage Resources Agency (SAHRA) must be notified immediately.

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1. INTRODUCTION

Natura Viva cc was appointed by Vidamemoria Heritage Consultants on behalf of Aurecon South Africa (Pty) Ltd to undertake an Archaeological Impact Assessment (AIA) of the proposed extension of an existing borrow pit, DR1381/11.3/0.3R (Vidamemoria pit no.132), to the northeast of Barrydale in the Cape Winelands District of the Western Cape. The proposed extension site is situated to the north of the Warmwaterberg (Figure 1). Material excavated from the proposed extension will be used for the maintenance of gravel roads in the region. Access to the affected area will be by an existing farm track. The existing pit will be expanded to form a larger floodwater attenuation pond and the existing and new cut faces of the excavation will be smoothed and neatly finished off.



Figure 1: Google earth image showing the location of the proposed extension of an existing borrow pit DR1381/11.3/0.3R (Vidamemoria pit no.132). The relevant 1:50 000 topographical map is 3320DB Plathuis.

2. LEGAL FRAMEWORK

Section 38 of the National Heritage Resources Act (Act 25 of 1999) is triggered by certain types of development, including changes of character to an area exceeding 5 000m², and makes provision for compulsory Heritage Impact Assessments to assess the potential impacts of such proposed developments on heritage resources. In terms of Section 38(1), a Notification of Intent to Develop (NID) form was submitted to Heritage Western Cape (HWC) by Vidamemoria. Following comment from HWC (case 1782-1796 ref.120327JL32) an AIA was included amongst the requirements according to Section 38(8) of the Act.

3. TERMS OF REFERENCE

The terms of reference for the AIA stipulated a field visit to locate and map archaeological resources, a short report dealing with the field observations, an assessment regarding the significance of the resources (in the context of other studies in the area) and any impacts on them, as well as recommendations regarding any mitigation required.

4. STUDY APPROACH

4.1 Methods

Fieldwork for the proposed extension was undertaken 2 December 2012. A site plan and polygon indicating the affected area were provided by Aurecon for the Phase 1 survey. The area was covered on foot and the tracks were recorded by a Garmin GPSMAP 62s set on the WGS84 datum (Figure 2). The site was extensively photographed.

4.2 Limiting factors

Visibility of archaeological remains on the ground was generally good.

5. DESCRIPTION OF AFFECTED ENVIRONMENT AND SITE

5.1 Archaeological background:

According to the map of impact studies recorded on the SAHRA Archaeology, Palaeontology and Meteorite Unit Report Mapping Project DVD (2009), no archaeological impact studies have been undertaken in the immediate vicinity of the proposed pit 132. The Sanbona Wildlife Reserve lies several km to the west of the affected area and, although the context of pit 132 is not directly comparable, the results of the Sanbona survey (Halkett 2002) can provide some indication of the types of archaeological remains which may be found in this part of the Little Karoo. Some preliminary observations were made by Halkett about the range, density and distribution of heritage sites ranging from Early Stone Age (ESA), Middle Stone Age (MSA), Later Stone Age (LSA), San rock painting sites, a possible Khoekhoen herder site to colonial period buildings and ruins. ESA and MSA open sites appear to occur throughout the reserve. LSA sites were less common and were largely confined to the foothills and kloofs of the Warmwaterberg. Several small rock shelters containing archaeological deposits and a number of rock painting sites with human, animal and possible therianthrope figures, as well as finger dots, were recorded. A large quantity of broken potsherds and ostrich eggshell beads were noted at the possible Khoekhoen herder site.

5.2 Borrow pit DR1381/11.3/0.3R (Vidamemoria pit no.132)

Approximate area: 8450m²

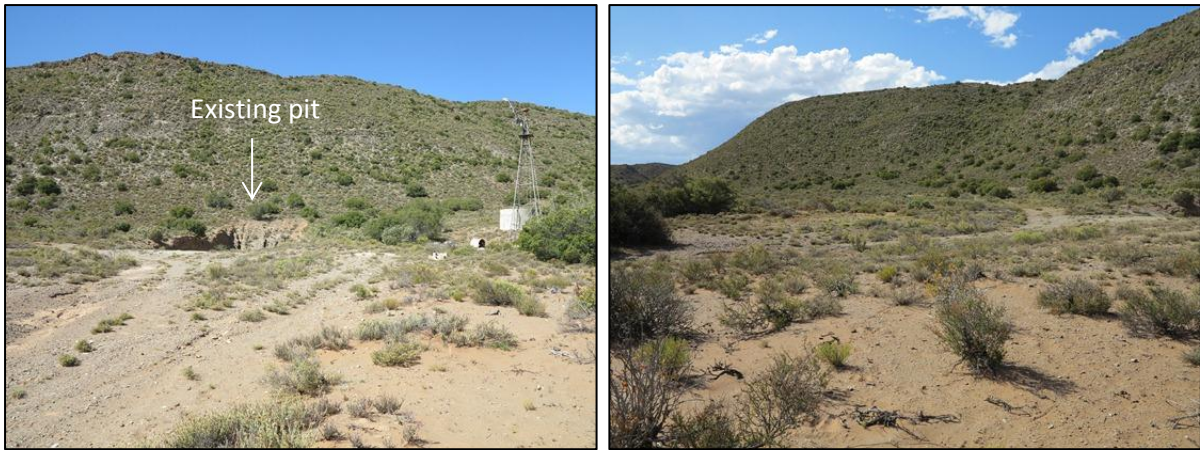
Location: S 33° 44' 19.57" E 20° 49' 35.96"

Farm name and number: Plattekloof (Bellair 13)

Environment: The proposed extension to an existing borrow pit is located partly on the lowest slopes of a moderately high, northwest-southeast aligned ridge and partly on the north-eastern edge of an alluvial outwash plain (Figures 2 to 5). The south-eastern boundary of the affected area is indicated by the existing pit (Figure 3). A wind-pump, water tank and drinking trough lie to the southeast of the polygon (Figures 3 and 8). The access track from the gate along the DR1381 cuts across the centre of the affected area, from the southeast to the northwest (Figure 4). The other boundaries delineating the polygon are not clear on the ground. Fine gravelly silty sand of alluvial wash and colluvial origin overlies mudrocks of the Tra Tra Formation of the Bokkeveld Group. The southwest-facing slope is rockier than the flatter-lying alluvial outwash plain. Quartzite cobbles, clasts of sandstone, mudrock and some quartz are evident. Small water courses, currently dry, drain into the stream to the south and southwest of the affected area (Figure 2). Sparse, low karoo bushes, *Salsola* sp. and 'vygies' cover the terrain (Figures 3 to 5), with a few scattered larger shrubs such as *Euclea undulata*, *Schotia brachypetala* and *Gloveria* sp. more common on the rockier slope (Figures 6 and 8). There are clear signs of disturbance – trampling and digging by animals, sheet-wash and erosion on the alluvial outwash plain and the hill-slope.



Figure 2: Google earth image showing the proposed expansion to borrow pit 132, the polygon (in yellow), the existing borrow pit, the tracks of the field survey (in blue) and the area (in red) where stone artefacts were observed. An existing floodwater attenuation dam is visible at the bottom centre of the image.

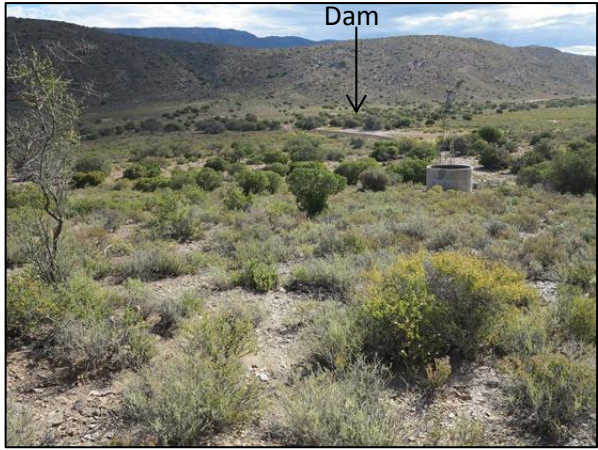
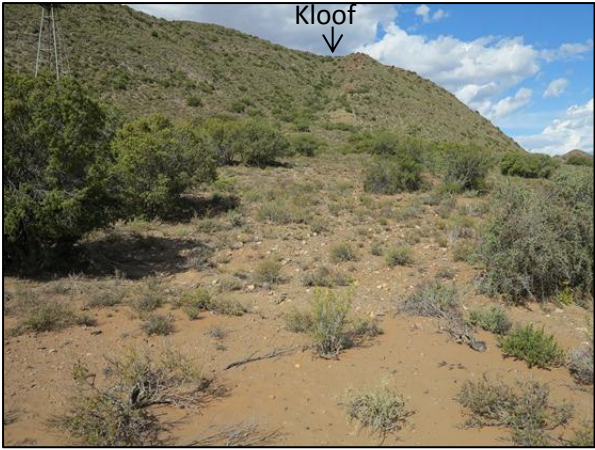


Figures 3 and 4: View towards the north of the existing borrow pit with the proposed extension to the left (northwest) and a wind-pump and water tank outside the polygon to the right (southeast); view towards the northwest of the track cutting through the proposed extension area.



Figures 5 and 6: View towards east with the wind-pump lying outside the area of the proposed extension; view towards the southeast from the north-western slope of the polygon.

Results of the survey: No archaeological remains, including signs of possible graves in the alluvium, were observed in the affected area itself. However, Stone Age artefacts were noted on the slope and the foot of the slope to the southeast of the polygon, in the area of the wind-pump and water tank (Figures 2, 7 and 8). Most of the 30 or so artefacts observed were manufactured from quartzite, particularly grey quartzite (Figures 9 to 13), but one flake of CCS (cryptocrystalline silica) was seen. Some of the flaked material is of indeterminate age, probably MSA and/or LSA, but some clearly MSA artefacts were recorded (for example, Figures 11 to 13). This material appears to have been washed down the slope from higher up, probably down the kloof visible in Figure 7. The base of a glass bottle was observed close to the attenuation pond and is likely to be of modern origin.



Figures 7 and 8: View towards the northeast showing the area where artefacts were noted to the southwest of the wind-pump, as well as the kloof down the ridge; view towards the southwest showing the same area, as well as the wind-pump, water tank and the nearby floodwater attenuation dam.



Figures 9 and 10: Selection of quartzite artefacts from the area indicated in red in Figure 2. The scale is in cm.



Figures 11 to 13: Selection of quartzite artefacts, most showing MSA characteristics, from the same area as those in Figures 9 and 10. The scale is in cm.

6. SIGNIFICANCE AND RECOMMENDATIONS

The absence of archaeological remains in the polygon itself, as well as the fairly low density of stone artefacts in a secondary context outside the affected area, indicate that the proposed extension of the existing borrow pit is of low archaeological heritage significance. No significant impact on such resources is expected if the proposed extension is developed. No further archaeological studies or mitigation are recommended.

If any human remains are found during the development of the proposed pits, work in that area must cease and the South African Heritage Resources Agency (SAHRA) must be notified immediately.

7. REFERENCES

Halkett, D.J. 2002. An initial scoping study of the Sanbona Wildlife Reserve, Barrydale. Unpublished report prepared for Earthworks. Archaeology Contracts Office.

SAHRA. 2009. Archaeology, Palaeontology and Meteorite Unit Report Mapping Project DVD. Version 1.0.

8. ACKNOWLEDGEMENTS

Ms Quahnita Samie of Vidamemoria Heritage Consultants is thanked for commissioning this study and providing background information.