

**ARCHAEOLOGICAL IMPACT ASSESSMENT
OF THE PROPOSED EXTENSION OF A BORROW PIT
ON SAAIPLAAS 63, CLANWILLIAM AREA,
WEST COAST DISTRICT MUNICIPALITY, 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 Nadeson Consulting Services to undertake an Archaeological Impact Assessment (AIA) of the proposed extension of an existing borrow pit, DR2196/14.75/R/50 (Vidamemoria pit no. 218), to the north of the Pakhuis Mountains in the Clanwilliam area, West Coast District Municipality. The affected area lies some 10 km to the south of the Doring River and over 6 km to the west of the Brandewyn River. Access to the quarry will be via the DR2196. Material excavated from the proposed extension will be used for the maintenance of gravel roads in the area. The pit will be rehabilitated and re-vegetated once mining activities have ceased.

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 17 May 2013. Visibility of archaeological remains on the ground ranged from good to poor depending on the density of the vegetation cover. The slope to the south of the DR2196 was covered by low scattered bushes, whereas the sandy area to the north had some very dense patches of vegetation.

No archaeological material was observed.

The absence of archaeological remains at the proposed extension site indicates that the polygon is of low archaeological heritage significance, although the numerous archaeological sites in the surrounding area provide a significant context for the pit. No significant direct impact on archaeological heritage is likely 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 pit extension, 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 Nadeson Consulting Services to undertake an Archaeological Impact Assessment (AIA) of the proposed extension of an existing borrow pit, DR2196/14.75/R/50 (Vidamemoria pit no. 218), to the north of the Pakhuis Mountains in the Clanwilliam area, West Coast District Municipality (Figure 1). The affected area lies some 10 km to the south of the Doring River and over 6 km to the west of the Brandewyn River. Access to the quarry will be via the DR2196. Material excavated from the proposed extension will be used for the maintenance of gravel roads in the area. The pit will be rehabilitated and re-vegetated once mining activities have ceased.

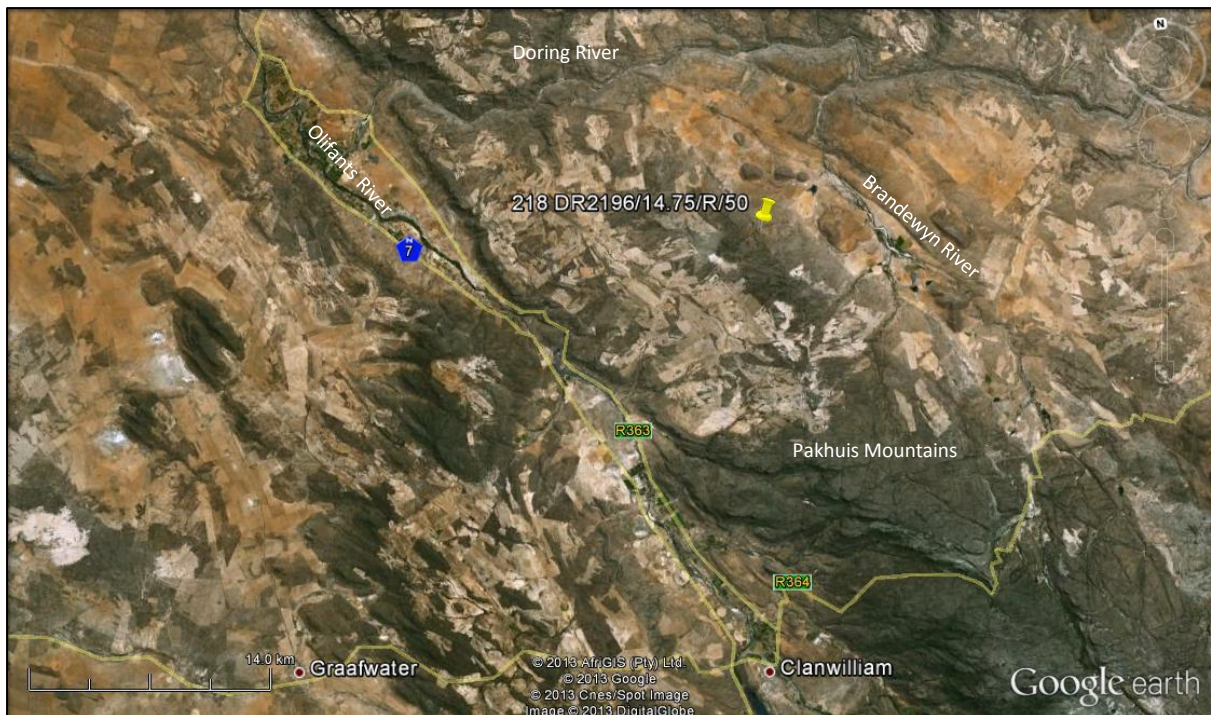


Figure 1: Google earth image showing the location of the proposed extension of existing borrow pit DR2196/14.75/R/50 (Vidamemoria pit no. 218) in relation to the Brandewyn, Doring and Olifants Rivers. The relevant 1:50 000 topographical map is 3118DD Bulshoek.

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 number 121011JL01) 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 by the author on 17 May 2013. A Site plan indicating the affected area was provided by Nadeson 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 varied depending on the density of the vegetation cover. It was good in the area to the south of the DR2196 and mostly poor in the densely-vegetated northern part of the polygon.

5. DESCRIPTION OF AFFECTED ENVIRONMENT AND SITE

5.1 Archaeological background:

The SAHRA database (2009) indicates only one archaeological impact study (Halkett et al. 1997) for the northern part of the Cederberg which includes the Pakhuis Mountains, although the rich archaeological history of the Cederberg, Olifants River Valley and the Doring River area is well-known as a result of the many research projects, including excavations and rock art surveys, undertaken over several decades, for example Parkington & Poggenpoel (1971); Parkington (1980); Manhire et al. (1983); Yates et al. (1985); Van Rijssen (1992); Sealy et al. (2000); Parkington (2003); Orton & Mackay (2008). The region has been a focus of human habitation for well over five hundred thousand years. Material dating from the Early Stone Age (ESA), Middle Stone Age (MSA), Later Stone Age (LSA) hunter-gatherers and pastoralists and colonial times has been recorded, mostly as scatters of artefacts lying on the current land surface, but some MSA and many LSA sites are also found in primary context in rock shelters. Of significance to the present study is the fact that many archaeological sites, including rock painting sites, have been recorded on rocky slopes to the southwest of the present study area, as well as to the southeast along the Brandewyn River (Manhire et al. 1983; Parkington 2003). Rock paintings also occur at the Bushman's Cave Berg Teater less than 1 km to the southwest of the affected area.

The relevant archaeological impact study mentioned above (Halkett et al. 1997) is the assessment of 7 proposed dam sites for the Olifants/Doring River Basin. One of the proposed sites, namely that for the Melkbosrug Dam, lies approximately 9 km to the

northeast of Pit 218. A large number of archaeological sites were recorded in the caves and rock shelters of the Doring River ravines and side kloofs. These include important rock painting sites, as well as caves with archaeological deposits. Numerous pre-colonial and colonial graves occur in the soft, deep soils of outwash fans of the rivers (Halkett et al. 1997). Recent archaeological impact studies not reflected in the 2009 SAHRA database are the impact assessments of the proposed extension of several borrow pits along the DR2196 (Tusenius 2012, 2013). Despite the rich archaeological context of these sites, no archaeological remains were observed during the surveys.

5.2 Borrow pit DR2196/14.75/R/50 (Vidamemoria pit no. 218)

Approximate area: 13 900m²

Location: S 31° 56' 59.05" E 18° 54' 45.01"

Farm name and number: Saaiplaas 63

Environment: The existing borrow pit is located to the south of the DR2196 on a fairly steep, north-facing slope at the foot of a small pass to the west (Figures 2, 3 and 4). The proposed extension is to the south and east of the present quarry (Figures 2 to 6). The flat-lying part of the polygon which lies north of the DR2196 (Figures 7 and 8) will in fact be excluded from future development due to the deep sandy nature of the soil (Nadeson Consulting Services 2012). Colluvial sand with angular to sub-angular sandstone boulders, blocks and gravel, some of it ferruginised, overlies weathered Bokkeveld Group sandstone on the southern slope (Figures 3 to 6). Scattered blocks of quartzite are evident on the surface and in small outcrops within the polygon. Occasional quartz lumps also occur. Visibility of material on the ground was generally good on the slope, but problematic to the north of the DR2196 where patches of dense vegetation occur (Figures 7 and 8). There is also disturbance from digging and burrowing in the latter area. A natural drainage line lies at the western margin of the affected area (Figure 2) and sandstone outcrop occurs outside the polygon, near the crest of the southern slope (Figures 2, 3 and 7). Although there appear to be no obvious overhangs in the low outcrop in the immediate vicinity of the affected area, the abundance of rock shelters with paintings in the general area suggests that rock art may well be present in the little kloof to the west and in the rocky area further to the north of the existing pit (Figures 2 and 4).

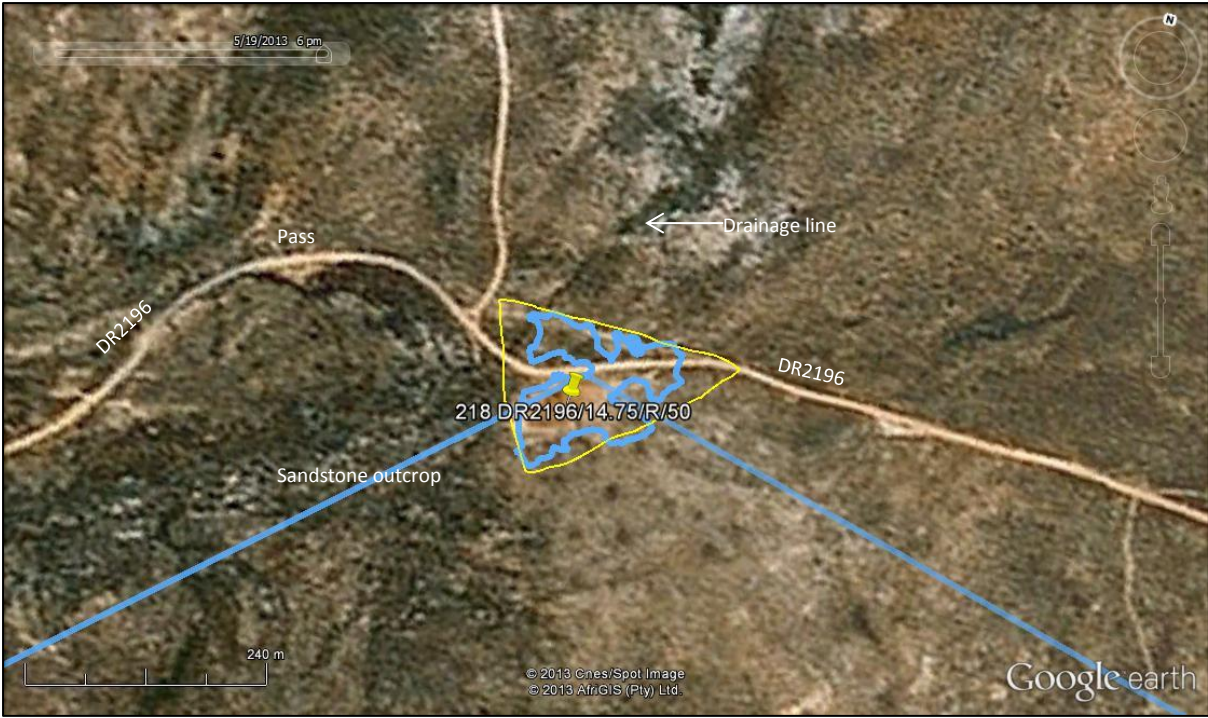


Figure 2: Google earth image showing the proposed extension of the existing borrow pit 218 and the tracks of the field survey. Please note that the resolution of the satellite image is poor and that the straight blue lines do not indicate survey tracks.



Figures 3 and 4: View towards the south with the existing pit in the middle ground and the sandstone outcrop outside the polygon to the right; view across the proposed extension area towards the northwest with the pass to the right and a small kloof on the left.



Figures 5 and 6: View towards the northeast showing some angular sandstone blocks and quartzite outcrop; view towards the north. The Brandewyn River lies over 5 km away, to the east and northeast of the hills in the background.



Figures 7 and 8: View towards the south of the part of the polygon which lies to the north of the DR2196 in the foreground and the southern slope in the background; view towards the east of the northern area.

Results of the survey: No archaeological remains were observed. Particular attention was paid to the quartz and quartzite chunks and blocks but no artefactual flaking was noted.

6. SIGNIFICANCE AND RECOMMENDATIONS

The absence of archaeological remains at the proposed extension site indicates that the polygon is of low archaeological heritage significance, although the numerous archaeological sites in the surrounding area provide a significant context for the pit. No significant direct impact on the affected area is likely 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 pit extension, work in that area must cease and the South African Heritage Resources Agency (SAHRA) must be notified immediately.

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8. ACKNOWLEDGEMENTS

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