# ARCHAEOLOGICAL IMPACT ASSESSMENT OF A PROPOSED BORROW PIT ON PORTION 1 OF FARM 112, THEEWATERSKLOOF DAM AREA, OVERBERG DISTRICT, WESTERN CAPE

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

Prepared for:

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On behalf of:

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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) for the proposed development of borrow pit MR281/1.91/R/190 (Vidamemoria pit no. 180). The proposed pit is situated in hilly, mainly agricultural land close to the Theewaterskloof Dam in the Villiersdorp area of the Overberg District Municipality. Material excavated from the proposed pit will be used for future resurfacing of gravel roads in the Overberg region. No new roads will have to be constructed as access to the quarry site will be via existing roads and tracks. The proposed pit will be rehabilitated once the material has been removed.

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 18 September 2012. Visibility of archaeological material on the ground was somewhat limited in areas with dense renosterveld vegetation and grass, but good in open patches and parts of the site covered by alien Port Jackson and blue gum trees.

Given the presence of an extensive, though dispersed, Early Stone Age (ESA) site at Gloria Bay, some 2 km to the northeast of proposed pit 180, similar material might have been expected in the affected area. However, no Stone Age archaeological remains were noted during the survey.

The only observations made concerned the remains of a cement floor and breeze-block structure adjacent to a trough leading to a catch pit. As these are of recent origin they are not of any historical significance.

The absence of Stone Age and historical archaeological remains indicate that the site of the proposed borrow pit 180 is of low archaeological heritage significance.

No significant impact on such resources is expected if the proposed borrow pit 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 Nadeson Consulting Services to undertake an Archaeological Impact Assessment (AIA) for the proposed development of borrow pit MR281/1.91/R/190 (Vidamemoria pit no. 180). The proposed pit is situated in hilly, mainly agricultural land close to the Theewaterskloof Dam in the Villiersdorp area of the Overberg District Municipality (Figure 1). Material excavated from the proposed pit will be used for future resurfacing of gravel roads in the Overberg region. No new roads will have to be constructed as access to the quarry site will be via existing roads and tracks. The proposed pit will be rehabilitated once the material has been removed.



Figure 1: Google earth image showing the location of the proposed borrow pit MR281/1.91/R/190 (Vidamemoria pit no. 180). The relevant 1:50 000 topographical map is 3419AB Caledon.

# 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 000m<sup>2</sup>, 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 1881-1973 ref 120726JL11E) 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 was undertaken on 18 September 2012. 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 throughout the affected area and ranged from good to poor. More detail is provided below in the description of the site and the results of the survey.

### 5. DESCRIPTION OF AFFECTED ENVIRONMENT AND SITE

#### 5.1 Archaeological background:

The SAHRA Archaeology, Palaeontology and Meteorite Unit Report Mapping Project DVD (2009) indicates only one impact study undertaken in the immediate vicinity of proposed pit 180. This is the Gloria Bay survey done by Yates (1994) in an area bordering the Theewaterskloof Dam. Gloria Bay lies over 2 km to the northeast of the present study area. An extensive, though dispersed Early Stone Age (ESA) site was observed over virtually the entire area of Gloria Bay. Most of the heavily-patinated stone artefacts were found on the surface, but a few were found stratified in the soil sections of two prominent dongas. Quartzite river cobbles, possibly from a relict river terrace of the Riviersonderend River, are the likely source of the raw material from which the artefacts have been made. The range of artefacts observed included large and small flakes, bifacially flaked pieces including handaxes, chopper-like pieces and cores. Some cobbles showed evidence of use as hammerstones. All the material was in a secondary context as intensive ploughing had moved artefacts within and on top of the soil (Yates 1994).

#### 5.2 Borrow pit MR281/1.91/R/190 (Vidamemoria pit no. 180)

Approximate area: 150m x 90 m Location: S 34° 4' 20.93" E19° 15' 4.38" Farm name and number: Portion 1 of Farm 112

**Environment:** The proposed pit 180 area is located in the north-western part of a triangular piece of land that is bounded on the south by the MR281 (Draaiberg Road), on the north-east by Gloria Farm and on the northwest by the western access road to Gloria Farm (Figure 2). The western and south-western boundaries of the affected area itself are roughly indicated on the ground by the edges of a fairly dense patch of alien Port Jackson shrubs (Figures 2, 3 and 5). The south-eastern boundary in the area covered by saplings and mature blue gum trees (Figures 6 and 7) is not clear but the MTN mast situated between the eastern fence and the adjacent Gloria Bay road (Figures 2 and 3) give some indication of the extent of the affected area. The north-western half of the site mainly consists of disturbed renosterveld vegetation with low bushes and shrubs (Figures 4, 8 and 9). Good rains had resulted in dense growth of grass and bulbs so visibility of archaeological material on the ground was poor in some of the renosterveld area. Some open patches do however occur and provided gaps where the surface of ferruginised Bokkeveld gravels (Figures 6, 7 and 8) and any archaeological remains could be observed. Sandstone outcrops are evident in the south-eastern part of the polygon (Figure 6).



Figure 2: Google earth image showing the polygon of proposed borrow pit 180, the tracks of the field survey and the MTN mast.

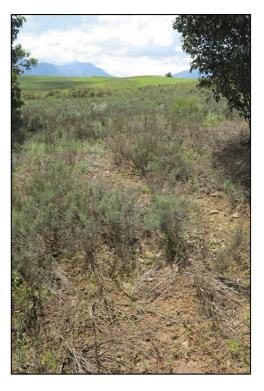


Figures 3 and 4: View towards the east showing the affected area which starts at the line of trees and is located between the track on the left (the north-western boundary) and the MTN mast in the background; view towards the southwest of the renosterveld vegetation in the north-western half of the site.



Figures 5 and 6: View towards the east of the Port Jackson trees in the south-western part of the site; view towards the northeast showing sandstone outcropping amongst the blue gum trees in the south-eastern part of the site.





Figures 7 and 8: Areas where the underlying ferruginised gravel is visible - amongst the blue gum saplings in the southern part and renosterveld in the central portion of the polygon respectively.



Figures 9 and 10: View towards the north of the northeast corner of the site and the neighbouring agricultural land; view towards the east of the remains of the breeze-block structure and trough leading to a catch pit.

**Results of the survey:** Given the presence of an extensive, though dispersed, ESA site at Gloria Bay, similar material might have been expected in the affected area of pit 180, although the Riviersonderend River - which would have provided a focus for human activity in the past, as it does in the present - lies over 2 km away. No Stone Age archaeological remains were however noted during the survey.

The only observations made concerned the remains of a cement floor and breeze-block structure adjacent to a trough leading to a catch pit (Figure 10). As these are of recent origin they are not of any historical significance.

# 6. SIGNIFICANCE AND RECOMMENDATIONS

The absence of Stone Age and historical archaeological remains indicate that the site of the proposed borrow pit 180 is of low archaeological heritage significance. No further archaeological studies or mitigation are therefore 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

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

Yates, R. 1994. Phase One Archaeological Investigation: Gloria Bay, Theewaterskloof Dam. Unpublished report prepared for VKE Consulting Engineers. Archaeology Contracts Office.

## 8. ACKNOWLEDGEMENTS

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