

**ARCHAEOLOGICAL IMPACT ASSESSMENT
OF PROPOSED BORROW PITS ON KLEINDOORNRIVIER
214 AND GROOTDOORNRIVIER 83 NEAR OUDTSHOORN,
EDEN 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 Aurecon South Africa (Pty) Ltd to undertake an Archaeological Impact Assessment (AIA) of the proposed development of two new borrow pits DR1655/5.8/0.2L (Vidamemoria pit no.133) and DR1655/17.2/0R (Vidamemoria pit no. 134) to the south of Oudtshoorn, Eden District Municipality, Western Cape. Material excavated from the pits will be used for the maintenance of gravel roads in the region. Access to the affected areas will be by existing roads and farm tracks. It is proposed to recreate the existing vegetated landscape at slightly lower elevation than at present at both proposed pits. A stock watering feature will also be created at the site of proposed Pit 133.

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 24 October 2012. Pit 133 is located on the lower, northeast-facing slope of a small hill and the adjoining relatively flat-lying land below it on the floodplain of the Doring River. Pit 134 lies on a west-facing slope of a hill close to the broad floodplain of the Grootdoring River. Visibility of archaeological remains on the ground was generally good.

Although no archaeological material was found in the actual affected areas of the proposed pits some heritage remains, namely a cemetery and a few stone artefacts, were observed in the vicinity of the sites. The stone artefacts found close to Pit 133 are in a secondary context and are therefore of low archaeological heritage significance. The cemetery situated close to the area of proposed Pit 134 is obviously of high significance and should be protected. It is recommended that the graves be fenced off and declared strictly off-limits to personnel involved with the proposed quarrying activities.

No significant direct impact on archaeological heritage resources is expected if the proposed pits are developed. No further archaeological studies or mitigation are recommended.

However, the question of the visual impact of the proposed development of Pit 134 on the context of the nearby historical farmstead should be addressed by a relevant specialist.

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 proposed development of two new borrow pits DR1655/5.8/0.2L (Vidamemoria pit no.133) and DR1655/17.2/0R (Vidamemoria pit no. 134) to the south of Oudtshoorn, Eden District Municipality, Western Cape (Figure 1). Material excavated from the pits will be used for the maintenance of gravel roads in the region. Access to the affected areas will be by existing roads and farm tracks. At the site of proposed Pit 133 it is proposed to recreate the existing vegetated landscape and create a stock watering feature at a slightly lower elevation than at present. It is proposed to recreate the existing vegetated landscape at a slightly lower elevation than at present at Pit 134.

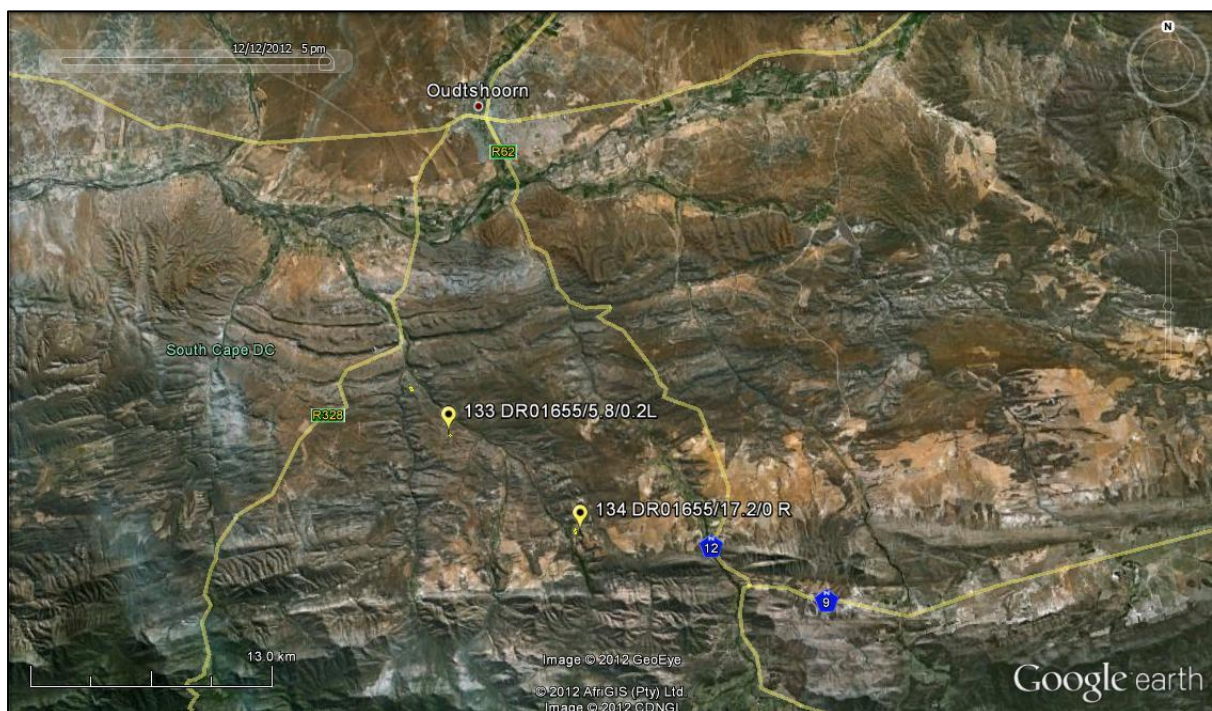


Figure 1: Google earth image showing the location of the proposed pits DR1655/5.8/0.2L (pit 133) and DR1655/17.2/0R (pit 134). The relevant 1:50 000 topographical maps are 3322CA Oudtshoorn and 3322CD & 3422AB George.

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 reference 120726JL22E) 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 pits was undertaken by the author and two assistants on 24 October 2012. Site plans indicating the affected areas were provided by Aurecon for the Phase 1 survey. Each area was covered on foot and archaeological occurrences and tracks were recorded by a Garmin GPSMAP 62s set on the WGS84 datum (Figures 2 and 9). Both sites were extensively photographed.

4.2 Limiting factors

Visibility of archaeological remains on the ground was generally good.

5. DESCRIPTION OF AFFECTED ENVIRONMENT AND SITES

5.1 Archaeological background:

No Archaeological Impact Assessments are indicated in the immediate vicinity of the proposed borrow pits on the map of impact studies recorded on the SAHRA Archaeology, Palaeontology and Meteorite Unit Report Mapping Project DVD (2009). However one study, concerning the upgrade of the Outeniqua Pass (Kaplan 1991, not Parkington as indicated on the 2009 SAHRA map), did identify archaeological sites at the junction of the Oudtshoorn-Camfer roads, the N9 and N12 respectively, some 9 – 10 km to the southeast of proposed pit 134 (See Figure 2). The seven archaeological sites consisted of three panels of rock paintings (one located in a rock shelter), a stone-walled structure which may be a possible late pre-colonial or historical stock pen and three scatters of stone artefacts. Most of the artefacts observed were of Middle Stone Age (MSA) and possibly Early Stone Age (ESA) origin. Only a few Later Stone Age (LSA) artefacts were seen at one of the sites.

5.2 Borrow pit DR1655/5.8/0.2L (Vidamemoria pit no.133)

Approximate area: 17 000 m²

Location: S 33° 44' 45.06" E 22° 10' 47.59"

Farm name and number: Kleindoornrivier 214

Environment: The proposed borrow pit is situated on the lower, northeast-facing slope of a small hill and the adjoining relatively flat-lying land below it on the floodplain of the Doring

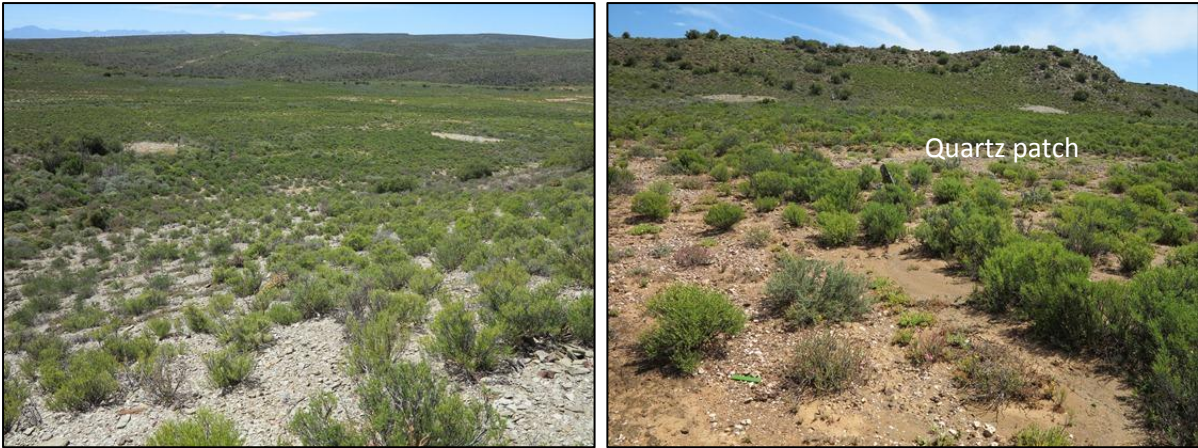
River which lies some 100m to the northeast of the affected area. Minor ephemeral watercourses, beyond the north-western and south-eastern boundaries of the proposed pit, drain into the river. Gravelly silty sand of colluvial origin with clasts of mudrock and occasional quartz fragments overlies cleaved Bokkeveld rocks. The vegetation consists of scattered karoo bushes such as *Pteronia pallens*, 'vygies' and euphorbias. Visibility of archaeological material on the ground was good.



Figure 2: Google earth image showing the proposed borrow pit 133 on the northeast-facing slope of the hill and the tracks of the field survey.



Figures 3 and 4: Pit 133 - view towards the south of the northern end of the hill with the northernmost geotechnical trial pit in the foreground; view towards the southeast.



Figures 5 and 6: Pit 133 - view towards the northeast taken from the slope of the hill; view towards the west with the one of the quartz patches where a couple of stone artefacts were observed outside the polygon. An old fence post is visible between the track and the quartz patch.

Results of the survey: No archaeological remains were observed in the polygon of the proposed borrow pit. Four quartzite artefacts of indeterminate age were however noted in quartz patches to the northeast of the polygon (Figure 6). These consist of one flake, two chunks or cores, and one weathered artefact with possible retouch along one edge (Figures 7 to 9 respectively). All appeared to have been affected by sheet wash and are thus in a secondary context.



Figures 7, 8 and 9: Pit 133 - stone artefacts observed outside the affected area. The scale is in cm.

5.3 Borrow pit DR1655/17.2/0R (Vidamemoria pit no. 134)

Approximate area: 21 000 m²

Location: S 33° 47' 37.32" E 22° 15' 22.08"

Farm name and number: Grootdoornrivier 83

Environment: The proposed borrow pit is located on a west-facing slope of a hill, capped by an old land surface mantled with alluvial gravels, to the east of the DR1655 (Figures 9 and 10). The affected area overlooks agricultural fields situated on the broad floodplain of

the Grootdoring River, some 400m to the west. The farm homestead and associated buildings lie across the river (Figures 9 and 11). The polygon of the proposed pit is bounded by a fence on the south, the road on the west and the northern boundary extends a little beyond the northern-most geotechnical trial pit indicated on the site plan provided. No clear marker for the eastern limit is evident on the ground. Gravelly silty sand with clasts of quartzite and quartz is exposed between the bushes of the Klein Karoo Renosterveld vegetation (Figures 12 and 13). The visibility of archaeological material on the ground was generally good as there were gaps between the bushes.

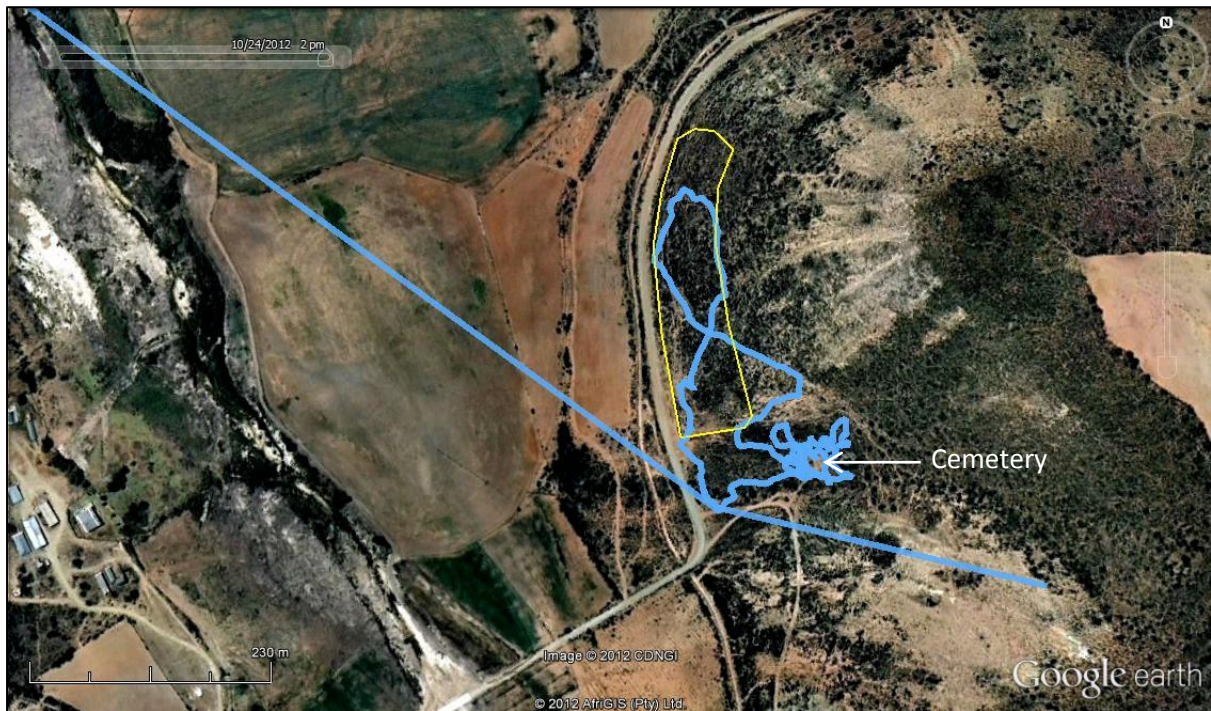


Figure 9: Google earth image showing the proposed borrow pit 134, the author's tracks of the field survey and the position of the cemetery. The Grootdoornrivier farm buildings are on the far left of the photo. Please note that the straight blue lines do not indicate survey tracks.

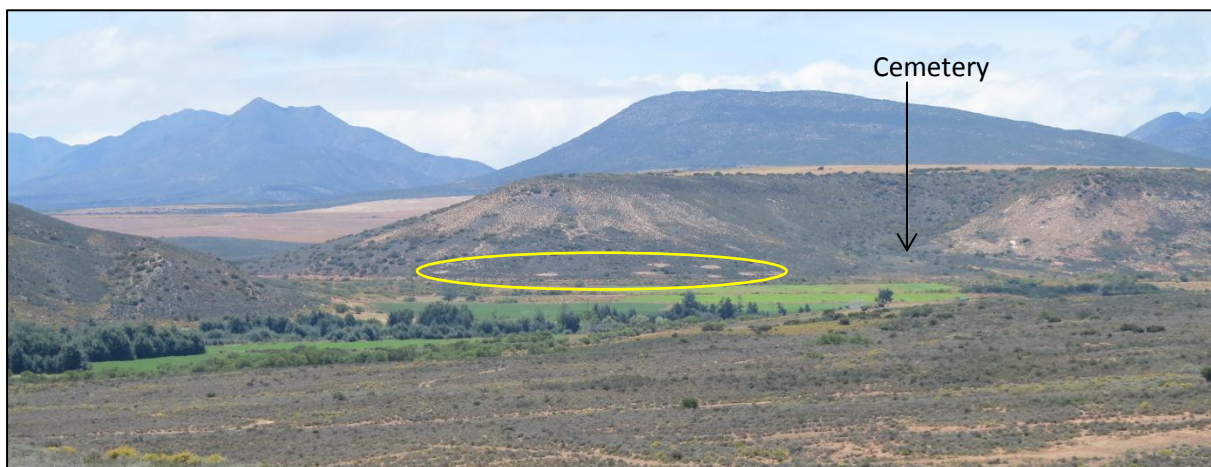


Figure 10: Pit 134 - view towards the east showing the approximate positions of the polygon and the cemetery. The flat pediment surface on the crest of the affected hill is clearly evident. The farmstead is located between the trees in the middle ground and the pit area.



Figures 11 and 12: Pit 134 - view across the affected area towards the floodplain of the Grootdoring River and farm buildings towards the west; detail of the gravelly silty sand.



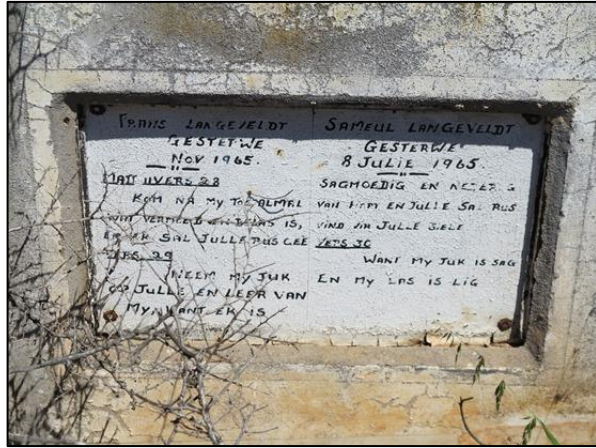
Figures 13 and 14: Pit 134 - view towards the south; view towards the northwest of the cemetery located outside the area of the proposed pit.

Results of the survey: No archaeological remains were observed in the affected area.

A cemetery was noted some 55m or more to the southeast of the polygon (Figures 9, 10, 14 to 18). The cemetery consists of at least 50 graves, probably more. Most of the graves lie in rows and are orientated ESE/WNW. Most are indicated by heaps of rounded cobbles or angular stones, some are just mounds of earth and a couple have cement boundaries. Many have sandstone headstones, some have cement headstones, a few have crosses (wire or wood) and some have nothing. Broken glass jars and tins are found in association with some of the graves. One small piece of abalone shell was also observed. With the exception of one headstone with writing from 1965 (Figure 18), none of the graves are labelled so it is difficult to date them. Besides the formal part of the cemetery, several scattered mounds and headstones are partly hidden by bushes on the outskirts of the more visible graves. A conversation with the farmer, Mr DM Heyns, revealed that the cemetery is used by farm workers and the oldest graves could possibly be 100 years old. Mr Heyns is the 8th generation of his family to farm the land since 1766 and the present homestead was built in 1803 (DM Heyns, pers. comm.).



Figures 15 and 16: Pit 134 - view towards the west showing some of the graves in the formal part of the cemetery; view towards the southwest with the cement headstones of some graves visible in the background and one of the stone heaps visible in the overgrown area with scattered graves.



Figures 17 and 18: Pit 134 - view towards the east showing some of the graves in the western portion of the cemetery; detail of the only labelled headstone.

6. SIGNIFICANCE AND RECOMMENDATIONS

Although no archaeological material was found in the actual affected areas of proposed Pits 133 and 134, some heritage remains were observed in the vicinity of the sites. The few stone artefacts found close to Pit 133 are in a secondary context and are therefore of low archaeological heritage significance. The cemetery close to the area of proposed Pit 134 is obviously of high significance and should be protected. It is recommended that the graves be fenced off and declared strictly off-limits to personnel involved with the proposed quarrying activities.

No significant direct impact on archaeological heritage resources is expected if the proposed pits are developed. No further archaeological studies or mitigation are recommended.

However, the question of the visual impact of the proposed development of Pit 134 on the context of the nearby historical farmstead should be addressed by a relevant specialist. The geotechnical report (Aurecon 2012) does indicate an awareness of the problem of the quarry becoming a “prominent eyesore” (see Figures 9 and 10) and proposes on-going rehabilitation as exploitation progresses.

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

Aurecon. 2012. Strategic Gravel Pit Summary Report – Borrow Pit DR1655/17,5/0,03R.

Kaplan, J. 1991. An Archaeological Impact Assessment of the proposed upgrading of the Outeniqua Pass, George. Unpublished report prepared for Hill, Kaplan, Scott. 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. Mr DM Heyns of Grootdoornrivier kindly provided information on the cemetery close to Pit 134. The assistance of Hedi and Erwin Stummer in the field is gratefully acknowledged.