AN ARCHAEOLOGICAL ASSESSMENT OF THREE BORROW PITS ALONGSIDE DR2959 FROM N7 TO BULLETRAP NORTHERN CAPE PROVINCE

Prepared for

VAN ZYL ENVIRONMENTAL CONSULTANTS

Att: Ms Irme van Zyl PO Box 567 Upington 8800 Ph: (054) 338 0722

Client:

Provincial Government Northern Cape: Department of Transport: Roads & Public Works

Bу



Agency for Cultural Resource Management

P.O. Box 159 Riebeek West 7306 Ph/Fax: 022 461 2755 Cellular: 082 321 0172 E-mail: acrm@wcaccess.co.za

> AUGUST 2008

Executive summary

A Phase 1 Archaeological Impact Assessment of three proposed borrow pits alongside DR2959 from the N7 to Bulletrap in the Northern Cape has identified no significant impacts to pre-colonial archaeological material that will need to be mitigated prior to proposed development activities.

1. INTRODUCTION

1.1 Background and brief

Van Zyl Environmental Consultants, on behalf of the Provincial Government of the Northern Cape: Department of Transport and Public Works, requested the Agency for Cultural Resource Management to undertake an archaeological impact assessment of three proposed borrow pits situated alongside DR2959 from the N7 to Bulletrap in the Northern Cape Province.

The proposed borrow pits have been identified as possible material sources for the proposed upgrading and surfacing of the 7.2 km road.

The extent of each borrow pit is about 1.5 ha

The aim of the study is to locate, identify and map archaeological heritage remains that may be negatively impacted by the planning and implementation of the proposed project, and to propose measures to mitigate against the impact.

It is important to note that the proposed upgrading of DR2959 is to stay within the existing road formation.

2. TERMS OF REFERENCE

The terms of reference for the archaeological study were:

- to determine whether there are likely to be any archaeological sites of significance within the proposed borrow pits
- to identify and map any sites of archaeological significance within the proposed borrow pits;
- to assess the sensitivity and conservation significance of archaeological sites within the proposed borrow pits;
- to assess the status and significance of any impacts resulting from the proposed development, and
- to identify mitigatory measures to protect and maintain any valuable archaeological sites that may exist within the proposed borrow pits.

3. THE STUDY SITE

A locality map is illustrated in Figure 1.

An aerial photograph of the study area indicating the proposed borrow pits is illustrated in Figure 2.

Bulletrap is a small rural settlement situated approximately 30 kms north of Springbok in the Northern Cape next to the N7 leading to Vioolsdrif and is about 580 kms north of Cape Town.

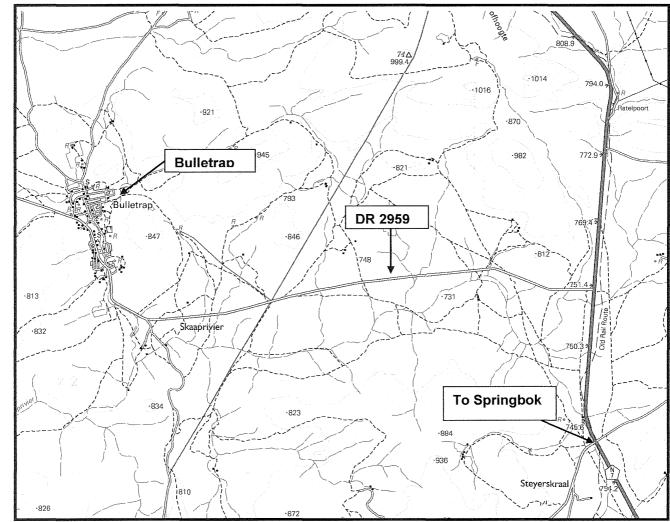


Figure 1. Locality map (2917 BD Ratelpoort)



Figure 2. Aerial photograph of the proposed borrow pits

4. APPROACH TO THE STUDY

4.1 Method of survey

The approach followed in the archaeological study entailed a ground survey of each of the proposed borrow pits.

The site visit and assessment took place on the 7th of August, 2008.

4.2. Constraints and limitations

There were no constraints or limitations associated with the proposed project.

4.3 Potential risks

There are no archaeological risks associated with the proposed project.

5. LEGISLATIVE REQUIREMENTS

5.1 The National Heritage Resources Act (Act No. 25 of 1999)

The National Heritage Resources (NHR) Act requires that "...any development or other activity which will change the character of a site exceeding 5 000m², or the rezoning or change of land use of a site exceeding 10 000 m², requires an archaeological impact assessment"

The relevant sections of the Act are briefly outlined below.

5.2 Archaeology (Section 35 (4))

Section 35 (4) of the NHR stipulates that no person may, without a permit issued by HWC, destroy, damage, excavate, alter or remove from its original position, or collect, any archaeological material or object.

5.3 Burial grounds and graves (Section 36 (3))

Section 36 (3) of the NHR stipulates that no person may, without a permit issued by the South African Heritage Resources Agency (SAHRA), destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years, which is situated outside a formal cemetery administered by a local authority.

6. FINDINGS

6.1 Borrow Pit 1 (S 29° 28 25.3 E 17° 46 23.0)

The proposed borrow pit is situated next to an existing (old) borrow pit alongside DR2959, just outside the town of Bulletrap. The proposed site is relatively flat, but slopes gently from north to south. The receiving environment comprises marginal agricultural lands, last ploughed for wheat in 1993. The receiving environment is heavily overgrazed and degraded and comprises low bush and scrub with larger open patches of ground. Some sheet erosion is also visible. There is some surface stone on the site, while a few small outcrops of quartzite occur in the north east, alongside a gravel farm road (Figures 3-6). A small, perennial stream is situated to the east of the farm road. No significant landscape features occur on the site. The surrounding land use comprises mainly natural veld, much of it overgrazed.

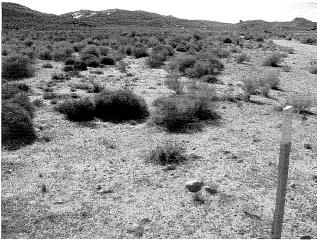


Figure 3. BP 1. View of the site facing north

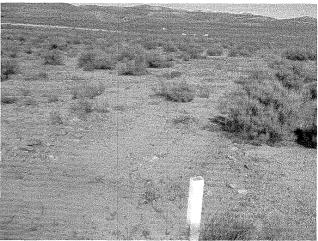


Figure 5. BP 1. View of the site facing south



Figure 4. BP 1. View of the site facing north

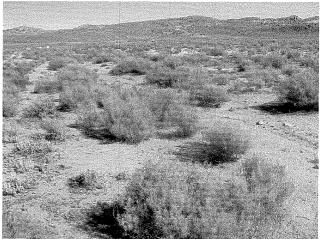


Figure 6. BP 1. View of the site facing south

Findings: Several quartz flakes and chunks and one partially retouched flake on a quartz crystal were documented during the study.

A possible elliptical (lower) grindstone in quartzite was also found, lying upside down in the veld, near the road in the south eastern portion of the proposed site (Figure 7).

The archaeological remains have been rated as having low local significance.

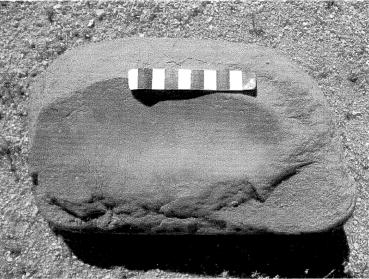


Figure 7. BP 1. Possible lower grindstone. Scale is in cm

6.2 Borrow Pit 2 (S 29° 28 15.3 E 17° 47 00.4)

The proposed borrow pit is located alongside DR2959. The sloping site is severely degraded and overgrazed (Figures 7-10). An old borrow pit occurs alongside a small perennial stream in the western portion of the site. The stream drains into the borrow pit, near the road. Bush and scrub cover much of the site which is also characterised by sheet wash and erosion. Large open patches of ground also occur in places. A gravel farm road cuts through the centre of the proposed site. Two (recent) stone walled kraals have been constructed around an outcropping of quartzite in the north western portion of the proposed site (Figures 11 & 12), while an ash dump/midden is situated behind the outcrop. Rusted metal, asbestos, glass and some modern cut bone occur in the area immediately surrounding the outcropping. According to Dr Peter Beaumont of the McGregor Museum in Kimberly, the stone walled feature is quite recent and does not retain much heritage value¹. A buffer of about 20 m has, however, been proposed around the kraal (Irme van Zyl pers. comm.). There are large amounts of quartzite on the highly degraded slopes in the western portion of the property, alongside the old borrow pit. No significant landscape features occur on the site. The surrounding land use comprises mainly natural veld, much of it overgrazed.

Findings: A few unmodified quartz flakes, chunks and at least one core was documented on the property.

In addition, two Middle Stone Age quartzite flakes were also counted.

The archaeological remains have been rated as having low local significance.

¹ Van Zyl, 2008. Background information document for the proposed upgrading of Road DR2959 from N7 to Bulletrap. Report prepared for Dept. of Transport, Roads and Public Works, Northern Cape Province.



Figure 7. BP 2. View of the site facing north

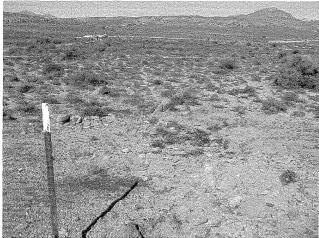


Figure 8. BP 2. View of the site facing south

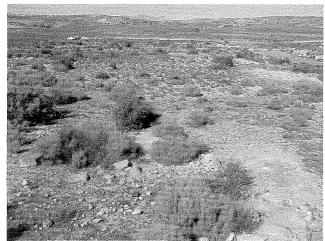


Figure 9. BP 2. View of the site facing south

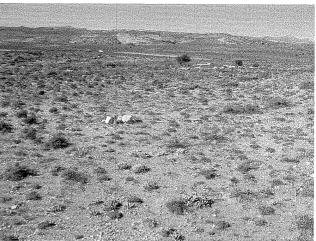


Figure 10. BP 2. View of the site facing south east



Figure 11. BP 2. Stone walled kraal. View facing north west

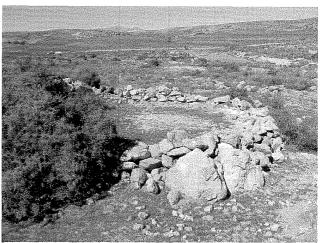


Figure 12. BP 2. Stone walled kraal. View facing south

6.3 Borrow Pit 3 (S 29° 28 09.2 469 E 17° 48 16.8)

The proposed borrow pit is located next to an existing borrow pit on slightly sloping north facing slopes alongside DR2959 (Figures 13-16). The proposed site is fairly severely degraded, much of it heavily overgrazed. The site is covered with dry bush and scrub and succulent vegetation, with larger open patches of ground occurring in the western portion. Some sheet erosion is also evident in both the western and eastern portion of the site. No significant landscape features occur on the site. The surrounding land use comprises mainly natural veld, much of it overgrazed.

Findings: A low density scatter of Later Stone Age quartz tools were documented during the survey. These comprise mainly flakes, including some utilised and several partially retouched flakes, several cores and chunks. The quartz is mainly vein quartz, while a few of the tools have been struck from quartz crystals.

The archaeological remains have been rated as having low local significance.

Two Middle Stone Age quartzite flakes were also counted.



Figure 13. BP 3. View of the site facing north east



Figure 15. BP 3. View of the site facing south

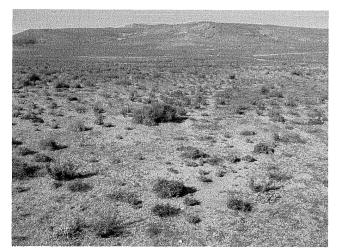


Figure 14. BP 3. View of the site facing south west

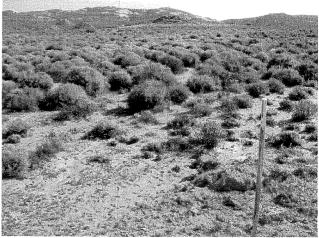


Figure 16. BP 3. View of the site facing north

7. IMPACT STATEMENT

The impact of the proposed project on archaeological heritage remains is likely to be **low**.

The probability of locating significant archaeological heritage remains during implementation of the project is likely to be improbable.

8. CONCLUSION

The Phase 1 Archaeological Impact Assessment of three borrow pits alongside DR2959 from the N7 to Bulletrap in the Northern Cape has identified no significant impacts to precolonial archaeological material that will need to be mitigated prior to proposed development activities.

9. RECOMMENDATIONS

The following recommendation is made:

• Should any unmarked human remains be disturbed, exposed or uncovered during earthworks, these must immediately be reported to the South African Heritage Resources Agency (Mrs Mary Leslie or Dr A. Jerardino 021-462 4502).