

Archaetnos Culture & Cultural Resource Consultants BK 98 09854/23

A REPORT ON A DETAILED BASELINE HERITAGE STUDY FOR THE BOOYSENSDAL CONTRACTORS CAMP, CLOSE TO STEELPOORT, LIMPOPO PROVINCE

For:

GCS PO Box 2597 Rivonia 2128

GCS Project No.: 11-210

REPORT: AE1158

By:

Dr. A.C. van Vollenhoven (L.AKAD.SA.) Accredited member of ASAPA

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Archaetnos P.O. Box 55 GROENKLOOF 0027 Tel: **083 2916104** Fax: 086 520 4173 E-mail: antonv@archaetnos.co.za

Members: AC van Vollenhoven BA, BA (Hons), DTO, NDM, MA (Archaeology) [UP], MA (Culture History) [US], DPhil (Archaeology) [UP], Man Dip [TUT], DPhil (History) [US] AJ Pelser BA (UNISA), BA (Hons) (Archaeology), MA (Archaeology) [WITS] ©Copyright Archaetnos The information contained in this report is the sole intellectual property of Archaetnos CC. It may only be used for the purposes it was commissioned for by the client.

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Although all possible care is taken to identify all sites of cultural importance during the survey of study areas, the nature of archaeological and historical sites are as such that it always is possible that hidden or subterranean sites could be overlooked during the study. Archaetnos and its personnel will not be held liable for such oversights or for costs incurred as a result thereof.

The South African Heritage Resources Agency (SAHRA) or one of its subsidiary bodies needs to comment on this report and clients are advised not to proceed with any action before receiving these. It is the responsibility of the client to submit the report to the relevant heritage authority.

SUMMARY

Archaetnos cc was appointed by GCS to conduct a detailed baseline heritage study for a temporary contractor's camp on the farm Kennedy's Vale 361 KT. The site is located approximately 15 km from the town of Steelpoort, Limpopo Province.

The fieldwork undertaken revealed two sites of cultural heritage significance. One is of medium heritage significance and one of low significance. The latter will be directly impacted whereas the first falls just outside of the area to be surveyed. **This report is seen as ample mitigation and therefore the proposed development can continue**

Discussions were also held with local residents. Information obtained from them is included in the report, together with desktop data on the area.

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1. INTRODUCTION

Archaetnos cc was appointed by GCS to conduct a detailed baseline heritage study for a temporary contractor's camp on the farm Kennedy's Vale 361 KT. The site is located approximately 15 km from the town of Steelpoort, Limpopo Province.

The client indicated the area where the proposed development is to take place, and the survey was confined to this area.

2. TERMS OF REFERENCE, SCOPE AND PURPOSE

The Scope and purpose and terms of reference for the survey were to:

- 1. Do an archaeological and heritage survey and assessment according to generally accepted HIA practices endorsed by SAHRA and ASAPA.
- 2. Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the property (see Appendix A).
- 3. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value (see Appendix B).
- 4. Locate possible heritage sites found on a map
- 5. Photograph heritage sites found
- 6. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions.
- 7. Propose suitable mitigation measures to minimize possible negative impacts on the cultural resources.
- 8. Recommend suitable mitigation measures should there be any sites of significance that might be impacted upon by the proposed development. This includes management measures and a heritage management plan.
- 9. Review applicable legislative requirements.
- 10. Involve local communities in the identification of heritage and archaeological sites.

Social consultation relating to the heritage report is to be handled by the client.

3. CONDITIONS, ASSUMPTIONS, UNCERTAINTIES AND GAPS

The following conditions and assumptions have a direct bearing on the survey and the resulting report:

- 1. Cultural Resources are all non-physical and physical man-made occurrences, as well as natural occurrences associated with human activity (Appendix A). These include all sites, structure and artifacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development. Graves and cemeteries are included in this.
- 2. The significance of the sites, structures and artifacts is determined by means of their historical, social, aesthetic, technological and scientific value in relation to their uniqueness, condition of preservation and research potential. The various aspects are not mutually exclusive, and the evaluation of any site is done with reference to any number of these aspects.
- 3. Cultural significance is site-specific and relates to the content and context of the site. Sites regarded as having low cultural significance have already been recorded in full and require no further mitigation. Sites with medium cultural significance may or may not require mitigation depending on other factors such as the significance of impact on the site. Sites with a high cultural significance require further mitigation (see Appendix B).
- 4. The latitude and longitude of any archaeological or historical site or feature, is to be treated as sensitive information by the developer and should not be disclosed to members of the public.
- 5. All recommendations are made with full cognizance of the relevant legislation.
- 6. It has to be mentioned that it is almost impossible to locate all the cultural resources in a given area, as it will be very time consuming. Developers should however note that the report should make it clear how to handle any other finds that might occur.
- 7. It should be noted that representatives from the mine indicated that there is no community linked to the site to be surveyed. Accordingly no contact information was provided and no arrangements for liaison with the community made. The heritage specialist did however consult with community members in the area, but no guarantee can be given that these people are the ones that used to have a link with the site that was surveyed.

4. DETAILS AND EXPERTISE OF THE PERSON WHO PREPARED THE REPORT

Dr. Anton Carl van Vollenhoven:

Tertiary education

- BA 1986, University of Pretoria
- BA (HONS) Archaeology 1988 (cum laude), University of Pretoria
- MA Archaeology 1992, University of Pretoria

- Post-Graduate Diploma in Museology 1993 (cum laude), University of Pretoria
- Diploma Tertiary Education 1993, University of Pretoria
- DPhil Archaeology 2001, University of Pretoria.
- MA Cultural History 1998 (cum laude), University of Stellenbosch
- Management Diploma 2007 (cum laude), Tshwane University of Technology
- DPhil History 2010, University of Stellenbosch

Relevant positions held

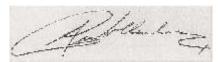
- 1988-1991: Fort Klapperkop Military Museum Researcher
- *1991-1999:* National Cultural History Museum. Work as Archaeologist, as well as Curator/Manager of Pioneer Museum (1994-1997)
- *1999-2002:* City Council of Pretoria. Work as Curator: Fort Klapperkop Heritage Site and Acting Deputy Manager Museums and Heritage.
- 2002-2007: City of Tswhane Metropolitan Municipality. Work as Deputy Manager Museums and Heritage.
- August 2007 present Managing Director for Archaetnos Archaeologists.
- *1988-2003*: Part-time lecturer in Archaeology at the University of Pretoria and a parttime lecturer on Cultural Resources Management in the Department of History at the University of Pretoria.

Experience and professional affiliations

- Has published 68 articles in scientific and popular journals on archaeology and history.
- Has been the author and co-author of over 300 unpublished reports on cultural resources surveys and archaeological work.
- Has published a book on the Military Fortifications of Pretoria.
- Has delivered more than 40 papers and lectures at national and international conferences.
- Member of SAHRA Council for 2003 2006.
- Member of the South African Academy for Science and Art.
- Member of Association for South African Professional Archaeologists.
- Member of the South African Society for Cultural History (Chairperson 2006-2008).
- Has been editor for the SA Journal of Cultural History 2002-2004.
- Member of the Gauteng PHRA's HIA adjudication committee.

5. DECLARATION OF INDEPENDENCE

I, Anton Carl van Vollenhoven from Archaetnos, hereby declare that I am an independent specialist within the field of heritage management.



Signed:

Date: 20 June 2011

6. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are dealt with mainly in two acts. These are the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998).

6.1 The National Heritage Resources Act

According to the above-mentioned act the following is protected as cultural heritage resources:

- a. Archaeological artifacts, structures and sites older than 100 years
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. Grave yards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites or scientific or technological value.

The national estate (see Appendix D) includes the following:

- a. Places, buildings, structures and equipment of cultural significance
- b. Places to which oral traditions are attached or which are associated with living heritage
- c. Historical settlements and townscapes
- d. Landscapes and features of cultural significance
- e. Geological sites of scientific or cultural importance
- f. Archaeological and palaeontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, palaeontological, meteorites, geological specimens, military, ethnographic, books etc.)

A Heritage Impact Assessment (HIA) is the process to be followed in order to determine whether any heritage resources are located within the area to be developed as well as the possible impact of the proposed development thereon. An Archaeological Impact Assessment only looks at archaeological resources. An HIA must be done under the following circumstances:

- a. The construction of a linear development (road, wall, power line canal etc.) exceeding 300m in length
- b. The construction of a bridge or similar structure exceeding 50m in length
- c. Any development or other activity that will change the character of a site and exceed $5\ 000\text{m}^2$ or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding $10\ 000\ \text{m}^2$

e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority

<u>Structures</u>

Section 34 (1) of the mentioned act states that no person may demolish any structure or part thereof which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

A structure means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith.

Alter means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or the decoration or any other means.

Archaeology, palaeontology and meteorites

Section 35(4) of this act deals with archaeology, palaeontology and meteorites. The act states that no person may, without a permit issued by the responsible heritage resources authority (national or provincial):

- a. destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- c. trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
- d. bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.
- e. alter or demolish any structure or part of a structure which is older than 60 years as protected.

The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the South African Heritage Resources Agency (SAHRA). In order to demolish such a site or structure, a destruction permit from SAHRA will also be needed.

<u>Human remains</u>

Graves and burial grounds are divided into the following:

- a. ancestral graves
- b. royal graves and graves of traditional leaders
- c. graves of victims of conflict
- d. graves designated by the Minister
- e. historical graves and cemeteries

f. human remains

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

- a. destroy, damage, alter, exhume or remove from its original position of otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
- b. 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; or
- c. bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation, or any equipment which assists in the detection or recovery of metals.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations** (**Ordinance no. 12 of 1980**) (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated) before exhumation can take place.

Human remains can only be handled by a registered undertaker or an institution declared under the **Human Tissues Act** (Act 65 of 1983 as amended).

Unidentified/unknown graves are also handled as older than 60 until proven otherwise.

6.2 The National Environmental Management Act

This act (Act 107 of 1998) states that a survey and evaluation of cultural resources must be done in areas where development projects, that will change the face of the environment, will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof are made.

Environmental management should also take the cultural and social needs of people into account. Any disturbance of landscapes and sites that constitute the nation's cultural heritage should be avoided as far as possible and where this is not possible the disturbance should be minimized and remedied.

7. METHODOLOGY

7.1 Survey of literature

A survey of literature was undertaken in order to obtain background information regarding the area. Sources consulted in this regard are indicated in the bibliography.

7.2 Field survey

The survey was conducted according to generally accepted HIA practices and was aimed at locating all possible objects, sites and features of cultural significance in the area of proposed development. If required, the location/position of any site was determined by means of a Global Positioning System (GPS), while photographs were also taken where needed.

The survey was done on foot and by off road vehicle.

7.3 Oral histories

People from local communities are interviewed in order to obtain information relating to the surveyed area. It needs to be stated that this is not applicable under all circumstances. When applicable, the information is included in the text and referred to in the bibliography.

7.4 Documentation

All sites, objects features and structures identified were documented according to the general minimum standards accepted by the archaeological profession. Co-ordinates of individual localities were determined by means of the Global Positioning System (GPS). The information was added to the description in order to facilitate the identification of each locality.

7.5 Evaluation of Heritage sites

The evaluation of heritage sites is done by using the following criteria:

- The unique nature of a site
- The integrity of the archaeological deposit
- The wider historic, archaeological and geographic context of the site
- The location of the site in relation to other similar sites or features
- The depth of the archaeological deposit (when it can be determined or is known)
- The preservation condition of the site
- Uniqueness of the site and
- Potential to answer present research questions.

8. LOCATION AND DESCRIPTION OF THE AREA

The area where the development planned is located approximately 15 km to the south-west of the town of Steelpoort. This is in the Limpopo Province (Figure 1-3).

The area is mostly disturbed due to previous human activities on the site. This include ploughing, grazing and also that it has been used as a camp previously. The ground is covered by grass, but this mostly is pioneer species. Sickle bush and other pioneer vegetation also dominate the vegetation (Figure 4-5). Although the plant growth in certain areas is denser, it clearly is pioneer species.

The topography of the area is very flat, although there is a mountain on the east and south. The development however does not go that high up the slope. The Dwars River is situated to the south-west, but again the development does not go that far in that direction for it to influence the topography.



Figure 1 Google image indicating the location of the surveyed site close to Steelpoort.

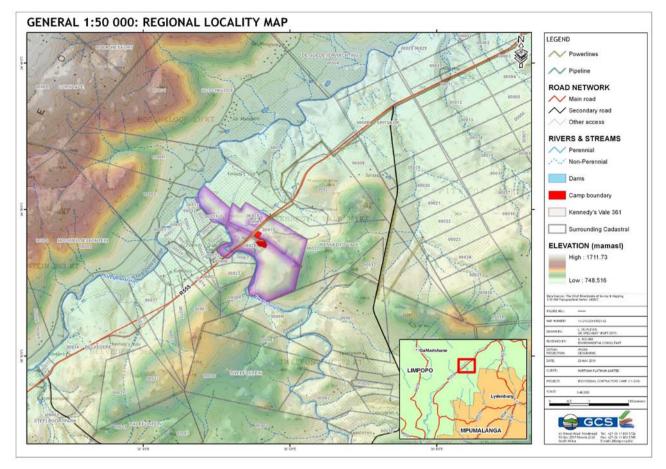


Figure 2 Location of the Booysensdal Contractors Camp.

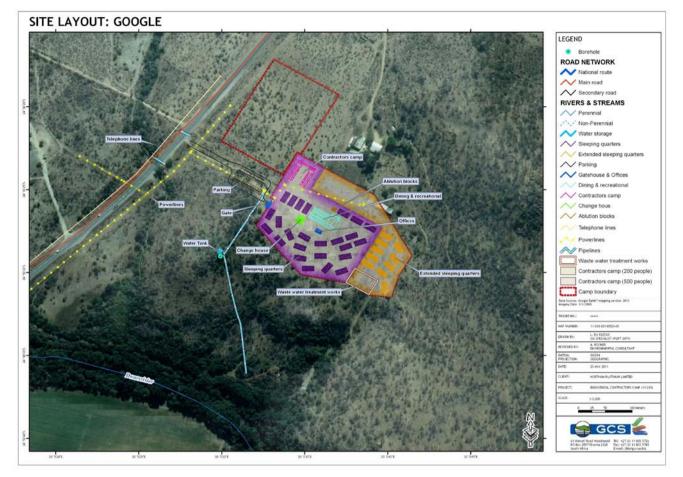


Figure 3 Google image with detail of the planned development.



Figure 4 General view of the surveyed area where the vegetation cover is denser.



Figure 5 General view of the surveyed area with less dense vegetation.

9. DISCUSSION

During the survey two sites of cultural heritage significance were located in the area to be developed. However it is important to consider that sites may also become known later during construction and mining work and that those need to be dealt with in accordance with the legislation discussed above. In order to enable the reader to better understand possible archaeological and cultural features that may be unearthed during construction activities, it is necessary to give a background regarding the different phases of human history.

9.1 Stone Age

The Stone Age is the period in human history when lithic material was mainly used to produce tools (Coertze & Coertze 1996: 293). In South Africa the Stone Age can be divided in three periods. It is however important to note that dates are relative and only provide a broad framework for interpretation. The division for the Stone Age according to Korsman & Meyer (1999: 93-94) is as follows:

Early Stone Age (ESA) 2 million $-150\ 000$ years ago Middle Stone Age (MSA) $150\ 000 - 30\ 000$ years ago Late Stone Age (LSA) $40\ 000$ years ago -1850 - A.D.

No Stone Age sites are indicated in a historical atlas of this area. However one needs to take note that this may only indicate a lack of research in the area. The closest Stone Age sites indicated in the atlas is Middle and Late Stone Age sites close to Ohrigstad (Bergh 1999: 5). Stone Age material was however found during various surveys in and around Steelpoort (Archaetnos database). The environment definitely would be supportive to Stone Age activities. The nearby mountain gives natural shelter and material to make stone tools from. The river would lure animals to the area and these people would therefore have hunted here. One should therefore be on the lookout for stone tools during construction work on the site.

9.2 Iron Age

The Iron Age is the name given to the period of human history when metal was mainly used to produce metal artifacts (Coertze & Coertze 1996: 346). In South Africa it can be divided in two separate phases according to Van der Ryst & Meyer (1999: 96-98), namely:

Early Iron Age (EIA) 200 – 1000 A.D. Late Iron Age (LIA) 1000 – 1850 A.D.

Huffman (2007: xiii) however indicates that a Middle Iron Age should be included. His dates, which now seem to be widely accepted in archaeological circles, are:

Early Iron Age (EIA) 250 – 900 A.D. Middle Iron Age (MIA) 900 – 1300 A.D. Late Iron Age (LIA) 1300 – 1840 A.D.

The nearest Early Iron Age site to the surveyed area is the sites at Lydenburg and Klingbeil to the south-east of the surveyed area. A large number of Late Iron Age sites have previously

been identified in an area roughly stretching between Lydenburg, Nelspruit and Badplaas (Bergh 1999: 6-7). Other sites have also been identified by Archaetnos during surveys in the area (Archaetnos database).

Therefore such sites may also be found higher up in the mountains. Signs of Iron Age activities were however identified during the survey, including some upper grinding stones and broken lower grinders (Figure 6). No site was however identified.

The environment of the surveyed area is suitable for Iron Age people. The mountain would give shelter and building material and the valley would provide grazing for livestock as well as water.



Figure 6 Iron Age remnants found during the survey.

9.3 Historical Age

The historical age started with the first recorded oral histories in the area. It includes the moving into the area of people that were able to read and write. It is also known that one of the early trade routes passed along the Steelpoort River (Bergh 1999: 9).

At the beginning of the 19th century the area was inhabited by the Koni, Tau, Pedi and Roka who are all of Sotho origin. During the Difaquane, in ca.1822, the Ndebele of Mzilikazi entered this area from the south. In 1825 a Zulu group under Zwide attacked the Ndebele here. As a result these other groups fled to the north. The returned later on (Bergh 1999: 10-11).

None of the early travellers who visited the old Transvaal visited this area. In 1836 the Voortrekker groups of Tregardt and Van Rensburg passed to the west of the Steelpoort River (Bergh 1999: 13-14). The land around Lydenburg, including the Steelpoort River Valley was traded from the Swazi in 1846 and the first white settlers then started farming here (Bergh 1999: 16, 130-132).

9.4 Discussion of sites identified during the survey

The two sites identified during the survey both date to the Historical Age. In talking to the community and by surveying a larger area as is the convention, three grave sites were also identified. These however fall outside of the area to be developed and are therefore only mentioned.

Site 1

This is the ruin of a building associated with a stone cattle kraal (Figure 7-8). The building is fairly recent and probably not older than 60 years. The rectangular kraal may well be older and may be a remnant from the earliest white farming activities in the area. It may however not be very unique and therefore the site is regarded as having **medium** cultural significance.

GPS: 24°50.249'S 30°05.649'E

It needs to be mentioned that this just falls outside of the area to be developed. As there may be an indirect impact care should be taken that the kraal is not disturbed during construction or other activities. No other mitigation measures are required.

Significance rating:

Extent – Low 1 Duration- Low/Medium 2 Magnitude – Quantitative Negative M/L 4 Probability of concern – 3 Significance of impact – SP = (S+D+M) x P = (1+2+4) x 3 = 7 x 3 = 21

This is a low environmental significance.



Figure 7 Building found at site no. 1.



Figure 8 Stone kraal at site no. 1.

<u>Site 2</u>

This is the remains of a former camp or something similar. It consists of an area disturbed and including various concrete floors, concrete platforms, and areas where artifacts such as glass, asbestos and other debris are found (Figure 9-10).

GPS: 24°50.498'S 30°05.600'E

The site is of a **low** cultural significance. This report is seen as ample mitigation and it may therefore be demolished during construction activities on site.

Extent – Low 1 Duration- Low 1 Magnitude – Quantitative Negative L 2 Probability of concern – 1 Significance of impact – SP = (S+D+M) x P = (1+1+2) x 1 = 4 x 1 = 4

This is a low environmental significance.



Figure 9 Concrete platform such as this one are found at site no. 2.



Figure 10 A concrete floor such as some of those at site no. 2.

10. CONSULTATION PROCESS

During the survey the following community members in the area were consulted:

- Mike Rankwa
- Manuel Mudau

They indicated graves in the area, but these were all outside of the one that was surveyed. They also indicated that no graves are found inside of the area that was surveyed.

11. CONCLUSIONS AND RECOMMENDATIONS

In conclusion it can be stated that the detailed baseline heritage study of the area was conducted successfully. The sites found are indicated in Figure 11.

The final recommendations are as follows:

• Although site no. 1 is of medium cultural significance it, falls outside of the area to be developed. As there may be an indirect impact care should be taken that the kraal is not disturbed during construction or other activities. No other mitigation measures are required for site no. 1.

- Site no. 2 is of low cultural significance. This report is seen as ample mitigation and it may therefore be demolished during construction activities on site.
- It should be noted that the subterranean presence of archaeological and/or historical sites, features or artifacts are always a distinct possibility. These include graves. Care should therefore be taken when development work commences that if any of these are accidentally discovered, a qualified archaeologist be called in to investigate.



Figure 11 Location of the sites found during the survey.

12. REFERENCES

Archaetnos database.

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APPENDIX A

Definition of terms:

Site: A large place with extensive structures and related cultural objects. It can also be a large assemblage of cultural artifacts, found on a single location.

Structure: A permanent building found in isolation or which forms a site in conjunction with other structures.

Feature: A coincidental find of movable cultural objects.

Object: Artifact (cultural object).

(Also see Knudson 1978: 20).

APPENDIX B

Definition of significance:

Historic value:	Important in the community or pattern of history or has an association with the life or work of a person, group or organization of importance in history.
Aestetic value:	Important in exhibiting particular aesthetic characteristics valued by a community or cultural group.
Scientific value:	Potential to yield information that will contribute to an understanding of natural or cultural history or is important in demonstrating a high degree of creative or technical achievement of a particular period
Social value:	Have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.
Rarity:	Does it possess uncommon, rare or endangered aspects of natural or cultural heritage.
Representivity:	Important in demonstrating the principal characteristics of a particular class of natural or cultural places or object or a range of landscapes or environments characteristic of its class or of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province region or locality.

APPENDIX C

Cultural significance:

- Low A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings.
- Medium Any site, structure or feature being regarded less important due to a number of factors, such as date and frequency. Also any important object found out of context.
- High Any site, structure or feature regarded as important because of its age or uniqueness. Graves are always categorized as of a high importance. Also any important object found within a specific context.

Heritage significance:

- Grade I Heritage resources with exceptional qualities to the extent that they are of national significance
- Grade II Heritage resources with qualities giving it provincial or regional importance although it may form part of the national estate
- Grade III Other heritage resources of local importance and therefore worthy of conservation

APPENDIX D

Protection of heritage resources:

- Formal protection

National heritage sites and Provincial heritage sites – grade I and II Protected areas - an area surrounding a heritage site Provisional protection – for a maximum period of two years Heritage registers – listing grades II and III Heritage areas – areas with more than one heritage site included Heritage objects – e.g. archaeological, palaeontological, meteorites, geological specimens, visual art, military, numismatic, books, etc.

- General protection

Objects protected by the laws of foreign states Structures – older than 60 years Archaeology, palaeontology and meteorites Burial grounds and graves Public monuments and memorials

APPENDIX E

Assessment of impacts identified

POTENTIAL IMPACT	ACTIVITY	ENVIRONMENTAL SIGNIFICANCE BEFORE MITIGATION						RECOMME MITIGATI MEASUR
		Μ	I D	S	Р	TOTAL	SP	REMAR
POTENTIAL ENVIRONMENTAL IMPACTS								
ISSUES RELATED TO HERI	ITAGE							
Site 1 - stone kraal	traffic	4	2	1	3	21	L	Keep an eye open
Site 2 - old camp	new camp	2	1	1	1	4	L	None
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	'	Ĺ	'	'	<u> </u>	'		
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	'	Ĺ'	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
ISSUES RELATED CUMULI	ATIVE IMPA	CTS	ON (Inse	ert Specia	list Field			
Site 1 - stone kraal	traffic	4	2	1	3	21	L	Keep an ey open
Site 2 - old camp	new camp	2	1	1	1	4	L	None
· · · · · · · · · · · · · · · · · · ·					<u> </u>			