

Archaetnos Culture & Cultural Resource Consultants BK 98 09854/23

#### A REPORT ON A CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED DEVELOPMENT OF A FILLING STATION IN BOSHOEK, NORTH WEST PROVINCE

For:

HYDRO SCIENCE PO Box 1322 Ruimsig 1732 E-mail: paulette@hydroscience.co.za

#### **REPORT NO.: AE01861V**

By:

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#### 7 December 2018

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### SUBMISSION OF REPORT

Please note that the South African Heritage Resources Agency (SAHRA) or one of its subsidiary bodies needs to comment on this report.

It is the client's responsibility to do the submission via the SAHRIS System on the SAHRA website.

Clients are advised not to proceed with any action before receiving the necessary comments from SAHRA.

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## **EXECUTIVE SUMMARY**

Archaetnos cc was requested by Hydro Science CC to conduct a cultural heritage impact assessment (HIA) for the proposed development of a filling station in Boshoek. The town of Boshoek lies to the north-west of Rustenburg and falls within the Rustenburg Local Municipality, in the North West Province.

The study area is known as portion 135 of the farm Boschhoek 103 JR. It lies towards the north-east of the R565 road, running through Boshoek. Adjacent properties are all either residential or light industrial.

The methodology for the study includes a survey of literature and a field survey. The latter 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 undertaken by doing a physical survey via off-road vehicle and on foot and covered as much as possible of the area to be studied. Certain factors, such as accessibility, density of vegetation, etc. may however influence the coverage.

All sites, objects, features and structures identified were documented according to the general minimum standards accepted by the archaeological profession. Coordinates 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.

During the survey no site of cultural heritage significance was identified. This is due to the entire area being disturbed by former and recent human interventions.

It is therefore recommended that the proposed development may continue. This report is seen as ample mitigation.

It should be noted that the subterranean presence of archaeological and/or historical sites, features or artifacts is always a distinct possibility. Due to the density of vegetation it also is possible that some sites may only become known later on. Operating controls and monitoring should therefore be aimed at the possible unearthing of such features. Care should therefore be taken when development commences that if any of these are discovered, a qualified archaeologist be called in to investigate the occurrence.

It is also important to take cognizance that it is the client's responsibility to do the submission of this report to the relevant heritage authority. No work on site may commence before receiving the necessary comments from this authority.

### CURRICULUM VITAE <u>Prof Anton Carl van Vollenhoven</u>

## PERSONAL INFORMATION

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## 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

## EMPLOYMENT HISTORY

- 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 Tshwane 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 part-time lecturer on Cultural Resources Management in the Department of History at the University of Pretoria.
- 2014-2015: Part-time lecturer for the Honours degree in Museum Sciences in the Department of History and Heritage Studies at the University of Pretoria
- Since 2015: Extraordinary Professor of History at the Mahikeng campus of the Northwest University

# **OTHER**

- Has published 79 articles in scientific and popular journals on archaeology and history.
- Has been the author and co-author of over 845 unpublished reports on cultural resources surveys and archaeological work.
- Has published books on the Military Fortifications of Pretoria and Heritage Guidelines.
- Contributed to a book on Mapungubwe.
- Has delivered more than 66 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; 2012-2014).

- Has been editor for the SA Journal of Cultural History 2002-2004.
- Member of the Provincial Heritage Resources Agency, Gauteng's Council.
- Member of Provincial Heritage Resources Agency, Gauteng's HIA adjudication committee (Chairperson 2012-2015).

A list of reports can be viewed on <u>www.archaetnos.co.za</u>.

#### DECLARATION OF INDEPENDENCE

I, Anton Carl van Vollenhoven from Archaetnos, hereby declare that I am an independent specialist within the field of heritage management. The report complies with the 2007 SAHRA guidelines in this regard.

Hospillander

Signed:

Date: 7 December 2018

#### LIST OF ACRONYMS:

- AIA Archaeological Impact Assessment
- CMP Cultural Management Plan
- EAP Environmental Assessment Practitioner
- EIA Environmental Impact Assessment
- HIA Heritage Impact Assessment
- PIA Palaeontological Impact Assessment
- SAHRA –South African Heritage Resources Agency

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### 1. INTRODUCTION

Archaetnos cc was requested by Hydro Science CC to conduct a cultural heritage impact assessment (HIA) for the proposed development of a filling station in Boshoek. The town of Boshoek lies to the north-west of Rustenburg and falls within the Rustenburg Local Municipality, in the North West Province (Figure 1-3).

The study area is known as portion 135 of the farm Boschhoek 103 JR. It lies towards the north-east of the R565 road, running through Boshoek. Adjacent properties are all either residential or light industrial.

The client indicated the area to be surveyed and the survey was confined to these. It was done via foot.



Figure 1: Location of Boshoek in the North West Province. North reference is to the top.



Figure 2: Location of the site in Boshoek. North reference is to the top.



Figure 3: Google Earth image indicating the surveyed area. North reference is to the top.

## 2. TERMS OF REFERENCE

The Terms of Reference for the survey were to:

- 1. Identify objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the property (see Appendix A).
- 2. Document the found cultural heritage sites according to best practice standards for heritage related studies.
- 3. Study background information on the area to be developed.
- 4. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value (see Appendix B).
- 5. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions.
- 6. Recommend suitable mitigation measures to minimize possible negative impacts on the cultural resources by the proposed development.
- 7. Review applicable legislative requirements.

### 3. CONDITIONS & ASSUMPTIONS

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 C).

- 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.

## 4. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are dealt with mainly in two acts. The first of these are the National Heritage Resources Act (Act 25 of 1999) which deals with the cultural heritage of the Republic of South Africa. The second is the National Environmental Management Act (Act 107 of 1998) which inter alia deals with cultural heritage as part of the Environmental Impact Assessment process.

### 4.1 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 paleontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, paleontological, 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 and can only be done by a professional archaeologist.

A Palaeontological Impact Assessment (PIA) is an assessment of palaeontological heritage. Palaeontology is a different field of study, and although also sometimes required by the South African Heritage Resources Agency (SAHRA)<sup>1</sup>, should be done by a professional palaeontologist.

The different phases during the HIA process are described in Appendix E. 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 000m<sup>2</sup> or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m<sup>2</sup>
- 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):

<sup>&</sup>lt;sup>1</sup> Please consult SAHRA to determine whether a PIA is necessary. It should be noted that according to the Palaeontology Sensitivity Map of SAHRA, a PIA is not needed in this area.

- a. destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or paleontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological 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 paleontological material or object, or any meteorite; or
- d. bring onto or use at an archaeological or paleontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and paleontological 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
- 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.

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

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 **National Health Act (Act 61 of 2003)**.

### 4.2 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.

#### 5. THE INTERNATIONAL FINANCE CORPORATIONS' PERFORMANCE STANDARD FOR CULTURAL HERITAGE

This standard recognizes the importance of cultural heritage for current and future generations. It aims to ensure that clients protect cultural heritage in the course of their project activities. This is done by clients abiding to the law and having heritage surveys done in order to identify and protect cultural heritage resources via field studies and the documentation of such resources. These need to be done by competent professionals (e.g. archaeologists and cultural historians).

Possible chance finds, encountered during the project development, also need to be managed by not disturbing such finds and by having them assessed by professionals. Impacts on the cultural heritage should be minimized. This include the possible maintenance of such sites in situ, or when impossible, the restoration of the functionality of the cultural heritage in a different location.

When cultural historical and archaeological artifacts and structures need to be removed is should be done by professionals and by abiding to the applicable legislation. The removal of cultural heritage resources may however only be considered if there are no technically or financially feasible alternatives. In considering the removal of cultural resources, it should be outweighed by the benefits of the overall project to the effected communities. Again, professionals should carry out the work and adhere to the best available techniques. Consultation with affected communities should be engaged in. This entails that access to such communities should be granted to their cultural heritage if this is applicable. Compensation for the loss of cultural heritage should only be given in extra-ordinary circumstances.

Critical cultural heritage may not be impacted on. Professionals should be used to advise on the assessment and protection thereof. Utilization of cultural heritage resources should always be done in consultation with the effected communities in order to be consistent with their customs and traditions and to come to agreements with relation to possible equitable sharing of benefits from commercialization.

### 6. METHODOLOGY

#### 6.1 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.

### 6.2 Reference to other specialist studies

The SAHRA Database (SAHRIS) could not be accessed as it was down during the writing of this report. However, one needs to realise that the property under discussion is in a town and therefore heritage reports done in the surrounding areas will have no effect on the specific property. One report is known from the Archaetnos database (Archaetnos' database).

### 6.3 Public consultation and stakeholder engagement

General public consultation will be done by Hydro Science. The various specialist reports will be utilized for this purpose.

#### 6.4 Physical 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. One regularly looks a bit wider than the demarcated area, as the surrounding context needs to be taken into consideration.

If required, the location/position of any site was determined by means of a Global Positioning System (GPS)<sup>2</sup>, while photographs were also taken where needed. The survey was undertaken by doing a physical survey on foot and covered as much as possible of the area to be studied (Figure 4).

<sup>&</sup>lt;sup>2</sup> A Garmin Oregon 550 with an accuracy factor of a few meters.

Certain factors, such as accessibility, density of vegetation, etc. may however influence the coverage. The size of the surveyed area is approximately 1,4 Ha and the survey took 1 hour to complete.

#### 6.5 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.

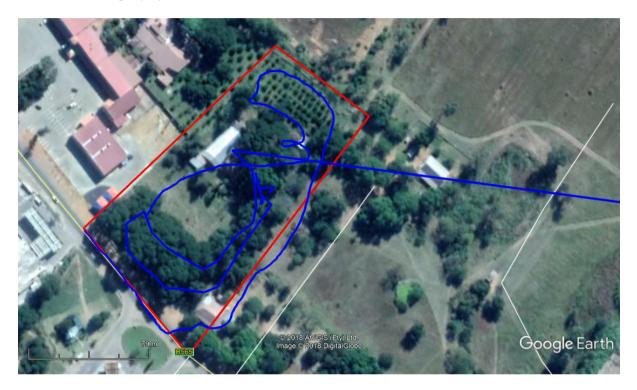


Figure 4: GPS track of the surveyed area. North reference is to the top.

### 6.6 Documentation

All sites, objects, features and structures identified were documented according to the general minimum standards accepted by the archaeological profession. Coordinates 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.

### 6.7 Evaluation of Heritage sites

The evaluation of heritage sites is done by giving a field rating of each (see Appendix C) 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.

## 7. DESCRIPTION OF THE ENVIRONMENT

The area that was surveyed is in an entirely urbanized location. Surrounding properties consist of light industries or residential smallholdings. The property under discussion is such a smallholding. The entire site is disturbed. This consist of the remains of landscaped gardens, alien trees, an orchard, an old farm dam, a house and other outbuilding (Figure 5-8).

As a result, no natural vegetation is to be found. Vegetation thus consist of pioneer species, such as weeds and grass with remains of lawns and landscaped garden features. The vegetation cover in the entire area is very low with an open under footing. Both the vertical and horizontal archaeological visibility were therefore good. The area definitely is deemed a low risk area for heritage sites.

The house referred to is younger than 60 years. The outbuildings are therefore probably of the same age, but in any case in a very poor state. It therefore has no heritage significance.

The topography of the surveyed area is fairly flat. No water courses or high-rise areas are present.



Figure 5: General view of the surveyed area, including alien trees.



Figure 6: Another view of the site including an old farm dam.



Figure 7: Orchard on the property.



Figure 8: The main house on the property.

## 8. HISTORICAL CONTEXT

No sites of cultural heritage significance were located during the survey. Some background information is given in order to place the surveyed area and the sites found in a historical context and to contextualize possible finds that could be unearthed during construction activities.

### 8.1 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 material has yet been reported in Boshoek (Bergh 1999: 4-5). This however does not mean that such material does not exist here, but only that such occurrences have not been noticed yet. It is most probably that Stone Age material are to be found in the wider vicinity.

### 8.2 Iron Age

The Iron Age is the name given to the period of human history when metal was mainly used to produce artifacts (Coertze & Coertze 1996: 346). In South Africa it can be divided in three separate phases according to Huffman (2007: xiii) namely:

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

Although no Early Iron Age site has been reported in the area (Bergh 1999: 6) it should be noted that very few sites from this period in time has been discovered throughout Southern Africa south of the Limpopo River.

A large number of Late Iron Age sites have however been recorded in the part of the North West Province which includes Boshoek (Bergh 1999: 7). The settlement of Phokeng was established before the first white settlers moved into this area (Bergh 1999: 9). One can therefore assume that Iron Age remains are located in the wider geographical area.

#### 8.3 Historical Age

The Historical Age started with the first historical sources which can be used to learn more about people of the past. In South Africa it can be divided into two phases. The first includes oral histories as well as the recorded oral histories of past societies. The latter were usually written by people who contact with such a community for a short time. This is followed by the second phase which includes the moving into the area of people that were able to read and write (Van Vollenhoven 2006a: 189).

At the start of the 19<sup>th</sup> century the Fokeng, a Tswana group, already inhabited the area to the north-west of the present-day Rustenburg (Bergh 1999: 10, 106). During the Difaquane (1820's), they fled from Mzilikazi's impi, but later returned to this area (Bergh 1999: 11).

Early travelers have moved through the area. The first of these were the explorers Robert Schoon and William McLuckie who moved through the area in 1829 (Bergh 1999: 12; Changuion 1999: 119). They were followed by David Hume in 1830, William Cornwallis Harris in 1836 and Dr David Livingstone in 1847 (Bergh 1999: 13; Changuion 1999: 121-123).

The first permanent white settlers came to the area in 1839-1840. This was during the Great Trek. The first farm names of the area are Waterval and Boschhoek, the latter being the farm on which the village of Boshoek was later on established (Bergh 1999: 15, 129).

Many of the buildings in the town date to the late 19<sup>th</sup>/ early 20<sup>th</sup> century and are therefore of heritage significance (Van Vollenhoven 2006b). None of these were however found on the surveyed site.

### 9. PUBLIC CONSULTATION

The application forms part of a Basic Assessment process. Public consultation is handled by the Environmental Impact Assessment Practitioner, namely Hydro Science, who can be contacted via Paulette Jacobs via e-mail at: paulette@hydroscience.co.za

### **10. CONCLUSION AND RECOMMENDATIONS**

As indicated no sites of cultural heritage significance was located in the surveyed area. The survey of the indicated area was completed successfully. The following is recommended:

- Since nothing of heritage importance was identified the proposed development may continue.
- This report is seen as ample mitigation.
- It should be noted that the subterranean presence of archaeological and/or historical sites, features or artifacts is always a distinct possibility. Care should therefore be taken when development commences that if any of these are discovered, a qualified archaeologist be called in to investigate the occurrence.

#### 11.REFERENCES

Archaetnos database.

- Bergh, J.S. (red.). 1999. Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies. Pretoria: J.L. van Schaik.
- Changuion, L. 1999. Blanke vestiging noord van die Vaalrivier. Vroeë blanke reisigers en besoekers, 1723-ca.1845. Bergh, J.S. (red.). 1999.
   Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies. Pretoria: J.L. van Schaik.
- Coertze, P.J. & Coertze, R.D. 1996. Verklarende vakwoordeboek vir Antropologie en Argeologie. Pretoria: R.D. Coertze.
- Huffman, T.N. 2007. Handbook to the Iron Age: The Archaeology of Pre-Colonial Farming Societies in Southern Africa. Scotsville: University of KwaZulu-Natal Press.
- International Finance Corporation. 2012. Overview of performance standards on Environmental and Social Sustainability. Performance Standard 8, Cultural Heritage. World Bank Group.
- Knudson, S.J. 1978. **Culture in retrospect.** Chicago: Rand McNally College Publishing Company.
- Korsman, S.A. & Meyer, A. 1999. Die Steentydperk en rotskuns. Bergh, J.S. (red.).

Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies. Pretoria: J.L. van Schaik.

- Republic of South Africa. 1980. Ordinance on Excavations (Ordinance no. 12 of 1980). The Government Printer: Pretoria.
- Republic of South Africa. 1999. **National Heritage Resources Act** (No 25 of 1999). Pretoria: The Government Printer.
- Republic of South Africa. 1998. **National Environmental Management Act** (no 107 of 1998). Pretoria: The Government Printer.
- Republic of South Africa. 2003. **National Health Act** (No 61 of 2003). The Government Printer: Pretoria.

SAHRA's SAHRIS database.

Van der Ryst, M.M. & Meyer, A. 1999. Die Ystertydperk. Bergh, J.S. (red.). Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies. Pretoria: J.L. van Schaik.

Van Vollenhoven, A.C. 2006a. Die prehistoriese en vroeë historiese tydvak in Pretoria. **Suid-Afrikaanse Tydskrif vir Kultuurgeskiedenis**, 20 (2).

Van Vollenhoven, A.C. 2006b. **Report on a desktop assessment of heritage resources in Boshoek, North West Province**. (Unpublished report, Wonderboompoort, Archaetnos).

### 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/ STATEMENT OF HERITAGE 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**

#### SIGNIFICANCE AND FIELD RATING:

#### 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

#### Field ratings:

National Grade I significance	should be managed as part of the national estate
Provincial Grade II significance	should be managed as part of the provincial estate
Local Grade IIIA	should be included in the heritage register and not be mitigated (high significance)
Local Grade IIIB	should be included in the heritage register and may be mitigated (high/ medium significance)
General protection A (IV A)	site should be mitigated before destruction (high/ medium significance)
General protection B (IV B)	site should be recorded before destruction (medium significance)
General protection C (IV C)	phase 1 is seen as sufficient recording and it may be demolished (low significance)

## 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

#### HERITAGE IMPACT ASSESSMENT PHASES

- 1. Pre-assessment or scoping phase establishment of the scope of the project and terms of reference.
- 2. Baseline assessment establishment of a broad framework of the potential heritage of an area.
- 3. Phase I impact assessment identifying sites, assess their significance, make comments on the impact of the development and makes recommendations for mitigation or conservation.
- 4. Letter of recommendation for exemption if there is no likelihood that any sites will be impacted.
- 5. Phase II mitigation or rescue planning for the protection of significant sites or sampling through excavation or collection (after receiving a permit) of sites that may be lost.
- 6. Phase III management plan for rare cases where sites are so important that development cannot be allowed.