



Archaetnos Culture & Cultural
Resource Consultants
BK 98 09854/23

**A REPORT ON A CULTURAL HERITAGE IMPACT ASSESSMENT FOR A
PROPOSED COMMERCIAL DEVELOPMENT ON A PORTION OF PORTION 55
OF THE FARM BLESBOKLAAGTE 296 JS, EMALAHLENI, MPUMALANGA
PROVINCE**

For:

**ADIENVIRONMENTAL
PO Box 647
Witbank
1035**

REPORT NO.: AE01726V

By:

***Prof. A.C. van Vollenhoven (L.AKAD.SA.)
Accredited member of ASAPA (Accreditation number: 166)
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18 May 2017

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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.

DISCLAIMER

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.

Should it be necessary to visit a site again as a result of the above mentioned, an additional appointment is required.

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Any changes to the scope of a project will require an additional appointment.

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EXECUTIVE SUMMARY

Purpose:

Archaetnos cc was requested by AdiEnvironmental CC to conduct a cultural heritage impact assessment (HIA) for a proposed commercial development on a portion of portion 55 of the farm Blesboklaagte 296 JS. This is in the town of eMalahleni (Witbank) in the Mpumalanga Province.

Project description:

The development entails a shopping centre, a church and a right of way servitude.

Methodology:

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. 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.

Public consultation:

Public consultation was done by AdiEnvironmental. Newspaper notices were published on 10 June 2016 in the Witbank News. On the same date site notices were placed on site.

Findings:

During the survey no sites of cultural heritage significance were identified within the immediate project area.

Recommendations:

The report is seen as ample mitigation and the proposed development may continue, but only after it had been approved by SAHRA.

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 via the SAHRIS System on the SAHRA website. No work on site may commence before receiving the necessary comments from SAHRA.

CURRICULUM VITAE OF SPECIALIST: PROF 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

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*: Part-time lecturer for the Honours degree in Museum Sciences in the Department of History and Heritage Studies at the University of Pretoria
- *2015*: Appointed extraordinary professor in history at the Mafikeng Campus of the Northwest University

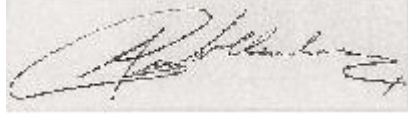
Other

- Published 75 articles in scientific and popular journals on archaeology and history.
- Author and co-author of over 580 unpublished reports on cultural resources surveys and archaeological work. A list of reports can be viewed on www.archaetnos.co.za
- Published a book on the Military Fortifications of Pretoria.
- Contributed to a book on Mapungubwe.
- Delivered more than 50 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.
- Accredited professional member of Association for South African Professional Archaeologists.
- Accredited professional 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 2012-2019).

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: 18 May 2017

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

Archaeos cc was requested by AdiEnvironmental CC to conduct a cultural heritage impact assessment (HIA) for a proposed commercial development on a portion of portion 55 of the farm Blesboklaagte 296 JS. This is in the town of eMalahleni (Witbank) in the Mpumalanga Province (Figure 1-4). The 1:50 000 topographic map information of the site is 2529CC.

The development entails a shopping centre, a church and right of way servitude. The heritage study forms part of a Basic Assessment. The Client indicated the area to be surveyed. This was done on foot and via off-road vehicle in May 2017.

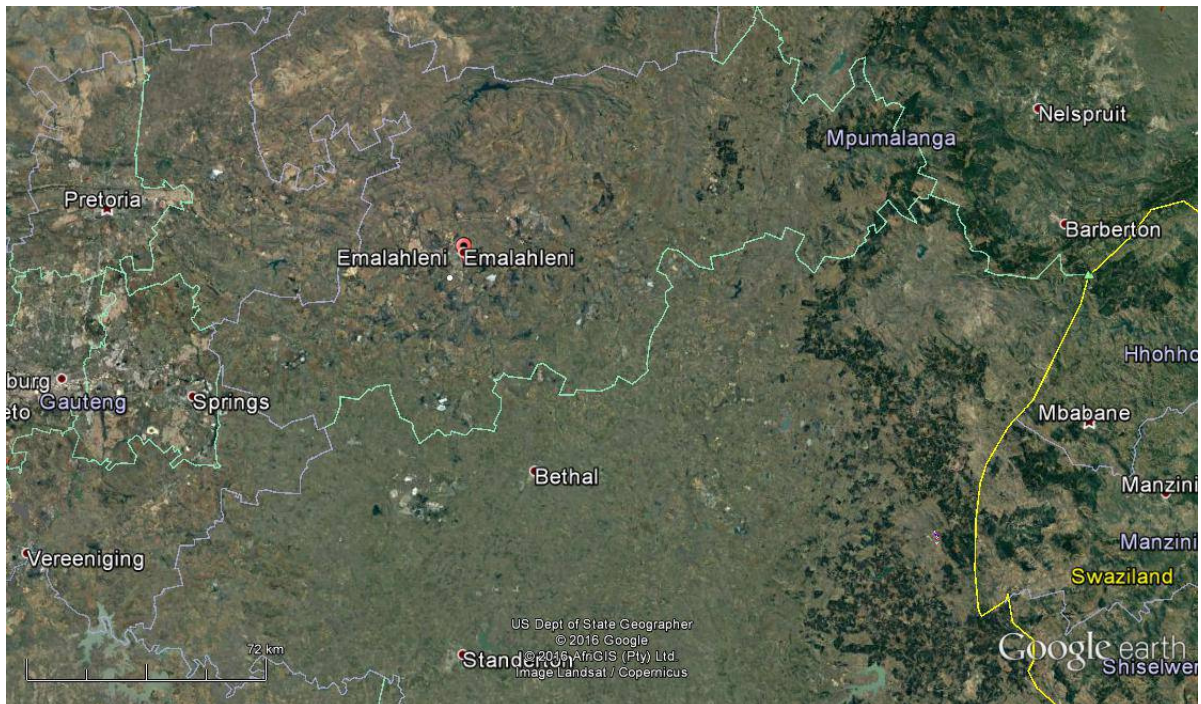


FIGURE 1: LOCATION OF EMALAHLENI IN THE MPUMALANGA PROVINCE.

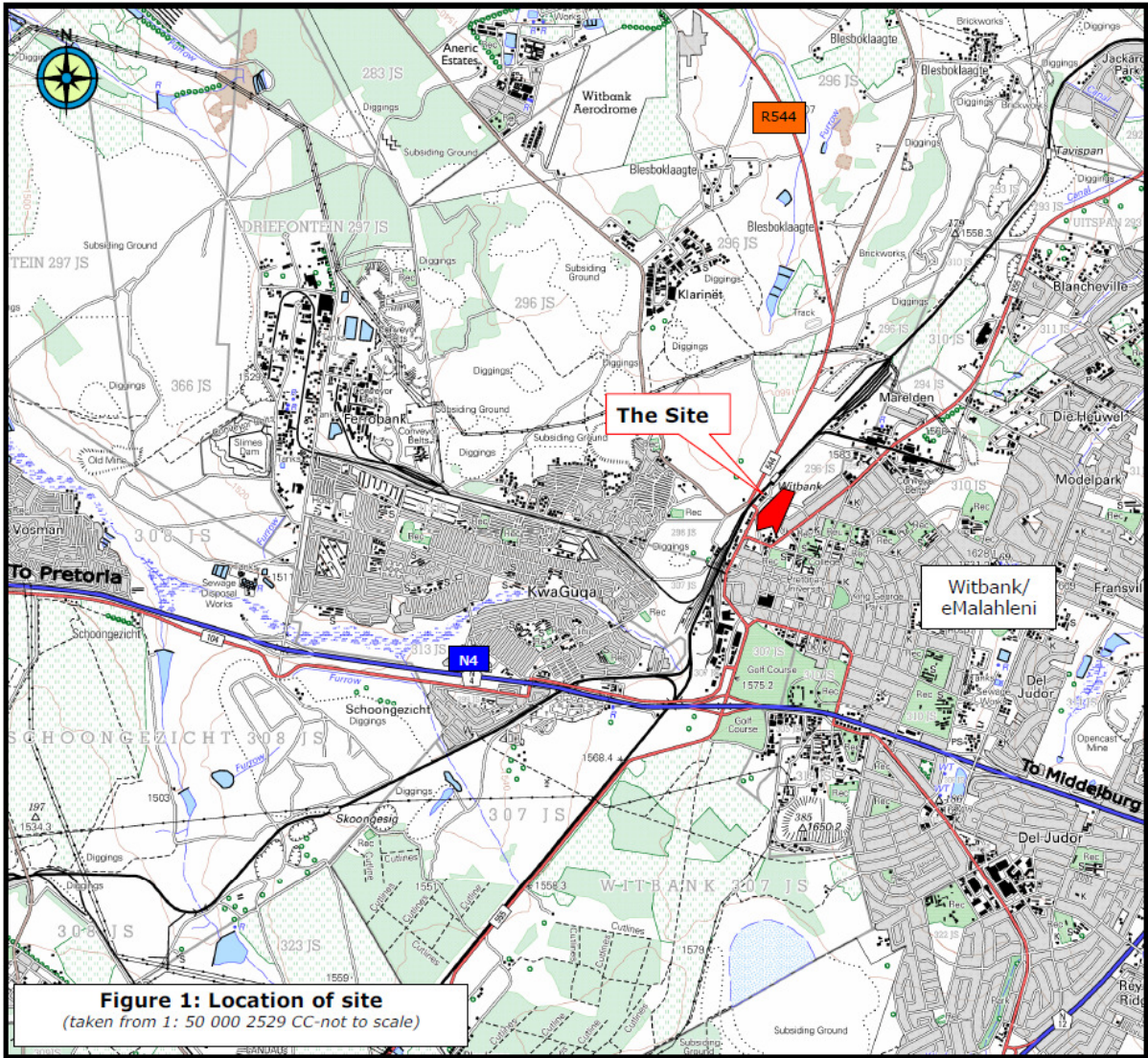


FIGURE 2: LOCATION OF THE SITE (ADIENVIRONMENTAL).



FIGURE 3: GOOGLE EARTH IMAGE INDICATING THE SITE BOUNDARIES.

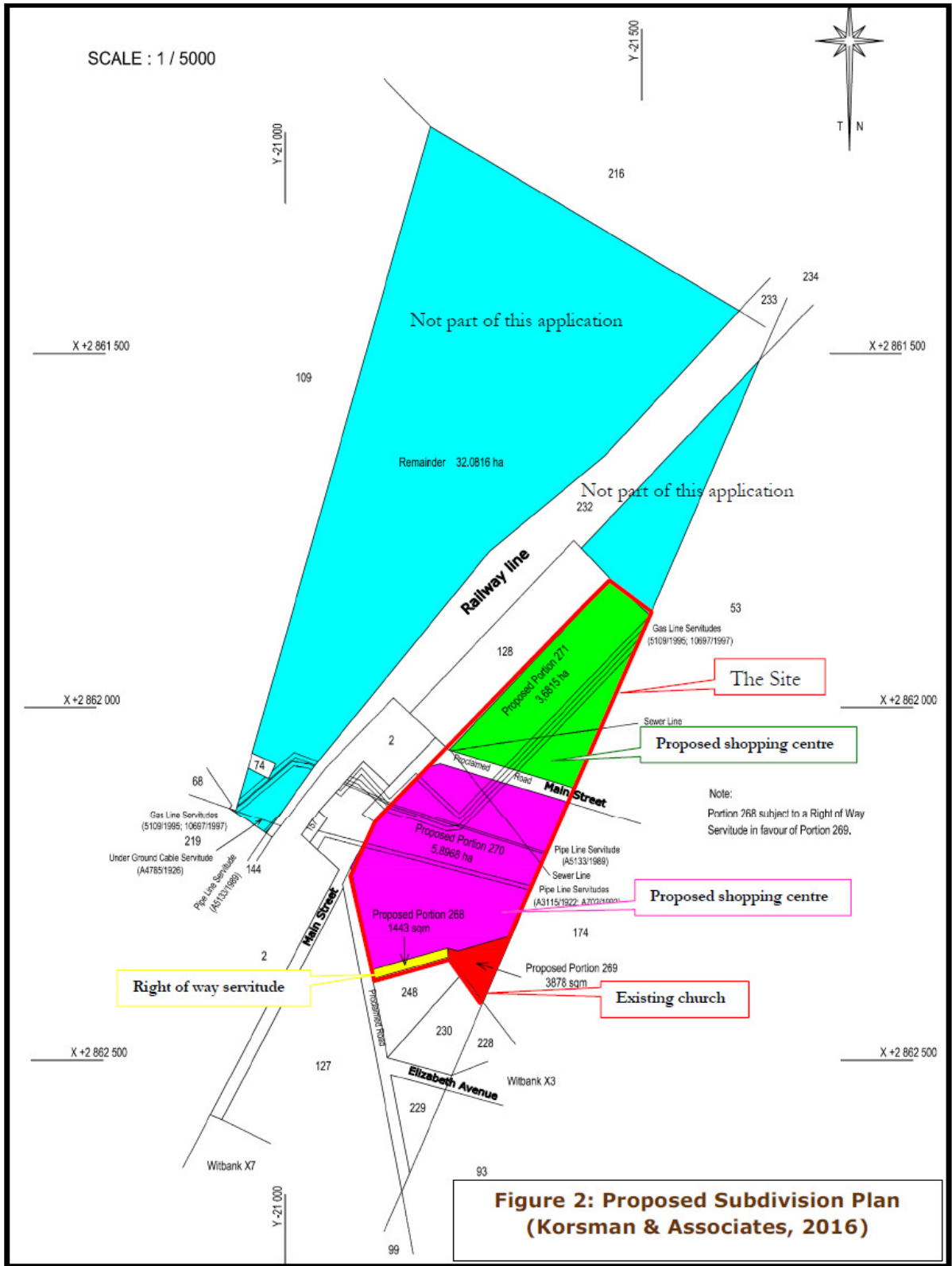


FIGURE 4: SITE DEVELOPMENT PLAN (ADIENVIRONMENTAL).

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. 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.

3.1 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 of 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 (AIA) only looks at archaeological resources.

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)¹, 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 000m² or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m²
- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority

Structures

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.

¹ Please consult SAHRA to determine whether a PIA is necessary.

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 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.

Human remains

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 or 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.

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 **Human Tissues Act (Act 65 of 1983 as amended)**.

3.2 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.

3.3 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). Any possible chance find, encountered during the project development, also needs to be managed by not disturbing it and by having it assessed by professionals.

Impacts on the cultural heritage should be minimized. This includes the possible maintenance of such sites in situ, or when not possible, 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, this 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 affected communities. Again professionals should carry out the work and adhere to the best available techniques.

Consultation with affected communities should be conducted. This entails that such communities should be granted access 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 affected 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.

4. METHODOLOGY

4.1 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.

4.2 Reference to other specialist studies

A large number of heritage studies were done in the eMalahleni area. No relevant information on the applicable portions of the farm Blesboklaagte 296 JS could be found (SAHRA's SAHRIS database).

It also needs to be indicated that the study area is within the central business and commercial area of eMalahleni and therefore is entirely disturbed by recent human interventions. Therefore any known heritage sites on adjacent land, will have no bearing on the study area.

A Visual Impact Assessment will be done as part of the Basic Assessment. Other applicable specialist studies will also be done

4.3 Public consultation and stakeholder engagement

Public consultation was done by AdiEnvironmental and can be requested from them. A BID document was compiled for this purpose and was distributed to various possible stakeholders. See section 8 of this report for the necessary information.

Newspaper notices were published on 10 June 2016 in the Witbank News. On the same date site notices were placed on site (Figure 5-6).



FIGURE 5: SITE NOTICE.

EVAH IS LOOKING FOR DOMESTIC WORK
3/5 Days a week. Sleep Out.
072 429 4742
LN036444

LIESBET SOEK HUISWERK
Sy het 5 jaar by ons gewerk, is hardwerkend en betroubaar. Sy praat goed Afrikaans.
076 984 0105
Email: mashudu@moseira.co.za

MANKOTI MAGRIETA
Benodig graag huiswerk vir Maandag tot Vrydag. In /uit slaap. Kan mooi skoonmaak wasgoed was en stryk.
072 211 3215

SARAH IS OPSEK NA HUISWERK (DOMESTIC)
3 DAE 'N WEEK. SLAAP UIT.
060 790 8697
VP022250

the borders of Mpumalanga Province.
Postal address: P. O. BOX 4811 WITBANK 1035
D. COMMENTS

Silvertondale 0184
tel: 012 804 1504
Faks: 012 804 7072
086 690 0468
E-pos: info@infraplan.co.za

GrondgebruikBestuur Skema 2010, dat ons, Umsebe Development Planners BK, verteenwoordig deur BJL van der Merwe, ST Masuku en enige van ons werksmaatskappies, Nelspruit, 1201.

Enige persoon of persone wat enige beswaar het teen die toestaan van die aansoek moet sodanige geskrewe beswaar volledig gemotiveer, indien by die Munisipale Bestuurder, Posbus 3, Witbank en die ondergetekende, nie later nie as 1 Julie 2016

Kontakbesonderhede van die Applikant:
Naam: GAP Development Planners
Fisiese Adres: Marlothstraat 40A, Nelspruit, 1201
Telefoonnommer: (013) 752-7513
E-pos Adres: admin@gapdevelopments.co.za
VP022276

LIQUIDATION AND DISTRIBUTION ACCOUNTS IN DECEASED ESTATES LYING FOR INSPECTION
In terms of section 35(5) of Act 66 of 1965 notice is hereby given that the Masters of the High Court and Magistrates as stated, Should no objection thereto be lodged with the Masters concerned during the specified period, the executors will proceed to make payments in accordance with the accounts.
Province: Mpumalanga
Estate Number: 21170/2014
Surname: MTHIMUNYE
First Name: THANDI MARTHATHA
Identity number: 611205 0333 084
Last address: 8057/12 VOSMAN, EMALAHLENI
Magistrate's Office: EMALAHLENI
Master's Office:

Witbank 1035
Email: mashudu@moseira.co.za
MOSERA
witbank@moseira.com

THEMRI Notices • Notices • Notices

NOTICE OF THE COMMENCEMENT OF A BASIC ENVIRONMENTAL ASSESSMENT PROCESS

Notice is herewith given in terms of Section 24(2) and 24D of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, and the Environmental Impact Assessment Regulations, 2014, of the intent to carry out a basic environmental assessment process for the following activity:

Description of the activity:

The applicant plans to utilize a portion of Portion 55 of the farm Blesboklaagte 296 JS for commercial purposes i.e. for the development of a shopping centre and associated infrastructure. The proposed project would involve Listed Activity 27 of Listing Notice 1 of 2014 (Government Notice R983 of 4 December 2014) as identified in terms of Section 24(2), 24(5), 24D and 44, read with Section 47A(1)(b) of the National Environmental Management Act, 1998.

Location of the activity:

The proposed site is located on a portion of Portion 55 of the farm Blesboklaagte 296 JS, eMalahleni. The site is located between Voortrekker Road and the Transnet railway line in close proximity of the eMalahleni CBD (close to Licence Department).

Extent (area) of the development:

The entire property is 42.1920 ha in extent, of which 10.1104 ha will be utilized for the development.

Name of proponent:

Jumbo van der Merwe Trust

Date of advertisement:

10 June 2016

In order to ensure that you are identified as an interested and/or affected party or to obtain a copy of the Background Information Document, please submit your name, contact information and interest in the matter to the contact person on/before 11 July 2016.

Reference number assigned by AdEnvironmental cc: BA2016/01.

Name of consultant:

AdEnvironmental cc.
P.O. Box 647, Witbank, 1035
Tel/fax: 013-697 5021
E-mail: riana@adienvironmental.co.za
Contact person: Riana van Rensburg

Ad
Environmental

Please note: No Jobs Available



EMALAHLENI LOCAL MUNICIPALITY

REGISTRATION OF SUPPLIERS ON CENTRAL SUPPLIERS DATABASE

Please Note: All Service Providers currently registered on the Municipality database are requested to register on the Central Suppliers Database (www.csd.go.za) since the Municipality's database will no longer be effective as from 01 July 2016.

All enquiries for database registration must be directed to the Supply Chain Management Unit, at (013) 690 6497, (013)690 6503 and (013)690 6484.

T JANSEN VAN VUUREN MUNICIPAL MANAGER

Civic Centre PO Box 3
Mandela Street eMalahleni
eMalahleni 1035
1035
www.emalahleni.gov.za

w10june/stadraad1/km

21st CENTURY Life
Never Stand Alone
NOTICE

Dear Valued Clients

Please note that our offices have moved to:
Shop 5, Gerry-Mann Building
C/o Athlone and Arras Street

Contact Number : 083 250 9244
083 631 4374
Head office : 011 805 1621

IF IT DOES NOT SAY 21ST CENTURY LIFE, IT IS NOT 21ST CENTURY LIFE

21st Century Life (Pty) Ltd
420 Janadel Avenue | Halfway Gardens | Midrand | 1685

Reg No. 2007/021608/07
21st Century Life is licensed by the Financial Services Board as an authorised Financial Service Provider with FSP number 35947

Director: Mr Aubrey Mkhabela

FIGURE 6: NEWSPAPER NOTICE (BOTTOM LEFT).

4.4 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. In this case it was not done additionally since it would be covered by the Public consultation report.

4.5 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)², 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 (Figure 7).

Certain factors, such as accessibility, density of vegetation, etc. may however influence the coverage. In this instance the area were found to be completely disturbed and therefore no problems with visibility was experienced. The size of the surveyed area is 42.1920 Ha. The survey took 1 hour to complete.

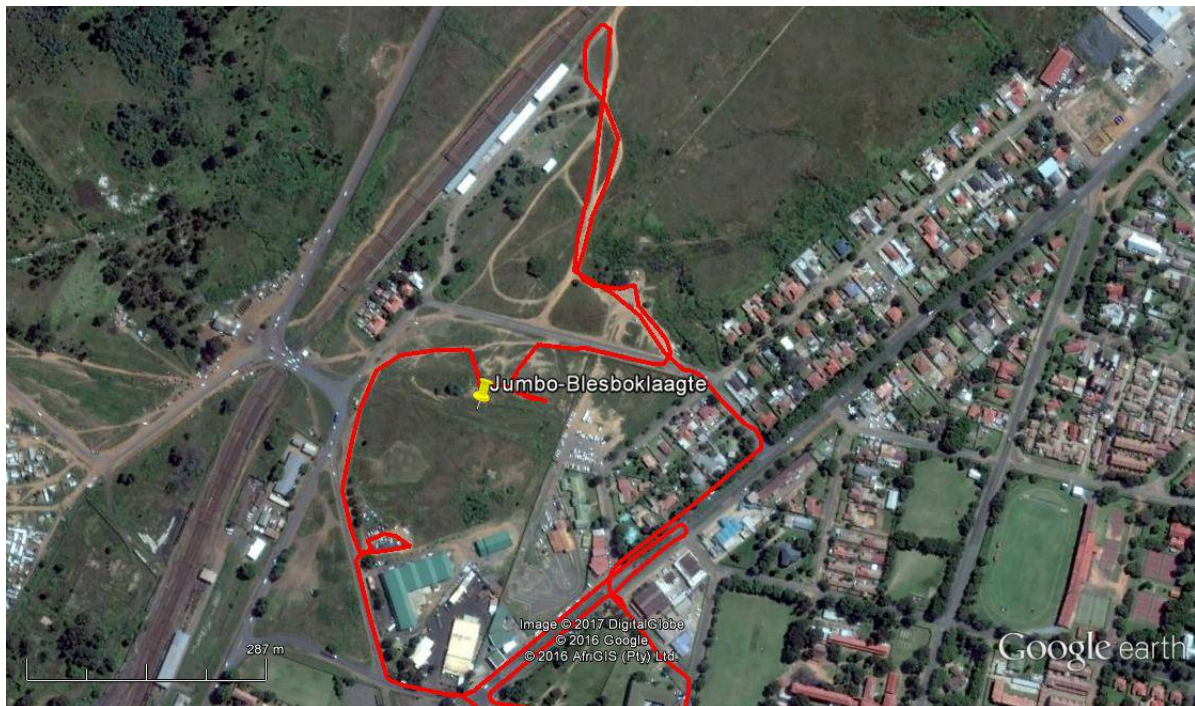


FIGURE 7: GPS TRACK OF THE SURVEYED AREA. NORTH REFERENCE IS TO THE TOP.

4.6 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.

4.7 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:

² A Garmin Oregon 550 with an accuracy factor of a few meters.

- 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.

5. ASSUMPTIONS, GAPS, RESTRICTIONS, CONDITIONS AND LIMITATIONS

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, structures 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.

7. As the entire surveyed area has been disturbed by recent human interventions, it is seen as a low risk areas to reveal heritage sites.
8. The vegetation cover in certain areas was extremely dense, which had a negative effect on archaeological visibility, but as this vegetation consist of pioneer species like grass and weeds, it is a clear indication of disturbance, therefore again indication it as being a low risk area for containing heritage sites.

6. DESCRIPTION OF THE SOCIO-ECONOMIC ENVIRONMENT

The population density in eMalahleni consist of 170 000 people in Witbank and 150 000 in Kwa-Guqa. The main employment sector is mining, including various mining companies. The unemployment rate is high, being 51,1%. The formal sector employs 40,5% people and the informal sector 8 %.

Water is provided via the eMalahleni Local Municipality by making use of the Witbank Dam. ESKOM provides power to the area.

7. DESCRIPTION OF THE PHYSICAL ENVIRONMENT

The area that was surveyed is located in the commercial centre of eMalahleni (Witbank). It forms part of the historic mining area of Witbank and has been undermined. As a result it has entirely been disturbed by recent human interventions. No natural vegetation exists. The vegetation cover consist of pioneer species including weeds and grass (Figure 8-9). These are reasonably dense in certain areas.

Large open spots occur. These are used for church gatherings (Figure 10) and parking. In general the area therefore is reasonably open (Figure 11) with a good view across the entire area. Main Street runs through the area as well as some gravel roads. It is flanked by other roads and buildings and is in close proximity to the railway line. The topography of the surveyed area is fairly flat. No drainage lines are present.



FIGURE 8: VIEW OF WEEDS AND GRASS IN THE SURVEYED AREA.



FIGURE 9: AREA WITH DENSE GRASS IN THE SURVEYED AREA.



FIGURE 10: CLEARED AREA USED FOR CHURCH PURPOSES.



FIGURE 11: CLEARED AREA USED FOR PARKING WITHIN THE SURVEYED AREA.



FIGURE 12: GENERAL VIEW OF THE STUDY AREA.

8. RESULTS OF PUBLIC CONSULTATION AND STAKEHOLDER ENGAGEMENT

No information related to heritage were received.

9. 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 in a broad historical and geographical context and to contextualize possible finds that could be unearthed during construction activities.

Quite a large number of heritage reports were written in the eMalahleni area. These however either indicated that nothing of heritage significance was found, or the sites that were found has no contextual link to the current surveyed area (SAHRIS database; Archaetnos' database).

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 on a map contained in a historical atlas of this area (Bergh 1999: 4). The closest known Stone Age occurrence is that of rock art close to the Olifants River to the south of Witbank (Bergh 1999: 5). This however should rather be seen as a lack of research in the area and not as an indication that such features does not occur. Some Middle Stone Age artifacts were identified out of context during previous surveys in the wider geographical area (Archaetnos' database).

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.

No Iron Age sites are indicated in a historical atlas around the town of Witbank, but this may only indicate a lack of research. The closest known Iron Age occurrences to the surveyed area are Late Iron Age sites that have been identified to the west of Bronkhorstspuit and in the vicinity of Bethal (Bergh 1999: 7-8).

9.3 Historical Age

The Historical Age started with the first recorded oral histories in the area. It includes the in-migration of people that were able to read and write.

The first white people to move through this area were the party of the traveler, Robert Scoon who passed through during 1836 (Bergh 1999: 13). Although the Voortrekkers moved across the Vaal River during the 1830's, it seems as if white people only settled here after 1850 (Bergh 1999: 14-15).

At the beginning of the 19th century the Phuthing, a South Sotho group, stayed in the vicinity of modern day Kriel and Bethal to the south of the surveyed area. During the Difaquane they fled to the south (Bergh 1999: 10-11; 109). In 1829 the traveler Robert Scoon passed through an area to the south of Witbank (Bergh 1999: 13). The first white farmers only settled here during the late 1850's. By the 1890's this area was inhabited by many white farmers (Bergh 1999: 18-20).

During the Anglo-Boer War the Highveld areas saw much action consisting of various skirmishes between Boer and Brit (Bergh 1999: 51, 54). It includes skirmishes on the farms Oshoek (4 December 1901), Trigaardsfontein (10 December 1901), Witbank (11 January 1902) and Nelspan (26 January 1902).

10. CONCLUSION AND RECOMMENDATIONS

The survey of the indicated area was completed successfully. As indicated no sites of cultural heritage significance were identified within the proposed project area.

The following is recommended:

- This report is seen as ample mitigation and the proposed development may thus continue, but only after the report had been approved by SAHRA.
- 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.

11. REFERENCES

Archaetnos database.

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.** Scottsville: 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. 1983. **Human Tissue Act** (Act 65 of 1983). 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.
- 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.

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.
- Aesthetic 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:

- Negligible – The site has no heritage significance, although it may be older than 60 years.
- Low - A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings. A site with minimal importance which is decreased by its bad state of decay.
- Low-Medium - A site of lesser importance, which is increased by a good state of preservation and contextual importance (e.g. a specific community).
- 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.
- Medium-High - A site that has high importance due to its age or uniqueness, but which decreases due to its bad state of decay.
- High - Any site, structure or feature regarded as important because of its age or uniqueness. Also any important object found within a specific context.
- Very High - A site of exceptional importance due to its age, uniqueness and good state of preservation.

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: The site should be managed as part of the national estate, should be nominated as Grad I site, should be maintained in situ with a protected buffer zone and a CMP must be recommended. Score above 50.

Provincial Grade II significance: The site should be managed as part of the provincial estate, should be nominated as Grade II site, should be maintained in situ with a protected buffer zone and a CMP must be recommended. Score between 40 and 50.

Local Grade IIIA: The site should be included in the heritage register and not be mitigated (high significance), should be maintained in situ with a protected buffer zone and a CMP must be recommended. Score between 36 and 40.

Local Grade IIIB: The site should be included in the heritage register and may be mitigated (high/ medium significance). Mitigation is subject to a permit application lodged with the relevant heritage authority. Score between 6 and 35.

Local Grade IIIC: The description in the phase 1 heritage report is seen as sufficient recording (low significance) and it may be granted destruction at the discretion of the relevant heritage authority without a formal permit application, subjected to the granting of Environmental Authorisation. Score below 5.

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.