

Archaetnos Culture & Cultural Resource Consultants BK 98 09854/23

A REPORT ON A CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED RECLAMATION OF THE LANDAU 3 MINE RESIDUE DEPOSIT AT THE ANGLO LANDAU MINE, CLOSE TO EMALAHLENI, MPUMALANGA PROVINCE

For:

SRK Consulting Engineers and Scientists
PO Box 55291
Northlands
2116

REPORT NO.: AE01723V

By:

Prof. A.C. van Vollenhoven (L.AKAD.SA.)

Accredited member of ASAPA (Accreditation number: 166)

Accredited member of SASCH (Accreditation number: CH001)

15 May 2017

Archaetnos P.O. Box 55 GROENKLOOF 0027 Tel: 083 291 6104

Fax: 086 520 4173

E-mail: antonv@archaetnos.co.za

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.

Reasonable editing of the report will be done upon request by the client if received within 60 days of the report date. However editing will only be done once and clients are therefore requested to send all possible changes in one request. Any format changes or changes requested due to insufficient or faulty information provided to Archaetnos on appointment, will only be done by additional appointment.

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

©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.

No.	Requirement Section Se				
1	A specialist report prepared in terms NEMA EIA Regulation 982 must contain:				
a)	Details of -				
(i)	The specialist who prepared the report				
(ii)	The expertise of that specialist to compile a specialist report including a curriculum vitae				
b)	A declaration that the specialist is independent				
c)	An indication of the scope of, and the purpose for which, the report was prepared				
cA)	An indication of the quality and age of base data used for the specialist report	10			
cB)	A description of existing impacts on the site, cumulative impacts of the proposed development and levels of acceptable change				
d)	The duration, date and season of the site investigation and the relevance of the season to the outcome of the assessment				
e)	A description of the methodology adopted in preparing the report or carrying out the specialised process inclusive of equipment and modelling used				
f)	Details of an assessment of the specific identified sensitivity of the site related to the proposed activity or activities and its associated structures and infrastructure, inclusive of a site plan identifying site alternatives				
g)	An identification of any areas to be avoided, including buffers				
h)	A map superimposing the activity including the associated structure and infrastructure on the environmental sensitivities of the site including areas to be avoided, including buffers				
i)	A description of any assumption made and any uncertainties or gaps in knowledge 6				
j)	A description the findings and potential implication\s of such findings on the impact of the proposed activity, including identified alternatives on the environment or activities				
k)	Any mitigation measures for inclusion in the EMPr				
l)	Any conditions for inclusion in the environmental authorisation	11			
m)	Any monitoring requirements for inclusion in the EMPr or environmental authorisation				
n)	A reasoned opinion -				
(i)	As to whether the proposed activity, activities or portions thereof should be authorised	11			
(iA)	Regarding the acceptability of the proposed activity or activities	11			
(ii)	If the opinion is that the proposed activity, activities or portions thereof should be authorised, any avoidance, management and mitigation measures that should be included in the EMPr, and where applicable, the closure plan				
o)	A description of any consultation process that was undertaken during the course of preparing the specialist report				
p)	A summary and copies of any comments received during any consultation process and where applicable all responses thereto; and				
q)	Any other information requested by the competent authority	4, 7 and 8			

EXECUTIVE SUMMARY

Purpose:

Archaetnos cc was requested by SRK Consulting to conduct a cultural heritage impact assessment (HIA) for the proposed reclamation of the Landau 3 Mine Residue Deposit. This lies south of the town of eMalahleni in the Mpumalanga Province.

Project description:

Anglo Operations (Pty) Ltd (AOL) intends to reclaim its Landau Mine 3 mineral residue deposit (MRD) in order to provide space for Eskom to relocate three 400kV powerlines. The proposed new powerline route intersects with the Landau 3 MRD and as a result the material needs to be removed to allow for the powerline relocation.

Prior to the development of the proposed projects, AOL and Eskom require environmental authorisation from the Department of Mineral Resources (DMR) and Department of Environmental Affairs (DEA) respectively. AOL appointed SRK as the independent EAP to manage and facilitate the environmental authorisation process.

The project entails the MRD reclamation (environmental authorisation application to be submitted to the DMR). This includes option for haul routes in order to haul the residue away from the area. The proposed MRD reclamation project requires environmental authorisation.

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 GPS. The information was added to the description in order to facilitate the identification of each locality.

Public consultation:

Public consultation was done as part of the heritage study. A site notice was placed close the MRD on 12 April 2017. A newspaper notices was placed in the Witbank News on Friday 14 April 2017. The public consultation period of 30 days therefore ends on 14 May.

No comments related to heritage were received.

Findings:

During the survey one site of cultural heritage significance were identified within the immediate project area.

Recommendations:

- From a heritage perspective, the graves identified should be mitigated.
- As indicated two possibilities exist. The first being to manage the graves in-situ and the second being exhumation.
- Although the site will be impacted on, it would be possible to shift the laydown area in order not to impact directly on the graves. Therefore Option 1 is recommended. This includes the writing of a site preservation management plan.
- After the recommendations above have been implemented, the proposed development may continue.
- 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.

CONTENTS

Page	÷
SPECIALIST REPORT REQUIREMENT TABLE	
CURRICULUM VITAE OF SPECIALIST 8 DECLARATION OF INDEPENDENCE 9 LIST OF ACRONYMS 9	
1. INTRODUCTION10	
2. PROJECT INFORMATION11	
3. TERMS OF REFERENCE14	
4. LEGISLATIVE REQUIREMENTS14	
5. METHODOLOGY18	
6. ASSUMPTIONS, GAPS, RESTRICTIONS, CONDITIONS AND LIMITATIONS24	
7. DESCRIPTION OF THE SOCIO-ECONOMIC ENVIRONMENT25	
8. DESCRIPTION OF THE PHYSICAL ENVIRONMENT25	
9. RESULTS OF PUBLIC CONSULTATION AND STAKEHOLDER ENGAGEMENT	
10.HISTORICAL CONTEXT32	
11. DISCUSSION OF SITES IDENTIFIED DURING THE SURVEY34	
12. CONCLUSIONS AND RECOMMENDATIONS37	
13.REFERENCES38	
APPENDIX A – DEFENITION OF TERMS	
······································	

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).

ASAPA Accreditation number: 166 SASCH Accreditation number: CH001

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: 15 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

1. INTRODUCTION

Archaetnos cc was requested by SRK Consulting to conduct a cultural heritage impact assessment (HIA) for the proposed reclamation of the Landau 3 Mine Residue Deposit. This lies south of the town of eMalahleni in the Mpumalanga Province (Figure 1-2).

The study forms part of a Scoping and Impact Assessment (S&IA) environmental authorisation process. The client indicated the area to be surveyed. It was surveyed via foot and off-road vehicle.



FIGURE 1: LOCATION OF EMALAHLENI IN THE MPUMALANGA PROVINCE.



FIGURE 2: LOCATION OF THE SITE IN RELATION TO EMALAHLENI.

2. PROJECT INFORMATION

2.1 LOCALITY

The Anglo Landau 3 Mine is situated adjacent to and south of eMalahleni. This is in the Mpumalanga Province.

2.2 PROJECT DESCRIPTION

The project entails the reclamation of the mineral residue deposit at the Anglo Landau 3 Mine. Anglo Operations (Pty) Ltd (AOL) intends to reclaim its Landau Mine 3 mineral residue deposit (MRD) in order to provide space for Eskom to relocate three 400kV powerlines. The powerline route currently traverse AOL's Landau 1 and 2 areas immediately west of the N12 freeway, south of eMalahleni.

In addition, the powerline route extends across previously mined underground bord and pillar workings of the numbers 2, 4 and 5 seams. Sinkholes have developed at Landau 1 and 2 due to historical shallow underground mining operations. Due to the formation of sinkholes the re-routing of the three 400 kV powerlines is being proposed.

The proposed new powerline route intersects with the Landau 3 MRD and as a result the material needs to be removed to allow for the powerline relocation. Eskom proposes to relocate three 400 kV powerlines that traverse AOL's Khwezela Colliery (formerly known as Landau Colliery and Kleinkopje Colliery) and Greenside Colliery mining right areas).

Prior to the development of the proposed projects, AOL and Eskom require environmental authorisation from the Department of Mineral Resources (DMR) and Department of Environmental Affairs (DEA) respectively. AOL appointed SRK as the independent EAP to manage and facilitate the environmental authorisation process.

The project consist of the MRD reclamation (environmental authorisation application to be submitted to the DMR). This includes option for haul routes in order to haul the residue away from the area (Figure 3). The proposed MRD reclamation project requires environmental authorisation.

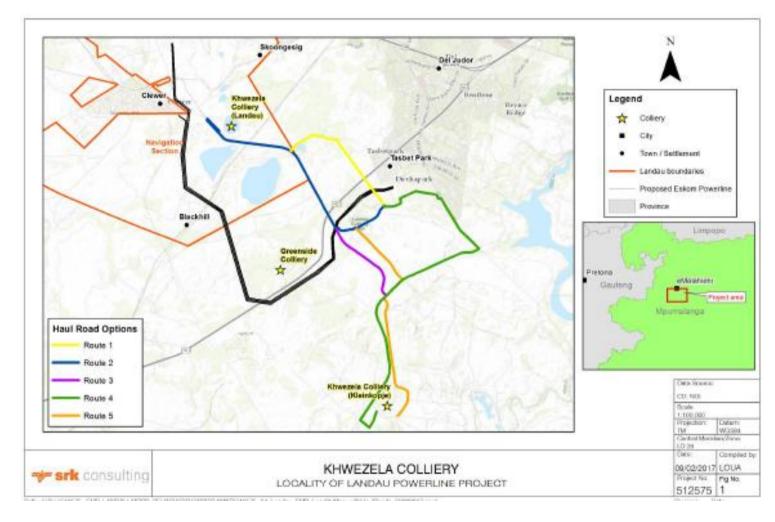


FIGURE 3: THE PROJECT AREA INDICATING THE 5 HAUL ROAD OPTIONS (SRK).

TABLE 1: SUMMARY OF PROJECT SPECIFICS

Type of development	Mining infrastructure		
Detail of proposed activities	Area larger than 5 000m ² and linear		
(NHRA section 38 triggers)	_		
Size of project	development longer than 300m in length		
Size of project	50 Ha for the mineral residue dump		
	Differs between 11 and 13 km depending on		
	the option chosen		
Municipality	eMalahleni Local Municipality		
1:50 000 topographic map number	2629AA		
	2629AB		
	2529CC		
	2529CD		
Farm portions	Landau 3 MRD:		
Tam portions	Klipfontein 322 JS Portion 27		
	Klipfontein 322 JS Portion 28		
	Haul roads:		
	Kleinkopje 15 IS Portion 1		
	Kleinkopje 15 IS Portion 36		
	Klipfontein 322 JS Portion 0		
	Klipfontein 322 JS Portion 9 Klipfontein 322 JS Portion 27		
	Klipfontein 322 JS Portion 28		
	Klipfontein 322 JS Portion 208		
	Klipfontein 322 JS Portion 209		
	Klipfontein 322 JS Portion 293		
	Blaauwkrans 323 JS Portion 0		
	Blaauwkrans 323 JS Portion 14		
	Blaauwkrans 323 JS Portion 15		
	Blaauwkrans 323 JS Portion 23		
	Blaauwkrans 323 JS Portion 33		
	Groenfontein 331 JS Portion 0		
	Groenfontein 323 JS Portion 3 Groenfontein 323 JS Portion 10		
	Klippan 332 JS Portion 2		
	Klippan 332 JS Portion 14		
	Klippan 332 JS Portion 18		
	Klippoort 334 JS Portion 0		
	Naauwpoort 335 JS Portion 0		
	Naauwpoort 335 JS Portion 32		
	Naauwpoort 335 JS Portion 47		
	Naauwpoort 335 JS Portion 48		
	Naauwpoort 335 JS Portion 49		
	Naauwpoort 335 JS Portion 50		
	Naauwpoort 335 JS Portion 55 Landau 349 IS Portion 0		
	Klipfontein 1206 JS Portion 0		
	Miprofitalit 1200 00 1 Ortion 0		

2.3 APPLICANT AND EAP DETAILS

The applicant is Anglo Operations (Pty) Ltd and the EAP compiling the application is SRK Consulting.

3. TERMS OF REFERENCE

The Terms of Reference for the survey were to:

- 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.
- 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.

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 (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;
- 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)**.

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.

4.3 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.

5. METHODOLOGY

5.1 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.

5.2 Reference to other specialist desktop studies

There are a few known archaeological sites that occur in the broader geographical environment of the area where new developments are planned. There is however no known records of archaeological sites that were available at the existing location. A number of heritage reports are known from previous studies in the eMalahleni area (see later).

5.3 Public consultation and stakeholder engagement

Public consultation was done as part of the heritage study. A site notice was placed close the MRD on 12 April 2017 (Figure 4-5). A newspaper notices was placed in the Witbank News on Friday 14 April 2017 (Figure 6-7). The public consultation period of 30 days therefore ends on 14 May.



FIGURE 4: SITE NOTICE ON SITE.

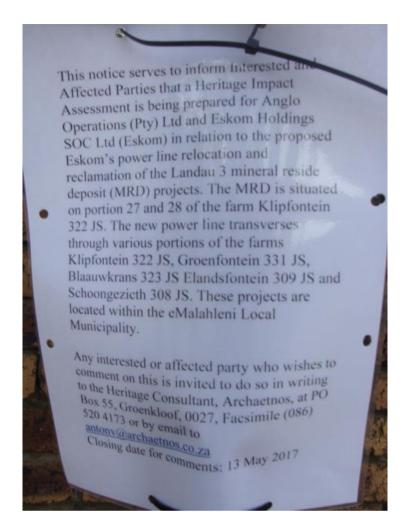


FIGURE 5: WORDING OF THE SITE NOTICE.

ERS POSITION AT im of 2 years in of 2 years it experience, great inication skills in ins and English as organising skills drivers license

ax short CV to: 066 689 3829

OEGMAN/DAME ljarige enkelpersoon. It 082 494 3947 SB080333

MAPHUTHA
JSWANA FUNERAL
SERVICES
eed Sales Rep for
sil services and cash
Men or woman can
for the position
nission base,
rience as a Rep will Ivantages Ray © 071 5000 329 LN039768

CS TECHNOLOGIES AN AUTHORISED IEALER FOR ADT SECURITY Tave vacancies for : es Reps/Tele Sales

IECT MARKETERS in Nelspruit, Witbank Middelburg branches perience in Sales and Becurity Industry will in Advantage but not al. Training will be

ided.
plicants must be
driven, motivated and
t in English. Own
report essential.
muneration; Basic with cture id CV's to:

OPERATIONS
MANAGER FOR FMCG
COMPANY
At least 7 years
management experience
in a busy warehouse management expenence in a busy warehouse /transport environment. Attention to detail, people

OPSOEK NA AFRIKAANS SPREKENDE PERSOON Met sober gewoontes en ondervinding as Sekuriteits esighouer. Kontak 081 885 9031

WE ARE IN URGENT NEED OF A RED SEAL OUALIFIED DIESEL NEED AND A RED SEAL OUALIFIED DIESEL NEED AND A RED SEAL OUALIFIED DIESEL NEED AND A RED SEAL OUALIFIED AND A RED SEAL icence Must have sober habits Must reside in Witbank or

*Must reside in ...
*Must reside in ...
Middelburg
*Must be able to start
**mediately or as soon as Should you meet all the above requirements and serious applicants only please contact us.
Contact: Wessie 072 391 7752
Email:
wessiesonchris@gmail.com

PRE-PRIMARY SCHOOL TEACHER NEEDED At Bubbly Hippo. Experience will be preferred. Come and hand CV in at the office or email

28.co.z8 bubbly.hippos@vodamail.co.za : 086 219 9335 bubbly.hippos@vodamail.co.za : N039771

WCMAS AWREST-NA

WITBANK COALFIELDS MEDICAL AID SCHEME

NOTICE TO MEMBERS totice is hereby given that the 82nd ual General Meeting of members of the Mitbank Coalfields Medical Aid Scheme will be held on Monday, 24th April 2017 £ 13H00 in the Scheme's offices, 2nd floor, #CMAS Building, corner of O.R. Tambo and Susanna Street, Withank.

By order of the Board of Trustees

R. BOOYENS PRINCIPAL OFFICER

SALES REP FOR FMCG COMPANY At least 5 years sales experience necessary, R5500 per month plus car allowance R2k, cell allowance, Commission of PAULINA IS LOOKING FOR DOMESTIC WORK For 3 OR 4 days a week.

PRECIOUS IS LOOKING R5k. Email CV to Clinton.nel @thembekasales.co.za VP025970 FOR WORK
As an Admin Lady or Shop
Assistant. Full time. Has
previous experience.
References Available.
Computer Literature. 0859

DOMESTIC/GENERAL VP025963

SARAH IS LOOKING

FOR DOMESTIC WORK

or work as a cleaner for 5
days a week. Sleep in or
out. ANNA IS LOOKING FOR DOMESTIC WORK 672 426 9323 LN039823

For 2/5 days. Sleep in or out. She can be a nanny or wants work at a 071 739 9447 — I N039759

BRENDA

BRENDA is looking for domestic work for 2, 3 or 5 days a week. Sleep in/ out. 079 530 8144 LN039763

EMILY SOEK HUISWERK Maandae - Vrydae: Slaap in: Afrikaans sprekend. 076 021 5450 __N039781

GIFT IS LOOKING FOR

DOMESTIC OR CLEANER WORK 3/5 days a week. Sleep in or out. 079 569 3893 LN039764

JANE IS LOOKING FOR DOMESTIC WORK

SYLVIA IS LOOKING FOR DOMESTIC WORK Or any other kind of job. 2 /3/5 or full time Sleep Out. Has plenty previous work experience. 072 269 8183 VP025961

076 636 5331

0900 LEGALS

0010 PUBLIC / LEGAL NOTICES

NOTICE
The following vehicles will be soil to make up for the storage fees. Audi - CNK 483 MP BMW - 320dE46 - PXY004 MP

BIMM - 320dE46 - PXYODA MP BIMM- E90 - FPS 808 MP BIMM - 830G1 - DWR 954 MP BIMW - E46 - NO NUMBER PLATES GCLF1 - DMK 755 MP SANTAFE - CHU709 L POLO TSI - HVB 590 MP CONTACT: 060 682 4987 LN039767

JUDITH IS LOOKING
FOR ADMIN WORK
Has 9 years of previous
experience. Computer
literate. Drivers License.
References Available
073 744 4320
VP025662

LINAH IS LOOKING FOR DOMESTIC WORK For 5days a week, Sleep out 050 691 3401 LN039774

LORINE IS LOOKING FOR DOMESTIC WORK or 5 days a week. Sleep 074 319 9137 LN039794

MARIA SOEK HUISWERK Vir 3/5 dae. Slaap uit 079 050 0909 LN039796

MAVIS IS LOOKING FOR DOMESTIC WORK 5 DAYS A WEEK, SLEEP IN

MELLANIA is looking for domestic work, 3/4/5 Days a week. Sleep out. 064 326 1764 078 548 3530 —LN039770

MY HUIS HULP SOEK Werk vir Dinsdae en Vrydae, werksaam 8 jr en beie betroubaär. Kontak Johanna

ISAZISO:
UKUNCIPHISA
UKUNCIPHISA
UKUNCIPHISA
UKUNCIPHISA
UKUNCIPHISA
USSEMATHUMENI
USS

Sez-SchelpringService of the Control of the Control

Limitation organization of the Control

Limitation organization org NOTICE:
NOTICE:
NOTICE:
NOTICE:
AFFECTED HUMAN
RETERINS IN GRAVES
Notice is heavie and
Notice is and kusukala ngośsiku lwesaziso. Ms Sisphany wd Walt Cott: Ost 570 1722 Emili: Istophany oza 6 postophany oza 6 postophany Celi: 073 613 9492 Email: lukas Øpostophany 6 postophany 6 postophan

NOTICE The Owners or Title

KENNISGEWING IN TERME VAN TERME VAN TERME VAN TERME VAN ERAL ALLEN SERVILLEN SENTULINEKEMA, 2010 Karnis geskied hiermed at ek (Antities Odendaal van de ferms Skyooverage (Edms) Bept, laansoek gedoen het (in tarme van Kousule 20 van de man de van de Antities of Carlon Senties van de Antities of Carlon Senties van de Senties van de Parker van de Parker van de Parker van de Parker van de laatse of de Parker van de laatse van de laatse van de laatse van de laatse van de Voorgenome aarsoek lê ter insa e by die aansoeker by sy ondergenoemide adnet de Parker van de Laatse (Earset) De Laatse de Parker van de Laatse van de Laatse

erage (Edms) Bpk Skycoverage (Edms) Br ADRES: Eenhede 10, 11 en 12, Blok C, El Ridge Blok C, El Ridge Kantoorpark, 100 Elizabeth Weg, thv Elizabeth weg, thv Elizabeth en Caravelle wee, Bantleth, Boksburg TELEFOONNOMMER: 011 979 7061 POSAOPES: Posbbus 16762, Altasville, 1465 1465 DATUM VAN EERSTE

April 2017 TUM VAN TWEEDE BLIKASIE: PUBLIKASIE: 14 April 2017 EIND DATUM VIR BESWARE: 05 Mei 2017 VP025885

KENNISGEWING
In terme van Klousula 26
van die eflatiahleni
Grondigebruikskerma
2010, gelees tesame mat
Gedeelte 80 van die
eMalahleni Rulmtelike
Beplanning on
Grondigebruikbestuur
Verordening, 2016
Aansoek vir Spesials
toestamming op cestemming op ERF 804 WITBANK UITBREIDING 5 ERF god WITEANK
UITBREIDING 6
Heidry word kennis gagee
dat ek, die
ordergetekende van
voormens is om aansoek
te deen by die glikalen in
begenoemde grond aan te
wend vir die volgende
doeleindes:
LOUSISSHUS
Planne ervol
son die volgende
toeleindes:
LOUSISSHUS
LOUSISSHU

NOTICE: HERITAGE IMPACT ASSESSIMENT FOR ESKOM'S POWER LINE RELOCATION THIS notice servers to inform interested and an experiment of the property of the proper

antonv@archaetnos.co.za Closing date for comments: 13 May 2017 OS003853

Remainder of Ef 1629.
Del Judor Extension 29
Township
Objections to or representations in respect
of this application must be lodged, logether with regions, to both the Municipal Manager, evidentheri, Local Municipality, P.O. Box 3, Withouti, 1035 and the applicant, in writing version 21 days of the publication of the last devertisement in the press, specialism of the proposed applicant at the NAME: Skycoverage (Pty) Ltd ADDRESS: Units 10, 11 and 12, Block C, El Rioge Office Park, 100 Elizabeth Road, clo Elizabeth and Caravelle Roade, Barilett, Bokeburg TELEPH-ONE NUMBER: 011 979 7061

In Terms of Clause 6 of the cMotaline It and Use Management Scheme 2010, Read With Section 80 Of The eMatahleri Spatial Planning And Land Use Management By-Law, 2016 Withpank Ext 56. Notice is hereby given in terms of the above that I, the undersigned, intend to apply to the eMalathieni Local Municipality for permission to use the above-mentioned property land for the construction and operation of a selecummunication mast and base station. According to the and base station.
According to the abovementioned scheme the land is zoned for * Industrial 1'

the land is zowed for
Industrial 1

Plans and/or parhoulars of
this application may be
respected during the
respected during the
respected during for
respective for CC PO Box 32017, Totiusdal,

0134 418 Rustic Road, Fax: 012 804 7072 086 690 0468 E-mail: pp@infraplan.co.za Reference number: 5884

NOTICE In terms of Clause 6 of the eMalahieni Land Use Management Schome 2010 read with Section 80 of the eMalahieni Spatial Planning and Land Use Management By-Law, 2016 Application for Written Consent? Application for White Consent on ERF 804 WITBANK EXTENSION 5 EXTENSION 5
Notice is hereby given in terms of the above that 1, the undersigned, intend to apply to the eMalahient Local Municipality for permission to use the abovementioned property Aland for the following purpose: Jand for the continuing purpose:
BOARDING HOUSE
Pleas and/or particulars of this application may be inspecied during normal office hours at the following address:
Directorate Development Planning, 3° Floor, Civic Centre, Mandela Avenue, eMalahleni, 1035.

FIGURE 6: NEWSPAPER NOTICE.

NOTICE: HERITAGE IMPACT ASSESSMENT FOR ESKOM'S POWER th LINE RELOCATION This notice serves to 21 inform Interested and Affected Parties that a Heritage Impact Assessment is being prepared for Anglo Operations (Pty) Ltd and Eskom Holdings SOC Ltd (Eskom) in relation to the proposed Eskom's power line relocation and reclamation of the Landau 3 mineral reside deposit (MRD) projects. The MRD is situated on portion 27 and 28 of the farm Kliptontein 322 JS. The new powerline transverses through various portions of the farm Klipfontein 322 JS. Groenfontein 331 JS, Blaauwkrans 323 JS, Elandsfontein 309 JS and Schoongezicth 308 JS. These projects are located within the sMalahleni Local Municipality. Any interested or affected party who wishes to comment on this is invited to do so in writing to the Heritage Consultant, Archaelnos, at P.O. Box 55, Groenkloof, 0027, Facsimile 086 520 4173 or by email to: antony@archaetnos.co.za Closing date for comments: 13 May 2017 -DS003853

FIGURE 7: WORDING OF THE NEWSPAPER NOTICE.

5.4 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)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 8). Unfortunately some

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

gates were closed restricting actions to sections of some of the routes, but even from a distance these seems to have had the same disturbed character as the rest.

Certain factors, such as accessibility, density of vegetation, etc. may however influence the coverage. In this instance the under footing was extremely dense and the vegetation cover medium to high. Accordingly both the horizontal and the vertical archaeological visibility was influenced negatively. The survey took 8 hours to complete.



FIGURE 8: GPS TRACK OF THE SURVEYED AREA. NORTH REFERENCE IS TO THE TOP. THE RED LINES ARE THE PHYSICAL TRACK, I.E. ROUTES FOLLOWED DURING THE INVESTIGATION.

5.5 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 GPS. The information was added to the description in order to facilitate the identification of each locality.

5.6 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.

6. 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. In this particular case the entire surveyed area has been disturbed by recent human activities, mainly mining infrastructure. Accordingly these areas are seen as a low risk areas to reveal heritage sites due to it being almost entirely disturbed.

8. The vegetation cover in certain areas was high and dense, which had a negative effect on both the vertical and the horizontal archaeological visibility.

7. 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.

8. DESCRIPTION OF THE PHYSICAL ENVIRONMENT

The surveyed area is mainly used for mining and therefore it is an almost entirely disturbed setting. Prior to mining the land use was mainly cattle and maize farming. As a result very little of the original natural vegetation remains in the project area. Pioneer species such as grass and weeds therefore dominate the environment. Exotic invader species such as black wattle are also found in isolated spots within the area.

Clearly the surveyed area had been disturbed by recent human interventions. The first of course is the MRD, consisting of waste mining material (Figure 9). All five proposed haul roads mainly follow existing or former roads and therefore also is in disturbed area. These include both gravel and tar roads, the latter sometimes following main provincial roads (Figure 10-18). Lastly certain sections have been disturbed by mining activities and large scale bulldozing (Figure 19-20).

Both the horizontal and vertical archaeological visibility is reasonably good, due to the lack of natural vegetation. Small areas with dense high vegetation does however occur where the visibility would be affected negatively.

The topography is relatively even. It does however fall towards the few perennial and non-perennial streams, which occurs in the surveyed area.



FIGURE 9: THE MRD TO BE RELOCATED.



FIGURE 10: EXISTING ROAD ALONG ROUTE OPTION 5.



FIGURE 11: EXISTING GRAVEL ROAD ALONG ROUTE OPTION 5. ALSO NOTE THE DENSE PIONEER VEGETATION.



FIGURE 12: PROVINCIAL ROAD FORMER PART OF ROUTE OPTION 4.



FIGURE 13: ANOTHER SECTION OF ROUTE OPTION 4 ALONG A PROVINCIAL ROAD.



FIGURE 14: GENERAL VIEW ALONG ROUTE OPTION 3.



FIGURE 15: VIEW ALONG ROUTE OPTION 2, WITHIN THE MINE BOUNDARY.



FIGURE 16: VIEW ALONG A PROVINCIAL ROAD, PART OF ROUTE OPTION 2.



FIGURE 17: VIEW ALONG ROUTE OPTION 1, WITHIN THE MINE BOUNDARY.



FIGURE 18: GRAVEL ROAD FORMING PART OF ROUTE OPTION 1.



FIGURE 19: DENSE VEGETAION ALONG ROUTE OPTION 5.



FIGURE 20: MINING ACTIVITIES ALONG ROUTE OPTION 5.

9. PUBLIC CONSULTATION AND STAKEHOLDER ENGAGEMENT

No comments related to heritage were received.

10. 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).

10.1 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).

However, no natural shelters were seen during the survey and therefore it is possible that these people did not stay here for long times. The close vicinity of water sources and ample grazing would have made it a prime spot for hunting and obtaining water during the past. Therefore one may assume that Stone Age people probably would have moved through the area.

10.2 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 Bronkhorstspruit and in the vicinity of Bethal (Bergh 1999: 7-8).

The good grazing and access water in the area would have provided a good environment for Iron Age people although building material seem to be reasonably scarce. One would therefore expect that Iron Age people may have utilized the area. This is the same reason why white settlers moved into this environment later on.

10.3 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).

One may therefore expect to find farm buildings, structures and objects from this time period in the area. Many graveyards from this period in time have also been identified in surrounding areas during past surveys (Archaetnos database).

11. DISCUSSION OF SITES IDENTIFIED DURING THE SURVEY

11.1 Site 1 – graves

A small grave yard was identified directly adjacent to the contractor laydown area. The site consist of six graves (Figure 21-22). These are neatly fenced in. The graves either have granite or cement borders and granite or slate headstones.

Two surnames were identified being Jacobs and De Wet. The dates identified varies between 1922 and 1929. Four of the graves are of unknown age, but likely older than 1922. The graves are therefore regarded as being heritage graves.

GPS: 25°56'46.6"S; 29°12'35.2"E



FIGURE 21: SOME OF THE GRAVES AT SITE NO. 1.



FIGURE 22: ANOTHER VIEW OF THE GRAVE YARD.

Cultural significance Table:

A place is considered to be part of the national estate if it has cultural significance because of - Its importance in the community	or not	Rating: 1 - Neglible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High H
or pattern of South Africa's history		
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	M
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Υ	M
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	Н
Its importance in exhibiting particular aesthetic	N	

characteristics valued by a community cultural group Its importance in demonstrating a	N	
high degree of creative or technical achievement at a		
particular period		
Its strong or special association	Υ	Н
with a particular community or cultural group for social, cultural		
or spiritual reasons		
Its strong or special association	N	
with the life or work of a person, group or organization of		
importance in the history of South		
Africa		
Sites of significance relating to	N	
the history of slavery in South Africa		
7 11100		
Reasoned assessment of signi	6 – High	
appropriate indicators outlined		

Integrity scale:

- 1 Bad state of preservation, but no contextual information
- 2 Bad state of preservation and includes contextual information
- 3 Reasonable state of preservation, but no contextual information
- 4 Reasonable state of preservation and includes contextual information
- 5 Good state of preservation, but no contextual information
- 6 Good state of preservation and includes contextual information
- 7 Excellent state of preservation, but no contextual information
- 8 Excellent state of preservation and includes contextual information

Field-rating = Cultural significance x Integrity

 $= 6 \text{ (High) } \times 6$

= 36

The site therefore is of a high cultural significance and receives a field rating of Local Grade IIIB: The site should be included in the heritage register and may be mitigated.

Two possibilities exist. The first being to manage the graves in-situ and the second being exhumation:

• The first option entails demarcating the graves, implementing a buffer and compiling a management for the sustainable preservation thereof. This should be written by a heritage expert. This usually is done when the graves are in no danger of being damaged, but where there will be a secondary impact due to the activities of the development.

• The second option is to exhume the mortal remains and then to have it relocated. This usually is done when the graves are in the area to be directly affected by the development activities. For this a specific procedure should be followed which includes social consultation. For graves younger than 60 years only an undertaker is needed. For those older than 60 years and unknown graves an undertaker and archaeologist is needed. Permits should be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site will be impacted on, but it would be possible to shift the laydown area in order not to impact directly on the graves. Therefore Option 1 is recommended. This includes the writing of a site preservation management plan.

12. CONCLUSION AND RECOMMENDATIONS

The survey of the indicated area was completed successfully. As indicated one site of cultural heritage significance were identified within the proposed project area (Figure 23).



FIGURE 23: LOCATION OF THE SITE IDENTIFIED DURING THE SURVEY.

The following is recommended:

• From a heritage perspective, the graves identified should be mitigated.

- As indicated two possibilities exist. The first being to manage the graves in-situ and the second being exhumation.
- Although the site will be impacted on, it would be possible to shift the laydown area in order not to impact directly on the graves. Therefore Option 1 is recommended. This includes the writing of a site preservation management plan.
- After the recommendations above have been implemented, the proposed development may continue.
- 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.
- In This regards the following 'Chance find Procedure' should be followed:
- 1. Upon finding any archaeological or historical material all work at the affected area must cease.
- 2. The area should be demarcated in order to prevent any further work there until an investigation has been completed.
- 3. An archaeologist should be contacted immediately to provide advice on the matter.
- 4. Should it be a minor issue, the archaeologist will decide on future action, which could include adapting the HIA or not. Depending on the nature of the find, it may include a site visit.
- 5. SAHRA's APM Unit may also be notified.
- 6. If needed the necessary permit will be applied for with SAHRA. This will be done in conjunction with the appointed archaeologist.
- 7. The removal of such archaeological material will be done by the archaeologist in lieu of the approval given by SAHRA, including any conditions stipulated by the latter.
- 8. Work on site will only continue after removal of the archaeological/ historical material was done.

13. 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. 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. 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, landuse, 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 37 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 36.

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.