



Status Quo and pre-mitigation Heritage Impact Assessment Report for Burials Identified during Phase 1 Impact Assessment Study for BMK East mining expansion Development in Steve Tshwete Local Municipality, in Mpumalanga Province.

August 2013



Status Quo and pre-mitigation Heritage Impact Assessment Report for Burials Identified during Phase 1 Impact Assessment Study for BHP Billiton Energy Coal South Africa, Wolvekrans Colliery, Boshmanskranexpansion Development in Steve Tshwete Local Municipality, in Mpumalanga Province.

August 2013

For and on behalf of

BHP Billiton Energy Coal South Africa,
Wolvekrans Colliery.

Approved by: Dr. McEdward Murimbika

Signed:

DOCUMENT INFORMATION

TITLE:	STATUS QUO AND PRE-MITIGATION HERITAGE IMPACT ASSESSMENT REPORT FOR BURIALS IDENTIFIED DURING PHASE 1 IMPACT ASSESSMENT STUDY FOR BHP BILLITON ENERGY COAL SOUTH AFRICA, WOLVEKRANS COLLIERY, AND BOSCHMANSKRANS EXPANSIONPROJECT INSTEVE TSHWETE LOCAL MUNICIPALITY, IN MPUMALANGA PROVINCE.		
PURPOSE OF SCOPE: The purpose of this document is to document burial grounds and graves affected by the proposed BHP Billiton Energy Coal South Africa, Wolvekrans Colliery, Boschmanskrans expansion Project. The development is located in Mpumalanga Province.			
DOCUMENT VERIFICATION			
Signature:		Position:	
Name:		Date: 06 August 2013	
Consulted: Teboho Motinyane of BHP Billiton to review the document. The document also went through Mafu Funeral Home (Nzumbululo Heritage Solutions) Quality Assurance Department for internal review.			
ENDOSSED Client Project Responsible Officer to sign off.			
Signature		Position Project Officer	
Name:		Date:	

NZUMBULULO RACIE TERMS

R	Responsible: the person actually produces the document			
A	Accountable: the person who has to answer for quality assurances			
C	Consulted: those who are consulted before the document is finalised			
I	Informed: those who must be informed when the document is published			
E	Endorsed: those who must approve the final document before it is published by the client			
Issue	Date	Reason For Issue	Responsible	Accountable
1	August 2013	BHP Billiton Consideration and on-ward Approval of Heritage Agency	Trust Mlilo	Dr. M. Murimbika
2		BHP Billiton Consideration and on-ward Approval of Heritage Agency	Trust Mlilo	Dr. M. Murimbika
Citation:	STATUS QUO AND PRE-MITIGATION HERITAGE IMPACT ASSESSMENT REPORT FOR BURIALS IDENTIFIED DURING PHASE 1 IMPACT ASSESSMENT STUDY FOR BHP BILLITON ENERGY COAL SOUTH AFRICA, WOLVEKRANS COLLIERYEXPANSION PROJECTINSTEVE TSHWETE LOCAL MUNICIPALITY, IN MPUMALANGA PROVINCE.			
Recipients:	BHP Billiton Energy Coal South Africa Limited (BECSA)			

Mafu Reference	4201714011
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CAVEAT

STATUS QUO AND PRE-MITIGATION HERITAGE IMPACT ASSESSMENT REPORT FOR BURIALS IDENTIFIED DURING PHASE 1 IMPACT ASSESSMENT STUDY FOR BHP BILLITON ENERGY COAL SOUTH AFRICA, WOLVEKRANS COLLIERY, AND BOSCHMANSKRANS EXPANSION PROJECT IN STEVE THWETE LOCAL MUNICIPALITY, IN MPUMALANGA PROVINCE.

Authorship: This Report has been prepared by Dr. M. Murimbika (Principal Investigator & Professional Archaeologist) assisted by Mr. T.Mlilofo for BHP Billiton. The report was prepared for BHP Billiton.

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Geographic Co-ordinate Information: Geographic co-ordinates in this report were obtained using a hand-held Garmin Global Positioning System device. The manufacturer states that these devices are accurate to within +/- 5 m.

Maps: Maps included in this report use data extracted from the NTS Map and Google Earth Pro and the BHP Billiton.

Disclaimer: The Author is not responsible for omissions and inconsistencies that may result from information not available at the time this report was prepared.

The survey was carried out within the context of tangible and intangible cultural heritage resources as defined by the SAHRA Regulations and Guidelines as to the authorisation proposed exhumation and reburial of graves affected by the power station development (BHP Billiton).

Signed by Principle Investigator:

McEdwardMurimbika (Ph.D.),

August2013

ACKNOWLEDGEMENTS

The author acknowledges the assistance of BHP Billiton for the provision of maps of affected areas and potential custodians.

MANAGEMENT SUMMARY

BACKGROUND

BHP Billiton commissioned this study. The study focuses on graves and burial grounds identified during Phase 1 Heritage Impact Assessment specialists study for the proposed BHP Billiton Energy Coal South Africa Wolvekrans Colliery Boschmanskrans Expansion Project in Steve Tshwete Local Municipality of Mpumalanga Province. Mafu's Funeral Home, in collaboration with Nzumbululo Heritage Solutions, were commissioned by BHP Billiton to conduct Phase 2 heritage mitigation study for the affected burial grounds and graves recorded within the footprint of the proposed mining expansion. Nzumbululo archaeologists and physical cultural property specialists conducted field survey of the site for the proposed coal mining development.

SUMMARY RESULTS

Nzumbululo Heritage Solutions heritage specialist team surveyed the proposed coal mining project area to confirm the location and distribution of burial grounds and grave sites and verify their condition and status *in situ* in context of proposed mining activities. A total of 132 graves were identified on six burial grounds distributed at varying distances from the proposed mining. The Burial Grounds WCB 001, WCB002, WCB004, WCB006 and WCB 10 are located within varying distances from each other suggesting that they belong to different families. All the graves in these burial grounds are on the direct path of the proposed mining expansion.

RECOMMENDATIONS

- 132 graves were identified within the mining footprint.
- The survey confirmed that the affected landscape has a long history of human occupation making it an active cultural landscape where there is a

possibility of encountering previously unknown graves in the project area during subsurface construction work.

- Several inquiries have been lodged by potential custodians of the affected graves and burial grounds. Therefore, a list of potential custodians is being compiled as part of the preparation for the Burial Grounds and Graves Permit applicant process.
- In the likely event that no custodians will come forward or will be identified for particular burials or graves, the graves will be treated as unknown graves and as such they fall within the jurisdiction of the National Heritage Resources Act (NHRA) 25 of 1999 under the assumption and observation that some of the graves have been confirmed to be older than 60 years.
- The proposed mining project will destroy all identified burial grounds on direct path of the development. As such these graves should be relocated to safe sites.
- Before any interference with the burial grounds and graves, a permit application should be lodged with South African Heritage Resources Agency (SAHRA) Burial Grounds and Graves Unit to secure the relevant permission for urgent intervention to rescue, salvage and relocate the burials to a safe and formal burial ground.
- The mining development will traverse through historic and active cultural landscape with historic and contemporary human settlements. This provides for a high probability of encountering chance finds and previously unknown graves during sub-surface construction work. Portions of the mine site are within historic homestead remains where there are high possibilities of encountering unmarked burials for infants that are traditionally buried in homesteads as opposed to being buried in cemeteries. As such, it is recommended that a heritage-monitoring program be developed for implementation during the construction period.
- A heritage monitoring program would require the project ECO to work with a stand-by heritage officer to ensure that any chance burial grounds or human remains that may be unearthed accidentally from previously

unknown or unidentified grave would be attended to in line with relevant applicable regulations.

TABLE OF CONTENTS

Document information..... - 3 -

Nzumbululo RACIE Terms - 3 -

Caveat - 4 -

ACKNOWLEDGEMENTS - 4 -

MANAGEMENT SUMMARY - 5 -

Background..... - 5 -

Summary Results..... - 5 -

Recommendations..... - 5 -

table of contents - 8 -

Table of figures.....- 10 -

ABBREVIATIONS.....- 11 -

DEFINITIONS- 11 -

1. INTRODUCTION- 15 -

2. AIM OF THE STUDY- 15 -

3. Specialist Qualifications- 16 -

4. Assumptions and Limitations.....- 16 -

5. HERITAGE LEGISLATION- 17 -

6. Grave outside NHRA Protection- 20 -

7. previously unidentified burial sites/graves.....- 21 -

8. Social consultaNCY.....- 21 -

9. Methodology.....- 30 -

9.1. Site Significance..... - 30 -

9.2. Methodology for Impact Assessment.....- 31 -

Impact Rating - 31 -

Certainty..... - 31 -

Duration.....	- 32 -
10. Results: Burial grounds and graves.....	- 32 -
10.1. Burial ground wcb 001	- 33 -
10.2. Burial ground (BCW 002).....	- 38 -
10.3. Burial Ground WCB004.....	- 39 -
10.4. Burial ground (WCB 0006)	- 41 -
10.5. Burial ground wcb (grave number 10).....	- 43 -
10.6. Burial ground (WCB 0010)	- 44 -
11. General Applicable HERITAGE MANAGEMENT GUIDELINES	- 46 -
12. SUMMARY RECOMMENDATIONS AND CONCLUDING REMARKS	- 47 -
13. Grave Relocation Process	- 48 -
14. BIBLIOGRAPHY	- 50 -
15. Appendix 1: Burial Relocation Project Method Statement	- 51 -
1. Discovery and Notification	- 51 -
2. Site Protection and Identification.....	- 51 -
3. Investigation and Reporting.....	- 51 -
3.1 Reporting.....	- 52 -
4. Site Disposition Agreement (Management Plan)	- 53 -
5. Arbitration.....	- 54 -
6. Records.....	- 54 -
7. Burial Relocation & Reburial.....	- 55 -
8. Risks.....	- 55 -
16. appendix 2: General Precautions	- 58 -
Personal Protective Equipment	- 58 -
Summary.....	- 59 -
17. APPENDIX 3: HUMAN REMAINS AND BURIALS IN DEVELOPMENT CONTEXT ...	-
60 -	
18. APPENDIX 4: HERITAGE MANAGEMENT PLAN INPUT INTO PROJECT EMP	65

TABLE OF FIGURES

Figure 1: Mining expansion Plan Map of the BHP Billiton Colliery (Courtesy of BHP Billiton 2012)**Error! Bookmark not defined.**

ABBREVIATIONS

AIA	Archaeological Impact Assessment
HIA	Heritage Impact Assessment
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
Nzumbululo	Nzumbululo Heritage Solutions (South Africa)
EMP	Environmental Management Plan
ASAPA	Association of South African Professional Archaeologists
CRM	Cultural Resource Management
NHRA	National Heritage Resources Act, Act 25 of 1999.
NEMA	National Environmental Management Act
EO / ECO	(Environmental Officer/ Environmental Control Officer)
PHRA	Provincial Heritage Resources Agency
SAHRA	South African Heritage Resources Agency

DEFINITIONS

Archaeological Material remains resulting from human activities, which are in a state of disuse and are in, or on, land and which are older than 100 years, including artefacts, human and hominid remains, and artificial features and structures.

Burial site the location of any human grave or remains that have been interred, cremated or otherwise placed, and include ossuaries, single burials, multiple burials; rock cairns; cave or cache burials etc. not situated within a cemetery.

Burial Site which is defined as: a place outside a recognized cemetery where the remains of a cultural ancestor of indigenous people have been interred or otherwise placed."

Chance Finds Archaeological artefacts, features, structures or historical cultural remains such as human burials that are found accidentally in context

previously not identified during cultural heritage scoping, screening and assessment studies. Such finds are usually found during earth moving activities such as water pipeline trench excavations.

Cultural Heritage Resources Same as Heritage Resources as defined and used in the South African Heritage Resources Act (Act No. 25 of 1999). Refer to physical cultural properties such as archaeological and palaeontological sites; historic and prehistoric places, buildings, structures and material remains; cultural sites such as places of ritual or religious importance and their associated materials; burial sites or graves and their associated materials; geological or natural features of cultural importance or scientific significance. Cultural Heritage Resources also include intangible resources such as religion practices, ritual ceremonies, oral histories, memories and indigenous knowledge.

Cultural Significance The complexities of what makes a place, materials or intangible resources of value to society or part of, customarily assessed in terms of aesthetic, historical, scientific/research and social values.

EO or ECO (Environmental Officer/ Environmental Control Officer) is BHP Billiton official or Agency responsible for the administration of the land on which the site is located.

Grave A place of interment (variably referred to as burial), including the contents, headstone or other marker of such a place, and any other structure on or associated with such place. A grave may occur in isolation or in association with others where upon it is referred to as being situated in a cemetery or burial ground.

Grave offering any object or objects associated with the human remains that may reflect the religious practices, customs or belief system of the interred.

Historic Material remains resulting from human activities, which are younger than 100 years, but no longer in use, including artefacts, human remains and artificial features and structures.

Historic under the NH Resources Act this generally means something older than 60 years.

Human remains mean the remains of a dead human body and include partial skeletons, bones, cremated remains and complete human bodies that are found outside a recognized cemetery" (adapted from NHR Act)

In Situ material culture and surrounding deposits in their original location and context, for example an archaeological site that has not been disturbed by farming.

Material culture Buildings, structure, features, tools and other artefacts that constitute the remains from past societies.

Recognized cemetery a defined area of land that is set aside for the burial of human bodies.

Representative means a descendant of the interred or of the person whose remains are found, or where no descendant survives or is identified, an official representative of the appropriate custodians of the burial site or the closest culturally affiliated group, religious denomination, military or authority as evidenced by the location or mode of burial. Where no representative can be determined the Archaeologist shall act as the representative on unclaimed or unknown burials and the EO at BH Billiton at the discretion and with the consent of the SAHRA, the custodian representative group.

Site A distinct spatial cluster of artefacts, structures, organic and environmental remains, as residues of past human activity.

Site disposition agreement means a written agreement to be reached between the EO and the representative of the interred regarding the disposition of the remains, including any disinterment and reinterment, and management plan management plan means a plan to identify the roles of the representative, Archaeologist and land owner or manager respecting the care and protection of the site, including a consideration of site records, site access, and ways to protect a site from disturbance until the proper exhumation, relocation and reburial is completed.

Heritage -That, which is inherited and forms part of the National Estate (Historical places, objects, fossils as defined by the National Heritage Resources Act 25 of 1999).

Heritage resources – This means any place or object of cultural significance.

1. INTRODUCTION

Mafu's Funeral Home was commissioned by BH Billiton to conduct Phase 2 heritage mitigation for burial grounds and graves affected by the proposed mining development servitude (see figure: 1). Mafu's Funeral Home worked in collaboration with Nzumbululo Heritage Solutions. The latter's archaeologists and heritage specialists team conducted a field and site condition survey of the mining footprint. The survey identified a total of 132 graves distributed in separate burial grounds. The identified burial grounds are on the direct mine footprint.

This report provides the results of the field study conducted to confirm the status quo of the affected burial grounds within the project area. The study was conducted within the framework of the legislations including the Section 36 of the National Heritage Resources Act (Act No 25 of 1999) and will soon apply the Human Tissue Act (1983) (also see Appendix 1-4).

2. AIM OF THE STUDY

The study was commissioned as part of a Phase 2 Heritage Mitigation exercise for the proposed BHP Billiton mining development. The study is part of the proposed grave relocation mitigation process aimed at relocating identified graves from the mining development to safer locations. In addition, the study sought to:

- ❑ Confirm the existence of the burial grounds and graves situated within the proposed mining development site.
- ❑ Conduct site condition survey of all recorded burial grounds and gravesite in the project's primary and secondary footprint impact zone. The primary impact zone being the direct path of the mining development and the secondary impact zone being in the buffer zone where the recorded graves may be affected by auxiliary developments such as construction of access or construction roads, construction camps or material storage sites.

- Make further recommendations on mitigation measures with the view to reduce specific adverse impacts and enhance specific positive impacts on the affected burial sites.
- Identify and discuss with local communities (where applicable) on potential impacts of the mining site and make the necessary recommendations on how to handle the matter.
- Take responsibility for communicating with SAHRA and other related authorities in order to obtain the relevant burial relocation permits and authorization.

3. SPECIALIST QUALIFICATIONS

Nzumbululo Heritage Solutions on behalf of Mafu Funeral Home compiled this Report for BHP Billiton Energy Coal Africa. Dr. M. Murimbika is leading the heritage mitigation program. The staff at Nzumbululo Heritage Solutions has a combined experience of more than 40 years in the heritage and cultural resources management consulting and development industry. McEdwardMurimbika (Ph.D.), Principal Investigator for this project, and Professional archaeologists is an accredited Principal Investigator and Member of ASAPA and ASAPA CRM, (Membership No. 194). Trust Mlilo, and Moses Mabuda are project Heritage Specialists and professional field archaeologists registered with the Association of Southern African Professional Archaeologists.

4. ASSUMPTIONS AND LIMITATIONS

Regardless of the comprehensiveness of the fieldwork undertaken, it is necessary to realise that the heritage resources identified during the fieldwork were limited to visible graves and burial grounds including those that were already recorded within the mine plan map. As such the sites do not necessarily represent all the possible heritage resources present within the area. Other classes of heritage resources in the area were covered under the Phase 1 HIA study conducted during the EIA and EMP phases of the project. This study was restricted to physically identifiable burial grounds and graves.

This means superficially unidentifiable graves and burial grounds, for example those covered by dense vegetation or have no visible signature are not accounted for herein. As such, should any burial/grave site (or any protected heritage features and/or objects for that matter) not included in the present inventory be located or observed, a heritage specialist should immediately be contacted.

Such accidentally or chance finds heritage features and/or objects may not be disturbed or removed in any way until such time that the heritage specialist had been able to make an assessment as to the significance of the site (or material) in question. This applies to graves and cemeteries as well. In the event that any graves or burial places are located during the development the procedures and requirements pertaining to graves and burials will apply as set out below.

5. HERITAGE LEGISLATION

The present study was conducted in line with applicable legislations and regulations. The identification, evaluation and assessment of any cultural heritage site, artefact, physical cultural properties, burial grounds and graves, intangible heritage or find in the South African context is required and governed by the following legislations:

1. National Environmental Management Act (NEMA) Act 107 of 1998
2. National Heritage Resources Act (NHRA) Act 25 of 1999
3. Minerals and Petroleum Resources Development Act (MPRDA) Act 28 of 2002
4. Development Facilitation Act (DFA) Act 67 of 1995

This present study is equally covered under the following sections in each Act, which refer directly to the identification, evaluation and assessment of cultural heritage resources.

1. National Environmental Management Act (NEMA) Act 107 of 1998
 - a) Basic Environmental Assessment (BEA) – Section (23) (2) (d)
 - b) Environmental Scoping Report (ESR) – Section (29) (1) (d)
 - c) Environmental Impacts Assessment (EIA) – Section (32) (2) (d)
 - d) EMP (EMP) – Section (34) (b)
2. National Heritage Resources Act (NHRA) Act 25 of 1999
 - a) Protection of Heritage Resources – Sections 34 to 36; and
 - b) Heritage Resources Management – Section 38
3. Minerals and Petroleum Resources Development Act (MPRDA) Act 28 of 2002
 - a. Section 39 (3)
4. Development Facilitation Act (DFA) Act 67 of 1995
 - a) The GNR.1 of 7 January 2000: Regulations and rules in terms of the Development Facilitation Act, 1995. Section 31.

The NHRA stipulates that cultural heritage resources may not be disturbed without authorization from the relevant heritage authority. Section 34 (1) of the NHRA states that “no person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority...” The NEMA (No 107 of 1998) states that an integrated EMP should (23:2(b)) “...identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage”. In accordance with legislative requirements and EIA rating criteria, the regulations of SAHRA and ASAPA have also been incorporated to ensure that a comprehensive legally compatible HIA report is compiled.

As highlighted in introductory sections of this report, the study specifically focuses on burial grounds and graves affected by the planned BHP Billiton mining development. All burial grounds and individual graves are protected by law irrespective of their age. Furthermore, there are regulations, which control handling and management of human remains and grave goods. Specifically, in terms of the Section 36 (3) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) 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 equipment, or any equipment, which assists in the detection or recovery of metals.

Therefore, in addition to the formal protection of culturally significance graves, all graves which are older than 60 years and which are not already located in a cemetery (such as ancestral graves in rural areas), are protected. Communities, which have an interest in the graves, must be consulted before any disturbance can take place. The graves of victims of conflict and those associated with the liberation struggle will have to be included, cared for, protected and memorials erected in their honour where practical. Regarding graves and burial grounds, the NHRA distinguishes between the following:

- Ancestral graves
- Royal graves and graves of traditional leaders
- Graves of victims of conflict
- Graves of individuals designated by the Minister by notice in the Gazette
- Historical graves and cemeteries
- Other human remains, which are not covered in terms of the Human Tissue Act, 1983 (Act No.65 of 1983).

All human remains are also protected under the Human Tissue Act, 1983 (Act No.65 of 1983). In addition, Municipal Ordinances provide for both burial grounds/cemetery and gravesites within certain localities.

6. GRAVES OUTSIDE NHRA PROTECTION

Graves younger than 60 years fall under Section 2(1) of the Removal of Graves and Dead Bodies Ordinance (Ordinance no. 7 of 1925) as well as the Human Tissues Act (Act 65 of 1983) and are the jurisdiction of the National Department of Health and the relevant Provincial Department of Health and must be submitted for final approval to the Office of the relevant Provincial Premier.

This function is usually delegated to the Provincial MEC for Local Government and Planning or in some cases the MEC for Housing and Welfare. Authorisation for exhumation and reinterment must also be obtained from the relevant local or regional council where the grave is situated, as well as the relevant local or regional council to where the grave is being relocated. All local and regional provisions, laws and by-laws must also be adhered to. In order to handle and transport human remains the institution conducting the relocation should be authorised under Section 24 of Act 65 of 1983 (Human Tissues Act).

Graves older than 60 years, but younger than 100 years fall under Section 36 of Act 25 of 1999 (National Heritage Resources Act) as well as the Human Tissues Act (Act 65 of 1983) and are the jurisdiction of the South African Heritage Resource Agency (SAHRA).

The procedure for Consultation Regarding Burial Grounds and Graves (Section 36(5) of Act 25 of 1999) is applicable to graves older than 60 years that are situated outside a formal cemetery administered by a local authority. Graves in the category located inside a formal cemetery administered by a local authority will also require the same authorisation as set out for graves younger than 60 years over and above SAHRA authorisation.

If the grave is not situated inside a formal cemetery but is to be relocated to one, permission from the local authority is required and all regulations, laws and by-laws set by the cemetery authority must be adhered to.

7. PREVIOUSLY UNIDENTIFIED BURIAL SITES/GRAVES

The proposed mining development is situated in an historic and contemporary cultural landscape with prehistoric, historic and contemporary human settlements and homestead remains. Given the history of human occupation of the affected area, there is a possibility that previously unknown burials may be discovered during subsurface construction work. Should burial sites be accidentally found, they must be reported to the nearest police station to ascertain whether or not a crime has been committed and a heritage expert should be called in to establish whether the burial is covered the NHRA. If there is no evidence for a crime having been committed, and if the person cannot be identified so that their relatives can be contacted, the remains must be kept in an institution where certain conditions are fulfilled. These conditions are laid down in the Human Tissue Act (Act No. 65 of 1983). In contexts where the local traditional authorities give their consent to the unknown remains to be re-buried in their area, such re-interment may be conducted under the same regulations as would apply for known human remains.

8. SOCIAL CONSULTANCY

The research team has been liaising with Teboho Motinyane and Wonderboy Masilela from BHP Billiton to trace families that were relocated from the affected project area. In accordance with relevant legislation Mafu Funeral Home advertised in the Sowetan dated 30 July 2013, Witbank News dated 2 August 2013, Middleburg Observer dated 2 August 2013, eMalahleni FM and Ekwekwezi FM (See Appendix A). Nzumbululo Heritage Solutions in collaboration with Mafu Funeral Home also pasted several on site notices in the Witbank, Middleburg and KwaMhlanga areas. Nzumbululo Heritage Solutions Witbank Office and Mafu Funeral Home located in Witbank handled inquiries from potential custodians who responded to the various adverts, which ran for 60 days as required by the law.

The Nzumbululo team tracked Mr Masilela (072 4934 406) and Mr Joubert Jacobus Petrus (0823227212) who stayed in the project area for many years. They both indicated that they know the whereabouts of some of the affected families and will cooperate in tracking them.

A meeting was set up between Mr Joubert J Petrus and Nzumbululo representatives and Mr Joubert indicated that he needed to consult family members with graves at their cemetery. A grave verification exercise was conducted and Mr Joubert J. Petrus identified two more unmarked graves, which were initially not counted within the cemetery. In consultation with Holtshauzen, Kings, Loodts, Koekmoer, Van Essens, Harmse, De Kock and Naude Families Mr Joubert signed consent forms on behalf of the said families. He signed for 23 graves located at two burial sites (WCB001 and WCB002).

Boy Mashiya (0717889474) of Ben 5 also provided valuable information about the whereabouts of some of the graves custodians. Since August 2013 Nzumbululo team has been processing inquiries and grave verifications with people who suspected that their family graves could be affected by the proposed mine development.

The Sgudla Family was the first to respond to the adverts. The family was represented by Johannes Sgudla (013 6886098, 0732224951). The family identified and consent for one grave located at WCB 0008.

On the 12th of September 2013 the Nzumbululo team tracked Samuel Mmelwa (0724934406), he identified 2 graves belonging to his family. In consultation with his relatives, Lucas Doctor Monareng and John Monareng, Samuel Masilela signed consent forms allowing the mine to relocate his family graves to Gembokspruit in KwaMhlanga.

On the 26th of September 2013 Samuel Mokgabudi and Family members came to verify the fate of their family graves, they identified four graves within the mine footprint (see consent forms) and accordingly they agreed to relocate the graves in accordance with the relevant legislation.

Nzumbululo team is stillreceiving and processinginquiries from potential custodians.

LIST OF ADVERTS

4 Rhodes Street
Witbank
1035



HOME
REGNO:2003/034594/23
VAT NO:4520216575

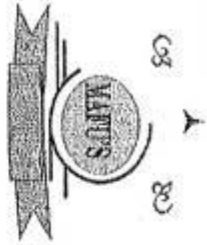
P.O. Box 4776
Witbank
1035

TEL : (013) 690 2989
FAX : (013) 690 2987

wonderfull@live.co.za
wonderful@mafusfuneralhome.co.za

EMALAHLENI FM : 013 696 1439

EKWEKWEZI FM : 012 431 5302



Notification of proposed exhumation and reburial of human remains from BHP Billiton operation;

Notification is hereby given in terms of section 36 of National Heritage Resources Act (Act 25 of 1999) and section 2(1) of the Graves and Dead Bodies Ordinance 1925 (Ordinance no 7 of 1925) of the intent of exhumation and reburial of graves that could be impacted upon by the project construction and related activities.

Location of the activities

- Boschmanskrans 22 IS Ptn of Remainder of Ptn 3
- Boschmanskrans 22 IS Ptn of Remainder of Ptn 4
- Welverdiend 23 IS Remainder of the farm

To ensure that you are identified as an interested and /or affected party, please submit your name and contact details and confirm your interest to the contact person by 30 September 2013.

Contact details : Wonderful Mafu

- Tel : 013 690 2989
- Fax : 013 690 2987
- Cell : 082 856 7854
- Email : wonderful1@live.co.za



Isaziso sokukhishwa kwama thuna amadala eBhphilliton Mine

Sazisa wonke umuntu ohlala e Middelburg nezindawo ezakhelene nayo (Hendrina, Emalaheni, njalonzalo) ukuthi kuzokhishwa wonke amathuna amadala ase bhphilliton Mine.

Lesi saziso senziwa ngokubambisana ne Section ye National Heritage Resource act (Act 25 of 1999) ne Section 2(1) umthetho wango 1925 wama thuna kanye nezidumbu (ordinance no 7 of 1925) Mayelana nesifiso sokwemba amathuna nokungcwatshwa kwawo kabusha uma ngabe uyathinteka kulomsebenzi sicela usazise ngokukhulu ukushesha.

Indawo lapho kuzokhishwa khona amathuna amadala

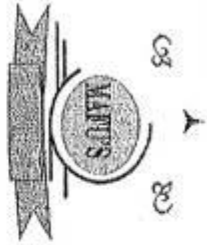
- Boschmanskrans 22 IS Ptn of Remainder of Ptn 3
- Boschmanskrans 22 IS Ptn of Remainder of Ptn 4
- Welverdiend 23 IS Remainder of the farm

Ukuze uqiniseke ukuthi yiso ngempela isihlobo sakho/nokuthi siyobekwa kuphi ngendlela efanele.

Sicela ufake igama lakho kanye nalapho ungatholakala khona, konke lakhu sikucela ngaphambi kokuba kufike umhla ka 30 September 2013.

Ningathintana : Wonderful Mafu

- Tel : 013 690 2989
- Fax : 013 690 2987
- Cell : 082 856 7854
- wonderful1@live.co.za



Notification of proposed exhumation and reburial of human remains from BHP Billiton operation;

Notification is hereby given in terms of section 36 of National Heritage Resources Act (Act 25 of 1999) and section 2(1) of the Graves and Dead Bodies Ordinance 1925 (Ordinance no 7 of 1925) of the intent of exhumation and reburial of graves that could be impacted upon by the project construction and related activities.

Location of the activities

- Boschmanskrans 22 IS Ptn of Remainder of Ptn 3
- Boschmanskrans 22 IS Ptn of Remainder of Ptn 4
- Welverdiend 23 IS Remainder of the farm

To ensure that you are identified as an interested and /or affected party, please submit your name and contact details and confirm your interest to the contact person by 30 September 2013.

Contact details : Wonderful MaFu

- Tel : 013 690 2989
- Fax : 013 690 2987
- Cell : 082 856 7854
- Email : wonderful1@live.co.za



Isaziso sokukhishwa kwama thuna amadala eBhphilliton Mine

Sazisa wonke umuntu ohlala e Middeburg nezindawo ezakhelene nayo (Hendrina, Emalaheni, njalonzalo) ukuthi kuzokhishwa wonke amathuna amadala ase bhphilliton Mine.

Lesi saziso senziwa ngokubambisana ne Section ye National Heritage Resource act (Act 25 of 1999) ne Section 2(1) umthetho wango 1925 wama thuna kanye nezidumbu (ordinance no 7 of 1925) Mayelana nesifiso sokwemba amathuna nokungcwatshwa kwawo kabusha uma ngabe uyathinteka kulomsebenzi sicela usazise ngokukhulu ukushesha.

Indawo lapho kuzokhishwa khona amathuna amadala

- Boschmanskrans 22 IS Ptn of Remainder of Ptn 3
- Boschmanskrans 22 IS Ptn of Remainder of Ptn 4
- Welverdiend 23 IS Remainder of the farm

Ukuze uqiniseke ukuthi yiso ngempela isihlobo sakho,nokuthi siyobekwa kuphi ngendlela efanele.

Sicela ufake igama lakho kanye nalapho ungatholakala khona, konke lakhu sikucela ngaphambi kokuba kufike umhla ka 30 September 2013.

Ningathintana : Wonderful MaFu

- Tel : 013 690 2989
- Fax : 013 690 2987
- Cell : 082 856 7854
- wonderful1@live.co.za



9. METHODOLOGY

The methods in this study followed an HIA process that consisted of three steps:

Step I – Literature Review: The background information to the field survey leans greatly on the Heritage Impact Assessment Report completed for BHP Billiton EIA Study for the expansion Project.

Step II – Physical Survey: A physical survey was conducted on foot through the proposed mine expansion project area by qualified archaeologists (June –July2013), aimed at locating and documenting graves and burial ground sites falling within and adjacent to the proposed mining development footprint.

Step III – The final step involved the recording and documentation of relevant burial grounds and grave sites, as well as the assessment of sites in terms of the heritage impact assessment criteria and report writing, as well as mapping and constructive recommendations on rescue, salvage and relocation of the burial grounds and grave sites as well as protecting those sites that will not be directly destroyed by the development but are in close proximity of the development where there is a possibility that they may be affected from secondary impacts.

9.1. SITE SIGNIFICANCE

All the burial grounds and gravesite covered by this report fall under the Generally Protected heritage sites category and they all retain a High and Medium Significance. Therefore, all the sites that are on the direct path of the development should be protected in situ or mitigated before destruction. These sites that are not on direct path of destruction but within close proximity of the development should be mapped, highly visibly marked and protected from any interference during the proposed development.

9.2. METHODOLOGY FOR IMPACT ASSESSMENT

Impact Rating

The impacts of the planned mining are considered VERY HIGH from both a heritage and developmental perspectives.

These impacts would be considered by society as constituting a major and usually permanent change to the (natural and/or socio-cultural) environment, and usually result in severe or very severe effects, or beneficial or very beneficial effects.

Example: The permanent loss of physical cultural properties or cultural landscape would be viewed by informed society as being of VERY HIGH significance.

Example: The establishment of open cast mining infrastructure in a farming area, which previously had very few services or high earning farming activities, would be regarded by the affected parties as resulting in benefits with VERY HIGH significance.

Certainty

DEFINITE: More than 90% sure of a particular fact. Substantial supportive data exists to verify the assessment.

PROBABLE: Over 70% certainty of a particular fact, or of the likelihood of an impact occurring.

POSSIBLE: Only over 40% certainty of a particular fact or of the likelihood of an impact occurring.

UNSURE: Less than 40% certainty of a particular fact or likelihood of an impact occurring.

Mining development impacts are considered certain on any graves or burial ground on its direct path. The grave and burial grounds sites within 100m of the mining site fall within the probably and possible impact region given the fact observation that the mining development will be associated with auxiliary

developments such as canals and access roads, servitude demarcation fence lines and boundaries as well as potential temporary construction camps and material storage sites during the proposed development.

Duration

SHORT TERM: 0 to 5 years

MEDIUM: 6 to 20 years

LONG TERM: more than 20 years

PERMANENT: site will be demolished or is already demolished

The Wovekrans Colliery Boschmanskrans Expansion development project falls under the Long Term and Permanent category. The grave and burial grounds on the direct path of the mining development will permanently be affected or destroyed if mitigation is not implemented prior to the development commencing.

10. RESULTS: BURIAL GROUNDS AND GRAVES

The field survey identified six burial sites whereby the majority (more than 71% of the identified graves) are located between 0-100m of the mine expansion and associated infrastructure (please refer to map below). As highlighted in previous sections, burial grounds and gravesites are accorded the highest social significance threshold (see Appendix 3). They have both historical and social significance and are considered sacred. Wherever they exist they may not be tempered with or interfered with during any proposed development. It is important to note that the possibility of encountering human remains during subsurface earth moving works anywhere on the landscape is ever present.

10.1 SUMMARY OF GRAVES RECORDED.

BURIAL SITE	NUMBER OF GRAVES RECORDED
WCB001	2
WCB002	20

WCB004	89
WCB006	9
WCB008B	1
WCB0010	11
TOTAL NUMBER OF GRAVES	132



Figure 1: Image showing access routes to the burial sites located during the survey (Google Image 2013).

10.1. BURIAL GROUND WCB 001

The location of BG WCB001 (Burial Ground 1) is within (please refer to Figure 2 below) the current mining activity area. The site will be affected by the proposed development of canal. Burial Ground 1 is located at the following coordinates: 26 ° 01' 10.5" S and 29 ° 26' 25.1"E. Two formal graves were recorded at this site. The graves are marked by tombstones and inscribed headstones. The graves are for Jacoba Johanna Harmse 1931 and Erasmus Albertus Harmse, 1939. Both graves are for adults and are facing west. These were most likely the owners of the farm and the derelict farmstead marked by remains of houses and tall gum trees. The burial ground is located in

association with remains of a historic stone enclosure. There is also a small rural settlement in the proximity of the site. The residence may have information that will help in the tracking of the potential custodians of the site. The burial ground is not maintained in any way and is covered by overgrown grass. This suggests that the custodians of the graves no longer access the site regularly and they may no longer be residing in the local area.



Plate 1: View of burial ground WCB001 within the proposed development site.



Plate 2: View of the two graves on Burial Site WCB 001. Plate 3:View of inscribed headstone bearing the details of the deceased

Table 1: Impact Assessment for WCB 001 site.

Impact	Impact	Heritage	Certainty	Duration	Mitigation
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	Significance	Significance			
Permanent destruction	Very High	General Protection for all graves and Burial Grounds	Definite	Permanent	Required

Table 2: Distance of burial grounds from the proposed mine footprint

Burial ground	Distance from the proposed canal
WCB001 BG132	Not clear
WCB001 BG134	Not Clear

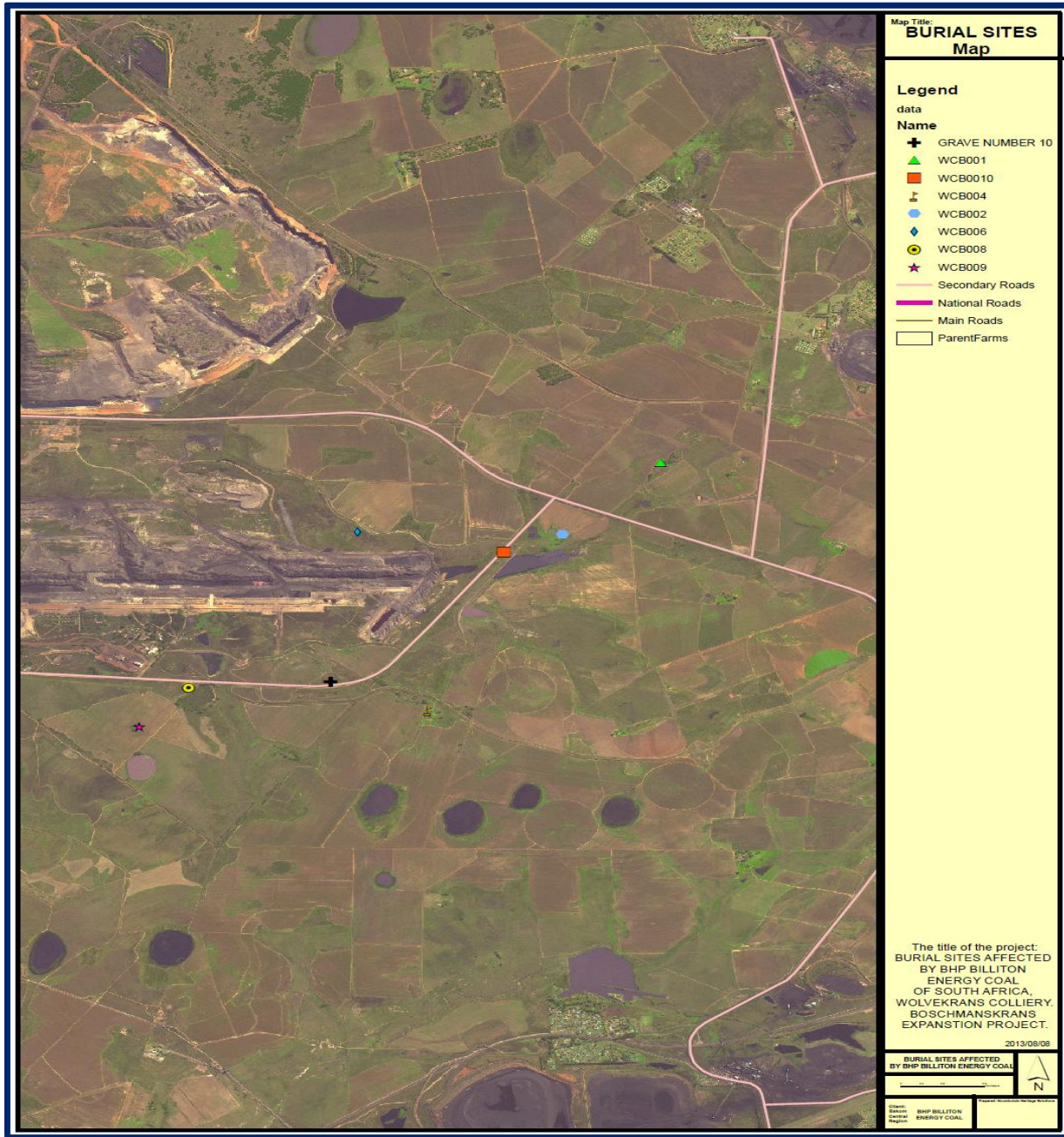


Figure 2: Map showing the identified graves in relation to the proposed mine site (Source: author 2013)

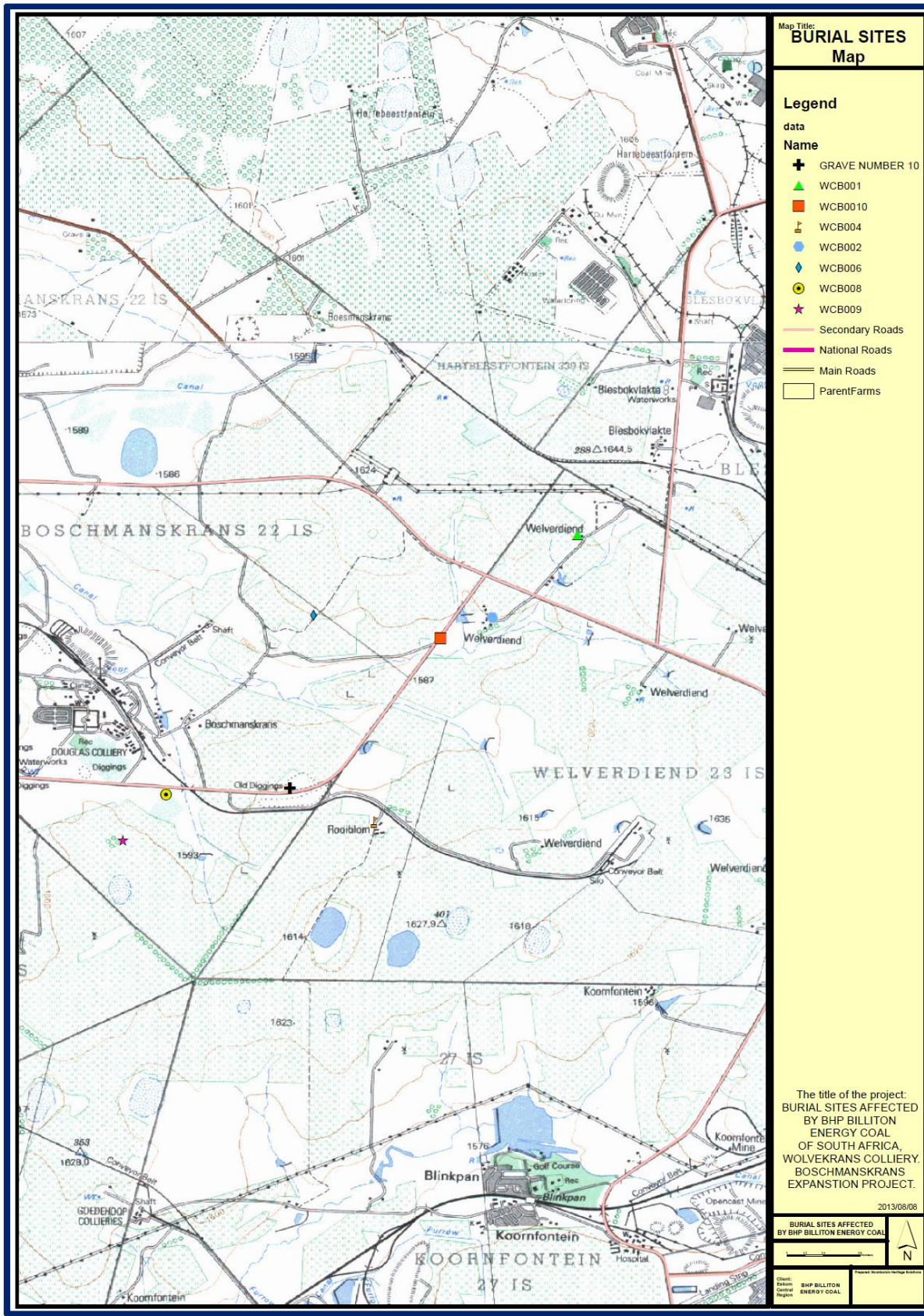


Figure 3: Map showing the identified graves in relation to the proposed mine site (Source: author 2013).

10.2. BURIAL GROUND (WCB 002)

Site WCB 002 is located within the mine footprint on the following geographic coordinates 26 ° 02.46.0' S, 29 ° 25.11.6' E. Twenty graves were recorded at this site. The graves were tagged from Grave number 11 to Grave number 30. All the twenty graves are marked by granite tombstones and inscribed headstone. The inscriptions on the tombstones are clearly visible, all the information on the tombstones is clear. Grave 11&12, 18&19, 20&21, 22& 23 are joined; probably they are for couples or siblings. All the graves are facing west. The graves are located in association with an abandoned farmstead WCB 003. The burial site is also located near Burial site WCB0010 which was previously not recorded. The graves are within a fence; although there is evidence of maintenance at burial site, at the time of survey the site was covered by thick grave cover. The burial site belongs to local farmers who may have relocated to some other areas as a result of coal mining developments in the area. The farm surrounding the site is still utilized. As such the current farmer may possibly provide vital information that will enable us to track the descendants.



Plate 3:View of Burial Ground WCB002 within the proposed development site.



Plate 4: A closer view of graves on WCB002.



Plate 6: Western view of burial site WCB002.

Plate 5: Table 3: Impact Assessment for WCB 002 Site.

Impact	Impact Significance	Heritage Significance	Certainty	Duration	Mitigation
Permanent destruction	Moderate	General Protection for all graves and Burial Grounds	Definite	Permanent	Required

10.3. BURIAL GROUND WCB004





Plate 6: Pictures 8 and 9: View of some few graves that reflect signs of maintenance.



Plate 7: Picture 10: View of 4 graves marked by inscribed tombstone. Picture 11: View of a grave with a clearly visible tombstone.



Plate 8: Picture 12: View of a tree that fell on some graves some years ago. Picture 13: View of a grave marked by raised soil piles. Note that many graves that are marked by raised soil piles were flattened by erosion and are not clearly visible (see plate below).



Plate 9: Plate 14 and 15: View of several graves that are no longer visible because of thick grass cover and erosion.

Site WCB 004 is located partially within the mine footprint on the following geographic coordinates 26 ° 02.46.0' S, 29 ° 25.11.6' E. Eighty eight (89) graves were recorded at this site. The graves were tagged from Grave number 31 to Grave number 119. The burial is the largest so far recorded within the mine footprint. The burial site probably belongs to farm dwellers most of whom may have been displaced by farming and mining developments in the area.

Table 3: Impact Assessment for WCB 004 site.

Impact	Impact Significance	Heritage Significance	Certainty	Duration	Mitigation
Probable	Moderate	General Protection for all graves and Burial Grounds	Probable	Permanent	Required should there be any physical interference during development

10.4. BURIAL GROUND (WCB 006).

The burial ground WCB006 is located within the active mining area. The burial site is located at GPS Coordinates 26 ° 01.38.7'S, 29 ° 24.51.8'E. A total of nine graves were recorded at this site. The graves were pegged and tagged from grave number 1 to grave number 9. All the graves on this burial ground are traditional in form. Three graves are marked by oval shaped stone cairns, one is marked by oval shaped baked bricks and five graves are marked by raised soil heaps with metal name tags on the head positions. The name tags have

succumbed to rust and information is not visible. Only grave number 9 has an inscribed cement tombstone written *Betty Mtimanyane/Mthimunye 20/07/1973*. The burial site is in a bad state of conservation, it is not maintained. Some soil heaps marking graves have been flattened by rain and only head marks are clearly identifiable. There is no sign of family custodians interacting with the burial site. However the information on grave 9 will assist in the tracking of potential custodians. The graves are all facing to the west.



Plate 10: Photos 16 (left) and 17 (right): One of the three graves from WC8006 which confirms to traditional form.



Plate 11: Photos 17 and 18: View a grave marked by oval shaped stone piles and a metal sheet name tag (L) and flattened grave only identified by an inscribed headstone.



Plate 12: Plate 18 and 19: View of inscribed head stone providing valuable information for the site(L) and a grave only marked by a peg and headstone.

Table 4: Impact Assessment for WCB006 site.

Impact	Impact Significance	Heritage Significance	Certainty	Duration	Mitigation
Permanent	High	General Protection for all graves and Burial Grounds	Definite	Permanent	Required should there be any physical interference during development

10.5. BURIAL GROUND WCB 008B (GRAVE NUMBER 10)

The burial ground is located within the mining area on the edge of a decommissioned road. A eucalyptus tree is growing over the grave. A solitary grave was recorded at this burial site. The grave is marked by cement plaster and is facing west. The burial site has been neglected for a long time as evidenced by a large tree growing over the grave. There is a possibility of encountering more graves, which were not identifiable due to thick vegetation cover and also previous road construction works adjacent to the grave. The grave is located at GPS Coordinates 26° 02.42.1'S, 29° 23.591E.



Plate 13: Photos 20 and 21: View of grave number 10 with a tree growing on the edge.

Table 5: Impact Assessment for Grave Number 10.

Impact	Impact Significance	Heritage Significance	Certainty	Duration	Mitigation
Permanent	Very High	General Protection for all graves and Burial Grounds	Definite	Permanent	Required before development

10.6. BURIAL GROUND (WCB 0010)

The Burial site WCB10 is located south west of WCB 0002 within the same farm. The burial site is located at GPS Coordinates S26 01 47.0 E029 25 36.8. A total of eleven graves were recorded on this burial ground. The burial ground is located on the edge of a road and boundary fence line. This burial site was previously not recorded by initial Heritage Impact assessment exercise. The graves were pegged and tagged from number 120 to number 130. Eight graves are marked by cement plaster and headstones, three are marked by oval shaped stone cairns and one is marked by baked brick edging. Ten graves are for adults and one grave is for an infant. The graves are arranged in two parallel linear patterns and are all facing west.



Plate 14: View of Burial site WCB 0010 which was not recorded during Phase I HIA study for the project.



Plate 15: Photos 23 (left) and 24 (right): View of an informant identifying some graves which were previously identified and graves marked by cement plaster and cement head markers.



Plate 16: Photos 25 and 26: View a neglected grave marked by cement plaster (L) and a disturbed grave marked by backed bricks and a cement head marker.



Plate 17: Plate 28 and 29: View of state of graves at burial site WCB0010.

Table 6: Table 7: Impact Assessment for WCB 0010 site.

Impact	Impact Significance	Heritage Significance	Certainty	Duration	Mitigation
-	Low	General Protection for all graves and Burial Grounds	Probable	Permanent	Mark and fence of. May be Required should there be any physical interference during development

11. GENERAL APPLICABLE HERITAGE MANAGEMENT GUIDELINES

This study has confirmed that there are burial grounds located on the direct path of the mine development. There are other sites within close proximity but

not on the direct path of the development. In addition to mitigation measures recommended herein, it is advisable that an information section on cultural resources be included in the SHEQ training given to contractors involved in surface earthmoving activities. These sections must include basic information on:

- Graves;
- Archaeological finds; and
- Historical Structures.

This module must be tailor made to include all possible finds that could be expected in that area of construction.

In the event that human remains are uncovered or previously unknown graves are discovered in the course of the proposed development a qualified archaeologist needs to be contacted and an evaluation of the finds made. If the remains are to be rescued, salvaged, exhumed and relocated, the relocation procedures as accepted by SAHRA need to be followed. This includes an extensive social consultation process.

12. SUMMARY RECOMMENDATIONS AND CONCLUDING REMARKS

This report is limited to survey and confirmation of location of burial grounds and gravesites in relation to the BHP Billiton Wolverkrans Colliery Boschmanskrans expansion project. No other physical cultural properties are discussed herein. The burials grounds and graves are classified as of high cultural significance. All sites should be mitigated prior to the mining expansion commencing. Two procedures are recommended for the identified burial grounds and gravesites. Burial and gravesites in the secondary impact zone may not require any interference. Such sites should be marked and fenced off for in situ protect during and after the mine development.

The burials that are directly affected by the mining expansion or by its associated activities should be relocated.

- i. All graves identified within the servitude are under threat in one way or the other from the proposed mining expansion. Such recorded graves

directly affected should be rescued or salvaged by exhumation and relocated as soon as the necessary permits are obtained.

- ii. An urgent Burial Ground and Graves heritage permit from SAHRA should be obtained to allow all affected graves that fall under the NHRA to be exhumed and relocated as stipulated by applicable laws and SAHRA regulations.
- iii. All graves that do not fall under the NHRA will be treated and relocated within the Human Tissue Act of 1983 and the local municipality graves and human burial ordinances.
- iv. Should any link be established between the burials and any community or families, consent should be secured from the custodians of the burials before the relocation exercise is conducted.
- v. The relocation exercise will be overseen by the accredited heritage professional and a professional Undertaker from MafuFuneral Directors will conduct the actual exhumation and re-interment.

Should additional previously unidentified graves be identified within the development path or buffer zones during construction works, the following measures must be taken.

- i. Mitigation of graves will require a fence around the cemetery with a buffer of at least 10 meters.
- ii. If graves are accidentally discovered during construction, activities must cease in the area and a qualified archaeologist be contacted to evaluate the find. To remove the remains a rescue permit must be applied for with SAHRA and the local South African Police Services must be notified of the find.

13. GRAVE RELOCATION PROCESS

Where the graves are to be relocated, a full grave relocation process that includes comprehensive social consultation must be followed.

The grave relocation process must include:

- i. A detailed social consultation process, that will trace the nextofkin and obtain their consent for the relocation of the graves, that will be at least 60 days in length;
- ii. On-Site notices indicating the intent of the relocation
- iii. Newspaper Notice indicating the intent of the relocation
- iv. A permit from the local authority;
- v. A permit from the Provincial Department of health;
- vi. A permit from the South African Heritage Resources Agency if the graves are older than 60 years or unidentified and thus presumed older than 60 years;
- vii. An exhumation process that keeps the dignity of the human remains and cultural rights intact;
- viii. An exhumation process that will safeguard the legal implications towards the developing company;
- ix. The actual exhumation and reburial process will be done by Mafu's Funeral Home, reputable company that are well versed in relocations;
- x. The process must be conducted in such a manner as to safeguard the legal rights of the families as well as that of the developing company.

Given the long history of human occupation in the affected project area, it is highly likely that more previously unidentified graves may be discovered on the subsurface during the on-going construction work. Should previously unknown or unidentified graves be discovered during the construction phase, they should be reported to heritage authorities to allow for their rescue before work proceeds on affected site. (See Appendixes 1 - 3 for additional applicable conditions, guidelines and procedures for handling human remains relocation programmes).

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15. APPENDIX 1: BURIAL RELOCATION PROJECT METHOD STATEMENT

1. DISCOVERY AND NOTIFICATION

If human burial remains are accidentally discovered during development at mining expansion site the following guidelines apply:

- a) The finder will immediately cease any further activity at the site and report the site to the BHP Billiton ECO. The ECO will notify the heritage expert (Archaeologist) and authorities.

2. SITE PROTECTION AND IDENTIFICATION

- a) The ECO and the Archaeologist and the permitting authority shall take reasonable measures to protect the site from environmental factors and any form of unauthorized interference or disturbance.
- b) Based on the evidence reported at the scene, the Archaeologist will investigate the site and make a preliminary determination as to the nature of the remains.
- c) Existing site inventories, land use records, and community, and authorities, should be consulted as soon as possible about possible identification of the remains. Some examination of the site/remains may be required to determine its cultural affiliation and age, and whether or not the site is modern or historic.
- d) The Archaeologist shall apply and acquire the relevant exhumation and rescue Permit from SAHRA Graves and Burial Unit.

3. INVESTIGATION AND REPORTING

- a) The ECO will direct the Archaeologist to carry out an investigation under any required permits, in consultation with the affected custodians (if available) and other affected parties, to make an initial report citing, if possible, the cultural affiliation of the human remains.

b) Within a reasonable time to be specified by the EO, and the affected parties, the Archaeologist shall deliver a written report and any notification not yet made, to:

- the ECO, and the affected custodians if appropriate;
- the SAHRA;
- the permitting authority of SAHRA Graves and Burials Unit
- any other representative of the interred, if known.

c) The written report shall attempt to identify:

- the representative group of the interred;
- the geographic boundaries of the site;
- the grave offerings or other heritage resources that may be associated with the remains or the site.

d) The Archaeologist may, with the agreement of the proper authority and the representative of the interred, if known, remove all or part of the human remains for temporary custody where the remains may otherwise be at risk prior to their re-burial at a safe site.

3.1 REPORTING

a) If the site is determined to be a contemporary burial site, the appropriate representative will be contacted in writing to provide further direction on the disposition of the remains.

b) BHP Billiton contractors carrying out authorized activity where a historic or archaeological burial site is discovered can continue that activity with the consent of the EO, where appropriate. The activity must stay 150 meters away from the grave while further arrangements are made by the Archaeologist to rescue and relocate the remains to a safe cemetery.

d) The Archaeologist may publish notice of the discovery in a newspaper or other public notice seeking information on the remains and alerting members of the public about the impending relocation of the remains to a predetermined formal cemetery or burial ground.

4. SITE DISPOSITION AGREEMENT (MANAGEMENT PLAN)

4.1 When the site or remains are identified

- a) The site shall not be disturbed and the EO, if on direct path of BHP Billiton development work, shall initiate discussions towards entering into a site disposition agreement with the representative of the interred where applicable.
- b) If the site is a historic or archaeological burial site, there must be joint approval of the site management plan on reburial as stated in the scope of services in terms of contract between BHP Billiton and Mafu.
- c) Decisions regarding reburial, relocation or other disposition should be determined on a case by case basis in consultation with those concerned and in a timely manner.

Site disposition agreements shall determine such things as:

1. the interim care of the human remains;
2. the scope and extent of analysis to be performed on the human remains, if any;
3. the exact location of the place where the human remains are to remain or to be interred;
4. the style and manner of disinterment, if applicable;
5. the style and manner of reinterment, if applicable;
6. the time period in which disinterment and reinterment is to take place;
7. the procedures relating to, and the final disposition of any grave offerings discovered with the human remains and any additional analysis of them;
8. the provision for future maintenance of the cemetery or site where the human remains are to be located;
9. access to the site and ways to prevent disturbance;
10. any other issue agreed upon.

4.2 When no representative is identified or no disposition is specified:

If disposition is not specified by a representative, or the remains are not claimed or no affiliation is established within a reasonable time, the Archaeologist shall with the necessary SAHRA permits and approvals provide for the following disposition:

- a) cover and leave the remains where they were found and have the site recorded as a burial site/heritage site, if on land suitable for a burial site; or
- b) have the remains disinterred and reinterred in the nearest appropriate cemetery; or
- c) remove the remains from the site for analysis and may have them reinterred in a recognized cemetery or;
- d) may act as the temporary repository of the remains until they are re-located for reburial at designated cemetery.

(Where the remains were found on Boscmanskran's mine expansion site but are not historic or archaeological remains, the Archaeologist may remove the remains in consultation with the mine EO and the affected parties.)

5. ARBITRATION

- a) If no disposition or reburial agreement or management plan is reached within a reasonable time the matter may be referred to arbitration for settlement.

6. RECORDS

- a) A record of the site and a report of the discovery and disposition plan shall be kept by the Archaeologist, for future reference to protect the site or identify the re-burial site.
- b) Access to information about discovered sites will be addressed in any site management plan developed under these guidelines, and will be protected under the Access to Information and Protection of Privacy legislations, and the NHRA.

7. BURIAL RELOCATION & REBURIAL

- Burial Relocation involves the identification of each grave and the manual excavation of the interred remains. Human remains, coffin features, and grave goods are exposed, their positions in the grave are carefully recorded, and maps and photographs of each grave are made following standard archaeological recovery techniques.
- Once excavation and examination are completed, the interred along with their grave goods are inventoried and carefully wrapped in acid-free tissue. Human remains are arranged anatomically and all materials are placed in specially designed containers, specified by the laws and regulations governed by the state where the re-interment location has been determined. The goal of re-interment is to restore as much of the original mortuary meaning as possible.
- Burial relocation is extremely culturally sensitive and BHP Billiton and contractors/service provider staff understands that the utmost respect must be shown to the interred, as well as the descendant communities. We advocate respectful involvement of descendent communities in the relocation process, whenever possible, and have an excellent reputation for communicating with descendant groups.
- Mafu and Nzumbululo Heritage Solutions has extensive experience conducting cemetery relocations for government agencies, other cultural resource firms, developers and private citizens in South Africa. We assure our clients as well as the descendent communities that the greatest amount of respect and care is taken when excavating and relocating these cemeteries.

8. RISKS

1. Legal Risks

BHP Billiton is exposed to a myriad of legal requirements on the local and national level when having to relocate burials. Burial relocation can infringe a number of human rights enshrined in the Constitution and legislations such the

NHRA. If not carried out properly, grave relocation can impact the right to burial and dignity. Community opposition may result in protests and delays on development.

Mitigation

When human remains are identified during the development, all measures must be taken to ensure the law and applicable regulations are enforced including mandatory public notifications.

2. Reputational risk

Relocation of human burials in particular also brings with it high risks for the BHP Billiton's reputation which is exacerbated by the instantaneous spread of news across the world via the internet. Lack of proper planning and management may lead to negative consequences, which in turn may affect the BHP Billiton's reputation.

Mitigation

Human remains identified in development contexts should be handled with utter most care to ensure the exhumation and relocation takes place in accordance with the law.

3. Operational risks

Legal action arising from the inadequate planning and implementation of burial relocation may result in BHP Billiton's permission to expand the mine being revoked via preliminary injunctions.

Operational risks may also arise from community protests directly. Cases of community opposition and protests, has previously disrupted work for days and weeks, involving, for example, the blockage of construction sites and vital roads and infrastructure. Construction may be delayed or disrupted.

Protests may be violent and impact on the health and safety of BHP Billiton staff perpetuating work delays in construction and operations. BHP Billiton

facilities, machinery, housing and other assets may be damaged and rendered unusable.

Mitigation

Boschmanskrans Expansion project site should have adequate security. All burial related matters should be held by the professional heritage team and reburial specialists. Human remains discovered during development should be reported to the ECO urgently and the Archaeologist notified in time to avoid any delays with the remains exposed on site. All exhumations and reburial exercises should be handled or scheduled in a manner that does not require the remains to be held elsewhere temporarily.

4. Financial risks

Legal, reputational and operational risks may also lead to other financial costs to the project. Moreover, costs may arise from legal action or disruptions in operations and work delays. Additional costs may be incurred when public protests require work to stop on site as a result of human remains discovery on site.

5. Human Remains Handling Risks

Exhumation, handling, transportation and reburial of human remains also pose a threat to public health if not handled to strict protocols. This risk is particularly highest in contemporary burials.

16. APPENDIX 2: GENERAL PRECAUTIONS

The following precautionary measures can help employers and employees remain safe and healthy whilst handling human remains. The transportation, handling and storage of human remains must also be carried out in a manner that preserves public safety and maintains the dignity of the deceased person.

PERSONAL PROTECTIVE EQUIPMENT

Hand Protection:

When handling potentially infectious materials, use appropriate barrier protection including latex and nitrile gloves (powder-free latex gloves with reduced latex protein content can help avoid reaction to latex allergies). These gloves can be worn under heavy-duty gloves which will, in turn, protect the wearer from cuts, puncture wounds, or other injuries that break the skin (caused by sharp environmental debris or bone fragments). A combination of a cut-proof inner layer glove and a latex or similar outer layer is preferable.

Foot Protection:

Footwear should similarly protect against sharp debris.

Hygiene:

- Wash your hands with soap and water or with an alcohol-based hand cleaner immediately after you remove your gloves.
- Give prompt care to any wounds sustained during work with human remains, including immediate cleansing with soap and clean water. Workers should also be vaccinated against hepatitis B, and get a tetanus booster if indicated.
- Ensure disinfection of vehicles and equipment.

SUMMARY

- In general, personnel involved in the recovery and handling of human remains from a burial site can limit risk from potential exposure by following the guidelines below.
- Vinyl or Latex gloves should be worn.
- Masks and protective eyewear or face shields should be worn during procedures that are likely to generate fluids to prevent exposure of mucous membranes of the mouth, nose, and eyes.
- Gowns or aprons should be worn during procedures that are likely to generate splashes of blood or other body fluids.
- Hands and other skin surfaces should be washed immediately and thoroughly if contaminated with blood or other body fluids. Hands should be washed immediately after gloves are removed.
- Ensure universal precautions for blood and body fluids.
- Ensure use of body bags.
- Ensure disinfection of vehicles and equipment.
- Bodies do not need to be disinfected before disposal (except in case of cholera).
- Vaccinate workers against hepatitis B.

17. APPENDIX 3: HUMAN REMAINS AND BURIALS IN DEVELOPMENT CONTEXT

Developers, land use planners and professional specialist service providers often encounter difficult situations with regards to burial grounds, cemeteries and graves that may be encountered in development contexts. This may be before or during a development project. There are different procedures that need to be followed when a development is considered on an area that will impact upon or destroy existing burial grounds, cemeteries or individual graves. In contexts where human remains are accidentally found during development work such as road construction or building construction, there are different sets of intervention regulations that should be instigated. This brief is an attempt to highlight the relevant regulations with emphasis on procedures to be followed when burial grounds, cemeteries and graves are found in development planning and development work contexts. The applicable regulations operate within the national heritage and local government legislations and ordinances passed in this regard. These guidelines assist you to follow the legal pathway.

1. First, establish the context of the burial:

A. Are the remains less than 60 years old? If so, they may be subject to provisions of the Human Tissue Act, Cemeteries Ordinance(s) and to local, regional, or municipal regulations, which vary from place to place. The finding of such remains must be reported to the police but are not automatically protected by the National Heritage Resources Act (Act 25 of 1999).

B. Is this the grave of a victim of conflict? If so, it is protected by the National Heritage Resources Act (Section 36(3a)). (Relevant extracts from the Act and Regulations are included below).

C. Is it a grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority? If so, it is protected by the National Heritage Resources Act (Section 36(3b)).

D. Are the human or hominid remains older than 100 years? If so, they are protected by the National Heritage Resources Act (Section 35(4), see also definition of "archaeological" in Section 2).

2. Second, refer to the terms of the National Heritage Resources Act most appropriate to the situation, or to other Acts and Ordinances:

A. Human remains that are NOT protected in terms of the National Heritage Resources Act (i.e. less than 60 years old and not a grave of a victim of conflict or of cultural significance) are subject to provisions of the Human Tissue Act and to local and regional regulations, for example Cemeteries Ordinances applicable in different Provincial and local Authorities.

B). All finds of human remains must be reported to the nearest police station to ascertain whether or not a crime has been committed.

C). If there is no evidence for a crime having been committed, and if the person cannot be identified so that their relatives can be contacted, the remains may be kept in an institution where certain conditions are fulfilled. These conditions are laid down in the Human Tissue Act (Act No. 65 of 1983). In contexts where the local traditional authorities given their consent to the unknown remains to be re-buried in their area, such re-interment may be

conducted under the same regulations as would apply for known human remains.

3. In the event that a graveyard is to be moved or developed for another purpose, it is incumbent on the local authority to publish a list of the names of all the persons buried in the graveyard if there are gravestones or simply a notification that graves in the relevant graveyard are to be disturbed. Such a list would have to be compiled from the names on the gravestones or from parish or other records. The published list would call on the relatives of the deceased to react within a certain period to claim the remains for re-interment. If the relatives do not react to the advertisement, the remains may be re-interred at the discretion of the local authority.

A. However, it is the responsibility of the developer to ensure that none of the affected graves within the cemetery are burials of victims of conflict. The applicant is also required in line with the heritage legislation to verify that the graves have no social significance to the local communities.

B. It is illegal in terms of the Human Tissue Act for individuals to keep human remains, even if they have a permit, and even if the material was found on their own land.

4. The Exhumations Ordinance (Ordinance No. 12 of 1980 and as amended) is also relevant. Its purpose is "To prohibit the desecration, destruction and damaging of graves in cemeteries and receptacles containing bodies; to regulate the exhumation, disturbance, removal and re-interment of bodies, and to provide for matters incidental thereto". This ordinance is supplemented and support by local authorities regulations, municipality by-laws and ordinances.

DEFINITIONS AND APPLICABLE REGULATIONS

1). A "Cemetery" is defined as any land, whether public or private, containing one or more graves.

2). A "grave" includes "(a) any place, whether wholly or partly above or below the level of ground and whether public or private, in which a body is permanently interred or intended to be permanently interred, whether in a coffin or other receptacle or not, and (b) any monument, tombstone, cross, inscription, rail, fence, chain, erection or other structure of whatsoever nature forming part of or appurtenant to a grave.

3). No person shall desecrate, destroy or damage any grave in a cemetery, or any coffin or urn without written approval of the Administrator.

4). No person shall exhume, disturb, remove or re-inter anybody in a cemetery, or any coffin or urn without written approval of the Administrator.

5). Application must be made for such approval in writing, together with:

a). A statement of where the body is to be re-interred.

b). Why it is to be exhumed.

c). The methods proposed for exhumation.

d). Written permission from local authorities, nearest available relatives and their religious body owning or managing the cemetery, and where all such permission cannot be obtained, the application must give reasons why not.

6). The Administrator has the power to vary any conditions and to impose additional conditions.

7). Anyone found guilty and convicted is liable for a maximum fine of R200 and maximum prison sentence of six months.

5. Human remains from the graves of victims of conflict, or any burial ground or part thereof which contains such graves and any other graves that are deemed to be of cultural significance may not be destroyed, damaged, altered, exhumed or removed from their original positions without a permit from the National Heritage Resources Agency. They are administered by the Graves of Conflict Division at the SAHRA offices in Johannesburg.

"Victims of Conflict" are:

- a). Those who died in this country as a result of any war or conflict but excluding those covered by the Commonwealth War Graves Act, 1992 (Act No. 8 of 1992).
- b). Members of the forces of Great Britain and the former British Empire who died in active service before 4 August 1914.
- c). Those who, during the Anglo Boer War (1899-1902) were removed from South Africa as prisoners and died outside South Africa, and,
- d). Those people, as defined in the regulations, who died in the "liberation struggle" both within and outside South Africa.

6. Any burial that is older than 60 years, which is outside a formal cemetery administered by a local authority, is protected in terms of Section 36(3b) of the National Heritage Resources Act. No person shall destroy damage, alter, exhume or remove from its original position, remove from its original site or export from the Republic any such grave without a permit from the SAHRA.

There are some important new considerations applicable to B & C (above).

SAHRA may, for various reasons, issue a permit to disturb a burial that is known to be a grave of conflict or older than 65 years, or to use, at a burial ground, equipment for excavation or the detection or the recovery of metals.

(Permit applications must be made on the official form Application for Permit: Burial Grounds and Graves available from SAHRA or provincial heritage resources authorities.) Before doing so, however, SAHRA must be satisfied that the applicant:

- a). Has made satisfactory arrangements for the exhumation and re- interment of the contents of such a grave at the cost of the applicant.
- b). Has made a concerted effort to contact and consult communities and individuals who by tradition have an interest in such a grave and,
- c). Has reached an agreement with these communities and individuals regarding the future of such a grave or burial ground.

PROCEDURE FOR CONSULTATION

The regulations in the schedule describe the procedure of consultation regarding the burial grounds and graves. These apply to anyone who intends to apply for a permit to destroy damage, alter, remove from its original position or otherwise disturb any grave or burial ground older than 60 years that is situated outside a formal cemetery administered by a local authority. The applicant must make a concerted effort to identify the descendants and family members of the persons buried in and/or any other person or community by tradition concerned with such grave or burial ground by:

- 1). Archival and documentary research regarding the origin of the grave or burial ground;
- 2). Direct consultation with local community organizations and/or members;
- 3). The erection for at least 60 days of a notice at the grave or burial ground, displaying in all the official languages of the province concerned, information about the proposals affecting the site, the telephone number and address at which the applicant can be contacted by any

interested person and the date by which contact must be made, which must be at least 7 days after the end of the period of erection of the notice; and

4). Advertising in the local press.

The applicant must keep records of the actions undertaken, including the names and contact details of all persons and organizations contacted and their response, and a copy of such records must be submitted to the provincial heritage resources authority with the application.

Unless otherwise agreed by the interested parties, the applicant is responsible for the cost of any remedial action required.

If the consultation fails to reach an agreement, the applicant must submit records of the consultation and the comments of all interested parties as part of the application to the provincial heritage resources authority.

In the case of a burial discovered by accident, the regulations state that when a grave is discovered accidentally in the course of development or other activity:

a). SAHRA or the provincial heritage resources authority (or delegated representative) must, in co-operation with the Police, inspect the grave and decide whether it is likely to be older than 60 years or otherwise protected in terms of the Act; and whether any further graves exist in the vicinity.

b). If the grave is likely to be so protected, no activity may be resumed in the immediate vicinity of the grave, without due investigation approved by SAHRA or the provincial heritage resources authority; and

c). SAHRA or the provincial heritage resources authority may at its discretion modify these provisions in order to expedite the satisfactory resolution of the matter.

d). Archaeological material, which includes human and hominid remains that are older than 100 years (see definition in section 2 of

the Act), is protected by the National Heritage Resources Act (Section 35(4)), which states that no person may, without a permit issued by the responsible heritage resources authority - destroy, damage, excavate, alter or remove from its original site any archaeological or palaeontological material.

The implications are that anyone who has removed human remains of this description from the original site must have a permit to do so. If they do not have a permit, and if they are convicted of an offence in terms of the National Heritage Resources Act as a result, they must be liable to a maximum fine of R100 000 or five years imprisonment, or both.

TREAT HUMAN REMAINS WITH RESPECT

a). Every attempt should be made to conserve graves in situ. Graves should not be moved unless this is the only means of ensuring their conservation.

b). The removal of any grave or graveyard or the exhumation of any remains should be preceded by an historical and archaeological report and a complete recording of original location, layout, appearance and inscriptions by means of measured drawings and photographs. The report and recording should be placed in a permanent archive.

c). Where the site is to be re-used, it is essential that all human and other remains be properly exhumed and the site left completely clear.

d). Exhumations should be done under the supervision of an archaeologist, who would assist with the identification, classification, recording and preservation of the remains.

e). No buried artifacts should be removed from any protected grave or graveyard without the prior approval of SAHRA. All artifacts should be re-buried with the remains with which they are associated. If this is not possible, proper arrangements

should be made for the storage of such relics with the approval of SAHRA.

f). The remains from each grave should be placed in individual caskets or other suitable containers, permanently marked for identification.

g). The site, layout and design of the area for re-interment should take into account the history and culture associated with, and the design of, the original grave or graveyard.

h). Re-burials in mass graves and the use of common vaults are not recommended.

i). Remains from each grave should be re-buried individually and marked with the original grave markers and surrounds.

j). Grouping of graves, e.g. in families, should be retained in the new layout.

k). Material from the original grave or graveyard such as chains, kerbstones, railing and should be re-used at the new site wherever possible.

l). A plaque recording the origin of the graves should be erected at the site of re-burial.

m). Individuals or groups related to the deceased who claim the return of human remains in museums and other institutions should be assisted to obtain documentary proof of their ancestry.

18. APPENDIX 4: HERITAGE MANAGEMENT PLAN INPUT INTO PROJECT EMP

Objective	<ul style="list-style-type: none"> Protection of archaeological sites and land considered to be of cultural value; Protection of known physical cultural property sites against vandalism, destruction and theft; and The preservation and appropriate management of new archaeological finds should these be discovered during construction. 							
	No.	Activity	Mitigation Measures	Duration	Frequency	Responsibility	Accountable	Contacted
Pre-Construction Phase								
1	Planning	Ensure all known sites of cultural, archaeological, and historical significance are demarcated on the site layout plan, and marked as no-go areas. No cultural, archaeological sites identified during the field survey phase.	Throughout Project	Weekly Inspection	Contractor [C] CECO	SM	ECO	EA EM PM
Construction Phase								
1	Emergency Response	<ul style="list-style-type: none"> Should any archaeological or physical cultural property heritage resources be exposed during excavation for the purpose of construction, construction in the vicinity of the finding must be stopped until heritage authority has cleared the development to continue. 	N/A	Throughout	C CECO	SM	ECO	EA EM PM
		<ul style="list-style-type: none"> Should any archaeological, cultural property heritage resources be exposed during excavation or be found on site, a registered heritage specialist or SAHRA official must be called to site for inspection. 		Throughout	C CECO	SM	ECO	EA EM PM
		<ul style="list-style-type: none"> Under no circumstances may any 		Throughout	C	SM	ECO	EA

		archaeological, historical or any physical cultural property heritage material be destroyed or removed from site;			CECO			EM PM
		<ul style="list-style-type: none"> Should remains and/or artefacts be discovered on the site during earthworks, all work will cease in the area affected and the Contractor will immediately inform the Construction Manager who in turn will inform SAHRA. 		When necessary	C CECO	SM	ECO	EA EM PM
		Should any remains be found on site that is potentially human remains, the SAHRA and South African Police Service should be contacted.		When necessary	C CECO	SM	ECO	EA EM PM
Rehabilitation Phase								
		Same as construction phase.						
Operational Phase								