Wandima Environmental Services

Archaeological Impact Assessment

Zondagsfontein substation, Telecommunication tower and 2X7.5km 132kV power line, Ogies, Mpumalanga Province

Version 1.0

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EXECUTIVE SUMMARY

As we know from legislation the surveying, capturing and management of heritage resources is an integral part of the greater management plan laid down for any major development or historic existing operation. With the proclamation of the National Heritage Resources Act 1999 (Act 25 of 1999) this process has been lain down clearly. This legislation aims to under pin the existing legislation, which only addresses this issue at a glance, and gives guidance to developers and existing industries to the management of their Heritage Resources.

The importance of working with and following the guidelines lain down by the South African Heritage Resources Agency cannot be overemphasised.

This document forms part of the Environmental Impact Assessment for the proposed Zondagsfontein substation, Telecommunication tower and 2X7.5km 132kV power line, Ogies, Mpumalanga Province.

The following outline the findings of the report:

Three heritage sites were identified during the physical surveying of the route alignment.

The following site specific recommendations area made:

Site Number	Rating	Recommendation
Site 1	Grade GP.C	If the site is to be impacted by the power line, it is recommended that the farmstead be documented and described by a conservation architect.
Site 2	Grade GP.A	It is recommended that the site be fenced and avoided during construction
Site 3	Grade GP.A	It is recommended that the site be fenced and avoided during construction

General

- **When the final layout plan is established for the mine it must be assessed whether any other sites will be impacted upon by roads, services,**

transmissions lines etc. The appropriate mitigation measures must be employed for these sites

- **A Monitoring plan or watching brief must be agreed upon by all the stakeholders for the different phases of the project**
- **If during construction any possible finds are made, the operations must be stopped and a qualified archaeologist be contacted for an assessment of the find.**
- **A heritage resources management plan must be developed for managing the heritage resources in the study area during construction and operation of the development. This includes basic training for construction staff on possible finds, action steps for mitigation measures, surface collections, excavations and communication routes to follow in the case of a discovery.**

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LIST OF ACRONYMS

SAHRA - South African Heritage Resources Agency
NHRA - National Heritage Resources Act (Act 25 of 1999)
EIA - Environmental Impact Assessment
AIA- Archaeological Impact Assessment

1. INTRODUCTION

MATAKOMA-ARM, Heritage Contracts Unit was contracted by Wandima Environmental Services to conduct an Archaeological Impact Assessment (AIA) for the proposed Zondagsfontein substation, Telecommunication tower and 2X7.5km 132kV power line, Ogies, Mpumalanga Province.

The aim of the study is to identify all heritage sites, document, and assess their importance within Local, Provincial and national context. From this we aim to assist the developer in managing the discovered heritage resources in a responsible manner, in order to protect, preserve, and develop them within the framework provided by the National Heritage Resources Act of 1999 (Act 25 of 1999) (NHRA).

The report outlines the approach and methodology utilised before and during the survey, which includes in Phase 1: Information collection from various sources and public consultations; Phase 2: Physical surveying of the area on foot and by vehicle; and Phase 3: Reporting the outcome of the study.

During the survey, 3 cultural heritage site of significance were identified. General site conditions and features on site were recorded by means of photos, GPS location, and description. Possible impacts were identified and mitigation measures are proposed in the following report.

This report must also be submitted to SAHRA provincial office for scrutiny.

1.1 PROJECT DESCRIPTION

Eskom is planning the construction of the proposed 25km new 132kV Bersfort line from Leseding MTS to Dilokong substation.

The proposed project consists of the following:

- Zondagfontein 7.5km 132kV Line 1

- Zondagfontein 7.5km 132kV Line 2
- Zondagfontein New 2x20MVA S-S and Telecommunication tower.

Refer to Figure 1 for locality map and proposed route alignments.

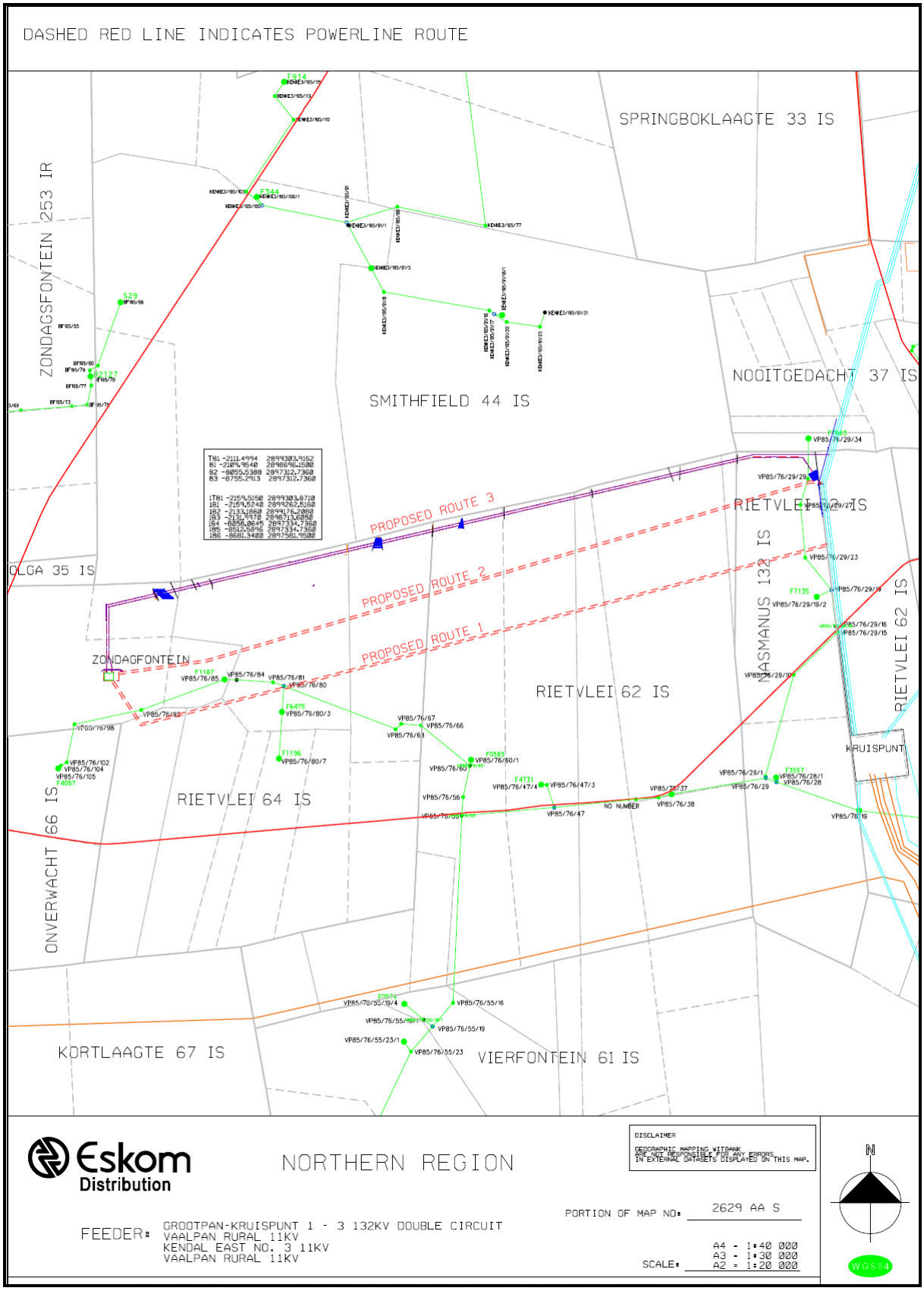


Figure 1: Proposed 132kV power line alternatives

2. APPROACH AND METHODOLOGY

The aim of the study is to extensively cover all data available to compile a background history of the study area; this was accomplished by means of the following phases.

2.1 PHYSICAL SURVEYING

Due to the nature of cultural remains, the majority that occur below surface, a physical walk through of the study area was conducted. MATAKOMA-ARM was appointed to conduct a survey of the proposed development area together with access routes and entrances to the proposed residential development. The total area of impact comprised an area of approximately 3 x 7.5km x 50 m corridors in total. The three alternative route alignments were surveyed over two days, by means of vehicle and extensive surveys on foot by MATAKOMA-ARM.

Aerial photographs and 1:50 000 maps of the area were consulted and literature of the area were studied before undertaking the survey. The purpose of this was to identify topographical areas of possible historic and pre-historic activity. All sites discovered both inside and bordering the proposed development area was plotted on 1:50 000 maps and their GPS co-ordinates noted. 35mm photographs on digital film were taken at all the sites.

3. WORKING WITH LEGISLATION

It is very important that cultural resources be evaluated according to the National Heritage Recourse Act. In accordance with the Act, we have found the following:

- These sites are classified as important based on evaluation of the National Heritage Recourses Act 1999 (Act No 25 of 1999) section 3 (3).

A place or object is to be considered part of the national estate if it has cultural significance or other special value because of-

(a) its importance in the community, or pattern of South Africa's history;

(b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
(c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
(d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
(e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
(f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
(g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
(h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and
(i) sites of significance relating to the history of slavery in South Africa.

(Refer to Section 9 of this document for assessment)

These sites should be managed through using the NHRA Sections 4, 5 and 6 and Sections 39-47.

The AIA forms part of the EIA competed under the National Environmental Management Act (NEMA)

Please refer to Section 9 for Management Guidelines.

4. ASSESSMENT CRITERIA

This chapter describes the evaluation criteria used for the sites listed below.
The significance of archaeological sites was based on four main criteria:

- **site integrity** (i.e. primary vs. secondary context),

- **amount of deposit, range of features** (e.g., stonewalling, stone tools and enclosures),
- **uniqueness** and
- **potential** to answer present research questions.

Management actions and recommended mitigation, which will result in a reduction in the impact on the sites, will be expressed as follows:

A - No further action necessary;

B - Mapping of the site and controlled sampling required;

C - Preserve site, or extensive data collection and mapping of the site; and

D - Preserve site

Impacts on these sites by the development will be evaluated as follows

4.1 IMPACT

The potential environmental impacts that may result from the proposed development activities.

4.1.1 Nature and existing mitigation

Natural conditions and conditions inherent in the project design that alleviate (control, moderate, curb) impacts. All management actions, which are presently implemented, are considered part of the project design and therefore mitigate against impacts.

4.2 EVALUATION

4.2.1 Site Significance

Site significance classification standards prescribed by the South African Heritage Resources Agency (2006) and approved by the Association for Southern African Professional Archaeologists (ASAPA) for the Southern African Development Community (SADC) region, were used for the purpose of this report.

FIELD RATING	GRADE	SIGNIFICANCE	RECOMMENDED MITIGATION
National Significance (NS)	Grade 1	-	Conservation; National Site nomination
Provincial Significance (PS)	Grade 2	-	Conservation; Provincial Site nomination
Local Significance (LS)	Grade 3A	High Significance	Conservation; Mitigation not advised
Local Significance (LS)	Grade 3B	High Significance	Mitigation (Part of site should be retained)
Generally Protected A (GP.A)	-	High / Medium Significance	Mitigation before destruction
Generally Protected B (GP.B)	-	Medium Significance	Recording before destruction
Generally Protected C (GP.C)	-	Low Significance	Destruction

4.2.2 Impact Rating

VERY HIGH

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

Example: The loss of a species would be viewed by informed society as being of VERY HIGH significance.

Example: The establishment of a large amount of infrastructure in a rural area, which previously had very few services, would be regarded by the affected parties as resulting in benefits with VERY HIGH significance.

HIGH

These impacts will usually result in long term effects on the social and/or natural environment. Impacts rated as HIGH will need to be considered by society as constituting an important and usually long term change to the (natural and/or social) environment. Society would probably view these impacts in a serious light.

Example: The loss of a diverse vegetation type, which is fairly common elsewhere, would have a significance rating of HIGH over the long term, as the area could be rehabilitated.
Example: The change to soil conditions will impact the natural system, and the impact on affected parties (in this case people growing crops on the soil) would be HIGH.

MODERATE
These impacts will usually result in medium- to long-term effects on the social and/or natural environment. Impacts rated as MODERATE will need to be considered by society as constituting a fairly important and usually medium term change to the (natural and/or social) environment. These impacts are real but not substantial.
Example: The loss of a sparse, open vegetation type of low diversity may be regarded as MODERATELY significant.
Example: The provision of a clinic in a rural area would result in a benefit of MODERATE significance.

LOW
These impacts will usually result in medium to short term effects on the social and/or natural environment. Impacts rated as LOW will need to be considered by the public and/or the specialist as constituting a fairly unimportant and usually short term change to the (natural and/or social) environment. These impacts are not substantial and are likely to have little real effect.
Example: The temporary change in the water table of a wetland habitat, as these systems are adapted to fluctuating water levels.
Example: The increased earning potential of people employed as a result of a development would only result in benefits of LOW significance to people who live some distance away.

NO SIGNIFICANCE
There are no primary or secondary effects at all that are important to scientists or the public.

Example: A change to the geology of a particular formation may be regarded as severe from a geological perspective, but is of NO significance in the overall context.

4.2.3 Certainty

DEFINITE: More than 90% sure of a particular fact. Substantial supportive data exist to verify the assessment.
PROBABLE: Over 70% sure of a particular fact, or of the likelihood of impact occurring.
POSSIBLE: Only over 40% sure of a particular fact or of the likelihood of an impact occurring.
UNSURE: Less than 40% sure of a particular fact or likelihood of an impact occurring.

4.2.4 Duration

SHORT TERM: 0 to 5 years
MEDIUM: 6 to 20 years
LONG TERM: more than 20 years
DEMOLISHED: site will be demolished or is already demolished

Example
Evaluation

Impact	**Impact Significance**	**Heritage Significance**	**Certainty**	**Duration**	**Mitigation**
Negative	Moderate	Grade GP.B	Possible	Short term	B

5. HISTORICAL BACKGROUND OF AREA

As heritage surveys deal with the locating of heritage resources in a prescribed cartographic landscape, the study of archival and historical data, and especially cartographic material, can represent a very valuable supporting tool in finding and identifying such heritage resources.

The historical background and timeframe can be divided into the Stone Age, Iron Age and Historical timeframe. These can be divided as follows:

Stone Age

The Stone Age is divided in Early; Middle and Late Stone Age and refers to the earliest people of South Africa who mainly relied on stone for their tools.

Earlier Stone Age: The period from ± 2.5 million yrs - ± 250 000 yrs ago. Acheulean stone tools are dominant.

Middle Stone Age: Various lithic industries in SA dating from ± 250 000 yrs – 22 000 yrs before present.

Later Stone Age: The period from ± 22 000-yrs before present to the period of contact with either Iron Age farmers or European colonists.

Iron Age

The Iron Age as a whole represents the spread of Bantu speaking people and includes both the Pre-Historic and Historic periods. Similar to the Stone Age it to can be divided into three periods:

The Early Iron Age: Most of the first millennium AD.

The Middle Iron Age: 10th to 13th centuries AD

The Late Iron Age: 14th century to colonial period.

Historic Timeframe

The historic timeframe intermingles with the later parts of the Stone and Iron Age, and can loosely be regarded as times when written and oral recounts of incidents became available.

6. SITES OF SIGNIFICANCE

The site of the proposed power line traverses mainly cultivated maize fields some 15 kilometres south of the town of Ogies in the Mpumalanga Highveld.

6.1.1 SITE 1

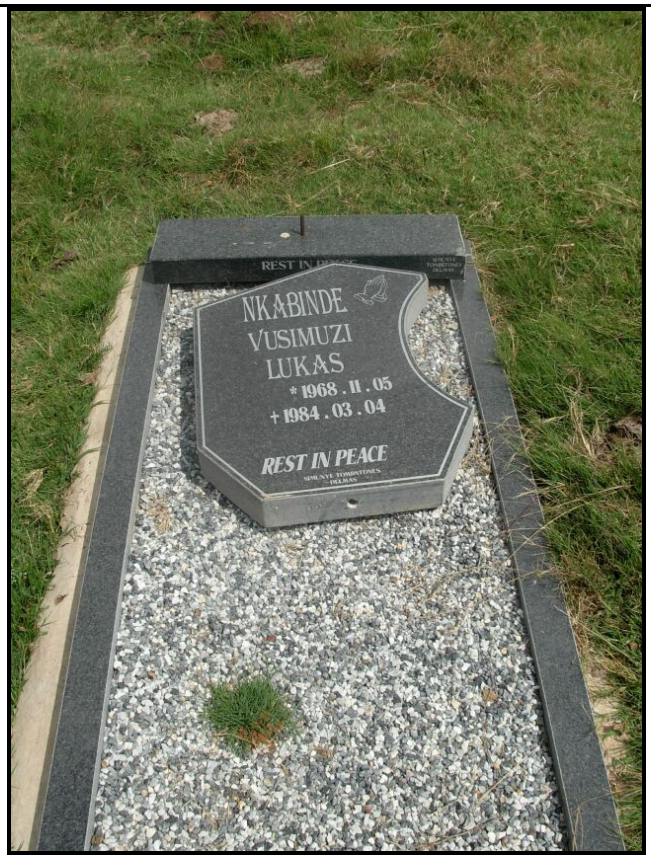
Description of Site: ***Site Number***	Site 1		
Map reference	***Topo-sheet number***	***Number of Map in report***	
	2629AA	***Annexure A***	
GPS coordinates: *Indicate Model and datum - WGS 84*	X	Y	
Garmin 38, WGS 84	-26.2027682	+29.0292263	
Site Data	***Description***		
Type of site *(e.g. open scatter; shell midden, cave /shelter);*	The site consists of an extensive farmstead. The farmstead contains a main dwelling area with numerous buildings including main house and outbuildings. The rest of the area is made up of sheds, storage buildings and workshops. The core of the main house is older than 60 years, with the sandstone foundation, wooden floors and door lintels indicating the age of the building. The main building has however extensively been changed with numerous additions added on through the years.		
Site categories *(e.g. Earlier Stone Age, Late Iron Age);*	Recent Historic		
Context *(i.e. primary or secondary);*	Primary		

Cultural affinities, approximate age and significant features of the site;	None
Estimation or measurement of the extent *(maximum dimensions) and orientation of the site(s);*	100x100m
Depth and stratification of the site *(where shovel test permits have been given), both in the text and through photographs of the sections;*	None visible
Possible sources of information about past environments, such as stalactites/ stalagmites, flowstone, dassie middens, peat or organic rich deposits.	None
Photographs and diagrams *(Figure numbers)*	 *Figure 2: Main dwelling with additions visible*
Statement of Significance *(Heritage Value)*	The site is of low-medium significance.
Field Rating *(Recommended grading or field significance)* of the	Generally protected C (GP.C)

site:					
Impact Evaluation *of development on site*	Impact on site is seen as possible low negative, as the alignment passes to the north of the farmstead				
Recommendations *including:*	If the site is to be impacted by the power line, it is recommended that the farmstead be documented and described by a conservation architect.				
Summary					
Field Rating	**Impact**	**Impact Significance**	**Certainty**	**Duration**	**Mitigation**
Grade GP.C	Negative	Low	Possible	Long term	A

6.1.2 SITE 2

Description of Site: ***Site Number***	Site 2		
Map reference	***Topo-sheet number***	***Number of Map in report***	
	2629AA	***Annexure A***	
GPS coordinates: *Indicate Model and datum - WGS 84*	X	Y	
Garmin 38, WGS 84	-26.2039805	+29.0352237	
Site Data	***Description***		
Type of site *(e.g. open scatter; shell midden, cave /shelter);*	The site is a cemetery consisting of 13 graves all aligned east west. One grave has a granite dressing. All other are stone packed dressings.		
Site categories *(e.g. Earlier Stone Age, Late Iron Age);*	Recent Historic		
Context *(i.e. primary or secondary);*	Primary		
Cultural affinities, approximate age and significant features of the site;	None		
Estimation or measurement of the extent *(maximum dimensions) and orientation of the site(s);*	30x30m		
Depth and stratification of the site *(where shovel test permits have been given), both in the text and through photographs of the sections;*	None visible		
Possible sources of information about past environments, such as stalactites/ stalagmites, flowstone, dassie middens, peat or organic rich deposits.	None		

Photographs and diagrams *(Figure numbers)*	 *Figure 3: Formal dressing on grave*
Statement of Significance *(Heritage Value)*	The site is of high significance.
Field Rating *(Recommended grading or field significance)* of the site:	Generally protected A (GP.C)
Impact Evaluation *of development on site*	Impact on site is seen as medium negative, through possible destruction of site
Recommendations *including:*	It is recommended that the site be fenced and avoided during construction

Summary					
Field Rating	**Impact**	**Impact Significance**	**Certainty**	**Duration**	**Mitigation**
Grade GP.A	Negative	Medium	Possible	Long term	D

6.1.3 SITE 3

Description of Site: ***Site Number***	Site 3		
Map reference	***Topo-sheet number***	***Number of Map in report***	
	2629AA	***Annexure A***	
GPS coordinates: *Indicate Model and datum - WGS 84*	X	Y	
Garmin 38, WGS 84	-26.2021620	+29.0268606	
Site Data	***Description***		
Type of site *(e.g. open scatter; shell midden, cave /shelter);*	Large informal cemetery 250m to the west of Site 1. Consist of approximately 50 graves. Graves are aligned East to West. Some graves have headstones others consist of stone packed grave dressing. The cemetery is heavily over grown and an accurate count of the graves were impossible		
Site categories *(e.g. Earlier Stone Age, Late Iron Age);*	Historic Recent		
Context *(i.e. primary or secondary);*	Primary		
Cultural affinities, approximate age and significant features of the site;	None		
Estimation or measurement of the extent *(maximum dimensions) and orientation of the site(s);*	100x100m		
Depth and stratification of the site *(where shovel test permits have been given), both in the text and through photographs of the sections;*	None visible		
Possible sources of information about past environments, such as stalactites/ stalagmites, flowstone, dassie middens, peat or organic rich deposits.	None		

Photographs and diagrams *(Figure numbers)*	 *Figure 4: Grave dressings in cemetery*
Statement of Significance *(Heritage Value)*	The site is of high significance.
Field Rating *(Recommended grading or field significance)* of the site:	Generally protected A (GP.A)
Impact Evaluation *of development on site*	Impact on site is seen as medium negative, through possible impact on site
Recommendations *including:*	It is recommended that the site be fenced and avoided during construction

Summary					
Field Rating	**Impact**	**Impact Significance**	**Certainty**	**Duration**	**Mitigation**
Grade GP.A	Negative	High	Possible	Long term	D

7. ASSUMPTIONS AND LIMITATIONS

Due to the nature of cultural remains that occur, in most cases, below surface, the possibility remains that some cultural remains may not have been discovered during the survey. Although MATAKOMA-ARM surveyed the area as thorough as possible, it is incumbent upon the developer to inform the relevant heritage agency should further cultural remains be unearthed or laid open during the process of development.

8. LEGAL AND POLICY REQUIREMENTS

In areas where there has not yet been a systematic survey to identify conservation worthy places, a permit is required to alter or demolish any structure older than 60 years. This will apply until a survey has been done and identified heritage resources are formally protected.

Archaeological and palaeontological sites, materials, and meteorites are the source of our understanding of the evolution of the earth, life on earth and the history of people. In the new legislation, permits are required to damage, destroy, alter, or disturb them. People who already possess material are required to register it.

The management of heritage resources are integrated with environmental resources and this means that before development takes place heritage resources are assessed and, if necessary, rescued.

In addition to the formal protection of culturally significant graves, all graves, which are older than 60 years and are not in a cemetery (such as ancestral graves in rural areas), are protected. The legislation protects the interests of communities that have interest in the graves: they may be consulted before any disturbance takes place.

The graves of victims of conflict and those associated with the liberation struggle will be identified, cared for, protected and memorials erected in their honour.

Anyone who intends to undertake a development must notify the heritage resource authority and if there is reason to believe that heritage resources will be affected, an impact assessment report must be compiled at the developer’s cost.

Thus developers will be able to proceed without uncertainty about whether work will have to be stopped if a heritage resource is discovered.

According to the National Heritage Act (Act 25 of 1999 section 32) it is stated that:

An object or collection of objects, or a type of object or a list of objects, whether specific or generic, that is part of the national estate and the export of which SAHRA deems it necessary to control, may be declared a heritage object, including –

- objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects, meteorites and rare geological specimens;
- visual art objects;
- military objects;
- numismatic objects;
- objects of cultural and historical significance;
- objects to which oral traditions are attached and which are associated with living heritage;
- objects of scientific or technological interest;
- books, records, documents, photographic positives and negatives, graphic material, film or video or sound recordings, excluding those that are public records as defined in section 1 (xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996), or in a provincial law pertaining to records or archives; and
- any other prescribed category.

Under the National Heritage Resources Act (Act No. 25 of 1999), provisions are made that deal with, and offer protection, to all historic and pre-historic cultural remains, including graves and human remains.

- 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 administrated by a local authority. Graves in the category located inside a formal cemetery administrated 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.

9. ASSESSMENT AND RECOMMENDATIONS

A locality map is provided in ***Annexure A***

Three heritage sites were identified during the physical surveying of the route alignment.

The following site specific recommendations area made:

Site Number	Rating	Recommendation
Site 1	Grade GP.C	If the site is to be impacted by the power line, it is recommended that the farmstead be documented and described by a conservation architect.
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General

- **When the final layout plan is established for the mine it must be assessed whether any other sites will be impacted upon by roads, services, transmissions lines etc. The appropriate mitigation measures must be employed for these sites**
- **A Monitoring plan or watching brief must be agreed upon by all the stakeholders for the different phases of the project**
- **If during construction any possible finds are made, the operations must be stopped and a qualified archaeologist be contacted for an assessment of the find.**
- **A heritage resources management plan must be developed for managing the heritage resources in the study area during construction and operation of the development. This includes basic training for construction staff on possible finds, action steps for mitigation measures, surface collections, excavations and communication routes to follow in the case of a discovery.**

10. LIST OF PREPARES

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Jaco vd Walt, BA (Hon) Archaeology (Wits)

11. REFERENCES

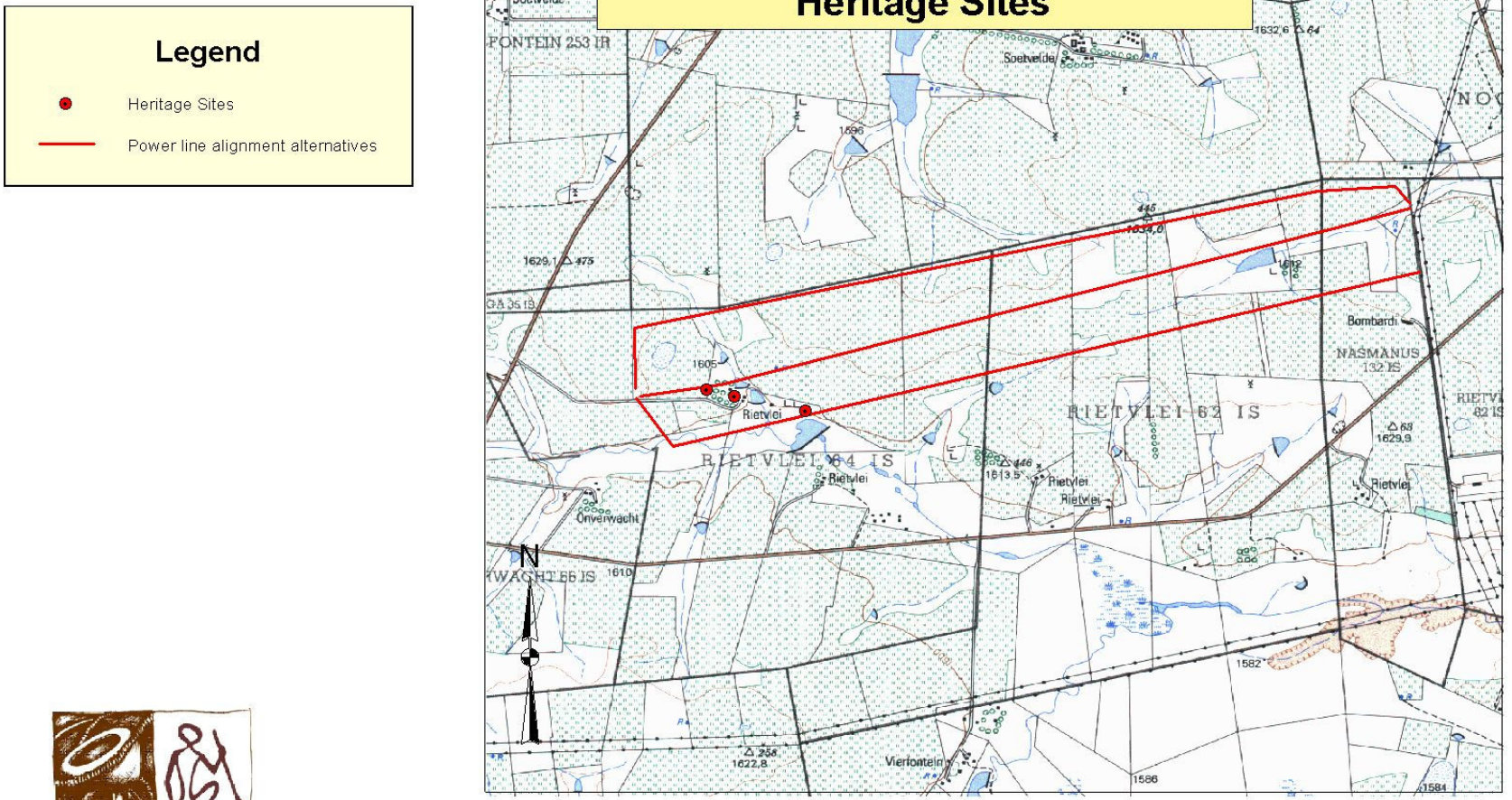
11.1 ARCHAEOLOGICAL PAPERS

Delius, Peter and Cope, Richard. 2007. Hard-faught frontiers: 1845-1883. In Mpumalanga: History and Heritage. Ed. Peter Delius. University of KwaZulu Natal University Press

11.2 CULTURAL HERITAGE PAPERS

Australia ICOMOS. The Burra Charter (The Australian ICOMOS charter for places of cultural significance). 2002.
Standard and Guidance for Archaeological Desk-Based Assessment. 1994.
International Council of Monuments & Site Documents. Conventions, Charters and Guidelines. 2002.
Documents on Cultural Heritage Protection. 2002.
International Council of Monuments & Site Documents. Guidelines to the Burra Charter: Conservation Policy. 1985.
International Council of Monuments & Site Documents. Guidelines to the Burra Charter: Cultural Significance. 1984.
Australian Historic Themes. A Framework for use in Heritage Assessment and Management. Australian Heritage Commission. 2001.

ANNEXURE A: Locality Map


Zondagfontein Powerline Project
Heritage Sites
Legend
Heritage Sites
Power line alignment alternatives
Soetvelde
Rooikoppies
Nooitgedacht
Bombardi
NASMANUS 132 IS
RIETVLEI 62 IS
RIETVLEI 64 IS
Rietvlei
Onverwacht
Vierfontein
1605
1629,9
1622,8
1586
1584
1582
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2000 0 2000 4000 Meters
MATAKOMA - ARM