case ID: 1796

URGENT NEGOTIATORS ENTERPRISES T/A
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23 January 2009

Head of the Department : Environmental Impact Management
The South African Heritage Resource Agency
25 Jorrisen Street
POLOKWANE
0700

For attention : **Mr D Lithole**
(Tel: 015 291 1804)

ESKOM SPENCER NDP PROJECT: Construction of three 2x20 MVA 132kV/22kV substations, 3 communication towers of 36 meters high and approximately 70km of 132kV kingbird power line: Submission of Scoping Report. Ref nr: 12/12/20/1296

Background
Eskom Distribution Northern Region proposes to construct two projects in the area southeast of Louis Trichardt, west of Giyani and north of Soekmekaar in the Local Municipalities of Molemole, Makhado, Greater Giyani and Greater Letaba in the Limpopo Province.
The first project is a 132kV power line from the Soekmekaar Substation to the new Mashau Substation, with its T-off from the existing Louis Trichardt – Venulu 132kV power line. The second project is a 132kV loop-in-loop-out power line from the new Mamaila Substation to the T-off from the existing Spencer – Venulu 132kV power line.

Project Locality
The identified properties to be affected by the route from the Soekmekaar Substation to the new Mashau Substation are: Boschkopje 519LS, Vlakfontein 520LS, Goedehoop 489LS, Nooitgedacht 488LS, Welgevonden 485LS, Wakkerstroom 484LS, Rietvlei 130 LT, Selati 122LT, Goedverwacht 121LT, Goedehoop 120LT, Geraldine 119LT, Weltevreden 118LT, Nooitgedacht 90LT, Riversdale 75LT, Thorndale 73LT, Bellevue 74LT, Malmesbury 72LT, Kruisfontein 48LT.
The identified properties to be affected by the route from the new Mamaila Substation to the T-off from the existing Spencer – Venulu 132kV power line are: Staatsgrond and Bellevue 150LT.

Request for input
You are hereby supplied with **one copy of the Scoping Report** for your perusal. All comment received by **2 March 2009** will be included and addressed in the EIA process and the EIA Report to be submitted to DEAT.

Invitation to information meeting
We invite you to an **information meeting** regarding the above project. The meeting will be on **18 February 2009 at 10h00 at the Soekmekaar Farmers Hall.** During the meeting you will have the opportunity to be involved in, and give your comments regarding the above-mentioned project. **YOU ARE KINDLY REQUESTED TO CONTACT THIS OFFICE IF YOU ARE ABLE TO ATTEND.**

Kind regards
Ria Pretorius
pp Gerber

ENVIRONMENTAL IMPACT ASSESSMENT

SCOPING REPORT

Eskom Spencer NDP Project

Ref nr 12/12/20/1296

URGENT NEGOTIATORS ENTERPRISES T/A
URGENEG
CC 1988/016906/23

Prepared for:

ESKOM NORTHERN REGION
AND
URGENEG

A PHASE I HERITAGE IMPACT ASSESSMENT (HIA) STUDY FOR ESKOM'S PROPOSED 132KV POWER LINE RUNNING FROM THE SOEKMEKAAR SUBSTATION TO THE PROPOSED NEW MASHUA SUBSTATION IN THE LIMPOPO PROVINCE OF SOUTH AFRICA

Prepared by:

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October 2008

EXCECUTIVE SUMMARY

This study contains the report on the Phase I Heritage Impact Assessment study which was done according to Section 38 of the National Heritage Resources Act (No 25 of 1999) for Eskom's proposed new 132kV power line running from the Soekmekaar Substation via the Singo Substation to the proposed new Mashua Substation in the Limpopo Province of South Africa. The construction of the new power line and substations is hereafter referred to as the Eskom Project while the alternatives for the proposed substations are referred to as the Eskom Project Area.

The Eskom Project may impact on any of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No. 25 of 1999). Consequently, Urgeneg and Eskom commissioned the author to undertake a Phase I HIA study for the proposed Eskom Project Area with the following aims

- To establish whether any of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) (see Box 1) do occur within the perimeters of the Eskom Project Area and, if so, to determine the level of significance of these heritage resources.
- To make recommendations regarding the mitigation or the conservation of any significant heritage resources that may be affected by the proposed Eskom Project.

The Phase I HIA study for the proposed Eskom Project Area revealed the following types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) near the Eskom Project Area, namely:

- Two graveyards (GY01, GY02).
- A Late Iron Age site (LIA01).

These heritage resources were geo-referenced, mapped and discussed in this report (Figure 3, Tables 1-2). The significance of the heritage resources is indicated and mitigation measures are outlined should they be affected by the Eskom Project.

Possible impact on the heritage resources

GY01 and GY02 as well as LIA01 are located near the proposed new power line that will be established between the Soekmekaar Substation and the proposed new Mashua Substation.

It is unlikely that either GY01 or GY02 or Site LIA01 will be impacted by the Eskom Project. Nevertheless, the significance of the graveyard and the Late Iron Age site is indicated by means of stipulations derived from the National Heritage Resources Act (No 25 of 1999) and other legislation.

The significance of the graveyards

All graveyards and graves can be considered to be of high significance and are protected by various laws. Legislation with regard to graves includes Section 36 of the National Heritage Resources Act (No 25 of 1999) whenever graves are older than sixty years. The act also distinguishes various categories of graves and burial grounds.

Other legislation with regard to graves includes those which apply when graves are exhumed and relocated, namely the Ordinance on Exhumations (No 12 of 1980) and the Human Tissues Act (No 65 of 1983 as amended).

The significance of the Late Iron Age site

The stone walled site (Site LIA01) qualifies as an archaeological and historical site and is protected by Section 38 of the National heritage Resources Act (No 25 of 1999).

Mitigating the heritage resources

It is unlikely that GY01 or GY02 or Site LIA01 will be impacted (affected, altered, destroyed) by the construction of the proposed Soekmekaar/Mashua power line or substations. However, if any of these remains are to be affected by the Eskom Project the following mitigation measures for the graveyards and the Late Iron site have to be adhered to, namely:

Mitigating the graveyards

GY01 and GY02 can be mitigated by following the following strategy, namely:

- The graveyards can be avoided by the proposed new Soekmekaar-Mashua power line.

Mitigating the Late Iron Age site

The Late Iron Age site may not be affected before the South African Heritage Resources Agency (SAHRA) has authorised such an impact on the site. An archaeologist accredited with the Association for Southern African Professional Archaeologists (ASAPA) has to apply for a permit from SAHRA which would authorize the destruction of these remains.

However, it is possible for the proposed Soekmekaar/Mashua power line to avoid Site LIA01 therefore ensuring that the above application needs not to be lodge to SAHRA.

The power line

The proposed Soekmekaar/Mashua power line corridor is therefore suitable for the construction of the proposed new power line.

The substations sites

Alternative 1 (north of a dirt road) and Alternative 2 (south of the dirt road) for the proposed new Singo Substation revealed no heritage resources of significance. Both these sites therefore can be used for the new substation.

Alternative 1 (east of drainage channel) and Alternative 2 (west of drainage channel) for the proposed new Mashua Substation revealed no heritage resources of significance. Both these sites therefore can be used for the new substation.

General

If any heritage resources of significance is exposed during the Eskom Project the South African Heritage Resources Authority (SAHRA) should be notified immediately, all development activities must be stopped and an archaeologist accredited with the Association for Southern African Professional Archaeologist (ASAPA) should be notify in order to determine appropriate mitigation measures for the discovered finds. This may include obtaining the necessary authorisation (permits) from SAHRA to conduct the mitigation measures.

Prepared for:

ESKOM NORTHERN REGION
AND
URGENEG

A PHASE I HERITAGE IMPACT ASSESSMENT (HIA) STUDY FOR ESKOM'S PROPOSED 132KV POWER LINE RUNNING FROM THE SPENCER-VENULU T-OFF TO THE PROPOSED NEW MAMAILA SUBSTATION IN THE LIMPOPO PROVINCE OF SOUTH AFRICA

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October 2008

EXCECUTIVE SUMMARY

This study contains the report on the Phase I Heritage Impact Assessment study which was done according to Section 38 of the National Heritage Resources Act (No 25 of 1999) for Eskom's proposed new 132kV power line running from the Spencer-Venulu T-off to the proposed new Mamaila Substation in the Limpopo Province of South Africa. The construction of the new power line and substation is hereafter referred to as the Eskom Project while the alternatives for the proposed power line corridors and substations are referred to as the Eskom Project Area.

The Eskom Project may impact on any of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No. 25 of 1999). Consequently, Urgeneg and Eskom commissioned the author to undertake a Phase I HIA study for the proposed Eskom Project Area with the following aims

- To establish whether any of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) (see Box 1) do occur within the perimeters of the Eskom Project Area and, if so, to determine the level of significance of these heritage resources.
- To make recommendations regarding the mitigation or the conservation of any significant heritage resources that may be affected by the proposed Eskom Project.

The Phase I HIA study for the proposed Eskom Project Area revealed the following types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999), namely:

- A graveyard (GY01).
- Remains from the recent past.

The graveyard was geo-referenced, mapped and discussed in this report (Figure 2, Table 1). The graveyard's significance is indicated and mitigation measures are outlined should it be affected by the Eskom Project.

The remains from the recent past have no significance and are not further discussed.

Possible impact on the graveyard

GY01 is located near the northern end of Alternative 1 and Alternative 2, at the point where these two alternatives bend towards the west. It is unlikely that GY01 will be impacted by

the Eskom Project. Nevertheless, the significance of the graveyard is indicated by means of stipulations derived from the National Heritage Resources Act (No 25 of 1999) and other legislation.

The significance of the graveyard

All graveyards and graves can be considered to be of high significance and are protected by various laws. Legislation with regard to graves includes Section 36 of the National Heritage Resources Act (No 25 of 1999) whenever graves are older than sixty years. The act also distinguishes various categories of graves and burial grounds.

Other legislation with regard to graves includes those which apply when graves are exhumed and relocated, namely the Ordinance on Exhumations (No 12 of 1980) and the Human Tissues Act (No 65 of 1983 as amended).

Mitigating the graveyard

GY01 can be mitigated by following the following strategy, namely:

- The graveyard can be avoided by Alternative 1 and Alternative 2 as both these alternatives bend towards the west before crossing the graveyard.

Both Alternatives 1 and Alternative 2 therefore are suitable for the construction of the proposed new power line.

The substations sites

Alternative 1 and Alternative 2 for the proposed new Mamaila Substation revealed no heritage resources of significance. Both these alternative sites therefore can be used for the new substation.

General

If any heritage resources of significance is exposed during the Eskom Project the South African Heritage Resources Authority (SAHRA) should be notified immediately, all development activities must be stopped and an archaeologist accredited with the Association for Southern African Professional Archaeologist (ASAPA) should be notify in order to determine appropriate mitigation measures for the discovered finds. This may include obtaining the necessary authorisation (permits) from SAHRA to conduct the mitigation measures.

1 INTRODUCTION

This study contains the report on the Phase I Heritage Impact Assessment study which was done according to Section 38 of the National Heritage Resources Act (No 25 of 1999) for Eskom's proposed new 132kV power line running from the Spencer-Venulu T-off to the proposed new Mamaila Substation in the Limpopo Province of South Africa.

The construction of the new power line and substation is hereafter referred to as the Eskom Project while the alternatives for the proposed power line corridors and substations are referred to as the Eskom Project Area.

Focused archaeological research has been conducted in the Limpopo Province of South Africa for more than four decades. This research consists of surveys and of excavations of Stone Age and Iron Age sites as well as the recording of rock art and historical sites. The Limpopo Province has a rich heritage comprised of remains dating from the pre-historical and from the historical (or colonial) periods of South Africa. Pre-historical and historical remains in the Limpopo Province therefore form a record of the heritage of most groups living in South Africa today.

Various types and ranges of heritage resources that qualify as part of South Africa's 'national estate' as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) occur in the Limpopo Province (see Box 1, next page).

Box 1: Types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999).

The National Heritage Resources Act (Act No 25 of 1999, Section 3) outlines the following types and ranges of heritage resources that qualify as part of the national estate, namely:

(a) places, buildings structures and equipment of cultural significance;

(b) places to which oral traditions are attached or which are associated with living heritage;

(c) historical settlements and townscapes;

(d) landscapes and natural features of cultural significance;

(e) geological sites of scientific or cultural importance;

(f) archaeological and paleontological sites;

(g) graves and burial grounds including-

(i) ancestral graves;

(ii) royal graves and graves of traditional leaders

(iii) graves of victims of conflict

(iv) graves of individuals designated by the Minister by notice in the Gazette;

(v) historical graves and cemeteries; and

(vi) other human remains which are not covered by in terms of the Human Tissue Act, 1983 (Act No 65 of 1983)

(h) sites of significance relating to the history of slavery in South Africa;

(i) moveable objects, including -

(i) objects recovered from the soil or waters of South Africa, including archaeological and paleontological objects and material, meteorites and rare geological specimens;

(ii) objects to which oral traditions are attached or which are associated with living heritage;

(iii) ethnographic art and objects;

(iv) military objects;

(v) objects of decorative or fine art;

(vi) objects of scientific or technological interest; and

(vii) books, records, documents, photographs, positives and negatives, graphic, film or video material 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).

The National Heritage Resources Act (Act No 25 of 1999, Art 3) also distinguishes nine criteria for places and objects to qualify as 'part of the national estate if they have cultural significance or other special value ...'. These criteria are the following:

(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;

(i) sites of significance relating to the history of slavery in South Africa

2 TERMS OF REFERENCE

The Eskom Project may impact on any of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No. 25 of 1999). Consequently, Eskom (Northern Region) and Urgeneg commissioned the author to undertake a Phase I HIA study for the proposed Eskom Project Area with the following aims

- To establish whether any of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) (see Box 1) do occur within the perimeters of the Eskom Project Area and, if so, to determine the level of significance of these heritage resources.
- To make recommendations regarding the mitigation or the conservation of any significant heritage resources that may be affected by the proposed Eskom Project.

3 THE ESKOM PROJECT AREA

3.1 Location

The Eskom Project Area falls within the Lowveld of Limpopo, an area to the east of the Drakensberg Escarp which is located 600m above sea level at its highest points. The region has an annual rainfall of well over 1 000mm.

The Lowveld region is the focal point of South Africa's subtropical fruit industry. The range which is utilized is large and includes mangoes, litchis, paw paws, bananas and avocado pears together with citrus, fruit pecan and other nuts. Other products include sugar cane, tobacco and timber from exotic forests that cover many of the mountain slopes. The region is also the country's winter vegetable garden.

The Lowveld houses several exquisite nature and game reserves. It is also home to the king of all sanctuaries, namely the National Kruger Park.

The Lowveld is also of importance for its minerals. The world's third largest deposits of phosphate are mined at Phalaborwa. Other major commodities from the region include copper, mica, vermiculite and iron.

3.2 The Eskom Project

The Eskom Project Area involves parts of the farms Staatsgrond and Bellevue 150 which is located to the north and south of the R81, approximately 70 km from Polokwane. The Project Area is situated to the south of the former Venda homeland. The villages of Sedibene and Mamokgadi occur in and near the Project Area (Tzaneen 2330; 1:250 000) (Figures 1).

The Eskom Project involves the following components:

- The construction of a 132kV power line which T-off from the Spencer-Venulu power line running across the farm Bellevue 150 and ending at the proposed new Mamaila Substation. This power line corridor has two alternatives, namely

Alternative 1 that runs to the west of a dirt road running northwards towards Sedibene and an Alternative 2 that runs to the east of this dirt road.

- The construction of the Mamaila Substation on one of two alternatives sites, namely Alternative 1 to the west of the dirt road running to Sedibene and Alternative 2 further north adjacent to this dirt road.

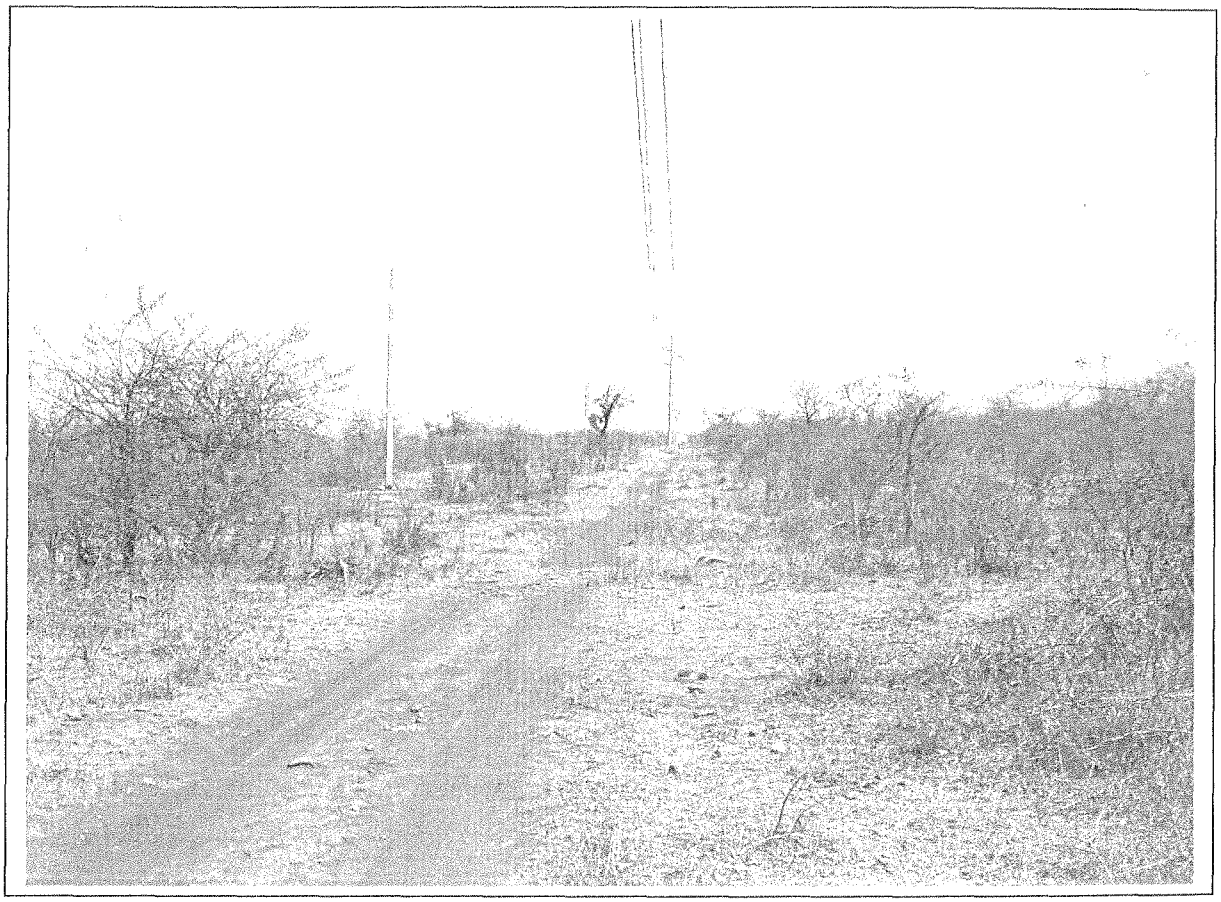


Figure 1- The Spencer- Venulu power line runs across the farm Bellevue 150. The proposed new 132kV power line will T-off from this power line in order to run northwards to the proposed new Mamaila Substation (above).

4 METHODOLOGY

This Phase I HIA study was conducted by means of the following:

- Surveying the proposed Eskom Project Area with a vehicle and selected spots on foot.
- Briefly surveying literature relating to the pre-historical and historical context of the Eskom Project Area.
- Consulting maps of the proposed Eskom Project Area.
- Consulting archaeological (heritage) data bases.
- Consulting spokespersons regarding the possible presence of graves and graveyards in the project area.
- Synthesising all information obtained from the data bases, fieldwork, maps and literature survey.

4.1 Fieldwork

The proposed Eskom Project Area was surveyed with a vehicle where accessible roads existed while selected, sensitive spots in the project area were surveyed on foot.

4.2 Databases, literature survey and maps

Databases kept and maintained at institutions such as the Provincial Heritage Resources Agency (PHRA) and the Archaeological Data Recording Centre at the National Flagship Institute (Museum Africa) in Pretoria were consulted to determine whether any heritage resources of significance has been identified during earlier heritage surveys in or near the Eskom Project Area.

The author is not unacquainted with the Eskom Project Area at large as he had done several heritage impact assessment studies near the proposed project area (see Part 8, 'Select Bibliography').

Literature relating to the pre-historical and the historical unfolding of the Eastern Highveld where the Eskom Project Area is located was reviewed (see Part 5, 'Contextualising the Eskom Project Area').

It is important to contextualise the pre-historical and historical background of the Eskom Project Area in order to comprehend the identity and meaning of heritage sites in and near the project area.

In addition, the Eskom Project Area was studied by means of maps on which it appears (Tzaneen 2330; 1:250 000).

4.3 Assumptions and limitations

It is possible that this Phase I HIA study may have missed heritage resources in the Eskom Project Area as heritage sites may occur in thick clumps of vegetation while others may lie below the surface of the earth and may only be exposed once development commences.

If any heritage resources of significance is exposed during the Eskom Project the South African Heritage Resources Authority (SAHRA) should be notified immediately, all development activities must be stopped and an archaeologist accredited with the Association for Southern African Professional Archaeologist (ASAPA) should be notify in order to determine appropriate mitigation measures for the discovered finds. This may include obtaining the necessary authorisation (permits) from SAHRA to conduct the mitigation measures.

4.4 Some remarks on terminology

Terms that may be used in this report are briefly outlined in Box 2.

Box 2. Terminologies that may be used in this report

The Heritage Impact Assessment (HIA) referred to in the title of this report includes a survey of heritage resources as outlined in the National Heritage Resources Act, 1999 (Act No 25 of 1999) (See Box 1).

Heritage resources (cultural resources) include all human-made phenomena and intangible products that are the result of the human mind. Natural, technological or industrial features may also be part of heritage resources, as places that have made an outstanding contribution to the cultures, traditions and lifestyles of the people or groups of people of South Africa.

The term 'pre-historical' refers to the time before any historical documents were written or any written language developed in a particular area or region of the world. The historical period and historical remains refer, for the Eskom Project Area, to the first appearance or use of 'modern' Western writing brought to the Eskom Project Area by the first Colonists who settled in this area during the 1830's.

The term 'relatively recent past' refers to the 20th century. Remains from this period are not necessarily older than sixty years and therefore may not qualify as archaeological or historical remains. Some of these remains, however, may be close to sixty years of age and may, in the near future, qualify as heritage resources.

It is not always possible, based on observations alone, to distinguish clearly between archaeological remains and historical remains, or between historical remains and remains from the relatively recent past. Although certain criteria may help to make this distinction possible, these criteria are not always present, or, when they are present, they are not always clear enough to interpret with great accuracy. Criteria such as square floor plans (a historical feature) may serve as a guideline. However, circular and square floors may occur together on the same site.

The term 'sensitive remains' is sometimes used to distinguish graves and cemeteries as well as ideologically significant features such as holy mountains, initiation sites or other sacred places. Graves in particular are not necessarily heritage resources if they date from the recent past and do not have head stones that are older than sixty years. The distinction between 'formal' and 'informal' graves in most instances also refers to graveyards that were used by colonists and by indigenous people. This distinction may be important as different cultural groups may uphold different traditions and values with regard to their ancestors. These values have to be recognised and honoured whenever graveyards are exhumed and relocated.

The term 'Stone Age' refers to the prehistoric past, although Late Stone Age peoples lived in South Africa well into the historical period. The Stone Age is divided into an Earlier Stone Age (3 million years to 150 000 thousand years ago) the Middle Stone Age (150 000 years to 40 000 years ago) and the Late Stone Age (40 000 years to 200 years ago).

The term 'Iron Age' refers to the last two millennia and 'Early Iron Age' to the first thousand years AD. 'Late Iron Age' refers to the period between the 16th century and the 19th century and can therefore include the historical period.

Mining heritage sites refer to old, abandoned mining activities, underground or on the surface, which may date from the pre-historical, historical or the relatively recent past.

The term 'study area', or 'Eskom Project Area' refers to the area where the developer wants to focus its development activities (refer to plan).

Phase I studies refer to surveys using various sources of data in order to establish the presence of all possible types of heritage resources in any given area.

Phase II studies include in-depth cultural heritage studies such as archaeological mapping, excavating and sometimes laboratory work. Phase II work may include the documenting of rock art, engraving or historical sites and dwellings; the sampling of archaeological sites or shipwrecks; extended excavations of archaeological sites; the exhumation of bodies and the relocation of graveyards, etc. Phase II work may require the input of specialists and requires the co-operation and approval of SAHRA.

5 CONTEXTUALISING THE ESKOM PROJECT AREA

The following brief overview of pre-historical, historical, cultural and economic evidence will help to contextualise the proposed Eskom Project Area.

5.1 Stone Age sites

Stone Age sites are marked by stone artefacts that are found scattered on the surface of the earth or as parts of deposits in caves and rock shelters. The Stone Age is divided into the Early Stone Age (covers the period from 2.5 million years ago to 250 000 years ago), the Middle Stone Age (refers to the period from 250 000 years ago to 22 000 years ago) and the Late Stone Age (the period from 22 000 years ago to 200 years ago).

The Later Stone Age is also associated with rock paintings and engravings which were done by the San, Khoi Khoi and in more recent times by Iron Age farmers.

Heritage surveys up to now have recorded Stone Age sites, rock paintings and engravings in the Lowveld.

5.2 Iron Age remains

The Iron Age is associated with the first agro-pastoralists who lived in semi-permanent villages and who practised metal working during the last two millennia. The Iron Age is usually divided into the Early Iron Age (covers the 1st millennium AD) and the Later Iron Age (covers the first 880 years of the 2nd millennium AD).

The Lowveld, near the Eskom Project Area, has been occupied by Early Iron Age communities as well as by Late Iron Age communities. The Eskom Project Area stretches across the former sphere of influence of the Lobedu people. This community occupied numerous settlements in the area. A brief historical background to the Lobedu is provided in this report (see below).

5.3 The historical period

The Eskom Project Area partly collates with people who can claim a Lobedu ancestry. A brief survey of literature relating to the Lobedu (or Balobedu) people who occupied the Tzaneen area for the past four centuries was undertaken. Particular attention was given to the origins and settlement history of the Lobedu. No ethnographic information regarding the Lobedu is presented. It is sufficient to state that the Lobedu is also known as the people of Modjaji, the name given to the queens who ruled this clan and who are renowned for their abilities 'to make rain'

The Lobedu people collectively are also referred to as the Kolobe tribes. Sotho tribes who have the *kolobe* (bushpig) as totem trace their origin to the Lobedu. These groups include the Kolobe of Mmamaila, Sekgôpô, Mmamabolo and Rakwadu.

The Lobedu in all likely-hood broke away from the Karanga during the time of the legendary kingdom of Monomotapa (in Zimbabwe) and moved southwards, eventually in main becoming Sotho-ized. The group originally settled west of Louis Trichardt from where they moved, under Mohale the founder of the Lobedu, south-westwards. Shortly before AD 1700 they arrived in their present territory. (At this stage, the Kolobe of Mmamobolo had already broken away from the main group).

Among the Lobedu the tribal heads claim to authority is based on his ability to use the rain medicine in his possession. During the rule of the last male tribal leader, Môgôdo, he entrusted the rain medicine to his daughter, Maselegwane, as his sons were conspiring to murder him. When he died Maselegwane succeeded her father as she possessed the rain medicine and became the first women ruler of the Lobedu. She called herself Modjaji and banished her brothers and half brothers from the kingdom.

Since the succession of Maselegwane the position of tribal leader, rain queen and the name 'Modjaji' was passed on to the daughter of the reigning queen. Modjaji II was historically the most famous of all the Lobedu queens as she led her people in a revolt against the government of the ZAR at the end of the 19th century. The Lobedu are today the main group in the Bolobedu district.

During and shortly before the stormy reign of Môgôdo (AD 1800) various splinter groups such as the Kolobe of Sekgôpô and Rakwadu broke away from the Lobedu. The descendants of these clans currently live in Sekgosese and Lobedu. The Kolobe of Mamaila had already broken away from the Lobedu around AD 1750 and moved northwards where they found refuge amongst the Venda in the Njelele Valley. After skirmishes with Albasini they moved southwards to Lebowa, shortly after 1855. By 1925 the tribe had undergone a final division. One part now lives in Sekgosese and the other in Bolobedu. Although the connection between the two tribes is recognised, each division is fully independent today.

After the Kolobe of Mmamabolo broke away from the Lobedu around AD 1700, the Mmamabolo settled on the Haenertsburg escarpment and led a nomadic existence. They settled in Sekhukhuneland for a short time and on their way back to Haenertsburg they overcame and assimilated various groups. The tribe divided into two groups after a succession dispute, namely that of Sekwala and the group of Mankweng who both live in the Thabamoopo district.

6 THE PHASE I HERITAGE IMPACT ASSESSMENT

6.1 Types and ranges of heritage resources

The Phase I HIA study for the proposed Eskom Project Area revealed the following types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999), namely:

- A graveyard (GY01).
- Remains from the recent past.

The graveyard was geo-referenced, mapped and discussed in this report (Figure 2, Table 1). The graveyard's significance is indicated and mitigation measures are outlined should it be affected by the Eskom Project.

The remains from the recent past have no significance and are not further discussed.

The Phase I HIA study is now briefly discussed and illustrated with photographs.

Heritage resources	Coordinates	Significance
Graveyard 01 Near Boabab tree Remains from the recent past are scattered in this area	23° 23.753' 30° 25.406'	HIGH

Table 1- Coordinates for a graveyard in and near the Eskom Project Area (above).

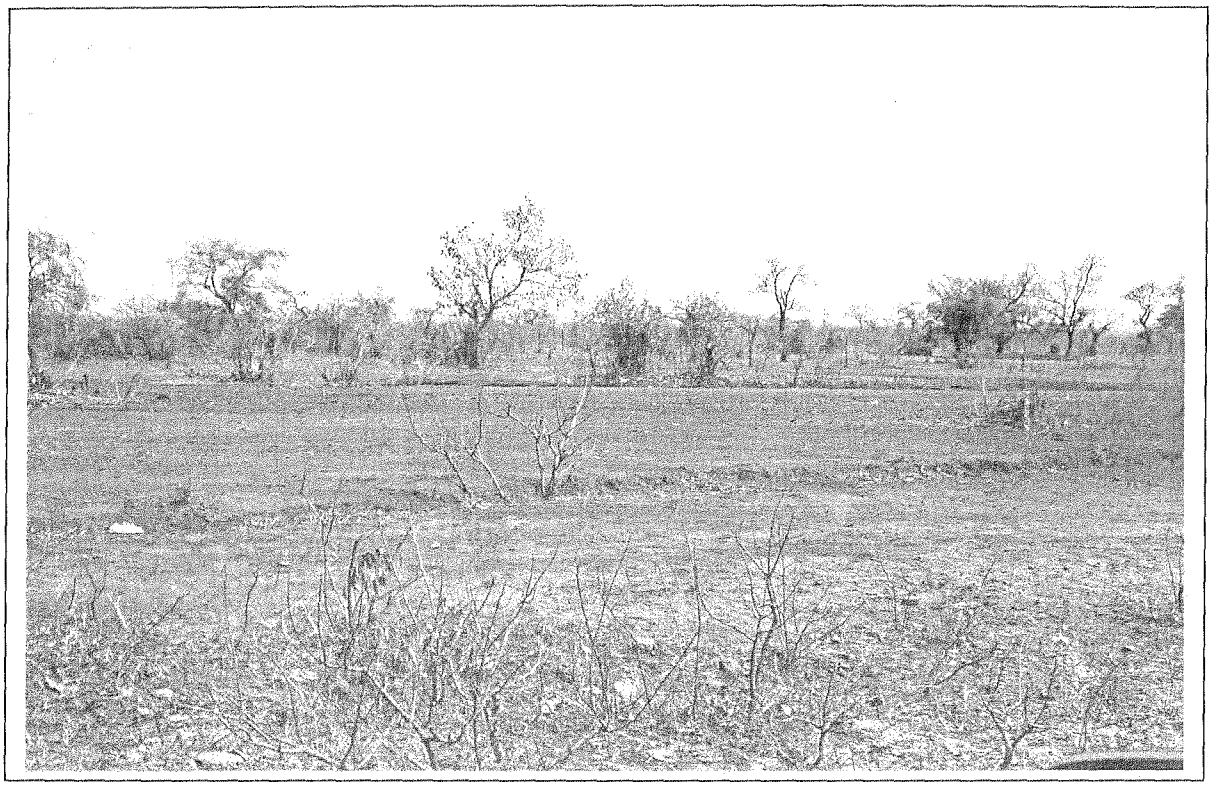
6.1.1 The graveyard

One graveyard (GY01) was observed near Alternative 1 and Alternative 2 for the proposed new power line, namely:

6.1.1.1 Graveyard 01

GY01 is a large formal graveyard located on Staatsgrond. It houses several hundred graves and is demarcated with a fence. Most of the graves merely consist of piles of stone while many are fitted with granite headstones and are edged with granite strips.

Figure 3- GY01 is a large formal cemetery near the northern end of Alternative 1 and Alternative 2 for the proposed new power line (above).



Figures 4 & 5- Alternative 1 will run along the western shoulder of a dirt road where the veldt is degraded (above). The last stretch of Alternatives 1 and 2 run across bush where no heritage resources of significance were observed (below).

6.2 Possible impact on the graveyard

GY01 is located near the northern end of Alternative 1 and Alternative 2, at the point where these two alternatives bend towards the west. It is unlikely that GY01 will be impacted by the Eskom Project. Nevertheless, the significance of the graveyard is indicated by means of stipulations derived from the National Heritage Resources Act (No 25 of 1999) and other legislation.

6.2.1 The significance of the graveyard

All graveyards and graves can be considered to be of high significance and are protected by various laws. Legislation with regard to graves includes Section 36 of the National Heritage Resources Act (No 25 of 1999) whenever graves are older than sixty years. The act also distinguishes various categories of graves and burial grounds.

Other legislation with regard to graves includes those which apply when graves are exhumed and relocated, namely the Ordinance on Exhumations (No 12 of 1980) and the Human Tissues Act (No 65 of 1983 as amended).

6.2.2 Mitigating the graveyard

GY01 can be mitigated by following the following strategy, namely:

- The graveyard can be avoided by Alternative 1 and Alternative 2 as both these alternatives bend towards the west before crossing the graveyard.

Both these alternatives therefore are suitable for the construction of the proposed new power line.

6.3 The substations sites

Alternative 1 (west of a dirt road) and Alternative 2 (west of the dirt road, but further to the north) for the proposed new Mamaila Substation revealed no heritage resources of significance. Both these alternative sites therefore can be used for the new substation.

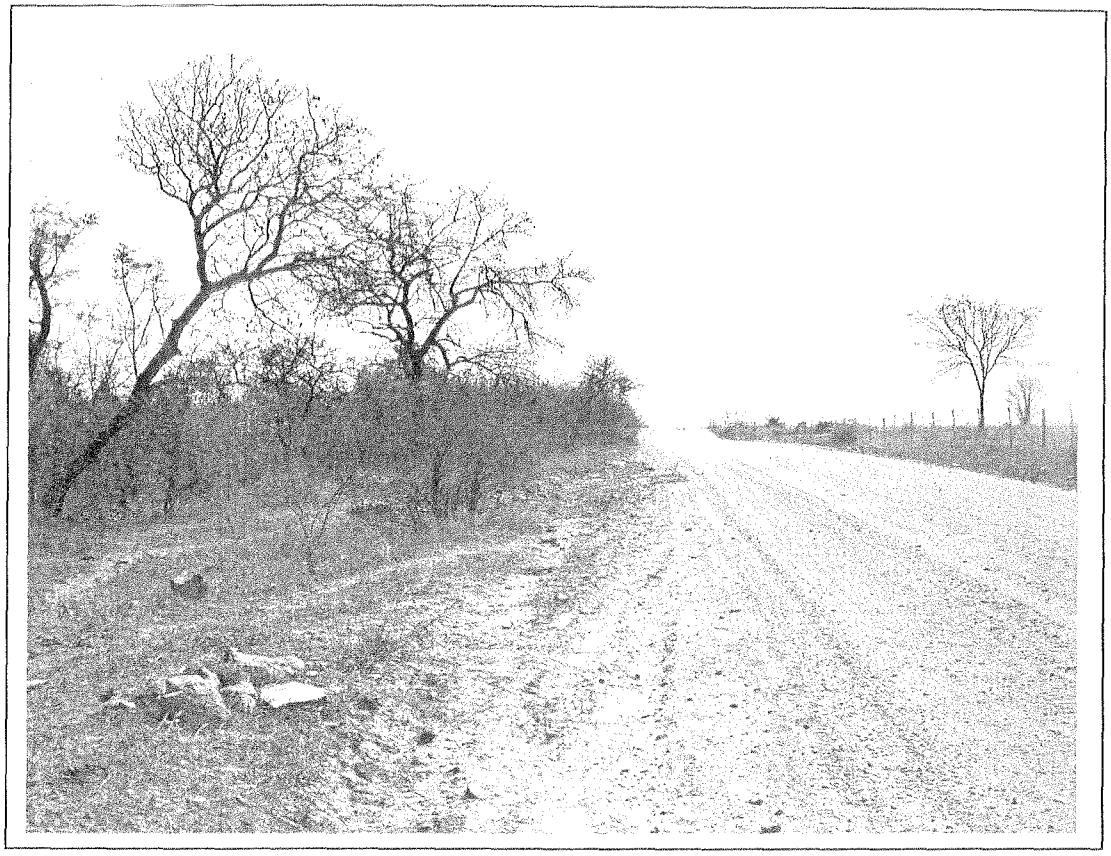


Figure 6- The Mamaila Substation may be located to the west of a dirt road (above). No heritage resources of significance were observed near one of the proposed Alternatives for the substation.

7 CONCLUSION AND RECOMMENDATIONS

The Phase I HIA study for the proposed Eskom Project Area revealed the following types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999), namely:

- A graveyard (GY01).
- Remains from the recent past.

The graveyard was geo-referenced, mapped and discussed in this report (Figure 2, Table 1). The graveyard's significance is indicated and mitigation measures are outlined should it be affected by the Eskom Project.

The remains from the recent past have no significance and are not further discussed.

Possible impact on the graveyard

GY01 is located near the northern end of Alternative 1 and Alternative 2, at the point where these two alternatives bend towards the west. It is unlikely that GY01 will be impacted by the Eskom Project. Nevertheless, the significance of the graveyard is indicated by means of stipulations derived from the National Heritage Resources Act (No 25 of 1999) and other legislation.

The significance of the graveyard

All graveyards and graves can be considered to be of high significance and are protected by various laws. Legislation with regard to graves includes Section 36 of the National Heritage Resources Act (No 25 of 1999) whenever graves are older than sixty years. The act also distinguishes various categories of graves and burial grounds.

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Mitigating the graveyard

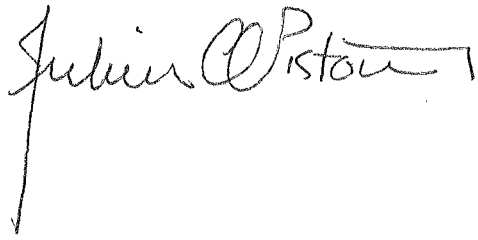
GY01 can be mitigated by following the following strategy, namely:

- The graveyard can be avoided by Alternative 1 and Alternative 2 as both these alternatives bend towards the west before crossing the graveyard.

Both these alternatives therefore are suitable for the construction of the proposed new power line.

The substations sites

Alternative 1 (west of a dirt road) and Alternative 2 (west of the dirt road, but further to the north) for the proposed new Mamaila Substation revealed no heritage resources of significance. Both these sites therefore can be used for the new substation.



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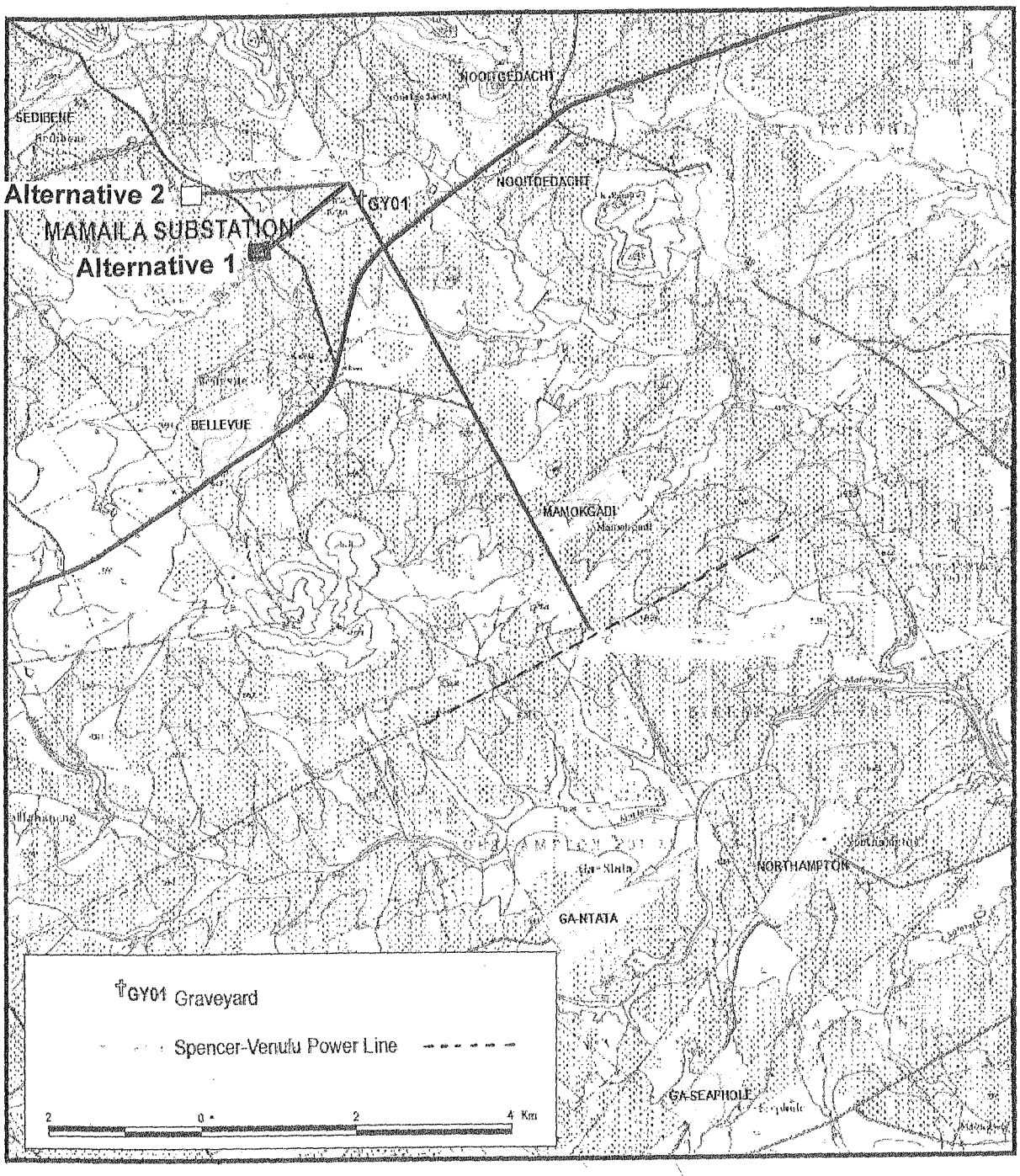

Figure 2- The Eskom Project Area involves a proposed new 132kV power line running between the existing Spencer-Venulu power line and the proposed new Mamaila Substation in the Limpopo Province of South Africa.

Note the presence of a single graveyard near Alternative 1 and Alternative 2 for the proposed new power line (above).

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17A LANDROS MARE STREETPOLOKWANE, 0700
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DATE: 22 January 2009
ENQUIRIES: Mrs Vhonani Ramalamula
E-mail: pramalamula@lp.sahra.org.za
Web site: www.sahra.org.za

YOUR REF: 9/2/240/0008
OUR REF: xxxxx

Attention: Ms Ria Pretorius
Landscape Dynamics
P.O. Box 947
Groenkloof
Pretoria
0027

By Fax: 012 346 2356

Dear Sir

RE: ESKOM MUSINA; THE CONSTRUCTION OF ± 60 KM 132 KV POWER LINE BETWEEN THE EXISTING NZHELELE TEE STATION AND THE EXISTING MUSINA SUBSTATION. SUBMISSION OF SCOPING DOCUMENT: REF NR; 12/12/20/1202

Thank you for your indication that development is to take place in this area.

Kindly be informed that all Eskom and archaeological related matters are handled by our SAHRA Archaeology, Palaeontology and Meteorite Unit (Mr Phillip Hine: email: pne@sahra.org.za, to whom we will send this report for his comments. Decisions on Burial grounds and graves are made by our Burial grounds and Grave (Ms Jennifer Kitto: email: jkitto@sat.sahra.org.za to whom we will send this report. Kindly note that this office will support the recommendations that will be made by the Units mentioned above.

Should there be any queries, please do not hesitate to contact the undersigned.

Yours sincerely

Vhonani Ramalamula
Cultural Heritage Officer
For the Manager
SAHRA Limpopo Office

another six graves are covered with stones. The inscription on the tomb stone reads as follows: 'Murwamuila Madzhoni, Rest in peace'

- A formal graveyard (GY02) is located to the west of Eskom's existing power line and to the south of the Nzelele Dam's turn-off. This graveyard is demarcated with a low stone wall.

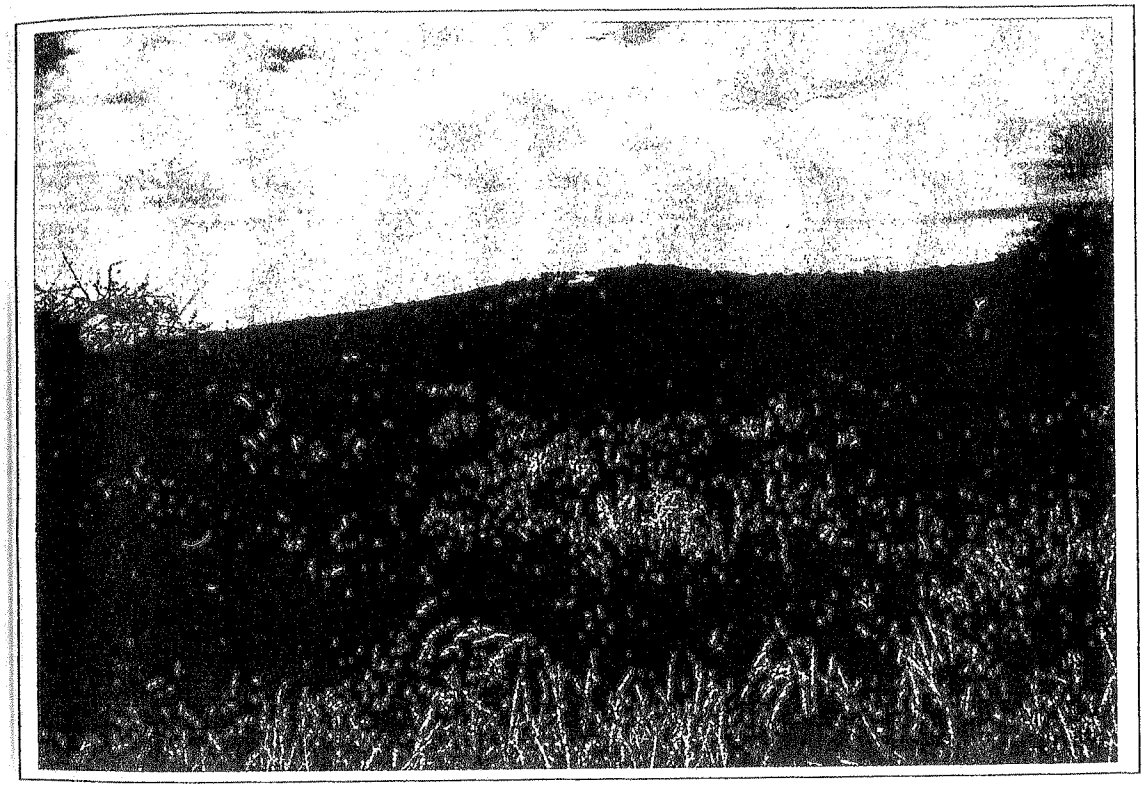

Figure 2- The remains of a village from the Historical Period or from the recent past (bald spot in foreground) (Site RP01) under Eskom's existing power line along Part AB (above).

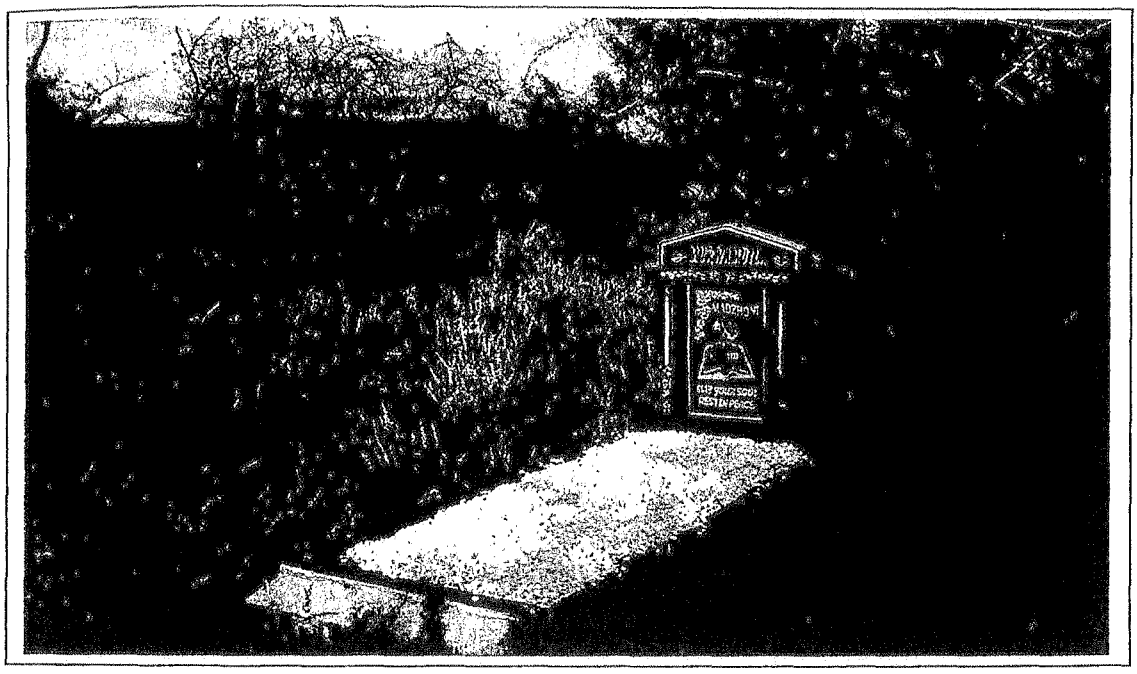

Figure 3- The grave of Murwamuila Madzhoni in GY01 close to Eskom's existing new power line corridor along Part AB (above).

5.2.2 Part BC: Between the Nzelele Dam and Tshipise turn-offs

Part BC runs in a northerly direction across the farms Bekaf 650MS, Juliana 647MS, Rissik 637MS, Fanie 578, Oom Jan 586 and 579, Groot Indaba 581, Buxton 575 and Scott 567 before reaching the Tshipise turn-off.

Part BC runs along a level corridor that is marked by loose scattered pieces of limestone rock.

A weathered sandstone ridge, drifting from the west to east, occurs to the east of Eskom's existing power line.

Figure 4- GY02 located to the west of Eskom's existing power line along Part AB (above).

5.2.3 Part CD: From the Tshipise turn-off to Blaauwkop 514

This part runs northwards across Scott 519, Van Heerden 519, Rampulana 515 and Blaauwkop 514.

Part CD of the power line corridor is slightly undulating and is marked by Boabab and a variety of other trees.

No heritage resources were observed along this part of the proposed new power line corridor.

5.2.4 Part DE: From Blaauwkop 514 to Verbaard 53

Part DE runs further northwards across Blaauwkop 514, (crossing the tip of Grasplaas 98), Waterside 513, Waterkloof 96, Dorothy 254 to Verbaard 53. Stretch DE is mountainous.

Part DE crosses numerous small non-perennial streams and also cuts through a narrow poort on Waterkloof 96 and Verbaard 53.

No heritage resources of significance were observed along this part.

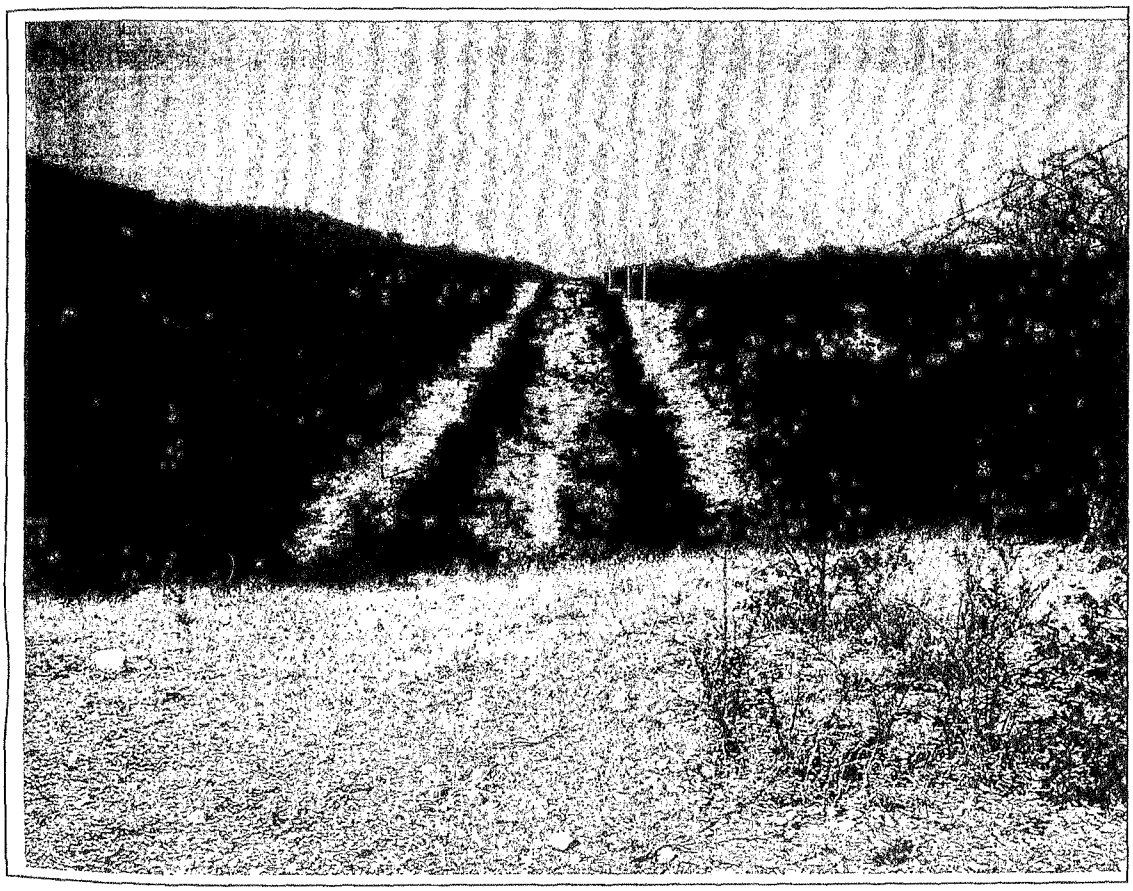

Figure 5- Eskom's proposed new power line crossing mountainous terrain along Part DE (above).

5.2.5 Part EF: From Verbaard 53 to Musina

Part EF runs north-eastwards and then north-westwards across Verbaard 53, Pangbourne 52, Mondferland 51, Toynton 49 and the Musina townlands to Musina.

Part EF initially runs across a level area on Verbaard 53 and then through a low mountain range on Pangbourne 52 before crossing the N1 in order to run across the flat terrain of the military base to the town of Musina.

No heritage resources of significance were observed along this part.

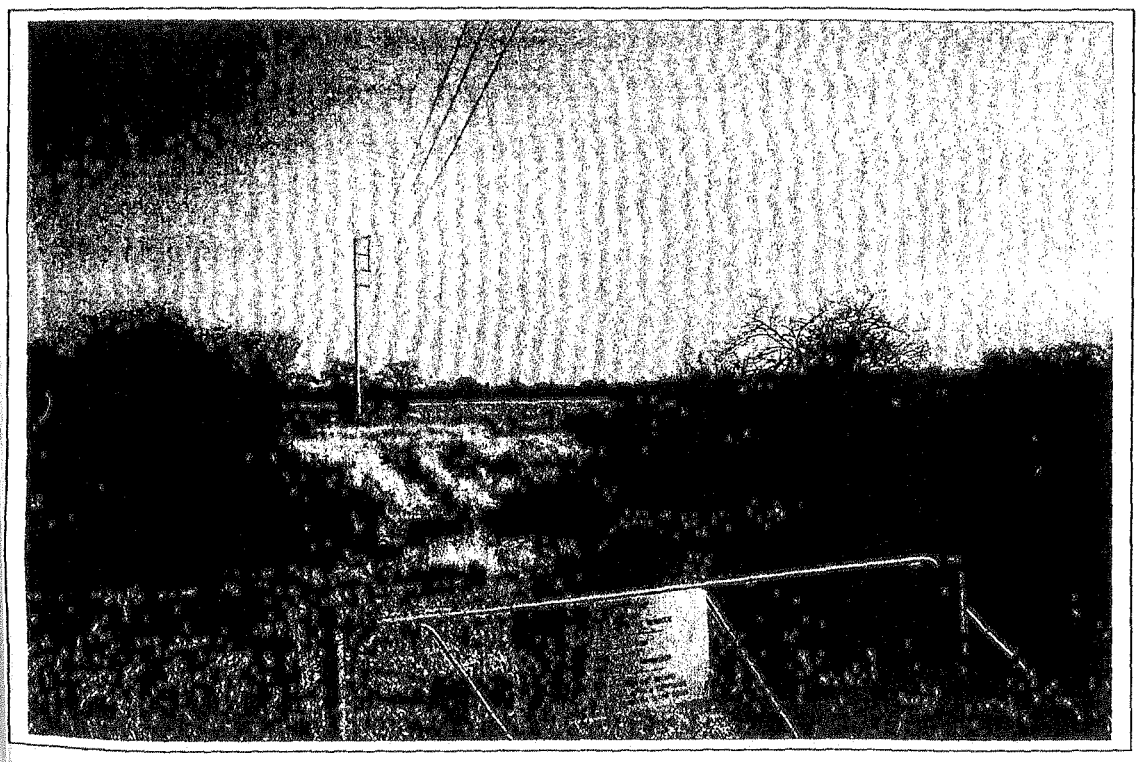

Figure 6- After crossing the N1 Part EF of Eskom's proposed new power line runs across the flat terrain of a military base followed by the Musina town lands to the Musina Substation (above).

Heritage resources	Coordinates	Significance
Stone Age Site (SA01)	22° 38.819' 29°.46.807'	HIGH
Remains from the recent past (RP01)	22° 50.531' 29°.53.330'	LOW
Graveyard (GY01)	22° 37.944' 29°.53.340'	HIGH
Graveyard (GY02)	22° 48.127' 29°.53.722'	HIGH

Table 1- Coordinates for heritage resources and their significance in and near Eskom's proposed new power line corridor running between the Paradise-T and Musina Substations in the Limpopo Province of South Africa (above).

5.3 The significance of the heritage resources

The Phase I HIA study for the 132kV power line running between the Paradise-T and Musina Substations revealed the following types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) in or near the Eskom Project Area, namely:

- A site with stone tools (Site SA01) in and near Eskom's proposed new power line corridor on the farms Oorwinning 713 and Windhoek 649.
- A site dating from the Historical Period (Site RRP01) or from the recent past on Windhoek 649.
- Two graveyards (GY01 and GY02), in and near the proposed new power line corridor on Windhoek 649.

These heritage resources in or near Eskom's proposed new power line were geo-referenced and mapped (Figure 1; Table 1). The significance of the heritage

esources were indicated by using criteria relating to the National Heritage Resources Act (No 25 of 1999) and criteria referring to the particular type of heritage resource under discussion.

5.3.1 The Stone Age site

Stone Age site qualify as archaeological sites which are protected by Section 35 of the National Heritage Resources Act (No 25 of 1999). However, Site SA01 along Part AB cannot be considered to be of high significance due to the following criteria:

- Site SA01 represents a random scatter of stone tools that also occur elsewhere along the northern foothills of the Soutpansberg. More Stone Age sites therefore exist where the proposed new power line will be constructed. An impact on Site SA01 would therefore be limited to a few individual artifacts within several large assemblages which occur in a wide area near the power line corridor.
- The majority of sites that were recorded date from the Middle Stone Age and perhaps from the First Intermediate Period (Late Acheulian or Sangoan culture). There are consequently a large number of stone tools available from at least one or two cultural periods and not necessarily from several consecutive time periods of the Stone Age. An impact on one or two cultural periods is less significant than an impact on a sequence of cultural periods representing a long period of time.
- The sites have been exposed by erosion and consequently are not sites with undisturbed archaeological contexts any longer. Sites with disturbed archaeological contexts have less significance than sites with undisturbed archaeological contexts.

5.3.2 The site from the Historical Period and/or the recent past

Site RP01 probably dates from the Historical Period and/or from the more recent past. Historical sites which are older than sixty years are protected by Section 35 of the National Heritage Resources Act (No 25 of 1999). However, this site cannot be considered to be of high significance due to the following criteria:

- Site RP01 lacks substantial surface material or (deep) archaeological deposits which would have enhanced the research potential of the site.
- Sites dating from the recent past may be more common than sites dating from the distant past as they were not subjected to long periods of natural decay. It is therefore possible that similar sites dating from the more recent past may occur in the Eskom Project Area making Site RP01 not necessarily unique.
- The site was partly damaged when a two track road was built through the eastern perimeter of the site (parallel with the existing power line).

5.3.3 The graveyard

Only GY01 will be affected by Eskom's proposed new power line. All graveyards and graves can be considered to be of high significance and are protected by various laws. Legislation with regard to graves includes the National Heritage Resources Act (No 25 of 1999) whenever graves are older than sixty years. The act also distinguishes various categories of graves and burial grounds. Other legislation with regard to graves includes those which apply when graves are exhumed and relocated, namely the Ordinance on Exhumations (No 12 of 1980) and the Human Tissues Act (No 65 of 1983 as amended).

5.4 Mitigating the heritage resources

Mitigation measures are outlined for these heritage resources that may be affected by the construction and maintenance of the new power line.

4.1 The stone tools

te SA01 needs not to be mitigated as the stone tools which are associated with is site will not be destroyed by the new development. The few stone tools that ay be affected by the development project will merely be re-deposited near the oposed new power line.

onsequently, no mitigation measures are required for the stone tools.

4.2 The site from the Historical Period and/or recent past

skom's pylons need not to be erected within the perimeters of Site RP01 which located under Eskom's existing power line. The proposed new power line will e constructed near Site's RP01 eastern perimeter. Site RP01 therefore needs ot to be affected by the construction of the new power line - particularly if the te is demarcated and highlighted with red emergency tape when the onstruction of the new power line is undertaken.

4.3 The graveyard

Y01 need not to be affected by the construction of the new power line as the aveyard can be left *in situ*. The graveyard can also be avoided as the proposed ew power lines will be constructed overhead (above) the cemetery and by sitioning the pylons closest to the graveyard at safe distances on opposite sides nds) of the graveyard. This graveyard merely contains seven graves that are oes not cover a large surface area as they are clustered together.

CONCLUSION AND RECOMMENDATIONS

The Phase I HIA study for the proposed new 132kV power line running between the Paradise-T and Musina Substations revealed the following types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) in or near the Eskom Project Area, namely:

- A site with stone tools (Site SA01) in and near Eskom's proposed new power line corridor on the farms Oorwinning 713 and Windhoek 649.
- A site dating from the Historical Period (Site RP01) or from the recent past on Windhoek 649.
- Two graveyards (GY01 and GY02) in and near the proposed new power line corridor on Windhoek 649.

These heritage resources in or near Eskom's proposed new power line were geo-referenced and mapped (Figure 1; Table 1). The significance of the heritage resources were indicated by using criteria relating to the National Heritage Resources Act (No 25 of 1999) and criteria referring to the particular type of heritage resource under discussion.

The significance of the heritage resources

The Stone Age site

Stone Age site qualify as archaeological sites which are protected by Section 35 of the National Heritage Resources Act (No 25 of 1999). However, Site SA01 along Part AB cannot be considered to be of high significance due to the following criteria:

- Site SA01 is associated with a random scatter of stone tools that also occur elsewhere along the northern foothills of the Soutpansberg. More Stone Age sites therefore exist where the proposed new power line will be constructed. An impact on Site SA01 would be limited to a few individual stone tools which are part of larger assemblages which occur in a wide area near the power line corridor.

- The majority of sites that were recorded date from the Middle Stone Age and perhaps from the First Intermediate Period (Late Acheulian or Sangoan culture). There are consequently a large number of stone tools available from at least one or two cultural periods and not necessarily from several consecutive time periods of the Stone Age. An impact on one or two cultural periods is less significant than an impact on a sequence of cultural periods representing a long period of time.
- The sites have been exposed by erosion and consequently are not sites with undisturbed archaeological contexts any longer. Sites with disturbed archaeological contexts have less significance than sites with undisturbed archaeological contexts.

The site from the Historical Period and/or the recent past

Site RP01 probably dates from the Historical Period and/or from the more recent past. Historical sites which are older than sixty years are protected by Section 35 of the National Heritage Resources Act (No 25 of 1999). However, this site cannot be considered to be of high significance due to the following criteria:

- Site RP01 lacks substantial surface material or (deep) archaeological deposits which would have enhanced the research potential of the site.
- Sites dating from the recent past are more common than sites dating from the distant past as they were not subjected to long periods of natural decay. It is therefore possible that similar sites dating from the more recent past may occur in the Eskom Project Area making Site RP01 not necessarily unique.
- The site was partly damaged when a two-track road was built through the eastern perimeter of the site (parallel with the existing power line).

The graveyard

Only GY01 will be affected by Eskom's proposed new power line. All graveyards and graves can be considered to be of high significance and are protected by various laws. Legislation with regard to graves includes the National Heritage

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Mitigating the heritage resources

Mitigation measures are outlined for those heritage resources that may be affected by the construction and maintenance of the new power line.

The stone tools

The few stone tools that may be affected by the development project are indestructible and will merely be re-deposited near the proposed new power line.

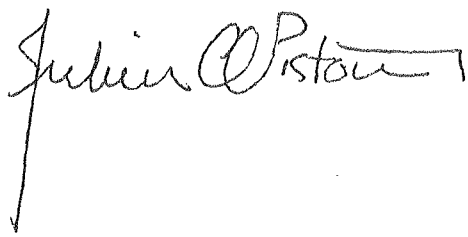
Consequently, no mitigation measures are required for the stone tools.

The site from the Historical Period and/or recent past

Eskom's pylons need not to be erected within the perimeters of Site RP01 which is located under Eskom's existing power line. The proposed new power line will be constructed near Site's RP01 eastern perimeter. Site RP01 therefore needs not to be affected by the construction of the new power line - particularly if the site is demarcated and highlighted with red emergency tape when the construction of the new power line is undertaken.

The graveyard

GY01 need not to be affected by the construction of the new power line as the graveyard can be left *in situ*. The graveyard can also be avoided as the proposed new power lines will be constructed overhead (above) the cemetery and by positioning the pylons closest to the graveyard at safe distances on opposite sides (ends) of the graveyard. This graveyard merely contains seven graves that are does not cover a large surface area as they are clustered together.



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