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A PHASE I HERITAGE IMPACT ASSESSMENT (HIA) STUDY FOR ESKOM'S PROPOSED NEW 132kV POWER LINE BETWEEN THE LEMARA SUBSTATION AND THE OLIFANTS RIVER NEAR HOEDSPRUIT AND FINALA IN THE MPUMALANGA PROVINCE

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EXECUTIVE SUMMARY

A Phase I Heritage Impact Assessment (HIA) study as required in terms of Section 38 of the National Heritage Resources Act (No 25 of 1999) was done for Eskom's proposed 132kV power line between the Lemara Substation and the Olifants River near Hoedspruit and Finala in the Mpumalanga Province. The construction of the proposed 132kV power line is hereafter referred to as the Eskom Project whilst the footprint of the proposed new power line is referred to as the Eskom Project Area.

The construction of the 132kV power line between the Lemara Substation and the Olifants River is part of an Eskom Project which involves different developmental components which have been addressed in several heritage impact assessment studies. These developmental components include:

- The construction of the proposed 132kV power line between the Lemara Substation and the proposed new Leboeng Substation
- The construction of the proposed 132kV power line between the Leboeng Substation and the Ohrigstad Substation.
- The construction of a proposed 22kV power line between the Phiring Substation and the Blyde River Canyon.

The aims with the Phase I HIA study were the following:

- To establish whether any of the types and ranges of heritage resources ('national estate') as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) do occur in the Eskom Project Area and, if so, to determine the significance of these heritage resources.
- To make recommendations regarding the mitigation and management of significant heritage resources that may be affected by the Eskom Project.

The Phase I HIA study for the Eskom Project revealed none of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) in and near the Eskom Project Area.

There is consequently no reason from a heritage point of view why the Eskom Project consisting of the construction of the 132kV power line between the Lemara Substation and the Olifants River cannot proceed.

General

This Phase I HIA study may have missed other 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.

CONTENTS

1 INTRODUCTION

This document contains the report on the results of the Phase I Heritage Impact Assessment (HIA) study which was done for Eskom's proposed new 132kV power line between the existing Lemara Substation and the Olifants River in the Mpumalanga Province. The proposed new electrification project is referred to as the Eskom Project whilst the footprint for the proposed new power line is referred to as the Eskom Project Area.

The construction of the 132kV power line between the Lemara Substation and the Olifants River is part of an Eskom Project which involves different developmental components which have been addressed in several heritage impact assessment studies. These developmental components include:

- The construction of the proposed 132kV power line between the Lemara Substation and the proposed new Leboeng Substation
- The construction of the proposed 132kV power line between the Leboeng Substation and the Ohrigstad Substation.
- The construction of a proposed 22kV power line between the Phiring Substation and the Blyde River Canyon.

Focused archaeological research has been conducted in the Mpumalanga Province for several decades. This research consists of surveys and of excavations of Stone Age and Iron Age sites as well as of the recording of rock art and historical sites in this area. The Mpumalanga 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 Mpumalanga Province of South Africa 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 the National Heritage Resources Act [No 25 of 1999]) occur in the Mpumalanga Province (see Box 1, next page).

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

The National Heritage Resources Act (Act No 25 of 1999, Art 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 palaeontological 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 Tissues Act, 1983 (Act No 65 of 1983);
(h) sites of significance relating to the history of slavery in South Africa;
(i) movable objects, including -
(i) objects recovered from the soil or waters of South Africa, including archaeological and palaeontological 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;
(a) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
(b) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
(c) 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)
(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 AIMS WITH THIS REPORT

Eskom intends to construct a new 132kV power line between the existing Lemara Substation and the Olifants River near Hoedspruit and Finala in the Mpumalanga Province. The Eskom Project may have an influence on any of the types and ranges of heritage resources which are listed in Section 3 of the National Heritage Resources Act (No 25 of 1999).

In order to comply with heritage legislation, Eskom requires knowledge of the presence, relevance and the significance of any heritage resources that may be affected by the proposed new project. Eskom needs this knowledge in order to take pro-active measures with regard to any heritage resources that may be affected, damaged or destroyed when the Eskom Project is implemented. Texture Environmental Consultants, the environmental company responsible for compiling the Environmental Impact Assessment (EIA) for the Eskom Project therefore commissioned the author to undertake a Phase I HIA study for the Eskom Project Area.

The aims with the Phase I HIA were the following:

- To establish whether any of the types and ranges of heritage resources ('national estate') as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) do occur in the Eskom Project Area and, if so, to determine the significance of these heritage resources.
- To make recommendations regarding the mitigation and management of significant heritage resources that may be affected by the Eskom Project.

3 METHODOLOGY

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

3.1 Fieldwork survey

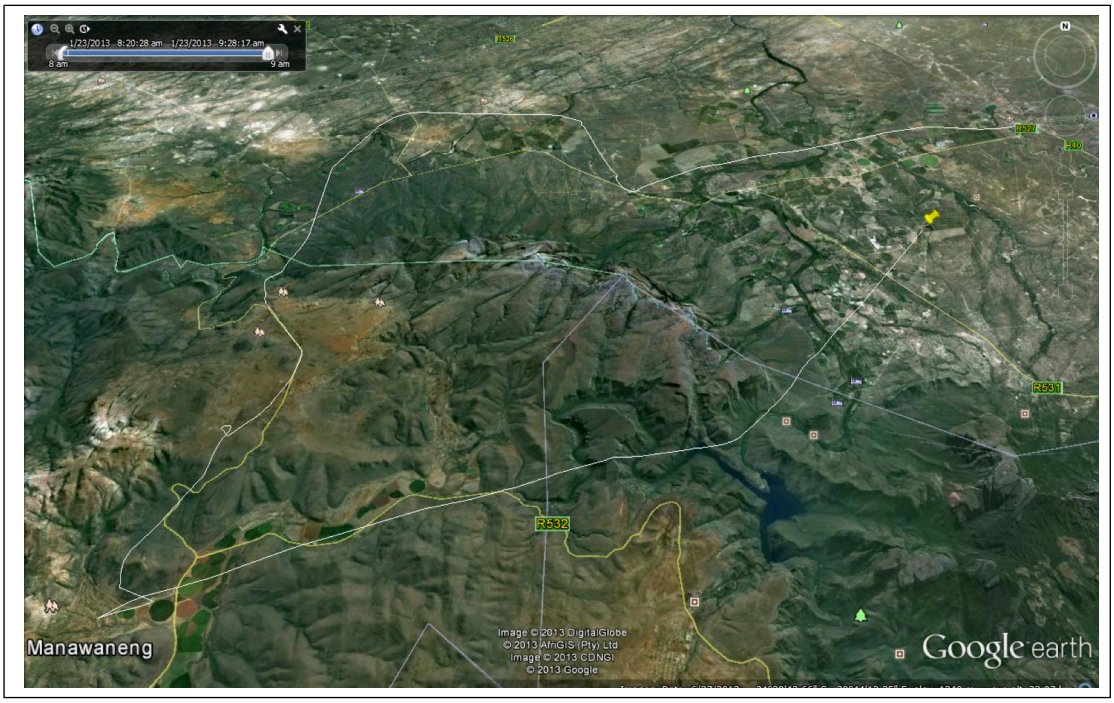
The proposed new power line corridor was surveyed with a helicopter and with a vehicle (where access roads existed) whilst pedestrian surveys of certain stretches of the power line corridor were undertaken. Track pathways were recorded with a mounted GPS instrument during a helicopter flight along the proposed new power line corridor as well as in a vehicle when the proposed power line corridor was followed by road. Pedestrian surveys were conducted from the main pathway that was recorded with the GPS instrument that was mounted in the vehicle.

The power line corridor was surveyed by the project team consisting of the following Eskom personnel (H. van Rensburg, K Roestrof, X Neethling); negotiators (P. Mosterd, R. Muldoon), environmental report compilers (R. Pretorius, E, Heyns) ornithologist (C. van Rooyen); botanist (W. Vlok) and the author (archaeologist) on three occasions, namely during: 20 & 21 September 2012, 10 & 11 October 2012 and on 23 & 24 January 2013. The author did additional fieldwork during three consecutive field surveys, namely on 11 & 12 March 2013, on 19 & 20 April 2013 and during 16 & 17 May 2013.

Photographs which illuminate the nature and character of the power line corridor can be viewed in ‘Part 6.1 The field survey’.

3.2 Databases, literature survey and maps

Literature relating to the pre-historical and the historical unfolding of Hoedspruit and part of the Drakensberg Escarp near the Project Area was reviewed. This review focused primarily on the pre-history as well as the Historical Period of the area. It provides a chronological outline of the region stretching from the pre-historical to the historical period which contributes to a better understanding of the identity and meaning of heritage sites which occur in and near the Eskom Project Area.



Figures 1 & 2- Track pathway for the proposed Eskom Project registered during the helicopter survey (above). A track pathway registered with a mounted GPS in a vehicle during one of several field surveys that was conducted for the Eskom Project. The 132kV Lemara to Olifants River power line represents the top of the project area (below).

The desktop study also involved consulting heritage data banks maintained at institutions such as the Mpumalanga Provincial Heritage Resources Agencies, the Archaeological Data Recording Centre at the National Flagship Institute (Museum Africa) in Pretoria and the national heritage resources register at the South African Heritage Resources Agency (SAHRIS) in Cape Town.

A number of Phase I HIA studies were done near the Eskom Project Area during the past decade, the results of which were published in several reports (see 'Select Bibliography', Part 8).

In addition, the Eskom Project Area was also studied by means of maps on which it appears (2430BC Strijdomtonnel & 2430BD Hoedspruit 1: 50 000 topographical maps; 2430 Pelgrimsrest 1:250 000 map & Google imagery).

3.3 Public meetings

Meetings between the public and the environmental consultants, negotiators, specialists and Eskom personnel were held on 16 and 17 May 2013. No concerns regarding any heritage issues were raised by the public during these meetings.

3.4 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 authorization (permits) from SAHRA to conduct the mitigation measures.

3.5 Some remarks on terminology

Terms that may be used in this report are briefly outlined below:

- Conservation: The act of maintaining all or part of a resource (whether renewable or non-renewable) in its present condition in order to provide for its continued or future use. Conservation includes sustainable use, protection, maintenance, rehabilitation, restoration and enhancement of the natural and cultural environment.
- Cultural resource management: A process that consists of a range of interventions and provides a framework for informed and value-based decision-making. It integrates professional, technical and administrative functions and interventions that impact on cultural resources. Activities include planning, policy development, monitoring and assessment, auditing, implementation, maintenance, communication, and many others. All these activities are (or will be) based on sound research.
- Cultural resources: A broad, generic term covering any physical, natural and spiritual properties and features adapted, used and created by humans in the past and present. Cultural resources are the result of continuing human cultural activity and embody a range of community values and meanings. These resources are non-renewable and finite. Cultural resources include traditional systems of cultural practice, belief or social interaction. They can be, but are not necessarily identified with defined locations.
- Heritage resources: The various natural and cultural assets that collectively form the heritage. These assets are also known as cultural and natural resources. 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.
- In-Situ Conservation: The conservation and maintenance of ecosystems, natural habitats and cultural resources in their natural and original surroundings.

- 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.
- Maintenance: Keeping something in good health or repair.
- 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 Project Area, to the first appearance or use of 'modern' Western writing brought to the Eastern Highveld by the first Colonists who settled here from the 1840's onwards.
- Preservation: Conservation activities that consolidate and maintain the existing form, material and integrity of a cultural resource.
- 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.
- Protected area: A geographically defined area designated and managed to achieve specific conservation objectives. Protected areas are dedicated primarily to the protection and enjoyment of natural or cultural heritage, to the maintenance of biodiversity, and to the maintenance of life-support systems. Various types of protected areas occur in South Africa.
- Reconstruction: Re-erecting a structure on its original site using original components.
- Replication: The act or process of reproducing by new construction the exact form and detail of a vanished building, structure, object, or a part thereof, as it appeared at a specific period.
- Restoration: Returning the existing fabric of a place to a known earlier state by removing additions or by reassembling existing components.
- 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).

- Sustainability: The ability of an activity to continue indefinitely, at current and projected levels, without depleting social, financial, physical and other resources required to produce the expected benefits.
- Translocation: Dismantling a structure and re-erecting it on a new site using original components.
- Project Area: refers to the area (footprint) where the developer wants to focus its development activities (refer to Figure 3).
- Phase I studies refer to surveys using various sources of data in order to establish the presence of all possible types and ranges of heritage resources in any given Project Area (excluding paleontological remains as these studies are done by registered and accredited palaeontologists).
- 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 human remains and the relocation of graveyards, etc. Phase II work involve permitting processes, require the input of different specialists and the co-operation and approval of SAHRA.

4 THE ESKOM PROJECT AREA

4.1 Location

The Eskom Project is situated to the north of the Drakensberg mountain range, approximately thirty kilometres to the west of Hoedspruit and approximately fifteen kilometres to the south-east of the village of Finala in the Mpumalanga Province. The area to the north of the Drakensberg Escarpment is characterised by irrigation agriculture along the banks of the Olifants River, Other landmarks include game reserves and the Swadini Holiday Resort which are all popular tourist destinations. The mining towns of Mica and Phalaborwa occur to the north-east and the lush tropical Tzaneen and Modjadji further to the north-west (2430BC Strijdomtonnel & Hoedspruit 1: 50 000 topographical map, 2430 Pelgrimsrest 1:250 000 map & Google imagery) (Figures A to G).

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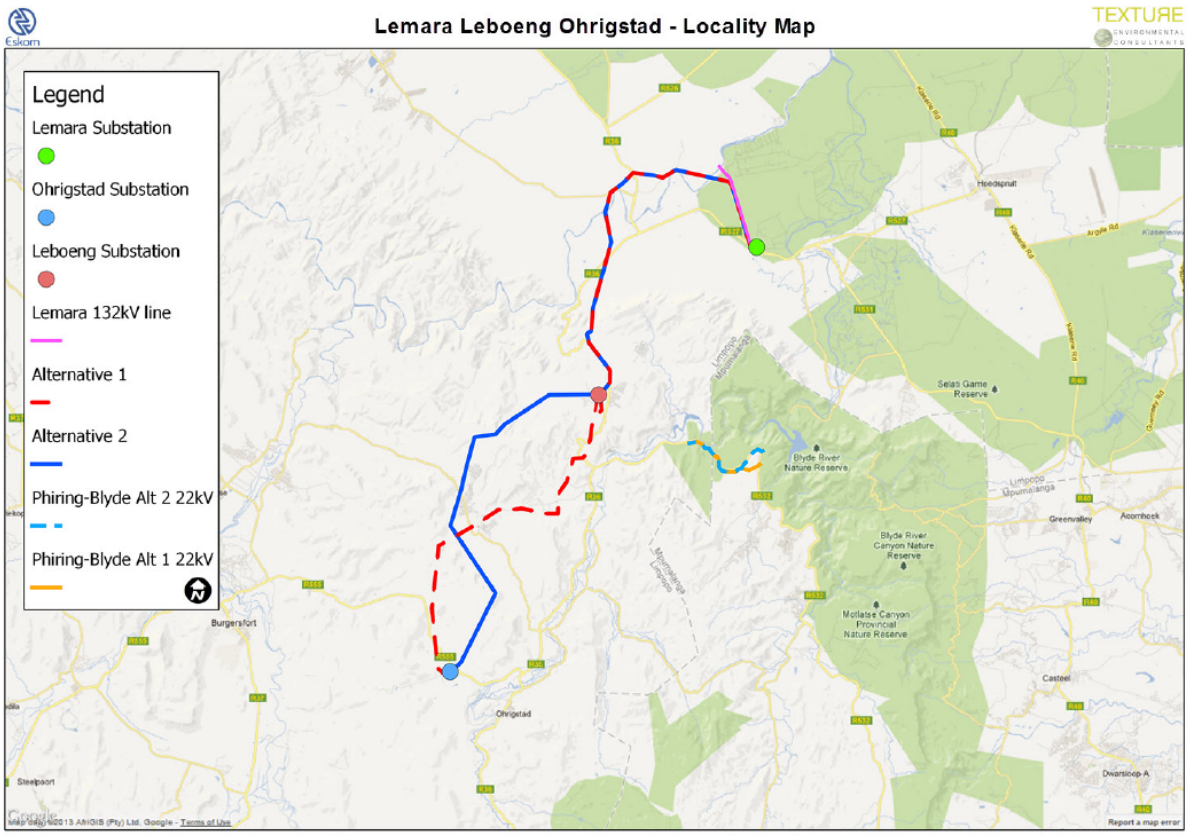


Figure 3- Regional map for the Eskom Project Area involving the 132kV Lemara to the Olifants River power line (pink coloured line) to the north of the Drakensberg Mountain range in the Mpumalanga Province (above).

4.2 The nature of the Eskom Project Area

The longest part (first and second stretches) of the proposed new 132kV power line runs along the shoulders of roads where disturbances have occurred as a result of the construction of these roads and fences. The last third (last) stretch runs across agricultural fields. The Eskom Project Area therefore cannot be described as pristine any longer

4.3 The nature of the Eskom Project

The key development components of the proposed Eskom Project include the following:

- The construction of the proposed 132kV power line between the Lemara Substation and the Olifants River. Currently, only one option is available for this line. However, the power line may have several options when it is extended from the Olifants River to different destinations in the future.

The construction of the proposed 22kV power line is referred to as the Eskom Project whilst the footprint for the proposed new power line is referred to as the Eskom Project Area.

5 CONTEXTUALISING THE PROJECT AREA

The following brief overview of pre-historical, historical, cultural and economic evidence will help to contextualise the larger region and the 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 to 250 000 years ago), the Middle Stone Age (refers to the period from 250 000 years to 22 000 years ago) and the Late Stone Age (the period from 22 000 years ago to 2 000 years ago).

Heritage surveys up to now have revealed few Stone Age sites in the area primarily as a result of the fact that these surveys did not focus on the recording of Stone Age sites. It can be expected that all the phases of the Stone Age may be presented in the region. Excavations conducted by the University of Pretoria in the Bushman rock shelter during the 1960's and 1970's has indicated that this mountainous area to the south of the Project Area hold Middle Stone Age (MSA) and Late Stone Age (LSA) sites which occur in rock shelters and in caves in the area.

The Late Stone Age is also associated with rock paintings and engravings which were done by the San, Khoi Khoi and in more recent times by Negroid (Iron Age) farmers. Rock paintings do occur in the Drakensberg particularly in KwaZulu/Natal further to the south (Maggs 1983, Smith & Zubieta 2007).

5.2 Iron Age remains

The Iron Age is associated with the first Bantu-Negroid 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).

Iron Age research along the Drankensberg Escarpment can be divided into two periods, namely the first phase which started with Early Iron Age (EIA) research after the discovery of the Lydenburg Heads and their publication in the early 1960's. Other sites belonging to other phases of the Iron Age were found and excavated hereafter. However, archaeological (heritage) research on the escarpment in general has been very restricted in areas as the work has been carried out within a 30km radius of Lydenburg.

The Lydenburg Valley has been occupied by Early Iron Age communities who also lived elsewhere in the Mpumalanga, Limpopo, KwaZulu-Natal and the North-West Provinces of South Africa during the 6th to the 9th centuries AD. One of the Early Iron Age sites which have been recorded near Lydenburg and which has produced the 'Lydenburg masks' in particular has won international academic acclaim for South Africa with regard to these unique and enigmatic objects (Whitelaw, G. 1996).

Based on ceramic typology, stratigraphy, and radio-carbon dates two cultural sequences consisting of four successive phases have been established for the EIA Drakensberg Escarpment near Lydenburg, namely (Evers 1977, 1980, 1981 & 1982):

- The Lydenburg Phase (Tradition) has been recognised as the first phase of the Iron Age. This phase dates between AD500 to 800. Five sites are associated with Lydenburg pottery namely the 'Head Site' (2530AB4), Doornkop (2530AB5), Plaston (2531AC1), Langdraai (2530AB24) and Klipspruit (2530AD17). These sites are all located on lower valley slopes in interfluve situations at the confluence of two streams. Sites are large and measures between 7 to 15 hectares.
- Sites belonging to the Klingbeil Phase (Tradition) appear to have a similar location and distribution than those of the Lydenburg Phase. Sites belonging to this phase include Langdraai and Doornkop which were re-occupied while at least two others occur in the Klingbeil Nature Reserve. A Klingbeil Tradition site located near Boomplaas (2530AB19) is situated close to a prehistoric

copper mine. The Klingbeil Phase has not been firmly dated but represents a continuum of the Lydenburg Tradition sites.

- In the Lydenburg area the Eiland Phase is poorly known. It represents the third phase of the local Iron Age but is still undated. It should fall in the range AD900-1400.
- The fourth or Marateng Phase of the Iron Age is associated with the stone walled sites of the Lydenburg area. Settlements are complexes of stone walling comprising of three basic units, namely homesteads, terraces and cattle tracks. Settlement location favours lower foot slopes of mountains and spur ends. Two stone walled settlement types can be distinguished, namely simple and more complex settlement types.

In Pedi oral tradition the Late Iron Age people (Marateng Phase of the Iron Age) who lived near Ohrigstad and Lydenburg were called Bakoni. The Bakoni originated from south-east Swaziland and moved westwards across the Drakensberg Escarpment to settle at Maŝaŝane - north-west of Polokwane during AD1730, a date which is not accepted by all researchers. However, some of these Koni moved south close to the Apies River around AD1790-1800 whilst numerous other fragments - which hived off from the main body – also moved onto the Highveld and into Sekhukhuneland (Collett 1979, 1983; Delius 1984; Maggs 2008; Makhura 2007' Delius & Schoeman 2008).

5.3 The Historical Period

The northern slopes and spurs of the Drakensberg Mountains near the Project Area is home to the Lowveld-Sotho who comprises of various clans each with a different origin, history, cultural affiliation and homeland which they have occupied at different times during the last three to four centuries. These clans include the Kolobe, Nareng, Tlhabine and the Kgaga. The Lobedu live further to the north, outside the Project Area but have left cultural influences on the Lowveld-Sotho.

The Kolobe clans (totem: 'kolobe', bush pig) are derived from the Lobedu who live closer to Tzaneen and Modjadji. This group include the Kolobe of Mmamaila,

Sekgôpô, Mmamabolo and Rakwadu who have a lesser bearing on the Project Area than the clans discuss below (Kruger 1936).

The Nareng (totem: ‘nare’, buffalo) used to control a vast sphere of influence along the northern Drakensberg which bordered on the Lobedu. The influence of the Nareng of Sekorôrô reached a height during AD1827 to AD1830 when famine ravaged the Lowveld and when cannibalism was a common occurrence. However, the Lowveld-Sotho’s influence was diminished when the Makgakala of Mafêfê (a break-away faction from the Pedi) took control of the Lowveld. The Lowveld-Sotho clans voluntarily, in order to avoid conflict, accepted their protection. The Makgakala was driven out of the Lowveld by the Pedi who was assisted by the Nareng of Sekorôrô in AD1900. After a dispute the tribe divided into two sections (Van Warmelo 1935; Krige 1937).

The Nareng of Letswalo also extended their influence at an early period to the borders of the Lobedu and took control of the Tlhabine of Mokgoboya and part of the Nkuna homeland. Due to internal strife after AD1800, consecutive raids by the Swazi between AD1857 and AD1860, wars with the Lobedu in AD1863 and attacks by the Pedi during AD1870 to AD1880 caused their influence to dwindle. Their support of the Tlou of Makgobo (Magoebaskloof) who refused to pay taxes to the ZAR finally led to a crushing defeat.

South-east of the Nareng of Sekorôrô live the Koni of Mamitša whilst the Kgaga of Maake and the Tlhabine of Mokgoboya live to the north-east. Both the Mamitša and Kgaga are derived from the Koni and both have the ‘phuti’ (‘duiker’) as a totem. The origin of the Tlhabine of Mokgoboya is unknown. Their totem (‘noko’, porcupine) is shared by both the Pedi and the Malatji (Krige 1937).

The colonial towns closest to the Project Area include Ohrigstad to the south of the Drakensberg and Hoedspruit to the north of the mountain range.

The village of Ohrigstad was founded in 1845 by the Voortrekker leader Andries Hendrik Potgieter and his followers. The establishment of the village occurred as a

result of political and geographic reasons, namely being close to the port at Lourenco Marques.

Ohrigstad was laid out in the well-watered valley of the present day Ohrigstad River, a tributary of the Olifants River. In June 1845 the town was established with broad streets and a fort for protection. The name chosen was Andries-Ohrigstad in honour of Potgieter and the Dutch benefactor Ohrig.

The residents were tormented by malaria carrying mosquitos and stoically suffered their visitation for three years. However, in the summer of 1848-49 the number of deaths from malaria reached epidemic proportions. Potgieter and some of his followers moved north to the Soutpansberg whilst others moved to Lydenburg. Ohrigstad was finally abandoned in 1849.

The present day village was established in 1923. The main crops of the area are citrus fruit, tobacco and wheat currently grown under irrigation from the Ohrigstad Dam. Other sites of historical interest include:

- The ruins of the original fort and abandoned village occur along the R36. On 10 October 1942 the remains of those who died from malaria and other causes during AD1845 to AD1850 were re-interred under a concrete replica of an ox wagon tilt.
- The Andries Hendrik Potgieter Memorial Hall was inaugurated in 1950 in honour of Andries Potgieter and the other founders of Ohrigstad (Bergh 1992; Erasmus 1995).

The origin of the name of the town of Hoedspruit is unknown. The reverend Frans Lion Cachet of the Dutch Reformed Church hold a meeting here as early as 1865. The meeting took place on the original farm which was also known as Hoedspruit. The town was surveyed in 1869. Today the village is the junction where the sixty kilometre branch railway line from Phalaborwa joins the Kaapmuiden-Soekmekaar line (Bergh 1992; Erasmus 1995).

6 THE PHASE I HERITAGE SURVEY AND ASSESSMENT

6.1 The proposed 132kV Lemara to the Olifants River power line

This proposed power line will run along the following three stretches, namely:

- The first stretch runs from the Lemara Substation westwards for approximately 500m along the northern shoulder of the R36 (which runs between Ofcalaco and Hoedspruit).
- The second stretch bends to the north-east and runs across Richmond 604KT and Liverpool 202KT following the eastern shoulder of a dirt road and a fence to the border of an eco-residential development on Liverpool 202KT.

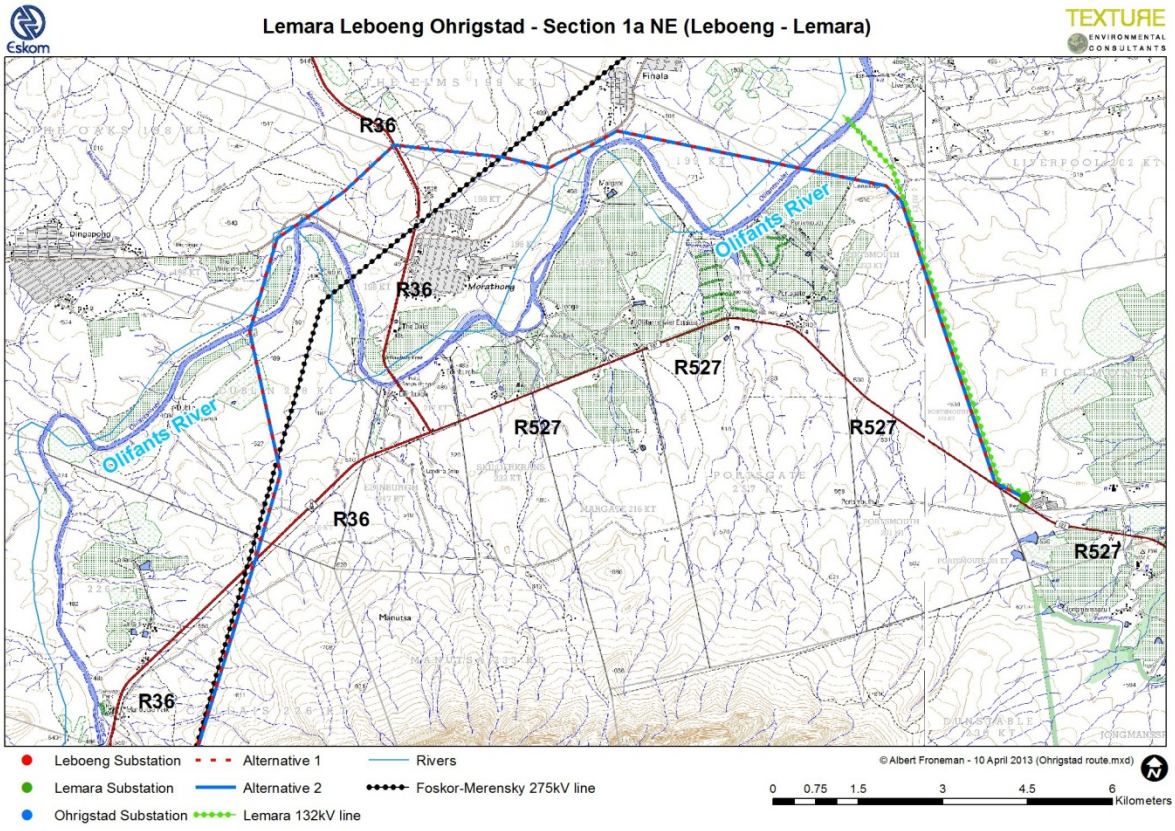


Figure 4- The Eskom Project Area involving the construction of the 132kV Lemara to the Olifants River power line (dotted green line) near Hoedspruit and the village of Finala in the Mpumalanga Province (above).

- The third stretch bends to the north-west at the end of the dirt road and runs across orchards before ending at the Olifants River.

6.2 The field survey

The field survey is briefly discussed and illuminated with photographs.

Figures 5 & 6- The Lemara Substation on Richmond 604KT from where the 132kV power line departs (above). The first stretch follows the northern shoulder of the R36 which runs between Ofcolaco and Hoedspruit (below).

Figures 7 & 8- The proposed 132kv Lemara power line runs across Richmond 604KT and Liverpool 202KT along the eastern shoulder of a dirt road and a border fence (above). The power line follows a two track dirt road along the fence. The last stretch of the power line bends to the north-west and follows Alternatives 01 and 02 for the Lemara/Leboeng power line (indicated in red). This stretch crosses orchards (best illuminated by means of a Google image) before ending at the Olifants River (below).

6.3 Conclusion

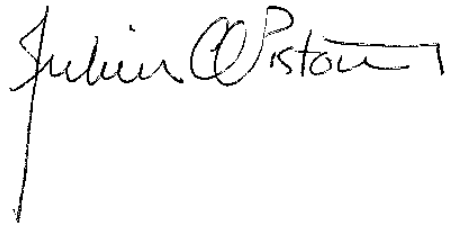
No heritage resources were observed along the proposed new 132kV power line between the Lemara Substation and the Olifants River.

There is consequently no reason from a heritage point of view why the Eskom Project consisting of the construction of the 132kV power line between the Lemara Substation and the Olifants River cannot proceed.

7 CONCLUSION AND RECOMMENDATIONS

No heritage resources were observed along the proposed new 132kV power line between the Lemara Substation and the Olifants River.

There is consequently no reason from a heritage point of view why the Eskom Project consisting of the construction of the 132kV power line between the Lemara Substation and the Olifants River cannot proceed.



Archaeologist & Heritage Consultant
Member ASAPA

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APPENDIX A: DETAILS OF THE SPECIALIST

Profession: Archaeologist, Museologist (Museum Scientists), Lecturer, Heritage Guide Trainer and Heritage Consultant

Qualifications:

BA (Archaeology, Anthropology and Psychology) (UP, 1976)

BA (Hons) Archaeology (distinction) (UP, 1979)

MA Archaeology (distinction) (UP, 1985)

D Phil Archaeology (UP, 1989)

Post Graduate Diploma in Museology (Museum Sciences) (UP, 1981)

Work experience:

Museum curator and archaeologist for the Rustenburg and Phalaborwa Town Councils (1980-1984)

Head of the Department of Archaeology, National Cultural History Museum in Pretoria (1988-1989)

Lecturer and Senior lecturer Department of Anthropology and Archaeology, University of Pretoria (1990-2003)

Independent Archaeologist and Heritage Consultant (2003-)

Accreditation: Member of the Association for Southern African Professional Archaeologists. (ASAPA)

Summary: Julius Pistorius is a qualified archaeologist and heritage specialist with extensive experience as a university lecturer, museum scientist, researcher and heritage consultant. His research focussed on the Late Iron Age Tswana and Lowveld-Sotho (particularly the Bamalatji of Phalaborwa). He has published a book on early Tswana settlement in the North-West Province and has completed an unpublished manuscript on the rise of Bamalatji metal workings spheres in Phalaborwa during the last 1 200 years. He has written a guide for Eskom's field personnel on heritage management. He has published twenty scientific papers in academic journals and several popular articles on archaeology and heritage matters. He collaborated with environmental companies in compiling State of the Environmental Reports for Ekhurhuleni, Hartebeespoort and heritage management plans for the Magaliesberg and Waterberg. Since acting as an independent consultant he has done approximately 800 large to small heritage impact assessment reports. He has a longstanding working relationship with Eskom, Rio Tinto (PMC), Rio Tinto (EXP), Impala Platinum, Angloplats (Rustenburg), Lonmin, Sasol, PMC, Foskor, Kudu and Kelgran Granite, Bafokeng Royal Resources etc. as well as with several environmental companies.

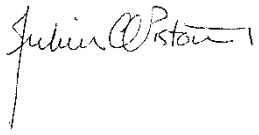
APPENDIX B: DECLARATION OF INDEPENDENCE

I, Julius CC Pistorius, declare that:

•I act as the independent environmental practitioner in this application
•I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant
•I declare that there are no circumstances that may compromise my objectivity in performing such work;
•I have expertise in conducting environmental impact assessments, including knowledge of the National Heritage Resources Act (No 25 of 1999) and any guidelines that have relevance to the proposed activity;
•I will comply with the Act, regulations and all other applicable legislation;
•I will take into account, to the extent possible, the matters listed in regulation **8** of the regulations when preparing the application and any report relating to the application;
•I have no, and will not engage in, conflicting interests in the undertaking of the activity;
•I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
•I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
•I will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
•I will keep a register of all interested and affected parties that participated in a public participation process; and
•I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not
•all the particulars furnished by me in this form are true and correct;
•will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
•I realise that a false declaration is an offence in terms of regulation 71 and is punishable in terms of section 24F of the Act.

Disclosure of Vested Interest

I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2010.



_____
Signature of the environmental practitioner:
Private Consultant

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Name of company:
5 January 2012

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Date:

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Signature of the Commissioner of Oaths:

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Date:

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Designation: