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**A PHASE I HERITAGE IMPACT ASSESSMENT (HIA) STUDY FOR
ESKOM'S PROPOSED SILIMELA PROJECT NEAR GROBLERSDAL
IN THE LIMPOPO 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 Silimela Project in the Limpopo Province of South Africa. The construction of the proposed Eskom Silimela Project is hereafter referred to as the Eskom Project whilst the footprint of the proposed Eskom Project is referred to as the Eskom Project Area.

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 proposed Eskom Silimela Project did not reveal the presence of any of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) in the Project Area.

There is consequently no reason from a heritage point of view why Eskom's proposed Silimela Project should not continue.

General (disclaimer)

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 Eskom's proposed Silimela 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 notified 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.

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1 INTRODUCTION

This document contains the report on the results of the Phase I Heritage Impact Assessment (HIA) study that was done for Eskom's proposed Silimela Project (Eskom Project) near Groblersdal in the Limpopo Province of South Africa.

Focused archaeological research has been conducted in the Limpopo 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 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 form a record of the heritage of most groups living in South Africa today.

Heritage resources in the Limpopo Province therefore constitute a rich and wide diversified range (comprising the 'national estate') as outlined in Section 3 of the National Heritage Resources Act (Act 25 of 1999) (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 TERMS OF REFERENCE

Eskom intends to construct the Eskom Silimela Project near Groblersdal in the Limpopo Province. This 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 Eskom Project. Eskom needs this knowledge in order to take proactive measures with regard to any heritage resources that may be affected, damaged or destroyed when the Eskom Project is implemented. Mbofho Consulting and Project Managers, the environmental consultant responsible for the environmental authorisation therefore commissioned the author to undertake a Phase I HIA study for 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 THE ESKOM PROJECT AREA

3.1 Location

The Eskom Project Area is located near Groblersdal in the Groblersdal District Municipality within the Elias Motsoaledi Municipality in the Limpopo Province. The proposed new 132kV power line runs across the farms Klipbank 26JS and Vaalfontein 14JS on the western outskirts of the town of Groblersdal. The Phase I HIA study therefore was limited to the corridor for the proposed new 132kV power line which will run between the Groblersdal Substation and the Silimela Substation (2529AB Groblersdal; 1:50 000 topographical map; 2528 Pretoria 1:250 000 map and Google imagery) (Figures 1 & 2).

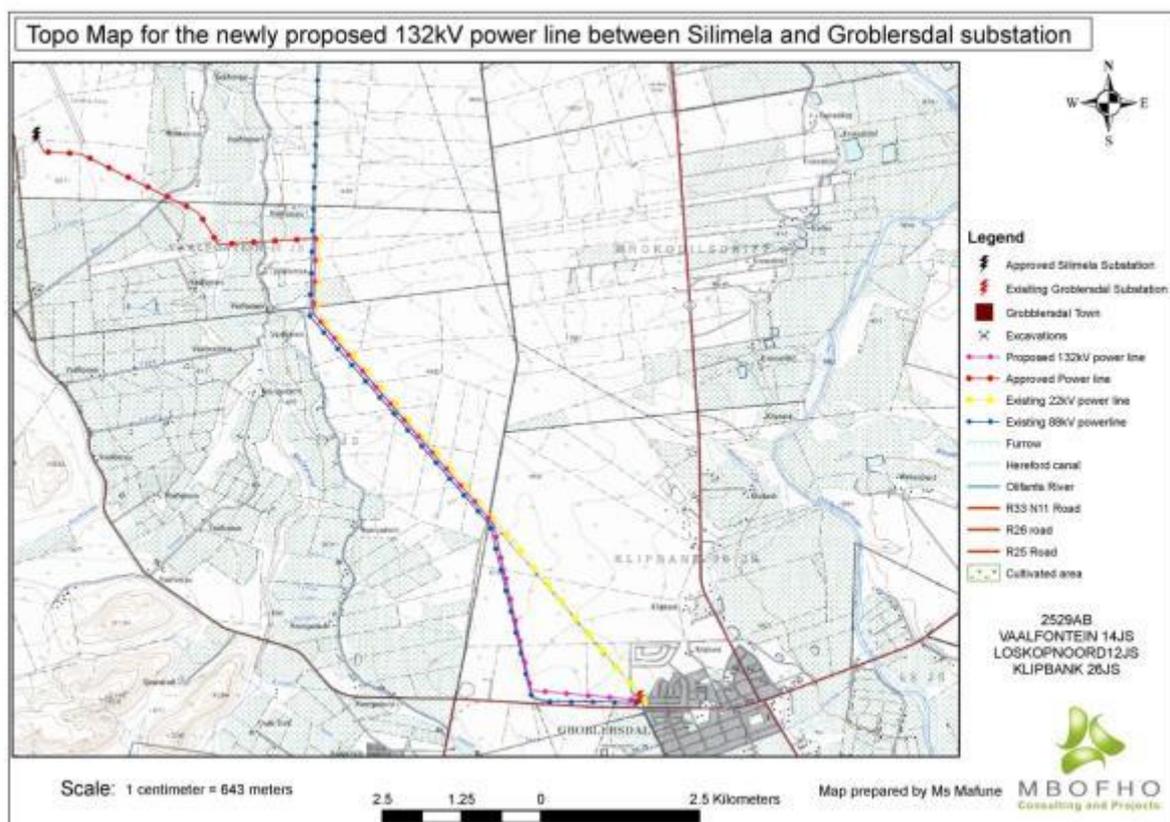


Figure 1- The Eskom Simelela Project involves the construction of a proposed new 132kV power line from the Groblersdal Substation to the Simelela Substation to the west of Groblersdal in the Limpopo Province (above).

3.2 Development components of the Eskom Project

The Eskom Silimela Project entails the construction of approximately 14.5 km of 132kV power line from the existing Groblersdal substation to an approved loop in loop out power line that emanates from the approved Silimela substation (Figure 1).

3.3 Nature of the Eskom Project Area

The study area is situated in the savanna biome and any natural woodland occurring within the study area consists entirely of Central Sandy Bushveld (Mucina & Rutherford 2006). This particular woodland type occurs in low undulating areas, sometimes between mountains and sandy plains supporting tall, deciduous *Terminalia sercia* and *Bureka Africana* woodland on deep sandy soils and low broad leafed *Combretum* woodland on shallow rocky or gravelly soils. The natural woodland in the study area has been disturbed by both past and present agricultural practices. Evidence of bush clearing and removal of trees is clearly visible to the west of the proposed alignment, where commercial agriculture, alongside the Moses River, dominates the landscape. This has resulted in very little undisturbed woodland remaining. Structurally the woodland to the east of the proposed alignment ranges from open shrub with scattered trees, to dense shrubs with many medium to large trees, depending on the level of bush clearing which happened in the past. Game and cattle farming practices are prevalent to the east of the proposed alignment.

4 METHODOLOGY

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

4.1 Fieldwork survey

The proposed Eskom Project Area was surveyed with a vehicle where roads provided access to the corridor. Some stretches of the proposed new power lines were surveyed on foot. It must be noted that the proposed new power line corridor follows two existing corridors which were previously constructed and which therefore imply that the proposed power line corridor do not represent a pristine stretch of land any longer.



Figure 2- A main track log was registered during the survey for Eskom's proposed Silimela Project. Pedestrian surveys were conducted from this main track (above).

The results of the field survey are illuminated in photographs in this report. These photographs also illustrate the nature and the characteristics of the Eskom Project Area (Part 6.1 'Field survey').

A track was recorded with a mounted GPS instrument which outlines the main tracks that were recorded during the survey. Pedestrian surveys were done from these main tracks (Figures 2 & 3).

4.2 Databases, literature survey and maps

Literature relating to the pre-historical and the historical unfolding of the Eskom Project Area was reviewed. This review focused primarily on the pre-history as well as the Historical Period of the Groblersdal region. It also provided a chronological history 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 may occur in and near the Eskom Project Area.

The desktop study also involved consulting heritage data banks maintained at institutions such as the Limpopo 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.

In addition, the Eskom Project Area was also studied by means of maps on which it appears (2529AB Groblersdal; 1:50 000 topographical map; 2528 Pretoria 1:250 000 map and Google imagery) (Figures 1 & 2).

Several heritage impact assessment studies were also done near the Eskom Project Area, namely:

- Pistorius, J.C.C. 2002a. *A Phase II investigation of a Late Iron Age site on the farm Blaauwbank 168JS in the proposed new Blueridge West Platinum Mine's premises in the Mpumalanga Province of South Africa*. Unpublished report prepared for SRK Consulting Engineers, Cluff Platinum and the South African Heritage Resources Authority (SAHRA).'

- Pistorius, J.C.C. 2002b. *A cultural heritage impact assessment for the farm Loskop 53JS for the scoping phase of the EMPR for the proposed Sheba's Ridge Platinum Mine in the Mpumalanga Province of South Africa*. Unpublished report prepared for SRK Consulting.
- Pistorius, J.C.C. 2002c. *A Cultural Heritage impact assessment for the farm Blaauwbank 168 for the scoping phase of the EMP for the proposed Blue Ridge West Platinum Mine*. Unpublished report prepared for SRK Consulting Engineers and Cluff Platinum.
- Pistorius, J.C.C. 2002d. *An extended Phase I Heritage Impact Assessment study for the surface infrastructure for the proposed Blue Ridge West Platinum Mine on the farm Blaauwbank 168 JS in the Mpumalanga Province of South Africa*. Unpublished report prepared for SRK Consulting Engineers and Cluff Platinum.
- Pistorius, J.C.C. 2006. Phase I Heritage Impact Assessment (HIA) study for the upgrading of the Groblersdal Water Treatment Works (WTW) in the Limpopo Province of South Africa. Unpublished report for Landscape Dynamics.
- Pistorius, J.C.C. 2008. Phase I Heritage Impact Assessment (HIA) study for the upgrading of the EMP amendment for Blue Ridge West near Groblersdal in the Mpumalanga Province of South Africa. Unpublished report for Cluff Platinum.

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 authorization (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 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.

5 CONTEXTUALISING THE PROJECT AREA

A brief overview of pre-historical and historical information below contextualises the Eskom Project Area. This information is necessary to understand the meaning and significance of heritage resources which may exist in 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 (this covers the period from 2.5 million years ago to 250 000 years ago), the Middle Stone Age (this 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 2 000 years ago) (Inskeep 1978; Deacon & Deacon 1999).

Heritage surveys have revealed significant numbers of Middle Stone Age sites in the Loskop Dam Nature Reserve as well as in Sheba's Ridge and Blueridge mining areas (Pistorius 2002a, 2002b, 2002c & 2002d).

The Late Stone Age is associated, amongst other things, with rock paintings and engravings done by the San, the Khoi Khoi and, in more recent times, by Negroid (Iron Age) farmers.

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 (this covers the 1st millennium AD) and the Later Iron Age (this covers the first 880 years of the 2nd millennium AD) (Mason 1962).

It seems that the Groblersdal area may have been occupied by Early Iron Age communities like those who also lived elsewhere in the Mpumalanga, Limpopo, KwaZulu-Natal and the North-West Province regions of South Africa during the 6th to the 9th centuries AD. Early Iron Age sites have been recorded near Marble Hall, and some of the Iron Age remains that have been discovered in the Loskop Dam Nature Reserve and in the Sheba's Ridge mining area may date back to the Early Iron Age.

According to oral tradition, two clans can be associated with the Groblersdal area prior to the arrival of the first Colonists in the late 19th century, namely the Bakôpa people of Maleo, and the Bantwane. The histories of these two Late Iron Age communities are therefore briefly reviewed below in order to determine whether these groups may have had any historical link with the broader Sheba's Ridge mining area (Mönnig 1978).

In the first half of the 19th century, the Kôpa lived at Maleoskop on the Riet River, a tributary of the Olifants River, on what are today the farms Rietkloof 166JS and Weltevreden 165JS. Although the Kôpa had lived in this area before the first Colonists arrived, the farms were given to settlers. In 1859/60 the ZAR government bought the farms from their owners and rented the farms to the Kôpa, on condition that the Kôpa pay their taxes and obey the ZAR government.

The Berlin missionaries Alexander Merensky and Heinrich Grütznier established the Gerlachshoop missionary station on the farm Rietkloof when they started their missionary work there in 1860.

The Kôpa, like the Ndzundza-Ndebele of Mabhogo near Roosenekal in the east, had a hostile relationship with the ZAR. They prevented ZAR officials from collecting taxes and they sent armed reinforcements to the Ndzundza-Ndebele whenever the Ndzundza-Ndebele expected to be attacked by the ZAR government.

A combined force of Pedi warriors and ZAR soldiers attacked the Kôpa in the second half of 1863. This attack was a response to an earlier attack by the Ndzundza-Ndebele and the Kôpa on the Pedi. The Kôpa successfully repulsed the attack. However, the Swazi then attacked the Kôpa on 10 May 1864 and dealt them a crushing defeat. More

than 850 Kôpa warriors were killed and 2 500 warriors and women were taken prisoner. Boleu, the Kôpa chief, was killed. He was succeeded by his son Ramapudu.

The Bantwane originated from Botswana and were a branch of the Kwena (the Bamangwato). Under the leadership of Chief Mathabathe, they migrated to Thabazimbi. There the group split.

A junior section led by Ngwato fled to the Kranskop area near Nylstroom (Modimolle), where Ngwato died around AD 1730. Makoni Mathabathe, who ruled for a short period (c. 1730 to 1735), succeeded Ngwato. Mohlamme Mathabathe I succeeded his father in c. 1735 and led the clan to the Warmbaths area and from there back to Thabazimbi, where he died in 1855.

Mothebedi Mathabatha led the senior section of the clan from Thabazimbi to Groblersdal, probably to what is today the farm Bloempoot, where he died around 1780. His son, Ramatshedi Mathabatha, succeeded him and ruled until 1805. Ramatshedi and his brother Chipani later quarrelled, and Chipani fled. A battle ensued at Schoonoord. Chipani fled to the farm 'Legi' (Vlaklaagte) in the Bronkhorstspruit area. He was later killed by Ramatshedi, who then consolidated the clan.

Ramatshedi settled at Vlaklaagte, where he died. Mohlamme Mathabathe II succeeded his father in 1805 and he led the clan to what is today Schilpadfontein. They remained there only briefly, as the Kgatla had already occupied the area. Kaukhane (or Kau), Mohlamme Mathabatha II's son, succeeded him in AD 1823 and led the clan back to Schoonoord in Sekhukhuneland. When Mzilikazi attacked the Bantwane, Kau was killed (sometime between 1835 and 1837).

The clan was scattered by Mzilikazi and a group of the Bantwane fled to the Pietersburg (Polokwane) area. The rest stayed on in the Rooigrond area under the leadership of Mathebe Mathabathe, one of Kau's brothers.

Conflict arose on Rooigrond between Mathebe and Monamudi, the Bakgopa chief. Mathebe moved to an area now named after him, Mathebeskloof, where he and his people remained for a while before moving to what is today the farm Uitspanning. They

later moved again, this time to Mathebe-se-kop in the Nebo area, where Mathebe died in 1865.

Ramatsedi Mathebe I succeeded his father Mathebe at Mathebe-se-kop. The tribe then moved to Maloek-syn-kop, where the group clashed with the Kgatla chief, Maluk. (They moved back to Mathebe-se-kop on the advice of Sekhukhune, the chief of the Pedi). Here they lived for four years before the Sekhukhune-land war broke out in 1872. They moved back to Uitspanning, where they came into conflict with the owner of the farm, Lourens Erasmus. The clan then moved to Witpankloof, where Ramatshedi died in 1896.

Ramatshedi was succeeded by his brother Paledi Mathebe. The clan bought the farm Kwarrielaagte, where Paledi died in 1923. He was buried in the cattle kraal of the *mosate* (capital). Kwarrielaagte, thirty kilometres to the south-west of Groblersdal, together with Elandsdoorn, Waterkloof and Valschfontein, became the Bantwane's permanent home. These farms are located to the south-west of the Sheba's Ridge mining area.

5.3 The historical period

The Eskom Project Area is located near Groblersdal and approximately twenty five kilometres to the north of the Loskop Dam. Both the town and the dam came into being as a result of the historical events that unfolded during the early 20th century.

Groblersdal is situated on the Olifants River and owes its origin to the Hereford and the Loskop irrigation schemes on the Olifants River. These schemes were started in 1930 and in 1935 respectively, thanks to the initiative of Willem Jacobus Grobler. The town was laid out on the farm Klipbank 267JS ('rocky ridge') and was named after Grobler. It was proclaimed on 9 March 1938, when the Loskop Dam irrigation scheme was nearing completion.

Investigations into the feasibility of a dam on the Olifants River had already started in 1905. Eventually the farm Loskop, approximately 48km to the north of Middelburg,

was chosen as the site, and construction of the dam began in 1934. The names of both the farm and the dam were derived from a lone hill in the otherwise open veldt. (The hill was submerged in the waters of the dam, but is occasionally visible when the water level drops significantly.)

The dam was completed in 1938. It had a capacity of 178 million m³, held behind a 45m wall. (The wall was recently raised about 9m to increase the capacity of the dam to about 360 million m³). Work then proceeded on the construction of two large canals, with a total length of 148km on either side of the river, below the dam. These canals, together with a network of subsidiary concrete-lined furrows irrigate some 28 000 ha of land. An area of 12 775 ha around the dam has been set aside as a nature reserve, which is home to virtually all the southern African species of antelope and a few white rhino, in addition to many birds.

The main crops grown in the area are cotton, sunflower seed, ground nuts, maize, wheat, lucerne, tobacco, vegetables and citrus. Vineyards have also been planted and the vines have adapted successfully to the semi-tropical climate of the area (Bergh 1998; Erasmus 1995).

6 THE PHASE I HERITAGE IMPACT ASSESSMENT STUDY

6.1 Field survey

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



Figures 3 & 4- The proposed new 132kV power line will leave the Groblersdal Substation on Klipbank 26JS (above) and will run parallel with an existing 88kV and a 22kV power line to the Simelela Substation (below).





Figure 5- The first stretch of the proposed new 132kV power line will run parallel with the national road running into Groblersdal before turning to the north-west on Klipbank 26JS (above).



Figure 6- The second and third stretches of the proposed new power line runs across relatively pristine veld on Klipbank 26JS before entering the switching station where the last stretch of the power line will bend to the north (above).



Figures 7 & 8- The last stretch of the proposed new power line will run between agricultural fields to a pylon where the proposed new power line will end (above and below).



6.2 Types and ranges of heritage resources

The Phase I HIA study for the proposed Eskom Project did not reveal the presence of any of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) in the Eskom Project Area.

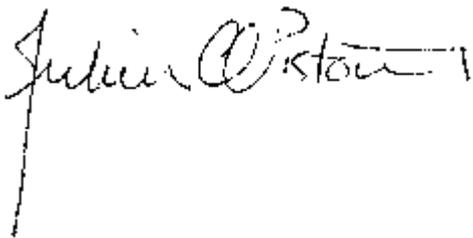
There is consequently no reason from a heritage point of view why Eskom's proposed Silimela Project should not continue.

7 CONCLUSION AND RECOMMENDATIONS

The Phase I HIA study for the proposed Eskom Similela Project did not reveal the presence of any of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) in the Project Area.

There is consequently no reason from a heritage point of view why Eskom's proposed Silimela Project should not continue.

If any heritage resources of significance is exposed during Eskom's proposed Simelela 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.

A handwritten signature in black ink, appearing to read 'Julius CC Pistorius', with a vertical line extending downwards from the start of the signature.

DR JULIUS CC PISTORIUS
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)

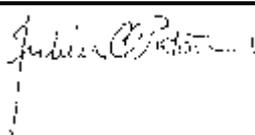
Lecturer and Senior lecturer Department of Anthropology and Archaeology, University of Pretoria (1990-2003)

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 Ekurhuleni, 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

<p>I, Julius CC Pistorius, declare that:</p> <ul style="list-style-type: none"> • 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. <p>Disclosure of Vested Interest</p> <p>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.</p>
<p></p> <p>_____ Signature of the environmental practitioner:</p> <p>Private Consultant</p> <p>_____ Name of company:</p> <p>24 July 2015</p> <p>_____ Date:</p>