

Prepared for:
URGENEG
ESKOM NORTHERN REGION

**A PHASE I HERITAGE IMPACT ASSESSMENT STUDY FOR
ESKOM'S PROPOSED NEW 132KV POWER LINE BETWEEN
THE LEBOWA SUBSTATION AND THE PROPOSED NEW
DWAALKOP SUBSTATION IN LEBOWAKGOMO AND
CHUNIESPOORT 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 (Act 25 of 1999) was done for Eskom's proposed new project in Lebowa and Chuniespoort in the Limpopo Province. The Eskom Project involves the construction of a proposed 132kV power line between the Lebowa Substation and the Dithabaneng Substation; the construction of a proposed 132kV power line between the Dithabaneng Substation and the proposed new Dwaalkop Substation and the construction of a 132kV loop-in-loop out power line between the Middelpunt-Dithabaneng power line and the proposed Boynton Substation. Whilst this development is referred to as the Eskom Project the footprints of these developmental components are referred to as the Eskom Project Area.

It is possible that the Eskom Project may impact on some of the types and ranges of heritage resources as outlined in Section 3 (see Box 1) of the National Heritage Resources Act (No 25 of 1999). The aims with this Phase I HIA study were the following:

- 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) (Box 1) do occur in the Eskom Project Area and, if so, to determine the nature, the extent and the significance of these remains.
- To determine whether these remains will be affected by the proposed Eskom Project and, if so, to evaluate what appropriate mitigation and management measures could be taken to reduce the impact of the proposed development on these heritage resources.

Considering the results of earlier heritage reports in conjunction with the findings of this heritage impact assessment it can be concluded that the following types and ranges of heritage resources occur in and near the Eskom Project Area, namely:

- The demolished village of Maneeng (next to Makurung village) holds at least eighty seven (87) graveyards and graves which are associated with a hundred and forty four (144) deceased individuals. Most of the graves are undecorated and it is highly likely that the majority of graves are older than sixty years (Roodt 2006).
- A single grave which is possibly older than sixty years occurs near Alternative 01 and Alternative 02 for the proposed new 132kV Lebowa-Dithabaneng power line.

(A scatter of isolated stone tools which were earlier recorded for the Lonmin-Dwaalkop Project has no bearing on this report as these occur far to the west of Eskom's Project Area [Pistorius 2009]).

Approximately ten of the graveyards in the demolished village of Maneeng (Nos 78-87) occur near the north-western corner of the village of Makurung where Alternative 01 for the proposed 132kV power line between the Dithabaneng Substation and the proposed Dwaalkop Substation power line will run. Alternative 02 for this power line runs across the demolished village of Maneeng where the majority of graveyards are located. All the graveyards in Maneeng have been geo-referenced and mapped (Figure 11) and their coordinates are indicated (Table 2).

The significance of the graveyards and graves

All graveyards and graves can be considered to be of high significance and all graveyards and graves are protected by various laws. Legislation with regard to graveyards and 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).

Possible impact on the graveyards

It is possible that the single grave (G01) near Alternative 01 and Alternative 02 for the proposed 132kV Lebowa Substation to Dithabaneng Substation power line may be affected by the Eskom Project whilst the construction of Alternative 02 for the proposed 132kV Dithabaneng Substation to the proposed Dwaalkop Substation may affect a number of graveyards if this alternative is used.

Consequently, mitigation measures are outlined for those graveyards and graves which may be affected by the Eskom Project.

Mitigating the graveyards and grave

If any of the graveyards or graves may be affected by the proposed Eskom Project the following mitigation measures have to be applied:

- If any graveyard or the single grave (G01) is going to be affected indirectly, i. e. the power lines or the pylons will be strung 30m or more away (and not closer) to any graveyard or the single grave (G01), the contractor must implement precautionary measures to prevent that any graveyard or the single grave (G01) is affected during the construction of the power lines, e.g. by means of demarcating the graveyards or the single grave (G01) with a fence. Access must exist for any relatives or friends who wish to visit the deceased after the power line has been constructed.

- If any graveyard or the single grave (G01) is going to be affected directly i.e. a power line must be strung above a graveyard or the grave or a pylon must be constructed on top of any graveyard or the single grave (G01) such a graveyard or the single grave (G01) must be exhumed and relocated. The exhumation of human remains and the relocation of graveyards are regulated by various laws, regulations and administrative procedures. This task is undertaken by forensic archaeologists or by reputed undertakers who are acquainted with the administrative procedures and relevant legislation that have to be adhered to whenever human remains are exhumed and relocated. The graveyards include graves which are older than sixty years. The process therefore includes social consultation with a 60 days statutory notice period (for the graves which are older than sixty years). Permission for the exhumation and relocation of human remains have to be obtained from the descendants of the deceased (if known), the National Department of Health, the Provincial Department of Health, the Premier of the Province and the local police.

Recommendation

Alternative 01 and Alternative 02 for the proposed 132kV power line between the Lebowa Substation and the Dithabaneng Substation may affect G01. If the G01 is affected directly, i.e. the power line is strung above the grave or a pylon is to be established on top off the grave the grave has to be exhumed and relocated. If the grave is going to be affected indirectly, i.e. the power line or pylons are constructed 30m away from the grave no mitigation measures are required except that the G01 is demarcated with a fence and an access gate.

Alternative 01 is recommended for the proposed 132kV power line between the Dithabaneng Substation and the proposed Dwaalkop Substation as this alternative will not affect any of the graveyards in the demolished village of Maneeng. Alternative 02 is considered a ~~no~~ go option considering the number of graveyards in the demolished village of Maneeng.

General

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.

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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 new project in Lebowakgomo and Chuniespoort in the Limpopo Province.

The Limpopo Province to the north and to the south of the Soutpansberg as well as to the north of the Watersberg, in the Watersberg and to the east of the Watersberg have been explored for archaeological remains in the past. These investigations have shown that the Limpopo Province has a rich archaeological heritage comprised of remains dating from the prehistoric and the historical past. Prehistoric and historical remains in the Limpopo Province reflect South Africa's national estate as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) (see Box 1).

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 new 132kV power lines, substations and associated 132kv loop-in and loop-out power lines in Lebowakgomo and Chuniespoort in the Limpopo Province of South Africa. 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 pro-active measures with regard to any heritage resources that may be affected, damaged or destroyed when the Eskom Project is implemented. Urogeneg, the 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 Heritage Impact Assessment study were the following:

- 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) (Box 1) do occur in the Eskom Project Area and, if so, to determine the nature, the extent and the significance of these remains.
- To determine whether these remains will be affected by the proposed Eskom Project and, if so, to evaluate what appropriate mitigation and management measures could be taken to reduce the impact of the proposed development on these heritage resources.

(The Eskom Project and the Eskom Project Area are described, outlined and contextualised in Part 4 and Part 5 of this report).

3 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 Eskom Project Area.
- Synthesising all information obtained from the data bases, fieldwork, maps and literature survey.

3.1 Fieldwork

The proposed Eskom Project Area comprising the proposed power line corridors and substation sites were surveyed with a vehicle where no heritage resources were expected to occur, e.g. ploughed fields, disturbed or developed areas). Selected stretches with ecological indicators for possible heritage resources such as sisal plants, aloes, cleared patches in the natural vegetation, etc. as well as features such as building rubble, protrusions on the surface, rock types visible on the surface, etc.)determined where more intense pedestrian surveys were undertaken.

No GPS track log is available as the survey was done *prior* to SAHRA advising that track logs be kept during surveys. The power lines were accessible in terms of access roads although the stretch that crosses the foothills of the Strydpoortberge was not surveyed. However, this stretch will follow an existing Eskom power line and as such a corridor which cannot be described as pristine any longer.

3.2 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 Eskom Project Area (see Part 8, ~~Select Bibliography~~).

Literature relating to the pre-historical and the historical unfolding of the Eskom Project Area 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 Eskom Project Area.

Maps outlining the Eskom Project Area were studied (2430CA Steelpoort; 1: 50 000 topographical map&2428 Modimolle; 1 250 000 map).

3.3 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.

3.4 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 1840s 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.
- 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 proposed Eskom Project is situated approximately sixty kilometres to the east of Mokopane (Potgietersrust) and fifteen kilometres to the east of Lebowa kgomo, previous capital of the Lebowa homeland. The imposing Chuniespoort and Strydpoort mountains are located further to the north of the Project Area whilst a series of mountains and mountain ranges skirt the northern, eastern and southern borders of the Eskom Project Area. The most impressive of these are the Maake and Sidibu Mountain ranges with the Maake Mountain range which has taken its name from the Kgaga of Maake. The Kgaga of Mphahlelewho today still lives in the area is derived from this clan who now lives along the eastern foothills of the Drakensberg further to the north.

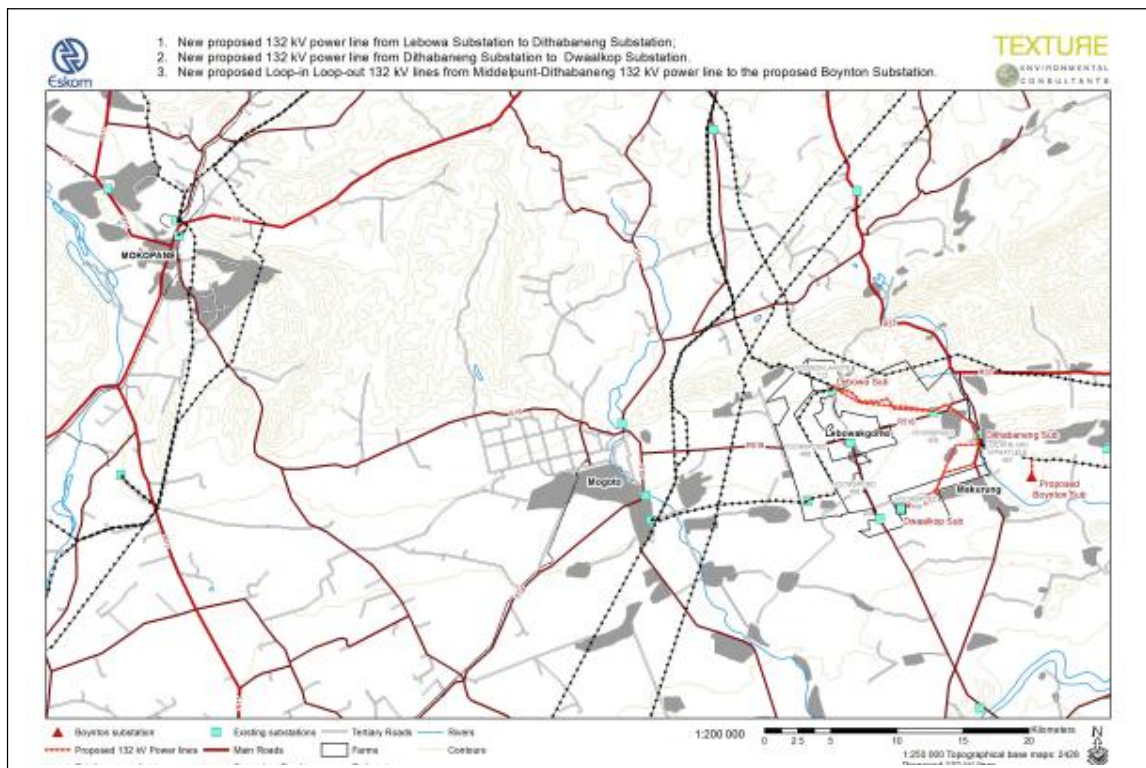


Figure 1- The Eskom Project Areas located in the heartland of Lebowa kgomo and Chuniespoort in the Limpopo Province (above).

4.2 The nature of the Eskom Project Area

Formal and informal villages are scattered from Lebowakgomo through Chuniespoort to Steelpoort further to the east. These communities used to be part of the former Lebowa homeland which was occupied by North-Sotho speaking communities generally referred to as the Pedi. These communities have various origins, histories and were never part of a homogenous cultural group. Many of these communities are still practising a mix farming subsistence.

These North Sotho communities have occupied the Lebowakgomo and Chuniespoort area for centuries. Therefore, large parts of the Eskom Project Area are not pristine any longer as communities have used level areas for agricultural activities over a prolonged period of time (see below). Heritage sites and graves may have been ploughed under whilst others may have been damaged or destroyed due to the long uninterrupted occupation of the region. Heritage sites and graves may also be hidden by thick clumps of vegetation, such as sickle bush, which have invaded previously utilized and overgrazed spots in the area.

4.3 Agricultural traditions

In the past, chiefs allocated pieces of land to the heads of wards that then provided plots to married men. The sizes of plots were determined by the number of wives a man had, but each plot was usually 1 to 2 hectares, which is the maximum that a woman could cultivate using a hoe. The introduction of the plough allowed families to cultivate larger areas of land, up to about 4, 5 hectares.

Crops included sorghum (*mabele*) and millet (*letsoa*), which were later largely replaced by maize (*mahea*) as a staple food. Supplementary crops included pumpkins (*marotse*), various varieties of gourd (*maraka*), beans (*dinawa*) and a type of groundnut (*ditloo*). Tobacco and sugarcane were also planted.

Although each person usually possessed his own stock, pasturage was used on a communal basis. At a fixed time the tribal ruler declared the reaped grain fields open for use as winter grazing. Grazing cattle in particular disturbs heritage resources, as

deposits on sites are churned under hoof and low stone foundations are broken and scattered.

4.4 The nature of the Eskom Project

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

- The construction of a proposed new 132kV power line between the Lebowa Substation and the Dithabaneng Substation. Two alternatives are available for this power line, namely Alternative 01 and Alternative 02.
- The construction of a proposed new 132kV power line between the Dithabaneng Substation and the proposed new Dwaalkop Substation. Two alternatives are available for this power line, namely Alternative 01 and Alternative 02.
- The construction of a proposed 132kV loop-in loop. out power line between theMiddelpunt-Dithabang power line and the proposed Boynton Substation.

These power line routes and the various options for the power line routes are referred to as the Eskom Project whilst the area to be affected by the proposed new power lines, substation and the proposed loop-in loop out power line is referred to as the Eskom Project Area (Figure 1).

4.5 The heritage potential of the Eskom Project Area

The Eskom Project in Lebowakomo and Chuniespoort together with the Steelpoort area further to the east, represent the heartland of the pre-historical and the historical Pedi chiefdom. This region is associated with a wide range of heritage resources and cultural landscapes. It is therefore necessary that the archaeological and historical significance of this region is described and explained in more detail before the results of the Phase II HIA study is discussed.

5 CONTEXTUALISING THE ESKOM PROJECT AREA

5.1 Pre-historical context

The pre-historical context of the Lebowakgomo and the Chuniespoort areas are not known as little research has been done in this area in the past. Further to the east of Chuniespoort, in the Steelpoort area, hundreds of Stone Age sites with predominant Middle Stone Age (MSA) assemblages dating from 200 000 years to 22 000 years ago occur in the network of dongas which occur on the wide valley floors between the Leolo Mountain range and its numerous foothills.

No thorough research on the Stone Age in Lebowakgomo and Chuniespoort has yet been undertaken. However, it can be expected that Stone Age sites dating from all periods from the Stone Age will occur in handsome numbers in this vast mountainous region which is marked by major rivers such as the Olifants and Chuniespoort whilst numerous smaller rivers and streams criss-cross the plains between the various mountain ranges. This is a region a wide ranging ecological potential which offered extensive opportunities for humans to exploit from an early period.

5.2 Historical context

A predominantly Northern Sotho-speaking population has occupied the previous Lebowa homeland in which the Eskom Project Area is located for centuries. These people are part of a larger Northern Sotho-speaking community who occupy a vast area between the Limpopo River in the north, the Drakensberg in the east and the Sekhukhune Mountains in the west. The history of the people of this area can be divided into several periods:

The earliest period of settlement is characterized by small groups of black people who drove the San and KhoiKhoi from the area. From AD1700 ancestral groupings of the present inhabitants of the land began to arrive in the area. Groups that can be distinguished include the following:

- A large group of Sotho came from the north-eastern parts of the Lowveld and settled on the plateau to the north and to the south of the Strydpoort Mountains. Amongst this group were the Kgaga from whom the Kgaga of Mphahlele originated.
- Smaller groups of Sotho of Kgatla and Hurutshe-Kwena origin moved from the Tswana area (Brits and Rustenburg) into the territory. Amongst them were the Pedi (or Rota) who moved into what is now Sekhukhuneland, where they subjugated the Sotho already living in the area.
- At that time Sekhukhuneland was also penetrated by Sotho arriving from the south-east.
- During the period after AD1600, the Northern Ndebele arrived from the south-east and settled in what is now the Mokerong district.

It is assumed that during the period from AD1700 to AD1826 the Pedi took political control over the territory previously known as Lebowa, but to the south of the Strydpoort Mountains. The Pedi chiefdom reached its zenith during the reign of Thulare, who died in 1824.

During the disruption of the *difaqane* (c.1822 to 1828) Mzilikazi attacked the Pedi from the south-east in 1826 and in 1827/1828. This caused the large-scale depopulation of the southern part of the Northern Sotho territory. The Pedi sought refuge in the Soutpansberg in 1822 and only returned in 1828.

After the wars with Mzilikazi, there were wars with the Swazi. The Voortrekkers arrived in the Steelpoort area and in Potgietersrust (Mokopane) in the late 1840s. Several armed struggles between the Voortrekkers and the Pedi ensued.

During the War of Sekhukhune (1879) the British were supported by the Swazi in their subjugation of the Pedi.

In 1842 Andries Hendrik Potgieter decided to move out of the British sphere of influence and to establish trade relations with Delagoa Bay. He moved with his followers from Potchefstroom to the Eastern Transvaal and founded

AndriesOhrigstad. (The name was later abbreviated to Ohrigstad). During 1848 to 1849 Ohrigstad was abandoned when many people died of malaria. The town of Lydenburg was founded further to the south near the confluence of the Sterkspruit and the SpekboomRiver.

The first discovery of platinum nuggets in 1924 by AndriesLombaard in the Moopetsi River on the farm Maandagshoek in the Steelpoort valley led to an increase in the rate of exploration and mining in the Steelpoort and Chuniespoort areas. Minerals which are sought after in this region include platinum and chromite.

5.3 The Kgaga of Mphahlele

A number of Sotho tribes, all of Kgaga origin, live to the north and to the south of the StrydpoortMountains, between the Pedi heartland further to the east and the Tlokwa territory in Sekgosesa to the west. The place of origin of the Kgaga people was Bokgaga, to the west of Ofcolaco. It was here that the Kgaga of Maake settled in early times. Their totem (usually a sacred animal that is venerated) was the *phuti* (or *duiker*).

Around 1750, the Kgaga of Mphahlele broke away from Maake and moved southwards and then westwards across the Steelpoort River. They eventually settled to the west of the OlifantsRiver and to the south of the StrydpoortMountains in the present Mphahlele village at Chuniespoort. When they arrived, the Kekana of Moletlane had already settled to the south-west of the area chosen by the Kgaga of Mphahlele. The Kgaga of Mphahlele remained in the area which is today known as the Lepelle-Nkumpi municipal area.

5.4 The Bokone

Another important group in this region was the Bokone who in time became scattered over a wide area of Limpopo and Mpumalanga. Groupings of the Bokone occupied the lowveld between Phalaborwa and Bokgaga (near Leydsdorp) at an uncertain date. The main body of the Bokone seems to have fallen under the leadership of the Matlala ruling lineage when this group splintered into a multiplicity

of groups during the 15th century and the 16th century. While some remained in the lowveld others ventured further south and westwards so that Koni groups settled in the later Ohrigstad, Lydenburg and Middelburg areas. The largest and most dominant group, however, settled in hillsides between Polokwane and Mokopane. This region is also known as Matlala-a-Thaba (Matlala of the Mountain). The Matlala royal house has experienced leadership conflicts during the 17th century. Splinter groups hereafter settled in Blouberg and Makgabeng whilst others occupied a number of mountains and river valleys such as Chuenespoort (Ga-Chuene) and ThabaTshweu (Witkoppen).

6 THE PHASE I HERITAGE IMPACT ASSESSMENT

The Phase I HIA study for the Eskom Project Areas is now briefly discussed and illuminated with photographs.

6.1 The proposed 132kV power line between the Lebowa and Dithabaneng Substations

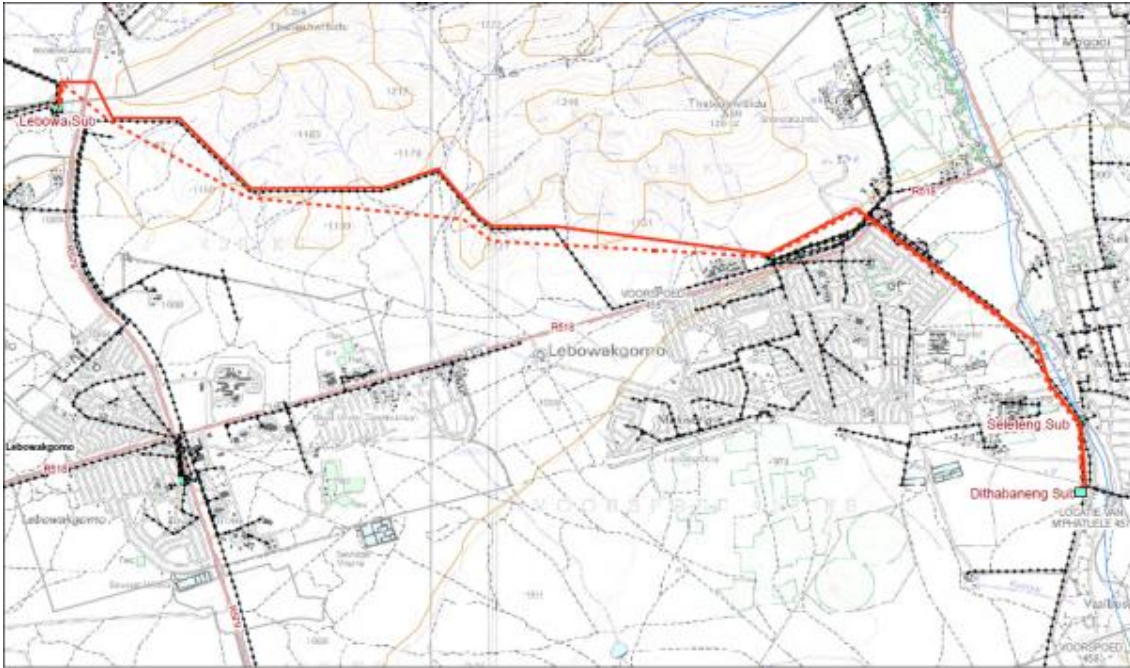


Figure 2- The proposed 132kV power line running between the LebowaSubstation and Dithabaneng Substation.

Note the presence of a single grave (G01) near the proposed 132kV Lebowa Dithabaneng power line in the Eskom Project Area (above).



Figure 3- After leaving the Lebowa Substation (background) the proposed 132kV power line ascends an extensive range of foothills belonging to the Strydpoort Mountains on the farm Voorspoed 458KS.



Figures 4 & 5- After descending the foothills of the Strydpoort Mountains the proposed power line runs along flat terrain near a mountain (above) before joining an existing power line in order to run east and then south (below).





Figures 6& 7- G01 possibly older than sixty years in close proximity of the proposed 132kV LebowaDithaba power line (above).The 132kV Lebowa/Dithabaneng power line runs south-east and southwards along a corridor between the villages of Lebowakgomo and Mamaolo to the Dithabaneng Substation (below).



2 The proposed 132kV power line between the Dithabaneng and the proposed Dwaalkop Substations

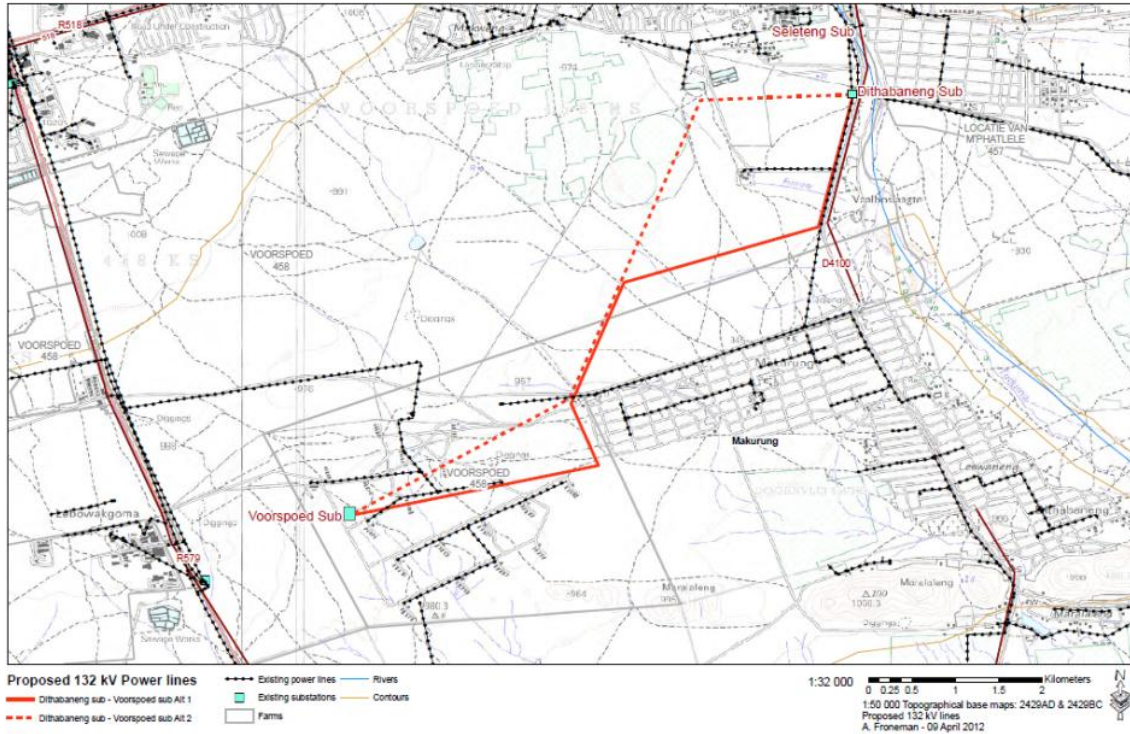


Figure8- The 132kV power line between the Dithabaneng and the proposed Dwaalkop (note Voorspoed)Substations (above).

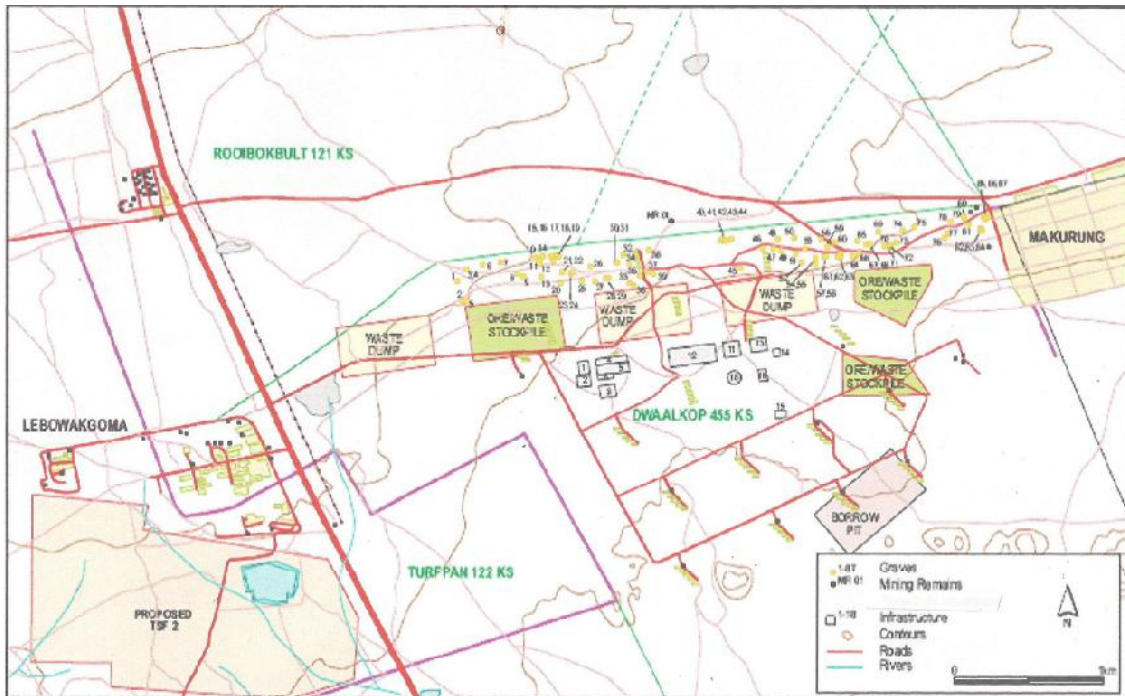


Figure 9- Note 87 graveyards in the demolished village of Maneeng where Alternative 02 may run. Ten graveyards occur in close proximity of Alternative 01 (Map borrowed from Pistorius, 2009) (above)



Figure 10- The 132kV power line between Dithabaneng and the proposed Dwaalkop Substation runs across an open plain to the north-western corner of the village of Makurung (above).



Figure 11- The north-eastern corner of the demolished village of Maneeng on the farm Doornvlei 456KS. It is here where Alternative 01 will run to the east of the graveyards and graves which occur in this demolished village (below).



Figure 12- One of at least eighty-seven graveyards in the former village of Maneeng (above).

6.3 The proposed 132kV loop-in and loop-out power line and Dwaalkop and Boynton Substations

No heritage resources of significance were observed at the following components of the Eskom Project, namely:

- Along the loop-in and loop-out power line between the 132kV Middelpunt-Dithabaneng power line. This piece of land was used for agricultural purposes in the past.
- The proposed Dwaalkop Substation. This substation is established on a piece of land where a chicken farm used to exist. The substation site therefore is a disturbed piece of land and currently overgrown with sickle-bush and grass.
- The Boynton Substation site like the 132kV loop-in and loop-out power line will be established on an abandoned agricultural field.

(Also note photographs with discussions below).



Figure 13- The proposed Dwaalkop Substation on Doornvlei 456KS is located on land where chicken sheds used to exist. This piece of land therefore has been disturbed in the past. Currently it is overgrown with vegetation (above).



Figure 14- The proposed 132kV loop-in and loop-out power line runs from the 132kV Middelpunt-Dithabaneng power line to the proposed new Boynton Substation. Both the power line and the substation are located in the midst of abandoned agricultural fields on the farm Mphatlele 457KS (above).

6.4 Types and ranges of heritage resources

Considering the results of earlier heritage reports in conjunction with the findings of this heritage impact assessment it can be concluded that the following types and ranges of heritage resources occur in and near the Eskom Project Area, namely:

- The demolished village of Maneeng (next to Makurung village) holds at least eighty seven (87) graveyards and graves which are associated with a hundred and forty four (144) deceased individuals. Most of the graves are undecorated and it is highly likely that the majority of graves are older than sixty years (Roodt 2006).
- A single grave which is possibly older than sixty years occurs near Alternative 01 and Alternative 02 for the proposed new 132kV Lebowa-Dithabaneng power line.

(A scatter of isolated stone tools which were earlier recorded for Lonmin's Dwaalkop Project has no bearing on this report as these occur far to the west of Eskom's Project Area [Pistorius 2009]).

Approximately ten of the graveyards in the demolished village of Maneeng (Nos 78-87) occur near the north-western corner of the village of Makurung where Alternative 01 for the proposed 132kV power line between the Dithabaneng Substation and the proposed Dwaalkop Substation power line will run. Alternative 02 for this power line runs across the demolished village of Maneeng where the majority of graveyards are located. All the graveyards in Maneeng have been geo-referenced and mapped (Figure 11) and their coordinates are indicated (Table 2).

Most of the graves are undecorated. The few that hold inscriptions are older than sixty years. Consequently, the graveyards should be treated as if they are older than sixty years.

6.5 The significance of the graveyards and graves

All graveyards and graves can be considered to be of high significance and all graveyards and graves are protected by various laws. Legislation with regard to graveyards and 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).

6.6 Possible impact on the graveyards

It is possible that the single grave (G01) near Alternative 01 and Alternative 02 for the proposed 132kV Lebowa Substation to Dithabaneng Substation power line may be affected by the Eskom Project whilst the construction of Alternative 02 for the

proposed 132kV Dithabaneng Substation to the proposed Dwaalkop Substation may affect a number of graveyards if this alternative is used.

Consequently, mitigation measures are outlined for those graveyards and graves which may be affected by the Eskom Project.

6.7 Mitigating the graveyards and grave

If any of the graveyards or graves may be affected by the proposed Eskom Project the following mitigation measures have to be applied:

- If any graveyards or the single grave (G01) is going to be affected indirectly, i. e. the power lines will be strung close to any of the graveyards or the single grave (G01) and the pylons will be placed close to any of the graveyards or the single grave (G01) (at least 30m or further from any of the graveyards or the single grave (G01)), the contractor must implement precautionary measures to prevent that any graveyard or the single grave (G01) is not affected during the construction of the power lines, e.g. by means of demarcating any graveyard or the single grave (G01) with a fence. Access must exist for any relatives or friends who wish to visit the deceased after the power line has been constructed.
- If any graveyard or the single grave (G01) is going to be affected directly (e.g. a pylon must be constructed on top of any graveyard or the single grave (G01) such a graveyard or the single grave (G01) can be exhumed and relocated. The exhumation of human remains and the relocation of graveyards are regulated by various laws, regulations and administrative procedures. This task is undertaken by forensic archaeologists or by reputed undertakers who are acquainted with the administrative procedures and relevant legislation that have to be adhered to whenever human remains are exhumed and relocated. This process also includes social consultation with a 60 days statutory notice period for graves older than sixty years. Permission for the exhumation and relocation of human remains have to be obtained from the descendants of the deceased (if known), the National Department of Health, the Provincial Department of Health, the Premier of the Province and the local police.

6.8 Recommendation

Alternative 01 is recommended for the proposed 132kV power line between the Dithabaneng Substation and the proposed Dwaalkop Substation as this alternative will not affect any of the graveyards in the demolished village of Nameng.

It is unlikely that Alternative 01 or Alternative 02 for the proposed 132kV power line between the Lebowa Substation and the Dithabaneng Substation will affect G01 although it will run close to the grave. Both alternatives must be constructed at least 30m from G01. is affected indirectly the power line may be strung above the grave and the pylons placed at a distances of 30m or more on opposite sides of the grave.

6.9 Tables

GRAVE	COORDINATES		SIGNIFICANCE
G01	24 17 19.6s 29 32 29.9s-		HIGH

Table 1- Coordinates for a single grave possibly older than sixty years near the proposed 132kV Lebowa to Dithabaneng power line in the Eskom Project Area (above).

Burial No.	Latitude	Longitude	Burial No.	Latitude	Longitude
1	-24.35238889	29.50333333	45	-24.35155556	29.52047222
2	-24.35355556	29.50361111	46	-24.35036111	29.52183333
3	-24.35163889	29.50386111	47	-24.35044444	29.52244444
4	-24.35163889	29.50383333	48	-24.34986111	29.52272222
5	-24.35361111	29.50388889	49	-24.35047222	29.52294444
6	-24.35136111	29.50491667	50	-24.34975	29.52372222
7	-24.35125	29.506	51	-24.35066667	29.52380556
8	-24.35197222	29.50697222	52	-24.35119444	29.52416667
9	-24.35216667	29.50730556	53	-24.35038889	29.52436111
10	-24.35094444	29.50805556	54	-24.35130556	29.52505556
11	-24.35105556	29.50830556	55	-24.35094444	29.52508333
12	-24.35133333	29.50836111	56	-24.34988889	29.52547222
13	-24.35213889	29.50838889	57	-24.35083333	29.52566667
14	-24.35086111	29.50852778	58	-24.35088889	29.52572222
15	-24.35086111	29.50905556	59	-24.35027778	29.52583333
16	-24.35111111	29.50916667	60	-24.35	29.52625

17*	-24.35077778	29.50930556	61	-24.35086111	29.52641667
18	-24.35088889	29.50938889	62	-24.35069444	29.52663889
19	-24.35088889	29.5095	63	-24.35083333	29.52666667
20	-24.3525	29.50961111	64	-24.35086111	29.52736111
21	-24.35188889	29.50969444	65	-24.34997222	29.52763889
22	-24.35183333	29.50972222	66	-24.35063889	29.52769444
23	-24.35194444	29.51025	67	-24.35016667	29.52819444
24	-24.35180556	29.51027778	68	-24.35016667	29.52836111
25	-24.35241667	29.51083333	69	-24.34944444	29.52886111
26	-24.35152778	29.51136111	70	-24.35025	29.52925
27	-24.35241667	29.51166667	71	-24.35022222	29.52958333
28	-24.35222222	29.51230556	72	-24.35019444	29.52963889
29	-24.35225	29.51244444	73	-24.35002778	29.53
30	-24.35119444	29.51297222	74	-24.34927778	29.53038889
31	-24.35122222	29.51305556	75	-24.34913889	29.53105556
32	-24.35072222	29.51336111	76	-24.34972222	29.53286111
33	-24.35244444	29.51377778	77	-24.34952778	29.53302778
34	-24.35130556	29.51380556	78	-24.34872222	29.53325
35	-24.35269444	29.514	79	-24.34855556	29.53405556
36	-24.35205556	29.51436111	80	-24.34844444	29.53411111
37	-24.35183333	29.51486111	81	-24.34894444	29.53436111
38	-24.3505	29.51494444	82	-24.34919444	29.53502778
39	-24.35194444	29.51525	83	-24.34933333	29.53502778
40	-24.34994444	29.51925	84	-24.34930556	29.53513889
41	-24.34986111	29.51938889	85	-24.34852778	29.53525
42	-24.34991667	29.51952778	86	-24.34858333	29.53530556
43	-24.34994444	29.51961111	87	-24.34847222	29.53555556
44	-24.34986111	29.51994444			

Table 2- List of burial locations/graves identified in the abandoned village of Maneeng on the border of the Eskom Project Area (above).

7 CONCLUSION AND RECOMMENDATIONS

Considering the results of earlier heritage reports in conjunction with the findings of this heritage impact assessment it can be concluded that the following types and ranges of heritage resources occur in and near the Eskom Project Area, namely:

- The demolished village of Maneeng (next to Makurung village) holds at least eighty seven (87) graveyards and graves which are associated with a hundred and forty four (144) deceased individuals. Most of the graves are undecorated and it is highly likely that the majority of graves are older than sixty years (Roodt 2006).
- A single grave which is possibly older than sixty years occurs near Alternative 01 and Alternative 02 for the proposed new 132kV LebowaDithabaneng power line.

(A scatter of isolated stone tools which were earlier recorded for LonminDwaalkopProject has no bearing on this report as these occur far to the west of Eskom's Project Area [Pistorius 2009]).

Approximately ten of the graveyards in the demolished village of Maneeng (Nos 78-87) occur near the north-western corner of the village of Makurung where Alternative 01 for the proposed 132kV power line between the Dithabaneng Substation and the proposed Dwaalkop Substation power line will run. Alternative 02 for this power line runs across the demolished village of Maneeng where the majority of graveyards are located. All the graveyards in Maneeng have been geo-referenced and mapped (Figure 11) and their coordinates are indicated (Table 2).

The significance of the graveyards and graves

All graveyards and graves can be considered to be of high significance and all graveyards and graves are protected by various laws. Legislation with regard to graveyards and 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).

Possible impact on the graveyards

It is possible that the single grave (G01) near Alternative 01 and Alternative 02 for the proposed 132kV Lebowa Substation to Dithabaneg Substation power line may be affected by the Eskom Project whilst the construction of Alternative 02 for the proposed 132kV Dithabaneng Substation to the proposed Dwaalkop Substation may affect a number of graveyards if this alternative is used.

Consequently, mitigation measures are outlined for those graveyards and graves which may be affected by the Eskom Project.

Mitigating the graveyards and grave

If any of the graveyards or graves may be affected by the proposed Eskom Project the following mitigation measures have to be applied:

- If any graveyard or the single grave (G01) is going to be affected indirectly, i.e. the power lines or the pylons will be strung 30m or more away (and not closer) to any graveyard or the single grave (G01), the contractor must implement precautionary measures to prevent that any graveyard or the single grave (G01) is affected during the construction of the power lines, e.g. by means of demarcating the graveyards or the single grave (G01) with a fence. Access must exist for any relatives or friends who wish to visit the deceased after the power line has been constructed.
- If any graveyard or the single grave (G01) is going to be affected directly i.e. a power line must be strung above a graveyard or the grave or a pylon must be constructed on top of any graveyard or the single grave (G01) such a graveyard or the single grave (G01) must be exhumed and relocated. The exhumation of human remains and the relocation of graveyards are regulated by various laws, regulations and administrative procedures. This task is

undertaken by forensic archaeologists or by reputed undertakers who are acquainted with the administrative procedures and relevant legislation that have to be adhered to whenever human remains are exhumed and relocated. The graveyards include graves which are older than sixty years. The process therefore includes social consultation with a 60 days statutory notice period (for the graves which are older than sixty years). Permission for the exhumation and relocation of human remains have to be obtained from the descendants of the deceased (if known), the National Department of Health, the Provincial Department of Health, the Premier of the Province and the local police.

Recommendation

Alternative 01 and Alternative 02 for the proposed 132kV power line between the Lebowa Substation and the Dithabaneng Substation may affect G01. If the G01 is affected directly, i.e. the power line is strung above the grave or a pylon is to be established on top of the grave the grave has to be exhumed and relocated. If the grave is going to be affected indirectly, i.e. the power line or pylons are constructed 30m away from the grave no mitigation measures are required except that the G01 is demarcated with a fence and an access gate.

Alternative 01 is recommended for the proposed 132kV power line between the Dithabaneng Substation and the proposed Dwaalkop Substation as this alternative will not affect any of the graveyards in the demolished village of Maneeng. Alternative 02 is considered a no go option considering the number of graveyards in the demolished village of Maneeng.

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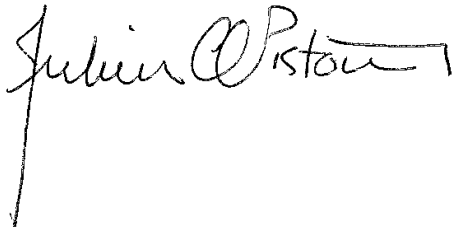
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A handwritten signature in black ink, reading "Julius CC Pistorius". The signature is written in a cursive, flowing style with a long vertical line extending downwards from the 'P'.

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