

**Prepared for:
SPITZKOP PLATINUM MINE
METAGO ENVIRONMENTAL ENGINEERS**

**A PHASE I HERITAGE IMPACT ASSESSMENT (HIA) STUDY FOR
THE PROPOSED NEW SPITZKOP PLATINUM MINE IN THE
STEELPOORT IN THE MPUMALANGA PROVINCE OF SOUTH
AFRICA**

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EXECUTIVE SUMMARY

This Phase I Heritage Impact Assessment (HIA) study for the proposed new Spitzkop Platinum Mine was done in terms of Section 38 of the National Heritage Resources Act (Act 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 proposed new Spitzkop Project Area and, if so, to determine the nature, the extent and the significance of these remains.
- To determine whether such remains will be affected by the development of the proposed new mine and, if so, to evaluate what appropriate mitigation measures could be taken to reduce the impact of the proposed mining development on such heritage resources.
- To propose management measures for those heritage resources that may continue to exist unaffected in the proposed new mining area.

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

- A few scattered stone tools in the numerous dongas that criss-cross the Spitzkop Project Area.
- At least three single graves and three graveyards in the Spitzkop Project Area.
- A stone cairn (*phiri*) associated with the initiation of boys.
- Remains from the recent past consisting of dilapidated residences occur wide across the Spitzkop Project Area. A few of these sites were mapped.

These heritage resources were geo-referenced and mapped (Figure 3; Tables 1-2).

The significance of the heritage resources was determined as some may be affected by the new mining development project. Mitigation measures are proposed for those heritage resources which may be affected by the mining development project.

The significance of the heritage resources that may be affected by the proposed new mining development project is based on stipulations from the National Heritage Resources Act (No 25 of 1999) and various other criteria:

The stone tools that occur in the network of dongas in the Spitzkop Project Area qualify as archaeological remains and are protected by Section 35 of the National Heritage Resources Act (No 25 of 1999). These stone tools can be considered to be of medium significance when considering the following criteria:

- The number of stone tools that were observed was limited although it is possible that high concentrations may occur in certain areas in the dongas which cover a large surface area.
- The stone tools occur out of any archaeological context which diminishes their significance for research purposes. (Any archaeological material in a sealed stratigraphic context has much higher significance).
- The number and types of stone tools that occur in the network of dongas in the Spitzkop Project Area is a mere fraction of the number of exposed stone tools that occur in the extensive network of dongas in the Steelpoort Valley.

The stone cairn that used to be part of the rituals associated with an initiation school qualifies as a historical/archaeological phenomenon which is protected by Section 35 of the National Heritage Resources Act (No 25 of 1999). This cultural phenomenon has a medium to high significance when considering the following criteria:

- The stone cairn is associated with an ancient cultural tradition that is still practised by groups in the Steelpoort Valley. It is therefore part of living heritage.
- The cairn can be associated with a certain group of men or regiment (*mophato*) who share a life long association of some kind. Members of this particular group may still be alive or their descendants may be aware of the *phiri* still existing in honour of their ancestors.
- A considerable number of these cairns occur throughout the Steelpoort. However, development in the Steelpoort is encroaching upon and endangering the future unaffected existence of these cultural objects.

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

The remains from the recent past do not qualify as historical significant remains.

Mitigation measures for any of the heritage resources that may be affected by the mining development project in the Spitzkop Project Area are the following:

Whenever surface areas of the dongas in the Spitzkop Project Area may be disturbed in the future, e.g. to construct roads or any other infrastructure, stone tools that may be present in the affected parts of the dongas have to be collected from the surface of the dongas.

The sampling of the stone tools can only be done by an archaeologist accredited with the Southern African Association for Professional Archaeologists (ASAPA) who must apply for a permit from the Mpumalanga Provincial Heritage Resources Authority (Mpumalanga PHRA) before the collection of the stone tools may commence.

The collected stone tools must be preserved in a provincial or a university museum.

If the initiation cairn is to be affected by the proposed new mining development this stone structure must be documented by means of a description and by photographing the structure after it has been cleared from overgrowth and vegetation. A brief report outlining the documentation and significance of this cultural phenomenon must be kept in the data bank of the Mpumalanga PHRA.

The documentation of the initiation cairn must be undertaken by an archaeologist accredited with ASAPA who must apply for a permit from the Mpumalanga PHRA before the initiation cairn may be destroyed by the mining development project.

If any of the graves or graveyards may be affected by the proposed mining development project, they have to be mitigated. One of the following strategies may be followed:

- The graves or graveyard can be preserved *in situ*. The graves or graveyards can be demarcated with brick walls or with fences. Conserving graves and graveyard *in situ* creates the risk and responsibility that they may be damaged (accidentally), that the mine remains responsible for their future unaffected existence, maintenance and that controlled access must exist for any relatives or friends who wish to visit the deceased.
- Graves and graveyards 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 all 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.

The remains from the recent past need no mitigation measures and can be destroyed by the mining development project.

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1 INTRODUCTION

This document contains the report on a Phase I Heritage Impact Assessment (HIA) study which was done for the proposed new Spitzkop Platinum Mine on the farms Kennedy's Vale 361, De Goede Verwachting 332 and Spitzkop 333 in the Steelpoort Valley in the Mpumalanga Province of South Africa.

The Mpumalanga Province of South Africa has a rich heritage comprised of remains dating from the pre-historic and from the historical (or colonial) periods of South Africa. Various types and ranges of heritage resources that qualify as part of South Africa's 'national estate' (outlined in Section 3 of the National Heritage Resources Act, Act No 25 of 1999) occur in the Mpumalanga Province (see Box 1). Some of these heritage resources may exist in the Spitzkop Project Area.

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

The National Heritage Resources Act (Act No 25 of 1999, 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;
- (b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- (c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- (d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- (f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons; (h)
- (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 OF THIS REPORT

The proposed new Spitzkop Platinum (Pty) Limited is a joint venture between Eastern Platinum Limited and Afriminerals (Pty) Ltd who intends developing the mine on the farms Kennedy's Vale 361, De Goede Verwachting 332 and Spitzkop 333 in the Steelpoort in the Mpumalanga Province of South Africa. The proposed new mine is hereafter referred to as the Spitzkop Platinum Mine.

The proposed new mining development project may impact on some of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) (see Box 1). Consequently, a Phase I HIA study has to be conducted for the proposed new Spitzkop Platinum Mine.

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 proposed new Spitzkop Project Area and, if so, to determine the nature, the extent and the significance of these remains.
- To determine whether such remains will be affected by the development of the proposed new mine and, if so, to evaluate what appropriate mitigation measures could be taken to reduce the impact of the proposed mining development on such heritage resources.
- To propose management measures for those heritage resources that may continue to exist unaffected in the proposed new mining area.

3 METHODOLOGY

This Phase I HIA study was conducted by

- Surveying the proposed Spitzkop Project Area with a vehicle and selected spots in the study area on foot as well as surveying, where possible, areas adjoining the project area (peripheral or buffer areas which need not to be affected by the proposed new development).
- Briefly surveying literature relating to the pre-historical and historical context of the Spitzkop Project Area.
- Consulting maps of the proposed project area.
- Consulting archaeological (heritage) data bases.
- Consulting spokespersons regarding the possible presence of heritage resources such as graveyards.
- Synthesising all information obtained from the fieldwork survey, literature review, maps, heritage data bases and spokespersons into this report.

3.1 Fieldwork

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

3.2 Databases, literature survey and maps

Databases kept and maintained at institutions such as the Provincial Heritage Resources Agency 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 Spitzkop Project Area.

The author is not unacquainted with the Project Area at large as he had done several heritage impact assessment studies in the Steelpoort (see 'Select Bibliography', Part 9).

Literature relating to the pre-historical and the historical unfolding of the Steelpoort where the proposed new Spitzkop Platinum Mine will be established was reviewed (see Part 5, 'Contextualizing the Spitzkop Project Area'). It is important to contextualise the pre-historical and historical background of the study area in order to comprehend the identity, meaning and significance of heritage resources in and near the Spitzkop Project Area (see Parts 5 & 9).

In addition, the Spitzkop Project Area was studied by means of the 1:50 000 topographical map on which the project area appears (2430CC Kennedy's Vale 1: 50 000 topographical map)

3.3 Spokespersons consulted

Spokespersons living in the project area are usually acquainted with the area, particularly if they were born there. Consequently, some spokespersons were therefore consulted with regard to the possible presence of graveyards and abandoned villages (see Part 10, 'Spokespersons consulted').

3.4 Mapping heritage resources

The most significant types and ranges of heritage resources found in the Spitzkop Project Area were geo-referenced using a GPS instrument and thereafter mapped in Arch View (Figure 3; Tables 1-2).

3.5 Assumptions and limitations

It must be pointed out that heritage resources can be found in the most unexpected places. It must also be borne in mind that surveys may not detect all the heritage resources in a given project area. While some remains may simply be missed during surveys (observations), others may occur below the surface of the earth and may only be exposed once mining development commences.

3.6 Some remarks on terminology

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

Box 2- Terminology relevant to this report

The Heritage Impact Assessment (HIA) referred to in the title of this report includes a survey of heritage resources as outlined in the National Heritage Resources Act , Act 25 of 1999 (see Box 1).

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

The term 'pre-historic' refers to the time before any historical documents were written or any written language developed in a particular area or region of the world. The historical period and historical remains refer, for the Eskom Project Area, to the first appearance or use of 'modern' Western writing brought to Lydenburg, Burgersfort and the Steelpoort by the first colonists who settled in this area after c. 1839.

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

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

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

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

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

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

The term 'mining area' ('critical area') refers to the area where the developer wants to focus development activities.

The term 'peripheral area' refers to the area that will not be affected by the proposed new development activities.

The 'South Shaft 3 Project Area' refers to both the mining and peripheral areas.

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

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

4 THE SPITZKOP PROJECT AREA

4.1 Location

The proposed new Spitzkop Platinum Mine on the farms Kennedy's Vale 361, De Goede Verwachting 332 and Spitzkop 333 is located in the Sekhukhune District Municipality in the southern part of the Steelpoort Valley in the Mpumalanga Province of South Africa. The project area covers a long narrow stretch of land between the Leolo Mountain range in the west and the Roossenekal-Burgersfort road (R37) in the east (Kennedy's Vale 2430CC 1: 50 000 topographic map) (Figures 1-3).

The Steelpoort Valley's name is derived from the Steelpoort (Tubatse) River, one of the main geographical features in this valley. The Steelpoort River is a southern tributary of the Olifants River. It flows from an altitude higher than 1 800m on the Highveld near Wonderfontein in the Belfast district northwards and then north-eastwards to join the Olifants River before the latter cuts through the Drakensberg to enter the Lowveld. Other prominent beacons in the wider study area include the Chromite Hills to the north-east of the study area and the imposing Leolo Mountain range to the west of the project area. The Leolo Mountain range is known as a beacon in the origin history of the Pedi.

4.2 The developed nature of the Spitzkop Project Area

Formal and informal villages are scattered throughout the Steelpoort Valley. These communities, some of which are still practising mixed subsistence farming, have occupied the Steelpoort Valley without interruption for decades and perhaps even for centuries. The project area therefore is not a pristine cultural landscape any longer as communities have lived in this valley, uninterrupted, for centuries. The archaeological remains in the Steelpoort, as

elsewhere in Sekhukhuneland, are being destroyed at an increasing rate as a result of three main activities, namely:

- Uncontrolled agricultural practises on valley floors where hundreds of archaeological sites have been under-ploughed since agriculture commenced nearly two millennia ago.
- Erosion which washes archaeological deposits away. Archaeological remains consisting of stone tools and potsherds can be seen in the numerous dongas that are scattered across the Steelpoort Valley.
- Settlements in Sekhukhuneland are established on top of older (archaeological and historical) settlements while expanding villages gradually incorporates older villages which are mainly located along the foot and foothills of the Leolo Mountain range.

The people who occupied the Steelpoort area practised hunting, gathering, cultivating and stock farming for many centuries. Many of the people who occupy the area still depend on agriculture and stock farming for a livelihood. Agricultural plots are still utilized by local communities. 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 underhoof and low stone foundations are broken and scattered.



Figure 1- The Spitzkop Project Area incorporates rugged veld with a network of dongas in which stone tools dating from the Stone Age occur (above).

4.3 In a cultural landscape

The proposed new Spitzkop Platinum Mine is located near the eastern foot of the Leolo Mountain range in the southern part of the Steelpoort Valley. This region is located close to the heartland of the pre-historical and the historical Pedi chiefdom and is associated with a wide range of heritage resources.

It is therefore necessary that the archaeological and historical significance of this cultural landscape be described and explained in more detail before the results of the Phase II HIA study is discussed (see Part 5, 'Contextualising the Spitzkop Project Area').



Figure 2- Parts of the Spitzkop Project Area has been sterilised from heritage resources as a result of agricultural activities (above).

5 CONTEXTUALISING THE SPITZKOP PROJECT AREA

The proposed new Spitzkop Platinum Mine is located near the heartland of the Steelpoort Valley which is renowned for its rich and diverse range of heritage resources. The following background information is aimed at contextualising the pre-historical and historical context of the project area.

5.1 Pre-historical context

Stone Age sites are scattered in the extensive network of dongas which occur across the wide valleys floors between the Leolo and other mountain ranges in the Steelpoort Valley. The author has observed sites on farms such as Hendriksplaats 281, Derde Gelid 278, Onverwacht 292, Winterveld 293, Annex Grootboom 335, Apiesboomen 295 and other farms. These stone tools date from the Early Stone Age (500 000 to 200 000 years ago), the Middle Stone Age (200 000 to 40 000 years ago) and from the Late Stone Age (40 000 to 200 years ago).

However, no archaeological survey for Stone Age sites as part of any extensive or in-depth Stone Age research project has to the knowledge of this author been done in the Steelpoort area as yet.

5.2 Pre-historical and early historical period

The origins of the first Bantu-Negroid farming communities who practised agriculture, live-stock herding and metal working can be traced to the Steelpoort Valley. These Early Iron Age farming communities whose settlements have been recorded on amongst others Hendriksplaats 281 and Derde Gelid 278 were related to Early Iron Age communities who, contemporaneously, AD500 to

AD900, settled further towards the east in the Lydenburg Valley. One of the settlements belonging to the Early Iron Age Lydenburg culture won international acclaim as the Lydenburg clay masks were discovered at this next to the Sterkspruit, south of Lydenburg.

The historical period in the Steelpoort Valley is associated with the second millennium AD when a predominantly Northern Sotho-speaking population occupied the Steelpoort. These people are part of a larger Northern Sotho-speaking community who occupy a vast area between the Mpumalanga River in the north, the Drakensberg in the east and the Sekhukhune Mountains in the west. Although they share a common language and certain traditions and customs, these people have never shown an awareness of a national identity. Numerous divisions and groups or clans therefore occupy this vast region. 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 Bantu people who started to drive the San and Khoi Khoi from the area and who are difficult to identify. From approximately AD1700 ancestral groupings of the present inhabitants of the land began to arrive in the area. Groups that can be distinguished include:

- A large group of Sotho who came from the north-eastern parts of the Lowveld and who settled on the plateau to the north and to the south of the Strydpoortberge.
- Small groups of Kgatla and Huruthshe-Kwena origin moved from the Tswana area (Brits and Rustenburg) into the territory. Amongst them were the present Pedi (or Rota) who moved into what is now Sekhukhuneland, where they subjected the Sotho already living there.
- During these times Sekhukhuneland was also penetrated by Sotho arriving from the south-east.
- 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 Strydpoortberge. The Pedi chiefdom reached its zenith during the reign of Thulare who died in 1824.

During the disruption of the *difaqane* (1822 to 1828) Mzilikazi attacked the Pedi from the south-east in 1826 and in 1827/1828. This caused 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 in the late 1840's. Several armed struggles between the Voortrekkers and the Pedi ensued (see below).

5.3 The Historical Period

After the British annexed the Transvaal (1877 to 1881) the Pedi was subjugated by the British who were supported by the Swazi during the war of Sekhukhune in 1879 (see more detail below).

In 1842 Andries Hendrik Potgieter wished to move from 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 Andries Ohrigstad (named after himself and Gergios Gerhardus Ohrig, a merchant from Amsterdam who was well disposed towards the Voortrekkers). The name was later abbreviated to Ohrigstad. The town also served as the seat of the Volksraad.

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 Spekboom River. This area was located on higher ground and was therefore healthier than Ohrigstad.

The railway line between Steelpoort and Lydenburg was constructed in 1924 due to an increase in the mining of chrome and magnetite. The name Steelpoort is derived from a hunting expedition that took place either in the late 19th century or the early 20th century. When a group of Voortrekkers from Natal under Frans Joubert had settled there, a man called Scholtz shot an elephant at dusk and on returning next morning found that the tusks had been removed. When the wagons were searched, the tusks were found in the possession of a man called Botha, after which the farm Bothashoek was named. Because an elephant had been killed there, the poort was named Olifantspoort. The river flowing through the poort was called Steelpoort River ('steel' meaning steal).

The Pedi were governed by Thulware until his death in 1824. His main village was Monganeng on the banks of the Tubatse River. His son, Sekwati, fled to the Soutpansberg in the north during the raids of Mzilikazi in 1822. He returned in 1828 and occupied the mountain fortress Phiring, his capital from where he united the Pedi.

The Pedi initially maintained good relations with the Voortrekkers who arrived in Ohrigstad from 1845. However, after a clash with Andries Hendrik Potgieter in 1852 Sekwati moved his capital to Thaba ya Mosego. Border disputes with the Zuid-Afrikaansche Republiek (ZAR) were settled in 1857 with an accord that stated that the Steelpoort River served as the border between Pedi land and the Lydenburg Republic.

Sekwati gave the Berlin Missionary Society permission to establish the Maandagshoek missionary station in Pedi territory. After Sekwati's death in 1861, his son Sekhukhune succeeded his father and also established his village at Thaba ya Mosego. He ordered the Berlin Missionary Society to discontinue their

work and the mission station was burnt down. Alexander Merensky, one of the missionaries, thereafter established the well-known Botšabelo missionary station at Middelburg.

The good relationship between the ZAR and the Pedi was gradually weakened. The period from 1876 to 1879 was one of conflict and war, first with the ZAR and then with the British who annexed the Transvaal in 1877. During the First Sekhukhune War in August 1876, the Voortrekkers attacked Thaba ya Mosego and partly destroyed the settlement.

The Second Sekhukhune War followed in November 1879 during which Sekhukhune was captured in the Mamatamageng cave and sent to prison in Pretoria. Two divisions attacked the Pedi. The main division, comprised of 3 000 whites and 2 500 black allies, attacked from the north-east. The Lydenburg division consisted of 5 000 to 8 000 Swazi impis, 400 other black allies and 400 white soldiers who attacked from Burgersfort in the south. The Second Sekhukhune War is associated with the settlements of Thaba ya Mosego and Tsjate, a new village established by Sekhukhune close to Thaba ya Mosego.

5.4 Historical beacons near the Spitzkop Project Area

Several outstanding significant historical beacons are located in or near the Leolo Mountain range and in the peripheral area outside the Spitzkop Project Area which deserves specific reference, namely:

- The mountain Thaba ya Mosego is part of the Leolo Mountain range. It was here that the British and their allies subjugated the Pedi of Sekhukhune in 1879 during the Battle of Sekhukhune. The Sekhukhune Wars of 1876 and 1879 were both fought in the Tsjate Valley where the Pedi chiefs Sekwati and Sekhukhune established mountain fortresses. Sekwati is buried on Thaba ya Mosego.

- One of the main Pedi villages (*mošate*) during this war, namely Tsjatse, is also located along the foot of the Leolo Mountain range.
- The missionary station known as Maandagshoek (or Ratagou) was established in the middle of the 19th century on Maandagshoek, to the north of the Spitzkop Project Area.
- Two mountains in the Leolo Mountain chain are known as 'Modimolle'. The name 'modimolle' implies that these mountains are sacred places. It is possible that Pedi chiefs (and possibly their wives as well) were buried near one or both of these mountains. (These mountains are probably still sacred places nowadays). The spirits of deceased chiefs (*badimo*) are venerated at these places and sacrifices are made annually at such places.
- The mountain Monganeng on Winterveld 293 may be where Thulare - one of the greatest Pedi chiefs of all time - lived during the early 19th century. The remains of his villages may be located near the Tubatse (Steelpoort) River.
- Names such as 'Badimo' and 'Badimong' are recorded on a mountain close to Monganeng. These names refer to forefathers (*'badimo'*) and the place of the forefathers (*'badimong'*) and therefore possibly to important settlements and graveyards that have important significance in the origin history of the Pedi.

6 THE PHASE I HERITAGE IMPACT ASSESSMENT

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

- A few scattered stone tools in the numerous dongas that criss-cross the Spitzkop Project Area.
- At least three single graves and three graveyards in the Spitzkop Project Area.
- A stone cairn (*phiri*) associated with the initiation of boys.
- Remains from the recent past consisting of dilapidated residences occur wide across the Spitzkop Project Area. A few of these sites were mapped.

These heritage resources were geo-referenced and mapped (Figure 3; Tables 1-2).

The significance of the heritage resources was determined as some may be affected by the new mining development project. Mitigation measures are proposed for those heritage resources which may be affected by the mining development project.

The heritage resources is now briefly discussed and illuminated with photographs.

6.1 Scattered stone tools

Scattered stone tools were observed in the extensive network of dongas that criss-cross the Spitzkop Project Area. It seems as if most of these stone tools date from the Middle Stone Age. These stone tools include scrapers, points and cores. The stone tools that were observed were not geo-referenced as they occur in low numbers over a wide area.

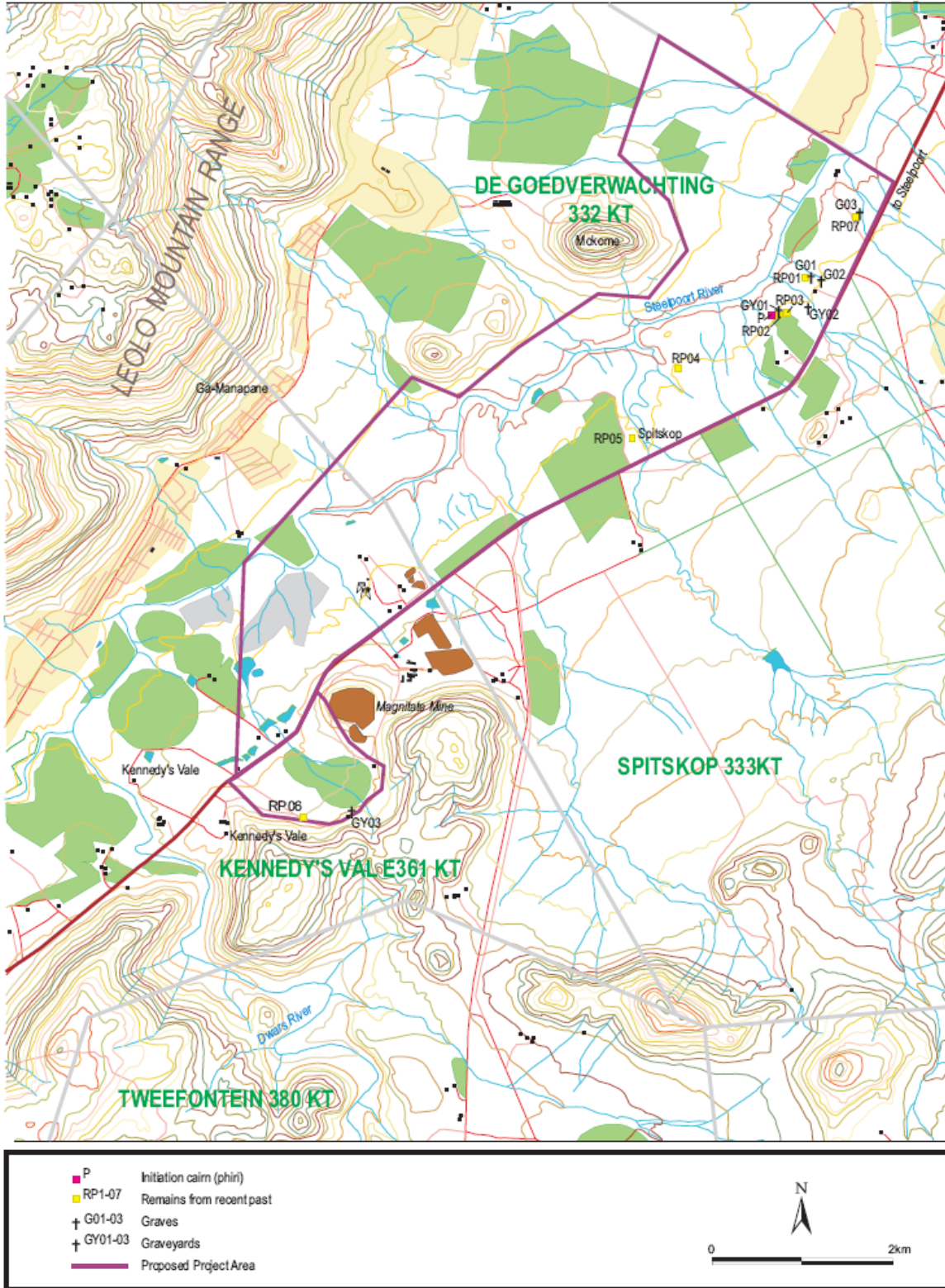


Figure 3- The Spitzkop Project Area on Kennedy's Vale 361, Spitzkop 333 and De Goedverwaching 332 KT in the Steelpoort Valley. Note the presence of heritage resources such as graves and graveyards, an initiation cairn (phiri) and remains from the recent past in the project area (above).



Figure 4- The extensive network of dongas which run into the Thubatse River in the Spitzkop Project Area contain scattered stone tools. In the photograph three cores from which flakes were removed can be observed (above).

6.2 Graves and graveyards

At least three single graves and three small graveyards were observed in the Spitzkop Project Area, namely:

6.2.1 Grave 01 (G01)

This grave is decorated with a large upright stone as well as smaller stones and gravel. G01 is associated with remains which date from the recent past (RP01).



Figure 5- Stone tool flakes observed in the extensive network of dongas which occur towards the central part of the Spitzkop Project Area. Note borer (*outil ecaille*, top left) and blade (bottom, right) (above).

6.2.2 Grave 02 (G02)

This formal grave is decorated with a granite headstone and edged with granite strips. The grave is covered with gravel. The inscription on the tomb stone reads as follows:

- 'Hier rus my dierbare eggenoot en ons vader Nicolaas Jacobus Venter Geb 18 Feb 1886 Oorl 5 Okt 1950 Ps 51 V1 en Jes 41 V10'



Figure 6- The grave of Nicolaas Jacobus Venter on a low rise on De Goede Verwachting 332 (above)

6.2.3 Grave 03 (G03)

This single grave is associated with remains from the recent past (RP07) which occur scattered across a wide area on De Goede Verwachting 332.

Grave 03 is decorated with a granite headstone and edged with granite strips. It is demarcated with a low stone wall.

The inscription on the tomb stone reads as follows:

- 'Nyoga Johannes Mndebele Robala Khutso'.



Figure 7- G03 belongs to Johannes Mndebele. It is located on De Goede Verwachting 332 (above).

6.2.4 Graveyard 01 (GY01)

This graveyard contains two and perhaps three graves, two for adults and the third may be the grave of a child. The first two graves are decorated with cement slabs and head stones. The third grave is merely edged with randomly placed stones.

The inscriptions on the cement headstones read as follow:

- 'Letshakana Mankgane'
- 'Ramatene Mankgane'



Figure 8- Two, or perhaps three graves of the Mankgane family on Spitzkop 333 (above). The graves are associated with remains dating from the recent past.

6.2.5 Graveyard 02 (GY02)

This graveyard contains nine graves, six decorated with granite head stones and edged with granite strips. Three are edged with stones.

Inscriptions on the granite head stones read as follow:

- 'Alfred Pampida Ngwabela 01-06-1989, 12-08-1994 Robala Khutso Tonga'
- 'Buyabhi 22-03-1941, 05-05-1983 Robala ka Khutso Tonga'
- 'Thindeka Esther Ngwabela 24-12-1901, 01-08-1969 Robala'
- 'Richard Matshabe 07-09-1976, 18-10- 2002 Robala'

- 'Kluleni Clara Toung 15-12-1965, 12-11-1966 Rest In Peace'
- 'Efa Stekwa 21-06-1950, 03-09-1951 Rest In Peace Psalm 23'



Figure 9- The graveyard of the Ngwabela clan on Spitzkop 333 (above).

6.2.6 Graveyard 03 (GY03)

This graveyard on Kennedy's Vale 332 contains three graves of members of the Makolane family. All three graves are fitted with white painted cement head stones. One is edged with cement strips. Inscriptions on the head stones are the following:

- 'Motupi Washu 1974'
- 'Tabeed Sekomawe Makolane 1964'
- 'Matukani Makolane'



Figure 10- GY03 on Kennedy's Vale 361 contains three graves of the Makolane family (above).

6.3 An initiation cairn (*phiri*)

An initiation cairn is located near G02. This feature comprises of a circular stack of flat stones which were built at the site where boys attended an initiation school. The cairn, which is also known as a *phiri*, serves as a visible monument to the boys and the regiment (*maphato*) to which the boys belong who attended the school.

The use of old abandoned sites for rituals associated with the *bodika* ceremony for boys would have emphasised the tradition of continuity that is implied with the *bodika* ceremony. Abandoned settlements or graveyards of the forefathers had a powerful influence on this ceremony.



Figure 11- An initiation cairn which was constructed at the end of the *bodikwa* initiation school for boys (located near G01) symbolises the continued existence of the *mophato* (regiment) that was created during the ceremony (above). Its location close to a cemetery may suggest gaining strength from the ancestors (above).

6.4 Remains from the recent past

Remains dating from the recent past were observed at several localities in the Spitzkop Project Area. These remains mostly consist of dilapidated mud houses and other evidence for occupation of the project area in more recent times such as 'modern' rubbish, e.g. tin plate and glass bottles. Vegetation associated with these sites includes prickly pears, the 'queen of the night', aloes and *euphorbia*.

Remains dating from the recent past usually comprises of dwellings that were occupied temporarily by single families or small extended families.

The following remains from the recent past were geo-referenced, namely:

- An extensive site (RP01) dating from the recent past on Spitzkop 333 in close proximity to G01. These remains include dilapidated mud dwellings; stone lines which possibly served as foundations for houses and the lower part of a solid stone wall which may have served as a cattle enclosure.
- The barely recognisable remains of mud dwellings near the Mankgane graves (RP02).
- Some extensive remains of mud dwellings and middens in close proximity of the Ngwabela graveyard (RP03). It is said that January Ngwabela and his family lived in these homesteads.
- An open spot with prickly pears and a lower grinding stone (RP04).
- A large open piece of land on a small plateau overlooking part of the project area where a dilapidated brick building and modern rubbish are scattered (RP05).
- Remains of mud dwellings and modern rubbish next to a dirt road on Kennedy's Vale 361 (RP06).



Figures 12 & 13- Site RP01 on Spitzkop 333 includes stone lines which probably served as the outer walls of a homestead (above). Remains of mud dwellings on Kennedy's Vale 361 (Site RRP06) (below).



| | GRAVES AND GRAVEYARDS | COORDINATES | SIGNIFICANCE |
|------|------------------------------|----------------------------|---------------------|
| G01 | Single grave | 24° 47.101'S; 30° 09.143'E | HIGH |
| G02 | Single grave (J Venter) | 24° 47.130'S; 30° 09.225'E | HIGH |
| G03 | Single grave (J Mndebele) | 24° 46.727'S; 30° 09.453'E | HIGH |
| GY01 | Mankgane graves | 24° 47.324'S; 30° 08.967'E | HIGH |
| GY02 | Ngwabela graves | 24° 47.298'S; 30° 09.148'E | HIGH |
| GY03 | Makolane graves | 24° 50.322'S; 30° 06.415'E | HIGH |

Table 1- Coordinates for single graves and graveyards in the Spitzkop Project Area (above).

| | HERITAGE SITES AND OTHER FEATURES | COORDINATES | SIGNIFICANCE |
|------|--|----------------------------|---------------------|
| P | Initiation cairn (<i>phiri</i>) | 24° 47.327'S; 30° 08.934'E | MED-HIGH |
| RP01 | Extensive remains from the recent past | 24° 47.105'S; 30° 09.155'E | LOW |
| RP02 | Disintegrated mud dwellings near GY01 | 24° 47.324'S; 30° 08.967'E | LOW |
| RP03 | Disintegrated mud dwellings near GY02 | 24° 47.305'S; 30° 09.031'E | LOW |
| RP04 | Open spot close to Tubatse River | 24° 47.650'S; 30° 08.370'E | LOW |
| RP05 | Remains of brick building | 24° 48.067'S; 30° 08.091'E | LOW |
| RP06 | Disintegrated mud dwellings | 24° 50.339'S; 30° 06.124'E | LOW |
| RP07 | Disintegrated brick and mud dwellings | 24° 46.733'S; 30° 09.443'E | LOW |

Table 2- Coordinates for an initiation cairn (*phiri*) and remains from the recent past in the Spitzkop Project Area (above).

7 THE SIGNIFICANCE, MITIGATION AND MANAGEMENT OF THE HERITAGE RESOURCES

The Phase I HIA study for the Spitzkop Project Area revealed the following types and ranges of heritage resources in the project area, namely (Figure 3; Tables 1-2):

- A few scattered stone tools in the numerous dongas that criss-cross the Spitzkop Project Area.
- At least three graves and three graveyards in the Spitzkop Project Area.
- A stone cairn (*phiri*) associated with the initiation of boys.
- Remains from the recent past consisting of dilapidated residences occur wide across the Spitzkop Project Area. A few of these sites were mapped.

The significance of these heritage resources has to be determined as they may be affected by the proposed new mining development project.

7.1 The significance of the heritage resources

The significance of the heritage resources that may be affected by the proposed new mining development project is based on stipulations from the National Heritage Resources Act (No 25 of 1999) and various other criteria:

7.1.1 The stone tools

The stone tools that occur in the network of dongas in the Spitzkop Project Area qualify as archaeological remains and are protected by Section 35 of the National Heritage Resources Act (No 25 of 1999). These stone tools can be considered to be of medium significance when considering the following criteria:

- The number of stone tools that were observed was limited although it is possible that high concentrations may occur in certain areas in the dongas which cover a large surface area.

- The stone tools occur out of any archaeological context which diminishes their significance for research purposes. (Any archaeological material in a sealed stratigraphic context has much higher significance).
- The number and types of stone tools that occur in the network of dongas in the Spitzkop Project Area is a mere fraction of the number of exposed stone tools that occur in the extensive network of dongas in the Steelpoort Valley.

7.1.2 The initiation cairn (*phiri*)

The stone cairn that used to be part of the rituals associated with an initiation school qualifies as a historical/archaeological phenomenon which is protected by Section 35 of the National Heritage Resources Act (No 25 of 1999). This cultural phenomenon has a medium to high significance when considering the following criteria:

- The stone cairn is associated with an ancient cultural tradition that is still practised by groups in the Steelpoort Valley. It is therefore part of living heritage.
- The cairn can be associated with a certain group of men or regiment (*mophato*) who share a life long association of some kind. Members of this particular group may still be alive or their descendants may be aware of the *phiri* still existing in honour of their ancestors.
- A considerable number of these cairns occur throughout the Steelpoort. However, development in the Steelpoort is encroaching upon and endangering the future unaffected existence of these cultural objects.

7.1.3 The graves and graveyards

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

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

7.1.4 Remains from the recent past

The remains from the recent past do not qualify as historical significant remains.

7.2 Mitigating the heritage resources

Mitigation measures for any of the heritage resources that may be affected by the mining development project in the Spitzkop Project Area are the following:

7.1.1 The stone tools

Whenever surface areas of the dongas in the Spitzkop Project Area may be disturbed in the future, e.g. to construct roads or any other infrastructure, stone tools that may be present in the affected parts of the dongas have to be collected from the surface of the dongas.

The sampling of the stone tools can only be done by an archaeologist accredited with the Southern African Association for Professional Archaeologists (ASAPA) who must apply for a permit from the Mpumalanga Provincial Heritage Resources Authority (Mpumalanga PHRA) before the collection of the stone tools may commence.

The stone tools must be preserved in a provincial or university museum.

7.1.2 The initiation cairn (*phiri*)

If the initiation cairn is to be affected by the proposed new mining development this stone structure must be documented by means of a description and by photographing the structure after it has been cleared from overgrowth and vegetation. A brief report outlining the documentation and significance of this cultural phenomenon must be kept in the data bank of the Mpumalanga PHRA.

The documentation of the initiation cairn must be undertaken by an archaeologist accredited with ASAPA who must apply for a permit from the Mpumalanga PHRA before the initiation cairn may be destroyed by the mining development project.

7.1.3 The graves and graveyards

If any of the graves or graveyards may be affected by the proposed mining development project, they have to be mitigated. One of the following strategies may be followed:

- The graves or graveyard can be preserved *in situ*. The graves or graveyards can be demarcated with brick walls or with fences. Conserving graves and graveyard *in situ* creates the risk and responsibility that they may be damaged (accidentally), that the mine remains responsible for their future unaffected existence, maintenance and that controlled access must exist for any relatives or friends who wish to visit the deceased.
- Graves and graveyards 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 all 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.

7.1.4 Remains from the recent past

The remains from the recent past need no mitigation measures and can be destroyed by the mining development project.

8 CONCLUSION AND RECOMMENDATIONS

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

- A few scattered stone tools in the numerous dongas that criss-cross the Spitzkop Project Area.
- At least three single graves and three graveyards in the Spitzkop Project Area.
- A stone cairn (*phiri*) associated with the initiation of boys.
- Remains from the recent past consisting of dilapidated residences occur wide across the Spitzkop Project Area. A few of these sites were mapped.

These heritage resources were geo-referenced and mapped (Figure 3; Tables 1-2).

The significance of the heritage resources was determined as some may be affected by the new mining development project. Mitigation measures are proposed for those heritage resources which may be affected by the mining development project.

The significance of the heritage resources that may be affected by the proposed new mining development project is based on stipulations from the National Heritage Resources Act (No 25 of 1999) and various other criteria:

The stone tools that occur in the network of dongas in the Spitzkop Project Area qualify as archaeological remains and are protected by Section 35 of the National Heritage Resources Act (No 25 of 1999). These stone tools can be considered to be of medium significance when considering the following criteria:

- The number of stone tools that were observed was limited although it is possible that high concentrations may occur in certain areas in the dongas which cover a large surface area.
- The stone tools occur out of any archaeological context which diminishes their significance for research purposes. (Any archaeological material in a sealed stratigraphic context has much higher significance).
- The number and types of stone tools that occur in the network of dongas in the Spitzkop Project Area is a mere fraction of the number of exposed stone tools that occur in the extensive network of dongas in the Steelpoort Valley.

The stone cairn that used to be part of the rituals associated with an initiation school qualifies as a historical/archaeological phenomenon which is protected by Section 35 of the National Heritage Resources Act (No 25 of 1999). This cultural phenomenon has a medium to high significance when considering the following criteria:

- The stone cairn is associated with an ancient cultural tradition that is still practised by groups in the Steelpoort Valley. It is therefore part of living heritage.
- The cairn can be associated with a certain group of men or regiment (*mophato*) who share a life long association of some kind. Members of this particular group may still be alive or their descendants may be aware of the *phiri* still existing in honour of their ancestors.
- A considerable number of these cairns occur throughout the Steelpoort. However, development in the Steelpoort is encroaching upon and endangering the future unaffected existence of these cultural objects.

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

graves are exhumed and relocated, namely the Ordinance on Exhumations (No 12 of 1980) and the Human Tissues Act (No 65 of 1983 as amended).

The remains from the recent past do not qualify as historical significant remains.

Mitigation measures for any of the heritage resources that may be affected by the mining development project in the Spitzkop Project Area are the following:

Whenever surface areas of the dongas in the Spitzkop Project Area may be disturbed in the future, e.g. to construct roads or any other infrastructure, stone tools that may be present in the affected parts of the dongas have to be collected from the surface of the dongas.

The sampling of the stone tools can only be done by an archaeologist accredited with the Southern African Association for Professional Archaeologists (ASAPA) who must apply for a permit from the Mpumalanga Provincial Heritage Resources Authority (Mpumalanga PHRA) before the collection of the stone tools may commence.

The collected stone tools must be preserved in a provincial or university museum.

If the initiation cairn is to be affected by the proposed new mining development this stone structure must be documented by means of a description and by photographing the structure after it has been cleared from overgrowth and vegetation. A brief report outlining the documentation and significance of this cultural phenomenon must be kept in the data bank of Mpumalanga PHRA.

The documentation of the initiation cairn must be undertaken by an archaeologist accredited with ASAPA who must apply for a permit from the Mpumalanga PHRA before the initiation cairn may be destroyed by the mining development project.

If any of the graves or graveyards may be affected by the proposed mining development project, they have to be mitigated. One of the following strategies may be followed:

- The graves or graveyard can be preserved *in situ*. The graves or graveyards can be demarcated with brick walls or with fences. Conserving graves and graveyard *in situ* creates the risk and responsibility that they may be damaged (accidentally), that the mine remains responsible for their future unaffected existence, maintenance and that controlled access must exist for any relatives or friends who wish to visit the deceased.
- Graves and graveyards 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 all 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.

The remains from the recent past need no mitigation measures and can be destroyed by the mining development project.

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