

**Prepared for:
METAGO ENVIRONMENTAL ENGINEERS**

**A PHASE I HERITAGE IMPACT ASSESSMENT (HIA) STUDY FOR
A PROPOSED NEW POWER LINE FOR THE UNITED MANGANESE
OF KALAHARI (UMK) MINE NEAR HOTAZEL IN THE NORTHERN
CAPE PROVINCE OF SOUTH AFRICA**

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EXECUTIVE SUMMARY

This Phase I Heritage Impact Assessment (HIA) study for a proposed new power line for the United Manganese of Kalahari (UMK) Mine on the farms Smartt 314 and Rissik 330 near Hotazel in the Northern Cape Province of South Africa was done in accordance with Section 38 of the National Heritage Resources Act (No 25 of 1999). The aims with the 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) do occur within the proposed new power line corridors.
- To determine the significance of these heritage resources (if they exist).
- To make recommendations regarding the mitigation or the conservation of these heritage resources if they are to be affected by the proposed new power line.

The Phase I HIA survey for the proposed new power line revealed none of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) in the Project Area.

There is consequently no reason from a heritage point of view why the construction of the proposed new power line should not proceed.

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

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1 INTRODUCTION

This document contains the report on the results of a Phase I Heritage Impact Assessment (HIA) study which was done for a proposed new power line to be established across the farms Rissik 330 and Smartt 314 near Hotazel in the Northern Cape Province of South Africa. The proposed new power lines will supply the United Manganese of Kalahari (UMK) Mine with the necessary capacity to undertake its mining operations.

Focused archaeological research has been conducted in the Northern Cape Province for some decades. This research consisted of surveys and the excavation and recording of Stone Age and rock engraving sites. Late Iron Age and historical sites also occur. The Northern Cape Province therefore has a rich heritage comprised of remains dating from the pre-historical and from the historical (or colonial) periods of South Africa. These pre-historical and historical remains form a record of the heritage of most groups living in South Africa today.

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

Box 1: Types and ranges of heritage resources as outlined in 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 paleontological sites;
- (g) graves and burial grounds including-
 - (i) ancestral graves;
 - (ii) royal graves and graves of traditional leaders
 - (iii) graves of victims of conflict
 - (iv) graves of individuals designated by the Minister by notice in the Gazette;
 - (v) historical graves and cemeteries; and
 - (vi) other human remains which are not covered by in terms of the Human Tissue Act, 1983 (Act No 65 of 1983)
- (h) sites of significance relating to the history of slavery in South Africa;
- (i) moveable objects, including -
 - (i) objects recovered from the soil or waters of South Africa, including archaeological and paleontological objects and material, meteorites and rare geological specimens;
 - (ii) objects to which oral traditions are attached or which are associated with living heritage;
 - (iii) ethnographic art and objects;
 - (iv) military objects;
 - (v) objects of decorative or fine art;
 - (vi) objects of scientific or technological interest; and
 - (vii) books, records, documents, photographs, positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No 43 of 1996).

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

- (a) its importance in the community, or pattern of South Africa's history;
- (b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- (c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- (d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- (f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- (h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa;
- (i) sites of significance relating to the history of slavery in South Africa

2 AIMS WITH THIS REPORT

A proposed new power line for the United Manganese of Kalahari (UMK) Mine will be established across parts of the farms Smartt 314 and Rissik 339 near Hotazel in the Northern Cape Province of South Africa. Metago Environmental Engineers, the environmental company responsible for compiling the EIA report for the development, commissioned the author to undertake a Phase I Heritage Impact Assessment (HIA) study for the proposed new power line corridors (Project Area) with the following aims:

- To establish whether any of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) do occur within the proposed new power line corridors.
- To determine the significance of these heritage resources (if they exist).
- To make recommendations regarding the mitigation or the conservation of these heritage resources if they are to be affected by the proposed new power line.

3 THE PROJECT AREA

3.1 Location

The UMK Mine was established on the vast manganese fields that underlie the north-eastern part of the Northern Cape Province. The mine is situated to the south of Hotazel and Black Rock and to the north of Postmasburg, centres of early manganese mining in the Northern Cape Province. The project area is also located approximately 60km to the north-west of the town of Kuruman, 'the fount of Christianity in Africa'.

The proposed new power line will be established on parts of the farms Smartt 314 and Rissik 330 near Hotazel in the Northern Cape Province of South Africa. The project area is bordered in the north and east by Eskom's existing 122kV Ferrum-Hotazel power line, in the west by the R380 running from the north to Kathu in the south and by Kalahari sand veldt in the south (2722BD Sutton; 1: 50 000 topographical map) (Figures 1 & 2).

One of two alternatives is proposed for the proposed new power line running to the UMK Mine. These alternatives are the following, namely (Figure 2):

- A preferred option which runs from Eskom's existing 122kV Ferrum-Hotazel power line to the UMK Mine's infrastructure to the west of a railway line. This option runs in a straight line from the east to the west across the farm Rissik 330 and is approximately 1,5km long.
- An alternative option which also runs from Eskom's existing Ferrum-Hotazel power line to the UMK Mine's infrastructure. However, this option runs from the north to the south across Smartt 314 and Rissik 330 and then bends towards the west. It is approximately 3km long



Figure 1- The Project Area where the proposed new power line will be established runs across the farms Smartt 314 and Rissik 339 near Hotazel in the Northern Cape Province (above).

3.2 Historical context of the Project Area

The historical context of the Project Area where the proposed new power lines will be established was outlined in the Phase I HIA study which was done for the UMK Mine, namely:

- 'Pistorius, J.C.C. 2006. *A Phase I Heritage Impact Assessment (HIA) study for the proposed new United Manganese of Kalahari (UMK) Mine on the farms Botha 313, Smartt 314 and Rissik 330 near Hotazel in the Northern Cape Province of South Africa.*' Unpublished report prepared for Metago Environmental Engineers.

This historical background is therefore not repeated in this report.

4 METHODOLOGY

4.1 Method

This Phase I HIA study was conducted by means of the following; consulting archaeological data bases; doing a survey on foot of the project area and by means of studying maps of the Project Area.

- Archaeological data bases kept at institutions such as the Kimberley Museum (provincial) and the South African Heritage Resources Authority in Cape Town (national) was consulted to establish if any heritage resources of significance occur in or near the project area.
- The Project Area was surveyed on foot.
- The 1: 50 000 and 1: 250 000 maps were used to study the project area.

4.2 Assumptions and limitations

It is possible that this HIA study may have missed heritage resources in the project area as heritage remains may be covered by low growing Kalahari bush while others may lie below the Kalahari sand and may only be exposed once development commences.

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

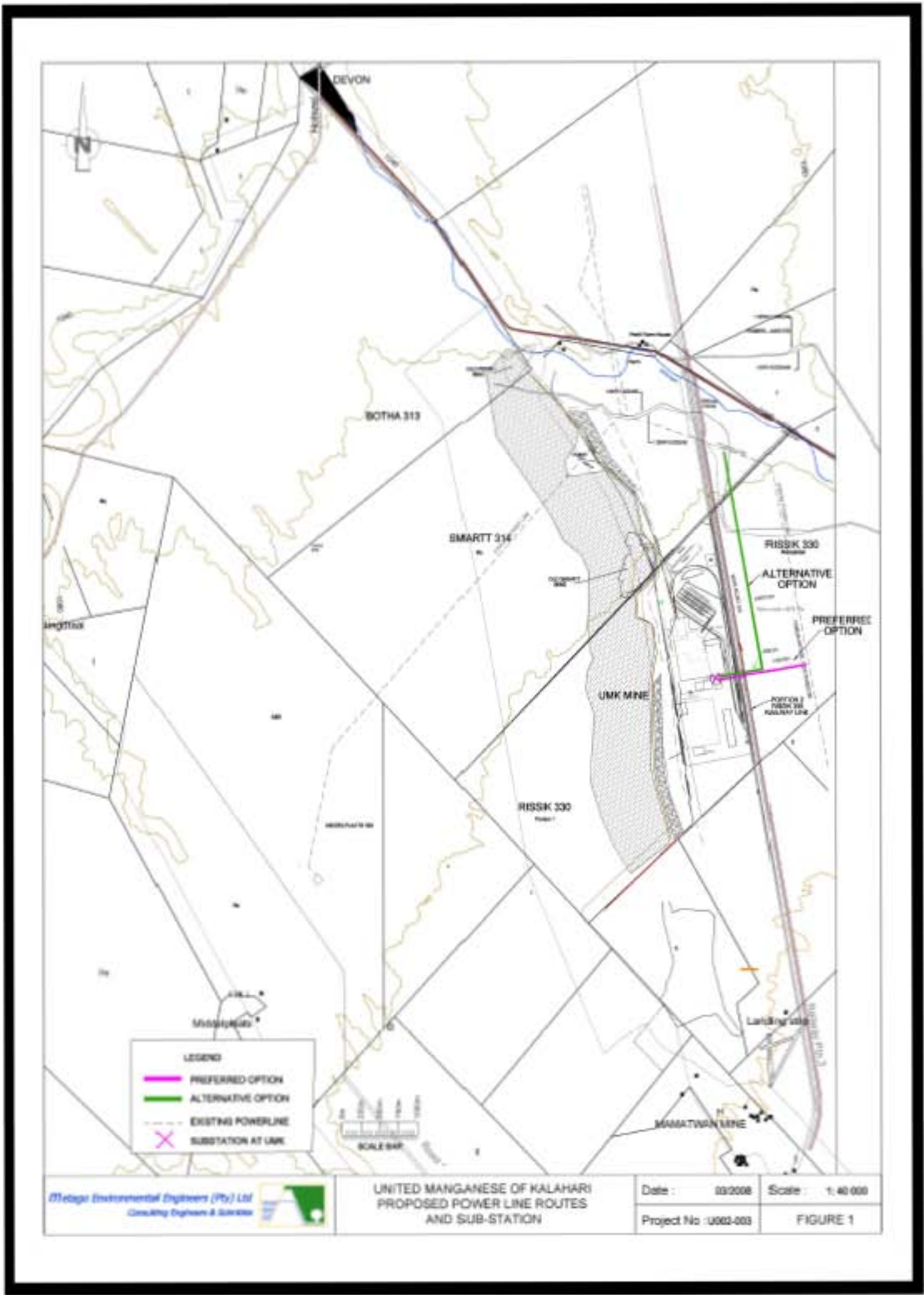


Figure 2- The Project Area involving two alternatives for a proposed new power line for the United Manganese of Kalahari (UMK) Mine near Hotazel in the Northern Cape Province (above).

5 THE PHASE I HERITAGE IMPACT ASSESSMENT (HIA) STUDY

5.1 Heritage resources in the project area

The Phase I HIA survey for the proposed new power lines for the UMK Mine revealed none of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) in the Project Area.

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



Figure 3- The proposed as well as the alternative power line corridors for the new power line will run from Eskom's existing Ferrum-Hotazel power line to the UMK Mine (above).



Figure 4- Both the proposed as well as the alternative power line corridors run between Eskom's existing Ferrum-Hotazel power line and the UMK Mine. Both these options run across Kalahari sandveld with low, scattered thorn trees (above).

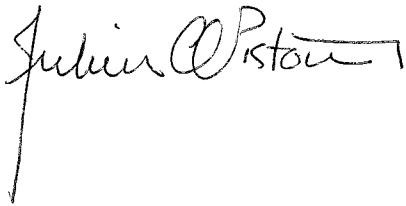


Figure 5- The proposed new power line will end at the UMK Mine's infrastructure which is located to the west of the R380 running to Kathu in the south (above).

6 CONCLUSION AND RECOMMENDATIONS

The Phase I HIA survey for the proposed new power lines for the UMK Mine revealed none of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) in the Project Area.

There is consequently no reason from a heritage point of view why the construction of the proposed new power line should not proceed.

A handwritten signature in black ink, appearing to read 'Julius CC Pistorius'. The signature is written in a cursive style with a long vertical line extending downwards from the end of the name.

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