

**Archaeological Survey Of The Ruigtevallei-  
Dreunberg 132kv Powerline, Eastern Cape.**

**For Eskom Holdings Pty (Ltd)**

**NEAS Ref.: DEA/EIA/0000692/2011**

**DEA Ref.:12/12/20/2315**

**Date: March 2013**

**By Gavin Anderson**

**Umlando: Archaeological Surveys and Heritage  
Management**

**PO Box 102532, Meerensee, 3901**

**Phone: 035-7531785 Fax: 0865445631**

**Cell: 0836585362**

**Email: Umlando@gmail.com**



## TABLE OF CONTENT

INTRODUCTION .....	3
NATIONAL HERITAGE RESOURCES ACT OF 1999 .....	10
METHOD .....	12
Defining significance.....	13
RESULTS .....	16
DESKTOP STUDY .....	16
FIELD SURVEY.....	18
RUI01 .....	22
RUI02 .....	23
RUI03 .....	24
RUI04 .....	25
RUI05 .....	26
RUI06 .....	28
Cemeteries .....	29
MANAGEMENT PLAN .....	29
CONCLUSION.....	30
REFERENCES .....	31
APPENDIX A .....	32
SITE RECORD FOMS.....	32

### TABLE OF FIGURES

FIG. 1 GENERAL LOCATION OF THE RUIGTEVALLEI-DREUNBERG POWERLINE.....	5
FIG. 2A: AERIAL OVERVIEW OF THE WESTERN RUIGTEVALLEI-DREUNBERG POWERLINE .....	6
FIG. 2B: AERIAL OVERVIEW OF THE EASTERN RUIGTEVALLEI-DREUNBERG POWERLINE.....	7
FIG. 3A: TOPOGRAPHICAL MAP OF THE WESTERN RUIGTEVALLEI-DREUNBERG POWERLINE .....	7
FIG. 3B: TOPOGRAPHICAL MAP OF THE EASTERN RUIGTEVALLEI-DREUNBERG POWERLINE .....	9
TABLE 1: SAHRA GRADINGS FOR HERITAGE SITES .....	15
Table 2: Heritage Sites Form The 1st Edition Topographical Maps.....	16
FIG. 4: LOCATION OF SETTLEMENTS ALONG THE RUIGTEVALLEI-DREUNBERG POWERLINE IN 1957 .....	17
TABLE 3: LOCATION AND ASSESSMENT OF RECORDED SITES .....	18
FIG. 5: PLAINS AND SLOPING HILLS ALONG THE ROUTE .....	19
FIG. 6A: LOCATIONS OF RECORDED SITES ALONG THE RUIGTEVALLEI-DREUNBERG POWERLINE .....	20
FIG. 6B: LOCATIONS OF RECORDED SITES ALONG THE RUIGTEVALLEI-DREUNBERG POWERLINE .....	21
FIG. 6: SELECTION OF STONE TOOLS AT RUI01.....	22
FIG. 7: STONE TOOLS AT BASE OF A KOPPIE AT RUI02 .....	23
FIG. 8: STONE WALLING AT RUI03 .....	24
FIG. 9: SCATTER OF HORNFELS TOOLS AT RUI04 .....	25
FIG. 11: POSITION OF TWO STONE CAIRNS AT RUI05 .....	26
FIG. 12: STONE CAIRNS AT RUI05 .....	27
FIG. 13: WALLING AT RUI06.....	28

## INTRODUCTION

Eskom proposes to construct 90km of 132kV overhead power line, and associated monopole infrastructures. The proposed power line is located in the northern part of the Gariiep Municipality of the Eastern Cape. The Gariiep Municipality is situated in the West of the Joe Gqabi District Municipality, and south of the Orange River, which separates the municipality from the Northern Cape and Free State Provinces. The 132kV power line will take off from the Ruigtevallei substation, approximately 35km north-west of Venterstad, and travel approximately 90km in a southeasterly direction to the Dreunberg substation. This work also includes building of foundations for towers (pylon and/ or structures) and conductor stringing. Figures 1 – 3 show the location of this power line

A Phase 1 Heritage survey was undertaken by eThembeni (2011). The recommendations were for an archaeological walkthrough for the line. SAHRA concurred with the recommendations (SAHRA File No. 9/2/004/0001).

The Terms of Reference for this project are:

- 1) Preparation and submission of an Archaeological Impact Report, as determined by South African National Heritage Resources Act, by:
  - a) undertaking a site visit to the project area and highlighted above;
  - b) determine whether there are likely to be any other Archaeological sites of significance along the proposed power line to be built ; as SAHRA recommended that a field survey be undertaken to identify possible archaeological material, burial ground and graves which may be impacted by the development;
  - c) identify and map any sites of cultural or palaeontological<sup>1</sup> significance along the proposed power line;

---

<sup>1</sup> The PIA was separately appointed

- d) indicate the sensitivity and conservation significance of potential archaeological sites potentially affected by the proposed development;
  - e) identify mitigatory measures to protect any such sites, and
  - f) Propose actions for inclusion in the Construction Environmental Management Plan for the proposed power line.
  - g) Identification of Archaeological sites/ historical resources or sites that could be affected by the proposed project and indicate them on the map.
- 2) Environmental management programme on how the identified potential Archaeological impacts should be mitigated and minimised.

The archaeological survey recorded five heritage sites along the route, and noted several graves that will not be affected by the power line. Most of the power line occurs on an extensive scatter of stone tools, especially in the plains, however these were not considered as sites due to the tools being in a secondary context and lag deposit. This is the norm for stone tool scatters in this area. Where stone tool sites do occur, they are at the base of the koppies, or in saddles within the koppies.

FIG. 1 GENERAL LOCATION OF THE RUIGTEVALLEI-DREUNBERG POWERLINE

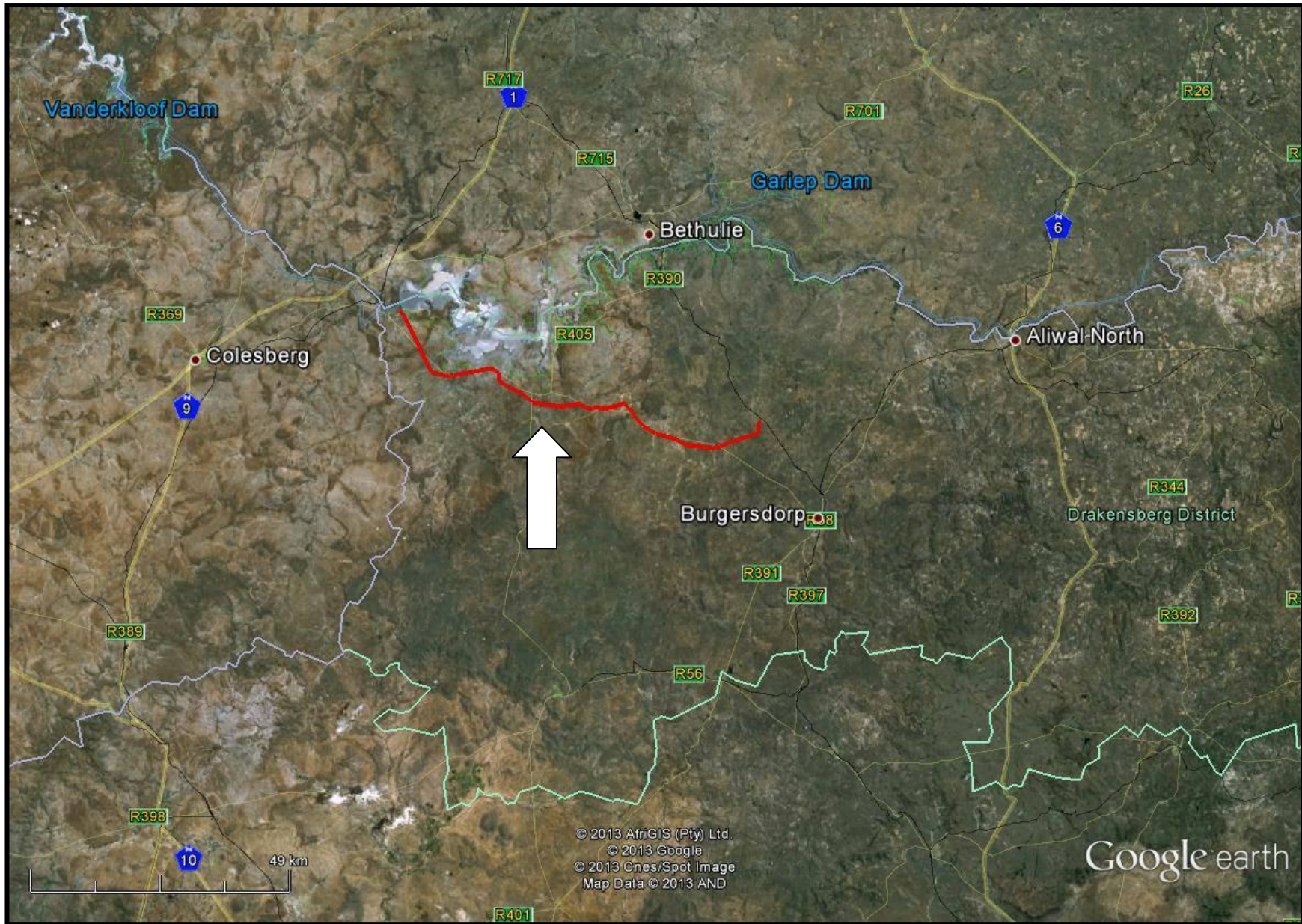


FIG. 2A: AERIAL OVERVIEW OF THE WESTERN RUIGTEVALLEI-DREUNBERG POWERLINE



FIG. 2B: AERIAL OVERVIEW OF THE EASTERN RUIGTEVALLEI-DREUNBERG POWERLINE



FIG. 3A: TOPOGRAPHICAL MAP OF THE WESTERN RUIGTEVALLEI-DREUNBERG POWERLINE

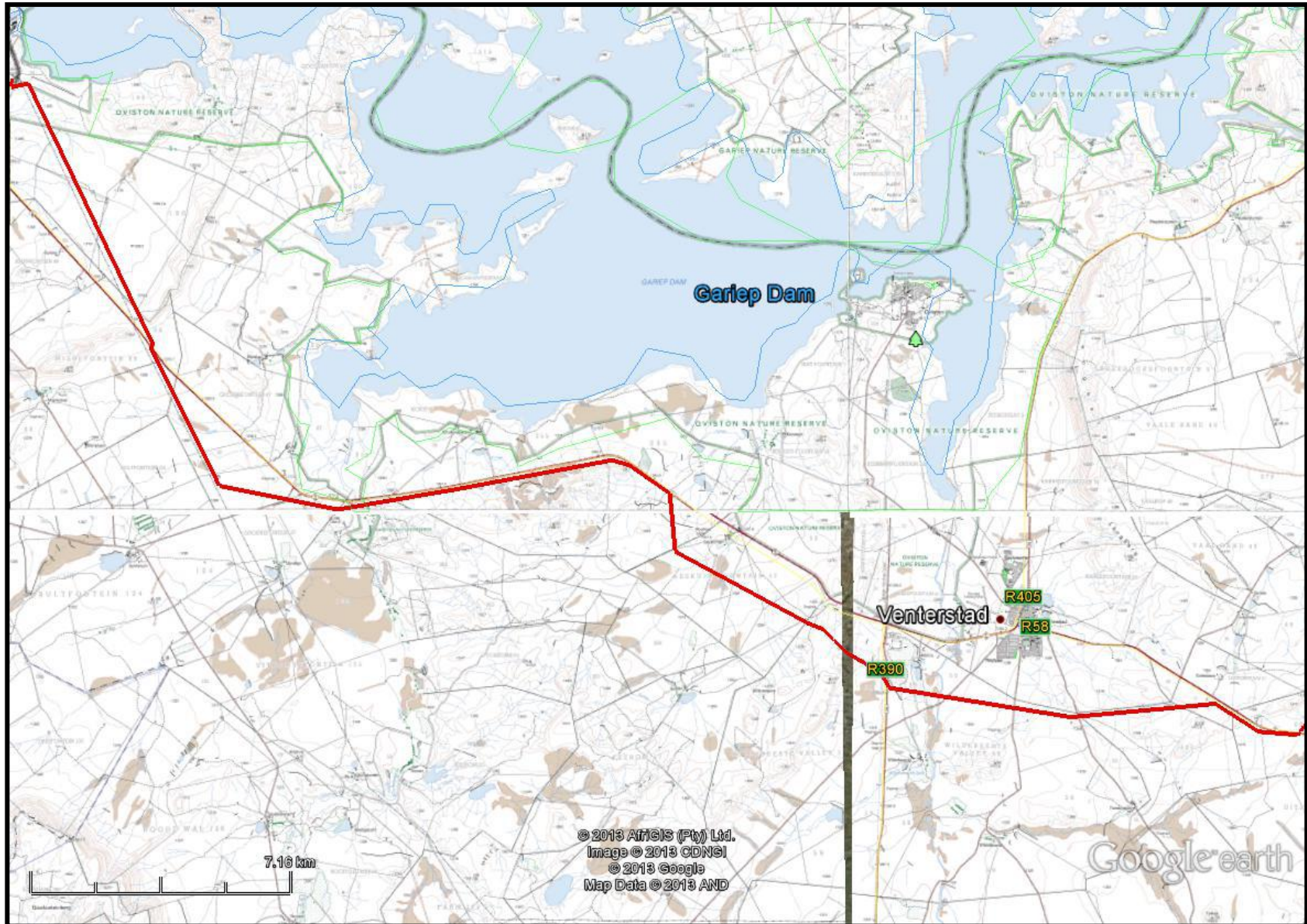
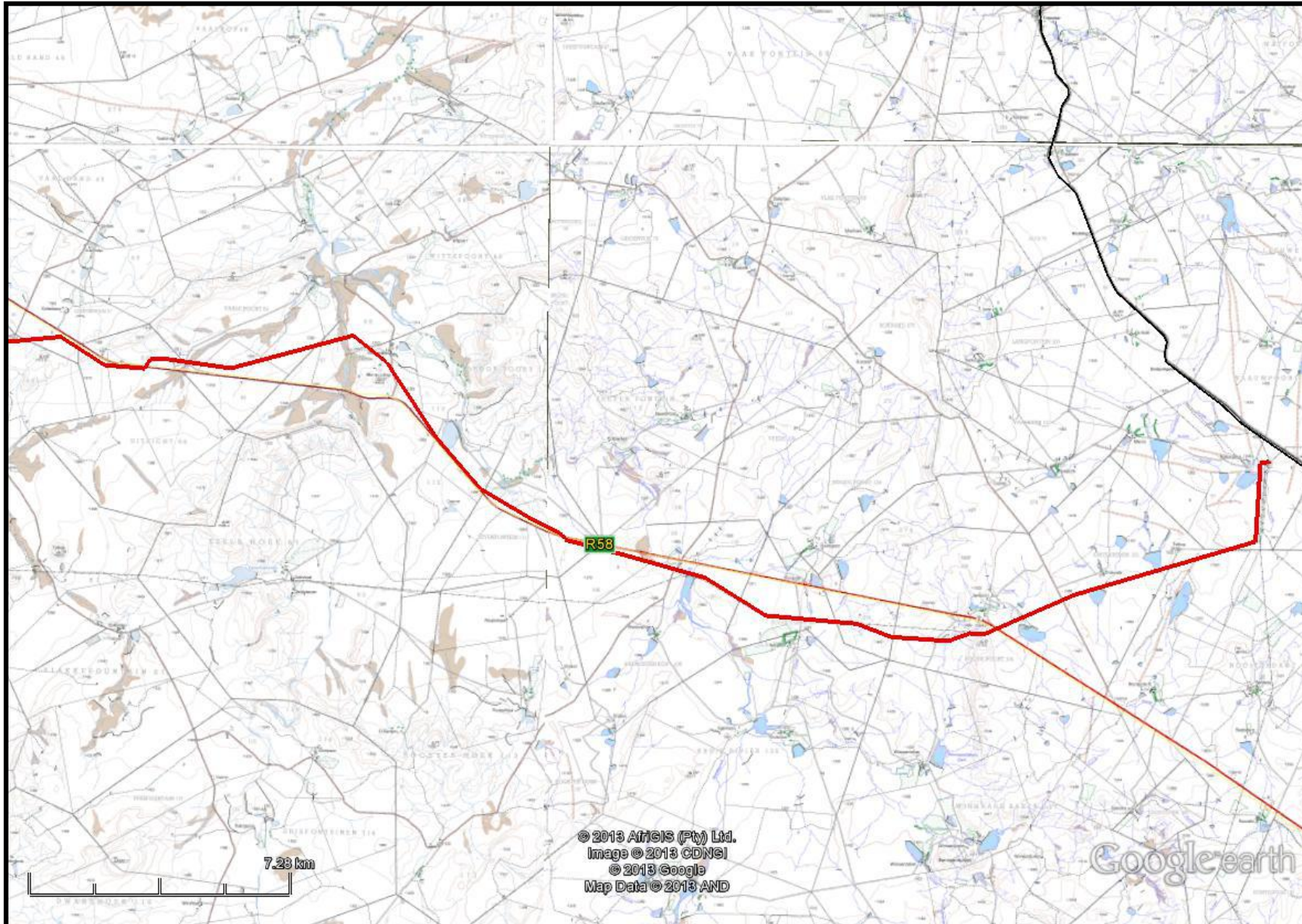




FIG. 3B: TOPOGRAPHICAL MAP OF THE EASTERN RUIGTEVALLEI-DREUNBERG POWERLINE



## NATIONAL HERITAGE RESOURCES ACT OF 1999

The National Heritage Resources Act of 1999 (pp 12-14) protects a variety of heritage resources. These resources are defined as follows:

1. “For the purposes of this Act, those heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations must be considered part of the national estate and fall within the sphere of operations of heritage resources authorities.
2. Without limiting the generality of subsection (1), the national estate may include—
  - 2.1. Places, buildings, structures and equipment of cultural significance;
  - 2.2. Places to which oral traditions are attached or which are associated with living heritage;
  - 2.3. Historical settlements and townscapes;
  - 2.4. Landscapes and natural features of cultural significance;
  - 2.5. Geological sites of scientific or cultural importance;
  - 2.6. Archaeological and palaeontological sites;
  - 2.7. Graves and burial grounds, including—
    - 2.7.1. Ancestral graves;
    - 2.7.2. Royal graves and graves of traditional leaders;
    - 2.7.3. Graves of victims of conflict;
    - 2.7.4. Graves of individuals designated by the Minister by notice in the Gazette;
    - 2.7.5. Historical graves and cemeteries; and
    - 2.7.6. Other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
3. Sites of significance relating to the history of slavery in South Africa;
  - 3.1. Movable objects, including—

4. Objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
  - 4.1. Objects to which oral traditions are attached or which are associated with living heritage;
  - 4.2. Ethnographic art and objects;
  - 4.3. Military objects;
  - 4.4. objects of decorative or fine art;
  - 4.5. Objects of scientific or technological interest; and
  - 4.6. books, records, documents, photographic 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).
5. Without limiting the generality of subsections (1) and (2), a place or object is to be considered part of the national estate if it has cultural significance or other special value because of—
  - 5.1. Its importance in the community, or pattern of South Africa's history;
  - 5.2. Its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
  - 5.3. Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
  - 5.4. Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
  - 5.5. Its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
  - 5.6. Its importance in demonstrating a high degree of creative or technical achievement at a particular period;
  - 5.7. Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
  - 5.8. Its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and

5.9. sites of significance relating to the history of slavery in South Africa”

## METHOD

The method for Heritage assessment consists of several steps.

The first step forms part of the desktop assessment. Here we would consult the database that has been collated by Umlando. This databases contains archaeological site locations and basic information from several provinces (information from Umlando surveys and some colleagues), most of the national and provincial monuments and battlefields in Southern Africa (<http://www.vuvuzela.com/googleearth/monuments.html>) and cemeteries in southern Africa (information supplied by the Genealogical Society of Southern Africa). We use 1<sup>st</sup> and 2<sup>nd</sup> edition 1:50 000 topographical and 1937 aerial photographs where available, to assist in general location and dating of buildings and/or graves. The database is in Google Earth format and thus used as a quick reference when undertaking desktop studies. Where required we would consult with a local data recording centre, however these tend to be fragmented between different institutions and areas and thus difficult to access at times. We also consult with an historical architect, palaeontologist, and an historian where necessary.

The survey results will define the significance of each recorded site, as well as a management plan.

All sites are grouped according to low, medium, and high significance for the purpose of this report. Sites of low significance have no diagnostic artefacts or features. Sites of medium significance have diagnostic artefacts or features and these sites tend to be sampled. Sampling includes the collection of artefacts for future analysis. All diagnostic pottery, such as rims, lips, and decorated sherds are sampled, while bone, stone, and shell are mostly noted. Sampling usually

occurs on most sites. Sites of high significance are excavated and/or extensively sampled. Those sites that are extensively sampled have high research potential, yet poor preservation of features.

### **Defining significance**

Heritage sites vary according to significance and several different criteria relate to each type of site. However, there are several criteria that allow for a general significance rating of archaeological sites.

These criteria are:

#### **1. State of preservation of:**

- 1.1. Organic remains:
  - 1.1.1. Faunal
  - 1.1.2. Botanical
- 1.2. Rock art
- 1.3. Walling
- 1.4. Presence of a cultural deposit
- 1.5. Features:
  - 1.5.1. Ash Features
  - 1.5.2. Graves
  - 1.5.3. Middens
  - 1.5.4. Cattle byres
  - 1.5.5. Bedding and ash complexes

#### **2. Spatial arrangements:**

- 2.1. Internal housing arrangements
- 2.2. Intra-site settlement patterns
- 2.3. Inter-site settlement patterns

#### **3. Features of the site:**

- 3.1. Are there any unusual, unique or rare artefacts or images at the site?

3.2. Is it a type site?

3.3. Does the site have a very good example of a specific time period, feature, or artefact?

**4. Research:**

4.1. Providing information on current research projects

4.2. Salvaging information for potential future research projects

**5. Inter- and intra-site variability**

5.1. Can this particular site yield information regarding intra-site variability, i.e. spatial relationships between various features and artefacts?

5.2. Can this particular site yield information about a community's social relationships within itself, or between other communities?

**6. Archaeological Experience:**

6.1. The personal experience and expertise of the CRM practitioner should not be ignored. Experience can indicate sites that have potentially significant aspects, but need to be tested prior to any conclusions.

**7. Educational:**

7.1. Does the site have the potential to be used as an educational instrument?

7.2. Does the site have the potential to become a tourist attraction?

7.3. The educational value of a site can only be fully determined after initial test-pit excavations and/or full excavations.

**8. Other Heritage Significance:**

8.1. Palaeontological sites

8.2. Historical buildings

8.3. Battlefields and general Anglo-Zulu and Anglo-Boer sites

8.4. Graves and/or community cemeteries

8.5. Living Heritage Sites

8.6. Cultural Landscapes, that includes old trees, hills, mountains, rivers, etc related to cultural or historical experiences.

The more a site can fulfill the above criteria, the more significant it becomes. Test-pit excavations are used to test the full potential of an archaeological deposit. This occurs in Phase 2. These test-pit excavations may require further excavations if the site is of significance (Phase 3). Sites may also be mapped and/or have artefacts sampled as a form of mitigation. Sampling normally occurs when the artefacts may be good examples of their type, but are not in a primary archaeological context. Mapping records the spatial relationship between features and artefacts.

**TABLE 1: SAHRA GRADINGS FOR HERITAGE SITES**

<b>SITE SIGNIFICANCE</b>	<b>FIELD RATING</b>	<b>GRADE</b>	<b>RECOMMENDED MITIGATION</b>
<b>High Significance</b>	National Significance	Grade 1	Site conservation / Site development
<b>High Significance</b>	Provincial Significance	Grade 2	Site conservation / Site development
<b>High Significance</b>	Local Significance	Grade 3A / 3B	
<b>High / Medium Significance</b>	Generally Protected A		Site conservation or mitigation prior to development / destruction
<b>Medium Significance</b>	Generally Protected B		Site conservation or mitigation / test excavation / systematic sampling / monitoring prior to or during development / destruction
<b>Low Significance</b>	Generally Protected C		On-site sampling monitoring or no archaeological mitigation required prior to or during development / destruction

## RESULTS

### DESKTOP STUDY

The desktop study consisted of analysing various maps for evidence of prior habitation in the study area, as well as for previous archaeological surveys. There have been no prior archaeological surveys in the direct area of the line. Dreyer (2006a, 2006b 2008a 2008b) has surveyed near the Ruigtevallei Substation and on the opposite side of the Gariep Dam. These reports noted some historical buildings and a single scatter of stone tools. Sampson (1974) has also undertaken much archaeological work in the area.

Several landowners knew of rock art sites on their farms; however, none was known to occur in the areas of the power line. These rock art sites were consistently along the bands of sandstone in the koppies.

There are no monuments or known historical cemeteries in the area of the power line. While Colesburg, Ventersdorp and Burgersdorp had 2<sup>nd</sup> Anglo-Boer War activity, there are no known battlefields, or structures along the route.

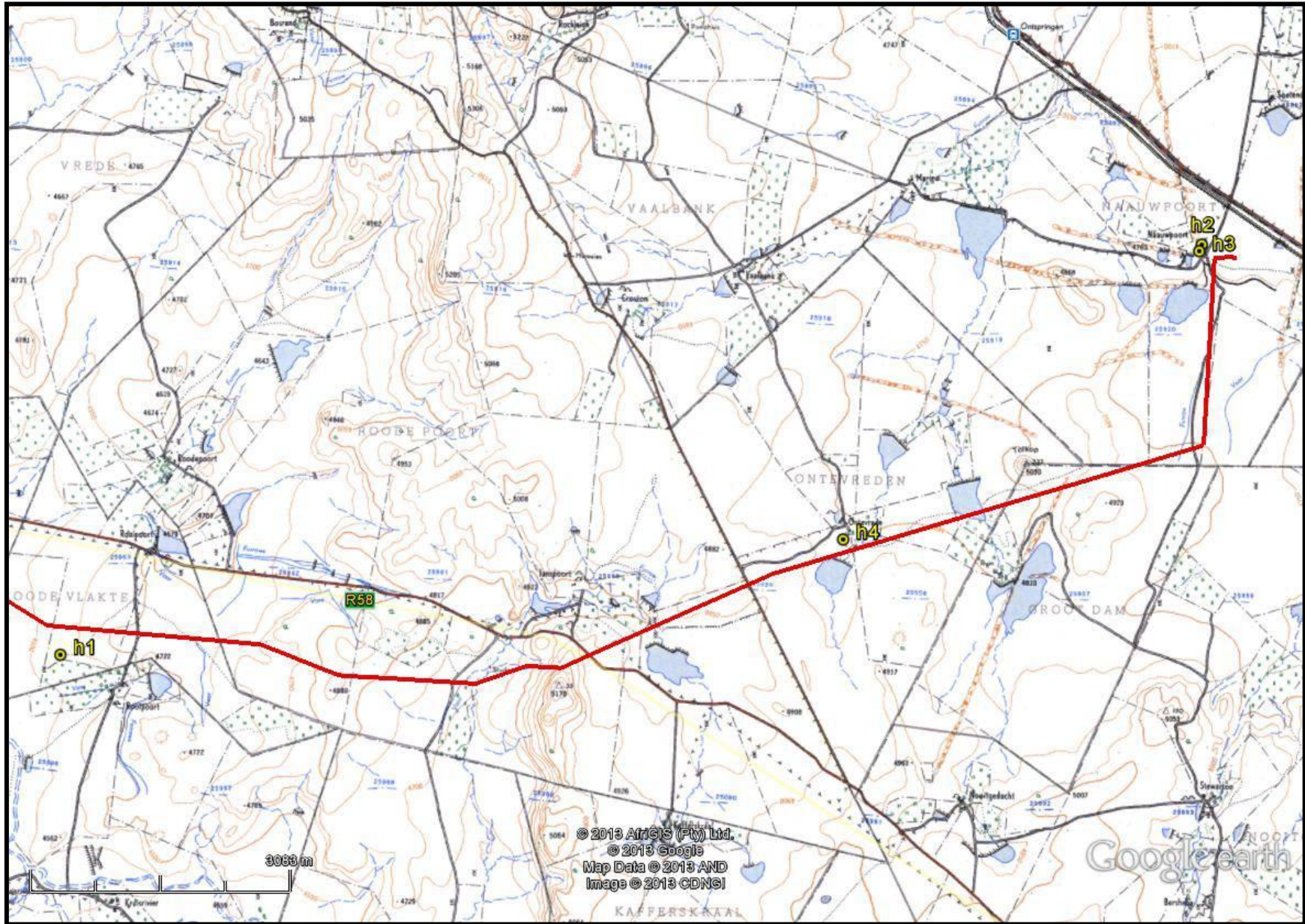
The earliest 1<sup>st</sup> edition 1:50 000 topographical maps of the area date 1944, 1957 and 1969. These maps indicate that there are no structures within the servitude; however, farm buildings and labourers' houses do occur within 500m of the line. All of these occur on the eastern side of the line (fig. 4)

**Table 2: Heritage Sites Form The 1st Edition Topographical Maps**

NAME	LATITUDE	LONGITUDE	DESCRIPTION
<b>h1</b>	-30.8712233	26.0662210	House
<b>h2</b>	-30.8275121	26.2075368	House
<b>h3</b>	-30.8282078	26.2071942	House
<b>h4</b>	-30.8588149	26.1632244	Ontevrede Farm



FIG. 4: LOCATION OF SETTLEMENTS ALONG THE RUIGTEVALLEI-DREUNBERG POWERLINE IN 1957



## FIELD SURVEY

The field survey was undertaken in March 2013. It soon became apparent that the plains were littered with stone tools. These tools were concentrated in deflation hollows and erosion gullies, and were thus all in a secondary context (fig. 5). The tools were mostly on hornfels, while a few were on quartz. The tools ranged from MSA to LSA artefacts, with one ESA cleaver. Two of these areas were noted for being archaeological sites; however, these were more a case of recording as an example. The extent of the site would literally be the extent of the power line, and beyond. The same pattern occurred throughout the power line in the plains. The koppies were different to the plains. Stone tools were found in higher concentrations in the saddles, or at the base of, the koppies, and these were systematically searched. Landowners were also questioned regarding heritage sites. Several farms have both rock art sites and cemeteries, or graves; however, these do not occur along the power line. For example, two historical cemeteries (one predating the 20<sup>th</sup> century) were recorded as well as a cemetery for farm labourers dating to the 1980s.

Table 3 lists the sites and their significance, while these are shown in Fig. 6.

**TABLE 3: LOCATION AND ASSESSMENT OF RECORDED SITES**

Name	Latitude	Longitude	Description	Requires Mitigation	SAHRA Rating
<b>GRAVES</b>	30.8111290	25.9682820	Farm Labourers' Graves	No	3A
<b>GREYLING Cemetery</b>	30.8079400	25.9704980	Greyling Family Cemetery	No	3A
<b>STRYDOM Cemetery</b>	30.8100700	25.9723060	Strydom Family Cemetery	No	3A
<b>LSA</b>	30.7626490	25.7089970	LSA Scatter	No	3C
<b>LSA/MSA</b>	30.7495530	25.6013680	MSA/ LSA Scatter	No	3C
<b>MSA</b>	30.7842080	25.7468990	MSA Scatter	No	3C
<b>RUI01</b>	30.8580457	26.1711373	LSA Scatter	No	3C
<b>RUI02</b>	30.8698000	26.0905480	LSA Scatter	No	3C
<b>RUI03</b>	30.8392970	25.9857640	Historic Walling	Yes	3C
<b>RUI04</b>	30.8724240	26.1282690	MSA/LSA Scatter	No	3C
<b>RUI05A</b>	30.7838060	25.7465840	Cairn	No	3C
<b>RUI05B</b>	30.7836010	25.7466540	Cairn	No	3C
<b>RUI06</b>	30.7036410	25.5418820	Walling	Yes	3C

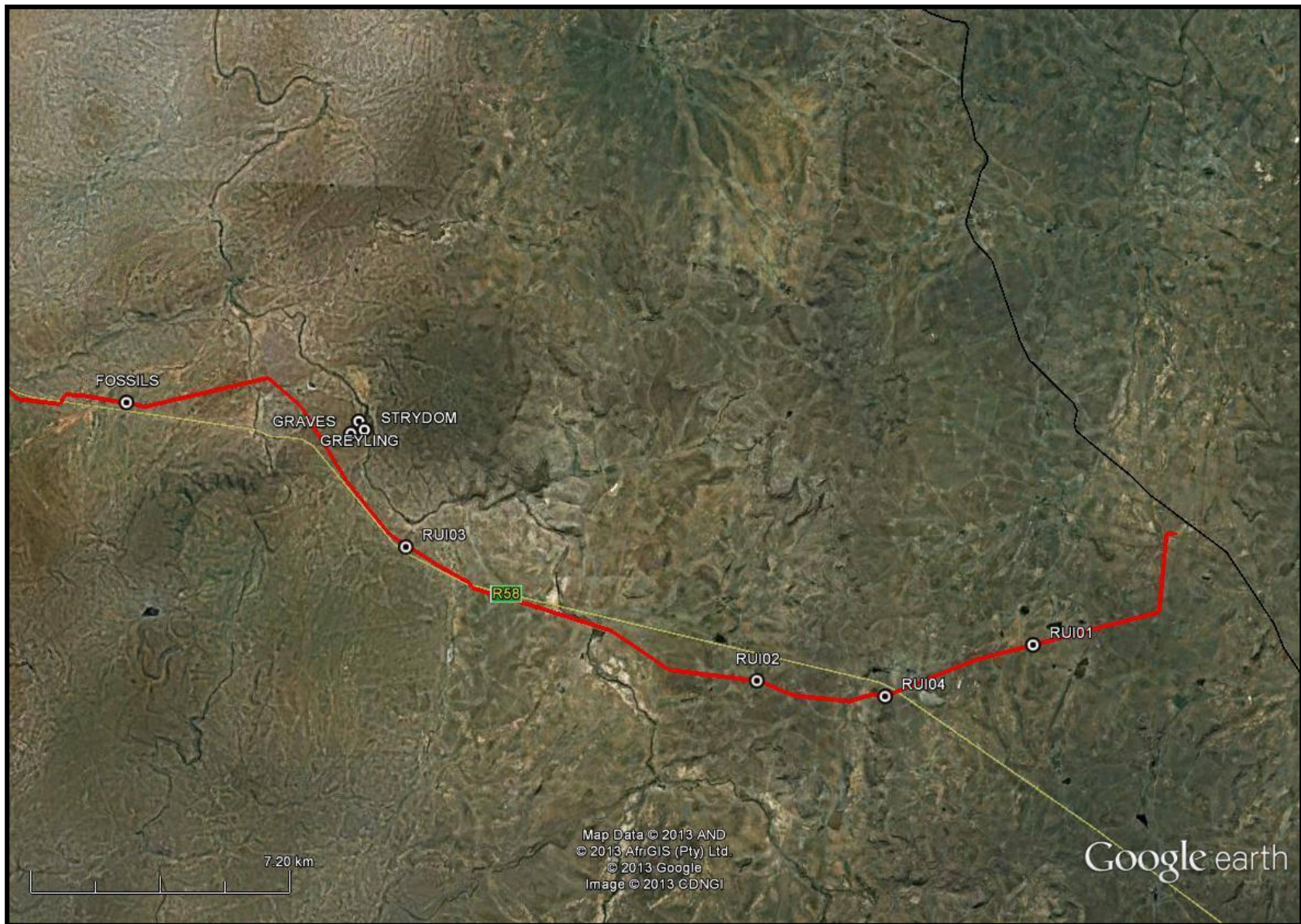
FIG. 5: PLAINS AND SLOPING HILLS ALONG THE ROUTE



FIG. 6A: LOCATIONS OF RECORDED SITES ALONG THE RUIGTEVALLEI-DREUNBERG POWERLINE



FIG. 6B: LOCATIONS OF RECORDED SITES ALONG THE RUIGTEVALLEI-DREUNBERG POWERLINE



## RUI01

RUI01 is located along a partially exposed grazing field. The site consists of an extensive scatter of Middle/Late Stone Age tools that extend for the length of the plain (fig. 7). The tools are mostly flakes and show evidence of utilisation and retouch. The one MSA tool has been reworked in the LSA. The tools are mostly on hornfels and some on quartzite and include: adzes, scrapers, (utilised) flakes, irregular cores and single platform cores.

Significance: The site is of low significance as the tools are few in number and in a secondary context.

Mitigation: No further mitigation is required.

SAHRA Rating: 3C

**FIG. 6: SELECTION OF STONE TOOLS AT RUI01**



## RUI02

RUI02 is located at the base of a small koppie. The site consists of a small scatter of Middle/Late Stone Age tools (fig. 7). The one MSA tool has been reworked in the LSA. The tools are mostly on hornfels and some on quartzite and include: adzes, scrapers, (utilised) flakes, irregular cores and single platform cores. The base of the hill may have been a living area, however, there are no signs of archaeological deposit, and the area has been regularly washed out.

Significance: The site is of low significance as the tools are few in number and in a secondary context.

Mitigation: No further mitigation is required.

SAHRA Rating: 3C

**FIG. 7: STONE TOOLS AT BASE OF A KOPPIE AT RUI02**



### **RUI03**

RUI03 is located along a small ridge on the sloping plains. The site consists of a dry stonewall that runs along the ridge. The southwestern part of the wall is intact, while the northeastern side is in ruins. (Fig. 8). The wall is either part of an old boundary marker or a kraal. The nearby Greyling family cemetery predates 1868, and the wall may be related to the original farm structures.

The power line will pass over the wall.

Significance: The site is of low significance.

Mitigation: While the site is of low significance, the wall should not be damaged. I suggest that pylons and stays do not affect the wall, and care is taken when the line is strung. The wall should be clearly demarcated before line construction begins.

SAHRA Rating: 3C

**FIG. 8: STONE WALLING AT RUI03**





## RUI04

RUI04 is located in a small saddle on the top of a koppie. The site consists of a small scatter of Late Stone Age tools (fig. 9). The hornfels tools are mostly cores, chunks and flakes, and the area could be a quarry, or manufacture site. The tools are however in secondary context and of various ages.

Significance: The site is of low significance.

Mitigation: No further mitigation is required.

SAHRA Rating: 3C

**FIG. 9: SCATTER OF HORNFELS TOOLS AT RUI004**



## RUI05

RUI05 is located near the edge of a large koppie overlooking the plains. The site consists of two small stone cairns ~25m apart (fig. 11-12). The cairns are not graves and do not appear to have any immediate function. They have been placed there for some time as seen by the moss and patination on the rocks. The line will occur 8m from the southernmost cairn. There is a concentration of LSA and MSA tools in this vicinity, especially in the eroded area to the east.

Significance: the site is of low significance as the tools are few in number and in a secondary context.

Mitigation: The cairns need to be clearly demarcated before construction with fencing. The line access road may affect the cairns

SAHRA Rating: 3C

**FIG. 11: POSITION OF TWO STONE CAIRNS AT RUI05**



FIG. 12: STONE CAIRNS AT RUI05



## RUI06

RUI06 is located along the ridge of a koppie overlooking the Gariiep Dam. The site consists of a dry stonewall (fig. 13). The wall is either part of an old boundary marker or a kraal. The wall is poorly constructed and not similar to the walling at RUI03

Significance: The site is of low significance

Mitigation: While the site is of low significance, the wall should not be damaged. I suggest that pylons and stays do not affect the wall, and care is taken when the line is strung. The wall should be clearly demarcated before line construction begins.

SAHRA Rating: 3C

**FIG. 13: WALLING AT RUI06**



## **Cemeteries**

One area had three cemeteries in close proximity. These are however 800m – 1200m from the line and will not be affected. The sites were recorded to determine their distance from the line. The Greyling family cemetery dates to the 19<sup>th</sup> century, and is in a poor condition. These graves belong to the original landowners. The second cemetery is for the Strydom family and dates to the 1950s. The last cemetery belongs to the farm labourers and dates to the 1980s (Mr van Wyk pers comm.). These graves are all unmarked and in various stages of preservation. An aardvark (or similar type of animal) has gone through two graves, and has disturbed some of the skeletal remains. Human bone fragments were observed on the surface at the entrance to the burrow.

Significance: The sites are of high significance.

Mitigation: No further mitigation is required.

SAHRA Rating: 3A

## **MANAGEMENT PLAN**

The scatters of stone tools throughout the power line route are extensive, and would not yield any new technological information. Moreover, they are not in a stratified deposit and will thus not be able to provide any temporal information. The impact of the line will be minimal on the tool scatters and thus no mitigation would be required.

The two stonewalls have low significance but should not be damaged by construction activity, as there is no need to affect them. They should be clearly demarcated before construction begins. Both sides of the wall should be marked.

The cairns should be clearly demarcated with fencing with a 5m buffer between the cairn and the fence.

## **CONCLUSION**

A heritage survey was undertaken for the Ruigtevallei-Dreunberg 132kV power line. The power line passes over several plains and koppies. The plains have concentrations of artefacts of various densities, however, these are all in a secondary context and would not provide further information if sampled. The impact of the power line on these scatters will be minimal. Since these are scatters of artefacts, I do not consider them as archaeological sites, and thus a permit would not be required.

Two dry stonewalls and two cairns were noted during the survey. These would need to be clearly demarcated before construction.

## REFERENCES

Dreyer, C. 2006a. First Phase Archaeological and Cultural Heritage Investigation of the Proposed Developments on Hestershoek 356, Bosduifkloof 522 & Joubertsgift 521, Bethulie, Free State.

Dreyer, C. 2006b. First Phase Archaeological and Cultural Heritage Investigation of the Proposed Developments on Bosduifkloof 522 Bethulie, Free State.

Dreyer, C. 2008a. First Phase Archaeological and Cultural Heritage Assessment of the Proposed Extensions to the Sewer Installation at Norvalspont, Eastern Cape.

Dreyer, C. 2008b. First Phase Archaeological and Cultural Heritage Assessment of the Proposed Construction and Refurbishment of the Existing Power Network Between Gariep Dam and Reddersburg, Free State.

Ethembeni Cultural Heritage. 2011. Phase one Heritage impact assessment of the proposed network strengthening of the Ruigtevallei-Dreunberg 132kV Power line, Local Municipality, Eastern Cape

Sampson, C.G., 1974. The Stone Age archaeology of Southern Africa, Academic Press, New York.

SAHRA 2012. Review comment on archaeological and palaeontological Impact assessments. SAHRA File No. 9/2/004/0001).

**APPENDIX A  
SITE RECORD FOMS**













