

CULTURAL HERITAGE IMPACT ASSESSMENT OF THE PROPOSED NORMANDIE-HLUNGWANE, COAL-LINK PROJECT, MPUMALANGA PROVINCE



ACTIVE HERITAGE CC.

**Frans E Prins, MA (Archaeology)
Sian M Hall (Hons) Anthropology**

**P.O. Box 947
Howick
3290**

**Cell: 0834739657
E-mail: activeheritage@gmail.com
Fax: 0867636380
www.activeheritage.webs.com**

TABLE OF CONTENTS

1	BACKGROUND INFORMATION ON THE PROJECT	1
2	SCOPE OF WORK	2
3	BACKGROUND TO ARCHAEOLOGICAL HISTORY OF AREA	4
4	BACKGROUND INFORMATION OF THE SURVEY	8
4.1	Methodology	8
4.2	Restrictions encountered during the survey	8
4.2.1	<i>Visibility</i>	8
4.2.2	<i>Disturbance</i>	8
4.3	Details of equipment used in the survey.....	9
5	DESCRIPTION OF SITES AND MATERIAL OBSERVED	9
5.1	Locational data	9
5.2	Description of the general area surveyed.....	9
5.3	Description of heritage sites.....	10
5.4	Dating the findings	10
5.5	Summary of findings	11
6	STATEMENT OF SIGNIFICANCE (HERITAGE VALUE)	11
6.1	Field Rating.....	11
7	RECOMMENDATIONS	11
8	IMPACT OF PROPOSED DEVELOPMENT ON HERITAGE RESOURCES	12
9	MAPS AND PHOTOGRAPHS	13
9	REFERENCES	16

LIST OF TABLES

Table 1	Background information on the project.....	1
Table 2	Heritage sites located during the ground survey.....	10
Table 3	Field rating and recommended grading of sites.....	12
Table 4	Impact of proposed development on heritage resources.....	13

LIST OF ABBREVIATIONS AND ACRONYMS

EIA	Early Iron Age
ESA	Early Stone Age
HISTORIC PERIOD	Since the arrival of the white settlers - c. AD 1836 in this part of the country
IRON AGE	Early Iron Age AD 200 - AD 1000 Late Iron Age AD 1000 - AD 1830
LIA	Late Iron Age
LSA	Late Stone Age
MSA	Middle Stone Age
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998 and associated regulations (2006).
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999) and associated regulations (2000)
SAHRA	South African Heritage Resources Agency
STONE AGE	Early Stone Age 2 000 000 - 250 000 BP Middle Stone Age 250 000 - 25 000 BP Late Stone Age 30 000 - until c. AD 200

EXECUTIVE SUMMARY

A cultural heritage survey of the proposed Coal-Link Project at Normandie-Hlungwane, Mpumalanga Province identified two heritage features directly adjacent to the identified footprint. These include two Later Iron Age Sites. It is suggested that the developer strictly maintain a buffer zone of at least 20m around these sites. Mitigation would be impractical and it is not supported by this study. There is no archaeological reason why the proposed development may not proceed on the remainder of the footprint as planned. However, attention is drawn to the South African National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA) which requires that operations that expose archaeological or historical remains should cease immediately, pending evaluation by the provincial heritage agency in the Mpumalanga Province.

1 BACKGROUND INFORMATION ON THE PROJECT

The consultants were approached by Sivist to conduct a heritage impact assessment (HIA) of the proposed Coal-Link Project at Sheepmoor, Mpumalanga Province.

According to the National Heritage Resources Act, 1999 (NHRA) (Act No. 25 of 1999), the heritage resources of South Africa include:

- 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 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. 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, 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).

2 SCOPE OF WORK

This study aims to identify and assess the significance of any heritage and archaeological resources occurring on the site. Based on the significance, the impact of the development on the heritage resources will be determined and appropriate actions to reduce the impact on the heritage resources put forward. In terms of the NHRA, a place or object is to be considered part of the national estate if it has cultural significance or other special value because of:

- 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; and
- i. sites of significance relating to the history of slavery in South Africa.

Table 1. Background information

Consultants:	Active Heritage cc (Frans Prins & Sian Hall) for Sivest
Type of development:	Scope - REBUILD the line from Normandie SS to Hlungwana SS. Option 1 - For the REBULD line, the structure will be LATTICE and the Conductor will be KINGBIRD. Option 2 - For the REBULD line, the structure will be existing Tower and the Conductor will be either Aluminium Conductor, Composite Core(ACCC) or Aluminium Conductor, Carbon Re-in forced (ACCR). A corridor width of 100m on either side of the existing line (IE CORRIDOR WIDTH IS 200M) needs to be covered in the assessment. The reason for this approach is to have an approval in place that would support any of the construction strategies that are being explored (Servitude Swap, New Servitude, Break and Build). The proposed Normandie–Hlungwane line: is 24km. long
Rezoning or subdivision:	Not applicable
Terms of reference	To carry out a Heritage Impact Assessment
Legislative requirements:	The Heritage Impact Assessment was carried out in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) and following the requirements of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA).

1.1. Details of the area surveyed:

Footprint: The footprint is a linear trajectory of 24km that spans both northern KwaZulu Natal and southern Mpumalanga. It runs parallel to the R33 and starts approximately 10km north of Paulpieterburg (Fig 1). Its GPS coordinates are given as: **Start** S 27° 21' 45.60" E 30° 51' 56.83" and **End** S 27° 09' 43.13" E 30° 52' 36.33".

Current land use: Open veld and commercial farms

3 BACKGROUND TO ARCHAEOLOGICAL HISTORY OF AREA

Definition

As defined in Article 1 of the World Heritage Convention Act No. 49 of 1999: Cultural heritage is considered a monuments, architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science, groups of buildings, groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science, sites, works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view.”

The project area has been poorly surveyed for heritage sites in the past. The SAHRA national register of heritage sites list no sites for the region. The majority of archaeological research has taken place to the immediate south of the study area in KwaZulu-Natal – an area which is exceptionally rich in Stone Age, Iron Age sites, and historical features. Nevertheless it is known from historical literature that San hunter-gatherers as well as Nguni and Sotho-speaking farmers occupied the area in the recent past. The area was also heavily affected during the Boer War of 1899-1901 and it is to be expected that many old farmsteads and associated grave yards may occur on farms in the region.

Archaeology and the prehistoric past

Archaeological sites in Mpumalanga and KwaZulu-Natal provide evidence for the existence of humanity going back 1, 7 million years. These sites offer insights into different phases of stone-age society, including Early, Middle, and Later Stone Age societies. It also provides a rich record of the settlement of the region by iron-age agro-pastoralists around 1600 years ago. The majority of the known sites, however, occur to the immediate north and south of the project area. Some of the sites provide tantalising clues about the relationship between these African farmers and the San hunter-gatherers of the region. The enormously evocative and internationally renowned Lydenburg Heads, which has been found to the north east of the project area and dating from approximately 900AD, have been linked to elaborate initiation

ceremonies amongst people whose descendants became known as the Shona. Four centuries later the Shona also produced the spectacular Zimbabwe-styled citadels of the Limpopo Province and Zimbabwe.

Abandoned mineshafts, moribund metal workings and excavated trade goods reveal a thriving industry in iron, tin, copper bronze and ochre. The presence of myriad exotic beads and marine shells testify to thriving trade networks that linked regional patterns of trade to the coast and to the far interior. Mpumalanga has, for a thousand years and more, been a vital trading channel; the archaeological record suggests that it was also a vibrant zone of interaction where diverse communities collided and co-operated and experienced forms of osmosis which indicate that the idea of fixed cultural or linguistic boundaries is incorrect. Terms like Nguni and Sotho, for example, present at best outer points on a continuum of social forms rather than discrete cultural groups. Cultural and economic interaction and exchange also gave rise to new forms of social division and political organisation including the emergence of powerful states which long preceded and probably contributed to the processes which fed into the later rise of the Zulu kingdom to the immediate south of the project area. Scores of elaborate stone-walled settlements, numerous terraced hillsides, and huts built from stone which cover the countryside to the immediate north and east of the project area and date back hundreds of years, bear witness to an extraordinary past of which little is known outside of the academia (Esterhuysen & Smith 2007).

Rock Art

A particularly significant and visually impressive aspect of Mpumalanga's and KwaZulu-Natal's heritage is the abundant rock art to be found all over these provinces. Some of these sites occur at Paulpieterburg to the immediate south of the project area. These vivid images provide insight into the religious beliefs, aspirations and anxieties of their makers. It also allows for a dialogue between present and pre-existing forms of identity and understanding of natural and spiritual worlds. Part of what is special about the rock art of Mpumalanga is its unique diversity, with an array of sites belonging to hunter-gatherer, herder and farmer communities. The most prolific rock art in the province provides reminders of the San (hunter-gatherers), the oldest occupants of the area. These are fine line paintings done by brush, most frequently of animals and human figures which according to some researchers often represent the intersection of material and spiritual worlds. In fact, it is often maintained that the majority of the art reflects the spiritual journey of San medicine people in the invisible realm.

Recent research has also suggested that Khoekhoen (herder) art exists within the later San sequences in the Mpumalanga Province. This is an art composed mainly of geometric designs in both painted and engraved forms and posing fascinating questions about the presence of Khoi herders in the region and their interaction with other groups. The final form of rock art was the work of the various iron-age farmer communities who settled there from 400AD. Rock paintings categorised as Sotho-Tswana and Nguni, which is applied by finger and is predominantly white in colour, is predominantly associated with male initiation, but during colonial times such art also becomes associated with conflict and domination. The majority of Nguni rock art, however, seems to be entirely engraved and dominated by representations of the layout of homesteads. It is clear that rock art constitutes an extraordinarily rich part of our heritage but at present it remains under-researched, undervalued, insufficiently protected and inadequately publicised (Smith & Zubieta 2007).

Oral History

Accounts of the initial waves of settlement of the region have to be reconstructed from the material record i.e. archaeology. But there are rich seams of oral tradition stretching back at least to the 15th century, which, if used critically and in conjunction with other forms of evidence, enable researchers to start to populate the historical landscape with the forebears of contemporary communities, to periodise movement, to outline patterns of conflict and co-operation, to glimpse changing forms of trade and to chart, from distinctive vantage points, the rise of new political systems such as the Zulu, Pedi, Ndzundza and Swazi polities (Delius 2007). Nguni as well as Sotho-speaking farmers occupied the immediate environs of the project area in the historical past. However, the systematic identification of archaeological sites associated with these historical processes still need to be undertaken.

The Historical Period

The arrival of the first Boer settlers in the early 1840's heralded a new era in the region. The following four decades were to see bitter struggles over land, labour, and political control. Berlin missionary activity after 1860 added an important religious dimension to this contestation and these struggles left an indelible mark on the division of land and the nature of society and religious belief in the region.

But perhaps the most singular feature of the history of this area is that it was the location of three critically important frontier zones. Boers competed for power and position with the Pedi, Swazi and Zulu kingdoms. They also confronted a range of internal forms of resistance and revolt. In the 1870s these frontiers played a central role in some of the most important conflicts of the 19th century. Wars between the Pedi and the Boers in 1876, the Zulu and the British in 1879, and the Pedi and the British later in the same year. They also played a decisive part in shifting the balance of power in South Africa in favour of white settlers and colonial control.

The modern landscape of northern KwaZulu-Natal and southern Mpumalanga is dotted with the sites of crucial battles and the remnants of the elaborate fortified strongholds crafted by African and mission communities from a combination of natural features and stone walling. In addition, the economic history of South Africa is intricately linked with the discovery of precious minerals and the subsequent gold rush of the late 19th century. Early mining towns such as Pilgrims Rest and Baberton situated towards the north east of the project area have become heritage tourism icons. Together, these towns contain almost 20 provincial heritage sites. However, most of these sites were identified along Eurocentric criteria and heritage features highlighting the contribution of indigenous communities are sadly lacking. While some of these sites have been recorded by local museums and researchers, many remain to be recognised and documented. Unfortunately those historical sites that have made it onto the heritage map are rarely effectively conserved or managed. In addition, they are often presented in a rather parochial manner and are rarely situated within the wider context of South African history. Neither are they linked one to another in ways which would allow an interested visitor to explore the geography and material remains of this deeply moving and profoundly important history. Although KwaZulu-Natal and Mpumalanga is famous for the vibrant and intricate arts and crafts of local communities, many of those who admire and even purchase these artefacts are unaware of their connection to the bleaker world of battlefields. Some of the most striking of these forms of artistic expression, such as Ndzundza Ndebele dress, beadwork and wall painting, have been partly shaped by a history of defeat and dispossession.

The best-known military memorials in the area recall bloody clashes between Boer and Briton and for many decades after its conclusion this conflict was represented

as 'a white man's war'. While this version reflected the official policy of both parties, theory and practice diverged dramatically, as is so often the case in history. It is now widely recognised that black people, including the San, played a broad range of roles in the war. As a result the term South African War has replaced the earlier more restricted name – the Boer War. But the central part black people played in the war in KwaZulu-Natal and Mpumalanga have not received the attention it deserves in existing texts, museums and monuments (Mbenga 2007). Nevertheless, the Chrissies Meer and Ermelo area to the immediate north of the project area has seen San collaboration with Boer commando's and families during the South African War (Prins 1999). However, it is uncertain to what extent such actions also extended towards the present project area in the past.

4 BACKGROUND INFORMATION OF THE SURVEY

4.1 Methodology

A desktop study was conducted of the SAHRA inventory of heritage sites. The SAHRIS website was also consulted. The existing database does not indicate any heritage sites in the project area.

A ground survey of the proposed developments following standard and accepted archaeological procedures was conducted. The area was walked by foot and hotspot areas identified by the studying of aerial photographs covering the footprint was also visited.

4.2 Restrictions encountered during the survey

4.2.1 Visibility

Visibility during the site visit was good.

4.2.2 Disturbance.

No disturbance of any potential archaeological stratigraphy or heritage features has been noted.

4.3 Details of equipment used in the survey

GPS: Garmin Etrek

Digital cameras: Canon Powershot A460

All readings were taken using the GPS. Accuracy was to a level of 5 m.

5 DESCRIPTION OF SITES AND MATERIAL OBSERVED

5.1 Locational data

Province: Mpumalanga

Towns: Paupietenburg, Normandie

5.2 Description of the general area surveyed

The footprint does not form part of any known cultural landscape although prominent battles sites occur to the immediate south of the project area. The archaeological survey of the footprint, however, identified two heritage sites. These include two Later Iron Age Sites. The context of these sites are discussed in Table 2 (below).

5.3 Description of heritage sites

Table 2. Heritage sites located during the ground survey.

No	Heritage site category	Brief description	Significance (Table 3)	Mitigation	GPS Latitude and Longitude
1	Late Iron Age Site (Figs 2, 3, 4, 5)	This later Iron Age site consists of 5 stone walled circles. The whole area covered by the stone walled circles measures approximately 200m x 100m. There are no artefacts visible on the surface. The site is situated approximately 320m to the east of the R33 and 220m to the east of the proposed powerline trajectory. It was most probably built and occupied by early Sotho-or Nguni-speaking agropastoralists (vide Huffman 2007) during the early 19 th century.	This site is protected by national heritage legislation. It is rated as of medium significance (Table 3). It may not be altered or destroyed under any circumstances.	Strictly maintain a 50m buffer zone around this site. This site is situated approximately 220m to the east of the proposed powerline trajectory. It is suggested that the powerline trajectory be shifted at least 40m to the west of its present projected position. There is no need for mitigation. However, a second phase heritage impact assessment will be called for, to arrange for mitigation, should the developers decide that it is not possible to shift the powerline.	S 27° 12' 14.99" E 30° 53' 18.10"

5.4 Dating the findings

The Later Iron Age Site has not been formally dated but typological associations suggest that it was inhabited in the early nineteenth century.

5.5 Summary of findings

One Later Iron Age Site was located during the survey. The footprint does not form part of any known cultural landscape.

6 STATEMENT OF SIGNIFICANCE (HERITAGE VALUE)

6.1 Field Rating

The Later Iron Age Site has been rated as Local Grade 111B (Table 3). This site is considered to be of high significance locally. It should be mitigated, and part retained as a heritage site before destruction.

Table 3. Field rating and recommended grading of sites (SAHRA 2005)

Level	Details	Action
National (Grade I)	The site is considered to be of National Significance	Nominated to be declared by SAHRA
Provincial (Grade II)	This site is considered to be of Provincial significance	Nominated to be declared by Provincial Heritage Authority
Local Grade IIIA	This site is considered to be of HIGH significance locally	The site should be retained as a heritage site
Local Grade IIIB	This site is considered to be of HIGH significance locally	The site should be mitigated, and part retained as a heritage site
Generally Protected A	High to medium significance	Mitigation necessary before destruction
Generally Protected B	Medium significance	The site needs to be recorded before destruction
Generally Protected C	Low significance	No further recording is required before destruction

7 RECOMMENDATIONS

- Maintain a buffer zone of at least 50m around the identified Later Iron Age Site.
- Shift the associated powerline at least 40m to the west of its present trajectory.

8 IMPACT OF PROPOSED DEVELOPMENT ON HERITAGE RESOURCES

Table 4. Impact of proposed development on heritage resources

HERITAGE	
HERITAGE	One Later Iron Age site occurs on the footprint
EXTENT (GEOGRAPHICAL)	Localised – all these sites are situated on the footprint
DURATION	Not applicable
PROBABILITY	Not applicable
REVERSIBILITY	Not applicable
IRREPLACEABLE LOSS OF RESOURCES	Excavation equals destruction in heritage conservation terms. Heritage sites cannot be renewed or rehabilitated as in biodiversity conservation management
CUMULATIVE IMPACTS	None
SIGNIFICANCE RATING – PRE MITIGATION	High rating. The sites must be recorded before mitigation. A second phase heritage impact assessment will be necessary and a permit must be obtained from SAHRA to allow possible rescue excavation and/or grave relocation.
MITIGATION MEASURE	Not applicable in this instance as it would be possible to shift the powerlines slightly in order to accommodate heritage conservation principles. However, the South African Heritage Act requires that any operations exposing archaeological and historical residues should cease immediately pending an evaluation by the heritage authorities.
SIGNIFICANCE – POST MITIGATION	Not applicable

9 MAPS AND PHOTOGRAPHS

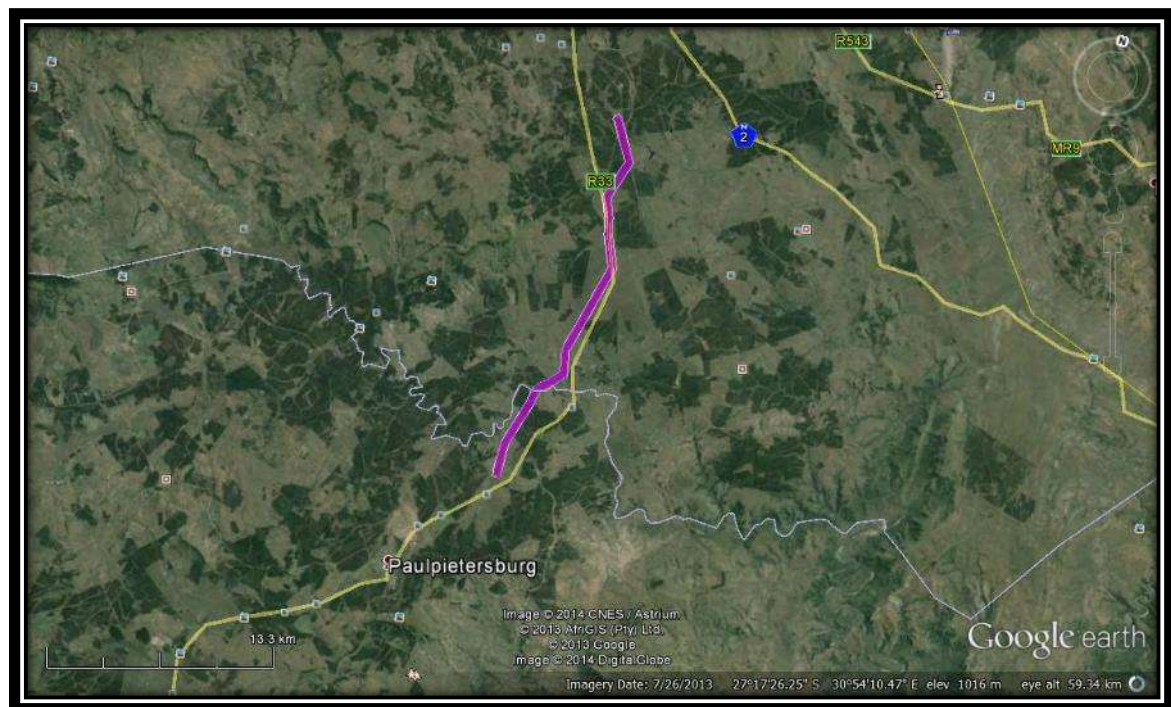


Figure 1. Google aerial photograph showing the location of the footprint at Normandie-Hlungwane. The proposed powerline trajectory spans both KwaZulu-Natal and Mpumalanga.

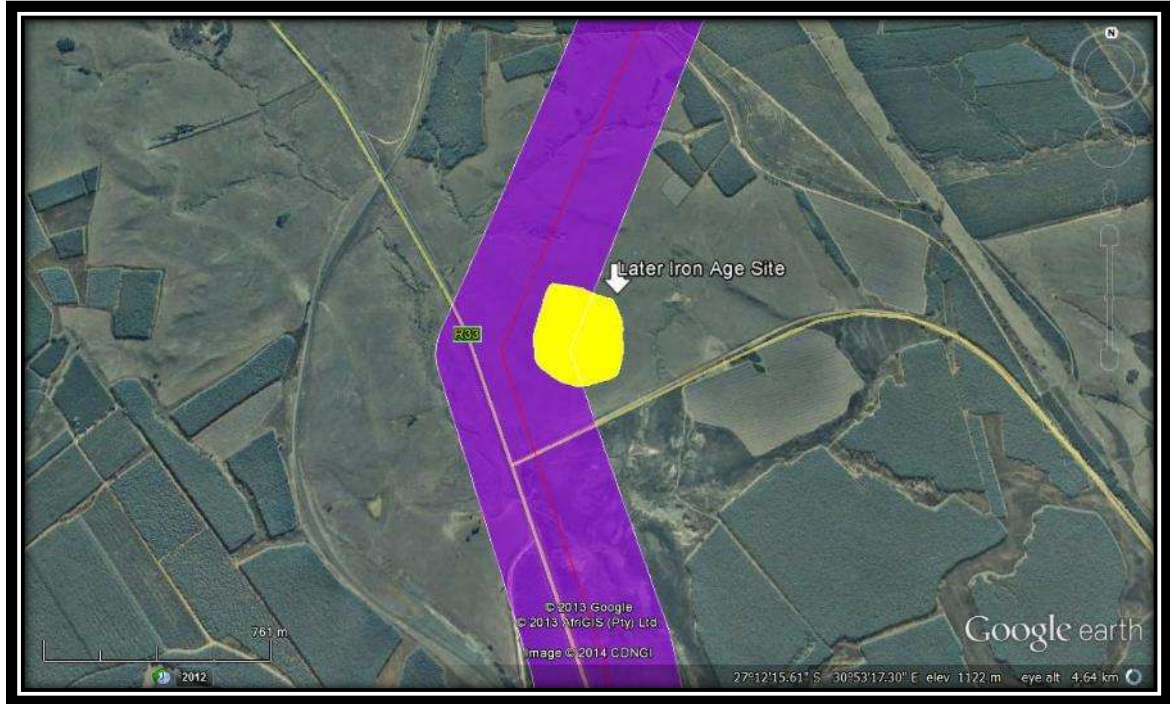


Figure 2. Google aerial photograph showing the location of the Later Iron Age Site adjacent to the proposed powerline trajectory.

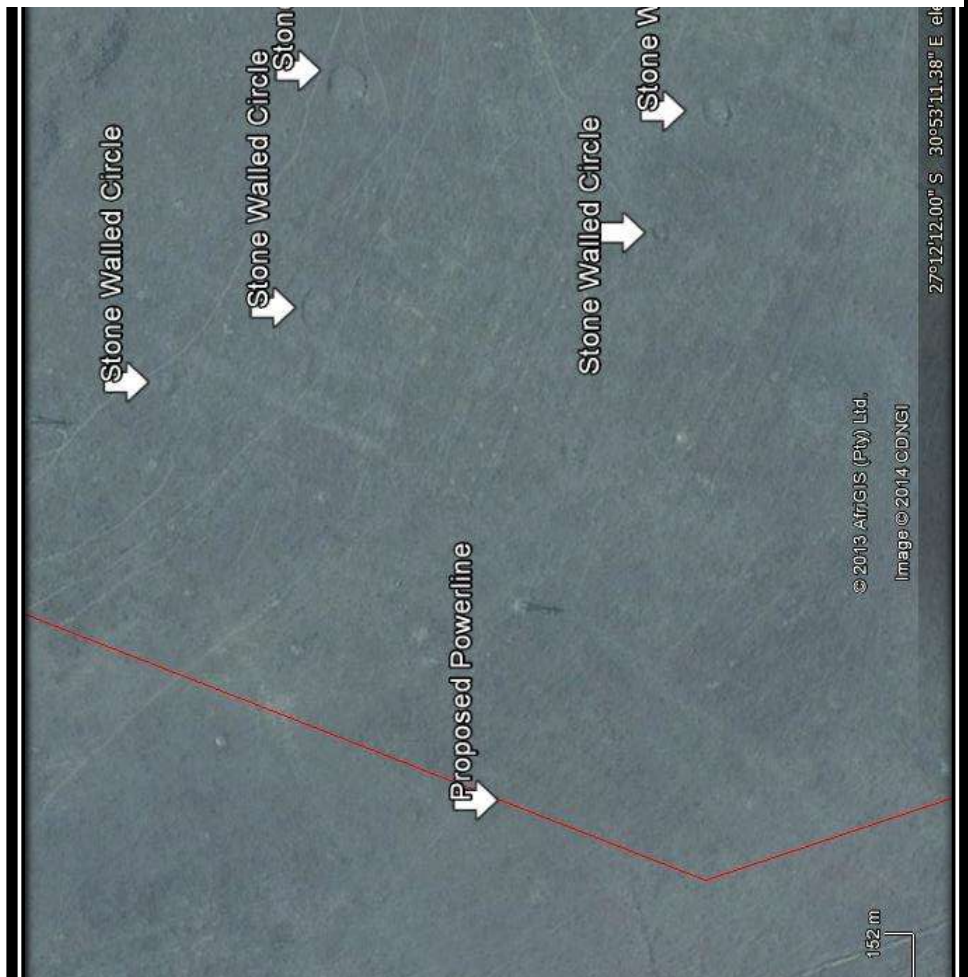


Figure 3. Google aerial photograph showing the location of the individual stone-walled circles (comprising one Later Iron Age Site) adjacent to the proposed powerline trajectory.



Figure 4. Stone walled circle indicating location of later Iron Age Site



Figure 5. Stone walling indicating location of Later Iron Age Site

9 REFERENCES

De Wit, M. 2007. Geology of Mpumalanga: a history of deep time. In Delius, P. (ed) *Mpumalanga reclaiming the past, defining the future*. Department of Culture and Tourism, Mpumalanga.

Delius, P. 2007. Introduction. In Delius, P (ed) *Mpumalanga reclaiming the past, defining the future*. Department of Culture and Tourism, Mpumalanga.

Huffman, T.N. 2007. *Handbook of the Iron Age*. University of the Witwatersrand Press: Johannesburg

Kros, C. 2007. The heritage of Mpumalanga. In Delius (ed) *Mpumalanga reclaiming the past, defining the future*. Department of Culture and Tourism, Mpumalanga.

Lewis-Williams D, & Blundell, G 2000. *Fragile Heritage: A Rock Art Fieldguide*. Witwatersrand University Press, Johannesburg.

Makhura, T 2007. The pre-colonial history of Mpumalanga societies until the 19th century. In Delius (ed) *Mpumalanga reclaiming the past, defining the future*. Department of Culture and Tourism, Mpumalanga.

Prins F. E. 1999. A glimpse into Bushman presence during the Anglo-Boer War. *Natalia*, 34

SAHRA, 2005. Minimum Standards for the Archaeological and the Palaeontological Components of Impact Assessment Reports, Draft version 1.4.

Smith, B., & Zubieta, L. 2007. The rock art of Mpumalanga. In Delius (ed). *Mpumalanga reclaiming the past, defining the future*. Department of Culture and Tourism, Mpumalanga.

Van Wyk-Rowe, C. 1997. The prehistorical and early historical inheritance of the Mpumalanga escarpment. *Research by the National Cultural History Museum Vol (6): 59-77*