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**A REPORT ON A HERITAGE WALKDOWN
AND IMPACT ASSESSMENT FOR THE PROPOSED NGWEDI (MOGWASE)
PROPOSED LINE CORRIDOR
NEAR PILANESBERG, NORTHWEST PROVINCE**

For:

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SUMMARY

APelser Archaeological Consulting was appointed by BAAGI Environmental Consultancy to conduct a Heritage Walk Down and Impact Assessment for the proposed Ngwedi (Mogwase) Powerline near Pilanesberg and Sun City in the Northwest Province. The focus of the study was the proposed line corridor and concentrating on the various Pylon positions on this line.

The proposed development is located on various farms in the area and has been disturbed to some degree through various activities in the past including farming, mining development, roads, powerlines and other infrastructure development. Portions still contain its natural vegetation (bushveld thorn trees and others) and in some sections the dense vegetation made access and visibility difficult. However, 27 sites and find spots, dating from the Stone Age, Iron Age and more recent Historical period, were identified and assessed during the study undertaken in August 2012. A team of various specialists undertook the walk down during a two-day period. Previous research and a HIA (done during 2010) for the 5 proposed corridors and substation locations also revealed a large number of heritage sites and features, and recommended the most preferred Corridor and Substation locations. This 2012 assessment focused on Corridors 1 & 2.

A number of the identified sites and features are of high significance and will be impacted on by the proposed development. Mitigation measures will have to be implemented to avoid or minimize these impacts. If the recommendations put forward at the end of this document are implemented, then, from a Cultural Heritage point of view, there would be no objection to the continuation of the proposed development.

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1. INTRODUCTION

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2. TERMS OF REFERENCE

The Terms of Reference for the study were to:

1. Conduct an onsite verification “walk down” for the proposed line corridor focusing on the proposed pylon positions within;
2. Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the proposed line corridor and the pylon locations. Use will be made of annotated maps where appropriate;
3. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value;
4. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions;
5. Propose suitable mitigation measures to minimize possible negative impacts on the cultural resources;
6. Prepare a heritage resource management plan;
7. Review applicable legislative requirements;

3. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are dealt with mainly in two acts. These are the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998).

3.1 The National Heritage Resources Act

According to the above-mentioned act the following is protected as cultural heritage resources:

- a. Archaeological artifacts, structures and sites older than 100 years
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. Grave yards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

The national estate includes the following:

- 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 features of cultural significance
- e. Geological sites of scientific or cultural importance
- f. Sites of Archaeological and palaeontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, palaeontological, meteorites, geological specimens, military, ethnographic, books etc.)

A Heritage Impact Assessment (HIA) is the process to be followed in order to determine whether any heritage resources are located within the area to be developed as well as the possible impact of the proposed development thereon. An Archaeological Impact Assessment (AIA) only looks at archaeological resources. An HIA must be done under the following circumstances:

- a. **The construction of a linear development (road, wall, power line, canal etc.) exceeding 300m in length**
- b. The construction of a bridge or similar structure exceeding 50m in length
- c. Any development or other activity that will change the character of a site and exceed 5 000m² or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m²
- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority

Structures

Section 34 (1) of the mentioned act states that no person may demolish any structure or part thereof which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

A structure means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith.

Alter means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or the decoration or any other means.

Archaeology, palaeontology and meteorites

Section 35(4) of this act deals with archaeology, palaeontology and meteorites. The act states that no person may, without a permit issued by the responsible heritage resources authority (national or provincial):

- a. destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- c. trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
- d. bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.
- e. alter or demolish any structure or part of a structure which is older than 60 years as protected.

The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the South African Heritage Resources Agency (SAHRA). In order to demolish such a site or structure, a destruction permit from SAHRA will also be needed.

Human remains

Graves and burial grounds are divided into the following:

- a. ancestral graves
- b. royal graves and graves of traditional leaders
- c. graves of victims of conflict
- d. graves designated by the Minister
- e. historical graves and cemeteries
- f. human remains

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

- a. destroy, damage, alter, exhume or remove from its original position of otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;

- b. destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
- c. bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation, or any equipment which assists in the detection or recovery of metals.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations (Ordinance no. 12 of 1980)** (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated to) before exhumation can take place.

Human remains can only be handled by a registered undertaker or an institution declared under the **Human Tissues Act (Act 65 of 1983 as amended)**.

Unidentified/unknown graves are also handled as older than 60 until proven otherwise.

3.2 The National Environmental Management Act

This act states that a survey and evaluation of cultural resources must be done in areas where development projects, that will change the face of the environment, will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof are made.

Environmental management should also take the cultural and social needs of people into account. Any disturbance of landscapes and sites that constitute the nation's cultural heritage should be avoided as far as possible and where this is not possible the disturbance should be minimized and remedied.

4. METHODOLOGY

4.1 Survey of literature

A survey of literature was undertaken in order to place the development area in an archaeological and historical context. The sources consulted in this regard are indicated in the bibliography.

4.2 Field survey/Walk Down

The assessment was conducted according to generally accepted HIA practices and was aimed at locating all possible objects, sites and features of cultural heritage (archaeological and historical) significance in the area of the proposed development. The location/position of all

sites, features and objects was determined by means of a Global Positioning System (GPS), while photographs were also taken where needed.

The assessment was undertaken on foot (walk down). Areas with the potential of containing archaeological and other sites were focused on during the walk down. This included rocky outcrops, erosion dongas and unnatural clumps of trees and other vegetation. During the assessment the line corridor was walked (pylon by pylon).

4.3 Oral histories

People from local communities are sometimes interviewed in order to obtain information relating to the surveyed area. It needs to be stated that this is not applicable under all circumstances. When applicable, the information is included in the text and referred to in the bibliography. This was done during the November 2010 HIA conducted by Mr. Francois Coetzee of UNISA Archaeology.

4.4 Documentation

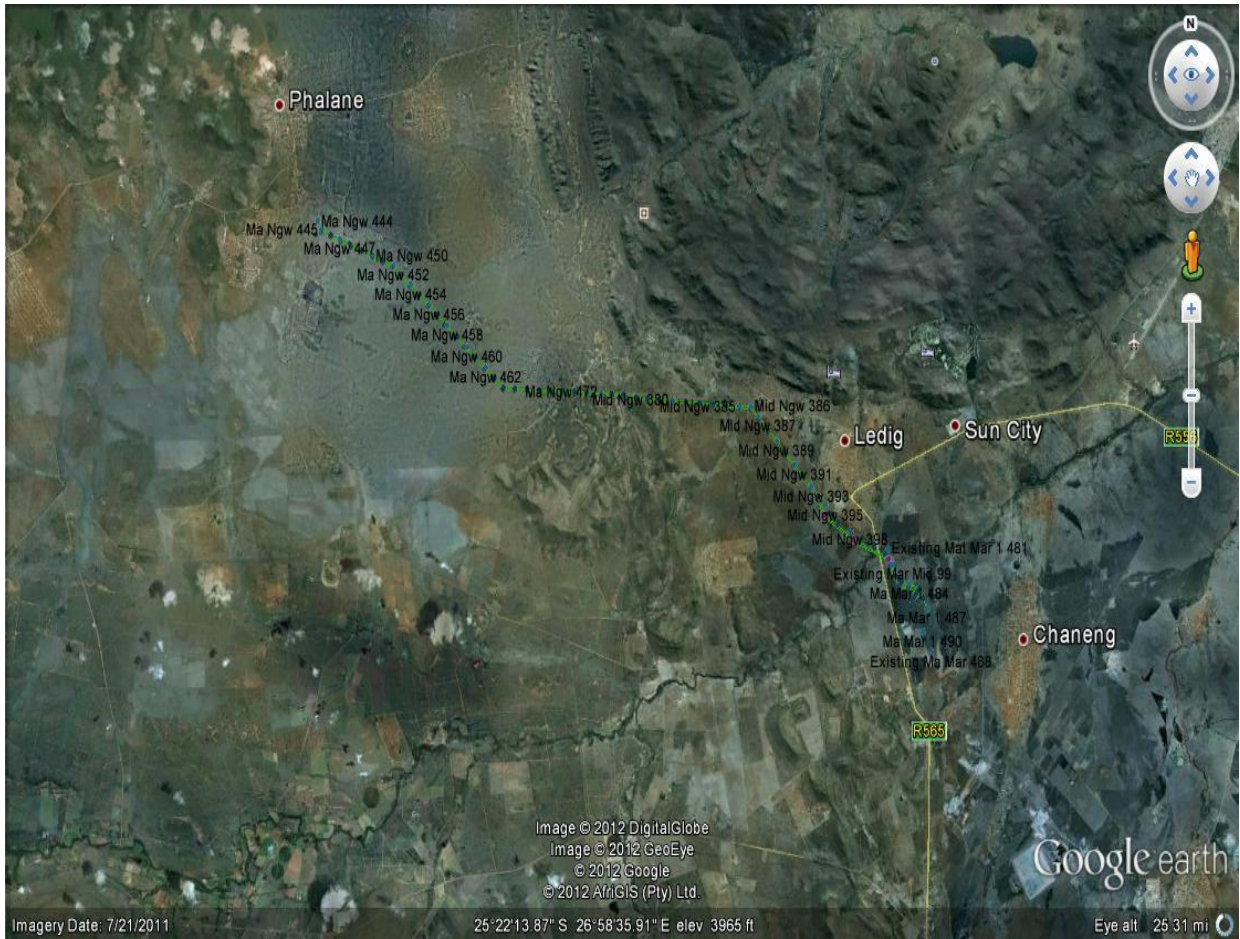
All sites, objects, features and structures identified are documented according to the general minimum standards accepted by the archaeological profession. Co-ordinates of individual localities are determined by means of the Global Positioning System (GPS). The information is added to the description in order to facilitate the identification of each locality.

5. DESCRIPTION OF THE AREA

The proposed development is located in the Northwest Province, close to Pilanesberg and Sun City. Various villages such as Ledig, Mogwase, Mahobieskraal, Chaneng and Phalane are located close-by. A number of farms, including Frischgewaagd 96 JQ, Elandsrivierspoort 210 JP, Mahobieskraal 211 JP and Kleingenoeg 124 JP form part of the area.

The topography of the area is generally flat and open, with grassy plains and old agricultural fields, while some sections follow the Elandsriver and is located on its floodplains. The Sandspruit also flows through the area. There are some rocky outcrops (granite) and higher hills over which the corridor traverses. Most of the area is fairly devoid of its natural and original vegetation, although there are section (in the hilly terrain for example) where the vegetation is quite dense and consisting of typical bushveld vegetation. Plain areas also contained clay (turf) and these areas normally did not contain any heritage sites or features as this was not ideal places for settlement (building).

Visibility in general was fairly good, although in certain sections this was hampered by thick, inaccessible vegetation and dense grass cover. Recent historical developments, including farming/agriculture, other infrastructural developments such as residential (rural villages and informal settlement), roads, Power Lines and mining (Pilanesberg Nickel Mine) has impacted on the area and many sites and features that might have existed here in the pas would have been disturbed or destroyed to a large degree. Despite this a fairly large number of sites of varying significance are known to exist in the area, with a number identified and recorded during the 2012 Heritage Walk Down.



**Figure 1: Aerial view of location of corridor (black numbers is Pylon positions).
(Google Earth 2012 – Image date 7/21/2011).**



Figure 2: One view of section of area next to existing line.



Figure 3: Another section. Ploughed area and open grass land.



Figure 4: Rocky outcrop with denser tree cover.



Figure 5: Another view of a section over which the line runs. Note the open nature of the area and the mountains in background.

6. DISCUSSION

A short, general, background to the archaeology and history of the area is given in the following section.

The Stone Age is the period in human history when lithic (stone) material was mainly used to produce tools. In South Africa the Stone Age can be divided in basically into three periods. It is however important to note that dates are relative and only provide a broad framework for interpretation. A basic division for the Stone Age (Berg 1999: 93-94) is as follows:

Early Stone Age (ESA) 2 million – 150 000 years ago
Middle Stone Age (MSA) 150 000 – 30 000 years ago
Later Stone Age (LSA) 40 000 years ago – 1850 - A.D

The closest known Stone Age sites are found in the so-called Magaliesberg Research Area. It consists of a number of sites including rock shelters in the Magaliesberg Mountain. These date back to the Middle and Later Stone Age and include rock engravings (Bergh 1999: 4 - 5; 94-95).

Stone Age material is frequently found close to rivers or other watercourses, and a number was found during this survey. These were mainly single, scattered, stone tools or low density concentrations of tools in drainage lines and erosion dongas. The sites are however insignificant. During the 2010 study several scatters of Middle Stone Age tools were also noted (Coetzee 2010: 6).

The Iron Age is the name given to the period of human history when metal was mainly used to produce artifacts. In South Africa it can be divided in two separate phases according to Van der Ryst & Meyer (in Berg 1999: 96-98), namely:

Early Iron Age (EIA) 200 – 1000 A.D.

Late Iron Age (LIA) 1000 – 1850 A.D.

Huffman (2007: xiii) however indicates that a Middle Iron Age should be included. His dates, which now seem to be widely accepted in archaeological circles, are:

Early Iron Age (EIA) 250 – 900 A.D.

Middle Iron Age (MIA) 900 – 1300 A.D.

Late Iron Age (LIA) 1300 – 1840 A.D.

According to oral tradition the BaKgatla ba Kgafela separated from the Mosetlha at Momusweng near the Hammanskraal district around AD 1700. The Kgafela settled at various locales on their north-western journey towards the Crocodile (Odi) River and eventually arrived in the Pilanesberg area between AD 1700 and AD 1750. However, on their arrival in the region the BaTlhako were already settled in the area and ruled the territory between the Crocodile River and Pilanesberg. Further to the south the BaFokeng ruled over the region north of Rustenburg with the northern border demarcated by the Elands River (south of the Pilanesberg). Another group that settled in the area is the BaTlokwa, who lived more towards the south west of Pilanesberg Mountains. Access to Pilanesberg was controlled by positioning extensive settlements at the periphery of Pilanesberg near the entrance to these pathway-like valleys.

Stone-walled settlements situated on these peripheral locals are usually positioned on intermediary spurs, which provided a defendable vantage point to monitor and control the movement of people in and out of Pilanesberg. In addition, rivers exiting Pilanesberg have sufficiently slowed down to create extensive fertile floodplains for agricultural production. The movement and supervision of grazing cattle both inside and outside Pilanesberg were controlled by an extensive cattle outpost system.

A previous regional survey of the area revealed several Late Iron Age (Early Moloko) sites along the floodplain of the Elands River. At least two sites have been archaeologically investigated (i.e. excavations) and results indicate that they are highly significant, especially in terms of their research potential.

The large Iron Age settlement known as Marothodi, which is a Batlokwa capital and the large Late Iron Age (Sotho-Tswana) settlements in and around Pilwe Hill are situated between Corridor 1 and 2. A total number of 10 Late Iron Age stone-walled settlements were recorded in the survey area. Three of these locals are associated with the mega site known as Marothodi. Marothodi is up for nomination as a Grade 1 (National) heritage site.

The above section was taken from Coetzees's November 2010 HIA (pp.1-3 and 6).

A number of Late Iron Age stone walled sites and features were located during the assessment of the area and will be discussed later on in the report.

The historical age started with the first recorded oral histories in the area. It includes the moving into the area of people that were able to read and write. Early travelers moved through this part of the Northwest Province. This included the group of Cowan & Donovan in 1808, David Hume in 1825, Robert Scoon and William McLuckie in 1827 & 1829, Hume & Schoon (1835), Andrew Smith (1835), while in 1836 William Cornwallis Harris visited the area. The well-known explorer Dr. David Livingstone passed through this area between 1841 and 1847 (Bergh 1999: 12-13, 119-122).

Four farm house complexes were recorded during the 2010 assessment of the area, but this number could be substantially higher due to the fact that earlier farm complexes have been demolished or vacated. Mostly only foundation structures remain. The early farm houses date to the 1880s when the land north of Rustenburg was surveyed for the first time. This early date is also substantiated by the Surveyor General's transfer date of the farms which is 1880s and 1890s. A total of 10 graveyards, cemeteries and isolated graves were also recorded. Although some are formalised cemeteries, most of the graves are unmarked and are therefore by default regarded as older than 60 years (Coetzee 2010: 6).

A few historical remains were recorded during the 2012 fieldwork. They will also be discussed in the next section.

Results of fieldwork

The significance of the aspects/impacts of the process will be rated by using a matrix derived from Plomp (2004) and adapted to some extent to fit this process. These matrixes use the consequence and the likelihood of the different aspects and associated impacts to determine the significance of the impacts.

The significance of the impacts will be determined through a synthesis of the criteria below:

Probability: This describes the likelihood of the impact actually occurring

Improbable: The possibility of the impact occurring is very low, due to the circumstances, design or experience.

Probable: There is a probability that the impact will occur to the extent that provision must be made therefore.

Highly Probable: It is most likely that the impact will occur at some stage of the development.

Definite: The impact will take place regardless of any prevention plans and there can only be relied on mitigatory measures or contingency plans to contain the effect.

Duration: The lifetime of the impact

Short Term: The impact will either disappear with mitigation or will be mitigated through natural processes in a time span shorter than any of the phases.

Medium Term: The impact will last up to the end of the phases, where after it will be negated.

Long Term: The impact will last for the entire operational phase of the project but will be mitigated by direct human action or by natural processes thereafter.

Permanent: The impact is non-transitory. Mitigation either by man or natural processes will not occur in such a way or in such a time span that the impact can be considered transient.

Scale: The physical and spatial size of the impact

Local: The impacted area extends only as far as the activity, e.g. footprint

Site: The impact could affect the whole, or a measurable portion of the above mentioned properties.

Regional: The impact could affect the area including the neighbouring residential areas.

Magnitude/ Severity: Does the impact destroy the environment, or alter its function

Low: The impact alters the affected environment in such a way that natural processes are not affected.

Medium: The affected environment is altered, but functions and processes continue in a modified way.

High: Function or process of the affected environment is disturbed to the extent where it temporarily or permanently ceases.

Significance: This is an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required.

Negligible: The impact is non-existent or unsubstantial and is of no or little importance to any stakeholder and can be ignored.

Low: The impact is limited in extent, has low to medium intensity; whatever its probability of occurrence is, the impact will not have a material effect on the decision and is likely to require management intervention with increased costs.

Moderate: The impact is of importance to one or more stakeholders, and its intensity will be medium or high; therefore, the impact may materially affect the decision, and management intervention will be required.

High: The impact could render development options controversial or the project unacceptable if it cannot be reduced to acceptable levels; and/or the cost of management intervention will be a significant factor in mitigation.

Stone Age finds in the area

Stone tools were recorded at four locations in the area, although there might be more scattered throughout, especially close to or in the drainage lines. The recorded finds are mostly single tools or low density scatters, being eroded out close to river/streambeds and is not significant. However one site (NG13) contains a relatively dense scatter of MSA/LSA stone tools and is located in an erosion donga/open area between pylons 135 and 136. The site also contains Iron Age pottery and hut clay fragments.

GPS Locations: NG02: **S25.40143 E27.08623**

NG03: **S25.40115 E27.08080**

NG08: **S25.37504 E27.04584**

NG13: **S25.35348 E27.01283**

Cultural Significance: Low-Medium

Heritage Significance: None (NG02, 03 & 08). NG13: **Grade III. Other heritage resources of local importance and therefore worthy of conservation**

Field Ratings: General protection C (IV C). Phase 1 is seen as sufficient recording and it may be demolished (low significance). For NG13 it is General protection B (IV B): Site should be recorded before destruction (medium significance).

Mitigation: Should in situ deposits be found then an archaeologist should be called in to investigate. It is recommended that the development stay clear of drainage lines and rocky outcrops

Probability of Impact: Probable

Duration of Impact: Medium term

Scale of Impact: Site

Significance of Impact: Low

Magnitude of Impact: Medium



Figure 6: Stone tools NG08.



Figure 7: Area around NG08.



Figure 8: Site NG13.



**Figure 9: Cultural material from NG13.
The site contains pottery as well.**

Historical sites

Six sites dating to the recent historical time period were identified and recorded during the walk down. NG04 is the remains of an old rail crossing (bridge) over the Elandsriver, NG07 is a stretch of stone walling (probably representing an old farm boundary), while NG12 and 16 is concentrations of bricks that possibly indicate the remains of old homesteads. NG27 and NG28 is rectangular stone built structures of which the age and function is unknown. The rail crossing is again located close to a drainage line, while the farm boundary is on a rocky ridge. These areas need to be avoided. NG12 and 16 is insignificant, although NG16 is located close to Pylon 375. NG27 & 28 is located close to Pylon 352 and will have to be mitigated.

GPS Locations: NG04: **S25.39334 E27.07111**
NG07: **S25.37652 E27.04627**
NG12: **S25.35386 E27.01887**
NG16: **S25.35035 E26.97389**

NG27 & NG28: S25.31263 E26.88674 & S25.31250 E26.88592

Cultural Significance: Low-Medium

Heritage Significance: None (NG07, 12 & 16). NG04 and NG27/28: **Grade III. Other heritage resources of local importance and therefore worthy of conservation**

Field Ratings: General protection C (IV C). Phase 1 is seen as sufficient recording and it may be demolished (low significance). For NG04 and NG27/28 it is General protection B (IV B): Site should be recorded before destruction (medium significance).

Mitigation: None for NG07, 12 and 16. Recording for NG04 and NG27/28

Probability of Impact: Probable

Duration of Impact: Medium term

Scale of Impact: Site

Significance of Impact: Low (NG07, 12 and 13). Moderate for NG04 and NG27/28

Magnitude of Impact: Medium



Figure 10: Old rail crossing NG04.



Figure 11: Farm boundary wall (NG07).



Figure 12: Bricks at NG12.
A similar scatter was found at NG16.

NOTE: No photos were taken at NG27/28 due to equipment failure, but the features consist of a number of stone constructed structures (foundations) located close to a low rocky ridge. The site is located close to Pylon 352.

Iron Age Sites

By far the largest number of the sites identified and recorded belongs to this period, and include scatters of pottery, hut clay and large stone walled homesteads and complexes. Two sites (NG05 and 06) are located on a rocky ridge and is a so-called rock gong area. Mitigation measures (including mapping, excavation and management plans) for the large stone walled

sites will have to implemented, should these sites be impacted (if the development cannot be changed to avoid these sites).

GPS Locations: NG05 and NG06 (rock gong area and pottery): **S25.37919 E27.04866 & S25.37714 E27.04796**

NG09 and NG10 (Scatter of undecorated pottery and hut clay): **S25.36994 E27.04019**

NG11 (scatter of undecorated pottery fragments): **S25.35879 E27.02879**

NG14 (hut clay and pottery in erosion donga): **S25.35345 E27.01263**

NG17-26: Stone walled settlement units (homesteads) probably forming part of the same complex.

17/18: **S25.34963 E26.96886**

19/20: **S25.34982 E26.96582**

21: **S25.34909 E26.96313**

22: **S25.34903 E26.96223**

23: **S25.34885 E26.96100**

24: **S25.34932 E26.95987**

25: **S25.32163 E26.90054**

26: **S25.32018 E26.89974**

Cultural Significance: Low (NG09, 10 & 11); Medium (NG05, 06 & 14); High (NG17-26)

Heritage Significance: None (NG09, 10 & 11). NG05, 06 and NG14: **Grade III. Other heritage resources of local importance and therefore worthy of conservation.** NG17-26: **Grade II. Heritage resources with qualities giving it provincial or regional importance although it may form part of the national estate**

Field Ratings: NG09, 10 and 11: **General protection C (IV C). Phase 1 is seen as sufficient recording and it may be demolished (low significance).** NG05, 06 and NG14: **General protection B (IV B): Site should be recorded before destruction (medium significance).** NG17-26: **Local Grade IIIB. Should be included in the heritage register and may be mitigated (high/ medium significance)**

Mitigation: None for NG09, 10 and 11. Recording for NG05, 06 and NG14 if impacted. Extensive mapping, recording, excavations and management of NG17-26. However it would be highly recommended that these sites be avoided if at all possible

Probability of Impact: Improbable (NG09, 10 and 11). Probable (NG05/06 and 14). Highly Probable (NG17-26).

Duration of Impact: Long Term/Permanent

Scale of Impact: Site and Regional

Significance of Impact: Negligible (NG09, 10 and 11). Moderate (NG05, 06 and NG14). High (NG17-26)

Magnitude of Impact: Low (NG05, 06, 09, 10, 11 and 14). High (NG17-26)

The sites (find spots) where scatters of undecorated pottery and hut clay were found (NG09, 10 and 11) are insignificant as the material is out of context and no other Iron Age features (stone walling) are located close by. Site NG14 (hut clay and pottery) is located in a large erosion donga (close to a drainage line) where a fairly large Stone Age component (NG13) is also present. Although areas such these (from a natural/ecological point of view) should be avoided, these sites could be mitigated by detailed mapping, recording and sampling of

cultural material if the development cannot be deviated away from here. NG14 is located between Pylons 135 and 136.

Sites NG05 and 06 are located on a rocky ridge between Pylons 145 and 146. Evidence of some of the norite outcrops being used as gongs (musical instruments) and possibly as sites for rainmaking rituals were found during the assessment. This includes areas where the rocks have been hit and smoothed, as well as pottery. From an ecological point of view these areas should be avoided, but if impacted these sites should be recorded in more detail and mapped.



Figure 13: Undecorated pottery at NG09.



Figure 14: General view of NG09/10.



Figure 15: Hut clay on NG10.



Figure 16: Norite outcrop NG05/06.



Figure 17: Rock gong area site NG05/06.

The stone walled settlements found at sites NG17-26 are extensive sites, forming part of a larger LIA complex probably dating to between the 17th and early 19th centuries. The sites contain livestock (cattle enclosures), hut bays and hut remains, large ash middens (refuse dumps) with deep deposits containing pottery, faunal remains and other cultural remains and other features such as grainbin stands. The sites are located in saddles between hills and around the foot slopes of these areas. These sites are located between Pylons 374 and 372, as well as Pylons 357 and 356. The sites are highly significant from an archaeological, anthropological, research and tourism perspective. They are similar to and possibly related to the known megasite Marothodi and others in the Pilanesberg area that has been researched in the past. These sites (if possible) should therefore be avoided at all costs. If the development of the corridor cannot be deviated away from here then extensive mitigation measures needs to be implemented. This will include detailed mapping and drawing and archaeological excavations. An Archaeological Heritage Management Plan should be drafted and implemented as well.



Figure 18: Section of NG17.



Figure 19: More walling at NG17/18.



Figure 20: Stone walling and hut bay.



Figure 21: Cultural material from one of the refuse areas.



**Figure 22: Extensive stone walling
at NG25/26.**



**Figure 23: Hut foundations
At NG25.**

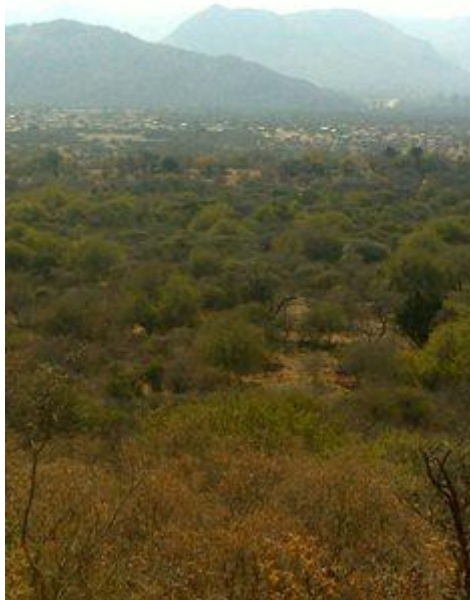


Figure 24: View towards sites NG17-24 in saddle/valley.



Figure 25: Aerial view of location of sites along corridor (Google Earth 2012).



Figure 26: Closer view of stone walled sites at NG25 and 26 (Google Earth 2012).

7. CONCLUSIONS AND RECOMMENDATIONS

In conclusion it is possible to say that the Heritage Walk Down for the Ngwedi (Mogwase) line corridor, has been completed successfully. A number of sites dating to the Stone Age, Late Iron Age and more recent historical time-period were identified and recorded. Some of the sites (especially the LIA stone walled sites and settlements) are highly significant and if negatively impacted will have to be mitigated. This would include detailed mapping and drawing, archaeological excavations and Management.

From an ecological view, as well as from a Heritage perspective, areas such as drainage lines and rocky ridges, outcrops and hills should be avoided. If the line corridor in these areas is to be deviated from the current proposed route a second round of walk downs has to be undertaken in these areas to assess the presence of sites and their significance. It should also be noted that it is not possible to locate all possible sites in an area due to vegetation cover, inaccessibility of areas and other factors. Sites, features and objects might therefore have been missed as a result.

It should also be noted that the subterranean presence of archaeological and/or historical sites, features or artifacts are always a distinct possibility. Care should therefore be taken during any development activities that if any of these are accidentally discovered, a qualified archaeologist be called in to investigate. This would include the discovery of previously unknown graves.

8. REFERENCES

Aerial views of the area, line corridor, substation location and site distribution: Google Earth 2012 and BAAGI Environmental Consultancy

Bergh, J.S. (red.). 1999. **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies.** Pretoria: J.L. van Schaik.

Coetzee, F. P. 2010. Extract from “**Cultural Heritage Survey**”. November 2010. UNISA. Title of report and client details not given (provided by BAAGI)

Knudson, S.J. 1978. **Culture in retrospect.** Chicago: Rand McNally College Publishing Company.

Korsman, S.A. & Meyer, A. 1999. Die Steentydperk en rotskuns. Bergh, J.S. (red.). **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies.** Pretoria: J.L. van Schaik.

Republic of South Africa. 1999. **National Heritage Resources Act** (No 25 of 1999). Pretoria: the Government Printer.

Republic of South Africa. 1998. **National Environmental Management Act** (no 107 of 1998). Pretoria: The Government Printer.

APPENDIX A

DEFINITION OF TERMS:

Site: A large place with extensive structures and related cultural objects. It can also be a large assemblage of cultural artifacts, found on a single location.

Structure: A permanent building found in isolation or which forms a site in conjunction with other structures.

Feature: A coincidental find of movable cultural objects.

Object: Artifact (cultural object).

(Also see Knudson 1978: 20).

APPENDIX B

DEFINITION/ STATEMENT OF HERITAGE SIGNIFICANCE:

- Historic value:** Important in the community or pattern of history or has an association with the life or work of a person, group or organization of importance in history.
- Aesthetic value:** Important in exhibiting particular aesthetic characteristics valued by a community or cultural group.
- Scientific value:** Potential to yield information that will contribute to an understanding of natural or cultural history or is important in demonstrating a high degree of creative or technical achievement of a particular period
- Social value:** Have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.
- Rarity:** Does it possess uncommon, rare or endangered aspects of natural or cultural heritage.
- Representivity:** Important in demonstrating the principal characteristics of a particular class of natural or cultural places or object or a range of landscapes or environments characteristic of its class or of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province region or locality.

APPENDIX C

SIGNIFICANCE AND FIELD RATING:

Cultural significance:

- Low A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings.
- Medium Any site, structure or feature being regarded less important due to a number of factors, such as date and frequency. Also any important object found out of context.
- High Any site, structure or feature regarded as important because of its age or uniqueness. Graves are always categorized as of a high importance. Also any important object found within a specific context.

Heritage significance:

- Grade I Heritage resources with exceptional qualities to the extent that they are of national significance
- Grade II Heritage resources with qualities giving it provincial or regional importance although it may form part of the national estate
- Grade III Other heritage resources of local importance and therefore worthy of conservation

Field ratings:

- i. National Grade I significance should be managed as part of the national estate
- ii. Provincial Grade II significance should be managed as part of the provincial estate
- iii. Local Grade IIIA should be included in the heritage register and not be mitigated (high significance)
- iv. Local Grade IIIB should be included in the heritage register and may be mitigated (high/ medium significance)
- v. General protection A (IV A) site should be mitigated before destruction (high/ medium significance)
- vi. General protection B (IV B) site should be recorded before destruction (medium significance)
- vii. General protection C (IV C) phase 1 is seen as sufficient recording and it may be demolished (low significance)

APPENDIX D

PROTECTION OF HERITAGE RESOURCES:

Formal protection:

National heritage sites and Provincial heritage sites – Grade I and II

Protected areas - An area surrounding a heritage site

Provisional protection – For a maximum period of two years

Heritage registers – Listing Grades II and III

Heritage areas – Areas with more than one heritage site included

Heritage objects – e.g. Archaeological, palaeontological, meteorites, geological specimens, visual art, military, numismatic, books, etc.

General protection:

Objects protected by the laws of foreign states

Structures – Older than 60 years

Archaeology, palaeontology and meteorites

Burial grounds and graves

Public monuments and memorials

APPENDIX E

HERITAGE IMPACT ASSESSMENT PHASES

1. Pre-assessment or Scoping phase – Establishment of the scope of the project and terms of reference.
2. Baseline Assessment – Establishment of a broad framework of the potential heritage of an area.
3. Phase I Impact Assessment – Identifying sites, assess their significance, make comments on the impact of the development and makes recommendations for mitigation or conservation.
4. Letter of Recommendation for Exemption – If there is no likelihood that any sites will be impacted.
5. Phase II Mitigation or Rescue – Planning for the protection of significant sites or sampling through excavation or collection (after receiving a permit) of sites that may be lost.
6. Phase III Management Plan – For rare cases where sites are so important that development cannot be allowed.