Archaeological Excavations and Surveys Along the Ariadne-Venus Transmission Line

For ESKOM

By

By Gavin Anderson

Institute for Cultural Resource Management, Natal Museum, Private Bag 9070, Pietermaritzburg, 3200

INTRODUCTION

The Institute for Cultural Resource Management was contracted by Eskom (Megawatt Park) to undertake an archaeological survey of the Ariadne-Venus transmission line. Several archaeological sites were already known to occur along the path of the transmission line and its servitudes. Eskom had been informed of these sites during the initial scoping exercise in 1995. The archaeological survey was undertaken during the last stages of the project, and in some cases after the pylons had been constructed and access roads completed.

The archaeological survey located several archaeological and historical sites, and mitigatory measures for each site were given. Few of these were, however, in direct line of the transmission line and/or access roads. A total of six archaeological sites are affected by the transmission line. However, only four of these required further archaeological mitigation.

All archaeological and historical sites are protected by the National Monuments Act of 1969 which makes it an offence to alter in any way such sites without a permit from the National Monuments Council (NMC). As from 1 April 1998, the KwaZulu-Natal Heritage Act of 1997 will replace the current heritage legislation in KwaZulu-Natal. The new heritage compliance agency, Amafa aKwaZulu-Natali, may require an assessment of the impact of any development on heritage resources, where such an assessment is not required by other legislation. The NMC and its successor in KwaZulu-Natal (Amafa) may hold developers responsible for any damage accrued to a site in cases where they have deviated from the permit requirements. It is the responsibility of the developers to apply for a permit should development have a negative impact on archaeological or historical sites.

ARCHAEOLOGICAL SITES: DESCRIPTION AND MITIGATION

I describe each site and give the suggested mitigation as stated in previous correspondence with Eskom (in italics). I then describe the mitigation if it had been undertaken.

Woodlands 1

This site is located between the transmission line numbers 131 and 132. The site can be divided into three separate parts: the cattle byre and two possible domestic areas. The main activity area is the cattle byre that is a stone-walled structure that abuts the base of the hill. The cattle byre has both a

primary and secondary enclosure. The primary enclosure is ±50 m in diameter, while the secondary enclosure is ±20 m in diameter. The walling is currently ±1 m thick and 0.5 m high. Both enclosures have a sandy soil that may contain archaeological material.

Southeast of the cattle byre is a small hill. Several boulders occur on the top of the hill and may be the remains of stone walling. Slightly downhill of this hill is a stone mound made from local material. This stone mound may be a grave.

Northwest of the cattle byre is a slightly taller hill that may have the remains of stone walling, although these boulders may be natural. In the vicinity of these boulders are areas of sparse vegetation that may suggest areas of human occupation or activity.

Mitigation required

The site appears to be of low significance, however further assessment would be needed if the site is to be affected by the servitudes for the transmission line. The stone mound may be a grave and this should not be affected in any manner. I suggest that the three areas be demarcated and that no heavy machinery disturbs the area. There is currently a track running between the cattle byre and the southeastern hill. If bulldozers continue to use this track, they may damage the stone walling. This should be avoided. A permit from the National Monuments Council would be required if this site is further affected.

Mitigation undertaken

The two hills referred to above have been damaged by bulldozer activity. The stone pile regarded as a potential grave has been destroyed. This is contrary to the proposed conservation mitigation I suggested for the site. While Amafa aKwaZulu-Natal will not prosecute the contractors for the damage to this site (pers. Comm. to Amafa aKwaZulu-Natal), I strongly believe that some form of penalty should be placed against the defaulters.

VEN1

VEN1 is a group of four archaeological sites on various plateaus of a hill near the pylon numbers 131 to 135. One site has already been damaged by the current pylon. The sites are low stone-walled settlements and are in a relatively good state of preservation. Each settlement consists of a few circular stone-walled features and a slightly larger circular enclosure nearby. The former may be the remains of houses and the latter a cattle byre. Some of the cattle byres have smaller enclosures within the main byre. At least two of these sites have archaeological deposit, and fragments of ceramic vessels were observed. Human graves may occur at this site. Three of the sites may date between AD 1250 and AD 1440. The lowest site is probably not older than 100 years.

Three of these sites may be directly affected by the construction of powerlines and thus require some form of mitigation. The last site would require mitigation if it is effected by the construction of an access road. These sites are of low (the most recent site) to medium-high significance and any impact will be negative.

There is a strong likelihood that these sites will be damaged when the pylons are constructed, as has already happened with the current pylon. Furthermore, the access road will in all probability be in the vicinity of these sites and thus may negatively affect the sites. I recommend the following mitigation:

- *If at all possible, the pylons and access roads should avoid all stone-walled structures.*
- *The upper three settlements need to be accurately mapped by an archaeologist.*
- *If the pylons are to be placed on a site the location of each pylon leg should be examined through archaeological excavation.*

Mitigation undertaken

Before any mitigation of the site itself began, the contractors and I walked the route of the access road delineated by myself. This route avoided all stone-walled features and potential archaeological deposits. The site officer and myself demarcated the route for the construction crew to ensure that the bulldozer would not deviate from the chosen route, and thus damage aspects of the site.

The stone-walled features of this site were accurately mapped (fig. 1). The four excavation holes for the tower legs were demarcated and excavated. No significant features or artefacts were located in

this excavation. The soil was dark brown to black and varied from 6 cm to 20 cm in depth. Bedrock was reached immediately beneath this soil.

Several pottery sherds were located, however, no sherds could be attributed to a specific time period. Two diagnostic sherds were excavated. One sherd had a flat rim with a rounded lip. The second sherd had a flat rim with a square lip. The pottery ranged from orange to red in colour.

The spatial layout of the whole site indicates that it is a multi-component site that has been reoccupied over several decades, if not centuries. The layout of individual stone-wall features vary from circular to rectangular in shape. The circular walls tend to be lower in height, suggesting an older age. Several of the stones from the walls have been re-used on different walls, and/or the same feature has been modified at various stages through history.

The orientation of the entrance of the byre to the gradient of the hill may give a relative date for each stone-walled feature. Maggs *et al.* (1986; 1991) suggested that if the entrance faces upslope, then the feature would probably pre-date the Shakan era (*c.* 1820 AD), while those facing downslope post-date the Shakan era (*c.* AD1830). The entrances of the features from VEN1 were difficult to locate because of:

1. the removal of stones by people though time,
2. the re-use of the stone features for agricultural purposes in such a way that entrances are blocked to inhibit cattle from entering the stone-walled feature;
3. the older walling was disturbed
4. walls had been re-used, often with more than one entrance, or had had additional enclosures and entrances built; and,
5. the grass had not yet been burnt, thus reducing visibility.

We did, however, walk the site extensively and sketched the site as we proceeded. This was followed by accurately mapping the site with a theodolite.

In conclusion, VEN1 has features that suggest an intermittent occupation date from 800 AD to the recent past (last 50 years), and that an archaeological deposit still exists in some of the cattle byres.

VEN2

VEN2 consists of two stone-walled archaeological sites on the same ridge of a hill. The first site is near the location of pylon number 240. This site is a low stone-walled structure. The walling is not well preserved, but there appears to be an archaeological deposit associated with the walling. This site may date to between AD 1250 and AD 1440. This site is of medium archaeological significance and any impact will be negative.

The second site in this group is near pylon number 242. The site extends from the existing transmission line to the Ariadne-Venus line path, and has already been negatively affected by the current pylon. The site consists of three to four circular stone-walled structures that may be the remains of houses and a cattle byre. There is a potential archaeological deposit at this site. This site is of medium archaeological significance and any impact will be negative.

While the pylon does not directly affect either site, they may be affected by the construction of servitudes such as access roads. I recommend the following mitigation:

- *the access road should avoid this site;*
- *contractors should not use the stones from this site, as with any other site, in the construction of the pylons;*
- *both sites need to be accurately mapped by an archaeologist; and,*
- *test pit excavations may be required if the pylons directly affect either site, or if the access road intends to cause any damage. These test pit excavations will occur in the areas where the pylon legs are to be inserted into the ground, or where the access road may pass through the site.*

The stone-walled features of this site were accurately mapped (fig. 2). The tower would not affect the site itself, however, the access road has the potential to damage portions of the site. After the site was mapped, I walked the access road with the contractors, indicating where the access road may be placed. We specifically demarcated areas where stones were not to be removed, and where the road should be placed when it passed between two stone-walls.

VEN223

VEN223 was excavated when the position of tower 223 had been moved after my initial site visit. The tower was now placed directly over a potential grave. The tower was moved 6m away from the

grave and onto an area with archaeological deposit. Two 2 m x 2 m x 0.20 m squares were excavated to retrieve archaeological remains prior to reconstruction. In addition to this, the contractors were shown where they were not allowed to impact on the site nor remove any stones without consultation with myself (as archaeologist of the project).

Several pottery fragments were recovered. Only one fragment was diagnostic. The rim was flat while the lip is flat with a slight external emphasis.

The site is the remains of a settlement probably dating to within the last 60 to 150 years.

The site will need to have an inspection after the construction phase has been completed.

VEN262

This site consisted of several stone-walled features and potential archaeological deposit in the direct path of the transmission line. One of the anchor lines were originally placed within the main cattle byre, however, I suggested that the tower be moved ±10m towards tower 263, and at least 2m from the wall. The tower was repositioned, and the surveyor assured me that the anchor lines were at least 2m away from the wall. I excavated one of these anchor lines.

The stone-walled features of the site were mapped according to archaeological standards (fig. 3). Since the features of the site are in direct path of the transmission line, I suggested that if the conservation management for this site is to be successful, then the cable for the transmission line should be walked, so as not to disturb any deposit or stone walled features.

The excavation at tower 262 did not locate any artefacts in the hard clay-like dark brown soil. Adiagnsotic sherds were, however, observed along the eroded paths cattle paths. Two lower grindstone fragments were located in two stone-walled features, while an upper grindstone was located at the northern byre. These grindstones suggest that sorghum and/or millet was being grown, and not maize. This allows me to date the site to before *c.* AD 1450 (the approximate date when maize was introduced to this part of Africa). The agricultural field and possible domestic areas are located at the top of the hill.

I requested that the cable is walked through this area, especially on the top of the hill. This site will require a site inspection after the towers have been completed.

VEN265

VEN265 has at least two small stone-walled features, with an interconnecting wall. An archaeological deposit exists in this area. The site was first recorded when the excavations for the towers had been completed, and the tower bases had been cemented, by the construction company. The Eskom Environmental Liaison Officer and myself discussed this site and both agreed that minimal impact should occur. We agreed that the stone walling and archaeological deposit should not be negatively affected unless mitigation had occurred. This information was to be forwarded to the construction company via Eskom.

During a recent site visit I noticed that bulldozer activity had negatively damaged the stone walling and archaeological deposit. The bulldozer had scraped part of the topsoil, thus removing the important archaeological deposit and disturbing the stone-walling. This was unnecessary activity and penalties should be placed on the contractors. The site had not yet been adequately recorded, and aspects of the site are now permanently lost. I view this activity as unacceptable in terms of the proposed commitment to Integrated Environmental Management Plan. This damage to the archaeological site is unsatisfactory, and the construction company should be appropriately penalised.

CONCLUSION

The Institute for Cultural Resource Management (ICRM) was contracted by Eskom to undertake the archaeological survey of the Ariadne-Venus transmission line, and suggest mitigation where necessary. The ICRM was only contracted during the last stages of the project, after much of the line had been constructed.

Several archaeological sites were recorded during the short survey. These sites ranged from low to high significance. The impact of the transmission lie on these sites varied from low negative to high negative. My mitigatory procedures emphasized the conservation of archaeological remains by having a minimum impact policy for these sites. Sites were mapped and/or excavated, or alternatively a tower was moved if the potential impact on the site was to high.

The archaeological sites date from *c.* AD 1200 to more recent times. The sites are probably those of early Nguni-speaking farmers and consist of stone-walled cattle byres and house structures. These types of sites tend to be located near the top of flattish hills in the Sweetveld grasslands.

Finally, I wish to express some concern regarding the process of the archaeological assessment and mitigation on this project. Despite assurances to the contrary during the Ariadne-Venus scoping exercise, I was given the go-ahead to conduct an archaeological impact assessment along the transmission line route at a very late stage in the project. In fact, construction and erection of the pylons had already begun, to the extent that much of the work on about half the line is complete. The ICRM was first approached in late November 1997 to undertake the archaeological assessment. By then the several of the access roads and pylons had already been constructed, or in the final process of construction. This had occurred in the corridor south of the N3 crossing to the Ariadne substation. Clearly, this is unsatisfactory. The environmental reports of March 1995 clearly indicated that archaeological sites exist in the affected area, that a transmission line would affect these sites, and that an assessment and some form of mitigation would be required.

These circumstances surrounding the archaeological assessment are extremely disturbing since Eskom has a policy, at least in KwaZulu-Natal, of protecting archaeological sites and conducting archaeological surveys prior to the construction of transmission lines. I hope that this will not reoccur and that the project leaders comply with the archaeological requirements for this project.

The archaeological conservation management plans have been overtly disregarded for this transmission line on three instances, either by the contractors or by Eskom not enforcing site management.

I believe that this transmission line should be revisited once the transmission line has been completed. This will determine the degree of damage, if any, to archaeological sites.

References

Mack, K. Maggs, T. and Oswald, D. 1991. Homesteads in two rural communities: an ethnoarchaeological investigation. *Natal Museum Journal of Humanities* ***3(1):*** 79-129.

Maggs, T., Oswald, D. Hall, M., and Ruther, H. 1986. Spatial parameters of Late Iron Age settlements in the upper Thukela Valley. *Annals of the Natal Museum* **27(2)**: 455-479.