



AFRICAN HERITAGE CONSULTANTS CC

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**CULTURAL HERITAGE RESOURCES IMPACT ASSESSMENT FOR TWO
ALTERNATIVE POWER LINES FROM THE EXISTING MBUMBU
TRACTION SUBSTATION TO THE PROPOSED TSAKANI SUBSTATION
THAT WILL RUN THROUGH THE FOLLOWING FARMS: BURLINGTON
217KU; ISLINGTON 219KU; EDINBURG 228KU; LUDLOW 227KU;
EGLINGTON 225KU, MPUMALANGA PROVINCE**

DEFINITION

The broad generic term *Cultural Heritage Resources* refers to any physical and spiritual property associated with past and present human use or occupation of the environment, cultural activities and history. The term includes sites, structures, places, natural features and material of paleontological, archaeological, historical, aesthetic, scientific, architectural, religious, symbolic or traditional importance to specific individuals or groups, traditional systems of cultural practice, belief or social interaction.

PROTECTED SITES IN TERMS OF THE NATIONAL HERITAGE RESOURCES ACT, ACT NO. 25 OF 1999

The following are the most important sites and objects protected by the National Heritage Act:

- Structures or parts of structures older than 50 years.
- Archaeological sites and objects.
- Paleontological sites.
- Meteorites.
- Ship wrecks.
- Burial grounds.
- Graves of victims of conflict.
- Public monuments and memorials.
- Structures, places and objects protected through the publication of notices in the Gazette and Provincial Gazette.
- Any other places or objects, which are considered to be of interest or of historical or cultural significance.
- Geological sites of scientific or cultural importance.

- Sites of significance relating to the history of slavery in South Africa.
- Objects to which oral traditions are attached.
- Sites of cultural significance or other value to a community or pattern of South African history.
- These sites may not be altered, damaged, destroyed or developed without prior approval of the South African National Heritage Resources Agency (SAHRA).

TERMS OF REFERENCE

The following comprise the objectives of this cultural and heritage resources impact assessment.

- To review existing information, desktop survey and pre-assessment.
- To record all heritage resources as defined in the South African Heritage Resources Act (Act 25 of 1999).
- To conduct field and site assessments of all of the known heritage resources in the area as well as searching the entire 1ha for heritage resources.
- To record oral traditions and history.
- To document and map all heritage resources.
- To assess and evaluate all significant heritage resources found.
- To compile an impact assessment of the proposed site.

METHODOLOGY

All appropriate documents on the Lowveld dealing with heritage were studied. The area is poorly documented except for the adjacent National Kruger Park where the University of Pretoria has surveyed the area in detail (Meyer, A 1986)

The fieldwork was conducted by vehicle and on foot. A large portion of the survey area allows for inspection by vehicle.

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND THE AREA

This section of the Lowveld has been poorly surveyed in the past, most probably because of all the informal settlements in the area. In contrast herewith the northern Lowveld towards Phalaborwa has been intensively surveyed (Miller, D. Kellick, D. and Van der Merwe N.J. 2001: 401 – 417; & Evers, T.M. and Van der Merwe N.J. 1987: 87 – 106)

To the south Evers has recorded an Early Iron Age site at Plaston near White River (Evans, T.M. 197: 170 – 178).

Just east of the surveyed area is the National Kruger Park. Most work in the area has been done by Prof. André Meyer of the Pretoria University. He has recorded a few Early Iron Age sites but most sites are Late Iron Age sites which mainly occur near major water resources. What is also important is to note that most of the area was Tsetse Fly area which had a severe impact on domesticated cattle sheep and goats (Meyer, A, 1986). The author also excavated a Late Iron Age site at Mluwati River. No remains of domesticated animals were found on the site (Küsel, U.S. 2001).

A number of cultural heritage resources impact assessments have been done in the area (Roodt, F. 2003; Roodt, H. 1999; Van der Walt, J. 2003; Van Schalkwyk, J.A. 2001 (i); Van Schalkwyk, J.A. 2001 (ii) and Van Schalkwyk, L.O. 2006.

Of these cultural heritage resources impact assessments only two Late Iron Age sites were found by Van Schalkwyk, J.A. (2001 (i)).

RESULTS

The proposed routes of the power line run through rural settlement areas, informal settlements and Lowveld bushveld (Van Wyk, B. & Van Wyk, P. 1997).

The route of the power line also crosses a large number of old maize and sorghum fields. Where the bushveld vegetation was dense the area had to be surveyed on foot.

Two alternative power line routes were inspected for the project. Both lines start at $S24^{\circ} 41' 1.9''$ & $E31^{\circ} 10' 56.3''$. The lines end at $S24^{\circ} 39' 20.5''$ & $E31^{\circ} 19' 31.2''$. The proposed site of the substation at $S24^{\circ} 39' 59.4''$ & $E31^{\circ} 19' 38.4''$ was also inspected on foot. See attached maps.

1. Purple Route

The purple line runs from the starting point in a north eastern direction through Lowveld bushveld vegetation – see photograph



Starting point of both proposed routes

Then it crosses two streams and the dirt road at $S24^{\circ} 39' 14.4''$ & $E31^{\circ} 14' 20.1''$ – see photograph.



From here the line will run east to the end destination at $S24^{\circ} 39' 21.3''$ & $E31^{\circ} 19' 29.2''$. Along this section of the route it will also run through bushveld vegetation but will also cross some old fields where maize and sorghum was planted – see photograph.



End destination of the proposed power lines

No important cultural heritage resources or graves were found along this route.

2. Green Route

This route starts at the same point as the purple route but follows a more southerly direction crossing a large dam to S24° 42' 9.9: & E31° 13' 37.2" – see photograph



From here it follows an easterly direction. Along this section the route runs through an informal settlement area and across old fields see photograph



The power line will end at the same spot as the purple line at S24° 39' 20.3" & E31° 19' 29.2". This last section also runs through bushveld and old fields -see photograph on purple line

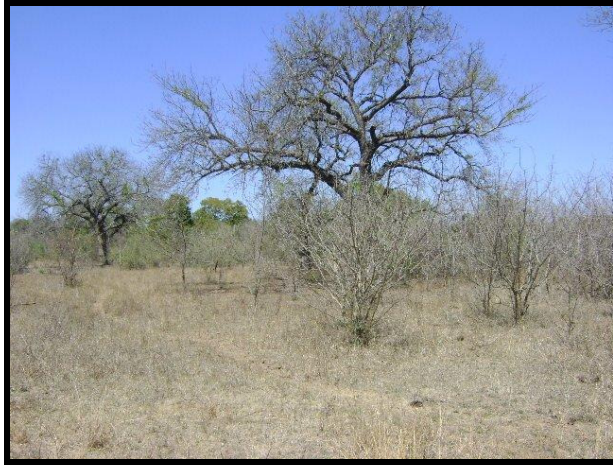
No important cultural heritage resources or graves were found along this route.

3. Proposed Substation site

The proposed site for the new substation lies near the river bed. The area is typical river vegetation with large trees and shrubs at S24° 39' 59.4" & E31° 19' 38.4". ***The site was inspected on foot and no important cultural heritage resources or graves were found.*** The site was photographically recorded north, northeast, east, southeast, south, southwest, west, and northwest – see photographs.



North



North East



East



South East



South



Southwest



West



Northwest

CONCLUSION

No important cultural heritage resources or graves are present on any of the two alternative routes. From a heritage point of view it does not really matter which route is preferred.

RECOMMENDATIONS

There is no objection to the construction of any of the two investigated routes given for the Mbumbu – Tsakani power line.

If during construction any cultural heritage resources or graves are unearthed all work has to be stopped until the site has been inspected and mitigated by a cultural heritage practitioner.

SITE INFORMATION

Owners contact details:

Eskom is still negotiating with the land owners for use of the land.

Developers contact details:

Mr. Josiah Zungu
Eskom Holdings SoC Pty Ltd
Eskom Distribution – Mpumalanga Region
PO Box 579, Nelspruit, 1200
Tel: 013 755 9655
Cell: 084 622 5412
Fax: 086 668 5894
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Consultants contact details:

Nicole Botham
Environmental Consultant
Royal HaskoningDHV
Tel: 012 367 5916
Fax: 012 367 5878
Email: nicole.botham@rhdhv.com

Type of development (e.g. low cost housing project, mining etc.)

17km 132kV power line

Whether rezoning and/or subdivision of land is involved:

Not Applicable

Full location of Province, Magisterial District/Local Authority, property (e.g. farm, erf name and number:

Bushbuckridge Local Municipality]
Ehlanzeni District Municipality
Mpumalanga Province

FARM NAME	NUMBER	PORTION
Burlington	217KU	0
Burlington	217KU	1
Burlington	217KU	2
Islington	219KU	0
Edinburgh	228KU	0
Edinburgh	228KU	2
Ludlow	227KU	0
Ludlow	227KU	3
Eglinton	225KU	0

Location map must have the polygon of the area to be surveyed on it and full geographical coordinates for all relevant points and where applicable indication of the area to be developed (footprint):

See attached

If possible an aerial photograph of the specific area showing the location of all site.

See Attached

REFERENCES

- 1/50 000 Maps: 2431 CA, CB, CC & CD
- Archaeological database of the National Cultural Museum Pretoria
- Google Maps
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- Roodt, H. 1999. *Phase 1 Archaeological Impact Assessment: Marite Pipeline Bosbokrand Northern Province.* An unpublished report by R & R Cultural Resource Consultants on file at SAHRA as: 1999-SAHRA-0073.
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- Van Schalkwyk, L.O. 2006. *Heritage Impact Assessment of Acornhoek Dam, Klaserie, Limpopo Province, South Africa.* An unpublished report by eThembeni Cultural Heritage on file at SAHRA as: 2006-SAHRA-0256.
- Van Wyk, B. & Van Wyk. P 1997. Field guide to Trees of Southern Africa.

