

**ESCOM TRANSMISSION LINE -  
DUVHA (WITBANK) TO JANUS (MECKLENBURG):  
CULTURAL HERITAGE SCOPING REPORT**

For:

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## **SUMMARY**

### **Escom transmission line - Duvha (Witbank) to Janus (Mecklenburg), scoping report for heritage management: cultural heritage scoping report:**

It must be stated from the outset that this is not a final evaluation of either of the routes, but that it is only an evaluation, based on existing information and a short field visit, to determine which of the two routes would be the preferred option. When all factors have been considered and a decision has been made to select a route, that route would then have to be subjected to a full assessment by an archaeologist.

From a cultural heritage point of view, the overall impact of any of the two proposed transmission lines is considered to be low. This can be further minimised by the careful placing of pylons and access routes. However, some areas have a very high density of archaeological sites and it is therefore of great importance where these are erected.

Based on what was found and its evaluation, it is recommended that the proposed development can continue in both the areas, on condition of acceptance of the following recommendations:

- That an archaeologist inspects each site selected for the erection of a pylon, especially at the Janus end of the line. The likelihood of impacting on an Iron Age site in this area is very high. However, if it cannot be shifted, mitigation measures, i.e. the controlled excavation of the site prior to development, can be implemented.
- The same holds true for any infrastructure development, eg. access routes, construction camp sites, borrow pits, etc.
- Avoid riverbanks, rims of pans and other water courses, as these were selected by Iron Age communities to settle on.
- Avoid all patches bare of vegetation unless previously inspected by an archaeologist.
- Avoid all outcrops unless previously inspected by an archaeologist.
- Communities living close to the proposed line, should be consulted as to the existence of sites of cultural significance, eg. graves, as well as sites that does not show any structures, but have emotional significance, such as battlefields, etc.
- All graves or cemeteries should be avoided, unless when totally impossible. The correct procedure, ie. notification, consultation and permit application, should then be followed in relocating the graves.
- The developer should keep in mind that archaeological sites might be exposed during the construction work. If anything is noticed, it should immediately be reported to a museum, preferably one at which an archaeologist is available, so that an investigation and evaluation of the finds can be made.

CONTENTS

SUMMARY . . . . .	1
CONTENTS . . . . .	2
1. AIMS OF THE SURVEY.....	3
2. TERMS OF REFERENCE .....	3
3. DEFINITIONS.....	3
4. LEGISLATIVE REQUIREMENTS .....	4
5. METHODOLOGY .....	5
6. DESCRIPTION OF THE AREA.....	6
7. DISCUSSION .....	6
8. RECOMMENDATIONS .....	9
9. REFERENCES .....	9
10. PROJECT TEAM .....	10
APPENDIX 1 .....	11
APPENDIX 2 .....	12

## **ESCOM TRANSMISSION LINE - DUVHA (WITBANK) TO JANUS (MECKLENBURG): CULTURAL HERITAGE SCOPING REPORT**

### **1. AIMS OF THE SURVEY**

The National Cultural History Museum was contracted by **EIMS** to undertake a scoping review of heritage resources that might occur and as a result be impacted upon in two proposed routes for an electricity transmission line. The aim of the review was to identify, based on existing information, which of the two proposed routes would be the most suitable for the proposed development.

### **2. TERMS OF REFERENCE**

The **Terms of Reference** for the study were to:

- 2.1 Assess the significance of the known cultural resources within the borders of the proposed development area, in terms of their historical, social, religious, aesthetic and scientific value.
- 2.2 Develop mitigation or control measures for impact minimization and cultural resources preservation.
- 2.3 Develop procedures to be implemented if previously unidentified cultural resources are uncovered during the construction.

### **3. DEFINITIONS AND ASSUMPTIONS**

The following aspects have a direct bearing on the survey and the resulting report:

- X **Cultural resources** are all nonphysical and physical human-made occurrences, as well as natural occurrences that are associated with human activity. These include all sites, structures and artefacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development.
- X The **significance** of the sites and artefacts are determined by means of their historical, social, aesthetic, technological and scientific value in relation to their uniqueness, condition of preservation and research potential. It must be kept in mind that the various aspects are not mutually exclusive, and that the evaluation of any site is done with reference to any number of these.
- X Sites regarded as having low significance have already been recorded in full and require no further mitigation. Sites with medium to high significance require further mitigation.

- X The latitude and longitude of archaeological sites are to be treated as sensitive information by the developer and should not be disclosed to members of the public.

#### 4. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are mainly dealt within two acts. These are the South Africa Heritage Resources Act (Act 25 of 1999) and the Environmental Conservation Act (Act 73 of 1989).

##### 4.1 South African Heritage Resources Act

###### **Archaeology, palaeontology and meteorites**

In terms of Section 35(4) of this act, no person may, without a permit issued by the responsible heritage resources authority destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or material or any meteorite; 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.

###### **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 (ie where the graves are located and where they are to be relocated) 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)**.

##### 4.2 Environmental Conservation Act

This act states that a survey and an evaluation of cultural resources should be undertaken in areas where development, which will change the face of the environment, is to be made. The impact of the development on the cultural resources should also be determined and proposals to mitigate this impact are to be formulated.

## 5. METHODOLOGY

### 5.1 Preliminary investigation

#### 5.1.1 Survey of the literature

A survey of the relevant literature was conducted with the aim of reviewing the previous research done and determining the potential of the area. In this regard, various anthropological, archaeological and historical sources were consulted - see the list of references below. A few published sources pertaining to the historical events that took place in sections of the route was found, as well as a number of unpublished reports on the archaeology in specific areas.

#### 5.1.2 Data bases

The **Archaeological Data Recording Centre** (ADRC), housed at the National Cultural History Museum, Pretoria, was consulted. This was used to draw up a preliminary map to indicate the existence of known sites of cultural significance, indicating potential problem areas.

The **Environmental Potential Atlas** was also consulted.

#### 5.1.3 Other sources

The topocadastral and other maps were also studied - see the list of references below.

### 5.2 Field survey

The survey was aimed at getting an overview of the areas. These were identified by members of ESCOM and EIMS. The area was investigated by driving the route, or by walking across shorter sections. Special attention was given to areas of potential habitation, and unnatural topographical occurrences such as trenches, holes, outcrops and clusters of trees were investigated.

### 5.3 Documentation

All sites, objects and structures identified were documented according to the general minimum standards accepted by the archaeological profession. Coordinates of individual localities were determined by means of the **Global Positioning System** (GPS)<sup>11</sup> and plotted on a map.

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<sup>11</sup> According to the manufacturer a certain deviation may be expected for each reading. Care was, however, taken to obtain as accurate a reading as possible, and then correlate it with reference to the physical environment before plotting it on the map.

## 6. DESCRIPTION OF THE AREA

The areas surveyed were determined by the proposed development, and roughly takes on the form of two routes running from the Witbank area in the south to the Mecklenburg area in the north (see Fig. 1). Covering such a long distance, the topography of the area varies from highveld, going down through the mountains forming the lowlands. Such a long area is bisected by a number of rivers. The geology and vegetation varies greatly over such a long distance, presenting a wide variety of resources and options that could be utilised by humans.

## 7. DISCUSSION

The aim of this report is to give an overview of the archaeological potential of the areas in which it is proposed to build the transmission line, as well as to point out areas/locations of possible high significance. A search was done in databases of known sites and this was used to produce a map (Fig. 1) that helped to inform this discussion and following recommendations.

Large sections of the areas investigated are still very under-researched by archaeologists. This makes an overview such as this somewhat dangerous, as there might still be many unrecorded/unknown sites.

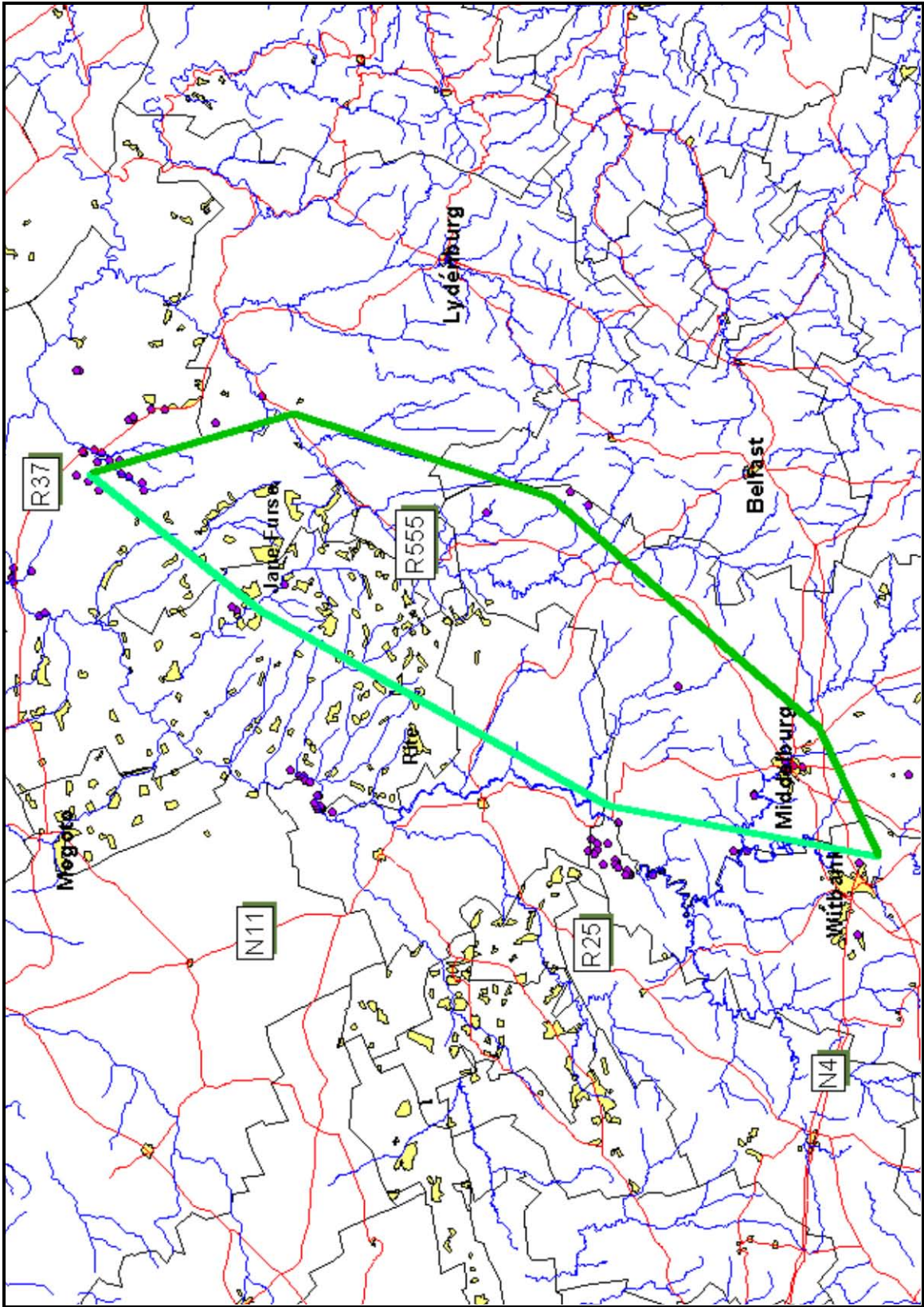
### 7.1 Stone Age

Stone Age people occupied most of South Africa below 1 500 metres above sea level at one time or the other. As a result, stone tools are found over most of the two routes, especially on the escarpment and down on the lower laying areas. During the Early and Middle Stone Age, open sites were preferred near watercourses or even the pans found on the highveld area. As a result, tools belonging to this period (Fig. 2) mostly occur in the open or in erosion dongas. As the artefacts are therefore surface occurrences, they are not in a primary context any more and consequently have little research value.

During the Later Stone Age, people started to occupy rock shelters over longer periods of time. As a result, their occupational debris, rock art and such are found in many shelters. However, open sites dating to the Late Stone Age are also known.

### 7.2 Iron Age

Iron Age sites also occur over the whole of the route. However, in the highveld section they are far less in number than down in the lower laying areas towards the northern section of the proposed development. In fact, as can be seen from the clustering in Fig. 1, there are a large number of sites in the Janus area. These sites date to the Early and Late Iron Age. During the Early Iron Age, people settled close to rivers, preferring the alluvial soils for cultivation. These sites are usually recognised by deposits consisting of ash, potsherds (Fig. 3), faunal remains, etc.



**Figure 1.** The approximate location of the two proposed routes. Known sites of cultural significance are indicated as purple dots.



During the Late Iron Age, people also started to build stone walls (Fig. 4) as part of their settlement layout, although this is not always the case. A few stone walled sites are known in the northern section of the proposed development. However, it is mostly on the highveld area where sites with extensive stone walling occurs. These sites are in some cases very complex and big, covering sever hundred square metres in come cases.

### 7.3 Historical period

Some historically very significant sites are located either very close to the proposed development or in the near vicinity.

The area around Mosego (on the farm Hackney 116KT) (Fig. 5), the old tribal capital of the Pedi nation, should be avoided as far as possible. This includes the old battlefield dating to 1879, when the British attacked the Pedi.

Similarly, the so-called Mapoch's caves, located on the farm Mapochsgronde 500JS in the Middelburg are, is also very sensitive. However, this site is located some distance from the proposed routes.

There are probably a number of farmsteads that are older than 60 years, as well as bridges and other structures. However, all of these are well known and it would be easy to avoid them.

## 8. RECOMMENDED MANAGEMENT ACTIONS

It must be stated from the outset that this is not a final evaluation of either of the routes, but that it is only an evaluation, based on existing information and a short field visit, to determine which of the two routes would be the preferred option. When all factors have been considered and a decision has being made to on a specific route, that route would then have to be subjected to a full assessment by an archaeologist.

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## 9. REFERENCES

### 9.1 Data bases

Archaeological Data Recording Centre, National Cultural History Museum, Pretoria.

Environmental Potential Atlas, Department of Environmental Affairs and Tourism.

### 9.2 Literature

Holm, S.E. 1966. *Bibliography of South African Pre- and Protohistoric archaeology*. Pretoria: J.L. van Schaik.

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Van Warmelo, N.J. 1935. *A Preliminary survey of the Bantu Tribes of South Africa*. Ethnological Publications No. 5. Pretoria: Government Printer.

Van Warmelo, N.J. 1977. *Anthropology of Southern Africa in Periodicals to 1950*. Pretoria: Government Printer.

### 9.2.2 Maps

1: 50 000 Topocadastral maps – 2429BC, BD, CB, CD, DA, DB, DC, DD  
2430AC, CA, CC  
2529AC, AB, AD, BA, BB, BC, BD, CA, CB, CC, CD, DA, DC

## 10. PROJECT TEAM

J van Schalkwyk

## APPENDIX 1: GLOSSARY AND ABBREVIATIONS

This section is included to give the reader some necessary background. It must be kept in mind, however, that these dates are all relative and serve only to give a very broad framework for interpretation.

### STONE AGE

Early Stone Age (ESA)	2 000 000 - 150 000 Before Present
Middle Stone Age (MSA)	150 000 - 30 000 BP
Late Stone Age (LSA)	30 000 - until c. AD 200

### IRON AGE

Early Iron Age (EIA)	AD 200 - AD 1000
Late Iron Age (LIA)	AD 1000 - AD 1830

### HISTORICAL PERIOD

Since the arrival of the white settlers - c. AD 1840 in this part of the country

ADRC - Archaeological Data Recording Centre

core - a piece of stone from which flakes were removed to be used or made into tools

SAHRA - South African Heritage Resources Agency

**APPENDIX 2: ILLUSTRATIONS**



**Figure 2.** Some examples of typical Middle Stone Age tools found in the northern section of the route.



**Figure 3.** Early Iron Age ceramics found in the northern section of the route.



**Figure 4.** Stone walled settlement dating to the Late Iron Age, found on the highveld area of the route.





**Figure 5.** Mosego, old capital of the Pedi, in the middle of the photograph, seen from the south following the proposed route.