

**A SURVEY OF CULTURAL RESOURCES AT THE
MAMPAKUIL BASE STATION, LOUIS TRICHARDT AREA**

For:

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SUMMARY

A survey of cultural resources at the Mampakuil Base Station, Louis Trichardt area.

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural importance found within the boundaries of the area in which the proposed development is to take place.

No sites, objects or structures of cultural significance were identified. It is therefore recommended that

- The proposed development can continue;
- The developers should be notified 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.

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1. AIMS OF THE SURVEY

The National Cultural History Museum was requested by **Environmental Impact Management Services** to survey a small area approximately 12 km south of Louis Trichardt, next to the N1. It is proposed to erect a cellular phone base station here. The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural importance found within the boundaries of the areas that is to be developed.

2. TERMS OF REFERENCE

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

- 2.1 Identify all objects, sites, occurrences and structures of an archaeological or historical nature located in the area of the proposed development.
- 2.2 Assess the significance of the cultural resources in terms of their historical, social, religious, aesthetic and scientific value.
- 2.3 Determine the possible impacts on the known and potential cultural resources in the area of interest.
- 2.4 Develop mitigation or control measures for impact minimization and cultural resources preservation.
- 2.5 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:

- **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 artifacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development.
- The **significance** of the sites and artifacts 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.

- 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.
- 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 National Monuments Act (Act 28 of 1969) and the Environmental Conservation Act (Act 73 of 1989). It is however important to note that new legislation is being prepared and this might come into effect by April 2000.

4.1 National Monuments Act

Article 12, subsection 2A of this act states that anyone who wishes to disturb, destroys, alter, remove or export any fossils, rock art or artifacts left at places inhabited by indigenous people before European colonisation, shipwrecks and their contents older than 50 years, buildings and structures that are older than 50 years, as well as paintings or furniture that have been in South Africa for more than 50 or years respectively, may do so only if they have a permit from the National Monuments Council. According to this Act the following resources are protected:

- a. Meteorites and fossils
- b. Prehistoric rock art
- c. Prehistoric tools, ornaments and structures
- d. The anthropological and archaeological contents of graves, rock shelters, caves, middens etc.
- e. Historical sites and archaeological finds, material or artifacts
- f. Declared national monuments
- g. Cemeteries and graves with headstones older than 50 years

The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the National Monuments Council to do so.

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 is to be formulated.

4.3 The White Paper on Heritage Resources

The white paper is currently being discussed by parliament and is destined to be promulgated before the end of 1999. It will replace the current National Monuments Act. The types of sites protected by the new act will be more or less the same than that covered by the current act, but

provide more strict measures of protection. One of the changes to the current act is that the 50 year clause is extended to 60 years.

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. Nothing pertaining to the particular area was found.

5.1.2 Data bases

The **Archaeological Data Recording Centre** (ADRC), housed at the National Cultural History Museum, Pretoria, was consulted. 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 field survey was done according to generally accepted archaeological practices, and was aimed at locating all possible sites, objects and structures. As the area is very small, it was easy to inspect the planned access road as well as the actual site to be developed (presumably marked by a tree that was spray painted red). However, a much larger area was inspected by subdividing it into an imaginary grid, using the most obvious topographical features such as the road and powerline. Each block of the grid was then surveyed by walking over it.

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)¹ and plotted on a map. This information was added to the description in order to facilitate the identification of each locality.

6. DESCRIPTION OF THE AREA

The area that was investigated is located \pm 90 metres east of the N2, on the farm Mampakuil 313LS in the Soutpansberg district of Northern Province. This is a very small area, covering only a

¹ 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.

few square metres, as well as the planned access road. However, it was easy to identify as it is located close to Escom pole No. NBH89 (Box 06A).

The main morphological characteristics of the area are lowlands with a few small hills. The dominant lithology of the area is gneis or archaic granite. No distinctive feature occur close to the area of development.

The original vegetation of the area is classified by Acocks (1975:44) as Mixed Bushveld and is currently being used for grazing.

7. DISCUSSION

No sites of cultural significance were identified in the area.

7.1 Stone Age

Two MSA cores were identified in the vicinity of the area that is to be developed. These were surface finds, without any further context. As they are judged to be of no special significance, they were left in place.

7.2 Iron Age

None.

7.3 Historical period

None.

8. RECOMMENDATIONS

No sites, objects or structures of cultural significance were identified. It is therefore recommended that

- The proposed development can continue in this particular place;
- The developers should be notified 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.

9. REFERENCES

9.1 Unpublished sources

9.1.1 Data base

Archaeological Data Recording Centre, (former) Tvl section, National Cultural History Museum, Pretoria.

Environmental Potential Atlas, Department of Environmental Affairs and Tourism.

9.2 Published sources

9.2.1 Books and journals

Acocks, J.P.H. 1975. *Veld Types of South Africa*. Memoirs of the Botanical Survey of South Africa, No. 40. Pretoria: Botanical Research Institute.

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

Mason, R. 1962. *Prehistory of the Transvaal*. Johannesburg: Witwatersrand University Press.

Van Riet Lowe, C. n.d. *The distribution of Prehistoric rock engravings and paintings in South Africa*. Archaeological Survey, Archaeological Series No. 7.

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 - 2329BB

10. PROJECT TEAM

J van Schalkwyk

APPENDIX 1: STANDARDIZED SET OF CONVENTIONS USED TO ASSESS THE IMPACT OF PROJECTS ON CULTURAL RESOURCES**Significance of impact:**

- low where the impact will not have an influence on or require to be significantly accommodated in the project design
- medium where the impact could have an influence which will require modification of the project design or alternative mitigation
- high where it would have a “no-go” implication on the project regardless of any mitigation

Certainty of prediction:

- Definite: More than 90% sure of a particular fact. Substantial supportive data to verify assessment
- Probable: More than 70% sure of a particular fact, or of the likelihood of that impact occurring
- Possible: Only more than 40% sure of a particular fact, or of the likelihood of an impact occurring
- Unsure: Less than 40% sure of a particular fact, or the likelihood of an impact occurring

Recommended management action:

For each impact, the recommended practically attainable mitigation actions which would result in a measurable reduction of the impact, must be identified. This is expressed according to the following:

- 1 = no further investigation/action necessary
- 2 = controlled sampling and/or mapping of the site necessary
- 3 = preserve site if possible, otherwise extensive salvage excavation and/or mapping necessary
- 4 = preserve site at all costs

Legal requirements:

Identify and list the specific legislation and permit requirements which potentially could be infringed upon by the proposed project, if mitigation is necessary.

APPENDIX 2: SURVEY RESULTS²

[Previous site numbers relate to other known sites on a particular ¼ degree sheet already documented in the ADRC, and does not necessarily refer to sites occurring on or close to the specific area of development.]

None

² See Appendix 1 for an explanation of the conventions used in assessing the cultural remains.

APPENDIX 3: 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

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

tuyeres - clay pipes used as part of the bellows during iron smelting