

NATIONAL CULTURAL HISTORY MUSEUM P O BOX 28088, SUNNYSIDE, 0132

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Date: 5 June 2000	Pages: 2	Ref:		
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Mrs Joubert

NONWENI ROAD AND BRIDGE SITE, MPUMALANGA

As requested, the information you asked for. If anything is lacking, please give me a call.

Regards

J van Schalkwyk

Budget

Professional fees		
1. Principal investigator - 16 hours @ R 300-00/hour	R	4 800-00
Travel and subsistence		
2. Transport 900 km @ R 1-91/km	R	1 719-00
3. Travel allowance - 8 hours @ R 50-00/km	R	400-00
Board & lodging		
4. Accommodation: 1 day @ R 400-00/person/day	R	400-00
Incidentals		
5. Documentation (diskettes, etc.)	R	20-00
6. Consumables (films, batteries, etc.)	R	50-00
Report		
7. Duplication & binding	<u>R</u>	20-00
	R	7 409-00
VAT is not included		

A report (hard copy as well as electronic version) will be submitted afterwards.

Schedule

Work can commence as soon as a letter of appointment has been received and a report can be submitted within two weeks from that.

Objective

The objective of the survey would be to

- 1. Identify all the known and potential cultural resources in the proposed area of development.
- 2. Assess the significance of the known and potential cultural resources in the area of interest.
- 3. Determine the possible impacts on the known and potential cultural resources in the area of interest.
- 4. Develop mitigation or control measures for impact minimization and cultural resources preservation.
- 5. Develop procedures to be implemented if previously unidentified cultural resources are uncovered during construction phase.

AAN: Administrasie

VAN: Dr J van Schalkwyk

ONDERWERP: NONDWENI-OPNAME: VIR NALEDI DEVELOPMENT

Uitgawes aangegaan tydens doen van die opname, Giyani-omgewing, Noordelike Provinsie

(Sien aangehegte strokies)

Voorskot			R 1	500-00
Verblyf	R	395-90		
Brandstof		R 822-33		
Tolgeld	R	71-00		
Voedsel	<u>R</u>	155-08	<u>R 1 444-31</u>	
Balans: terugbetaling			R	55-69

A SURVEY OF CULTURAL RESOURCES AT THE NEW NONDWENI BRIDGE AND ROAD, NORTHERN PROVINCE

For:

NALEDI DEVELOPMENT P O Box 15283 Sinoville 0129

Survey conducted and report prepared by the:

NATIONAL CULTURAL HISTORY MUSEUM PO Box 28088 SUNNYSIDE 0132

> Telephone - (012) 324 6082 Telefax - (012) 328 5173

REPORT: 2000KH05

Date of survey: June 2000

Date of report: June 2000





SUMMARY

A survey of cultural resources at the new Nondweni bridge and road, Northern Province

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.

Province

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A SURVEY OF CULTURAL RESOURCES AT THE NEW NONDWENI BRIDGE AND ROAD, NORTHERN PROVINCE

1. AIMS OF THE SURVEY

The National Cultural History Museum was requested by **Naledi Development** to survey a section of approximately 5 km east of the Hans Merenskey Nature Reserve. It is proposed to build a bridge over the Letaba river and redirect the road leading to the bridge on both sides of the river. 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 Heritage Resources Act (Act 25 of 1999) and the Environmental Conservation Act (Act 73 of 1989).

4.1 National Heritage Resources Act (Act No. 25 of 1999)

In terms of Section 35(4) of this Act, no person may, without a permit issued by the relevant heritage resources authority, destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or material or any meteorite; or bring onto, or use at an archaeological or palaeotological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and palaeotological material or objects, or use such equipment for the recovery of meteorites.

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.

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

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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 relatively small, it was easy to inspect the planned access road as well as the actual bridge site. However, a much larger area was inspected in order to anticipate the making of detours, borrowpits, etc.

5.3 **Documentation**

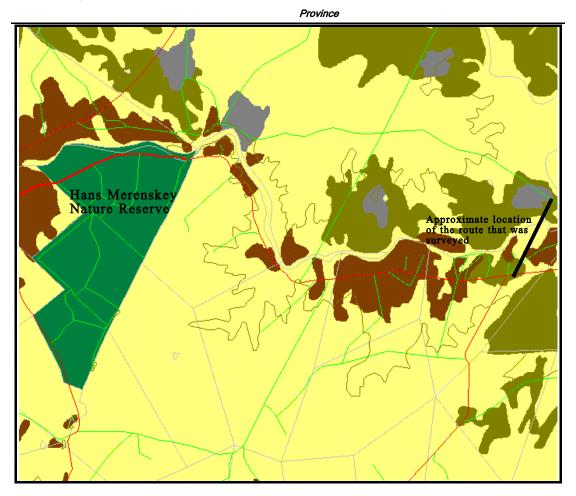
All sites, objects and structures identified were documented according to the general minimum standards accepted by the archaeological profession. Coordinates of individual localities were determined by means of the **Global Positioning System** (GPS)¹ and plotted on a map. This information was added to the description in order to facilitate the identification of each locality.

6. DESCRIPTION OF THE AREA

The area that was investigated, is located south of the Letaba river, on the farm Nondweni 720LT, in the Phalaborwa district of Northern Province and is indicated in Figure 1.

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.



7. DISCUSSION

No sites of cultural significance were identified in the area.

7.1 Stone Age

None.

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.

Evers, T.M. 1974. Iron Age research in the eastern Transvaal, South Africa. South African Archaeological Bulletin 30:71-83.

Evers, T.M. 1982. Two Later Iron Age sites on Mabete, Hans Merensky Nature Reserve, Letaba District, N.E. Transvaal. *South African Archaeological Bulletin* 37:63-67.

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

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 - 2330DB

10. PROJECT TEAM

J van Schalkwyk

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

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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.

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APPENDIX 2: SURVEY RESULTS²

[Previous site numbers relate to other known sites on a particular ¹/₄ 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.

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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 settle	ers - 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

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Invoice requested by J van Schalkwyk

For:

Naledi Development P O Box 15283 Sinoville 0129

For attention:

Mrs C Joubert Telephone: (012) 543 9093

Service rendered:

Cultural resources survey report, proposed Nondweni bridge and road development, Northern Province.

Professional fees		
1. Principal investigator - 16 hours @ R 300-00/hour	R	4 800-00
Travel and subsistence		
2. Transport 900 km @ R 1-91/km	R	1 719-00
3. Travel allowance - 8 hours @ R 50-00/km	R	400-00
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