

**ARCHAEOLOGICAL INVESTIGATION OF THE PROPOSED  
ELECTRICITY CABLE ROUTE, PERRIERS ROCK ROAD,  
GREATER ST LUCIA WETLAND PARK WORLD HERITAGE SITE**

For:

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ON BEHALF OF THE GREATER ST LUCIA WETLAND PARK AUTHORITY

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REPORT: 2003KH19

Date of survey: July 2003      Date of report: July 2003





## **SUMMARY**

### **Archaeological Investigation Of The Proposed Electricity Cable Route, Perriers Rock Road, Greater St Lucia Wetland Park World Heritage Site**

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 it is proposed to lay an electricity cable.

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

- Development in the second section of the study area would present no problems. However, the developer should be notified that in the unlikely event that archaeological sites are exposed during the construction work, it should immediately be reported to, Amafa, so that an investigation and evaluation of the finds can be made.
- The site identified in the first section of the study area (SLD6) has already been impacted on by existing development. This was primarily due to the making of the existing road and the water pipeline. If development is kept to the narrow confines of the road and its shoulder, little further damage would be caused. However, any other development outside this (i.e. away - southwards of the road) would definitely have an impact on the site. It is therefore recommended that no development take place here unless full-scale excavations are done as mitigation measure (no further developments are currently planned).
- It is presumed that road has been upgraded in anticipation of the lodge. However, should the developer require the road to be further upgraded, it is recommended that this upgrading take place in consultation with an archaeologist and Amafa.

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## **ARCHAEOLOGICAL INVESTIGATION OF THE PROPOSED ELECTRICITY CABLE ROUTE, PERRIERS ROCK ROAD, GREATER ST LUCIA WETLAND PARK WORLD HERITAGE SITE**

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

The National Cultural History Museum was contracted by ACER (Africa) Environmental Management Consultants on behalf of the GSLWP Authority to survey an area in which it is proposed to lay a cable for the provision of electricity to a small resort that is to be developed at Perriers Rock, Greater St Lucia Wetland Park. 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 that is to be impacted by the 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:

- X **Cultural resources** are all non-physical 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). In KZN, the KwaZulu-Natal Heritage Act, Act 10 of 1997.

##### 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.

###### **Structures:**

Section 34(1) of this act states that no person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

“Structure” means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith;

“Alter” means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or other decoration or any other means.

###### **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 or 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.

##### 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. Nothing pertaining to the archaeology of this particular area was found, although a number of survey reports exist (e.g. Anderson n.d).

#### 5.1.2 Data bases

The **Environmental Potential Atlas** was 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. The area to be investigated was indicated to the Consultant by ACER by means of maps. Mr I Jackson, SNA engineer responsible for the project accompanied the survey team on a site visit.

The area was firstly investigated by walking across it. Special attention was given to unnatural topographical occurrences such as trenches, holes, outcrops and clusters of trees were investigated.

As this is in essence a linear development, the line in which the cable is to be laid was further investigated by augering it every 30 metres down to a depth of between 1,0 metre (minimum) and 1,50 metre maximum.

### 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>1</sup> and plotted on a map. This information was added to the description in order to facilitate the identification of each locality.

Map datum used: Hartebeeshoek 94 (WGS84).

<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 area surveyed was determined by the proposed development (Fig 1 & 2). The topography of the larger area varies from plains to rolling hills, the latter formed by sand dunes running parallel to the coast. The area is bisected by a number of small rivers. The original vegetation of the area is classified as coastal bushveld/grassland and is largely pristine in the study area.

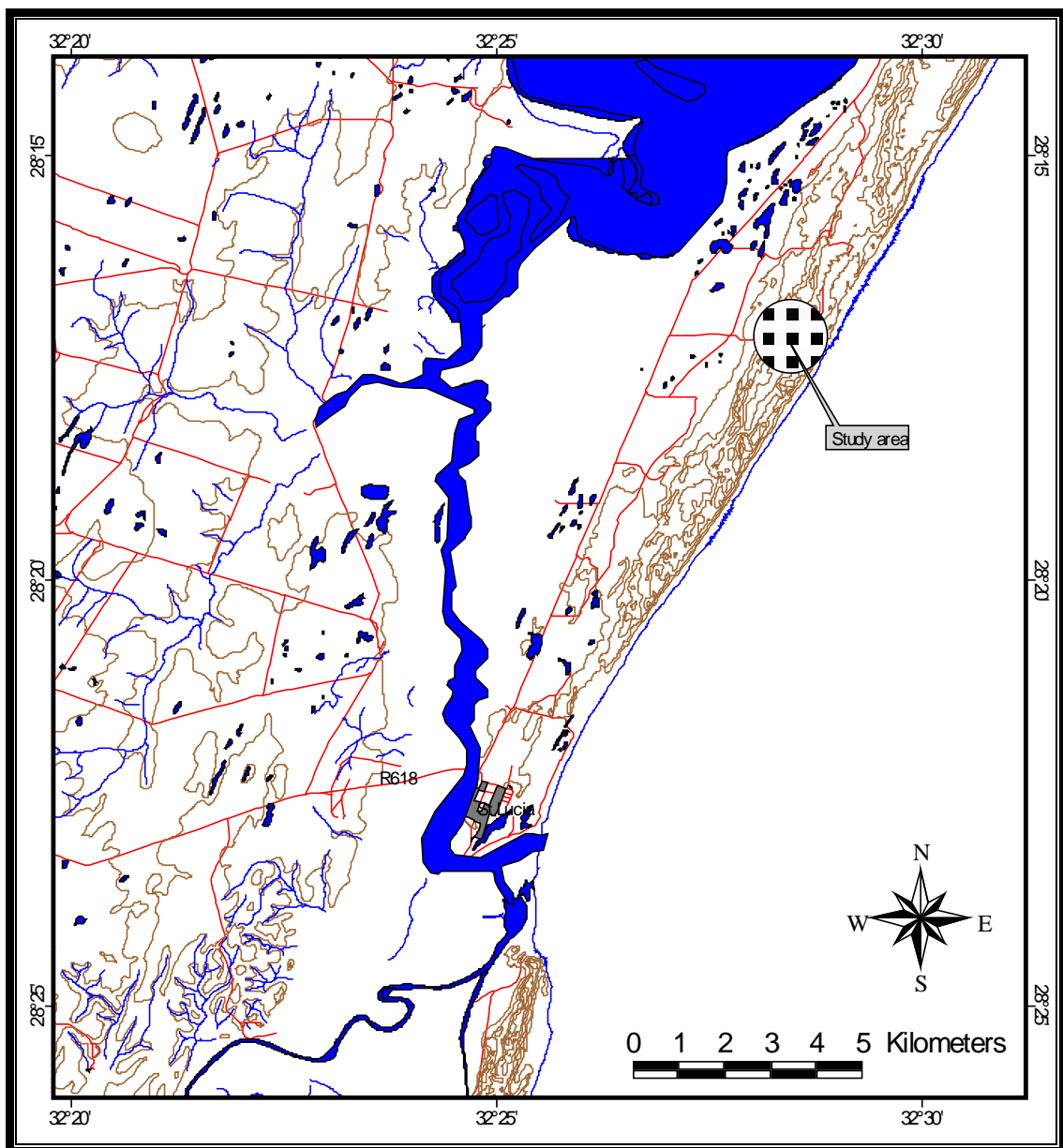
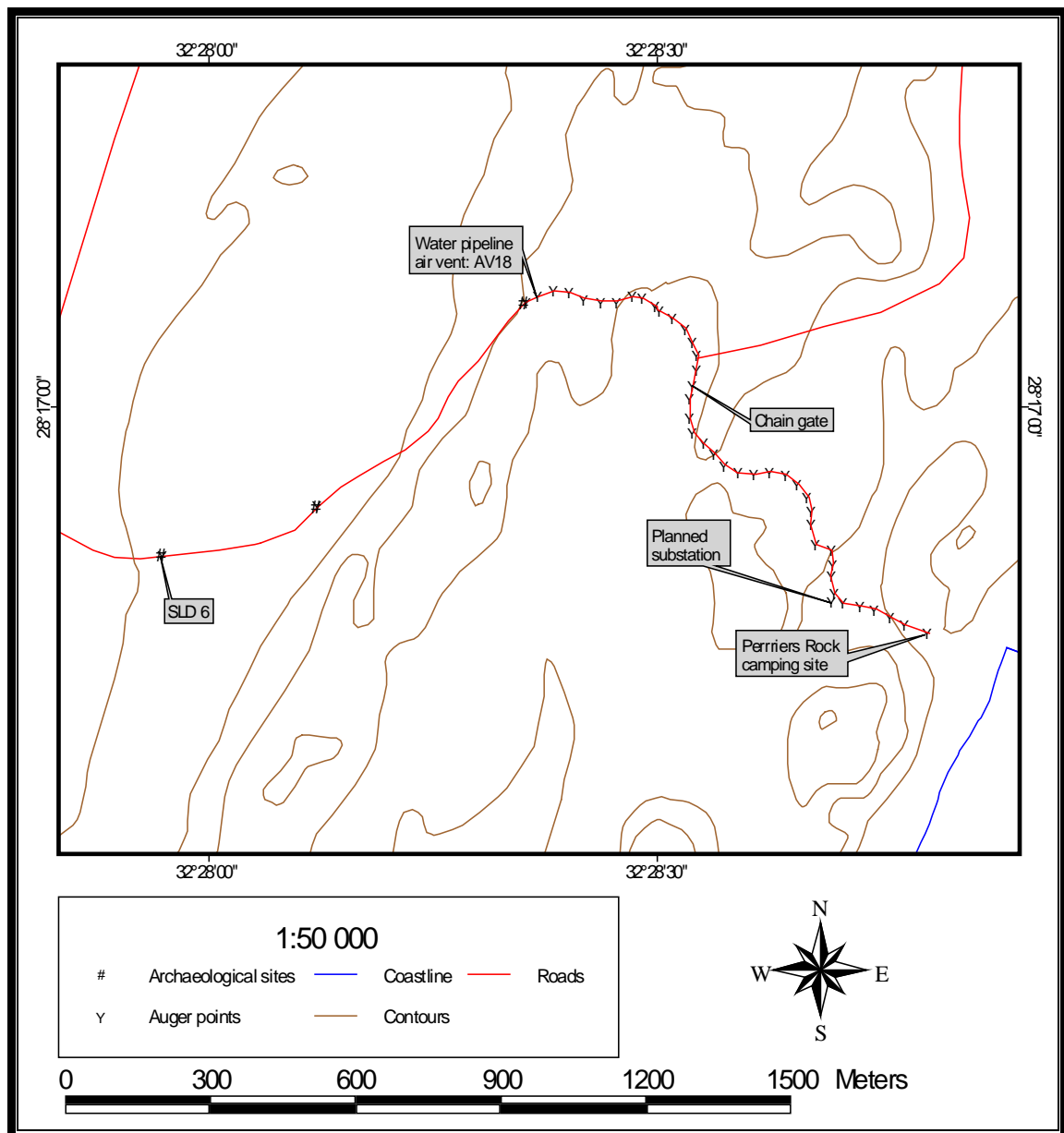


Figure 1. Location of the study area.





**Figure 2.** Close up of the road, indicating the spots where augering took place.

## 7. DISCUSSION

From the junction with the tar road to the camp at Perriers Rock is a total distance of 2,3 km. Of this, we intensively tested the last 1,2 km. This is from a position on the highest point of the track, close to the water reservoir, at air vent no. 18 down to the camp. Testing of the route (see Fig. 2), visually as well as by augering, produced no evidence of any archaeological remains that might be impacted on by the proposed development.

For the first 0,9 km section of the road, the electricity cable has already been laid. For the remaining 0,2 km section, the trench has been dug, but for safety purposes was filled again until the cable could be laid.

This first section has already been surveyed by Mr G Anderson of the Natal Museum, Pietermaritzburg. In this section he identified the existence of an Iron Age site (coded SLD6 by him), which he classified as having “medium potential”. During the current survey, potsherds and shell fragments have been recovered in at least three places in this first section of the road (see Fig. 2). It is difficult to relate this to Anderson’s report, as he does not give any specific detail. However, because of its location, it is taken to be the same site. It is also deduced from Mr Anderson’s report that he recovered sufficient information for identifying and dating of the site. We concur with his classification and interpretation of the site.

Previously, this site has been impacted on by the development of the existing road, as well as currently in places by the trench that was excavated for the electricity cable. However, investigation has shown that it is quite an extensive site, occurring on both sides of the road, especially on the higher, flatter areas. In this latter area, it has also been impacted on by the water pipeline.

## 8. RECOMMENDATIONS

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 it is proposed to lay an electricity cable.

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

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- It is presumed that road has been upgraded in anticipation of the lodge. However, should the developer require the road to be further upgraded, it is recommended that this upgrading take place in consultation with an archaeologist and Amafa.

## 9. REFERENCES

### 9.1 Data bases

Environmental Potential Atlas, Department of Environmental Affairs and Tourism.

## 9.2 Literature

Anderson, G. n.d. *Results of the Archaeological excavations*. Unpublished report supplied by ACER (Africa).

## 9.3 Maps

1: 50 000 Topocadastral maps – 2832AD

## 10. PROJECT TEAM

J van Schalkwyk  
M Naude

## **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: 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