

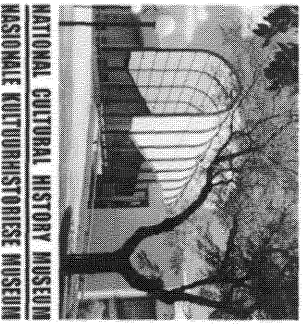
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**HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED WATERFORD GOLF AND RIVER ESTATE, PARYS AREA, FREE STATE**

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## **SUMMARY**

### **HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED WATERFORD GOLF AND RIVER ESTATE, PARYS AREA, FREE STATE**

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural significance found within the boundaries of the area in which it is proposed to develop a golf estate and its infrastructure.

It is our viewpoint that the proposed development can take place in the study area, and we therefore put forward the following recommendations:

- Development can continue only on condition of acceptance of the proposed mitigation measures set out for the identified site (see Appendix 2).
- We request that if archaeological sites or graves are exposed during construction work, 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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**GLOSSARY OF TERMS AND ABBREVIATIONS**

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

**HISTORIC PERIOD**

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

ADRC - Archaeological Data Recording Centre

Impact - A description of the effect of an aspect of the development on a specified component of the biophysical, social or economic environment within a defined time and space

PHRA – Provincial Heritage Resources Agency

SAHRA - South African Heritage Resources Agency

## **DEFINITIONS AND ASSUMPTIONS**

- *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.
- 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.
- 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.
- Archaeological sites: any area of land containing artefacts, ecofacts, features and structures in any combination of the above.
- Isolated occurrences: findings of artefacts or other remains located apart from archaeological sites. Although these are noted and samples are collected, it is not used in impact assessment and therefore do not feature in the report.
- Traditional cultural use: resources which are culturally important to people.
- The latitude and longitude of archaeological sites are to be treated as sensitive information by the developer and should not unduly be disclosed to members of the public.

**HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED WATERFORD GOLF AND RIVER ESTATE, PARYS AREA, FREE STATE**

**1. INTRODUCTION**

The National Cultural History Museum<sup>1</sup>, Pretoria, was appointed by Strategic Environmental Focus to conduct a Heritage Impact Assessment (HIA) in and area in which it is proposed to develop a golf estate in the northern Free State.

**2. SCOPE OF WORK**

The scope of work consisted of conducting a Phase 1 archaeological survey of the site in accordance with the requirements of Section 38(3) of the National Heritage Resources Act (Act 25 of 1999).

This include:

- Conducting a desk-top investigation of the area;
- A visit to the proposed development site.

The objectives were to

- Identify possible archaeological, cultural and historic sites within the proposed development areas;
- Evaluate the potential impacts of construction, operation and maintenance of the proposed development on archaeological, cultural and historical resources;
- Recommend mitigation measures to ameliorate any negative impacts on areas of archaeological, cultural or historical importance.

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<sup>1</sup> The National Cultural History Museum is affiliated to the Northern Flagship Institution, which acts as parent body for a number of museums, all of which resort under the Department of Arts and Culture.

### **3. STUDY APPROACH AND METHODOLOGY**

#### **3.1 Extent of the Study**

This survey and impact assessment covers the areas of the proposed development and its related infrastructure, as presented in Section 4 and illustrated in Figure 1.

#### **3.2 Methodology**

##### *3.1 Preliminary Investigation*

3.1.1 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 reports, anthropological, archaeological and historical sources were consulted - see the list of references below. Very little pertaining to the area specific was found and most sources deal with topics in the larger geographical region.

3.1.2 Data bases  
The *Heritage Sites Database* and the *Environmental Potential Atlas* was consulted.

3.1.3 Other sources  
Topocadastral and other maps were also studied - see the list of references below.

##### *3.2 Field survey*

The area that had to be investigated, was identified by Strategic Environmental Focus by means of maps. The area was subdivided into smaller block by using natural (rivers, etc.) and manmade (roads, fences) features. Each block was then investigated by walking across it in a number of transects. Where possible, local landowners were interviewed as to the occurrence of heritage sites on their properties.

##### *3.3 Documentation*

Sites, objects and structures that are identified are documented according to the general minimum standards accepted by the archaeological profession. Coordinates of individual localities are determined by means of the *Global Positioning System (GPS)*<sup>2</sup> and plotted on a map. This information is added to the description in order to facilitate the identification of each locality.

Map datum used: Hartbeeshoek 94 (WGS84).

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<sup>2</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 to correlate it with reference to the physical environment before plotting it on the map.

#### 4. DESCRIPTION OF THE AFFECTED ENVIRONMENT

##### 4.1 Location

The area surveyed is located in the Parys municipal district of the northern Free State, east of the N1 in the vicinity of the Vaal Barrage Dam (Fig. 1).



Fig. 1. Location of the study area, outlined in purple. The identified cemetery is indicated by the red cross.

##### 4.2 Site Description

The study area is located on portion 4 of the farm Luciana 214. The geology is made up of arenite and the original vegetation is classified as Moist Cool Highveld Grassland. The topography of the area can be described as plains.

Some development have already taken place on the site, which would have had an effect on any heritage resources .

##### 4.3 Overview of the region

###### Stone Age

The region has been inhabited by humans since Early Stone Age (ESA) times. Tools dating to this period are mostly, although not exclusively, found in the vicinity of watercourses. The original dating and evolutionary scheme for the development of tools during this early period, was based on a study of the river terrace gravels of the Vaal River, referred to as the *Older*, the *Younger* and the *Youngest gravels* (Söhngé, Visser & Van Riet-Lowe 1937, Breull 1948). However, on subsequent investigation,

the findings derived from this proved to be unacceptable as it was based on incorrect interpretations of the river gravels. It was only with the excavation of similar material from sealed, stratified sites, that it was realised that the material from the river gravels was not in its primary context, having been uncovered and washed about over many millennia. Consequently, artefacts derived from such surface collections are now seen to have little significance.

#### *Iron Age*

The occupation of the larger geographical area did not start much before the 1500s. To understand all of this, we have to take a look at the broader picture. Towards the end of the first millennium AD, Early Iron Age communities underwent a drastic change, brought on by increasing trade on the East African coast. This led to the rise of powerful ruling elites, for example at Mapungubwe. The abandonment of Mapungubwe (c. 1270) and other contemporaneous settlements show that widespread drought conditions led to the decline and eventual disintegration of this state.

By the 16th century things changed again, with the climate becoming warmer and wetter, creating conditions that allowed Late Iron Age (LIA) farmers to occupy areas previously unsuitable, for example the Witwatersrand and the treeless, wind swept plains of the Free State.

This period of consistently high rainfall started in about AD 1780. At the same time, maize was introduced from Maputo and grown extensively. Given good rains, maize crops yield far more than sorghum and millets. This increase in food production probably led to increased populations in coastal areas as well as the central highveld interior by the beginning of the 19th century.

This wet period came to a sudden end sometime between 1800 and 1820 by a major drought lasting 3 to 5 years. The drought must have caused an agricultural collapse on a large, subcontinent scale.

#### *Historic period*

White settlers moved into the area during the first half of the 19<sup>th</sup> century. They were largely self-sufficient, basing their survival on cattle/sheep farming and hunting. Few towns were established and it remained an undeveloped area until the discovery of gold in the Witwatersrand area.

During the Anglo-Boer War, the Vaal River played a significant role, as it formed a physical barrier that could be crossed only in a few places. Some skirmishes took place to the west of the study area, and most of the bridges were destroyed by the ZAR forces in an effort to keep the British at bay.

#### **4.4 Identified sites**

The area that was investigated shows signs of farming activities as there is large pieces of land that have been cultivated. A number of demolished structures were found in the surveyed area and it seems to be that of old farm workers houses. Some of the foundations indicate that the structures were made from locally fired clay/mud bricks, whereas others are of modern bricks with concrete floors. These features can probably be linked with the large informal cemetery in the area. However, most of the remains of these structures are just the foundations, with little else, e.g. middens to be found.

Other features in the area include what could be farm dam, filled in with rubble.



**5. IDENTIFICATION OF RISK SOURCES**

Heritage sites are fixed features in the environment, occurring within specific spatial confines. Any impact upon them is permanent and non-reversible. Those resources that cannot be avoided and that are directly impacted by the development can be excavated/recorded and a management plan can be developed for future action. Those sites that are not impacted on can be written into the management plan, whence they can be avoided or cared for in the future.

The following project actions may impact negatively on heritage sites and other features of cultural importance. The actions are most likely to occur during the construction phase of a project.

**Table 1**

<b>Construction phase:</b>	
<b>Possible Risks</b>	<b>Source of the risk</b>
Actually identified risks	
- damage to sites	Construction work
Anticipated risks	
- looting of sites	Curious workers
<b>Operation phase:</b>	
<b>Possible risks</b>	<b>Source of risk</b>
Actually identified risks	
- damage to sites	Not keeping to development plans
Anticipated risks	
- damage to sites	Unscheduled construction/developments
- looting of sites	Curious workers/visitors

## **6. RECOMMENDATIONS**

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural significance found within the boundaries of the area in which it is proposed to develop a golf estate and its infrastructure.

It is our viewpoint that the proposed development can take place in the study area, and we therefore put forward the following recommendations:

- Development can continue only on condition of acceptance of the proposed mitigation measures set out for the identified site (see Appendix 2).
- We request that if archaeological sites or graves are exposed during construction work, 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.

## 7. REFERENCES

### 7.1 Data bases

Heritage Sites Database, Pretoria.

Environmental Potential Atlas, Department of Environmental Affairs and Tourism.

### 7.2 Literature

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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.

### 7.3 Maps

1 : 50 000 Topocadastral maps – 2627DC

## 8. PROJECT TEAM

J van Schalkwyk, principal investigator

F Teichert, field assistant

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

**Significance**

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.

Matrix used for assessing the significance of each identified site/feature

<b>1. Historic value</b>				
Is it important in the community, or pattern of history				
Does it have strong or special association with the life or work of a person, group or organisation of importance in history				
<b>2. Aesthetic value</b>				
Does it have significance relating to the history of slavery				
It is important in exhibiting particular aesthetic characteristics valued by a community or cultural group				
<b>3. Scientific value</b>				
Does it have potential to yield information that will contribute to an understanding of natural or cultural heritage				
Is it important in demonstrating a high degree of creative or technical achievement at a particular period				
<b>4. Social value</b>				
Does it have strong or special association with a particular community or cultural group for social, cultural or spiritual reasons				
<b>5. Rarity</b>				
Does it possess uncommon, rare or endangered aspects of natural or cultural heritage				
<b>6. Representativity</b>				
Is it important in demonstrating the principal characteristics of a particular class of natural or cultural places or objects				
Importance in demonstrating the principal characteristics of a range of landscapes or environments, the attributes of which identify it as being characteristic of its class				
Importance in demonstrating the principal characteristics of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province, region or locality.				
<b>7. Sphere of Significance</b>				
International		High	Medium	Low
National				
Provincial				
Regional				
Local				
Specific community				
<b>8. Significance rating of feature</b>				
1.	Low			
2.	Medium			
3.	High			

**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 RESULTS<sup>3</sup>**

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

Map datum used: Hartebeeshoek 94 (WGS84).

### **1. Location: Luciana 214 (S 26.77983; E 27.69182)**

Description: Informal cemetery with as many as 100 graves. Many do not have formal headstones. The earliest date of death that was found was 1948 and the latest was 1982.

Discussion: Due to the dense vegetation, it is difficult to count all the graves. It is recommended that this feature is retained and formalised by fencing it off, with access for descendants and that the vegetation growth is controlled annually.

Evaluation of significance: High on a local level

Significance of impact: High

Certainty of prediction: Probable

Recommended management action: 3 = preserve site if possible, otherwise extensive mapping/documentation necessary

Legal requirements: Notification, consultation, permits, SAHRA permit

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<sup>3</sup> See Appendix 1 for an explanation of the conventions used in assessing the cultural remains.



Fig. 2. One of the graves in the cemetery.