# A PHASE 1 ARCHAEOLOGICAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED REZONING AND SUBDIVISION OF PORTION 1 AND 118 OF THE FARM CHELSEA NO. 25 (KRAGGA KAMMA GAME PARK), PORT ELIZABETH, NELSON MANDELA BAY MUNICIPALITY, EASTERN CAPE PROVINCE, TO ESTABLISH A RESORT DEVELOPMENT.

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# A PHASE 1 ARCHAEOLOGICAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED REZONING AND SUBDIVISION OF PORTION 1 AND 118 OF THE FARM CHELSEA NO. 25 (KRAGGA KAMMA GAME PARK), PORT ELIZABETH, NELSON MANDELA BAY MUNICIPALITY, EASTERN CAPE PROVINCE, TO ESTABLISH A RESORT DEVELOPMENT.

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**Note:** This report follows the minimum standard guidelines required by the South African Heritage Resources Agency for compiling Archaeological Heritage Phase 1 Impact Assessment (AHIA) reports.

## SUMMARY

## Proposal

The original proposal was to conduct a survey of possible archaeological heritage sites for the proposed rezoning and subdivision of portion 1 and 118 of the farm Chelsea No. 25 (Kragga Kamma Game Park), Port Elizabeth, Nelson Mandela Bay Municipality, Eastern Cape Province, to establish a resort development; to establish the range and importance of the heritage sites, the potential impact of the development and to make recommendations to minimize possible damage to these sites.

## The investigation

No visible archaeological sites were found during the investigation, but there is a small cemetery on the property. The entire property is covered by dense, short grass, patches of dune forest and alien vegetation which may cover sites and/or material.

## **Cultural sensitivity**

The area investigated appears to be of low cultural sensitivity, but important material may be exposed after the top soil is removed (for example human remains).

### Recommendations

- 1. All construction work on the dune crests must be monitored.
- 2. If any concentrations of archaeological material are uncovered during development it should be reported immediately to the nearest archaeologist, museum and/or the South African Heritage Resources Agency (SAHRA).
- 3. The small cemetery is protected by Provincial and/or local regulations and the National Heritage Resources Act of 1999 and must not be disturbed without a permit from SAHRA. A proper fence must be constructed to keep animals from entering the cemetery and damage the graves.

### **PROJECT INFORMATION**

#### Status

The report is part of an Environmental Impact Assessment.

#### The type of development

The rezoning and subdivision of the property to establish a resort development

#### **The Developer**

Tamarron Trading 144(Pty) Ltd Port Elizabeth

### The Consultant

CEN Integrated Environmental Management Unit Contact person: Dr M. Cohen 36 River Road Walmer Port Elizabeth 6070 Tel: 041 5812983/5817811 Fax: 041 5812983

### **Terms of reference**

Conduct a survey of possible archaeological heritage sites for the proposed rezoning and subdivision of portion 1 and 118 of the farm Chelsea No. 25 (Kragga Kamma Game Park), Port Elizabeth, Nelson Mandela Bay Municipality, Eastern Cape Province, to establish a resort development; to establish the range and importance of the heritage sites, the potential impact of the development and to make recommendations to minimize possible damage to these sites.

### **BRIEF ARCHAEOLOGICAL BACKGROUND**

#### Literature review

Little is known about the archaeology of the immediate area, mainly because no systematic research has been conducted there. The oldest evidence of the early inhabitants in this area are large stone tools, called handaxes and cleavers, which can be found amongst river gravels and in old spring deposits in the region (Deacon 1970). These large stone tools are from a time period called the Earlier Stone Age (ESA) and may date between 1 million and 250 000 years old. The large Handaxes and cleavers were replaced by smaller stone tools called the Middle Stone Age (MSA) flake and blade industries. Evidence of MSA sites occur throughout the region and date between 200 000 and 30 000 years old. Fossil bone may in rare cases be associated with MSA occurrences. (Deacon & Deacon 1999).

The majority of archaeological sites found in the area date from the past 10 000 years (called the Later Stone Age) and are associated with the campsites of San hunter-gatherers and Khoi pastoralists. These sites are difficult to find because they are in the open veld and often covered by vegetation and sand. Sometimes these sites are only represented by a few stone tools and fragments of bone. The preservation of these sites is poor and it is not always possible to date them Africa (Deacon & Deacon 1999). There are many San hunter-gatherers sites in the nearby Elandsberg and Groot Winterhoekberg Mountains. Here caves and rock

shelters were occupied by the San during the Later Stone Age and contain paintings along the walls. The last San/KhoiSan group was killed by Commando's in the Groendal area in the 1880s.

Some 2 000 years ago Khoi pastoralists occupied the region and lived mainly in small settlements. They were the first food producers in South Africa and introduced domesticated animals (sheep, goat and cattle) and ceramic vessels to southern.

The most common archaeological sites along the nearby coast are shell middens (relatively large piles of marine shell) found usually concentrated opposite rocky coasts, but also along sandy beaches (people refer to these as 'strandloper middens') (Rudner 1968).These were campsites of San hunter-gatherers, Khoi herders and KhoiSan peoples who lived along the immediate coast (up to 5 km) and collected marine foods. Mixed with the shell are other food remains, cultural material and often human remains are found in the middens. In general middens date from the past 6 000 years. Also associated with middens are large stone floors which were probably used as cooking platforms (Binneman 2001, 2005).

### References

- Binneman, J.N.F. 2001. An introduction to a Later Stone Age coastal research project along the south-eastern Cape coast. Southern African Field Archaeology 10:75-87.
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- Deacon , H.J. 1970. The Acheulia occupation at Amanzi Springs, Uitenhage District, Cape Province. Annals of the Cape Provincial Museums. 8:89-189.
- Deacon, H.J. & Deacon, J. Human beginnings in South Africa. Cape Town: David Phillips Publishers.
- Rudner, J. 1968. Strandloper pottery from South and South West Africa. Annals of the South African Museum49:441-663.

#### **Relevant impact assessments**

Binneman, J. 2008. A phase 1 archaeological heritage impact assessment for the proposed development of an eco-estate on portion 190 of Chelsea 25, Port Elizabeth, Nelson Mandela Bay Municipality, Eastern Cape Province. Prepared for CEN Integrated Environmental Management Unit. Port Elizabeth

### **DESCRIPTION OF THE PROPERTY**

#### Area surveyed

### Location data

The proposed rezoning and subdivision of portion 1 and 118 of the farm Chelsea No. 25 (Kragga Kamma Game Park), Port Elizabeth, Nelson Mandela Bay Municipality, to establish a resort development, is situated south of the Kragga Kamma Road and west of Christian Road in Chelsea/next to Theescombe (Maps 1 & 2). The property is managed as a game farm and the development is approximately 192,6 hectare in extent.

<u>Map</u>

1:50 000 3325 CD & 3425 AB Uitenhage

#### **ARCHAEOLOGICAL INVESTIGATION**

#### Methodology

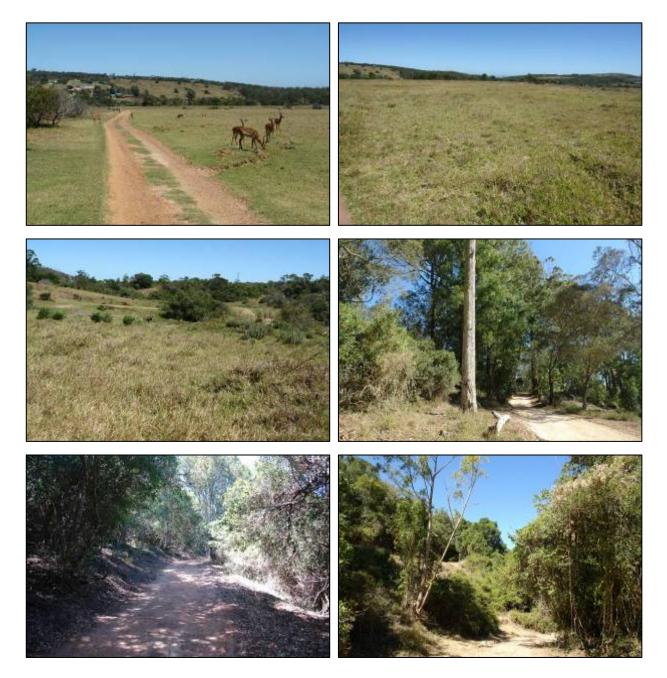
The proposed property for development is a game park with dangerous animals. The investigation was conducted by two people from a vehicle and where possible spot checks were carried out on foot. GPS readings were taken with a Garmin Plus II and all important features were digitally recorded. Large areas of the property were cleared for agricultural activities in the past. Low, dense grass covers most of the property and alien vegetation is also visible throughout the property and in drainage/vlei areas (Figs 1-6). There are several activities/features visible related to the game park which disturbed the landscape such as buildings, fences, roads, power lines and lodges (Figs 7-12). A large patch of dune forest covers the southern and south-western part which is part an old Holocene dune system underlain by a much older Pleistocene/Tertiary fossil dune system, running roughly parallel to the coast (west to east). The dense vegetation made it impossible to locate archaeological sites/material. Often Earlier and Middle Stone Age stone tools (dating between a million and 30 000 years old) are found in these dune systems. Fossil bone is occasionally associated with these stone tools. Middle Stone Age stone tools were found on a fossil dune ridge exposed by sand mining close to the south-eastern boundary of the game park (Map 2). There is also a small cemetery on the property (Figs 13-14) (GPS reading: 33.59.075E; 25.27.790S).

# **Description of sites**

Although not part of this investigation, the cemetery is reported here for future references. A specialist must be consulted if relocation of the graves is considered. There are at least five visible graves in the small cemetery situated between a patch of alien trees and almost completely overgrown by grass (Figs 13-14). Apart from one grave which dates from the 1890's, the other four are recent graves dating between 1982 and 1989. The cemetery is protected by Provincial and/or local legislation. The former grave is some 120 years old and therefore also protected by the National Heritage Resources Act of 1999, but has been vandalised in the past. The cemetery is demarcated by short poles and a steel cable fence, but it is to low to prevent animals from entering the cemetery and possibly damaging the graves and headstones.

### Discussion

Apart from the small cemetery, the proposed area for development would appear to be of low cultural sensitivity. The area investigated is situated further than 5 km from the coast and falls outside the maximum distance shell middens are expected to be found from the beach. Although it is unlikely that any archaeological material will be found, there is always a possibility that human remains and/or other archaeological may be uncovered during the development removed. Such material must be reported to the nearest museum, archaeologist or to the South African Heritage Resources Agency if exposed (see general remarks and conditions below).



Figs 1-6. Different views of the Kragga Kamma Game Park landscape; dense short grass and patches of bush (top), dense long grass in vlei areas and patches of alien trees (middle) and dune thicket (bottom).







Figs 7-12. Small scale disturbances in the Kragga Kamma Game Park.



Figs 13-14. Views of the overgrown cemetery and the low fence.

## RECOMMENDATIONS

1. All construction work must be monitored if the development takes place on the fossil dune crests. An archaeologist must inspect the construction site when the topsoil and surface vegetation is removed to establish if there are any archaeological sites/materials. Alternatively a person must be trained as a site monitor to report to the foreman when archaeological sites are found. This person must monitor all levelling and trenching activities during the construction phase.

- 2. If any concentrations of archaeological material are exposed during construction, all work in that area should stop and it should be reported immediately to the nearest museum/archaeologist or to the South African Heritage Resources Agency so that a systematic and professional investigation can be undertaken. Sufficient time should be allowed to remove/collect such material (See appendix 1 for a list of possible archaeological sites that maybe found in the area).
- 3. The small cemetery is protected by Provincial and/or local regulations and the National Heritage Resources Act of 1999 and must not disturbed.
  - A proper fence must be constructed to keep animals from entering the cemetery and damage the graves.
  - If relocation of the graves is considered, then all the correct procedures, especially the public participation process must be followed. Permits must be obtained from SAHRA for any work on graves and graveyard older than 60 years. It is recommended that a specialist be consulted should any further work be required on the graveyard.
- 4. Construction managers/foremen should be informed before construction starts on the possible types of heritage sites and cultural material they may encounter and the procedures to follow when they find sites.

### **GENERAL REMARKS AND CONDITIONS**

**Note:** This report is a phase 1 archaeological heritage impact assessment/investigation only and does not include or exempt other required heritage impact assessments (see below).

The National Heritage Resources Act (Act No. 25 of 1999, section 35) requires a full Heritage Impact Assessment (HIA) in order that all heritage resources, that is, all places or objects of aesthetics, architectural, historic, scientific, social, spiritual linguistic or technological value or significance are protected. Thus any assessment should make provision for the protection of all these heritage components, including archaeology, shipwrecks, battlefields, graves, and structures older than 60 years, living heritage, historical settlements, landscapes, geological sites, palaeontological sites and objects.

It must be emphasised that the conclusions and recommendations expressed in this archaeological heritage sensitivity investigation are based on the visibility of archaeological sites/features and may not therefore, reflect the true state of affairs. Many sites/features may be covered by soil and vegetation and will only be located once this has been removed. In the event of such finds being uncovered, (such as during any phase of construction work), archaeologists must be informed immediately so that they can investigate the importance of the sites and excavate or collect material before it is destroyed. The onus is on the developer to ensure that this agreement is honoured in accordance with the National Heritage Act No. 25 of 1999.

It must also be clear that Archaeological Specialist Reports (AIAs) will be assessed by the relevant heritage resources authority. The final decision rests with the heritage resources authority, which should grant a permit or a formal letter of permission for the destruction of any cultural sites.

# APPENDIX 1: IDENTIFICATION OF ARCHAEOLOGICAL FEATURES AND MATERIAL FROM INLAND AREAS: guidelines and procedures for developers

### 1. Human skeletal material

Human remains, whether the complete remains of an individual buried during the past, or scattered human remains resulting from disturbance of the grave, should be reported. In general the remains are buried in a flexed position on their sides, but are also found buried in a sitting position with a flat stone capping and developers are requested to be on the alert for this.

### 2. Fossil bone

Fossil bones may be found embedded in calcrete deposits at the site. Any concentrations of bones, whether fossilized or not, should be reported.

### 3. Stone artefacts

These are difficult for the layman to identify. However, large accumulations of flaked stones which do not appear to have been distributed naturally should be reported. If the stone tools are associated with bone remains, development should be halted immediately and archaeologists notified.

### 4. Stone features and platforms

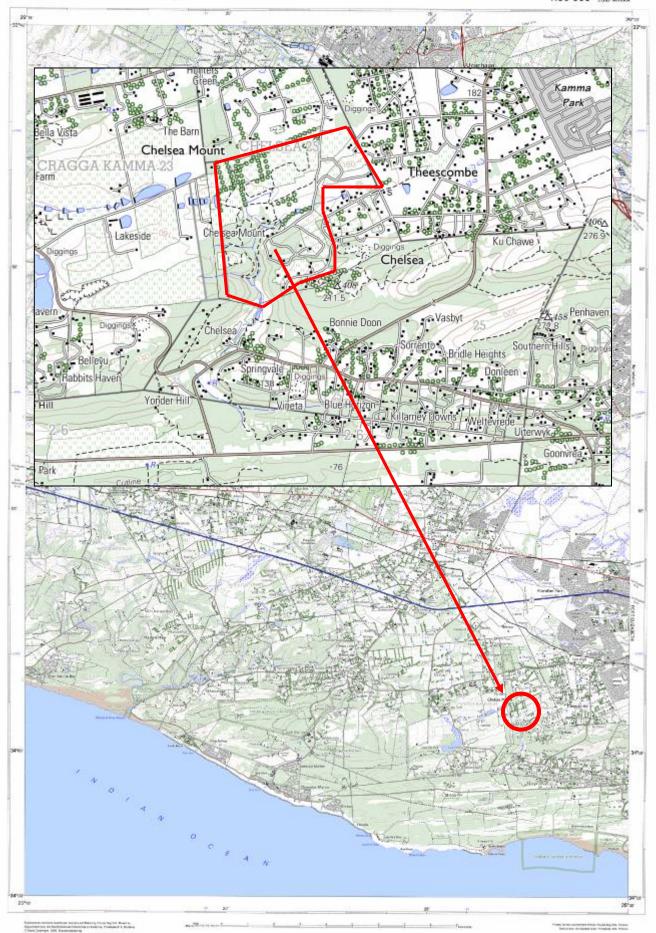
They come in different forms and sizes, but are easy to identify. The most common are an accumulation of roughly circular fire cracked stones tightly spaced and often filled in with charcoal. They are usually 1-2 metres in diameter and may represent cooking platforms. Others may resemble circular single row cobble stone markers. These are different sizes and may be the remains of wind breaks or cooking shelters.

### 5. Historical artefacts or features

These are easy to identified and include foundations of buildings or other construction features and items from domestic and military activities.

3325CD & 3425AB UITENHAGE

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Map 1. 1:50 000 maps indicating the location of the proposed Kragga Kamma Game Park development. The red lines outline the approximate size of the game park.



Map 2. Aerial photographs indicating the location of the proposed Kragga Kamma Game Park development. The yellow dot marks the cemetery and the blue oval exposed a fossil dune are where Middle Stone Age stone tools were found during a previous survey.