

**ARCHAEOLOGICAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED CARPE DIEM COASTAL  
ECO-ESTATE DEVELOPMENT, GREAT FISH POINT: COASTAL FORELAND SURVEY (PALMIET ANNEX  
239)**

**Prepared for:** Chand Environment Consultants

P. O. Box 238  
Plumstead  
7801

**Compiled by:** Dr Johan Binneman

Department of Archaeology  
Albany Museum  
Somerset Street  
Grahamstown 6139

September 2006

**ARCHAEOLOGICAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED CARPE DIEM  
COASTAL ECO-ESTATE DEVELOPMENT, GREAT FISH POINT: COASTAL FORELAND SURVEY  
(PALMIET ANNEX 239)**

Dr Johan Binneman  
Department of Archaeology  
Albany Museum  
Grahamstown  
6139

**PROPOSAL**

The original proposal was to do a survey of possible archaeological heritage sites of the coastal foreland (on the farm Palmiet Annex 239) 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.

**SUMMARY**

*Few visible archaeological heritage sites/material were found during the visit. However, possible sites and material may be covered by the shifting dune sand and may only be exposed when these dunes move on. The property however is surrounded by archaeological and historical sites and material. The development will have an impact on the surrounding areas and therefore also on the cultural resources. To minimize possible damage of sites or the collecting of material by residents and/or visitors, it is suggested that potential home owners and visitors be made aware of possible heritage resources in the area or on their properties, and that a management strategy to conserve these resources be included in the constitution of the Home Owners Association or any other legal organisation. Notice boards should also be placed at strategic points, such as at the entrance gate and all access routes to the beach to inform residents and visitors on the management strategy for the area.*

**THE INVESTIGATION**

The investigation was done on foot and covered the area between the vegetated coastal dune belt and the high water mark. Much of this area is covered by high dunes and continues 'waves' of large shifting sand dunes which are slowly moving parallel with the coast from west to east (estimated to move less than 5-6 metres a year). Calcrete, fossilized dune sand and remnants of cobble beach floors are exposed between the dunes. Some archaeological material was exposed on these hard land forms. The continuous movement of the dunes implies that areas which are exposed currently will be covered by sand in a few months/years time while new areas will be exposed at the same time. This implies that we have, and always will have, only a keyhole view of the archaeological heritage of this area and that a 'complete investigation' of the coastal foreland is not possible at the moment, and possibly never will be. Although this may be frustrating, at least the archaeological sites and material are protected 'naturally'. On the other hand, not much archaeological material was found, of course not ruling out that the 'important' sites/material may still be covered by dunes, and will only be exposed in the remote future.

In general, very little archaeological material was located, surprisingly even opposite the rocky coasts. The following observations were made.

**1.** No *in situ* shell middens were found in the area investigated. Only two thin scatters of fragmented shell were found.

**33.30.48 S; 27.07.14 E**

Thin scatter of mainly *Oxystele sinensis*, *Patella* spp. - *oculus* and *longicosta*, *Burrupea* spp. and occasional *Turbo sarmaticus* and *Haliotis midæ* found in the bay between the first two rows of coastal dunes. No cultural material associated. The shell material probably represent slope run and came from higher up on the second dune, which may suggest that there are shell middens, but currently no longer visible. Status of possible shell middens is not known.

**33.31.25 S; 27.06.54 E**

Thin scatter of fragmented shell on a calcrete floor mainly from *Turbo sarmaticus* and *Patella* spp. There was no cultural material associated with this feature and is of insignificant value.

2. Occasional stone tools were found on the exposed calcrete land floors, but these were patinate and polished almost beyond recognition and in most cases it was not possible to assign tools too any specific time period.

**33.31.25 S; 27.06.23 E**

**33.31.27 S; 27.06.13 E**

Ten or more silcrete and black shale sand polished stone tools were found at these two localities exposed on calcrete land floors. Some were from the Middle Stone Age and others were too patinate to tell from which period they originated. The cultural value of these stone tools is insignificant.

**33.31.26 S; 27.06.12 E**

This area measured some 50 x 20 metres and was the only relatively important site found during the survey. Many stone artefacts manufactured from silcrete, local quartzite and black shale are scattered on both sides of a calcrete capped ridge. It is not clear if all the artefacts belong to the same time period because the black shale blades and quartzite small points are well weathered and polished, while the silcrete artefacts appeared to be less weathered. However, in general silcrete is more durable than the black shale. Nevertheless, a segment (34 mm) which is larger than the average LSA segments from the nearby Kleinmond site (some 3 km away) together with the small triangular points suggest at least that some of the material if not all, resemble a Howieson's Poort type collection. The ridge composed fossilized dune sand capped by calcrete. There are still a few shells and silcrete artefacts embedded in the fossilized dune sand, the last remains of a shell lens or midden. Presumably the shell and stone artefacts scattered next to the ridge eroded from this original shell lens. It is difficult to estimate a possible age for the shell lens, but assuming that the dunes covering most of the coastal area is from Holocene age then the calcrete capping and fossilized dune sand may well date from the middle Later Pleistocene.

## CONCLUSIONS

Based on the visibility of archaeological sites, the area investigated in general displayed a status of low cultural sensitivity. However, much of the area is covered by shifting dunes and several important sites may still be covered and will only be exposed once the dunes move. The surrounding areas (within 1.5 km from the boundaries of the proposed development) is rich in archaeological and historical sites and material (see below).

## CULTURAL SENSITIVITY OF THE AREA

Although the visible archaeological sensitivity of the area investigated is low, the coast between Port Alfred and the Great Fish River in general is rich in archaeological sites and material. Several archaeological sites are also found nearby the proposed development. The most common archaeological sites are shell middens (large piles of marine shell) found usually concentrated opposite rocky coasts (people refer to these as 'strandloper middens'). There are large shell middens along the rocky coast 1.5 km west of Palmiet Annex 239. A small decorated bag shaped KhoiSan pot was found at one of the middens. Large collections of stone tools and other material and human remains came from the nearby Kleinmonde holiday town. Several shell middens are also situated 1.5 km east of the proposed development along the Great Fish River coast. These shell middens were campsites of San, KhoiSan and possibly Bantu-speakers who lived along the immediate coast and collected marine foods. Mixed with the shell are other food remains, cultural material and often human remains are found in the middens. These middens date from the past 8 000 years. Other archaeological sites may consist of concentrations of stone artefact and/or bone remains. Some of the stone tools may date back to the Middle Stone Age, some 100 000 years old, and the fossil bone occurrences along the coast may also date this far back. The first archaeological collection of stone tools (dating from the Middle Stone Age) in South Africa was made at the Great Fish River Mouth in 1858 by a Colonel Bowker.

The Great Fish River Mouth area also witnessed a fair amount of activity in historical times, especially during the War of the Axe, between 1846 and 1847. Fort D'acre was constructed on the west bank of the Fish River close to the proposed development. A ferry was constructed at the Fish River to link the Cape Colony with Waterloo Bay (small bay near the mouth of the Old Woman's River where the Fish River golf course is currently situated). Waterloo Bay, served as landing place for soldiers and supplies in the war between the British and the AmaXhosa people. Several ships wrecked along the Fish River coast during these years. Many historical artefacts can be found in the area which originated from the military and civilian camps. There is also a small cemetery where soldiers were buried. Blue and white ceramics were also found on the property adjacent to Palmiet Annex

## Potential Impact

- Sites may be damaged or lost during construction of houses, roads etc;
- Material may be collected from sites close by or further adjacent areas by homeowners and visitors;
- Direct impact on potential archaeological resources would take place within the proposed development area. All permanent information lost regarding heritage status on a local, regional and national level; and
- Indirect impact (but not less important) would be the result of the proposed development on archaeological resources close to the development. All archaeological resources/material are in a specific context and should these contexts be disturbed, i.e. collecting of material by the public; the result would be as above.

## Impact Assessment

	EXTENT	DURATION	INTENSITY	STATUS	SIGNIFICANCE	CONFIDENCE	PROBABILITY
WITHOUT MITIGATION	H	H	H	NEGATIVE	H	H	H
WITH MITIGATION	M	H	L	NEGATIVE	M	H	H

## Mitigation

### Design

- A small information centre at a central place, i.e. the entrance gate, where relevant information can be displayed regarding the heritage resources of the area and 'management strategy' would be a valuable contribution towards the conservation of the heritage resources.
- Notice boards should also be placed at strategic points, such as at the access routes to the beach to inform/ remind residents and visitors on the 'management strategy' for the area.

### Construction

- All construction of structures as proposed above (or any other) should be monitored carefully by management, and should heritage sites/material be exposed or uncovered, it be reported immediately to the nearest museum or to the South Africa Heritage Resources Agency.

### Operation

- Terms of conditions, in the form of a 'management strategy' should be included in the constitution of the Home Owners Association or into any other relevant legal organisation. The purpose of this 'management strategy' would be to inform the house owners and visitors to the development of possible heritage resources on the property and surrounds, and to prevent or at best minimize possible damage of sites or prevent the collecting of material by residents and/or visitors. This 'management strategy' document (terms of conditions) can be compiled by the South Africa Heritage Resources Agency in cooperation with the Home Owners Association.

## GENERAL REMARKS AND CONDITIONS

**Note:** This report is for a Phase 1 archaeological heritage impact assessment only and do 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/material and may not therefore, reflect the true state of affairs. Many sites 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, (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 Phaset Specialist Reports (ALAs) will be assessed by the relevant heritage resources authority. The final decision rests with the heritage resources authority, which should give a permit or a formal letter of permission for the destruction of any cultural sites.

Loss of aerial and ground vegetation cover due to removal of trees and opening up of the thicket-forest canopy for construction purposes and on an ongoing basis in areas in close proximity to the dwellings

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

### **1. Shell middens**

Shell middens can be defined as an accumulation of marine shell deposited by human agents rather than the result of marine activity. The shells are concentrated in a specific locality above the high-water mark and frequently contain stone tools, pottery, bone and occasionally also human remains. Shell middens may be of various sizes and depths, but an accumulation which exceeds 1 m<sup>2</sup> in extent, should be reported to an archaeologist.

### **2. 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.

### **3. Fossil bone**

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

### **4. 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.

### **5. 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 filled in with charcoal and marine shell. They are usually 1-2 metres in diameter and may represent cooking platform for shell fish. Others may resemble circular single row cobble stone markers. These are different sizes and may be the remains of wind breaks or cooking shelters.

### **6. 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.