



**PHASE 1 HERITAGE IMPACT ASSESSMENT FOR THE ESTABLISHMENT  
OF THE SARDINIA BAY GOLF ESTATE (ERF 378 – THEESCOMBE),  
PORT ELIZABETH.**

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## **Introduction**

Dr Webley of the Albany Museum in Grahamstown was approached in May 2007 to undertake a Phase 1 Heritage Impact Assessment of Erf 378, Theescombe, Port Elizabeth, which has been identified for the establishment of the Sardinia Bay Golf Estate (Figure 1). The Erf is approximately 92 ha in extent. It is currently zoned for agricultural purposes and a portion of the area is used as a golf course. The remainder of the Erf is covered in a mixture of grazing and indigenous bush. It is intended to develop the land into a low-density Golf Estate (Figure 2). Those sections of land currently under grazing, was cleared historically when it formed part of a farm. The aim of the development is to construct the residential component of the development on the cleared land and to maintain the indigenous bush where this is feasible (Figure 3).

## **Legislation**

Section 38 of the National Heritage Resources Act (1999) clearly indicates that any person constructing a road or similar linear developments exceeding 300m in length or developing an area exceeding 5000 m<sup>2</sup> in extent is required to notify the responsible provincial heritage resources authority or SAHRA. SAHRA will in turn advise whether an impact assessment report is needed before development can take place.

With regard the built environment Section 34 of the Act stipulates 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.

Section 35 of the Act specifies that “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 a meteorite.”

With regard burial grounds and graves, Section 36 (3) of the Act clearly stipulates that no person may, without a permit issued by the relevant heritage authority or SAHRA, (a) destroy, damage or exhume the grave of the victim of conflict; (b) destroy, damage or exhume any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority.

Subject to the provision of any other law, any person who in the course of development discovers the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the relevant heritage authority which must, in co-operation with the South African Police Service and in accordance with the regulations of the responsible heritage authority, carry out an investigation to determine whether the grave is protected in terms of the Act or is of significance to any community

Living heritage (defined in the Act as including cultural tradition, oral history, performance, ritual, popular memory, skills and techniques, indigenous knowledge systems and the holistic approach to nature, society and social relationships) is also given protection under the Act. Section 24 of the Act makes provision for provincial

heritage resources authorities to maintain a register of heritage resources and to set up management plans for their preservation.

### **Terms of Reference**

The terms of reference are to identify any heritage or archaeological site which may be threatened by the construction of the housing estate and the golf course.

### **Background Information**

Information on human settlement in this area is very sparse. No archaeological excavations have been undertaken in the Algoa Bay area. There are therefore no published reports of the dates for prehistoric occupation of the area. Our information on the prehistory of the area is based on Rudner's survey of the coast of South Africa published in the 1960s. According to Rudner (1968) the Algoa Bay area was fringed with middens and belts up to 400m long and 100m wide. Humewood itself was built on extensive middens. "Strandlopers" are said to have lived in the dunes until around 1800.

**Shell middens:** During a previous survey (Webley 2005) of adjoining areas for the Madiba Bay Leisure Park, numerous shell middens were found in the Cape Recife Nature Reserve, along Marine Drive on either side of the road and in the Sardinia Bay Nature Reserve. It is expected that only a small fraction of sites were discovered. The majority of archaeological sites are hidden by sand dunes and vegetation. The shell middens were generally badly degraded, and the shells highly fragmented. Bone remains are rare, and very few middens contained stone artifacts. The majority of the artifacts were made on quartzite and quartz. No formal stone artifacts were identified. A large proportion of the middens contained pottery, suggesting that they are younger than 2 000 years.

**Driftsands Historical Dump material:** In addition to the abundance of shell middens in the area, there is also historical material in this general area. Previous surveys in the Driftsands area have revealed extensive historical dump material dating to the Victorian period. After European settlement of the area, the Driftsands threatened the harbour development of Port Elizabeth and it was decided in 1893 to stabilise the dunes by spreading the town garbage in a swathe from Happy Valley to Sardinia Bay. The rubbish was taken to the dunes by temporary light railway, spread in a relatively thin layer on the dunes, and the seeds of Australian acacias (Rooikranz, Port Jackson and Long-leaf wattles) planted into the garbage "compost". This job was started in 1893 and completed in 1909.

Large collections of the historical dump material was made in the 1990's around the Port Elizabeth University campus and deposited into the Port Elizabeth (Bayworld) Museum. Much of the organic remains from the historical rubbish dump have of course disintegrated. The remains include pieces of broken china (e.g. annular ware, Asiatic pheasant design, pink transfer ware, etc), oyster shells, welsh slate, Holbrook bottles, Codd bottles and marbles, green bottles, stoneware, etc. There are also stone artefacts, scattered in between the dump material, it is difficult to say if it is *in situ*, or has been transported with the historical material. Many of these items were

discovered in 2005 when a survey was undertaken for a water reservoir at Schoenmakerskop (Webley 2005).

**Historical structures/graves:** An historical plan of 1871 by Robert Pinchim (Figure 4) shows the extent of the threat of the Driftsands to the properties in the area. It would appear that the Sardinia Bay Golf course is probably located on one of the properties owned by Charles Lovemore, possibly the farm called Bushy Park. It is not known whether any historical material was dumped in this area, and whether the ruins of any of these original farmhouses still exist. This section of the farm was purchased for a golf course approximately 12 years ago (information supplied by the manager of the golf course) and no information is available on the previous owners or important heritage sites such as old farm buildings or graves. No old farm buildings or structures were identified and the manager of the Golf course is of the opinion that there are no graves of farm workers or the ruins of labourers cottages on the estate.

## **RESULTS OF THE SITE SURVEY**

The site was visited on 10 May 2007. I was accompanied by the manager of the golf course who drove me around to all the sites identified for development. Both the grazing areas and the indigenous bush are extremely dense and it is not possible to get a glimpse of the soil surface to determine whether there is any artefactual material scattered in the area.

Property development sites 65-72 are located around a small hill and small sections of soil have been exposed. The soil is very sandy and contains numerous shell fragments of the giant African snail (*Achatina* sp.).

Many of the roads indicated on Figure 3 are existing tracks. The track which winds between the bushes from sites 89 to 100 travels through a very sandy area where there are numerous evidence for the giant African snail. I climbed one of the coastal hills in order to see if there was any evidence for marine shell or stone tools on the top of the hill. However none were visible. Finally, we travelled along sites 101 to 110, and then returned via sites 80 to 88.

## **SOURCES OF RISK, IMPACT IDENTIFICATION AND ASSESSMENT**

The survey has revealed that the greatest potential risk to the heritage of the area is likely to be the bull-dozing of large sections of the coastal dune area during development. This section of the coastal area has been covered in dense coastal vegetation. However, in the past these coastal dunes would have been open and constantly shifting. The golf estate development will take place approximately 1 km from the coast, and research elsewhere in South Africa (Kaplan 1993) has shown that shell middens may occur up to 5km from the coast. It is therefore theoretically possible that shell middens (similar to the ones found in the 2005 survey in the Sardinia Bay Nature Reserve) may be located under the soil surface in the golf estate area and will be uncovered during development.

Bull-dozing of the area has the potential to destroy archaeological sites buried beneath the soil surface. Archaeological sites are non-renewable and once destroyed, the

information value is lost forever. For this reason, caution should be used when the area is cleared.

#### **RECOMMENDED MITIGATION MEASURES AND MANAGEMENT ACTIONS**

The golf course is only 1 km from the coast, and entire coastal zone appears to be extremely rich in shell middens (Webley 2005). No shell middens were observed during this survey, which is unusual, but is probably related to the density of the vegetation. It is highly likely that there are archaeological shell middens in the area which will be uncovered during development.

Since archaeological sites are protected by the National Heritage Resources Act of 1999 (NHRA) it is important that archaeologists are involved in the planning stage of the development and are able to make an input with regards conservation. Not all archaeological shell middens are of equal significance and it is not feasible to try and preserve them all. However, it is important to note that archaeologists know nothing about the archaeology of the Algoa Bay area as no archaeological research has ever been undertaken. For example, we have no radiocarbon dates for human settlement in the area. We know nothing about human settlement and interaction prior to the arrival of European settlers. Our knowledge (or lack of knowledge) of this time period is entirely dependent on archaeological research. Any decision with regard actions with respect archaeological sites in Algoa Bay would have to take this into consideration.

No Historical Dump Material was discovered during the survey of the area. The historical records suggest that the material was dumped in a swathe all the way to Sardinia Bay. The poorly documented records from the 19<sup>th</sup> century make it difficult to determine whether any dump material will be located on Theescombe. However, it is clearly possible that historical dump material will be encountered during development. Since this material is protected by the NHRA, a strategy will need to be developed to cope with this material if it is uncovered. It is clearly not possible to sample the entire area and a sampling strategy would therefore be designed to collect complete or rare/important items. Any items which are recovered should be lodged in the Bayworld Museum (Port Elizabeth).

#### **RECOMMENDATIONS**

In view of the absence of any visible historical or archaeological material during the survey, I would recommend that development of the golf estate may take place. However, the contractors should take every care to avoid destroying archaeological sites which may be located beneath the soil surface. When excavation of the site takes place, contractors should look for the following features:

1. Dense accumulations of marine shell, representing prehistoric shell middens relating to past human occupation of the area.
2. Human remains including burials.
3. Concentrations of historical dump material such as ceramics, metal, bone, bottles, etc.

If any of the above is discovered, further development of the property must stop immediately and archaeologists as well as the South African Heritage Resources Agency should be contacted to determine the significance of the discovery.



Figure 1 : The location of Theescombe in relation to the shell middens at Sardinia Bay Nature Reserve and the Driftsands sites at Schoenmakerskop.

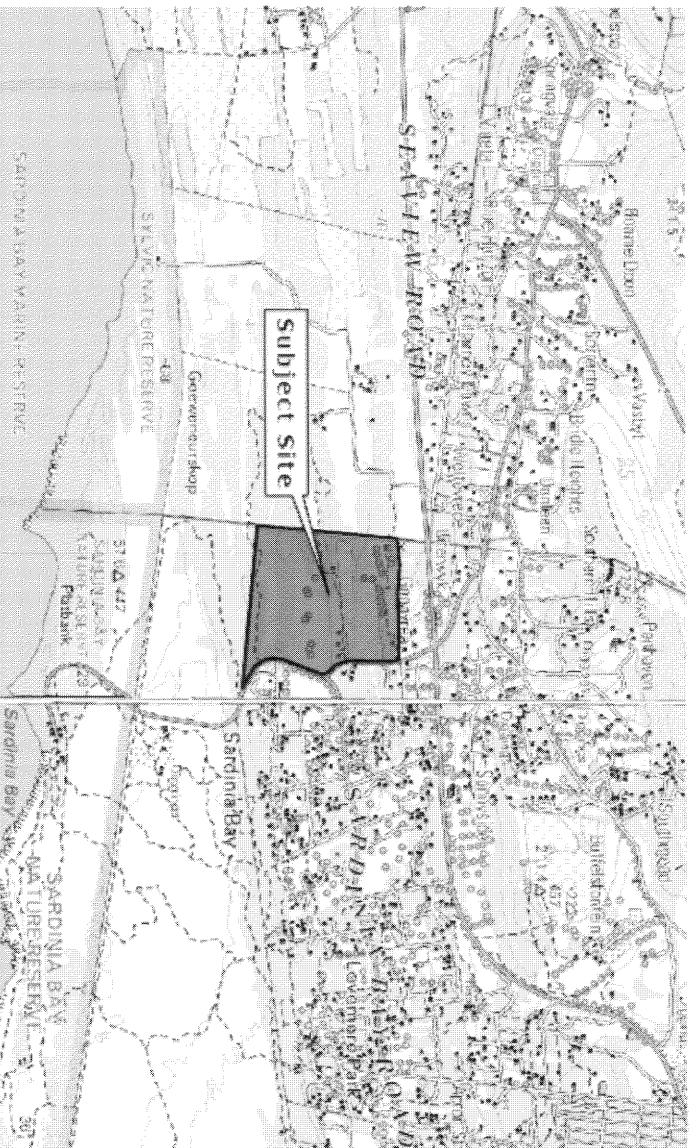


Figure 2: Extract from a 1:50 000 map showing the location of the property (Cohen 2007).



Figure 3: Concept layout for the proposed development.

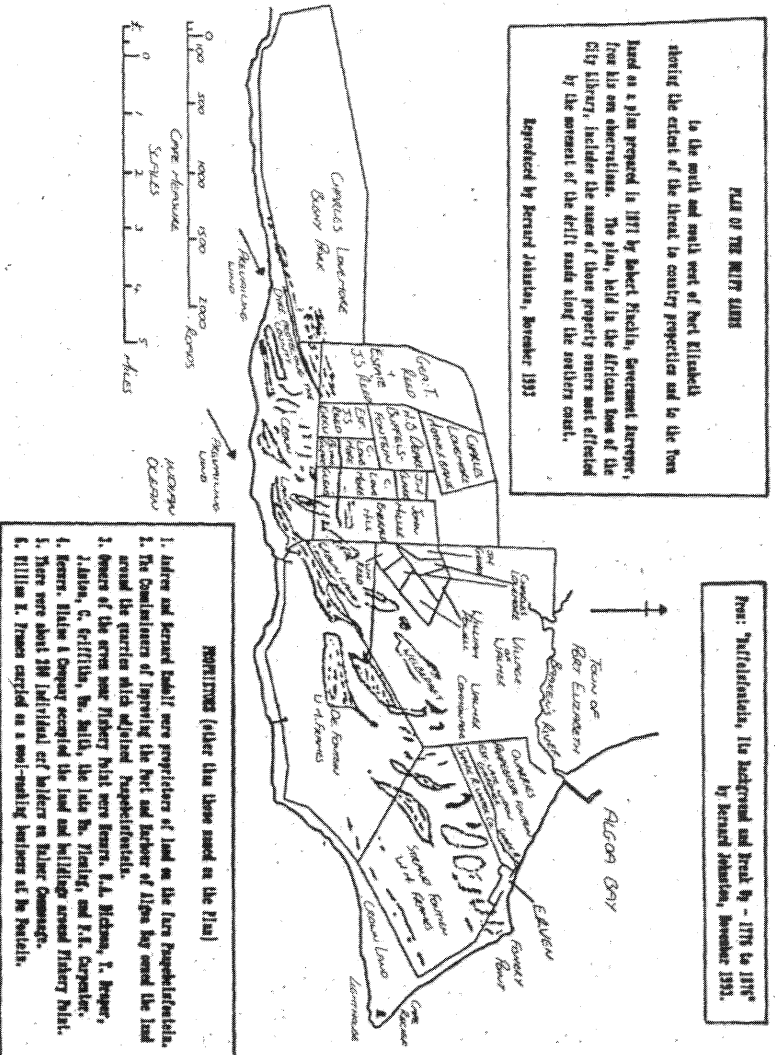


Figure 4: Plan of 1871 by Robert Pincham, showing the extent of the threat of the Driftsands to properties in the Port Elizabeth area (Johnston 1993).

## TERMINOLOGY

**Shell Middens:** are open-air shell accumulations, which have resulted from human occupation. While some shell middens (occurring in caves) have been dated to older than 20 000 years, the majority of shell middens found along the South African coastline date between 300 years and 10 000 years ago. They may vary in size, between 1 m and 20 m in diameter. Generally there is a correlation between the shellfish in the midden and what is available on the rocks of the seashore nearby. While the public often mistakenly refers to them as Strandloper middens, it is more correct to say that middens older than 2 000 years are the product of San hunter-gatherers. Middens dating between 2 000 and 300 years ago are either related to the San or to Khoekhoen herders. Herder sites generally contain pottery. They are the most common type of archaeological site is found within 5 km from the coast

**Middle Stone Age:** Stone tools from this period are often made on fine-grained stone and they reflect a more controlled use of the flaking properties. These tools date between 200 000 and 40 000 years ago.

**Later Stone Age:** LSA peoples were ancestral to the San (Bushmen) and lived in South Africa between 40 000 years ago and colonial times. Later Stone Age tools are typically made on fine grained cherts and chalcodonites, although quartz tools are also very common. They are generally microlithic in size and conform to certain designs, such as scraper, segments and adzes. They are easy to recognize and date.



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