

**ARCHAEOLOGICAL STUDY
PROPOSED DEVELOPMENT
SUNSET BEACH PHASE 7 (ERF 27264)
MILNERTON**

Prepared for

COASTEC

By

Agency for Cultural Resource Management
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**FEBRUARY
2001**

Executive summary

One upper grindstone and one broken white mussel scraper were located during a baseline archaeological study of erf 27264, Milnerton, on the Cape West Coast.

Some extremely ephemeral fragments of shellfish remains were also located in the north-eastern portion of the study site, outside of the proposed development area.

The proposed Sunset Beach Phase 7 development envisages residential units with associated infrastructure.

The study site, which is 3.18 ha in extent, is fairly heavily disturbed.

The impact of the proposed development on archaeological remains/sites is considered to be low to negligible.

The probability of locating significant archaeological sites/remains during implementation of the project is also considered to be low.

Burial remains may, however, be uncovered or disturbed during earthworks.

With regard to the proposed Sunset Beach Phase 7 development, the following archaeological recommendations are made:

- No archaeological mitigation is required.
- Should any human remains be disturbed, exposed or uncovered during earthworks, these should immediately be reported to a professional archaeologist, or the South African Heritage Resources Agency. Burial remains should be treated sensitively at all times. Human remains should not be removed until inspected by a professional archaeologist.
- No further detailed studies are required.

The above recommendations are subject to the approval of the South African Heritage Resource Agency Plans Committee.

1.0 INTRODUCTION

1.1 Background

COASTEC Environmental Consultants have requested that the Agency for Cultural Resource Management undertake an archaeological study of the proposed Sunset Beach Phase 7 development in Milnerton on the Cape west coast.

The proposed development envisages residential units, with associated infrastructure.

The aim of the study is to locate, identify and map archaeological remains that may be negatively impacted by the planning, construction and implementation of the proposed development, and to propose measures to mitigate against the impact.

2.0 TERMS OF REFERENCE

The terms of reference for the archaeological study were:

1. to determine whether there are likely to be any archaeological sites of significance within erf 27264;
2. to identify and map any sites of archaeological significance within the above area;
3. to assess the sensitivity and conservation significance of archaeological sites potentially affected by the proposed development;
4. to assess the significance of any impacts resulting from the proposed development, and
5. to identify mitigatory measures to protect and maintain any valuable archaeological sites that may exist within the site.

3.0 THE STUDY SITE

The study site for the proposed development is illustrated in Figure 1.

The site is situated alongside Otto du Plessis Drive in Milnerton, opposite the Rietveldi and directly adjacent to the Olive Grove Development. The site is 3.18 ha in extent.

The site is fairly heavily disturbed. A gravel track bisects the site at the base of the frontal dunes, while a number of small informal footpaths are visible over the site. Dumping of building rubble is also quite prevalent. Dune mole rat activity is extensive across the site.

4.0 STUDY APPROACH AND DOCUMENTATION OF ARCHAEOLOGICAL SITES

The approach used in the archaeological study entailed a detailed ground survey of the property.

A limited desktop study was also undertaken.

4.1 Archaeological context of the study area

Large numbers of shell middens were previously recorded among the sand dunes all the way from Paarden Eiland to Milnerton (Rudner 1968). Sadly, most of these sites have been lost as a result of residential and recreational development (Kaplan 1993).

Archaeological sites, including Later Stone Age¹ (LSA) shell middens, and even older Early Stone Age² tools and fossils have also been collected on the beach near the mouth of the Milnerton Lagoon (Avery 1995; Kaplan 1995). Shell middens and scatters of LSA tools have also been located at Rietvlei (Kaplan 1996:8)

Excavations at Milnerton Beach (Deacon & Goosen 1996) and in Melkbosstrand have shown that indigenous San hunter-gatherers peopled the landscape around Table View more than 3000 years ago.

The early Dutch settlers at the Cape encountered Khoisan communities on these shores and living among the dunes and made contact with them. There are numerous historical accounts of Khoi groups and 'Strandlopers' (Khoi entrepreneurs in the trade between the Dutch and the Khoi) peopling the Table Bay coastline before and shortly after the arrival of the Dutch settlers at the Cape in 1652 (Smith 1983). Sites dating to the 'contact' period have been located and excavated in Melkbosstrand (Kaplan 1998, 2000d).

LSA burials have also been excavated and exposed by wave action at Milnerton (Abrahams 1983; and Avery pers. comm.).

The palaeontological significance of the area has also been noted (Avery 1995, 1998). According to Avery (1998:9) elephant tusks and other bones were recovered during the course of the dredging of the Rietvlei, and fossil bones have been collected in more recent years (Wolhuter pers. comm.).

¹ A term referring to the last 20 000 years of precolonial history in southern Africa.

² A term referring to the period between 2 million and 200 000 years ago.

5.0 RESULTS OF THE ARCHAEOLOGICAL STUDY

One upper grindstone and one broken white mussel (donax serra) scraper were located on the site.

Some extremely ephemeral fragments of shellfish remains were also located in the north eastern portion of the site, outside of the development area.

Significance of finds: **low**

Suggested mitigation: **none required**

6.0 IMPACT STATEMENT

The impact of the proposed Sunset Beach Phase 7 development on archaeological sites or remains is considered to be low.

The probability of locating significant archaeological sites during implementation of the project is also considered to be low.

Burial remains may however, be uncovered or disturbed during earthworks.

7.0 LEGISLATION

Archaeological sites and human burial remains are protected under the National Heritage Resources Act (No. 25 of 1999). The Act came into effect on 01 April 2000, and replaces the National Monuments Act (No. 28 of 1969).

It is an offence to destroy, damage, excavate, alter, or remove from its original position, or collect, any archaeological material or object, without a permit issued by the South African Heritage Resources Agency (SAHRA).

8.0 RECOMMENDATIONS

With regard to the proposed Sunset Beach Phase 7 development, the following heritage management recommendations are made.

1. No archaeological mitigation is required.
2. Should any human remains be disturbed, exposed or uncovered during earthworks, these should immediately be reported to a professional archaeologist, or the South African Heritage Resources Agency. Burial remains should be treated sensitively at all times. Human remains should not be removed until inspected by a professional archaeologist.
3. No further detailed studies are required.

The above recommendations are subject to the approval of the South African Heritage Resource Agency Plans Committee.

9.0 COST ESTIMATE FOR ARCHAEOLOGICAL RECOMMENDATIONS

Cost estimates for the recovery of human burial remain/s are difficult to calculate. In the context of a development such as Sunset Beach Phase 7, human remains are usually exposed or uncovered during the course of earthworks, and as such are usually disturbed or damaged in the process. In such cases, archaeological mitigation involves limited digging/excavation, sieving of associated deposits and recovery of the skeletal remains. Some laboratory work and curation of the remains will also be required, while permanent storage of human remains at the South African Museum is also required.

Time taken for the recovery, curation and storage of one or two human remains from erf 27264 should therefore not exceed 3-4 days and a cost estimate of R 8000.00 is envisaged.

10.0 REFERENCES

- Avery, G. 1995. Archaeological and palaeontological survey: Milnerton Lagoon Mouth (3318CD). Report prepared for Knight Hall Hendry & Associates. Cape Town South African Museum.
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- Kaplan, J. 1993. The state of archaeological information in the coastal zone from the Orange River to Ponto do Ouro. Report prepared for the Department of Environment Affairs and Tourism. Agency for Cultural Resource Management.
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- Kaplan, J. 1998a. Archaeological study, proposed Rietvlei environmental centre. Report prepared for CSIR Environmentek. Agency for Cultural Resource Management.

- Kaplan, J. 1998b. Archaeological excavations at Atlantic Beach, Melkbosstrand. Report prepared for Johnnic Property Developments (Pty) Ltd. Agency for Cultural Resource Management.
- Rudner, J. 1968. Strandloper pottery from South and South West Africa. *Annals of the South Africa Museum* 49:441-663.
- Smith, A.B. 1983. Prehistoric pastoralism in the Southwestern Cape, South Africa. *World Archaeology* 15:79-87.

sunset beach: intention to subdivide to single residential

- an Environmental Management Plan should be compiled and implemented for both construction and operational phases should development proceed.

Developmental options

In summary, total loss of the site would have the greatest significance for the local plantlife, although larger, presumably more viable, examples of this habitat are found elsewhere. A key mitigatory measure would be to translocate rare and important species to "safe" habitats elsewhere.

Part development of the site would lead to a compromise where some of the existing natural area would be preserved, but might not be large enough to sustain the present plant and animal populations.

The long-term ecological viability of small remnants such as these is uncertain, given the inadequate management of the local coastal dune system. Any increase in natural open space will therefore place an even greater burden on already stretched management resources.

Comments

Any comments on the proposed subdivision should be communicated to Uschi Pond at Coastec, the consultancy facilitating the environmental assessment and public participation process (see details below). Comments should reach us by 7 April 2001.

Pamphlet distributed on 15 March 2001.

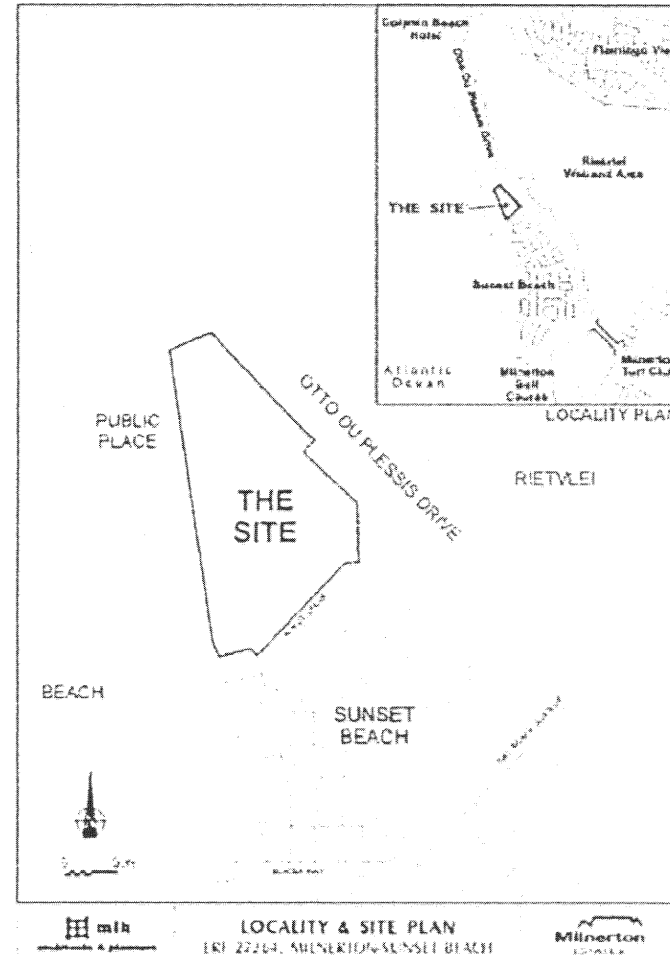
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Entomology

Context

The coastal Dune Thicket stretching from Milnerton northwards contains an abundance of insect life, including butterflies. Specialised breeding sites and conditions are selected by some blue and copper butterflies (Lycaenidae) and which meet with their specific life-cycle requirements. Historically, one such breeding site was situated where the main development of Sunset Beach has already been completed. Recent surveys, however, indicate that certain species no longer occur in the area or are very scarce in this fragmented natural environment. Some species use this vegetation belt as a flight corridor to nectar plants.

A survey of the insects on the site revealed:

- the comparatively small study site supports fewer butterflies today even though necessary life support systems are present
- the 25 species of butterflies encountered on the site (14 of which breed in the area) are relatively common and readily seen in many other locations; none are on the Red Data list
- the area is infested by the Argentine ant, posing a threat to the indigenous ant species, with a probable decline in butterfly breeding activity.

Impact statement and recommendations:

- a key factor to conserving local blue and copper butterflies is related to the conservation of cocktail ant nests in the area, and these in turn are threatened by the invasion of alien plants and the Argentine ant
- insect conservation is better achieved through habitat conservation of large key areas.

Botany

Context

The site is located towards the southern end of both the West Coast Dune Thicket system, and the Cape West Coast Biosphere Reserve (Diep River). Dune systems along this coastline are threatened by development and high impact use. They are also home to a number of local endemic (restricted distribution) and Red Data species.

A survey of the study site revealed:

- the vegetation comprises a unique form of Dune Thicket, related to the distinct soil type of the area. Similar vegetation is only known from a few other localities, such as the Blaauwberg Conservation Area
- 58 indigenous, perennial plant species occur at the site
- one Red Data species, *Gladiolus griseus* (a bulb), one protected species *Sideroxylon inerme* (milkwood), and two uncommon species, *Haemanthus pubescens* subsp. *pubescens* (a bulb) and *Hermannia pinnata* (a prostrate shrub) were encountered
- the largest known populations of *Brunsvigia orientalis* and *Haemanthus pubescens* in the vicinity of Cape Town occur on this site
- the site is impacted by dumping, whilst woody alien infestation and trampling is low.

Impact statement and recommendations:

- development of the site would result in the loss of an important botanical area
- further development might lead to greater impacts on the primary coastal dunes, if access is not regulated
- development would also lead to the loss of one of the few remaining populations of the threatened *Gladiolus griseus*
- a spring survey should be undertaken prior to any development decision, to establish the nature of the bulbs and annuals on the site

INTENTION TO SUBDIVIDE AND DEVELOP ERF 27264, MILNERTON – SUNSET BEACH EXTENSION

Background

The Milnerton Estates Ltd. intends to develop the final phase of their Sunset Beach residential estate. The parcel of land is located immediately north of the existing Sunset Beach residential area, west of Otto Du Plessis Drive (see diagram). The area comprises 3.2 ha and is separated from the coastline by a primary coastal dune system, a major part of which has already been ceded, by Milnerton Estates, to Blaauwberg Administration, as Public Open Space. *The erf is already zoned single residential and an application for the subdivision to smaller erven is to be made.* Recommendations arising from a stormwater management system and traffic impact assessment have been undertaken and approved as part of the original rezoning application for Sunset Beach.

The Rietvlei wetland, a Protected Natural Environment, abuts Otto Du Plessis Drive to the east of the proposed development site. The coastal dune system north of Sunset Beach forms part of the PNE.

Because the site has already been rezoned to residential, it is not subject to the Environmental Impact Assessment regulations. However, the developer is committed to an environmentally friendly approach which will ensure that development responds to the constraints and opportunities of the environment.

Environmental significance

Several specialist studies have been undertaken to establish the nature and sensitivity of the site, and which are aimed at guiding any future development at Sunset Beach.

Archaeology

Context

Khoi groups and 'Strandlopers' peopled the Table Bay coastline before and after the arrival of the Dutch settlers at the Cape in 1652. Shell middens, fossils and stone-age tools have been found in this area, whilst burials have been exposed by wave action at Milnerton.

A ground survey of the property revealed:

- several archaeological fragments were found on site
- the site is fairly heavily disturbed by a gravel track at the base of the frontal dunes, a number of informal footpaths and localised dumping.

Impact statement and recommendations:

- the impact of the proposed development on archaeological sites or remains is considered to be low to negligible
- the probability of locating significant archaeological sites during implementation of the project is also considered to be low
- burial remains may, however, be uncovered or disturbed during earthworks and such should immediately be reported to a professional archaeologist or the South African Heritage Resources Agency
- no mitigation is required
- no further detailed studies are required.

SAHRA

mmh

FILE

South African Heritage Resources Agency

2003 -12- 17

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12 April 2001
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SEARCHED	INDEXED
SERIALIZED	FILED
AL	SAHRA

DATE
ENQUIRIES
OUR REF:

Uschi Pond
Coastce
PO Box 370
Rondebosch
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RECEIVED

17 DEC 2003

*Need to make report of this
after power*

Dear Uschi

INTENTION TO SUBDIVIDE AND DEVELOP ERF 27264,
MILNERTON - SUNSET BEACH EXTENSION

I very much appreciate your effort to contact us. As I explained I have unfortunately been away in Mpumalanga and then at home with tick bite fever

The SAHRA Archaeology Permit Committee has been increasingly concerned about the loss of shell midden sites along the West Coast. These represent a record of the life of the San hunter gatherer people at certain times and the arrival of the herder Khoekhoen along this coast. It has become apparent that unless we take immediate action we shall have no record at all of the lives of these peoples for certain periods in our area. We have therefore formed a group to monitor any development and have formed the practice of visiting all sites that are threatened by development with the archaeologist(s) concerned, members of our committee and an ornate specialist, in an effort to ensure that we do not lose more information than can be avoided.

Unfortunately I have not as far as I am able to ascertain, received a copy of the Archaeological Impact Assessment in this case so have not been able to arrange this for this site. I assume from the regulations that you cite that there has been such a report. I am not really in a position to decide whether I can comfortably accept these recommendations without seeing the report.

Is it possible for me to have a faxed copy of the Archaeological Assessment urgently so that I am able to see whether we can waive the usual site visit and debate (as seems to be the case from the recommendations you have been given)?

As the recommendations indicate, a surface survey does not always indicate the presence of archaeological material, which may be buried. The consequence of this is that we ask the developer to have the archaeologist in question monitor any earth movement as "sensitive"

FAX TO: ANDREW WILSON

COMPANY: MLH PAGE: 17 OF: 20

FAX NO: 4243810 DATE: 17-12-03

FROM: A.B. LOU

COMPANY: CASTRAC PHONE NO: 68551445

FAX NO: 68551445 FAX (PAD 750)

