

A PHASE 1 ARCHAEOLOGICAL ASSESSMENT OF PORTION 6 OF THE FARM DYKER EILAND, ST HELENA BAY

Prepared for

Beyers A.W.
Land Surveyors and Township Consultants

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Prepared by

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EXECUTIVE SUMMARY

The Archaeology Contracts Office of the University of Cape Town was commissioned by Beyers A.W. Land Surveyors and Township Consultants (on behalf of their client, Mr C. Van Zyl) to conduct a phase 1 Archaeological survey of portion 6 of the farm Dyker Eiland, St Helena Bay. Ten Late Stone Age middens were located. It is recommended that an archaeological sampling program be implemented prior to development of the site.

1. INTRODUCTION

The Archaeology Contracts Office of the University of Cape Town was commissioned by Beyers A.W. Land Surveyors and Township Consultants¹ (on behalf of their client, Mr C. Van Zyl) to conduct a phase 1 Archaeological survey of portion 6 of the farm Dyker Eiland, St Helena Bay. The proposed development is situated mainly on the west and east sides of Cape St. Martin (a narrow low promontory covered by vegetated dunes) which lies directly north of the farm, Dyker Eiland.

The ACO was requested by the client to:

1. Conduct a phase 1 archaeological survey of the development area.
2. Locate and plot archaeological sites.
3. Submit a report on the findings.

2. ARCHAEOLOGICAL BACKGROUND

The west coast south of Lamberts Bay has been subjected to research by archaeologists during the last three decades. This work has shown that the west coast of South Africa has been occupied by people for at least a million years. During the LSA (Late Stone Age) period which began about 20 000 years ago, the ancestors of the San (Bushmen) hunter/gatherers occupied the Cape. They were attracted to the coastline which provided a predictable marine food supply. As a result of this the existing late Holocene coastline (last 5000 years) is extremely rich in archaeological sites, especially shell middens in the immediate coastal zone. The archaeological sites of this period are often associated with stretches of rocky shoreline where black mussels and limpets could be collected. Just after 2000 years ago the Khoi Khoi (Hottentot) herders moved into southern Africa via the west coast. They brought with them domestic sheep, goats, cattle and the art of making pottery. One of the main foci of early herding economy at the Cape was the Vredenburg Peninsula with its rich soils, good grazing for animals as well as sheltered bays and rocky shores where shellfish were easily collected.

Cape St Martin has been subject to some specific archaeological research in the past. Two extensive complexes of shell middens (sites DE 5 and 6) were first recorded by Francis Thackeray and the South African Museum in 1975 (Thackeray 1975). Robertshaw (1979:74) writes "... a large amount of shell middens are located on Cape St Martin; indeed the area can be treated as virtually a single archaeological site." A stratified midden on Cape St Martin was subject to excavation by Robertshaw as part of his PhD fieldwork (Robertshaw 1978). Unfortunately Robertshaw failed to provide the most basic of locational information so it is not possible to re-identify the site that he excavated out of the many in this area. Robertshaw found that the surface layer 1 of the midden contained pottery but layer 2 did not. He also found that formal tools were so rare "that it would be rash to assign any cultural or industrial label to this assemblage" (Robertshaw 1979:75). He notes that 90% of the stone artefacts were not found in the midden material but associated with a number of stone features close by. Robertshaw found that the shellfish sample was dominated by limpets, especially *Patella granatina* and *Patella granularis*. Animal bone was dominated by the Cape Fur seal, but jackass

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penguins and cormorants were also eaten. Two radiocarbon dates were obtained: layer 1 was dated to 1700±50 years B.P. (before present) and layer 2 was dated to 1930±70 years B.P. Robertshaw excavated 29m² of layer 1 and 12m² of layer 2. The material was sieved using 12mm and 3mm sieves. Every 4th bucket was bulked using the 12mm sieve only. The report presented by Robertshaw in his dissertation contains a detailed artefactual, faunal and shellfish analysis along with a series of radiocarbon dates for the midden and one of the associated stone hearths. It may be argued that this particular midden is well documented it is not clear whether it is typical of the archaeological material found in this area.

3. METHOD

Members of the ACO visited the development zone on Cape St Martin. The area was searched on foot to locate archaeological sites. A site record form was completed for all instances and the locations were marked on a 1:10 000 orthophoto. In some cases small test excavations were dug to check for buried archaeological material. Difficulty was experienced in obtaining reliable satellite signals so the sites could not be plotted using GPS (global positioning system) fixes. A map of the area is presented in Figure 1 showing the location of the property. The positions of archaeological sites are indicated on Figure 2.

4. RESULTS

This section of this report describes the archaeological material and assesses each site for its archaeological importance. Site identification numbers do not relate to those assigned by the South African Museum in 1975, mainly because locations were not accurately plotted.

DE 1

The presence of this site was indicated by a small amount of shell eroding out of an animal burrow. A test excavation revealed that a dense shell midden lay under some 3-400 mm of red aeolian sand. The lens of dense shell and ash was 300 mm thick. As the site was completely buried it was not possible to determine its lateral extent. The small sample of material examined contained quartzite cobbles and flakes. No bone was seen. The shellfish species seen consisted of *Choromytilus meridionalis* (black mussel), *Burnupena* sp.(whelks), *Patella granatina* (dominant), *Patella granularis* (dominant), *Patella argenvillei*, *Patella barbara* (limpets) and *Haliotis midae* (perlemoen).

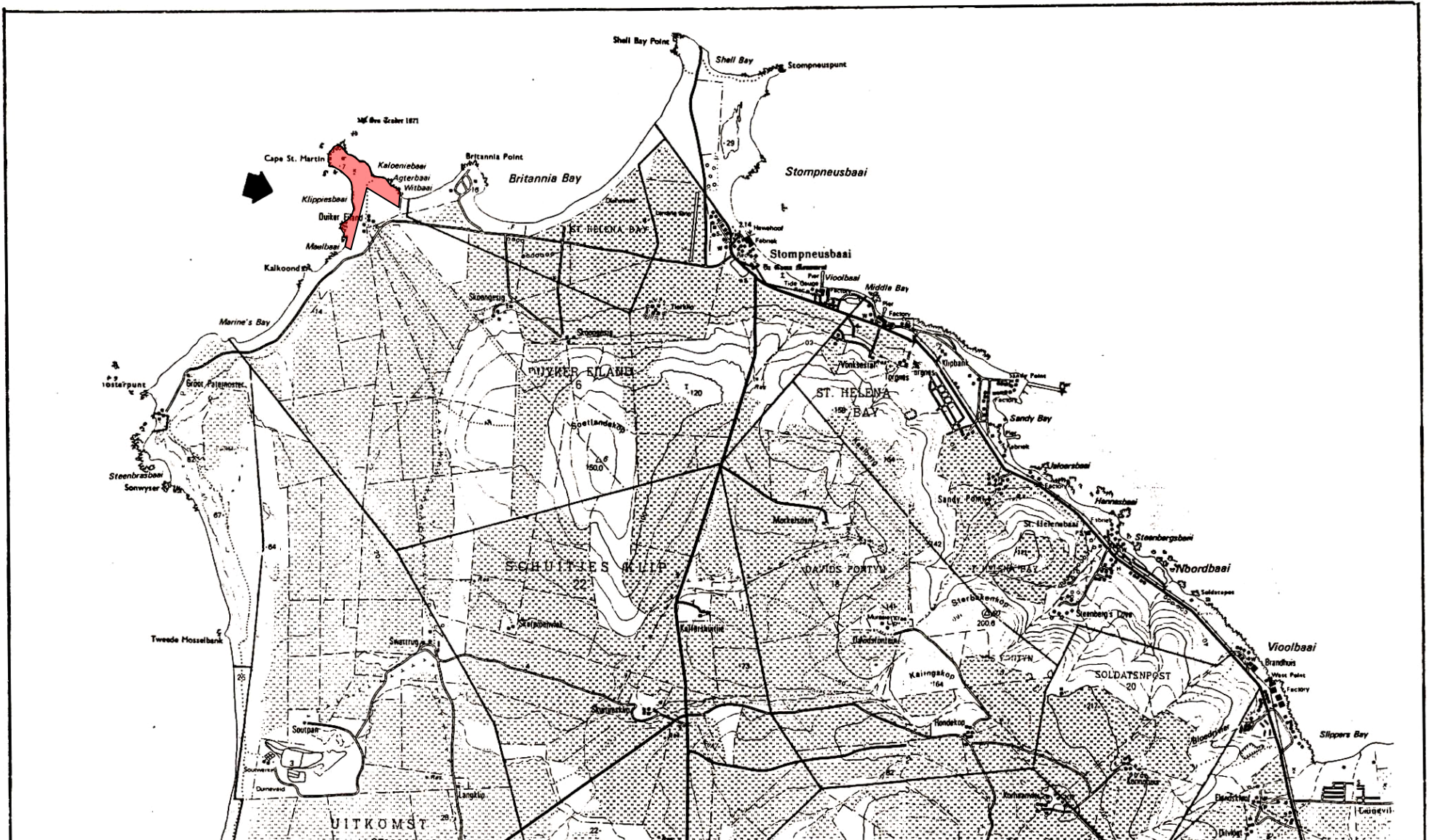
Importance: High. This is a well preserved site with good information potential.

Impact: The site will be destroyed by earthmoving and construction activities.

Mitigation: A representative sample of material should be excavated, sorted and curated.

DE 2

This consists of an ephemeral scatter of shell and some stone artefacts in a disused road. Test excavations did not produce any evidence of buried material. Artefactual material consisted of some quartz flakes and a single red crypto-crystalline silicate flake.



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Subsequent searching of the development area showed that in all roads where a previous land surface was exposed (compacted light-brown sands) similar material was evident.

Importance: Low.

Impact: The site will be destroyed by earthmoving and construction activities.

Mitigation: None required.

DE 3

This is a very large limpet midden that covers some prominent dunes that rise about 3m above the surrounding landscape. It is quite likely that the midden is stratified within these dunes. Shellfish species seen are *Choromytilus meridionalis*, *Burnupena* sp., *Patella granatina* (dominant), *Patella granularis* (dominant), *Patella argenvillei*, *Patella barbara* and *Haliotis midae*. Artefactual material consists of numbers of quartzite manuports, hammerstones and flakes. No ceramics were seen on the surface.

Importance: High. This is a well preserved site with stratigraphic potential.

Impact: The site will be destroyed by earthmoving and construction activities.

Mitigation: A portion of the site should be excavated and the various units sampled, the material should be sorted and curated.

DE 4

This is a very large scatter of midden material in a deflated area between some dunes. There are several mounds on which a lens of in situ material has survived. Shellfish species noted include *Choromytilus meridionalis*, *Burnupena* sp., *Patella granatina* (dominant), *Patella granularis* (dominant), *Patella argenvillei*, *Patella barbara* and *Haliotis midae*. Rock lobster mandibles were also seen. Cultural material on the site includes fragments of Cape Coastal pottery, quartzite flakes and cores as well as a number broken cobbles and manuports. Also present in the area are a number of stone features that may be hearths or burial cairns.

Importance: Medium

Impact: The site will be destroyed by earthmoving and construction activities.

Mitigation: A portion of the site should be excavated and the material sorted and curated. A stone feature should be sectioned.

DE 5

A small scatter of midden material that has been badly damaged. The shellfish species seen consist of *Choromytilus meridionalis*, *Burnupena* sp. *Patella granatina* (dominant), *Patella granularis* (dominant), *Patella argenvillei*, *Patella barbara* and *Haliotis midae*. Artefactual material seen is a single ostrich eggshell bead and fragments of quartzite.

Importance: Medium. A small amount of undisturbed material remains where it has not been damaged by the road.

Impact: The site will be destroyed by earthmoving and construction activities.

Mitigation: The remaining portion of the site should be excavated and the material sorted and curated.

DE 6

This site is located in a deflated area in the open land back from the shoreline. It consists of a scatter of highly fragmented shell and some artefacts. The cultural material consists of some quartz and silcrete flakes, a backed piece and an incomplete segment. Also noted were quantities of ostrich eggshell.

Importance: Low.

Impact: The site will be destroyed by earthmoving and construction activities.

Mitigation: None required

DE 7

A 300mm capping of midden material exists on some low sandy mounds. Although one of these has been damaged, a significant amount of material has not been disturbed. Shellfish species noted are *Choromytilus meridionalis*, *Burnupena* sp. *Patella granatina* (dominant), *Patella granularis* (dominant), *Patella argenvillei* and *Patella barbara*. There is some indication of differentiation between *Patella* and *C. Meridionalis* dominated areas. The midden evidently contains bone - tortoise and bird. Pottery is also present. Other artefactual material seen consists of quartzite flakes and cores as well as "sausage" shaped manuports and hammerstones.

Importance: High. A significant amount of undisturbed material remains where the site has not been eroded or damaged by the road.

Impact: The site will be destroyed by earthmoving and construction activities.

Mitigation: The remaining portion of the site should be excavated and the material sorted and curated.

DE 8

This is a large deflated midden centered around a mound on which some in situ material still exists. Ostrich eggshell is very common. Shell species seen include *Choromytilus meridionalis*, *Burnupena* sp. *Patella granatina* (dominant), *Patella granularis* (dominant), *Patella argenvillei* and *Patella barbara*. No ceramics were seen but artefacts include quartzite flakes, cores and manuports.

Importance: Low.

Impact: The site will be destroyed by earthmoving and construction activities.

Mitigation: None required



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DE 9

This is a complex of archaeological occurrences that lie in a deflated area that spans the breadth of Cape St Martins Peninsula. Most of the midden material is deflated but there are shell piles with in situ material. Of interest are a number of stone features which could be deflated cairns or hearths. Bone (including a whale vertebra) is also present on the site. Artefactual material consists quartzite flakes, cores and manuports. Shellfish seen are *Choromytilus meridionalis*, *Burnupena* sp. *Patella granatina* (dominant) *Patella granularis* (dominant), *Patella argenvillei*, *Patella barbara* and *Haliotis midae*.

Importance: Medium. Undisturbed material exists which may produce useful samples.

Impact: The site will be destroyed by earthmoving and construction activities.

Mitigation: The undisturbed portion of the site should be excavated and the material sorted and curated. Some of the stone features should be sectioned/tested.

DE 10

This is a damaged site located close to a workers cottage. Shell species noted include *Choromytilus meridionalis*, *Burnupena* sp. *Patella granatina* (dominant), *Patella granularis* (dominant), *Patella argenvillei*, *Patella barbara* and *Haliotis midae*. Artefactual material is the usual collection of quartzite fakes, chunks and manuports.

Importance: Low.

Impact: The site will be destroyed by earthmoving and construction activities.

Mitigation: None required.

5. CONCLUSION

Cape St Martin is particularly rich in archaeological material. The major reason for this is the large expanses of rocky shoreline that could be exploited by prehistoric people, especially during the last 2000 years when the Vredenburg Peninsula was inhabited by herding peoples. The results of this survey indicate that most of the sites are very similar to the midden excavated by Robertshaw (1979) in terms of shellfish and artefactual content. The contents of the middens reflect the types of edible shellfish inhabiting the area today. Indications are that most of the sites on Cape St. Martin are under 2000 years old and post-date the introduction of ceramic technology and herding economy to this area.

6. RECOMMENDATIONS

The following recommendations are subject to the consideration of the National Monuments Council Archaeology Plans Committee. Shell middens are protected by the National Monuments Act of 1969 (as amended). This means that destruction of a midden may take place only after a permit has been issued by the NMC. The NMC is prepared to issue permits for the destruction of archaeological material once they are satisfied that

suitable mitigation measures have been carried out. Application must be made by the developer for permission to destroy archaeological material.

1. Although there are a number of sites in the development area that contain in situ deposits, there is no reason to conduct extensive mitigatory excavations on all of them due to their similarity. It can also be argued that the excavation by Robertshaw (1979) has gone some way to mitigating the potential destruction of archaeological sites on Cape St. Martin. Unfortunately the sieve sizes (3mm and 12mm) used by Robertshaw are considered to be too large by modern standards which means that there could be inadequacies in the bulk samples resulting from his excavation. Mitigatory work should be geared towards collecting supplementary samples to rectify this imbalance.

2. It is suggested that the developer contract an archaeologist to conduct a limited program of archaeological sampling (including dating) on three of the more well preserved middens and associated features in the development area. The size of the samples and sites to be selected should be decided in collaboration with the National Monuments Council. The ACO will attempt to establish the precise location of Robertshaw's excavation.

3. Several of the stone features should be sampled to determine if they are burials or hearths.

7. REFERENCES

Robertshaw, P.T. 1979. Coastal settlement, fresh water fishing and pastoralism in the later prehistory of the Western Cape, South Africa. University of Cambridge: unpublished Phd dissertation.

Thackeray, F. 1975. Unpublished Field Records housed in the Spatial Archaeology Research Unit. University of Cape Town.

8. INVESTIGATION TEAM

Fieldwork and report

Dave Halkett
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