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PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT
PROPOSED DEVELOPMENT
LANGEBAN COUNTRY ESTATE
LANGEBAN
CAPE WEST COAST

Prepared for

ENVIROAFRICA

By

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Executive summary

The Langebaan region is a highly sensitive archaeological environment, yet only three artefacts were located during a Phase 1 Archaeological Impact Assessment of the proposed Langebaan Country Estate in Langebaan on the Cape West Coast.

The proposed project envisages a golf estate with high-density residential development.

Current development on the property comprises the Langebaan Country Club with clubhouse and golf course.

The bulk of the property comprises mainly natural veld. Some disturbance and earthworks occur in places. A few granite outcroppings are dotted around the site.

Dune mole rate activity is extensive.

The results of the archaeological assessment will be used to compile an Environmental Constraints Plan to guide proposed development of the property.

The archaeological remains located during the study are not important and have been given low significance ratings.

The impact of the proposed project on archaeological remains is likely to be low.

Human burials and fossil remains may, however, be uncovered or exposed during earthworks.

Overall, the receiving environment is not considered to be archaeologically sensitive, vulnerable or threatened.

With regard to the proposed Langebaan Country Estate development, the following recommendations are made.

- No immediate archaeological mitigation is required.
 - Future proposed borrow pits and quarry sites servicing the project should be inspected for archaeological remains.
 - If excavations penetrate underlying calcrete/limestone deposits, an archaeologist and palaeontologist should be contracted to monitor these activities.
- The Langebaan/Saldanha region is well known for extensive fossil sites, which are associated with calcrete beds.
- 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.

The recommendations are subject to the approval of the South African Heritage Resource Agency (SAHRA).

1. INTRODUCTION

1.1 Background and brief

EnviroAfrica has requested the Agency for Cultural Resource Management to undertake a Phase 1 Archaeological Impact Assessment (AIA) of the proposed Langebaan Country Estate development in Langebaan, on the Cape West Coast.

The proposed project comprises a golf estate, including high-density residential development, in an area of some 320 ha.

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 project, and to propose measures to mitigate against the impact.

The results of the archaeological assessment will, together with the botanical, and biophysical assessment of the property, be used to compile an Environmental Constraints Plan to guide the proposed development.

2. 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 on the proposed site;
2. to identify and map any sites of archaeological significance on the proposed site;
3. to assess the sensitivity and conservation significance of archaeological sites on the proposed site;
4. to assess the status and 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 on the proposed site

3. THE STUDY SITE

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

The property is located on either side of the road coming into Langebaan from the R27 (West Coast Road), just a few kilometre's from the entrance to the town.

The property is the site of the Langebaan Country Club, which currently comprises a clubhouse and 12-hole golf course spread over both properties.

The bulk of the 320 ha site comprises mainly natural veld (Figures 2 & 3).

A few granite outcrops are dotted around the site.

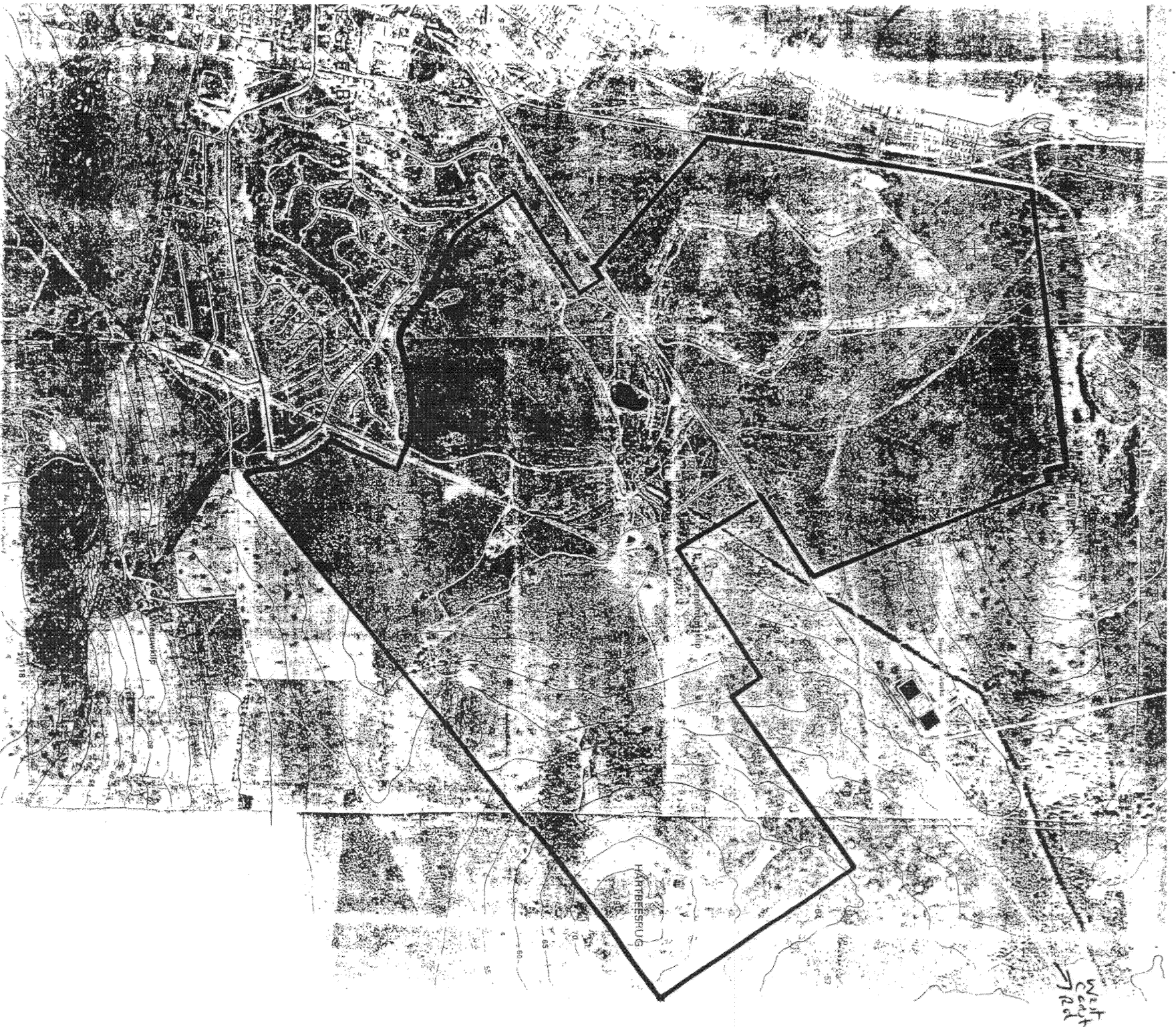


Fig 1. Phase 1 Archaeological Impact Assessment, proposed development, Longbeorn Centre Est. The study site.

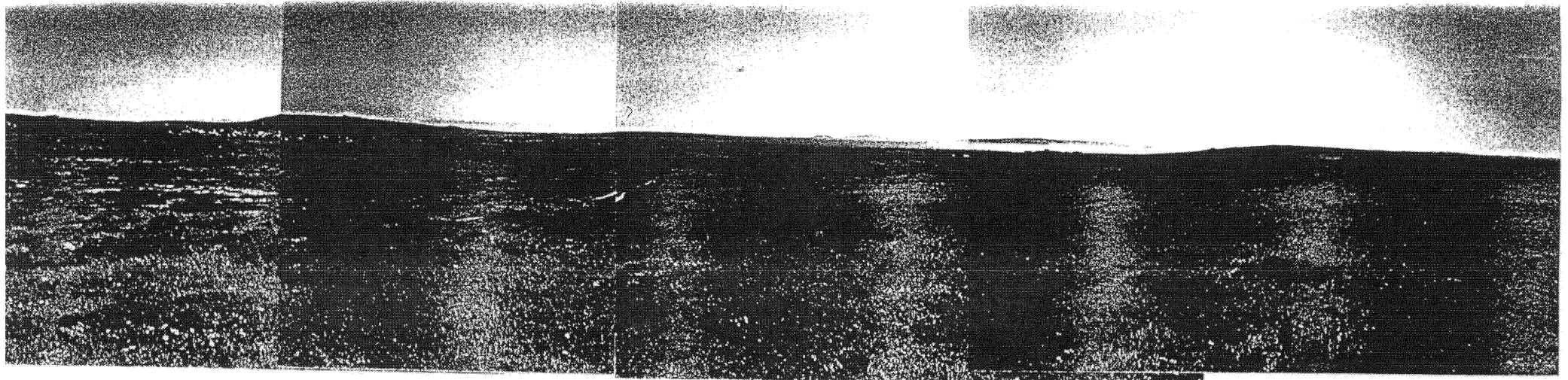


Figure 2. Phase 1 Archaeological Impact Assessment, proposed development, Langebaan Country Estate. The study site looking west.

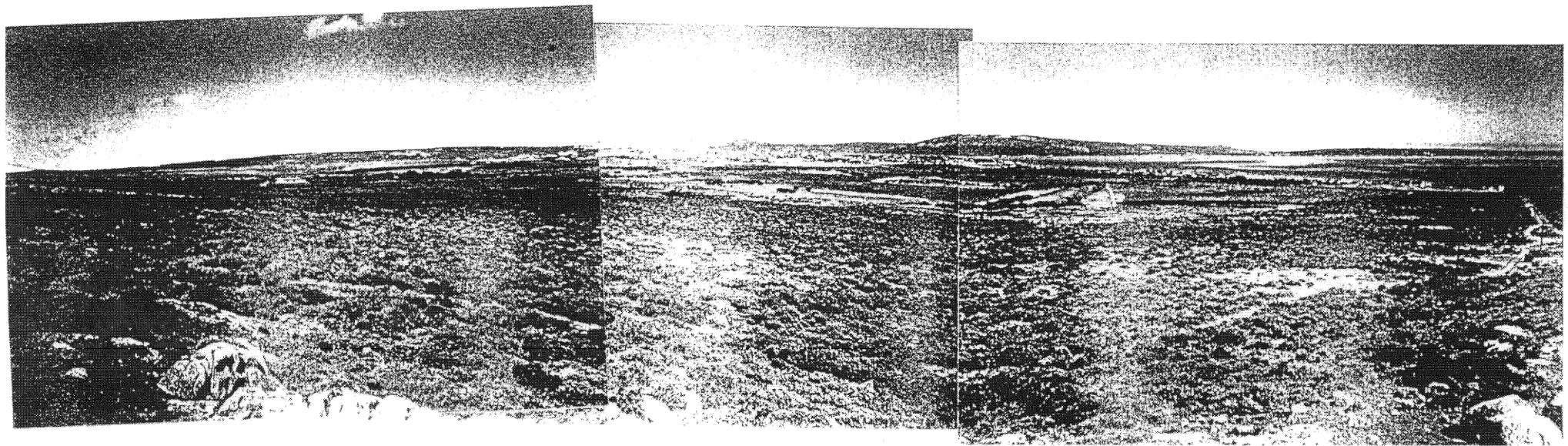


Figure 3. Phase 1 Archaeological Impact Assessment, proposed development, Langebaan Country Estate. The study site facing looking south-west.

Two borrow pits occur in the far north-western portion of the property, alongside the Mykonos Road.

In the large southern portion, a network of gravel roads cuts across the site. Some smaller excavations are also present, including a recent sand quarry in the southwestern portion of the site.

Calcrete/limestone beds and loose pieces of calcrete are visible in the gravel roads that cut across the study area.

Dune mole rat activity is extensive on the site.

4. APPROACH TO THE STUDY

The approach used in the archaeological study entailed a systematic foot survey of the property.

Particular attention was paid to searching the area around the granite outcroppings; known locations of early Khoi herder sites (Sadr et al 1992).

A desktop study was undertaken.

5. A BRIEF OVERVIEW OF THE ARCHAEOLOGICAL SIGNIFICANCE OF LANGEBAAN

Archaeological visibility in Langebaan is extremely high (Kaplan 1993). More than 40 sites have been recorded between Lentjiesklip 1 and Lynch Point (Hart & Halkett 1992; Kaplan 1999; Parkington & Poggenpoel 1987). Excavations and studies have shown that the rocky shoreline at Lentjiesklip and Lynch Point acted as a foci that attracted Later Stone Age¹ (LSA) people as they offered greater opportunities for the exploitation of marine foods particularly shellfish (Hart 1991; Kaplan 2000).

The archaeology suggests that the pattern of occupation of the Langebaan area involved people locating themselves at the coast where large quantities of shellfish was consumed, as well as seals, fish, bird, tortoise and small antelope. Evidence also suggests that LSA people may have been scheduling their visits to collect lower tidal zone shellfish such as limpets and perlemoen (Hart 1991).

Excavations at Lentjiesklip 4 (Parkington et al 1988) and Lentjiesklip 2 (Hart 1991) show that some of the sites in the region date to between 4000 and 1800 years ago (Hart 1991), some of which have been found buried up to three metres below the sand body. The domestic and material cultural items generated from these and other excavations, indicate a wide range of human responses to opportunities and needs over time.

A human burial was also uncovered during excavation of a service trench at Lentjiesklip 2 (Hart 1991).

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

It is also well established that vertebrate fossils and archaeological occurrences in the Langebaan Limestone (calcrete) formations and associated deposits in the Saldanha Bay area, are extremely valuable sources of information on the sedimentary, chronological, palaeoenvironmental and palaeoecological context of the development of modern human behaviour during the Middle Stone Age² (MSA) and perhaps even the Early Stone Age³ (ESA) (Avery 1997).

More recently, 120 000 year old fossil footprints were discovered in ancient fossil dunes at Kraalbaai on the western shores of the Langebaan Lagoon (Roberts 1996), among the oldest modern human footprints in the world.

Middle Pleistocene occurrences and the recovery of human remains in the Langebaan Limestone deposit at Sea Harvest, in Saldanha Bay, has also provided some of the earliest evidence we have in the world for the human exploitation of coastal resources, more than 100 000 years ago (Grine & Klein 1993; Volman 1978).

Beside evidence of well preserved bone, ostrich eggshell, ochre and MSA stone implements, the Hoedjiespunt limestone sediments in Saldanha Bay also contains evidence of early modern human about 125 000 years ago (Berger & Parkington 1995).

The younger Mid Pleistocene (~ 250 000 years) Elandsfontein site near Langebaan, a hominid butchery site where ESA and MSA artefacts are found, is also associated with a large and diverse fossil fauna. The partial skull of 'Saldanha Man', probably an archaic form of *Homo sapiens*, was also discovered at this locality (Singer & Wymer 1968).

With regard to ancient fossil sites, The Varswater quarry near Langebaanweg has yielded Mio-Pliocene (~ 5 million years) fossils of great diversity and quantity (Hendey 1982). Earthworks at the Saldanha Steel Project also exposed rare and previously unknown crocodilian and other fossil remains from the Miocene Period, from deposits underlying calcareous formations during excavations for descaling pits (Roberts 1997a).

Several fossil hyena lairs have also provided glimpses of past Pleistocene (1.6 million – 200 000 years) faunas, including herbivores and carnivores, at Hoedjiespunt and Sea Harvest and Besans Klip in Vredenburg (Roberts 1997a). An EIA for the proposed Alpha Saldanha Cement Project in Saldanha Bay also revealed the presence of an unusual Mid-Miocene (~ 11-12 million years) fauna, including the shell of a giant extinct ostrich like bird (Roberts 1997b).

The reasons for the abundance of fossil archaeological and palaeontological remains in the Saldanha - Langebaan area is in part related to the highly calcareous character of the aeolianites (fossil dunes) and shallow marine sediments. Bones and implements are readily preserved by the rapid carbonate cementation of the strata in which they become entombed.

² A term referring to the period between 200 000 and 20 000 years ago.

³ A term referring to the period between 2 million and 200 000 years ago.

6. RESULTS OF THE ARCHAEOLOGICAL STUDY

One ESA limestone flake was found in a borrow pit opposite the entrance to the Strandloper Restaurant, alongside the Mykonos Road, in the far north-western portion of the property.

One piece of ostrich eggshell was found among a granite outcropping in the extreme north-eastern portion of the property.

A possible MSA limestone flake was found in the sand quarry in the south-western portion of the property, but has been badly damaged by quarrying activities. Large pieces of calcrete also occur in the quarry.

Importance of finds: **low**

Suggested mitigation: **none required**

No shellfish remains were found associated with extensive dune mole rat activity on the site, which would otherwise suggest the presence of buried shellfish remains.

7 IMPACT STATEMENT

The impact of the proposed Langebaan Country Estate development on archaeological remains is likely to be low.

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

Human burials may, however, be exposed or uncovered during earthworks and excavations. Remnant sand dunes occur east of the golf clubhouse.

Fossils may also be exposed in the underlying calcrete/limestone beds, during excavations.

8 CONCLUDING STATEMENT

Overall, the receiving environment is not considered to be archaeologically sensitive, vulnerable, or threatened.

9 RECOMMENDATIONS

With regard to the proposed Langebaan Country Estate development, the following recommendations are made.

- No immediate archaeological mitigation is required.
 - Future proposed borrow pits and quarry sites servicing the project should be inspected for archaeological remains.
 - If excavations penetrate the underlying calcrete/limestone deposits, an archaeologist and palaeontologist should be contracted to monitor these activities. The Langebaan/Saldanha region is well known for extensive fossil sites, which are associated with calcrete beds.
 - 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.

The recommendations are subject to the approval of the South African Heritage Resource Agency (SAHRA).

10. REFERENCES

- Avery, G. 1997. Alpha Saldanha Cement Project: archaeological potential of limestone and other calcareous deposits. Report prepared for Mark Wood Consultants.
- Berger, L.R., & Parkington, J.E. 1995. A new Pleistocene hominid-bearing locality at Hoedjiespunt, South Africa. *American Journal of Physical Anthropology* 98:601-609.
- Grine, F.E., & Klein, R.G. 1993. Late Pleistocene human remains from the Sea Harvest site, Saldanha Bay, South Africa. *South African Journal of Science* 88:145-152.
- Hart, T. 1991. Archaeological excavations at Lentjiesklip 2. *Archaeology Contracts Office*, University of Cape Town.
- Hart, T. & Halkett, D. A first phase archaeological survey of a portion of Farm 1065 (Oliphantstokop) near Langebaan.
- Hendey, Q.B. 1982. Langebaanweg – a record of past life. *South African Museum*, Cape Town.
- Parkington, J. & Poggenpoel, C. 1997. An archaeological survey of the Lynch Point Lentjiesklip area. *Department of archaeology*, University of Cape Town.

- Parkington, J., Poggenpoel, C. & Hart, T. 1988. Report on the first phase of excavations at Lynch Point, Langebaan. Report prepared for Club Mykonos, Langebaan. Archaeology Contracts Office, University of Cape Town.
- Kaplan, J. 1993. The state of archaeological information in the coastal zone from the Orange River to Ponta do Ouro. Report prepared for the Department of Environmental Affairs and Tourism. Agency for Cultural Resource Management.
- Kaplan, J. 1999. Archaeological assessment, Erf 2078, Langebaan. Report prepared for Crowther Campbell & Associates. Agency for Cultural Resource Management.
- Kaplan, 2000. Archaeological test excavations, Erf 2078, Langebaan. Report prepared for Langebaan Cove (Pty) Ltd. Agency for Cultural Resource Management.
- Roberts, D.L. 1996. Footprints in the sand. Abstract, 8th Biennial PSSA Conference, Stellenbosch
- Roberts, D.L. 1997a. Fossil occurrence at the Saldanha Steel site. Report prepared for Saldanha Steel Project (Pty) Ltd. Pretoria. Council for Geoscience Geological Survey.
- Roberts, D.L. 1997b. Palaeontological impact assessment Alpha Saldanha Cement Project. Report prepared for Mark Wood Consultants. Pretoria: Council for Geoscience Geological Survey.
- Sadr, K., Gribble, J. & Euston-Brown, G. 1992. The Vredenburg Peninsula survey, 1991/92. In Smith, A.B. & Muti, B (eds) Guide to archaeological sites in the south western Cape. Department of Archaeology, University of Cape Town.
- Singer, R. & Wymer, J. J. 1968. Archaeological investigations at the Saldanha skull site in South Africa. South African Archaeological Bulletin 23: 63-74.
- Volman, T.P. 1978. Early archaeological evidence for shellfish collecting. Science 201:911-913.