

**PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT
PROPOSED HOUSING DEVELOPMENT
ERF 578
LAAIPILEK
CAPE WEST COAST**

Prepared for

ENVIRODINAMIJK

Client: Tarsius Agtien (Edms) Bpk

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Executive summary

A Phase 1 Archaeological Impact Assessment of a proposed housing development on Erf 578 Laaipek on the Cape West Coast has identified no significant impacts to pre-colonial archaeological material that will need to be mitigated prior to proposed development activities.

Shelly beach deposits occur over a large portion of the subject property, which are probably features of late Pleistocene, Last Interglacial shoreline deposits. Such deposits have also been identified further north at Dwarskersbos and are of considerable palaeontological importance.

With regard to the proposed housing development of Erf 578 Laaipek, the following recommendations are made.

- Bulk earthworks and excavations must be monitored by a professional archaeologist. Alternatively, this task could be undertaken in consultation with an Environmental Control Officer (ECO).
- Vegetation clearing operations must be monitored by a professional archaeologist. This task could also be undertaken in consultation with the ECO.
- Should any human burials be uncovered during excavations, these should immediately be reported to the South African Heritage Resources Agency (Att: Ms Mary Leslie: 462 4502), or Heritage Western Cape (Att: Dr A. Jerardino: 483 9692). Human burials should be treated sensitively at all times.
- Should any shipwreck material (such as wooden beams, etc) be uncovered during excavations and bulk earthworks, these should immediately be reported to the Maritime Archaeologist at the South African Heritage Resources Agency (Att: Mr Jonathan Sharfman: 462 4502).
- Bulk earthworks and excavations must be inspected by a professional palaeontologist.

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1. INTRODUCTION

1.1 Background and brief

Envirodinamik¹, on behalf of Tarsius Agtien (Edms) Bpk requested that the Agency for Cultural Resource Management (ACRM) conduct a Phase 1 Archaeological Impact Assessment (AIA) for a proposed housing development on Erf 578 Laaipek on the Cape West Coast.

The proposed rezoning and subdivision of the subject property entails the construction of approximately 216 single residential units with internal roads and services. Provision is also made for Public Open Space.

The property is currently zoned Undetermined.

The extent of the proposed development (about 19 ha) falls within the requirements for an archaeological impact assessment as required by Section 38 of the South African Heritage Resources Act (No. 25 of 1999).

The aim of the study is to locate and map archaeological heritage sites and remains that may be negatively impacted by the planning, construction and implementation of the proposed project, to assess the significance of the potential impacts and to propose measures to mitigate against the impacts.

Consulting palaeontologist Dr John Pether has been appointed to undertake a specialist palaeontological assessment of the proposed development.

2. TERMS OF REFERENCE

The terms of reference for the study were:

- to determine whether there are likely to be any archaeological sites of significance within the proposed site;
- to identify and map any sites of archaeological significance within the proposed site;
- to indicate the sensitivity and conservation significance of archaeological sites potentially affected by the proposed development;
- to assess the status and significance of any impacts resulting from the proposed development; and
- to identify mitigatory measures to protect and maintain any valuable archaeological sites that may exist within the site.

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3. THE STUDY SITE

A locality map of the study area is illustrated in Figure 1.

An aerial photograph of Erf 578 Laaiplek is illustrated in Figure 2.

A site development plan is illustrated in Figure 3.

Erf 578 Laaiplek (at S° 32 45 694 E° 18 09 454 on map datum WGS 84) is located on the coast, immediately to the north of Laaiplek, on the Cape West Coast. The shoreline area is characterised by a long sandy beach. The north western border of the site abuts the Pelican Beach Holiday Resort. The flat, vacant site is fairly severely disturbed and degraded as a result of heavy pedestrian traffic. The eastern portion of the site, and its boundary with an existing residential development is, particularly severely disturbed. Numerous footpaths from this area cut across the site leading down to the beach. A spit of deflated land running along almost the entire length of the western portion of the property, occurs immediately behind the low frontal dunes. There is also some dumping on the site. A large portion of the site is infested with alien vegetation, resulting in low archaeological visibility (Figures 4-9). There are no significant landscape features on the site. The surrounding land use comprises beach and Public Open Space and residential development to the south and east.

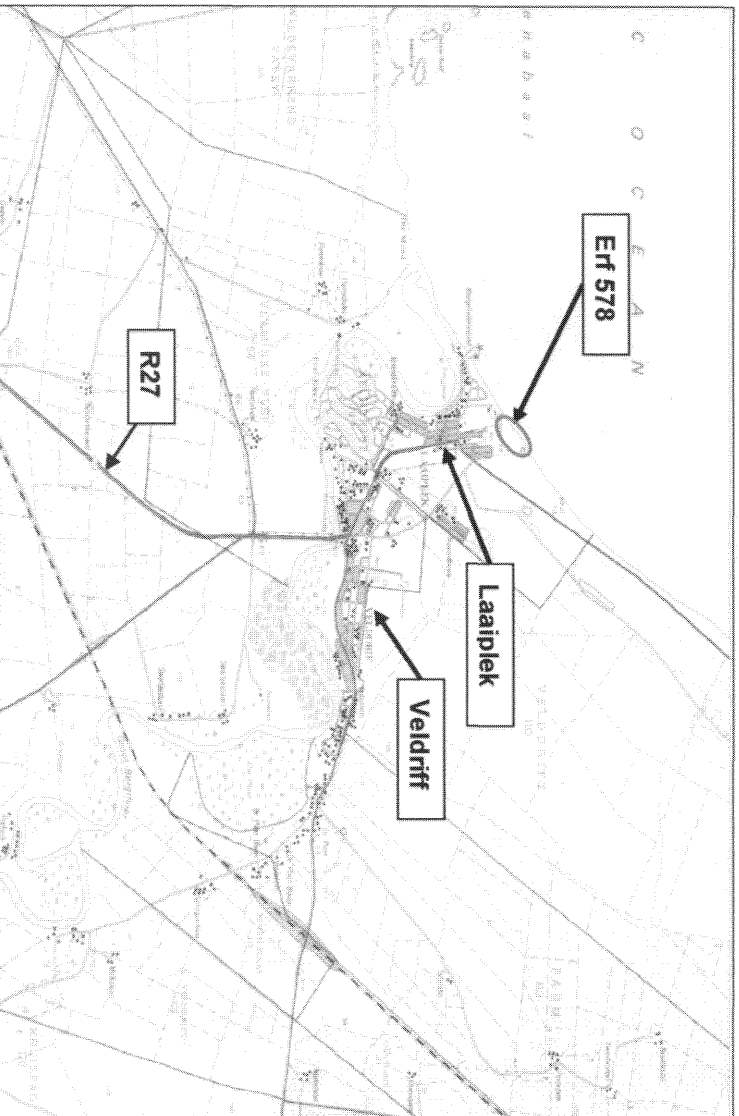


Figure 1. Locality map (3218 CB & CA Aurora)



Figure 2. Aerial photograph of the study site.





Figure 4. View of the site facing south, taken



Figure 6. View of the site facing west.



Figure 5. View of the site facing south east.



Figure 7. View of the site facing north east.

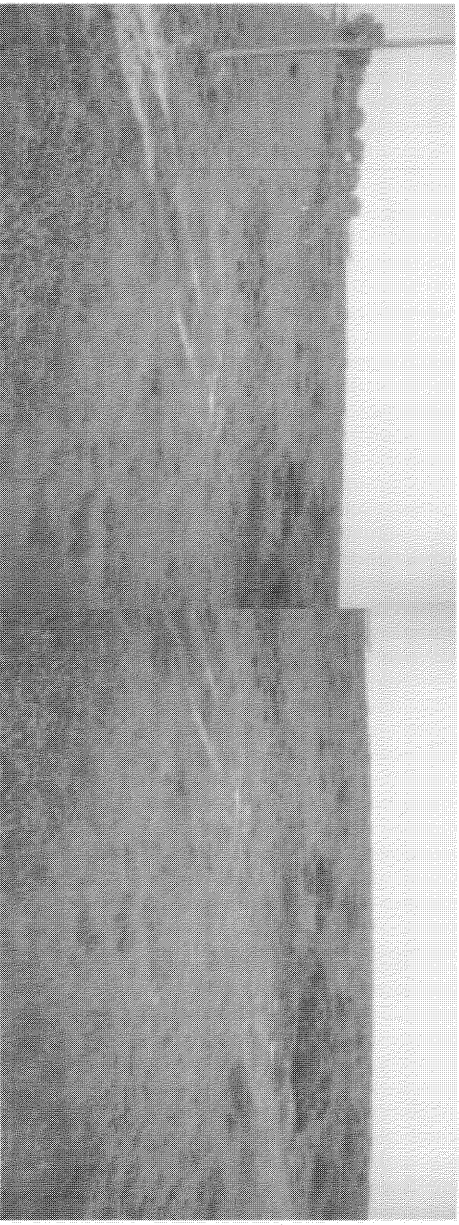


Figure 8. View of the site facing south.

Figure 9. View of the site facing south west

4. APPROACH TO THE STUDY

4.1 Method of survey

The approach followed in the archaeological study entailed a foot survey of Erf 578 Laaipek.

The archaeological assessment took place on the 21st of June, 2006.

A desktop study was also undertaken.

4.2 Constraints and limitations

A large portion of the property is infested with alien vegetation, resulting in low archaeological visibility.

4.3 Identification of risk sources

Human burials and shipwreck material may be exposed or uncovered during bulk earthworks and excavations.

4.4 Results of the desk top study

Archaeological research on the Cape West Coast, between Elands Bay and Draaihoek (north of Dwarskroos), has established that there was human occupation present in the sandy dune areas adjacent the coastline over the last 3000 years (Jerardino 2003). Most of the archaeological sites consist of thin scatters of dispersed shell, associated with bone, ostrich eggshell stone artefacts and pottery. Similar-type Later Stone Age (LSA) sites, containing shell, ostrich eggshell, stone artefacts and decorated pottery have also been recorded south of Draaihoek (Kaplan 2005). Jerardino (2003) has suggested that most of these sites, in the low, deflated sandy areas adjacent the shoreline, appear to result from brief, episodic occupations.

Along the alignment of the now-tarred West Coast Road, between the Berg River (at Laaipek) and Rocher Pan, there are a number of deflated hollows in the veld inland of the shoreline area, which contain small numbers of stone artefacts, a few potsherds and occasional pieces of ostrich eggshell (Parkington & Manhire 1988).

Archaeological sites have also been recorded in the dune cordon at Rocher Pan and Die Duine (Kaplan 1998, 1997), while Rudner (1968) described LSA shell middens among the dunes at Duinefontein and Die Vlei. These sites typically consist of large scatters of white sand mussel (Donax serra) with bones and occasional pieces of ostrich eggshell and stone artefacts.

Further south, at Dwarskersbos, low density scatters of LSA tools and pottery have been located east of the main road running through the town (Kaplan 2006), while even further south, several LSA shell middens have also been recorded between Laaipek and Dwarskersbos (Hart & Miller 1994). Ancient tidal fishtraps (*viswywers*) have been described at Swartpunt, south of the mouth of the Berg River (Hart & Halkett 1992). This group of fishtraps is one of the best known examples on the west coast.

In addition to the pre-colonial archaeological heritage remains described above, extensive sets of well-preserved shelly beach deposits at Dwarskersbos are features of late Pleistocene, Last Interglacial shoreline deposits that occur widely in the area (Kaplan 2005b, 2006; Pether 2004). These beach deposits are of considerable palaeontological importance, as they provide a record of changes in faunal communities with time, record historical sea-level changes, as well as preserve fossil remains. Another significance of these types of coastal deposits, of increasing importance to date, is in the evaluation of geohazards and evidence of earth tremors (John Pether pers. comm.).

4.4.1 Shipwrecks

It is important to note that a number of shipwrecks are also known to occur in the St Helena Bay, including the Dutch East India Company (VOC) Gouden Buys (1693) which went down near the mouth of Berg River, at Laaipek. To date, no shipwreck material has been recovered from the St. Helena Bay shoreline.

Below is a list of the known shipwrecks in the St. Helena Bay area².

SHIP	AREA	DATE
Columbus	Berg River mouth	1885
Friends Goodwill	St Helena Bay	1840
Good Hope	St Helena Bay	1910
Huis te Vlietter	St Helena Bay	1731
Reflector	St Helena Bay	1851
Gouden Buys	St Helena Bay	1693
Perimede	Dwarskersbos	1860
Barbara	Berg River mouth	1868
Paparoa	St Helena Bay	1926

² Shipwreck information made available by Mr John Gribble, until recently, the maritime archaeologist at the South African Heritage Resource Agency (SAHRA)

5. LEGISLATIVE REQUIREMENTS

5.1 The National Heritage Resources Act (Act No. 25 of 1999)

‘...any development or other activity which will change the character of a site exceeding 5 000m², or the rezoning or change of land use of a site exceeding 10 000 m², requires an archaeological impact assessment in terms of the National Heritage Resources Act (No. 25 of 1999)’.

5.1.1 Structures (Section 34 (1))

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 South African Heritage Resources Agency (SAHRA), or Heritage Western Cape.

5.1.2 Archaeology (Section 35 (4))

No person may, without a permit issued by the SAHRA or Heritage Western Cape, destroy, damage, excavate, alter or remove from its original position, or collect, any archaeological material or object.

5.1.3 Burial grounds and graves (Section 36 (3))

No person may, without a permit issued by SAHRA or Heritage Western Cape, destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years, which is situated outside a formal cemetery administered by a local authority.

6. IMPACT ASSESSMENT AND DESCRIPTION

No archaeological heritage remains were located during the baseline study of Erf 578 Laaiplek

However, much of the subject property, particularly the back portion, is covered with shelly beach deposits. These typically comprise extensive and sometimes substantial surface scatters of Venerupis corrugate (Venus clams), White Sand Mussel (Donax serra) and other small bivalves. Large numbers of Trough Shell (Lutraria lutraria) also occur. Some Black Mussel (Choromytilus meridionalis) and small amounts of ribbed mussel (Aulacomya ater) are also present. The shell occurs in open spaces surrounded by thick bush. A large amount of the associated smaller shell fragments are edge rounded and water worn.

These beach deposits are most likely features of late Pleistocene, Last Interglacial shoreline deposits (Dr John Pether Consulting Palaeontologist pers. comm.). Such deposits have been identified further north at Dwaarskroepbos (Kaplan 2003, 2005b; Pether 2004), but so far have not been described from the beaches at Laaiplek.

Much less shell is apparent in the wind deflated area behind the low (eroded) frontal dunes, and these more likely represent storm beach deposits, or tidal wash-ups.

7. IMPACT STATEMENT

The impact of the proposed housing development of Erf 578 Laaiplek on important archaeological heritage remains is likely to be very low.

Unmarked human burials and shipwreck material may, however, be uncovered or exposed during bulk earthworks and excavations.

Excavations for services may also expose shelly beach deposits of Holocene and Late Pleistocene significance.

8. RECOMMENDATIONS

With regard to the proposed development of Erf 578 Laaiplek, the following recommendations are made.

- Bulk earthworks and excavations must be monitored by a professional archaeologist. Alternatively, this task could be undertaken in consultation with an Environmental Control Officer (ECO).
- Vegetation clearing operations must be monitored by a professional archaeologist. This task could also be undertaken in consultation with the ECO.
- Should any unmarked human burials be uncovered during excavations, these should immediately be reported to the South African Heritage Resources Agency (Att: Ms Mary Leslie: 462 4502), or Heritage Western Cape (Att: Dr A. Jerardino: 483 9692).
- Should any shipwreck material (such as wooden beams, etc) be uncovered during excavations and bulk earthworks, these should immediately be reported to the Maritime Archaeologist at the South African Heritage Resources Agency (Att: Mr Jonathan Sharfman: 462 4502).
- Bulk earthworks and deep excavations must be inspected by a professional palaeontologist.

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