PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT PROPOSED HOUSING AND ASSOCIATED DEVELOPMENT OF PELICAN PARK PHASES 2 AND 3 PELICAN PARK CAPE TOWN

Prepared for

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By

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Executive summary

Chand Environmental Consultants requested that the Agency for Cultural Resource Management undertake a specialist Phase 1 Archaeological Impact Assessment of Pelican Park Phases 2 and 3, an area extending from Lotus River southwards to the coast between Strandfontein and Rondevlei/Zeekoevlei, in the Western Cape Province.

Proposed development options comprise various uses such as residential housing, business, light industrial, mixed use, schools, community facilities and public open space.

The affected property was zoned about 25 years ago for housing purposes, but to date has only been partially developed for housing.

The proposed activity will be undertaken on the remainder of Erf 829 Pelican Park.

The extent of the proposed development (381.5 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 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.

A thin scatter of fragmented shellfish and between 30 and 40 pieces of ostrich eggshell were located on a partially vegetated and recently burnt dune top alongside a well-used sandy track in Pelican Park Phase 2, about 400 m south west of the existing residential development of Peacock Close.

Despite a systematic and detailed search, no archaeological heritage remains were located in Pelican Park Phase 3.

The Phase 1 Archaeological Impact Assessment has identified no significant impacts to pre-colonial archaeological material that will need to be mitigated prior to the proposed development activities.

Human burials may, however be exposed or uncovered during bulk excavations and earthworks.

Potentially valuable fossil remains may also be intersected or exposed during bulk excavations.

With regard to the proposed development of Pelican Park Phases 2 and 3, the following recommendations are made:

- If appointed, the Environmental Control Officer (ECO) is to be briefed by a professional archaeologist what to look out for during vegetation clearing operations and preparation of the site for construction purposes.
- Contractors, staff and plant operators should be briefed what to look out for, particularly during vegetation clearing operations and earthworks.
- Heritage remains uncovered or disturbed during vegetation clearing and earthworks should not be disturbed until inspected by the ECO and verified by a professional archaeologist.
- Trenching and excavations should be inspected by a qualified palaeontologist at regular intervals.
- Should any human remains be disturbed, exposed or uncovered during earthworks, these should immediately be reported the South African Heritage Resources Agency (Mrs Mary Leslie @ 021 462 4502).
- The construction Environmental Management Plan (EMP) should detail reporting procedures to manage the discovery of any heritage artefacts during construction. This would include the recovery or exposure of human burials during construction activities, for example.

1. INTRODUCTION

1.1 Background and brief

Chand Environmental Consultants requested the Agency for Cultural Resource Management to undertake a specialist Phase 1 Archaeological Impact Assessment (AIA) of Pelican Park Phases 2 and 3, in the Western Cape Province.

The proposed project involves a residential housing development, incorporating various associated uses, such as business, light industrial, mixed use, schools, community facilities and public open space.

The affected property was zoned about 25 years ago for housing purposes, but to date has only been partially developed for housing.

The extent of the proposed development (381.5 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 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.

2. TERMS OF REFERENCE

The terms of reference for the archaeological 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 assess the sensitivity and conservation significance of archaeological sites within the proposed site;
- 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 proposed site

3. THE STUDY SITE

A 1:50 000, site locality map is illustrated in Figure 1.

An aerial photograph of the affected property is illustrated in Figure 2.

The proposed activity will be undertaken on the remainder of Erf 829 Pelican Park.

Pelican Park extends from Lotus River southwards to the coast between Strandfontein and Rondevlei/Zeekoevlei. The site is bounded on the east by Strandfontein Road (M17), Baden Powell Drive on the south and the Strandfontein sewerage ponds and Zeekoevlei on the west. The large site is vacant, save for the relatively recent residential housing developments of Pelican Park, Peacock Close and Pelican Heights (refer to Figure 2).

The site comprises a series of large, heavily vegetated parabolic and transverse sand dunes, with several large wetlands in between (Figure 3). The southern portion of the property is also heavily vegetated (Figure 4), while the southwestern portion is severely degraded, due mainly to the area being utilized as a seagull nesting colony (Figure 5). Dumping and illegal sand mining is widespread over those parts of the site that are close to the residential housing developments. Numerous footpaths and small tracks cut across the site. Dune mole rat activity is extensive across the entire site. Several large gravel service roads intersect the property in the northern portion of the site. The foundations and ruins of some modern buildings also occur in this area. Some bulk earthworks are also evident in this northern area.

Although not part of the current study, the possible realignment of Baden Powell Drive behind the coastal primary dunes was also carefully searched for archaeological heritage remains (Figure 6). This area is also quite degraded and disturbed.

4. APPROACH TO THE STUDY

4.1 Method of survey

The approach followed in the archaeological study entailed a detailed foot survey of Pelican Park Phases 2 and 3.

The site visit and assessment took place over two days, on the 26th of April and the 19th of May 2005.

Visible archaeological occurrences were recorded and given a co-ordinate using a Gamin Gecko GPS set on map datum WGS 84.

A desktop study was also undertaken.

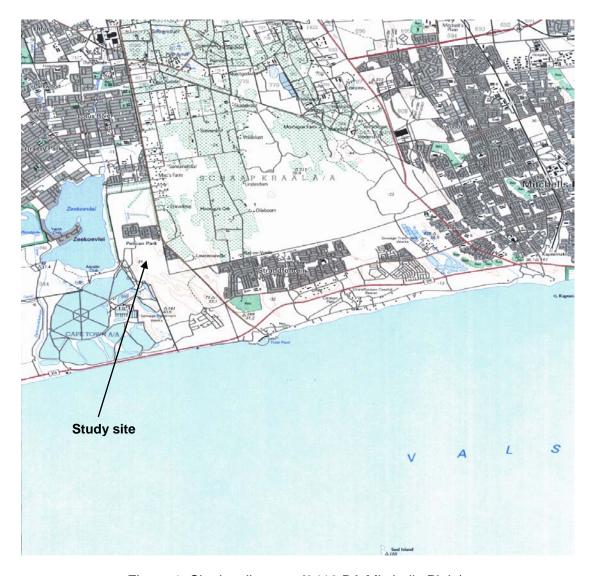


Figure 1. Site locality map (3418 BA Mitchells Plain).

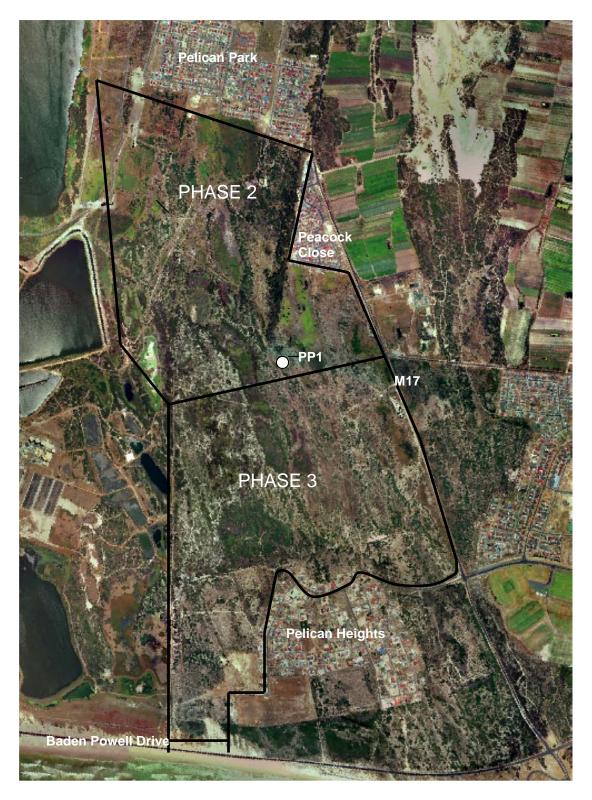


Figure 2. Aerial photograph of the site.



Figure 3. View of the site facing north. Note the wetland areas between the high dunes.



Figure 4. View of the site facing south. Pelican Heights can be seen to the left of the plate



Figure 5. View of the site facing north. The picture was taken from Baden Powell Drive.



Figure 6. View of the site facing west. Pelican Heights is to the right of the plate.

Baden Powell Drive and the False Bay coastline are to the left.

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. LIMITATIONS

A large portion of the study area is very well vegetated resulting in low archaeological visibility.

7. IMPACT ASSESSMENT AND DESCRIPTION

7.1 Pelican Park Phase 2

PP 1 (GPS reading S 34° 04 495 E 18° 32 024)

A thin scatter of fragmented shellfish and between 30 and 40 pieces of ostrich eggshell were located on a partially vegetated and recently burnt dune top alongside a small, but well-used sandy track overlooking a large wetland area, about 350-400m southwest of the existing residential development of Peacock Close (Figure 7). A small pipeline runs alongside the sandy track, which has also been marked with orange bunting.

The shellfish remains comprise mainly small fragments of weathered Black Mussel (<u>Choromytilus meridionalis</u>), with some fragments of weathered limpet (genus <u>Patella</u>) also occurring. Several whole <u>Patella cochlear</u> were also counted. One large whelk was noted.

The ostrich eggshells are mainly small fragments, but several large pieces were also noted.

Despite a detailed search of the immediate surrounding area, no other cultural remains or artefacts were located.

The above remains have been graded low local significance and no mitigation is required.



Figure 7. PP 1

7.2 Pelican Park Phase 3

No archaeological heritage remains were located in Pelican Park Phase 3.

Research has shown that LSA hunter-gatherers focused their occupation close to areas where shellfish could be collected from the rocky shoreline (Kaplan 1993). This may explain the lack of pre-colonial archaeological sites on the Pelican Park land that lies adjacent to a long stretch of sandy beach.

7.3 Other finds in the general study area

No archaeological heritage remains were located during a baseline study of Pelican Park Phase 1, which is located immediately north of Pelican Park (Kaplan 2001).

A thin scatter of fragmented shellfish and several fragments of ostrich eggshell were located on a highly degraded sand dune alongside Strandfontein Road (M17) (Kaplan 2002).

Buried midden material from the late 19th or early 20th century that may have accumulated as a result of a small trek-fishing community, has been documented behind the primary dunes at Capricorn Park, about 10 km west of Pelican Park (Halkett & Hart n.d.).

According to Mr Dalton Gibbs (pers. comm. 2002) the reserve manager at the Rondevlei Nature Reserve, a Later Stone Age (LSA) shell midden has been located in the northern portion of the reserve, as well as a single Dutch clay pipe.

Isolated scatters of Stone Age artefacts have been recorded along the beach between Strandfontein and Macassar (Kaplan 1993).

Rudner (1968) also described several shell middens behind the primary dunes at Strandfontein and Swartklip.

Activities that related to the Battle of Muizenberg (1795) did not extend this far to the east with most of the skirmishes restricted to the areas west of Zandvlei (Halkett & Hart n.d.).

Even in the historic period, archaeological material is scarce in the general study area, the unconsolidated sandy soils being unsuitable for most agricultural activities (Halkett & Hart n.d.).

Some fossil material has also been found on the Anglo Alpha sand mine near Zandvliet/Macassar (Halkett & Hart 1997), to the east of the study area.

8. IMPACT STATEMENT

The impact of the proposed housing and mixed-use development in Pelican Park Phases 2 and 3 on precolonial archaeological heritage remains is likely to be low.

The probability of locating significant precolonial archaeological remains during implementation of the proposed project is likely to be improbable.

Human burials may, however, be uncovered or exposed during bulk earthworks and excavations.

Excavations for foundations and services, for example, may also expose or uncover buried archaeological and palaeontological (fossil) remains beneath the aeolian (wind-blown) sands.

9. RECOMMENDATIONS

With regard to the proposed development of Pelican Park Phase 2 and 3, the following recommendations are therefore made:

- If appointed, the Environmental Control Officer (ECO) must be briefed by a professional archaeologist what to look out for during vegetation clearing operations and preparation of the site for construction purposes.
- Contractors, staff and plant operators should be briefed by the ECO and archaeologist what to look out for, particularly during vegetation clearing operations and earthworks.
- Heritage remains uncovered or disturbed during vegetation clearing and earthworks should not be disturbed until inspected by the ECO and verified by a professional archaeologist.
- Trenching and excavations must be inspected by a qualified palaeontologist at regular intervals.
- Should any human remains be disturbed, exposed or uncovered during earthworks, these should immediately be reported the South African Heritage Resources Agency (Mrs Mary Leslie @ 021 462 4502).
- The construction EMP should detail reporting procedures to manage the discovery of any heritage artefacts during construction. This would include the recovery or exposure of human burials during construction activities, for example.

10. REFERENCES

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