

**PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT
PROPOSED DEVELOPMENT
SCHULPHOEK POINT
HERMANUS**

Prepared for

DE VILLIERS BROWNLIE ASSOCIATES

By

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EXECUTIVE SUMMARY

A Phase 1 Archaeological Impact Assessment of the proposed Schulphoek Village development in Hermanus has identified significant potential impacts to pre-colonial archaeological material that will need to be mitigated and managed prior to development activities.

Archaeological monitoring of vegetation clearing operations and bulk earthworks during the Construction Phase of the project is also recommended.

1. INTRODUCTION

1.1 Background and brief

De Villiers Brownlie Associates requested that the Agency for Cultural Resource Management undertake a Phase 1 Archaeological Impact Assessment (AIA) of Erf 243 Hermanus, in the Western Cape Province.

The proposed Schulphoek Village project provides for a mixed-use development, envisaging a core residential village, an African Village comprising guest lodge/chalet/backpackers lodge, a caravan and camping site, a restaurant and shops, an African craft market, and a conference centre.

A Milkwood Heritage Area comprising forest walks and Xhosa initiation site is also envisaged.

An abalone plant and small mariculture industry is also proposed.

The extent of the property is about 40 ha.

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

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 within the proposed site;
2. to identify and map any sites of archaeological significance within the proposed site;
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;
5. to identify mitigatory measures to protect and maintain any valuable archaeological sites that may exist within the proposed site; and
6. to propose actions for inclusion in a Construction Environmental Management Plan for the proposed project.

3. STUDY APPROACH AND DOCUMENTATION OF ARCHAEOLOGICAL SITES

The approach used in the study entailed a baseline survey of Erf 243 Hermanus.

A desktop study was also undertaken.

The South African coastal zone is a sensitive, threatened and vulnerable archaeological region (Kaplan 1993). The majority of coastal archaeological sites are located within 300 m of the shoreline. As development spreads along the coastline, archaeological sites have come under increasing threat and many sites in the Hermanus region have already been destroyed completely.

Planning for the coastal zone must therefore take account of this rich archaeological heritage. With the increased pressure to develop the shoreline area, new settlements are often built on top of much older (precolonial) settlements, resulting in the irrecoverable loss of archaeological material and remains.

More than 50 archaeological sites have been recorded in the Hermanus region (Kaplan 1993). These include mostly Later Stone Age¹ (LSA) sites, but Middle Stone Age² (MSA), as well as Early Stone Age³ (ESA) sites also occur.

The Hermanus coastal zone was very attractive to prehistoric LSA hunter-gatherers, who camped inshore and harvested the abundant shoreline resources, fishing and collecting shellfish remains in the rocky intertidal and tidal zones. It is here that large amounts of shellfish were processed and consumed.

It is therefore not surprising that many shell middens (ancient rubbish dumps) in the Hermanus area have been recorded. Shell middens have been located at Harry's Bay, Nuwebaai, Mudge Point, Vermont, Onrus River Mouth, Sandbaai and Swartdam (Kaplan 1993).

Shell middens have also been recorded at Schulphoek Point (Rudner 1968), while ancient tidal fishtraps (*viswywers*) have been recorded at Onrus River Mouth (Kaplan 1993).

4. THE STUDY SITE

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

An aerial photograph of the site is illustrated in Figure 2.

A proposed conceptual development plan is illustrated in Figure 3.

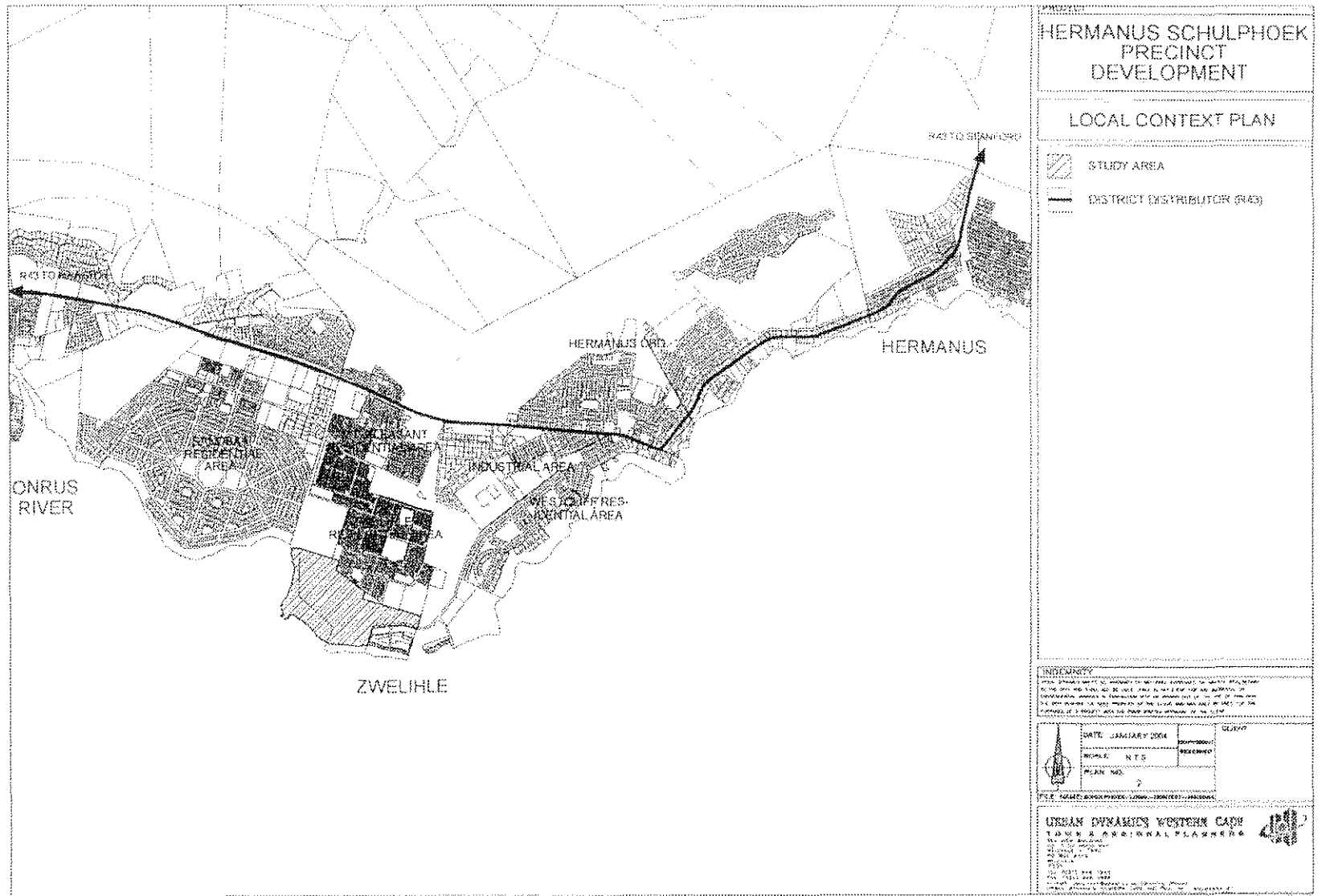
Erf 243 Hermanus is characterised by a large indigenous Milkwood forest, which covers more than 40% of the affected property. The forest is criss-crossed by a number of small tracks and footpaths used mainly by nearby residents of Zwelihle and Mount Pleasant. A large excavation scar, probably the result of illegal sand mining, and an informal road, cuts through the centre of the forest down to the rocky shoreline (see Figure 2). Illegal dumping in this area is also widespread.

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

² A term referring to the period between 250 000 and 20 000 years ago.

³ A term referring to the period between 2 million and 250 000 years ago.

Figure 1. Archaeological study, Schulphoek Point, Hermanus Locality Plan.



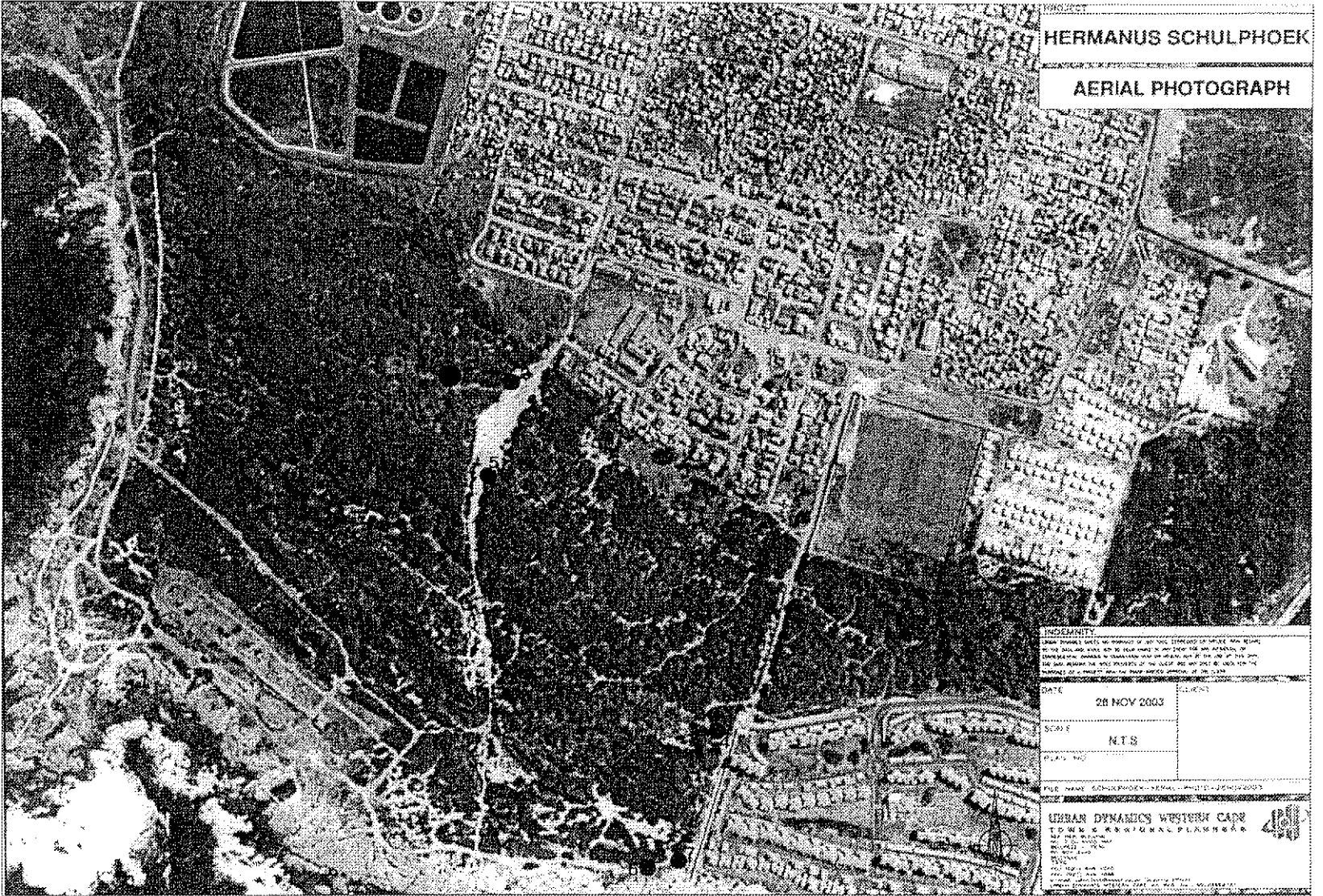


Figure 2. Archaeological study, Schulphoek Point, Hermanus. Aerial photograph of the site.

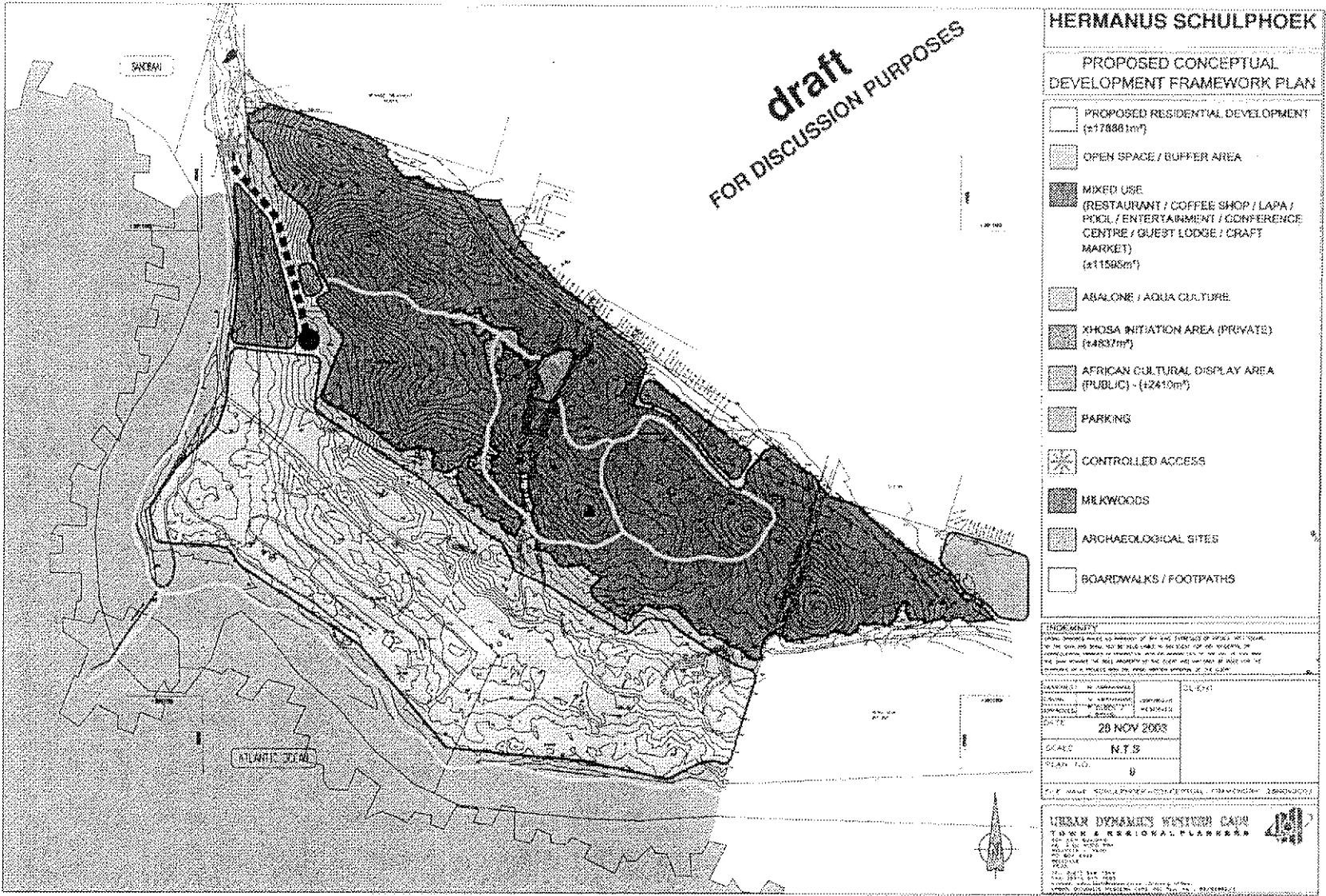


Figure 3. Archaeological study, Schulphoek Point, Hermanus. Proposed Conceptual Development Plan.

The remainder of the property is infested with alien vegetation (Figures 4-6). A large excavation pit (infested with alien vegetation) occurs in the south-eastern portion of the property, close to the Beach Club residential development.

Severe alteration of the immediate shoreline area has also taken place, mainly as a result of the development of a large public recreational area, which includes braai and picnic facilities, tidal pools, parking area, change room facilities, wide gravel roads and coastal tracks (Figures 7 & 8 & see Figure 2).

Extensive erosion of the shoreline area and frontal dunes is also very evident.

5. LEGISLATIVE REQUIREMENTS

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

5.1.1 Archaeology (Section 35 (4))

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

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

No person may, without a permit issued by the South African Heritage Resources Agency (SAHRA), 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.

5.2 Application requirements and procedure

Permit applications must be made on the official form:

- *Application for permit to destroy: Archaeological and palaeontological sites and meteorites;*
- *Application for permit: Burial Grounds and Graves.*

Permit application forms are available from SAHRA, and Heritage Western Cape



Figure 4. Archaeological study, Schulphoek Point, Hermanus. Site facing south.



Figure 5. Archaeological study, Schulphoek Point, Hermanus. Site facing west.

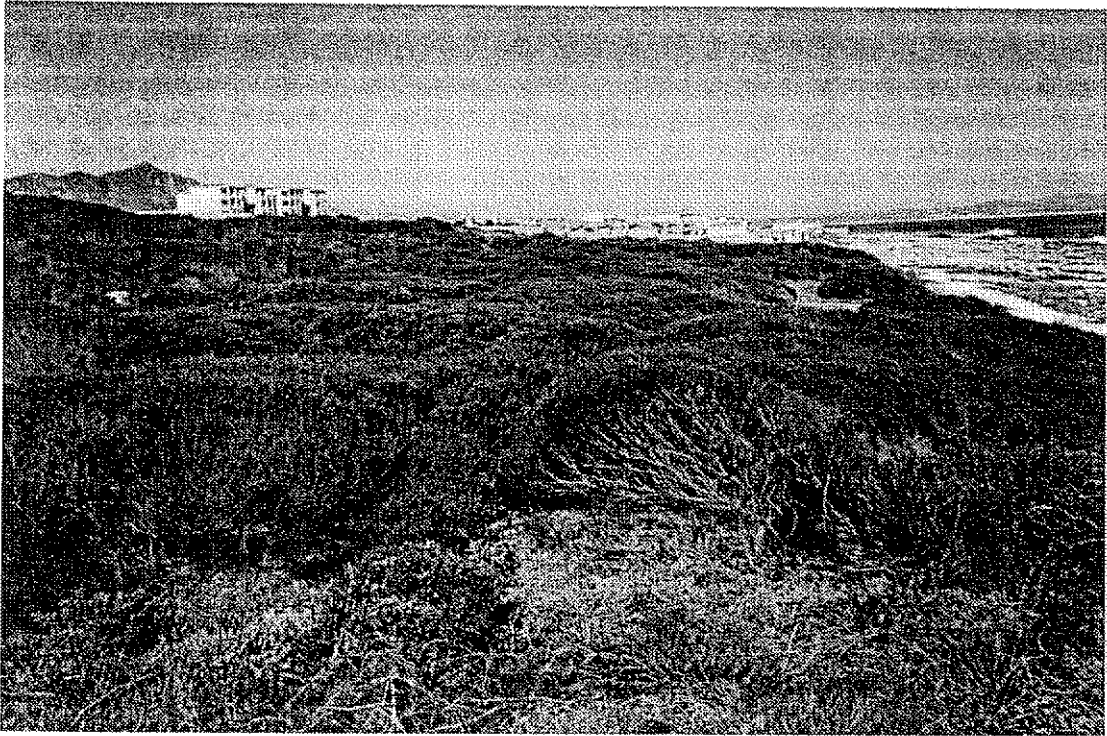


Figure 6. Archaeological study, Schulphoek Point, Hermanus. Site facing east and Beach Club development.

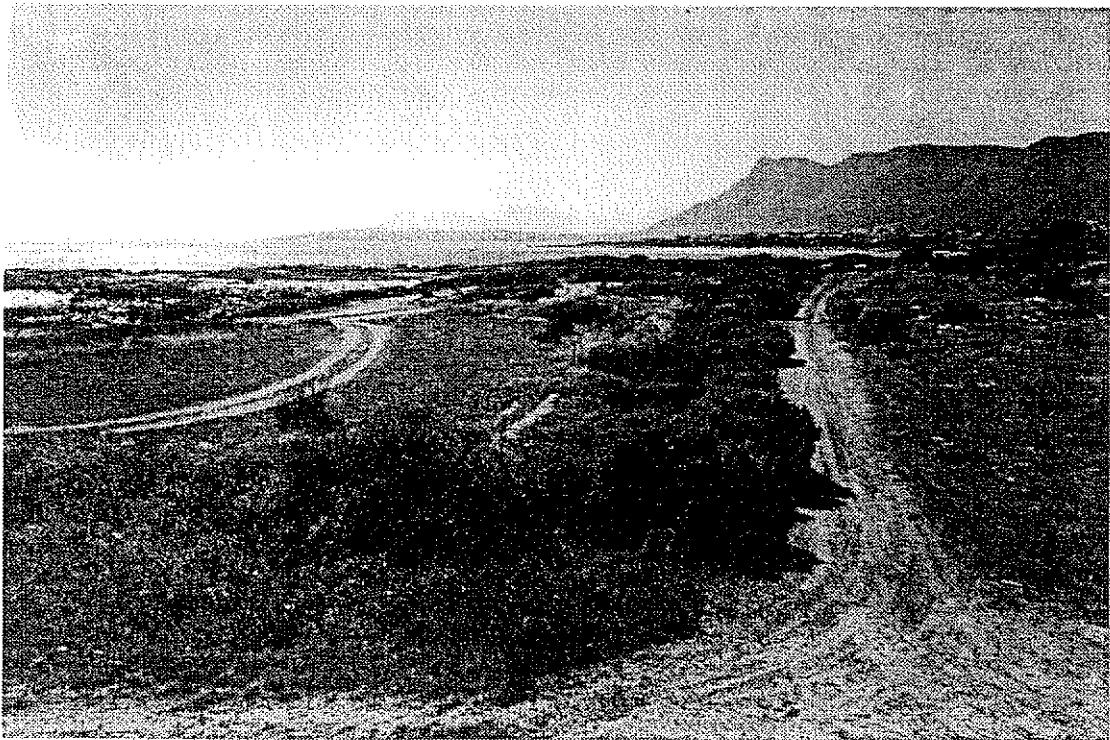


Figure 7. Archaeological study, Schulphoek Point, Hermanus. View of old development

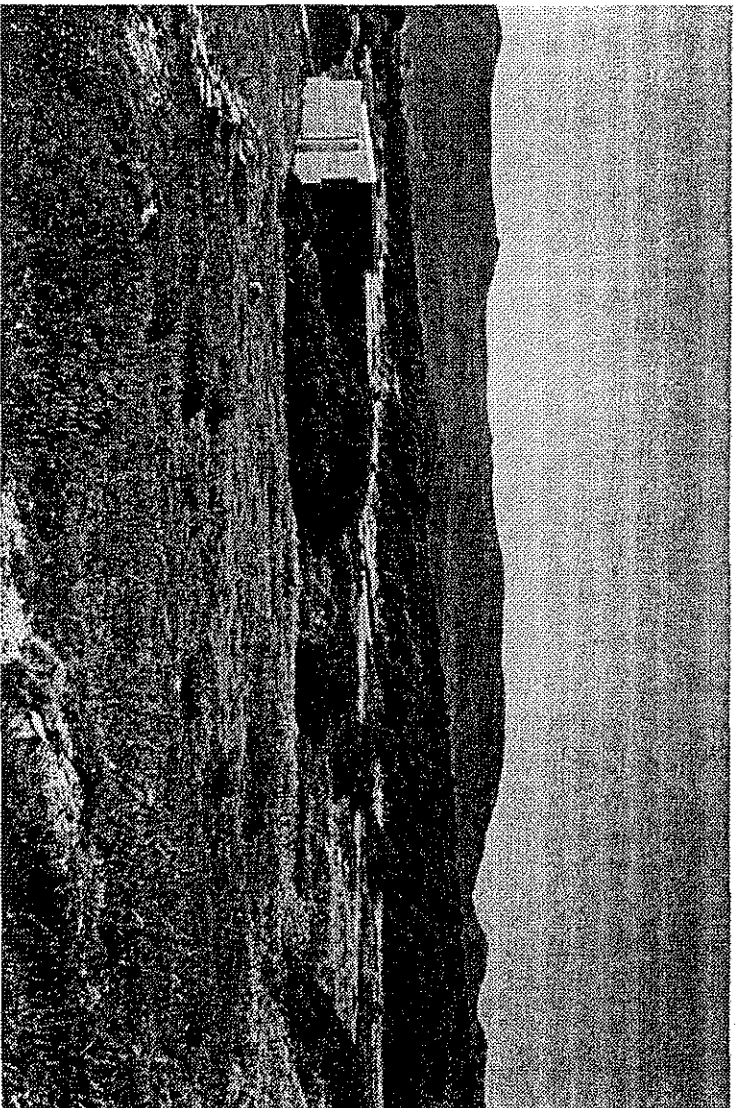


Figure 8. Archaeological study, Schulphoek Point, Hermannus. View of old development

6. CONSTRAINTS AND LIMITATIONS

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

Access to the Milkwood Forest is also restricted, despite the existence of a number of small tracks and footpaths.

7. IDENTIFICATION OF POTENTIAL RISKS

The following project actions may likely impact negatively on archaeological remains.

The actions are most likely to occur during the Construction and Operation Phase of the proposed project.

During the Construction Phase

- Vegetation clearing operations in the heavily (alien) infested shoreline area may expose hidden shell middens.
- Bulk earthworks and excavations for services and roads for example may expose or uncover buried shell middens and human burials.

During the Operation Phase

- The development and operation of proposed forest walks may impact negatively on precolonial Later Stone Age campsites in the Milkwood forest.

8. IMPACT ASSESSMENT AND DESCRIPTION

Seven archaeological sites were located during the baseline survey of Erf 243 Hermanus.

Figure 2 illustrates the location of archaeological sites recorded during the study.

The archaeological finds were recorded and given a co-ordinate using a Garmin Gecko 201 GPS set on map datum WGS 84.

SKP 1 (GPS reading S 34°25 731 E 19°12 298)

SKP 1 is located at the beginning of a small sand track entering the Milkwood forest about 30m east of Schulphoek Road, at the entrance to the property (Figure 9).

The site comprises a very thin scatter of shellfish fragments, mainly limpet species, some perlemoen (*Haliotis midae*) and *Turbo samarticus*, which occur among the low, wind-eroded and partially vegetated dunes, on either side of the sand track.

A few whole limpets (*Patella argenvillei*) also occur in the low deflated sands. One manuport, one quartzite chunk, and three quartzite flakes were also noted.

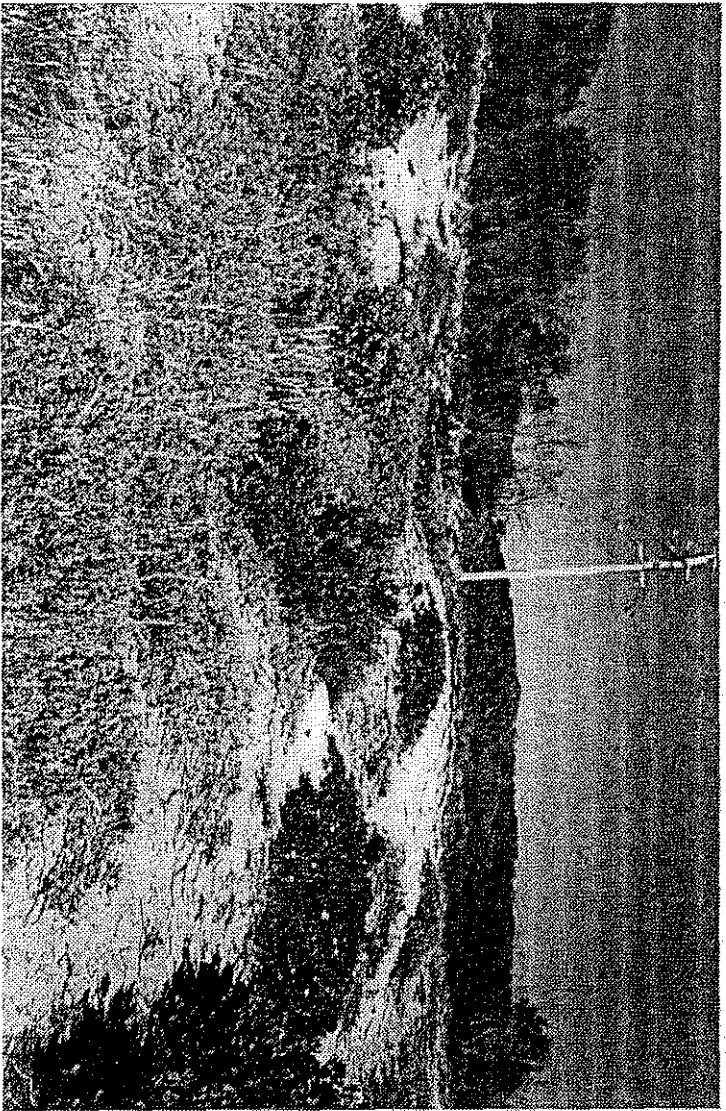


Figure 9. Archaeological study. Schuilphoek Point, Hermanus. SKP 1.

A few fragments of shellfish (mainly limpets and some perlemoen) have also been brought to the surface by extensive dune-mole rat activity. The immediate surrounding area is also very degraded as a result of heavy pedestrian traffic.

SKP 1 is severely disturbed.

Significance of find: **low**

Suggested mitigation: **none required**

SKP 2 (GPS reading S 34°25 943 E 19°12 573)

This Later Stone Age (LSA) shell midden is located on the crest of an extremely steep (dune) cutting about 200 m south of the access road to the illegal sand mine through the Milkwood forest (Figure 10).

Some in-situ shellfish (including large, bleached *Turbo samarticus*, large perlemoen, *Patella argenvillei* and *Patella granatina*) and some quartzite stone flakes are visible on the crest of the cutting within a dark 1 m thick capping of humic sand. Some shellfish, possibly of MSA origin, also occurs in the underlying Pleistocene sand/eroded limestone deposits.

Relatively large numbers of whole and fragmented shellfish (including *Patella granatina*, *Patella argenvillei* and some *operculum*), a few rough quartzite flakes, flaked quartzite cobbles, and some bleached bone, were also noted out of context on the slopes of the steep east-facing slopes, and in the road/track below the dune slope.

The site has largely been destroyed by illegal sand mining, which has cut through the dune and exposed the archaeological site.

Significance of find: **medium/potentially high**

Suggested mitigation: **the in-situ archaeological remains should be rescued by a professional archaeologist**

SKP 3 (GPS reading S 34°25 875 E 19°12 534)

The site, very likely a LSA hunter-gatherer campsite, is located in a large clearing in the Milkwood forest about 60-70 m west of SKP 2 (Figure 11 & see also Figure 3).

The campsite comprises an extensive scatter of shellfish remains (both whole and fragmented) and cultural material either side of a well-used footpath through the forest, in a large open clearing beneath mature Milkwood trees.

Large numbers of shellfish are present on the site, dominated by limpets species (*Patella argenvillei*, *Patella cochlear* and *Patella tabularis*), with *Turbo samarticus*, *operculum*, whelk, perlemoen and Black Mussel (*Choromytilus meridionalis*) also occurring.

Many stone tools are present on the site, including silcrete, quartzite and quartz flakes, chunks and miscellaneous retouched pieces. One silcrete scraper and one quartzite hammerstone was also noted, as well as a number of manuports. The quartzite and quartz could easily have been obtained locally. The source of the



Figure 10. Archaeological study, Schulphoek Point, Hermanus. SKP 2

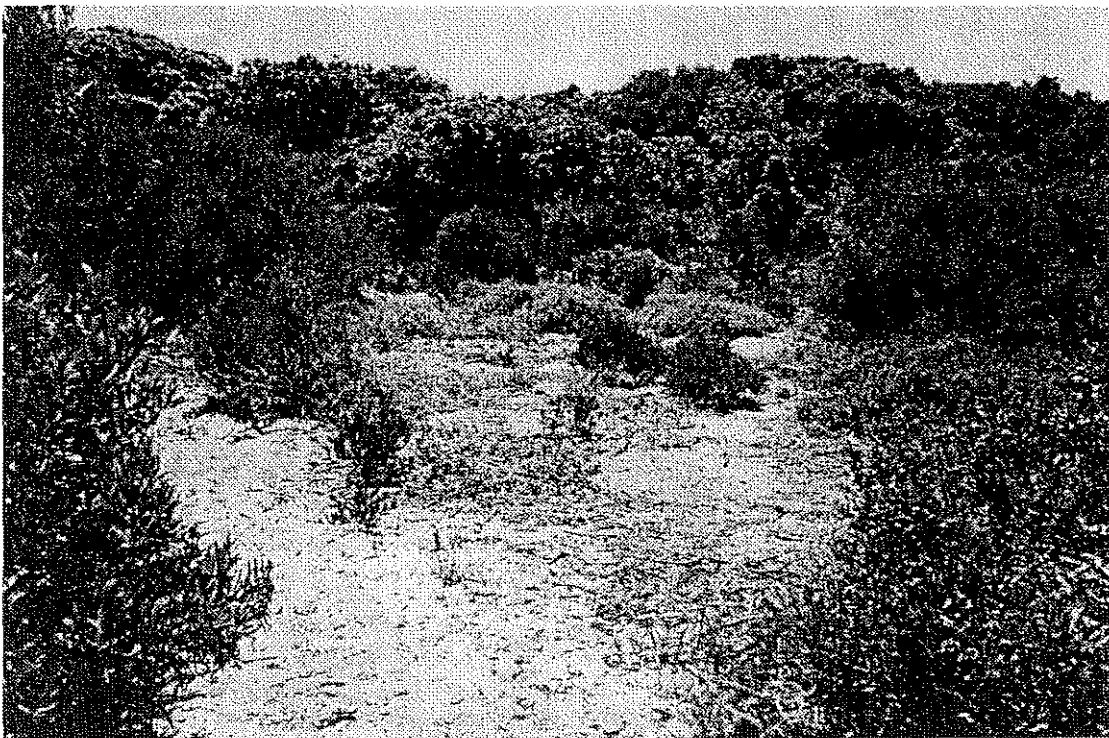


Figure 11. Archaeological study, Schulphoek Point, Hermanus. SKP 3

silcrete is uncertain, but may possibly have been sourced from a quarry close to the town of Botriver, alongside the R43 (Kaplan 2003).

Many pieces of Cape coastal pottery are also present on the site. These include both burnished and unburnished pieces. No decorated potsherds were noted.

Some ostrich eggshell pieces were also found.

Dune mole rat activity is extensive in the forest clearing and many of the sand mounds are associated with relatively large amounts of shellfish remains, suggesting that substantial shell midden material also occur below the surface.

SKP 3 is very disturbed, mainly as a result of heavy pedestrian traffic along the footpath through the forest. Despite the high impact, however, the site still retains some integrity.

Hunter-gatherer campsites (located in Milkwood forests) are extremely rare in the Western Cape. The only other comparable sites have been located at Hout Bay, Cape Point and Gansbaai (Tim Hart, Archaeology Contracts Office, University of Cape Town, pers. comm.), where the forest canopy provided both shelter and close proximity to the productive shoreline.

Smaller patches of shellfish remains and a few stone tools and some pottery were located in a clearing about 25m south east of the main campsite. Modern (i.e. cut/machine sawed) bone, bits of plastic and domestic debris are scattered about in this area, which is also very disturbed.

Significance of find: **potentially high**

Suggested mitigation: **the site should be investigated in more detail, and the archeological deposits systematically excavated by a professional archaeologist**

SKP 4 (GPS reading S 34°26 109 E 19°12 765)

A very thin scatter/patch of fragmented shellfish, and three small potsherds were located in a small footpath on the south-eastern boundary of Erf 243, alongside the Beach Club residential development.

The site is located in a small clearing surrounded by exotic Rooikrantz trees. The archaeological remains are mixed up with large amounts of building rubble, including broken tiles, bits of asbestos sheeting, plastic, glass and rusted metal bits, which are scattered around.

The surrounding area is very disturbed and degraded.

Significance of find: **low**

Suggested mitigation: **none required**

SKP 5 (GPS reading S 34°26 059 E 19°12 595)

Eight small pieces of pottery (no refits), and a few fragments of shellfish (*Turbo samarticus* and *Patella argenvillei*) were found in an open space on a heavily eroded sandbank alongside the illegal sand mine/road, about 250 m south of **SKP 2**.

The immediate surrounding area is very degraded.

Significance of find: **low**

Suggested mitigation: **none required**

SKP 6 (GPS reading S 34°26 193 E 19°12 692)

The site is located at the northern end of the beach, about 150-200 m south of the Beach Club residential development, on an eroded dune bank alongside a small coastal track/road (Figure 12). The track has cut through the frontal dunes alongside the shoreline, resulting in severe erosion and disturbance.

Relatively large numbers of surface shellfish remains (both naturally occurring beach deposits and archaeological) are scattered about on the sloping south facing remnant dune. These include mainly fragments (but also some whole shell) of *Patella cochlear*, *Patella argenvillei*, *Turbo samarticus* and perlemoen. Shellfish remains are also scattered about in the coastal track. Two rough quartzite flakes were found, while quartzite beach cobbles, probably manuports, were also noted.

The site is eroded and damaged as a result of the construction of the coastal track.

Significance of find: **low**

Suggested mitigation: **none required**

SKP 7 (GPS reading S 34°26 189 E 19°12 721)

SKP 7 is located about 30m north of **SKP 6**, at the end of the coastal track, on the edge/toe of the same severely eroded dune. The site comprises a few fragments of shellfish and a few whole shell, mainly limpet species. No other archaeological remains were noted.

Significance of find: **low**

Suggested mitigation: **none required**

It is important to note that remnant archaeological remains occur occasionally along the shoreline and among the eroded raised beach terraces at Schulphoek Point. These remains, (including **SKP 6 & SKP 7**), may well be the remains of some of the shell middens recorded by Rudner (1968) during his beach surveys undertaken in the 1950's and 1960's.

The large public recreational development at Schulphoek Point, including braai and picnic area, roads, buildings, tidal pools, etc. (built in the early 1990's), has very likely destroyed many of the previously recorded shell middens in this area. A few stone flakes and chunks and a few small potsherds were located in the large braai/picnic area. Dune mole rat activity is extensive in this area.

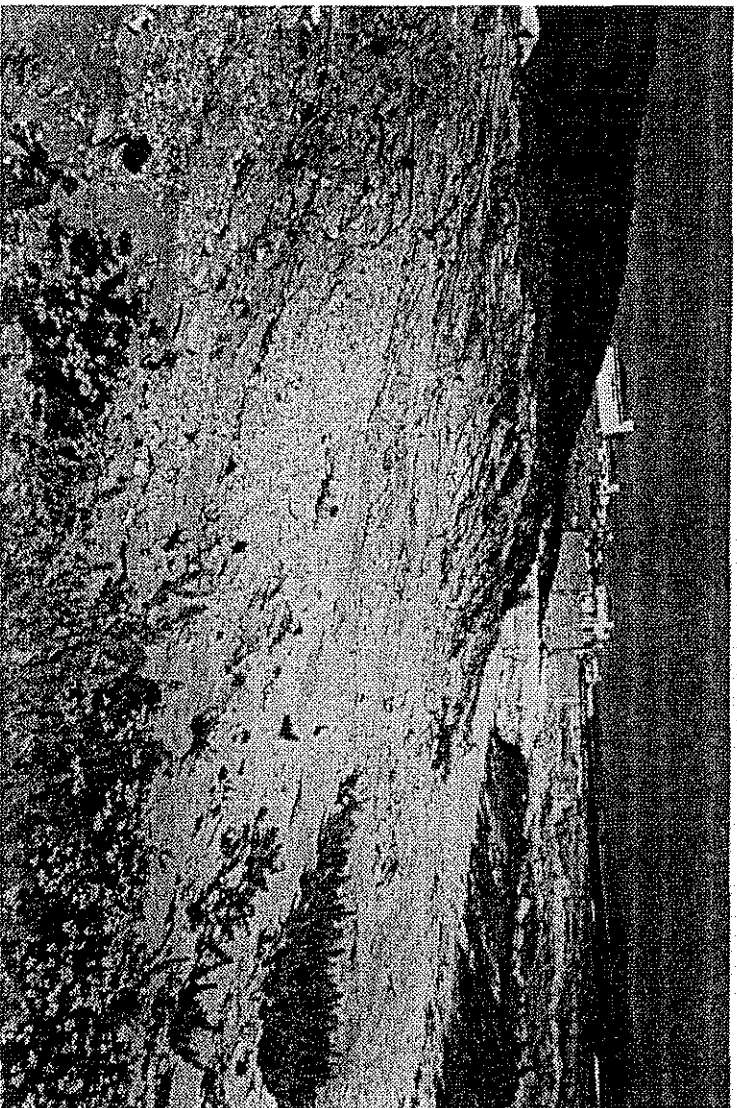


Figure 12. Archaeological study, Schulphoek Point, Hermannus, SKP 6.

Crushed shellfish remains (probably a combination of archaeological and beach deposits) occur in the large levelled parking area in front of the change room buildings. The shoreline area is severely degraded as a result of the recreational development, old earthworks, and associated activities such as roads.

The coastal track, numerous small footpaths as well as illegal 4 x 4 activity have also eroded and damaged the shoreline and low dunes on the raised beach terraces.

9. IMPACT STATEMENT

The proposed Schulphoek Village development will likely impact negatively on archaeological remains.

Shell middens and human burials may also be exposed or uncovered during vegetation clearing operations.

Bulk earthworks and excavations for services such as water and roads may also uncover buried shell middens and human burial remains.

Should these be uncovered, the impacts could be potentially high.

10. CONCLUDING STATEMENT

The assessment of the proposed Schulphoek Village development has identified significant impacts to pre-colonial archaeological material that will need to be mitigated and managed prior to development activities.

11. RECOMMENDATIONS

With regard to the proposed Schulphoek Village development, the following recommendations are made:

- The in-situ Later Stone Age archaeological deposits from **SKP 2** must be excavated prior to development proceeding. The proposed African Craft Village is located in this area (see Figure 3). The site has been severely damaged (as a result of illegal sand mining), but rare Middle Stone Age shell midden material may also be present in the Pleistocene fossil sands below the dune capping.
- Systematic archaeological excavations must be undertaken of the area around the hunter-gatherer campsite (**SKP 3**) in the Milkwood Forest, prior to development proceeding. The site has already been severely impacted by pedestrian traffic through the forest. Such sites are extremely rare in the Western Cape and have the potential to generate important information on modern human settlement and subsistence in the coastal zone.
- If feasible, **SKP 3** could be developed as a public-viewing site, and incorporated in the proposed Milkwood Heritage Area. The proposed forest walks will pass through the site (see Figure 3). Failure to effectively manage the site will result in the irrecoverable loss of important archaeological information.

It is important to note that the South African Heritage Resources Agency (SAHRA) must be notified of the intention to open a site to the public.

The development of public-viewing archaeological sites is also subject to the implementation of a Heritage Site Management Plan.

With regard to the proposed Schulphoek Village development, the following recommendations must also be included in the Construction Environmental Management Plan (CEMP).

The CEMP must detail reporting procedures to manage the discovery of any heritage artefacts during the Construction Phase of the proposed project. For example;

- Should an Environmental Control Officer (ECO) be appointed, he/she must be briefed by a professional archaeologist what to look out for during the Construction Phase of the project.
- Vegetation clearing operations, bulk earthworks and excavations for services and roads must also be monitored by a professional archaeologist.

Should any shell midden material be exposed or uncovered during these activities, archaeological mitigation may be required. The proponent is responsible for the cost of mitigating archaeological remains.

- Human burials or human burial remains uncovered or disturbed during bulk earthworks and excavations should not be removed or disturbed until inspected by a professional archaeologist.
- Should any human remains be exposed or uncovered during earthworks, these should immediately be reported to a professional archaeologist, and SAHRA.

The recommendations are subject to the approval of the Archaeology, Palaeontology and Meteorites Committee of Heritage Western Cape.

12. REFERENCES

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.

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Rudner, J. 1968. Strandloper pottery from South and South West Africa. *Annals of the South African Museum*.49:441-663.