

**PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT
THE PROPOSED VERLORENVLEI COASTAL GAME AND
NATURE RESERVE
PIKETBERG DISTRICT
CAPE WEST COAST**

Prepared for

WITHERS ENVIRONMENTAL CONSULTANTS

By

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EXECUTIVE SUMMARY

Withers Environmental Consultants requested that the Agency for Cultural Resource Management (ACRM) conduct a Phase 1 Archaeological Impact Assessment (AIA) of the proposed Verlorenvlei Coastal Game and Nature Reserve near Elands Bay and Redelinghuis, on the Cape West Coast.

The aim of the study is to locate and map archaeological sites and heritage 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.

Three farms form the proposed Verlorenvlei Coastal Game and Nature Reserve.

- Portion 1 of the Farm Draaihoek No. 10
- Portion 6 of the Farm Witte Drift No. 4 (Skuinskraal)
- Portion 12 of the Farm Groote Drift No. 5 (Sand Hoogte)

Combined, the three properties cover an area of more than 1000 ha in extent.

The extent of the proposed development 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).

Three development Nodes are envisaged.

Node 1: on Portion 1 of the Farm Draaihoek No. 10, a portion of which has already been approved and developed provides for, an additional 15-20 resort units.

Node 2: on Portion 6 of the Farm Wittedrift No. 4 (Skuinskraal) provides for approximately 15 units.

Node 3: on Portion 6 of the farm Wittedrift No. 4 (Skuinskraal) provides for about 24 resort units in three clusters. A guesthouse and several labourer's cottages located alongside the Verlorenvlei will also be renovated.

A proposed Picnic Site (PS) on Portion 6 of the farm Wittedrift No. 4 (Skuinskraal) is also envisaged.

The owners of the property also wish to develop a public rock art-viewing site on Portion 12 of the farm Groote Drift No. 5 (Sand Hoogte).

ACRM has therefore also been instructed to propose guidelines for the development of a public rock art viewing site and for managing heritage resources on the property.

The development of a public rock art viewing site is subject to the implementation of a Conservation, or Heritage Management Plan (HMP), as required in terms of Section 47 (3) of the National Heritage Resources Act (No 25 of 1999).

The HMP is intended principally to help guide the development and management of a rock painting site to be opened to visitors to the resort.

The HMP will form part of an integrated Environmental Management Plan (EMP) to be implemented for the proposed project.

The development of sensitive rock art sites to be opened to the public will need to be undertaken in close consultation with Heritage Western Cape, the delegated provincial heritage authority.

Other Interested and Affected Parties who must be consulted include the Department of Archaeology at the University of Cape Town who has been involved in recording rock painting sites in the Eland Bay/Redelinghuis area for many years.

The approach followed in the Phase 1 AIA entailed firstly undertaking a detailed baseline survey of the proposed project. This involved an archaeological assessment of each of the proposed development Nodes, including the proposed Picnic Site and the proposed Visitor Rock Art-Viewing Site.

A desktop study was also undertaken.

The archaeological heritage study of the proposed Verlorenvlei Coastal Game and Nature Reserve has identified potentially significant impacts to pre-colonial archaeological material that will need to be mitigated and managed prior to development activities.

Node 1: Large numbers of pre-colonial pottery (including decorated and diagnostic pot sherds), ostrich eggshell and stone tools were located in the wind deflated dune cordon which lies parallel to the sandy shore at Draaihoek, near Elands Bay. Stone-cracked cooking hearths and burnt and ash shell dumps were also recorded on some of these wind deflated sites. Most of these sites are already quite severely disturbed and degraded, however.

Although these Node 1 coastal sites will not be directly impacted by the proposed development, increased physical and human pressures (i.e. secondary or long-term cumulative impacts) that are often associated with such developments will very likely impact negatively on these fragile and threatened archaeological resources.

Recommended actions for mitigating impacts in Node 1 include mapping and limited excavation/sampling and dating of some of the archaeological features, as well as controlled collection of archaeological heritage remains.

Other protective measures (in lieu of above recommendations) must also include, for example, the construction of raised boardwalks through the deflated dunes, information boards and signage, production of pamphlets/brochures, and/or restricting public access to the deflated sites, although the latter may be difficult to achieve.

Node 2: Two well preserved rock painting sites (one containing possibly early Boer settler art and social commentary) were located less than 350 m from Node 2.

Recommended actions for mitigating impacts include full documentation of the sites and artwork. The sites must also be included in a HMP for the proposed project.

Node 3: Later Stone Age tools were located in the old farmlands in Node 3, but most of these tools occur in a fairly severely disturbed context and are not considered to be significant.

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

Picnic Site: One well-preserved rock painting site was located at the proposed Picnic Viewing site. In addition, two more painted sites were found, but these comprise very faint and faded paintings.

Recommended actions for mitigating impacts include full documentation of the site and artwork. The site must also be included in a HMP for the proposed project.

Public Rock Art Site: A proposed public rock art viewing site has been identified by the applicant on the prominent rock outcrop known as Rooiberg, overlooking the Verlorenvlei. The large impressive shelter and equally impressive and well preserved paintings are well-known and have been recorded by archaeologists from the Department of Archaeology at the University of Cape Town.

Recommended actions for mitigating impacts include full documentation of the site and artwork. A HMP must be developed for the proposed project.

It is further proposed that the Department of Archaeology, University of Cape Town, is contracted by the applicant to develop the site for public viewing. This will involve not only full documentation of the site, but also planning, supervising and managing the construction of any structures such as viewing platforms and boardwalks, as well as guide training and human resources development.

1. INTRODUCTION

1.1 Background & brief

Withers Environmental Consultants requested that the Agency for Cultural Resource Management (ACRM) conduct a Phase 1 Archaeological Impact Assessment (AIA) of the proposed Verlorenvlei Coastal Game and Nature Reserve near Elands Bay and Redelinghuis, Piketberg District, on the Cape West Coast.

The aim of the study is to locate and map archaeological sites and heritage 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.

The extent of the proposed development (more than 1000 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).

Three development Nodes are envisaged:

Node 1: on Portion 1 of the Farm Draaihoek No. 10, a portion of which has already been approved and developed provides for, an additional 15-20 resort units.

Node 2: on Portion 6 of the Farm Wittedrift No. 4 (Skuinskraal) provides for approximately 15 units.

Node 3: on Portion 6 of the farm Wittedrift No. 4 (Skuinskraal) provides for about 24 resort units in three clusters. A guesthouse and several farm labourer's located cottages alongside the Verlorenvlei will also be renovated.

A proposed Picnic Site on Portion 6 of the farm Wittedrift No. 4 (Skuinskraal) is also envisaged.

The results of the archaeological assessment will, together with the botanical and biophysical assessment of the proposed development, be used to prepare an Environmental Management Plan (EMP) plan for the proposed project.

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 development Nodes, including the proposed Picnic Site;
- to identify and map any sites of archaeological significance within the proposed development Nodes, including the proposed Picnic 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 measures to protect and maintain any valuable archaeological sites that may exist within the proposed development Nodes and the proposed Picnic Site.

The owners of the property also wish to develop a public rock art-viewing site on Portion 12 of the farm Groote Drift No. 5 (Sand Hoogte).

ACRM has therefore also been instructed to propose guidelines for the development of a public rock art viewing site and for managing heritage resources on the property.

The development of a public rock art viewing site is subject to the implementation of a Conservation, or Heritage Management Plan (HMP), as required in terms of Section 47 (3) of the National Heritage Resources Act (No 25 of 1999).

The HMP is intended principally to help guide the development and management of a rock painting site to be opened to visitors to the resort.

3. APPROACH TO DOCUMENTING ARCHAEOLOGICAL SITES IN THE STUDY AREA

3.1 Assumptions

Since the receiving environment (i.e. both the coastal zone and the mountains) is located within known archaeologically sensitive areas (see for example Kaplan 1993), the archaeological assessment assumes that:

- Damage to heritage resources potentially will occur in the development of the property (i.e. both at the coast and in the mountains), as well as in the entire duration of the future use of the property; and thus that
- Effective long-term management procedures must be established and mitigation of archaeological sites must be implemented, before the property is developed, and approval for the public rock art viewing site given.

3.2 Method

In terms of an archaeological approach (i.e.: a methodology) in assessing potential impacts and developing guidelines for the implementation of a HMP for the proposed project, there was a need to undertake a baseline study (i.e. a Phase 1 AIA) of the proposed project.

Since the Verlorenvlei area is known to contain large numbers of protected Bushman/San rock painting sites, as well as caves with archaeological deposits, the immediate surrounding areas within each proposed development Node, were also carefully searched for archaeological sites.

Archaeologists from the Department of Archaeology at the University of Cape Town, (Mr Tony Manhire and Professor John Parkington) and Iziko: South Africa Museum (Mr Royden Yates), were consulted during the course of the study. The above have an intimate knowledge of the archaeology of the affected region.

With regard to the proposed development at Draaihoek (i.e. Node 1), particular attention was paid to the known archaeologically sensitive shoreline dune area (Kaplan 1993; Jerardino 2003).

A desktop study was also undertaken.

Note: Fieldwork for this project was undertaken in October 2004 and the report completed in November 2004 (and updated in December 2005). Problems associated with certain aspects of the project meant that this report was not submitted to Heritage Western Cape, the Provincial Heritage Authority.

4. THE STUDY AREA

A locality map is illustrated in Figure 1.

Three farms form the proposed Verlorenvlei Coastal Game and Nature Reserve.

- Portion 1 of the Farm Draaihoek No. 10
- Portion 6 of the Farm Witte Drift No. 4 (Skuinskraal)
- Portion 12 of the Farm Groote Drift No. 5 (Sand Hoogte)

Combined, the three properties cover an area of more than 1000 ha in extent.

The Verlorenvlei area of the West coast occupies a unique status in the study area, in that it possesses a multiplicity of conservation assets in terms of its archaeological, aesthetic, social, historical, cultural and architectural assets.

Any development in this area should be sensitively planned, taking account of the rich diversity of its archaeological sites as well as its particular vernacular history.

The landscape character of the study area must be also protected as it forms an integral part of the 'sense of place'. The Cape West Coast is a distinct area and has a unique character of its own. Development must therefore be responsive to the 'sense of place' and aesthetic quality.

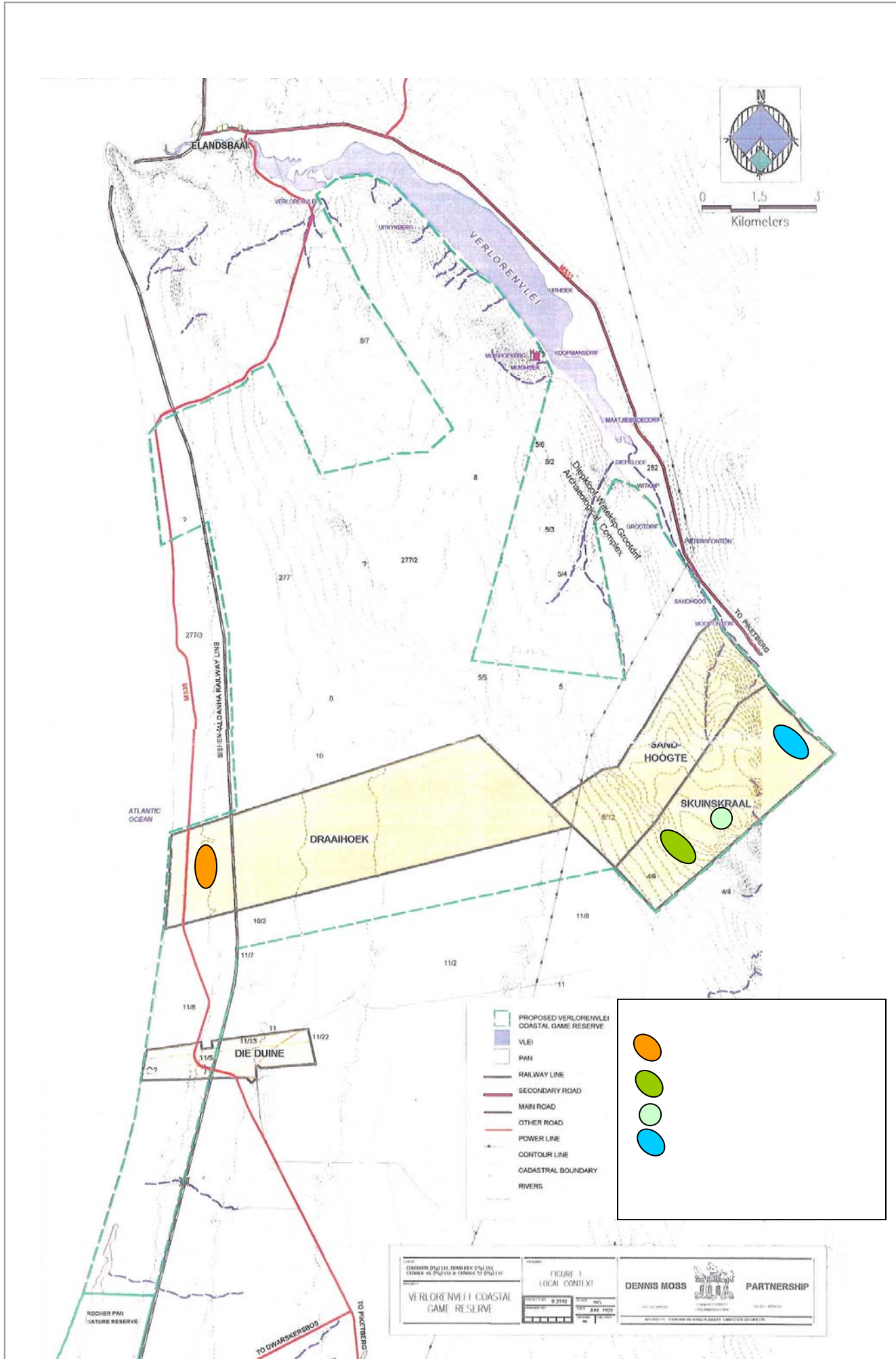


Figure 1 Location of the proposed Verlorenvlei Coastal Game and Nature Reserve

5. A BRIEF OVERVIEW OF EXSITING ARCHAEOLOGICAL INFORMATION IN THE STUDY AREA

5.1 Historical settlement at Verlorenvlei

By the early seventeenth century, little was known about the Verlorenvlei area as it was slightly to the west of the main routes of exploration along the West Coast. Most of the early traveler's along the Cape west coast, such as Bergh in 1682, Simon van der Stel in 1685, Thurnberg in 1774, Le Vaillant in 1783, Barrow in 1797 and Barnard in 1800, passed through the Verlorenvlei area, crossing the river much further upstream and did not venture along the vlei toward the sea. The names of many of these early traveler's can still be seen on the walls of the cave known as the 'Heerenlogement' which was used as an overnight shelter and is situated further north, between Graafwater and the Olifants River.

By at least the late 1600's, it would appear that no colonists had yet settled in the Verlorenvlei area, although it was being used to graze herds of cattle, supervised by local Khoi. It would also appear that indigenous San people were living in the area under Keyser or Caesar, and that they probably used as their base the land called Caesar's Kraal (behind Muishoekberg), to the east of the Verlorenvlei Settlement (Sinclair 1980). Starrenburg also visited the kraal of 'Hannibal' in the Verlorenvlei area in about 1700 (Sinclair 1986).

From the late 1700s grazing of cattle and wheat cultivation continued and occupation of the land became more permanent, with the building of farmhouses and probably also the beginnings of the Verlorenvlei settlement (Sinclair 1980; Gribble 1990).

Previously wheat was grown only for local use because of the difficulties of transport to the Cape Town market, but with the introduction of marine transport, and the removal of a fixed price, incentive was provided for export of surplus wheat to Cape Town. The cutters of the Stephen brothers are reported to have collected the grain from the Verlorenvlei area. The grain was taken by farmers to the Plan House near Baboon Point, and stored there until the arrival of the cutters, which apparently landed for loading at a point between the present crayfishing jetties and the sand bar across the river (Sinclair 1980).

The economic incentive, combined with favourable conditions for wheat cultivation, stimulated the growth of the Verlorenvlei settlement. The presence of the horse-mill and the bakery within the settlement suggests that a small community already existed, their way of life closely associated with the cultivation and processing of wheat (Sinclair 1980).

While the mid-nineteenth century saw the boom of the wheat era in the Verlorenvlei area, certain factors contributed to its decline, probably during the early twentieth century. The introduction of machinery and the growth of co-operative facilities rendered local processing by animal labour unnecessary. Environmental factors, such as a declining soil fertility and water catchment potential due to poor farming methods, overutilisation and overgrazing, and possible climatic change, may also have led to the areas decline (Sinclair 1980).

The Verlorenvlei area still retains some fine examples of the many development phases in the vernacular architecture of the West Coast Sandveld (Gribble 1990).

5.2 Verlorenvlei/Elands Bay

The Verlorenvlei/Elands Bay area is without doubt an extremely sensitive archaeological environment, and is probably one of the most intensively researched areas in South Africa. Archaeological sites occur in abundance. Research has shown that people have occupied the coastline and inland areas here for well over 100 000 years (Parkington 1976).

There are approximately 100 archaeological sites near the lower reaches of the Verlorenvlei and among the cliffs immediately opposite Baboon Point (Kaplan 1993). Most of the sites are located either on rocky kopjes or along the immediate coastline.

The area is rich in prehistoric campsites, caves and rock shelters with rock paintings, shell middens and geoarchaeological features. Well known sites include Elands Bay Cave at Baboon Point, Spring Cave on Bobbejaansberg, Tortoise Cave above the quarry near Danielsdrif, and Diepkloof Cave west of Grootdrif.

At least 90 rock art sites have also been recorded, most of them in the Table Mountain Sandstone Group outcrops along the south bank of the Verlorenvlei (Manhire *et al* 1993; Van Rijssen 1984; Manhire 1998). Rock paintings record the remarkable artistic achievement of the indigenous San or Bushman of southern Africa who created them for religious purposes as part of a changing cultural tradition that persisted for over 20 000 years. Well-known painting sites include Elands Bay Cave on the Bobbejaansberg, and the Diepkloof/Witklip/Grootdrif complex (where rare paintings of fat-tailed sheep occur), while many more painted sites have been recorded among the inland Sandveld kopjes (Manhire 1981, 1997), including the proposed public rock art viewing site at Rooiberg (Manhire, pers. comm.).

5.3 South of Elands Bay

Archaeological sites south of Elands Bay are characterised by fairly extensive, but superficial surface scatters of shellfish remains associated with pottery, stone artefacts and faunal remains. On sites of this kind, the sand mussel, *Donax Serra* occurs in high numbers and may reflect the general location of these scatters along the sandy beaches, where they stretch almost continuously for 50 kilometres (Parkington 1976).

However, more recent surveys along this stretch of coastline have established that extensive archaeological surface scatters with a more substantial black mussel and limpet component, also occur behind the parallel dune cordon south of Elands Bay where relatively large numbers of such sites have been recorded at Draaihoek (in the study area), Southkloof, Langdam, and Nuwedam (Jerardino 2003).

6. LEGISLATIVE REQUIREMENTS

6.1 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).

6.1.1 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.

6.1.2 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.

6.1.3 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.

7. IDENTIFICATION OF POTENTIAL RISKS

The following project actions may impact negatively on archaeological sites in the study area.

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

During the Construction Phase

- Contractors and workers may inadvertently come across rock painting sites, possibly damaging them in the process.

During the Operation Phase

- Visitors to Skuinskraal (Node 2 and the proposed Picnic Site) may inadvertently come across rock painting sites in the area, possibly damaging them in the process.
- Longer-term, cumulative (or secondary) impacts such as increased human activity as a result of the proposed development, may impact negatively on fragile archaeological heritage remains at Draaihoek (Node 1). Many of these sites are already badly damaged and disturbed, however.

8. IMPACT ASSESSMENT AND DESCRIPTION

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

Figure 2 indicates the location of archaeological sites described in the report.

8.1 Node 1

No archaeological heritage remains were located in Node 1, which is located about midway between the MR535 to Elands Bay and the Sishen-Saldanha railway line, in open scrub and unconsolidated red sands characteristic of the Sandveld.

The resort development at the coast at Draaihoek has already been approved (and developed), however, and comprises a guest lodge, restaurant and about six chalets. A swimming pool and public access boardwalk over the dunes to the beach is also planned. A car park is located at the beach.

Ten Later Stone Age (LSA) archaeological `sites` were recorded along the shoreline at Draaihoek. Some of the sites very likely represent a complex of inter-related sites, rather than single, isolated occurrences.

A portion of the coast south of Elands Bay has been intensively searched by Dr Antoinette Jerardino, Senior Heritage Officer at Heritage Western Cape (pers. comm.). Most of the sites in the dune cordon recorded by Jerardino and her co-workers appear to result from brief occupations, sometime between 3000 and 2000 years ago. The archaeological sites typically consist of thin and dispersed scatters of shell associated with bones, ostrich eggshell, stone artefacts and pottery (Jerardino 2003).

The presence of pottery on all of the `sites` described below also suggests that they date to sometime after the arrival of Khoi pastoralists, around 2000 years ago.

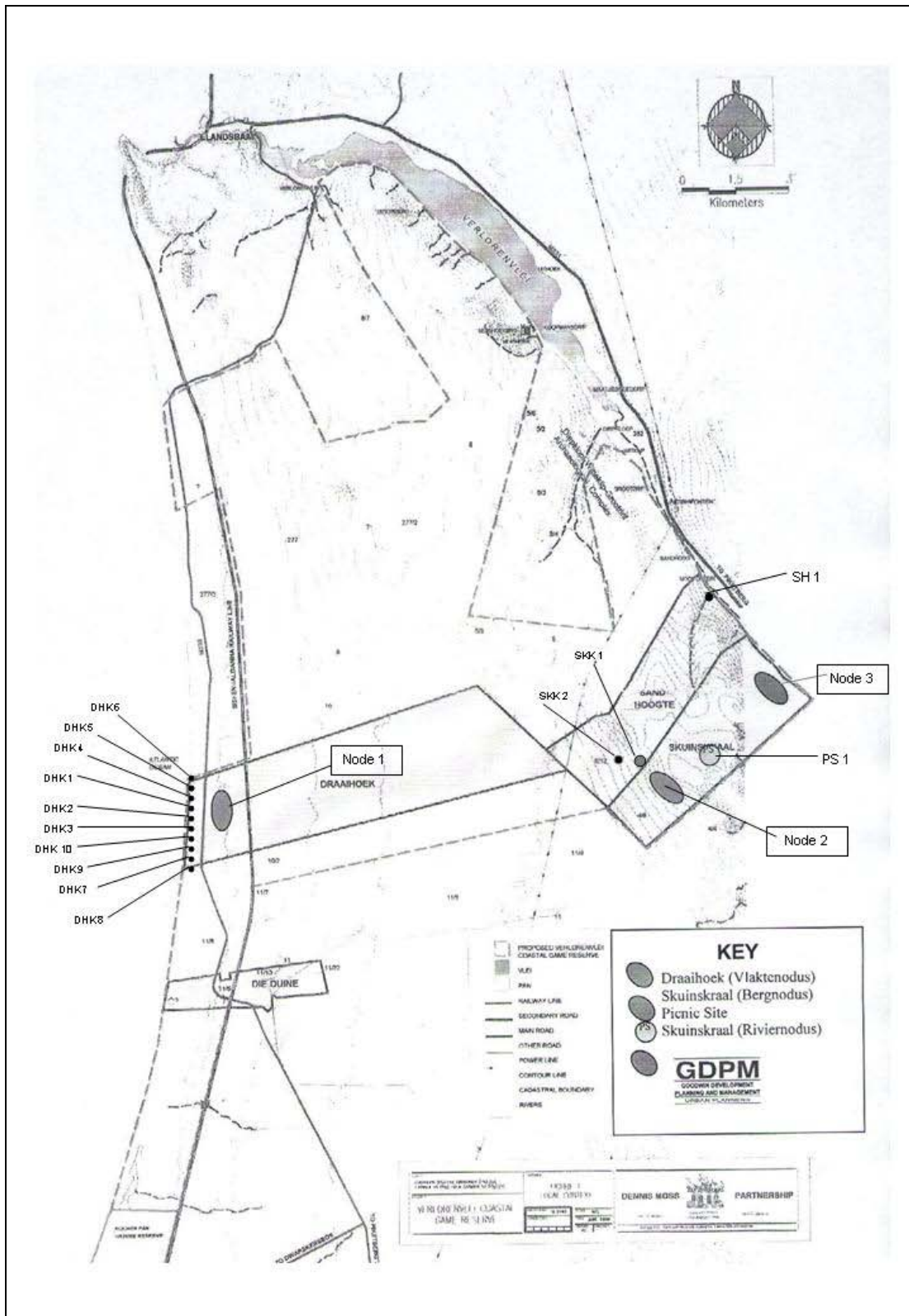


Figure 2 The location of archaeological sites described in the report

DHK 1. GPS reading S 32° 29 024 E 18° 20 046

Four quartz chunks, three quartz flakes, one quartz core, some unworked quartz pebbles and two quartzite chunks, were located in a large wind-deflated dune alongside the shoreline, south west of the newly built guest houses at Draaihoek (Figure 3). Large numbers of white sand mussel (Donax serra) and occasional fragments of Black Mussel (Choromytilus meridionalis) litter the site, as do many bits of rusted metal, glass, plastic and other domestic debris. Some marine bird bone was also noted, but these are all sun-bleached and fragile and most likely recent additions to the site. The occurrence of such large numbers of fresh sand mussel is more likely the result of seagull predation, rather than being archaeologically derived. Sand mussel dominated 'sites' with very little, if any archaeological remains have also been located in the wind-deflated dunes alongside the shoreline at Rocher Pan and Die Duine (Kaplan 1997, 1998; Rudner 1968).

Suggested mitigation: **none required**



Figure 3 DHK 1. View of the site facing north-east.

DHK 2. GPS reading S 32° 29 069 E 18° 20 046

Large numbers of white mussel and a few fragments and larger pieces of Black Mussel were located in a wind deflated dune about 50 m south of DHK 1. One quartz chunk was noted.

Suggested mitigation: **none required**

DHK 3. GPS reading S 32° 29 182 E 18° 20 121

Large numbers of sand mussel, a few fragments of Black Mussel, a few Whelks and several Limpets (Patella granatina) were located in a large, west-facing wind deflated dune basin (Figure 4). The site is littered with bits of glass, plastic, rusted metal and domestic debris. Bone (all sun-bleached and fragile), including bird, tortoise (Chersina angulata) and some unidentified bone were also noted. Archaeological heritage remains recorded include one quartz chunk, one quartzite chunk and one schist chunk. Four small pieces of thick-walled, blackened grit-tempered pottery were also found. Seven

larger pieces of thin-walled red-burnished body sherds were found at the bottom of a steep south facing dune slope (GPS S 32° 29 157 E 18° 20 037) (Figure 5).

Suggested mitigation: **archaeological remains to be collected**



Figure 4 DHK 3. View of the site facing north.



Figure 5 DHK 3 pottery.

DHK 4. GPS reading S 32° 28 990 E 18° 20 055

Large numbers of white mussel, a few Whelk and fragments of Black Mussel occur in a large wind-deflated sand basin north of DHK 1. Broken glass, bits of plastic and domestic debris litter the site. Some fragile and sun-bleached marine bird and other unidentified bone were also noted. Five pieces of ostrich eggshell and one large piece of undecorated pottery were also found. One quartzite chunk and one quartzite manuport were counted.

Suggested mitigation: **archaeological remains to be collected**

DHK 5. GPS reading S 32° 28 850 E 18° 20 052

Five large pieces of black burnished, thin-walled, undecorated pottery were located at the bottom of a white mussel littered dune slope, part of an extensive series of large wind deflated dunes in the area (Figure 6 Figure 7). Bone, including tortoise, bird and some unidentified bone were also noted.

A large thin-walled decorated body sherd and an internal pot lug were also found on a steep west-facing dune slope (Figure 8). This is an important find and suggests that both pre-colonial hunter-gatherer as well as herder/pastoralist settlement may be represented on the Draaihoek shoreline sites. At least 25 more pieces of thin-walled black burnished pottery, including one small rim sherd, were also found on the site.

Suggested mitigation: **archaeological remains to be collected**



Figure 6 DHK 5. View of the site facing north.



Figure 7 DHK 5 pottery.



Figure 8 DHK 5 pottery.

DHK 6. GPS reading S 32° 28 745 E 18° 20 074

Large numbers of white sand mussel were located in an extensive series of wind-deflated shoreline dunes both south and north of the Draaihoek farm boundary (Figure 9). The `site' may be part of a larger complex of wind deflated sites in the immediate surrounding area, including DHK 5. Shellfish remains extend for several hundred metres beyond the boundary of the farm, marked by a small jeep track. 4 x 4 activity in this area have damaged the dunes and shoreline area, and impacted negatively on archaeological heritage remains in the area. A concentrated scatter of Black Mussel and some white mussel on a low dune was also noted. Large numbers of rusted metal bits, wood, plastic, broken glass and bottles litter the site. The remains of modern fires were also noted in the lee of some of the flatter dunes along the shoreline.

More than 80 pieces of pottery were found on the site, occurring in three or four coherent clusters (Figure 10 & Figure 11). These include thin-walled, red and black burnished ware, as well as coarse-grained unburnished potsherds (GPS reading S° 32 28 722 E 18° 20 085). Many of the grit-tempered pottery pieces are wind-blasted. Among the undecorated potsherds, five rim sherds and one pot base were counted. Very few cultural remains were found, other than a few quartzite manuports, five quartz chunks and three quartz flakes.

Suggested mitigation: **archaeological remains to be collected**



Figure 9 DHK 6. View of the site facing north.



Figure 10 DHK 6 pottery.



Figure 11 DHK 6 pottery.

DHK 7. GPS reading S 32° 29 426 E 18° 19 996

The site is located about 50 m north of the southern boundary of the farm Draaihoek, and comprises an extensive scatter of white sand mussel located in a wind deflated dune basin immediately behind the low vegetated dunes running alongside the shoreline (Figure 12). About 20 pieces of pottery, including one rim sherd and two quartz flakes, were noted lying on top of a cooking hearth surrounded by charcoal and fire-cracked and blackened quartzite stone flakes. Modern domestic debris such as metal wire, plastic and broken glass is scattered about the area surrounding the `hearth' and two wooden poles are set into the sand close by. About 30-40 small pieces of thin walled, wind-blasted pottery, some with traces of red ochre, occur about 5 m east of the cooking hearth (Figure 13). Several more small concentrations of pottery were also noted scattered on the site.

Suggested mitigation: **archaeological remains to be collected. Mapping and excavation and dating of cooking hearth also recommended**



Figure 12 DHK 7. View of the site facing north.



Figure 13 DHK 7. Pottery

DHK 8. GPS reading S 32° 29 349 E 18° 20 011

The site comprises an extensive scatter of white mussel, as well as some Black Mussel in a wind-deflated sand basin immediately north of DHK 7 (Figure 14). One weathered and decorated (long tight parallel lines) red-burnished piece of pottery was noted lying on top of a small mound of partially exposed burnt Black Mussel shell on a low west facing dune slope, the associated sand deposits comprising a fine, ashy grey-coloured matrix (Figure 15). Black Mussel is also scattered about in a low arc. It is clear that this important archaeological feature has been 'blown open' by the shifting sands. A small concentration of about nine relatively large pieces of weathered and partially burnished potsherds, as well as a concentration of about 20-25 small weathered pieces of pottery were also noted on the site. No other cultural items were found, other than two unworked quartz nodules.

Suggested mitigation: **archaeological remains to be collected. Mapping and excavation and dating of archaeological feature (i.e. hearth) also recommended**



Figure 14 DHK 8. The site facing north.



Figure 15 DHK 8 Wind exposed hearth. Note the grey ash deposit and piece of pottery.

DHK 9. GPS reading S 32° 29 308 E 18° 20 006

The site comprises a scatter of white sand mussel in a wind-deflated and eroded sand basin immediately north of DHK 8. Several hundred pieces of ostrich eggshell (including large pieces) and about 30-40 pieces of pottery, including two rim sherds, some partially stained with red ochre, were noted on a low mound alongside a narrow dune plume below a 2-3 m high wind-eroded and partially vegetated dune in the centre of the site (Figure 16). Two or three pieces of ostrich eggshell appear to be openings of ostrich eggshell water containers, while relatively large numbers of weathered and fragile bone, mainly bird but also possibly seal, are scattered about. Three quartzite flakes, one indurated shale flake, one quartz flake, and one shale chunk (or manuport), were also noted.

The skeleton of a large seal is also partially exposed on top of the 2-3 m high eroded dune above the archaeological concentration (Figure 17). Several dozen more pieces of grey-colored, coarse tempered pottery were counted on a north-facing dune slope about 10 m north-east from the main concentration of ostrich eggshell and pottery (Figure 18).

Suggested mitigation: **archaeological remains to be mapped and collected.**
Limited excavation recommended in order to determine the significance of the archaeological deposit.



Figure 16 DHK 9. View of the site facing north east.



Figure 17 DHK 9. Skeleton of partially-exposed seal.



Figure 18 DHK 9. View of the site facing north west. Note the pottery on the dune slope.

DHK 10. GPS reading S 32° 29 294 E 18° 20 0615

An extensive scatter of white sand mussel occurs in a small, wind-deflated basin about 125 m south of the car park at Draaihoek (Figure 19). About 40-50 pieces of highly weathered, coarse-tempered and blackened potsherds were counted, scattered about in a fairly discreet area. No other cultural items were found, other than a few small unworked quartz pebbles.

Suggested mitigation: **archaeological remains to be collected**



Figure 19 DHK 10. View of the site facing north

8.2 Node 2

Node 2 is located behind the Muishoekberg/Wittedrift with views of Klein Tafelberg and the coast in the distance (Figure 20). It is interesting to note that San people were apparently living in the area behind Muishoekberg in the late 1600's (Sinclair 1980) and may well have been responsible for at least some of the rock art described below.

Two San/Bushman rock painting sites were located during the baseline study (refer to Figure 2).

SKK 1. GPS reading S 32° 27 834 E 18° 28 090

The site is located about 200 m west of Node 2, at the southern end (toe) of the rock outcrop known as Bakenkop (on 1:50 000 map reference 3218 AD Redelinghuis) (Figure 211).

The large (about 15m x 8m), south-facing, dome-shaped sandstone shelter, contains an impressive panel of painted images, including large numbers of human figures (both male, indeterminate and attenuated), handprints, numerous antelope species (both isolated and associated), as well as superimposed images, all in red paint.

Many of these images are in fine detail and the rock art is well preserved. Also, in black paint, are paintings of possible ostriches, baboon, antelope (including eland), possibly domestic cow, and human figures (Figure 222). Some vandalism (such as scratching) has occurred over some of the paintings, but this does not detract from the general overall quality of the art.

There is also some graffiti on the shelter wall dating back to 1844, 1892, 1866, 1913 and 1947, as well as some extensive early Boer settler social commentary written on yellow clay smeared over the walls of the shelter. This in itself is a vitally important cultural resource. Also, of major importance, is the possible presence of some early Boer settler imagery in the form of a horse drawn in black charcoal (Figure 233).

No archaeological deposit is contained within the shelter. Bedrock and rotted bedrock is visible on the floor of the shelter, and part of the ceiling of the shelter has also collapsed. The shelter is currently being used by domestic stock, evident by the presence of sheep and cow dung on the floor of the cave. Only a few archaeological cultural remains were noted, including a piece of ostrich eggshell, two quartz flakes and one indurated shale flake.

Suggested mitigation: **The site and artwork must be documented in detail and included in a HMP**



Figure 20 Node 2. The proposed site facing east.



Figure 21 SKK 1. View of the site facing south.



Figure 22 SKK 1 paintings.



Figure 23 SKK 1 paintings. Note the horse drawn in black.

SKK 2. GPS reading S 32° 27 720 E 18° 28 018

The site is located about 150 m west of SKK 1, and about 350 m west of proposed Node 2 at the southern end of a large rock outcropping known as Broekman se Klip (on 1:50 000 map reference 3218 AD Redelinghuis) . Facing south southwest, the large, high, open dome shaped sandstone shelter measures about 25m x 6m (Figure 24).

The paintings are not as numerous, nor as well preserved, as those in SKK 1, but some images in fine detail do occur. Most of the art is in red paint and includes humans (both male and indeterminate) in different postures, indeterminate antelope, eland, a clearly associated group of about 15 small indeterminate animals (Figure 25), as well as some 'crude' animal imagery, perhaps very late San art (Figure 26). Some graffiti, dating back to 1982, is also present on the wall of the shelter.

The archaeological deposit in the shelter has been heavily trampled by domestic animals. The floor of the shelter is very sandy (blackened) and loose and covered in a patchy layer of cow dung. Some Later Stone Age tools were found in various drip lines within the shelter, including four silcrete flakes, a few small silcrete blades, two small blackened potsherds, and a several lumps of hematite.

Suggested mitigation: The site and artwork must be documented in detail and included in a HMP.

It appears that SKK 1 and SKK 2 have not been previously recorded, but archaeologists from the Department of Archaeology at the University of Cape Town have located rock art sites nearby, at Wolfberg on the adjacent farm Groote Drift 5 (Tony Manhire pers. comm.).

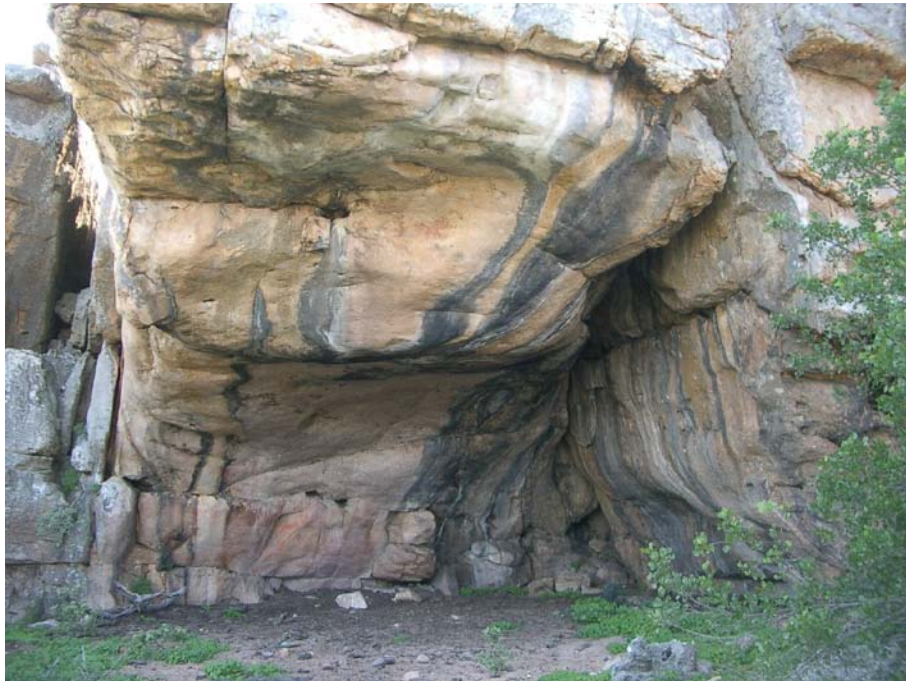


Figure 24 SKK 2. View of the site.



Figure 25 SKK 2 paintings.



Figure 26 SKK 2 paintings.

The surrounding rocky landscape was also carefully searched for additional rock painting sites and caves, and although a number of small and larger shelters/overhangs were found, no more painted sites were located.

One LSA flake and a partial grindstone were found in disturbed and trampled fields in the Node 2 complex.

A small silcrete convex thumbnail scraper (GPS reading S 32°28 066 E 18° 28 234) was found on the talus slope in front of a bank of sandstone about 200m north-east of Node 2.

Suggested mitigation: **none required**

8.3 Node 3

Node 3 is located on the south bank of Verlorenvlei. Three clusters comprise Node 3.

Cluster 1 (GPS reading at approximately S 32° 27 126 E 18° 30 716) is located in the south eastern portion of the proposed site, in old, disturbed agricultural lands (Figure 27). No archaeological remains were located during a search of the site, but a handful of dispersed silcrete tools, including flakes, chunks, and one adze were located in natural veld alongside the eastern boundary of the proposed site. The tools were found associated with dune mole rat and porcupine burrows. No shellfish remains were noted.

Suggested mitigation: **none required**



Figure 27 Node 3. Cluster 1. View of the site facing west.

Cluster 2 (GPS reading at approximately S 32° 27 034 E 18° 30 686) is located in the south central portion of the proposed site, in old disturbed agricultural lands (Figure 28). One silcrete flake and one quartzite miscellaneous retouched piece was found on a eroded gravel slope wash alongside the main access road that cuts through Node 3. Three silcrete flakes and two silcrete chunks were found near some old gravel diggings near the western boundary of the game fence line.

Suggested mitigation: **none required**



Figure 28 Node 3. Cluster 2. View of the site facing north west.

Cluster 3 (GPS reading at approximately S 32° 26 126 E 18° 30 763) is located in the western portion of the proposed site, in a wide strip of old, disturbed agricultural lands alongside the Verlorenvlei (Figure 29).

No archaeological remains were located during a survey of the proposed site.



Figure 29 Node 3. Cluster 3. View of the site facing west.

LSA and a few MSA¹ tools were noted on the remainder of Node 3, which comprises mostly old lands and is severely degraded.

A proposed guesthouse (a modern farm building) has already been renovated. Other buildings include a large modern shed and some laborer's cottages, some of which will be converted into additional guest chalets.

¹ A term referring to the period between 200 000 and 20 000 years ago.

8.4 Proposed Picnic Site (PS)

The proposed PS is located on top of the Muishoekberg, on Portion 6 of the farm Wittedrift No. 4 (Skuinskraal). The picnic site is ringed by large sandstone outcroppings, forming an impressive, natural amphitheatre (Figure 30). It is perhaps a bit too romantic to consider that the site may indeed be the kraal of the San leader Caeser/Keyser (Sinclair 1980).

Three San/Bushman rock painting sites were located during the survey of the picnic site (Figure 2), none of which have been previously recorded.

PS 1. GPS reading S 32° 27 757 E 18° 29 511

The site is located in a low shallow sandstone overhang, overlooking the distant Verlorenvlei and the Cederberg Mountains (1:50 000 map reference 3218 AD Redelinghuis) (Figure 321). An extensive talus slope is located in front of the bank of rock. Facing north, the site measures about 15m x 2m. Some very faded indeterminate human figures and smudges in red paint occur to one side of the overhang. One of these figures has been vandalised (chipped out). To the right of the overhang, a line of eight small, therianthrop (half animal half human) forms occur (Figure 32). These paintings, in red ochre, are relatively well preserved. No archaeological deposit occurs in the site, and no cultural remains were located. One LSA silcrete flake and a few small silcrete and quartz chunks were found on the talus slope in front of the overhang.

Suggested mitigation: **The site and artwork must be documented in detail and included in a HMP**

PS 2. GPS reading S 32° 27 802 E 18° 29 406

Very faded paintings, including a smudge of paint (possibly a palette) and three or four (possibly) indeterminate human figures in red paint were located beneath a large fallen sandstone boulder.

Suggested mitigation: **none required**

PS 3. GPS reading S 32° 27 691 E 18° 29 465

Very faded indeterminate paintings (more smudges than visual art) were located in a very low north-facing sandstone overhang about 50 m west of SKK 1.

Suggested mitigation: **none required**



Figure 30 Proposed Picnic Site (PS).



Figure 31 . PS 1. View of the site.



Figure 32 . PS 1 paintings.

8.5 Proposed public rock art site (SH 1)

The site (at approximately S 32° 25 756 E 18° 29 138) is located on the Rooiberg mountains, overlooking the Verlorenvlei, on Portion 12 of the farm Groote Drift No. 5 (Sand Hoogte), on 1: 50 000 map reference 3218 AD Redelinghuis (refer to Figure 2, Figure 33 & Figure 34).

This very impressive site has been recorded by archaeologists from the Department of Archaeology at the University of Cape Town (Tony Manhire, pers. comm.). The large shelter, measuring about 30m x 10m, contains some extraordinary complex and detailed San/Bushman imagery, including large male figures carrying bags with tassels, quivers and arrows (Figure 35), hunters carrying triple-curved bows (Figure 36), trance scenes (Figure 37), and many other images such as antelope (Figure 38), indeterminate humans (both attenuated, representational and stick), handprints, 'mythological' animal forms (Figure 39), and 'cave scenes'. Superimposition is also quite widespread over many of the paintings.

Natural processes such as percolation of salts from behind the porous sandstone rock (see Figure 36) have unfortunately damaged some of the art. No archaeological deposit occurs in the shelter and no cultural remains were noted on the floor of the shelter.

Some recent graffiti is apparent, but this does not detract from quality of the painted art.

Additional paintings, including well preserved human forms and finger dots were also located in a lower 'chamber' on the mountain.

Suggested mitigation: **The site and artwork must be documented in detail and included in a HMP**



Figure 33 SH 1. View of the site.



Figure 34 SH 1. View from the shelter overlooking the Verlorenvlei.

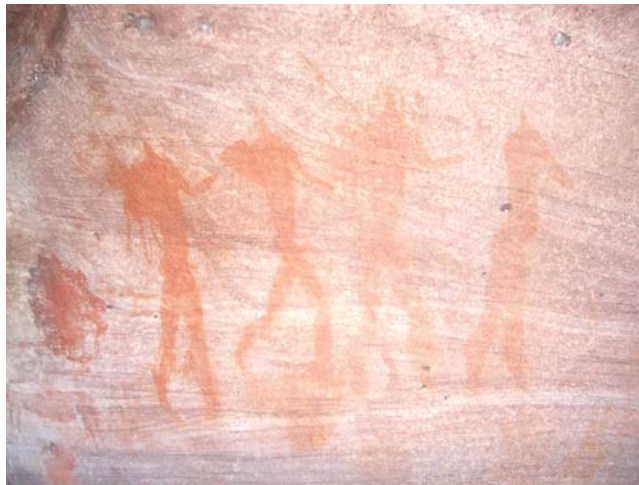


Figure 35 SH 1 paintings



Figure 36 SH 1 paintings



Figure 37 SH 1 paintings



Figure 38 SH 1 paintings.



Figure 39 SH 1 paintings

7. PROPOSED GUIDELINES FOR THE IMPLEMENTATION OF AN ARCHAEOLOGICAL HERITAGE MANAGEMENT PLAN FOR THE PROPOSED VERLORENVLEI COASTAL GAME AND NATURE RESERVE

The development of any archaeological heritage site to be opened to the public is subject to the implementation of a Conservation or Heritage Management Plan (HMP), and is a requirement in terms of Section 47 (3) of the National Heritage Resources Act (No. 25 of 1999).

A HMP for the proposed Verlorenvlei Coastal Game and Nature Reserve is intended principally to help guide the development and management of rock painting sites to be opened to the public. This refers particularly to SH 1.

The aim of the HMP is to retain the significance of the heritage resources, and ensure the effective protection and sustainable development of known rock art resources on the property.

A HMP may also form the basis for a Heritage Agreement required in terms of Section 42 of the National Heritage Resources Act and the presentation of protected archaeological resources.

The development of sensitive rock art sites, and most importantly, **the choice of site**, to be opened to visitors to the proposed Verlorenvlei Coastal Game and Nature Reserve, will need to be undertaken in close consultation with Heritage Western Cape, the delegated provincial heritage authority, who will also need to approve the HMP. Interested And Affected Parties must also be consulted.²

Rock art is a non-renewable resource and therefore requires specialised planning and management (Deacon 1993). The responsibility ultimately rests with the landowner to ensure protection and conservation of rock art sites, which are considered a priceless national resource. Archaeological sites including those with rock paintings are especially vulnerable to damage.

The South African Heritage Resources Agency (SAHRA) has proposed minimum standards for archaeological sites to be opened to the public. The core of these standards provides for the production of a HMP, or a Cultural Resource Management Plan.

A HMP must be developed as part of the overall Environmental Management Plan for the proposed Verlorenvlei Coastal Game and Nature Reserve project.

The HMP must also be a dynamic document, one that can change and be manipulated and continually reviewed and updated as more information and sites comes to light. In effect, it should be seen as a work in progress.

² The Department of Archaeology at the University of Cape Town have been engaged in a long term recording programme of rock art sites in the area, including known sites on the Rooiberg and surrounding area.

Each painted site is unique, requiring its own site-specific management guidelines and protective measures. For example, domestic animals such as sheep and cattle should not be allowed to enter SKK 1 and SKK 2. Animals (as well as humans) tend to kick up dust and rub against the paintings, damaging them in the process.

Some of the minimum standards proposed by SAHRA when developing a rock art site for public viewing include the following:

- A Heritage Management Plan must be done, which must include a complete and detailed documentation of the site and the artwork. The purpose of the management plan is to conserve the significance of the site by controlling the impact of visitors.
- A permit is required for any disturbance at an archaeological site, including the erection of notice boards, board walks, fences, etc.
- A Heritage Agreement is required in terms of Section 42 of the National Heritage Resources Act.
- Access and numbers of visitors to the site should be strictly controlled and managed.
- If appropriate, facilities such as litter bins, toilets, etc should be provided.
- Specially trained guides must be provided so that the meaning of the rock art is interpreted, so as to enhance the experience of the visitor.
- Appropriate measures used to protect rock art sites must be effective. For example, a barrier may be set up between the visitor and the rock art, or a boardwalk built. A cover could also be put on the floor of the site to prevent dust being kicked up and damaging the art.
- If appropriate, efforts should be made to remove graffiti, for which a permit is also required.
- Arrangements should be made for a long-term monitoring and maintenance programme.

These and other measures must be considered when developing a HMP for visitor viewing sites.

8. RECOMMENDATIONS

With regard to the proposed Verlorenvlei Coastal Game and Nature Reserve, the following recommendations are made:

- **Node 1:** Archaeological heritage remains from **DHK 3-10** must be collected by a professional archaeologist. There is the danger of important archaeological remains such as pottery being picked up and taken away as a result of an increase in visitors to the planned (and already developed) resort at Draaihoek.

Despite the fact that the Draaihoek sites are quite disturbed and degraded, the presence of previously unknown decorated pottery, possibly of herder origin, for example, necessitates the need for a controlled collection of these important archaeological remains.

- The stone cracked cooking hearth (**DHK 7**) must be mapped, excavated and dated.
- The archaeological feature (i.e. the hearth) in **DHK 8** must be mapped, excavated and dated.
- **DHK 9** must be mapped and limited excavation undertaken in order to determine the significance of the archaeological deposit.

Other protective measures (in lieu of above recommendations) may also include, for the example, the construction of raised boardwalks, information boards and signage, production of pamphlets/brochures, and restricting public access to the wind deflated sites, although the latter may be difficult to achieve.

- The rock painting sites known as **SKK 1, SKK 2, PS 1** and the proposed **Rock Art Viewing Site (SH 1)** must be recorded and documented in detail.
- A HMP for **SKK 1, SKK 2, PS 1** and **SH 1** must be developed in close consultation with Heritage Western Cape, the delegated provincial heritage authority, and other Interested and Affected Parties.

It is proposed that the Department of Archaeology, University of Cape Town, is contracted by the applicant to develop the site (**SH 1**) for public viewing. This will involve not only full documentation of the site, but also planning, supervising and managing construction of any structures such as viewing platforms and boardwalks, as well as guide training and human resource development.

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