

**PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT
REMAINDER OF THE FARM WITTEKLIP NO. 123
VREDENBURG**

Prepared for

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By

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Executive summary

Doug Jeffery Environmental Consultants requested that the Agency for Cultural Resource Management undertake a specialist Phase 1 Archaeological Impact Assessment of the remainder of the Farm Witteklip No. 123 Vredenburg, on the Cape West Coast.

The property, comprising agricultural lands, is located alongside the R399 between Saldanha Bay and Vredenburg.

The proposed rezoning of the affected property is for the purpose of a retail shopping centre, to be called West Stone Mall.

The extent of the proposed development (15 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.

No precolonial archaeological heritage remains were locate during the study

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.

The specialist Phase 1 Archaeological Impact Assessment of the remainder of the Farm Witteklip No. 123 Vredenburg has rated the potential impacts to archaeological material as being low.

Fossil remains may, however, be uncovered or exposed during earthworks and excavations in underlying calcrete and limestone deposits on the property.

It is well established that vertebrate fossils and ancient archaeological occurrences occur in the Langebaan Limestone (calcrete) formations and associated deposits in the Saldanha Bay/Vredenburg area.

With regard to the proposed development of the remainder of the Farm Witteklip No. 123 Vredenburg, the following recommendations are made:

- A professional palaeontologist must be appointed to assess the possible palaeontological significance of the fossiliferous material on the property if underlying calcrete deposits are intercepted during earth-moving operations.
- Should any human remains be disturbed, exposed or uncovered during earthworks, these should immediately be reported to the South African Heritage Resources Agency (Mrs Mary Leslie @ 021 462 4502).

1. INTRODUCTION

1.1 Background and brief

Doug Jeffery Environmental Consultants requested the Agency for Cultural Resource Management to undertake a specialist Phase 1 Archaeological Impact Assessment (AIA) of the remainder of the Farm Witteklip No. 123 in Vredenburg on the Cape West Coast.

The proposed rezoning of the property (from Agriculture Zone 1) is for the purpose of a retail shopping centre, to be called West Stone Mall.

The extent of the proposed development (about 15 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, identify and map archaeological remains that may be negatively impacted by the planning, construction and implementation of the proposed project, and to propose measures to mitigate against the impact.

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 site locality map is illustrated in Figure 1.

The property is located in Vredenburg on the Cape West Coast. Access to the site is directly off the R399 between Vredenburg and Saldanha Bay (Figures 2-5). The property, comprising old agricultural lands, is fairly flat in the north, sloping gently in the central and southern portion. Some excavations have occurred in the north eastern corner of the site. The central portion of the farm has recently been ploughed, a wide strip running almost down the entire length of the property. A buffer of indigenous veld runs alongside the eastern boundary of the site which is defined by a gravel road and the railway line. There are no significant landscape features on the site, other than the presence of several mature blue gum trees in the northern portion of the property.



Figure 1. Site locality map (3217 DB & DD Vredenburg)



Figure 2. View of the site facing south. Note the R399 in the top right hand corner of the plate



Figure 3. View of the site facing south. The gravel road marks the eastern boundary of the property.



Figure 4. View of the property facing south.



Figure 5. View of the property facing north west. Vredenburg Hills are in the top left hand corner of the plate.

4. APPROACH TO THE STUDY

4.1 Method of survey

The approach followed in the archaeological study entailed a detailed foot survey of the property.

The site visit and assessment took place on 30 June 2005.

A desktop study was also undertaken.

5. A BRIEF OVERVIEW OF THE ARCHAEOLOGICAL AND FOSSIL SIGNIFICANCE OF THE SALDANHA BAY/VREDENBURG PENINSULA

The Saldanha Bay/Vredenburg Peninsula is exceptionally rich in archaeological sites (Kaplan 1993; Sadr *et al* 1992). Its richness is determined largely by its rocky shoreline formation which was favoured by both Later Stone Age¹ (LSA) hunter-gatherers and Khoi herders in the past, as it offered greater opportunities for the exploitation of marine foods, while the shales and granites provided vital nutrients for domestic stock.

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

The recovery of human remains in the limestone deposits at Sea Harvest, in Saldanha Bay, has provided some of the earliest evidence we have in the world for the human exploitation of coastal resources, more than 100 000 years ago (Grine & Klein 1993; Volman 1978).

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

With regard to more ancient fossil sites, earthworks at the Saldanha Steel Project exposed rare crocodylian and other fossil remains from the Miocene Period, from deposits underlying calcareous formations (Roberts 1997a).

Several fossil hyena lairs have also provided glimpses of past Pleistocene (1.6 million – 200 000 years) faunas, including herbivores and carnivores, at Hoedjiespunt and Sea Harvest (Roberts 1997a).

An EIA for the proposed Alpha Saldanha Cement Project in Saldanha Bay also revealed the presence of an unusual Mid-Miocene (~ 11-12 million years) fauna, including the shell of a giant extinct ostrich like bird (Kaplan 1999; Roberts 1997b).

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

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

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

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

6. LEGISLATIVE REQUIREMENTS

6.1 The National Heritage Resources Act (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. IMPACT ASSESSMENT AND DESCRIPTION

No archaeological heritage remains were located during the baseline survey of the remainder of the farm Witteklip No. 123.

It is interesting to note, however, that large numbers of LSA tools were located on the grass slopes and grazing lands in the remainder of Portion 7 of the Farm Witteklip No. 123 directly opposite the R399. Many of the tools are associated with the presence of several large outcroppings of granites on the upper slopes of the property, a known location of herder sites in the Vredenburg area (Kaplan 2005, Sadr et al 1992).

8. IMPACT STATEMENT

The impact of the proposed development of a shopping centre on the remainder of the Farm Witteklip No. 123 in Vredenburg, 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.

Fossil remains may, however, be exposed in possible underlying calcrete/limestone deposits during bulk excavations and civil works.

9. RECOMMENDATIONS

The archaeological impact assessment of the remainder of the Farm Witteklip No. 123 in Vredenburg has rated the potential impacts to archaeological material as being low provided that:

- A professional palaeontologist must be appointed to assess the possible palaeontological significance of the fossiliferous material on the property if underlying calcrete deposits are intercepted during earth-moving operations.
- 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).

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