

**HERITAGE ASSESSMENT: PROPOSED CONSTRUCTION OF A FILM SET AND ASSOCIATED
INFRASTRUCTURE ON ERF 1212/3 (STRANDFONTEIN TIDAL POOL AND SURROUNDS),
DISTRICT MITCHELL'S PLAIN, WESTERN CAPE**

(Assessment conducted under Section 38 (1) of the
National Heritage Resources Act No 25 of 1999)

Prepared for:
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EXECUTIVE SUMMARY

The Archaeology Contracts Office at the Western Cape was appointed by Sillito Environmental Consulting to provide a Heritage Statement and complete a NID for the construction of a temporary film set, “The Sinking of the Laconia” in the Strandfontein Tidal Pool, Mitchell’s Plain, Cape Town.

It is proposed that the film set will be constructed in the western portion of the Strandfontein Tidal Pool in August 2009. A 1.5 m deep channel may need to be dredged in the tidal pool to facilitate the shooting of the film. Approximately 50 m² of soil will be removed from the pool and dumped nearby. It will be returned to the pool after the end of shooting (December 2009). The film crew will be housed in the parking area to the west of the pool.

The tidal pool was visited on the 25 June 2009 and the following conclusions were drawn:

- The dredging of a 1,5m channel in the pool to facilitate the construction of the film set is unlikely to impact on buried shipwrecks. In the unlikely event that there are buried shipwrecks beneath the sand in the tidal pool, then they will already have been impacted by the construction of the pool more than 20 years ago;
- There is a small likelihood that dredging may uncover palaeontological material embedded in the calcrete beneath the sandy base of the pool and a palaeontological comment is required. Dr Pether has recommended that after dredging the pool, a palaeontologist is appointed to look at the dredged soil for any evidence of fossil material;
- The establishment of a camp for the film crew on the nearby car lot is unlikely to impact on buried archaeological remains, such as burials and shell middens.
- The construction of the film set in the tidal pool will be screened from view by the pavilion and will not be visible from the R310.

It is recommended that filming may proceed with the mitigation recommended for the palaeontology.

1. INTRODUCTION

The Archaeology Contracts Office at the Western Cape was appointed by Sillito Environmental Consulting to undertake a basic heritage assessment of the Strandfontein Tidal Pool and surrounds, Mitchell's Plain, Cape Metro prior to the construction of a temporary film set "Sinking of the Laconia" by Two Oceans Production. The property on which the Strandfontein Tidal Pool is located on Erf 1212/3 belongs to the City of Cape Town.

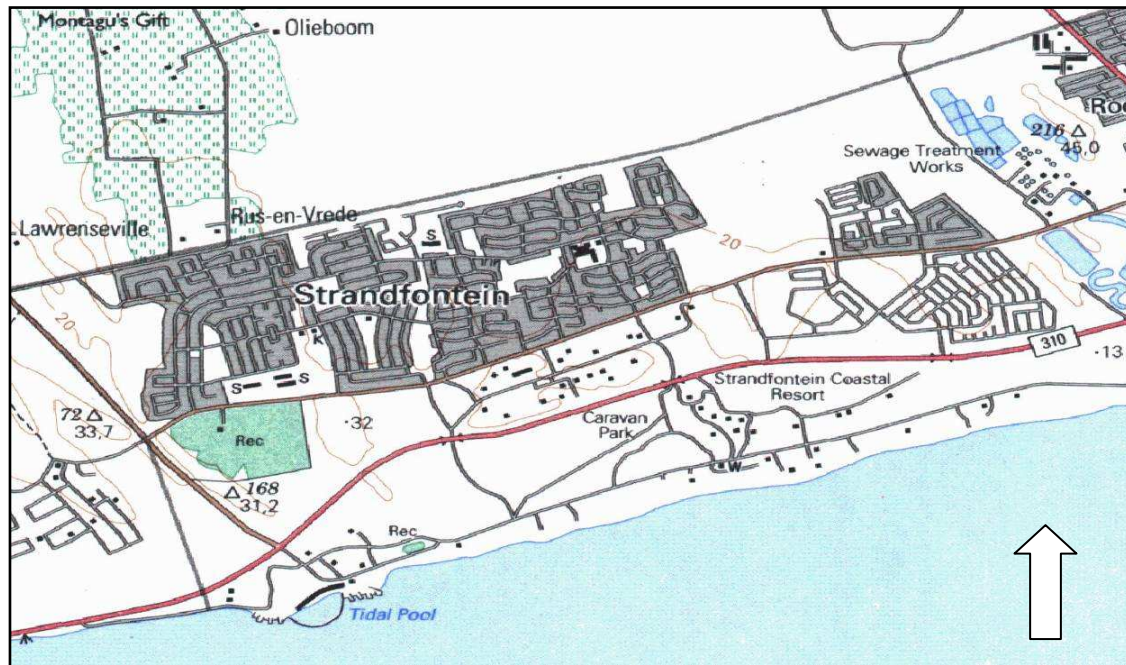


Figure 1: The location of the Strandfontein Coastal Resort and Tidal Pool on the False Bay coast.

The area which has been identified for the film shoot includes the tidal pool and the parking area immediately to the west of the tidal pool.

2. DEVELOPMENT PROPOSALS

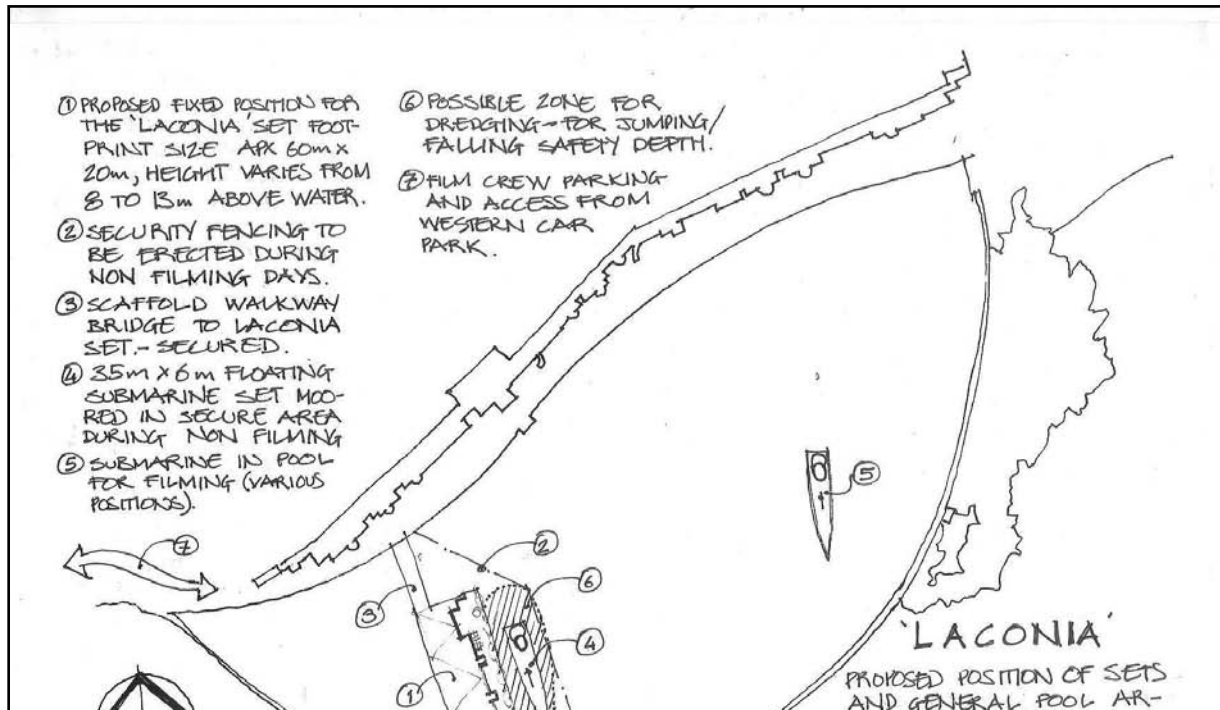
The Two Oceans Production film company intend to start filming “Sinking of the Laconia” in the Strandfontein Tidal Pool from mid-August 2009. This will involve building the set of the ship “Laconia” as well as the building of the set of a “U-Boat”. Further, the company will be required to dredge an area in front of the set to allow stunts to jump into the pool to move the lifeboats and to allow the set to move in a limited way. An excavator will be used to dredge a channel of 1,5 m deep in the pool and the sand would be placed in an area behind the set and to the west of the pool. The total amount of sand which will be dredged from the pool will be 50 cubic metres. The sand will be set aside for the duration of the shoot, and will then be returned and the pool will be rehabilitated



Figure 2: Aerial view of the Strandfontein Tidal Pool. The film set will be constructed to the west of the line running across the pool. Note the pale coloured rocks on the outside of the pool, they represent the original calcrete rocks of this area. The dark rocks appear to have been placed here artificially.

The film crew are expected to number 100 people and their base camp will be located in the parking area to the west of the tidal pool. A maximum of 50 vehicles will also be parked in this area. All vehicles will use the western access road to the pool, away from the main public entrance and parking areas. According to the specifications provided by the company they will be bringing portable toilets on site and all waste will be disposed of by the construction and catering companies.

The area adjacent to the set and bridge will be fenced off to prevent public access and screening fences will be used to mitigate the visual impact of the construction and base camps.



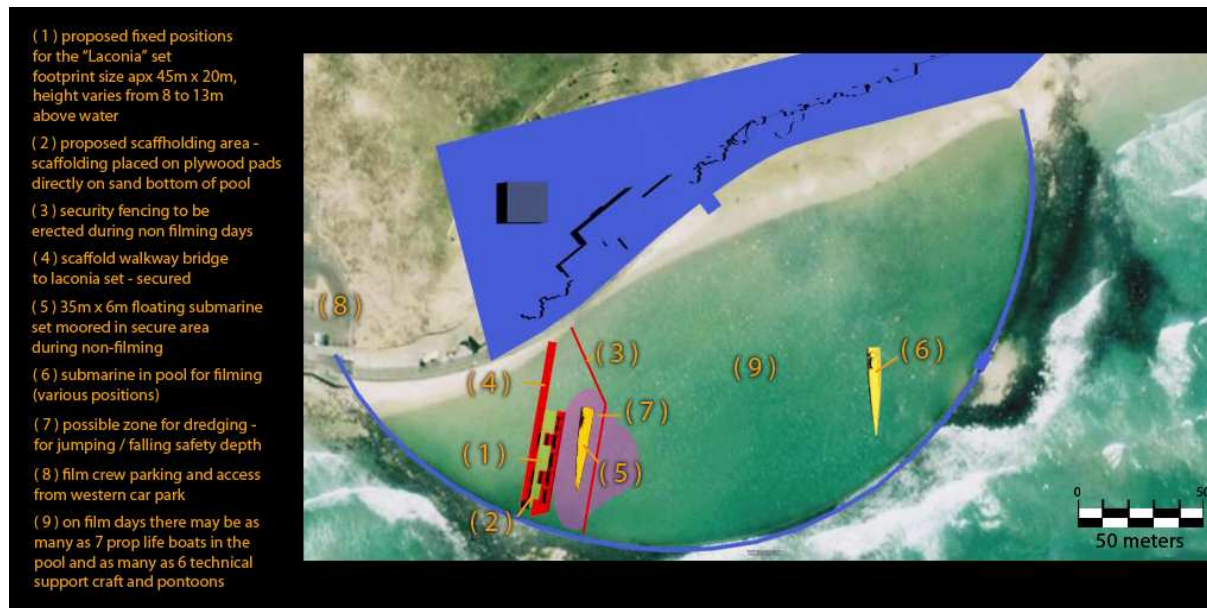


Figure 4: A computer generated model of the design of the sets in the Strandfontein Tidal Pool. The construction will be to the west of the pool, and the eastern section will not be affected.

3. TERMS OF REFERENCE

ACO was appointed to determine whether there would be any heritage implications for the construction of the temporary film set in the Strandfontein Tidal Pool.

4. LEGISLATIVE REQUIREMENTS

The National Heritage Resources Act, No 25 of 1999 (Section 38 (1)) makes provision for a compulsory notification of the intent to development when any development exceeding 5000 m² in extent, or any road or linear development exceeding 300m in length is proposed.

The NHRA provides protection for the following categories of heritage resources:

- Landscapes, cultural or natural (Section 3 (3))
- Buildings or structures older than 60 years (Section 34);
- Archaeological Sites, palaeontological material and meteorites (Section 35);
- Burial grounds and graves (Section 36);
- Public monuments and memorials (Section 37);
- Living heritage (defined in the Act as including cultural tradition, oral history, performance, ritual, popular memory, skills and techniques, indigenous knowledge systems and the holistic approach to nature, society and social relationships) (Section 2 (d) (xxi)).

The size of the development (construction of a temporary film set) in the tidal pool is less than 5000 m² and therefore Section 38 (1) of NHRA does not apply. *However, there are four aspects of the development (construction of a temporary film set) which may impact on the following heritage resources:*

4.1 Shipwrecks between the high and low water mark

Dredging of a channel in the tidal pool may uncover *shipwreck* material. Section 35 (1) of the NHRA states that “the protection of any wreck in the territorial waters and the maritime cultural zone shall be the responsibility of SAHRA”. The maritime cultural zone is defined in the Maritime Zones Act 1994 to fall below the low water mark. Hence, the tidal pool at Strandfontein, which falls between the high water and low water levels of the sea, would fall within the jurisdiction of Heritage Western Cape.

4.2 Archaeological material on land

The establishment of a temporary camp site in the car park close to the tidal pool needs to be assessed in terms Section 35 of NHRA, i.e. possible impact on *archaeological heritage* resources such as shell middens.

4.3 Scenic Route

The impact of the temporary set structures on the Baden Powell *scenic routes* (310) which follows the False Bay coast needs to be assessed.

4.4 Palaeontological Remains

Previous palaeontological research at Swartklip, further to the east along the False Bay coast, has revealed fossil dunes of the Pleistocene Langebaan Formation containing late Pleistocene fossil hyena remains. The dredging of a channel in the pool may disturb calcrete deposits at the base of the Strandfontein Tidal pool containing fossil material (Section 35 of NHRA). Dr John Almond's comments are attached at the end of this heritage statement.

5. BACKGROUND INFORMATION

Fossil (or palaeontological) remains have been found on the Anglo Alpha limestone mine near Zandvliet (Halkett & Hart 1997), north east of the study area, while the significant fossil-bearing deposits on the False Bay coastline have also been widely reported (Pether 2005). Just east of the tidal pool near the end of Surf Road, beach erosion exposes Pleistocene organic-rich "Vlei" deposits with *Tomichia* brack/freshwater gastropods in clayey soils, with *Equus capensis*, *Raphicerus*, *Hippotragus* and plant macrofossils (G. Avery pers comm.) To the west of the tidal pool blocks of "lignitic" or peaty material wash up, including the mandible of *Reunca* sp,

Dr G Avery (Iziko Museums) reported on Middle Stone Age (MSA) tools buried in calcrete surfaces at the Olympic Sand Mine in 2003, while earlier studies describe MSA tools embedded in the weathered limestone cliffs at Swartklip and Wolfgat on the False Bay coastline.

In the late 1960's archaeologists (Rudner 1968 and H. Deacon pers. comm. 1993), recorded the presence of isolated and ephemeral scatters of stone artefacts and shell middens (ancient rubbish dumps) on the beaches at Strandfontein, Swartklip and Macassar. However, due to recreational and infrastructure development such as road construction these sites most likely no longer exist. According to Mr Ken Young (Jonathan Kaplan pers. comm. 2002), a retired building contractor living in Riebeeck West, *several 'Bushmen' burials were uncovered during excavations and bulk earthworks for the Strandfontein Pavilion, but these were illegally re-buried in soft sands in the surrounding area.*

An examination of the information on shipwrecks in this area is summarized in Table 1. Shipwreck data is generally very vague and there is insufficient information to pinpoint the location of any of these wrecks or to determine whether they may be impacted by the dredging of the tidal pool. It remains very unlikely.

6. SITE SURVEY

A brief site survey was conducted on 25 June 2009. The area around the tidal pool, including the slopes of the hill behind the pool, was examined for heritage implications. Digital photographs were also taken.

6.1 *Limitations*

There were no limitations to the survey.

7. RESULTS

The site visited was conducted with a view to identifying any heritage resources which might be negatively impacted by the type of development outlined by the client.



Plate 1: View of the edge of the Tidal Pool and the Pavilion, looking west. Plate 2: The western portion of the Tidal Pool which will be used for the filming. Note the calcrete rocks (pale colour) between the dark rocks outside the rim of the tidal pool.



Plate 3: The car park to the west of the Tidal Pool where the film crew will be accommodated during the film shoot. Plate 4: The ridge of sand behind the pavilion partly hides the tidal pool from the view of passing motorists on the R310 (red arrow).

No archaeological remains were observed on the hill of loose soil between the pavilion and the R310. The tidal pool is only partly visible from the road. It is largely obscured by the hill and the pavilion. There is no evidence of tidal fish traps, although it is possible that the tidal pool may have been constructed on pre-colonial fish traps. There are outcrops of calcrete outside the walls of the tidal pool which may contain fossil material. The tidal pool is very shallow (around 1m in depth) and clearly dredging will be required to build the sets.

8. CONCLUSIONS AND RECOMMENDATIONS

The temporary construction of a film set in the Strandfontein tidal pool on the 310 scenic route, the dredging of a channel in the tidal pool as well as the impact of a temporary camp in the nearby parking lot has been assessed:

- The dredging of a 1,5m channel in the pool to facilitate the construction of the film set is unlikely to impact on buried shipwrecks. In the unlikely event that there are buried shipwrecks in the tidal pool, then they will already have been impacted in the recent past;
- There is a very small likelihood that dredging may uncover palaeontological material embedded in the calcrete beneath the sandy base of the pool and a palaeontological comment is required. Dr J Pether (palaeontologist) has made comments (see end of this statement) and recommended that a palaeontologist inspect the dredged material in order to see if they contain fossils;
- The establishment of a camp for the film crew on the nearby car lot is unlikely to impact on buried archaeological remains, such as burials and shell middens.
- The construction of the film set in the tidal pool will be screened from view by the pavilion and will not be visible from the R310.

It is recommended that filming may proceed with the paleontological mitigation recommended.

9. REFERENCES

Barwis, J.H. & Tankard, A.J. 1983. Pleistocene Shoreline Deposition and Sea-level History at Swartklip, South Africa. *Journal of Sedimentary Research* Volume 53 (1983)

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Kaplan, J. 2006. Phase 1 Archaeological Impact Assessment Western Macassar Dunes, Cape Town.

Klein, R.G., 1975. Palaeoanthropological implications of the nonarchaeological bone assemblage from Swartklip 1, south-western Cape Province, South Africa. *Quaternary Research* 5: 275 – 288.

Pether, J. 2005. Macassar Dunes Eco-Trail Project. Palaeontological assessment of the Macassar Dunes. General information document. Report prepared for the Environmental Evaluation Unit.

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R. Singer and A.O. Fuller, 1962. The geology and description of a fossiliferous deposit near Zwartklip in False Bay. *Transactions of the Royal Society of South Africa* 36 (1962), pp. 205 – 211.

From: "John Pether" <jpether@iafrica.com>
To: "Lita Webley" <lita.webley@uct.ac.za>
Date: 6/29/2009 12:24 PM
Subject: RE: Strandfontein tidal pool - dredging

Hi Lita,

Just east of the tidal pool near the end of Surf Rd, beach erosion exposes Pleistocene organic-rich "Vlei" deposits with *Tomichia* brack/freshwater gastropods in clayey sands, with *Equus capensis*, *Raphicerus*, *Hippotragus leucophaeus* and plant macrofossils (G. Avery, pers. comm., long ago).

To the west of the tidal pool blocks of "lignitic" or peaty material wash up, incl. mandible of *Redunca*.

At Swartklip the peaty facies with terrestrial bones and shell predate overlying ~230 ka aeolianite and are likely of early MIS 7 age (Roberts, et al, 2009).

(Roberts, D.L., Bateman, M.D., Murray-Wallace, C.V., Carr, A.S. Holmes, P.J. 2009. West coast dune plumes: Climate driven contrasts in dune field morphogenesis along the western and southern South African coasts. *Palaeogeography, Palaeoclimatology, Palaeoecology* 271, 24-38.)

Dredging in the tidal pool may well turn up some of this material.

Are they going to "stockpile" the dredged material somewhere where it can be inspected easily? There could be MSA stuff in it?

Regards,

John

TABLE 1: SELECTED SHIPWRECKS, FROM THE STRANDFONTEIN AREA, IN THE SAHRA DATABASE

Name	Date	Location	Comments
Drietal Handelaars	1789	Near Swartklip Rocks (present Monwabisi), False Bay	Wooden sailing vessel
Padang	1829	Muizenberg Beach	Wooden sailing vessel
La Camille	1836	Farmer Peck's Farm, Muizenberg	Wooden sailing vessel
Admiral Cockburn	1839	Muizenberg Beach	Wooden whaling vessel
Le Protie/Protee	1839	Near Farmer Peck's Farm, Strandfontein	Wooden whaling vessel
Felix Vincidor	1841	Muizenberg Beach	Wooden sailing vessel
Johanna Wagner	1862	Zandfontein, 5 km from Muizenberg Beach	Sailing vessel