EXPLORATORY ARCHAEOLOGICAL INVESTIGATIONS AT PP7: TO DETERMINE FEASIBILITY, STRATEGY & SCOPE FOR REMEDIAL MITIGATION AND CONSERVATION

Erf 15387 and a portion of Erf 2001, Farm Boplaas, Pinnacle Point, Mossel Bay District, Western Cape Province

Final Report

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and

Heritage Western Cape
(HWC permit No. 2008-09-004)
(HWC Ref. No HM/PINNACLE POINT/FARM BOPLAAS 15387, PTN of Erf 2001)

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8 October 2009

Executive Summary

A significant event of water erosion resulted in the partial destruction of a coastal shell midden site (PP7) at Pinnacle Point. Exploratory archaeological investigations were conducted to determine the extent of damage, nature and stratigraphic character of the site as well as the feasibility, strategy and scope of remedial archaeological mitigation and the conservation of remaining deposits.

For several reasons it is recommended that archaeological mitigation of PP7 is not feasible or desirable, and that - in lieu of mitigation - the focus should be on stabilizing the site for its protection and conservation.

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1 Introduction

Site PP7 – a Later Stone Age shell midden on the coast at Pinnacle Point, Mossel Bay at around S34.20515 E22.09179 - suffered extensive damage from erosion and requires remedial mitigation to obtain representative samples as well as the implementation of measures to protect and conserve the remaining archaeological deposits where possible (Figures 1 & 2 and Plates 1 & 4 through 8). Note that, unless stated otherwise, the name PP7 is used here to refer to PP7 lower (see Figure 2).

A permit application submitted to Heritage Western Cape in July 2008 proposed and motivated for exploratory archaeological investigations. The rationale was that this work would allow us to make recommendations for full archaeological mitigation and to determine effective protective and conservation measures.

This report focuses on exploratory fieldwork conducted at PP7 and does not refer to other sites in the area or previous archaeological work done at Pinnacle Point. The site and its exposed/disturbed contents are not described in any detail. The primary purpose for which Heritage Western Cape (HWC) issued a works permit was to establish the extent of mitigation work required, a strategy for conservation and to develop a more informed works programme for both HWC and the client.

Exploratory investigations were conducted to determine the extent of damage, nature and stratigraphic character of the site as well as the feasibility, strategy and scope of remedial mitigation and conservation of the remaining deposits.

2 Methodology

From 7 October 2008, the author and two field assistants spent six days on site performing the following tasks (see pictures below):

- inspected PP7 upper and PP7 lower for damage caused by erosion
- inspected erosion-cut profiles and eroded - *ex situ* - archaeological materials
- cleared slumped and spilled material – by trowel and brush - from the southern wall of the donga to examine the in tact archaeological profile of the midden deposit as exposed through erosion
- sieved archaeological deposit through 3 and 10 mm sized mesh screens to examine the content of damaged midden sediments, screened material was retained for the record and future purposes
- excavated – by trowel - small test holes to determine the stratigraphic nature, extent and integrity of deposits

3 Results of Exploratory Investigation

The above work revealed the following (see pictures below);

- PP7 upper and lower lie alongside the now renown and globally significant archaeological site of PP6, and continued or future erosion is a great threat to these sites (Plate 1)
- below the rocky overhang of PP7 upper, the talus slopes steeply to the rocky shoreline below at an angle of greater than 30^0 (Plates 1, 2 & 6)

- a substantial part of PP7 lower is ruined by erosion (see Table 1 for coordinate data for PP7 and the erosion gully; see Plates 6 through 7)
- PP7 upper is less affected and is largely in tact (Plate 4)
- the northern extent of PP7 is destroyed as evidenced by the near absence of shell midden materials in the northern erosion-cut profile
- a large portion of PP7 remains in tact and can be conserved (Plates 1 & 2)
- some sections of archaeological deposits visible in the erosion-cut, southern profile show that, in places, the steep talus slope below the small overhang resulted in considerable mixing of materials as they migrated and settled down slope (Plate 7)
- along other sections of the southern profile, the midden deposits are bedded and not mixed as described above in point 4
- the midden material consists predominantly of a variety of shellfish species, stone artefacts typical of the Later Stone Age are dominant while bone and other cultural materials are rare
- some small test holes revealed the presence of in tact shell midden layers in aeolian dune sands below the upper midden deposits up to a depth of at least 2 m below the surface – while no stone artifacts were seen in these small exposures of the lower lenses, it is possible that they are of Middle Stone Age origin (Plates 7 & 8)
- the lower shell midden layers are in tact, stratified and well bedded and would likely yield more valuable information than the partially mixed, compromised upper midden deposits
- due to the steep talus slope and great depth of significant midden horizons, any archaeological excavations will be very difficult and not economically viable
- to reach the lower layers will require opening a large area – due to the great depth of these layers and because the matrix is well sorted dune sand – in order to prevent profile collapse
- pedestrian and excavation related activities will damage vegetation that binds sediments and protects the slope from erosion
- any disturbance to vegetation and sediments on the steep slope pose a great risk to further erosion and damage to archaeological materials, vegetation, and the ancient dune itself
- protection and conservation of the remaining archaeological deposits at PP7 and potentially PP6 will require effective, permanent stabilization of the erosion donga in the near future

Table 1. Coordinate data for PP7 and the erosion gully.

Name	Description	WGS 84 Lat/Lon decimal degrees
PP7	PP7 lower	S34.20515 E22.09179
1	erosion gulley	S34.20501 E22.09176
2	erosion gulley	S34.20503 E22.09182
3	erosion gulley	S34.20504 E22.09190
4	erosion gulley	S34.20505 E22.09195
5	erosion gulley	S34.20506 E22.09205
6	erosion gulley	S34.20508 E22.09211

4 Recommendations

Based on results of the exploratory investigations, the following is recommended;

- no further archaeological mitigation should be conducted at PP7
- in lieu of archaeological mitigation, the focus should be on stabilizing the donga to prevent further erosion of sediments, vegetation and midden deposits
- a suitable engineer should be appointed - as a matter of urgency - to devise an effective strategy to stabilize PP7 and to prevent further erosion

Figures and Plates (on following pages)

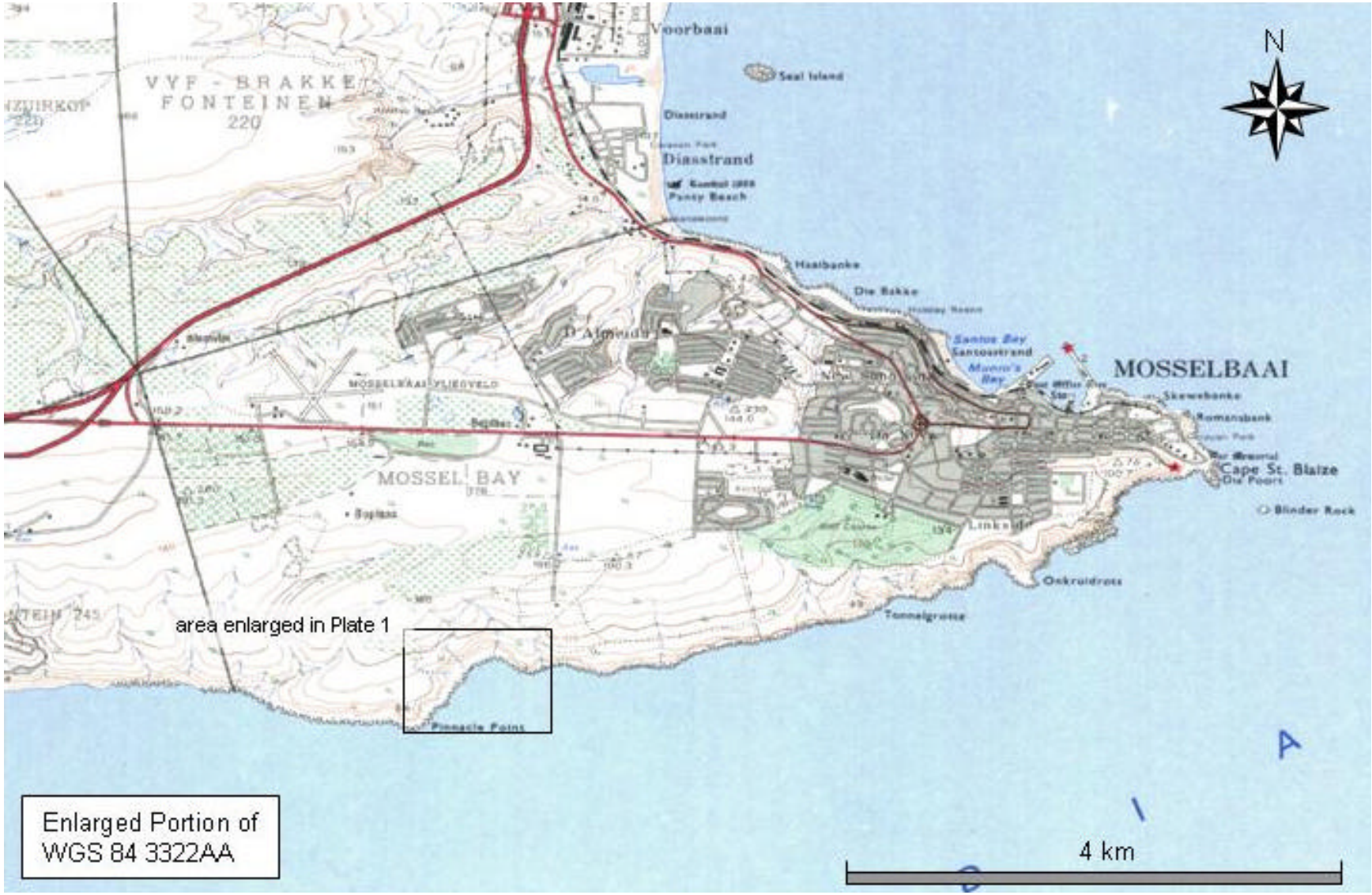

Figure 1. General location of Pinnacle Point relative to Mossel Bay, Western Cape Province.

Figure 2. Aerial photo showing position of PP7 (white oval) in relation to other sites on a portion of Pinnacle Point.

Plate 1. Panorama toward SW and NE: PP7 relative to a few cave sites at Pinnacle Point. Note steepness of slope at PP7.

Plate 2. Looking down talus slope from PP7 upper – note steepness of slope and erosion donga at bottom left of image.

Plate 3. ENE view from the talus slope of PP7

Plate 4. Southern edge of donga with rock shelter of PP7 upper

Plate 5. Upper reaches of donga with archaeological debris on southern wall of erosion gulley

Plate 6. Looking down from upper part of donga with crew screening cleared sediments at centre left

Plate 7. End of 6th day in field; note a few of the small test holes with archaeological deposits

Plate 8. Close up of test holes with archaeological layers; the lower shell midden layer is at least 2 m below the surface