C-545 CATALOGUE COPY

ARCHAEOLOGICAL REPORT CATALOGUE COVERSHEET

Area Archaeologist to complete sections A, B, C, D and Map Name, Region and District - on card and other sections i to vi

i)

A. Author LOURANDOS, H.	D. Reason PROTECTION/ASSES		Map TWEED HEADS.
"	Authority NPWS		Ref. 6735 4153
B. File No. A8971	Report to NPWS		Map
Date of Rep. 7.6.79.	Type INVESTIGATION		Ref.
C. Title INVESTIGATION OF SHELL MIDDEN WITH BURIALS OFF EMAIRE VALE ROAD, SOUTH OF BALLINA. (4-4-29) 4.5.8.	Test Exc.		Region NORTHERN
	Gen Rep.		District LISMORE
	Bone		Where held CAT.
	Shell		Sites Located Yes/No
	Lithic		Geomph.
	Wood		Pollen
Site No. 4-4-29 4.5.8	Soil		C14.

ASSOC. REP.
C-1926
C-678
C-4237
C-674
C-1215
C-1254
C-0051
C-0048
C-0700
C-1209

ii) Copy of report:

	on file
	in Site Register
	to ARAC

iii) Are copies of maps with Catalogue Copy (ORIGINAL)? ✓

iv) Where are the photographs filed ?

	Register
✓	Catalogue

v) If Report is "Systematic Survey"

N/A.

Is Survey

	Total
	Sample
	Cursory

vi) Archaeologist Handling .....

Overlay Marked up: Yes / No N/A
Why not

Copy to Region: Yes/No

Date: 12/8/80

Catalogued by: JOH

Date: 25/11/79.

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REPORT TO THE NATIONAL PARKS AND WILDLIFE SERVICE. CATALOGUE COPY

An eroded shell midden with burials off Empire Vale Road, south of Ballina.

Introduction

This report follows an inspection of the site on 23.4.79 together with Howard Creamer from National Parks and Wildlife Service. The original report on the site is listed as TD/IV/S/193 and the site number is 4-4-29. 4·5·8

Location Data

The site is situated approximately 5 km south of Ballina and located on a fore dune c. 100 m behind the beach and c. 9 m above sea level. The midden can be approached from the Empire Vale Road which leads to a track that crosses the dunes to the beach (see map attached). The site can be located by the following map and air photo references.

1. map a) Tweed Heads; scale 1:250,000; grid ref. 6735 4153.
   map b) Empire Vale; scale 1:25,000; grid ref. 533 013.

2. Air photo ref. Ballina; Run no. 5; photo 6-4; date Flown 9.8.71.

The site is situated in the County of Richmond, Parish of South Ballina, on Vacant Crown Land, along a beach front.

Description of Site

The local environment is of an extensive sandy beach backed by vegetated dunes. The area behind the dunes is now cultivated and any original wetlands that may have existed would now be drained. The site consists of a large "blow-out" containing archaeological material, two human burials, and an area of stratified deposit. The dimensions of the eroded area are approximately 250-300 m long and 150 m wide. The stratified deposit lies immediately to the south of this "blow-out" and the burials are grouped together at its northern end. The stratified area is located about 3 m below the present dunes which appear to be recent in origin (i.e. post European contact) while the lowest point of the eroded area is c. 4 m below this again. As one burial appears to be partially 'in situ' this evidence suggests that the site (midden & burials) was deposited along the undulating dune surface with the burials dug into a natural hollow.

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a) burials.

Two burials were located close together. The local ranger also reported that he remembered seeing a third burial in the same area. The first burial was of a full skeleton lying in a "flexed" position. From the condition of the teeth (heavily worn) it appears to have been of a mature individual. In general, preservation was poor. The skeleton appeared to be almost fully articulated, and lay on its right side in an east-west position, with the skull to the east, and faced northwards. Because of the degree of articulation the burial appeared to be 'in situ' although some bones were lying scattered about caused apparently by recent erosion.

The second burial is located some 2 m to the east of the first and is disarticulated. It consisted of a skull and some parts of long bone scattered in an area of c. 1 m^2. The third burial was reported to have been located c. 3 m east of the second but we were unable to find any trace of it.

b) the stratified area.

This area measured c. 100 x 50 m and is a shell midden stratified in a dark soil horizon to a depth of c. 20-30 cm. This soil horizon perhaps capped the dunes in recent times. As already mentioned, above this horizon is a quantity of loose and presumably more recent (post European contact) dune cover. The soil horizon appears to be now eroding from below this recent dune layer and presumably a larger area of this archaeological site still lies buried below recent dune immediately to the south of this area. It is possible that the entire length of dunes south of Ballina is composed of one fairly continuous and thinly deposited midden most of which is still covered by vegetation.

The exposed stratified deposit is of concentrated shell together with plentiful stone artefact material. The predominant shell species was the sand beach species Plebidonax deltoides, but also noticed were Crassostrea commercialis and other ocean rock platform species although no rock platforms were noticed in the vicinity of the site. The cultural assemblage

was composed of : flakes of chert and quartz, some of the latter showing bipolar fracture; small quartz pebbles; concentrations of pebbles (some flaked) some of them covering an area of 1 x 1.5 m and composed of up to 50-70 pebbles. The latter could have been flaking stations as no concentration of charcoal was associated to indicate that they may have been hearths. Charcoal was present in the deposit but no other organic material (such as bone) was evident.

c) eroded area ("blow-out")

This extensive area was composed of similar material to the above assemblage and presumably is the eroded remnant of the same cultural horizon. The assemblage included: similar proportions of shell species; concentrations of pebbles; large flaked water-worn pebble tools (one measuring 30 x 25 x 15 cm) of what appeared to be a local hard sand-stone, and in appearance like classic "pebble-choppers"; chert, agate and quartz cores and flakes. Cores of chert/agate were multifaceted, and as well a "blade" core about 3 cm high and worked all around the striking platform, and a chert core with bipolar fracture, were noticed. Some chert flakes had been retouched, and one particular flake c. 4 cm in length, had been retouched along one long margin. The quartz material was composed of small flakes and cores.

Archaeological significance

We have here evidence of an extensive and potentially much larger single horizon archaeological site. As already indicated much more extensive cultural deposit may lie buried beneath recent dune cover at least south of the site. The cultural deposit indicates that fairly recent occupation was composed of an industry of small chert and quartz flakes and cores displaying bipolar fracture and possible blade-flaking techniques. Large flaked water-worn pebbles ("choppers") were also used. Exploitation of the sandy litoral and some offshore-rock platforms for shellfish is the only obvious evidence of the economy of the site. The importance of the site is offset on the one hand by the richness and extent of the deposit and on the other by its limited depth which indicates a short time period.

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On these grounds the site cannot be given an "A" classification but at the same time should be strongly considered for preservation.

Because of their association with the shell middens, the burials would also appear to be of fairly recent origin.

Recommendation

As the two burials are now in a rapid state of disarticulation caused by erosion, I would suggest that they be preserved with some haste. This could take either of two solutions:

1. that the burials be covered 'in situ' as they now exist and that this area be stabalised by a limited planting of vegetation to prevent further erosion. (We carried out a shallow covering of the burials while inspecting the site in a short-term attempt at some protection).
2. that the burials be carefully excavated by a trained archaeologist and reburied in the immediate vicinity and their position stabalised by planting vegetation. The excavation must entail careful recording of the burials (a plan of the distribution of bones and associated artefacts and stratigraphical details) together with the mapping of their exact location in relation to the archaeological site, the immediate environment and the position of reburial.

Although large scale erosion is now taking place in the area it still may be possible to carry out the first plan as a stop-gap measure. The restabalised site could be monitored by rangers in case of further erosion.

If it is decided that the present erosion is uncontrolable plan two may be the more practical and long term solution. Reburial could take place nearby but away from the area of erosion. Attempts could also be made to contain this erosion by replanting vegetation across the "blow out". The archaeological importance of this eroded area has now been lost as the deposit is no longer stratified.

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Secondly, I would recommend that the dunes in the region of stratified deposit also be stabalised to prevent further erosion of the site. As the latter is only a limited area, this task could be achieved with a minimum of effort.

Harry Lourandos,

Department of Prehistory & Archaeology,
University of New England,
Armidale.
7.6.79.

Photographs (by Howard Creamer) Kodacolor/76

1. Aerial view of the beach looking north towards Ballina. The eroded dunes which include the site can be seen in the centre of the photograph.

3. The "flexed" burial is pictured in the lower right hand corner with the "blowout" behind & the stratified site in the upper left hand area of the photograph.

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5. Close-up of "flexed" burial.

6. The stratified midden showing the depth of deposit, soil horizon, and remains of dune vegetation with erosion in foreground.

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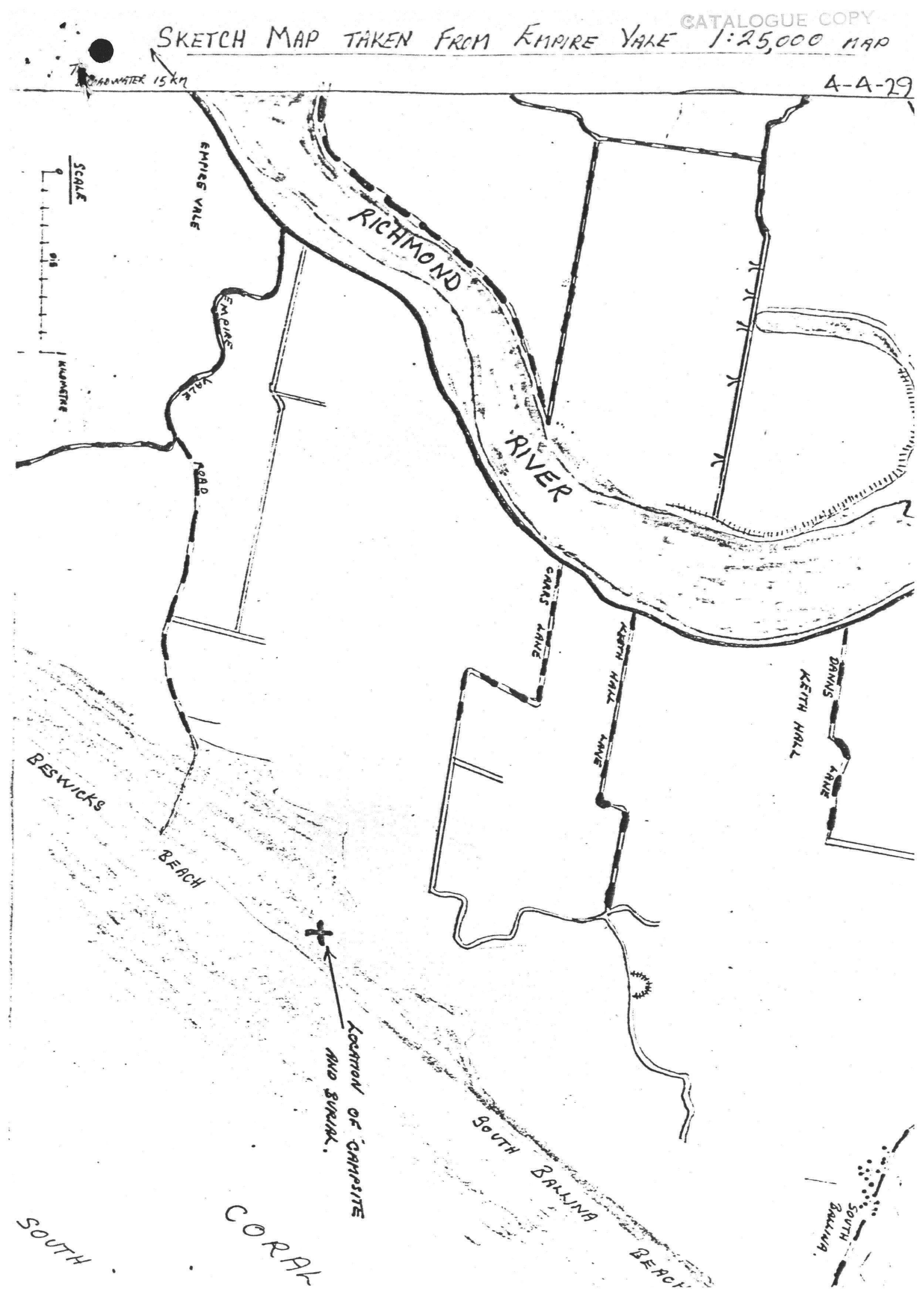
SKETCH MAP TAKEN FROM EMPIRE VALE 1:25,000 MAP

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