

# RESEARCH BULLETIN

Supplement to Newsletter  
Volume 17.1 Autumn 1987

Registered for posting as a Publication - Category B  
ISSN 0156-9295 IBH 2801

Box 220 Holme Building  
University of Sydney 2006  
Telephone (02) 692 2763

## Number 1

### A NOTE ON THE CONSTRUCTION TECHNIQUES OF CONVICT BUILT ROADS

Andrew Wilson

#### Introduction

This paper was prompted by the latest in Grace Karskens' articles on the Great North Road and the convict road gangs that built it. In a masterly combination of historical and archaeological evidence she has identified the work of particular gangs in particular areas and come to an understanding of working patterns and the distribution of gangs along the road (Karskens 1986:22-27).

In analysing the road she adopted a typology of construction styles to facilitate identification and description. This typology applies only to the Great North Road study area but it may well form the basis for the description of other convict built roads. It is with this in mind that I wish to describe a different construction technique evident in the remains of the Old Bathurst Road.

#### Old Bathurst Road

The history of the original road over the Blue Mountains to Bathurst is well documented, it was constructed in the 6 months between July 1814 and January 1815. Governor Macquarie appointed Lieutenant William Cox as superintendant of the work with instructions to open a road 12 feet (3.6 metres) wide. Cox's gang consisted of 40 men, 20 of whom were the convict labourers who actually built the road.

Following the normal practice of the time, in which Cox had considerable experience, he did not form a road in the modern

sense but set out to clear, define and drain a trafficable route. The journal kept by Cox makes clear the method he adopted. The guide was sent ahead to check the route. The convict work party followed, clearing the track of vegetation, boulders and outcrops of stone. The road was then graded and any necessary gutters, culverts and bridges were built.

Cox's party worked under different conditions to the road gangs who later worked on the Great North Road. Their aim was to open up a route to the inland as quickly as possible, not to create durable road works or punish by hard labour. Later work has obliterated most of the work undertaken by Cox's party, but various short stretches of the original route survive.

#### Linden/Woodford Remains

In September/October 1983 remains of the original road work were identified during a survey of the environs of a water pumping station constructed by the Metropolitan Water Sewerage and Drainage Board of New South Wales (Wilson 1983). The work was carried out in conjunction with a similar survey for prehistoric remains (Ross 1983). The survey area is about halfway between Linden and Woodford, immediately east of the Great Western Highway (Grid Reference 8930-I-S KATOOMBA 676652).

The road in this area was constructed in September 1814. Historical descriptions and plans of this part of the road make it clear the remains date from this period, although the road was constantly upgraded during its use (Wilson:4-9).

The remains in the survey area consist of kerb lines and gutters cut into the exposed sandstone bedrock (See Figures 1 - 3). The kerb lines clearly represent the adaptation of existing techniques to the local topography: the exposed mountain ridge with little or no soil and vegetation. The ridge was originally chosen precisely because it was free of vegetation and therefore provided the easiest path.

This technique is not represented in Grace Karskens' typology for the Great North Road. It is not in the strict sense a form of building construction but it was clearly used by to mark the line of the road.

Elsewhere along the route Cox's party used techniques similar to those found on the Great North Road, when these were appropriate. On the rocky outcrops within the survey area they marked the route by cutting it into the mountain itself.

Andrew Wilson  
Consultant Archaeologist, Sydney

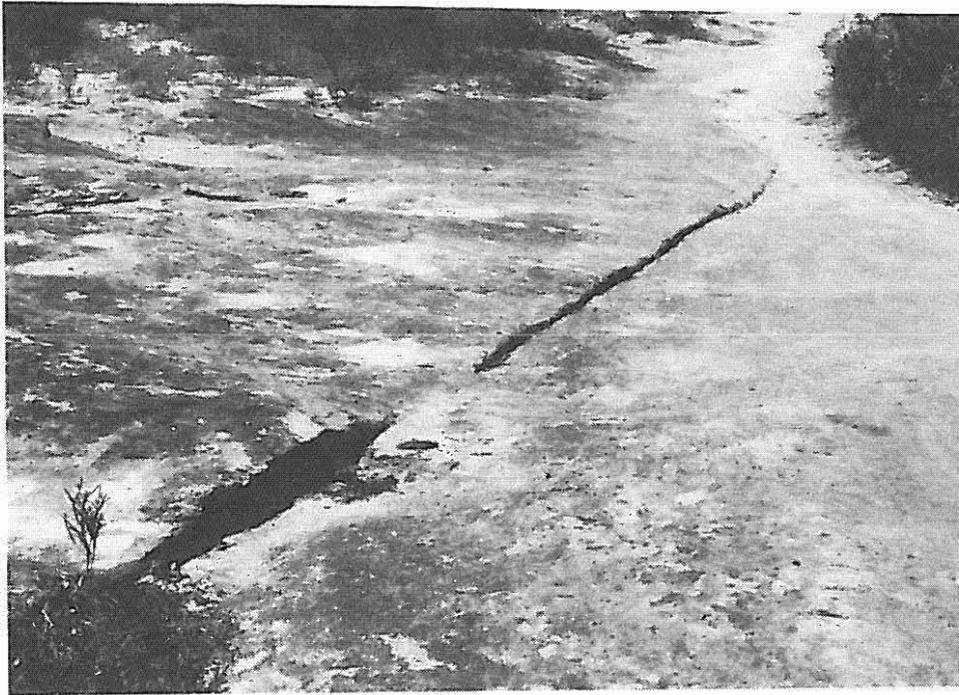


Fig 1: Shows the longest single section of kerb in the survey area. The kerb line has been worn down, and is partly covered by sand where it crosses the line of a modern unmade road. Scale is 1 metre in 100mm divisions. Photo by Andrew Wilson.



Fig 2: Shows a section of road defined by kerbs on both sides. The kerb lines are visible in shadow on the right, and marked by a scale on the left. The bedrock road surface is clearly visible. Scale is 1 metre in 100mm divisions. Photo by Andrew Wilson.



Fig. 3:  
Shows a gutter  
cut through  
the kerb line  
to direct  
water away  
from the road  
surface.

Scale is 1  
metre in 100mm  
divisions.

Photograph by  
Andrew Wilson.

### Acknowledgements

I am grateful to Anne Ross and John Thorne for their assistance during the original survey, and to the staff of the Metropolitan Water Sewerage and Drainage Board of New South Wales who were involved in the project.

### Select Bibliography

#### Grace Karskens

- 1986 'Defiance, deference and diligence: three views of convicts in New South Wales road gangs' in *The Australian Journal of Historical Archaeology* 4:17-28

#### Anne Ross

- 1983 *Prehistoric Archaeological Survey of the Northern section of the Old Bathurst Road and Linden B Pumping Station, Woodford, Blue Mountains*  
Unpublished Report and Supplement  
Metropolitan Water Sewerage and Drainage Board of New South Wales

#### Andrew Wilson

- 1983 *Historical Archaeological Survey of Linden 'B' Water Pumping Station 274 and Access Routes*  
Unpublished Report  
Metropolitan Water Sewerage and Drainage Board of New South Wales