

Our Ref: 04/040 PJ\$:vb

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18 March 2004

Coal River Working Party University of Newcastle University Drive CALLAGHAN NSW 2308

ATTENTION: Dr. Erik Eklund

Dear Sir

RE: Investigation of Convict Workings - Fort Scratchley

REPORT ON SURVEYING PROCEDURES

Following your invitation to participate in the search for the coal seam workings at Fort Scratchley we have undertaken the following activities:-

- 1. Record the current location of topographic features and existing structures within and surrounding the fort by precise GPS survey techniques.
- 2. Produce a scale plot of this information and overlay onto a 2003 aerial photograph of the same scale to enable confirmation of accuracy of photograph. Comparisons were excellent enabling us to eliminate distortion through lens or reprinting in our subsequent reliance on this document.
- 3. Print a copy of the recently discovered 1856 survey map of the Fort Scratchley (signal hill) site to the same scale as the photograph.
- 4. Overlay the 1856 map onto the photograph by both hard copy (light table) method and by digital means in cad to identify common features which enabled alignment one to the other.

Evidence of physical change to the topography of the site is immediately apparent due mainly to the construction of the fort structures in the 1890's.



Despite these significant changes there remain a large number of features clearly apparent in both plans to satisfy our need for certainty as to the correct alignment.

The principal features adopted for this definition are as follows:-

- The original cadastral boundary corner being the north west corner of Susan Ranclauds 2 acres shown on the 1856 map which is now the fenced corner of Cottage at the corner of Fort Drive and Parnell Place.
- The outline of the cliff face on parts of the east and west side of Fort Scratchley.
- The centreline of Nobby's Breakwater Road.
- 5. Having determined the common alignment between 1856 and 2004 surveys we have co-ordinated the plotted locations of the 3 mine drifts shown on the old plan to enable us to both plot their position onto the photograph and to set out their location on the ground.
- 6. Pins were installed on the site of the southern (1) and middle (2) drifts on Friday 12 March 2004. An offset pin 1.5 metres north was placed for the northern drift (3) on the same day. This drift would appear to be behind the buttress evident in the photo report.

This report is to accompany an A1 plan which indicates the material utilized in completing this survey.

Monteath & Powys Pty Limited have much pleasure participating with you in this project and wish you continued success in the search.

Yours faithfully

MONTEATH'& POWYS PTY LIMITED

Peter J Sherlock