

LANDCOM  
Creating Better Communities

# PLEISTOCENE OCCUPATION ON THE CUMBERLAND PLAIN

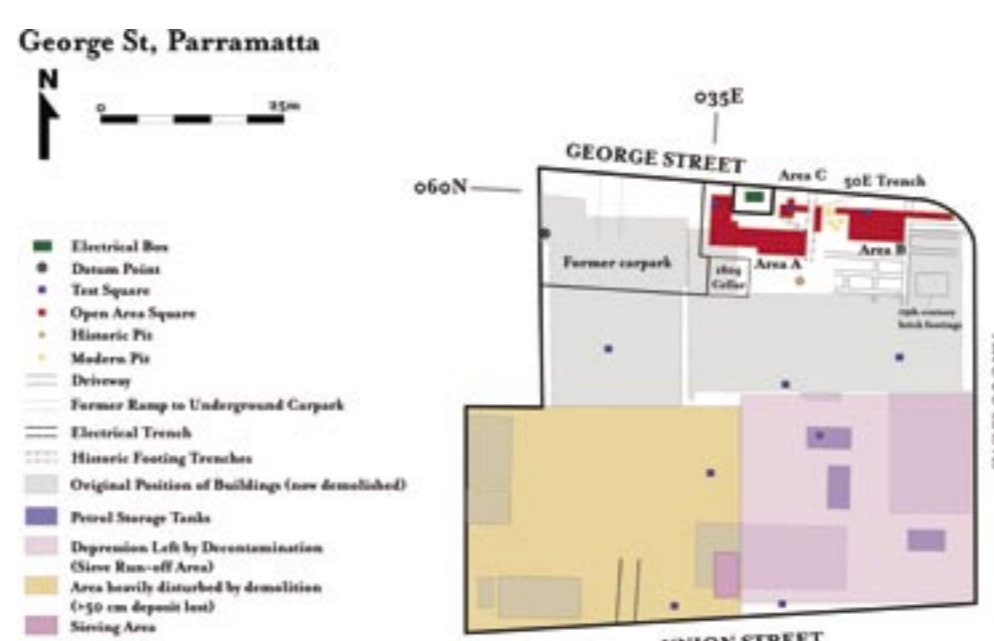
Amy Stevens, Jo McDonald, Mark Rawson, Beth White  
Jo McDonald Cultural Heritage Management Pty Ltd based on work done for Landcom



RTA-G1 is located at 109-113 George Street, Parramatta, NSW. The site was excavated as a part of a salvage excavation programme prior to development (image taken after demolition but before salvage). RTA-G1 is located close to CG1 (JMCD CHM 2005b) and is believed to be a part of the same archaeological landscape.



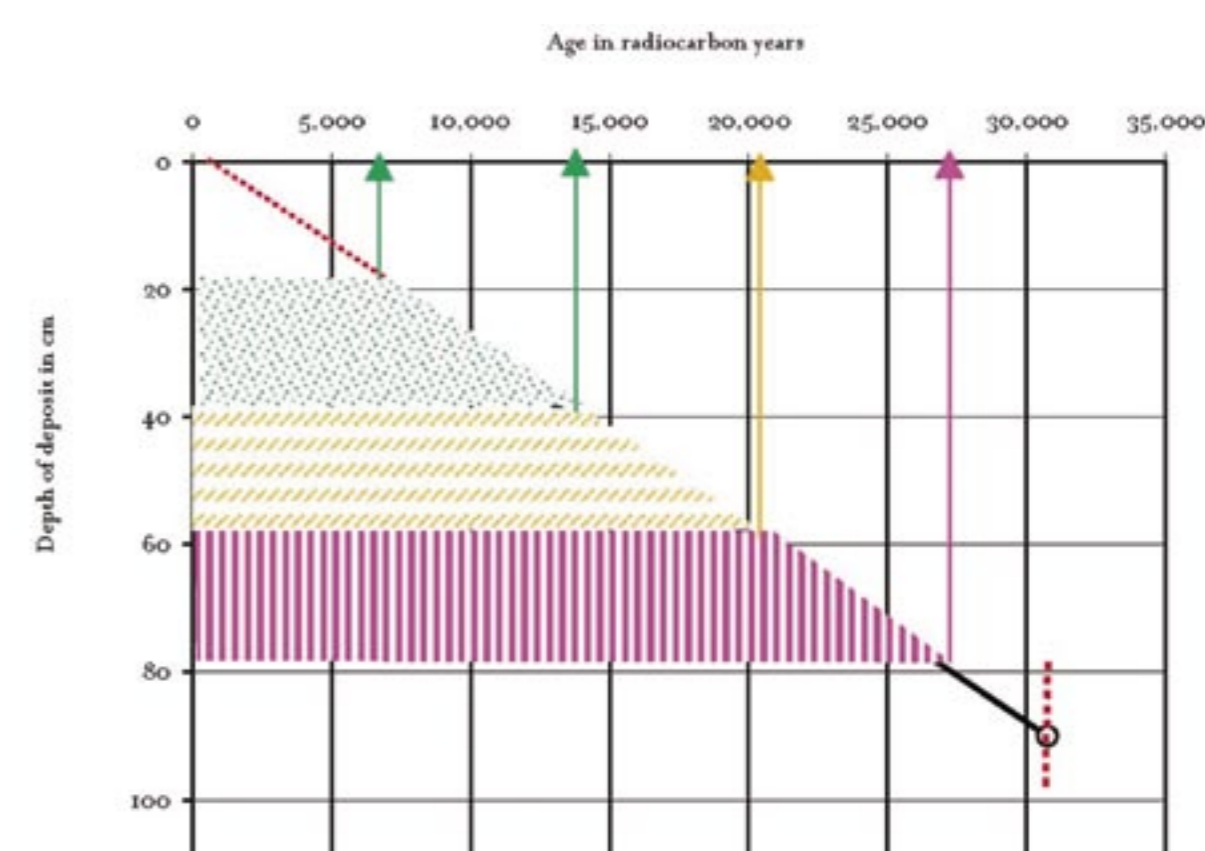
The site is located within a sandy river terrace deposit south of Parramatta River. Fine resolution excavation and conjoin analysis of flaked stone demonstrate intact deposit with little disturbance. The top 30cm of deposit was removed by demolition works.



Dating evidence from Site RTA-G1 provides confirmation of the continuous occupation of the Cumberland Plain from c.30,000 BP, through the terminal Pleistocene and into the mid-Holocene. Five radiocarbon dates obtained from charcoal samples collected *in situ* indicate that a low-intensity occupation on this landscape began as early as 30,735 ± 407 BP, more than doubling the previously accepted time frame for Aboriginal occupation of the Sydney region.

The spatial distribution of lithics and the dating results indicate an accumulation of evidence from multiple occupation episodes. The assemblage reflects repeated phases of occupation over many thousands of years, with activities including a range of tool production, use and maintenance, storage, grinding and using heat-treated stone.

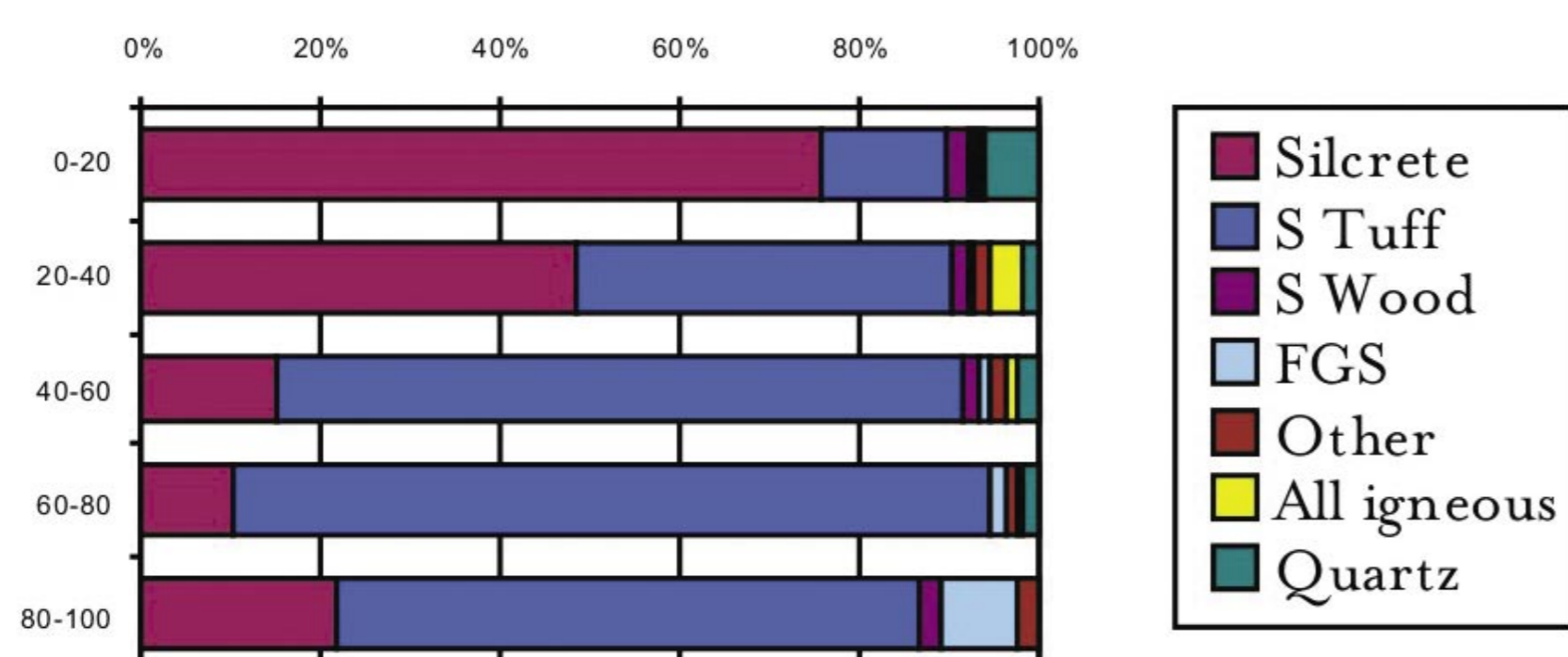
Site RTA-G1 was occupied throughout periods of significant environmental changes in the Sydney Region, including dramatic change in climate and fluctuating sea levels. These changes would have included a shift from a freshwater woodland environment to an estuarine environment and resultant changes associated with the availability of food and stone resources.



Wk-	Square	Depth	Determination	Cal BP	Probability
17436	45E 60N	13cm	3,270 ± 35 BP	3,270 to 3,000	92.5%
17432	59E 58N	30-33cm	4,433 ± 35 BP	5,050 to 4,840	93.9%
17434	56E 57N	20cm	6,078 ± 54 BP	7,020 to 6,690	94.4%
17433	36E 56N	24cm	8,206 ± 51 BP	9,280 to 8,990	95.4%
17435	35E 57N	80-100cm	30,735 ± 407 BP	Too old to calibrate	

RTA-G1 has yielded an intact sequence of human occupation, with changes in site usage and lithic technologies over time. Radiometric determinations have provided a firm date for the transition from the preferential use of silicified tuff to substantial use of silcrete at c.6,000 - 8,000 years ago. Silicified tuff assemblages have been encountered in deep open sites previously (see JMCD CHM 2005a), and are considered to be pre-Bondaian in age.

There is considerable depth of deposit, with evidence of Bondaian artefacts in the top 20cm and pre-Bondaian lithics lower in the sequence.



Raw material by depth for RTA-G1, showing distinct change in preference from silicified tuff to silcrete over time.

Settlement appears to follow a pattern of high residential mobility at the initial, low-density occupation of the region, with emerging territoriality and changing levels of mobility evident in the more recent Pre-Bondaian assemblages.

The radiocarbon determinations presented here provide a reference point for distinct and clear changes in the archaeological record through time.

References:  
Jo McDonald CHM Pty Ltd, 2005a. Archaeological salvage excavation of site RTA-G1 109-113 George Street Parramatta, NSW. Report to Landcom.  
Jo McDonald CHM Pty Ltd, 2005b. Archaeological salvage excavation of site CG1 (NPWS #45-5-2648), at the corner of Charles and George Streets, Parramatta, NSW. Report prepared for Meriton Apartments Pty Ltd

> Detail of two hatchet heads and anvil / grindstone found in a cluster, possibly cached and dated (Wk-17436). A third hatchet head was found immediately south. Four anvils were recovered at similar depths from across the site.



> Stone manuport feature found below 30cm depth. A large amount of manuport (>20kg) stone was recovered across the site. Radiocarbon determinations (Wk-17434) provide a minimum age estimate of 9,280 to 8,990 cal BP for the presence of imported stone, possibly for use as heat-retainers in hearths.



> Large ironstone uniaxially flaked core recovered at 74-78cm depth. Ironstone artefacts were recovered at site CG1 (JMCD CHM 2005b), but have not previously been reported on the Cumberland Plain.

