

Woollahra heritage inventory

Based on the NSW Heritage Office State Heritage Inventory sheet

ITEM DETAILS					
Name of item	Cliff Street archaeology				
Item type	Archaeological-Terrestrial/ Transport – Land/ Road				
Significant area or group					
Address	<p>Known archaeology exists in the area of Cliff Street south of Victoria Street extending the length of the carpark. Test pits were carried out past this point but did not reveal archaeological evidence. The area of Cliff Street highlighted red represents the extent of area where sandstone cobble stones are known to exist.</p> 				
Use	Road				
Statement of significance	<p>The line of Cliff Street is part of the very intact layout of the Watsons Bay subdivision, which is an early Sydney village subdivision, and its original plan and scale of buildings remain legible. The line of Cliff Street contributes to the overall significance of the locality.</p> <p>The cobbled road surface of Cliff Street is locally significant because the technology and surviving sections are possibly rare examples of their type [Criterion F]. The cobbled surface demonstrates an earlier phase of road surfacing that is contemporary with the Watsons Bay subdivision, and provides a sense of how it was established and may have looked [Criteria A, C]. Because the surface has been compromised by later intrusions for services it lacks the integrity that gives it a higher status or to meet other criteria. Although there is uncertainty about its exact date of construction, this is sufficiently secure to consider it as an example of 19th century road engineering. The later site elements such as the material of the footpath, services, carpark and landscaping are not significant.</p>				
Level of significance	<table border="1"> <tr> <td>State</td> <td>Local</td> </tr> <tr> <td></td> <td>Local</td> </tr> </table>	State	Local		Local
State	Local				
	Local				
Heritage listings	Located within the Watsons Bay Heritage Conservation Area Development Control Plan				

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DESCRIPTION	
Construction years	c1890 – in line with the 1855 subdivision of Watsons Bay, and the eventual sale in 1892
Physical description	<p>Line of the road</p> <p>The road line follows the 1793 Laing grant boundary on its eastern side. The road line was established in the 1855 subdivision plan. Normal practice at the time was to survey the roads and lots accurately before sale at auction, so the Cliff Street road reserve existed at least on official papers and may also have been present on the ground as survey pegs. It had been formed into a road by at least the end of the 19th century, still retaining the original surveyed line.</p> <p>The line of the road therefore reflects the 1855 subdivision in the same way as the pattern of allotments. The variable width of the road's current eastern side obscures the exact relationship to Laing's grant boundary. The creation of the car park has reduced the legibility of the strong line, as the eastern boundary of the road and the entire estate.</p> <p>Cobble sandstone road surface</p> <p>The cobbled sandstone road surface was exposed in a number of sections, primarily along the northern section of Cliff Street and in minor surface removal along Cliff Street, during the drainage and road works undertaken by Woollahra Council during 2006, and is of a consistent formation. It comprises roughly shaped rectangular blocks with dimensions averaging 350mmx150mm laid in complete courses across the width of the street. No side drains or kerbing was exposed in any area opened. The courses are well laid with minimal spacing between blocks. In the northern of Cliff Street the stones are benched, ie. laid so that each course has a horizontal tread rather than on the gradient of the surface. Stones are a seeming random mixture of colours from whites to heavily oxidised reds and browns. Most appear to be sound in condition. In the northern section the cobbled surface ran from the western kerb to the approximate mid point of the road, where it was cut through by the drainage channel trench. The cut-through edge is rough with missing blocks suggesting the road continued into the area of the cut. Further along Cliff Street three small exposures showed that the surface continues as far as the southern end of the car park but has been cut through by later work at a consistent 1.3 metre distance from the western kerb line. This cut has been backfilled with compacted sandstone rubble. This can be readily distinguished from the cobble surface by its variable stone size, the large amount of sand between stones, inconsistent orientation of pieces. As in the north it can be confirmed as a later cut by the infilling of missing sections of laid stones forming a dentate pattern.</p> <p>The cobbled surface probably represents an exposed, wearing surface but the possibility that it was intended to be overlain by a layer of smaller aggregate cannot be definitively discounted at this stage. Exposure of a more extensive area may provide evidence to support it being a base layer, such as residual aggregate fines being pressed into the surface, staining from bituminous coatings or evidence of sealing at a higher level than the current well-formed top of the stones.</p> <p>Other elements</p> <p>Other identified elements within the road reserve are:</p> <ul style="list-style-type: none"> • The current asphalt road surface • The current footpath, kerb and guttering • Existing water and gas service lines to the houses along Cliff Street • A drainage channel running along the approximate centre line of the street in the northern section • Car park planter beds and their trees. • Sandstone bedrock and natural soils <p>The above elements have recently undergone an upgrade to improve the drainage for properties within the heritage conservation area. The elements are not cited as significant items.</p> <p><u>Note: The cobbled sandstone road surface also extended along that part of Cliff Street to the north of Victoria Street. Elements of that surface are still present, but are not in their original location.</u></p>
Modification and dates	<p>Council records indicate that work was undertaken to this section of Cliff Street in 1920 when the original road surfacing was recorded in Council minutes.</p> <p>Elements such as the current road surface, formed concrete, blue metal aggregate, utilities, date from the mid twentieth century.</p> <p>Subsurface investigation to date has revealed an early to mid 1900s channel which is cut into rock, which acts as the drainage channel. A plan dated 1977 locates this channel down the centre of the road.</p> <p>In 2006 Council undertook drainage and road improvement works to improve the drainage capacity of the immediate area. New road surface, footpath and driveway crossovers were constructed at this time.</p>

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Further comments	It is likely that the cobble stone surface roadway extend to other areas of the area associated with the similar subdivision of the roads, eg Cove, Camp, Pacific, Victoria and Cliff streets. Similar undisturbed cobbles can be expected to be found. The installation of utilities throughout the Watsons Bay Heritage Conservation Area is also likely to have impacted on any surviving section of roadway.
HISTORY	
Historical notes	<p>The 1892 sale shows the original 1855 street layout and there is no suggestion of any change in lot arrangements. This raises the question of whether Cliff Street had actually been built by 1892. Although Cliff Street follows the Laing grant boundary of 1793 there is no evidence of any works on the land until the construction of the water Police Station. Their main access would have been by boat, although they may have used informal tracks to get to Watsons Bay. The 1843 Donnithorne subdivision appears to have been aborted without any result, and is unlikely to have required such a roadway being built. The 1855 subdivision plan shows the alignment and is a reasonable earliest possible date for its construction but the evidence is not definitive of actual construction as opposed to survey.</p> <p>A plan of the 1860s shows the subdivision layout, the large swamp almost reaching the line of Cliff Street, the Water Police station and a roadway from the rear of the Water Police Station leading up the western side of South Head. There is no sign of a connection between the end of Cliff Street and this road. It is possible that this could have happened over the northern end of the beach but is more likely to have provided access to the tip of South Head from the Water Police Station.</p> <p>Another undated plan also shows the swamp and Water Police station, a 'Government road' at the head of Watsons Bay but not Cliff Street. It is not clear whether we can read this as the street having been surveyed for the 1855 subdivision but not built, as there were no lots sold in this area yet. If the swamp had come close to the Government Road it is likely that it would have been indicated. The probable route of the Government Road would follow the current entry road to HMAS Watson, which intersects with Cliff Street to the south of the drainage works and provides a gentler grade to access the defence lands than any other route. The 1881 Trigonometrical Survey map repeats the same information apart from the small reserve over the swamp.</p> <p>Cliff Street is shown laid out in 1889 plans by Higinbotham and Robinson, but these are typically based on parish maps and do not reflect on the ground conditions. Another possibility is that it was the impending sale of the remaining town lots in 1892 that would have prompted construction of the road. As the centre of the estate had clearly been unattractive to new buyers, despite the presence of a large swamp in the rear of the lots, it may have been expedient to drain the swamp, form up street in a solid manner and generally make the area more attractive for sale.</p> <p>Still another possible construction date is 1895, when the Municipality of Vaucluse was formed as a breakaway from Woollahra Municipality. As was the pattern elsewhere in Sydney, the establishment of a new Council often heralded a brief period of road construction. Based on the quality of the stonework, the construction of the road is almost certainly attributable to the 19th century. The great roads to the North, West and South generally followed the Telford method, of graded sizes of aggregate, to create a sound all-weather surface. Comparable urban roadways made of sandstone blocks have been identified in The Rocks and date from the 1840s. Barrenjoey Head access road combines sandstone blocks of similar size with long blocks laid down the slope, to support the carriage of sledged goods. Some 20th century roads use sandstone, but generally well-sorted in size with the top wearing surface being composed of smaller stones or harder stone being used when available.</p> <p>Roadwork of the Great Depression tends to exhibit the advantages of mechanical aids, which particularly meant gravel crushing machinery that could sort accurately for aggregate sizes and steam rollers, meaning that the different layers of fill, and underlying clay or soil could be solidly compacted.</p> <p>20th Century history of the area</p> <p>The 1892 sale set the character of the area, with small lots containing predominantly timber buildings being constructed. As a built up residential area with a military neighbour, there does not appear to be any significant change in the streetscape. Vaucluse Council's minutes provide some general information about road building during the period, but little specifically referring to Cliff Street. In 1914, Mr Edmund Playfair, who lived at the northern end of Cliff Street, complained to Council that the end of the street had washed away in storms and further that there was no easy way of getting from the roadway to the beach except scrambling down rocks.</p> <p>In 1914 a Mayoral minute complained that a wet season had drawn attention to the bad state of local roads, many of which had had no provision made for drainage. A survey showed that Council was responsible for more than 16 miles [c26 km], and although it had been previously reported to be in a bad way, an allocation of kerbing and guttering funds had made a difference, and coating with asphalt would fix much of the remaining problem. Where roads were in such a bad way that they needed to be reconstructed they preferred surfacing with clinker and ash rather than the more expensive blue metal [Vaucluse council Ministerial Minute 6 March 1914, cited in Britten n.d.].</p> <p>Mention is made of Cliff Street in Council minutes of 1920 as being subject to road works costing £590. From the context this is most likely for the kerbing and guttering of the street and sealing with asphalt / tar. A later report of June 1930 listed which roads in the municipality were tar-macadamed and required top dressing. Cliff Street was listed in this group, with an estimate of £96 to carry out the work, implying failure of the work</p>

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	<p>carried out ten years earlier. A follow up report in September 1931 still had Cliff street as one of the roads in urgent need of renewed asphaltting. As this was during the Great Depression it may simply have been a reduced Council rate revenue that was the cause of lack of maintenance rather than any inherent design faults [Brittenn.d.].</p> <p>A lot plan of c.1930 shows the street essentially unchanged in its layout to the original subdivision plan of 1855 [Figure 8]. An aerial photo of 1943 shows the road tarred, with whitish concrete footpaths following their current alignment. The area of the car park appears to be overgrown, with a line of substantial trees along the road edge. In 1977 the military began a process of withdrawing from operational bases in Sydney, with the majority of the land eventually being transferred to the NSW government, and becoming part of Sydney Harbour National Park. The Constables Cottage was taken over by the National Parks and Wildlife Service for staff accommodation as was a later, post-world War II building to its southeast [now 33 Cliff Street].</p>
HISTORICAL THEMES	
State historical theme	Building settlements, towns and cities/ Activities associated with creating, planning and managing urban functions, landscapes and lifestyles in towns, suburbs and villages.
Local historical theme	Land Tenure/ Houses/ Suburban Expansion.
ASSESSMENT of HERITAGE CRITERIA	
Historical significance SHR criterion (a)	<p>The archaeological resource relates to a number of historic themes:</p> <ul style="list-style-type: none"> • Developing economies/technology/ road building – demonstrated by road surfaces • Building settlements, towns and cities/ towns, villages and suburbs/ Subdivision – demonstrated by road alignment. <p>The resource most strongly demonstrates the technology of road building with the cobbled surface. This is locally significant. The road alignment has been compromised along with its eastern boundary and no longer demonstrates the original grant boundary.</p>
Historical association significance SHR criterion (b)	The archaeological resource does not meet this criterion.
Aesthetic significance SHR criterion (c)	The cobbled road surface meets the guidelines for inclusion in this criterion as it is aesthetically distinctive and 'exemplifies a particular taste, style or technology'. It meets this criterion at a local level.
Social significance SHR criterion (d)	The archaeological resource does not meet this criterion.
Technical/Research significance SHR criterion (e)	The archaeological resource meets this criterion at a low level of significance. The age of the cobbled surface has no been able to be determined through documentary research, beyond narrowing down to a c50 year period. Apart from this, and the details of how it was built, which are largely observable from the surface, there is little direct information that it can provide. It does not meet the guidelines for inclusion in this criterion.
Rarity SHR criterion (f)	Known cobbled road surfaces are relatively rare. They are known sporadically from older parts of Sydney, but also exist as surviving local sections obscured by later surfaces. Until their presence is proven elsewhere within the Woollahra Municipality, the cobbled surface should considered to be locally rare.
Representativeness SHR criterion (g)	The archaeological resource has been compromised by later work. The most extensive section of the cobbled surface only represents half the original width. No side drainage has been preserved in the areas exposed, and may have been deliberately removed. It is not considered to meet this criterion.
Integrity	Where found, the sandstone cobble stones are in a consistent formation, in roughly shaped rectangular blocks laid across Cliff Street. Later disturbances and intrusions have impacted on the integrity.

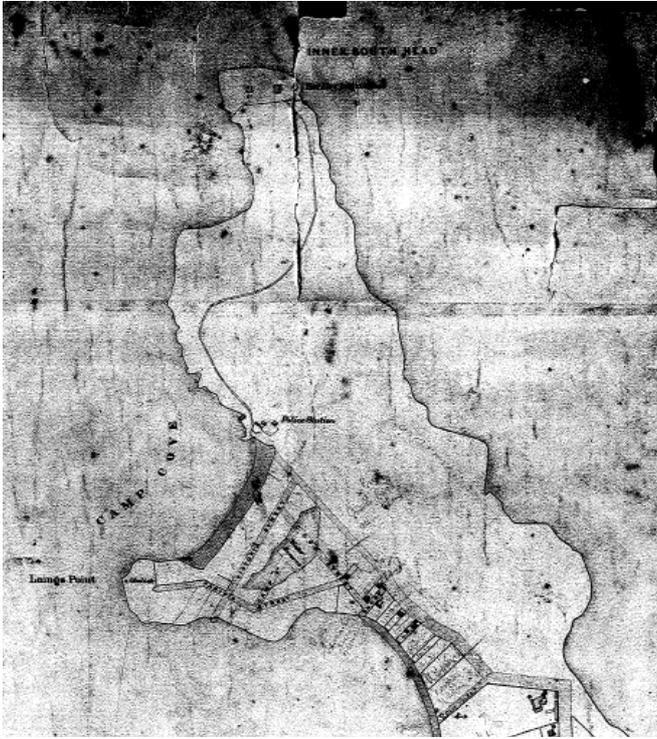
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RECOMMENDATIONS				
Recommendations	That the known archaeological evidence located in the section of Cliff Street between the Victoria Street intersection and 27 Cliff Street be listed as an archaeological relic in Woollahra Local Environmental Plan 1995 Schedule 3 – heritage items.			
INFORMATION SOURCES				
Type	Author/Client	Title	Year	Repository
Report	Banksia Heritage + Archaeology	Cliff Street, Watsons Bay: archaeological assessment of potential impacts by drainage works	2006	Woollahra Council
Report	Woollahra Council	Statement of Heritage Impact	2006	Woollahra Council
Thematic History	Megan Martin	Thematic History of Watsons Bay	1997	Woollahra Council
AUTHOR OF THIS REPORT				
Jodi Ayre, Strategic Heritage Officer Chris Bluett, Manager Strategic Planning			January 2007 April 2011	

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IMAGES			
Image caption	1860s Map of Watsons Bay showing the 1855 subdivision		
			
Image year	1860s	Image author and copyright holder	Woollahra Local History Library

IMAGES			
Image caption	The 1892 sales advertisement, aiming to sell those blocks that had not been purchased following the original subdivision in 1855.		
			
Image year	1892	Image author and copyright holder	Woollahra Local History Library

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IMAGES

Image caption

Cobbled surface exposed at northern end of Cliff Street
[The archaeology shown in these photographs was removed during the 2006 road and drainage works, as approved by the NSW Heritage Office. The photographs provide evidence of the remaining known archaeology in the southern section of Cliff Street.]



Image year

2006

Image author and
copyright holder

Denis Gojak, Banskia Heritage +
Archaeology

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IMAGES

Image caption Plan prepared during archaeological work undertaken in 2006, showing exposed sections of sandstone cobble surfaces and known likely disturbances and intrusions.

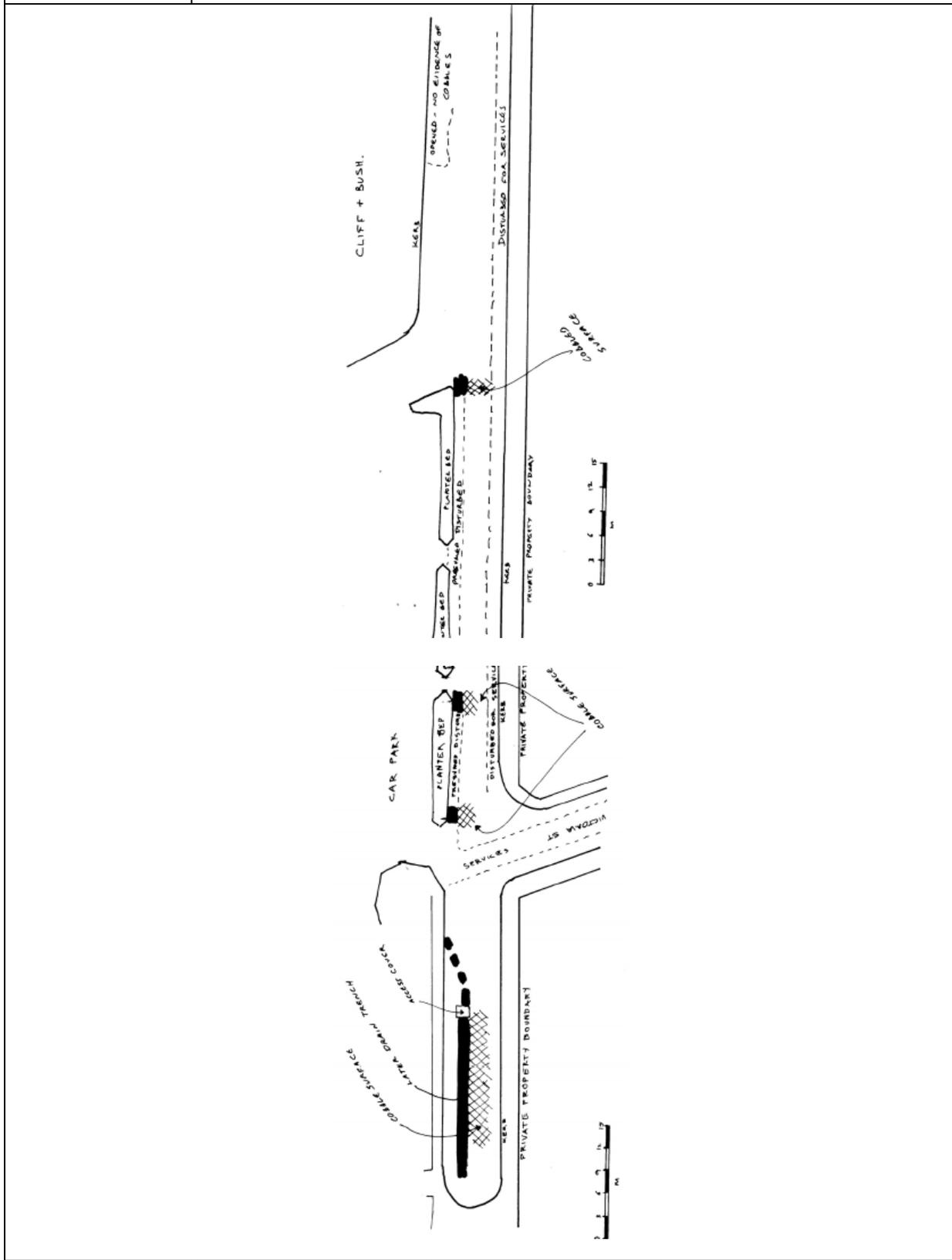


Image year	2006	Image author and copyright holder	Denis Gojak, Banskia Heritage + Archaeology
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