

Postal Name & Address:
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General Enquiry Details:

Re: Report by Peter Ellsmore and Associates Pty Ltd concerning graves at Huskisson Anglican Church
Please find below my review of the report provided by Mr S. Bartlett regarding the possibility of unmarked graves at the Huskisson Anglican Church site. As you will see this report cannot be accepted as a credible investigation as to whether there are further unmarked graves on the site.

Best regards,
Dr Evan Christen

Review of report by Peter Ellsmore and Associates Pty Ltd concerning graves at Huskisson Anglican Church

22/12/18

Introduction

There is uncertainty about the number and location of unmarked graves at the site of the former Huskisson Anglican Church.

In April 2015, GBG Australia were commissioned by Shoalhaven Council to explore a relatively small area of the block for graves (crown land and church land). This company has specialised archaeology and grave location services. This company used specialised Ground Penetrating Radar (GPR) equipment. Their report locates 7 potential grave sites.

In November 2018, Peter Ellsmore and Associates Pty Ltd were commissioned by Mr S. Bartlett (applicant on DA on the block) to survey for graves in the church owned land. The company is an engineering company that does not advertise archaeological or grave location expertise. They used GPR suitable for location of services before construction work. Their report concludes that the area they surveyed is "unlikely to have any grave sites", but that is "an assessment only, not a guarantee".

Review of report

The report by Peter Ellsmore and Associates Pty Ltd is intended to assure the Shoalhaven Council and others that it is unlikely that there are any further unmarked graves at the site. However, there are major deficiencies in the approach and report that mean that this survey cannot be taken as a credible investigation of whether there are further unmarked graves.

The major deficiencies fall into three categories: 1) The area surveyed, 2) The survey methodology, 3) Lack of reference to the previous survey by GBG Australia.

1. The area surveyed – there is about 20-30% of the block area that was not covered by the survey. This area includes the area around the church where previous graves were found, around the old church and hall and 5m wide strips along boundaries. This is adequate space for a grave and it is not unconceivable that graves would be along a boundary. The survey was also unable to be undertaken where there are shipping containers and piles of rubbish.

2. The survey methodology – the GPR equipment used is suitable for finding services such as water mains, electricity, gas, sewer but is not specialised GPR equipment as used for archaeology and grave sites. The survey lines were 40cm apart, a more appropriate spacing for detecting unmarked graves is a 25cm line spacing, this provides adequate data points across the relatively small area of a grave (75cm x 150cm). The data analysis was simple inspection of the output data on the GPR screen (normal for service location) without any further data processing which is usually required in order to find subtle anomalies such as grave sites. See figure 2 of GBG Australia report for specialised assessment. The report also does not provide a geo-referenced plan view of all the GPR readings of the surveyed area. The report only provides occasional single point profiles. It would appear from the process used (visual assessment and spray marking the ground) and report provided, that the company probably does not have the capacity to provide a geo-referenced map of GPR data at various depth profiles or do any real data processing. This is what would be normally presented to assess the possibility of anomalies such as

grave sites. See Figure 4 of GBG Australia report for a specialised analysis suitable for assessing potential graves sites.

3. This new survey did not cover any of the previous grave sites located on church land. It is not clear if that area was not surveyed or not reported on. The map provided in the report is unclear about this. Either way by covering the area of the known graves the Peter Ellsmore and Associates Pty Ltd survey would have been able to assess whether their equipment and methodology was capable of picking up the grave sites.

Overall it can be concluded that the survey by Peter Ellsmore and Associates Pty Ltd cannot be accepted as a credible assessment of the likelihood of further graves at the sight.

Recommendations

- 1) Set aside the report by Peter Ellsmore and Associates Pty Ltd as unacceptably flawed.
- 2) Mr S. Bartlett or any other entity interested in grave sites use a specialised geophysical assessment company with skills in archaeology and grave site detection.
- 3) When undertaking assessments for unmarked graves follow credible guidelines such as those proposed by NSW NPWS in "Lost but not forgotten: A guide to methods for identifying Aboriginal unmarked graves" (NSW NPWS, 2003). For example the guidelines state: 'Only a qualified geophysical contractor should undertake a ground penetrating radar survey. To find out whether a GPR is the right method for detecting possible unmarked graves, an orientation survey will be necessary beforehand. This should only be undertaken by a geophysical expert.' P 32
- 4) The whole of the area of the church land should be thoroughly surveyed, rather than selected areas.

E.W. Christen, PhD,MSc,HND, Member SSSA 16/12/2018