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## **Response to NPWS comments on the Archaeological assessment of the Kaolin Project, Newnes – Lithgow.**

Two experienced archaeologists and an experienced field officer from the Bathurst LALC conducted the survey of the Kaolin Mine. It is the professional opinion of the consultants and the LALC representative, that there are no “*heritage values*” located “*on the development area*”. This assessment is based on the survey of 38 ha of the Kaolin development area of which, taking an average 30% visibility across the site into account, an estimated 30.8% or 11.6 ha were effectively surveyed. As stated, visibility across the survey area averaged 30% and photographs 3 and 4 presented in the report show this to be the case.

The predictive model used for this survey was developed and tested at the adjacent Clarence Mine Lease Area where Mills and Kelton surveyed a 2,600 hectare area and identified:

- 4 open camp sites
- 2 shelters with artefacts
- 3 PADs,
- re-identified the location of NPWS Site #45-2-0186 (shelter with art)
- 4 areas of archaeological sensitivity
- the creation of two exclusion zones was recommended.

These results verify the site distribution potential identified in the predictive model.

The fact that no sites or PADs were identified by the consultants and the LALC representative within the Kaolin development area was not the result of either the limited nature of the survey or the absence of ground visibility, but rather the result of the absence of potential archaeologically sensitive landform units within the survey area.

- 87% of the survey area was steep hillslope where the possibility of large camp sites being present is extremely low
- The hillcrest area which constituted 5.3% of the surveyed area had been heavily impacted by the Clarence coal stockpile but was subject to a 100% on foot assessment.
- There are no permanent creeklines, springs or swamps within the Kaolin boundaries.
- There were no depositional landforms present within the Kaolin boundaries and negligible topsoil resources indicating a very low potential for subsurface artefacts.

Therefore the likelihood of large sites being present in the development area is extremely low.

Predictive modelling is not an exact science however, the model developed and tested by Mills and Kelton over a 2,638 ha area of the Clarence and Kaolin development areas shows unequivocally that Aboriginal activities were focused on sandstone outcrops and outliers, hanging swamps, springs, permanent streams and to a lesser degree ridgeline and crests where limited evidence for use of the area for transport routes was identified.

**None of these highly sensitive landform units are present in the Kaolin area.**

Because of factors such as visibility on the day and/or the extent of the survey, one can never say definitively that there is no potential for sites to be present in a particular survey area. Indeed one could say that any reasonably intact area in the State of NSW has a potential for archaeological material to be present. However the real test is to identify locations in which sites of potentially high scientific and or cultural significance are present.

Surveys over 2,638ha in the Clarence Mine and Kaolin Sands Quarry areas by Mills and Kelton have identified with a high degree of certainty, areas of potentially high archaeological significance and have recommended that these areas be included in an exclusion zone. These areas, which lie outside the Kaolin project area have been included in subsidence protection zones within the Clarence Colliery mine plan.

It is the opinion of the consultants and the LALC representative that “*Preliminary observations*” at the Kaolin Mine do not need to be substantiated by sub-surface testing as no areas where sub-surface testing was appropriate or justified were identified.

### **Cultural Assessment**

Prior to this survey extensive consultation was undertaken with the following Aboriginal groups to determine those groups who had an interest and cultural affiliation with the survey area.

- State LALC (General inquiries)
- Deerubbin LALC (Kevin Kavanagh)
- Gandangara LALC (Lenny Malone)
- Bathurst LALC (Warwick Peckham)

Details of this consultation are set out in section 2 of the report.

As a result of this consultation it was determined by the Aboriginal communities that the group, which should investigate the area was Bathurst LALC.

*Bathurst LALC concludes that no sites or areas of potential archaeological deposit (PADs) are present within the Kaolin Survey area.*