

# ARCHAEOLOGY ASSESSMENT



# APPENDIX 7



**HARPER  
SOMERS  
O'SULLIVAN**

---

**Archaeology Assessment  
For  
Proposed Powerline  
At  
Airly Coal Mine  
Near Capertee, NSW**

---

Prepared by:

**RPS Harper Somers O'Sullivan Pty Ltd**

241 Denison Street,  
Broadmeadow NSW 2292  
PO Box 428, HAMILTON NSW 2303

T: 612 4961 6500  
F: 612 4961 6794  
E: [enquiries@rpsoso.com.au](mailto:enquiries@rpsoso.com.au)  
W: [www.rpsoso.com.au](http://www.rpsoso.com.au)

Job No: 25401  
Date: June 2009

Prepared for:

**Airly Coal Pty Ltd**

Glen Davis Road  
Capertee NSW 2846

**Document Status**

<i>Version</i>	<i>Purpose of Document</i>	<i>Orig</i>	<i>Review</i>	<i>Review Date</i>	<i>Format Review</i>	<i>Approval</i>	<i>Issue Date</i>
V1	Final Report	SP/DR	DR	23-6-09	AT 23-6-09	D. Rigby	23-6-09

**Disclaimers**

*This document is and shall remain the property of RPS Harper Somers O'Sullivan Pty Ltd. The document may only be used for the purposes for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised copying or use of this document in any form whatsoever is prohibited.*

## EXECUTIVE SUMMARY

RPS Harper Somers O'Sullivan (RPS HSO) was engaged by Airly Coal Pty Ltd to undertake an archaeological assessment over land holdings at Airly in the Capertee Valley, within the Lithgow LGA in NSW. The purpose of the archaeological assessment was to investigate a range of options for a proposed powerline route (and associated infrastructure) to connect the Airly Coal Mine (Airly) to the existing Integral Energy power supply, and to undertake a detailed assessment for the preferred powerline route. RPS HSO conducted archaeological and ecological assessments at the same time to determine the best alignment with the least impact. Following these investigations one option was selected as the "preferred option" as it had the least archaeological impact to the area. It is this option upon which the assessment has been based.

The proposed powerline route will follow predominantly a north-east to south-west axis, with a substation being located at the north-east end of the alignment.

The archaeological study covered both European and Aboriginal archaeological potential. The field investigations identified an Aboriginal site within the study area, but not within the proposed powerline route alignment. The proposed powerline route would not impact the known Aboriginal site, and therefore would permit work to commence within the planned timeframe and ensure conservation of the abovementioned Aboriginal site from the proposed works.

# TABLE OF CONTENTS

Page

EXECUTIVE SUMMARY .....	i
1.0 INTRODUCTION .....	1
1.1 Background & Scope .....	1
1.2 Purpose & Aims .....	2
1.3 Project Description.....	2
1.4 Legislation & Guidelines .....	3
2.0 ARCHAEOLOGICAL DATA.....	6
2.1 AHIMS Search of Registered Aboriginal Sites.....	6
2.2 Sites not on the AHIMS .....	7
2.3 Summary of AHIMS .....	8
2.4 Historical Archaeology .....	8
2.5 Limitations.....	10
2.6 Previous Archaeological Data.....	10
2.6.1 Brayshaw 1990 Airly EIS .....	10
2.6.2 Brayshaw 1991 Airly EIS .....	10
2.6.3 Mills 1998 Airly Mine .....	11
2.6.4 Hiscock & Attenbrow, 2004.....	11
2.6.5 Summary.....	11
3.0 FIELD INSPECTION.....	12
4.0 ASSESSMENT .....	14
4.1 Potential Impact .....	14
4.2 Archaeological Site Description outside the Powerline Route .....	14
5.0 CONCLUSION AND RECOMMENDATIONS .....	16
5.1 Overview .....	16
5.2 Recommendations.....	16

5.2.1	Recommendation 1 .....	16
5.2.2	Recommendation 2 .....	16
5.2.3	Recommendation 3 .....	16
5.2.4	Recommendation 4 .....	16
6.0	REFERENCES .....	17
7.0	PLATES .....	18

**TABLES**

**Page**

Table 2-1: AHIMS Results for Zone 55(3) AMG84 .....	7
Table 2-2: AHIMS Results for Zone 56(1) AMG84 .....	7

**FIGURES**

**Page**

Figure 1-1: Locality .....	4
Figure 1-2: Proposed Powerline Route .....	5
Figure 2-1: AHIMS Results .....	9
Figure 4-1: Archaeology Site and Proposed 66kv Powerline Route .....	15

**APPENDICES**

APPENDIX 1

Legislation

APPENDIX 2

AHIMS Site Data

APPENDIX 3

Site Card

## 1.0 INTRODUCTION

RPS Harper Somers O'Sullivan (RPS HSO) was engaged by Airly Coal Pty Ltd, a wholly owned subsidiary of Centennial Coal (Centennial Airly), to undertake an archaeological assessment over land holdings in the Capertee Valley, within the Lithgow LGA in NSW (Figure 1-1). Centennial Airly own properties within the Capertee Valley associated with the Airly Coal Mine (Airly). Since 2001 Airly has been on a care and maintenance program. Centennial Airly are planning to re-commence underground coal mining at Airly in accordance with the current Development Consent. Centennial Airly require the construction of a 66kV powerline and associated infrastructure to provide sufficient electricity supply for the planned re-commencement of mining operations. The proposed powerline will connect to an existing Integral Energy 66kV line, running along the Wallerawang-Gwebegar rail line, approximately 1.5km north from the township of Capertee.

Multiple alignment options were investigated prior to the selection of the preferred alignment. The proposed powerline will be owned, managed and maintained by Centennial Airly.

Centennial Airly is currently in the process of applying to Integral Energy (as the determining authority under Part 5 of the *EP&A Act*) for approval to construct the take-off point for the 66kV powerline from existing Integral Energy infrastructure. The take-off point infrastructure will be owned and maintained by Integral Energy. The application for the take-off point is being dealt with separately and is not subject to this assessment.

### 1.1 Background & Scope

The proposal encompasses a powerline (and associated infrastructure) to provide power to the Airly pit top area. The approximate study area is shown in Figure 1-1.

The proposed powerline route was determined after deliberation of a number of different routes. It was the purpose of the preliminary archaeological investigation to identify the route which has the least archaeological impact. The proposed powerline route is shown on Figure 1-2. This archaeological assessment addresses the potential impact of the proposed powerline route.

The proposed powerline route crosses cleared land up to the western extremity of the southwest ridgeline and crosses in the vicinity of an existing access road. The powerline route continues on to skirt the northern extremity of the ridge and then traverses open pasture land to the already approved 66kV substation.

## 1.2 Purpose & Aims

The purpose of this document is to identify and ensure Centennial Airly has sufficient information to comply with the relevant cultural heritage legislation under Part 3A of the *EP&A Act (1979)* when commencing work on the proposed 66 kV powerline.

This report will inform Centennial Airly of:

- Existing Aboriginal and historic European archaeological sites within the study area;
- Mitigation measures that may be required to avoid impact to sites or potential sites associated with the proposed powerline route.

## 1.3 Project Description

The proposed powerline will commence from the Integral Energy take-off point (Figure 1-2) and continue in a north-east direction towards Airly. The proposed powerline route will be owned and maintained by Centennial and will include the following:

- Establishment of an easement 15 m wide for the full length (approximately 3.8 km) of the proposed powerline route;
- Construction of 66kV powerline within the easement including:
  - Installation of approximately 34 poles in timber, steel or concrete and stays, insulators and fittings;
  - Installation of overhead 66kV transmission lines;
  - Construction of 66kV circuit metering and circuit breaker yard near the take off point end;
  - Construction of barriers at road crossings;
  - Connection to 66kV-11kV substation at the Airly Project Site end; and
  - Connection to the existing Integral take-off point.
- Construction of farm style access track within the easement, utilising existing tracks where possible. Where the route crosses Airly Creek construction of a vehicle crossing is not required as an existing bridge will be used, located immediately downstream of the proposed powerline crossing.



Apart for intermittent vegetation clearance along the powerline, the impact will generally be limited to the placement of a pole every 100m to 150m. The emplacement of the pole will require a 50 cm<sup>2</sup> area to be excavated for the pole. The emplacement of poles will require heavy machinery to access this section of the powerline.

## 1.4 Legislation & Guidelines

Centennial is bound to comply with the legislative requirements associated with registered and unregistered cultural heritage contained of the study area.

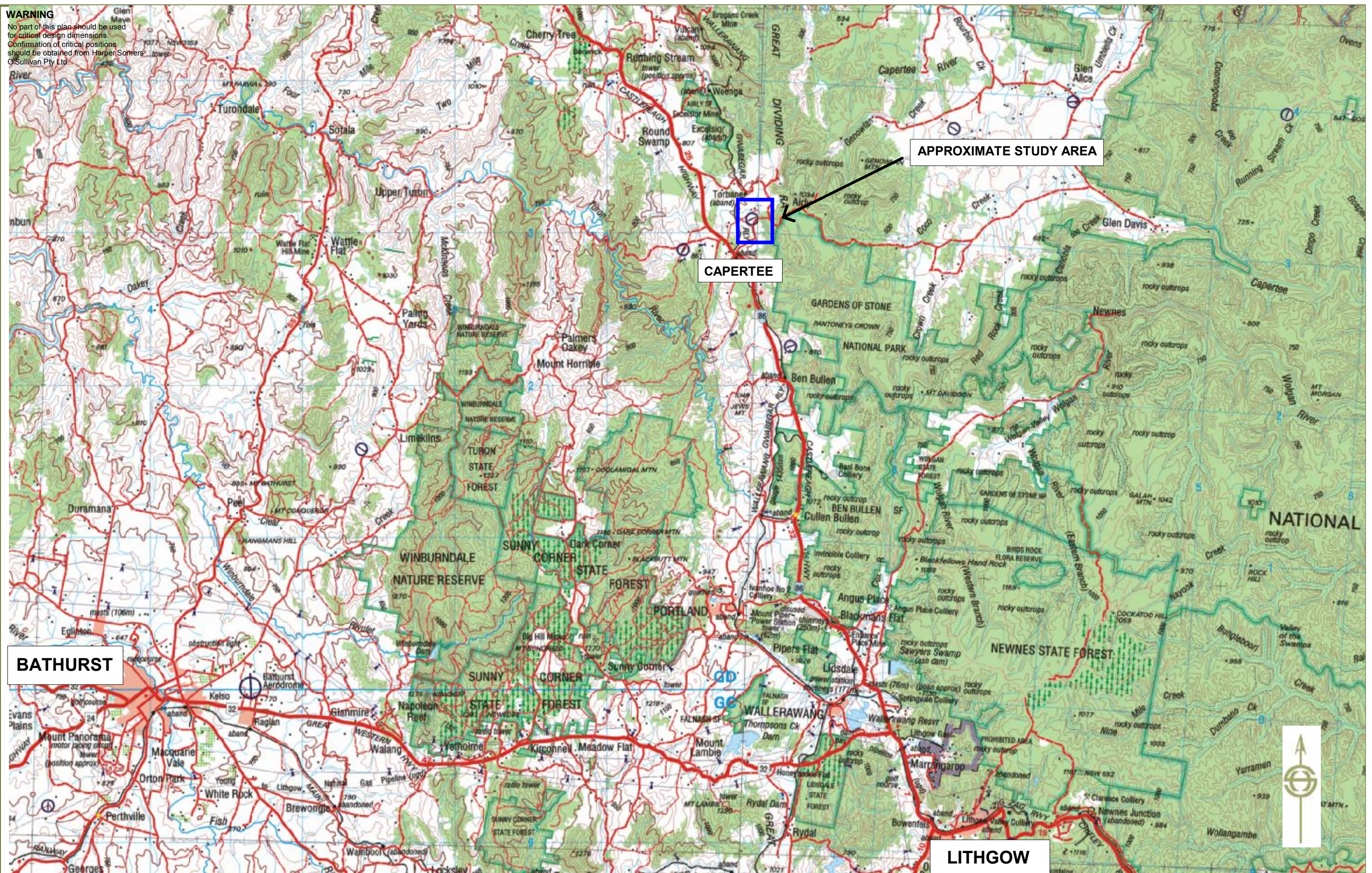
It is incumbent on any land manager to adhere to legislative requirements that protect Indigenous cultural heritage in NSW. The Department of Environment and Climate Change (DECC), formerly the Department of Environment and Conservation (DEC), is the governing body that has the responsibility for managing and administering all facets of Aboriginal cultural heritage sites in New South Wales. The legislative policy that forms the structure for the care and management of Aboriginal sites in NSW is the *National Parks and Wildlife Act of 1974* (NPW Act). The Director General of the DECC oversees the care, protection and appropriate management of these sites in accordance with the *NPW Act* (1974). Section 90 of the NPW Act stipulates that it is an offence if a person does not obtain the consent of the Director-General before disturbing an Aboriginal site, place or object, and people will be prosecuted by the DECC.

Under Part 3A of the *Environmental Protection and Assessment Act* (EP&A Act 1979), the requirements to obtain a Section 90 Permit for a site or Section 87 Permit for conservation / research are not required.

At the national level the *National Heritage List* and the *Commonwealth Heritage List* (for those items under the control of the Commonwealth Government) records and protects those items that are accorded National Significance. The extensive *Register of the National Estate* lists those items considered of value for future generations.

Extracts of the relevant legislation can be found in Appendix 1.

**WARNING**  
 No part of this plan should be used for critical design dimensions. Confirmation of critical positions should be obtained from Harper Somers O'Sullivan Pty Ltd.



**TITLE:**  
 Figure 1-1 Locality Map

**CLIENT:** Centennial Coal





**PLANNING SURVEYING ECOLOGY**

**SCALE:** 1: 235,000 at A3 Size  
**DRAWN:** S. Corry  
**APPROVED:** A. Richardson  
**DATUM:** MGA Zone 55 (GDA 94)  
**DATE:** 1/10/2008  
**LAYOUT REF:** J:\JOBS\25K\25401 - Capertee\Drafting\MapInfo Figure 1-1 Locality Map 260908  
**CONTOUR INTERVAL:** N/A  
**JOB REF:** 25401

Copyright  
 "This document & the information shown shall remain the property of Harper Somers O'Sullivan Pty Ltd. The document may only be used for the purpose for which it was supplied and in accordance with the terms of engagement for the commission. Unauthorised use of this document in any way is prohibited."  
 241 DENISON STREET BROADMEADOW PO BOX 428 HAMILTON NSW 2303  
 T: 02 4961 6500 F: 02 4961 6794 E: survey@hso.com.au W: www.hso.com.au ABN 11 093 343 858

**LEGEND**


-  Proposed 66kV Powerline Route
-  Marks Existing Infrastructure Take Off Point



**WARNING**

No part of this plan should be used for critical design dimensions. Confirmation of critical positions should be obtained from RPS Harper Somers O'Sullivan Pty Ltd.



<p><b>TITLE:</b> Figure 1-2 Proposed 66kV Powerline Route AIRLY PROJECT</p> <p><b>CLIENT:</b> Centennial Coal Pty Ltd</p> <p><b>PLANNING SURVEYING ECOLOGY</b></p>	 <b>HARPER SOMERS O'SULLIVAN</b>	<p><b>SCALE:</b> 1: 1000 at A3 Size</p> <p><b>DATUM:</b> MGA Zone 56 (GDA 94)</p> <p><b>LAYOUT REF:</b> J:\JOBS\25K\25401 - Capertee\Drafting\MapInfo 25401 Figure 1-2 Proposed 66kV Powerline Route A-A3</p> <p><b>CONTOUR INTERVAL:</b> N/A</p> <p><b>JOB REF:</b> 25401</p>	<p><b>DRAWN:</b> L.Steel</p> <p><b>DATE:</b> 23/04/2009</p> <p><b>APPROVED:</b> D.Rigby</p> <p>241 DENISON STREET BROADMEADOW PO BOX 428 HAMILTON NSW 2303  T: 02 4961 6500 F: 02 4961 6794 E: <a href="mailto:survey@hso.com.au">survey@hso.com.au</a> W: <a href="http://www.hso.com.au">www.hso.com.au</a> ABN 11 093 343 858</p>
--	---	--	--

## 2.0 ARCHAEOLOGICAL DATA

The archaeological site data was sourced from a search of the DECC Aboriginal Heritage Information Management System (AHIMS) and from literature searches pertinent to the study area.

In an assessment conducted of the previous archaeological work for the area, it became evident that there were issues with the Australian mapping zones and how sites are recorded. The present study area falls within the boundary of Zone 56 (1), but immediately to the west of the study area is Zone 55 (3). If consultants recording sites are not certain or aware of this Zone boundary, then sites can be recorded in the wrong co-ordinate system, but also when an AHIMS search is conducted a search nominated for one Zone, will not capture the sites recorded in the adjacent zone.

### 2.1 AHIMS Search of Registered Aboriginal Sites

A search was issued for a 10km area to the west of the study area (Zone 55(3)) on 24th September 2008. The AHIMS search identified a total of six (6) archaeological sites as being registered within a 10km radius of the study area. Of these sites two were duplicated, and one site was listed as 'deleted'. The sites 44-3-0029 (Capertee Shelter with art and deposit) and site 44-3-0056 (Capertee Bora-ceremonial / carved tree) has the exact same co-ordinate listed indicating it could be the one site recorded twice, or one of the sites has incorrect co-ordinates. In addition, the 44-3-0044 (running stream; kadisha an axe grinding groove site) has the exact same co-ordinates for 44-3-0085 (Jack Halls Creek; Kadisha; Sofola an axe grinding groove site), indicating these are also duplicate site recordings. The Site 44-3-0147 which was recorded as a scarred tree has been listed as 'deleted', which means it is no longer considered to be a site protected under the *NPW Act*. The site may have been incorrectly recorded as a site, then later reassessed as not being a site, or the tree has been removed.

There are no sites registered within the study area relevant to this proposal.

**Table 2-1: AHIMS Results for Zone 55(3) AMG84**

Site Type	Frequency in AHIMS	Destroyed or Deleted Sites	Omitting Possible Site Duplications	Registered Sites within Study Area
Axe grinding groove	3	0	2	0
Shelter (with variations)	1	0	1	0
Bora / Ceremonial	1	0		0
Scarred tree	1	1	0	0
<b>Total</b>	<b>6</b>	<b>1</b>	<b>3</b>	<b>0</b>

**Table 2-2: AHIMS Results for Zone 56(1) AMG84**

Site Type	Frequency in AHIMS	Destroyed or Deleted Sites	Registered Sites within Study Area
Axe grinding groove	1	0	0
Shelter (with variations)	1	0	0
Open Camp Site	2	0	0
<b>Total</b>	<b>4</b>	<b>0</b>	<b>0</b>

## 2.2 Sites not on the AHIMS

The following sites were identified in Mills (1998) as there were site recording sheets included in her report. These sites do not appear on the AHIMS print out most likely due to DECC's recent digital archiving program where some records were taken off site for digitising.

- C-ST-1 is a scarred tree (not within the study area) AMG 84 Zone 56(1) 220837E – 6332246N
- AC-OS-1 is a small density open camp site (not within the study area) AMG 84 Zone 56(1) 220109E – 6331038N

Subsequent and ongoing research, including physical visits to DECC in Hurstville by RPS HSO, has uncovered the site cards pertaining to the above sites. There is confusion it appears as to the status of AC-OS-1. DECC AHIMS lists it as being current, yet anecdotal information from the Bathurst Aboriginal Land Council indicates the site was salvaged some years ago.

## 2.3 Summary of AHIMS

RPS HSO was informed in early June 2008 by the DECC AHIMS staff that the archives (archaeology reports) would be absent from the AHIMS sources for a period of three weeks while they were being digitised. In mid July 2008 RPS HSO made contact with the AHIMS to determine the status of the archives, and were informed that most of the reports were still unavailable.

Subsequently, RPS HSO attended the DECC AHIMS office at Hurstville on March 24th, 2009 to again search the database. It was during this visit that site cards for C-ST-1 and AC-OS-1 were obtained.

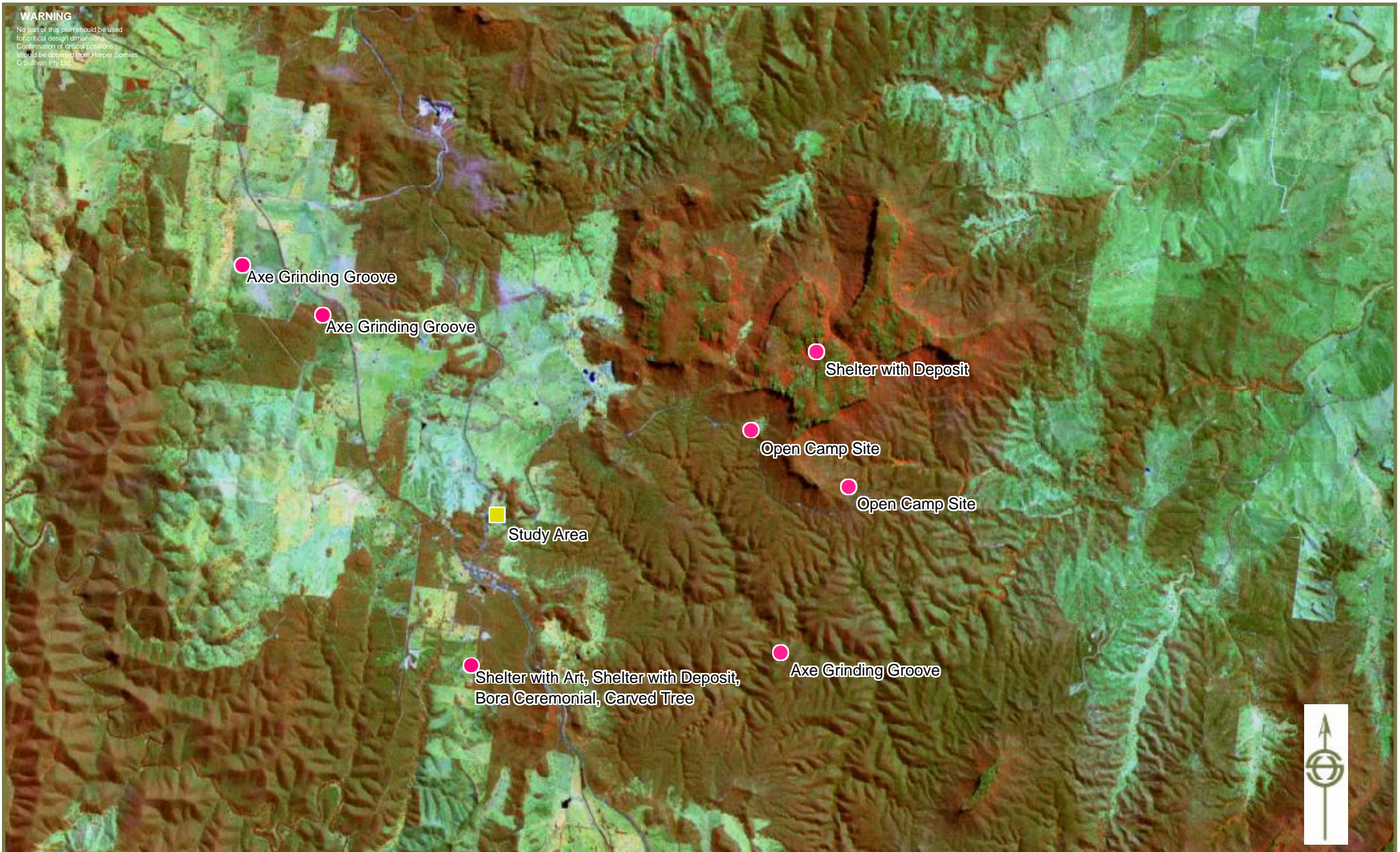
Based on the various source of site data it is difficult to confirm at this stage if there are 10 or 12 sites within the 10 km radius investigated, but it is known that no registered sites are inside the study area.

As a result, RPS HSO has not been afforded the opportunity to rigorously search previous archaeological reports for this area. The only report available in the archives was written by Mills (1998). Centennial provided two reports written by Brayshaw McDonald Pty Ltd (Brayshaw 1990 & 1991). RPS HSO also sourced general archaeological information from a number of other sources including Hiscock & Attenbrow (2004) from which the following information was derived.

## 2.4 Historical Archaeology

No historical European sites were identified inside the study area.

**WARNING**  
 No part of this plan should be used for critical design dimensions. Confirmation of critical positions should be obtained from Harper Somers O'Sullivan Pty Ltd.



**TITLE:**  
 Figure 2-1 AHIMS Results for Airly Coal

**CLIENT:**  
 Centennial Airly Coal Pty Ltd



**PLANNING SURVEYING ECOLOGY**

Copyright  
 "This document & the information shown shall remain the property of Harper Somers O'Sullivan Pty Ltd. The document may only be used for the purpose for which it was supplied and in accordance with the terms of engagement for the commission. Unauthorised use of this document in any way is prohibited."

241 DENISON STREET BROADMEADOW PO BOX 428 HAMILTON NSW 2303  
 T: 02 4961 6500 F: 02 4961 6794 E: [survey@hso.com.au](mailto:survey@hso.com.au) W: [www.hso.com.au](http://www.hso.com.au) ABN 11 093 343 858

**SCALE:** 1: 10 000 at A4 Size **DRAWN:** L. Steel **APPROVED:** S.Paddington

**DATUM:** MGA Zone 56 (GDA 94) **DATE:** 26/9/2008

**LAYOUT REF:** J:\JOBS\25401 - Casper\08\Drilling MapInfo\25401 AHIMS Figure 2-1 A-A4.WOR

**CONTOUR INTERVAL:** N/A

**JOB REF:** 25401

## 2.5 Limitations

RPS HSO has sourced relevant information where possible via AHIMS and other sources. Several reports and site cards were made available, but details of some activities remain elusive due to DECC's recent digital archiving program.

## 2.6 Previous Archaeological Data

### 2.6.1 Brayshaw 1990 Airly EIS

Brayshaw conducted an archaeological assessment in 1990 over the Airly Coal Mine (Authorisation Area A232) as part of an Environmental Impact Statement (EIS). The survey targeted areas that were likely to be impacted by subsidence and areas likely to be disturbed by ground surface infrastructure.

The survey was conducted over a period of three days with no Aboriginal representatives present. The survey was conducted by two archaeologists who started at Mount Airly and concluded there were no suitable rock falls or formations suitable for shelters. The survey included sections of Mount Airly, Genowlan Mountain and the parts of the associated floodplains. From this survey only one site was located, an artefact scatter site located on a spur on an east-west axis. Brayshaw also reports on a possible rock shelter 'site' identified by an environmental consultant, and does state that it could have potential deposits with art. Brayshaw, however, did not investigate the 'site' herself, but did include it in the Environmental Impact Statement.

Brayshaw concluded, that the mountains would have been too steep to be occupied, and that the area is most likely to have been used to travel through for 'short-term sporadic hunting' (Brayshaw 1990:11). The contents of Brayshaw's Airly Mountain site, provides a solid indication of the raw material expected in sites of this area; the raw material is predominantly comprised of very fine grained white quartz, with chert the next most common raw material. The most common tool type included flakes with minor frequencies of microliths (including Bondi points) blade flakes and cores. Brayshaw surmised that the present Glen Davis Road was the main travelling route for past populations.

The area covered by Brayshaw's 1990 survey is located to the immediate east of the present study area.

### 2.6.2 Brayshaw 1991 Airly EIS

A survey was conducted by Brayshaw the following year to investigate areas of potential impact as changes had been made to the mine plan since her previous



survey. The possible rockshelter site identified the previous year was also to be investigated with the surface infrastructure changes too.

When Brayshaw surveyed the rockshelter site, she identified artefacts on the surface, but no art (but there was modern graffiti). This was recorded as Genowlan Creek 1. Brayshaw identified another shelter area nearby that was classified as a PAD (Dog Trap Creek).

### **2.6.3 Mills 1998 Airly Mine**

Mills was engaged to conduct an archaeological survey for the realignment of the access road to the Airly Mine in 1998. The field component involved representatives from the Local Aboriginal community. Within this survey work Mills located two sites; one artefact scatter which had a small density (AC-OS-1) and one scarred tree (C-ST\_01). The artefact scatter was located within the road realignment; however, the scarred tree was not within any areas to be impacted. Mills concluded that there was no reason for the project realignment not to proceed, providing that the relevant NPWS permits were obtained prior to any ground disturbance works.

### **2.6.4 Hiscock & Attenbrow, 2004**

Peter Hiscock and Val Attenbrow re-analysed an artefact assemblage from a site called Capertee 3 that was originally excavated by F.D. McCarthy in the 1950's and 60's. The aim was to write a paper that presented a re-examination of backed artefacts at Capertee 3 and consequently their chronological sequence. The paper established that although high rates of backed artefact production occurred between 1500 and 3500 b.p. these same tool types were made in low numbers prior to that date in the middle to early Holocene period, supporting a model of fluctuating production rates throughout the Holocene.

### **2.6.5 Summary**

The site density in the broader area is not considered high, but this is in part limited by the small numbers of archaeological surveys in the area. The site types located in the areas were either small occupation densities or sites that were associated with more secular activities. The broader landform assessments also show there to be limited water sources in the area providing a strong indication that the area is not suitable for large numbers of people for extended periods of time. It is also contended that where sites do occur in situ that they will most likely not pre-date the Holocene period.

Relating specifically to the study area for this assessment, the landforms, the limited reliable water sources and level of disturbances from pastoral activities, substantially limits the potential for sites to be located.

### 3.0 FIELD INSPECTION

The proposed alignment detailed in this report was determined after deliberation of a number of different routes. All potential routes were inspected with the preferred route, described below, encountering no Aboriginal or historic European archaeological constraints.

The proposed powerline route commences at the south western portion of the study area and continued in a north eastern axis. From the Integral Energy take off point, the easement continued down a gentle slope to an ephemeral catchment area (Plate 1). The area had been disturbed by farming activities, which had reduced the soil depth. On the other side of the catchment, the slope began to rise towards a vegetated ridgeline. The slopes in this area were talus, covered in lichen and appeared to be formed from sedimentary sandstone. The area was predominantly covered in grass, but the soil was exposed in patches and through the grasses, providing approximately 10% visibility across this section of the field inspection. The depth of soil was shallow with exposed B horizon in some places. There was a partially formed access track which had approximately 80% visibility.

The raw material at this section of the field inspection was not suitable for knapping. There were no food or implement resources within this section of the field inspection.

From the lower grassed slope, the powerline route continues up an area which had been subject to sheet and rill erosion following the formation of an unsealed vehicular access track. This access track on the eastern side of the rail line will be used as the primary access track for maintenance of this easement by Centennial Airly.

The access track was formed of exposed bedrock, portions of B horizon and conglomerate materials. There were no Aboriginal resources in this area or the potential to impact any Aboriginal sites by either the emplacement of the feeder or the use of the access track for maintenance.

On the northern side of the mountain the powerline route extended around the western side to avoid heavily vegetated areas. This area had been affected by the pastoral activities at this location. The soil had obviously been turned using a plough, which provided the opportunity to investigate the contents of the soil. The soil was very shallow, there were no raw materials contained in the soil and no evidence of Aboriginal artefacts in this area.

As the powerline route followed around the base of the mountain in a north-easterly direction, the area was still being used for pastoral purposes. The soil depth in these locations was greater than the areas closer to the base of the mountain. There was infrastructure in this area including sheds, fencing and access tracks which provided the opportunity to investigate the soil, the exposures and identify any potential for subsurface materials. The grass covered the area with an occasional tree in the paddock (but not within the easement). Within the grassed areas the ground was visible and the area had approximately 20% visibility.

The powerline route continues along to the former air strip. This area was denuded of soil and had no potential for retaining any Aboriginal artefacts. Beyond the air strip the landform sloped to the north and there were areas of high visibility which had been created from rill erosion. There was 90% visibility across an area approximately 100m X 100m and exposed aggregate rubble from a degrading conglomerate. No raw material or Aboriginal artefacts were visible within these erosion exposures. The soil depth where the proposed powerline crosses the creek was shallow, and the steep banks that led to the creek featured exposed bedrock. There was no raw material suitable for tool manufacturing at this location, and it was assessed as having very low to nil probability for retaining cultural heritage materials. The vegetation regrowth on the northern side of the creek demonstrated recent disturbances and the turning of soil. From this point the easement continued in a north east direction up a gentle grassed slope. As for previous areas, the grass provided a low level of visibility (10-15%) in conjunction with the occasional area of exposure.

## 4.0 ASSESSMENT

### 4.1 Potential Impact

The proposed powerline route (Figure 4-1) will not impact upon any cultural heritage items or the site detailed in Section 4.2 below. Airly 1 does not fall inside, or is at risk from the proposed powerline development.

### 4.2 Archaeological Site Description outside the Powerline Route



**Airly 1** - Easting MGA56/GDA94219208, MGA56/GDA94 Northing 6330113

Airly is an artefact scatter of predominantly quartz and quartzite flakes covering an area of approximately 0.63 hectares. The site is situated in a saddle atop a ridge on flat ground. Vehicular access tracks are apparent to the north of the site.

Strewn along the saddle is a scatter of quartz artefacts (Plate 2). The artefacts were predominantly located on the western side of the saddle in a cleared area. This area has been partially disturbed by farming activities and includes access tracks, vegetation clearing, fencing and grazing. The quartz raw material is of a much better quality than the local quartz material observed along the ridge to the south. The quartz had been knapped by free hand percussion rather than the usual bipolar technique used for quartz (Plates 3&4).

It should be noted that the proposed powerline route will have no impact upon the archaeological material detailed above, as it does not fall on the proposed powerline route. Indeed, the powerline route was specifically selected by Centennial Airly to avoid impact to all cultural heritage items.

**LEGEND**

-  Proposed 66kV Powerline Route
-  Marks Existing Infrastructure Take off Point

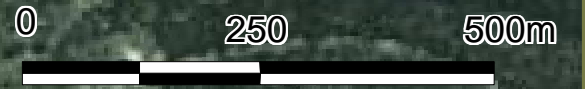
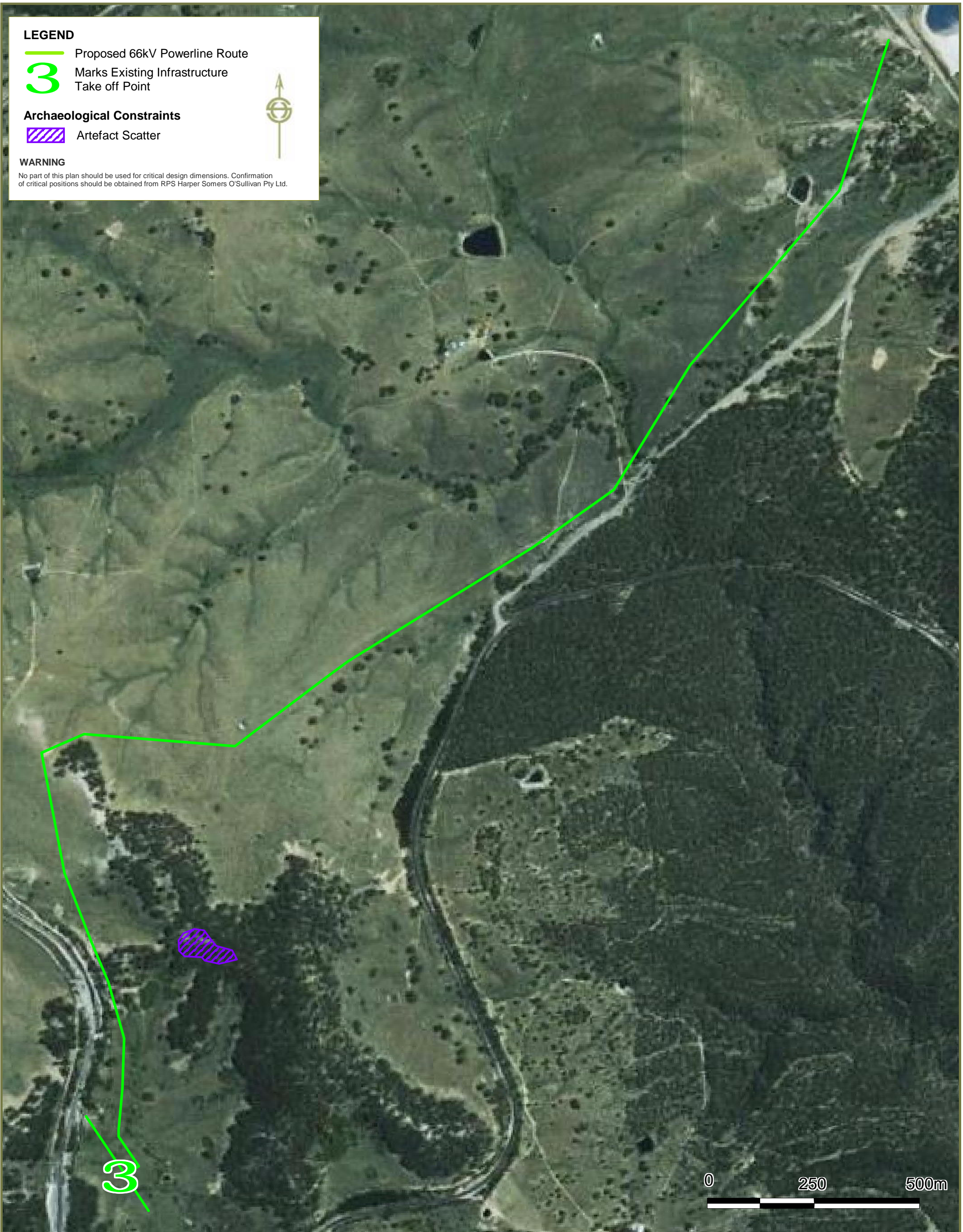
**Archaeological Constraints**

-  Artefact Scatter



**WARNING**

No part of this plan should be used for critical design dimensions. Confirmation of critical positions should be obtained from RPS Harper Somers O'Sullivan Pty Ltd.



**TITLE:**  
Figure 4-1 Archaeological Sites & Proposed  
66kV Powerline Route  
AIRLY PROJECT

**CLIENT:**  
Centennial Coal Pty Ltd



**PLANNING SURVEYING ECOLOGY**

**HARPER  
SOMERS  
O'SULLIVAN**

**SCALE:** 1: 800 at A3 Size

**DRAWN:** L.Steel

**APPROVED:** D.Rigby

**DATUM:** MGA Zone 56 (GDA 94)

**DATE:** 23/04/2009

Copyright  
\*This document & the information shown shall remain the property of Harper Somers O'Sullivan Pty Ltd. The document may only be used for the purpose for which it was supplied and in accordance with the terms of engagement for the commission. Unauthorised use of this document in any way is prohibited.\*

**LAYOUT REF:** J:\JOBS\25K\25401 - Capertee\Drafting\MapInfo

25401 Figure 4-1 Arch Sites & Proposed 66kV Route A-A3

**CONTOUR INTERVAL:** N/A

**JOB REF:**  
**25401**

241 DENISON STREET BROADMEADOW PO BOX 428 HAMILTON NSW 2303  
T: 02 4961 6500 F: 02 4961 6794 E: [survey@hso.com.au](mailto:survey@hso.com.au) W: [www.hso.com.au](http://www.hso.com.au) ABN 11 093 343 858

## 5.0 CONCLUSION AND RECOMMENDATIONS

### 5.1 Overview

Having investigated the numerous options, the proposed powerline route is the preferred option to minimise impact to heritage values, which provides the best outcomes and reflects best practice.

### 5.2 Recommendations

- **Airly can commence works without any archaeological constraints.**

#### 5.2.1 Recommendation 1

During the course of construction work, if suspected Aboriginal cultural heritage material is encountered, work should cease immediately. The NSW Department of Environment and Climate Change (DECC) and relevant Local Aboriginal Land Council should be notified. Works should only recommence when an appropriate and approved management strategy has been agreed to by all of the relevant stakeholders.

#### 5.2.2 Recommendation 2

In the event that skeletal remains are uncovered whilst construction operations are underway, work is to stop immediately and the NSW Coroner's Office and NSW Police contacted. If deemed to be of Aboriginal origin, the relevant Local Aboriginal Land Council and the DECC are to be contacted.

#### 5.2.3 Recommendation 3

The site detailed in section 4.2 of this report should be recorded on a site card to be submitted to the AHIMS section of DECC.

#### 5.2.4 Recommendation 4

In relation to Historical archaeological management, if during the course of clearing work, non-Indigenous heritage material exceeding 50 years in age is uncovered, work should cease immediately in the vicinity. The NSW Heritage Branch and a suitably qualified archaeologist should be notified and works only recommence when an appropriate and approved management strategy is implemented.

## 6.0 REFERENCES

- Brayshaw, H. 1990. *Archaeological Reconnaissance within Airly Authorisation (A232) Near Capertee, NSW*. An unpublished report prepared for Sinclair Knight and Partners on behalf of Novacoal Pty Ltd. May 1990.
- Brayshaw, H. 1991. *Airly Authorisation (A232) Near Capertee, NSW: Additional Archaeological Survey for Aboriginal Sites*. An unpublished report prepared for Sinclair Knight and Partners on behalf of Novacoal Pty Ltd. July 1991.
- DECC, 2006. *The Vegetation of the Western Blue Mountains: Including Capertee, Cox's, Jenolan and Gurnang Areas*. A report funded by the Hawkesbury – Nepean Catchment Management Authority. July 2006.
- DECC, 1997. *NPWS Guidelines for Aboriginal Heritage Impact Assessment in the Exploration and Mining Industries*.
- Flood, J. 1999. *Archaeology of the Dreamtime: The Story of Prehistoric Australia and its People*. Angus and Robertson, Sydney.
- Hiscock, P. & Attenbrow, V. 'A revised sequence of backed artefact production at Capertee 3, New South Wales', *Archaeology in Oceania*, vol.39, p.p.94-99, 2004.
- Mills, R. 1998. *An Archaeological Survey of the proposed realignment of the access road to Airly Mine*. An unpublished report commissioned by International Environmental Consultants. January 1998.

## 7.0 PLATES



**Plate 1: Photo of Powerline Take off Position**



**Plate 2: Quartz Artefact Scatter. Scatter is approximately 25m<sup>2</sup> in area.**





Plate 3: Quartz Artefacts



Plate 4: Quartzite artefacts

## APPENDIX 1

---

### Legislation

***The following overview of the legal framework is provided solely for information purposes for the client, and should not be construed as legal advice. RPS Harper Somers O'Sullivan will not be liable for any action taken by any person, body or group as a result of this general overview, and recommend that specific legal advice be obtained from a qualified legal practitioner prior to any action being taken as a result of the general overview below.***

## Legislative Context – Indigenous

Centennial Airly are planning to re-commence underground coal mining at Airly in accordance with the current Development Consent and seek S75W approval under Part 3A of EPA Act. As such the following legislative summary immediately below is applicable.

### ***Environmental Planning & Assessment Act 1979 (EPA Act)***

This Act regulates a system of environmental planning and assessment for New South Wales. Land use planning requires that environmental impacts are considered, including the impact on cultural heritage and specifically Aboriginal heritage. Within the EP&A Acts Parts III, IV, and V relate to Aboriginal heritage.

Part III regulates the preparation of planning policies and plans. Part IV governs the manner in which consent authorities determine development applications and outlines those that require an environmental impact statement. Part V regulates government agencies that act as determining authorities for activities conducted by that agency or by authority from the agency. The National Parks & Wildlife Service is a Part V authority under the *EP&A Act*.

In brief, the NPW Act provides protection for Aboriginal objects or places, while the *EP&A Act* ensures that Aboriginal cultural heritage is properly assessed in land use planning and development.

Part 3A of the EPA relating to major projects, obviates the need to conform with other specific legislation. In particular, s75U of the EPA Act explicitly removes the need to apply for s87 or s90 permits under the NPW Act. This means that although Aboriginal cultural heritage is considered during the planning process, a permit is not required to disturb or destroy an Aboriginal object or place. However, the Director-General of Planning must nonetheless consult with other government agencies, including DECC and National Parks & Wildlife, prior to any decision being made.

Likewise, under Section 75U of the Environmental Planning and Assessment Act (1979) permits that would otherwise be required under the Heritage Act (1977) do not apply to approved major projects under Part 3A.

Other legislative instruments pertaining to heritage are detailed below;

## Commonwealth

### ***Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (ATSIHP Act)***

This purpose of this Act is to preserve and protect of all heritage place of particular significance to Aboriginal and Torres Strait Islander people. This Act applies to all sites and objects across Australia and in Australian waters (s4).

It would appear that the intention of this Act is to provide national baseline protection for Aboriginal places and objects where State legislation is absent. It is not to exclude or limit State laws (s7(1)). Should State legislation cover a matter already covered in the Commonwealth legislation, and a person contravenes that matter, that person may be prosecuted under either Act, but not both (s7(3)).

The Act provides for the preservation and protection of all Aboriginal objects and places from injury and / or desecration. A place is construed to be injured or desecrated if it is not treated consistent with the manner of Aboriginal tradition or is or likely to be adversely affected (s3).

## State

It is incumbent on any land manager to adhere to legislative requirements that protect indigenous culture heritage in NSW. The relevant legislation is:

### ***National Parks & Wildlife Act 1974 (NPW Act)***

The NPW Act provides statutory protection for all Aboriginal relics (not being a handicraft made for sale, with penalties levied for breaches of the Act. Part 6 of this Act is the relevant part concerned Aboriginal objects and places, with the ss86 and s90 being the most pertinent:

Section 86: "A person, other than the Director-General or a person authorised by the Director-General in that behalf, who:

- a) disturbs or excavates any land, or causes any land to be disturbed or excavated, for the purpose of discovering an Aboriginal object,
- b) disturbs or moves on any land an Aboriginal object that is the property of the Crown, other than an Aboriginal object that is in the custody or under the control of the Australian Museum Trust,
- c) takes possession of an Aboriginal object that is in a national park, historic site, state conservation area, regional park, nature reserve, karst conservation reserve or Aboriginal area,
- d) removes an Aboriginal object from a national park, historic site, state conservation area, regional park, nature reserve, karst conservation reserve or Aboriginal area, or
- e) erects or maintains, in a national park, historic site, state conservation area, regional park, nature reserve, karst conservation reserve or Aboriginal area, a building or structure for the safe custody, storage or exhibition of any Aboriginal object, except in accordance with the terms and conditions of an unrevoked permit

issued to the person under section 87, being terms and conditions having force and effect at the time the act or thing to which the permit relates is done, is guilty of an offence against this Act.

Section 90: *“A person who, without first obtaining the consent of the Director-General, knowingly destroys, defaces or damages, or knowingly causes or permits the destruction or defacement of or damage to, an Aboriginal object or Aboriginal place is guilty of an offence against this Act.”*

Permits are issued under s87 of the NPW Act to avoid disturbing or removing an Aboriginal object or site, whereas consents may be issued under s90 to permit the destruction or damage of a site.

Penalties under these two sections are currently 50 penalty units, or 6 months in gaol, or both for individual and 200 penalty units for a corporation.

## Legislative context – Non indigenous

At the national level, the National Heritage List and the Commonwealth Heritage List (for those items under the control of the Commonwealth Government) records and protects those items that are accorded National Significance. The extensive Register of the National Estate lists those items considered of value for future generations.

### State

#### ***Heritage Act 1977***

The *Heritage Act 1977* (amended in 1999 and 2008) provides protection for listed items of heritage significance and can be defined as a place, building, work, relic, moveable object or precinct. The Act includes subsurface relics and protection is afforded items of state significance listed on the State Heritage Register. Items of Local Significance are afforded protection under the EPA Act. Of note is the following provision under s139 of the Heritage Act:

*“A person must not disturb or excavate any land knowing or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit”*

#### ***Environmental Planning & Assessment Act 1979 (EPA Act)***

This Act regulates a system of environmental planning and assessment for New South Wales. Land use planning requires that environmental impacts are considered, including the impact on cultural heritage and specifically Aboriginal heritage. Within the *EP&A Acts* Parts III, IV, and V relate to heritage.

Part III regulates the preparation of planning policies and plans. Part IV governs the manner in which consent authorities determine development applications and outlines those that require an environmental impact statement. Part V regulates government agencies that act as determining authorities for activities conducted by that agency or by authority from the agency.

Part 3A of the EPA relating to major projects, obviates the need to conform with other specific legislation. In particular, s75U of the EPA Act explicitly removes the need to apply for an approval under Part 4 of the *Heritage Act 1977*, or an excavation permit under s139 of the *Heritage Act*. With respect to non-indigenous heritage, this means that although heritage is considered during the planning process, a permit is not required to disturb or destroy a place or relic within the meaning of the *Heritage Act*. However, the Director-General of Planning must nonetheless consult with other government agencies prior to any decision being made

## APPENDIX 2

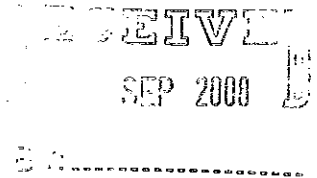
---

### AHIMS Site Data



Your reference : Capertee Search  
Our reference : AHIMS #23812

Harper Somers O'Sullivan Pty Ltd  
PO Box 428  
Hamilton NSW 2303



Wednesday, 24 September 2008

Attention: Sarah Paddington

Dear Sir or Madam:

**Re: AHIMS Search for the following area at Capertee; Zone: 55; E: 773900 - 783900; N: 6325200 - 6335200;**

I am writing in response to your recent inquiry in respect to Aboriginal objects and Aboriginal places registered with the NSW Department of Environment and Climate Change (DECC) at the above location.

A search of the DECC Aboriginal Heritage Information Management System (AHIMS) has shown that 6 Aboriginal objects and Aboriginal places are recorded in or near the above location. Please refer to the attached report for details.

The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not to be made available to the public.

The following qualifications apply to an AHIMS search:

- AHIMS only includes information on Aboriginal objects and Aboriginal places that have been provided to DECC;
- Large areas of New South Wales have not been the subject of systematic survey or recording of Aboriginal history. These areas may contain Aboriginal objects and other heritage values which are not recorded on AHIMS;
- Recordings are provided from a variety of sources and may be variable in their accuracy. When an AHIMS search identifies Aboriginal objects in or near the area it is recommended that the exact location of the Aboriginal object be determined by re-location on the ground; and
- The criteria used to search AHIMS are derived from the information provided by the client and DECC assumes that this information is accurate.

All Aboriginal places and Aboriginal objects are protected under the *National Parks and Wildlife Act 1974* (NPW Act) and it is an offence to destroy, damage or deface them without the prior consent of the DECC Director-General. An Aboriginal object is considered to be known if:

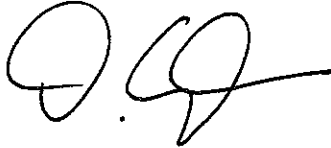
- It is registered on AHIMS;
- It is known to the Aboriginal community; or



- It is located during an investigation of the area conducted for a development application.

If you considering undertaking a development activity in the area subject to the AHIMS search, DECC would recommend that an Aboriginal Heritage Assessment be undertaken. You should consult with the relevant consent authority to determine the necessary assessment to accompany your development application.

Yours Sincerely

A handwritten signature in black ink, appearing to read 'D. Gordon', with a long horizontal stroke extending to the right.

Gordon, David  
Administrator  
Information Systems & Assessment Section  
Culture & Heritage Division  
Phone: 02 9585 6513  
Fax: 02 9585 6094



List of Sites ( List - Short )

Capertee Area

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 55, Easting From = 773900, Easting to = 783900, Northing From = 6325200, Northing to = 6335200, Requestor like 3023%, Service ID = 23812, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Easting	Northing	Context	Site Features	Site Types <small>(recorded prior to June 2001)</small>	Recording <small>(Primary)</small>	Reports <small>(Catalogue Number)</small>	State Arch. Box No <small>(for office use only)</small>
<u>44-3-0028</u>	<u>Capertee:</u>	AGD	55	775492	6333617	Open Site	GDG :-	Axe Grinding Groove	ASRSYS	1298, 4795	NRS/17798/1/289
						Status Valid					
						Primary Contact			Permit(s)		
<u>44-3-0029</u>	<u>Capertee:</u>	AGD	55	778043	6328484	Enclosed Shelter	ART :-, AFT :-	Shelter with Art, Shelter with Deposit	ASRSYS	1298	NRS/17798/1/289
						Status Valid					
						Primary Contact			Permit(s)		
<u>44-3-0044</u>	<u>Running Stream:Kadisha:</u>	AGD	55	773950	6334700	Open Site	GDG :-	Axe Grinding Groove	Lance	1097, 1298	NRS/17798/1/290
						Status Valid					
						Primary Contact			Permit(s)		
<u>44-3-0056</u>	<u>Capertee:</u>	AGD	55	778043	6328484	Open Site	CMR :-, TRE :-	Bora/Ceremonial, Carved Tree	ASRSYS	65	NRS/17798/1/290
						Status Valid					
						Primary Contact			Permit(s)		
<u>44-3-0085</u>	<u>Jack Halls Creek:Kadisha:Sofala:</u>	AGD	55	773950	6334700	Open Site	GDG :-	Axe Grinding Groove	Webster, Lance	1097	NRS/17798/1/290
						Status Valid					
						Primary Contact			Permit(s)		
<u>44-3-0147</u>	<u>CHC-ST1 (Capertee)</u>	GDA	55	777705	6329080	Open Site	TRE : 1	None	Benton	99921	
						Status Deleted					
						Primary Contact			Permit(s)		

## APPENDIX 3

---

### Site Card





# Aboriginal Sites Register of NSW

NPWS, PO Box 1967, Hurstville NSW 2220

## Standard Site Recording Form

New Recording  Additional information

SITE IDENTIFICATION						
Site name	Airly 1			NPWS Site Number		
Owner/manager	Airly Coal Pty. Ltd.					
Owner Address	Capertee, NSW					
LOCATION						
Location	Airly Farm, via Glen Davis Road Capertee, NSW					
How to get to the site	Turn onto Glen Davis road at Capertee, follow for approximately 3 kilometres and turn left into Airly Coal Pty. Ltd. entry. Site is atop a ridge line southwest of Airly Homestead.					
1:250,000 map name				NPWS map code	88311S	
Datum/Zone	GDA94/M GA56	Easting (AMG)	94219208	Northing	6330113	
Method for grid reference	GPS - Magellan	Map scale (if method = map)	1:25,000	Map name	Capertee	
NPWS District	Lithgow City Council			NPWS Zone		
Portion no.				Parish		
SITE DESCRIPTION						
Site type(s)				Site type code (NPWS use only)		
<p><b>Description of site and contents</b></p> <p>CHECKLIST: eg. length, width, depth, height of site, shelter, deposit, structure, element eg. tree scar, grooves in rock.</p> <p>DEPOSIT: colour, texture, estimated depth, stratigraphy, contents-shell, bone, stone, charcoal, density &amp; distribution of these, stone types, artefact types.</p> <p>ART: area of decorated surface, motifs, colours, wet/dry pigment, engraving technique, no. of figures, sizes, patination.</p> <p>BURIALS: number &amp; condition of bone, position, age, sex, associated artefacts.</p> <p>TREES: number, alive, dead. likely age, scar shape, position, size, patterns, axe marks, regrowth.</p> <p>QUARRIES: rock type, debris, recognisable artefacts, percentage quarried</p>	<p>Airly is an artefact scatter of predominantly quartz and quartzite flakes covering an area of approximately 0.63 hectares. Strewn along the saddle is a scatter of quartz artefacts. The artefacts were predominantly located on the western side of the saddle in a cleared area. This area has been partially disturbed by farming activities and includes access tracks, vegetation clearing, fencing and grazing. The quartz raw material is of a much better quality than the local quartz material observed along the ridge to the south. The quartz had been knapped by free hand percussion rather than the usual bipolar technique used for quartz.</p>  					



# Aboriginal Sites Register of NSW

NPWS, PO Box 1967, Hurstville NSW 2220

Standard Site Recording Form

SITE ENVIRONMENT				
Land form		Aspect		Slope
Mark position of the site				
Local rock type	<i>Quartz, quartzite, sedimentary sandstone</i>	Land use/effect	<i>farming</i>	
Distance from drinking water	<i>1.5 kilometres</i>	Source	<i>Airly Creek</i>	
Resource zone (eg. estuarine, river, forest)	<i>Forested ridgeline</i>	Vegetation	<i>Open forest, dry sclerophyll</i>	
Edible plants	<i>No.</i>	Faunal resources (include shellfish)	<i>Macropods, common woodland birds.</i>	
Other exploitable resources (eg. ochre)	Potential Ochre source nearby			
Are there other sites in the locality	Yes	Are they in the Sites Register	Yes	Other site types include Scarred Tree, Artefact scatter, isolated find
SITE MANAGEMENT				
Site condition	disturbed			
Management recommendations	Leave as is			
Have artefacts been removed from site	<i>No</i>	When		
By whom	Deposited at			
Consent applied for	Consent issued			
Date of issue	Consent number			
SITE INSPECTION AND RECORDING				
Reason for investigation	Airly Coal Powerline assessment			
Were local Aborigines contacted or present for the recording	<input checked="" type="checkbox"/> Not contacted <input type="checkbox"/> Contacted and present <input type="checkbox"/> Contacted but not present	Names and addresses		
Is the site important to local Aborigines	Yes			
Verbal/written reference sources	ASR report number(s)			
Photographs taken	Yes	No of Photos attached	2	
Site recorded by	RPS Harper Somers O'Sullivan		Date of recording	September 2008
Address/institution	RPS Harper Somers O'Sullivan 241 Denison St, Broadmeadow NSW 2292			