

SMP Archaeological Impact Assessment, Longwalls 5 to 9

Prepared for Ashton Coal Operations

Insite Heritage Pty Ltd

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1.0 Introduction

This report has been prepared to provide input into the Subsidence Management Plan (SMP) for longwall and miniwalls 5 to 9 (LW/MW5-9) in the Pikes Gully Seam. The objective of this report is to review existing information regarding the cultural heritage contained in the area of longwalls and miniwalls 5 to 9, continue consultation with the Aboriginal community and assess the need for any approvals under Part 6 of the *National Parks and Wildlife Act 1974*.

The review is based upon revision of previous studies, a desktop assessment of impact and an assessment of the management of cultural heritage values to date in longwalls 1 & 2.

A full overview of the Development Consent and a review of the project background is contained elsewhere in the SMP and is not repeated here.

2.0 Project & Site Description

The Ashton Coal Project (ACP) is located approximately 14km northwest of Singleton in the Hunter Valley region of New South Wales. The project includes an open cut mine, an underground mine, a Coal Handling and Preparation Plant and associated rail siding and infrastructure. The mine has been developed in a staged manner, with the infrastructure and open cut mine developed concurrently.

ACP was granted consent on 11 October 2002 by the Minister of Planning pursuant to the provisions of the Environmental Planning and Assessment Act 1979 (Development Consent No. 309-11-2001-i). There are over 250 individual consent conditions that apply to the project.

Development of the underground mine commenced in December 2005 and is accessed through the southern wall of the Arties Pit under the New England Highway. Approval for secondary extraction of longwalls (LW) 1 to 4 in the Pikes Gully Seam was granted in March 2007 by the Department of Primary Industries - Minerals (DPIM). This approval and associated Subsidence Management Plan applies to LW 1 to 4 in the Pikes Gully Seam only. Ashton's underground mine is proposed as a multiseam extraction and plans to extract four coal seams in descending order (Pikes Gully, Upper Liddell, Lower Liddell, and Lower Barrett).

Following completion of LW4, underground mining will progress to the west into panels 5 through to 9. Mining in this area will pass beneath Bowmans Creek and the associated saturated alluvium. Following extensive investigation, the mine plan in this area has been designed to feature a combination of both full-width longwalls and miniwalls (MW) to minimise subsidence impacts beneath Bowmans Creek and the associated saturated alluvium.

Subsidence impacts to all surface features over LW 1 to 4 are currently managed in accordance with the approved SMP for that area. Prior to commencing LW/MW 5 – 9 SMP approval is required from the Department of Primary Industries and other relevant government agencies.

3.0 Background review

3.1 Previous Studies

In 2002, Dan Witter surveyed the Ashton Coal Project site which included both the open cut area and the underground area. The survey data can be found in his report *Ashton Coal Mining Project Environment Impact Statement: Aboriginal Archaeology* June 2002 report to HLA Envirosciences prepared for White Mining.

The survey revisited a number of sites recorded by a previous survey plus an additional 285 exposures identified by aerial photography which were surveyed on foot. Fourteen sandstone outcrops were visited for potential grinding grooves and artwork (Witter 2002:1).

The survey area was divided into coverage zones (see Figure 2), and survey work carried out in the zones likely to be impacted by the proposed Ashton Coal Project. Previous land use practices, areas of exposures, and ground cover were all individually assessed for each zone and influenced survey coverage (Witter 2002:39).

Due to their location outside the areas of likely impact and survey restrictions due to limited visibility some of the zones were only partially surveyed by Witter or not surveyed at all. The following zones were partially surveyed (Witter 2002:39-41):

- Zone 4 - north of the New England Highway and south of the Great Northern Railway, around the confluence of Bettys and Bowmans Creeks;
- Zone 8 - northern part of Bowmans Creek valley below New England highway bridge and west of Bowmans Creek; and
- Zone 11 - southern end of study area

The following zones were not surveyed by Witter (2002):

- Zone 5 - open cut mining rehabilitation area east of Brunkers Road; and
- Zone 9 - southern part of Bowmans Creek valley.

Four areas were tested for their potential to contain buried Pleistocene surfaces. One area of buried deposit was identified at Glennies Creek and an isolated artefact was observed in the deposit (Hardy 2002 in Witter 2002:41, 50). The survey located 102 exposures with artefacts (EWA's) and six sets of grinding grooves (GG).

Zone 7 and parts of Zones 6 and 10 either have or will be impacted by subsidence in the course of underground mining of longwalls 1 to 4. Impacts to cultural heritage associated with these longwalls was previously assessed (ERM, 2006) and management is being undertaken in accordance with the Ashton Coal - Archaeological and Cultural Heritage Management Plan (2007).

The western part of Zone 7, Zone 9, Zone 4, Zone 5 and Zone 8, are the subject of this review. As mentioned previously zone 5 was not surveyed as the area consists of rehabilitated overburden. Zone 9 was not surveyed as it lay outside the area of impact associated with surface disturbance works proposed at that time. Underground mining was planned over the area with limited surface disturbance identified. It was noted that the area had been heavily cultivated, however it is noted that this will not have destroyed any sites present, although it may impact upon their scientific significance. The impact in this area will be minimal so whilst it is not expected to require any form of permits, the field work will be undertaken for inclusion in Ashton Coal's data base.

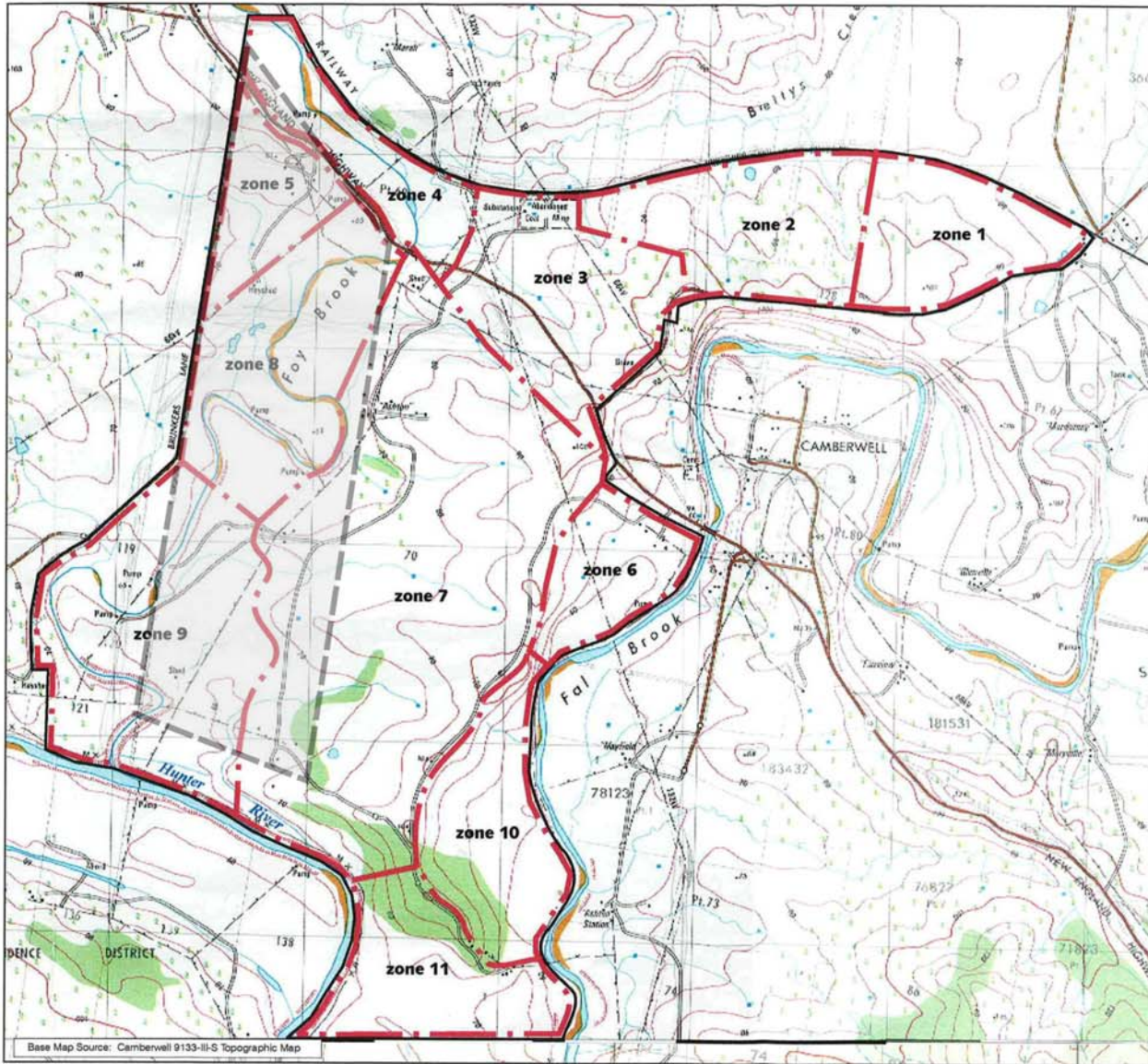


Figure 1 Witter's survey zones with the longwalls/ miniwalls 5-9 SMP area overlaid.

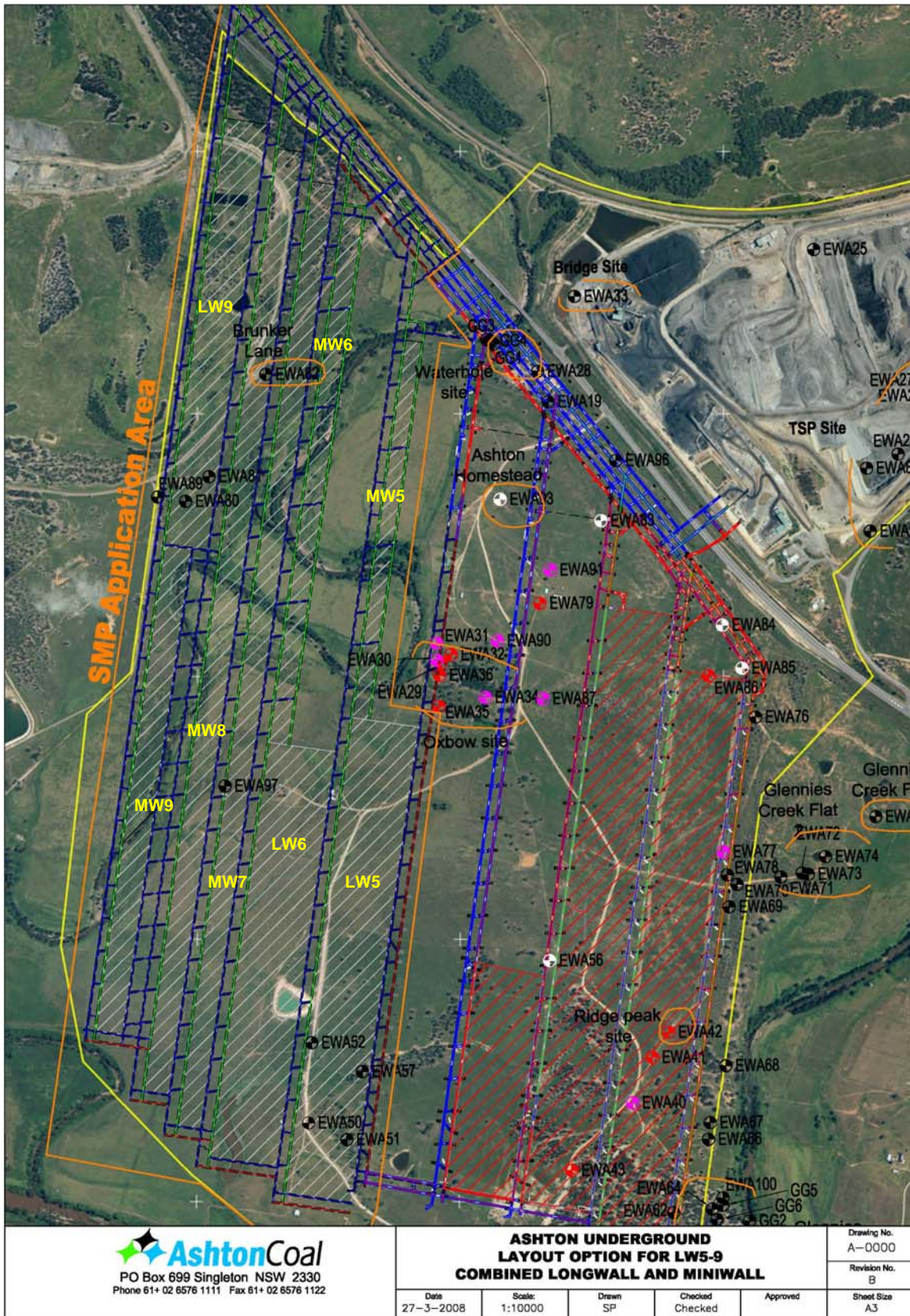


Figure 2 LW / MW 5-9 shown on the left outlined in orange with sites marked as EWA's in the context of the entire SMP area

3.1.1 Sites identified outside of the Current SMP Area

In the previous studies there have been a number of significant sites identified. These all fall outside of this current SMP area and area of assessment. These sites are;

- The Glennies Creek Flat Sites, Glennies Bluff Sites and Hunter River Site identified by Witter (2002) were not impacted by the mining of longwall 1 (see Figure 3). All the grinding grooves recorded in the area are being avoided with the set back of longwalls by at least 100 metres.
- The Waterhole Site (EWA 28 &19) was considered to be a site of significance and is located at a waterhole abutting a sandstone outcrop on Bowman's Creek. The site covers a 250x100m area, see Figure 3. 256 artefacts, including 36 implements and three sets of grinding grooves (GG1, GG3, GG4) were identified, with visibility at 50%. Although heavily disturbed, Witter identified a 50x50m area between exposed area EWA 28 and the grinding grooves expected to contain *in situ* deposits. It was considered that the site may possibly be an extension of the Bridge site located on the east bank of Bowmans Creek.
- The Oxbow Site (EWA 29,31,32,34-36,87,90) located on the eastern margin of Bowmans Creek extends over a 400x150m area is considered to be a good example of a typical camp site for the region. 204 artefacts were recorded with visibility at 10%. The highest concentrations of artefacts were identified in an undisturbed area, of high archaeological integrity, approximately 50x50m, at the junction of two gullies. Smaller artefact concentrations were also noted approximately 400m up the tributary channels. The site contained rare artefact types; 27 implements were recorded and a silcrete workshop identified. This site is likely to be partially impacted by longwall 4.
- Ashton Homestead Site (EWA 93) covers an area of 10x3m. 8 artefacts were recorded at this location with visibility at 80%. This site was identified as an intact deposit.
- The Glennies Creek site (EWA 61, 62, 64, 65, 92) was also considered to be significant based on the diversity of the artifact assemblage and the largely undisturbed nature of the site. The site is considered to have a very high potential for *in situ* deposits. The site is located at a large waterhole on Glennies Creek and extends over a 600x400m area. 236 artefacts were identified with visibility at 20%. Three sets of grinding grooves (GG2, GG5, GG6) and a flake tool workshop were also recorded. An additional 60 artefacts were visible in the exposure, but were not recorded. 39 implements were identified and an additional 21 from the workshop at EWA 92.
- The Ridge Peak Site (EWA 41-45, 58-59) covers an area of 800x100m. 34 artefacts recorded with visibility at 10% and 6 implements were identified. The main concentration of artefacts is located at the top of the peak in a relatively undisturbed area. The ridge peak site occurs at the highest point in the Ashton ridge area.
- High Spur Site (EWA 46-49) covers an area 400x50m and is located on a spur which overlooks the Hunter River to the south. 142 artefacts were recorded with visibility at 20%. 6 implements were identified. The area around EWA 46 (30x10m) was considered largely undisturbed and may possibly contain an intact deposit, the remainder of the site has been disturbed by a vehicle track and drainage furrow. The main concentration of artefacts recorded at EWA 46 and a workshop of burnt silcrete identified.
- High Ridge Site (EWA 76,79,84-86) is located on the shoulder of Ashton Ridge and extends over a 300x200m area. 19 artefacts, including a number of blades, were recorded in the survey with visibility at 10%. A microblade workshop of tuff was identified at EWA 84.

Within the underground area Witter designated three sites of high significance, the Waterhole site, Oxbow site and Glennies Creek site (management area D). The three sites are described as remarkably similar in assemblage attributes, similar landscape contexts and may be of a distinct site type associated with an archaeographic system of long term (or reliable) streams. A specialised use for the sites is indicated such as focus on fish traps or drought retreats (Witter 2002 p122).

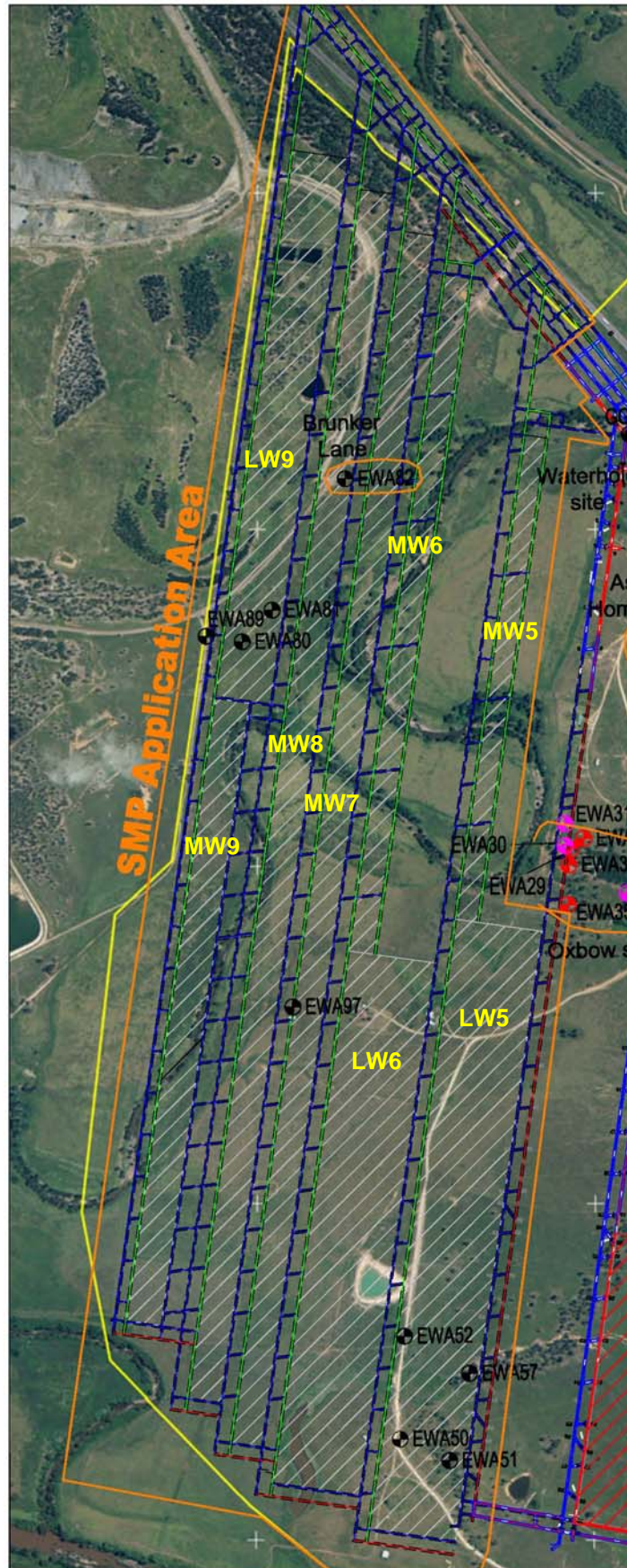


Figure 3 Sites located above LW/MW 5-9

3.1.2 Sites identified within the Current SMP Area

There are only a limited number of sites identified within the current SMP area and that are the subject of this assessment. They are of lesser significance. The sites include the Brunkers Lane site, (EWA 82, management area C) which was considered to be an indicator of the potential for subsurface deposits on the creek flats, although these are likely to have lost some contextual integrity due to a history of ploughing. This potential has been noted. The remaining recorded sites, EWA's 80,81, 89, 97, 52 and 50, are isolated finds.

It is noted that an area of the north-west (zone 5) and south-west (zone 9) of the current SMP area were not surveyed by Witter as these areas were outside the proposed surface infrastructure impact zone in 2002. Zone 5 has been partly disturbed by overburden emplacement areas related to Macquarie Generations activities; however, the eastern part of the area remains relatively intact. Zone 9 was heavily covered with pasture in 2002, having been heavily cultivated for some years whilst in use as a dairy farm. To address this issue it is proposed to conduct a survey of these areas prior to the extraction of miniwalls 7, 8 & 9. The survey will be conducted with the relevant aboriginal community. Whilst little or no impact is anticipated based on the impacts observed during longwall panel 1 which had the least depth from the surface and, as modelled, the greatest potential for surface remediation, the survey will allow the inclusion of the sites in Ashton's archaeological database.

3.2 Consultation

The consultation process is a continuation from the process that has been carried out since the development of the Ashton Coal Project. The consultation has included full project assessment work in relation to the Open Cut areas and for longwall panels 1-4. The draft SMP Archaeology assessment report for LW/MW 5-9 has been circulated to those groups registered for this development area.

As part of the consultation to date for LW/MW 5 to 9 the following groups were notified and comments invited on the preparation of the draft SMP either on the open day held on the 7/07/2008 or directly to Ashton Coal:

- Registrar of Aboriginal Owners
- Ungooroo Aboriginal Corporation
- Wattaka Wonnarua C.C. Service
- Wanaruah Local Aboriginal Land Council
- Wonnarua Aboriginal Custodians Corporation
- Junburra Consulting
- Aboriginal Native Title Elders Consultants
- Lower Wonnarua Tribal Council
- Wonnarua Nation Aboriginal Corporation
- Yarrawalk / Biami

Letters were also sent to Yarrawalk Enterprises and Aboriginal Native Title Heritage Consultants, however this correspondence was returned. A letter was then sent to Biami in lieu of Yarrawalk following consultation with the DECC. A new address has now been found for Aboriginal Native Title Heritage Consultants and a draft report forwarded to them, for review, as well as those groups registered.

Advertisements were also placed in the Sydney Morning Herald and Singleton Argus notifying the community of the preparation of the SMP and advertising the Public Information Day which was held at Singleton Library on the 7th July 2008.

A letter of response was received from the Wanaruah Local Aboriginal Land Council, Noel Downs on the 8/07/2008.

A draft Archaeological Impact assessment report was sent to all groups listed on the 26/9/08 requesting comment. The closing date for comment was the 13/10/2008 however this was extended to the 20/10/2008 at the request of the Wonnaruah LALC. Ashton then made follow up phone calls to the stakeholder groups from the 17th to the 19th of Oct 2008 to check if each had any comments. Alan Paget of Ungooroo indicated he was satisfied with the draft as did Victor Perry from Junburra Consulting. During the follow up call on 17/10/08 to Biami Robert Lester asked for the documents to be email to him, he was advised that the deadline for responses had closed but an extension was granted to another group to the 20/10/08 if he could provide a response by then. Messages were left for Wattaka and Barry Anderson, Lower Wonnarua Tribal Council.

A response was received from Wonnaruah LALC, Suzie Worth (20/10/2008) supporting the draft plan. Scott Franks from Biami/Yarrowalk then contacted Ashton on the 24/10/08 and responded to the SMP as an objection to the extension of the previous Section 90 issued for Longwalls 1-4. Ashton representative, Lisa Richards, rang Biami and left message reiterating that Ashton was not applying for an AHIP at this time.

The consultation log can be seen in Appendix A, letters of comment in Appendix B and samples of notification letters and the response of the Registrar of Aboriginal Owners in Appendix C.

3.3 Legislative Requirements

The legislation relevant to the assessment of cultural heritage is outlined below.

The *National Parks and Wildlife Act 1974* (as amended)

The NPW Act (Section 90) provides statutory protection for all material evidence of Aboriginal occupation of NSW. Aboriginal places which are areas of cultural significance to the Aboriginal community, are also protected by the 1974 Act (Section 84) that states:

“the Minister may declare lands to be ‘protected archaeological areas’ to preserve Aboriginal places and relics; and

it is an offence to disturb or destroy an Aboriginal place or relic without first obtaining written consent from the Director of National Parks and Wildlife Service NSW.”

The *Environmental Planning and Assessment Act 1979* (as amended)

The EP&A Act states that environmental impacts are to be considered in land use planning. The term ‘environmental impacts’ specifically relates to Aboriginal heritage in three parts of the act.

i) Part III covers planning instruments such as State Environmental Planning Policies (SEPP), Regional Environmental Plans (REP) and Local Environmental Plans (LEP). The guidelines on the preparation of planning instruments specifically state that Aboriginal heritage should be assessed as an integral part of these studies.

ii) Part IV of the Act determines the way in which consent authorities make decisions regarding development applications. Section 79C (b) states that the impact of development on the natural or built environment should be considered before consent is granted; and

iii) Part V of the Act points out that State government agencies which act as determining authorities must also conduct reviews of their own or other agencies activities in terms of impact on the environment. Where these impacts are deemed to be minimal a Review of Environmental Factors is required, although where impacts are greater an EIS would be generated. This part of the Act requires that;

‘any impacts on a locality having aesthetic, anthropological, architectural, cultural, historic, scientific, recreational, scenic or

Social significance or other special value for present of future generations’ (DUAP 1995) is accounted for.

3.4 Existing Subsidence Management and Monitoring

Ashton Coal currently holds an Aboriginal Heritage Impact Permit (AHIP) under section 90 of the *National Parks and Wildlife Act 1974* for the area impacted by mining in the LW 1-4 area. This AHIP includes all known sites within the LW 1-4 SMP approved area, with the exception of the Grinding Grooves on Bowmans Creek and Glennies Creek for which there is predicted to be no impact.

LW1 was predicted to experience the greatest degree of cracking , some of which would require remediation by ripping. Only one location required remediation to be undertaken that impacted on an identified archaeology site. As per the SMP for LWs 1 and 4, a process was followed that involved contacting the community groups and archaeologist, recording in-situ the site (an isolated find) by photograph and peg the location of the artefact. The artefact was then collected and stored under lock on-site at the Ashton office. Once the area is fully remediated the artefact will be returned to the location as marked by the peg, and a report will be prepared and circulated to the Aboriginal groups.

The community seem supportive of this approach which was formulated with community involvement (see SMP for longwall panels 1-4).

At the date of this report preparation, LW 2 is complete. Monitoring of sites is continuing in accordance with the relevant management plans, and to date, no impacts to archaeological sites has been observed for LW2.

4.0 Predicted Subsidence Impacts (LW/MW 5 to 9)

4.1 Subsidence

The subsidence anticipated, based on modelling by SCT Operations Pty Ltd (2008) for longwalls and miniwalls 5 to 9 will be a maximum of 1.6 metres with the extraction of the Pikes Gully Seam. Whilst it is noted that this will not be the final subsidence figure as three additional lower seams will be mined in the future, these will be subject to additional assessment and approvals prior to mining of each seam.

The following subsidence movements and characteristics are predicted (SCT 2008):

| Panel | Maximum Subsidence | Maximum Tensile Strain | Max. Compressive Strain | Maximum Tilt |
|-------|--------------------|------------------------|-------------------------|--------------|
| | (mm) | (mm/m) | (mm/m) | (mm/m) |
| LW5 | 1600 | 20 | 27 | 67 |
| MW5 | 200 | 3.2 | 4.2 | 11 |
| LW6 | 1600 | 17 | 23 | 57 |
| MW6 | 350 | 3.2 | 4.2 | 11 |
| MW7 | 350 | 3.2 | 4.2 | 11 |
| MW8 | 350 | 3.2 | 4.2 | 11 |
| MW9 | 200 | 3.2 | 4.2 | 11 |
| LW9 | 1200 | 15 | 20 | 50 |

Figure 4 shows a model of the anticipated subsidence across the site. Longwall panels 1-4 are located on the right between Glennies and Bowmans Creeks. Longwall and miniwall panels 5-9 are located to the left incorporating the meanders of Bowmans Creek. It can be seen that the impact of subsidence on the surface diminishes as the coal seams run to greater depth beneath the surface. Hence the greatest degree of subsidence has been experienced with the excavation of longwall panel no.1. On the basis of this model it is anticipated that there will be minimal surface cracking that will require remediation over longwall panels 5-9. Cracking is possible over LW5, LW6 and LW9 along the edges of the panel blocks.

In addition the panels themselves have been placed deliberately to avoid potential impacts upon the more significant aspects of the sites recorded. Specifically LW5 has been shortened so that the end of the standard width longwall pass stops more than 100 metres short of the meander of Bowmans Creek (Oxbow Site). This also means that there will be no longwall mining within 200m of the Bowmans Creek grinding grooves, placing them at no risk of impact from underground mining impacts. Several mini-panels (5, 6 and 7 8 and 9) have been designed to minimise impacts on Bowmans Creek. These measures will also minimise the impact on archaeological sites on the surface reducing the maximum depth of subsidence to 350mm. Surface cracking over miniwall panels is unlikely to be perceptible

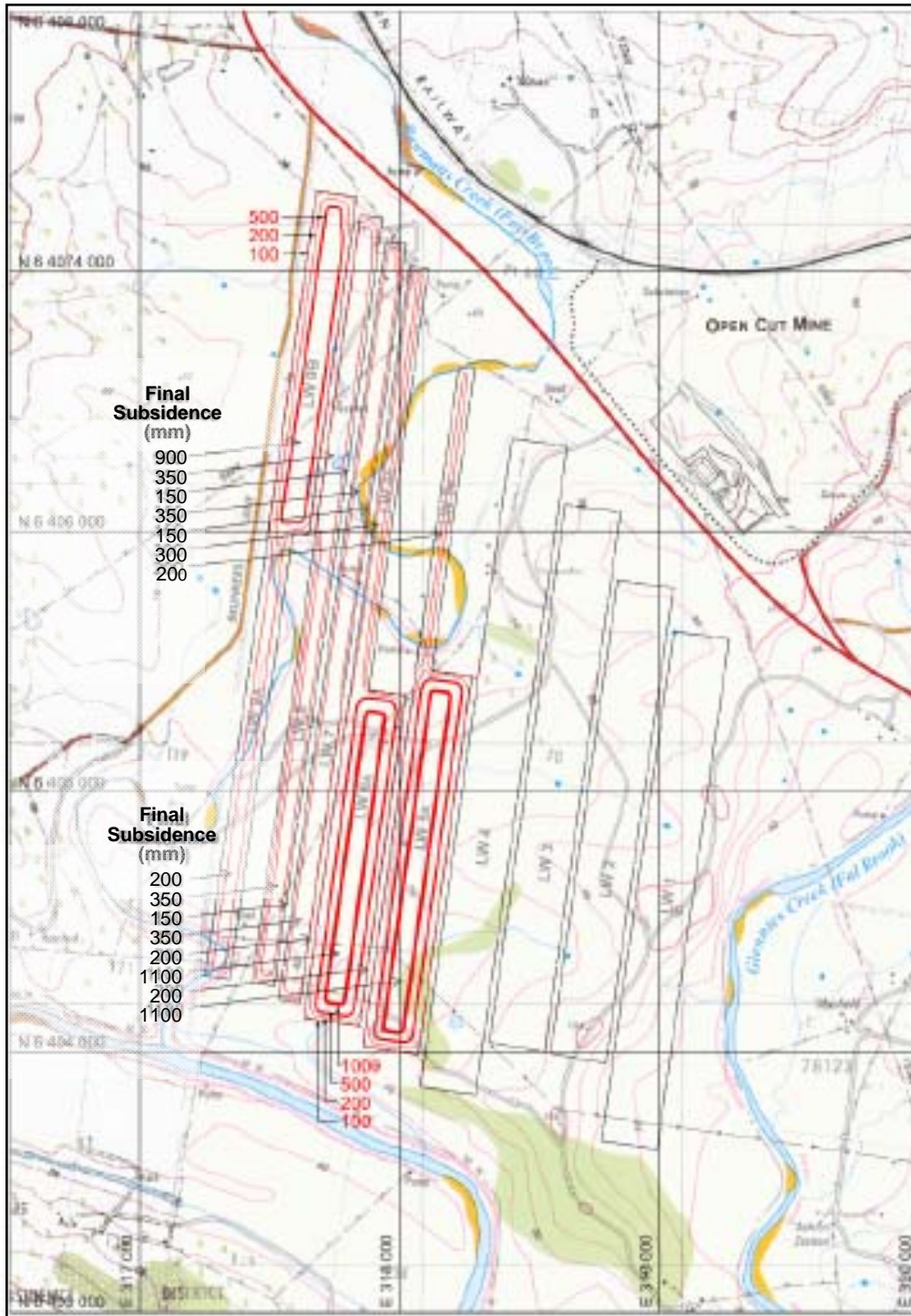


Figure 4 model of the anticipated subsidence across the site.

4.2 Subsidence effects on the Archaeological Resource

The sites that lie within the area of impact are isolated finds or artefact scatters. The grinding grooves recorded in the area are not within the current SMP Application area and or subsidence impact zone from any longwall panels.

The effects on artefact scatters has been described as potentially including the following:

1. Cracking. The ground may crack as a result of the underground goaf collapse. The cracks are usually a few millimetres wide but may be several centimetres wide which may require ripping by a bulldozer to prevent erosion or soil degradation. Generally where cracking requires repair a single pass by a bulldozer is sufficient. In sensitive area a small excavator and bobcat are used to further reduce the impacts from repair works.
2. Knick points and rilling. Changes in slope can cause changes in erosion patterns and may hasten the movement of knick points upslope. Earthworks may also be required to repair or control erosion.
3. Ponding. Ponds may develop where subsidence forms depressions. The deposition of sediment can bury artefacts. The dewatering of ponds and remediation may also impact artifacts by vehicle movements and requirement of earthworks.

Archaeological site integrity is unlikely to be impacted by subsidence itself. It is the attrition of artefacts due to rilling and knick point progression that may reduce integrity. Where cracking occurs it is unlikely to impact upon the integrity of sites. It is the management of some cracks, ponding, and erosion that require earthworks that has the greatest potential to impact sites.

4.3 Archaeological Sites Longwalls & Miniwalls 5-9

Additional field survey will be undertaken if surface remediation works are identified as being necessary in the areas that where not surveyed by Witter in 2002. This involves Zone 9 and part of Zone 5. Any additional sites located will be incorporated into the subsidence management plan.

The following table of sites are those which have been identified by Witter (2002) and are located above the longwall and miniwall panels 5 to 9. The majority of the sites are isolated finds (5 sites), with three sites containing three or less artifacts. Ten artifacts were located at the final site EWA 82 (Brunkers Lane Site) which was designated of moderate significance as an indicator that there may be further artifact deposits on the creek terraces particularly where these are intersected by creek tributaries.

The isolated finds and small artefact scatters are considered to be of low archaeological significance as they are consistent with the isolated finds found throughout the region. These sites are also unlikely to be impacted by disturbance because of the nature of their lack of complexity and the chances of an individual artefact falling down a crack being so low where one artifact is involved.

The modelling of subsidence indicates the potential for cracking on LW's 5,6 and 9 to be similar to that experience at LW1. However, the greater depth of the coal seam on the western side of the property will act as a buffer and reduce the potential for significant cracking. Therefore, the potential for the need for remediation should be significantly less than that experienced on LW1.

Table 1. Isolated EWA's identified by Witter (2002) that are above LW/MW 5-9.

| <i>Site Name</i> | <i>Site Type</i> | <i>Site Dimensions</i> | <i>Landform</i> | <i>Visibility</i> |
|------------------|------------------|------------------------|-----------------|-------------------|
| EWA 82 | Open Camp site | 20x2m | terrace | 20% |
| EWA 81 | Isolated find | 50x2m | terrace | 10% |
| EWA 80 | Isolated find | 50x2m | Flat spur | 20% |
| EWA 89 | Isolated find | 50x5m | terrace | 20% |
| EWA 50 | 2 artefacts | 1x 2m | trib flat | 50% |
| EWA 51 | Isolated find | 2x1m | trib flat | 50% |
| EWA 52 | Isolated find | 1x2m | trib flat | 80% |
| EWA 57 | 2 artefacts | 5x50m | trib bottom | 20% |
| EWA 97 | 3 artefacts | 20x20m | Terrace edge | 20% |

A site impact assessment has been developed. Four categories of potential subsidence risk have been defined and are outlined below:

- High – Definite potential for cracking to occur that will require repair.
- Medium – Subsidence will be experienced but only a moderate chance that cracking that requires repair will occur.
- Low – Subsidence may be experienced at the site however there is a low chance that repair work will be required.
- No Impact – No impacts on sites will occur as they are located outside the subsidence zone.

Table 2. Sites or EWA's identified by Witter (2002) that are in the vicinity of longwall panels 5-9.

| Site Name | Site Type | Site Dimensions | Risk of impact | Comment |
|------------------|------------------|------------------------|-----------------------|----------------------------|
| EWA 82 | Open Camp site | 20x2m | Medium | Edge of the panel |
| EWA 81 | Isolated find | 50x2m | Medium | As above |
| EWA 80 | Isolated find | 50x2m | Low | In the middle of the panel |
| EWA 89 | Isolated find | 50x5m | No impact | To the west of panel 9 |
| EWA 50 | 2 artefacts | 1x 2m | Low | In the middle of the panel |
| EWA 51 | Isolated find | 2x1m | Low | In the middle of the panel |
| EWA 52 | Isolated find | 1x2m | Medium | Edge of Panel |
| EWA 57 | 2 artefacts | 5x50m | Medium | Edge of Panel |
| EWA 97 | 3 artefacts | 20x20m | Medium | Edge of Panel |

5.0 Management of Subsidence Impacts

The management of the subsidence impacts for the LW/MW 5-9 area is proposed to be similar as that currently in operation for the existing LW1-4 area. However due to the depth of mining in this SMP area in many cases there may be some flexibility in the location of the remediation works required. Where surface remediation works are identified in either of the zones that have not had field survey work undertaken (zones 5 and 9) ACOL will involve the relevant community groups and an archaeologist in undertaking field surveys prior to the work being undertaken. All precautions will be taken to try and avoid impacting on identified archaeological sites during remediation work. Where surface remediation work is identified to necessitate impacting an archaeological site, ACOL will either apply for an additional AHIP under section 90 of the *National Parks and Wildlife Act 1974* for that site at that time, or seek modification of the existing AHIM currently in place, to include the additional site.

5.1 Monitoring

All sites will be/ are pegged and will be inspected pre and post longwall mining. The condition of the sites will be recorded and should a deterioration in condition be noted, due to erosion or other factors, advice will be sought from an archaeologists to determine the best course of action to stabilise the condition of the site.

5.2 Cracking

The impact of subsidence on the sites is likely to be minimal. It is where cracking, erosion or ponding occurs which subsequently requires remediation that the greatest impact on sites can occur. This impact is likely to be the movement of artefacts vertically and horizontally in relation to each other. Given that the majority of the study area has been ploughed, heavily grazed and subject to sheet erosion it is highly probable that the artefacts have been subject to movement in an inter site context. However, the scale of movement may be greater during remediation due to the need to rip as deeply as possible – deeper than the average plough zone. The most significant movement of artefacts may involve re-deposition of a small proportion of the assemblage within the B soil horizon thus confusing site context. However due to the depth of mining in this area in many cases there may be some flexibility in the location of the remediation works required. All precautions will be taken to try and avoid impacting on archaeological sites with this stage.

Cracking is more likely to occur at the edges of the longwall panel where the greatest degree of tilt and strain is experienced in the overburden strata. It is likely that cracking will occur within 30 metres, parallel to the side of the longwall panels. Cracking is therefore predicted to be more likely along the edges of longwall panels 5, 6 and 9 (refer to tilt / strain values in table above).

The cracking process is likely to be completed within a week of undermining. Sites identified as moderate to high potential for impact will be monitored by mine staff on a daily basis during this time. Where cracks that are likely to require remediation occur through or adjacent to sites, Ashton will either gain an additional AHIP under section 90 of the National Parks and Wildlife Act 1974 for that site at that time, or seek modification of the existing AHIM currently in place, to include the additional site.

Under the AHIP an archaeologist and community members will collect surface artifacts within the impact zone. Implements such as burrens and backed blades will be recorded by GPS readings and collected for temporary storage at the offices of Ashton Coal. A general site recording of the context of the site will also be made. Any sub surface deposits will be excavated to a total width of 3 metres (based on the width of a Caterpillar D9T), being 1.5m each side of the crack. This width will be modified to less where the machine to be used is smaller, the aim being to minimise the disturbance of the site and maximise the amount of deposit left in-situ.

The excavated deposit will be sieved through a five mm aperture sieve and artifacts retained on site. New site cards will be filled out noting what activity has occurred and showing where artifacts have been redeposited.

5.3 Ponding

Subsidence is likely to cause ponding and will be identified by mine staff during monitoring of the subsidence area. Where ponds are created they may require pumping out of surface water. This activity may impact on sites where vehicle access on wet soils create ruts. Silt may also accumulate in areas of ponding. Where ponding occurs over an area of sites of complexity involving a specific artefact scatter, the area will be fenced to prevent vehicles passing over the site. Pumping out of excess water can still be carried out over or through the fence.

Earthworks to ensure ponded areas can permanently drain will be minimised in extent and avoid known archaeological sites where possible. If impacts are necessary, the same procedures discussed above for remediation of cracking will be implemented.

5.4 Erosion

Areas of potential rill or knick point erosion will be identified by mine staff during monitoring of the subsidence area. Areas of erosion that threaten the integrity of sites will be stabilised by techniques that avoid site impacts such as the installation of contour banks above the site to divert water. Where this is not considered to be effective, surface artefacts will be collected within the impact zone of any necessary remediation work.

The mine controls erosion across the site as part of their land management strategy. Where known sub surface deposits will be impacted, they will be excavated over the footprint of remediation work, artefacts

recorded and subsequently returned to the site following remediation. A site card will be updated to reflect the activities that have occurred.

5.5 Site inductions

As an additional safeguard the induction of plant operators will include site identification information, and Ashton Environment Team will regularly inspect works. Should any potential archaeological material be identified, the archaeologist and Aboriginal community will be contacted to provide a formal identification. The Aboriginal community will be consulted prior to management decisions being made.

6.0 Summary

The management of subsidence impact to date appears to be appropriate and adequate to address the heritage value of the archaeological sites and community concerns. One site over LW 1 has undergone salvage to date, which involved the recording of the site (an isolated find), the carrying out of the remediation measures and the replacement of the artifact as close as is feasible to its original position.

It is likely that in 2009 a salvage of part of the Oxbow site will be undertaken in conjunction with the community. This will provide a sample of the subsurface deposits at this site and upon analysis the artifacts will be returned to their general location within the site.

The longwall and miniwalls 5 to 9 are unlikely to impact on any significant site. The isolated finds to the south of Bowmans Creek will not be impacted due to their character and the low likely hood of subsidence impacts.

It is anticipated that minor cracking will occur on Longwall panels 5, 6 and the northern section of 9. The southern portion of LW9 enters the terrace area identified by Witter as an area of potential archaeological deposit. However, as this area is primarily a miniwall design cracking is anticipated to be minimal it is unlikely that any remediation measures will be required. It is the remediation measures that have the greater potential to impact on the sites as the subsidence cracking itself is relatively minor.

Due to the depth of mining in this SMP area in many cases there may be some flexibility in the location of the remediation works required. Where surface remediation works are identified in either of the zones that have not had field survey work undertaken (zones 5 and 9) ACOL will involve the relevant community groups and an archaeologist in undertaking field surveys prior to the work being undertaken. All precautions will be taken to try and avoid impacting on identified archaeological sites during remediation work. Where surface remediation work is identified to necessitate impacting an archaeological site, ACOL will either apply for an additional AHIP under section 90 of the *National Parks and Wildlife Act 1974* for that site at that time, or seek modification of the existing AHIM currently in place, to include the additional site.

7.0 Bibliography

| | | |
|---------------------------------------|------|---|
| Ashton Coal Operations Pty Limited | 2006 | <i>Archaeological and Cultural Heritage Management Plan.</i> |
| Environmental Resource Management P/L | 2006 | <i>Archaeological and Cultural Heritage Subsidence Management Plan. Ashton Coal Longwall Panels 1-4. Annexe L Ashton Coal Subsidence Management Plan.</i> |
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| Mulvaney, J. and Kamminga, J. | 1999 | <i>Prehistory of Australia.</i> Allen & Unwin, St Leonard's. |
| Witter, D.C. | 2002 | <i>Ashton Coal Mining Project. Environmental Impact Statement: Aboriginal Archaeology.</i> A report to HLA Envirosiences for White Mining Ltd. |

Appendix A

Consultation Log

Indigenous Correspondence Log

| Date | Details | Correspondence referred to |
|------------|--|---|
| 21/02/2007 | The following groups were contacted via telephone and invited to attend a site meeting at Ashton Coal on 28th February 2007 | Invitation to Site Meeting Archaeology Subsidence Management Plan Longwall Panels 1-4 |
| | Junburra Consulting formerly Upper Wonnarua Tribal Council, Wonnarua Tribal Council and Upper Hunter Wonnarua Council | |
| | Lower Wonnarua Tribal Council | |
| | Aboriginal Native Title and Heritage Consultants | |
| | Wonnaruah Local Aboriginal Land Council | |
| | Wonnaruah National Aboriginal Corporation | |
| | Unsuccessful attempts were made to contact Mr Barry Anderson (Lower Wonnarua Tribal Council) but were unsuccessful. Wonnarua Nation Aboriginal Corporation were not contactable and it is understood that they are not currently involved in cultural heritage management. | |
| 28/02/2007 | Representative of the following groups attended the on site meeting on 28 February 2007: | Site Meeting Archaeology Subsidence Management Plan Longwall Panels 1-4 |
| | Junburra Consulting | |
| | Aboriginal Native Title and Heritage Consultants | |
| 13/03/2007 | Representatives of Ungooroo Aboriginal Corporation and Wattaka Wonnarua Cultural Consultants were briefed in a separate meeting. | Additional Meeting Archaeology Subsidence Management Plan Longwall Panels 1-4 |

| | | |
|------------|---|---|
| 8/05/2007 | Copies of draft archaeological subsidence management reports forwarded to the following groups for their review: Junburra Consulting Lower Wonnarua Tribal Council Aboriginal Native Title Heritage Consultants Wonnaruah Local Aboriginal Land Council Wattaka Wonnarua Cultural Consultants Ungooroo Aboriginal Corporation Wanaruah Aboriginal Custodians Corporation | Draft Archaeological subsidence management report for LW panels 1-4 |
| May-07 | Responses and comments on the draft management plan received from: | Draft Archaeological subsidence management report for LW panels 1-4 |
| | Wanaruah Local Aboriginal Land Council via facsimile 16/05/2007 | |
| | Wanaruah Aboriginal Custodians Corporation - Ms Barbara Foot rang to discuss on 18/05/2007 | |
| | Angela Besant met with Barbara Foot to discuss management plan 22/05/2007 at Acacia Ct Singleton. Mrs Foot agreed with the strategy of the plan. Angela Besant to follow up location of a bowl in a tree, and possible fish trap that Mrs Foot remembered being on the Ashton site when surveyed with Dan Witter. Agreed that these sites won't be impacted by any remediation work because: | |
| | a) fish trap in creek and the creeks are not being undermined | |
| | b) the tree is not likely to be impacted by cracking of the scale anticipated in this stage of the project | |
| | Angela Besant agreed to take Mrs Foot and son David to site when next work was being undertaken on site, so that Mrs Foot can see how well or otherwise the methodology is working | |
| 21/05/2007 | Emailed Ungooroo and Wattaka (via Ungooroo) and Junburra requesting response to draft report and letter agreeing as per discussed at meeting. | LW panels 1-4 |
| 24/05/2007 | Rang Junburra re: response to draft report. Said will email response today. | LW panels 1-4 |
| | Rang Wattaka re: response to report. Said will fax today. | |
| | Rang Graham Ward (Ungooroo), was out of the office. | |
| | Rang Barry Anderson will read report and supply response within the next few days. | |
| | Rang John Mathews (Aboriginal Native Title Heritage Consultants) said will send fax tomorrow. | |
| 28/05/2007 | Response received via fax from Wattaka. Agrees with management recommendations set out in the report. | LW panels 1-4 |
| 30/05/2007 | Emailed Junburra and Ungooroo, telephoned the Mathews and Barry Anderson. | LW panels 1-4 |

| | | |
|------------|--|-----|
| | Report received from Junburra. | |
| 26/09/2007 | Yarrowalk correspondence regarding concerns raised to DECC over s90 application | s90 |
| 28/09/2007 | Ashton response to DECC re: Yarrowalk concerns in s90 application outstanding concerns | s90 |
| 29/10/2007 | Ashton response to DECC re: Yarrowalk concerns in s90 application outstanding concerns | s90 |
| 27/09/2007 | | s90 |
| 1.00pm | Invited groups to a meeting at Ashton Coal on 04.10.07. | s90 |
| | Des Hickey – Wattaka Wonnarua Cultural Consultancy Service. Is unable to attend meeting due to field work commitments. Asked if Angela could call him back after meeting to let him know the details. | |
| | Telephoned John and Margaret Mathews, no answer on mobile. Left number to call back. | |
| | Wanaruah LALC – Spoke to Donna the acting manager - will be able to attend the meeting. Also said that she would be able to inform John and Margaret Mathews about the meeting. | |
| | Ungooroo Aboriginal Corporation – will try and attend meeting, are short staffed at the moment and busy with field work. | |
| | Wonnarua Custodians -Barbara Foot. She is unable to attend the meeting due to illness, but her son David may be able to attend on her behalf. | |
| | Upper Wonnarua Tribal Council, spoke to Marian who said that Victor would be able to attend the meeting. | |
| | Telephoned Barry Anderson – left message with daughter to call back. Called again at 4.50pm. | |
| | Telephoned Tom Miller on mobile, no answer, no answering service. | |
| | Emailed Lee-Ann Ball and asked for her to ask Tom Miller to call. | |
| 28/09/2007 | Telephoned Tom Miller on his mobile, was up at 'The Knockout' on the north coast, said he would call back on his return to Newcastle on the 02.10.07. | s90 |
| 3/10/2007 | Telephoned Ungooroo Aboriginal Corporation, spoke to Allan Paget – said he would be able to attend meeting. | s90 |
| | Telephoned Upper Wonnarua Tribal Council, spoke to Marian, who said that Victor would be there at the meeting | |
| | Telephoned Wanaruah LALC. Spoke to Donna who had told John and Margret Mathews about the meeting, and will remind them. Informed us that they would be back in the office at 3.30pm and to call then. Called at 4pm, the Mathews not in, left message to call back on mobile or office number. | |
| | Telephoned David Foot - Wonnarua Custodians - to remind him about the meeting. | |
| | Telephoned Lower Hunter Wonnarua Council -Tom Miller. Said he hoped to be there at the meeting, will call back to confirm. | |

| | | |
|------------|--|---|
| | Telephone call from Tom Miller, he is unable to make meeting, asked to call Tracey Skene and see if she could attend on his behalf. | |
| | Telephoned Tracey, she is unable to make the meeting. | |
| 10/10/2007 | Emailed management plan to Lee-Ann Miller to forward on to Tom Miller for review. | s90 |
| 19/12/2007 | Correspondence received from DEC re: Aboriginal Community Consultation process complaints received | s90 |
| 19/12/2007 | Correspondence received from DECC re: notice of amendment of conditions to S90 AHIP #2783 | AHIP #2783 |
| 1/12/2007 | Notification correspondence to the following indigenous groups regarding receipt of AHIP #2783 issued under s90 Junburra Consulting Lower Wonnarua Tribal Council Aboriginal Native Title Heritage Consultants Wonnaruah Local Aboriginal Land Council Wattaka Wonnarua Cultural Consultants Ungooroo Aboriginal Corporation Wanaruah Aboriginal Custodians Corporation | AHIP #2783 Notification Correspondence LW 1-4 |
| 23/06/2008 | Notification letter was sent to the following indigenous groups informing them of the opportunity for their input of the preparation of the subsidence management plan for mining of longwall 5-9 through the public open day to be hold on 7 July or by contacting Aston Coal directly Ungooroo Aboriginal Corporation Wattaka Wonnarua C.C. Service Wonnarua Local Aboriginal Land Council Wonnarua Aboriginal Custodians Corporation Junburra Consulting Biami Pty Ltd (Yarrowalk) Aboriginal native Title Heritage Consultants Lower Wonnarua Tribal Council | Notification correspondence re: preparation of Subsidence Management Plan for longwall 5-9 |
| 25/06/2008 | Aboriginal Native Title Heritage Consultants and Yarrowalk correspondence returned recipient had left address listed on file | |
| 26/06/2008 | Rang Roger (DECC) to confirm the addresses of the returned letters | Notification correspondence re: preparation of Subsidence Management Plan for longwall 5-9 |

| | | |
|-----------|---|---|
| | | |
| | Aboriginal Native Title Heritage Consultants | |
| | 31 Mitchell St | |
| | Muswellbrook. | |
| | | |
| | This is Margret Mathews. | |
| | | |
| | DECC have them registered as | |
| | Aboriginal Native Title Elders Consultants. | |
| | 69 Tobruk Ave | |
| | Muswellbrook 2333 | |
| | | |
| | Yarrawalk | |
| | PO Box 906 | |
| | Muswellbrook 2333 | |
| | | |
| | This is now Biami | |
| | Biami Pty Ltd | |
| | PO Box 1502 | |
| | NORTH SYDNEY NSW 2059 | |
| | Roger Confirmed that he thought Yarrawalk was still operating but is happy if we contact Biami in lieu of Yarrawalk, as the Yarrawalk address was having mail returned to sender. | |
| 7/07/2008 | Ashton SMP Open Day – attended by Barry French for Yarrawalk. Barry indicated he was involved in the original survey. He had discussed the project with Scott Franks and was representing Yarrawalk / Biami . Would like to review SMP and was told that a copy would be forwarded to Biami/Yarrawalk. | Draft Archaeological subsidence management report for LW panels 5-9 |
| 8/07/2008 | Response received from Noel Downs Wannarua LALC | |

| | | |
|------------|---|---|
| 25/09/2008 | Sent the updated plans of the SMP 5-9 Archaeological Plans Ungooroo Aboriginal Corporation Wattaka Wonnarua C.C. Service Wonnarua Local Aboriginal Land Council Wonnarua Aboriginal Custodians Corporation Junburra Consulting Biami Pty Ltd Aboriginal Native Title Heritage Consultants Lower Wonnarua Tribal Council | Correspondence re: Preparation of Subsidence Management Plan for Longwall 5-9 |
| 16/10/2008 | Suzie Worth called and Asked for an extension of time to respond to the SMP Plan. Extension given to Monday the 20th. Her contact number is 0427102116 | Preparation of Subsidence Management Plan for Longwall 5-9 |
| 17/10/2008 | LR telephoned the ACOL main group Aboriginal stake holder groups to see if they had any feedback regarding the preparation of SMP for Longwall 5-9 | Preparation of Subsidence Management Plan for Longwall 5-9 |
| 17/10/2008 | Biami -0438 295 120 spoke to Robert Lester he has not seen the report, asked where it sent, told him the North Sydney post office box, this is right though no one in the office has sent it to him he will try and track down. Asked in the future if we would be able to cc him in on the below email robertandcarolyn@bigpond.com. Can we send him a copy of the correspondence on the email address now. I said yes, however I have given another group an extension until Monday, if he could get some comments back to us by then it would be appreciated so we do not have it drag on. | Preparation of Subsidence Management Plan for Longwall 5-9 |
| 18/10/2008 | Called Ungooroo spoke to Alan does not have a problem with it | Preparation of Subsidence Management Plan for Longwall 5-9 |
| 19/10/2008 | Wattaka Wonnarua C.C. Service - spoke to Irene Des is at work he will have to call Lisa back | Preparation of Subsidence Management Plan for Longwall 5-9 |

| | | |
|------------|--|--|
| 20/10/2008 | Junburra Consulting - spoke with Victor Perry he is happy to keep going, happy with how things have been handled so far. Asked if he had contact details for Aboriginal native Title Heritage Consultants (thought this was Matthews and that they have changed) also asked about Wonnarua Aboriginal Custodians Corporation (never heard of them) | Preparation of Subsidence Management Plan for Longwall 5-9 |
| 20/10/2008 | Received correspondence from Officer of the Registrar advising subject land does not have Registered Aboriginal Owners | Preparation of Subsidence Management Plan for Longwall 5-9 |
| 20/10/2008 | Received correspondence from Wanarua LALC by fax, generally agreeing to SMP management and recommend monitoring of Bowmans Creek, fieldwork prior to remediation and avoidance of known sites or a section 90 be applied for. | Preparation of Subsidence Management Plan for Longwall 5-9 |
| 21/10/2008 | Lower Wonnarua Tribal Council 6574 5303 - Andersons left a message on the answering machine | Preparation of Subsidence Management Plan for Longwall 5-9 |
| 21/10/2008 | Biami - Lisa left a message for Robert Lester re needing feed back for SMP we are needing to closeout now | Preparation of Subsidence Management Plan for Longwall 5-9 |
| 24/10/2008 | Scott Franks called re SMP – discussion of employment opportunities. Informend that the deadline for response to the SMP closed on the 13/10/08. Undertook to respond to SMP in an hour. | Preparation of Subsidence Management Plan for Longwall 5-9 |
| 24/10/2008 | Received letter from Scott Franks objecting to a variation to a Section 90 requested that relevant information be sent to Biami, for further consideration. | Preparation of Subsidence Management Plan for Longwall 5-9 |
| 24/10/2008 | Lisa Richards rang Scott (left message) to reinforce that the SMP was not a Section 90 application, the report was part of a larger document and we would be moving forward with this. | Preparation of Subsidence Management Plan for Longwall 5-9 |

Appendix B

Consultation Aboriginal Community Documents Received

Ashton SMP Public Information Day - 7 July 2008 - Consultation Record

| Name | Time | Suburb |
|--------------|------|-------------------------------|
| Barry FRENCH | 1:10 | 12 HAYDON ST. MUSWELLBROOK |

| Topics Raised | Response |
|---|--|
| <ul style="list-style-type: none"> * Location of artefacts? * Scattered artefacts * Depth of longwall? * Been talking to Scott Franks (SF) • Barry was involved in original survey and was requested by Scott Franks (SF) to attend on behalf Biami / Yarrowalk. | <ul style="list-style-type: none"> • Subsidence impacts limited - will take same approach w/ blanket S90 to ensure emergency repairs can be carried out. Will be managed as per current management plan which has been approved. • Depths indicated • SF. been sent letter as per SMP requirements. • SF. has copy of existing MP. • Comments welcome. • No issues with current management or proposed impact to scattered sites |

| Further Information Requested? | If yes, preferred contact details |
|--|-----------------------------------|
| +WOULD BE INTERESTED IN REVIEWING ARCHAEOLOGY M.P. | 6541 2765 |

Recorded By: A. Kerr.....

Page No. 1.....



PO BOX 127
 19 MAITLAND STREET,
 MUSWELLBROOK 2333
 ABN 33 251 730 169

PH: (02) 6543 1288
 (02) 6543 1962
 FAX: (02) 6542 5377
 EMAIL: wanarua@bigpond.net.au

Lisa Richards
 Environment and Community Relations Manager
 Ashton Coal Operations
 P.O. Box 699
 Singleton NSW 2330

Re: Preparation of Mine Subsidence Management Plan - Ashton Coal

Dear Lisa,

I thank you for this opportunity to comment on the Preparation of Mine Subsidence Management Plan - Ashton Coal.

Aboriginal Cultural Heritage is not limited to the relics and art that have survived the impact of European settlement. It is a living culture and includes landforms, water holes vegetation zones, habitats, and peoples.

Before considering any consents, Wanaruah Local Aboriginal Land Council has a duty to fully explore and compare all the negative impacts that such action will have against the benefits of the development, to the Land, Aboriginal Culture and the Community.

The area in question has great cultural and social significance to Aboriginal peoples of this area as it is within easy walking distance of several VERY significant sites and ceremonial grounds. It is also situated in the proximity of the song line between the Hunter Valley and the Coast. This very important cultural and economic transit way was in use for thousands of years.

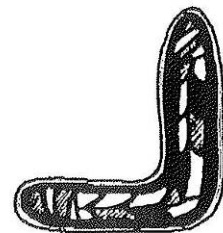
In regards to the current cultural assessment we offer the following comments:

1. Wanaruah Local Aboriginal Land Council does not and will NOT agree to the disturbance or destruction of any Aboriginal Cultural Sites contained within the conservation offset area.
2. Wanaruah Local Aboriginal Land Council does not and will NOT agree to the disturbance or damage of the conservation offset area by underground mining.

Again thank you for this opportunity for input,

Noel Downs
 CEO

8/7/08





PO BOX 127
19 MAITLAND STREET,
MUSWELLBROOK 2333
ABN 39 251 730 169

PH: (02) 6543 1288
(02) 6543 1962
FAX: (02) 6542 5377
EMAIL: wanaruah@bigpond.net.au

20 October 2008

Ms L Richards
Environment and Community Relations Manager
Ashton Coal Operations
PO Box 699
SINGLETON NSW 2330
(Sent by email to lrichards@astoncoal.com.au)

Dear Lisa

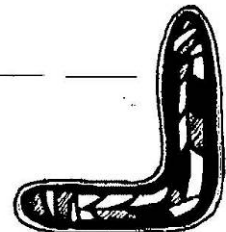
RE: RESPONSE TO PREPARATION OF A SUBSIDENCE MANAGEMENT PLAN – ASHTON COAL

In response to your letter and draft SMP Archaeological Impact Assessment, Longwalls Miniwalls 5 to 9 prepared by Insite Heritage Pty Ltd, in which you request our comments. We apologise for not responding to your proposed management plan aim last week.

Generally, the Wanaruah LALC is in agreement with the conservation methods of sites that will or maybe impacted by underground longwall and miniwall mining activities at Bowmans and Glennies Creeks.

The Land Council undertook a salvage of artefacts (EWA 28) at recorded site '37-3-0006' in September 2008 under DECC AHIP Permit No. 1090556 as recommended by Insite Heritage Pty Ltd as part of a Telstra optic cable replacement project. The DECC site card also included the grinding groove sites (GG1, GG3 and GG4). These grinding groove sites were inspected and photographed as requested in the salvage brief, however no investigation for artefacts associated with the grinding grooves was undertaken. The report is currently being written and it was noted in the proposed subsidence management plan that these sites will not be impacted, in fact Ashton Coal Operations Pty Ltd have agreed to stop the longwall pass more than 100m short of the meander of Bowmans Creek and that there will be no longwall mining within 200m of the Bowmans Creek grinding grooves. The mini panels designed to minimize cracking and hydrological

Wanaruah Local Aboriginal Land Council



impacts to the waterway and waterhole appear to be appropriate precautionary measures for the sites' protection provided that no future changes to mine plans are proposed.

The 'Oxbow site' (EWA 29, 31, 32, 34-36, 87 and 90) is to be 'partially impacted by Longwall 4'. This site should be salvaged under an AHIP Section 90 permit prior to any work taking place in this area below the surface.

RECOMMENDATIONS

It should be recommended that:

- that regular monitoring of the Bowmans Creek sites be maintained throughout the life of the mine and should mine plans in the future threaten to disturb the sites, then an archaeologist will need to be consulted as will the Aboriginal community and action strategies put in place.
- that where surface remediation works are identified, further fieldwork will be required.
- any known sites that may be impacted by the longwall/miniwall mining activities are either to be avoided altogether or an AHIP Section 90 permit for salvage is to be obtained.

We look forward to continuing the consultation process and should you wish to discuss any matter in this letter further, please do not hesitate to contact me on 6543 1288.

Yours sincerely



Suzie Worth
Cultural Heritage Officer
Wanaruah Local Aboriginal Land Council



Biami Pty Ltd
ABN 47 128 926 947
Ground floor 53 Walker St
North Sydney NSW 2060
PO Box 1502 North Sydney
NSW 2059
info@biami.com.au
www.biami.com.au

24 October 2008

Lisa Richards
Environment and Community Relations Manager
Ashton Coal Operations Pty Ltd.
Phone: 0265709219
Mobile: 0427462650

Ashton SMP Archaeology Report

Dear Lisa,

I will need to confirm with DECC that this is in fact a variation of a section 90 that Yarrawalk in fact objected to, this being the case my understanding of the original section 90 was for Ashton to actually sit down and discuss the section 90 with Yarrawalk to date this still has not accrued.

This being the case one again we are objecting to the variation as it will impact on an area that is culturally significant to our people, at this at this stage we are more than happy to meet with yourself and Ashton Staff at our office to discuss this. I will advise DECC with regard to our decision at this stage and I am looking forward to achieving a outcome with regard to this.

Could you please e-mail all relevant information regarding this project to the e-mail address provided below.

Look forward to your reply.

Regards,

Scott Franks
Director
Email: scott@biami.com.au
Phone: 0401195490

Appendix C

Examples of notification letters sent out and Registrar Comments received

Error! Objects cannot be created from editing field codes.



11 Mansfield Street
Glebe NSW 2037
PO Box 117, Glebe NSW 2037
P: 02 9562 6277 F: 02 9562 6330

Lisa Richards
Environment and Community Relations Manager
Ashton Coal Operations
PO Box 699
Singleton NSW 2330

Dear Lisa

Re: Request - Search for Registered Aboriginal Owners

I refer to your letter of 20 June 2008 advising of a proposed Subsidence Management Plan application and associated consultation process for longwall mining at Ashton Coal Operations close to Pikes Gully Seam.

I have searched the Register of Aboriginal Owners and the subject land does not have Registered Aboriginal Owners pursuant to Division 3 of the *Aboriginal Land Rights Act 1983* (NSW).

The Wanaruah Local Aboriginal Land Council will be able to assist you with information on other interested groups, their contact details are;

Wanaruah Local Aboriginal Land Council

PO Box 127

Muswellbrook NSW 2333

P: (02) 6543 1288 F: (02) 65425377

Yours sincerely

per Kylie McLeod
Project Officer
Aboriginal Land Rights Act (1983)

3 July 2008



ASHTON COAL OPERATIONS PTY LIMITED
ABN 22 078 556 500

GLENNIES CREEK ROAD TEL: 02 6576 1111
CAMBERWELL NSW 2330 FAX: 02 6576 1122

PO Box 699
SINGLETON NSW 2330

ENVIRONMENTAL CONTACT LINE: TEL: 02 6576 1830
TOLL FREE NUMBER: 1800 657 639
WEB ADDRESS: WWW.ASHTONCOAL.COM.AU

23 June 2008

Ungooroo Aboriginal Corporation
PO Box 3095
SINGLETON NSW 2330

Dear Sir/Madam,

RE: PREPARATION OF A SUBSIDENCE MANAGEMENT PLAN - ASHTON COAL

Ashton Coal Operations Limited is currently preparing a Subsidence Management Plan for Submission to the Department of Primary Industries for the next section of the underground mine within the Pikes Gully Seam (longwall and miniwalls 5 to 9). The SMP area is within the current Development Consent DA 309-11-2001-I and Mining Lease 1533. An Environmental Impact Statement and archaeological survey, consultation and impact assessment for these panels was completed as part of the DA process.

The objective of the SMP process is to ensure subsidence management strategies are in place for potential subsidence impacts prior to the commencement of underground mining in each application area. Ashton Coal is expecting to lodge the application by early August 2008.

Impacts to areas of archaeological and cultural heritage on Ashton's land will continue to be managed in accordance with Ashton Coal's Archaeology and Cultural Heritage Management Plan. Where necessary, the existing Aboriginal Heritage Impact Permit (AHIP #2783) will be amended to include Aboriginal objects at risk as a result of subsidence impacts such as surface cracks or an identified need for soil remediation. If subsidence predictions indicate that it will be necessary to include additional Aboriginal objects within AHIP #2783, opportunity will be provided to all suitably experienced representatives of the local Aboriginal groups (as listed in AHIP #2783) to be involved in monitoring activities related to the development consent and subsidence management.

Prior to lodgement of the SMP application, Ashton Coal would like to provide an opportunity for all stakeholders to comment on the proposal. In addition to a letter to stakeholders, the intention to prepare a SMP will be advertised in the Singleton Argus and the Sydney Morning Herald outlining the opportunity for comment. These opportunities will include contacting either Ashton

Sydney Office: Level 14, 213 Miller Street, North Sydney, NSW, 2060 – Tel: (02) 9922 3777 Fax: (02) 9923 2427
Brisbane Office: Level 6, 316 Adelaide Street, Brisbane, QLD, 4000 – Tel: (07) 3248 7900 Fax: (07) 3211 7328

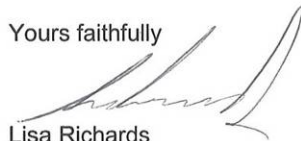
Ref: Ungooroo_23Jun08.doc

Coal directly, and/or attending a Public Open Day to be held at the Singleton library on Monday 7th July 2008 from 1pm to 8pm.

Following submission of the SMP to the DPI there will also be an advertised Public Exhibition Period of 30 days in which the proposed SMP can be viewed and commented upon by the public.

Should you have any questions about this process, please contact the undersigned.

Yours faithfully

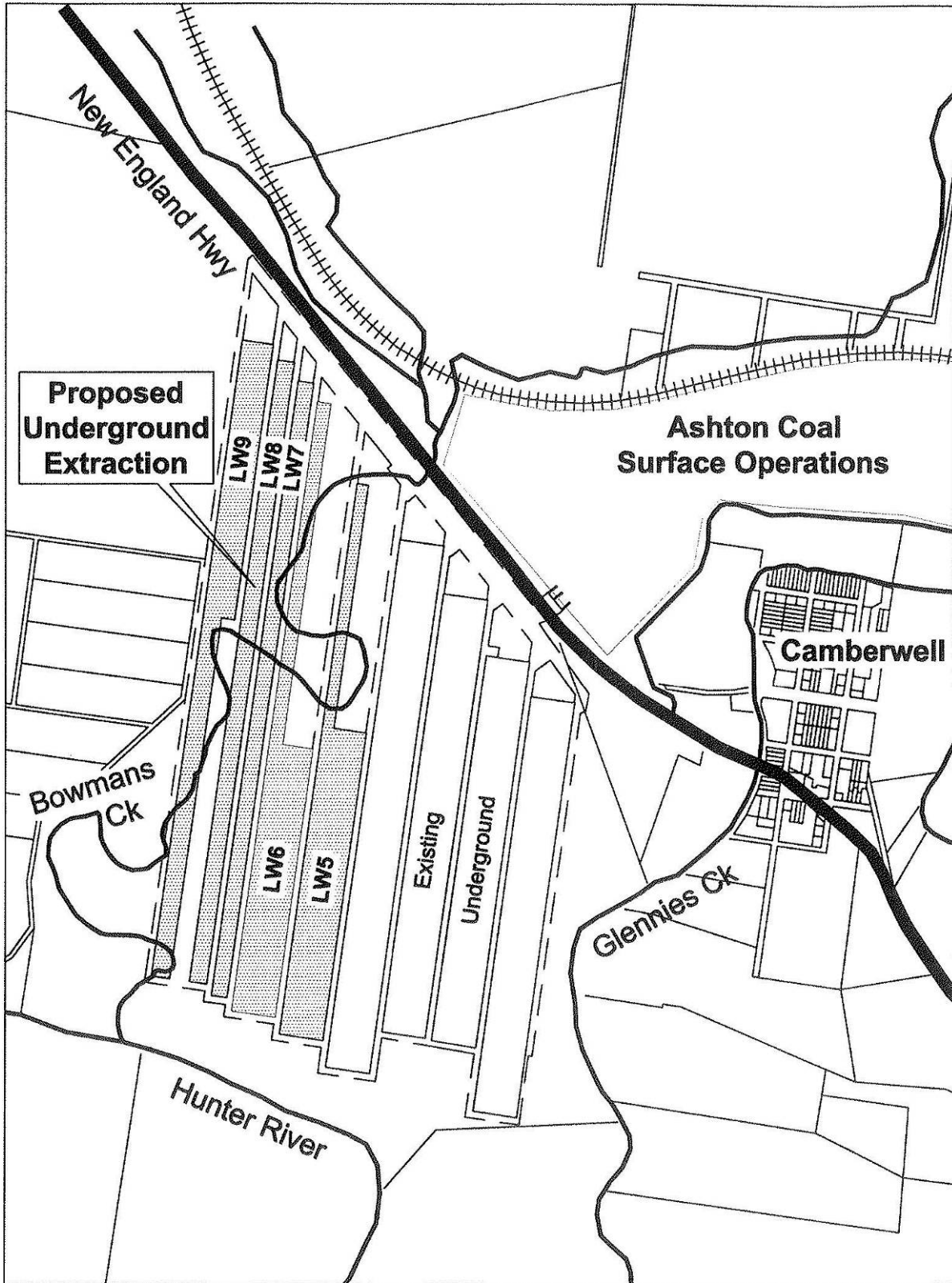



Lisa Richards
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Ashton Coal Operations
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Direct Dial: +61 2 6570 9219

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encl: Mine Plan



| | | | | | | |
|---|-------|---|---------|----------|------------|----------------------|
|  PO Box 699 Singleton NSW 2330 Phone 61+ 02 6576 1111 Fax 61+ 02 6576 1122 | | ASHTON UNDERGROUND APPLICATION AREA COMBINED LONGWALL & MINIWALL 5-9 | | | | Drawing No A-9234 |
| | | | | | | |
| Date | Scale | Drawn | Checked | Approved | Sheet Size | |
| 19-06-2008 | NTS | SP | Checked | SP | A4 | |



Ashton Coal Operations Pty Limited
ABN 22 078 556 500

Glennies Creek Road
Camberwell NSW 2330

Tel: 02 6576 1111
Fax: 02 6576 1122

PO Box 699
Singleton NSW 2330

Environmental Contact Line:
Toll Free Number:
Web Address:

Tel: 02 6576 1830
1800 657 639
www.ashtoncoal.com.au

26 September 2008

Aboriginal Native Title Heritage Consultants
16A Mahogany Ave
MUSWELLBROOK NSW 2333

Dear Sir/Madam,

RE: PREPARATION OF A SUBSIDENCE MANAGEMENT PLAN - ASHTON COAL

We had attempted to notify you on the 23 June 2008 that Ashton Coal Operations Limited is currently preparing a Subsidence Management Plan (SMP) for submission to the Department of Primary Industries for the next section of the underground mine within the Pikes Gully Seam (longwall and miniwalls 5 to 9). However the mail was returned to use with the wrong address, we have now obtained this new address. The SMP area is within the current Development Consent DA 309-11-2001-I and Mining Lease 1533. An Environmental Impact Statement and archaeological survey, consultation and impact assessment for these panels was completed as part of the DA process.

The objective of the SMP process is to ensure subsidence management strategies are in place for potential subsidence impacts prior to the commencement of underground mining in each application area. Ashton Coal has completed an Archaeology Impact Assessment for inclusion in the SMP a draft copy of this has been enclosed for your review. Any feed back in relation to this report should be sent to the undersigned by Monday the 13th October 2008.

Should you have any questions about this process, please contact the undersigned.

Yours faithfully

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encl: Archaeology Impact Assessment LW/MW 5-9