

APPENDIX 6:

ABORIGINAL COMMUNITY CONSULTATION

Note: Only includes additional Aboriginal stakeholder consultation undertaken for the Abel Modification Project

Consultation Database (additional consultation for the Abel Modification Project 2012):

Date	Person Contacted	Organisation	How Contacted	Contacted By	Organisation	Description
2/3/2012	Margaret Harvey	Awabakal LALC	Letter	Tony Sutherland	Donaldson Coal	Provided information about the proposed Abel Modification and proposed heritage assessment (including draft methodology) with a request for comment and input on cultural values by 26 March 2012.
2/3/2012	Ken Riddiford	Mindaribba LALC	Letter	Tony Sutherland	Donaldson Coal	Provided information about the proposed Abel Modification and proposed heritage assessment (including draft methodology) with a request for comment and input on cultural values by 26 March 2012.
2/3/2012	Thomas Miller and Dean Miller	Lower Hunter Wonnarua Council	Letter	Tony Sutherland	Donaldson Coal	Provided information about the proposed Abel Modification and proposed heritage assessment (including draft methodology) with a request for comment and input on cultural values by 26 March 2012.
2/3/2012	Scott Franks	Yarrowalk (a division of Tocomwall Pty Ltd)	Letter	Tony Sutherland	Donaldson Coal	Provided information about the proposed Abel Modification and proposed heritage assessment (including draft methodology) with a request for comment and input on cultural values by 26 March 2012.
2/3/2012	Shane Frost	Awabakal Descendants Traditional Owners Aboriginal Corporation	Letter	Tony Sutherland	Donaldson Coal	Provided information about the proposed Abel Modification and proposed heritage assessment (including draft methodology) with a request for comment and input on cultural values by 26 March 2012.
2/3/2012	Gordon Griffiths and Shannon Griffiths	Wonnarua Culture Heritage	Letter	Tony Sutherland	Donaldson Coal	Provided information about the proposed Abel Modification and proposed heritage assessment (including draft methodology) with a request for comment and input on cultural values by 26 March 2012.
2/3/2012	Ann Hickey	Gidawaa Walang	Letter	Tony Sutherland	Donaldson Coal	Provided information about the proposed Abel Modification and proposed heritage assessment (including draft methodology) with a request for comment and input on cultural values by 26 March 2012.
2/3/2012	Margaret Matthews	Aboriginal Native Title Consultants	Letter	Tony Sutherland	Donaldson Coal	Provided information about the proposed Abel Modification and proposed heritage assessment (including draft methodology) with a request for comment and input on cultural values by 26 March 2012.
2/3/2012	Rodney Matthews and Michele Stair	Giwiirr Consultants	Letter	Tony Sutherland	Donaldson Coal	Provided information about the proposed Abel Modification and proposed heritage assessment (including draft methodology) with a request for comment and input on cultural values by 26 March 2012.
2/3/2012	Christine Matthews	Hunter Valley Cultural Consultants	Letter	Tony Sutherland	Donaldson Coal	Provided information about the proposed Abel Modification and proposed heritage assessment (including draft methodology) with a request for comment and input on cultural values by 26 March 2012.
2/3/2012	Clifford Matthews	Mingga Consultants	Letter	Tony Sutherland	Donaldson Coal	Provided information about the proposed Abel Modification and proposed heritage assessment (including draft methodology) with a request for comment and input on cultural values by 26 March 2012.

Date	Person Contacted	Organisation	How Contacted	Contacted By	Organisation	Description
2/3/2012	Darrell and Melissa Matthews	Upper Hunter Heritage Consultants	Letter	Tony Sutherland	Donaldson Coal	Provided information about the proposed Abel Modification and proposed heritage assessment (including draft methodology) with a request for comment and input on cultural values by 26 March 2012.
2/3/2012	Larry Van Vliet	Valley Culture	Letter	Tony Sutherland	Donaldson Coal	Provided information about the proposed Abel Modification and proposed heritage assessment (including draft methodology) with a request for comment and input on cultural values by 26 March 2012.
2/3/2012	Des Hickey	Wattaka Wonnarua C.C. Service	Letter	Tony Sutherland	Donaldson Coal	Provided information about the proposed Abel Modification and proposed heritage assessment (including draft methodology) with a request for comment and input on cultural values by 26 March 2012.
14/3/2012	Ken Riddiford	Mindaribba LALC	Letter	Tony Sutherland	Donaldson Coal	Arranged participation in field survey.
14/3/2012	Thomas Miller and Dean Miller	Lower Hunter Wonnarua Council	Letter	Tony Sutherland	Donaldson Coal	Arranged participation in field survey.
14/3/2012	Scott Franks	Yarrowalk (a division of Tocomwall Pty Ltd)	Letter	Tony Sutherland	Donaldson Coal	Arranged participation in field survey.
14/3/2012	Shane Frost	Awabakal Descendants Traditional Owners Aboriginal Corporation	Letter	Tony Sutherland	Donaldson Coal	Arranged participation in field survey.
21/3/2012	Tony Sutherland	Donaldson Coal	Email	Ken Riddiford	Mindaribba LALC	Requested two LALC representatives for survey.
25/3/2012	Tony Sutherland	Donaldson Coal	Email	Shane Frost	Awabakal Descendants Traditional Owners Aboriginal Corporation	Requested different arrangements for field survey due to issues with availability.
27/3/2012	Shane Frost	Awabakal Descendants Traditional Owners Aboriginal Corporation	Telephone	Peter Kuskie	South East Archaeology	Explained nature of heritage assessment and survey and confirmed arrangements for 2nd April.
27/3/2012	Tony Sutherland	Donaldson Coal	Email	Kerrie Brauer	Awabakal Traditional Owners Aboriginal Corporation	Kerrie enquired about Project.
30/3/2012	Dean Miller	Lower Hunter Wonnarua Council	Telephone	Peter Kuskie	South East Archaeology	Confirmed participation in field survey.
30/3/2012	Ken Riddiford	Mindaribba LALC	Telephone	Peter Kuskie	South East Archaeology	Confirmed participation in field survey.
30/3/2012	Scott Franks	Yarrowalk (a division of Tocomwall Pty Ltd)	Telephone	Peter Kuskie	South East Archaeology	Confirmed participation in field survey.
2/4/2012	Shane Frost; Lionel McGrady; Mat Yates, Adam Johnson; Danny Franks, Steve Verey;	ADTOAC; LHWC; Mindaribba LALC; Yarrowalk;	Fieldwork	Stephen Free Jason Barr; Adam Heeny	South East Archaeology; Donaldson Coal	Field survey of Abel Modification investigation area.
3/4/2012	Kerrie Brauer	Awabakal Traditional Owners Aboriginal Corporation	Email	Tony Sutherland	Donaldson Coal	Tony explained that minor modification to existing Project, for which ATOAC is not a registered stakeholder, and assessment to be conducted in accordance with approved AHMP. Kerrie satisfied with explanation.
3/4/2012	Shane Frost; Lionel McGrady, Luke House; Mat Yates, Adam Johnson; Steve Verey;	ADTOAC; LHWC; Mindaribba LALC; Yarrowalk;	Fieldwork	Stephen Free Jason Barr; Adam Heeny	South East Archaeology; Donaldson Coal	Field survey of Abel Modification investigation area.

Date	Person Contacted	Organisation	How Contacted	Contacted By	Organisation	Description
4/4/2012	Shane Frost; Lionel McGrady; Mat Yates, Adam Johnson; Steve Verey;	ADTOAC; LHWC; Mindaribba LALC; Yarrowalk;	Fieldwork	Stephen Free Jason Barr; Adam Heeney	South East Archaeology; Donaldson Coal	Field survey of Abel Modification investigation area.
5/4/2012	Lionel McGrady, Daniel Scott; Mat Yates, Adam Johnson; Steve Verey;	LHWC; Mindaribba LALC; Yarrowalk;	Fieldwork	Stephen Free Jason Barr; Adam Heeney	South East Archaeology; Donaldson Coal	Field survey of Abel Modification investigation area.
11/4/2012	Shane Frost; Adam Johnson; Danny Franks;	ADTOAC; Mindaribba LALC; Yarrowalk;	Fieldwork	Stephen Free; Adam Heeney	South East Archaeology; Donaldson Coal	Field survey of Abel Modification investigation area.
12/4/2012	Shane Frost; Lionel McGrady, Todd Maley; Adam Johnson	ADTOAC; LHWC; Mindaribba LALC	Fieldwork	Stephen Free; Adam Heeney	South East Archaeology; Donaldson Coal	Field survey of Abel Modification investigation area.
12/4/2012	Tony Sutherland	Donaldson Coal	Telephone	Gordon Griffiths	Wonnarua Culture Heritage	Gordon enquired about Project. Tony explained that minor modification to existing Project, and assessment to be conducted in accordance with approved AHMP. Gordon satisfied with explanation.
13/4/2012	Lionel McGrady, Todd Maley; Adam Johnson; Danny Franks, Steve Verey;	LHWC; Mindaribba LALC; Yarrowalk;	Fieldwork	Stephen Free	South East Archaeology	Field survey of Abel Modification investigation area.
25/6/2012	Margaret Harvey	Awabakal LALC	Letter	Tony Sutherland	Donaldson Coal	Provided draft Aboriginal cultural heritage assessment report and draft proposed changes to Aboriginal Heritage Management Plan with request for comment by 25 July 2012.
25/6/2012	Ken Riddiford	Mindaribba LALC	Letter	Tony Sutherland	Donaldson Coal	Provided draft Aboriginal cultural heritage assessment report and draft proposed changes to Aboriginal Heritage Management Plan with request for comment by 25 July 2012.
25/6/2012	Thomas Miller and Dean Miller	Lower Hunter Wonnarua Council	Letter	Tony Sutherland	Donaldson Coal	Provided draft Aboriginal cultural heritage assessment report and draft proposed changes to Aboriginal Heritage Management Plan with request for comment by 25 July 2012.
25/6/2012	Scott Franks	Yarrowalk (a division of Tocomwall Pty Ltd)	Letter	Tony Sutherland	Donaldson Coal	Provided draft Aboriginal cultural heritage assessment report and draft proposed changes to Aboriginal Heritage Management Plan with request for comment by 25 July 2012.
25/6/2012	Shane Frost	Awabakal Descendants Traditional Owners Aboriginal Corporation	Letter	Tony Sutherland	Donaldson Coal	Provided draft Aboriginal cultural heritage assessment report and draft proposed changes to Aboriginal Heritage Management Plan with request for comment by 25 July 2012.
25/6/2012	Gordon Griffiths and Shannon Griffiths	Wonnarua Culture Heritage	Letter	Tony Sutherland	Donaldson Coal	Provided draft Aboriginal cultural heritage assessment report and draft proposed changes to Aboriginal Heritage Management Plan with request for comment by 25 July 2012.
25/6/2012	Ann Hickey	Gidawaa Walang	Letter	Tony Sutherland	Donaldson Coal	Provided draft Aboriginal cultural heritage assessment report and draft proposed changes to Aboriginal Heritage Management Plan with request for comment by 25 July 2012.

Date	Person Contacted	Organisation	How Contacted	Contacted By	Organisation	Description
25/6/2012	Margaret and John Matthews	Aboriginal Native Title Consultants	Letter	Tony Sutherland	Donaldson Coal	Provided draft Aboriginal cultural heritage assessment report and draft proposed changes to Aboriginal Heritage Management Plan with request for comment by 25 July 2012.
25/6/2012	Rodney Matthews and Michele Stair	Giwiirr Consultants	Letter	Tony Sutherland	Donaldson Coal	Provided draft Aboriginal cultural heritage assessment report and draft proposed changes to Aboriginal Heritage Management Plan with request for comment by 25 July 2012.
25/6/2012	Christine Matthews	Hunter Valley Cultural Consultants	Letter	Tony Sutherland	Donaldson Coal	Provided draft Aboriginal cultural heritage assessment report and draft proposed changes to Aboriginal Heritage Management Plan with request for comment by 25 July 2012.
25/6/2012	Clifford Matthews	Mingga Consultants	Letter	Tony Sutherland	Donaldson Coal	Provided draft Aboriginal cultural heritage assessment report and draft proposed changes to Aboriginal Heritage Management Plan with request for comment by 25 July 2012.
25/6/2012	Darrell and Melissa Matthews	Upper Hunter Heritage Consultants	Letter	Tony Sutherland	Donaldson Coal	Provided draft Aboriginal cultural heritage assessment report and draft proposed changes to Aboriginal Heritage Management Plan with request for comment by 25 July 2012.
25/6/2012	Larry Van Vliet	Valley Culture	Letter	Tony Sutherland	Donaldson Coal	Provided draft Aboriginal cultural heritage assessment report and draft proposed changes to Aboriginal Heritage Management Plan with request for comment by 25 July 2012.
25/6/2012	Des Hickey	Wattaka Wonnarua C.C. Service	Letter	Tony Sutherland	Donaldson Coal	Provided draft Aboriginal cultural heritage assessment report and draft proposed changes to Aboriginal Heritage Management Plan with request for comment by 25 July 2012.
3/7/2012	Peter Kuskie	SEA	Telephone	Scott Franks	Yarrawalk (a division of Tocomwall Pty Ltd)	Discussed draft Aboriginal cultural heritage assessment report. Scott indicated support for report and AHMP, subject to more involvement from Traditional Owners in ongoing consultation and field investigations.
20/7/2012	Peter Kuskie	SEA	Letter	Scott Franks	Yarrawalk (a division of Tocomwall Pty Ltd)	Provided response to draft Aboriginal cultural heritage assessment report, supporting the report and AHMP, subject to more involvement from Traditional Owners in ongoing consultation and field investigations.
23/7/2012	Tony Sutherland	Donaldson Coal	Letter	Shane Frost	Awabakal Descendants Traditional Owners Aboriginal Corporation	Provided response to draft Aboriginal cultural heritage assessment report.
26/7/2012	Tony Sutherland	Donaldson Coal	Email	Kerrie Brauer	Awabakal Traditional Owners Aboriginal Corporation	Tony reiterated earlier explanation that minor modification to existing Project, for which ATOAC is not a registered stakeholder, and assessment to be conducted in accordance with approved AHMP.

Relevant Correspondence (in relation to the Abel Modification Project):

Examples of correspondence forwarded to all stakeholders:



2 March 2012

Mindaribba Local Aboriginal Land Council
PO Box 401
EAST MAITLAND NSW 2323

Attention: Ken Riddiford

Dear Ken,

ABEL UNDERGROUND MINE MODIFICATION – ABORIGINAL CULTURAL HERITAGE ASSESSMENT

Donaldson Coal owns and operates the Abel Underground Mine, located approximately 23 kilometres north-west of Newcastle in New South Wales (NSW). Project Approval (05_0136) for the Abel Underground Mine was granted on the 7 June 2007 pursuant to section 79J of the NSW *Environmental Planning and Assessment Act, 1979* (EP&A Act). As a condition of the Project Approval, an Aboriginal Heritage Management Plan (AHMP) was prepared for the Abel Underground Mine and approved by the NSW Department of Planning in February 2008.

Donaldson Coal plans to seek approval for a modification of Project Approval (05_0136) under section 75W of the EP&A Act (the Modification). In accordance with the approved Abel AHMP, please find enclosed information about the Modification and proposed heritage assessment process, including the proposed methodology.

Mindaribba Local Aboriginal Land Council is invited to provide input on:

- The nature of the proposed methodology.
- Any Aboriginal objects or places of cultural value within the investigation area, or issues of cultural significance, that you are aware of.
- Any restrictions or protocols you may consider necessary in relation to any information of sensitivity that you may provide.
- Any other factors you consider to be relevant to the heritage assessment.

Mindaribba Local Aboriginal Land Council is invited to make a written submission on the proposed methodology to Donaldson Coal by the 26 March 2012. All comments received by this date will be taken into consideration as the proposed methodology is reviewed and finalised.

Could you please direct all correspondence regarding the proposed methodology to:

Tony Sutherland
Technical Services Manager – Underground Operations
Donaldson Coal Pty Ltd
PO Box 2275
Greenhills NSW 2323
Telephone: 02 4015 1105
Facsimile: 02 4015 1199
Email: Tony.Sutherland@gcl.com.au

Yours sincerely,

Donaldson Coal Pty Limited

A handwritten signature in blue ink, appearing to read 'Tony Sutherland'.

Tony Sutherland
Technical Services Manager – Underground Operations

Gloucester Coal Ltd ABN 66 008 881 712
PO Box 2275, Greenhills NSW 2323 Australia
Phone +61 2 4931 0553 Fax +61 2 4934 2736 www.gloucestercoal.com.au

25 June 2012

Awabakal Decendants Traditional Owners Aboriginal Corporation
PO Box 86
CLARENCE TOWN NSW 2321

Attention: Shane Frost

Dear Shane,

RE: ABEL UPGRADE MODIFICATION – ABORIGINAL CULTURAL HERITAGE ASSESSMENT

Please find enclosed for your review and comment, a copy of the draft Aboriginal Cultural Heritage Assessment (ACHA) for the Abel Upgrade Modification.

Appendix 8 of the draft ACHA includes proposed changes to the existing and approved Abel Underground Mine Aboriginal Heritage Management Plan (Donaldson Coal, 2007) (AHMP) to reflect the findings of the ACHA. Changes to the AHMP have been tracked for ease of review. Your comments on the proposed changes would be appreciated.

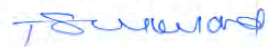
All comments (either in writing or verbally) are to be provided by 25 July 2012. All relevant comments received by this date will be taken into consideration as the ACHA is finalised. The final ACHA will be made available to you after completion.

Could you please direct all correspondence regarding the draft ACHA to:

Tony Sutherland
Technical Services Manager – Underground Operations
Donaldson Coal Pty Ltd
PO Box 2275
Greenhills NSW 2323
Telephone: 02 4015 1105
Facsimile: 02 4015 1199
Email: Tony.Sutherland@gcl.com.au

Yours sincerely,

Donaldson Coal Pty Limited



Tony Sutherland
Technical Services Manager – Underground Operations

Responses from and other correspondence with stakeholders:

From: kerrie@awabakal.com.au [mailto:kerrie@awabakal.com.au]
Sent: Tuesday, 3 April 2012 8:36 AM
To: Tony Sutherland
Cc: Shane Frost
Subject: RE: Abel Underground Modification-Aboriginal Cultural Heritage Assessment

Hi Tony,

Thank you for your reply, and we look forward in continuing our working relationship in the future.

Kind regards,
Kerrie Brauer.



Kerrie Brauer | Director | Administration | Awabakal Traditional Owners Aboriginal Corporation
M: 04 12 86 63 57 | E: kerrie@awabakal.com.au | www.awabakal.com.au
PO Box 253 Jesmond NSW 2299 Australia

From: Tony Sutherland [mailto:Tony.Sutherland@gcl.com.au]
Sent: Tuesday, 3 April 2012 8:25 AM
To: kerrie@awabakal.com.au
Subject: Abel Underground Modification-Aboriginal Cultural Heritage Assessment

Hi Kerrie,

The Abel Underground Modification is a minor modification of the existing Part 3A Project Approval for the Abel Underground Mine. We note that your organisation was not a registered stakeholder for this Project. An Aboriginal Heritage Management Plan (AHMP) was developed in 2007 in consultation with the registered stakeholders for the Abel Underground Mine in accordance with the requirements of the Part 3A Project Approval and subsequently approved by the NSW Department of Planning. The approved AHMP is the governing document regarding the consultation and assessment process for the Abel Underground Modification.

In accordance with the approved AHMP, fieldwork is occurring for several days in the area the subject of the Modification. Although there is limited opportunity for your involvement in this survey we appreciate your involvement and input in other Donaldson Coal projects and we will ensure that you are advised of any future projects at the Abel Underground Mine, for example the upcoming Abel Expansion Project.

Regards,

Tony

Tony Sutherland
Technical Services Manager- Underground Operations



Part of Gloucester Coal

Abel Mine, 1132 John Renshaw Drive, Black Hill NSW
PO Box 2275, Greenhills NSW 2323 Australia
p: +61 (2) 4015 1105 | **m:** 0407 239 820 | **f:** +61 (2) 4015 1199
e: Tony.Sutherland@gcl.com.au

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Tocomwall Pty Ltd

PO Box 76 Caringbah NSW 1495

Tel: 02 9542 7714 Fax: 02 9524 4146

Email: info@tocomwall.com.au www.tocomwall.com.au

ABN: 13 137 694 618

Attention: Peter Kuskie,
South East Archaeology
24 Bamford St
Hughes ACT 2605

20 July 2012

Re: Abel Upgrade Modification

Dear Peter,

We have reviewed the report entitled *Abel Underground Mine: Supplementary Aboriginal Cultural Heritage Assessment for Abel Upgrade Modification* (South East Archaeology 2012) and the revised *Abel Underground Mine: Aboriginal Heritage Management Plan*.

Issue #1 As advised via telephone, we generally support the *Supplementary Aboriginal Cultural Heritage Assessment for Abel Upgrade Modification* but would prefer to see greater involvement of the Traditional Owners in the ongoing consultation and field investigations relating to future Subsidence Management Plan (SMP) requirements. The document is well detailed and very informative which has assisted us in coming to this conclusion. We would also like to commend South East Archaeology for being available via phone to assist us with understanding some of the finer points of the report. South East Archaeology has conducted an outstanding field assessment and reporting for this project, furthermore Tocomwall is looking forward to working with South East Archaeology and Abel Underground Mine in the future.

Regards,

Scott Franks
Director & Aboriginal Heritage Manager
Registered Native Title Claimant

Integrating Landscape Science & Aboriginal Cultural Knowledge for our Sustainable Future



PO BOX 86
CLARENCE TOWN
NSW 2321

Date: 20 July 2012

Attention: Tony Sutherland
Technical Services Manager-Underground Operations
Donaldson Coal Pty Ltd
PO Box 2275
Greenhills NSW 2323

Re: Comments-Draft Report for the Abel Upgrade Modification-Aboriginal Cultural Heritage Assessment.

ALLA Tony,

Issue #2

We have reviewed the draft report supplied to us regarding the **Abel Upgrade Modification-Aboriginal Cultural Heritage Assessment** and we have some concerns regarding the content of the draft report and the ramifications of the proposed management and mitigation of our Cultural Heritage. We are of the opinion that the report as well as the AHMP overlooks important factors in regard to the current legislative requirements for management and mitigation of our Cultural Heritage and consultation with Aboriginal Stakeholders and it is our belief that the AHMP which was adopted in 2007 is now outdated and already 5 years old and should be totally revised as a whole not just in parts (as is the case). Serious consideration needs to be given in regard to the management and mitigation recommendations that this draft report is putting forward and the adoption of the current legislation regarding consultation with Aboriginal Stakeholders should reflect the new policies and guidelines and requirements which govern the consultation process and help to guide the protection of our Cultural Heritage. These changes need to be implemented to afford as much protection as possible to any Cultural Heritage sites that may be put at risk of impact within the proposed project area.

Issue #2

We do understand from page 4 of the draft report that the AHMP was 'approved by the Department of Planning in 2008 and is currently implemented to manage all interactions between the Approved Project and Aboriginal heritage.' Also that 'The investigation has therefore sought to address the Director-General's requirements via relevant procedures within the approved AHMP, with reference to the DEC (1997, 2004, 2005) policies and guidelines.' We do now have new OEH requirements which were implemented in 2010 and of which require a specific consultation process to take place between registered Aboriginal Stakeholders and the proponent regarding all Cultural Heritage aspects needed to undertake projects that affords all Aboriginal Stakeholders (or what is being more commonly used, Registered Aboriginal Parties or RAPs) the opportunity to be consulted in relation to what they see as important to them regarding the management of Cultural Heritage within the proposed project area. That is why we have an issue with the AHMP as an outdated document continuing to be used based on old and outdated legislation and without being revisited and updated to allow for current standard performance measures to be implemented affording ongoing and vital protection to our Cultural Heritage. There is no indication within the draft report of any revision that has taken place to the document over the last 4 years and this to us is a crucial management measure that should be revisited on an annual basis.

Considering the information supplied it gives us no other option but to say up front that we do not agree with the draft report in its current form and the AHMP is lacking in many aspects and in our opinion does not reach anywhere near the standard that is expected by the legislative constraints of today.

Below we bring to your attention in the following dot points just a couple of outstanding issues that we believe need to be addressed within the draft report and AHMP. Unfortunately, we believe there are so many issues with this draft report document and the outdated AHMP and a total lack of positive consultation with the Aboriginal Stakeholders in regard to our Cultural Heritage and how it should be managed, to be able to address them all here.

Cultural Significance

Issue #3

- First, we would question where is the Cultural Significant assessment within the draft report which is supposed to outline what the Aboriginal Cultural significance of the area is and in what

Issue #3 regard we hold it significant to us. We know that we have been asked for comments regarding this project but there needs to be some framework for this at the front of this report (in consultation with us) as now under the legislative requirements it is the Cultural Significance report that should be presented first and then the archaeological report that follows this in the document. This has not been done in the first instance and therefore presents this draft report in the light of already not meeting current legislative requirements or standards. On page 4 of the draft report it states that *'The primary aims and tasks of this Aboriginal cultural heritage assessment have been to;*
-Prepare a supplementary archaeological report for the modification...' Again where is the Cultural Significance report??

Aboriginal Heritage Management Plan (AHMP)

Issue #4 ➤ It states in the last dot point on page 4 that *'Where required, revise the AHMP to address Project Modification and any other relevant amendments that may be necessary in relation to the broader project area.'* With this in mind we address the next concern we have which is that in many parts of the AHMP it only acknowledges the LALC (Local Aboriginal Land Councils) as attending to and being consulted in relation to Cultural Heritage matters. This defies logic when not all Aboriginal People are members of Aboriginal Land Councils and should not result in the creation of an environment which then forgets about and overlooks their opinions because of this. Some feel that their best interests and concerns regarding the protection and preservation and management and mitigation of Cultural Heritage sites are not being appropriately handled or overseen by Land Councils thus amounting to the creation of separate entities, Aboriginal Corporations, which have memberships as large as some of these LALC's. Just because someone is not a member of an Aboriginal Land Council should not nullify their voices or concerns. Unfortunately the AHMP in this current form does do this especially when it is specifically saying that consultation in many instances will only be with the LALC!!

Issue #4 This then if left as it is in the AHMP where in many instances throughout the document only reference to the LALC is maintained without adding the Aboriginal Stakeholders along with the LALC, then this ultimately denies other Aboriginal People in the community a voice concerning Cultural Heritage and it's management. We can show examples of some of these numerous places in which only the LALC is mentioned in the AHMP for consultation but this is not an exhaustive list of these entries.

Examples are shown within **Appendix 8: Abel Underground Mine: Aboriginal Heritage Management Plan Revised Working Draft 2.0** can be seen on pages 5, 6, 7, 8, 9, 20, 21, 23, 25, 26, 27, 28.

Issue #4 It is paramount that the words "Aboriginal Stakeholders" is added to all content of the AHMP along with the entries of LALC's so as to allow the concerns and opinions/voices of the Aboriginal Stakeholders to be considered regarding Cultural Heritage.

➤ Also in **Appendix 8: Abel Underground Mine: Aboriginal Heritage Management Plan Revised Working Draft 2.0** On page 3 second paragraph it states that *'Approximately 63 Aboriginal heritage sites and Potential Archaeological Deposits (PADs) are present within the Project area, including 18 within the surface area north of John Renshaw Drive and 45 within the underground area south of John Renshaw Drive.'*

a. This is only a summary of known/recorded Cultural Heritage sites in the area. The information in its current form could be misleading as this is not an exhaustive list of sites as this is at present an unknown quantity. And the more assessments that are carried out and environmental changes impact on the area there is the possibility for more Cultural Heritage sites to come to light. So this sentence should be reworded to include the words known/recorded- *'Approximately **at this present time, there are 63 known/recorded** Aboriginal heritage sites and Potential Archaeological Deposits (PADs) are present within the Project area'*. This would be a more fair representation within the draft report of Cultural Heritage in the area. And again this is why there needs to be annual revision of the AHMP.

Issue #4 ➤ Page 8 and third paragraph of the **Appendix 8: Abel Underground Mine: Aboriginal Heritage Management Plan Revised Working Draft 2.0** it says that *'Donaldson will consult with Registered Native Title Claimants and other registered Aboriginal stakeholders...where Donaldson determines that such consultation may be beneficial...'*

- Issue #3**
- a. Why is it that Donaldson can determine who to consult with when there are specific guidelines within legislation of who they need to consult with?? Consultation is not an area that is left up to Donaldson to decide for themselves who they will consult with but for Donaldson it is a requirement of the legislation of who they are to consult with. Again this is another example of an outdated AHMP that neglects to reflect the appropriate standards required.

Cultural Heritage Sites

- On page 46 of the draft report it states about the Two (2) scarred trees that;
 - a. *'Although the scar of AMC2/D is symmetrical, the tree does not appear to be of sufficient age to host a scar of Aboriginal origin...'* We would disagree with this statement as this type of tree is not normally found in the landscape here displaying what can only be described as an enormous size and in our experience is not what you would call a young tree. There is no reason not to conclude that this tree could be of quite a sufficient age to have Aboriginal scars. Normally these trees are now only seen as small specimens growing along the creeks and gullies within the mountainous areas.
 - b. *'Although a larger, relatively old tree, the scar on AMC12/A is asymmetrical and appears more likely to have derived from natural or non-indigenous causes.'* Again this is only conjecture and the actual scar which is situated below the newer outer scar is the point of discussion here. As seen in Figure2 there is a scar symmetrical in shape and much older on the inside of another outer one that is an asymmetrical scar. Figure3 indicates an older symmetrical scar shown by a red line.

Therefore on page 53 subheading **Possible scarred trees AMC2/D and AMC12/A** it states that they are *'...assessed as being of low scientific significance... on the basis that the origin of both scars is inferred to be non-Aboriginal.'* Again it is only inferred and due to an educated guess to come to this conclusion without sufficient evidence to prove otherwise is in our opinion not appropriately addressing the question of adequate Cultural Heritage management. (Please see photos Figure1 of this tree AMC2/D with archaeologist standing beside to gauge size of tree. Please see Figure2 and 3 for example of inner older scar of AMC12/A).

- On page 52 of the draft report grinding groove sites, open artefact scatter sites the rock shelter with PAD and scarred trees are all considered to be of low or low to moderate scientific significance. This is based on archaeological formula and not Aboriginal Cultural perspectives. Every part of our Cultural Heritage is significant to us as it represents our physical and cultural ties to this particular land. It gives us a physical connection to our Ancestors and these areas should not be ranked according to a scientific judgment but by a Cultural significance perspective.

- Issue #3**
- On page 58 of the draft report in the first paragraph and last it states that *'...decisions about the management of sites should be made in consultation with the relevant Aboriginal stakeholders'* and *'...staged systematic archaeological survey by suitably qualified and experienced archaeologists and the Aboriginal stakeholders of all areas proposed to be undermined'*. This then if written in the draft report should be reflected also in the revised AHMP.

- Issue #4**
- On page 59, first dot point, it says *'for open grinding groove sites assessed as being low significance, following detailed recording of the evidence, impacts will be permitted to occur without further action'*. We would like these questions answered;

- Issue #3**
Issue #6
- a. First, why are they considered low significance in the first place and if it is due to the archaeological significance then why is there no Cultural significance taken into account?? This needs to be addressed, as all our sites are significant to us!!
 - b. Second, who is conducting the baseline recording/monitoring of these sites?? This should involve all the Aboriginal Stakeholders as we are the ones who can speak for our own Cultural Heritage.
 - c. Third, why is it just a given that impacts can occur on and to our sites without appropriate consultation and the consideration of intergenerational equity?? If there are to be impacts then there should be offsets due to the nature of this being a part 3a!!
 - d. Fourth, why is there to be no further action?? This seems to be a great deal for the mining company but unfortunately we are always the ones who lose our Cultural Heritage among other things!!

Significance of the Artefact Scatters, Isolated Finds and Axe Grinding Grooves

- Issue #6**
- For us as Awabakal People the artefact scatters, isolated finds and the axe grinding grooves are all part of our Cultural Heritage and are considered by us to be of high significance. For archaeologists there is a clinical 'put it in a box' view 'so it can be categorised and assessed when stacked up against criteria that someone has formulated to fit it into their bigger picture' type of response. This is fine in some circumstances but it doesn't always work. Not always can we narrow things down to squeeze them into the box of our choosing that we want them to fit into. We are talking about the influence of a lot of variables over many centuries. Therefore to restrict something to a standard that is only defined by someone who formulates a process so as to control or have it conform to their opinion, is not looking out to see what is there, but confines their perspectives which then limit the true boundaries of that same process. We should look past those things that limit and constrain us; there is always more than meets the eye!!

Intergenerational Equity

- Issue #7**
- We believe that there has been a drastic oversight within this draft report and the AHMP which noticeably fails to address the question of Intergenerational Equity. If Cultural Heritage sites are compromised of which they are going to be as stated on page 55 of the draft report that the grinding groove sites AMB1/A, AMC2/A and AMC16/A are predicted by MSEC (2012) that fracturing (cracking of the bedrock could occur at these sites of up to 50%.

Where is the intergenerational equity and offsets (if under part 3a) for the possible destruction of our Cultural Heritage??

We must ask ourselves what is intergenerational Equity?? We see *Intergenerational Equity* as a provision for future generations to benefit from what has transpired in the past and to have been left as much as the previous generation.

Below are provided three (3) examples we have included quoted from international organisations/standards from around the world which explain what *Intergenerational Equity* represents;

- Intergenerational equity:*** A core proposition is that future generations have a right to an inheritance (capital bequest) sufficient to allow them to generate a level of well-being no less than that of the current generation. Also refers to fairness in the treatment of different members of the same generation.¹
- Intergenerational equity:*** Meeting the needs of the present without compromising the ability of future generations to meet their own needs.²
- Inter-generational equity:*** The principle of equity between people alive today and future generations. The implication is that unsustainable production and consumption by today's society will degrade the ecological, social, and economic basis for tomorrow's society, whereas sustainability involves ensuring that future generations will have the means to achieve a quality of life equal to or better than today's.³

Does Donaldson Coal think they adequately address ***Intergenerational Equity*** in their underground mining activities and the potential to impact Awabakal Cultural Heritage sites within that underground mining area?

- We would now like to solicit a response from Donaldson Coal in regard to these important questions below.
- Issue #7**
- What measures have been put in place within this Draft Report for the Abel Upgrade Modification so as to address the issue of Intergenerational Equity in the event of possible damage or disturbance to Awabakal Aboriginal Cultural Heritage if potential surface impacts from subsidence eventuate?***

¹ From Website 'www.traditionalknowledge.info/glossary.php'

² From Website 'www.konsult.leeds.ac.uk/public/level1/sec17/index.htm'

³ From Website 'www.ic.gc.ca/eic/site/ee-ee.nsf/eng/h_ef00016.html'

- Issue #7 *b. How has and will Donaldson Coal address the question now of Intergenerational Equity for future generations of Awabakal People?*

Baseline Recording and Monitoring of sites

- Issue #8 ➤ There is a need for the Aboriginal Stakeholders again to be recognised in this regard and given the opportunity to be present for the baseline recording and ongoing monitoring of all Cultural Heritage sites that may be impacted by the proposed upgrade of mining from board and pillar to longwall and shortwall. This is another area that has failed to be included into the AHMP.

Director-Generals Requirements for Heritage

- Issue #9 ➤ We draw your attention to **Appendix 1** within the draft report **Director-General's Requirements**. On page 78 of the draft report the requirements are set out under the heading of **Heritage**. This states that 'an Aboriginal cultural heritage assessment (including both cultural and archaeological significance) which must:
- *Demonstrate effective consultation with Aboriginal communities in determining and assessing impacts, and developing and selecting mitigation options and measures;*
 - *Outline any proposed impact mitigation and management measures (including an evaluation of the effectiveness and reliability of the measures)*
- a. As to the first dot point, there has been no other consultation with us other than being given the opportunity to make some written comments on this draft report. As far as we are concerned, this does not equate to an effective mechanism to help produce constructive dialogue that can contribute to developing and selecting viable options for mitigation and management measures for our Cultural Heritage.

- ❖ We believe that the consultation has been inadequate as there have been no workshops with the Aboriginal Stakeholders to discuss in depth the related impacts to Cultural Heritage from the proposed project or mitigation and management options.
- ❖ There is no Cultural significance assessment attached to this draft report because there has been a failure to consult with us in regards to the Cultural significance of the area or our Cultural Heritage which is located in this area.
- ❖ As to the second dot point, many of the proposed impact mitigation and management measures just seem to be adopted and carried over from what is in the AHMP from 2007. As previously mentioned this AHMP is outdated and should have been regularly updated and revised to include changes to legislation among other things.

Therefore, when taking these points into consideration, we believe that the draft report does not meet the Director-Generals Requirements for Heritage.

Offsets

- Issue #10 ➤ A couple of questions to ponder and address are;
- a. Where are the offsets addressed within this draft report regarding the possible destruction of our Cultural Heritage sites??
 - b. Where has the AHMP been updated to include further offsets (if at all any were originally addressed). This is an important issue that we have not seen any mention of within this draft report and AHMP but have seen plenty of evidence to show that there will be impacts to our Cultural Heritage!!
 - c. Why is it that there seems to be nothing to protect our Cultural Heritage and to leave something for those who are to come in the future but allows for if it is properly recorded beforehand (and considered low significance) it is ok then for it then to be destroyed?? This is blasé to say the least!!

Are these questions going to be adequately addressed in the report and AHMP??? Or maybe not!

Statement of significance of this area to Awabakal Traditional Descendants

It also must be remembered that the significance of place to our people does not just rely on the presence of artefacts, grinding grooves, scars or any visible evidence associated with the site or area. Although what does remain in the physical realm whether small or large, does connect us to our Ancestors and our Cultural Heritage being the physical reminder of what helped govern and guide the everyday lives of our people. With this physical evidence we can touch the very stones (artefacts) that they (our Ancestors) worked and fashioned into tools and implements. We can visit the sites they also visited and utilised and left us as reminders of their physical presence within the landscape that makes up our Traditional Country. Unfortunately in this day and age it has become too easy due to ignorance, lack of connection and insufficient understanding of the entire picture, not to mention so called progress, to devalue and debase our People and our Cultural Heritage which has belonged and survived in this area for thousands of years. The fact that this area is a contributing part of what makes us who we are and where we come from cannot be defined just as something tangible. The feeling of the area and the extensive connection we have with it, the awareness of knowing this is a connection that is confined to just a handful of people living today because it was **OUR** Ancestors that walked upon it. This is sufficient enough for us to be resolute in knowing that we are part of the reason of what makes this place significant. Our people, the Awabakal, have for centuries looked after this area as part of our greater Traditional Tribal Country and we believe that in today's climate we as Awabakal Descendants need to continue to be involved in the Protection, Preservation, consultation and management issues that affect the Traditional Tribal Country of our Ancestors. We consider our involvement paramount and if neglected or overlooked in this process, we believe it is to the detriment of the community and the complete understanding of the Awabakal People and the wellbeing of the area in question. This land holds secrets which are significant to us, many stories from the past connect us to it and these stories will continue to live and be significant because they live in us and are what makes us by birthright, Awabakal People.

Therefore it is imperative that people understand that all of our Cultural Heritage is of great importance to our People, whether it is an isolated find or artefact scatters that are encountered, it is all significant. From the smallest to the largest they are all relevant. Then again, a place may be just as significant to us without any physical evidence or application or designation being placed upon it. A landscape as devoid of physical evidence as is common sense and morality by those who enforce or support much of the legislation that not always, but on many occasions, ultimately sees the demise of the very Cultural Heritage that they themselves have vowed to protect and through their much celebrated but sadly misplaced enthusiasm, is more than often overlooked on many occasions by those who should know better but unfortunately don't.

Issue #6

As outlined above this area is very significant to us as Awabakal People. These Cultural Heritage Values that remain around this area are a glimpse into the lives of our Ancestors and are paramount and integral to the future intergenerational equity and Cultural Heritage and Knowledge of our People, the Awabakal. It is where our People have lived for generations. Our Ancestors fought for centuries for the place they came from and all that had been passed down to them!! This today is the legacy we have inherited. We still fight to protect and preserve the integrity and uniqueness of the Awabakal People. We think of the future; will those to come endure and continue this generational legacy??

We thank you for the opportunity to provide our response and comments for this draft report and would ask for our response and comments to be added to the final report. We look forward to your reply and if you need further clarification regarding the information we have provided please don't hesitate to contact us at your earliest convenience. Our contact details are as follows.

NGI NOA

Shane Frost-Managing Director: Awabakal Descendants Traditional Owners Aboriginal Corporation
Email: shanefrost@bigpond.com Phone: 49964325 Fax: 49964325 Mobile: 0428320671

Cultural Heritage Sites - Physical reminders of our Ancestors; once they are gone, they are gone forever and impossible to bring back!! THINK first and make WISE decisions last!!

Please see next page for Figures 1-3



Figure1. To left is the picture of scarred tree AMC2/D. Please note the size of this tree to archaeologist. To the right of this tree is another smaller specimen which indicates the usual size these are found in the landscape.

Figure2. Below Left is photo of scarred tree AMC12/A, it can be seen that there are two (2) scars on this tree one older (on the inside and one newer on the outside).

Figure3. Below Right highlighted area delineated by red line and showing original scarred area which is definitely symmetrical.

Issue #5



From: Tony Sutherland <Tony.Sutherland@gcl.com.au>
Sent: Tuesday, 31 July 2012 8:01 AM
To: kerrie@awabakal.com.au
Cc: 'Peter Kuskie'; 'Shane Frost'; Josh Peters
Subject: RE: Review and Response-Abel Upgrade Modification Draft Report.
Attachments: RE: Abel Underground Modification-Aboriginal Cultural Heritage Assessment (106 KB)

Hi Kerrie,

As previously discussed (attached), the Abel Underground Modification is a minor modification of the existing Part 3A Project Approval for the Abel Underground Mine. An Aboriginal Heritage Management Plan (AHMP) was developed in 2007 in consultation with the registered stakeholders for the Abel Underground Mine in accordance with the requirements of the Part 3A Project Approval and subsequently approved by the NSW Department of Planning. The approved AHMP is the governing document regarding the consultation and assessment process for the Abel Underground Modification.

We certainly appreciate your involvement and input in our other Donaldson Coal projects (e.g. Tasman Extended Project) and we will ensure that you are advised of any future projects at the Abel Underground Mine, for example the upcoming Abel Expansion Project.

We look forward to continuing our good working relationship with you in the future.

Regards,

Tony

Tony Sutherland
Technical Services Manager- Underground Operations



Abel Mine, 1132 John Renshaw Drive, Black Hill NSW
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From: kerrie@awabakal.com.au [<mailto:kerrie@awabakal.com.au>]
Sent: Thursday, 26 July 2012 8:20 AM
To: Tony Sutherland
Cc: 'Peter Kuskie'; 'Shane Frost'
Subject: RE: Review and Response-Abel Upgrade Modification Draft Report.
Importance: High

Dear Tony,

It has come to my attention that as a Registered Aboriginal Stakeholder for the proposed project I have not been afforded an equal opportunity to Review and Response to the Abel Upgrade Modification Draft Report, as to date I have not received a copy of the Draft Report and hope that this is just an oversight.

It is my understanding that according to the OEH Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010, all Registered Aboriginal Stakeholders that have not been afforded to take part in the site assessment are to take part in the consultation process.

I would appreciate it if you would please send a copy of the Abel Upgrade Modification Draft Report and also given the appropriate timeframe (28 days) to review and respond.

At this juncture we will be asking OEH to provide information in relation to our request.

Regards,
Kerrie Brauer



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From: Shane Frost [mailto:awabakal_to@bigpond.com]
Sent: Monday, 23 July 2012 8:35 PM
To: Tony Sutherland
Cc: Peter Kuskie; kerrie@awabakal.com.au
Subject: Review and Response-Abel Upgrade Modification Draft Report.
Importance: High



ALLA Tony,

Please find attached to this email our response to the draft report for Abel Upgrade Modification.

This email will also be Ccd to OEH and DoP.

NGI NOA
Shane Frost
Managing Director: Awabakal Descendants Traditional Owners Aboriginal Corporation
Email:awabakal_to@bigpond.com Phone:[49964362](tel:49964362) Fax:[49964325](tel:49964325) Mobile:[0428320671](tel:0428320671)

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APPENDIX 7:

SUBSIDENCE IMPACT ASSESSMENT
(MSEC 2012)

6.13. Archaeological Sites

6.13.1. Description of the Archaeological Sites

There are 18 archaeological sites which have been identified within or immediately adjacent to the Study Area, which are shown in Drawing No. MSEC492-19. A summary of these sites is provided in Table 6.17.

Table 6.17 Archaeological Sites within or Immediately Adjacent to the Study Area

Site Name	Site ID	Type	Location
Abel 1	38-4-0985	Grinding Grooves	Approx. 150 metres north of LDLW4
Abel 2	38-4-0986	Grinding Grooves	Approx. 50 metres east of LDLW3
AMA2/A	<i>Pending</i>	Artefact Scatter	Directly above UDSW4
AMA2/B	<i>Pending</i>	Artefact Scatter	Directly above UDSW3
AMA2/C	<i>Pending</i>	Artefact Scatter	Directly above UDSW4
AMB1/A	<i>Pending</i>	Grinding Grooves	Directly above LDSW2
AMC10/A	<i>Pending</i>	Grinding Grooves	Approx. 110 metres west of LDLW1
AMC12/A	<i>Pending</i>	Scarred Tree (Possible)	Directly above UDBP2 and LDLW2
AMC16/A	<i>Pending</i>	Grinding Grooves	Directly above UDBP4 and LDLW4
AMC2/A	<i>Pending</i>	Grinding Grooves	Directly above LDLW3
AMC2/B	<i>Pending</i>	Rock Shelter	Directly above LDLW3
AMC2/C	<i>Pending</i>	Grinding Grooves	Approx. 180 metres north of LDLW4
AMC2/D	<i>Pending</i>	Scarred Tree (Possible)	Directly above LDLW3
AMC5/A	<i>Pending</i>	Artefact Scatter	Above northern end of LDLW4
Black Hill Quarry 1	38-4-0341	Artefact Scatter	Directly above LDSW3
CA6	<i>Pending</i>	Artefact Scatter	Approx. 50 metres north of UDSW5
F1/B	38-4-0980	Artefact Scatter	Approx. 70 metres north of UDSW5
FMC6 Donaldson Mine	38-4-0668	Artefact Scatter	Directly above UDSW5

SUBSIDENCE PREDICTIONS AND IMPACT ASSESSMENTS FOR MODIFIED WORKINGS IN ML1618
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 PAGE 75



There are also three cultural places (i.e. areas of cultural sensitivity) identified within the Study Area, which are shown in Drawing No. MSEC492-19. A summary of these sites is provided in Table 6.18.

Table 6.18 Cultural Places Identified within the Study Area

Site Name	Type	Location
Black Hill Locality	Cultural Place	Partially above shortwalls in the Lower and Upper Donaldson Seams, thin seam workings in the Upper Donaldson Seam and longwalls in the Lower Donaldson Seam
Black Hill Pathway	Cultural Place	Partially above thin seam workings in the Upper Donaldson Seam and longwalls in the Lower Donaldson Seam
Ceremonial Area	Cultural Place	Partially above thin seam workings in the Upper Donaldson Seam and longwalls in the Lower Donaldson Seam

Further descriptions of the archaeological sites and cultural places are provided in the report prepared by *South East Archaeological (SEA, 2012)*.

6.13.2. Predictions for the Archaeological Sites

A summary of the maximum predicted subsidence, tilt and curvatures for the archaeological sites is provided in Table 6.19. The parameters provide in the table are the maximum values within a 20 metre radius of the sites. The tilt and curvatures are the maxima at any time during or after the completion of mining.

Table 6.19 Maximum Predicted Total Conventional Subsidence, Tilt and Curvatures for the Archaeological Sites within or Immediately Adjacent to the Study Area

Site Name	Site ID	Maximum Predicted Total Conventional Subsidence (mm)	Maximum Predicted Total Conventional Tilt (mm/m)	Maximum Predicted Total Conventional Hogging Curvature (km ⁻¹)	Maximum Predicted Total Conventional Sagging Curvature (km ⁻¹)
Abel 1	38-4-0985	< 20	< 0.5	< 0.01	< 0.01
Abel 2	38-4-0986	200	3	0.06	< 0.01
AMA2/A	<i>Pending</i>	1350	35	1.50	1.90
AMA2/B	<i>Pending</i>	1550	50	3.60	3.50
AMA2/C	<i>Pending</i>	800	45	1.50	1.10
AMB1/A	<i>Pending</i>	800	11	0.30	0.05
AMC10/A	<i>Pending</i>	100	2	0.02	< 0.01
AMC12/A	<i>Pending</i>	1400	8	0.20	0.05
AMC16/A	<i>Pending</i>	2400	9	0.15	0.45
AMC2/A	<i>Pending</i>	1300	7	0.10	0.20
AMC2/B	<i>Pending</i>	400	8	0.10	0.04
AMC2/C	<i>Pending</i>	25	< 0.5	< 0.01	< 0.01
AMC2/D	<i>Pending</i>	400	7	0.10	0.04
AMC5/A	<i>Pending</i>	350	6	0.15	0.04
Black Hill Quarry 1	38-4-0341	1000	9	0.25	0.10
CA6	<i>Pending</i>	< 20	< 0.5	< 0.01	< 0.01
F1/B	38-4-0980	< 20	< 0.5	< 0.01	< 0.01
FMC6 Donaldson Mine	38-4-0668	1450	35	1.60	2.40

The maximum predicted conventional curvatures for the archaeological sites are 3.6 km⁻¹ hogging and 3.5 km⁻¹ sagging for the artefact scatters, 0.30 km⁻¹ hogging and 0.45 km⁻¹ sagging for the grinding grooves, 0.10 km⁻¹ hogging and 0.04 km⁻¹ sagging for the rock shelter, and 0.20 km⁻¹ hogging and 0.05 km⁻¹ sagging for the scarred trees.

The maximum predicted conventional strains for the archaeological sites, based on applying a factor of 10 to the maximum predicted conventional curvatures, are 36 mm/m tensile and 35 mm/m compressive for the artefact scatters, 3.0 mm/m tensile and 4.5 mm/m compressive for the grinding grooves, 1.0 mm/m tensile and 0.4 mm/m compressive for the rock shelter, and 2.0 mm/m tensile and 0.5 mm/m compressive for the scarred trees.

The analysis of strains measured in the NSW Coalfields, for previously extracted panels having similar width-to-depth ratios as the proposed shortwalls, is provided in Section 4.4. Non-conventional movements can also occur and have occurred in the NSW Coalfields as a result of, amongst other things, anomalous movements. The analysis of strains provided in Chapter 4 includes those resulting from both conventional and non-conventional anomalous movements.

The cultural places are partially located above the proposed shortwalls in the Upper and Lower Donaldson Seams, the proposed thin seam workings in the Upper Donaldson Seam, and the proposed longwalls in the Lower Donaldson Seam. These places could experience the full range of predicted subsidence movements, which were described in Chapter 4.

6.13.3. Comparison of the Predictions for the Archaeological Sites with those Provided in the Part 3A Environmental Assessment

The comparisons of the maximum predicted subsidence parameters for the archaeological sites, based on the *Modified Layout*, with those provided in the Part 3A Environmental Assessment, based on the *Approved Layout*, are provided in Table 6.20 to Table 6.22. It is noted, that comparisons have not been provided for the rock shelter, as none were not identified at the time of the Part 3A Environmental Assessment.

Table 6.20 Comparison between the Maximum Predicted Total Conventional Subsidence Parameters for the Artefact Scatter Sites Based on Approved and Modified Layouts

Layout	Maximum Predicted Total Conventional Subsidence (mm)	Maximum Predicted Total Conventional Tilt (mm/m)	Maximum Predicted Total Conventional Hogging Curvature (km ⁻¹)	Maximum Predicted Total Conventional Sagging Curvature (km ⁻¹)
Approved Layout (Part 3A)	920	17	Not Provided	Not Provided
Modified Layout (MSEC492)	1550	50	3.6	3.5

Table 6.21 Comparison between the Maximum Predicted Total Conventional Subsidence Parameters for the Grinding Groove Sites Based on Approved and Modified Layouts

Layout	Maximum Predicted Total Conventional Subsidence (mm)	Maximum Predicted Total Conventional Tilt (mm/m)	Maximum Predicted Total Conventional Hogging Curvature (km ⁻¹)	Maximum Predicted Total Conventional Sagging Curvature (km ⁻¹)
Approved Layout (Part 3A)	370	6	Not Provided	Not Provided
Modified Layout (MSEC492)	2400	11	0.30	0.45

Table 6.22 Comparison between the Maximum Predicted Total Conventional Subsidence Parameters for the Scarred Trees Based on Approved and Modified Layouts

Layout	Maximum Predicted Total Conventional Subsidence (mm)	Maximum Predicted Total Conventional Tilt (mm/m)	Maximum Predicted Total Conventional Hogging Curvature (km ⁻¹)	Maximum Predicted Total Conventional Sagging Curvature (km ⁻¹)
Approved Layout (Part 3A)	190	3	Not Provided	Not Provided
Modified Layout (MSEC492)	1400	7	0.20	0.05

It can be seen from the above tables, that the maximum predicted mine subsidence parameters for the archaeological sites, based on the *Modified Layout*, are greater than those provided in the Part 3A Environmental Assessment, based on the *Approved Layout*.

The reason for this is partly due to additional sites being identified above the proposed mining areas. For example, only two grinding groove sites were identified within the current Study Area at the time of the Part 3A Environmental Assessment, which were Abel 1 and Abel 2. The maximum predicted subsidence parameters at these grinding groove sites, based on the *Modified Layout* (i.e. 200 mm subsidence and 3 mm/m tilt), are less than those provided for these sites in the Part 3A Environmental Assessment (i.e. 370 mm subsidence and 6 mm/m tilt).

The discussions on the potential impacts on the archaeological sites, based on the predicted subsidence parameters for the *Modified Layout*, are provided in the following sections.

6.13.4. Impact Assessments for the Artefact Scatter Sites

There are eight sites comprising artefact scatters or isolated finds within or immediately adjacent to the Study Area, being Sites AMA2/A, AMA2/B, AMA2/C, AMC5/A, Black Hill Quarry 1 (i.e. 38-4-0341), CA6, F1/B (i.e. 38-4-0980), and FMC6 Donaldson Mine (i.e. 38-4-0668).

These types of sites can potentially be affected by cracking of the surface soils as a result of mine subsidence movements. Discussions on the potential for surface deformations resulting from the proposed mining are provided in Section 4.8. It is unlikely, that these scattered artefacts or isolated finds themselves would be impacted by surface cracking.

Further discussions on the potential impacts on the artefact scatter sites, resulting from the proposed mining, are provided in the report prepared by *South Eastern Archaeological* (SEA, 2012).

6.13.5. Impact Assessments for the Grinding Groove Sites

There are seven grinding groove sites within the Study Area, being Sites Abel 1 (i.e. 38-4-0985), Abel 2 (i.e. 38-4-0986), AMB1/A, AMC10/A, AMC16/A, AMC2/A, and AMC2/C.

The grinding groove sites Abel 1, Abel 2, AMC10/A and AMC2/C are located outside the extents of the proposed mining at distances 150 metres, 50 metres, 110 metres and 180 metres, respectively, at their closest points.

The maximum predicted conventional strains at Sites Abel 1 and Abel 2 are similar to uniform strains provided in the Part 3A Environmental Assessment. The potential impacts on these sites, therefore, are similar to those assessed in the Part 3A Environmental Assessment, which stated that "*Abel 1 grinding grooves are unlikely (i.e. a probability of $\leq 5\%$) to be cracked by the uniform tensile strains of <0.3 mm/m. It is possible (i.e. a probability of 10 - 50%) that the Abel 2 grinding groove site could be cracked by a CWC uniform strain of 0.5 mm/m. A maximum crack width of 3 to 5 mm is predicted for the site at this location*" (SE, 2006).

The maximum predicted conventional strains at Sites AMC10/A and AMC2/C are very small, less than the order of survey tolerance (i.e. less than 0.3 mm/m). It is unlikely, therefore, that these sites would be adversely impacted as a result of the proposed mining (i.e. a probability of less than 5 %).

The remaining grinding groove sites within the Study Area, being Sites AMB1/A, AMC16/A and AMC2/A, are located directly above the proposed mining. The predicted conventional strains at these sites vary between 1 mm/m to 3 mm/m tensile, and between 2 mm/m and 4.5 mm/m compressive. Fracturing in bedrock has been observed in the past, as a result of longwall mining, where tensile strains were greater than 0.5 mm/m or where compressive strains were greater than 2 mm/m. It is possible, therefore, that fracturing of the bedrock could occur in the vicinity of Sites AMB1/A, AMC16/A and AMC2/A.

Preventive measures could be implemented at the grinding grooves Sites AMB1/A, AMC16/A and AMC2/A, if required, including slotting of the bedrock around the sites to isolate them from the ground curvatures and strains. It is possible, however, that the preventive measures could result in greater impacts on these sites than those which would have occurred as a result of mine subsidence movements.

Further discussions on the potential impacts on the grinding groove sites, resulting from the proposed mining, are provided in the report prepared by *South Eastern Archaeological* (SEA, 2012).

6.13.6. Impact Assessments for the Rock Shelter Site

There is one rock shelter within the Study Area, being Site AMC2/B, which is located directly above the maingate of proposed Longwall LDLW3 in the Lower Donaldson Seam. The maximum predicted tilt for the rock shelter is 8 mm/m (i.e. 0.8 %), which represents a change in grade of 1 in 125. It is unlikely that this site would experience any adverse impacts resulting from the mining induced tilt.

The maximum predicted curvatures for the rock shelter are 0.10 km⁻¹ hogging and 0.04 km⁻¹ sagging, which represent minimum radii of curvature of 10 kilometres and 25 kilometres, respectively. The maximum predicted conventional strains for this site, based on applying a factor of 10 to the maximum predicted conventional curvatures, are 1 mm/m tensile and 0.4 mm/m compressive.

It is extremely difficult to assess the likelihood of instabilities for the rock shelter based upon predicted ground movements. The likelihood of the shelter becoming unstable is dependent on a number of factors which are difficult to fully quantify. These factors include jointing, inclusions, weaknesses within the rockmass, groundwater pressure and seepage flow behind the rockface. Even if these factors could be determined, it would still be difficult to quantify the extent to which these factors may influence the stability of the shelter naturally or when it is exposed to mine subsidence movements.

The predicted curvatures and conventional strains at the rock shelter are similar to those typically experienced in the Southern Coalfield, where there is extensive experience of mining beneath rock shelters. It has been reported that, where longwall mining has previously been carried out in the Southern Coalfield, beneath 52 shelters, that approximately 10 % of the shelters have been affected by fracturing of the strata or shear movements along bedding planes and that none of the shelters have collapsed (Sefton, 2000).

The rock shelter within the Study Area (Ref. AMC2/B) is an isolated boulder having a length less than 3 metres and a height less than 2 metres (SEA, 2012). This type of site is much less susceptible to mine subsidence impacts than the larger and continuous rock shelter sites which have been previously mined beneath in the Southern Coalfield. The potential impacts on this site, therefore, are expected to be much less than those previously observed in the Southern Coalfield.

It has been assessed, the likelihood of significant physical impacts on the rock shelter Site AMC2/B, resulting from the proposed mining, is relatively low (i.e. less than 5 %). Further discussions on the potential impacts on the rock shelter, resulting from the proposed mining, are provided in the report prepared by *South Eastern Archaeological* (SEA, 2012).

6.13.7. Impact Assessments for the Scarred Trees

There are two possible scarred trees within the Study Area. Site AMC12/A is located directly above the proposed thin seam workings in the Upper Donaldson Seam (i.e. UDBP2) and above the proposed longwalls in the Lower Donaldson Seam (i.e. LDLW2), and Site AMC2/D is located directly above the proposed longwalls in the Lower Donaldson Seam (i.e. LDLW3).

It has been found, from past longwall mining experience, that the incidence of impacts on trees is extremely rare. Impacts on trees have only been previously observed where the depths of cover were extremely shallow, in the order of 50 metres or less, or on very steeply sloping terrain, in the order of 1 in 1 or greater.

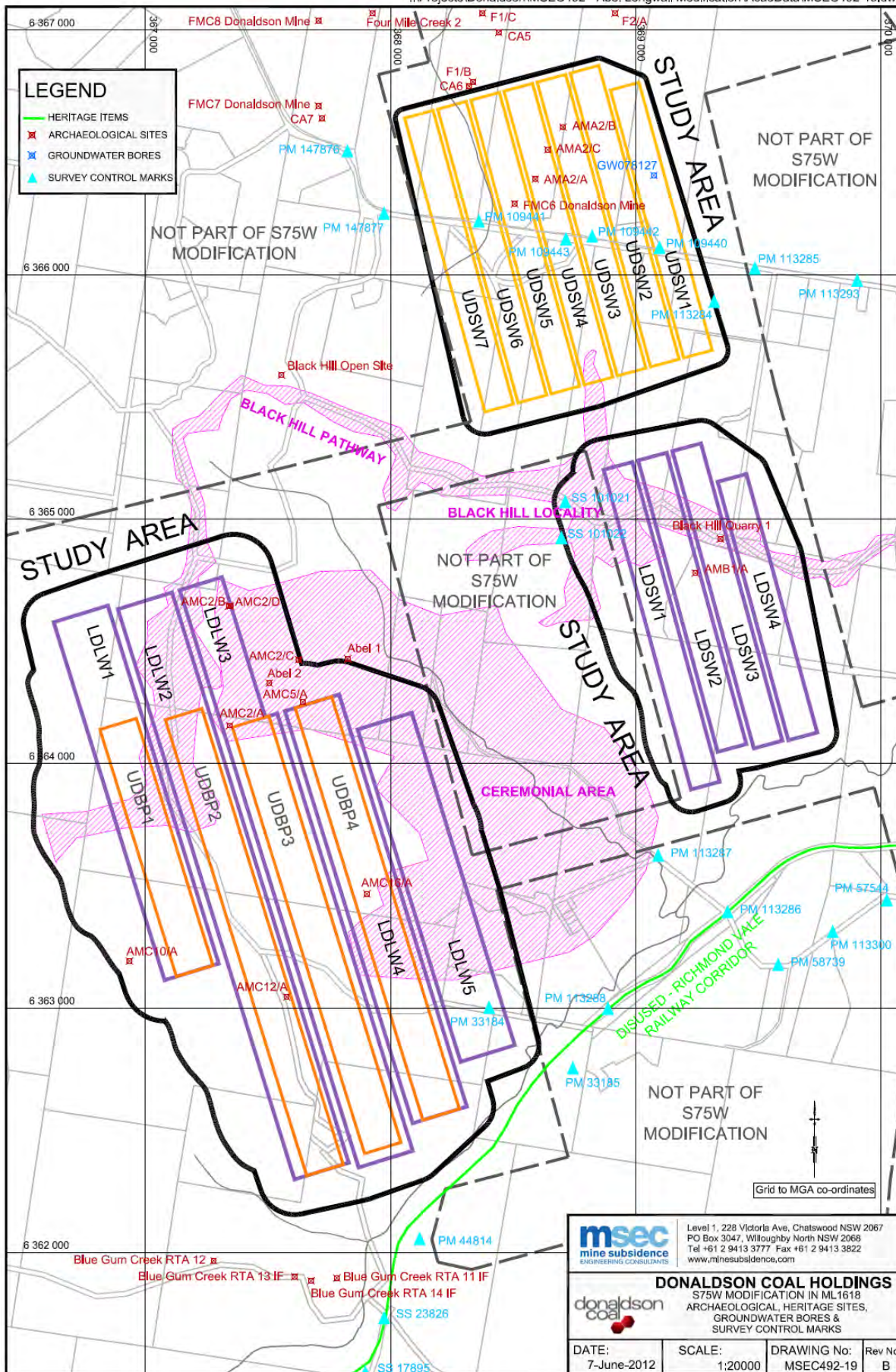
In the locations of the possible scarred trees, the depths of cover to the proposed thin seam workings and the proposed longwalls vary between 280 metres and 350 metres, and the depths of cover to the existing workings in the Borehole Seam vary between 80 metres and 120 metres. Also, the natural surface gradients in these locations are less than those which would be considered steep slopes (i.e. less than 1 in 3). It is unlikely, therefore, that the scarred trees would be adversely impacted by the proposed mining.

Further discussions on the potential impacts on the scarred trees, resulting from the proposed mining, are provided in the report prepared by *South Eastern Archaeological* (SEA, 2012).

6.13.8. Impact Assessments for the Cultural Places

The cultural places identified within the Study Area are the Black Hill Locality, Black Hill Pathway and the Ceremonial Area. These places could experience the full range of predicted subsidence movements, which were described in Chapter 4.

The potential impacts on the cultural places include surface cracking and deformations (refer to Sections 4.8 and 5.4) and changes in surface water drainage (refer to Sections 5.1, 5.6, 5.8 and 5.9). Further discussions on the potential impacts on the flora and fauna in these areas are provided in the report prepared by *Hunter Eco* (2012).



APPENDIX 8:

**PROPOSED AMENDMENTS TO APPROVED
*ABEL UNDERGROUND MINE: ABORIGINAL
HERITAGE MANAGEMENT PLAN*
(Donaldson Coal 2007)**

**ABEL UNDERGROUND MINE:
ABORIGINAL HERITAGE
MANAGEMENT PLAN**

Revised Working Draft 2.0

DONALDSON COAL Pty Limited

PO Box 2275
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August 2012

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1 INTRODUCTION

This Aboriginal Heritage Management Plan (the plan) applies to the following areas:

- The Abel Underground Mine surface disturbance area north of John Renshaw Drive as marked on Figure 1;
- The area above the Abel Underground Mine workings south of John Renshaw Drive, which may be the subject of subsidence, as marked on Figure 1;

This plan has been prepared to address the requirements of the *National Parks and Wildlife Act 1974* (NP&W Act) and the *Environmental Planning and Assessment Act 1979* (EP&A Act), specifically the Statement of Commitments and Part 3A Major Project approval MP 05_0136 dated 7 June 2007 for the Abel Underground Mine and the Modification Approval for the Abel Upgrade Modification.

This plan interfaces with the Donaldson Mine Operations Plan.

This plan:

- Defines responsibilities of personnel;
- Defines procedures in relation to Aboriginal heritage;
- Establishes key performance indicators;
- Establishes policies and actions for compliance with the NP&W Act and EP&A Act and Part 3A Approval;
- Facilitates a process of communication and decision-making; and
- Assists Donaldson to meet legal and ethical obligations in relation to Aboriginal heritage.

Implementation of this plan is the responsibility of the Donaldson Environmental Manager.

2 ABORIGINAL HERITAGE EVIDENCE

The best current approximation of the names and locations of Aboriginal heritage evidence within the project area is marked on Figure 1 and listed in Table 1. This is based on information about previous recordings contained in archaeological reports, the Office of Environment and Heritage (OEH) Aboriginal Heritage Information Management System (AHIMS) and information collected during archaeological surveys of the project area.

Approximately 63 Aboriginal heritage sites and Potential Archaeological Deposits (PADs) are present within the Project area, including 18 within the surface area north of John Renshaw Drive and 45 within the underground area south of John Renshaw Drive. Apart from one open artefact and grinding groove site, the remainder of the sites within the surface area are open artefact sites. The underground area hosts eight open grinding groove sites, three scarred trees, one rock shelter with PAD, one PAD and 32 open artefact sites.

No Aboriginal heritage sites are listed within the area on other heritage registers or planning instruments, including the Maitland, Cessnock and Newcastle Local Environmental Plans and the Hunter Regional Environmental Plan and other registers under the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*, the *Environment Protection and Biodiversity Conservation Act 1999* or the *Australian Heritage Council Act 2003* such as the Commonwealth Heritage List and National Heritage List.

Places may be of traditional or historical cultural significance to Aboriginal people, but do not necessarily host physical remains. Historical accounts identify at least two places of cultural significance within the underground area, a pathway along Black Hill Spur extending south to Mount Sugarloaf and a ceremonial site known as 'the Doghole' in the vicinity of Stockrington and Long Gully. In addition, the Black Hill locality is a cultural landscape of traditional, historical and contemporary cultural significance to the Aboriginal community.

In addition to the *identified* heritage evidence, there are *potential* heritage resources within the project area. Stone artefact evidence is likely to occur in a widespread distribution of variable density across virtually all landform units within the underground area. Other types of heritage evidence are known to occur or have some potential to occur within the underground area, particularly ceremonial sites, cultural sites of significance, grinding grooves, lithic quarries, rock shelters, shell middens and scarred trees.

The significance of Aboriginal heritage evidence, including scientific, cultural, educational, historic and aesthetic values, can be assessed against a range criteria commonly used in Aboriginal heritage management. Scientific value involves assessment of the potential usefulness of the heritage evidence to address further research questions (research potential), the representativeness of the evidence, the nature of the evidence and its state of preservation. Cultural significance refers to the contemporary, historic or traditional value placed upon the evidence by the local Aboriginal community. It is important to observe that all heritage evidence tends to have some contemporary significance to Aboriginal people, because it represents an important tangible link to their past and to the landscape.

3 STATUTORY OBLIGATIONS

The *National Parks and Wildlife Act 1974* (NP&W Act) provides the primary basis for the legal protection and management of Aboriginal heritage evidence within NSW. The Act provides various controls for the protection, management and destruction of Aboriginal objects. Under the Part 3A Major Project amendments to the *Environmental Planning and Assessment Act 1979* (EP&A Act), subsequent to approval being granted, a Section 90 Aboriginal Heritage Impact Permit (AHIP) under the NP&W Act is not required to impact Aboriginal objects. *In lieu* however, the Part 3A project approval conditions, including the Statement of Commitments outlining proposed heritage management and mitigation measures, must be adhered to.

While the primary legislation offering protection to Aboriginal heritage in NSW is enacted by the State, several Acts administered by the Commonwealth may also be relevant. The *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* provides for the protection of areas and objects which are of significance to Aboriginal people in accordance with Aboriginal tradition. The amended *Environment Protection and Biodiversity Conservation Act 1999* and the *Australian Heritage Council Act 2003* include a National Heritage List of places of national heritage significance and a Commonwealth Heritage List of heritage places owned or managed by the Commonwealth. In addition to these Commonwealth acts, local planning instruments also contain provisions relating to indigenous heritage and development. At present, no Aboriginal sites identified within the project area are listed on these registers or plans.

4 MANAGEMENT POLICIES AND ACTIONS

This section outlines the policies for management of the identified and potential Aboriginal heritage evidence within the project area, along with the actions necessary to implement these policies.

4.1 Roles and Responsibilities

The personnel responsible for implementation of this plan to ensure compliance with regulatory requirements and safe and effective management of Aboriginal heritage within the project area are specified here.

DONALDSON ENVIRONMENTAL MANAGER:

The Donaldson Environmental Manager is responsible for:

- Developing, implementing and maintaining this plan;
- Reviewing and updating this plan;
- Educating relevant staff and contractors to ensure all are aware of their obligations under this plan;
- Coordinating all activities and investigations required under this plan;
- Coordinating all consultation with the Aboriginal community required under this plan;
- Being the first point of contact at Donaldson in relation to Aboriginal heritage issues.

ABORIGINAL COMMUNITY:

The Mindaribba and Awabakal Local Aboriginal Land Councils are responsible in relation to their respective Land Council areas for:

- Providing suitably qualified and/or experienced representatives to attend meetings, site inspections and surveys with 5 working days notice;
- Providing written comment to Donaldson on the draft of any heritage assessment or heritage monitoring report or in relation to any other heritage issue where requested by Donaldson, within 15 working days of a verbal or written request by Donaldson;
- Complying with all Occupational Health and Safety, Equal Opportunity and Donaldson Development Consent, Part 3A Approval and Plan of Management requirements at all times when on Donaldson lease areas;
- Undertaking other duties as reasonably requested by Donaldson in relation to Aboriginal heritage.

OTHER PERSONNEL:

Other staff and contractors of Donaldson are responsible for:

- Being aware of their obligations under this plan;
- Being aware of the existence of Aboriginal heritage evidence in their work area and specific actions required under this plan to protect or manage that evidence;
- Immediately informing their supervisor should any new Aboriginal heritage evidence be identified;
- Immediately ceasing work in any area where new Aboriginal heritage evidence is identified and informing their supervisor should any impacts occur to Aboriginal heritage evidence that are not consistent with this plan.

4.2 Aboriginal Community Involvement

POLICY:

Donaldson acknowledges that Aboriginal heritage is of primary interest to the Aboriginal community and that Aboriginal people have the right to be consulted and involved in all aspects of decision-making in relation to their heritage.

Donaldson recognises that the Aboriginal community has a paramount role in identifying cultural significance and cultural values.

Donaldson recognises that the Local Aboriginal Land Councils (LALCs) are the democratically elected and representative bodies responsible under the *Aboriginal Land Rights Act 1983* for providing advice and expertise on Aboriginal matters and will therefore function as the central point of contact with the Aboriginal community in relation to heritage issues. Much of the project area lies within the boundaries of the Mindaribba LALC and the southeastern portion of the project area lies within the boundaries of the Awabakal LALC (refer to Figure 1).

Donaldson recognises that at times the input of Registered Native Title Claimants and other registered Aboriginal stakeholders with demonstrated qualifications in cultural heritage, skills or experience in the conduct of heritage studies in the local area, and/or specific cultural knowledge of the lease area may be sought in relation to specific heritage issues.

ACTIONS:

- Donaldson will provide the relevant LALC with details of the proposed methodology of any archaeological survey (excluding monitoring) or excavation planned within the project area and allow the LALC a minimum of 15 working days to provide comment, including identification of issues or areas of cultural significance that might affect, inform or allow refinement of the methodology. Donaldson will document and take into account all comment provided by the LALC and identify in the final report how these comments were considered in finalising the methodology;
- Donaldson will engage representatives of the relevant LALC to participate in any archaeological survey, excavation or monitoring required under this plan. Donaldson will provide the LALC with a minimum of 5 working days notice of the date of commencement of the field investigation, unless a shorter period is agreed to by the LALC. Donaldson will provide safe access to the investigation area and induct LALC representatives to an appropriate level for Occupational Health and Safety and mine procedures and requirements for that investigation area;
- The relevant LALC will provide suitably qualified and/or experienced representatives to participate in any archaeological survey, excavation or monitoring required under this plan. The LALC representatives will comply with all requirements of Donaldson, including Occupational Health and Safety requirements, at all times when on Donaldson lease areas;
- Donaldson will provide the relevant LALC with draft copies of all heritage assessment and heritage monitoring reports produced under this plan and allow the LALC 15 working days to provide written comment. Donaldson will document and take into account all comment provided by the LALC and demonstrate in the final report how these comments have been taken into consideration;

- The relevant LALC will provide written comment to Donaldson on the draft of any heritage assessment or heritage monitoring report or in relation to any other heritage issue where requested by Donaldson, within 15 working days of a verbal or written request by Donaldson;
- Donaldson will provide the relevant LALC with final copies of all heritage assessment and heritage monitoring reports produced under this plan, within 25 working days of the completion of the report;
- Donaldson will consult with Registered Native Title Claimants and other registered Aboriginal stakeholders with demonstrated qualifications in cultural heritage, skills or experience in the conduct of heritage studies in the local area, and/or specific cultural knowledge of the project area in relation to specific heritage issues where Donaldson determines that such consultation may be beneficial to the completion of a heritage survey, excavation or report;
- Donaldson will make available to Registered Native Title Claimants and other registered Aboriginal stakeholders final copies of any heritage assessment and heritage monitoring reports produced under this plan, within 25 working days of the completion of the report and receipt of a verbal or written request from such a party for that specific report;
- Donaldson will arrange and host a meeting on an annual basis with the nominated executives of the LALCs to discuss the operation and effectiveness of this plan, any heritage reports or work conducted under this plan, and any other heritage issues that are deemed relevant by either Donaldson or the LALCs. Donaldson will maintain and distribute minutes of such meetings to the LALCs;
- Donaldson will assist the relevant LALC to collect and curate any items that are salvaged as per Sections 4.4 and 4.5 of this plan;
- Donaldson will immediately notify the relevant LALC should human skeletal material be identified within the lease area;
- Donaldson will permit LALC representatives access to inspect recorded Aboriginal heritage evidence on Donaldson controlled land subject to the receipt of 3 working days written notice, and safety and operational considerations at that time.

RESPONSIBILITY:

- The Environmental Manager will coordinate all consultation with the Aboriginal community required under this plan;
- Mindaribba LALC will coordinate the involvement of the Land Council with Donaldson for all heritage issues within their Land Council boundary;
- Awabakal LALC will coordinate the involvement of the Land Council with Donaldson for all heritage issues within their Land Council boundary;
- Other Personnel will provide support to Donaldson where requested to implement these actions.

4.3 Aboriginal Site Database

POLICY:

Donaldson will maintain a current database providing details of all identified Aboriginal heritage evidence within the project area so that this plan can be effectively implemented.

ACTIONS:

- Donaldson will maintain an Aboriginal Site Database in both tabular and graphical form that presents the locations and names and other relevant details of all identified Aboriginal heritage evidence within the project area (eg. Table 1 and Figure 1);
- Donaldson will update the database within 3 working days after becoming aware or being informed of the identification of any previously unrecorded Aboriginal heritage evidence within the project area;
- Donaldson will make the Database available to all relevant personnel, contractors and LALC representatives where necessary to ensure that this plan can be effectively implemented;
- Donaldson will not make the Database publically available without obtaining the prior written consent of the LALCs.

RESPONSIBILITY:

- The Environmental Manager will create, maintain and update the Database;
- The Environmental Manager will make the Database available where necessary;
- The Environmental Manager will liaise with the LALCs should it be necessary to make any information in the Database available to the public;
- Other Personnel will provide support to Donaldson where requested to implement these actions.

4.4 Management of Recorded Aboriginal Sites in Surface Impact Area

POLICY:

Donaldson will seek to *minimise* impacts to identified and potential Aboriginal heritage evidence within the surface disturbance area (refer to Figure 1) and to conserve identified evidence where impacts are not required to occur for operational reasons.

Donaldson will seek to *mitigate* impacts to identified and potential Aboriginal heritage evidence within the surface disturbance area where impacts must occur for operational reasons.

Donaldson will manage specific recorded Aboriginal heritage sites and implement procedures to manage other types of Aboriginal heritage evidence should they be identified within the surface impact area as specified below and consistent with the Part 3A Approval and relevant legislation.

Human skeletal remains are excluded here and dealt with in Section 4.8.

ACTIONS:

- A comprehensive archaeological survey of the surface disturbance area north of John Renshaw Drive, including land both within the Abel site and Bloomfield site, has been conducted as part of the Environmental Assessment (Kuskie 2006) and fulfils a relevant component of Part 3A Major Project approval MP 05_0136 Condition 29(c).
- Approximately 17 artefact scatter sites (refer to Table 1, Figure 1) have been identified within the area of surface disturbance north of John Renshaw Drive. Also, artefact scatter sites F1/A and F2/A may be impacted by construction of the fan site south of John Renshaw Drive (refer to Table 1, Figure 1). In addition, a widespread distribution of stone artefacts (currently obscured by vegetation and/or soil) occurring at a generally low density is predicted to occur throughout the surface impact area (apart from ground already subject to high impacts). The continued use of existing facilities and infrastructure (including roads) and the construction plans for new facilities and infrastructure (including all areas where impacts to the ground surface may occur) will be assessed against the location plan of identified Aboriginal heritage evidence (Figure 1). Where impacts may occur from either existing use or newly proposed uses, the artefact evidence will be assessed by a qualified archaeologist and the relevant LALC, its significance will be assessed and mitigation and management strategies formulated by Donaldson, the archaeologist and relevant LALC. Any evidence assessed as being of scientific and/or cultural significance within a regional context will be subject to conservation. In this circumstance, no work shall be undertaken that will cause any impacts to the site and fencing and/or marking of the site location, erection of signage and notification of relevant personnel may be required to ensure that impacts do not occur. Any evidence assessed as being of scientific and/or cultural significance within a local context but not a regional context may be subject to impacts but only with mitigation measures agreed to by Donaldson, the independent archaeologist and relevant LALC. For artefact scatter sites such mitigation measures may include surface collection and/or archaeological excavation of evidence, curation of evidence and provision of a report with reference to the DECC *Aboriginal Heritage Standards and Guidelines Kit* (1997). Any evidence assessed as being of low scientific and/or cultural significance may be impacted without mitigation measures, but only after the evidence has been recorded in detail, with reference to the DECC *Aboriginal Heritage Standards and Guidelines Kit* (1997);

- Where surface collection of stone artefacts occurs (refer to procedure above), where agreed to by the relevant LALC this may involve temporary storage of collected and clearly labelled artefacts in a secure facility, followed by their replacement as close as possible to their original positions after the completion of mining works. The relevant LALC will be invited to participate in the collection and replacement of artefacts and the location of the temporary storage facility will be established in consultation with the relevant LALC;
- One open grinding groove and artefact site (#38-4-0665, refer to Table 1, Figure 1) has been identified within the surface disturbance area. This site will be subject to conservation. No work shall be undertaken that will cause any impacts to this site. As per the procedures in Section 4.7, fencing and/or marking of the site location, erection of signage and notification of relevant personnel will be implemented as deemed necessary to ensure that impacts do not occur;
- Other grinding groove sites may occur within the surface disturbance area. Where identified, such evidence will be assessed by a qualified archaeologist and the relevant LALC, its significance will be assessed and mitigation and management strategies formulated by Donaldson, the archaeologist and relevant LALC. Any evidence assessed as being of scientific and/or cultural significance within a regional context will be subject to conservation. In this circumstance, no work shall be undertaken that will cause any impacts to the site and fencing and/or marking of the site location, erection of signage and notification of relevant personnel will be implemented as deemed necessary to ensure that impacts do not occur. Any evidence assessed as being of scientific and/or cultural significance within a local context but not a regional context may be subject to impacts but only with mitigation measures agreed to by Donaldson, the independent archaeologist and relevant LALC. For grinding groove sites such mitigation measures may include removal of the rock hosting the grooves and curation of the evidence with the relevant LALC or another heritage or educational place approved by the LALC. Any evidence assessed as being of low scientific and/or cultural significance may be impacted without mitigation measures, but only after the evidence has been recorded in detail, with reference to the *DECC Aboriginal Heritage Standards and Guidelines Kit (1997)*;
- Although not identified to date and predicted to have a low to very low potential to occur, should cultural sites of significance¹ be identified within the surface disturbance area, an assessment by a qualified archaeologist and/or anthropologist and the relevant Aboriginal stakeholders will occur. The assessment will identify the nature of the evidence, the identity of the informants, and the significance of the site. Donaldson will seek to minimise surface impacts in the location of any such site, to the extent feasible within operational requirements;

¹ Cultural sites may be of traditional or historical cultural significance to Aboriginal people but do not necessarily host physical remains. This category does not include the contemporary significance or cultural value that may be attributed in the present time to physical evidence such as artefact scatters. Sites of traditional significance may include places related to beliefs that date from the pre-contact period and have persisted until the present time such as mythological sites. Sites of historic significance may include places related to Aboriginal use or knowledge during the post-contact period such as massacre sites, historic camp sites and resource-use areas, and contact sites.

- Although not identified to date and predicted to have a low to very low potential to occur, should evidence of lithic quarry or shell midden sites be identified within the surface disturbance area, such evidence will be assessed by a qualified archaeologist and the relevant LALC, its significance will be assessed and mitigation and management strategies formulated by Donaldson, the archaeologist and relevant LALC. Any evidence assessed as being of scientific and/or cultural significance within a regional context will be subject to conservation. In this circumstance, no work shall be undertaken that will cause any impacts to the site and fencing and/or marking of the site location, erection of signage and notification of relevant personnel will be implemented as deemed necessary to ensure that impacts do not occur. Any evidence assessed as being of scientific and/or cultural significance within a local context but not a regional context may be subject to impacts but only with mitigation measures agreed to by Donaldson, the independent archaeologist and relevant LALC. For lithic quarry and midden sites such mitigation measures may include surface collection and/or archaeological excavation of evidence, dating of shell/charcoal deposits, curation of evidence and provision of a report with reference to the DECC *Aboriginal Heritage Standards and Guidelines Kit* (1997). Any evidence assessed as being of low scientific and/or cultural significance may be impacted without mitigation measures, but only after the evidence has been recorded in detail, with reference to the DECC *Aboriginal Heritage Standards and Guidelines Kit* (1997);
- Although not predicted to occur, should evidence of bora/ceremonial, carved tree, rock shelter with art and/or occupation deposit, scarred tree or stone arrangement sites be identified within the surface disturbance area, these site types would potentially be of regional significance and will therefore be subject to conservation. No work shall be undertaken that will cause any impacts to any such site. As per the procedures in Section 4.7, fencing and/or marking of the site location, erection of signage and notification of relevant personnel will be implemented as deemed necessary to ensure that impacts do not occur.

RESPONSIBILITY:

- The Environmental Manager will coordinate all actions required to comply with the management of recorded Aboriginal sites within the surface disturbance area;
- Other Personnel will provide support to Donaldson where requested to implement these actions.

4.5 Management of Recorded Aboriginal Sites in Underground Area

4.5.1 Bord and Pillar Underground Mining Area

POLICY:

Donaldson will seek to *minimise* impacts to identified and potential Aboriginal heritage evidence within the bord and pillar underground mining area, including all evidence (grinding grooves and rock shelters) susceptible to impacts from subsidence (refer to Figure 1).

Donaldson will seek to *mitigate* impacts to identified and potential Aboriginal heritage evidence within the bord and pillar underground mining area where impacts must occur for operational reasons.

Donaldson will manage specific recorded Aboriginal heritage sites and implement procedures to manage other types of Aboriginal heritage evidence should they be identified within the bord and pillar underground mining area as specified below and consistent with the Part 3A Approval and relevant legislation.

Human skeletal remains are excluded here and dealt with in Section 4.8.

ACTIONS:

- Approximately three scarred trees, one PAD and 32 open artefact sites, along with two cultural sites, including a ceremonial place and Aboriginal pathway, (refer to Table 1, Figure 1) have been identified within the underground area south of John Renshaw Drive. In addition, there is a high potential for further stone artefacts to occur in a widespread distribution of variable density across virtually all landform units. There is also potential, albeit generally low to very low, for other bora/ceremonial, carved tree, cultural, lithic quarry, shell midden, scarred tree and stone arrangement sites to occur within the underground area. Subsidence is not anticipated to result in impacts to these forms of heritage evidence. As such, the key management actions required are those specified in Sections 4.3, 4.6 and 4.7;
- Eight open grinding groove sites (refer to Table 1, Figure 1) have been identified within the underground area. Other grinding groove sites may occur within the underground area, particularly within drainage depressions where sandstone bedrock outcrops, but also in other areas of outcropping sandstone. Grinding groove sites are susceptible to mining induced subsidence impacts through cracking to the grooves and the rocks hosting them. These sites and any other grinding groove sites identified within the underground area will be subject to avoidance of impacts from bord and pillar mining. Therefore, no bord and pillar mining shall be undertaken that will cause any impacts to these sites. An assessment of the potential impacts of subsidence will be undertaken at each identified grinding groove site by an appropriately qualified expert. The bord and pillar mine plan will be altered to ensure that the assessed risk of subsidence impact to each grinding groove site is minimised to less than one percent;

- Where sandstone rock formations are present, there is potential for overhangs, shelters or caves which may host evidence of Aboriginal occupation (eg. stone artefacts, deposits and/or art). One rock shelter with PAD has been identified in the underground mining area. Such rock shelter sites (including those with potential deposits, but no identified heritage evidence) are susceptible to mining induced subsidence impacts through rock fall and cracking. Where identified within the underground area, these sites will be subject to avoidance of impacts from bord and pillar mining. Therefore, no bord and pillar mining shall be undertaken that will cause any impacts to these sites. An assessment of the potential impacts of subsidence will be undertaken at each identified rock shelter site by an appropriately qualified expert. The mine plan will be altered to ensure that the assessed risk of subsidence impact to each rock shelter site is minimised to less than one percent.
- Minor direct surface impacts may occur within the Underground Mining Area in relation to ventilation shafts and other infrastructure. Where such impacts are proposed, archaeological investigation will occur as outlined in Section 4.6, and any Aboriginal sites identified will be managed in accordance with the procedures outlined for each site type in Section 4.4.

RESPONSIBILITY:

- The Environmental Manager will coordinate all actions required to comply with the management of recorded Aboriginal sites within the underground area;
- Other Personnel will provide support to Donaldson where requested to implement these actions.

4.5.2 Longwall and Shortwall Underground Mining Area

POLICY:

Donaldson will seek to *minimise* impacts to identified and potential Aboriginal heritage evidence within the longwall and shortwall underground area, including evidence (grinding grooves and rock shelters) susceptible to impacts from subsidence (refer to Figure 1 and Kuskie 2012).

Donaldson will seek to *mitigate* impacts to identified and potential Aboriginal heritage evidence within the longwall and shortwall underground area where impacts must occur for operational reasons.

Donaldson will manage specific recorded Aboriginal heritage sites and implement procedures to manage other types of Aboriginal heritage evidence should they be identified within the longwall and shortwall underground area as specified below and consistent with the Part 3A Approval and relevant legislation.

Human skeletal remains are excluded here and dealt with in Section 4.8.

ACTIONS:

- Approximately six open artefact sites, two scarred trees and two cultural sites, including a ceremonial place and Aboriginal pathway, (refer to Figure 1) have been identified within the longwall and shortwall underground area. In addition, there is a high potential for further stone artefacts to occur in a widespread distribution of variable density across virtually all landform units. There is also potential, albeit generally low to very low, for other bora/ceremonial, carved tree, cultural, lithic quarry, shell midden, scarred tree and stone arrangement sites to occur within the longwall and shortwall underground area. Subsidence is not anticipated to result in impacts to these forms of heritage evidence. As such, the key management actions required are those specified in Sections 4.3, 4.6 and 4.7;
- Seven open grinding groove sites (refer to Figure 1) have been identified within the longwall and shortwall underground area. Other grinding groove sites may occur within the longwall and shortwall underground area, particularly within drainage depressions where sandstone bedrock outcrops, but also in other areas of outcropping sandstone. Grinding groove sites are susceptible to mining induced subsidence impacts through cracking to the grooves and the rocks hosting them. In relation to open grinding groove sites, the significance assessment would be undertaken by appropriately qualified and experienced archaeologists, in consultation with the registered Aboriginal stakeholders (refer to Section 4.2):
 - For open grinding groove sites assessed as being of low significance, following detailed recording of the evidence, impacts will be permitted to occur without further action;
 - For open grinding groove sites assessed as being of low to moderate or higher significance, following detailed recording of the evidence, a qualified subsidence expert will provide an assessment of potential subsidence impacts:
 - Where the potential for subsidence impacts is assessed as unlikely or very unlikely, impacts will be permitted to occur without further action;
 - Where the potential for subsidence impacts is assessed as anything more than unlikely, impacts will be permitted to occur with detailed analysis of a sample of individual grinding grooves at each site using residue and use-wear techniques and experimental data, along with monitoring.
 - For open grinding groove sites assessed as being of high significance and where the potential for subsidence impacts is assessed as anything more than unlikely, in addition to the above, mitigation options such as slotting of the bedrock around the site to isolate it from ground curvatures and strains will be investigated by a qualified subsidence expert and implemented where feasible (ie. the potential benefit of mitigating impacts outweighs the potential risk that the mitigation procedure will itself cause impacts to the site).

- Where sandstone rock formations are present, there is potential for overhangs, shelters or caves which may host evidence of Aboriginal occupation (eg. stone artefacts, deposits and/or art). One rock shelter with PAD has been identified in the longwall and shortwall underground area. Such rock shelter sites (including those with potential deposits, but no identified heritage evidence) are susceptible to mining induced subsidence impacts through rock fall and cracking. In relation to rock shelter sites:
 - For rock shelter sites/PADs assessed as being of low significance, following detailed recording of the evidence, impacts will be permitted to occur without further action;
 - For rock shelter sites/PADs assessed as being of low to moderate, moderate or high significance, following detailed recording of the evidence, a qualified subsidence expert will provide an assessment of potential subsidence impacts:
 - Where the potential for subsidence impacts is assessed as unlikely or very unlikely, impacts will be permitted to occur without further action;
 - Where the potential for subsidence impacts is assessed as anything more than unlikely, and the significance is assessed as low to moderate, or moderate, impacts will be permitted to occur with monitoring;
 - Where the potential for subsidence impacts is assessed as anything more than unlikely, and the significance is assessed as moderate to high, or high, the site will be subject to test excavation and consideration of further mitigation (salvage excavation). Subsequently, impacts will be permitted to occur with monitoring;
 - Where the potential for subsidence impacts is assessed as anything more than unlikely, and grinding grooves are present within the shelter on portable rock formations, these will be removed prior to undermining for temporary storage at the Donaldson Coal office, then replaced at or as close to their original positions after undermining has occurred;
 - Where the potential for subsidence impacts is assessed as anything more than unlikely, and grinding grooves are present within the shelter on the main body of the rock mass, impacts will be permitted to occur with detailed analysis of the grooves using residue and use-wear techniques and experimental data, along with monitoring.
 - In relation to rock shelter sites, the assessment of significance and conduct of any test or salvage excavations would occur as per the following procedures:
 - The significance assessment and any excavation would be undertaken by appropriately qualified and experienced archaeologists, in consultation with the registered Aboriginal stakeholders (refer to Section 4.2);
 - The significance assessment and any excavation would be undertaken prior to any subsidence impacts occurring to any of those specific areas or sites;
 - An initial small test excavation would occur, with the aim to identify the nature of deposits, site integrity and research potential, and enable a reassessment of significance;

- A baseline would be established in the shelter and an accurate plan prepared;
- A 2 metre x 0.5 metre trench would be pegged out in the central portion of the main habitable floor area of the shelter, extending from near or at the rear of the shelter towards or across the dripline;
- The excavation would be dug by trowel in 0.5 x 0.5 metre units to the depth of the visible or predicted cultural deposits or to bedrock. Each unit would be labelled using an alphanumeric grid. Major rock would be excavated around and not removed;
- Excavation units would be dug in successive levels ('spits') of five centimetres depth, within individual soil units. Where pits or lenses are identified, these may also be excavated and sieved separately as a sub-unit. Where stratigraphy/soil profile changes occur, a new spit may be commenced;
- Vertical control (depth below surface) would be established using levels off a datum point;
- Data would be recorded for each excavation unit on an 'Excavation Unit Recording Form', including the position of any features or key evidence and soil descriptions;
- Soil from each level within an excavation unit would be placed into separate buckets and separately dry-sieved through 2-3 millimetre mesh. Material (both natural and cultural) remaining in the sieve would be sorted by a qualified archaeologist to retain all probable and potential cultural items and dispose of the natural items;
- Samples of soil would be retained;
- Charcoal samples would be retained where identified and where suitable for radiocarbon or other methods of direct dating, submitted to an accredited laboratory for dating;
- At the completion of excavation the trench would be lined with plastic and backfilled with the excavated/sieved sediment;
- The excavation and site would be photographed;
- Retrieved artefacts would be washed and dried if necessary and recorded by a qualified archaeologist. A minimal level of information would be recorded for every artefact collected (provenance, stone material type, lithic item type, size, weight, nature and quantity of cortex, and presence and nature of any use-wear or residues) with additional attributes recorded where necessary. Individual artefacts of significance may be photographed and/or illustrated;
- Any shell and bone material retrieved would be recorded, with identification to genus or species level where possible and counts of minimum numbers undertaken. Similar shell and bone items would be bagged together for each unit spit;

- Following recording of artefacts into a computer database, individual objects would be bagged separately in resealable, labelled plastic bags, with provenance information recorded on waterproof ink on the plastic bag label strips. Artefact bags would be grouped together for each excavation area and further provenance information included on metal tags;
- After recording and undermining has occurred, retrieved artefacts would be reburied in a container within the excavated/backfilled trench, unless a Care Agreement from the OEH is obtained by the relevant LALC;
- A report would be prepared by a qualified archaeologist with reference to the *Aboriginal Heritage Standards and Guidelines Kit* (1997) and the requirements of the AHMP, documenting the methods, results (including a plan of the site and excavation area, artefact databases and analysis with respect to relevant research questions) and Aboriginal involvement. The report would include a revised assessment of the significance of the site. Hard copies would be distributed to the DP&I, OEH and the relevant LALC within 25 working days of completion;
- Updated site records would be lodged with the OEH;
- On the basis of the initial test excavation, the qualified archaeologist in consultation with the relevant LALC, would determine whether more detailed salvage excavation is required. This decision would be made in consideration of the:
 - Revised significance assessment of the site;
 - Probability for serious and substantial and irreversible impacts to occur to the heritage resource from mining-induced subsidence and the consequent permanent loss of heritage value;
 - Potential for impacts to occur to the heritage resource from salvage excavation, should excavation occur but subsequent impacts from subsidence do not eventuate;
 - Potential for information obtained through salvage to contribute to address locally relevant research questions, refine the occupation model and further understanding of Aboriginal occupation of the locality, thereby offsetting impacts of the Project and assisting the ongoing management of heritage with respect to development impacts; and
 - Principles of ecologically sustainable development (integration of economic and cultural heritage considerations in the decision-making process), including the principle of intergenerational equity and the precautionary principle;
- Any salvage excavation, analysis, reporting and curation would occur in accordance with the methods outlined above for test excavation, but involve a larger sample from the rock shelter;
- The aim of any salvage excavation would be to mitigate the impacts of the Project on scientific and cultural values, through the retrieval and analysis of evidence and contribution to an improved understanding of Aboriginal occupation of the locality; and

- The excavation area and location would be determined by an appropriately qualified and experienced archaeologist, in consultation with the relevant LALC, with consideration of the potential subsidence impacts, extent of the habitable floor area and PAD, nature of the evidence, and the spatial area and quantity of data required to address relevant research questions and thereby successfully mitigate the impacts of the Project.
- Minor direct surface impacts may occur within the Underground Mining Area in relation to ventilation shafts and other infrastructure. Where such impacts are proposed, archaeological investigation will occur as outlined in Section 4.6, and any Aboriginal sites identified will be managed in accordance with the procedures outlined for each site type in Section 4.4.

RESPONSIBILITY:

- The Environmental Manager will coordinate all actions required to comply with the management of recorded Aboriginal sites within the longwall and shortwall underground area;
- Other Personnel will provide support to Donaldson where requested to implement these actions.

4.6 Further Archaeological Investigation and Section 138 Applications

POLICY:

Donaldson will ensure that where required, prior to underground mining, Aboriginal heritage will be addressed in a Subsidence Management Plan (SMP) prepared in accordance with the Department of Primary Industries (DPI) (2003) *Guidelines for Subsidence Management Approval Applications* (or the latest version or replacement of this document).

As part of the SMP process, staged systematic archaeological survey of each section proposed to be undermined will occur with the participation of the Aboriginal stakeholders prior to any underground mining in each section, in order to ensure that the nature and extent of Aboriginal heritage evidence that may be susceptible to impacts is identified and managed according to this plan and Part 3A Approval.

Donaldson will ensure that any variations to the proposed works that will cause surface impacts north of John Renshaw Drive to areas outside of those previously subject to heritage surveys shall be investigated by an archaeologist with the participation of the Aboriginal stakeholders prior to any impacts occurring, in order to ensure that the nature and extent of Aboriginal heritage evidence that may be susceptible to impacts is identified and managed according to this plan and Part 3A Approval.

Donaldson will ensure that the potential impacts of any variations to the proposed underground mine plan on the identified Aboriginal heritage resource will be assessed, in order to ensure that Aboriginal heritage evidence is managed in accordance with this plan and Part 3A Approval.

ACTIONS:

Donaldson will engage a suitably qualified and experienced archaeologist to identify and address the relevant SMP guidelines and other statutory requirements, including through:

- Description of the existing environment and potential impacts;
- Detailing baseline studies and monitoring;
- Undertaking an archaeological survey to identify and record any Aboriginal heritage evidence or areas of potential evidence within the SMP application area. The survey will encompass the geographic extent of the application area and will be undertaken within each area to be undermined in advance of mining, irrespective of specific SMP requirements;
- Assessing the significance of any identified heritage evidence within the SMP application area;
- Assessing the potential impacts of the proposed activity upon the identified or potential Aboriginal heritage evidence, including with reference to previous experience of subsidence impact in existing mined areas;
- Consultation with the local Aboriginal community, including the participation of relevant LALC representatives in the archaeological survey;
- Identification and assessment of management and mitigation options for any Aboriginal heritage evidence identified, consistent with this plan and Part 3A Approval;

- Provision and implementation of recommendations for the most appropriate management and mitigation options, consistent with this plan and Part 3A Approval;
- Provision of a report detailing the above for each SMP application area, produced with reference to the DECC *Aboriginal Heritage Standards and Guidelines Kit* (1997), with copies distributed to the NSW Department of Trade, Investment, Regional Infrastructure and Services (DTIRIS), OEH, Department of Planning and Infrastructure (DP&I) and the relevant LALC within 25 working days of finalisation of the report;
- Where surface impacts are proposed north of John Renshaw Drive in any areas outside of those previously subject to detailed heritage survey, a new heritage survey will be undertaken of those areas by a qualified archaeologist with the relevant LALC. Any identified Aboriginal heritage evidence or potential evidence will be managed in accordance with Section 4.4 of this plan;
- Where direct surface impacts are proposed in the Underground Mine Area south of John Renshaw Drive in any areas outside of those previously subject to detailed heritage survey, a new heritage survey will be undertaken of those areas by a qualified archaeologist with the relevant LALC. Any identified Aboriginal heritage evidence or potential evidence will be managed in accordance with the specific procedures set out in Sections 4.4 and 4.5;
- Where future alterations are proposed to the underground mine plan, the potential impacts of any changes on the identified and potential Aboriginal heritage resource will be assessed:
 - Where the alterations to the underground mine plan are proposed in areas already subject to heritage survey sampling (consistent with current standards), this will involve an assessment of potential subsidence impacts by a qualified subsidence expert and reconsideration of the management strategies for relevant identified sites by an appropriately qualified and experienced archaeologist, in consultation with the relevant LALC;
 - Where the alterations to the underground mine plan are proposed in areas that have not been subject to heritage survey sampling consistent with current standards, the procedures outlined in Section 4.6 will be implemented, followed by the assessment of potential subsidence impacts by a qualified subsidence expert and consideration of management strategies for relevant identified sites by an appropriately qualified and experienced archaeologist, in consultation with the relevant LALC.

RESPONSIBILITY:

- The Environmental Manager will coordinate all actions required to comply with the Aboriginal heritage aspects of a Section 138 SMP application and further archaeological studies in advance of underground mining or in relation to changes to the underground mine plan;
- The Environmental Manager will coordinate all actions required in relation to heritage surveys of areas of potential surface impacts that are located outside of the areas previously subject to heritage investigation;

- Other Personnel will provide support to Donaldson where requested to implement these actions.

4.7 Identification of Previously Unrecorded Aboriginal Sites

POLICY:

Should any previously unrecorded Aboriginal heritage evidence be identified within the project area during the course of operations, Donaldson will ensure that this evidence is subject to temporary conservation and is recorded and appropriate management strategies consistent with the Part 3A Approval and this plan are implemented in consultation with the Aboriginal community.

Human skeletal remains are excluded here and dealt with in Section 4.8.

ACTIONS:

- Upon identification of any previously unrecorded Aboriginal heritage evidence, all work that may cause impacts to that evidence shall immediately cease and the Environmental Manager be notified;
- Temporary fencing and/or marking of the site location and signage may be implemented as deemed necessary to ensure inadvertent impacts do not occur;
- Relevant personnel may be notified as deemed necessary to ensure that inadvertent impacts do not occur;
- Should the Aboriginal heritage evidence occur in the surface impact area, it will be managed in accordance with the specific procedures set out in Section 4.4;
- Should the Aboriginal heritage evidence occur in the underground area, it will be managed in accordance with the specific procedures set out in Section 4.5;
- Should the Aboriginal heritage evidence comprise a type of evidence different to those addressed in Sections 4.4 and 4.5 (for example, rare and otherwise unexpected forms of evidence such as Pleistocene age artefact sites that relate to Aboriginal occupation earlier than 10,000 years ago) it will be recorded by a qualified archaeologist and the relevant LALC, its significance will be assessed and mitigation and management strategies formulated by Donaldson, the archaeologist and relevant LALC. Any evidence assessed as being of scientific and/or cultural significance within a regional context will be subject to conservation. Any evidence assessed as being of scientific and/or cultural significance within a local context but not a regional context may be subject to impacts but only with mitigation measures agreed to by Donaldson, the independent archaeologist and relevant LALC;
- The relevant LALC will be notified within 10 working days of the identification of the Aboriginal heritage evidence and the management actions to be implemented in accordance with this plan and Part 3A Approval;
- A site record will be lodged with the OEH within 15 working days to comply with Section 91 of the NP&W Act;
- Work that may impact upon the Aboriginal heritage evidence may only recommence with the approval of the Environmental Manager and after actions set out in this plan and Part 3A Approval have been implemented.

RESPONSIBILITY:

- The Environmental Manager will coordinate and instigate all action required;
- Other Personnel will provide support to Donaldson where requested to implement these actions.

4.8 Identification of Human Skeletal Remains

POLICY:

Should any human skeletal remains be identified during work, Donaldson will ensure that actions are implemented to comply with statutory obligations and will consider the special needs of the Aboriginal community should those remains be identified as Aboriginal.

ACTIONS:

- If human skeletal material is identified during work, all work in the area of the material will cease immediately;
- Donaldson will immediately notify the NSW Police, relevant LALC, DP&I and OEH;
- Donaldson will facilitate, in cooperation with the Police, LALC, DP&I and OEH, the identification of the skeletal remains by an appropriately qualified person;
- Should the remains be identified as Aboriginal and the Police require no further involvement, Donaldson will manage the remains in accordance with the requirements of the DP&I and OEH in consultation with the Aboriginal community and with advice from a heritage expert. Possibly strategies may involve conservation *in situ* through avoidance of works in that location, conservation *in situ* by emplacement of a protective barrier and fill above the evidence, or excavation and reburial elsewhere.

RESPONSIBILITY:

- The Environmental Manager will coordinate all action required, including notification of and consultation with the Aboriginal community, Police, DP&I and OEH;
- Other Personnel will provide support to Donaldson where requested to implement these actions.

4.9 Monitoring

POLICY:

A regional monitoring network for Aboriginal heritage across the Abel, Tasman, Donaldson and Bloomfield leases will be formed for the duration of the mining leases.

The existing programme of monitoring in the Donaldson Bushland Conservation Areas will be continued to ensure that the condition of a sample of Aboriginal heritage sites that occur within the surface area north of John Renshaw Drive is regularly assessed.

A sample of Aboriginal heritage sites within the underground area, comprising site types for which it is not anticipated that subsidence related impacts will occur, will be monitored before and after undermining in their vicinity to confirm the accuracy of these predictions.

All Aboriginal heritage sites for which it is inferred that undermining may result in impacts (ie. rock shelter and grinding groove sites) will be monitored before and after undermining in their vicinity to ensure the adequacy of conservation measures (ie. mining exclusion zones) around those sites.

ACTIONS:

- Monitoring of the seven existing datum points within the Donaldson Conservation Area (refer to Table 2) will continue on an annual basis, involving inspection by a qualified archaeologist and a representative of the Mindaribba LALC. The inspection will occur during or close to the month of August and will involve recording of data on surface exposure, visibility, environmental conditions, human impacts, natural impacts, and condition of markings and signs relating to the Conservation Areas, in a manner consistent with previous monitoring, along with details of Aboriginal participation and any issues raised by the Aboriginal community regarding management of the Conservation Areas. These actions will be reported on in the annual monitoring report (refer below);
- Monitoring will occur for a sample of Aboriginal sites within the Abel Underground Area for which subsidence related impacts are not expected to occur (refer to Table 3). The inspections will occur prior to undermining and three months and six months after undermining, and thereafter on an annual basis for five years. The inspections will be undertaken by a qualified archaeologist and a representative of the relevant LALC. Each inspection will involve recording of data on surface exposure, visibility, environmental conditions, pre-existing human and natural impacts, heritage evidence present and any identified changes to these environmental and heritage data from previous monitoring inspections, along with details of Aboriginal participation. The potential cause (eg. subsidence or other impacts) of changes to the condition of individual sites will be assessed. These actions will be reported on in the annual monitoring report (refer below);

- Monitoring will occur for all Aboriginal sites within the Abel Underground Area and Tasman Underground Area for which subsidence related impacts may occur in order to ensure the adequacy of conservation measures (ie. mining exclusion zones) around specific sites, identify if any subsidence related impacts have occurred, assist with refining the modelling involved in assessing potential subsidence impacts and thereby guide future assessments within the locality, and enable documentation of the actual impacts of the Project and provide an understanding of the intact heritage resource post-mining (refer to Table 4). The inspections will occur prior to undermining and approximately three months after undermining. The inspections will be undertaken by a qualified archaeologist and a representative of the relevant LALC. Each inspection will involve recording of data on surface exposure, visibility, environmental conditions, pre-existing human and natural impacts, heritage evidence present and any identified changes to these environmental and heritage data from previous monitoring inspections, along with details of Aboriginal participation. The potential cause (eg. subsidence or other impacts) of changes to the condition of individual sites will be assessed. These actions will be reported on in the annual monitoring report (refer below);
- An annual report documenting the results of monitoring will be prepared and provided to the relevant LALC, DP&I and the OEH within 25 working days of finalisation of the report, detailing the methodology of the inspections, conditions of the environment and Aboriginal heritage evidence at the relevant sites, comparisons with previously reported descriptions of each site, identification of any natural and/or human impacts during the intervening period, and identification of any implications for ongoing management and protection of the Aboriginal heritage evidence throughout the project areas;
- Tables 3 and 4 will be updated as required on the basis of the results of further archaeological surveys within the project areas. Any newly identified rock shelter, stone arrangement and grinding groove sites and any other site types deemed susceptible to subsidence impacts will be added to Table 4.

RESPONSIBILITY:

- The Environmental Manager will coordinate and instigate all monitoring action required;
- The Environmental Manager will ensure Tables 3 and 4 are updated as required;
- Other Personnel will provide support to Donaldson where requested to implement these actions.

4.10 Review of Plan

POLICY:

The plan will be regularly verified to establish that it is functioning as designed (ie. policies adhered to and actions implemented) to the standard required.

ACTIONS:

- On an annual basis, Donaldson or an independent expert engaged by Donaldson will review this plan to identify the degree to which the policy objectives are being met, the suitability of the actions in terms of addressing the policy objectives, the quality of performance of the actions, and any additional policies or actions or modifications to existing policies or actions that may be required to enable better functioning of the plan;
- The performance of the plan will be assessed against key performance indicators, such as the protection of Aboriginal heritage, extent of impacts to Aboriginal heritage, number of mining days lost due to actions under the plan, and the number and nature of any adverse responses or input from relevant government authorities or the Aboriginal community;
- Verification may include, where deemed necessary in response to requests of the LALCs, Environmental Manager, DP&I or OEI, independent review of any heritage assessment report generated under this plan.

RESPONSIBILITY:

- The Environmental Manager will be responsible for undertaking or engaging experts to review the operation of this plan on an annual basis.

Table 1 Aboriginal Sites Recorded Within The Abel Project Area

OEH Site #¹	Site Name²	Site Type / Features³	MGA Eastings⁴	MGA Northings⁴	Locality Within Abel Mine
38-4-0106	Black Hill Open Site	open artefact site	367555	6365589	Underground Area
38-4-0139	Four Mile Creek 1	open artefact site	368235	6367209	Underground Area
38-4-0140	Four Mile Creek 2	open artefact site	367925	6367069	Underground Area
38-4-0158	Reynolds Rock	open grinding groove site	366355	6364799	Underground Area
38-4-0338	Ironbark 1 ⁵	open artefact site	367708	6369879	Surface Area
38-4-0339	Ironbark 2	open artefact site	369295	6368079	Surface Area
38-4-0341	Black Hill Quarry 1	open artefact site	369345	6364919	Underground Area
38-4-0620	Donaldson Monitoring Site 3 (DMS3)	open artefact site	369195	6368151	Surface Area
38-4-0640	Donaldson Monitoring Site 4 (DMS4) ⁶	open artefact site	368768	6368362	Surface Area
38-4-0665	FMC3 Donaldson Mine ⁷	open grinding groove and artefact site	368405	6369089	Surface Area
38-4-0666	FMC4 Donaldson Mine ⁸	open artefact site	368355	6368839	Surface Area
38-4-0667	FMC5 Donaldson Mine	open artefact site	368605	6368889	Surface Area
38-4-0668	FMC6 Donaldson Mine ⁹	open artefact site	368410	6366250	Underground Area
38-4-0669	FMC7 Donaldson Mine	open artefact site	367705	6366689	Underground Area
38-4-0670	FMC8 Donaldson Mine	scarred tree	367705	6367039	Underground Area
38-4-0672	ISF3 Donaldson Mine ¹⁰	open artefact site	368800	6367810	Surface Area
38-4-0684	ERM site 1-3 ¹¹	open artefact site	368465	6367394	Underground Area
38-4-0685	ERM site 5-6 ¹²	open artefact site	369253	6367574	Underground Area
38-4-0686	ERM site 4 ^{13, 14}	open artefact site	369380	6367761	Underground Area
38-4-958	A20/C ¹⁵	open artefact site	368833	6368100	Surface Area
38-4-959	A20/A ¹⁵	open artefact site	368679	6368637	Surface Area
38-4-979	F1/C ¹⁵	open artefact site	368374	6367077	Underground Area
38-4-980	F1/B ¹⁵	open artefact site	368334	6366790	Underground Area
38-4-981	F1/A ¹⁵	open artefact site	368872	6367219	Underground Area
38-4-984	A17/A ¹⁵	open artefact site	368200	6368906	Surface Area
38-4-985	Abel 1 ¹⁵	open grinding groove site	367823	6364430	Underground Area
38-4-986	Abel 2 ¹⁵	open grinding groove site	367510	6364337	Underground Area
38-4-987	A22/A ¹⁵	open artefact site	368838	6367839	Surface Area
38-4-1008	A21/A ¹⁵	open artefact site	368620	6368650	Surface Area
38-4-1009	F2/A ¹⁵	open artefact site	368921	6367076	Underground Area
38-4-1010	A17/C ¹⁵	open artefact site	368034	6369312	Surface Area
38-4-1011	A15/A ¹⁵	open artefact site	367881	6369777	Surface Area
38-4-1012	A7/A ¹⁵	open artefact site	366839	6370687	Surface Area
38-4-1014	A17/B ¹⁵	open artefact site	368070	6369393	Surface Area
-	CA5 ¹⁶	open artefact site	368440	6366990	Underground Area

OEH Site # ¹	Site Name ²	Site Type / Features ³	MGA Eastings ⁴	MGA Northings ⁴	Locality Within Abel Mine
-	CA6 ¹⁷	open artefact site	368320	6366770	Underground Area
-	CA7 ¹⁸	open artefact site	367720	6366640	Underground Area
38-4-1136	HLA Risk Assessment Isolated Find	open artefact site	368668	6369241	Surface Area
38-4-1216	CTGM PAD1	PAD	371039	6368231	Underground Area
38-4-1287	CTGM1 AT1	open artefact site	371995	6368278	Underground Area
38-4-1288	CTGM2 BL	open artefact site	370364	6368087	Underground Area
38-4-1289	CTGM3 AT3	open artefact site	370646	6368123	Underground Area
38-4-1290	CTGM4 MC	open artefact site	370764	6368013	Underground Area
38-4-1336	Black Hill 1	open artefact site	372098	6368010	Underground Area
38-4-1354	Blue Gum Creek RTA 11 IF	open artefact site	367780	6361896	Underground Area
38-4-1355	Blue Gum Creek RTA 12	open artefact site	367278	6361967	Underground Area
38-4-1356	Blue Gum Creek RTA 13 IF	open artefact site	367608	6361900	Underground Area
38-4-1357	Blue Gum Creek RTA 14 IF	open artefact site	367675	6361884	Underground Area
pending	AMA2/A ¹⁹	open artefact site	368590	6366390	Underground Area
pending	AMA2/B ¹⁹	open artefact site	368703	6366603	Underground Area
pending	AMA2/C ¹⁹	open artefact site	368640	6366511	Underground Area
pending	AMB1/A ¹⁹	open grinding groove site	369242	6364779	Underground Area
pending	AMC2/A ¹⁹	open grinding groove site	367343	6364155	Underground Area
pending	AMC2/B ¹⁹	rock shelter with PAD	367340	6364645	Underground Area
pending	AMC2/C ¹⁹	open grinding groove site	367624	6364425	Underground Area
pending	AMC2/D ¹⁹	scarred tree	367346	6364645	Underground Area
pending	AMC5/A ¹⁹	open artefact site	367641	6364252	Underground Area
pending	AMC10/A ¹⁹	open grinding groove site	366935	6363192	Underground Area
pending	AMC12/A ¹⁹	scarred tree	367576	6363045	Underground Area
pending	AMC16/A ¹⁹	open grinding groove site	367903	6363467	Underground Area
-	Diocese 1 ²⁰	open artefact site	370717	6366454	Underground Area
-	Diocese 2 ²⁰	open artefact site	369524	6367536	Underground Area
-	Diocese 3 ²⁰	open artefact site	370200	6366299	Underground Area

1. OEH Site # - site number as listed on the OEH AHIMS;
2. Site name of visible, spatially separate locations of heritage evidence/Aboriginal objects;
3. Standard archaeological site type description. Note - there are numerous errors and inaccuracies in the OEH AHIMS data with respect to site descriptions, these have been corrected where possible. 'Isolated artefacts' often comprise the only visible evidence of a larger artefact scatter, hence all 'isolated artefacts' and 'artefact scatters' are referred to as 'open artefact occurrences';
4. MGA grid reference - The listed grid reference only refers to a single point within a site - often sites extend over broader areas of land. As noted above, there are numerous inaccuracies in the OEH AHIMS data and the accuracy of grid references not recorded by South East Archaeology has not necessarily been verified;
5. Site 'Ironbark 1' (OEH #38-4-338) was presumably relocated by Kuskie (2006) and recorded as A12/A;
6. Site DMS4 (OEH #38-4-640) was presumably relocated by Kuskie (2006) and recorded as A20/B;

7. Description from the OEH #38-4-0665 site record places this site on the eastern side of Four Mile Creek, although reported grid references place this site on the western side of the creek. Umwelt (2002) also map this site on the western side of the creek;
8. Description from the OEH #38-4-0666 site record places this site 100 metres west of Four Mile Creek, although reported grid references place this site approximately 200 metres west of the creek. Umwelt (2002) also map this site 200 metres west of the creek;
9. Umwelt (2002) map this site 3.5 kilometres east of the reported grid references. It is inferred that the OEH AHIMS grid references are incorrect with interchanging of the easting "6" and "8". New grid references have been created for this site on the basis of previous mapping and reported site descriptions;
10. The OEH site record has incorrect grid references (c. 1 kilometre in error, probably a single digit error). The description from the OEH site record states that the site is under a powerline easement c.30 metres east of Four Mile Creek. The mapping in Umwelt (2002) concurs. This item probably corresponds with A22/A located by Kuskie (2006). New grid references have been created for this site on the basis of previous mapping and reported site descriptions;
11. ERM sites 1, 2 and 3 (probable a single artefact scatter) have the same reported grid references, placing the site on the northern side of John Renshaw Drive. However, ERM (1998) mapping places the sites on the southern side of John Renshaw Drive. The evidence may have been impacted by improvements to John Renshaw Drive;
12. ERM Sites 5 and 6 (probably a single artefact scatter) have the same reported grid references, placing the site on the northern side of John Renshaw Drive. However, ERM (1998) mapping places the sites on the southern side of John Renshaw Drive. The evidence may have been impacted by improvements to John Renshaw Drive;
13. ERM Site 4 reported grid references place the site on the northern side of John Renshaw Drive, although ERM (1998) mapping places the site on the southern side of John Renshaw Drive. The evidence may have been impacted by improvements to John Renshaw Drive;
14. ERM Site 7 may be located within the John Renshaw Drive road reserve and marginally outside of the underground area and has therefore been excluded from this Table. ERM Site 7 reported grid references place the site on the northern side of John Renshaw Drive, although ERM (1998) mapping places the site on the southern side of John Renshaw Drive. The evidence may have been impacted by improvements to John Renshaw Drive;
15. Site identified and recorded by Kuskie (2006);
16. CA5 was recorded by Umwelt (2001) but is not registered on the OEH AHIMS. It may correspond with F1/C located by Kuskie (2006). Umwelt (2001) moved artefacts from sites CA5, CA6 and CA7 0.5 metres off the track on which they were situated. New grid references have been created for this site on the basis of previous mapping and reported site descriptions;
17. CA6 was recorded by Umwelt (2001) but is not registered on the OEH AHIMS. It may correspond with F1/B located by Kuskie (2006). Umwelt (2001) moved artefacts from sites CA5, CA6 and CA7 0.5 metres off the track on which they were situated. New grid references have been created for this site on the basis of previous mapping and reported site descriptions;
18. CA7 was recorded by Umwelt (2001) but is not registered on the OEH AHIMS. It is located close to site #38-4-0669. Umwelt (2001) moved artefacts from sites CA5, CA6 and CA7 0.5 metres off the track on which they were situated. New grid references have been created for this site on the basis of previous mapping and reported site descriptions;
19. Site identified and recorded by South East Archaeology (Kuskie 2012) during survey for Abel Modification;
20. 'Diocese 1, 2 and 3' were recorded by Besant (2003) but are not registered on the OEH AHIMS.

Additional Notes: While the OEH grid references place site #38-4-0552 within the underground area, descriptions from the site card place this site on the northern side of John Renshaw Drive outside of the underground area and it has therefore been omitted from this table. There are potentially other errors associated with the OEH AHIMS data for sites not recorded by South East Archaeology. Sites of cultural significance that do not contain Aboriginal objects are not listed within this Table.

REFERENCES:

ERM Mitchell McCotter Pty Ltd 1998

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Kuskie, Peter 2006

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Draft for Consultation: Aboriginal Archaeological Assessment: Bushland Conservation Areas, Donaldson Mine, Beresfield. Unpublished report to Donaldson Coal Pty Ltd.

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Table 2 Monitoring Datum Points Within Donaldson Bushland Conservation Areas

Datum Point #	Datum Point Location (AMG references)	Justification ¹
1	368585E 6368203N	Located on a lower slope, within 50 metres of Four Mile Creek, and adjacent to a confluence. This is an archaeologically sensitive area and is relatively undisturbed. This datum will provide information on any human or natural impacts which may be affecting such locations in the conservation areas.
2	368778E 6368204N	Located on an upper slope. This area is relatively undisturbed and is within 50 metres of the active mine area. This datum will provide information regarding the impact of mining operations on adjacent conservation areas.
3	368089E 6366977N	Located on the bank of Four Mile Creek. This datum is the location of an artefact scatter recorded by Brayshaw in 1985 (38-4-139). The site could not be relocated during the recent survey (Umwelt 2001), probably due to dense vegetation cover and low visibility. This datum will provide information on any human or natural impacts which may be affecting such locations in the conservation areas.
4	368513E 6366656N	Located on a mid slope typical of this environment. This datum will provide information on any human or natural impacts which may be affecting such locations in the conservation areas.
5	370699E 6368184N	Located on a vehicle track on a mid slope at site DMS5. This is a typical site location within the Bushland Conservation Areas. This datum will provide information on any human or natural impacts which may be affecting Aboriginal cultural heritage sites and/or their context.
6	370704E 6369768N	Located on a stream channel bank, within 100 metres of a mine impact area. This is an archaeologically sensitive area and is relatively undisturbed. This datum will provide information on any human or natural impacts which may be affecting such locations in the conservation areas.
7	370837E 6370639N	Located on a vehicle track on a lower slope. This datum will provide information on any human or natural impacts which may be affecting such locations in the conservation areas.

¹ Umwelt (Australia) Pty Ltd 2005 Aboriginal Sites Management Plan, Year 5: Donaldson Open Cut Coal Mine, Beresfield near Newcastle.

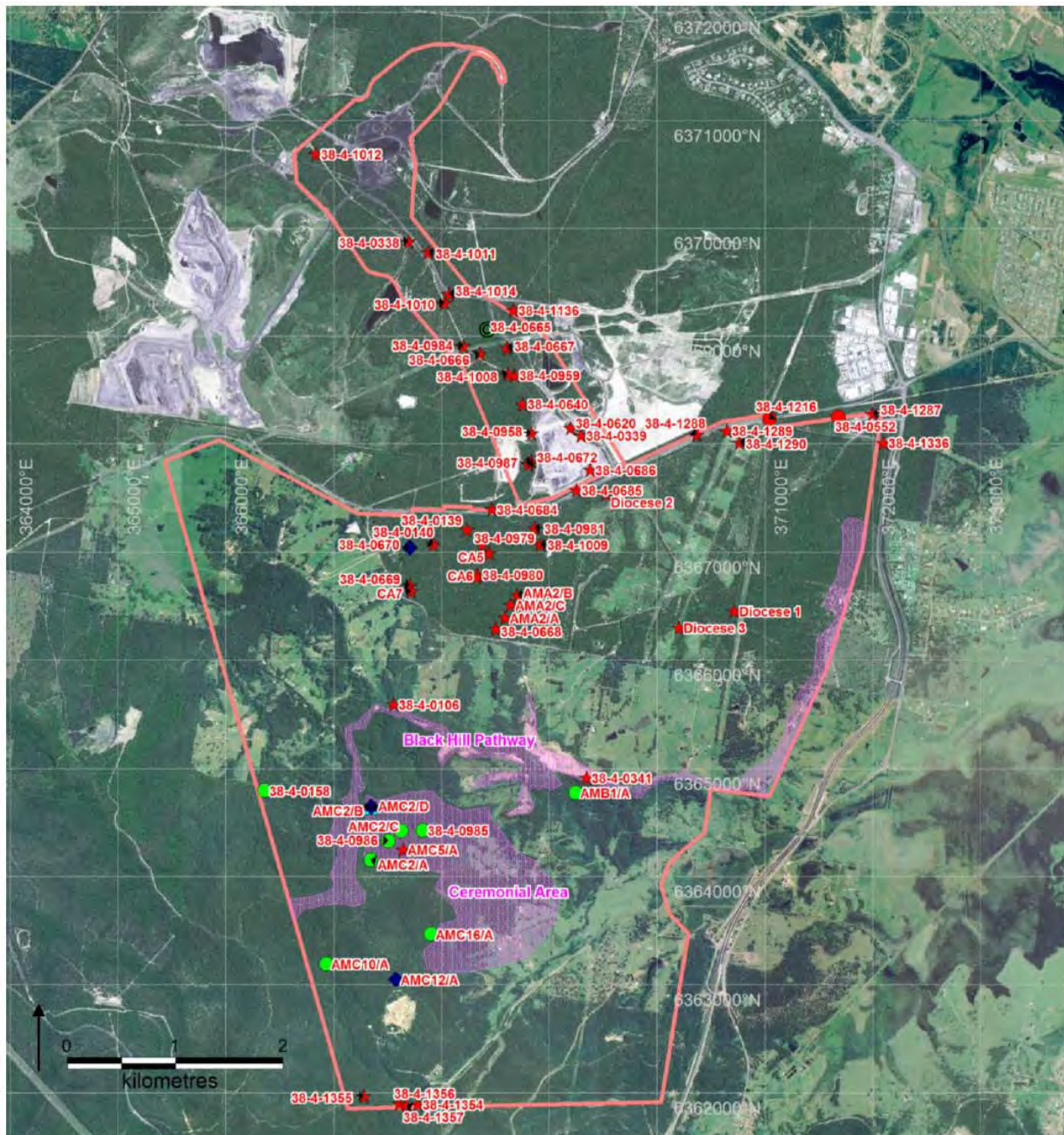
Table 3 Sample Of Aboriginal Sites For Monitoring Within The Abel Underground Area For Which Subsidence-Related Impacts Are Not Expected To Occur

Datum Point #	Site Name/Number	Datum Point Location (MGA references)	Justification
8	38-4-0140 (Four Mile Creek 2)	367925E 6367069N	Artefact scatter located on margin of Four Mile Creek. Assess impacts of subsidence on erosion in the drainage depression and any consequent impacts on heritage.
9	F1/C	368374E 6367077N	Artefact scatter located on vehicle track on simple slope. Assess impacts of subsidence on the simple slope and vehicle track and any consequent impacts on heritage.
10	38-4-0670 (FMC8)	367705E 6367039N	Scarred tree site. Assess impacts of subsidence on tree.

Table 4 Aboriginal Sites For Monitoring Within The Abel and Tasman Underground Areas For Which Subsidence-Related Impacts May Occur

Datum Point #	Site Name/Number	Datum Point Location (MGA references)	Justification
11	38-4-0158 (Reynolds Rock)	366355E 6364799N	Grinding groove site. Assess impacts of subsidence on grooves and their context.
12	Abel 1	367823E 6364430N	Grinding groove site. Assess impacts of subsidence on grooves and their context.
13	Abel 2	367510E 6364337N	Grinding groove site. Assess impacts of subsidence on grooves and their context.
15	AMB1/A	369242E 6364779N	Grinding groove site. Assess impacts of subsidence on grooves and their context.
16	AMC2/A	367343E 6364155N	Grinding groove site. Assess impacts of subsidence on grooves and their context.
17	AMC2/B	367340E 6364645N	Rock shelter with PAD. Assess impacts of subsidence on shelter.
18	AMC2/C	367624E 6364425N	Grinding groove site. Assess impacts of subsidence on grooves and their context.
19	AMC10/A	366935E 6363192N	Grinding groove site. Assess impacts of subsidence on grooves and their context.
20	AMC16/A	3679036363467	Grinding groove site. Assess impacts of subsidence on grooves and their context.

Figure 1 Approximate Location Of Aboriginal Sites Recorded Within The Abel Project Area



- Key:**
- ★ open artefact site
 - open grinding groove and artefact site
 - open grinding groove site
 - Potential Archaeological Deposit (PAD)
 - ▲ rock shelter with PAD
 - ◆ scarred tree
 - area of cultural sensitivity
 - ▭ Abel Underground Mine (Project Area to which AHMP applies)