

Our ref: HMS ID 12487

Melanie Hollis
Principal Planning Officer
Department of Planning, Housing and Infrastructure
melanie.hollis@planning.nsw.gov.au

Letter uploaded to the Major Projects Planning Portal

Advice on Response to Submission – State Significant Development

Proposal: Metropolitan Coal Mine Modification 4

Major Project reference: MP08_0149-Mod-4

Received: 11 November 2025

Dear Melanie,

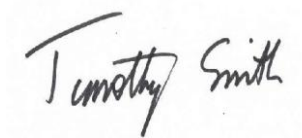
Thank you for your referral seeking advice on the above State Significant Development Response to Submissions. Thank you for the continued opportunity to comment on the project.

Heritage NSW previously provided comment on the Modification Report, raising 17 comments and queries focused on compliance with existing Conditions of Consent, requesting additional consultation information, requiring additional information on the archaeological assessment, and clarification on impacts and assigned significance of sites (advice dated 18 August 2025; Ref: HMS 11294).

Responses to these comments were provided by Peabody in Section 4.1.3 of the Submissions Report. The Submissions Report provided adequate responses to several comments, namely early work impacts, auxiliary infrastructure impacts and relinquished mining areas, however responses to most comments have not been adequately addressed. As such, Heritage NSW recommends that the Department of Planning, Housing and Infrastructure request the applicant to address the detailed advice and outstanding matters outlined in **Attachment A** prior to considering determination.

Please note that the comments provided relate only to Aboriginal cultural heritage regulation matters. If you have any questions about this correspondence, please contact Corey O'Driscoll, Senior Assessments Officer at Heritage NSW on (02) 9873 8500 or heritagemailbox@environment.nsw.gov.au

Yours sincerely,

A handwritten signature in black ink that reads "Timothy Smith". The signature is written in a cursive style, with the first name "Timothy" and the last name "Smith" clearly legible.

Tim Smith OAM

Director - Assessments Branch

Heritage NSW - Department of Climate Change, Energy, the Environment and Water

As Delegate under *National Parks and Wildlife Act 1974*

26 November 2025

Attachment A – Detailed Aboriginal cultural heritage advice

Compliance with Performance Measure

1. Our previous advice on the Modification Report raised concerns regarding the approach adopted by Metropolitan Coal to assess subsidence related impacts on Aboriginal cultural heritage (ACH) and the implications this miscalculation may have on meeting ACH performance measures under the Conditions of Consent. In response, Peabody stated their disagreement with this assessment, outlining that they felt it did not reflect approved performance indicators and definitions of adverse impact developed in consultation with the Registered Aboriginal Parties (RAPs), Heritage NSW, and Department of Planning, Housing and Infrastructure (DPHI), and outlined in the Aboriginal Cultural Heritage Assessment Report (ACHAR) and Submissions Report. These definitions limit subsidence ‘impacts’ to overhang collapse and direct damage to art or grinding grooves, with all other modifications classified as a ‘change’ in site condition.

Heritage NSW acknowledges that we have provided prior advice on Heritage Management Plans (HMPs) for the existing longwalls, with the most recent advice provided in July 2024. We note that this HMP reiterated the ACH performance measure and furthered this by committing to limiting harm to <7% of ACH sites.

Throughout 2025, Heritage NSW has refined its position on what constitutes subsidence related impacts to Aboriginal objects following investigations into subsidence related damage to ACH across NSW. Advice consistent with that provided in relation to the current Modification has also been provided by Heritage NSW on other underground mining projects in NSW. Following our previous advice, Heritage NSW requested Niche Environment and Heritage (Niche) undertake a review of subsidence related harm across the southern coalfields for the Dendrobium Coal Mine. This analysis outlined the level of subsidence damage by individual mines and the results have not been adequately considered in the Modification Report nor Submissions Report for the current proposal.

Heritage NSW maintains its position that subsidence related harm to ACH includes any damage to rockshelters and potential archaeological deposit (PAD) when in association with other Aboriginal objects demonstrating the habitation of the structure and/or area by Aboriginal people in the past. This is consistent with habitation structures being recognised as an Aboriginal site feature on the Aboriginal Heritage Information Management System (AHIMS) and with the definition of ‘Types of Sites or types of features’ as provided in Appendix A of the *Code of Practice for Archaeological Investigations of Aboriginal Objects in New South Wales* (‘the Code of Practice’; DECCW 2010). This is pertinent to the separation of ‘impact’ and ‘change’ currently employed under the HMPs for Metropolitan Coal as those sites that have experienced a subsidence related ‘change in condition’ should be considered impacted. This is especially true for Aboriginal sites containing multiple features (i.e., PAD, art, grinding grooves) where the likelihood of potential harm is increased but largely left to chance whether any subsidence damage intersects with the multiple features. We further note that current definitions employed by Metropolitan Coal under HMPs, which separate ‘impact’ and ‘change’ do not adequately account for the long-term effects that the subsidence related change may have on the shelter condition and the other Aboriginal objects contained within (i.e. indirect impacts).

Heritage NSW therefore reiterates its recommendation that DPHI seek legal advice on the existing and proposed impacts to ACH related to subsidence.

Further, on the probability of subsidence related impact to the 25 sites within and adjacent to the project area, Heritage NSW requires additional information on the existing impact to ACH sites across Metropolitan Coal. While Metropolitan Coal employs narrower longwall panels to limit subsidence across the mine area, subsidence related impacts are proposed for up to 25 ACH sites within the Modification area. Following a review of the available predicted subsidence for sites at Metropolitan Coal, of the 13 sites with subsidence related impacts, nine sites had available data for vertical subsidence predictions. These vertical subsidence predictions varied from <20 mm to 1126 mm, indicating that even sites considered low-risk may be subject to subsidence related impacts. This additional information must:

- a. Include site-specific probabilities of subsidence impacts based on individual site conditions.
- b. Be prepared by an appropriately qualified and experienced mine engineer.
- c. Incorporate site inspections where necessary to validate predictions.

Peabody's response also outlined that of the 25 sites within the Modification Area, ten are already approved for mining under existing approvals. However, the Modification application would supersede any existing approvals and, as the Modification Report outlines, a number of sites approved for mining are contained within the relinquishment areas, demonstrating that existing approvals do not necessarily result in ACH sites being undermined.

Archaeological Assessment

2. Heritage NSW remains concerned about the limited survey coverage within the Modification Area. Previous surveys cover only 9% of the Modification Area, significantly less than comparable underground mining projects reviewed by Heritage NSW, such as Moolarben UG4, Moolarben UG2, Maxwell Underground, and Wambo where survey coverage ranges from 50% to 87%. Similar concerns regarding the adequacy of survey and potential for undiscovered Aboriginal sites were raised by the RAPs during consultation and by Wollongong City Council (WCC) during public exhibition. In response to RAP queries on survey coverage, Niche stated that these issues had been addressed through consultation and finalised methodology. However, as this comment has subsequently been raised during public exhibition and several times during consultation, Heritage NSW believes that RAP concerns about survey coverage have not been adequately addressed.

In response to these concerns, the Submissions Report argued that the survey coverage was adequate as it targeted those areas most likely to contain ACH and that the dense vegetation and steep cliffs would have also limited past occupation. While the ACHAR and Submissions Report state that areas of existing survey undertaken for existing approvals are adequate, the requested track log information was not provided as the surveys were more than 15 years old and it remains unclear of the extent of survey coverage. We further note that current vegetation density may or may not reflect past conditions and cannot reliably be used to argue for limiting past occupation without analysis and supporting evidence.

Further, the Submissions Report outlines that the unsurveyed areas in the western and northern portion of the project area are unsafe and of low archaeological potential owing to slopes of 18-45 degrees. However, slope analysis in the ACHAR shows that sites are expected on slopes between 5.45-30 degrees, indicating that the unsurveyed areas have the potential to contain further ACH sites.

As current survey efforts are unlikely to adequately capture ACH within the Modification Area, Heritage NSW reiterates our request for:

- a. Provision of additional mapping of:
 - i. Areas deemed inaccessible /unsafe.
 - ii. Areas where surveys intersected with upland swamps.
- b. The completion of additional survey in safe areas, and/or consideration of the use of alternative methods of inspection (e.g., drone followed by spot surveys) for high-potential areas as identified based on existing survey and slope analysis.
- c. Provision of survey track logs and contour mapping (and other relevant contextual information) at appropriate scales to clearly demonstrate that survey coverage adequately assessed those areas likely to contained ACH. We note that survey track logs may be provided as shapefiles for review.

Significance Assessment

3. Heritage NSW previously requested additional information on the nature of the grinding groove sites within the Modification Area. In response, Peabody provided a table of the grinding groove sites and details of contextual information from their recording, along with clarification of the 50-groove threshold for more than low scientific significance. However, the information provided was not comprehensive enough as required to adequately address our comments.

Heritage NSW requests that the applicant undertake a detailed analysis of the grinding grooves sites across the southern coalfields, consistent with the approach used by Niche for the Dendrobium Coal Mine. This analysis must explain the basis for the 50-groove minimum threshold employed and how it compares to regional grinding groove site patterns to support the assigned significance ratings.

4. The Submissions Report outlines that no changes have been made to the significance assessment of any site. Heritage NSW, however, remains concerned about the assigned scientific significance of a number of ACH sites across the Modification area, particularly multi-component rockshelter and art sites (some with PAD) that have been rated the same as *ex-situ* isolated artefacts. Further, the lack of testing of PADs across the southern coal fields means there is potential for the scientific significance of sites to be greater than currently assigned. Specific examples include:
 - Woronora Reservoir Northern Trail 5: Rated moderate scientific significance despite a mix of rare motifs in excellent condition and noted conservation value.
 - Woronora Reservoir Northern Trail 23 and 25: Shelter sites, with art, artefacts, and PAD that, despite having multiple forms of habitation evidence, are deemed to be of low significance.
 - There is little discussion on the potential for each site with PAD to contain archaeological material worthy of conservation based on site specific conditions.

Further information is requested to ensure our concerns on the significance of sites are adequately addressed. Specifically, we request:

- a. Further information on the significance of sites within the Modification Area, noting the unknown potential of sites with areas of untested PAD, those sites noted above, and

consideration for the cultural landscape that the sites are situated in and its influence on the local and regional significance of sites and site complexes.

- b. The request for consideration of the cultural landscape was included in our previous comments and as was the request to better integrate Illawarra Local Aboriginal Land Councils (LALC) comments in Section 8.4.1 of the ACHAR. These comments require addressing with a detailed assessment of the local and regional area, comparison of sites, and further discussion on each site's significance based on their features.
 - c. Consideration should be given to undertaking test excavations, in consultation with the RAPs, on a sample of rockshelter sites with PAD to gain a better understanding of significance of these sites.
5. Heritage NSW requested greater consideration of the cumulative impact to ACH across the southern coalfields. In response, Peabody argue that Section 8.4 of the ACHAR has considered the potential tangible and intangible cumulative impacts of the Modification, including consideration of the principles of Ecologically Sustainable Development. Further, in the Submissions Report, Peabody argue that the expected impacts align with mining to date, that based on the subsidence predictions impacts are assessed as unlikely, and the relinquishment of approved mining areas has resulted in reduced impacts to 13 sites. However, as noted above, additional information is required on the subsidence predictions based on individual site conditions to confirm the expectations and as outlined in the Submissions Report, the relinquishment does not act as an offset for other impacts to ACH and should not be taken into account. As noted above, while ten sites are currently approved for impact within the Modification Area, this application would replace any existing approval and may result in varied outcomes for ACH sites.
- Heritage NSW reiterates that the cumulative impact and increase from 144 ACH sites within the mining area to 173 (increase of ~20%) has not currently been adequately assessed. Additional discussion and justification are required on the matter to ensure that the principles of Ecologically Sustainable Development and Precautionary Principle are adhered to.
6. The current application allows for unmitigated impact at up to 25 ACH sites with any possible remediation actions to be outlined within a Trigger Action Response Plan (TARP). This approach does not conform with the Precautionary Principle where actions are retrospective rather than pre-emptive. As there is credible threat to a number of ACH sites, we request that pre-emptive measures for avoidance be discussed, and possible remediation actions outlined to ensure that they have been adequately consideration prior to any potential impact to ACH sites.

Management and Mitigation Measures

7. Heritage NSW requested additional information on the baseline recording methodology and advocates for updates to the baseline recordings. The Submissions Report provided additional information on the baseline methodology and noted that any changes to the methodology would be considered post-approval and in consultation with the RAPs. However, the response did not commit to any changes in the baseline recording methodology. To ensure that Heritage NSW can advise the Department on whether the monitoring of sites is adequate prior to considering any project approval, commitments on updates to the methodology are required to align with best practice. It is recommended that:
- a. Baseline assessment be upgraded to reflect current best practice and modern standards. While recording at an Aboriginal Heritage Information Management System (AHIMS) site

card level is sufficient for generalised recording of a site, assessment of the impact via subsidence, especially as project approvals require a limited amount of impact, should be undertaken at a greater level of accuracy.

- b. Methods such as photogrammetry, D-stretch, vibration monitoring, and 3D modelling be included in the baseline assessment. Increased accuracy in recording would aid Metropolitan Coal in determining whether the predictive subsidence at each site occurred or whether less/greater levels occurred.
8. Heritage NSW outlined that updated AHIMS site card recording are required for a number of sites to include latest baseline recording and to ensure they comply with Requirements 18-24 of the Code of Practice. In response, Peabody noted that all site cards were completed by Niche in compliance with the Code of Practice and review is being undertaken for recordings in the Modification Area. However, following our review of AHIMS site cards, a number of existing site cards have been found to not comply with the Code of Practice, namely those relating to Requirement 22 (Recording rock art). **We therefore reiterate that all site cards must be updated to comply with the Code of Practice, noting that additional site visits may be required to ensure all necessary recordings are completed to the correct standard.**
9. Please confirm whether Woronora Reservoir Northern Trail 24 is within the project area as Heritage NSW notes that the site is incorrectly plotted on AHIMS.

Consultation

10. Heritage NSW queried the consultation undertaken with the RAPs as part of the Modification application. In response, an additional copy of Appendix B (Consultation Log) of the ACHAR was provided to Heritage NSW for review, while the Submissions Report states that all RAP concerns were addressed during ACHAR consultation. As noted above, Heritage NSW continues to have concerns with the extent of survey coverage, reactive rather than pre-emptive harm mitigation, lack of Cultural Values Assessment, and risk of a greater number of sites across the project area, concerns also raised by Illawarra Local Aboriginal Land Council (LALC) and Cubbitch Barta. Following review of consultation documentation, Heritage NSW reiterates that many of the concerns raised by the RAPs have not been adequately considered and responded to.

For example, Appendix B of the ACHAR does not include email responses to Cubbitch Barta during methodology review and Illawarra LALC following draft ACHAR. Rather, responses to these comments were addressed in the ACHAR, where it appears that Illawarra LALC did not receive a formal response until the final ACHAR was submitted to them. The consultation log does not include correspondence evidence for the supply of the final ACHAR to the RAPs, nor evidence that they were provided a project update during public exhibition.

On the response to Cubbitch Barta, Heritage NSW notes that consultation timeframes are minimum timeframes and all comments received must be adequately addressed. Additionally, it is unclear when the request for a physical copy of the methodology was met, and adequate time should be given for the posting and review of a physical copy were required. The comments on survey remained relevant following finalisation of the survey methodology as several stages of survey were undertaken and similar comments were raised during meetings and formal responses by other RAPs.

Heritage NSW requires the following items to address concerns with consultation undertaken for the Modification application:

- a. Please clarify if there were formal email responses were provided to Cubbitch Barta and Illawarra LALC and provide consultation documents for the supply of the final ACHAR to RAPs.
- b. Heritage NSW requests that a Cultural Values Assessment is undertaken to ensure that the cultural values associated with the project area and landscape are adequately captured, recorded, and assessed.
- c. As per the Modification Application comments, please ensure that the comments and concerns by the RAPs are adequately addressed throughout the ACHAR, including in assessing significance, undertaking additional survey, and consideration for additional sites being present within the project area. Where required to fully address RAP concerns, additional consultation with the RAPs must be undertaken.