

INTEGRA UNDERGROUND

GLENCORE



Aboriginal Heritage Management Plan

Document Number: INTUG-263795162-23

Status: Approved

Version: 3.0

Effective: 10 September 2018

Review: 10 September 2021

Owner: Environment and Community Manager

Table of Contents

1	Background.....	4
1.1	Introduction	4
1.2	Objectives	4
1.3	Requirements of the Plan.....	5
1.3.1	Statutory Requirements	5
1.3.2	GCAA Requirements.....	7
1.3.3	Extraction Plan Guideline Requirements	7
1.3.4	Statement of Commitments	9
2	Consultation.....	12
2.1	Consultation with External Stakeholders	12
2.2	Ongoing community consultation and involvement	12
2.3	Access to Aboriginal sites and stored Aboriginal objects	13
3	Existing Environment.....	15
3.1	Previous investigations	15
3.2	Cultural values	15
3.3	Overview of Aboriginal Sites	16
3.4	Potential Impacts.....	19
3.4.1	Overview	19
3.4.2	Installation of Infrastructure	20
3.4.3	Subsidence.....	21
4	Aboriginal Heritage Protection.....	23
4.1	Measures to Protect Aboriginal Sites.....	23
4.2	Bettys Creek Habitat Management Area	23
4.2.1	Erosion Control	23
4.2.2	Bushfire Hazard Reduction	23
4.2.3	Exclusion of Stock.....	24
4.2.4	Weed Control	24
4.3	Site monitoring	24
4.3.1	Photographic monitoring	24
4.3.2	Site condition monitoring.....	25
4.4	Artefact records and storage facility.....	25
5	Implementation.....	26
5.1	Management Controls.....	26
5.1.1	Ground Disturbance Permit	27
5.2	Aboriginal Site Salvage	27
5.2.1	Site Collection	27
5.2.2	Site Excavation	28
5.3	Chance Finds	28
5.3.1	Aboriginal Objects	28
5.3.2	Human Remains	28
5.4	Training and Communication	29

5.4.1	Obligation to Protect Aboriginal Heritage	29
5.4.2	Generic Induction Training.....	30
5.5	Contemporary Best Practice	30
6	Measurement and Evaluation	31
7	Record Keeping and Reporting Requirements	32
7.1	Project reports	32
7.2	Statutory reporting requirements	32
7.2.1	Discovery of Aboriginal objects.....	32
7.2.2	Care and Control Permit application.....	32
7.2.3	Reporting impact to Aboriginal sites	32
7.2.4	Reporting of AHMP non-compliance incident.....	32
8	Review and Improvement	33
8.1	Plan Review	33
8.2	Contingency Plan	33
9	Accountabilities.....	34
10	Document Information	35
10.1	Related Documents.....	35
10.2	Reference Information.....	35
10.3	Change Information.....	36
	Appendix A - Endorsement of Appointment of Consultant.....	37
	Appendix B – External Consultation Records.....	38
	Appendix C – AHMP Approval	41
	Appendix D – Trigger Action Response Plan	46

1 Background

1.1 Introduction

This Aboriginal Heritage Management Plan (AHMP) is one of a series of Environmental Management Plans that together form the Environmental Management System for the Glencore Integra Underground Mine, herein referred to as Integra Underground.

The Integra Underground is approximately 12 km north-west of Singleton, in the Singleton Local Government Area (see **Figure 1**). Underground mining operations are approved at a maximum extraction rate of 4.5 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal until 31 December 2035 under Project Approval PA 08_0101 (as modified). This approval allows longwall mining of the Hebden, Barrett and Middle Liddell seams to produce high quality, semi-hard coking coal for export.

The Integra Underground was formerly a part of the larger Integra Mine Complex. This complex comprised both underground and open cut operations and operated under a single project approval instrument which combined the project approvals for the Integra Underground (PA 08_0101) and Integra Open Cut (PA 08_0102). In late 2015, HV Coking Coal Pty Ltd (HVCC) (a 100% Glencore-owned company) acquired all assets associated with the Integra Underground, which had been placed in care and maintenance in May 2014. Bloomfield Collieries Pty Limited (Bloomfield) purchased the open cut and surface facilities (subsequently re-named the Rix's Creek North Mine).

Following the separate sale of the underground and open cut, the combined project approval was modified to separate the approvals. Following the separation of the approvals Integra Underground operated under PA 08_0101 as modified.

HVCC recommenced underground operations in 2017, with development resuming in February 2017 and longwall extraction resuming in May 2017 in accordance with the Extraction Plan as required under Condition 20 of Schedule 3 of PA 08_0101. An application for a further modification to PA 08_0101 (MOD 7) and accompanying Environmental Assessment (EA) was lodged with the Department of Planning and Environment (DPE) in June 2017. Subsequently, approval was granted by DPE on 15 September 2017. The modification application was made to facilitate the construction of a water pipeline from Integra Underground to the adjacent Mt Owen Complex and the subsequent use of the pipeline to transfer mine water. The modification enables surplus mine water collected at Integra Underground to be managed at the Mt Owen Complex and within Glencore's Greater Ravensworth Area Water Sharing Scheme (GRAWSS).

An application for Modification 8 (MOD 8) to PA 08_0101 and accompanying EA was lodged with the DPE in November 2017. Approval was granted by DPE on 16 April 2018. MOD 8 allows continuation of longwall mining of the Middle Liddell Seam further to the north of the currently approved longwall panels, along with the construction and operation of ancillary surface infrastructure required to support the mining activities.

1.2 Objectives

This Aboriginal Heritage Management Plan (AHMP) has been developed to satisfy Schedule 3 Conditions 20(g) and 33 of PA 08_0101, and to ensure Aboriginal cultural heritage is managed in accordance with relevant legislative requirements, and in consultation with the Aboriginal community.

Accordingly, this plan:

- provides a system of identifying and protecting items and areas of cultural value;
- establishes an ongoing Aboriginal stakeholder consultation process;
- describes the manner in which Aboriginal sites will be recorded, salvaged or monitored; and
- describes the measures to be implemented if any unexpected finds are discovered.

The Aboriginal sites are listed in this AHMP. The reader is referred to the original Environmental Assessment (EA) for the Integra Underground Coal Project (ERM 2009a) for further details of Aboriginal site characteristics as well as general archaeological and environmental background information.

The Mt Owen Open Cut Aboriginal Cultural Heritage Management Plan (ACHMP) documents procedures for the management of Aboriginal cultural heritage values within the approval area for the Mt Owen Continued Operations Project (SSD 5850) and the Glendell Mine (DA 80/952).

The area covered by the Mt Owen ACHMP overlaps with the Integra Underground project area and the area covered by this AHMP. Consequently, a collaborative approach between Integra Underground and the Mt Owen Complex to the management of Aboriginal heritage is adopted.

The management of non-Aboriginal cultural heritage is addressed in the Historical Heritage Management Plan (HHMP). Together, the AHMP and the HHMP form the overall Heritage Management Plan for Integra Underground.

1.3 Requirements of the Plan

1.3.1 Statutory Requirements

PA 08_0101 stipulates requirements related to this AHMP. These are summarised in **Table 1-1** below.

Table 1-1 – Relevant Development Consent Conditions

PA 08_0101 Condition	Project Approval Condition Description	Relevant Section of Plan
Schedule 3, Condition 32D	Unless otherwise authorised under the <i>National Parks and Wildlife Act 1974</i> , the Proponent must ensure that the development does not cause any direct or indirect impact on identified Aboriginal heritage items located outside the approved disturbance area of the development.	Section 4
Schedule 3, Condition 33	The proponent must prepare a Heritage Management Plan for the project to the satisfaction of the Secretary. This Plan must:	This plan
	a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;	This AHMP has been prepared by Pamela Kottaras of EMM Consulting in accordance with correspondence from DPE dated 19 December 2016 (refer to Appendix A). Updates have been completed to this plan in 2018 based on MOD 8.
	b) be prepared in consultation with OEH, the Aboriginal community, the Heritage Division, Council, local historical organisations and any relevant landowners;	Section 2 and Appendix B
	c) be submitted to the Secretary for approval;	Appendix C
	d) include the following for the management of Aboriginal cultural heritage on site: - details regarding the measures to be implemented to avoid (as far as practicable) and manage Aboriginal cultural heritage on site; - an Aboriginal cultural heritage education program, to be developed in consultation with all relevant registered Aboriginal parties, and used for the induction of all personnel and contractors involved in construction or surface disturbance activities; - methods for recording, salvaging and/or managing all Aboriginal sites, objects and deposits that are to be destroyed within the	Section 4 Section 5.4.2 Section 5 Section 5 and 6 Sections 4.4 and 5.5

PA 08_0101 Condition	Project Approval Condition Description	Relevant Section of Plan
	project area; - methods for conserving, managing and monitoring all Aboriginal sites, objects and deposits that are to be protected within the project area; - maintaining and managing access to Aboriginal sites, objects and deposits by the Aboriginal community, including provision of an appropriate Keeping Place; - managing the discovery of any new Aboriginal sites, objects or skeletal remains identified during the project; and - ongoing consultation and involvement of the Aboriginal community in the conservation and management of Aboriginal cultural heritage values on the site.	Section 5.3 Section 2
	e) include programs/procedures for the following, in accordance with the applicable guidelines of the Heritage Division: - archival recording of any other heritage items to be destroyed by the project; - conserving, managing, monitoring, and where appropriate, relocating any non-Aboriginal sites, objects and deposits on the site; - interpreting the findings of the additional heritage or archaeological investigations carried out on the site; and - managing the discovery of any new non-Aboriginal objects or skeletal remains identified during the project.	This condition is not relevant to the AHMP and has been addressed as part of the Integra Underground HHMP. (Refer to: www.glencore.com.au/IntegraUnderground)
	The proponent must implement the approved management Plan as approved from time to time by the Secretary.	This plan
Schedule 5, Condition 2	The Proponent must ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:	This plan
	a) detailed baseline data;	Section 3
	b) a description of: - the relevant statutory requirements (including any relevant approval, licence or lease conditions); - any relevant limits or performance measures/criteria; and - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures; and	Section 1.3
	c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria	Sections 4 and 5
	d) a program to monitor and report on the: - impacts and environmental performance of the project; and	Section 6

PA 08_0101 Condition	Project Approval Condition Description	Relevant Section of Plan
	- effectiveness of any managements measures (see (c) above);	
	e) a contingency plan to manage any unpredicted impacts and their consequences; and	Section 8.2 and Appendix D (TARP)
	f) a program to investigate and implement ways to improve the environmental performance of the project over time;	Section 8
	g) a program to regularly review management practices to align with contemporary best practice industry standards;	Section 5.5
	h) a protocol for managing and reporting any: - incidents; - complaints; - non-compliances with the conditions of this approval and statutory requirements; and - exceedances of the impact assessment criteria and/or performance criteria; and	Section 7.4.2
	i) a protocol for periodic review of the plan.	Section 8

1.3.2 GCAA Requirements

This AHMP has been prepared in accordance with Glencore Coal Assets Australia's (GCAA) 11.21 *Aboriginal Cultural Heritage – NSW Protocol*, which outlines GCAA's policy of engagement with the Aboriginal community and for reporting and conservation of Aboriginal cultural heritage. Consultation is discussed further in **Section 2**.

A set of guiding principles has been developed which describe how GCAA will engage with Aboriginal people to pursue mutually beneficial outcomes. The right of Aboriginal peoples to free, prior and informed consent is recognised, and engagement with these communities is based on principles of good faith negotiation and relevant legislation as outlined in the GCAA document *Human Rights and Our People*.

Systematic engagement with Aboriginal peoples' representative bodies as well as individual members of Aboriginal communities is undertaken in a way that is consistent with the GCAA *Community and Stakeholder Engagement Standard* (see **Section 2**) and the International Council on Mining & Metals *Position Statement on Indigenous Peoples and Free, Prior and Informed Consent*.

1.3.3 Extraction Plan Guideline Requirements

The DPE and the former NSW Department of Industry – Division of Resources and Energy (now known as the Resources Regulator)) prepared guidelines for the preparation of extraction plans required under conditions of development consent, project approval and mining leases for underground coal mining. These guidelines must be applied in the preparation of any Extraction Plan required under conditions of development consent granted under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) for underground coal mining in NSW.

The Extraction Plan must include a number of key component plans, including a Heritage Management Plan, which are to follow the structure outlined in **Table 1-2** below. This AHMP has also been prepared to meet these requirements, as shown in the table.

Table 1-2 – Extraction Plan Guideline Requirements

Extraction Plan Guideline Requirement	Relevant Section of this AHMP
Overview of all landscape features, heritage sites, environmental values, built features or other values to be managed under the component plan;	Section 3
Setting out all performance measures included in the development consent relevant to the features or values to be managed under the component plan;	Section 1.3
Setting out clear objectives to ensure the delivery of the performance measures and all other relevant statutory requirements (including relevant safety legislation);	Section 1.2
Proposing performance indicators to establish compliance with these performance measures and statutory requirements;	Section 6
Describing the landscape features, heritage sites and environmental values to be managed under the component plan, and their significance. It should be noted that a full description of such features, sites and values would commonly have been provided and considered in a recent environmental impact assessment. Consequently, this section can be relatively brief, and focus on the presentation of appropriate figures and/or graphical plans;	Section 3
Fully describing all currently-predicted subsidence impacts and environmental consequences relevant to the features, sites and values to be managed under the component plan;	Section 3.4.2
Fully describing all measures planned to remediate these impacts and/or consequences, including any measures proposed to ensure that impacts and/or consequences comply with performance measures and/or the Applicant's commitments;	Section 5
Describing the existing baseline monitoring network and the current baseline monitoring results, including pre-subsidence photographic surveys of key landscape features and key heritage sites which may be subject to significant subsidence impacts (such as significant watercourses, swamps and Aboriginal heritage sites);	Section 3
Fully describing the proposed monitoring of subsidence impacts and environmental consequences;	Section 6
Describing the proposed monitoring of the success of remediation measures following implementation;	Section 6
Fully describing adaptive management proposed to avoid repetition of unpredicted subsidence impacts and/or environmental consequences;	TARP is provided in Appendix D
Fully describing contingency plans proposed to prevent, mitigate or remediate subsidence impacts and/or environmental consequences, which substantially exceed predictions or which exceed performance measures;	Section 5
Listing responsibilities for implementation of the plan; and	Section 9
An attached Trigger, Action, Response Plan (effectively a tabular summary of the above).	Attached in Appendix D

1.3.4 Statement of Commitments

Table 1-3 includes all obligations that were identified in the Statement of Commitments appended to PA 08_0101. These were commitments from earlier environmental assessments that will remain in this document to provide further context to the development of the AHMP.

Table 1-3 – Relevant Statement of Commitments

Desired Outcome	Existing or Proposed Actions	Timing	Relevant Section of Plan
Operations are managed such that adverse impacts to significant Aboriginal and Historical heritage items are avoided, minimised and/or offset.	Artefact scatters (sites 37-3-0597, 37-3-0595 and 37-3-0027) that will be destroyed by the proposed Bettys Creek diversion will be salvaged and involve the following: - During clearing works in the areas where surface earthworks will occur, a qualified archaeologist will undertake field work with assistance from the Aboriginal community; and - Artefacts will be recorded individually and, once any site is salvaged, all materials and list of details collected for each artefact will be provided to the Local Aboriginal Land Council.	Prior to the diversion of Bettys Creek.	Diversion of Bettys Creek has been completed. Sites 31-3-0597 and 37-3-0595 have been salvaged, and site 37-3-0027 remains insitu as it sits outside the diversion disturbance footprint
	Monitoring of excavation works along the banks of Bettys Creek will be undertaken by a representative of the Aboriginal community.	During excavations work undertaken for the diversion of Bettys Creek.	Diversion of Bettys Creek has been completed
	The area to be impacted by the realignment of Main Creek will be re-surveyed with the assistance of the local Aboriginal community and any sites fully recorded and logged prior to the confirmation of the channels' locations and designs.	Prior to the diversion of Main Creek.	Diversion of Main Creek has been completed. These sites also sit outside the footprint of the remaining longwall panels (LW13-20)
	Should the additional survey works in the area to be impacted by the realignment of the Main Creek highlight any areas of high cultural or scientific significance, the alignment of the proposed works will be altered and/or subsurface investigations will be undertaken in consultation with OEH and the Secretary.	Prior to the diversion of Main Creek.	As above
	Sites 37-3-0682, 37-3-0683 and any additional sites recorded during the survey will be salvaged prior to construction commencing and all activities requiring soil removal associated with the realignment of Main Creek will be monitored by representatives of the Aboriginal community. The salvage will: Be undertaken by a qualified archaeologist during clearing works in the areas where surface earthworks will occur with assistance from the	Prior to the diversion of Main Creek.	As above

Desired Outcome	Existing or Proposed Actions	Timing	Relevant Section of Plan
	Aboriginal community; and Include recording of individual artefacts. Once any site is salvaged, all materials and list of details collected for each artefact will be provided to the Local Aboriginal Land Council.		
	Monitoring of excavation works along the banks of Main Creek will be undertaken by a representative of the Aboriginal community.	During excavations work undertaken for the diversion of Main Creek.	As above
	Infrastructure will be sited to avoid impacts to known heritage sites. Should impacts be unavoidable, OEH and the local Aboriginal community representatives will be consulted.	Continuous, as required.	Section 2
	The Aboriginal community will be given the opportunity to collect any surface artefacts from the planned surface (remediation) activities.	Prior to ground disturbing works in an area.	Section 5.2
	In consultation with the local Aboriginal community, the existing Aboriginal Cultural Heritage Management Plan (ACHMP) will be revised and built upon to detail management of project induced effects.	Prior to the commencement of ground disturbing works.	Section 8.1
Ensure minimal subsidence impacts on archaeology	OEH and the Local Aboriginal Community Representatives will be consulted should there be impacts to potential Aboriginal deposits as a result of remediation works along creeks and works to rehabilitate cracks.	Prior to any remediation that may be required.	Section 2
	A qualified archaeologist will assess the potential impact of the planned works.	Prior to any subsidence remediation works.	Section 5
	Should subsidence levels be greater than predicted, archaeological subsurface testing may be undertaken in affected areas with the involvement of the Aboriginal stakeholders and OEH.	As required.	Section 5.2
	The Hebden SMPs to be developed will incorporate and build upon the existing Archaeology Subsidence Management Plan.	Prior to the commencement of proposed longwall mining in the affected area.	Section 3.4.2

Table 1–4 includes all obligations that are identified within the Environmental Assessments for MOD 7 and MOD 8 of PA 08_0101.

Table 1-4 – Relevant Commitments from MOD 7 and MOD 8 Environmental Assessments

EA Commitment	Timing	Relevant Section of Plan
MOD 7 - Integra to Mount Owen Complex Water Pipeline Modification Environmental Assessment (Hansen Bailey 2017a)		
4. The alignment of the pipeline (and its associated infrastructure) may be modified to minimise impacts to sensitive ecological or archaeological values identified within the Assessment Boundary.	Prior to and during pipeline construction	Section 3.4.1
5. Fencing and signage will be established around the three Aboriginal sites located within the Assessment Boundary (37-3-1173, 37-3-0294 and 37-3-1193).	Prior to works in the vicinity of these sites	Section 4.1 Section 5.1
6. An archaeologist will oversee the land disturbance associated with the creek crossings.	During land disturbance associated with creek crossings	Section 5.1
MOD 8 – Longwall Extension Modification Environmental Assessment (Hansen Bailey 2017b)		
15. The Aboriginal Heritage Management Plan will be updated to include mitigation measures relevant to the modification. The management plan will be updated in consultation with the relevant regulatory authorities and Aboriginal stakeholders	Following approval of MOD 8	This Plan Section 2.1
16. Avoidance of direct impacts to MOCO OS-6 will be achieved if practicable. If direct impacts are unavoidable, surface collection of the remaining artefacts will occur in accordance with the AHMP	Following approval of MOD 8	Section 3.4.1
17. An archaeologist will be present during land disturbance associated with the powerline crossing of Bettys Creek. In the event that heritage items are identified, the chance finds protocol in the AHMP will be followed.	During construction of powerline across Bettys Creek	Section 5.1 Section 5.3

2 Consultation

2.1 Consultation with External Stakeholders

DPE endorsed the appointment of Pamela Kottaras of EMM Consulting Pty Limited (EMM) to prepare this AHMP. A copy of correspondence confirming this endorsement is included in **Appendix A**.

As per condition 33 (b) of Schedule 3 of the PA, the current revision of this AHMP has been prepared in consultation with NSW Office of Environment and Heritage (OEH), the Aboriginal community (registered Aboriginal parties (RAPs), and Singleton Council.

The list of RAPs, as per the original EA for the underground mine, is as follows:

- Aboriginal Native Title Consultants	Michael Matthews
- Barkuma Neighbourhood Centre	Anne-Marie Hickey
- Giwiirr Consultants	Jamie-Lee Stair
- Hunter Valley Cultural Consultants	Colleen Stair
- Ungooroo Aboriginal Corporation	Alan Paget
- Ungooroo Culture and Community	Rhonda Ward
- Upper Hunter Heritage Consultants	Justin Matthews
- Upper Hunter Wonnarua Council Inc	Tracey Skene
- Wanaruah Local Aboriginal Land Council	Donna Matthews
- Wattaka Wonnarua CC Services	Des Hickey

A draft version of this AHMP was distributed to the RAPs on 3 November 2016 and all RAPs were invited to provide commentary on the document. In response, a letter of support was provided by Wonnarua Nation Aboriginal Corporation, which is included in **Appendix B**.

Letters received from Singleton Council and OEH are also attached in **Appendix B**.

A copy of the DPE approval of the AHMP is in **Appendix C**.

This AHMP has been reviewed and updated following approval of MOD 8 (see **Section 1**). The *Longwall Extension Modification Environmental Assessment* (Hanson Bailey 2017b) contains details of the consultation undertaken in relation to MOD 8. Following a meeting on 26 April 2018 where the changes made were discussed, Integra Underground will provide a copy of this 2018 update to the RAPs for comment.

2.2 Ongoing community consultation and involvement

As described in **Section 1.2**, the area covered by the Integra Underground project area and this AHMP overlaps with the area covered by the Mt Owen Complex ACHMP. Further, the area to be mined by Integra Underground (i.e. LW13 to LW20) is within the Mt Owen Complex project area, and is therefore actively managed by the Mt Owen Complex.

As part of the implementation of their ACHMP, the Mt Owen Complex established an Aboriginal Cultural Heritage Working Group (ACHWG), which oversees the implementation of the Mt Owen Complex ACHMP and actively contributes to the management of cultural heritage at the complex. This is achieved by:

- providing relevant information about the cultural significance and values of the Aboriginal object(s) and/or place(s);
- providing for ongoing communication of information on mining operations and cultural heritage management and the Aboriginal community;
- providing advice on how to address community relationships; and

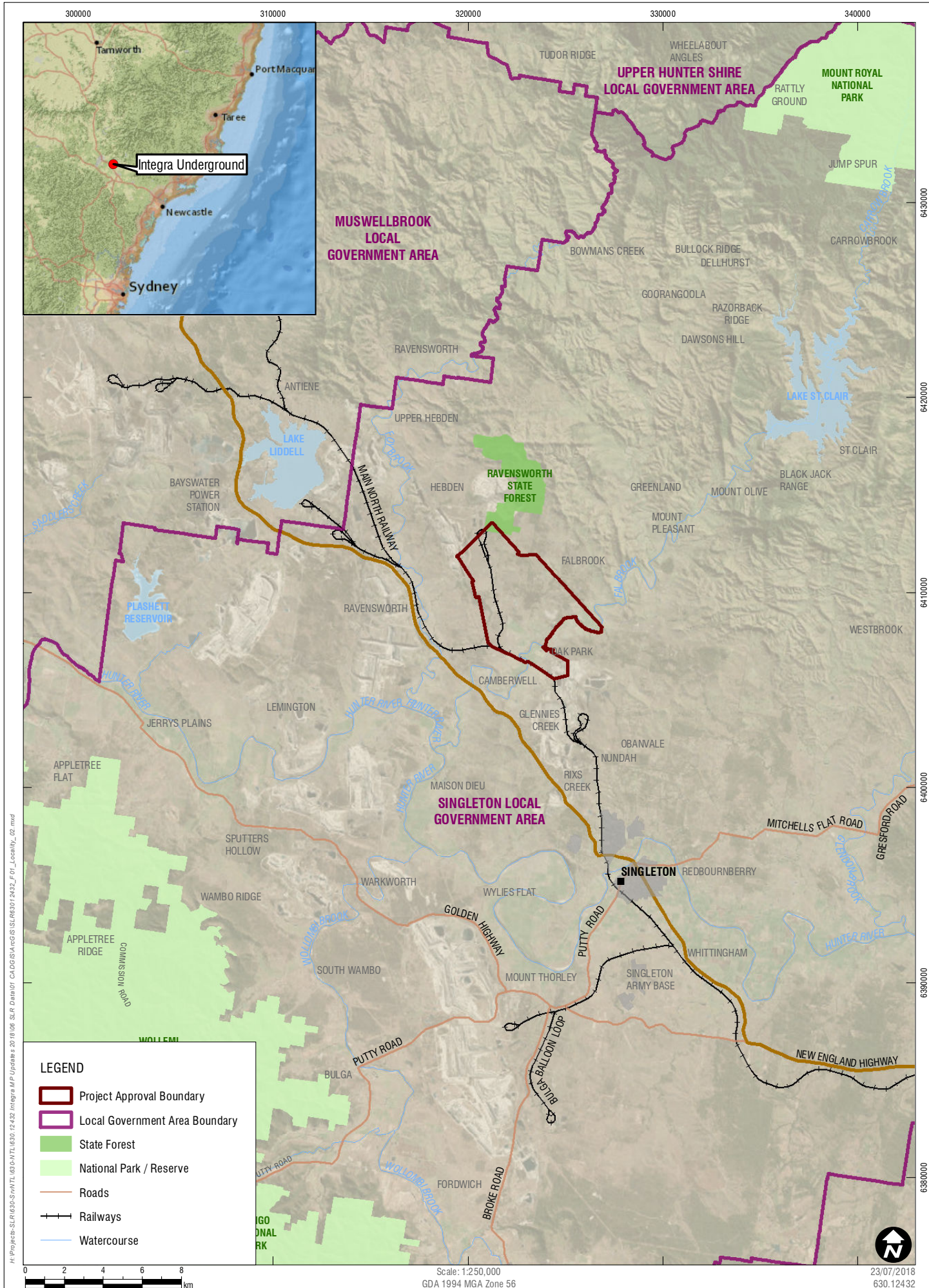
- d) commenting on future draft assessment reports and management plans before they are submitted to regulatory authorities.

Members of the ACHWG include representatives from the RAPs and representatives from the Mt Owen Complex (including the Environment and Community Manager).

Given the overlap between the two operations, where consultation with the Aboriginal community regarding operations at Integra Underground is required, this consultation will be undertaken via the already established Mt Owen Complex ACHWG.

2.3 Access to Aboriginal sites and stored Aboriginal objects

Local Aboriginal community access to Aboriginal sites and stored Aboriginal objects will be made available by Integra Underground subject to reasonable safety and security measures, such as availability of Integra Underground staff assistance. Any request to visit is to be made to the Integra Underground Environment and Community Manager.



Locality Plan

FIGURE 1

3 Existing Environment

3.1 Previous investigations

The Integra Underground project area has been subject to numerous previous archaeological investigations, which all informed the comprehensive Aboriginal Heritage assessment undertaken as part of the EA prepared to support the development application for PA 08_0101 (ERM 2009a). In addition, a detailed *Aboriginal Cultural Heritage Assessment Report* was conducted for the neighbouring Mt Owen Continued Operations Project (ACHM 2013).

As noted within the *Heritage Assessment for the Integra Underground Coal Project* (ERM 2009b), the large number of archaeological investigations undertaken within the vicinity of the Integra Underground project area provides adequate information to obtain a comprehensive understanding of the nature and distribution of Aboriginal heritage sites within the Integra Underground project area.

Previous cultural heritage investigations in the Upper Hunter Valley have shown that the types of sites likely to occur in the area include:

- scarred or carved trees;
- stone arrangements;
- grinding grooves;
- stone artefact scatters and isolated artefacts; and
- burials.

This predictive information is based on the regional and local archaeological context, the results of AHIMS searches and environmental information such as landform, geology and flora and fauna data.

The management measures presented in this AHMP are based on the findings of the *Heritage Assessment for the Integra Underground Coal Project* (ERM 2009b), subsequent environmental assessments and in consideration of the Mt Owen ACHMP. In addition, an AHIMS search was undertaken over the project area to confirm the status of the sites and to identify any recently recorded sites.

3.2 Cultural values

Research and consultation with the Aboriginal community was conducted as part of the *Heritage Assessment for the Integra Underground Coal Project* (ERM 2009b). The Integra Underground project area is located in the Hunter Valley landscape within the traditional country of the Wonnarua people. Evidence of their occupation of this area is extensive and it is widely accepted that this region is of cultural significance to the Wonnarua people. Aboriginal heritage sites with archaeological evidence are all of cultural value to the Aboriginal community through the tangible connection they represent to pre-European Aboriginal land use (ERM 2009b). Aboriginal heritage sites are also valuable in sustaining contemporary Aboriginal identity through the opportunities they provide for both teaching and engagement with heritage in field investigations.

As previously noted, there is some overlap between the area assessed as part of the *Aboriginal Cultural Heritage Assessment* report for the neighbouring Mt Owen Continued Operations Project (ACHM 2013) and the Integra Underground project area. As part of consultation with members of the Wonnarua community for this assessment, it was noted that the sites and/or places within the assessed area were considered by all to be of lower significance (ACHM 2013). Further, the assessment also acknowledged the modified nature of the assessed area, which has been subject to varying degrees of land clearing and mining (ACHM 2013). Such disturbance has not only altered the landscape, but also removed the context of the remaining cultural material and Aboriginal heritage sites.

3.3 Overview of Aboriginal Sites

Table 3–1 lists Aboriginal sites identified in the Integra Underground project area, which are categorised as follows:

- 'site name' is as recorded on AHIMS, if an AHIMS number is provided;
- site names without an AHIMS number are Integra Underground sites that may have been attributed an AHIMS number but Integra Underground lists them separately;
- 'site type' reflects the most up-to-date AHIMS attribute;
- 'AHIMS status' is the attribute provided by AHIMS; and
- 'Notes' is commentary based on an analysis of the entire data set but does not always include ground-truthing.

Figure 2 illustrates the location of the sites listed in **Table 3–1**.

Table 3–1 – Summary of Aboriginal Sites Found in the Integra Underground project area

Site Name	Site Type	Source	Site ID	AHIMS status	Notes
Glennies Creek; Sydenham	Scarred Tree	AHIMS	37-3-0019	Valid	
Glennies Creek Site A/Brayshaw Site A/Bettys Creek A	Open camp site	AHIMS	37-3-0025	Destroyed	
Glennies Creek Site C/Bettys Creek Site C	Open camp site	AHIMS	37-3-0027	Destroyed	
Glennies Creek Site 1	Isolated find	AHIMS	37-3-0187	Valid	May be GC 1 (4 artefacts that have been salvaged)
Glennies Creek Site 2	Isolated find	AHIMS	37-3-0188	Valid	May be GC 2 (2 artefacts that have been salvaged)
Glennies Creek Site 3	Isolated find	AHIMS	37-3-0189	Valid	May be GC 3 (isolated find that has been salvaged)
Site 2 (MORL 2)	Isolated find	AHIMS	37-3-0294	Valid	
Rav East 22	Isolated find	AHIMS	37-3-0421	Destroyed	
Bettys Creek 4	Isolated find	AHIMS	37-3-0594	Destroyed	Section 90 permit #2267
Bettys Creek 5	Isolated find	AHIMS	37-3-0595	Destroyed	Section 90 permit #2267
Bettys Creek 6	Isolated find	AHIMS	37-3-0596	Destroyed	Section 90 permit #2267
Bettys Creek 7	Isolated find	AHIMS	37-3-0597	Destroyed	Section 90 permit #2267
Bettys Creek 8	Isolated find	AHIMS	37-3-0598	Destroyed	Section 90 permit #2267
Bettys Creek 17	Isolated find	AHIMS	37-3-0607	Destroyed	Section 90 permit #2267
Bettys Creek 21	Isolated find	AHIMS	37-3-0611	Destroyed	
Bettys Creek 22	Isolated find	AHIMS	37-3-0612	Valid	

Site Name	Site Type	Source	Site ID	AHIMS status	Notes
BC44a	Isolated find	AHIMS	37-3-0645	Destroyed	Section 90 permit – listed as #2267 in 2012 ACHMP, and #2123 in the SMP
BC44b	Isolated find	AHIMS	37-3-0646	Destroyed	Section 90 permit – listed as #2267 in 2012 ACHMP, and #2123 in the SMP
BC51	Open camp site	AHIMS	37-3-0647	Destroyed	Section 90 permit #2267
BC63	Open camp site	AHIMS	37-3-0657	Destroyed	Section 90 permit #2267
BC64	Isolated find	AHIMS	37-3-0658	Destroyed	Section 90 permit #2267
BC65	Open camp site	AHIMS	37-3-0659	Destroyed	Section 90 permit #2267
BC66	Open camp site	AHIMS	37-3-0660	Destroyed	Section 90 permit #2267
BC67	Open camp site	AHIMS	37-3-0661	Destroyed	Section 90 permit #2267
Main Creek 10	Open camp site w PAD	AHIMS	37-3-0679	Valid	
Main Creek 11	Isolated find	AHIMS	37-3-0680	Valid	
Main Creek 12	Open camp site w PAD	AHIMS	37-3-0681	Valid	
Main Creek 13	Artefact scatter, PAD	AHIMS	37-3-0682	Valid	
Main Creek 14	Open camp site w PAD	AHIMS	37-3-0683	Valid	
Main Creek 9	Open camp site w PAD	AHIMS	37-3-0684	Valid	
Main Creek 8	Open camp site	AHIMS	37-3-0685	Valid	
GCS10	Isolated find	AHIMS	37-3-0696	Valid 321874E 6409806N	This site shares the same coordinates with 37-3-0699 on AHIMS. Likely to be an entry error on AHIMS database.
GCS9	Isolated find	AHIMS	37-3-0697	Valid	
GCS8	Isolated find	AHIMS	37-3-0698	Valid	
GCM1	Isolated artefact	AHIMS	37-3-0699	Error in coordinates on AHIMS 321873E 6409558N	Refer to 37-3-0696

Site Name	Site Type	Source	Site ID	AHIMS status	Notes
GCM 2	Isolated find or artefact scatter			Valid	
GCM 3	Isolated find or artefact scatter			Valid	
GCM 4	Isolated find or artefact scatter			Valid	
Bettys Creek 9	Isolated find	AHIMS	37-3-0599	Destroyed	
Bettys Creek 10	Isolated find	AHIMS	37-3-0600	Destroyed	
Bettys Creek 16	Isolated find	AHIMS	37-3-0606	Destroyed	
MOCO IF-17	Isolated find	AHIMS	37-3-1186	Valid	
MOCO OS-7	Isolated find	AHIMS	37-3-1195	Destroyed	
MOCO OS-8	Isolated find	AHIMS	37-3-1196	Valid	
MOCO IF-18	Isolated find	AHIMS	37-3-1211	Destroyed	
MCISO1	Isolated find		37-3-0921	Valid	
MCISO2	Isolated find		37-3-0922	Valid	
MCISO3	Isolated find		37-3-0923	Valid	
IF1.	Isolated find		37-3-1394	Valid	
IF2.	Isolated find		37-3-1395	Valid	
Bettys Creek 3	Isolated find	AHIMS	37-3-0593	Destroyed	
BC52	Open camp site	AHIMS	37-3-0648	Destroyed	
BC53	Isolated find	AHIMS	37-3-0649	Destroyed	
BC54	Isolated find	AHIMS	37-3-0650	Destroyed	
BC55	Isolated find	AHIMS	37-3-0629	Destroyed	
Bettys Creek 44 (BC44)	Isolated find	AHIMS	37-3-0636	Destroyed	
MOCO IF-14	Isolated find	AHIMS	37-3-1183	Destroyed	
MOCO IF-15	Isolated find	AHIMS	37-3-1184	Destroyed	
MOCO IF-16	Isolated find	AHIMS	37-3-1185	Valid	
MOCO OS-3	Isolated find	AHIMS	37-3-1191	Destroyed	
MOCO OS-4	Isolated find	AHIMS	37-3-1192	Destroyed	
MOCO OS-5	Isolated find	AHIMS	37-3-1193	Valid	

Site Name	Site Type	Source	Site ID	AHIMS status	Notes
MOCO OS-6	Isolated find	AHIMS	37-3-1194	Partially destroyed	Partially destroyed
MOCO IF-7	Isolated find	AHIMS	37-3-1176	Destroyed	
MOCO IF-8	Isolated find	AHIMS	37-3-1177	Destroyed	
MOCO IF-9	Isolated find	AHIMS	37-3-1178	Destroyed	
MOCO IF-10	Isolated find	AHIMS	37-3-1179	Destroyed	
MOCO IF-11	Isolated find	AHIMS	37-3-1180	Destroyed	
MOCO IF-12	Isolated find	AHIMS	37-3-1181	Destroyed	
MOCO IF-13	Isolated find	AHIMS	37-3-1182	Destroyed	
MT OWEN IF3	Isolated find	AHIMS	37-3-1161	Valid	
GCS-9	Isolated find	AHIMS	37-3-0700	Valid	
GCS-10	Open camp site	AHIMS	37-3-0701	Valid	
MOCO IF-4	Isolated find	AHIMS	37-3-1173	Valid	
MOCO IF-6	Isolated find	AHIMS	37-3-1175	Valid	
Swamp Creek Pad	Unknown	AHIMS	37-3-0668	Valid	

3.4 Potential Impacts

3.4.1 Overview

Key operational activities at Integra Underground include:

- longwall development within the Middle Liddell seam using continuous miners;
- longwall mining within the Middle Liddell seam. The approval for MOD 8 allows mining within LW 15 to 20;
- extraction of coal to a maximum of 4.5 Mtpa of ROM coal;
- subsidence monitoring and remediation as per the approved Integra Underground Extraction Plan;
- storage of ROM coal at the pit top and haulage of ROM coal to the Rix's Creek North Coal Handling and Preparation Plant (CHPP);
- operation of workshop and administration areas;
- ventilation and gas management; and
- on site water management as per the Integra Underground Water Management Plan (WMP).

The operation of Integra Underground will require minimal surface disturbance from time to time, with disturbance generally limited to six principal sources, including:

- exploration activities;
- gas drainage works;
- ventilation works;
- construction activities;

- minor subsidence remediation works, if required; and
- implementation of erosion and sedimentation controls associated with the above disturbance activities.

All minor surface disturbances will be managed in accordance with Integra Underground's *Exploration Activities and Minor Surface Infrastructure Management Plan*.

3.4.2 Installation of Infrastructure

The installation of infrastructure such as exploration bores, gas drainage boreholes on the surface overlying the mine workings, additional mine ventilation facilities and/or the water transfer pipeline from Integra Underground to the Mt Owen Complex will result in ground disturbance. The exact locations of infrastructure will be confirmed as mining progresses. However, to the extent practicable, such infrastructure will be sited to avoid impacts on recorded sites.

The Integra Underground to Mt Owen Complex pipeline generally follows a south-east to north-west alignment from the Portal Sump towards the Mt Owen Complex. Various pipeline alignments were considered in order to optimise pump efficiency, whilst avoiding adverse impacts to sensitive environmental features (Hansen Bailey, 2017a). The chosen alignment crosses Glennies, Main and Bettys Creeks.

The water pipeline was generally installed above ground, which involved minimal ground disturbance. However, the pipeline was buried beneath public roads and access tracks, the main channels of Main Creek and Bettys Creek and where required due to other impacts (e.g. visual amenity).

Table 3-2 – Summary of Aboriginal Sites Found in the Proximity of the Integra Underground To Mt Owen Complex Pipeline

Site Name	Site Type	Source	Site ID	AHIMS status	Notes
MOCO IF-4	Isolated find	AHIMS	37-3-1173	Valid	
MORL 2	Artefact Scatter	AHIMS	373-0294	Valid	
MOCO OS-5	Isolated find	AHIMS	37-3-1193	Valid	

The *Longwall Extension Modification Environmental Assessment* (Hansen Bailey 2017b) identified six existing sites within the Assessment Boundary. One of these sites (37-3-0668) is located in a highly modified area and is assumed to have been salvaged. Four of the recorded sites are expected to experience subsidence movements (see **Section 3.4.3**). One site (see **Table 3-3**) is located within the indicative easement for the 66 kV powerline. Avoidance of the site could be achieved by siting the powerline to the western side of the access track and within an existing disturbed area.

Table 3-3 – Summary of Aboriginal Sites Found in the Proximity of the MOD 8 Ancillary Infrastructure

Site Name	Site Type	Source	Site ID	AHIMS status	Notes
MOCO OS-6	Artefact Scatter	AHIMS	37-3-1194	Valid	Partially destroyed

Should impacts to Aboriginal heritage sites be unavoidable, OEH and the RAPs will be consulted prior to the disturbance of the sites.

3.4.3 Subsidence

The Aboriginal sites found in the areas of expected subsidence for LW 13 to LW20 are listed in **Table 3-4**. This table only includes valid sites, with sites that have already been destroyed or salvaged not included.

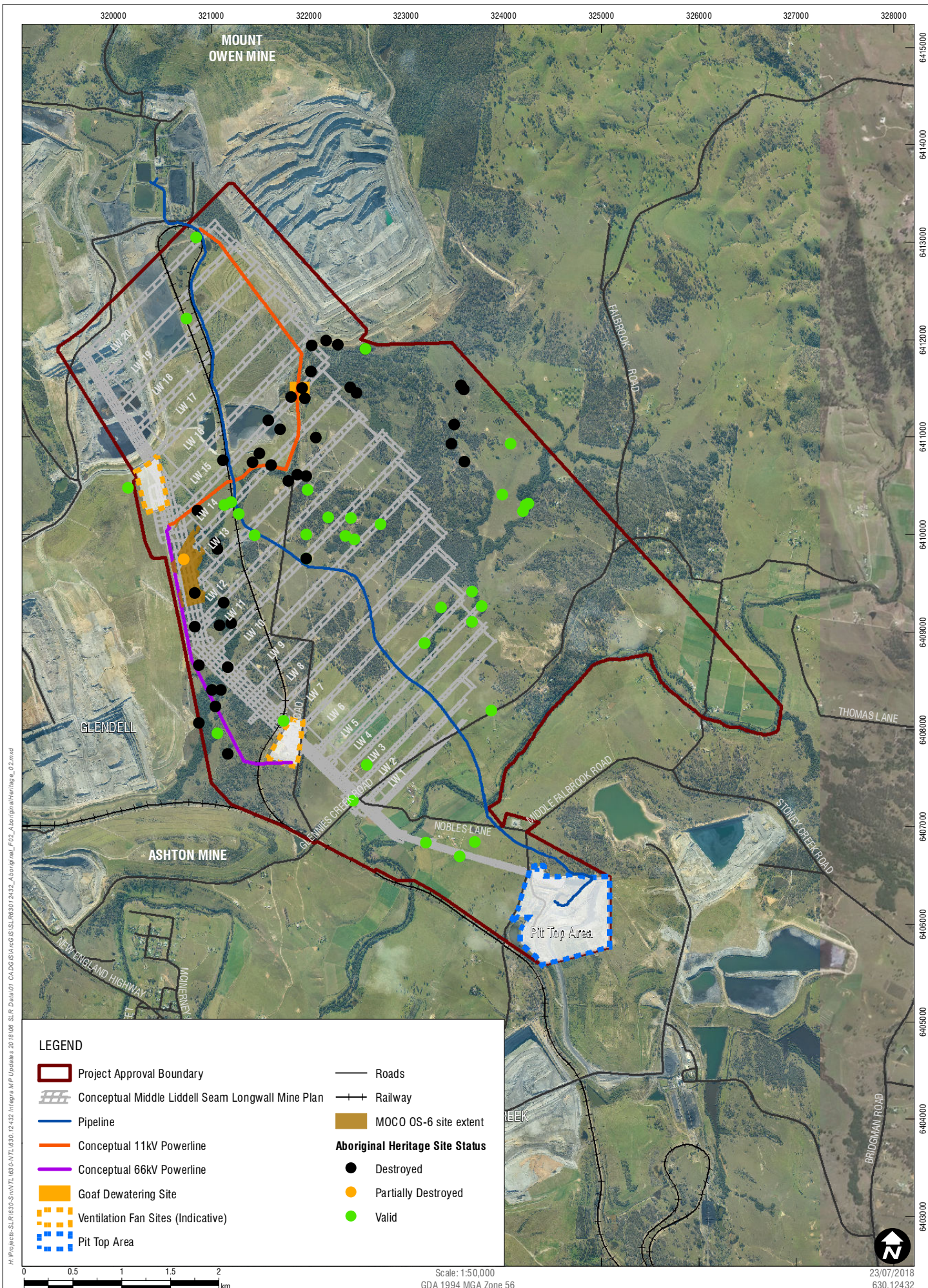
Table 3-4 – Summary of Aboriginal Sites Found in the Proximity of the Expected Subsidence Movement Zone

Site Name	Site Type	Source	Site ID	AHIMS status	Notes
Site 2 (MORL 2)	Isolated find	AHIMS	37-3-0294	Valid	
GCS9	Isolated find	AHIMS	37-3-0697	Valid	
MOCO IF-4	Isolated find	AHIMS	37-3-1173	Valid	MOD 8
MOCO IF-6	Isolated find	AHIMS	37-3-1175	Valid	MOD 8
Bettys Creek 22	Isolated find	AHIMS	37-3-0612	Valid	MOD 8

As noted by SCT (2017), the magnitude and frequency of previous surface cracking at Integra Underground is minimal. Although subsidence may result in the lowering of ground surface level and alterations in the morphology of landforms, as noted within the EA (ERM 2009a), vertical or horizontal displacement will not directly cause significant disturbance to any of the sites identified in **Section 3.1**. Subsidence impacts resulting from the extraction of the approved LW15-20 are expected to remain within the levels predicted in previous EAs for Integra Underground (Hansen Bailey 2017b).

The *Longwall Extension Modification Environmental Assessment* (Hansen Bailey 2017b) identified three additional sites expected to experience subsidence movements. These three valid sites (artefact scatter or isolated find) are generally not sensitive to subsidence impacts such as surface cracking and/or water pooling.

Indirect impacts such as earthworks required to remediate subsidence-induced erosion, surface cracking and/or ponding across the Integra Underground project area may disturb surface and subsurface artefacts. However, it is unlikely that these activities will affect the archaeological significance of the low density artefact scatters listed in **Section 3.1** (ERM 2009a).



Aboriginal Heritage Sites

FIGURE 2

4 Aboriginal Heritage Protection

4.1 Measures to Protect Aboriginal Sites

Measures to protect and manage Aboriginal sites include:

- fencing;
- land management;
- recording;
- interpretation; and
- monitoring.

Further detail on specific measures are provided in the sub-sections below.

4.2 Bettys Creek Habitat Management Area

The Mt Owen Open Cut ACHMP describes the Bettys Creek Habitat Management Area (HMA), which is located within the Integra Underground project area (refer to **Figure 2**). A number of Aboriginal heritage sites have previously been identified within the Bettys Creek HMA, as also shown on **Figure 2**. As noted in the ACHMP, the perimeter of the Bettys Creek HMA will be fenced and signage at entry points will indicate:

- the area contains Aboriginal heritage sites;
- no ground disturbing impacts without authorisation; and
- no vegetation removal beyond weed control.

As also described within the ACHMP, land management activities within the Bettys Creek HMA will include:

- erosion control;
- bushfire hazard reduction;
- exclusion of stock; and
- weed control.

A collaborative approach will be adopted between Integra Underground and the Mt Owen Complex to ensure the measures to protect the Aboriginal sites within and adjacent to the Bettys Creek HMA are implemented.

4.2.1 Erosion Control

Erosion control measures will be implemented at known protected Aboriginal sites under erosion threat. Erosion control actions may be undertaken in a manner that avoids disturbance to Aboriginal objects where possible. Minor movement of individual artefacts is permissible on the condition that artefacts are returned to their original location immediately after the erosion control management action. Before and after photographs will record erosion control actions. Such records will be retained in association with this AHMP.

4.2.2 Bushfire Hazard Reduction

Clearing of excess fuel load where required will be undertaken in a manner that minimises ground disturbance. Preferred methods of hazard reduction include manual brush cutting and grass slashing with the slasher set at a minimum of 150 mm to avoid impacting surface Aboriginal stone artefacts.

4.2.3 Exclusion of Stock

As per the Mt Owen Complex ACHMP, stock is excluded from the Bettys Creek HMA to avoid impact to identified Aboriginal heritage values.

4.2.4 Weed Control

Noxious weed control may occur within the Bettys Creek HMA provided that where physical weed removal is necessary, weeds are cut above ground level and not ripped from the ground so as to avoid ground disturbance. Where root balls have been inadvertently pulled from the surface, the soil shall be promptly returned to its original location and methods amended to avoid reoccurrence.

4.3 Site monitoring

As per the Mt Owen ACHMP, site monitoring within the Integra Underground project area will take two forms:

- a) photographic monitoring shall be undertaken at up to 10 representative sites with more than 10 artefacts in the non-impact area; and
- b) site condition monitoring shall be undertaken at a roster of representative sites susceptible to natural deterioration.

A site included in the photographic monitoring group could also be in the site condition monitoring group if it is assessed that annual visits would be advantageous to maintain the site's condition.

Should any site included in either monitoring program be assessed as not requiring further monitoring, it can be substituted for another site.

A collaborative approach will be adopted between Integra Underground and the Mt Owen Complex to ensure all sites are monitored in accordance with the site monitoring procedure described within the Mt Owen ACHMP and this AHMP.

4.3.1 Photographic monitoring

The objectives of photographic monitoring are to:

- a) document land condition prior to management measures;
- b) measure effects of erosion;
- c) measure efficacy of land management measures to mitigate erosion; and
- d) document Aboriginal site condition over time.

Photographic monitoring will entail:

- a) taking photographs from at least two fixed locations at each site at least every three years;
- b) placing permanent photo points (such as a star picket with signage) at all photographic monitoring sites;
- c) all photographs will include a range pole placed 20 m from the camera in order to create a scaled reference point. If topography or vegetation does not allow the range pole to be placed 20 m from the camera, a shorter distance can be used but this will be noted in the report and replicated during the next photographic monitoring program;
- d) photographs will be taken in high definition with images stored in digital form at Integra Underground in association with this plan;
- e) the results and recommendations of the photographic monitoring shall be presented in a monitoring report and a summary included in the annual review; and
- f) colour printouts will be available to interested Aboriginal parties on request for review as to the efficacy of land management measures in relation to Aboriginal heritage.

4.3.2 Site condition monitoring

The objectives of site condition monitoring are to:

- a) measure efficacy of land management measures to mitigate erosion; and
- b) document Aboriginal site condition over time.

The site condition monitoring program will entail:

- a) visiting a roster of sites annually to identify impacts, recommend mechanisms to avoid impact and/or maintain, where appropriate, any preventive erosion mechanisms at the site;
- b) assessing the efficacy of any erosion control measures; and
- c) maintaining a photographic and written record of each site and presenting the results and recommendations in a monitoring report.

4.4 Artefact records and storage facility

As noted previously, the area to be mined by Integra Underground mining operations (i.e. LW13 to LW20) is also part of the area actively managed by the Mt Owen Complex as part of the implementation of their ACHMP. In accordance with the Mt Owen Complex ACHMP, an artefact storage facility will be established in the Yorks Creek Voluntary Conservation Area (VCA). All materials will be held in a locked facility with access managed by the Mt Owen Complex Environment and Community Manager or other nominated senior staff member. The design and exact placement of the facility will be done in consultation with the ACHWG.

Cultural heritage materials salvaged under this AHMP will be stored and managed in the Mt Owen Complex facility. All materials will be packaged and labelled generally in accordance with Australian Museum standards (refer to <http://australianmuseum.net.au/document/Archaeological-Collection-Deposition-Policy>).

All materials will be retained at the artefact storage facility for the life of the mine unless otherwise approved by OEHL in a Section 85 Care and Control Permit under the NSW *National Parks and Wildlife Act 1974* (NPW Act).

At mine closure, the materials will be transferred to a facility nominated by the RAPs subject to approval by OEHL in a Section 85 Care and Control Permit under the NPW Act. Where an agreed facility cannot be nominated, consideration will be given to lodging the material with either the Australian Museum (subject to its acceptance), a local Aboriginal cultural centre (if one is present) or a local heritage museum that can provide secure ongoing storage and curation. Where no facility can be identified, the relevant material may be reburied within the Integra Underground project area in a secure manner that allows later retrieval. The location must be chosen following consultation with the ACHWG and be notified to the OEHL in the designated manner.

5 Implementation

5.1 Management Controls

Integra Underground will undertake the following management controls to protect valid Aboriginal sites (as listed in **Table 3–1**) through all stages of future surface related activities:

- infrastructure will be sited to avoid impacts to known heritage sites where practicable;
- if impacts are unavoidable, OEH and the RAPs will be consulted in regard to any required management measures or salvage activities;
- the site of proposed disturbance activities will be identified in the field during a walkover to be conducted by relevant persons. Sites that will be located within 50 m of development works or other activities will be assessed with regard to potential damage associated with placement, and where required, temporarily fenced (with protective material such as orange coloured webbing) prior to the commencement of works to prevent accidental disturbance. Fenced sites will be inspected at the completion of the works to confirm the management approach was effective;
- where the salvage/collection of Aboriginal objects/sites is required an archaeologist and Aboriginal representatives will be commissioned to undertake the collection. All artefacts will be stored in labelled bags and documented in a report. The artefacts will then be relocated to a location agreed to with the Aboriginal representatives and a final report will be prepared for the OEH to obtain site clearance;
- the Aboriginal community will be given the opportunity to collect any surface artefacts from any planned surface or remediation activities;
- all surface disturbance activities will be conducted in accordance with the Integra Underground *Exploration Activities and Minor Surface Infrastructure Management Plan* and GCAA's *Ground Disturbance Permit (GDP) Procedure* (CAA HSEC PRO 0002) (refer to **Section 5.3.1** below);
- access tracks will be established and used in a manner that avoids all identified sites where practicable; and
- all relevant contractors and site management personnel will be advised of the locations of the sites and the requirements of the NPW Act prior to the commencement of works. This is completed as part of the site induction process (refer to **Section 3.4**).

The Integra Underground to Mt Owen Complex pipeline traverses Glennies, Main and Bettys Creeks. Due to the potential for artefacts to be located along creek lines, a qualified archaeologist was present during the land disturbance activities associated with the construction of the pipeline across these creek crossings.

A qualified archaeologist will be present during the land disturbance activities associated with the construction of the powerline crossing of Bettys Creek.

To ensure that there are minimal subsidence impacts on archaeology as a result of Integra Underground's operations:

- prior to any remediation that may be required, OEH and local Aboriginal community representatives will be consulted should there be impacts to potential Aboriginal deposits as a result of remediation works along creeks and works to rehabilitate cracks;
- prior to any subsidence remediation works, a qualified archaeologist will assess the potential impact of the planned works; and
- as required, should subsidence levels be greater than predicted, archaeological subsurface testing may be undertaken in affected areas with the involvement of Aboriginal stakeholders and OEH.

Further detail on procedures to be implemented is provided below.

5.1.1 Ground Disturbance Permit

A GDP will be required for all surface disturbance work at Integra Underground in accordance with the Integra Underground *Exploration Activities and Minor Surface Infrastructure Management Plan* and GCAA's *Ground Disturbance Permit (GDP) Procedure* (CAA HSEC PRO 0002).

The person requesting the permit is to provide the following on the permit:

- task specific details;
- details of any erosion and sediment control measures proposed (where necessary); and
- details of any clearing activities and stockpiles required as part of the ground disturbance.

If a cultural heritage clearance has been obtained within the proposed disturbance area, the location of this clearance will be verified on the plans for the proposed disturbance works. Alternatively, if a cultural heritage clearance has not been obtained, due diligence of the proposed disturbance area will be conducted.

If cultural heritage sites are located within the disturbance area (including access tracks), these sites will be identified on the plans for the proposed disturbance works. If no cultural heritage sites are located within the disturbance area (including access tracks), this will be verified against existing site data prior to the commencement of any surface disturbance works.

All required controls to manage cultural heritage impacts will be listed in the GDP.

5.2 Aboriginal Site Salvage

5.2.1 Site Collection

Site collection is a salvage measure only for sites that will be impacted and after consultation with the Aboriginal community.

If impacts to the sites identified in **Table 3-1** are unavoidable, these sites will be collected in accordance with the procedure detailed below.

As noted in **Section 3**, the exact locations of the proposed exploration holes will be confirmed as mining progresses.

Where site salvage is required, collection will be conducted by an archaeologist and rostered RAPs prior to impact activities occurring and in accordance with the following procedure:

- individual artefacts will be flagged;
- the collection area will be photographed with the flags *in situ*;
- the artefacts will have their locations recorded by GPS, preferably by differential GPS (DGPS) where available;
- the artefacts will be allocated a site number, date and collection details;
- the artefacts will be retained for recording and report preparation;
- basic attributes will be recorded and must include:
 - o raw material;
 - o technological type;
 - o implement type;
 - o weight; and
 - o maximum dimension.
- each site will be collected and stored in a Tyvek (or similar type) bag and labelled as follows:
 - o "[agreed name] Surface Collection";

- site name;
- date; and
- bag number
- a Tyvek (or similar type) tag with the bag information will be included in each bag; and
- a descriptive report will be prepared with a map of individual artefact locations within the site or exposure boundaries.

5.2.2 Site Excavation

Activities requiring archaeological salvage excavation in the Integra Underground project area are complete. Archaeological excavation of Aboriginal sites is not a requirement of this stage of the operation. Should archaeological excavation be required, a method will be prepared in consultation with the RAPs and incorporated into this AHMP.

5.3 Chance Finds

5.3.1 Aboriginal Objects

In the event of chance finds including isolated artefacts, artefact scatters, grinding grooves and modified trees being discovered during activities that may cause harm, work will cease immediately in the relevant area and the process below will be followed:

- the RAPs and OEH will be notified;
- all new sites will be registered on AHIMS;
- objects will be managed in a manner that is consistent with the measures in this document; and
- work will not recommence until the required clearances have been obtained.

5.3.2 Human Remains

In the unlikely event that a burial site or suspected human skeletal material is exposed during works, all relevant procedures for excavation and removal will be undertaken in accordance with the *Policy Directive –Exhumation of Human Remains* (NSW Department of Health 2008); *Skeletal Remains – Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977* (NSW Heritage Office 1998) and the *Aboriginal Cultural Heritage Standards and Guidelines Kit* (NPWS 1997).

The following process is to be followed:

- as soon as remains are exposed, work will immediately cease within a 10 m radius around the remains and temporary fencing will be erected to restrict access and allow assessment and management;
- contact local police, OEH and the Heritage Division;
- a physical or forensic anthropologist will inspect the remains in situ, and make a determination of ancestry (Aboriginal or non-Aboriginal) and antiquity (pre-contact, historic or forensic);
- if the remains are identified as forensic the area is deemed as crime scene; or
- if the remains are identified as Aboriginal, the site is to be secured and the OEH and all registered Aboriginal parties are to be notified in writing; or
- if the remains are non-Aboriginal (historical) remains, the site is to be secured and the Heritage Division is to be contacted.

The above process functions only to appropriately identify the remains and secure the site. From this time, the management of the remains is to be determined through liaison with the appropriate stakeholders (NSW Police Force, forensic anthropologist, OEH, Heritage Division, DPE, registered Aboriginal parties, DPE endorsed archaeologist, etc.) and in accordance with the NSW *Public Health Act 1991*.

Any human skeletal remains uncovered during the course of works will be removed in a sensitive and dignified manner. Approval from NSW Health, under the NSW *Public Health Act 1991*, will be required prior to removing/exhuming any skeletal remains. Controlled excavation and removal by the site archaeologists and other appropriate specialists (forensic anthropologist, registered Aboriginal parties, NSW Police Force, as appropriate) will be undertaken in accordance with relevant guidelines and any requirements of the OEH, DPE and NSW Health.

Prior to removal, a site specific management plan for the removal of any potential human skeletal remains uncovered will be developed, in consultation with a physical anthropologist, the Heritage Division, OEH, registered Aboriginal parties and other relevant stakeholder groups, if required. The management plan would need to consider the issues detailed in *Skeletal Remains – Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977* (NSW Heritage Office 1998). These issues include but are not limited to:

- excavation issues - including personnel who may need to be required, Occupational Health and Safety and recording.
- access issues - including limited access, security and stakeholder participation.
- management issues – including management during excavation and analysis, publicity, interpretation, location of interim resting place (in consultation with relevant stakeholders), ongoing curation of recovered materials and professional access to data.
- re-interment and commemoration – including appropriate consultation with relevant stakeholders.

Locations of interim resting places and final re-interment/repository (as appropriate) for any human skeletal remains will depend on the nature of the remains and outcome of consultation. Interim resting places could comprise the Coroner's Office or Department of Forensic Medicine (if remains forensic), local undertakers or appropriate research facility (if historic) or an appropriate interim keeping place as indicated following consultation (if Aboriginal).

5.4 Training and Communication

5.4.1 Obligation to Protect Aboriginal Heritage

All employees, contractors, sub-contractors and visitors to Integra Underground have an obligation to avoid harming Aboriginal heritage unless engaged in an Aboriginal heritage management activity described in this AHMP.

The NPW Act defines "harm" to an object or place as any act or omission that:

- a) destroys, defaces or damages the object or place, or
- b) in relation to an object-moves the object from the land on which it had been situated, or
- c) is specified by the regulations, or
- d) causes or permits the object or place to be harmed in a manner referred to in paragraph (a), (b) or (c),
- e) but does not include any act or omission that:
- f) desecrates the object or place, or
- g) is trivial or negligible, or
- h) is excluded from this definition by the regulations.

Integra Underground personnel, contractors and subcontractors who have responsibility for land management and/or minor surface disturbance activities have an obligation to protect Aboriginal heritage within their area of work responsibility.

Protection means active recognition of known Aboriginal heritage and active measures to avoid Aboriginal heritage. This may include fencing and/or modification of work plans to avoid heritage.

5.4.2 Generic Induction Training

Generic induction training is provided to all employees and contractors through the GCAA *Generic Surface Induction* and the *Site Familiarisation*. During this training, all employees, contractors, sub-contractors and visitors to Integra Underground will be made aware of the obligation to avoid harm to Aboriginal heritage. .

The Mt Owen Complex has developed an Aboriginal cultural heritage education program in consultation with registered Aboriginal parties. Integra Underground will utilise this education program for the training of personnel and contractors involved in surface disturbance activities under PA 08_0101.

5.5 Contemporary Best Practice

Management practices will be reviewed annually to ensure that current practices align with contemporary best practice standards. These actions will be documented in the Annual Review and their implementation monitored.

.

6 Measurement and Evaluation

The monitoring of identified Aboriginal sites to identify subsidence impacts will be conducted in accordance with the Approved Extraction Plan. The three phases will include:

- the current status of sites within the LW panels to be mined will be confirmed so as to establish a baseline for subsequent monitoring and impact assessment;
- monitoring within predicted subsidence impact zones during mining to allow the implementation of subsidence impact management processes, application of any permits and remediation works as required; and
- post-mining monitoring to establish that no further subsidence impacts are likely and to allow the completion of subsidence impact management processes. This will include the documentation of the location and status of the sites following mining.

The monitoring during mining will comprise:

- documented monthly visual inspections of potentially affected archaeological sites when the longwall face is approaching within 150 m, and continuing until the face is 500 m past (or completed);
- photographic records of any detected damage; and
- detailed descriptions of any remediation work required to be supplied to the Aboriginal community and a Section 90 Consent to be obtained as required.

The post-mining monitoring will comprise:

- a documented visual inspection of each archaeological sites once the second subsequent longwall face has retreated a minimum of 500 m past (or is complete);
- a documented visual inspection of archaeological sites once the second subsequent longwall panel is complete;
- photographic records of any detected damage; and
- a final survey of each archaeological site to determine its post subsidence character.

7 Record Keeping and Reporting Requirements

7.1 Project reports

A technical report will be prepared documenting the results of any Aboriginal site salvage in accordance with the *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010).

7.2 Statutory reporting requirements

7.2.1 Discovery of Aboriginal objects

Under s89A of the NPW Act, it is a requirement that OEH is notified of the existence of Aboriginal objects as soon as practicable after they are first identified. This is usually undertaken through the completion of an OEH Aboriginal Site Card which is submitted to the Registrar of the AHIMS for inclusion on the Aboriginal sites database. Information regarding AHIMS and site recording forms can be downloaded from the OEH website.

7.2.2 Care and Control Permit application

Under s85A of the NPW Act, Aboriginal objects remain the property, and under the protection of, the Crown until formal transfer to an Aboriginal owner or Aboriginal owners occurs. An application for a Care and Control Agreement will be made to OEH. Care and Control Agreement Application forms can be downloaded from the OEH website.

7.2.3 Reporting impact to Aboriginal sites

Although not strictly required by the NPW Act, OEH expects that information on authorised impacts to Aboriginal sites be reported to them on an Aboriginal Site Impact Recording Form, which can be downloaded from the OEH website.

7.2.4 Reporting of AHMP non-compliance incident

Should any Aboriginal cultural heritage site or area be impacted by works not authorised as described in this plan, Integra Underground will report the non-compliance or potential non-compliance to DPE and OEH as soon as practicable after identifying the incident in accordance with Schedule 5 Condition 9 of PA 08_0101. This report will include a description of the incident, its circumstances and the corrective measures undertaken.

8 Review and Improvement

8.1 Plan Review

This management plan will be reviewed (and revised if necessary) in accordance with the requirements of Schedule 5 Condition 6 of PA 08_-0101.

8.2 Contingency Plan

The procedure to be implemented when unexpected finds are encountered during surface disturbance activities are documented in **Section 3.5**.

In the event that subsidence is greater than predicted, resulting in unexpected impacts to heritage sites, the incident procedure documented in the Integra Underground EMS will be followed. A Trigger Action Response Plan is also included in **Appendix D**.

9 Accountabilities

The general roles and responsibilities of staff at Integra Underground in respect of this AHMP are presented in **Table 9-1**.

Table 9-1 – Roles and responsibilities

Role	Accountabilities for this document
Operations Manager	Provide adequate resources for the implementation of this management plan.
Environment and Community Manager or delegate	Implement this management plan. Interface for environmental and heritage matters between government authorities, private industry, contractors, community groups and the wider community. Maintain an environmental monitoring program for heritage sites. Report information relating to heritage sites occurring throughout the year in the Annual Review. Coordinate reviews of this management plan.
All personnel	Comply with all requirements of this management plan.

10 Document Information

Relevant legislation, standards and other reference information will be regularly reviewed and monitored for updates and will be included in any future revisions to this AHMP. Related documents listed in **Section 7.1** provide the linkage and source to develop and maintain compliance information relevant to the AHMP.

10.1 Related Documents

Related documents, listed in **Table 10-1** below, are documents directly related to or referenced from this document. Internal procedures have not been reviewed or endorsed by DPE and Glencore is responsible for verifying these procedures are in accordance with this management plan and generally in accordance with PA 08_0101.

Table 10-1 – Related documents

Number	Title
GCAA	
GCAA HSEC PCL 0013	11.21 Aboriginal Cultural Heritage - NSW
CAA HSEC PRO 0002	Ground Disturbance Permit Procedure
Integra Underground	
INTUG-793190785-45	Environmental Management Strategy
INTUG-793190785-49	Exploration Activities and Minor Surface Infrastructure Management Plan
INTUG-263795162-23	Historical Cultural Heritage Management Plan

10.2 Reference Information

Reference information, listed in **Table 10-2** below, is information that is directly related to the development of this document or referenced from within this document.

Table 10-2 – Reference information

Reference	Title
ACHM 2013	<i>Aboriginal Cultural Heritage Assessment Report for the Mount Owen Continued Operations Project</i>
ERM 2009a	<i>Proposed Integra Underground Coal Project Environmental Assessment</i>
ERM 2009b	<i>Integra Underground Coal Project Heritage Assessment</i>
ERM 2007	<i>Glennies Creek Longwall Panels 10 to 17 Application for Subsidence Management Approval – Archaeology Subsidence Management Plan (Annex L)</i>
Hansen Bailey (2017a)	Integra to Mount Owen Complex Water Pipeline Modification Environmental Assessment
Hansen Bailey (2017b)	Integra Underground Mine Longwall Extension Modification Environmental Assessment for HV Coking Coal Pty Ltd
Hansen Bailey (2018)	Integra Underground Mine Longwall Extension Modification Response to Submissions for HV Coking Coal Pty Limited
HLA 2007	<i>Aboriginal Heritage Assessment of the Glennies Creek Open Cut Coal Mine</i>
ERM 2002	<i>Ravensworth East Archaeological Investigation</i>

Reference	Title
ERM 2006	<i>Glennies Creek Colliery Longwall Panels Ten to Seventeen Cultural Heritage Assessment</i>
ERM 2005	<i>Glennies Creek Colliery Longwall Panels Seven to Nine Cultural Heritage Assessment</i>
Glencore 2016	<i>Mount Owen Open Cut Aboriginal Cultural Heritage Management Plan</i>
NPWS 1997	<i>Aboriginal Cultural Heritage Standards and Guidelines Kit (NPWS 1997).</i>
NSW DECCW 2010	<i>Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW</i>
NSW Department of Health 2008	<i>Policy Directive –Exhumation of Human Remains</i>
NSW Heritage Office 1998	<i>Skeletal Remains – Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977</i>
NSW Heritage Office 2006	<i>Photographic Recording of Heritage Items Using Film or Digital Capture</i>
SCT 2017	<i>Integra Underground Mine: Subsidence Assessment for LW13 and LW14 Extraction Plan</i>
Umwelt 2004a	<i>Aboriginal Archaeological Assessment – Glendell Open Cut Mine Project</i>
Umwelt 2004b	<i>Survey and Assessment of Impact on Aboriginal Cultural Heritage and Archaeological Values, Main Creek Hunter Valley, NSW</i>

10.3 Change Information

A summary of the document history is provided in **Table 10-3** below.

Table 10-3 – Change information

Version	Date	Review team (consultation)	Change Summary
1.0	February 2017	Pamela Kottaras (EMM) Nicole Armit (EMM) Mark Robinson (Integra Underground) Chloe Piggford (Integra Underground)	New document for Integra Underground
2.0	September 2017	Chloe Piggford (Integra Underground)	Update to reflect Modification 7 of Project Approval in line with Schedule 5, Condition 6 of PA 08_0101.
3.0	June 2018	Sophie Nicholas and Chris Jones (SLR) Chloe Piggford (Integra Underground)	Update to reflect Modification 8 of PA 08_0101

Appendix A - Endorsement of Appointment of Consultant



**Planning &
Environment**

**Planning Services
Resource Assessments**
Contact: Thomas Watt
Phone: 9274 6375
Email: thomas.watt@planning.nsw.gov.au

Mr Mark Robinson
Environment and Community Manager
Integra Underground
PO Box 320
Singleton NSW 2330

Mark
Dear Mr Robinson,

Approval of Experts – Integra Underground Coal Mine

I refer to your letters dated 16 November 2016 requesting the Secretary's approval of experts to prepare management plans, as required under conditions 20, 33 and 41 of Project Approval (PA) 08_0101.

The Secretary has reviewed the nominations and is satisfied that the following persons are suitably qualified and experienced and has approved their appointment, as follows:

- Mark Robinson of Integra Underground mine (project coordinator), Chris Jones of SLR Global Environmental Solutions, Ken Mills of SCT Operations Pty Ltd and Andrew Dawkins of GeoTerra Pty Ltd to prepare the Extraction Plan, required under condition 20 in Schedule 3;
- Pamela Kottaras of EMM Consulting to prepare the Heritage Management Plan, required under condition 33 in Schedule 3; and
- Nicole Armit of EMM Consulting to prepare the Exploration Activities and Minor Surface Infrastructure Management Plan, required under condition 41 in Schedule 3.

If you wish to discuss this matter, please contact Thomas Watt on 9274 6375.

Yours sincerely,

Howard Reed

Howard Reed
Director
Resource Assessments
as nominee of the Secretary

19-12-16

Appendix B – External Consultation Records



Office of
Environment
& Heritage

DOC16/574014-1

Mr Mark Robinson
Integra Underground
Glencore
mark.robinson@glencore.com.au

Dear Mr Robinson

Integra Underground Recommencement - Review of Management Plans

I refer to your email dated 8 November 2016 notifying the Office of Environment and Heritage (OEH) of a change in ownership and proposed recommencement of mining operations at Integra Underground Mine. Your email sought feedback from OEH on the approved management plans for Integra which have been updated in line with the ownership changes and proposed development and extraction of LW13-14 in 2017/18.

As I indicated to you in a follow up email (10 November 2016), the Hunter Central Coast Region Planning Team has a significant workload at present. I had hoped to be able to provide a review of the following plans within the time frames provided: Rehabilitation – Mine Operations Plan, Aboriginal Heritage Management Plan, Biodiversity Management Plan and Water Management Plan. Unfortunately, it has not been possible to review these plans in the short time frame provided.

As I previously advised, the Non Aboriginal Heritage Management Plan was forwarded to OEH Heritage Division for review. I understand Heritage Division will provide advice on behalf of OEH and the Heritage Council of NSW in separate correspondence.

If you require any further information regarding this matter please contact Robert Gibson, Regional Biodiversity Conservation Officer, on 4927 3154.

Yours sincerely

 28 NOV 2016

RICHARD BATH
Senior Team Leader Planning, Hunter Central Coast Region
Regional Operations

Locked Bag 1002 Dangar NSW 2309
Level 4/26 Honeysuckle Drive Newcastle NSW 2300
rog.hcc@environment.nsw.gov.au
ABN 30 841 387 271
www.environment.nsw.gov.au

From: Ihlein, Mark <mihlein@singleton.nsw.gov.au>
Sent: Tuesday, 15 November 2016 10:45 AM
To: Robinson, Mark (Integra Underground - AU)
Subject: Re: Integra Underground

Hi Mark

Apologies for the delay - the documents are satisfactory from Singleton Councils perspective.

Regards
Mark

Sent from my iPhone

On 15 Nov 2016, at 9:50 am, "Mark.Robinson@glencore.com.au<<mailto:Mark.Robinson@glencore.com.au>>"<Mark.Robinson@glencore.com.au<<mailto:Mark.Robinson@glencore.com.au>>> wrote:

Hi Mark,
Could you provide a response so we can progress the plans to Department of Planning for their review?

Kind regards
Mark Robinson
Integra Underground
Glencore
Telephone: +61 2 65774205
Mobile: 0439 131 585

From: Robinson, Mark (Integra Underground - AU)
Sent: Tuesday, 8 November 2016 3:33 PM
To: 'Ihlein, Mark'
Cc: Smith, Kelly (Integra Underground - AU)
Subject: RE: Integra Underground

Hi Mark,

As discussed last week, the Integra Underground Project Approval requires consultation with Council on the development management plans.
The approved management plans for Integra have been updated to account for the change in the ownership and proposed recommencement of operations for the development and extraction of LW13-14 in 2017-2018. Development is planned to commence 1 January 2107 with longwall extraction planned to commence in May 2017. The updated management plans to be developed in consultation with Council under the Integra Project Approval are attached for Councils review i.e.

- Heritage (Aboriginal and Non Aboriginal)
 - Water Management Plans
 - Rehabilitation (MOP) – (the appendices for Rehabilitation Cost Estimate and plans, are too large a file size to send by email and can be sent by file transfer if requested).
- Could you please provide any feedback by 15 November 2016?

Kind regards
Mark Robinson
Integra Underground
Glencore
Telephone: +61 2 65774205
Mobile: 0439 131 585

From: Laurie Perry <l.perry@optusnet.com.au>
Sent: Tuesday, 22 November 2016 3:23 PM
To: Smith, Kelly (Integra Underground - AU)
Cc: Robinson, Mark (Integra Underground - AU)
Subject: RE: Integra Underground - Aboriginal Heritage Management Plan

Hi Guys

Looks all good to me I will table this at our board meeting on Saturday and get back to you.

Cheers

Laurie Perry

CEO - Wonnarua Nation Aboriginal Corporation

Ground Floor John St Singleton NSW

PO BOX 3066

Singleton Delivery Centre 2330

Ph : (02) 6571 8595

Fax: (02) 6571 8551

Mob : 0412 593 020

Email : enquiries@wonnarua.org.au

Home : l.perry@optusnet.com.au

Website : www.wonnarua.org.au

From: Kelly.Smith@glencore.com.au [<mailto:Kelly.Smith@glencore.com.au>]
Sent: Tuesday, 15 November 2016 4:59 PM
To: enquiries@wonnarua.org.au; l.perry@optusnet.com.au
Cc: Mark.Robinson@glencore.com.au
Subject: Integra Underground - Aboriginal Heritage Management Plan

Good afternoon Laurie,

HV Coking Coal Pty Limited (wholly owned by Glencore) has recently announced the recommencement of mining operations at Integra Underground (Integra).

The approved management plans for Integra have been updated to account for the change in the ownership and proposed recommencement of operations for the development and extraction of LW13-14 in 2017-2018. Development is planned to commence 1 January 2017 with longwall extraction planned to commence in May 2017.

As per condition 33 (b) of Schedule 3 of the Project Approval the Aboriginal Heritage Management Plan is to be prepared in consultation with the Aboriginal community and registered Aboriginal parties.

Please find attached a copy of the Integra Underground Aboriginal Heritage Management Plan.

A copy of this Management Plan was also posted to the following address on the 8 November 2016.

PO BOX 3066

Singleton Delivery Centre 2330

If you have any comments or queries regarding this Management Plan please contact Mark Robinson on 0439 131 585 or at Mark.Robinson@glencore.com.au

Kind regards,

Kelly Smith

*Environment and Community Graduate
Integra Underground*

GLENCORE

Phone: (02) 6577 4215

Email: kelly.smith@glencore.com.au

Appendix C – AHMP Approval



**Planning &
Environment**

Planning Services
Resource Assessments
Contact: Matthew Sprott
Phone: 8217 2054
Email: matthew.sprott@planning.nsw.gov.au

Chloe Piggford
Environment and Community Manager
Integra Underground
PO Box 320
Singleton NSW 2330

Dear Ms Piggford

Integra Underground Mine (PA 08_0101) – Management Plans

I refer to your letter of 8 December 2016 requesting the Secretary's approval of a number of management plans required under the conditions of approval for PA 08_0101, prior to the recommencement of operations at the Integra Underground Mine.

The Department notes that Glencore is seeking to pursue the staged recommencement of operations at the mine, commencing with the development of first workings for Longwalls 13-14 in February 2017 and progressing to longwall extraction in May 2017.

The Department has now completed its assessment of the final draft versions of the following management plans submitted via email on 10 February 2017:

- Air Quality and Greenhouse Gas Management Plan (condition 15, Schedule 3);
- Noise Management Plan (condition 9, Schedule 3);
- Biodiversity Management Plan (condition 32, Schedule 3);
- Heritage Management Plans for Aboriginal and non-Aboriginal heritage (condition 33, Schedule 3); and
- Exploration Activities and Minor Surface Infrastructure Management Plan (condition 41, Schedule 3).

The Department is satisfied that the above plans include appropriate management measures and adequately address the requirements of the project approval, for the purposes of developing first workings for Longwalls 13-14 of the Integra Underground Mine. However, the Department considers that these plans would benefit from further refinement to the description of the approved longwall layout, clarification of the flora and fauna species and vegetation communities overlying the project area and additional specificity around the measures that would be implemented through trigger action response plans to address the likely impacts of the development.

Consequently, I wish to advise that the Secretary conditionally approves the above plans for the purposes of developing the first workings for Longwalls 13-14. Glencore is required to consult further with the Department regarding the refinement and subsequent approval of these plans prior to the commencement of longwall extraction at the site.

Please ensure the effective date on the cover page of the above plans is revised to reflect the date of this letter. Once finalised please place a copy of the approved plans on your website.

If you wish to discuss this matter further, please contact Matthew Sprott at the details listed above.

Yours sincerely


Howard Reed 17.2.17
Director Resource Assessments
as the Secretary's nominee

Department of Planning and Environment
Level 22, 320 Pitt Street Sydney NSW 2000 | GPO Box 39 Sydney NSW 2001 | T 1300 305 695 | www.planning.nsw.gov.au



Planning Services
Resource Assessments
Contact: Robyn Skinner
Phone: 6575 3409
Email: robyn.skinner@planning.nsw.gov.au

Ms Chloe Piggford
Environment & Community Manager
Integra Underground
PO Box 320
Singleton NSW 2330

Dear Ms Piggford,

Integra Underground Mine (PA 08_0101) – Management Plans

This letter refers to the following site-wide management plans for Integra Underground Mine that were submitted to the Department for approval:

- Biodiversity Management Plan, submitted 3 April 2017 (condition 32 of Schedule 3); and
- Heritage Management Plans for Aboriginal and non-Aboriginal heritage, submitted 27 March 2017 (condition 33 of Schedule 3).

The Department notes these revised plans were submitted after the Department issued a conditional approval on 17 February 2017. The Department has since reviewed the revised plans and considers they now adequately address the full requirements of the relevant conditions. Consequently, the Secretary approves the above plans.

Once finalised please place a copy of the approved plans on your website and forward a copy to the Department.

If you wish to discuss this matter, please contact Robyn Skinner on 6575 3409.

Yours sincerely,


Howard Reed 6.4.17
Director Resource Assessments
as nominee of the Secretary

Department of Planning and Environment
320 Pitt Street Sydney NSW 2000 | GPO Box 39 Sydney NSW 2001 | T 1300 305 695 | www.planning.nsw.gov.au



Planning &
Environment

Planning Services
Resource Assessments
Contact: Megan Dawson
Phone: 9274 6391
Email: megan.dawson@planning.nsw.gov.au

Ms Chloe Piggford
Environment & Community Manager
Integra Underground
PO Box 320
Singleton NSW 2330

Dear Ms Piggford,

**Integra Underground Mine (PA 08_0101)
Updated Management Plans following Modification 7**

I refer to your correspondence of 26 September 2017, submitting five updated management plans for Integra Underground Mine to the Department for approval. I understand that these plans have been updated to address the new activities and requirements approved under modification 7 on 18 September 2017.

The Department has reviewed the following plans and is satisfied that they meet the relevant requirements under PA 08_0101:

- Noise Management Plan (condition 9 of Schedule 3);
- Water Management Plan (condition 31 of Schedule 3);
- Biodiversity Management Plan (condition 32 of Schedule 3);
- Aboriginal Heritage Management (condition 33 of Schedule 3); and
- Historic Heritage Management (condition 33 of Schedule 3).

Consequently, I wish to advise that the Secretary approves the above plans. Please provide final (untracked) versions of these plans to the Department at your earliest convenience and place a copy of them on your website.

If you wish to discuss this matter further, please contact Megan Dawson on 9274 6391.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Matthew Spratt'.

28/09/17

Matthew Spratt

A/Director Resource Assessments
as nominee of the Secretary

From: Crawford, Mary-Anne <mcrawford@singleton.nsw.gov.au>
Sent: Wednesday, 11 July 2018 8:05 PM
To: Piggford, Chloe (Integra - AU)
Cc: Ihlein, Mark
Subject: RE: Integra Underground mine - Management Plans - for comment

Hi Chloe

Thank you for the opportunity to comment on the revised management plans.

Council has no comment on these plans at this time.

Could you please direct any future correspondence to myself and the standard Singleton email address, ssc@singleton.nsw.gov.au in the first instance, thanks

Regards,



MARY-ANNE CRAWFORD
**Manager Development and Environmental
Services**
T 02 6578 7337
M 0400 403 550
E mcrawford@singleton.nsw.gov.au
W singleton.nsw.gov.au



Planning &
Environment

Planning Services
Resource Assessments
Contact: Jack Murphy
Phone: 8217 2016
Email: jack.murphy@planning.nsw.gov.au

Ms Chloe Piggford
Environmental and Community Manager
Integra Underground

Email: chloe.piggford@glencore.com.au

Dear Ms Piggford,

**Integra Underground Project (08_0101)
Environmental Management Plans**

I refer to your email dated 7 September 2018, submitting a revised environmental management strategy and revised environmental management plans for the Integra Underground Project. The Department has reviewed the following documents:

- Heritage Management Plan dated September 2018 (condition 33, Schedule 3);
- Air Quality and Greenhouse Gas Management Plan dated September 2018 (condition 15, Schedule 3);
- Biodiversity Management Plan dated September 2018 (condition 32, Schedule 3);
- Environmental Management Strategy dated September 2018 (condition 1, Schedule 5);
- Water Management Plan dated September 2018 (condition 31, Schedule 3);
- Construction Traffic Management Plan dated September 2018 (condition 42, Schedule 3);
- Noise Management Plan dated September 2018 (condition 9, Schedule 3); and
- Exploration Activities and Minor Surface Infrastructure Management Plan dated September 2018 (condition 41, Schedule 3).

The Secretary has approved the above documents. Please ensure finalised copies of these documents are made available on the company's website.

Should you have any enquiries in relation to this matter, please contact Jack Murphy.

Yours sincerely,

A handwritten signature in blue ink that reads 'Howard Reed'.

Howard Reed 10.9.18
Director
Resource Assessments
as nominee of the Secretary

Appendix D – Trigger Action Response Plan

Characteristic	Trigger	Action	Response
Minor surface disturbance areas	Inadvertent clearing occurs for surface infrastructure such as gas drainage infrastructure, exploration activities or other surface activities disturbing known Aboriginal sites	Work will cease immediately and the area will be inspected by a qualified archaeologist to assess the level of impact on the sites.	Sites will be managed accordingly. OEH and RAPs representatives will be consulted. Work will not recommence until the required clearances are obtained. If deemed to be necessary, Aboriginal sites will be salvaged in accordance with the procedures described in the AHMP.
	Inadvertent clearing occurs for surface infrastructure such as gas drainage infrastructure, exploration activities or other surface activities disturbing unknown Aboriginal sites	Work will cease immediately and the area will be inspected by a qualified archaeologist to assess the level of impact on the sites.	Sites will be managed accordingly. The RAPs and OEH will be notified and all new sites will be registered on AHIMS. Work will not recommence until the required clearances are obtained. If deemed to be necessary, Aboriginal sites will be salvaged in accordance with the procedures described in the AHMP.
Subsidence	Subsidence induced surface cracking is greater than predicted and disturbs known Aboriginal sites.	Known Aboriginal sites will be inspected by a qualified archaeologist to assess the level of impact.	Sites will be managed accordingly. OEH and RAPs will be consulted. If deemed to be necessary, Aboriginal sites will be salvaged in accordance with the procedures described in the AHMP.
	Earthworks required to remediate subsidence-induced erosion, surface cracking and/or ponding disturb surface and subsurface artefacts.	Work will cease immediately and the area will be inspected by a qualified archaeologist to assess the level of impact on the sites.	Re-profiling works will be undertaken in accordance with the landform presented in the MOP. Sites will be managed accordingly. The RAPs and OEH will be notified and all new sites will be registered on AHIMS. If deemed to be necessary, Aboriginal sites will be salvaged in accordance with the procedures described in the AHMP.