

Historic Heritage Management Plan

Mount Thorley Warkworth Operations (Warkworth Continuation SSD-6464 & Mount Thorley Operations SSD-6465)

Prepared by Yancoal Australia

July 2017

Document Control Table

Version number	Date	Revision description	DP&E approval date
v1	July 2017	Original	11 October 2017

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(FINAL – July 2017)



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Andrew

Dear Mr Speechly

**Mount Thorley Warkworth Operations (SSD 6464 and SSD 6465)
Approval of Management Plans**

I refer to Joel Deacon's correspondence from 11 July 2017 submitting revised management plans for the Mount Thorley Warkworth mining complex (SSD 6464 and SSD 6465). The Department notes the management plans have been revised to address the Department's comments of 3 October 2017 (see **Attachment A**).

The Department has reviewed the following plans and is satisfied that they meet the relevant requirements under SSD 6464 and SSD 6465:

- Wollombi Brook Aboriginal Cultural Heritage Conservation Area Management Plan version 7 (condition 38 of Schedule 3 of SSD 6464); and
- Historic Heritage Management Plan version 5 (condition 46 of Schedule 3 of SSD 6464). The Department notes that this management plan has been developed to meet the requirements of condition 46 of Schedule 3 of SSD 6464 and to include the management of historic heritage within the area covered by the Mount Thorley Operations development consent (SSD 6465).

I wish to advise that the Secretary approves the above management plans. Please place final copies of the management plans on your website.

Should you have any questions in relation to this matter, please contact Jessie Evans on the above details.

Yours sincerely

Howard Reed

Howard Reed

11.10.17

Director

Resource Assessments

as nominee of the Secretary

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Mount Thorley Warkworth Operations Historic Heritage Management Plan (Warkworth Continuation SSD-6464 & Mount Thorley Operations SSD-6465)

Table 1: Warkworth Continuation SSD-6464 Schedule 3, Condition 46 – Historic Heritage Management Plan requirements

Condition 46 - Historic Heritage Management Plan	HHMP Section / Schedule
The Applicant shall prepare a Historic Heritage Management Plan for the development to the satisfaction of the Secretary, and carry out the development in accordance with this plan. This plan must:	
(a) be prepared by suitably qualified & experienced persons whose appointment has been endorsed by the Secretary;	Recital I
(b) be prepared in consultation with the Heritage Branch, Council, CHAG & local historical organisations;	Recitals J & K; Provision 2
(c) be submitted to the Secretary for approval prior to carrying out any mining to the west of Wallaby Scrub Road;	Recital L
include the following for the management of historic heritage on site:	
<ul style="list-style-type: none"> • conservation management plans for the former RAAF Base Bulga, Great North Road (Wallaby Scrub Road portion), Brick House & Springwood Homestead; and 	Schedules 10, 11, 12 & 13
a program/procedures for:	
<ul style="list-style-type: none"> ○ archaeological investigations of Wallaby Scrub Road, Well 2 and the former RAAF Base Bulga Complex; 	Schedule 14
<ul style="list-style-type: none"> ○ photographic recording of all historic heritage sites within the disturbance areas prior to disturbance; 	Schedule 12 & Schedule 19
<ul style="list-style-type: none"> ○ relocation & storage of movable heritage items; 	Provisions 6 & 14, & Schedules 5 & 6
<ul style="list-style-type: none"> ○ managing the discovery of any new heritage items during the development; 	Provision 11
<ul style="list-style-type: none"> ○ ongoing consultation and the involvement of the relevant historical groups in the conservation & management of historic heritage on the site; 	Provision 2 & 25
<ul style="list-style-type: none"> ○ developing an interpretation programme of the heritage values of the RAAF Base Bulga Complex & the Great North Road Complex; 	Schedules 15 & 16
<ul style="list-style-type: none"> ○ establishing the Mount Thorley Warkworth Historic Heritage Conservation Fund and the Mount Thorley Warkworth Great Northern Road Conservation Fund; and 	Schedules 17 & 18
<ul style="list-style-type: none"> ○ protecting the other heritage items outside the disturbance areas. 	Provision 3, & Schedules 2 & 3

Note: It is accepted that the conservation management plan for the Springwood Homestead and interpretation programme for the RAAF Base Bulga Complex and the Great North Road Complex will not be submitted with the initial Historic Heritage Management Plan. These should be progressively added to the plan once completed.

Table of Abbreviations

CTP	Convict Trail Project Incorporated
CHAG	Community Heritage Advisory Group
CHMS	Cultural Heritage Management System
CHZS	Cultural Heritage Zoning Scheme
DMO	Data Management Officer
DP&E	Department of Planning and Environment
GDP	Ground Disturbance Permit
GIS	Geographic Information System
GPR	Ground Penetrating Radar
MTW	Mount Thorley Warkworth Operations
OEH	Office of Environment and Heritage
SHSM	Singleton Historical Society and Museum
SSD	State Significant Development
ToR	Terms of Reference

Recitals

- A. Yancoal Australia Pty Ltd, holds mining tenements pursuant to Warkworth Continuation Operations and Mount Thorley Operations located south-west of Singleton, NSW.
- B. Warkworth Operations and Mount Thorley Operations are operated as an integrated mining operation and are referred to as Mount Thorley Warkworth Operations.
- C. Mining and associated development activities at Mount Thorley Warkworth Operations are approved and regulated under the Warkworth Continuation SSD-6464 and Mount Thorley Operations SSD-6465 development consents approved on 26 November 2015.
- D. Yancoal Australia has developed this Historic Heritage Management Plan pursuant to Schedule 3, Condition 46 of SSD-6464.
- E. SSD-6465 does not have a requirement to develop a Historic Heritage Management Plan, however Yancoal Australia are applying the same historic heritage management principles, processes and measures across all the lands approved under development consents SSD-6464 and SSD-6465.
- F. The provisions of this Historic Heritage Management Plan apply to all lands that are subject to the consent conditions of the Warkworth Continuation SSD-6464 and Mount Thorley Operations SSD-6465 as depicted in Schedule 1 of this Historic Heritage Management Plan.
- G. The provisions of this Historic Heritage Management Plan apply to all Historic Heritage objects and sites located within the Historic Heritage Management Plan Area.
- H. This Historic Heritage Management Plan has been prepared by Dr David Cameron (Manager Heritage and Aboriginal Relations) and Joel Deacon (Specialist Cultural Heritage NSW), whose appointment has been endorsed by the Secretary on 14 November 2016 in compliance with SSD-6464 condition 46(a).
- I. Interested community members and organisations, including local historical organisations, through the auspices of the Community Heritage Advisory Group, were consulted in the development of this Historic Heritage Management Plan.
- J. Yancoal Australia has consulted with the Department of Planning and Environment, the Heritage Division of the Office of Environment and

Heritage, and Singleton Council in the preparation of this Historic Heritage Management Plan.

- K. Internal procedures referenced in this document have not been reviewed or endorsed by the Department of Planning & Environment. Yancoal takes responsibility for ensuring these procedures are in accordance with this management plan and generally in accordance with the development consent.
- L. This Historic Heritage Management Plan was approved by the Department of Planning and Environment on **11 October 2017** and came into effect on **11 October 2017**.

Definitions

Community Heritage Advisory Group (CHAG). The CHAG is the primary entity through which Yancoal communicates and consults with regard matters pertaining to Historic Heritage associated with Mount Thorley Warkworth Operations. The CHAG is comprised of community stakeholders and representatives from Yancoal. The CHAG was established voluntarily as a community consultation and advisory forum for reviewing all matters pertaining to the management of historic heritage located on Yancoal owned lands.

Community Stakeholders means local interested individuals, community representatives, groups and organisations such as local historical groups who Yancoal consult with, principally through the auspices of the Community Heritage Advisory Group.

Convict Trail Project Incorporated. The Convict Trail Project is an incorporated community based organisation with membership open to all organisations and individuals with an interest in, or responsibility for the conservation and management of the Great North Road.

Ground Disturbance Permit (GDP) means the internal Yancoal permit that must be requested and approved before undertaking any work or activity that may disturb ground, such as clearing vegetation, removing top soil, excavating, that can potentially harm cultural heritage and/or environmental values.

Ground Disturbance/Disturbing Activity means:

- (i) disturbance by machinery or other means of the topsoil or surface rock layer of the ground;
- (ii) otherwise disturbing the material or cultural integrity of an area or object of cultural heritage significance.
- (iii) the removal of native vegetation by disturbing root systems and exposing underlying soil; and

Historic Feature is a general term used by heritage managers to describe any place, building, work, relic, moveable object or precinct with known or potential historic heritage significance. Examples of historic heritage features found in the Hunter Valley include convict sites, settlement ruins, graves, cemeteries, roads, bridges, airfields, parks and sporting venues, mining, pastoral and agricultural sites, and historic archaeological deposits.

Historic Heritage Features Inventory is a comprehensive knowledge base that incorporates all known historic features located on Yancoal lands as identified from local & NSW government site registers, project assessment reports (e.g. EIS) and from targeted community consultation.

Historic Heritage is defined as any deposit, artefact, object or material evidence that relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and is of State or local heritage significance. A place, building, work, relic, moveable object or precinct may have State and/or local significance relating to historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.

Historic Heritage Management Plan (or HHMP) Area means that portion of land consented for mining under SSD-6464 and SSD-6465 as described & depicted in the maps in Schedule 1 of this HHMP.

Historic Heritage Management Plan (or HHMP) means this Historic Heritage Management Plan document and its associated schedules, data, information and documentation.

Item in accordance with the *Heritage Act 1977*, means a place, building, work, relic, moveable object or precinct.

Moveable Object in accordance with the *Heritage Act 1977*, means a moveable object that is not a relic.

Place in accordance with the *Heritage Act 1977*, means an area of land, with or without improvements.

Relic in accordance with the *Heritage Act 1977*, means any deposit, artefact, object or material evidence that:

- (a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and
- (b) is of State or local heritage significance.

Yancoal means Yancoal Australia Pty Ltd, which owns and operates Warkworth Operations through the Warkworth Mine Joint Venture. Yancoal provides all management services to MTW including cultural heritage management services for Warkworth Operations.

Background

Mount Thorley Warkworth Operations

Mount Thorley Warkworth (MTW) Operations is an integrated open cut coal mine complex that incorporated the Warkworth and Mount Thorley mines and is located 11 kilometres south-west of Singleton in the Hunter Valley. The complex has been operational for over 30 years. MTW is situated within the Singleton local government area. The area immediately surrounding the mine is dominated by coal mines and associated infrastructure and industry. The Redbank Power Station and Hunter Valley Operations and Wambo mines are located to the north and Bulga Coal mine to the south.

Historic Heritage Management at MTW

Yancoal Australia (Yancoal) has comprehensive policies, standards and protocols in place to guide Historic Heritage management across all of its operations. In the context of the Upper Hunter Valley, these policies are applied consistently and in consultation with community stakeholders who have interests in this region (which includes the MTW) and with whom Yancoal have well developed and active formal relationships.

Together these comprise the Cultural Heritage Management System (CHMS) which provides a comprehensive set of processes and procedures for the efficient management of cultural heritage (both Aboriginal and Historic) that apply across all Yancoal development activities and land tenures including MTW.

The overarching objective of the CHMS is to efficiently manage and mitigate the risks associated with development impacts on cultural heritage in order to provide mine sites and projects timely and authorised access to Yancoal lands for mining and associated development activities. The CHMS operates under the guiding principle of causing zero harm to Aboriginal and historic heritage wherever possible. Where development requirements necessitate impacts on cultural heritage, Yancoal will ensure that all necessary and reasonable measures are implemented in order to mitigate those impacts in compliance with statutory requirements, cultural heritage agreements, company policies and standards, and in consultation with our host communities.

A responsive system for ongoing consultation with the community regarding historic heritage matters has been developed through the Community Heritage Advisory Group (CHAG) which was established in April 2012. The CHAG oversees all aspects of Historic Heritage management associated with Yancoal's operations, projects and lands throughout the Upper Hunter Valley. The CHAG is formally acknowledged by the Department of Planning and Environment as a party for community consultation in conditions 44, 45 and 46 of SSD-6464.

Comprehensive Historic Heritage impact assessments were undertaken to inform the Warkworth Continuation and Mount Thorley Operations 2014 Environmental Impact Statements. These assessments have included consultation with community stakeholders and with their active participation in fieldwork assessments. The results of the assessments, and consultation conducted over time with the CHAG, DP&E, and the Heritage Branch have directly informed the preparation of this Historic Heritage Management Plan (HHMP).

It is recognised by both Yancoal and the CHAG that this HHMP is a living document which may be revised and amended from time to time with the endorsement of Yancoal and the CHAG, and subject to such revisions and amendments being approved by DP&E.

Provisions of the Historic Heritage Management Plan

1. Purpose of the HHMP

This HHMP sets out the principles, processes and measures through which Historic Heritage will be managed at Mount Thorley Warkworth (MTW) with respect to all lands that are subject to the consent conditions of the Warkworth Continuation SSD-6464 and Mount Thorley Operations SSD-6465 as depicted in Schedule 1 of this HHMP. This is an integrated HHMP that has been developed to comply with Schedule 3, Condition 46 of the Warkworth Continuation SSD-6464 and also to include the management of historic heritage located within the area covered by the Mount Thorley Operations SSD-6565 consent.

2. Consultation

The Community Heritage Advisory Group (CHAG) is the primary forum through which Yancoal Australia (Yancoal) communicates and consults with regard to matters pertaining to Historic Heritage associated with the MTW and other Yancoal operations within the Hunter Valley. Outcomes from the consultation process conducted through the auspices of the CHAG inform management decision-making associated with the development, implementation, and revision of this HHMP. It should be noted that Singleton Council's Heritage Advisor is a member of the CHAG and has been a regular attendee at meetings of this group.

Consultation to inform the development of this HHMP was undertaken at CHAG meetings (and via subsequent correspondence) held on 29 April 2016, 8 June 2016, 12 August 2016, 19 October 2016, 14 December 2016 and 24 February 2017. Consultation drafts of this HHMP were reviewed at CHAG meetings held on 19 October, 14 December 2016, 24 February 2017, 3 May 2017 and 9 June 2017.

A copy of this HHMP was also provided to the Heritage Division on 19 June 2017 for review and comment prior to submission to DP&E.

The results of Historic Heritage assessments and consultation with the CHAG, Convict Trail Project, Singleton Council, Heritage Division (OEH - Office of Environment & Heritage) and DP&E informed the preparation of this HHMP.

3. Historic Heritage Management Inventory

The Historic Heritage Management Inventory (see **Schedule 2**) documents the identification number, location, attributes and specific management requirements for each historic heritage site (e.g. object, site or area) that is subject to this HHMP. The Inventory incorporates all Historic Heritage sites located within the HHMP Area (as depicted in **Schedule 1** of this HHMP) that

have been recorded and assessed during field surveys, inspections or as chance finds.

The HHMP Inventory is a core element of the Warkworth Operations Cultural Heritage Geographic Information System (GIS) and Cultural Heritage Zoning Scheme (CHZS). The Inventory is a 'live' database that records the management status of each site as management actions are implemented (such as salvage mitigation) and the database updated over time including inclusion of chance finds.

The Inventory includes the following information to inform the management of each site:

- a. The Unique Identifier number;
- b. Site Type (e.g. house ruin, well etc);
- c. Site Description and Values (e.g. number/density and attributes);
- d. Site Extent (e.g. 10m diameter);
- e. Date recorded and person recording;
- f. Coordinates (GDA94 Zone 56);
- g. Lot/DP number
- h. Management Option A (management measures if a site is NOT to be disturbed by development); and
- i. Management Option B (management measures if site is to be disturbed by development)

4. Cultural Heritage GIS and Zoning Scheme

The MTW CHZS controls mine development-related land use activities within the HHMP Area, and other lands associated with the MTW area. The CHZS is incorporated within the MTW Cultural Heritage GIS. The GIS records Cultural Heritage site locations (both Aboriginal & historic), extents and other management information as well as the zoning scheme. The CHZS is revised from time to time in line with the implementation of the provisions of this HHMP. Details of the CHZS management status zone classifications are provided in **Schedule 3** of this HHMP.

5. Ground Disturbance Permits (GDP)

No Ground Disturbing Activity will take place within the HHMP Area without the issue of a GDP by duly authorised Yancoal personnel. The GDP process is an internal Yancoal mechanism that is additional to, but does not obviate, the need to comply with the provisions of this HHMP or other relevant development consent approvals.

All applications for a GDP must specify the boundary extent of the area that is to be subject to the Ground Disturbing Activity, the nature of the activities that are to be undertaken in that area, and the proposed date on which the activities are to commence.

No GDP will be approved unless the area that is subject to the proposed Ground Disturbing Activity has been assessed against the CHZS and all relevant management measures have been implemented as specified in the Historic Heritage Management Inventory (**Schedule 2**) of this HHMP.

6. Relocation & Management of Historic Objects

The management of movable historic objects (e.g. artefacts) has been considered for both the short and the long term management.

Short Term Management

Any historic objects that are removed from the HHMP Area under the provisions of this HHMP will be photographed (**Schedule 19**), appropriately tagged (noting site number, date of mitigation, storage identification number, etc.) and securely stored at the Yancoal Hunter Valley Services Cultural Heritage Storage Facility. This facility, located at 1011 Lemington Road, Ravensworth, will be the initial repository for all historic heritage items salvaged from Yancoal operations in the Upper Hunter Valley, including the MTW area.

Long Term Management

In the first instance, the Singleton Historical Society and Museum (SHSM) will be contacted and offered custody of any items they deem appropriate and of a high enough significance that warrants display or conservation for the local community. Yancoal will ensure that all contextual information regarding any historical objects donated to the SHSM is also provided.

For those items not taken by the SHSM, Yancoal will discuss and agree on long term management options with the CHAG. Alternative management options may include donating the items to other relevant societies or Singleton Shire Council, using them for display at the MTW Administration Offices, or relocating them to historic sites that will be protected within either the Wollombi Brook or Loder Creek Aboriginal Cultural Heritage Conservation Areas. Whatever the final repository, Yancoal will ensure that all contextual information regarding any historical objects so relocated or donated is also provided.

In the event that Yancoal retains custody of salvaged historic objects, they will be retained, managed and stored at the Yancoal Hunter Valley Services Cultural Heritage Storage Facility.

7. Community Heritage Conservation Initiatives

This provision enables community nominated heritage conservation initiatives to be submitted through the auspices of the CHAG to Yancoal for consideration. Where a community heritage initiative is approved by Yancoal

a scope for the initiative will be developed and incorporated into this HHMP as an element under **Schedule 20**.

8. Workplace Health and Safety

Yancoal is committed to the principle that all workplace injuries are preventable and accepts its responsibility to provide a safe workplace, fit-for-purpose equipment and safe systems of work. This can only be achieved if all understand and accept obligations to comply with relevant legislation and any relevant Yancoal operational policies, procedures or plans.

All Yancoal employees, contractors and visitors undertaking historic heritage management activities within the HHMP Area will be required to have participated in any inductions required by Yancoal prior to entry to the mine leases to ensure they have an understanding of relevant legislation and any relevant Yancoal operational policies, procedures or plans.

Employees, contractors and visitors conducting historic heritage management activities will be required to wear all relevant Personal Protective Equipment as prescribed under the MTW Health and Safety procedures.

9. Cultural Heritage Management Inductions

The Yancoal operations induction process includes appropriate Aboriginal and Historic Cultural Heritage management content. The induction process applies to all Yancoal personnel and contractors working at MTW.

As a minimum requirement, Yancoal will ensure that the following elements are incorporated in the current and any future cultural heritage management induction module for the HHMP Area:

- a. an overview of the cultural heritage management program implemented at the MTW area;
- b. a general description of historic and Aboriginal cultural heritage values - both the tangible (e.g. material culture such as artefacts) and the intangible (e.g. spiritual);
- c. an overview of the key provisions of the HHMP;
- d. an overview of the CHZS and the Limit of Disturbance Boundary provisions;
- e. an overview of the standard operating procedures associated with Significant Areas, Restricted Access Areas and other CHZS requirements;
- f. an overview of the GDP system and the specific requirements associated with cultural heritage management;
- g. the legal provisions governing the management of cultural heritage; and,
- h. the responsibility and duty of care that each individual has to comply with the cultural heritage management process established for the MTW area, and with all relevant provisions of pertinent legislation.

Detailed records are maintained of all personnel who have completed the Yancoal induction process and the date on which it was provided. Yancoal will ensure these inductions remain current (which may include refresher courses from time to time where this is deemed necessary).

10. Discovery of Human Skeletal Remains

Where identified or possible human skeletal remains are discovered within the HHMP Area then the process for management of skeletal remains outlined in the Heritage Branch publication "Skeletal Remains; Guidelines for Management of Human Skeletal Remains" will be implemented. Details of the process for management of the discovery and reporting of skeletal remains are appended in **Schedule 9** of this HHMP.

11. Discovery of New Finds

Any newly identified Historic Heritage sites or objects located within the HHMP Area will be protected with an initial 20m buffer (where physically possible to do so) around the site until Yancoal has determined the attributes and cultural heritage significance of the site. Yancoal will consult with the CHAG, and seek technical advice if required, to inform the development of the management measure/s most appropriate for the site or object. Any newly identified Historic Heritage site or object will be temporarily protected by the implementation of the procedures specified in **Schedule 8** (Fencing and Barricading) of this HHMP. The ongoing management of new sites or objects will be determined in a manner consistent with the relevant management measures specified in provisions and schedules of this HHMP.

12. Photographic Recording

Where there is a requirement to take archival quality photographic recordings of historic heritage items or sites, the guidelines outlined in the Heritage Office (2006) document *Photographic Recording of Heritage Items Using Film or Digital Capture* will be followed. This document is appended to this HHMP as **Schedule 19**.

13. Sub-Surface Investigations (including Potential Archaeological Deposits)

Any places identified as requiring this form of management will be subject to the management process outlined in **Schedule 4** of this HHMP.

14. Collection of Historic Heritage Items

Any places identified as requiring this form of management will be subject to the management processes outlined in **Schedules 5 and 6** of this HHMP.

15. Activity Area Monitoring

Any places identified as requiring this form of management will be subject to the management process outlined in **Schedule 7** of this HHMP.

16. Fencing and Barricading Historic Heritage Sites, Places and Areas

Any places identified as requiring this form of management will be subject to the management process outlined in **Schedule 8** of this HHMP.

17. Signage for Historic Heritage Sites, Places and Areas

All historic heritage sites, objects, places or areas located within the HHMP Area that are subject to fencing and barricading requirements, as per **Schedule 8** of this HHMP, will be identified with at least one sign which denotes that it is either a Significant Area or Restricted Access Area or Archaeological/Heritage Site unless otherwise specified in **Schedule 2** of this HHMP. Additional signs will be installed along the boundary for larger sites, places or areas so that the extent boundary is clearly denoted from all directions of access. Signs will make it explicit that entry to these sites, places or areas is not permitted without authorisation.

18. Ground Disturbance Management Buffers

Unless otherwise specified in **Schedule 2** of this HHMP, a standard ground disturbance exclusion buffer radius of 10m will apply around each historic heritage site extent or object. No disturbance is to occur within the buffer area without authorisation under this HHMP and an approved Yancoal MTW GDP.

The management buffer area is defined as the distance between the greatest extent of the site in any particular direction and the external buffer boundary. Buffered areas may be delineated with temporary barricading or with hard fencing where specified in either **Schedule 2** or **Schedule 8** (Fencing and Barricading) of this HHMP, or where required as a condition of a GDP. Where hard fencing or barricading has been installed around a site in conformance with **Schedule 8**, then the fence/barricade alignment will constitute the outer boundary of the ground disturbance management buffer.

Where specific site conditions or project requirements do not allow space sufficient for the standard prescribed management buffer, for example where an existing track, fence, or other physical constraint intersects with the buffer area, then the buffer distance will be the greatest practical distance available.

19. HHMP Compliance Inspections

Yancoal will conduct HHMP compliance inspections at least annually for the life of mining operations within the HHMP. Yancoal, at its discretion, will initiate HHMP compliance inspections at other times as it determines are necessary including for incident investigations pertaining to alleged procedural breaches of the HHMP.

The purpose of the HHMP compliance inspections is to:

- a. inspect areas and sites to assess compliance with the provisions of this HHMP;
- b. inspect and monitor the condition and management of various sites; and
- c. review the effectiveness and performance of the HHMP provisions in the management of historic heritage at the mine.

Reports on HHMP compliance inspections, and other inspections as may be undertaken consistent with the above provisions, will be drafted by Yancoal. These reports will be provided to the CHAG. An annual report on the outcomes of compliance inspections will be incorporated into the MTW Annual Review which is provided to DP&E.

HHMP compliance inspections will involve the following elements:

- a. Yancoal will develop a Terms of Reference (ToR) for each HHMP compliance inspection specifying the area to be inspected and methodology to be adopted;
- b. CHAG members may volunteer to assist in the conduct of HHMP compliance inspections if they so wish;
- c. a HHMP compliance inspection report pro-forma will be completed for the nominated inspection areas;
- d. the HHMP compliance inspection report pro-forma will note the outcomes of the inspections including evidence of compliance and non-compliance with HHMP provisions, recommendations on modifications and improvements to management provisions, recommendations on corrective actions, and other relevant comments associated with the HHMP provisions;
- e. Yancoal and the CHAG will review any recommendations arising from the compliance inspection and may agree to adopt any or all recommendations, or make such other measures they deem appropriate to address any issues raised in the compliance inspection; and
- f. where Yancoal and the CHAG agree to any recommendations or other measures, then Yancoal will amend this HHMP in consultation with the Heritage Division, and seek DP&E's approval on the amendments to the HHMP.

20. Procedural Breaches and Incident Reporting

In accordance with Schedule 5, condition 3 (g) and condition 7 of both SSD-6464 and SSD-6465 any alleged procedural breach of this HHMP will be investigated in accordance with the MTW site incident investigation procedures and incidents reported immediately to the Secretary and any other relevant agencies. A notification and detailed report on any incidents will be provided to the Secretary within the timeframe specified in the conditions of

the SSD-6464 and SSD-6465 approvals, and such further reports as may be requested by the Secretary.

Any incidents that are determined to be a breach of the conditions of this HHMP, including any unauthorised impacts on historic heritage, will be reported to the CHAG as soon as practicable but, at least at the next scheduled CHAG meeting.

21. Variations to this HHMP and Schedules

As the MTW SSD-6464 and SSD-6465 approvals are valid to November 2036 there may be circumstances in the future (such as changes in legislation) where variations or revisions to this HHMP and schedules are required. As per Schedule 2, condition 14 of both SSD-6464 and SSD-6465, Yancoal will review this HHMP as and when required. Where Yancoal determines through such reviews that a variation or revision of this HHMP or schedules is required, Yancoal will, in consultation with the CHAG, engage with DP&E, the Heritage Division and any other relevant agencies that have authority to approve variations or revisions to the HHMP or schedules. Yancoal will submit in writing any such proposed variations or revisions (and updates to schedules) to DP&E and any other relevant agencies for information and/or consideration and/or written approval.

22. Statutory Consents

The MTW SSD-6464 and SSD-6465 development approvals provide an exemption from any further statutory authorities for the management of historic heritage for the term of these development consents and within these development consent areas. This includes requirements for obtaining any further permits under the *NSW Heritage Act 1977*. This HHMP, as approved by the Secretary, provides the statutory authority necessary to undertake the preparation and implementation of all assessment, management, mitigation and salvage measures for historic heritage located on lands that are located within the development consent areas subject to this HHMP.

Historic heritage on Yancoal owned land at MTW that is located outside of the development consent areas will be managed in accordance with the *NSW Heritage Act*, and any permits or additional requirements needed under this act will be sought and complied with prior to any management works commencing

23. Confidentiality

The following information is confidential information:

- a. information (including but not limited to any reports, correspondence, photographs, data or technical specifications provided verbally, in writing or digitally) provided for the purposes of developing this HHMP, or as required by this HHMP; and

- b. information concerning:
 - (i) Yancoal, or any Related Body Corporate,
 - (ii) MTW, or
 - (iii) Yancoal's operations.

Yancoal will not disclose any of the confidential information referred to in this section except:

- a. to officers, employees, members, directors, servants, agents, contractors and sub-contractors of Yancoal whose duties require such disclosure;
- b. to members of the community, through the auspices of the CHAG, where information regarding historic heritage sites has been requested;
- c. to Yancoal's accountants, technical advisors, legal advisors, auditors or other professional advisers, or to Yancoal's financiers or to a recognised stock exchange on which a party are listed;
- d. to the extent necessary to comply with any Applicable Laws, or where disclosure is required by any Applicable Laws;
- e. where disclosure is necessary in performing obligations or enforcing rights under this HHMP;
- f. to the extent that such information is already part of the public domain otherwise than by breach of this section;
- g. as expressly permitted under this HHMP;
- h. where Yancoal is required to meet internal governance or decision making processes in relation to developing, authorising, implementing or operating this HHMP;
- i. where disclosure of the information is required to comply with any requirement of any Government Agency or other regulatory body (including the Australian Stock Exchange) and Yancoal uses its reasonable endeavours to minimise such disclosure;
- j. for any due diligence study by a prospective assignee; or
- k. in defending any legal action where Historic Heritage is relevant.

Yancoal shall take all steps reasonably necessary to ensure that the confidential information referred to in this section is known only to such persons as may reasonably require knowledge thereof in the course of their duties or functions and, to the extent permitted by law, require any person to whom it intends to disclose such information (who is not otherwise under a statutory, professional or contractual duty to keep such information or data confidential) to give an undertaking to keep such information confidential.

24. Implementation of Management Measures

The implementation of all management measures and provisions of this HHMP will be conducted through the management procedures of the Yancoal

CHMS and/or under a ToR (or other scope of works) developed in consultation with the CHAG as may be appropriate.

25. Terms of Reference (ToR) – Scope of Works

Historic heritage assessments, mitigation and other management activities undertaken within the HHMP Area are generally formalised through a ToR or other scope of works. A ToR is a scope of works document that provides details of a proposed activity and its potential impacts, the scope and scale of the historic heritage activities and methodology (e.g. survey, salvage mitigation etc), description of areas for investigation, management requirements, outcomes of investigations (reporting), personnel required, selection of Technical Advisors, work dates, hours and fees, site induction requirements, occupational health and safety issues, administrative and logistical arrangements, communications, data management and sensitive information management protocols, budgets and contact details. ToRs are developed in collaboration with stakeholders through the auspices of the CHAG as may be appropriate.

Representatives of the CHAG will be invited to assist Yancoal under the auspices of the ToR to conduct the assessment or other management activities. Technical Advisors, such as archaeologists or heritage architects, may be engaged by Yancoal to assist with the development of assessment and management methodologies, and to provide technical advice. Technical Advisors participate at the invitation of Yancoal and report directly to Yancoal. CHAG volunteers and Technical Advisors work within the parameters established in this HHMP and as specified in a ToR.

Assessment and management methodologies are designed to be systematic and comprehensive, and rigorous planning and digital data management procedures are applied to ensure areas are comprehensively assessed for Historic Heritage management measures are implemented.

26. Administrative Arrangements for Historic Heritage

CHAG Volunteers

CHAG participants will be invited to assist in the conduct of heritage field surveys (i.e. identification of Historic Heritage objects, sites and places), compliance inspections and implementing management measures.

Technical Advisors

A Technical Advisor may be engaged by Yancoal to conduct investigations, management and assessment activities and provide technical advice on the type, form, extent, archaeological significance and other aspects of Historic Heritage management. The Technical Advisor will ensure that their assessment and reporting activities are conducted in conformance with the relevant Heritage Division guidelines and any additional requirements specified in a ToR

and/or this HHMP. The Technical Advisor will also record details of the Historic Heritage in collaboration with the Yancoal Data Management Officer. The Technical Advisor will provide a report on the outcomes of these investigations as specified in a ToR or other reporting brief.

The Technical Advisor may also be engaged to conduct management activities such as salvage collections, sub-surface investigation, excavations, site verification etc.

Yancoal reserves the right to select and engage Technical Advisors, that Yancoal deem suitably qualified and experienced to undertake the duties of Technical Advisor.

Data Management Officers (DMO)

The DMO may be a Yancoal employee or a contractor engaged by Yancoal and is responsible for directing the survey or management activities as per the agreed methodology and electronically recording all Historic Heritage objects, sites and places identified. The DMO will enter this information into the MTW Historic Heritage GIS. The DMO will generate all maps and survey and site recording, mitigation and management data for Yancoal.

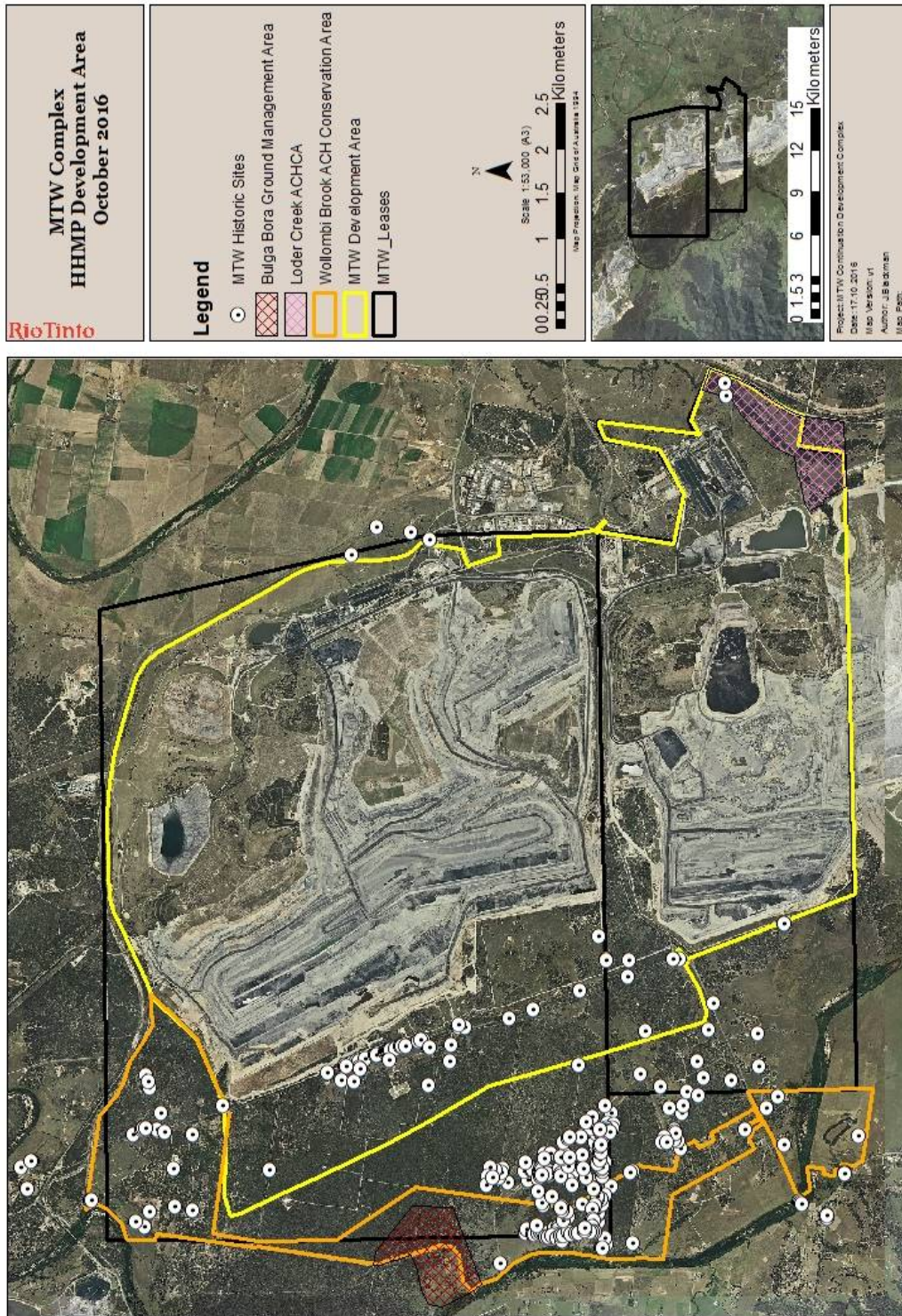
27. Minimisation of Blasting Impacts

Yancoal will determine the nature and risks of potential impacts of blasting activities upon Historic Heritage situated within the vicinity of the HHMP Area as an element of the MTW blast management plan.

Consistent with the results of the risk assessment process used to inform the development of, and, from time to time, revise and update the MTW blast management plan, Yancoal will implement appropriate management measures consistent with the HHMP for the relevant type of Historic Heritage object or place.

Additionally, Yancoal will implement a program of monitoring of blast affects at selected nearby locations as listed in Schedule 3, condition 14(b) of the Warkworth Continuation SSD-6464 to determine any impacts resulting from blasting activities. Should this monitoring show the initial risk modelling requires amendment, such amendment will be made and management measures, consistent with the relevant classification of historic heritage as described in this HHMP and Historic Heritage Management Inventory, implemented as required.

Schedule 1 – Plan of the Mount Thorley Warkworth Operations (SSD-6464 & SSD-6465) Historic Heritage Management Plan Area



Schedule 2 – Historic Heritage Management Inventory

The Historic Heritage Management Inventory is a ‘live’ register and management measures database. The Inventory documents the identification number, location coordinates and lot on plan number, attributes and specific management requirements for all Historic Heritage items (e.g. place, building, work, relic, moveable object or precinct) that are subject to this HHMP.

The Inventory incorporates all Historic Heritage items located within the HHMP Area that are either currently registered on any relevant heritage list or that have been recorded during assessments, inspections or as chance finds.

New items will be added to the Inventory as they are identified during future assessments or inspections, or when chance finds are identified during the life of the operations approved under SSD-6464 and SSD-6465. The database includes the specific management measures to be implemented for each item and will be updated as management measures are implemented or revised.

A tabulated listing of historic heritage items located within the HHMP Area as at November 2016 is provided in the following table.

Schedule 2 –MTW Historic Heritage Management Inventory Sites Table

Site Name & Type	Site Extent	Co-ordinates	Lot/DP#	Management if Disturbed	Management if NOT Disturbed
RBHH-001 Former RAAF Base Bulga Complex (portion of eastern airstrip)	338 ha	314899E, 6387979N (centre of complex)	Multiple lots: DP 107717-1 DP 587986-6 DP 589662-549 DP 610376-1 DP 610376-2 DP 735566-2 DP 755267-129 DP 755270-24 DP 755270-25 DP 755270-26 DP 755270-35 DP 755270-71 DP 755270-82 DP 755270-83 DP 755270-95	<ul style="list-style-type: none"> • Preparation of a Conservation Management Plan (completed) • Archival Recording of historic features of former RAAF Base complex (completed) • Implementation of Chance Finds Protocol in the event that additional features are discovered during clearance activities • Test excavation of east-west runway in impact area 	<ul style="list-style-type: none"> • Fencing of development disturbance area boundary & signage erected to delineate area not to be disturbed

GNR-001 Great North Road Complex (Wallaby Scrub Road development area)	4.5km x 1.5km approx.	315245E, 6392956N to 316225E, 6389900N approximately	Various lots/DPs: DP 1135536-350 DP 129800-1 DP 755267-165 DP 755267-164 DP 755267-190 DP 755267-172 DP 755267-63 DP 248570-6 DP 246201-11 DP 246201-3 DP 246201-12 DP 246201-9 DP 246201-2 DP 246201-10 DP 246201-1 DP 129800-1 DP 113342-7	<ul style="list-style-type: none"> • Preparation of a Conservation Management Plan (completed) • Following closure of the road, further investigation of the archaeological potential of the road, & test pitting in specific locations along Wallaby Scrub Road to determine potential physical remains & aid in interpretation • Interpretation of the alignment of the road 	<ul style="list-style-type: none"> • Protection of remnant road examples within the Wollombi Brook Aboriginal Cultural Heritage Conservation Area & fencing of same as per Schedule 8
GNR-005 Blazed Tree – eastern side of Wallaby Scrub Road, located c.5m east of the current road with the scar facing north	10m approx. (canopy)	315931E, 6390731N	No lot- road easement. Closest DP#: DP 755267-172	<ul style="list-style-type: none"> • Photographically record • Removal of scar to SHSM or HVS Cultural Heritage Storage Facility 	<ul style="list-style-type: none"> • Barricading of site as per Schedule 8
GNR-009 Well #1 – east of Wallaby Scrub Road, near main gates	3m approx.	316389E, 6389478N	DP 755267-165	<ul style="list-style-type: none"> • Photographically record 	<ul style="list-style-type: none"> • Barricading of site as per Schedule 8

GNR-012 Well #2 – east of Wallaby Scrub Road	3m approx.	317111E, 6387838N	DP 612684-341	<ul style="list-style-type: none"> • Archaeological excavation & recording 	<ul style="list-style-type: none"> • Barricading of site as per Schedule 8
GNR-014 Bridge Remains – located in a swampy area at the north-western corner of the intersection of Wallaby Scrub & Putty Roads	Approx. 10-15m	317113E, 6387091N	No lot- road easement. Closest DP#: DP 755270-61	<ul style="list-style-type: none"> • Photographically record • Implementation of Chance Finds Protocol in the event that additional features are discovered during clearance activities 	<ul style="list-style-type: none"> • Barricading of site as per Schedule 8
MTW-013 Dump Site – adjacent to track west of Wallaby Scrub Road. Lot 97 on DP755267	5m approx.	314778E, 6391576N	DP 755267-97	<ul style="list-style-type: none"> • Photographically record • Implementation of Chance Finds Protocol in the event that additional features are discovered during clearance activities 	<ul style="list-style-type: none"> • Barricading of site as per Schedule 8
MTW-018 Former House Site #2 – west of Wallaby Scrub Road. Lot 1 on DP	Approx. 60m x 60m	315773E, 6390779N	DP 804245-1	<ul style="list-style-type: none"> • Photographically record • Implementation of Chance Finds Protocol in the event that additional features are discovered during clearance activities 	<ul style="list-style-type: none"> • Barricading of site as per Schedule 8
MTW-019 Dump Site #2 – west of Wallaby Scrub Road	Approx. 30m x 40m	315757E, 6390642N	DP 804245-2	<ul style="list-style-type: none"> • Photographically record • Implementation of Chance Finds Protocol in the event that additional features are discovered during clearance activities 	<ul style="list-style-type: none"> • Barricading of site as per Schedule 8

MTW-020 P1 Huts – 377 Wallaby Scrub Road	20m x 30m	315907E, 6390581N	DP 804245-2	<ul style="list-style-type: none"> • Further assessment to determine the origin of the buildings • Consider opportunities for relocation & adaptive reuse of the building 	<ul style="list-style-type: none"> • Barricading of site as per Schedule 8
MTW-022 Dump Site #4 – west of Wallaby Scrub Road	20m x 20m	315982E, 6389582N	DP 755267-129	<ul style="list-style-type: none"> • Photographically record • Implementation of Chance Finds Protocol in the event that additional features are discovered during clearance activities 	<ul style="list-style-type: none"> • Barricading of site as per Schedule 8
MTW-023 P1 Huts – 297 Wallaby Scrub Road	40m x 40m	316143E, 6389815N	DP 755267-129	<ul style="list-style-type: none"> • Further assessment to determine the origin of the buildings • Consider opportunities for relocation & adaptive reuse of the building 	<ul style="list-style-type: none"> • Barricading of site as per Schedule 8
MTW-029 Former House Site #4 – east of Wallaby Scrub Road	40m x 50m	317371E, 6387918N	DP 1026900-8	<ul style="list-style-type: none"> • Photographically record • Implementation of Chance Finds Protocol in the event that additional features are discovered during clearance activities 	<ul style="list-style-type: none"> • Barricading of site as per Schedule 8
MTW-030 Former House Site #5 – east of Wallaby Scrub Road	Approx. 40m x 40m	317099E, 6387583N	DP 612684-341	<ul style="list-style-type: none"> • Photographically record • Implementation of Chance Finds Protocol in the event that additional features are discovered during clearance activities 	<ul style="list-style-type: none"> • Barricading of site as per Schedule 8

MTW-032 Building Remains – west of Wallaby Scrub Road	Approx. 40m x 40m	316323E, 6387408N	DP 610376-2	<ul style="list-style-type: none"> • Photographically record • Implementation of Chance Finds Protocol in the event that additional features are discovered during clearance activities 	<ul style="list-style-type: none"> • Barricading of site as per Schedule 8
MTW-005 Springwood – south of Golden Hwy, west of Wallaby Scrub Road & adjacent to Wollombi Bk	80m x 100m	314435E, 6393563N	DP 1135647-360		<ul style="list-style-type: none"> • Preparation of Conservation Management Plan including recommendations for ongoing management & maintenance of the place (completed) • Fencing of site as per Schedule 8
MTW-006 Shed Complex – 800m south of Springwood	90m x 120m	314320E, 6392310N	DP 1135537-220		<ul style="list-style-type: none"> • Photographically record • Implementation of Chance Finds Protocol in the event that additional features are discovered during clean up & maintenance activities
MTW-007 Orchard Remains – 750m south-west of Springwood	3ha approx.	314141E, 6392964N	DP 1135537-220		<ul style="list-style-type: none"> • Photographically record • Implementation of Chance Finds Protocol in the event that additional features are discovered during clean up & maintenance activities
MTW-008 Building Complex – 650m south-west of Springwood	45m x 70m	314203E, 6393066N	DP 1135537-220		<ul style="list-style-type: none"> • Photographically record • Implementation of Chance Finds Protocol in the event that additional features are discovered during clean up & maintenance activities

MTW-009 Timber Well – c.20m east of former fence line & 5m west of track	10m x 10m	314372E, 6392640N	DP 755267-16		<ul style="list-style-type: none"> • Photographically record • Implementation of Chance Finds Protocol in the event that additional features are discovered during clean up & maintenance activities
MTW-010 Quarry #1 – west of Wallaby Scrub Road	70m x 90m	314330E, 6392437N	DP 755267-16		<ul style="list-style-type: none"> • Photographically record • Implementation of Chance Finds Protocol in the event that additional features are discovered during clean up & maintenance activities
MTW-011 Quarry #2 – west of Wallaby Scrub Road	180m x 180m	314789E, 6392643N	DP 755267-16		<ul style="list-style-type: none"> • Photographically record • Implementation of Chance Finds Protocol in the event that additional features are discovered during clean up & maintenance activities
MTW-012 Former House Site – west of Wallaby Scrub Road	30m x 30m (nearby likely associated orchard? Approx. 110m x 150m)	315164E, 6392441N Aerial image puts house site at 3145259E, 6392429N	DP 755267-16		<ul style="list-style-type: none"> • Photographically record • Implementation of Chance Finds Protocol in the event that additional features are discovered during clean up & maintenance activities
MTW-014 Trig Station Watts – 220m east of Wallaby Scrub Road	1m x 1m	315401E, 6392785N	DP 246201-12		<ul style="list-style-type: none"> • Photographically record

MTW-015 Harvester – west of Wallaby Scrub Road	5m x 10m	315684E, 6392910N	DP 246201-3		<ul style="list-style-type: none"> • Photographically record
MTW-016 Shed – west of Wallaby Scrub Road, on rise north of vehicle track	Approx. 10m x 10m	315764E, 6392925N	DP 246201-3		<ul style="list-style-type: none"> • Photographically record
MTW-017 Quarry #3 – west of Wallaby Scrub Road, south of Golden Highway	50m x 40m	315833E, 6392952N	DP 246201-3		<ul style="list-style-type: none"> • Photographically record • Implementation of Chance Finds Protocol in the event that additional features are discovered during clean up & maintenance activities
MTW-024 House Complex – adjacent to Wollombi Bk near northern end of north-south runway. Lot 7 on DP735566	100m x 110m	313738E, 6389010N	DP 735566-2		<ul style="list-style-type: none"> • Photographically record • Implementation of Chance Finds Protocol in the event that additional features are discovered during clean up & maintenance activities
MTW-025 Trig Station Warkworth 11 – west of Wallaby Scrub Rd, east of airstrip & north of track	3m x 1m	315943E, 6388148N	No DP- in road easement. Closest Lot: DP 610376-1		<ul style="list-style-type: none"> • Photographically record • Barricading of site as per Schedule 8

MTW-045 Kangaroo Downs Cattle Run – adjacent to Loder Creek, off Broke Road	10m x 30m	323378E, 6386508N	DP 263943		<ul style="list-style-type: none"> • Photographically record • Implementation of Chance Finds Protocol in the event that additional features are discovered during clean up & maintenance activities
MTW-046 Kangaroo Downs Bridge Remains – adjacent to Loder Creek, off Broke Road	Approx. 15m x 5m	323509E, 6386513N	DP 263943		<ul style="list-style-type: none"> • Photographically record • Implementation of Chance Finds Protocol in the event that additional features are discovered during clean up & maintenance activities

Schedule 3 – Cultural Heritage Zoning Scheme

The MTW Cultural Heritage Zoning Scheme (CHZS) controls mine development-related land use activities within the HHMP Area, and other adjacent MTW lands. The CHZS is incorporated within the MTW Cultural Heritage GIS. The GIS records Historic Heritage (as well as Aboriginal Cultural Heritage) site locations, extents, recording and management information as well as the zoning scheme. The CHZS is revised from time to time in line with the implementation of the provisions of the HHMP.

The CHZS includes the following management status zones:

- Zone 1 Significant Area – designated areas to protect all known Heritage sites, places or objects. Access is restricted to the sites and areas, and development is not permitted unless authorised under the provisions of the HHMP and appropriate management measures have been implemented (e.g. photographic recording, collection or excavation). Zone 1 areas may also include Conservation Areas and Environmental Areas established for long term protection where development is not permitted.
- Zone 2 Restricted Access Area (Unassessed) – areas not assessed for heritage, or where Yancoal determine that an assessment has been too limited or otherwise not adequate for management purposes, where access is restricted as a precautionary measure to protect any as yet unknown heritage sites. Access is restricted and development is not permitted unless authorised under the provisions of the HHMP, or until an adequate assessment has been undertaken and appropriate management measures have been implemented.
- Zone 3 Restricted Access Area (Assessed) – areas where heritage has been assessed and access is restricted to protect known heritage sites, places and objects. Typically a Zone 3 area encompasses a number of heritage sites located within a larger area of land. Access is restricted and development is not permitted unless authorised under the provisions of the HHMP and appropriate management measures have been implemented (such as on a site avoidance basis).
- Zone 4 Conditional Development Area – areas where heritage assessment and specific management measures have been completed under the provisions of the HHMP, or other appropriate statutory consent. Specific development disturbance activities can be approved as per terms and conditions of a GDP where such development does not adversely impact any heritage sites or areas. Examples of this may include the continued use of existing access roads and tracks, grounds

maintenance around historic heritage buildings, or areas where surface heritage sites have been mitigated but where post-ground disturbance activity monitoring for the presence of sub-surface cultural materials is required under **Schedule 2** of this HHMP.

- Zone 5 Approved Development Area – where all heritage assessment and management measures have been completed under the provisions of the HHMP and/or other appropriate statutory consent, and where all heritage issues have been addressed. These areas typically include existing developed mine operations areas (working pits, dumps, haul roads, etc.), other approved development areas and infrastructure where there are no activity disturbance restrictions.

Schedule 4 - Sub-Surface Investigation Areas

Sub-surface investigations will be limited to sites and areas specifically identified in **Schedule 2** of this HHMP as locations where such material is expected to be found (i.e. recorded Potential Archaeological Deposits) or where development activities lead to the identification of sub-surface historical cultural materials. Specific sub-surface investigation methodologies will be formulated for each site or area requiring this work as identified in **Schedule 2** of this HHMP and will be comply with:

1. *Historical Archaeology Code of Practice 2006* (OEH); and
2. The conditions of a *Heritage Act 1977*, Section 140 Archaeological Permit (if required as advised by Heritage Division, OEH).

Sub-surface investigation methodologies might include any of the following measures or as otherwise specified in a Section 140 Archaeological Permit:

- a. test pitting at defined locations;
- b. trench pitting at defined locations;
- c. grader or other mechanical scrapes at defined locations;
- d. ground penetrating radar (GPR) at defined locations;
- e. where test pits are required, initial test pitting will be limited to test pits of no more than 5m² per 100m² of the site or area identified for sub-surface investigations, unless otherwise specified for a particular site in **Schedule 2** of this HHMP;
- f. results of test pits, trenches, scrapes and GPR may necessitate further sub-surface investigations. In these circumstances, the additional work is to be consistent with the provisions of the HHMP and details will be specified in a ToR for the work; and/or
- g. the number, dimensions, depth, distribution, length and/or width of sub-surface excavations or scrapes for each nominated area will be consistent with the agreed mitigation methodology specified in **Schedule 2** of this HHMP and as defined in a ToR.

Schedule 5 - Controlled Collection of Historic Artefact Scatters

As a general principle historic artefact scatters will be subject to a controlled collection methodology unless otherwise specified in **Schedule 2** of this HHMP. A controlled collection methodology may include any of the following measures but which are to be specifically defined for each artefact scatter to suit the collection requirements of each site. For example, the overall dimensions of the collection area and dimensions of the grid collection cells will vary from site to site:

- a. the extent and boundary of the artefact scatter to be the subject of controlled collection will be delineated by marker pegs and string lines;
- b. if the scatter area is to be sub-divided into grid cells for collection then an alpha numeric grid numbering system will be adopted;
- c. the scatter extent collection boundary and grid cell dimensions will be those determined by agreement between Yancoal and the Technical Advisor engaged for the controlled collection, taking account of data about the area contained in any report or **Schedule 2** of this HHMP; and
- d. materials will be collected in a manner that is consistent with the agreed mitigation methodology specified in **Schedule 2** of this HHMP and as defined in a ToR. These are to include a procedure for the recording, bagging, tagging and storage of mitigated materials.

Schedule 6 - Salvage Collection of Historic Isolated Artefacts

As a general principle isolated historic artefacts will be subject to a salvage collection methodology unless otherwise specified in **Schedule 2** of this HHMP. A salvage collection methodology may include any of the following measures:

- a. each isolated historic artefact or designated group of isolated historic artefacts will be collected in a manner that is consistent with the agreed mitigation methodology specified in **Schedule 2** of this HHMP and as defined in a ToR. The ToR is to include a procedure for the recording, bagging, tagging and storage of mitigated materials.

Schedule 7 - Activity Area Monitoring

As a general principle activity monitoring will be limited to sites, places or areas where:

- a. activity monitoring is specified for a particular site, place or area in **Schedule 2** of this HHMP; or
- b. sub-surface investigations indicate that activity area monitoring is required as per the requirements of this HHMP; or
- c. ground disturbance activities reveal Historic Heritage sites, places or areas that warrant activity area monitoring.

Activity area monitoring will only be conducted after initial vegetation clearing has occurred and before top soil stripping, where these operations are not carried out simultaneously. Where vegetation clearing and top soil stripping do not occur simultaneously, and where it is safe to do so, activity area monitoring may occur after the vegetation clearing operations have been completed. These conditions are required to comply with mine site health and safety procedures.

Activity area monitoring will consist of the following:

- a. Yancoal may nominate a Technical Advisor such as a suitably qualified and experienced archaeologist to participate in the activity area monitoring process;
- b. an activity area monitoring pro-forma assessment sheet will be completed for each area and signed by the CHAG representatives and Technical Advisors (if in attendance);
- c. The pro-forma assessment sheet will note the outcome of the activity area monitoring, and note any further management actions required to be undertaken or as concurrently implemented such as salvage collection.

Schedule 8 - Fencing and Barricading Historic Heritage Sites, Places & Areas

Temporary barricading (e.g. star picket and hi-viz poly-tag line/flag bunting or hi-viz mesh or similar) of historic heritage sites, places and areas will occur where sites are not already hard fenced and:

- a. the historic heritage site, place or area is designated as a Significant Area or Restricted Access Area; or
- b. the historic heritage site, place or area is located within 50m of a development disturbance area (e.g. during construction); or
- c. the historic heritage site, place or area is located within an area where barricading is required to protect sites from development disturbance activities or until such time as any necessary mitigation measures (e.g. salvage) have been implemented at the site); or
- d. the historic heritage site, place or area may be adversely impacted upon by access, activity, or other human, livestock or natural process; or
- e. as otherwise determined as an appropriate precautionary measure at the discretion of Yancoal.

As a general principle, hard fencing (e.g. star picket/timber post and wire) of historic heritage sites, places and areas will only occur where:

- a. the historic heritage site, place or area is designated as a Significant Area or Restricted Access Area; or
- b. the historic heritage site, place or area is located within 50m of an ongoing active work area; or
- c. the historic heritage site, place or area may be adversely impacted upon by access, activity, or other human or natural process; and
- d. hard fencing of the site/s is specified in **Schedule 2** of this HHMP.

The following provisions shall apply in relation to historic heritage sites, places or areas where hard fencing or barricading is required:

- except where otherwise specified in **Schedule 2** of this HHMP and/or Ground Disturbance Management Buffers (Section 18), a minimum 5m buffer around the defined site extent will apply for the purposes of defining the alignment of the fence/barricade (i.e. 10m diameter around an isolated historic artefact);
- the minimum 5m buffer is defined as the distance between the greatest extent of the site in any particular direction and the fence/barricade line;
- where specific site conditions or project requirements do not allow space sufficient for a minimum 5m buffer, for example where an existing track, fence, or other physical constraint intersects with the buffer alignment, then the buffer distance will be that which is the greatest practical distance available;
- Sites may be hard fenced or barricaded individually or collectively (i.e. several sites within a single hard fenced or barricaded area);

- Hard fencing is considered fencing of a permanent nature constructed using timber posts or steel pickets and three or more strands of wire, or other fencing materials;
- Barricading is considered fencing of a temporary nature constructed using steel pickets and hi-viz poly-tag line/flag bunting or hi-viz mesh or similar;
- In areas where continuous grazing of livestock occurs stock-proof hard fencing is to be installed, for sites where this is specified in the HHMP **Schedule 2**.
- Temporary and permanent barricading or fencing will be regularly inspected (and if necessary maintained and repaired) by cultural heritage staff at the following times:
 - i. Prior to approving any GDPs located in the vicinity of barricaded or fenced historic heritage sites;
 - ii. During HHMP Compliance Inspections; and
 - iii. During regular informal inspections by cultural heritage staff in the course of their normal fieldwork duties.

Schedule 9 – Management of Human Skeletal Remains: Heritage Office (1998) *Skeletal Remains; Guidelines for Management of Human Skeletal Remains*

Where human skeletal remains of historic (non-Aboriginal) origin are encountered then they will be managed in accordance with the *Skeletal Remains: Guidelines for the Management of Human Skeletal Remains under the Heritage Act (OEH, 1998)*. The *Skeletal Remains: Guidelines* booklet is appended as a digital document in the Schedule 9 e-folder.

The following actions are to be implemented immediately in the event that identifiable or possible human skeletal remains are discovered.

Step 1.

Any ground disturbance works occurring in the immediate vicinity of the human skeletal remains must cease immediately. The immediate area is to be secured to ensure no one interferes with the skeletal remains (it may be a crime scene).

Step 2.

The person who made the discovery of identifiable or possible human skeletal remains is to immediately contact their supervisor and report the find. The supervisor will contact the General Manager (GM) - MTW (or most senior manager available on site) to report the find and advise that the find must be reported to the NSW Police (Singleton police station). The GM (or delegate) will determine who will report the find to the police.

Step 3.

Once the discovery of identifiable or possible human skeletal remains has been reported to the police, the supervisor, or another person nominated by the GM, will implement any measures required by the police to secure the area. Unless otherwise advised by the police, the immediate area surrounding the human skeletal remains is then to be cordoned off at an appropriate distance with suitable barricading materials (such as hi-viz tagged polyline or mesh barricading).

Step 4.

The police will determine if the identifiable or possible human skeletal remains are associated with a crime scene, or are possible Aboriginal or historical archaeological remains. If determined by police to be historical archaeological remains, the police will contact the Heritage Branch to provide written confirmation of the archaeological status of the find. If it is determined to be a police matter, personnel are to follow the instructions of the police.

Step 5.

If the Heritage Branch confirms that the remains are believed to be historical archaeological in origin then the supervisor who reported the find is to notify either the Yancoal Specialist Cultural Heritage or the Yancoal Manager Environment & Communities (Yancoal Hunter Valley Services). The Specialist Cultural Heritage or Manager Environment & Communities will advise the supervisor on any further management actions to be implemented and whether or not works can re-commence in the area, depending upon the written advice received from the Heritage Branch. Any resulting cultural heritage management activities associated with the skeletal remains will be subject to consultation with the CHAG. At the same time as notification is made to the Heritage Branch, the Manager Environment & Communities (or delegate) will notify and consult with community stakeholders as soon as it is practical and possible to do so (nominally within two business days).

Schedule 10 - Conservation Management Plan for the former RAAF Base Bulga

A Conservation Management Plan has been developed for the RAAF Base Bulga complex in consultation with the CHAG. The Conservation Management Plan is appended as a digital document in the Schedule 10 e-folder.

Schedule 11 - Conservation Management Plan for the Great North Road (Wallaby Scrub Road section)

A Conservation Management Plan has been developed for the Great North Road (Wallaby Scrub Road section) in consultation with the CHAG. The Conservation Management Plan is appended as a digital document in the Schedule 11 e-folder.

Schedule 12 - Conservation Management Plan for the Brick House (Jarvis House)

A Conservation Management Plan has been developed for the Brick House (Jarvis House) in consultation with the CHAG. The Conservation Management Plan is appended as a digital document in the Schedule 12 e-folder.

Schedule 13 - Conservation Management Plan for Springwood Homestead

A Conservation Management Plan has been developed for the Springwood Homestead in consultation with the CHAG. The Conservation Management Plan is appended as a digital document in the Schedule 13 e-folder.

Schedule 14 - Procedure for Archaeological Investigations of Wallaby Scrub Road, Well 2 and the former RAAF Base Bulga Complex

Wallaby Scrub Road

The extension of Warkworth Mine requires the closure and subsequent demolition of the majority of Wallaby Scrub Road within the study area. At this stage, the northern section is likely to remain intact. Management recommendations, including further archaeological investigations, have been made to ensure that as much information about the Great North Road in this location is obtained prior to development. The detailed methodology for the following investigations will be contained in Terms of Reference to be developed in consultation with the CHAG.

- *Further Survey* – Due to safety risks associated with operating within a road reserve, the road was not comprehensively surveyed, and it is likely that historic features in this location have not been adequately identified and recorded. Once the road has been closed to traffic, a comprehensive survey of the road will be undertaken to assess all historic features within the road reserve.
- *Archaeological Excavations* – Areas of archaeological potential have been identified. In particular, areas of high archaeological potential are located at the following areas:
 - Northern section where the road has been straightened and the original alignment remains to the east of the current road
 - Middle area where road has been realigned
 - Area surrounding Putty Road intersection where road has been realigned

There is also moderate archaeological potential in areas where the road appears to have been built up, and the original road may remain in situ underneath the existing modern road. Prior to demolition of the road, areas of moderate and high potential will be excavated, and the original road uncovered in sections where possible to allow for it to be recorded.

- *Conservation* - There is potential for the northern section of Wallaby Scrub Road to remain undisturbed by the mine extension. Where this occurs, a program of maintenance and conservation will be implemented to ensure the future preservation of the Great North Road in this location. This may involve repositioning of stones and removal of vegetation impacting on road features.

Well 2

An archaeological mechanical excavation and recording methodology will be developed, in consultation with the CHAG, and implemented prior to the disturbance of this feature.

Former RAAF Base Bulga Complex

Only a small portion of the former RAAF Base Bulga will be impacted by the extension of mining at Warkworth (see map at Schedule 1). The anticipated area of disturbance comprises c.4.8ha at the end of the east-west runway – this comprises a cleared area at the end of the runway, and does not contain any of the runway proper. Further, this area is within a 200m mine buffer zone (ie no mining operations), therefore anticipated impacts, if any, are minor.

Despite these minimal impacts, the following actions are planned for that section of the east-west runway that is to be disturbed:

- Thorough & comprehensive survey of the potential disturbance area to identify any historic objects or features that may be present
- Where items of movable heritage value are located and likely to be impacted, salvage will be undertaken to ensure that any items of significance are collected prior to the area being impacted
- Where heritage features are identified and likely to be impacted, and where archaeological excavation would be beneficial in obtaining further information on those features, excavations will be considered to mitigate any impacts on those features.
- Where movable items of historical interest are located within the potential disturbance area, they will be offered to the Singleton Historical Society and Museum for retention in their collection

Schedule 15 - Interpretation programme of the heritage values of the RAAF Base Bulga Complex

Warkworth Continuation SSD-6464 Schedule 3, Condition 46 – Historic Heritage Management Plan Condition note: *It is accepted that the conservation management plan for the Springwood Homestead and interpretation programme for the **RAAF Base Bulga Complex** and the Great North Road Complex will not be submitted with the initial Historic Heritage Management Plan. These should be progressively added to the plan once completed.*

Schedule 16 - Interpretation programme of the Great North Road Complex

Warkworth Continuation SSD-6464 Schedule 3, Condition 46 – Historic Heritage Management Plan Condition note: *It is accepted that the conservation management plan for the Springwood Homestead and interpretation programme for the RAAF Base Bulga Complex and the **Great North Road Complex** will not be submitted with the initial Historic Heritage Management Plan. These should be progressively added to the plan once completed.*

Schedule 17 - Mount Thorley Warkworth Historic Heritage Conservation Fund

Condition 44 of SSD-6464 requires:

The Applicant shall establish and contribute \$500,000 under the Mount Thorley Warkworth Historic Heritage Conservation Fund in consultation with Council and the CHAG and to the satisfaction of the Secretary.

Following consultation with both Singleton Council and CHAG between April and October 2016 the Warkworth Historic Heritage Conservation Fund (HHCF) proposal was submitted to DP&E for review on 26 October 2016.

DP&E approved the HHCF proposal on 3 February 2017 (see letter of approval appended as a digital document in the Schedule 17 e-folder). The approval included the following conditions.

The proponent write to the Secretary on an annual basis providing:

1. The number of funding applications received;
2. The number of applications assessed as part of the Singleton Council Heritage Advisory Committee review process;
3. The number of applications approved by Singleton Council;
4. A summary of the purpose and objectives of each approved application; and
5. Evidence of funding given to the HHCF, including a cumulative breakdown of how funding has been expended on endorsed projects.

Schedule 18 - Mount Thorley Warkworth Great North Road Conservation Fund

Condition 45 of SSD-6464 requires:

The Applicant shall establish and contribute \$200,000 under the Mount Thorley Warkworth Great Northern Road Conservation Fund to be administered by the Applicant in consultation with Council, CHAG, Convict Trail Project and Heritage Branch, to the satisfaction of the Secretary.

Following consultation with Singleton Council, CHAG, Convict Trail Project and Heritage Branch (OEH) between April and October 2016 the Great Northern Road Conservation Fund (GNRCF) proposal was submitted to DP&E for review on 26 October 2016.

DP&E approved the GNRCF proposal on 3 February 2017 (see letter of approval appended as a digital document in the Schedule 18 e-folder). The approval included the following conditions.

1. A list of projects to be funded developed in consultation with the stakeholders listed in Condition 45 of Schedule 3 (SSD-6464) is to be submitted to, and approved by, the Secretary prior to the allocation of any funding.
2. The list of projects to be funded is to be reviewed every two years by Yancoal and affected stakeholders, and any changes submitted to the Secretary for approval.
3. The proponent write to the Secretary on an annual basis providing:
 - a) An update on the progress of approved activities and projects;
 - b) An evaluation of completed activities and projects;
 - c) Details of future activities and projects that are intended to be funded through the GNRCF; and
 - d) Evidence of funding given to the GNRCF, including a cumulative breakdown of how funding has been expended on endorsed projects.

Schedule 19 - Heritage Office (2006) *Photographic Recording of Heritage Items Using Film or Digital Capture*

The *Photographic Recording* booklet is appended as a digital document in the Schedule 19 e-folder.

Schedule 20 – Community Heritage Conservation Initiatives

During the consultation with the CHAG to develop this management plan a number of community heritage conservation initiatives were suggested and proposed. These initiatives can include conservation management, historical research, community heritage engagement and other community based activities with a historic heritage and conservation focus.

This schedule has been included in the plan to provide a means by which community heritage conservation initiatives can be formally proposed through the CHAG for consideration by Yancoal.

Where an initiative is agreed to by Yancoal a Terms of Reference (Scope of Work) will be developed in which the purpose, activities, outcomes, budget and evaluation of each initiative will be detailed. Terms of Reference for endorsed initiatives will be submitted to the Secretary for approval.

Community heritage conservation initiatives can be proposed through the CHAG at any time over the life of this plan (for the life of the SSD-6464 development approval) and approved initiatives will be added as appendices to this schedule.

Community initiatives proposed for consideration at the time of the preparation of this plan (February 2017) include:

1. Bulga heritage community consultation group. This group has been established at the request of members of the Bulga community to provide a forum for direct consultation with Yancoal on heritage matters of particular significance and interest to the Bulga community associated with the development and operation of the Mount Thorley Warkworth mine. Through this group, three projects (prepared by Dr Neville Hodgkinson on behalf of representatives of the Bulga community) have been proposed:
 - a. Colonial and Mitchell's Roads and Towns Plan (MTW commitment of up to \$15,000 for this project), including –
 - i. Archival research of Wollombi Brook bridges
 - ii. Archival road survey details and building features
 - iii. Great North Road chronological maps and present road status
 - b. Bulga Environs Heritage Conservation (MTW commitment of up to \$50,000 for this project, with additional funding subject to further approval by MTW), including –
 - i. Establishment of the Bulga School office
 - ii. Preparation of a Wambo-Springwood-Warkworth precinct scope

- iii. Signage, rest area and interpretation of Great North Road crossings
 - iv. Employment of an officer and the preparation of their scope of research
 - c. Bulga Culture Centre, including the revitalisation of the Bulga Public School with direction from the Bulga heritage community consultation group. Initial MTW commitment of \$75,000 to establish a Bulga Heritage Group Fund, with any additional and/or ongoing funding subject to further consultation between the Bulga Heritage Group and MTW, and approval by MTW.
2. Comprehensive historical land use and occupation study methodology for the Mount Thorley Warkworth lands.
 3. Restoration of Newport dairy building.
 4. Springwood/Watts memorial plaque.

Proposal documents and Terms of Reference for each initiative are appended as a digital documents in the Schedule 20 e-folder.