

# Appendix C

## Heritage Assessment Review

## Appendix C Archaeological Heritage Assessment Review

21 November 2017

Garry Bailey  
General Manager of Mining Development  
The Bloomfield Group  
Rixs Creek Mine  
Rixs Creek, NSW

Dear Garry,

**RE: Summary of heritage works completed within previously disturbed areas and sites located within the 'New Disturbance Area', Rixs Creek Mine**

**1.0 Introduction**

In October 2016, AECOM Australia Pty Ltd (AECOM) prepared and submitted a Response to Submissions (RTS) report on behalf of Bloomfield Collieries Pty Ltd (the Proponent) to the Department of Planning and Environment (DP&E) for the Rix's Creek Continuation of Mining Project. Subsequently, DP&E requested additional information regarding previous heritage assessments completed across the entire mine lease area to determine whether Existing Permitted Mining Areas or the New Disturbance Area have been subjected to adequate heritage assessment. This information is included in **Section 2.0** below in support of a Revised Response to Submissions (RRTS) report.

Following submission of the RTS, DP&E undertook a review of the Project Area to confirm which parts of the Project Area fall outside the Existing Permitted Disturbance Area in the mines existing development consent (DA 49/94). Following this, and agreement between the proponent and DP&E on the 'New Disturbance Area' as part of the Project, DP&E requested clarification of what impacts would occur to Aboriginal and Historic heritage sites/items in this New Disturbance Area. This is addressed in **Section 3.0** of this report.

**2.0 Previously Completed Heritage Works**

**2.1 Aboriginal**

Seven Aboriginal heritage assessments have been undertaken within the Project Area and cover both the Existing Permitted Disturbance Area and the New Disturbance Area. A summary of each is provided below.

***Archaeological Survey of Authorisation 89, proposed site of Bloomfield Collieries' Coal Mine at Rixs Creek, Singleton (Brayshaw, 1981)***

Brayshaw (1981) completed the initial investigation of the proposed Rix's Creek Open Cut Coal Mine completing archaeological survey within the proposed mine footprint with a methodology concentrating on watercourses and adjacent areas of erosion. A total of eighteen open artefact sites (i.e., artefact scatters and isolated artefacts) were identified within the proposed mine footprint (Rixs Creek 1 to Rixs Creek 18). Two sites were identified along the length of Rixs Creek, while the others were identified along tributaries and upper slopes. The survey included portions of the Existing Permitted Disturbance Area as shown on **Figure 1**.

***Additional Archaeological Information relating to Authorisation 89, Proposed Site of Bloomfield Collieries' Coal Mine at Rixs Creek, Singleton (Brayshaw, 1982)***

At the request of the National Parks and Wildlife Service (NPWS) Brayshaw (1982) completed a supplementary report to the 1981 assessment in order to provide more detailed descriptions seven sites (AHIMS Sites 37-6-0237, 37-6-0238, 37-6-0239, 37-6-0240, 37-6-0241, 37-6-0242, 37-6-0245) that were to be impacted by the Project and as such subject to a Consent to Destroy. This report was submitted to the NPWS with Consent to Destroy (CtD) applications forwarded to NPWS for the seven affected sites. NPWS requested salvage of impacted sites be undertaken prior to granting the CtDs.

***Archaeological Investigations at Rix's Creek in the Hunter Valley, NSW (Brayshaw, 1983)***

In accordance with the CtDs archaeological salvage involving surface collection of four sites and detailed recording of artefacts at three others was completed prior to impacts. A detailed salvage report was completed by Brayshaw (1983) outlining the results of the salvage.

***Archaeological Assessment Re-Survey Coal Lease Extension Bloomfield Colliery, Rixs Creek, Singleton, NSW (Effenberger, 1994)***

Effenberger (1994) completed archaeological survey of a proposed Rixs Creek mine extension area (ML 1432) concentrating on watercourses and adjacent areas. Eight sites, comprising seven artefact scatters and one isolated artefact, were identified, all of which were found within 200m of creeklines. The survey included portions of the Existing Permitted Mining Area.

***Section 90 Application and Research Design Rixs Creek, NSW AR # 1833 (HLA-Envirosciences Pty Ltd, 2007)***

HLA-Envirosciences Pty Ltd (2007) was engaged to complete surface collection of eight sites originally identified by Brayshaw and Effenberger (Granbalong 1 to 6 and sites 17 and 181) located within the impact area of the proposed Rixs Creek mine extension area. The salvage was completed in December 2007 in accordance with Aboriginal Heritage Impact Permit (AHIP) #2822 issued to Rixs Creek in November 2007.

***Rixs Creek Continuation of Mining Project Aboriginal Archaeological & Cultural Heritage Impact Assessment (AECOM Australia Pty Ltd, 2014b)***

AECOM (2014b) completed archaeological survey of a proposed mine extension area as part of the Rixs Creek Continuation of Mining Project. Full coverage survey was undertaken in those areas considered not to be subject to previous mine approvals as advised by representatives of Rixs Creek Mine. A total of 22 new Aboriginal sites were identified during survey, consisting of 15 artefact scatters and seven isolated artefacts. All sites were identified within 100 m of a watercourse or drainage gully. A further six previously recorded sites were noted within the Project Area. In total, 21 sites were identified as being directly impacted by the Project. AECOM recommended that a detailed Aboriginal Cultural Heritage Management Plan (ACHMP) be prepared for the Project, incorporating an archaeological salvage program for impacted sites. The survey included portions of the Existing Permitted Mining Area as shown on **Figure 1**.

***Aboriginal Archaeological Due Diligence Assessment of Bund and Access Road Area (AECOM Australia Pty Ltd, 2014a)***

AECOM (2014a) completed additional archaeological survey of the proposed location of a bund and access road within the Rix's Creek Continuation of Mining Project Area. Two previously unrecorded Aboriginal sites were identified within the Project Area comprising one artefact scatter and one isolated artefact both of which were located adjacent to watercourses. The survey included portions of the Existing Permitted Mining Area.

*Note: sites 37-6-0235, 37-6-0236, 37-6-0250 and 37-6-0251 are listed on the AHIMS register as being recorded as part of the Archaeological Assessment of Lands at Pioneer Road, Singleton (Archaeological Risk Assessment Services, 2004). However, this is incorrect; reference to the associated site cards indicates that these sites were recorded by Brayshaw (1981).*

**2.2 Historic Heritage**

One historic heritage assessment has been completed within the Project Area. A summary of the assessment is provided below.

***Rix ' s Creek Mine Non- Indigenous Heritage Impact Assessment (AECOM Australia Pty Ltd, 2015)***

AECOM (2015) completed archaeological survey of a proposed mine extension area as part of the Rixs Creek Continuation of Mining Project. In addition, full coverage survey was undertaken in those areas not subject to previous mine approvals as advised by representatives of Rixs Creek Mine. In addition, areas within and adjacent to the Project Area with known heritage items and potential heritage items as identified from background research, were inspected. This included any areas within the Existing Permitted Mining Area. Five heritage items were identified during the assessment

including the a Linear Embankment, Mound with Historic Material, a Vertical Shaft with Fencing, Granbalang Trig Station, and the Rixs Creek Coke Ovens. Accordingly, AECOM recommended that a Historic Heritage Management Plan be prepared for the Project to manage impacts to identified historic heritage items and that a Conservation Management Plan (CMP) be prepared to guide the conservation of Rix's Creek Coke Ovens & Associated Works. It is noted that the mine has existing management plans in place however these would be updated as necessary prior to the commencement of works.

### 3.0 Impacts to Aboriginal/Historic Heritage Sites

An assessment of Aboriginal and historic sites located within the 'New Disturbance Area' finds that no historic heritage items and 17 Aboriginal sites are located in this area. However, two historic heritage items are location nearby and may be indirectly impacted. **Table 1** provides details of the Aboriginal sites located within the 'area to be disturbed' (**Figure 2**) and the historic heritage items located nearby (**Figure 3**).

**Table 1 Impacted Heritage Sites**

Site ID	Site name	Status	Site types
<b>Aboriginal</b>			
37-6-0235	Rixs Creek;	Valid	Open artefact site
37-6-0236	Rixs Creek;	Valid	Open artefact site
37-6-0250	Rixs Creek;	Valid	Open artefact site
37-6-1793	Granbalong 3 <sup>1</sup>	Valid	Open artefact site
RCAS10	RCAS10	Valid	Open artefact site
RCAS11	RCAS11	Valid	Open artefact site
RCAS3	RCAS3	Valid	Open artefact site
RCAS4	RCAS4	Valid	Open artefact site
RCAS5	RCAS5	Valid	Open artefact site
RCAS8	RCAS8	Valid	Open artefact site
RCAS9	RCAS9	Valid	Open artefact site
RCIA1	RCIA1	Valid	Open artefact site
RCIA2	RCIA2	Valid	Open artefact site
RCIA3	RCIA3	Valid	Open artefact site
RCIA6	RCIA6	Valid	Open artefact site
RCIA7	RCIA7	Valid	Open artefact site
RCIA8	RCIA8	Valid	Open artefact site
<b>Historic</b>			
N/A	Rixs Creek Coke Ovens & Associated Works	Valid	Historic
N/A	Granbalang Trig Station	Valid	Historic

1 – Note that the Aboriginal heritage open artefact site *Granbalong 3* (AHIMS No. 37-6-1793) should not be confused with the historic heritage site *Granbalong Trig Station*. The common naming is due to the location of both items in relation to the Granbalong Estate, an agricultural property that operated in the area in the late 1800's.

## **4.0 Recommendations**

### **4.1 Aboriginal**

The Aboriginal Archaeological and Cultural Heritage Impact Assessment completed by AECOM (2014b) for the Project recommended the following in relation to Aboriginal heritage. These recommendations remain appropriate for the management of Aboriginal cultural heritage within New Disturbance Area.

#### **4.1.1 Archaeological Salvage Program**

*An archaeological salvage program should be undertaken for those sites within the Project Area impacted by the Project. Salvage should occur prior to the commencement of any Project-related ground clearance works. The program, which is to be detailed in the ACHMP for the Project, should incorporate the following:*

- *Surface artefact collection of the 21 (now 17) impacted sites will be undertaken prior to the commencement of mining activities. Surface collection is considered an appropriate and effective mitigation option for these sites given their content and level of archaeological significance. Table 1 provides a list of the potentially impacted sites appropriate for surface collection if confirmed for impacts.*
- *Recovered artefacts should be subject to appropriate forms of analysis and managed in accordance with the ACHMP. RAPs should be involved in the collection of surface artefacts. Appropriate long-term management options for recovered artefacts should be developed in consultation with RAPs during the preparation of the ACHMP.*
- *ASIR cards for all salvaged sites are required to be submitted to OEH at the completion of the salvage.*

#### **4.1.2 Archaeological Excavation Program**

*Archaeological excavations should be undertaken in areas retaining the potential for subsurface deposits adjacent to artefact scatter sites AHIMS #37-6-0235 (adjacent to Dead Mans Gully), Rixs Creek AS15 (adjacent to Rixs Creek) and Rixs Creek AS156 (adjacent to Rixs Creek). Archaeological excavations at these sites will involve test and open area excavations.*

*Detailed geomorphological assessments of these sites should also be undertaken for the purposes of characterising and describing exposed soils and profiles, elucidating localised landform histories and defining, where appropriate, the extent and location of ground disturbance. Assessments should be carried out by a qualified geomorphologist.*

#### **4.1.3 Protection of Non-Impacted Sites**

*All Aboriginal sites not impacted by the Project but within the Project Area should be protected from impacts (n=7). They are to be protected via permanent stock-proof fencing and appropriate associated signage. Site fencing is to be erected after consultation with a qualified archaeologist and RAP representatives. All relevant staff and contractors are to be made aware of the nature and locations of all sites as well as the legal obligations with respect to them. Protected sites will need to be identified on all relevant mine site plans. Details for the care of protected sites should be incorporated into the ACHMP.*

#### **4.1.4 Annual Monitoring of Conserved Sites**

*It is recommended that protected sites remaining within the Project Area are subject to annual monitoring to ensure their continued preservation. This monitoring should be outlined in the ACHMP and undertaken with consultation with a qualified archaeologist and RAP representatives.*

#### **4.1.5 AHIMS Site Cards**

*AHIMS sites cards will be completed and submitted to OEH for all newly recorded sites at the completion of the assessment.*

#### **4.1.6 Previously Unrecorded Aboriginal Archaeological Evidence**

*If Aboriginal objects are uncovered in any of the three work areas during the proposed activity, all works in the vicinity should cease immediately to prevent any further impacts and a qualified*

archaeologist be brought in to make an assessment. Management options for any newly identified objects will be dependent on the nature and significance of these objects.

The NPW Act requires that, if a person finds an Aboriginal object on land and the object is not already recorded with AHIMS, they are legally bound under s.89A of the NPW Act to notify OEH as soon as possible of the object's location. This requirement applies to all people and to all situations, including when following the due diligence code.

#### **4.1.7 Aboriginal Site Database**

The existing Aboriginal Site Database for the Project Boundary will be updated upon commencement of the Project to incorporate the findings of this assessment report. Bloomfield will be responsible for the maintenance of this database which will, at a minimum, contain the name, type, size (where applicable), MGA coordinates and status of all Aboriginal sites identified as part of this assessment and previous assessments within the Project Area. The database is to be regularly updated throughout the operational life of Project.

#### **4.1.8 Aboriginal Heritage Introduction & Cultural Awareness Training**

As part of Project inductions, an Aboriginal cultural heritage component should be included. This will outline current protocols and responsibilities with respect to the management of Aboriginal cultural heritage for the Project. It will also provide an overview of the site types present and procedures for reporting the identification of Aboriginal archaeological sites.

In addition, Aboriginal cultural awareness training will be undertaken for all staff whose roles may reasonably bring them into contact with Aboriginal sites and/or involve consultation with local Aboriginal community members.

The commitment to the development of the Aboriginal cultural awareness training package will be included in the ACHMP.

#### **4.1.9 Reporting under the ACHMP**

All Aboriginal heritage management and mitigation works carried out under the ACHMP for the Project should be documented to a standard comparable to that required by the Code of Practice for Archaeological Investigation of Aboriginal Objects 2010 (DECCW 2010a). Plain English summaries of technical archaeological salvage reports should also be prepared. Printed and/or digital copies of all archaeological salvage reports (plain English and technical) should be made available to RAPs upon request.

#### **4.1.10 Continuing Access to Non-Salvaged Sites for Archaeological Research**

Provisions regarding continuing access to non-salvaged sites within and outside of the Disturbance Boundary for the Project Area for archaeological research purposes should be included in the ACHMP for the Project. Requests will be assessed by Bloomfield, in consultation with RAPs and OEH, on the basis of merit. Where granted, access would be subject to relevant operational and safety considerations. Access to some areas would be restricted during periods of construction or mining.

#### **4.1.11 Periodic Review of ACHMP**

The ACHMP for the Project should be subject to periodic review to ensure that all management policies are being adhered to and are working effectively. Periodic reviews will also provide an opportunity to make modifications to existing policies and to add, where appropriate, new policies.

#### **4.1.12 Human Skeletal Remains**

This section outlines the procedures to be undertaken in the case that human remains are discovered during development. The procedures take into account the following documents:

- Manual for the Identification of Aboriginal Remains (NSW Department of Environment & Conservation, 2006);
- 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 (NSW National Parks and Wildlife Service, 1997).*

*In the event that construction activity reveals possible human skeletal material (remains) with the study area, the following procedure is to be followed:*

1. *An area of 20 m radius is to be cordoned off by temporary fencing around the exposed human remains site - construction work can continue outside of this area as long as there is no risk of interference to the human remains or the assessment of human remains;*
2. *The Manager on site is to notify the proponent;*
3. *The Police are to be contacted at the earliest reasonable time;*
4. *Contact OEH's Environment line on 131 555*
5. *A physical or forensic anthropologist will be commissioned by the Police to inspect the remains in situ (organised by the police unless otherwise directed by the police), and make a determination of ancestry (Aboriginal or non-Aboriginal) and antiquity (pre-contact, historic or modern):*
  - *if the remains are identified as modern the area is deemed as crime scene; or*
  - *if the remains are identified as Aboriginal, the site is to be secured and OEH and all Aboriginal stakeholders are to be notified in writing; or*
  - *if the remains are identified as non-Aboriginal (historical) remains, the site is to be secured and the OEH's Heritage Division is to be contacted.*
6. *The above process functions only to appropriately identify the remains and secure the site. From this time, the management of the area and remains is to be determined through one of the following means:*
  - *if the remains are identified as a modern matter liaise with the police;*
  - *if the remains are identified as Aboriginal liaise with the proponent, OEH and Aboriginal stakeholders;*
  - *if the remains are identified as non-Aboriginal (historical) liaise with the proponent and OEH's Heritage Division; and*
  - *if the remains are identified as not being human then work can recommence without delay.*

#### **4.2 Historic**

The identified historic heritage items are outside of the disturbance footprint of the Project and would therefore not be directly impacted (for example, require removal) as part of the Project. The historic heritage assessment completed by AECOM (2015) for the Project recommended the measures detailed in **Table 2** in relation to historic heritage items located adjacent to the New Disturbance Area.



**Table 2 Historic heritage sites**

Site Name	Significance Criteria	Impact	Recommendations
Rixs Creek Coke Ovens & Associated Works	State	<b>Indirect</b> (possible vibration impacts)	A Conservation Management Plan (CMP) be produced to manage the Rixs Creek Coke Ovens & Associated Works. The CMP would investigate ways to reduce the impacts from vibration impacts as well as exploring ways to preserve and maintain it, considering other potential impacts such as vegetation growth, weathering and erosion.
Granbalang Trig Station	Local	<b>Indirect</b> (possible visual impacts)	It is recommended that the placement of spoil piles in proximity to Granbalang Trig Station be sympathetic to the outlook of the trig station. This is to be managed through a Historic Heritage Management Plan (HHMP).

These recommendations remain appropriate for the management of historic heritage items adjacent to the New Disturbance Area.

Yours faithfully



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Archaeologist

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## 5.0 References

- AECOM Australia Pty Ltd. (2014a). *Aboriginal Archaeological Due Diligence Assessment of Bund and Access Road Area*. Unpublished report to Rix's Creek Pty Ltd.
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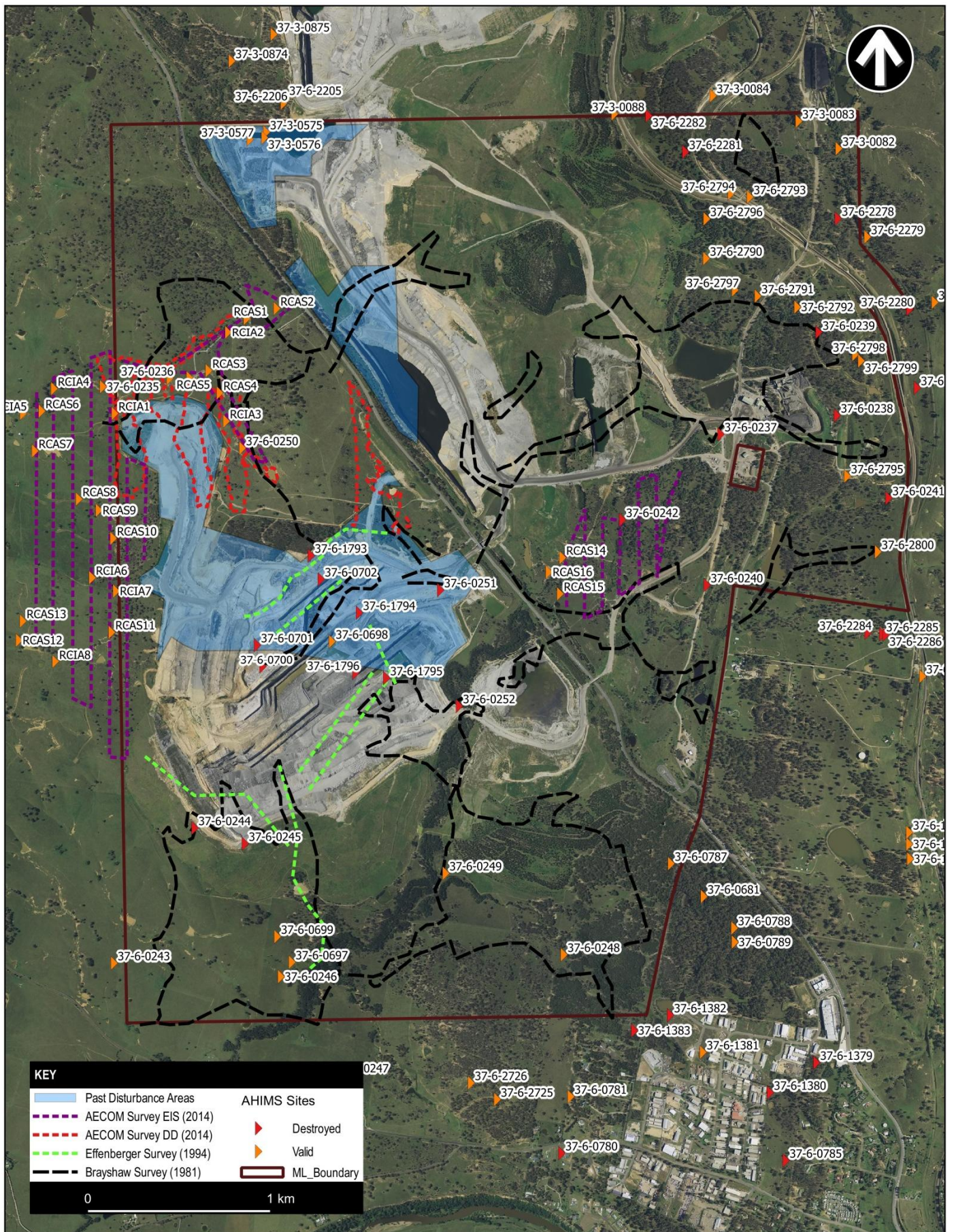


Figure 1 Previous Aboriginal Investigations



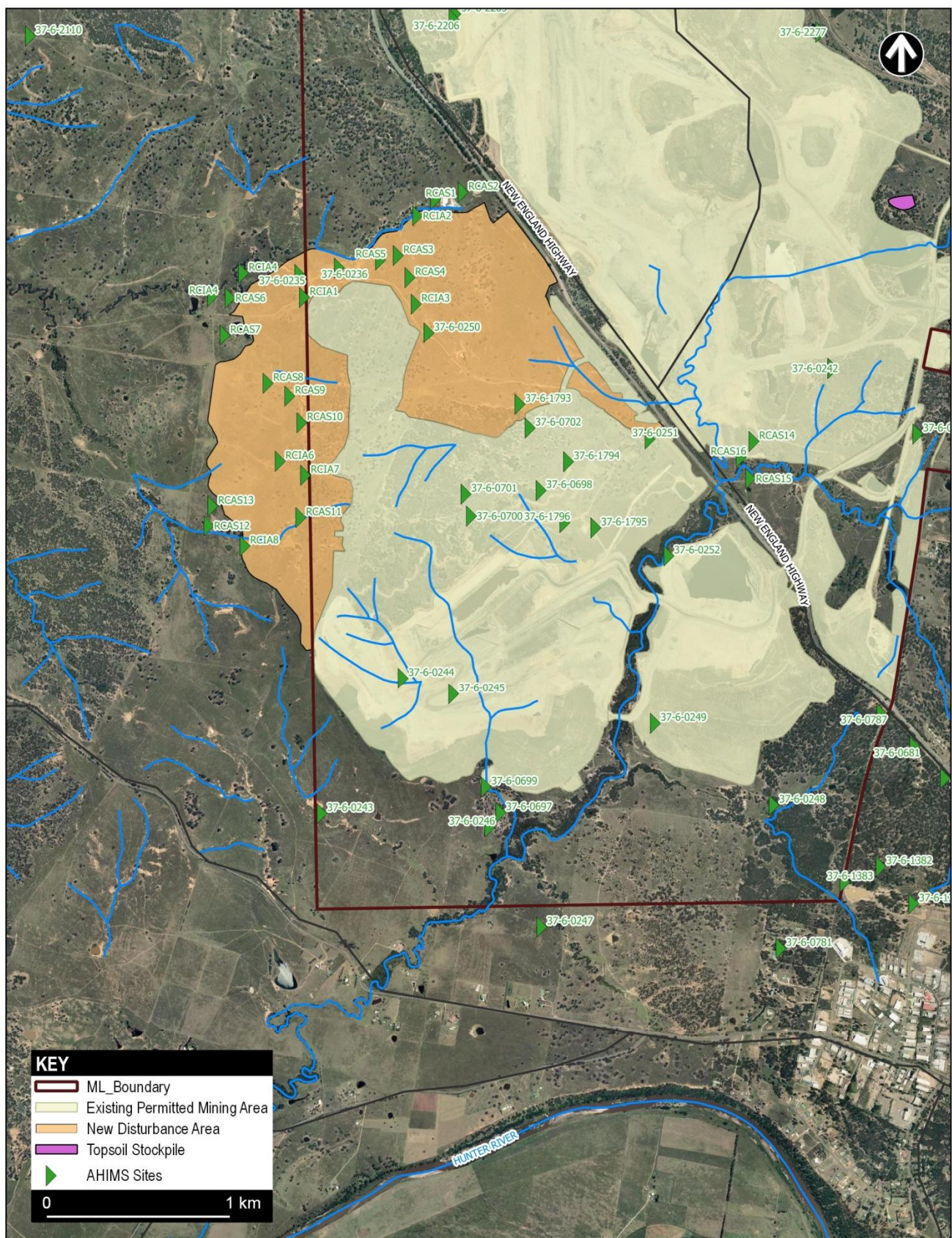


Figure 2 AHIMS sites and Project area



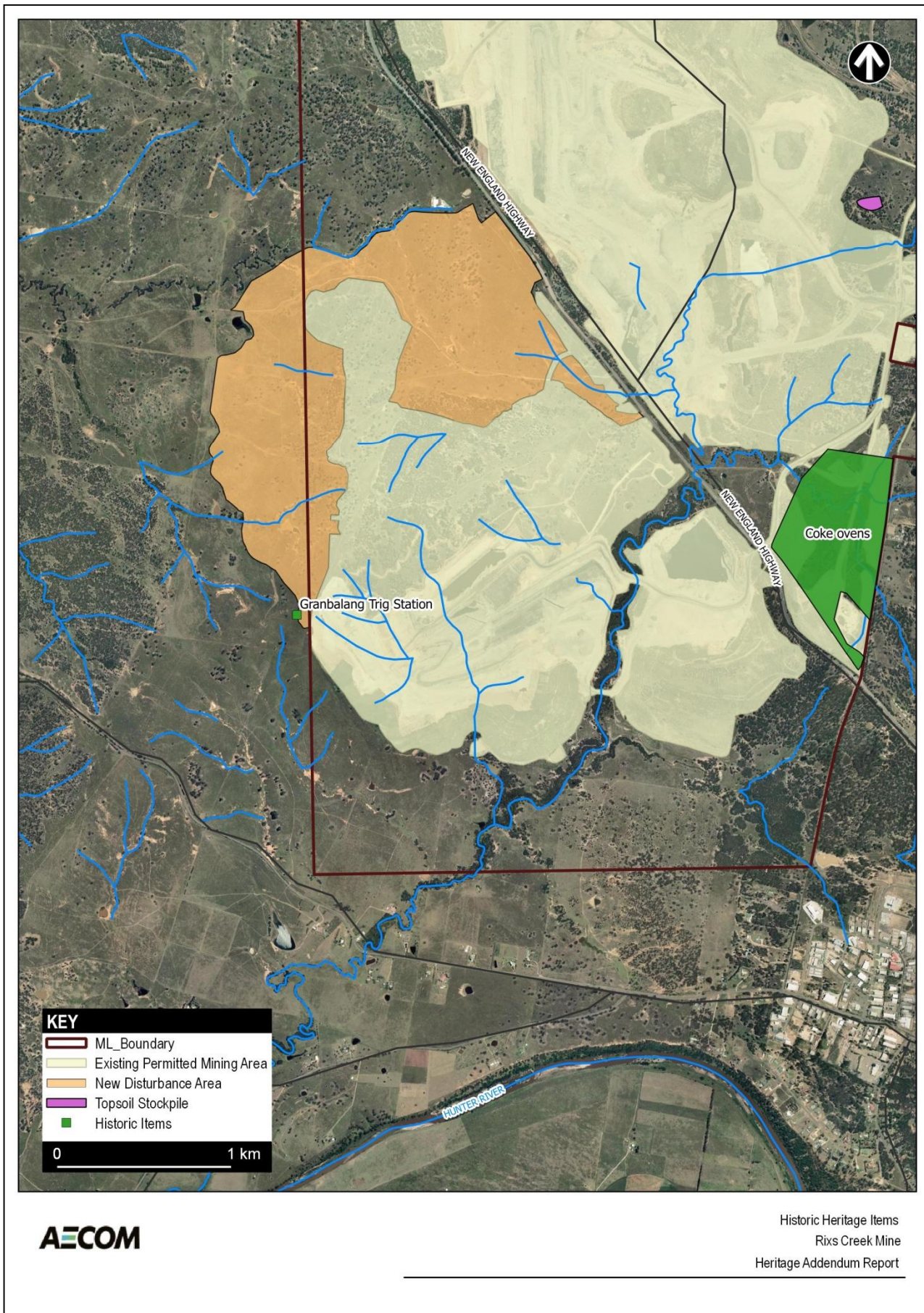


Figure 3 Historic heritage items

