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***East Boggabri Coal Pty Ltd***

ABN: 73 100 742 185

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***Transport Route Construction  
Management Plan***

***for the***

***East Boggabri Coal Mine***

**Approved**

***Prepared by:***



**R. W. CORKERY & CO. PTY. LIMITED**

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**R. W. CORKERY & CO. PTY. LIMITED**

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## ***Transport Route Construction Management Plan***

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***East Boggabri Coal Mine***

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## ACRONYMS USED THROUGHOUT THIS REPORT

AEMR	-	Annual Environmental Management Report
CCC	-	Community Consultative Committee
CHPP	-	Coal Handling and Preparation Plant
DA	-	Development Application
DEC	-	Department of Environment and Conservation
DoP	-	Department of Planning
DPI (Ag)	-	Department of Primary Industries (Agriculture)
EBC	-	East Boggabri Coal Pty Ltd
EIS	-	Environmental Impact Statement
EMS	-	Environmental Management Strategy
GSC	-	Gunnedah Shire Council
IBC	-	Idemitsu Boggabri Coal Pty Ltd
NSW Industrial Noise Policy	-	Industrial Noise Policy
ISO	-	International Standards Organisation
LALC	-	Local Aboriginal Land Council
NSC	-	Narrabri Shire Council
RTA	-	Roads and Traffic Authority
SMU	-	Soil Mapping Unit
TRCMP	-	Transport Route Construction Management Plan
WCM	-	Whitehaven Coal Mining Pty Ltd



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## 1 INTRODUCTION

This Transport Route Construction Management Plan (TRCMP) for the East Boggabri Coal Mine (“the mine”), has been prepared in compliance with *Conditions 4(42)*<sup>1</sup> of a development consent issued for the East Boggabri Coal Mine (DA 88-4-2005). The mine is to be managed by the newly formed company, East Boggabri Coal Pty Ltd (EBC), a joint venture between Whitehaven Coal Mining Pty Ltd (WCM) and Idemitsu Boggabri Coal Pty Ltd (IBC). The consent was issued in the name of the Joint Venture before the management company was incorporated.

The approved transport route between the mine site and the Whitehaven Coal Handling and Preparation Plant (CHPP) is defined in *Condition 4(40)(a)*<sup>1</sup> and shown on **Figure 1** in two sections, namely the northern section and the southern section. With the exception of Rangari Road, the northern section of the transport route between the mine site and Whitehaven Coal Mine requires construction. Rangari Road itself will, however, require some upgrading. The remainder of the route (the southern section) is already in existence and is used by trucks currently transporting coal from the Whitehaven Coal Mine to the Whitehaven CHPP.

This plan applies only to the northern section of the approved transport route.

This TRCMP has been prepared to meet the requirements of *Condition 4(42)* and as such, includes operational safeguards and procedures to:

- (a) control erosion and sedimentation;
- (b) protect and manage Aboriginal cultural heritage sites (including sites GGOS1, GGOS2, GGOS3 & GGOS4);
- (c) control dust generation;
- (d) minimise impacts on native vegetation; and
- (e) monitor the noise generated during construction to ensure that it complies with the criterion in *Condition 4(6)*<sup>1, 2</sup>.

However, in order to act as a comprehensive management tool for the East Boggabri Coal Mine, this TRCMP also includes measures to manage local air quality during construction of the route.

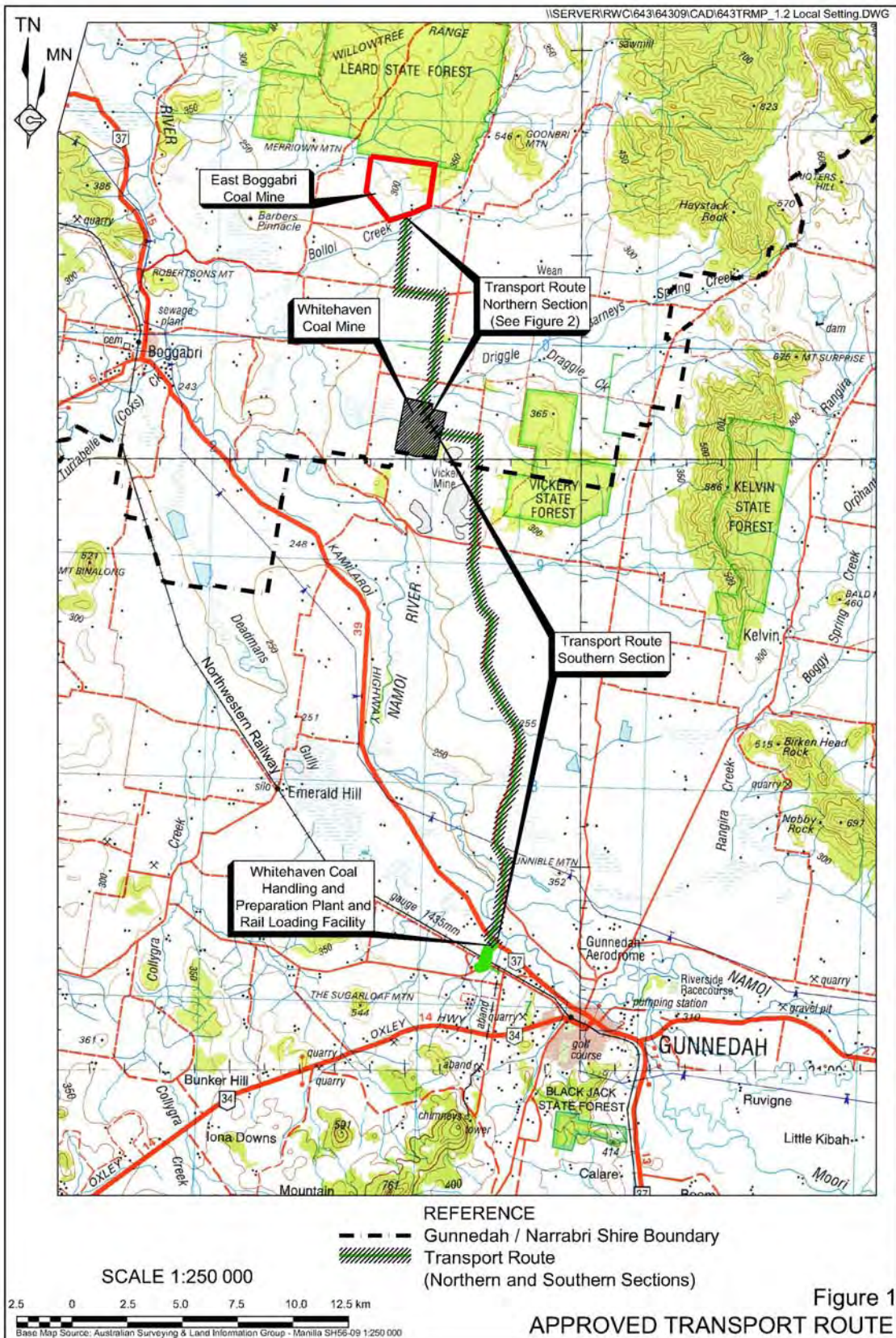
Construction of the northern section will involve the installation of crossings on each of Bollol and Driggle Driggle Creeks. These activities and associated safeguards are presented in the separate Watercourse Crossing Management Plan.

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<sup>1</sup> See Appendix 1 for full condition.

<sup>2</sup> *Condition 4(42)* also references *Conditions 4(7)* and *4(8)*. These conditions refer to the generation of traffic noise and land acquisition criteria and are in the Road Noise Management Plan (separate document).





## 2 TRANSPORT ROUTE DESIGN

### 2.1 Environmental Setting

The northern section of the transport route traverses parts of the “Thuin”, “Tarrowonga”, “Kyalla”, “Bungalow” and “Whitehaven” properties (see **Figure 2**) and will involve the upgrading of a 2km section of Rangari Road and public road / transport route intersection construction. “Thuin”, “Bungalow” and “Whitehaven” are owned by WCM while agreements have been formulated with the owners of “Kyalla” and “Tarrowonga” for the construction of the transport route across their property (see **Appendix 1**).

The land on which the transport route will be located slopes gently to the southwest and is periodically inundated by low velocity, sheet flood flows following protracted periods of heavy rainfall. With the exception of the crossings of Bollol and Driggle Driggle Creeks, the land to be disturbed is currently used for agricultural cropping and grazing. Sections 3.3.1 and 3.4.1 provide information on the Aboriginal heritage and vegetation of the land to be disturbed.

### 2.2 Road Design

**Figure 2** presents the alignment of the transport route between the mine site and the Whitehaven Coal Mine. With the exception of the creek crossings (considered separately in the Watercourse Crossing Management Plan) the road design will be as follows.

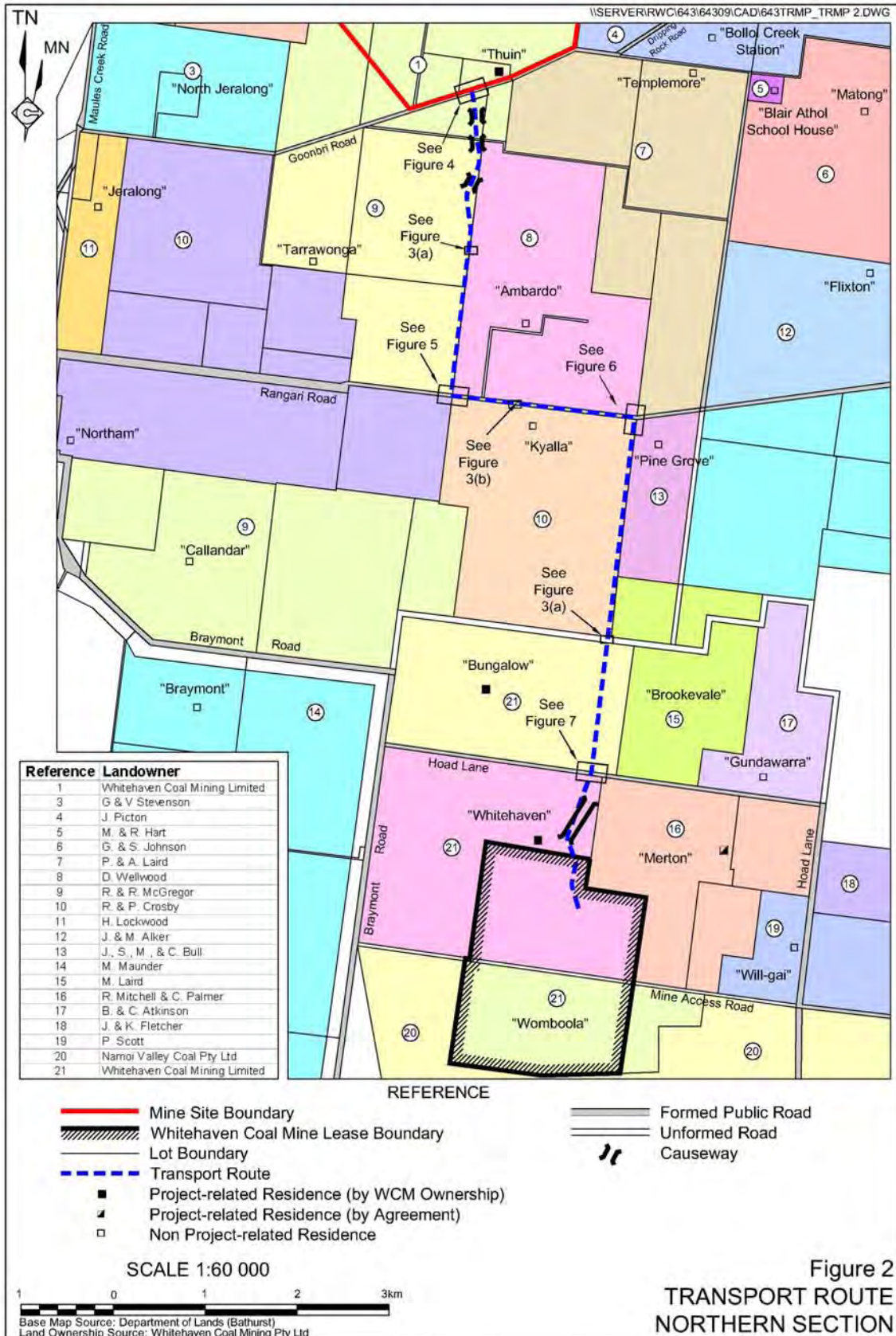
- The road surface will be constructed at existing ground level. This will require the excavation of a box-cut, the base of which would be compacted with a roller and subsequently filled with suitable sub-base and base-course materials sourced from the Whitehaven Coal Mine and the East Boggabri Coal Mine. **Figure 3** displays the road design for the new road sections and the Rangari Road upgrade.
- The road pavement will be 9.6m in width comprising a 7.6m wide, two-coat bitumen seal and a 1m wide gravel shoulder retained on both sides of the sealed surface.
- Road-side drains will be constructed on the upslope side of the road (see Section 3.2.2).
- Centre line and edge markings will be painted on the sealed surface (on the public road sections).
- Guideposts and appropriate signage will be installed on both the private and public sections of the transport route (with the approval of NSC).
- The sections of road on private land will be fenced on both sides with lockable gates installed at the intersection(s) with the public roads.

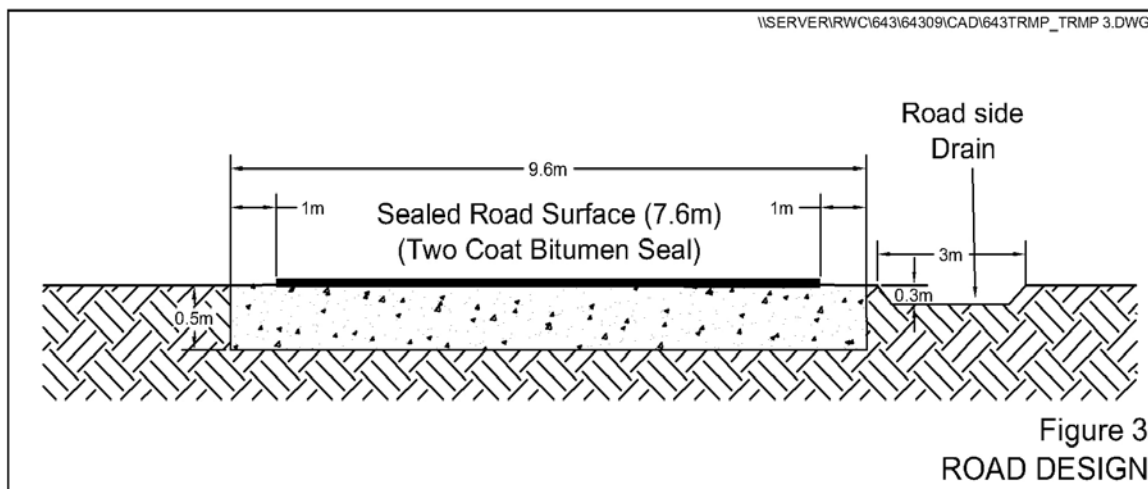
### 2.3 Intersection Design

#### 2.3.1 Mine Site Entrance – Goonbri Road

The mine site entrance would be located on Goonbri Road approximately 370m west of the existing entry to the “Thuin” property and would provide line-of-sight vision of approximately 500m in both directions along Goonbri Road.







**Figure 4** displays the design of the intersection to be constructed at the entrance to the mine site at Goonbri Road. This “Type A” Rural Road intersection will be at right angles to Goonbri Road and right of way given to traffic on this public road. Goonbri Road will be sealed for a distance of 50m on both sides of the intersection.

### 2.3.2 Constructed Transport Route – Rangari Road (MR 357)

**Figures 5** and **6** display the design of the intersections to be constructed at the junction of the transport route and Rangari Road on both the “Tarrawonga” and “Kyalla” properties.

In summary, the intersections will be constructed as follows.

- The intersections will be at right angles to MR 357.
- The right turn treatment from MR 357 into “Tarrawonga” will be a Type **AUR** (**AU**xillary lane **R**ight turn) treatment.
- The left turn treatment from “Kyalla” onto MR 357 will be a Type **BAL** (**BA**sic **L**eft turn). To facilitate the smooth flow of the mine vehicles onto MR 357 without the requirement for through vehicles to stop, the left turn treatment will incorporate an acceleration lane. This will also allow vehicles to accelerate as they enter the main road traffic flow.



In accordance with recommendations from both the Roads and Traffic Authority (RTA) and Narrabri Shire Council (NSC), EBC will manage the construction of these two intersections as follows.

- Approval for the intersection designs will be obtained from the RTA prior to commencement of construction.
- EBC will bear the cost of all works and any surveillance work by RTA representatives during the construction works.
- All construction works will be undertaken by pre-qualified contractors, under the conditions of a Single Invitation Contract and an approved Traffic Control Plan (to be prepared by the contractor).
- A Works Authorisation Deed (WAD) with a security deposit covering the full cost of the work on each public road will be entered into by EBC prior to the start of construction.
- A Road Occupancy Licence will be obtained from the RTA prior to construction.

### **2.3.3 Hoad Lane — Constructed Transport Route**

**Figure 7** displays the design of the intersection to be constructed between the transport route and Hoad Lane. This Type A Rural Road intersection will be at right angles to Hoad Lane and right of way given to traffic on this public road. Hoad Lane will be sealed for a distance of 50m on both sides of the intersection.

## **3 CONSTRUCTION MANAGEMENT PLAN**

### **3.1 Construction Activities**

#### **3.1.1 Road Construction**

The road will generally be constructed in sections from south to north (ie. starting from Whitehaven Coal Mine) and involve the following activities.

- (i) Topsoil and subsoil will be excavated as a box-cut to a depth of 500mm and maximum section length of 500m. This material will be delivered to the respective landowner / land user for spreading over the property (topsoil) or other construction works such as access roads or stock relief pads (subsoil).
- (ii) The box-cut will be filled with gravel from the Whitehaven Coal Mine or East Boggabri Coal Mine and compacted to natural ground level.
- (iii) Roadside drains will be progressively constructed on the up-slope side of the gravel filled box-cut.
- (iv) The two-coat bitumen seal will be applied, road markings painted and roadside markings, signage and fencing installed, as appropriate. Sealing will take place in a single campaign on completion of all preparatory works.

By constructing the road surface at the same elevation as the surrounding surface level, natural surface water flows will not be impeded.



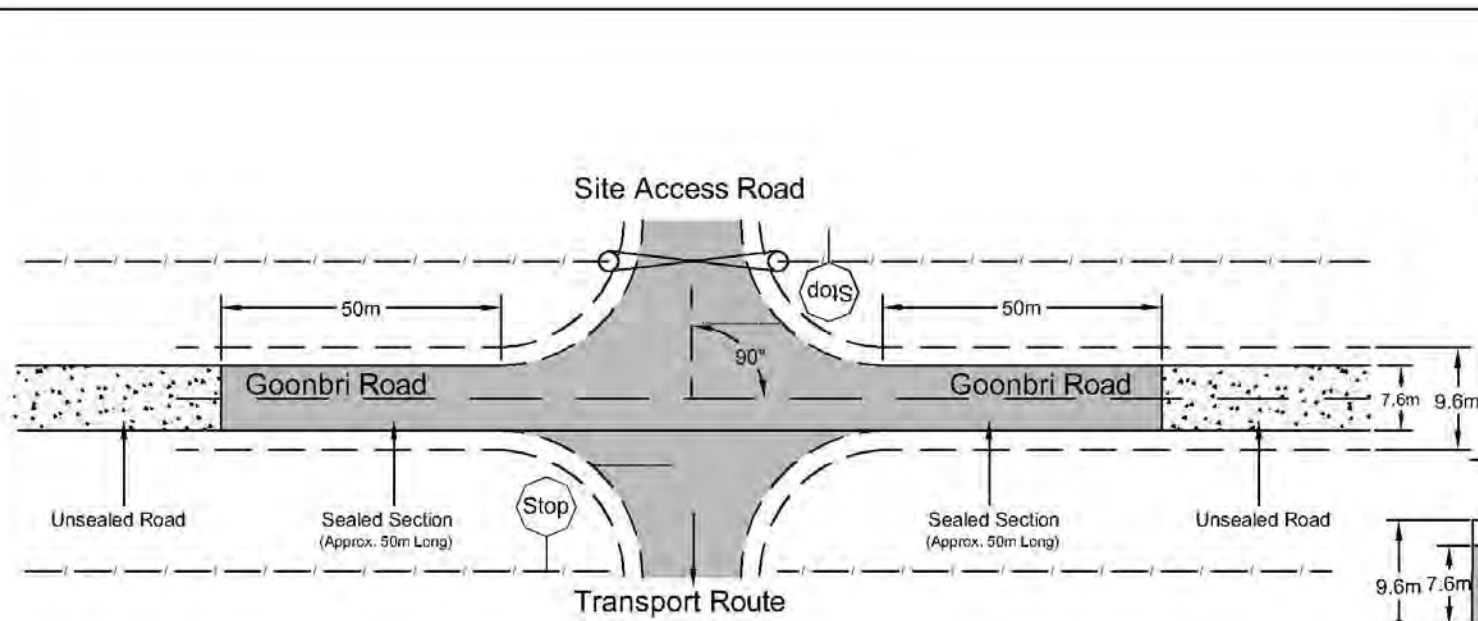


Figure 4

SITE ACCESS ROAD - TRANSPORT ROUTE - GOONBRI ROAD

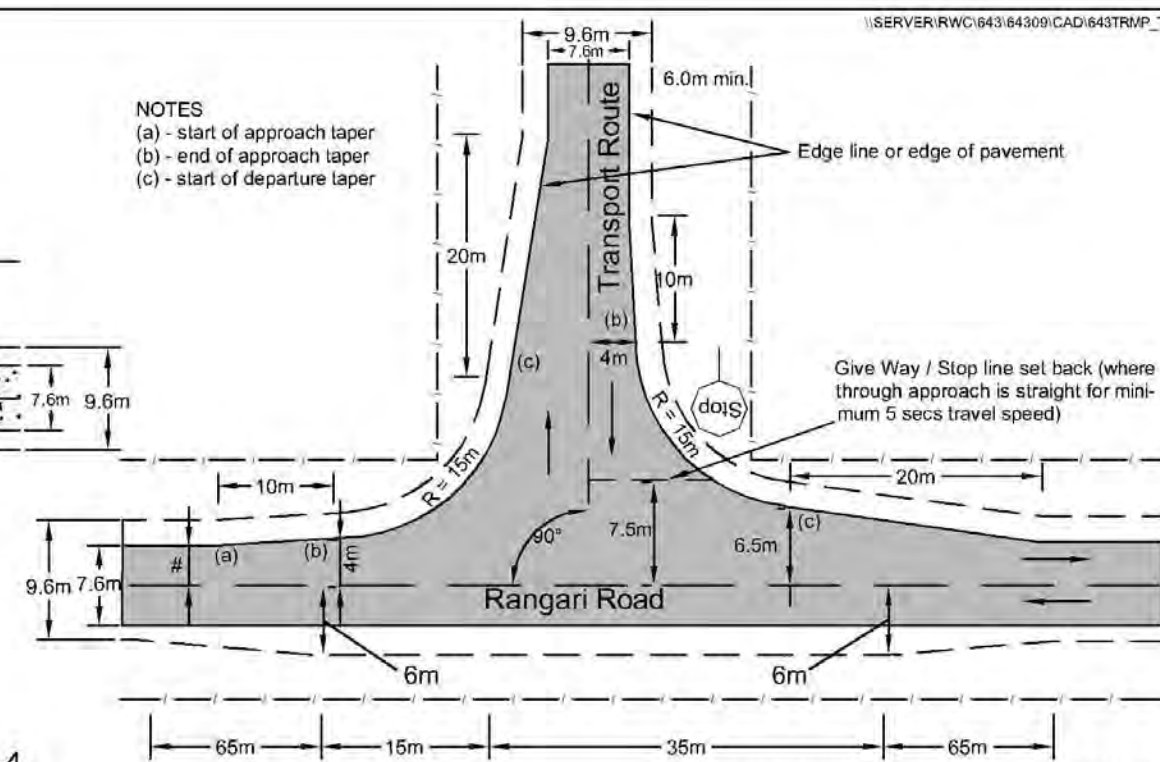


Figure 5

TRANSPORT ROUTE - RANGARI ROAD

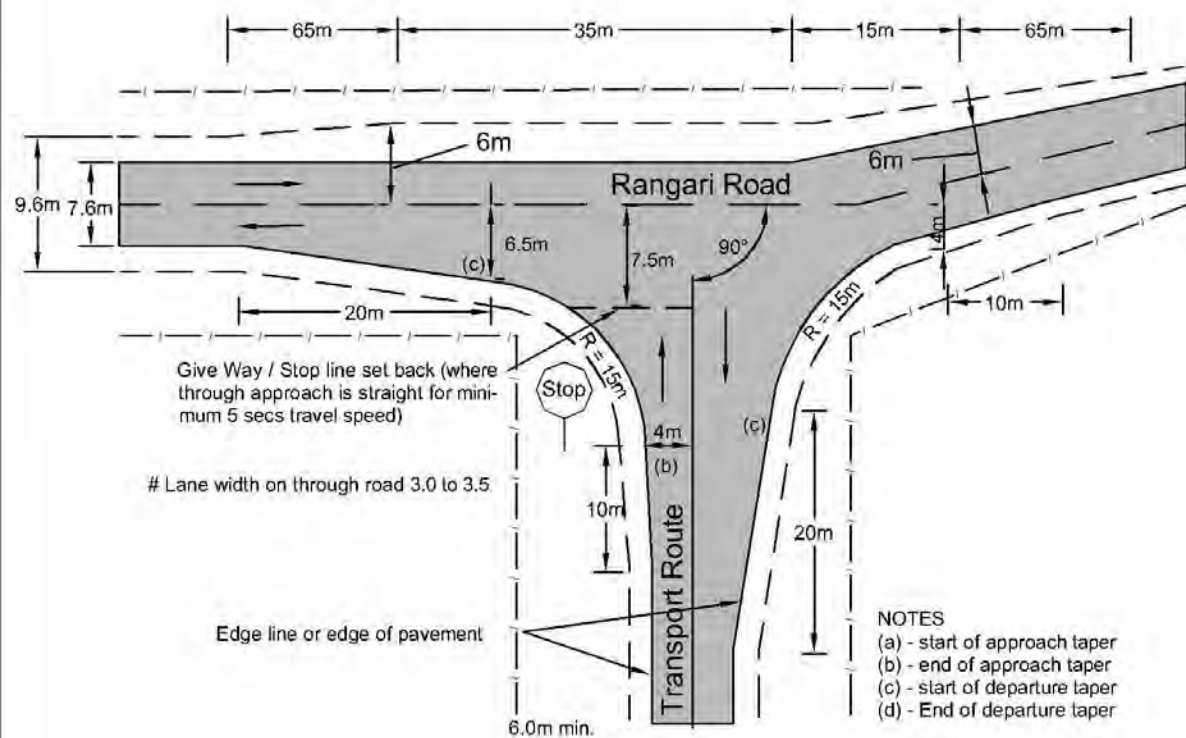


Figure 6

RANGARI ROAD - TRANSPORT ROUTE

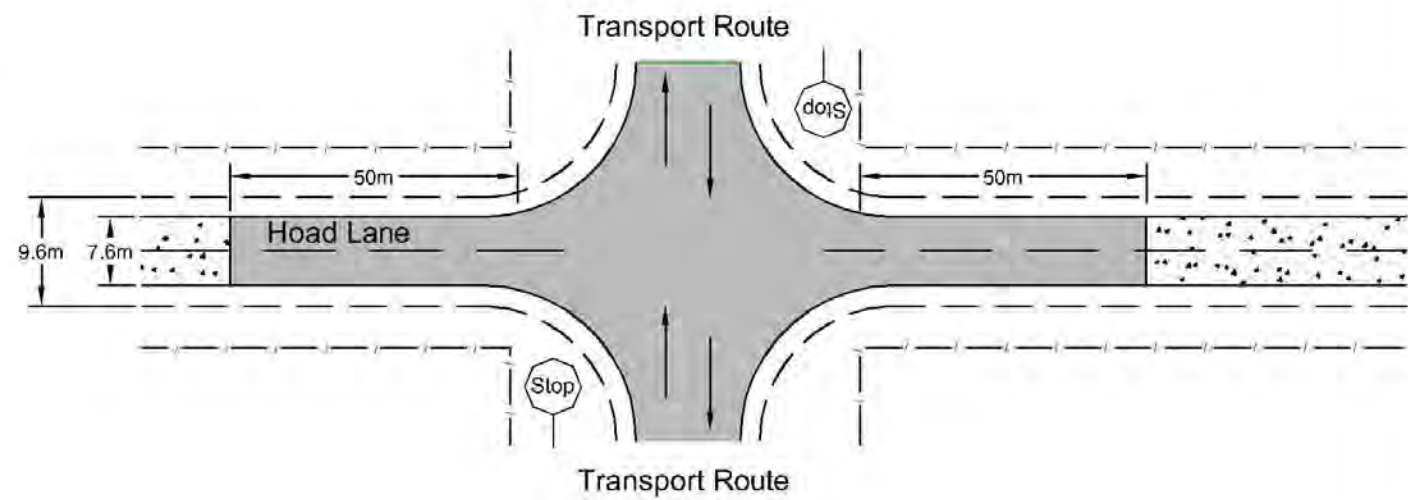
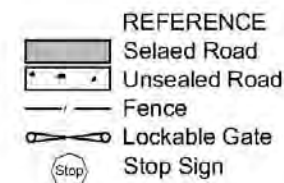


Figure 7

TRANSPORT ROUTE - HOAD LANE



Figures 4 to 7  
SCHEMATIC INTERSECTION DESIGNS

Source: Modified After RTA Road Design Guide

### 3.1.2 Watercourse Crossing Construction

Detailed specifications for the construction of the watercourse crossings are presented in the Watercourse Crossing Management Plan.

### 3.1.3 Hours of Operation

Road construction activities will be confined to the hours of 7.00am and 6.00pm, Monday to Saturday, excluding public holidays (in accordance with *Condition 4(9)*).

## 3.2 Erosion and Sedimentation Management

### 3.2.1 Existing Soil Types and Erosion Potential

Following the sampling of selected test pits over the section of the transport route to be constructed, two Soil Mapping Units (SMUs) were identified.

1. SMU 3 – duplex soils occurring on slightly more elevated areas. These soils have a relatively sandy surface layer of varying depth overlying more clayey material.
2. SMU 4 – clay soils occurring on the level plains. These soils are clayey throughout the topsoil and upper subsoil with sandy material encountered at depth in some profiles.

**Figure 8** presents the locations of SMUs 3 and 4. The erosion hazard was determined to be low for SMU 3 and moderate for SMU 4. SMU 4 displays moderate salinity and possible sodicity and as such, care will be taken when stripping and transferring this soil type during construction activities.

### 3.2.2 Operational Safeguards and Procedures

The primary safeguard to be implemented during the construction of the transport route will be to limit the area of disturbance on each day of construction to that which can be filled within sub-base on that day. This will be achieved through adoption of the following procedures.

- 500m will be the maximum section length of each box-cut, as this represents the maximum distance that can be filled with sub-base within the nominated daily hours of operation. This distance will be reduced if rain is forecast for that day.
- Boxed-out sections will be filled with sub-base prior to completion of each day's work.

The design and management of surface water drainage will also be important in preventing erosion and sedimentation resultant from uncontrolled surface water flows over disturbed surfaces.

- Up-slope drainage will be constructed progressively with the excavation and filling of the box-cut. The roadside drains will be constructed with the following design parameters.
  - Trapezoidal cross-section.
  - Bank batter of between 1:3 to 1:6 (V:H).
  - 300mm deep with a 3m wide flat base.
  - Longitudinal gradient of max 1:400 (V:H).



- Roadside drains will direct surface water flows to the south to natural low points where the water will be allowed to flow over the road surface. Mitre drains will direct this water away from the road surface.
- A mixture of non-persistent cover crop and perennial grass species with recognized soil conservation attributes as recommended by DPI (Ag) will be sown within the roadside drains and at mitre drain outlets.
- Silt-stop fencing and/or hay bale protection will be installed at mitre drain outlets until vegetation is well established.
- Drains for the Goonbri Road to Bollol Creek section of the transport route will be constructed on the western (up-slope) side of the road. Existing contour banks in this area will be modified to divert surface water flows away from the roadside drainage system and to a 5ML storage dam to be constructed (see **Figure 8**). Overflow from this dam will be to Bollol Creek.
- Drains will be constructed on both sides of the existing Rangari Road with culverts installed at the entrances to local properties (to avoid vehicles passing through the constructed drains).

In addition to these operational safeguards and design features, the following procedures and management practices will be implemented to further reduce the risk of erosion and sedimentation.

- (i) The roadside drains and erosion and sediment control structures will be inspected monthly, or after each rainfall event of >25mm/24hr, to assess their success in preventing erosion and identify signs of potential erosion.
- (ii) The roadside drains and sediment control structures will be regularly cleaned of accumulated sediment material.
- (iii) If, following heavy rain, erosion is identified, it will be remediated quickly using one or a combination of the following.
  - a. Filling the erosion channels.
  - b. Re-grassing and re-establishment of vegetation.
  - c. Installation of additional controls, eg. energy dissipaters

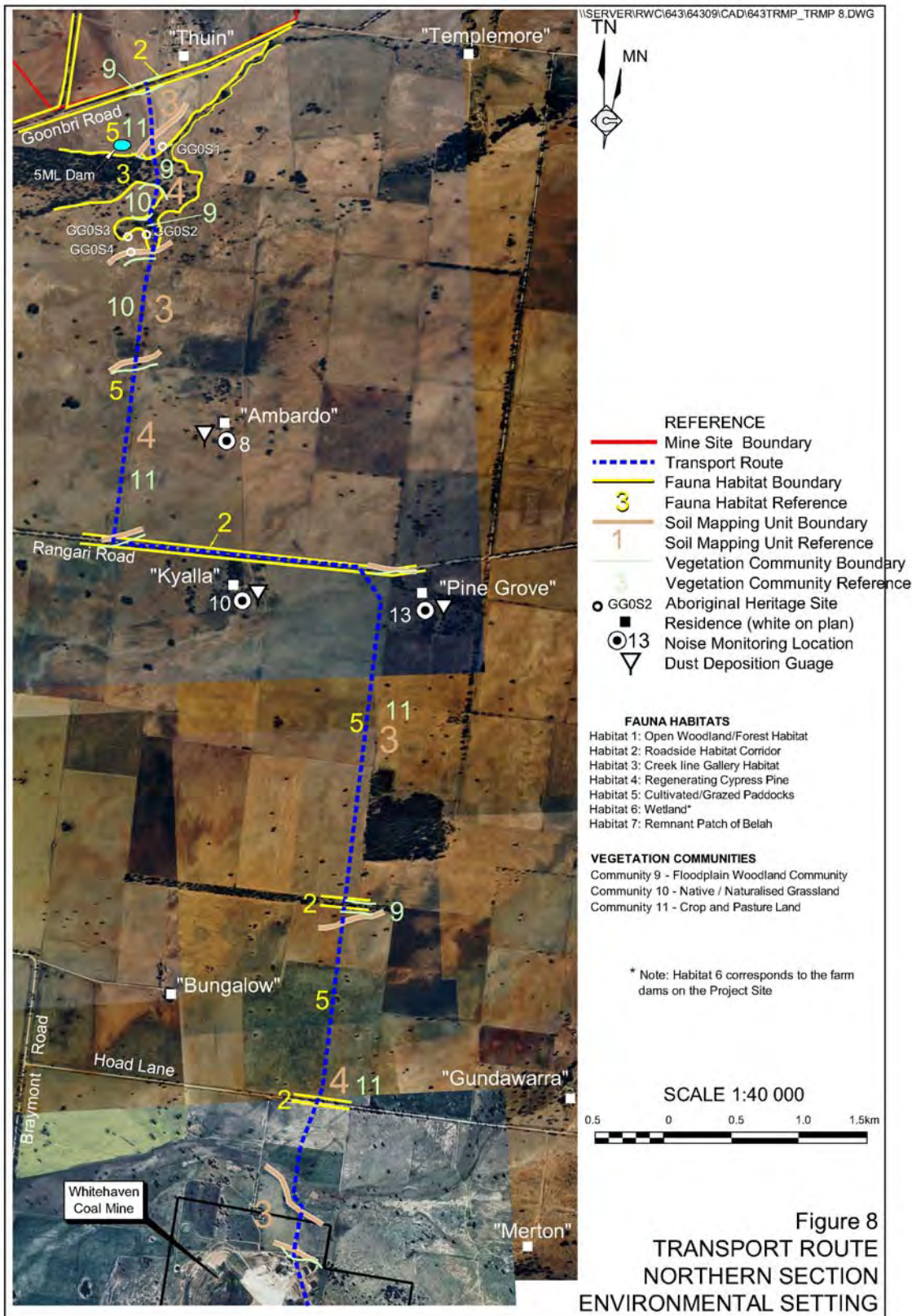
Erosion and sediment control management in the area of Bollol and Driggle Draggle Creeks is presented in the Watercourse Crossing Management Plan.

### **3.3 Cultural Heritage Management**

#### **3.3.1 Identified Sites and Artefacts**

During the preparation of the EIS for the East Boggabri Coal Mine, Archaeological Surveys and Reports Pty Ltd (ASR) was commissioned to survey the transport route for Aboriginal sites or artefacts, assess the significance of any identified site or artefacts and prepare a report on the





impact associated with the construction of the transport route. The results of the survey and the assessment of significance and impact were summarised in ASR (2005), (presented as Part 6 of the *Specialist Consultant Studies Compendium* which supported the EIS). This report included references to a previous survey and report on Aboriginal heritage of land surrounding the transport route to the south of Rangari Road (ASR, 1999).

The survey identified four Aboriginal heritage sites, as described in **Table 3.1** and shown on **Figure 8** and **Plates 1 to 4**.

**Table 3.1**  
**Aboriginal Heritage Sites within the Transport Route Corridor**

Reference*	Site Type	Comments
GG051	Open Scatter	15-20 artefacts in an area approximately 60m (N-S) x 45m (E-W)
GG052	Open Scatter	20-25 artefacts in an area approximately 60m (N-S) – 45m (E-W)
GG053	Open Scatter	8-10 artefacts in an area of approximately 15m diameter.
GG054	Open Scatter	5 artefacts in an erosion feature of an area approximately 3m (N-S) x 9m (E-W)
Source: Modified after ASR (2005) – Section 7		* See <b>Figure 8</b>

### 3.3.2 Operational Safeguards and Procedures

Although the alignment of the transport route has been designed to avoid disturbance of the four identified Aboriginal sites and each site has been fenced with barb and plain wire to the satisfaction of Bigundi Biame Gunnedarr Traditional People and the Red Chief LALC representatives, the following additional operational safeguards and controls will be adopted by EBC and/or its contractors.

- (i) Aboriginal monitors will be invited to inspect all topsoil stripping activities along the sections of the transport route on private land.
- (ii) Representatives of the local Aboriginal community will be notified in the event of any change to the orientation, alignment or disturbance associated with the transport route.
- (iii) All employees/contractors will be made aware of their responsibility under the *National Parks and Wildlife Act 1974* to notify the Mine Manager should any additional sites be identified and to cease work in this area immediately. The specific procedures or protocol to be adopted following the discovery of any additional site are outlined below.

Each of the operational safeguards and procedures has been developed following the receipt of recommendations for the management of the sites from the Red Chief LALC and Bigundi Biame Gunnedarr Traditional People who were involved in the ASR (2005) survey. **Appendix 3** presents correspondence from the Red Chief LALC and Bigundi Biame Gunnedarr Traditional People noting their satisfaction of the current fencing arrangement and recommendation for all employees to remain vigilant in maintaining the integrity of these fences.





In the event of the discovery of a potential Aboriginal site or artefact, the following protocol will be followed.

- (i) Work will cease in the area of the discovery.
- (ii) If the area of discovery is in deposited material, then work will also cease in the area where the material has come from.
- (iii) The person discovering the artefact will notify their supervisor who will ensure that work has ceased and the area(s) is(are) cordoned off with tape.
- (iv) The supervisor will notify the Mine Manager or senior EBC personnel on site.
- (v) The Mine Manager (or Senior EBC person) will:
  - request a qualified archaeologist to attend the site and advise on its archaeological significance;
  - request the site monitor(s) from the Red Chief LALC and Bigundi Biame Gunnedarr Traditional People, if not already present, to attend and advise on its cultural significance in consultation with the qualified archaeologist; and
  - if the find is determined to be a site, notify DEC with the advice from the archaeologist, the Red Chief LALC and Bigundi Biame Gunnedarr Traditional People for determination of further procedures.
- (vi) The Mine Manager will implement the procedure(s) or direction(s) issued by DEC.
- (vii) Work will not recommence in the area of any discovery until the site has been inspected and permission granted from DEC to recommence construction activities.

### 3.3.3 Monitoring

As noted in Section 3.3.2, representatives of the Red Chief LALC and Bigundi Biame Gunnedarr Traditional People will be notified of the scheduled dates for soil stripping activities. Site monitors from these two Aboriginal groups will be invited to observe soil stripping activities to ensure there is no disturbance to the identified sites and to inspect the areas being disturbed for additional sites or artefacts.

## 3.4 Native Vegetation Management

### 3.4.1 Existing Native Vegetation

As part of the EIS preparation process, Geoff Cunningham Natural Resource Consultants Pty Ltd (GCNRC) was commissioned to survey the existing vegetation within the transport route corridor and assess the significance of disturbance associated with its construction. The results of the survey and assessment of significance and impact were summarised in GCNRC (2005), Part 4b of a *Specialist Consultant Studies Compendium* which supported the EIS. The field survey identified three vegetation communities within the transport route corridor (see **Figure 8**). No threatened flora species or communities were observed within the transport route corridor (GCNRC, 2005).



The three vegetation communities are described as follows.

### **Community 9 – Floodplain Woodland (Bimble Box-Pilliga Grey Box) Community**

This community occurs on open floodplain country and in association with Bollol Creek and Driggle Draggle Creek. Tree species recorded include Bimble Box, Pilliga Grey Box, Wilga, White Cypress Pine, Myall, Rough-barked Apple and Rosewood. Shrub species include Western Golden Wattle, Eastern Cottonbush, various Acacia species and the introduced weed, African Boxthorn, over a groundcover dominated by native grasses.

### **Community 10 - Native / Naturalised Grassland Community**

Native and introduced groundcover species dominate this community with scattered individual or clumps of Narrow-leaf Ironbark, White Cypress Pine, Tumbledown Gum and Wilga. Black Roly-poly occurs in some areas.

### **Community 11 - Crop and Pasture Land**

Cereal stubble and bare cultivated land occur in some sections of this community while in other areas, lucerne pastures are present. Trees and shrubs are generally absent, or present as scattered individuals of Narrow-leaf Ironbark, White Cypress Pine, Tumbledown Gum and Wilga.

## **3.4.2 Design Features, Operational Safeguards and Procedures**

### **3.4.2.1 Design Features**

In order to minimise the impact on native vegetation communities, the transport route was aligned to avoid disturbance to stands of native trees at the intersection with Goonbri Road, the crossing of Bollol Creek and a stand of trees approximately 250m south of Bollol Creek.

### **3.4.2.2 Operational Safeguards and Procedures**

The alignment of the transport route has been designed to minimise the necessity to clear remnant trees and shrubs with disturbance largely restricted to cleared agricultural land. Notwithstanding these design features, EBC will implement the following operational safeguards and procedures.

- (i) The extent of clearing undertaken will be confined to the footprint of the proposed road and its verges.
- (ii) All areas to be cleared will be clearly defined.
- (iii) All clearing will be undertaken in campaigns.
- (iv) EBC will monitor for the presence and spread of noxious weeds and implement targeted controls, such as weed spraying, as necessary.



### 3.4.3 Monitoring

Community 9 contains isolated Bimble Box, a Koala feed tree species, and other native trees which might provide hollows or roosting sites for native birds and bats. As a consequence, any trees to be felled will be inspected for Koalas, nesting birds and roosting bats.

No other monitoring is proposed.

## 3.5 Air Quality Management

### 3.5.1 Compliance Criteria

The management of air quality, and specifically dust, will be necessary during road construction activities in order to avoid any substantial increases in dust deposition levels at residences located near the transport route. *Condition 4(1)* nominates that annual average dust deposition levels should not increase by more than 2g/m<sup>2</sup>/month and not exceed 4 g/m<sup>2</sup>/month.

### 3.5.2 Operational Safeguards and Procedures

EBC will implement the following operational safeguards and procedures during the construction of the transport route.

- Clearing ahead of construction activities will be minimised.
- Dust suppression by water application will be used to increase soil moisture should stripping occur during periods of high wind or low soil moisture.
- Cleared areas will be watered regularly during construction.
- Areas of soil disturbance such as roadside drains and soil stockpiles will be re-vegetated.
- Water application to gravel surfaces to assist compaction and dust generation.

### 3.5.3 Monitoring

EBC, IBC and WCM have an established network of dust deposition gauges in the vicinity of the transport route, of which the following will be of relevance in the assessment of road construction impact.

- “Pinegrove”;
- “Kyalla”;
- “Ambardo”.
- “Bungalow”;
- “Gundawarra”; and

As a minimum, these gauges, which are identified on **Figure 8**, will be monitored for the duration of the road construction period.



## 3.6 Road Construction Noise Monitoring

### 3.6.1 Sensitive Receivers

Three non-project related residences are located within 1km of the section of the transport route to be constructed (see **Table 3.2**). These are considered the only sensitive receivers to construction noise and, only then, when construction activities are being undertaken in the immediate vicinity.

**Table 3.2**  
**Residences Within km of the Constructed Section of the Transport Route**

Ref*	Property Name	Distance to Proposed Transport Route (m)
8	"Ambardo" <sup>#</sup>	720
10	"Kyalla"	200
13	"Pine Grove"	250
* see <b>Figure 8</b>		
<sup>#</sup> This is also a monitoring point for operational noise monitoring (see Noise Management Plan)		

### 3.6.2 Compliance Criteria

*Condition 4(6)* of the Consent requires noise generated during the construction of the transport route not to exceed and an  $L_{A10(15 \text{ minute})}$  of 40dB(A) where:

- noise from the development is to be measured at the most affected point or within the residential boundary, or at the most affected point within 30m of a dwelling (rural situations) where the dwelling is more than 30m from the boundary; and
- the noise emission limits apply under meteorological conditions of:
  - wind speeds of up to 3m/s at 10m above ground level; or
  - temperature inversion conditions of up to 3°C/100m, and wind speeds of up to 2m/s at 10m above ground level.

### 3.6.3 Monitoring

Noise compliance monitoring during the road construction activities will be operator-attended in order to accurately determine the noise contribution from those activities alone. Monitoring will be conducted at or near the residential locations listed in **Table 3.2** and shown on **Figure 8** when road construction activities are occurring in close proximity to the residence, or in the case of the "Ambardo" residence, in conjunction with construction noise monitoring for the mine site.

Attended noise surveys will be conducted as follows.

1. All noise monitoring will be carried out in accordance with NSW DEC's Environmental Noise Control Manual (ENCM) and applicable Australian Standards.



2. Noise levels will be measured in one-third octave bands using an instrument with IEC Type 1 characteristics as defined in AS 1259-1990 "Sound Level Meters". The instrument will have current calibration as per manufacturer's instructions and field calibration will be confirmed before and after measurements with a sound level calibrator.
3. The instrument will be set to A-weighting, "fast" response and measurements of  $L_{Aeq(15 \text{ minute})}$  will be taken at each location in **Table 3.2**. Each measurement will be stored at a sampling rate of no greater than 5 seconds for further analysis.
4. A minimum of three measurement periods will be undertaken at each residence in rotation to identify the noise emission from each phase of activity, ie. soil stripping / boxing out, gravel delivery and compaction.
5. Field notes will be taken during each measurement recording the time and duration of noise events, noise sources, instantaneous noise levels and the frequency range of identified site noise sources.
6. Extraneous noise sources will be filtered from the measured signal using Bruel & Kjaer Evaluator Software and the  $L_{Aeq(15\text{-minute})}$  level attributable to the construction activities will be identified and compared with the relevant criteria.
7. Details regarding type and location of items of plant, survey interval, weather conditions, extraneous noise sources, monitoring locations and times of measurement will be recorded for inclusion in the noise monitoring report.

The person conducting the measurements will compile the results and analyses of all noise monitoring and include them in the AEMR for presentation to the relevant parties.

## **4 REFERENCES**

**Archaeological Surveys & Reports Pty Ltd (1999).** *The Report of the Investigation for Archaeological Relics and Sites at the Site of a Proposed Open Cut Coal Mine "Whitehaven"*, North of Gunnedah, Northern NSW.

**Archaeological Surveys & Reports Pty Ltd (2005).** *Aboriginal Heritage Assessment for the Proposed East Boggabri Coal Mine*, Prepared on behalf of the East Boggabri Joint Venture – Part 6 of the *Specialist Consultant Studies Compendium*.

**Austrroads (2000).** *Roadfacts 2000* Austrroads, Canberra.

**Geoff Cunningham Natural Resource Consultants Pty Ltd (2005d).** *Flora Assessment of the Proposed Transport Route*, Prepared on behalf of the East Boggabri Joint Venture - Part 4b of the *Specialist Consultant Studies Compendium*.

**NSW Department of Environment and Conservation (EPA) (2000).** *Industrial Noise Policy*.

**NSW Department of Environment and Conservation (EPA) (1994).** *Environmental Noise Control Manual*.

**Spectrum Acoustics Pty Ltd (2005).** *Noise and Vibration Assessment for the Proposed East Boggabri Coal Mine*. Prepared on behalf of the East Boggabri Joint Venture - Part 7 of the *Specialist Consultant Studies Compendium*.



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# **APPENDIX 1**

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## **Relevant Development Consent Conditions (DA 88-4-2005)**

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**Table A1  
Relevant Development Consent Conditions**

Page 1 of 2

Reference	Condition	Section / Reference in TRCMP
4(9)	<p><b>Operating Hours – Construction Stage</b> During the Construction Stage, the Applicant is permitted to carry out development between 7 am to 6 pm Monday to Saturday, excluding public holidays. The Applicant shall notify the Department of the date of commencement and completion of construction activities.</p>	Section 3.1.3
4(40)	<p><b>Transport Route</b> The Applicant shall ensure that:</p> <ul style="list-style-type: none"> <li>(a) coal from the mine site is only transported along the private sections of the transport route, Rangari Road, Hoard Lane, Blue Vale Road, and the Kamillaroi Highway to the Whitehaven Siding coal handling and preparation plant;</li> <li>(b) trucks travelling to and from the mine site do not exceed 40 kilometres per hour in the vicinity of the school bus when it is operating on Hoard Lane; and</li> <li>(c) spillage from coal haulage vehicles is minimised; and</li> <li>(d) any spillage is promptly managed to avoid harm to the environment.</li> </ul>	Section 4.1
4(41)	<p><b>Transport Route Construction</b> Prior to the transport of coal from the development, the Applicant shall:</p> <ul style="list-style-type: none"> <li>(a) design and construct a sealed road from the mine site to Whitehaven mine; and</li> <li>(b) design and construct intersections of this road with Goonbri Road, Rangari Road and Hoard Lane, to the satisfaction of NSC.</li> </ul>	Section 3
4(42)	<p><b>Transport Route Construction Management Plan</b> Prior to the commencement of any construction of the transport route, the Applicant shall prepare (and following approval, implement), a Construction Management Plan for the transport route construction works. This plan shall describe the measures that would be implemented to:</p> <ul style="list-style-type: none"> <li>(a) control erosion and sedimentation;</li> <li>(b) protect and manage Aboriginal cultural heritage (including sites GGOS1, GGOS2, GGOS3 &amp; GGOS4);</li> <li>(c) measures to minimise impacts on native vegetation; and</li> <li>(d) monitor the noise generated by the development to ensure that it complies with the criteria in conditions 7 and 8,</li> </ul> <p>to the satisfaction of the Director-General.</p>	Section 3 Section 3.2 Section 3.3 Section 3.4 Section 3.5



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## APPENDIX 2

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# Correspondence from Local Aboriginal Representative Groups

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RED CHIEF LOCAL  
ABORIGINAL LAND  
COUNCIL

P.O. BOX 745  
GUNNEDAH NSW, 2380

PHONE: (02) 6742 3602  
FAX: (02) 6742 3815

28 November 2005

Attention  
Mr Wayne Parkes  
Project Manager  
East Boggabri Project  
Whitehaven Coal Mining Pty Ltd  
PO BOX 56  
BOGGABRI NSW 2382

Dear Wayne

In response to your request for approval on fencing carried out around archaeological sites – GGOS1, GGOS2, GGOS3 and GGOS4, within the East Boggabri lease area.

Robert Horne from Red Chief Local Aboriginal Land Council inspected these sites on the 17 November 2005 and has confirmed to me his satisfaction in the manner of which the sites have been fenced.

**Recommendation:** That Whitehaven Coal Mining and your employees are vigilant of the fences condition and its repair throughout the life of the mine.

Yours sincerely

  
Gina Field  
Manager





**BIGUNDI BIAME GUNNEDARR TRADITIONAL PEOPLE**

(IN THE MIST OF GOD)

16 SOUTH STREET  
GUNNEDAH NSW 2380  
PHONE: 02 6742 0311  
FAX: 02 6742 0311

Attention  
Mr Wayne Parkes  
Project Manager  
East Boggabri Project  
Whitehaven Coal Mining Pty Ltd  
PO Box 56  
BOGGABRI NSW 2382

Dear Wayne

In response to your request for approval of fencing carried out around archaeological sites- GGOS1, GGOS2, GGOS3 and GGOS4, within the East Boggabri lease area.

After inspection of the fenced area I'm satisfied with the manner in which the sites have been protected (fenced).

Recommendation: That Whitehaven Coal Mining and your employees are vigilant of the fences condition and its repair throughout the life of the mine.

Respectfully yours,

Wayne Griffiths  
Bigundi Biame

Friday, 9 December 2005

