

## **Appendix 2 – EIS Supplementary documents**

Documents provided in the following order:

- Response to DECCW Initiated Stop the Clock
- Additional information supplied in Response to DECCW Initiated Stop the Clock (15 February 2011)
- Response to I&I Request for Additional Information
- Additional information supplied in Response to DECCW Initiated Stop the Clock (1 March 2011)
- Response to Council Request for Additional Information
- Response to NOW Request for Additional Information
- Response to RTA Request for Additional Information
- Revised Appendices C, D & E to the Ecological Assessment prepared by Oz Ark Environmental and Heritage Management Pty Ltd received 15 April 2011.
- Revised Appendices B, C, D, E, F & G to the Ecological Assessment prepared by Oz Ark Environmental and Heritage Management Pty Ltd received 28 April 2011.



ABN: 67 118 684 576

# COBAR CONSOLIDATED RESOURCES LIMITED

## Response to DECCW Initiated "Stop the Clock" Issued on 24 January 2011

for the

## WONAWINTA SILVER PROJECT

February 2011

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*Prepared by:*



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

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ABN: 67 118 684 576

# COBAR CONSOLIDATED RESOURCES LIMITED

## Response to DECCW Initiated "Stop the Clock" Issued on 24 January 2011

For the

## WONAWINTA SILVER PROJECT

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## 1. INTRODUCTION

The Department of Environment, Climate Change and Water (DECCW) requested Cobar Shire Council 'stop the clock' on the assessment of the Environmental Impact Statement (EIS) accompanying a development application by Cobar Consolidated Resources Limited (CCR) on 24 January 2011. DECCW requested further information be supplied as follows.

- **Noise.** Further assessment is required regarding prevailing meteorological conditions.
- **Aboriginal Cultural Heritage.** Further information/clarification is required regarding the adequacy of consultation with Aboriginal stakeholders and mapping of identified Aboriginal sites.
- **Biodiversity.** Further information/clarification is required regarding impacts on vegetation and the proposed Compensatory Habitat Strategy
- **Groundwater.** Further information/clarification is required regarding the proposed measures to protect groundwater from pollution.
- **Hazardous Material Management.** Further information/clarification is required regarding the proposed measures to protect fauna and the environment in general from use of hazardous materials onsite.
- **Surface water.** Further information/clarification is required regarding surface water management onsite.
- **Miscellaneous.** On January 1 2011, the Bedooba State Forest was gazetted as the Bedooba State Conservation Area (SCA) and is now under the management of DECCW (Parks and wildlife Group). Advice regarding permissibility of the proposed pipeline through the recently gazetted Bedooba state conservation area (SCA) is provided in Attachment 1.

The following sections consider the specific requests for more information made by DECCW.





## 2. NOISE

DECCW wrote:

*"With reference to the Bureau of Meteorology Annual Rainfall Maps: ([http://www.bom.gov.au/cgi-bin/Climate/cgi-bin/scripts/annual\\_rainfall.cgi](http://www.bom.gov.au/cgi-bin/Climate/cgi-bin/scripts/annual_rainfall.cgi)), the subject site receives less than 400mm annual rainfall and would therefore be categorised as 'arid or semi-arid' in accordance with the INP. The default inversion parameters for an arid or semi-arid area are: 80C/100m temperature inversion strength for all receivers, plus a 1m/s source to receiver component drainage flow wind speed for those receivers where applicable.*

*It is therefore likely that the predictive noise modelling has underestimated the predicted noise levels under applicable default INP meteorological inversion conditions.*

- 1. Amended modelling results for appropriate INP default meteorological conditions are therefore required prior to DECCW being in a position to determine whether GTA's can be issued."*

### Response

ERM Australia subsequently re-ran the noise model prepared for the Project assuming Class 'G' inversion (8°/100m) 1m/s prevailing wind, as per Table C2 of the INP. The resulting noise predictions are presented in Table 1.

**Table 1**  
**Noise Predictions for Class G Inversion Conditions**

	Predicted L <sub>Aeq</sub> Noise Level (dB(A))			Predicted L <sub>1</sub> Noise Level (db(A))
	Day	Evening	Night	
Scenario 1 (Site Establishment)				
Manuka	31.1	36.3	36.3	43.1
Wirlong	32.1	35.1	35.1	37.8
Scenario 2 (Year 1 Operations)				
Manuka	31	36.5	36.5	43
Wirlong	32	35	35	38

Notably, the predicted noise levels are almost identical to those presented in the EIS. ERM suggest this is due a combination of the following factors.

- Reduced effect of inversion at the nominated distances (1.5km to 2km from noise sources).
- Intervening topography reducing the effect of the inversion conditions, i.e. more of the noise waves flattened and directed into the ridge between the noise source and residence.
- Reduced wind speed modelled (1m/s vs 2m/s).

Based on the additional modelling results, effectively replicating those included in the EIS, the proposed management and assessment included in the EIS remains relevant.



### 3. ABORIGINAL CULTURAL HERITAGE

DECCW wrote:

"Consultation

*The proponent has not fully complied with stage 2/3 of the Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010. Under the policy the proponent is required to give registered Aboriginal stakeholders the opportunity to review and provide feedback on the methodology. The proponent must also seek any cultural information from the registered Aboriginal stakeholders. This feedback was due on the 23<sup>rd</sup> June 2010, however the field work commence on the 21<sup>st</sup> of June 2010.*

*There is also no record of any comments or concerns provided (if any) by the registered parties in the community consultation log.*

- 1. The proponent must provide evidence that the Aboriginal community had no concerns with the methodology and had no information on important sites or areas for consideration."***

Response

It is noteworthy that the fieldwork was scheduled within the time frame allowed for registered Aboriginal parties to comment on the methodology. To facilitate a response, OzArk contacted all registered stakeholders to ensure they received the correspondence and to confirm their stance on both the methodology and proposed survey dates. OzArk confirm that all parties were verbally supportive of the outlined process, and recognised that due to project time constraints the survey was to commence two days prior to the feedback closure date.

Subsequent to the draft report being sent to the four registered Aboriginal groups, verbal conversations indicated that Richard Kennedy (Mount Grenfell Board of Management) and Lesly Ryan (NLALC) were satisfied with the methodology undertaken for survey and supported the recommendations in the report. Bill Lord, on behalf of CLAC and Norm and Elaine Ohlsen, requested an extension to revise the document so as to submit an informative written response. The verbal responses of Richard Kennedy (Mount Grenfell Board of Management) and Lesly Ryan (Nyngan LALC), along with Bill Lord's request for an extension in time, are documented in *Appendix 2* of the Cultural Heritage Assessment completed by OzArk and included in the EIS as *Appendix 8*.

The written response of Cobar LALC, which was not included in the Cultural Heritage Assessment completed by OzArk, is included as **Annexure 1**. **Annexure 2** provides an updated consultation log supplied by OzArk on 4 February 2011.

DECCW also wrote:

"Mapping

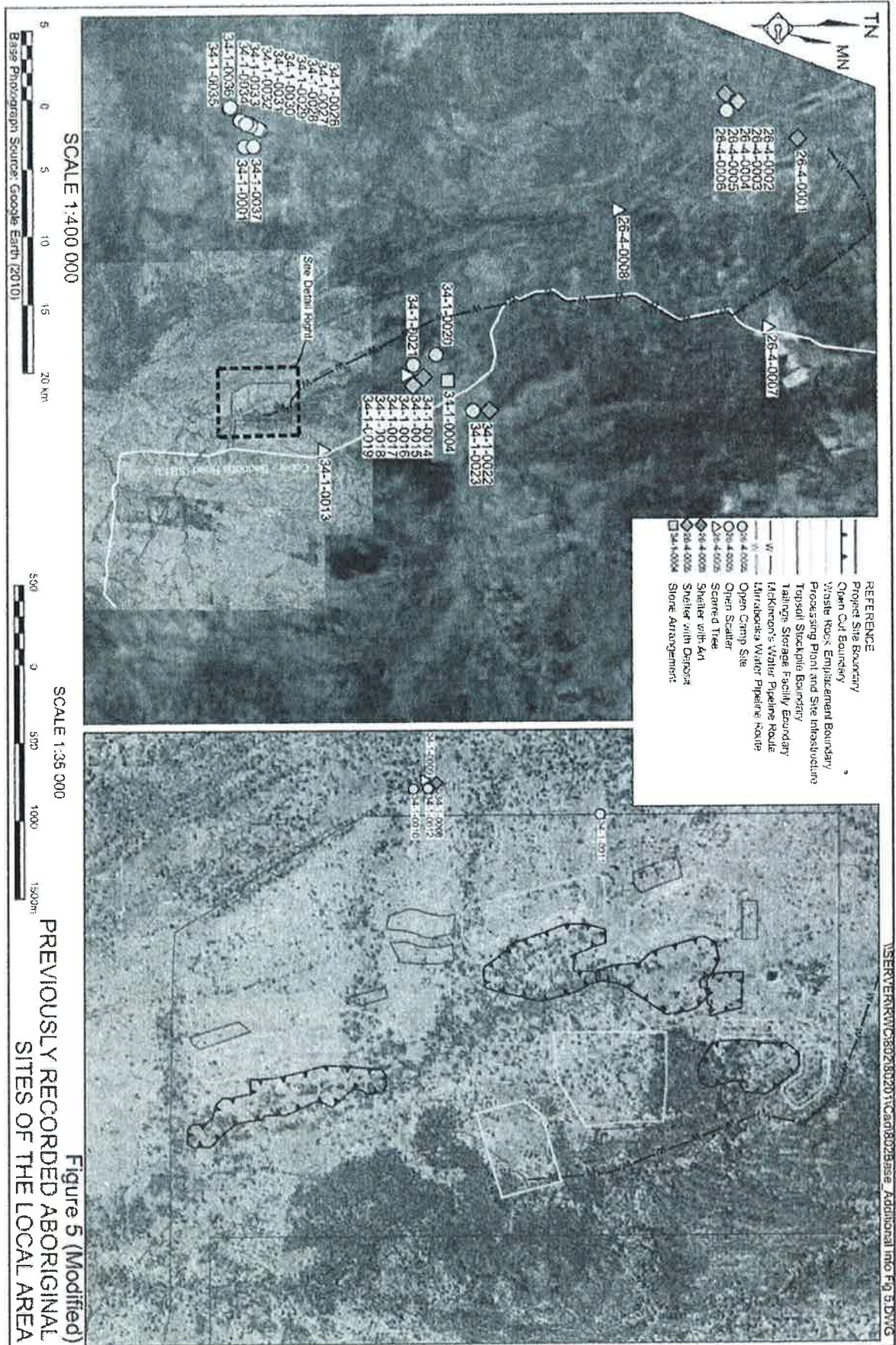
*The table associated with the map in Figure 5 is incorrect. In this table site 26-4-005 is identified as a Stone Arrangement. This is incorrect; it is an Artefact scatter.*

- 1. The map should be amended to accurately reflect this."***

The error is acknowledged and a corrected version of **Figure 5** (referenced as **Figure 5 – Modified**) is attached.







## 4. BIODIVERSITY

DECCW wrote:

"Impacts on Vegetation

*Conflicting information is presented on impacts on vegetation communities and area of disturbance. ....*

*Furthermore, one vegetation community (coloured dark blue on the vegetation maps) is missing from the map legends throughout the EIS.*

*It is recommended that the proponent clarify and confirm the expected impacts on native vegetation communities."*

Response

To assist in the assessment of impacts on vegetation, **Figures 6, 8 and 16** of the *Environmental Assessment* have been updated (renamed **Figures 6 - Modified, 8 - Modified and 16 - Modified**) to include the vegetation mapping unit (VMU) reference within the coloured polygons. Notably, vegetation mapping unit represented by the dark blue colour is **Vegetation Mapping Unit 4: *Eucalyptus populnea* – very sparse (Benson 103)**.

The conflicting information related to impacts on vegetation communities has been reviewed and it has been identified that the information contained within the Ecological Assessment for the Project (*Appendix 7*) was based on a version of the Project Site layout that was subsequently updated. Several other minor anomalies in the calculation of Project-related impact have been corrected and the following confirms the Project-related impact on the vegetation of the Project Site.

- Only vegetation meeting the community classification of Benson 103 would be disturbed by the Project. Vegetation conforming to the Benson 174 community type is restricted to the northeastern corner of the Project Site (which would remain undisturbed by the Project and forms part of the proposed Compensatory Habitat Area).
- In total, a maximum of 299.1ha of vegetation would be disturbed on the Project Site comprising:
  - 223ha of Benson 103; and
  - 72.1ha of Benson 103D; and
  - 4ha of Benson 103SS.

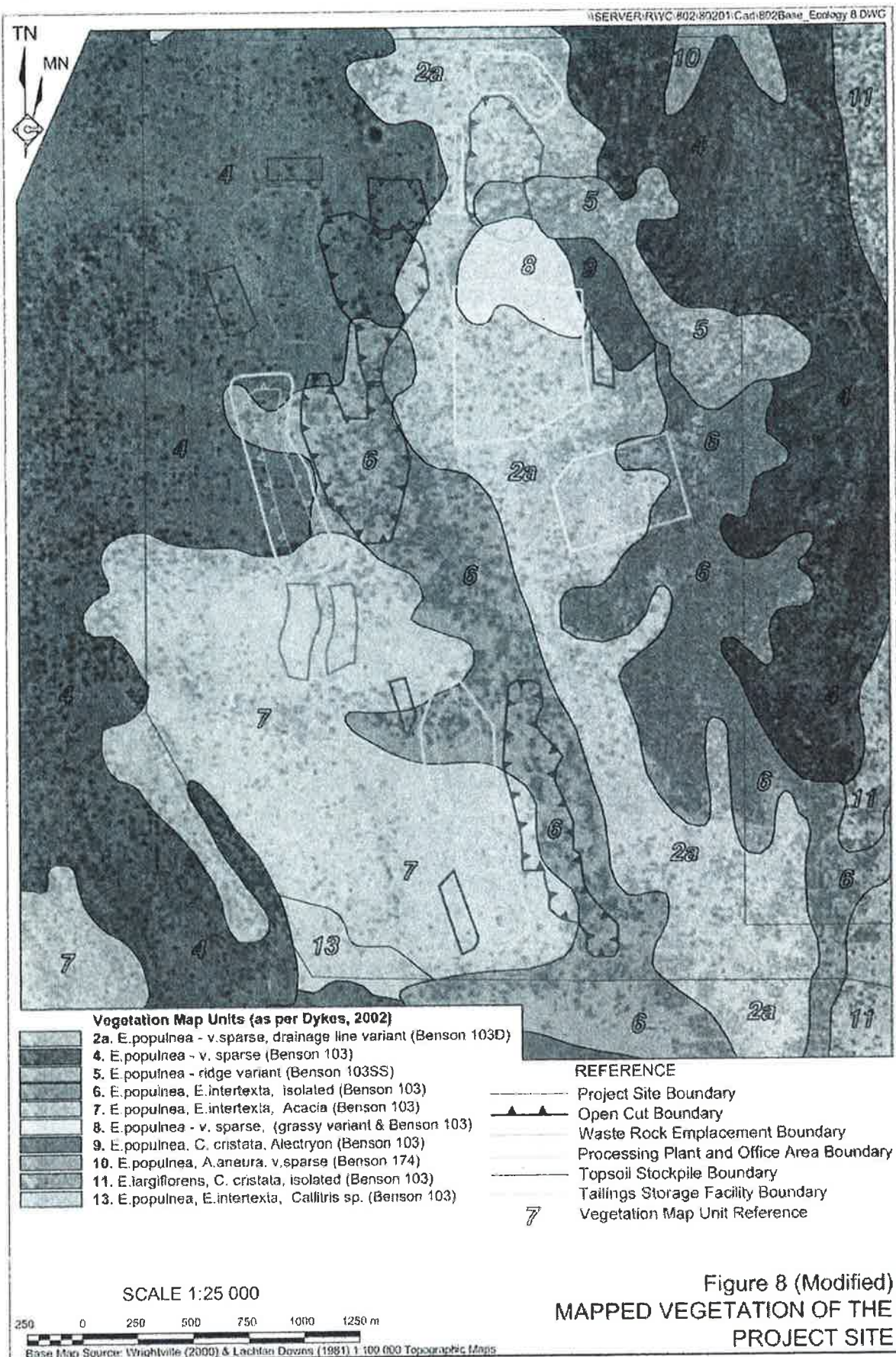
*Table 20* of the Ecological Assessment (*Appendix 7*) (renamed **Table 20 - Modified**) and **Table 4.8** of the *Environmental Assessment* (renamed **Table 4.8 - Modified**) have been reviewed and corrected to provide the DECCW with a detailed summary of the proposed disturbance by VMU and Project activity. Notably, **Table 4.8 - Modified** considers the vegetation within the proposed Compensatory Habitat Area.



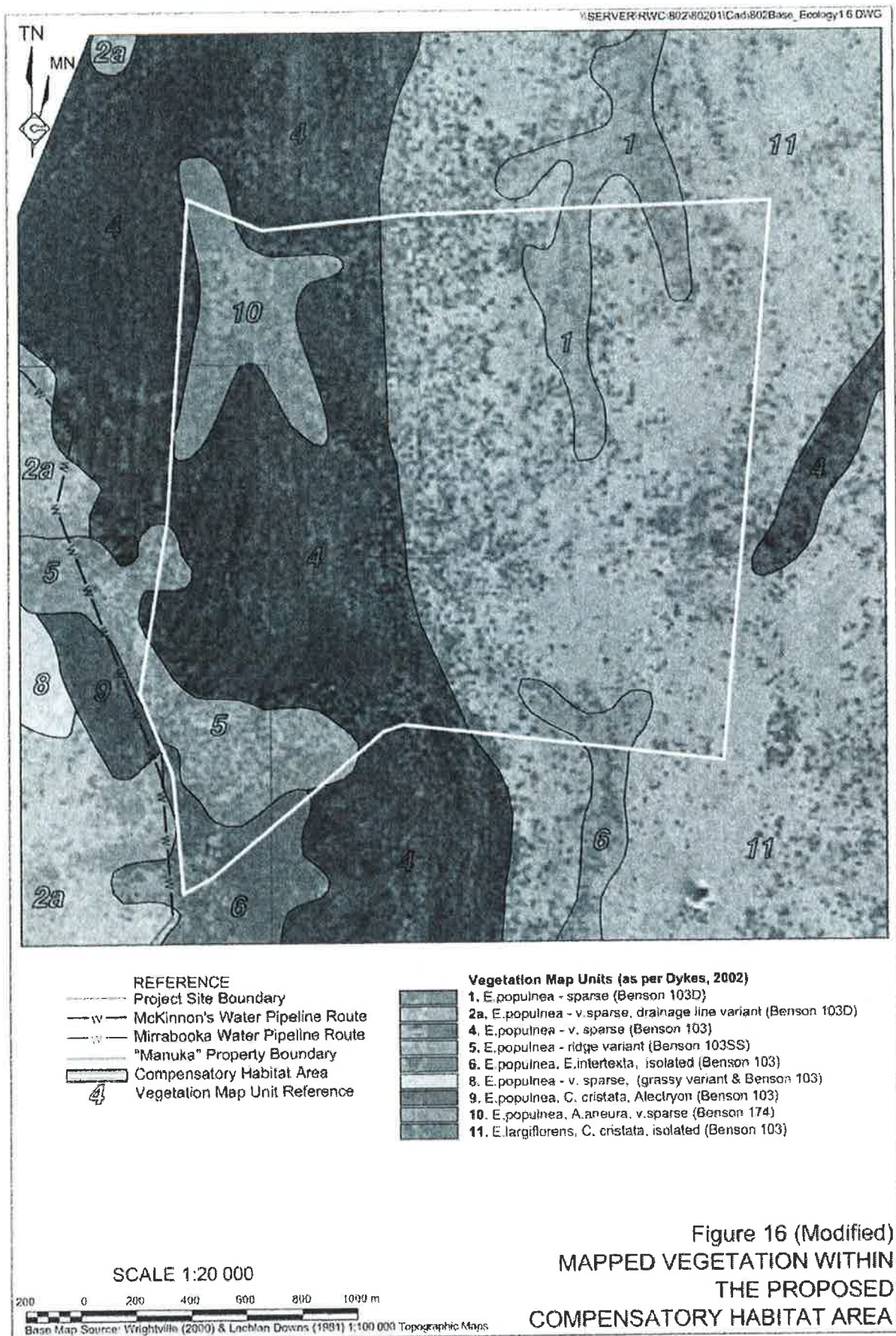












**Table 20 - Modified**  
**Direct Impacts on Vegetation of the Project Site**

Page 1 of 2

Activity	Area (ha)	Vegetation Mapping Unit			Habitat Values to be Altered
		No.	Dykes (2002)	Benson et al. (2006)	
Open Cut - South Pit	21	6	<i>E. populnea</i> , <i>E. intertexta</i> – isolated	Benson 103	Analogous habitat within the Project Site, neighbouring properties and the locality. No 'special / unique', ground water dependent communities or habitats to be modified.
	5	7	<i>E. populnea</i> ; <i>E. intertexta</i> – acacia		
Open Cut - South Central Pit <sup>1</sup>	25	6	<i>E. populnea</i> , <i>E. intertexta</i> – isolated	Benson 103	Analogous habitat within the Project Site, neighbouring properties and the locality. No 'special / unique', ground water dependent communities or habitats to be modified.
	1	2a	<i>E. populnea</i> – v. sparse, drainage line variant	Benson 103D	Benson 103D Variant has more potential to possess microbat habitat.
Open Cut - North Central Pit <sup>1</sup>	20	4	<i>E. populnea</i> – v. sparse	Benson 103	Analogous habitat within the Project Site, neighbouring properties and the locality. No 'special / unique', ground water dependent communities or habitats to be modified.
	3	6	<i>E. populnea</i> , <i>E. intertexta</i> – isolated	Benson 103	
	3	2a	<i>E. populnea</i> – v. sparse, drainage line variant	Benson 103D	Benson 103D Variant has more potential to possess microbat habitat.
Open Cut - North Pit	11	2a	<i>E. populnea</i> – v. sparse, drainage line variant	Benson 103	Benson 103D Variant has more potential to possess microbat habitat.
	4	5	<i>E. populnea</i> – ridge variant	Benson 103SS	Benson 103SS Variant has more potential to possess habitat for reptiles.
	2	8	<i>E. populnea</i> – v. sparse, grassy variant	Benson 103	Analogous habitat within the Project Site, neighbouring properties and the locality. No 'special / unique', ground water dependent communities or habitats to be modified.
Waste Rock emplacements	20	6	<i>E. populnea</i> , <i>E. intertexta</i> – isolated	Benson 103	Analogous habitat within the Project Site, neighbouring properties and the locality. No 'special / unique', ground water dependent communities or habitats to be modified.
	30	7	<i>E. populnea</i> , <i>E. intertexta</i> – acacia		
	25	4	<i>E. populnea</i> – v. sparse		
	12	2a	<i>E. populnea</i> – v. sparse, drainage line variant	Benson 103D	Benson 103D Variant has more potential to possess microbat habitat.
Processing Plant and Office Area	30	2a	<i>E. populnea</i> – v. sparse, drainage line variant	Benson 103D	Benson 103D Variant has more potential to possess microbat habitat.
	10	6	<i>E. populnea</i> , <i>E. intertexta</i> – isolated	Benson 103	Analogous habitat within the Project Site, neighbouring properties and the locality. No 'special / unique', ground water dependent communities or habitats to be modified.

<sup>1</sup> The two central pits would connect, however, the ore would be mined separately.





Table 20 – Modified (cont'd)  
 Direct Impacts on Vegetation of the Project Site

Page 2 of 2

Activity	Area (ha)	Vegetation Mapping Unit			Habitat Values to be Altered
		No.	Dykes (2002)	Benson et al. (2006)	
Tailings Storage Facility	27	2a	<i>E. populnea</i> – v. sparse, drainage line variant	Benson 103D	Benson 103D Variant has more potential to possess microbat habitat.
	8	8	<i>E. populnea</i> – v. sparse, grassy variant	Benson 103	Analogous habitat within the Project Site, neighbouring properties and the locality. No 'special / unique', ground water dependent communities or habitats to be modified.
Internal Haul Roads	2	Various		Benson 103	
Mine Access Road	6.1	Various		Benson 103	Road would follow existing access to 'Wirlong'. Unlikely to alter habitat values as clearing of substantive vegetation is unlikely to occur.
Soil Stockpiles and Surface Water Management Structures	35	Various		Benson 103	Analogous habitat within the Project Site, neighbouring properties and the locality. No 'special / unique', ground water dependent communities or habitats to be modified.
				Benson 103D	Benson 103D Variant has more potential to possess microbat habitat.

Table 4.8 - Modified  
 Comparison of Disturbed Vegetation and the Vegetation of the Concept Compensatory Habitat Strategy

Vegetation Community (Dykes 2002)		Vegetation Community (Biometric Database)	Impact Area (ha)	Compensatory Habitat (ha)
1	<i>Eucalyptus populnea</i> – sparse	Benson 103D	0.1	12
2a	<i>E. populnea</i> - very sparse (drainage line variant)	Benson 103D	72	0
4	<i>Eucalyptus populnea</i> – very sparse	Benson 103	78	192
5	<i>Eucalyptus populnea</i> – very sparse (ridge variant)	Benson 103SS	4	30
6	<i>Eucalyptus populnea</i> , <i>E. intertexta</i> – isolated	Benson 103	86	11
7	<i>Eucalyptus populnea</i> , <i>E. intertexta</i> , <i>Acacia</i>	Benson 103	40	0
8	<i>E. populnea</i> - very sparse (dense native grassy layer variant)	Benson 103	13	0
9	<i>E. populnea</i> , <i>Casuarina cristata</i> , <i>Alectryon oleifolius</i> ssp. <i>Elongates</i>	Benson 103	6	0
10	<i>E. populnea</i> – <i>Acacia aneura</i> – very sparse.	Benson 174	0	28
11	<i>E. Largiflorens</i> , <i>C. Cristata</i> - isolated	Benson 103	0	217
			<b>299.1</b>	<b>490</b>

DECCW also wrote

"Compensatory Habitat Proposal"

*The EIS does not adequately demonstrate how the Compensatory Habitat Strategy (CHS) will achieve the Department's 'Principles for the use of biodiversity offsets in NSW'. ... ..*



*The proposed CHS does not adequately meet the Department's principles for biodiversity offsets:*

*a) Offsets must be enduring*

*Whilst the 'Compensatory Habitat Strategy' proposed is a positive step, it is not clear whether the proponent intends to secure the 'compensatory habitat' in perpetuity. Whilst Section 4 of the EIS refers to a conservation agreement, Appendix 7 states that the 'proposed compensatory habitats are not afforded long term protection through land tenure and will only be managed through a Land Management Plan.*

*b) Offsets should aim to result in a net improvement in biodiversity over time, and must be quantifiable, with the impacts and benefits reliably estimated'*

*Enhancement of biodiversity in offset areas should be equal to or greater than the loss in biodiversity from the impact site. The offset or 'compensatory habitat' should also be based on a quantitative assessment of the loss in biodiversity as a result of the development and the gain in biodiversity from the offset.*

*The CHS appears to consist of two components:*

- 1. measures undertaken within the operational areas of the project site; and*
- 2. a separate 'conservation area'.*

*The EIS has not provided relevant information supporting the quantum of the 'compensatory habitat' proposed. The EIS concludes that the proposal will 'maintain or improve' biodiversity values, without detailing any scientific methodology employed to reach this conclusion.*

*The EIS indicates that the proponent intends to purchase the 'Manuka' property, which is approximately 9 700ha in size. DECCW is of the view that there are good opportunities for an expanded 'Compensatory Habitat Strategy' on this property. However, only a very small portion of the property has been proposed as compensatory habitat.*

*No information is included on the area of compensatory habitat to be enhanced within the operational areas of the project site (excluding post mine rehabilitation). Only the separate 'conservation area' has been used in calculating the offset ratio.*

*Whilst the EIS has considered the vegetation communities, habitat values and cultural values available within the 'conservation area', the EIS simply states that the shape and size of the polygon (approximately 490ha, Figures 15 and 16 of Appendix 7) was 'largely derived by topography i.e. a reasonable position for the goat/macropod exclusion fence on terrain suitable for its construction'.*

*Based on the information provided, it is difficult to compare the likely improvement in condition of the compensatory habitat areas with the losses from the development site. The EA also presents little detail regarding the condition of the proposed compensatory habitat in comparison to the impact sites (impact sites estimated to range from low-moderate to moderate-good). Such data is essential to calculate the offset required for the loss. The EIS compares two sites (development vs 'conservation area') in terms of existing habitat complexity only.*

*The Department considers it likely that the quantum of compensatory habitat proposed falls short of that required to adequately offset the impacts of the mining operation. An offset or 'compensatory habitat' can only produce a 'maintain or improve' outcome if the condition of an appropriately sized area constituting the offset is improved via appropriate management, and*



*this increase is quantified via a suitable metric along with an outline of the management that will be applied in perpetuity.*

*It is recommended that the proponent include within the EIS:*

- 1. An adequate assessment of the amount and condition of both the impact and proposed offset sites;*
- 2. A clearly defined CHS, the quantum of which is justified by a suitable metric (e.g. the Biobanking Assessment Methodology or other scientific methodology), and which also meets the Department's 'Principles for the use of biodiversity offsets in NSW';*
- 3. A proposal for proper in perpetuity arrangements to secure the conservation management of the CHS areas."*

#### Response

*The following response and additional information is based on information supplied by Mr Phillip Cameron of OzArk Environment and Heritage Management P/L (OzArk).*

The Ecology Assessment prepared for the Project and included as *Appendix 7* of the EIS, recommends a Land Management Plan (LMP) and the development of a Compensatory Habitat Area (CHA) as the offset strategy. DECCW note that detail within the report is insufficient to quantify if an 'improve or maintain' outcome would be achieved. Secondly, DECCW note the offsets need to be consistent with the DECCW 'Principles for the use of biodiversity offsets in NSW'.

Specifically, DECCW note that the proposed offset strategy does not adequately address the following principles.

- a) Offsets must be enduring.*
- b) Offsets should aim to result in a net improvement in biodiversity over time, and must be quantifiable, with the impacts and benefits reliably estimated.*

The following provides further consideration of the offset strategy as proposed in the EIS, as well as a proposal for an alternate offset strategy which could more easily address the above principles.

#### **The Compensatory Habitat Strategy (as Presented in the EIS)**

It is acknowledged that detailed field survey and assessment of the proposed CHA, nor detailed commitments as to specific inclusions in the LMP were included within the Ecology Report or EIS. Based on experience gained from previous assessments completed for projects requiring offset strategies, and the fact that there is certainty of access to the "Manuka" property for offsetting purposes, it was considered reasonable to provide the general concept for the offset strategy as part of the development application process. Put another way, it is considered unreasonable for the applicant to be required to complete significant field survey, assessment and offset development work, prior to receiving approval for the proposal that would be the subject of the offset.

With regard to DECCW's request for quantification of the CHS using BioBanking or another suitable metric system, it is noted that the assessment for the Project was not developed following the BioBanking Methodology (2009) (which is voluntary). With respect to application of a suitable metric system (such as BioBanking), one of the major driving forces behind the location of the CHA were cultural values associated with a rock art site (regionally



restricted and culturally significant) and the protection of rocky habitat (an area of higher habitat complexity in the locality) targeting carpet pythons, a regionally significant species (both culturally and ecologically) known to occur in the area. The locality has the highest local density of carpet pythons personally encountered (the species is rarely recorded by the author) in Western NSW. Exclusion of goats with a suitable fence was considered a desirable outcome on a number of levels and intended to establish an area where the native ground layer would naturally recover.

The environmental values noted above, as well as waterways (not an issue in this instance), are not attributes that are captured using the BioMetric tool, hence affecting the 'value' of the area in question. One can use semantics with respect to 'retention of rocks' versus protection of sandstone ridges, rocky habitats featured in the Subject Area, however, I did not feel that the BioBanking methodology would represent the environmental value of those attributes noted earlier in the selection of the CHA.

Application of BioBanking methods would allow comparison of habitat to be cleared against that set aside within the CHA and justification of the number of hectares of each vegetation type within the offset. Further one could argue that application of the BioBanking methodology to develop the CHA (irrespective of those values noted earlier and not given weight) is the basic tenant of the offset. However, this tenant is two dimensional in that it separates cultural values from landscape and its relationship with the surrounding biota, a position which is not reflective of pre-history use nor contemporary Aboriginal environmental values. The author was attempting to adopt a more holistic or at least multidimensional consideration whilst trying to deliver a greater environmental outcome for the same investment of resource. In this instance smaller, targeted and well maintained was considered preferable to bigger and potentially not as well resourced.

The author's selection of the area nominated was based on the following.

- Habitat surrounding the Subject Area is relatively homogenous, i.e. the offset area can basically go anywhere in the immediate vicinity possessing suitable rocky habitat for pythons.
- The art site (and associated scarred trees and artefact sites) is the item with the most significant 'rarity', which is located within a biologically complex habitat. In this instance both cultural and regionally significant species values were protected in the one locality.
- The size of the CHA, as noted was not derived by scientific rigorous methods, rather from practical experience with the construction and management of exclusion zones (Australian Native Flora and Fauna Sanctuary Western Plains Zoo, Genaren Hill Sanctuary Peak Hill LGA and Broken Hills Living Desert).
- In this instance, a smaller area which can be constructed in challenging terrain and is fully fenced from goats is preferable to recommending a larger area significantly more challenging to construct / maintain a goat proof fence.

On receipt of development consent for the Project, the Applicant is committed to completing the necessary field assessment and is happy to accept a condition of approval requiring implementation to the satisfaction of the consent authority and/or DECCW within 18 months of approval. This would provide for the quantification of the proposed impacts AND offsets in accordance with an existing framework.





The applicant believes that the CHS proposed and presented in the EIS represents a reasonable overview of an appropriate offset strategy of which the appropriate level of detail could be obtained, presented and approved by DECCW and Council following the receipt of development consent.

### **An Alternative Offset Proposal**

Considering the DECCW request to be able to adequately assess the merits of the proposed offset within an existing framework, the idea of protecting and enhancing a culturally important site and habitat for a regionally significant species as a smaller discrete area within a CHS incorporating a larger portion of the "Manuka" property has been re-evaluated and the information provided below aims to provide for the DECCW request for further information.

The objectives intended can be obtained through the development of a Property Vegetation Plan (PVP) over part or all of the 'Manuka' property. Notably, the recently released PVP's are identified as meeting the criteria for securing offsets under certain conditions (for Part 3A Projects) and as such a mechanism recognised by DECCW as providing both the rigour and the long term security required.

The main disadvantages is that goat proof fencing of the smaller CHA that would afford greater protection of the registered Aboriginal sites as well as provide the potential for a greater recovery of native ground cover (the most depleted and threatened type of vegetation in the locality) would no longer form a component of the offset. Native ground cover is the only vegetative layer which is suitable to 'maintain or improve', however, on the positive side the PVP would facilitate broader recovery across the entire property, allow the property owner to undertake existing agricultural activities (grazing of sheep and goats) and is less likely to cause concern when landowners / leaseholders change.

Given the above, it is recommended that a Property Vegetation Plan is developed for 'Manuka' as a condition of consent. Notes relevant to PVPs (summary of DECCW and Catchment Management Authority websites) have been provided below:

- A PVP is a voluntary, legally binding agreement between a landholder and the local CMA. In Western Division land written agreement needs to be obtained from the Commissioner of Western Lands.
- Because PVPs are agreements that affect the land and are long-term (a major outcome desired by DECCW), they are linked to the property through the land title. An abstract of the PVP must be registered on the register kept by the Department of Lands under the *Real Property Act 1900*. The register is the central place where any person (e.g. prospective purchasers) can look to find out what interests affect the land.
- Preparation of a PVP is free. The CMA will supply all the information needed, including a high-definition satellite image of the PVP proposal. CMA staff will liaise with the property holder to develop the PVP.
- The time taken to prepare a PVP depends upon the type being applied for, the size and nature of the site and the complexity of any negotiated management actions. The local CMA will estimate the time required once they are contacted and you have discussed the plans.



- The landholder will need to provide the local CMA with ownership and property details of the land, along with details of the offsetting proposal. The proponent's representative(s) are required to accompany the CMA officer on the property so that the plan can be prepared together.
- Agreed management actions linked to offsets and incentives may continue for a longer period (> 15 years), including in perpetuity.
- PVPs that do not include clearing can last for any time agreed to by the landholder and the CMA.
- A landholder can apply at any time to change a PVP if, for example, it is intended to modify farming practices.
- Once agreed by the landholder, approved by the CMA and signed by both parties, a PVP is a legal agreement under both the *Native Vegetation Act 2003* and the *Threatened Species Conservation Act 1995*. It is binding for the agreed period.
- A PVP is not affected by any changes to local or state planning rules or new listings of threatened species.
- A PVP cannot be revoked unless it is breached.

The Western CMA has a number of repeating conservation actions such as protection of remnant native vegetation, wetlands and hollow-bearing trees, retention of native shrubs and woody debris on the ground, wildlife corridors, control of feral species and weeds, and fire management, indicating that these key actions can potentially benefit a wide range of threatened species. Where applicable in 'Manuka' these would form the basis of the PVP whilst maintaining existing agricultural activities.

Based on the above, the establishment of a PVP over part or all of the 'Manuka' property could satisfy the DECCW offset principle requiring "*Offsets must be enduring*".

In order to satisfy the DECCW offset principle which states, "*Offsets should aim to result in a net improvement in biodiversity over time, and must be quantifiable, with the impacts and benefits reliably estimated*", further field survey and property assessment would be undertaken to establish the type and condition of remnant vegetation, fauna habitat and other important ecological features on the "Manuka" property. On the basis of this survey, specific conservation actions would be developed in consultation with the Western CMA (and DECCW) to improve the biodiversity of the property over time. These conservation measures would likely include the excision and fencing of smaller areas surrounding important cultural and ecological features (such as included in the original CHA), along with retention of hollow bearing trees, weed and feral animal control and protection of other key habitat features of significance to threatened species.

The applicant intends on discussing the relative merits of the two offset strategies with DECCW and develop (in consultation with DECCW) a schedule for development, design and implementation (post approval).



## 5. GROUNDWATER

DECCW wrote:

### "Groundwater"

1. *Further information/clarification is required regarding the proposed measures to protect groundwater from pollution. ....*

*DECCW's standard requirement for these types of liners is a re-compacted clay liner of at least 90cm in thickness. Where the proposed liner will not meet this thickness and the natural geology of the site in conjunction with constructed clay liners is considered sufficient in meeting this requirement, sufficient evidence must be provided in support of this to demonstrate the construction will be adequate to prevent pollution of groundwater (e.g. geological evidence etc.).*

2. *Details of the proposed QA/QC program must also be provided to ensure earthworks (compaction etc.) are undertaken in the appropriate manner and the design criteria are achieved.*
3. *Further information is required regarding the proposed groundwater monitoring network particularly around the TSF, but also any other groundwater monitoring across the site. this includes the number and locations of piezometers, as well as parameters to be monitored*

*Noting it is DECCW's expectation that piezometers are located in strategic locations, depending on the location of structures with the greatest risks to groundwater and other factors such as groundwater flow direction etc. This would include locating piezometer up gradient and down gradient of structures with the greatest risk to groundwater.*

*Information must also be provided regarding the reasoning behind the proposed groundwater monitoring network.*

4. *Further detail is required regarding the encapsulation of waste rock and waste rock material containing confirmed acid forming material in particular. This should include details of liners for waste rock emplacements containing acid forming material and clarification as to whether these liners will be lined to meet a permeability of  $1 \times 10^{-9}$  m/s or less. This should also address the information requirements outlined in item 1) above."*

### Response

1. The Applicant recognises the requirement to line storages of water or other materials which are saline or otherwise contaminated, e.g. containing elevated WAD Cyanide concentrations, to prevent pollution of groundwater and/or surface water resources. The Applicant proposes to line structures such as the TSF and water storages within the Processing Plant and Office Area with compacted clay to achieve permeability of  $1 \times 10^{-9}$  m/s or less.

Unless otherwise justified by detailed design for these structures currently being completed by URS Australia Pty Ltd, which would be provided to DECCW for consideration, the Applicant confirms that the compacted thickness would be at least 90cm thick.



2. The Applicant has commissioned URS Australia Pty Limited (URS) to design and manage construction of the TSF should the project be approved. Mr Neil Mattes, Senior Principal of URS notes the following in relation to QA/QC procedures for dam design and construction.

*"The Tailings Storage Facility (TSF) will be a Prescribed Dam under the NSW Dams Safety Act 1978, and as such will have to be designed, constructed and operated to meet the requirements of the NSW Dams Safety Committee (DSC). These requirements are extensive and detailed, but broadly require the TSF to be designed in accordance with current good practice as set out in the various Australian National Committee on Large Dams (ANCOLD) Guidelines. In regard to construction, the DSC requires "the dam designers to be integrally involved during construction of tailings dams and to approve any design changes made during construction. This involvement is to be signed-off formally by the Owners representative in a Construction Certificate to be provided to the DSC. Work-as-Executed Drawings and a Construction report are to be provided to the DSC at the same time."*

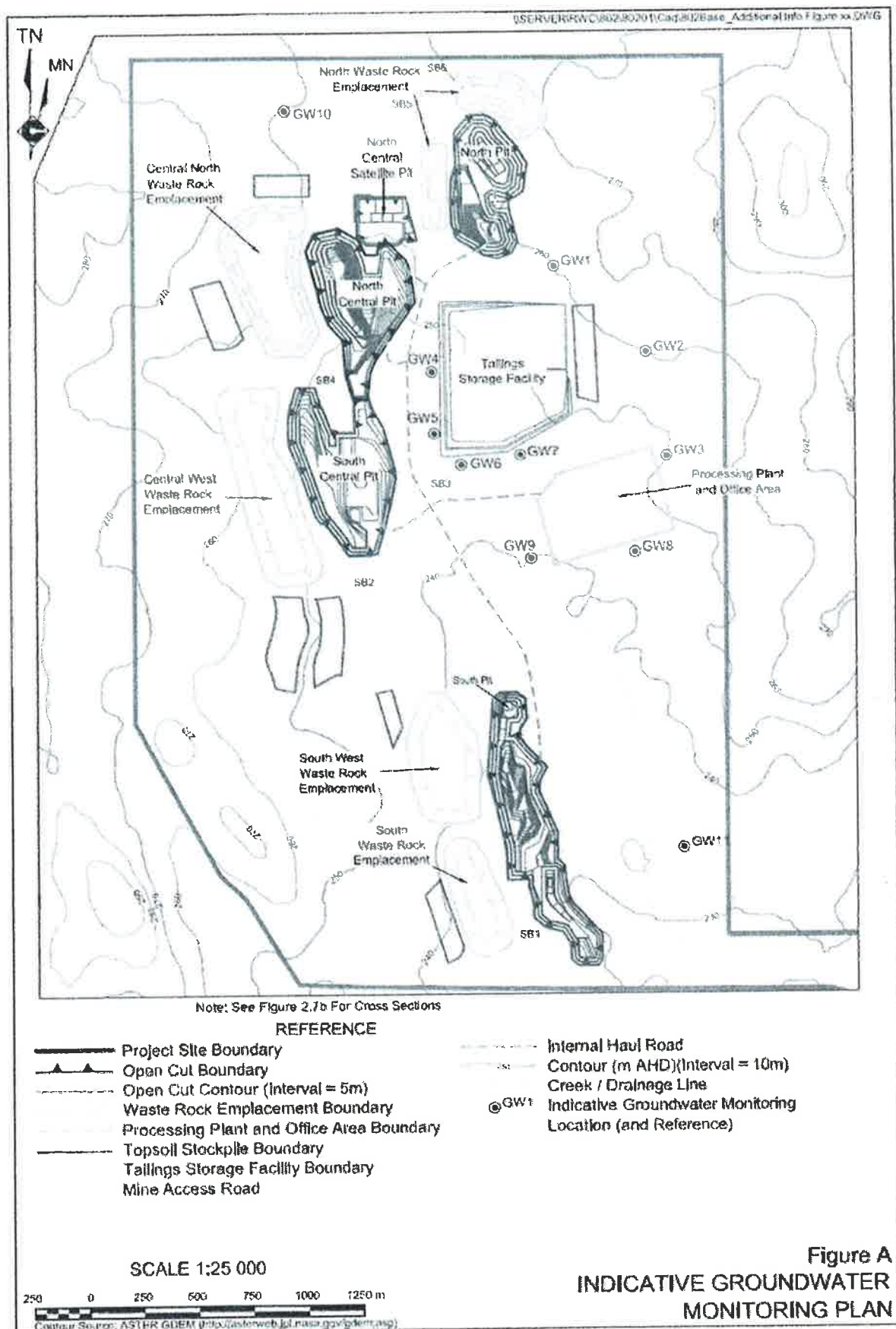
*The Technical Specification for TSF construction will be prepared by the TSF designer, and will include a section setting out quality control/quality assurance requirements in regard to construction material properties and compaction. The Specification will require the Contractor to provide for approval a QA/QC Plan to meet the Specification requirements. The QA/QC data will be progressively reviewed by the designers during construction, and will be incorporated in the Construction Report."*

Mr Mattes notes that URS do not have "standard" QA/QC requirements for TSF Technical Specifications, with requirements tailored to the particular design and construction situation for each TSF. This notwithstanding, QA/QC requirements to be established and applied to earthworks related to compaction would be generally in accordance with QA/QC programs implemented for similar construction works and would include the following requirements.

- All fill material would be tested to ensure compaction to the correct moisture content. Samples for moisture content testing shall be taken in accordance with the requirements of AS 1289.1-1991.
- The minimum frequency of testing would be 1 test per 5 000m<sup>2</sup> of each layer of fill.
- Fill material which does not comply with the required moisture content limit specifications would be reworked and watered/dried as required.
- Compaction testing of the fill material would be carried out immediately following compaction of homogenous lots.
- Test lots would be determined by the earthworks contractor and approved by the superintendent or Project Manager.
- Acceptance of results to specified permeability requirement ( $<1 \times 10^{-9}$  m/s) by Project Manager required before further placement of fill to be carried out.







- The minimum frequency of testing would be 1 test per 5 000m<sup>2</sup> of each layer of fill. A higher frequency of testing would be implemented if, in the opinion of the Project Manager, a significant number of test results fail to meet the specification requirements or the material is showing significant variability. In such cases the frequency of testing of new areas would be increased to 1 test per 2 500m<sup>2</sup> and retesting of failed material at a frequency of 1 test per 1 000m<sup>2</sup>.
3. The exact locations of groundwater monitoring bores would be identified following receipt of development consent and availability of final Tailings Storage Facility design. The Applicant would include these locations within an application for Environment Protection Licence to be submitted following receipt of development consent. Based on the final Project Site layout (see *Figure 2.1* of the EIS), and local topography (which is likely to influence sub-surface flows of water), **Figure A** provides the indicative locations of piezometers.

Piezometers placed up-gradient and down-gradient of the TSF and Processing Plant and Office Area, would likely be constructed as nested piezometers, targeting both near surface flows and the deeper aquifer. Piezometers placed beyond the pits would likely be constructed to access the underlying aquifer (measured to be between 190m and 200m AHD).

**Table 2** presents an indicative monitoring regime for the piezometers surrounding the TSF and Processing Plant and Office Area (Points GW1 to GW9). **Table 3** presents an indicative monitoring regime for the piezometers surrounding the pits (Points GW10 and GW11).

**Table 2**  
**Indicative Monitoring Regime for Points GW1 to GW9**

Analyte	Unit	Frequency	Sampling Method
Alkalinity (as Calcium Carbonate)	mg/L	Quarterly	Representative Sample
Antimony	mg/L	Quarterly	Representative Sample
Arsenic	mg/L	Quarterly	Representative Sample
Cadmium	mg/L	Quarterly	Representative Sample
Calcium	mg/L	Quarterly	Representative Sample
Chloride	mg/L	Quarterly	Representative Sample
Copper	mg/L	Quarterly	Representative Sample
Cyanide (WAD)	mg/L	Quarterly	Representative Sample
Electrical Conductivity	µS/cm	Monthly	In situ
Lead	mg/L	Quarterly	Representative Sample
Magnesium	mg/L	Quarterly	Representative Sample
Potassium	mg/L	Quarterly	Representative Sample
Selenium	mg/L	Quarterly	Representative Sample
Silver	mg/L	Quarterly	Representative Sample
Sodium	mg/L	Quarterly	Representative Sample
Standing Water Level	m (AHD)	Monthly	In situ
Sulphate	mg/L	Quarterly	Representative Sample
Total hardness	mg/L	Quarterly	Representative Sample
Zinc	mg/L	Quarterly	Representative Sample
pH	pH	Monthly	In situ



**Table 3**  
**Indicative Monitoring Regime for Points GW10 and GW11**

Analyte	Unit	Frequency	Sampling Method
Alkalinity (as Calcium Carbonate)	mg/L	Quarterly	Representative Sample
Antimony	mg/L	Quarterly	Representative Sample
Arsenic	mg/L	Quarterly	Representative Sample
Cadmium	mg/L	Quarterly	Representative Sample
Calcium	mg/L	Quarterly	Representative Sample
Chloride	mg/L	Quarterly	Representative Sample
Copper	mg/L	Quarterly	Representative Sample
Electrical Conductivity	µS/cm	Monthly	In situ
Lead	mg/L	Quarterly	Representative Sample
Magnesium	mg/L	Quarterly	Representative Sample
Potassium	mg/L	Quarterly	Representative Sample
Selenium	mg/L	Quarterly	Representative Sample
Silver	mg/L	Quarterly	Representative Sample
Sodium	mg/L	Quarterly	Representative Sample
Standing Water Level	m (AHD)	Monthly	In situ
Sulphate	mg/L	Quarterly	Representative Sample
Total hardness	mg/L	Quarterly	Representative Sample
Zinc	mg/L	Quarterly	Representative Sample
pH	pH	Monthly	In situ

Daily samples would be taken from the discharge to the TSF and analysed daily for WAD Cyanide and weekly for total and free cyanide.

- There is no confirmed acid forming material within the waste rock. Information contained within the EIS with respect to acid generating material was predictive based on the chemical properties of the waste rock to be generated. It considered the chemical composition of the small proportion of sulphidic material that requires excavation. Notably, and as identified in *Section 2.5.3.2* of the EIS, the sulphidic material contains high grade silver and it is proposed to stockpile this material whilst future modifications to the processing plant are considered to enable the recovery of silver from this material.

The Applicant proposes that following receipt of development consent, samples of the various waste rock types would be taken and analysed for Net Acid Generating Potential (NAGP) and Acid Neutralising Capacity (ANC). In the event that the material is identified as non-acid forming, no specific management strategies would be implemented and the sulphidic material would be stockpiled as proposed in the EIS and either processed following modification to the plant or placed within the waste rock emplacement.

Should the material display acid forming properties, the Applicant would implement the following measures to isolate, neutralise and/or encapsulate the material.

- If waste rock with an ANC equivalent to the NAGP of the sulphidic material is identified, this would be used to create the nominated non-mill feed stockpile area nominated in *Section 2.5.3.2* of the EIS. The volume of this material required to provide an appropriate neutralising capacity would be obtained from a suitably qualified professional.



- Should no suitable material with ANC be identified, the stockpile area for the non-mill feed would be constructed with clay and compacted to achieve a permeability of  $1 \times 10^{-9}$  m/s or less.
- In either case, the stockpile area would be isolated from natural or constructed drainage lines, with a bund constructed of the same material to prevent the discharge of any runoff.
- Should the sulphidic material be processed, the remaining stockpile area would be excavated and placed within one of the waste rock emplacements.
- In the event that the non-mill feed is not processed, it would be placed within one of the waste rock emplacements. Either compacted clay or ANC material would be placed around the acid forming material to encapsulate it within the final landform. A specific management plan would be developed (in consultation with DECCW and Council) prior to the encapsulation of the material which would require approval by Industry & Investment NSW.



## 6. SURFACE WATER

DECCW wrote:

### "Surface Water

1. *The EIS does not make mention of the requirement for any contaminated water management structures onsite (only 'clean' and 'dirty'). Clarification is required as to whether any contaminated water storage structures are required as part of surface water management onsite and the location and design criteria for these structures.*
2. *The location, of the raw water dam is not provided on plans. This should be included on relevant plans."*

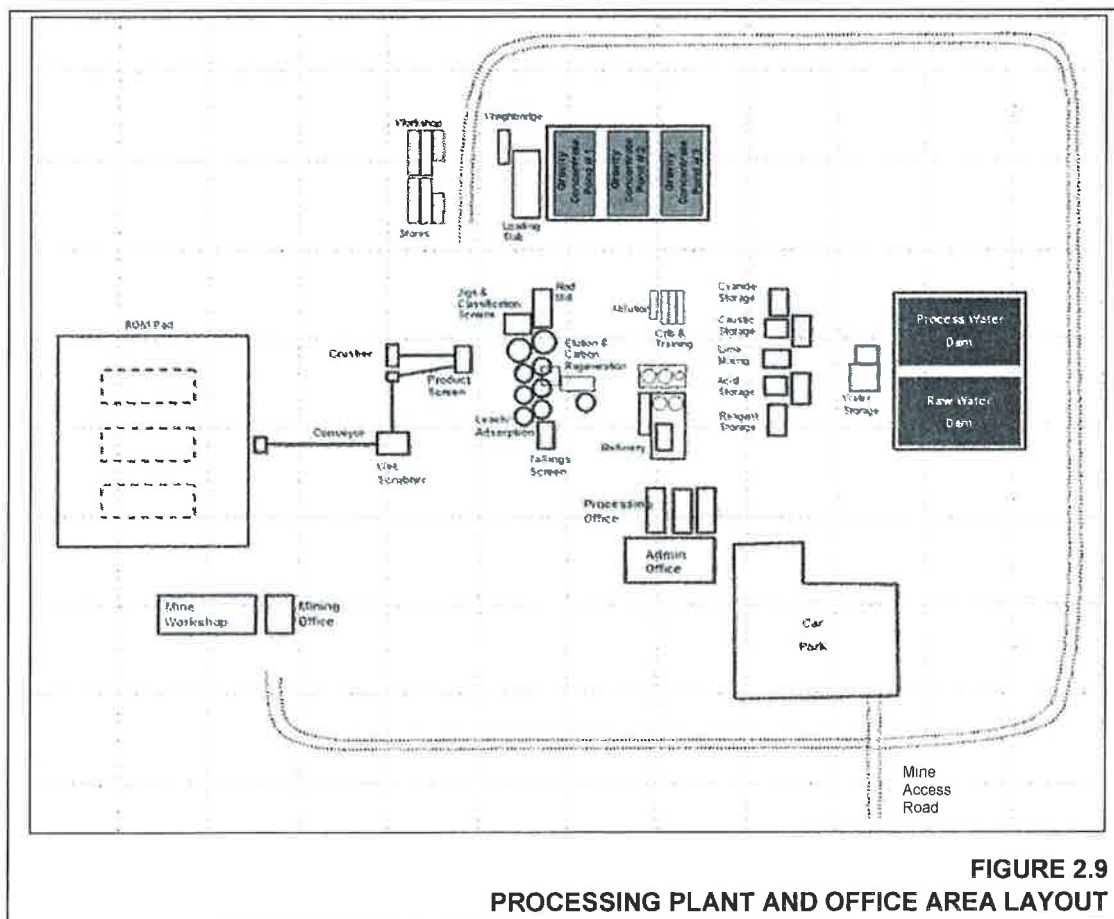
### Response

No contaminated water structures are required on the Project Site.

All hazardous materials would be placed within appropriately bunded areas preventing potentially contaminated runoff from discharging.

Runoff from equipment maintenance areas would be diverted to a sump (within the workshop area of the Processing Plant and Office Area) before being pumped through an oil-water separating unit.

The location of the Raw Water Dam is presented on *Figure 2.9* of the EIS. **Figure 2.9** is presented again below for DECCW's information.





## 7. HAZARDOUS MATERIAL MANAGEMENT

DECCW wrote:

*"Clarification is required regarding:*

- 1. The maximum expected concentrations of WAD cyanide in the tailings as discharged at the Tailings Storage Facility (TSF) discharge point.*
- 2. Clear identification of management strategies that will be employed to reduce potential for exposure of fauna to cyanide including details of control measures and monitoring programs."*

### Response

As noted in Section 2.7.3 of the EIS, Cyanide speciation testing has been completed for the tailings (also referred to as 'residue' in Section 2.7.3). Specifically, the following is noted on p. 2-41 of the EIS.

*"Cyanide speciation test work indicates that plant cyanide levels may be managed to reduce concentrations of WAD cyanide complexes in the residue stream to less than 5ppm"*

Further test work has been completed by the applicant confirming the very low WAD cyanide concentration of the tailings. A caveat is placed on this assessment work by the applicant in that more elevated WAD cyanide concentrations in the tailings discharged to the TSF could be encountered from time to time depending on the chemical and/or physical characteristics of specific ore to be processed. This caveat notwithstanding, the applicant can confirm that the predicted WAD CN concentration of the tailings would remain below the 50mg/L concentration identified by documents such as *Priority Existing Chemical Assessment Report No 31- Sodium Cyanide* (Department of Health and Aging NICNAS, 2010) and *International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold* (International Cyanide Management Institute, 2006).

On the basis of the above, the applicant proposes the following limits be placed on the WAD cyanide concentration of tailings discharge to the TSF.

- 90th percentile limit of 30mg/L.
- Maximum of 50mg/L.

On the basis of the tailings cyanide speciation test work conducted, it is considered reasonable that management of the TSF be in accordance with Category 1 of Recommendation 5a of *Priority Existing Chemical Assessment Report No 31- Sodium Cyanide* (Department of Health and Aging NICNAS, 2010), namely:

- process controls are in place to reduce WAD cyanide concentration to <10mg/L;
- contingency measures to prevent wildlife visitation are identified, nominated and implemented in the event that WAD cyanide concentration exceeds 10mg/L; and
- monitoring programs are implemented to assess wildlife visitation to the TSF and mortality.

The following provides the commitments made by the applicant in relation to the implementation of contingency measures to prevent wildlife visitation and ongoing monitoring.



### Contingency Controls

Should ore types be identified which would result in more than occasional WAD cyanide concentrations of greater than 10mg/L, the applicant would implement the following contingency strategies.

- The base of the TSF would be fenced as recommended by OzArk (2010) (*Appendix 7* of the EIS), i.e. a combination of a large (tall > 1.8m) chain mesh fence (or similar) to exclude large mammals with a fine mesh skirt at its base to exclude small mammals and reptiles.
- Ponding tailings water at the base of the central decant tower would be covered with floating balls (to minimise access of birds).

At the time of implementation of these contingency strategies, DECCW would be advised as to the proposed schedule for implementation (or modification to the proposed contingency measures).

Other measures such as the use of hydrogen cannons and spotlights were considered, however, a review of Department of Health and Aging NICNAS (2010) and advice obtained from other operating mines indicates that these measures have limitations in their effectiveness due to habituation of fauna to their implementation.

### Monitoring

The applicant commits to implementing a wildlife monitoring program to evaluate the effects of cyanide use on wildlife as recommended by OzArk (2010) (*Appendix 7* of the EIS – pp. A7-127 & A7-128).

DECCW also wrote:

"Other Hazardous Materials

*Clarification is required as to whether all consumables listed-in section 2.11.2.5 will be stored in appropriately bunded areas."*

### Response

All hazardous material would be stored within bunded areas or within containers which meet the minimum Australian Standard, e.g. AS 1940-2004.



## 8. MISCELLANEOUS

DECCW wrote:

1. *It is recommended that the proponent investigate alternative route options outside of the Bedooba SGA. Consideration of alternative routes must include assessment of issues identified in the Director General's Requirements issued 5 February 2010.*

### Response

Given the gazetting of Bedooba State Conservation Area (SCA) on 1 January 2011, the Applicant has reviewed the proposed alignment of the Mirrabooka Water Pipeline Route which traverses the Bedooba SCA (formerly Bedooba State Forest). The potential realignment of the pipeline around Bedooba SCA (both to the north and south) was considered, however, several disadvantages were identified.

1. The realignment would add significantly to the length of pipeline required (2.6km for realignment to the north and 3km for realignment to the south). This would increase the capital cost associated with the pipeline infrastructure, as well as pumping and maintenance costs once operations.
2. An increase in pipeline length would also increase the total area of disturbance associated with the pipeline, as well as, increase the potential for environmental impacts resultant from a pipe leak or spill (by a factor directly related to the increase in pipeline length).
3. Realignment to the north would require access to an additional property.

It is understood that there is no legal impediment to the construction and management of a water pipeline through a State Conservation Area, however, demonstration that the environmental impact would be minimal is considered the minimum standard sought for such an activity to be approved.

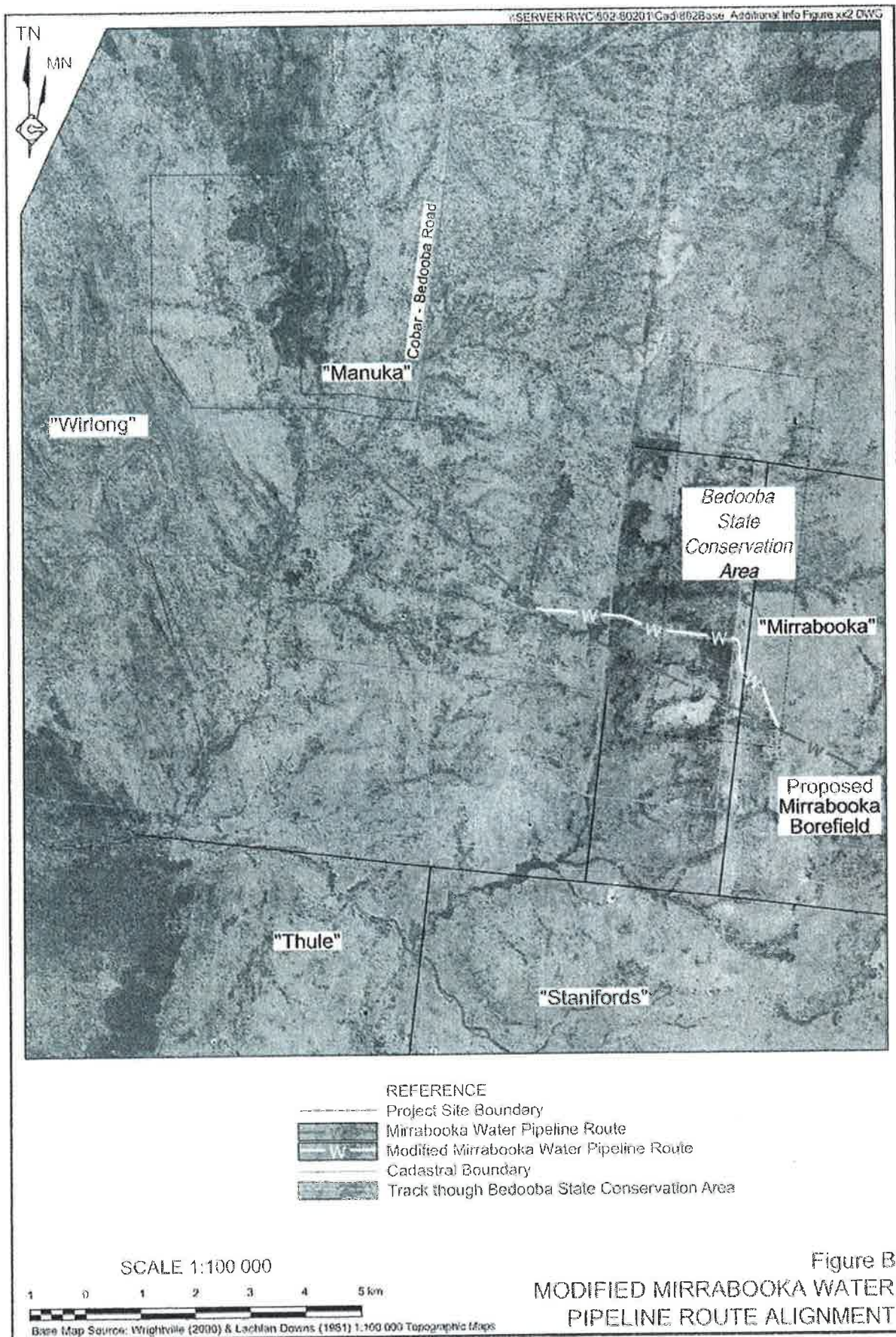
With a view to identifying an alignment through Bedooba SCA, which would minimise the additional length of pipeline required, Mr Phillip Cameron (of OzArk Environment and Heritage Management ["Ozark"]), who conducted the ecological assessment of the Project Site and water pipeline routes, was consulted as to whether any cleared areas or roads/tracks were present in relative close proximity to the surveyed pipeline route.. The occurrence of a cleared and maintained road (which acts as an access road to Bedooba SCA and the homestead on the "Mirrabooka" property) was identified by Mr Cameron. Notably, the originally proposed Mirrabooka Water Pipeline Route is aligned within this road easement for a portion of its length before the pipeline route continues east-southeast to the proposed borefield whereas the road makes a more circuitous approach to the "Mirrabooka" homestead.

**Figure B** identifies the original alignment of the Mirrabooka Water Pipeline Route through Bedooba SCA, and the alignment of the existing "Mirrabooka" homestead access road.

Given the occurrence, and requirement for continued use as an access road to the "Mirrabooka" homestead, it is proposed to realign the Mirrabooka Water Pipeline Route along this road. To ensure that any impact is minimised, the pipeline would be placed immediately below the road surface with disturbance required in the placement of the pipeline confined to the existing cleared surface of the road.







Occasional access would be required by mine personnel, approximately monthly, to inspect the pipeline route for obstructions, unauthorised access and general maintenance issues. This access would be negotiated with DECCW and an appropriate management procedure prepared to ensure that this does not compromise the objectives of the Bedooba Plan of Management (once prepared). To reduce vehicular access to the SCA, the Applicant would require all other traffic between the Project Site and the proposed Mirrabooka borefield to use the Cobar-Bedooba Road and rather than the more direct route through Bedooba SCA.

Management of the water pipeline route within Bedooba SCA would be the same as nominated for all other sections of the pipeline route. The following describes the operational controls that would be implemented to safeguard against pollution of the environment by saline water (as a result of spillage or leakage).

- The pipeline would be buried within a channel approximately 1m below the ground. This would ensure that accidental damage by vehicles or surface equipment (or vandalism) is avoided.
- The Applicant would undertake an inspection of the entire length of the pipeline at least monthly. This requires the entire length of the pipeline to be visually inspected for signs of moisture which could indicate a leaking pipe. All inspections would be completed in accordance with an appropriate management procedure, developed in consultation with DECCW.
- At the time of installation, additional monitoring controls would be considered, eg. flow meters linked by telemetry.
- Isolation (gate) valves would be installed along the pipeline at distances of no more than 1km apart. This would allow sections of the pipeline to be isolated and drained and ensure that the entire pipeline length does not need to be drained to facilitate maintenance.
- Should a leak be detected, pumping would be immediately ceased, and the section of pipe isolated, drained and repaired. The area affected by saline water would then be flushed with freshwater, using at least 10 times the volume of the leakage.

No additional vegetation or fauna habitat would be disturbed by realigning the pipeline route.

As the disturbance would be limited to the road surface, there would be no potential for the identification of Aboriginal sites or artefacts. This notwithstanding, each of the registered Aboriginal parties are to be consulted regarding the proposed pipeline route realignment.



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# Annexures

(No. of pages including blank pages = 11)

- Annexure 1    Response of Cobar Local Aboriginal Land Council
- Annexure 2    Updated Consultation Log (Registered Aboriginal Parties)



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# Annexure 1

## Response of Cobar Local Aboriginal Land Council

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## COBAR LOCAL ABORIGINAL LAND COUNCIL



Po Box 410  
Cobar NSW 2835

Ph: 02 6836 1144  
Fax: 02 6836 1292

To Dr Jodie Benton

OzArk

Dear Dr Jodie

### **RE: Draft Wonawinta Archaeology/Cultural Heritage Report**

Thank You for the provision of this report. Cobar Local Aboriginal Land Council (CLALC) apologises for the delay in our response. CLALC has the following responsibilities in the following areas:

#### **Land Rights and Land Councils**

The Aboriginal Land Rights Act 1983 provides a mechanism for compensating Aboriginal people of NSW for loss of their land. The preamble of the Aboriginal Land Rights Act 1983 states that land was traditionally owned and occupied by Aboriginal people and accepts that as a result of past Government decisions, the amount of land set aside for Aboriginal people had been reduced without compensation.

In addition Division 1A Clause (4) of the Act states:

A Local Aboriginal Land Council has the following functions in relation to Aboriginal culture and Heritage:

- (a) to take action to protect the culture and heritage of Aboriginal persons in the Council's area, subject to any other law,
- (b) to promote awareness in the community of the culture and heritage of Aboriginal persons in the Council's area.

In relation to the Draft Report CLALC make the following observations and recommendations;



R. W. CORKERY & CO. PTY. LIMITED



- p. 18 of the report. Please note that there is now a Native Title Application covering the whole of the proposed mine site. The Native Title Claim is currently being prepared by Native Title Services Corp in Dubbo. Any enquiries about this claim should be directed to that office.
- p. 70 States that 5 sites "sites" will be impacted, but p. 71 says that 11 sites may be impacted. It is unclear as to how many sites will be impacted and what the level of impact may be.
- p. 71 Management options should include the employment of an appropriate Aboriginal person to monitor any ground disturbance on or adjacent to any sites and particularly along the proposed pipeline routes
- CLALC also recommends that CCR should consider adopting the Equator Principles prior to financing the proposed development.
- CLALC also recommends that the Traditional Owners, the Ngayampaa people, are the rightful owners of their heritage and therefore have the rights to negotiate the future management of the heritage items found during the survey.

Again we wish to thank OZ Ark for the copy of the report. If we can be of further assistance please do not hesitate to contact our Co-ordinator Rena Clements at the CLALC office.

Signed *Norman Olsen*

Date 9.12.2010

Chairperson CLALC

*NORMAN OLSEN*



# Annexure 2

## Updated Consultation Log (Registered Aboriginal Parties)

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WONAWINTA COMMUNITY CONSULTATION				
Date	Organisation /	Contact Name	Comment	OzArk staff/method
PLEASE NOTE STAGE 1 UNDERTAKEN BY RW CORKERY				
31.4.2010	Cobar Age and Cobar Weekly		EOI Advert placed in local newspaper by RWC, Cobar Age and Cobar Weekly Newspaper on the 31st of March 2010.	AI - RWC
Stage 1 Round 1 (ICCR)				
29.03.10	Cobar Shire Council	Garry Ryman	stage 1 letter sent	AI - RWC
29.03.10	Cobar LALC	The Proper Officer	stage 1 letter sent	AI - RWC
29.03.10	DECCW	Paul Houston	stage 1 letter sent	AI - RWC
29.03.10	Office of the Registrar	Megan Mebberson	stage 1 letter sent	AI - RWC
29.03.10	NTS Corp	The Proper Officer	stage 1 letter sent	AI - RWC
Responses Stage 1				
07.04.10	Elaine Ohlsen	Elaine Ohlsen	Elaine Ohlsen expressed interest in the project, written letter sent via fax	AI - RWC
09.04.10	Cobar Shire Council	Garry Ryman	CSC responded and advised the following people should be contacted *Cobar LALC *Condobolin LALC *Elaine Ohlsen *Wilyam (Bill) Lord	AI - RWC
14.04.10	DECCW	Paul Houston	DECCW responded and advised the following organisations should be contacted *Cobar LALC *Aboriginal Ref Grp Central West CMA *Mount Grenfell Board of Mgmt *Condobolin LALC *Murrin Bridge LALC *Nyngan LALC	AI - RWC
	Cobar LALC	The Proper Officer	verbally registered interest by phoning RWC office	AI - RWC
NEW DECCW GUIDELINES INTRODUCED 8 APRIL				
Stage 1 Round 2 (ICCR)				
05.05.10	Aboriginal Reference Group□Western CMA	Aboriginal Heritage Officer	posted Stage 1 Round 2 letter, EOI closure date 21 May 2010	OzArk - CB
05.05.10	Bill Lord	Bill Lord	emailed Stage 1 Round 2 letter, EOI closure date 21 May 2010	OzArk - CB
05.05.10	Condobolin LALC	Rebecca Shepherd	posted Stage 1 Round 2 letter, EOI closure date 21 May 2010	OzArk - CB
05.05.10	Murrin Bridge LALC	Annette Ohlsen	posted Stage 1 Round 2 letter, EOI closure date 21 May 2010	OzArk - CB
05.05.10	Mount Grenfell□Historic Site Board of Mgmt	Phil Kennedy	posted Stage 1 Round 2 letter, EOI closure date 21 May 2010	OzArk - CB
05.05.10	Nyngan LALC	Chairperson	posted Stage 1 Round 2 letter, EOI closure date 21 May 2010	OzArk - CB
Complete Stage 1 Responses				
20.05.10	Nyngan LALC	Lesly Ryan	Received EOI letter via email stating that Nyngan LALC would like to register interest in the project and be consulted.	OzArk - CB
20.05.10	Mount Grenfell□Historic Site Board of Mgmt	Richard Kennedy	Mr Kennedy phoned to express interest in the project and confirm this organisation wishes to be consulted.	OzArk - JB
01.06.10	Bill Lord / Mount Grenfell Board of Management	ph: 0427 282 681□e: wilyaml@hotmail.com	received email from Bill Lord 'Hi Dr Jodie, I have spoken to Richard Kennedy, Chairperson Mt Grenfell Board of Management, re: the above project. Richard is happy to allow me to represent the Board in this matter. I am the Cobar LALC rep on the Board. Is there any conflict regarding me attending as a nominee of the Board but being covered by the LALC insurance/OHS? If so, I can try to obtain some kind of cover note for the week. I don't work at Endeavour mine anymore as I have full time job as the local train driver. I have submitted a leave form and will have to see if I can get time off work to participate. □Q. Will I be able to camp out for the week or will the team be travelling to and from the site each day? Thanks for any suggestions or advice□Kind Regards Bill	OzArk - JB





02.06.10	Bill Lord	ph: 0427 282 681☐e: wilyaml@hotmail.com	phoned Bill to confirm receipt of email and acknowledge message left on answerphone. Explained that if he was able to attend as long as a nominated organisation was able to provide a certificate of currency that would be okay. Mentioned was not sure of transport situation but will advise if camping was allowed. If others travel back and forth he may want to car pool if camping not an option.	OzArk - CB
15.06.10	Bill Lord	ph: 0427 282 681☐fax: per Cobar LALC	Bill phoned to confirm that his leave has been granted and he is able to participate in the survey. I advised that Phil is making enquiries about accommodation closer to the site and I would confirm details with him either by phone or fax.	OzArk - CB
15.06.10	Elaine Ohlsen	ph: 6836 1144☐fax: 6836 1292	phoned Cobar LALC to confirm participation, Rena not in office this week however Elaine Ohlsen advised that she will be participating in the survey, as will Norman Ohlsen on behalf of Cobar LALC. Advised that I need to see Workers Compensation Certificate of Currency and that I had been chasing this up & will send through a fax about it so they can look into it in Rena's absence. Emailed through request for w/comp certificate and also notification that the Proponent will be making two paid positions a day available.	OzArk - CB
15.06.10	Lesly / Nyngan LALC		emailed Lesley with copy of Stage 2 letter (previously mailed in May) and requesting response.	
16.06.10	Lesly / Nyngan LALC		spoke to Lesly who advised they are unable to send a site officer however I reassured her the NLALC would be sent a copy of the draft report for comment and that we welcome their input.	OzArk - CB
16.06.10	Bill Lord	Cobar LALC office	spoke to Bill Lord to confirm that NLALC are not participating in the fieldwork and requested that he organise the days of the survey between himself, Elaine and Norman	OzArk - CB
17.06.10	Bill Lord / Norman Ohlsen	Cobar LALC office	spoke to both Bill & Norman, emailing and faxing details to CLALC office and faxing duplicate details to Bill's work.	OzArk - CB
Stage 2/3 (Under ACHCR Guidelines)				
25.05.10	Cobar LALC	Rena Clements☐PO Box 410☐Cobar NSW 2835	Stage 2/3 project brief and information sent, request comment by 23rd June and also advised FW to take place 21st - 26th June	OzArk - CB
25.05.10	Mount Grenfell☐Historic Site Board of Mgmt	Richard Kennedy☐c/- Cobar LALC☐PO Box 410 Cobar 2835	Stage 2/3 project brief and information sent, request comment by 23rd June and also advised FW to take place 21st - 26th June	OzArk - CB
25.05.10	Nyngan LALC	Lesly Ryan☐PO Box 43☐Nyngan NSW 2825	Stage 2/3 project brief and information sent, request comment by 23rd June and also advised FW to take place 21st - 26th June	OzArk - CB
25.05.10	Elaine Ohlsen	6 Lamrock Street☐Cobar 2835☐ph: 0488 690 287☐e: elaineohlsen@hotmail.com	Stage 2/3 project brief and information sent, request comment by 23rd June and also advised FW to take place 21st - 26th June	OzArk - CB
Registered Aboriginal Parties				
	Cobar LALC	Rena Clements☐PO Box 410☐Cobar NSW 2835☐ph: 6836 1144☐fax: 68361292		
	Mount Grenfell☐Historic Site Board of Mgmt	Richard Kennedy☐c/- Cobar LALC☐PO Box 410 Cobar 2835☐ph: 0409 208 203		
	Nyngan LALC	Lesly Ryan☐PO Box 43☐Nyngan NSW 2825		
	Elaine Ohlsen	6 Lamrock Street☐Cobar 2835☐ph: 0488 690 287☐e: elaineohlsen@hotmail.com		
Fieldwork				
21-26/06.10			Survey, Ben Churcher, Kim Tuovinen, Bill Lord, Norman Ohlsen, Elaine Ohlsen	OzArk - CB



30.09.10	Nyngan LALC	Lesly Ryan PO Box 43 Nyngan NSW 2825	mailed copy of report on CD to the NLALC office, comment due by 2nd November 2010	
30.09.10	Cobar LALC	Rena Clements PO Box 410 Cobar NSW 2835	mailed copy of report on CD to the CLALC office, comment due by 2nd November 2010. spoke to Rena to let her know it would be arriving and she advised she would also let Bill Lord/Elaine & Norm Ohlsen know.	
30.09.10	Mount Grenfell Historic Site Board of Mgmt	Richard Kennedy 6 Moonya Drive Wodonga VIC 3690	mailed copy of report on CD to Richard, comment due by 2nd November 2010. spoke to Richard to advise it was being sent and checked postal address	
30.09.10	Elaine Ohlsen / Norm	e: 'elaineohlsen@hotmail.com'	emailed Norm & Elaine to let them know the report would be available at the LALC office and advised comment closure date	
30.09.10	Bill Lord	e: wilyaml@hotmail.com	emailed Bill to let him know the report would be available at the LALC office and advised comment closure date	
04.11.10	Cobar LALC	Rena Clements ph: 6836 1144 e: 'cobarlalc@bigpond.com'	phoned and left message with reception asking if Rena could contact OzArk re: any comments on draft report. Flicked email through as well.	OzArk - CB
04.11.10	Mount Grenfell Historic Site Board of Mgmt	Richard Kennedy ph: 0409 208 203	phoned and spoke to Richard Kennedy who verbally confirmed he was happy with the report and the work that was done for the assessment	OzArk - CB
04.11.10	Nyngan LALC	Lesly Ryan ph: 6832 2639 e: 'nynganlalc@bigpond.com'	phoned and left message with LALC reception as Lesly not in office until Monday, advised I had emailed request for Lesly to contact OzArk office and was informed that emails are checked daily.	OzArk - CB
04.11.10	Elaine Ohlsen	6 Lamrock Street Cobar 2835 ph: 0488 690 287 e: 'elaineohlsen@hotmail.com'	phoned Elaine who advised they had had difficulty reading report as it came on a disc. I said I would send a hard copy for review	cb- phone
04.11.10	Bill Lord	ph: 0427 282 681	phoned Bill who also said they had had difficulty with format of report. Advised I would send a hard copy and he asked if they could have a week extension. Extended date to Tuesday 16 Nov	cb- phone
04.11.10	Cobar LALC	Bill / Elaine / Norm c/- Rena Clements PO Box 410 Cobar NSW 2835	posted hard copy to LALC	cb - mail
05.11.10	Nyngan LALC	Lesly Ryan ph: 6832 2639 e: 'nynganlalc@bigpond.com'	via email Hi Cheryl 'yes we are happy with what we have read thank you for the reminder Lesly NLALC 0268322639	CB - EMAIL
10.11.10	Cobar LALC	Rena Clements ph: 6836 1144	Phoned office and Rena advised they had received the report and it had been handed on to Bill Lord. Once Bill returns it for comment CLALC will also add any comment and return by 16 Nov.	cb- phone
23.11.10	Bill Lord	ph: 0427 282 681	Bill Lord phoned and apologised for the delay with the reply, he is drafting a response letter and will have the CLALC send it through.	cb- phone
09.12.10	Bill Lord	ph: 0427 282 681	phoned Bill Lord to check where response was & indicating it will be necessary to finalise the report without the response. Bill advised he will check with Rena @ CLALC and have her send it through.	cb- phone
09.12.10	Cobar LALC	Norm Ohlsen	Received correspondence/comment on draft report.	cb - fax
13.12.10	NNTT	Kimberley Wilson   CASE OFFICER/SEARCH CO-ORDINATOR Telephone (02) 9235 6328	received correspondence confirming that no native title claims are current in this area.	cb - email



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15 February 2011

Mr Garry Ryman  
Director of Planning and Environmental Services  
Cobar Shire Council  
PO Box 223  
COBAR NSW 2835

Original sent by email to: garry.ryman@cobar.nsw.gov.au

Dear Garry

**Re: Additional Information Supplied in Response to DECCW Initiated 'Stop the Clock'**

Further review of Bedooba State Conservation Area (SCA) has resulted in a subsequent revision to the proposed alignment of the Modified Mirrabooka Pipeline Route through Bedooba SCA. There are in fact several formed tracks through the former state forest, however, the water pipeline would follow the route identified on the Lachlan Downs 1:100 000 scale topographic map, as well as GIS databases such as the Spatial Information Exchange (SIXviewer) administered by the Department of Lands.

*Figure B*, as presented in the "Response to DECCW Initiated 'Stop the Clock'", identified the pipeline as following another formed track through Bedooba SCA (which while identified on the SIXviewer, is not identified on the Lachlan Downs 1:100 000 scale topographic map). A revised version of the figure illustrating the modified alignment of the Mirrabooka Pipeline Route through Bedooba SCA is included. Notably, the assessment of environmental impact, as discussed in the "Response to DECCW Initiated 'Stop the Clock'", remains unchanged.

A copy of this letter and revised figure has been sent to DECCW.

Please do not hesitate to contact me if you require further information related to the enclosed document.

Regards,

Alex Irwin

Att: Revised Figure of Mirrabooka Pipeline Route

Copy: Department of Environment, Climate Change and Water



## Cobar Consolidated Resources Limited

