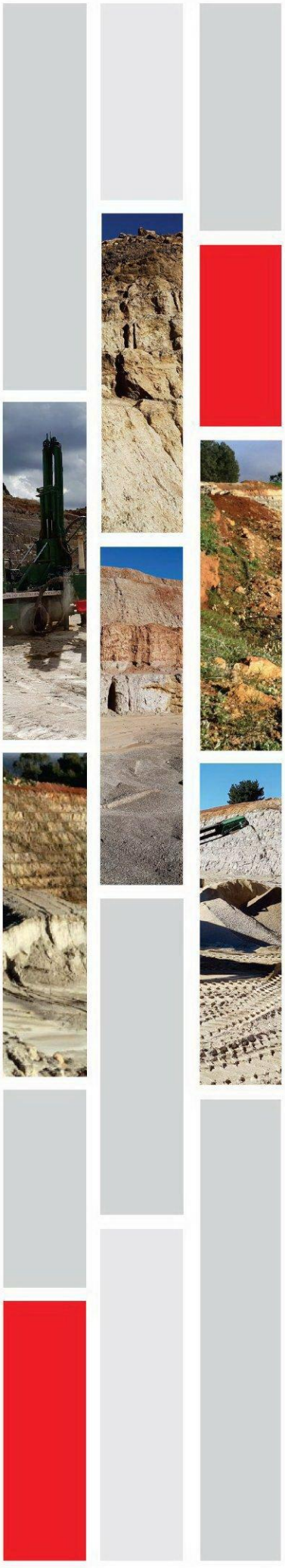

APPENDIX I

Biodiversity Assessment

DOC18/188649

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7 June 2016

Greg Thomson
Principal Consulting Geologist
Director
VGT Pty Ltd
PO Box 2335
Greenhills NSW 2323
Recipient Greg@vgt.com.au

Dear Greg,

RE – Biodiversity Advice, Andersons Quarry

Please find attached the methodology, results, and possible biodiversity constraints associated with the potential future expansion of the clay mine at Anderson's Quarry. The biodiversity assessment involved two components: a desktop assessment and a field survey. The main aims were to identify and map vegetation communities, particularly threatened communities, and potential habitat for threatened species on the site.

The field survey was undertaken on foot across the whole property on the 17th of May 2016.

The study found that the site supports Box-gum woodland, a threatened ecological community. Potential threatened species habitat was also found for a number of flora and fauna species.

If impacts to these values are likely from any future expansion, it is recommended that additional survey work be undertaken during early spring to determine the quality of the box-gum woodland and establish whether threatened species are present on the site.

Impacts to other biodiversity values should be assessed at the time of the development application process in accordance with the EP&A Act requirements.

I would be pleased to discuss this project with you further, as required.

Yours sincerely,

Carolyn Woods
Ecologist, Environmental Impact Assessment Officer

Phone 0430276799

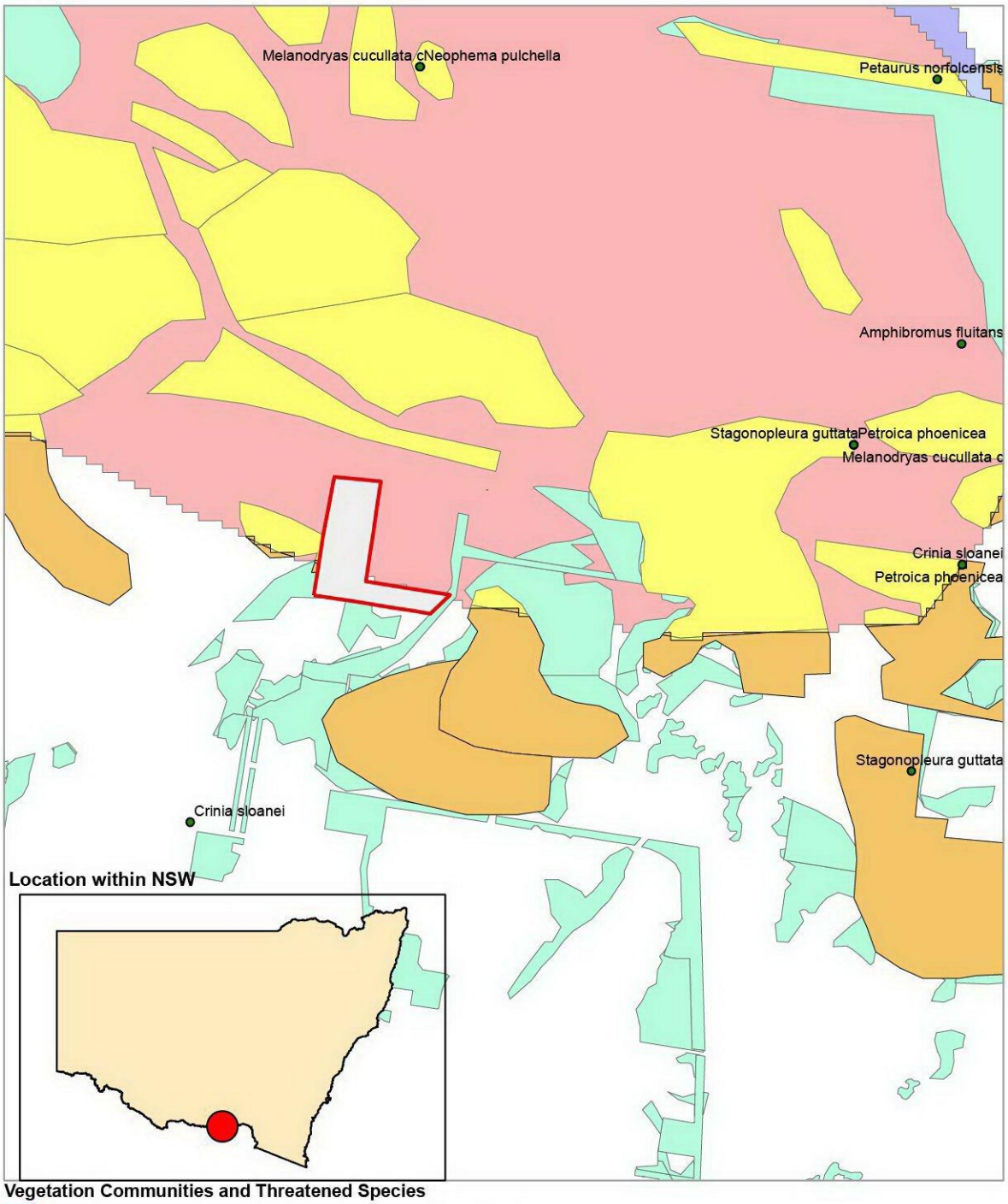
NGH Environmental

BIODIVERSITY ADVICE, ANDERSON'S QUARRY

1.1 METHODS

A desktop review of the property (including areas adjacent to the mine site in the vicinity of the area) was undertaken on the 12th and 16th of May for the property north of Albury (proposal area). The proposal area is approximately 7.36ha. This review consisted of searches of the Office of Environment and Heritage (OEH) BioNet database (10km radius) and VIS mapping, and the Environmental Protection and Biodiversity Conservation (EPBC) Protected Matters Database. Three VIS mapping layers were reviewed for the Murray region which covered the property (Figure 1). Threatened species records were also obtained

and mapped (



). Please note that all species recorded with the EPBC and Bionet search were included within the assessment but only Bionet species were included within the mapping. This is because the EPBC database does not include actual records of species, only their likely occurrence.

A brief field survey was undertaken on foot on the 17th of May 2016 between 10am and 1pm by Carolyn Woods, Ecologist with NGH Environmental. This field survey was undertaken to validate the vegetation within the property boundary and identify other significant features including hollow-bearing trees, nest sites, water bodies or any other flora and fauna habitat. Refer to Figure 2 for the location of potential fauna and flora habitat and vegetation communities identified from the field survey.

The location of observed vegetation communities were recorded with GPS (Garmin GPSMAP 62S model). The location of hollow-bearing trees and other habitat were also recorded.

1.2 RESULTS

1.2.1 Desktop Review

Vegetation Communities

The VIS mapping shows two native vegetation types as potentially occurring in the proposal area. One of the vegetation communities' matches the description of the *White Box - Blakely's Red Gum - Yellow Box grassy woodland of the NSW South Western Slopes Bioregion (Benson 282)* in the BioMetric Vegetation Types database (referred to as Box-Gum Woodland Community and also known as Tablelands and Slopes Box-Gum Woodland-Murray VIS Map 2906). This community conforms to the TSC Act listed endangered ecological community, *Grassy White Box - Blakely's Red Gum - Yellow Box woodland and derived native grassland*. It is listed under the EPBC Act as the critically endangered ecological community (CEEC) *White Box Yellow Box Blakely's Red Gum Woodlands and derived native grassland.*

The second native vegetation community potentially occurring in the proposal area is listed as Dry Foothill Forest. According to the Office of Environment and Heritage, "Dry Foothill Forest occurs at lower elevations of the upper Murray, on drier sites with northerly aspects or slopes with poorly developed soils. Dominant tree species include Red Stringybark (*E. macrorhyncha*), Broad-leaved Peppermint (*E. dives*), Scribbly Gum (*E. rossii*) and Brittle Gum (*E. mannifera*)".

An area of cleared land is also identified on the VIS mapping.

Three Threatened Ecological Communities were identified within the EPBC Protected Matters search. Only one, *White Box Yellow Box Blakely's Red Gum Woodlands and derived native grassland* is identified on the VIS mapping as potentially occurring at the site.

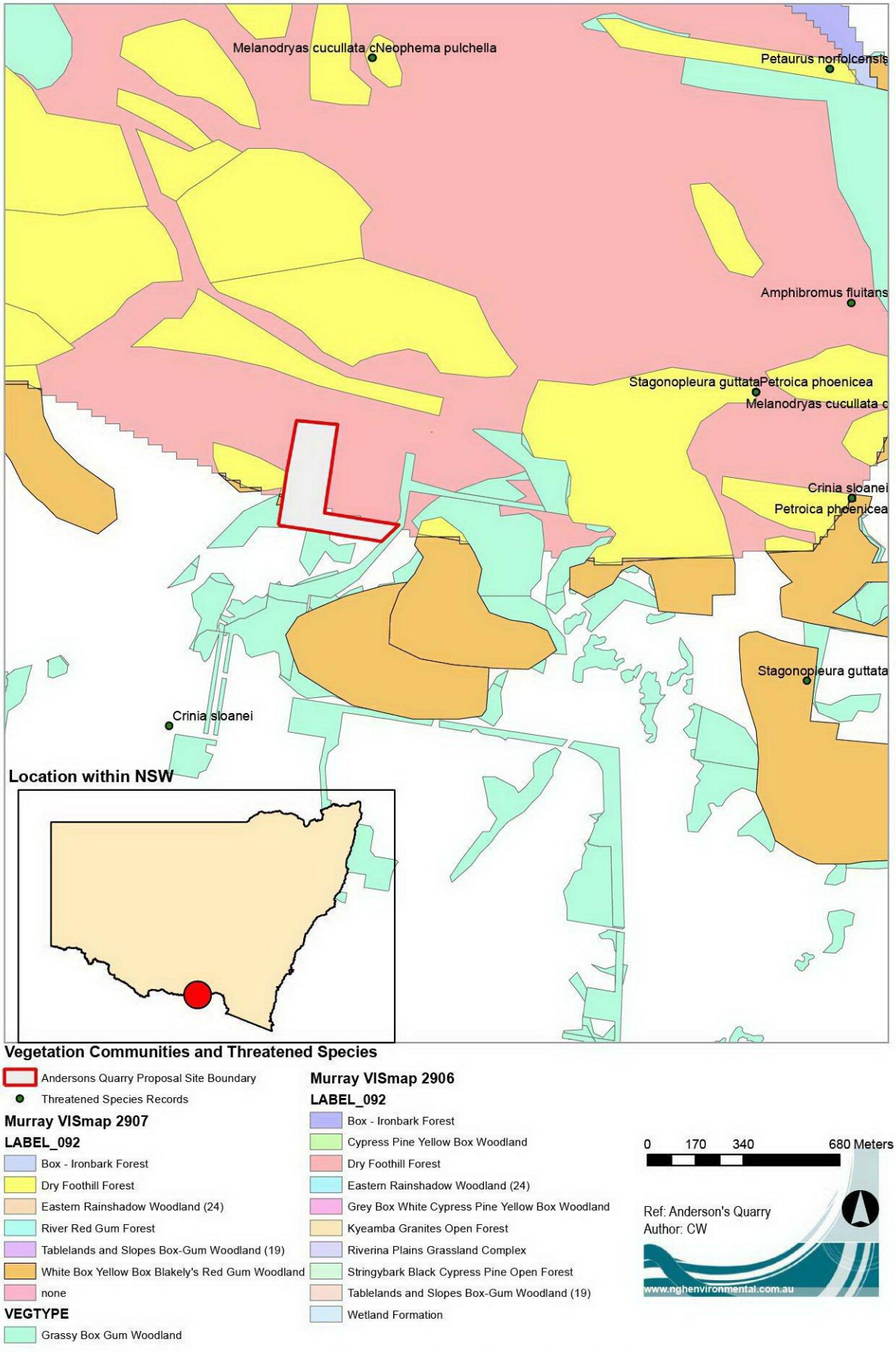
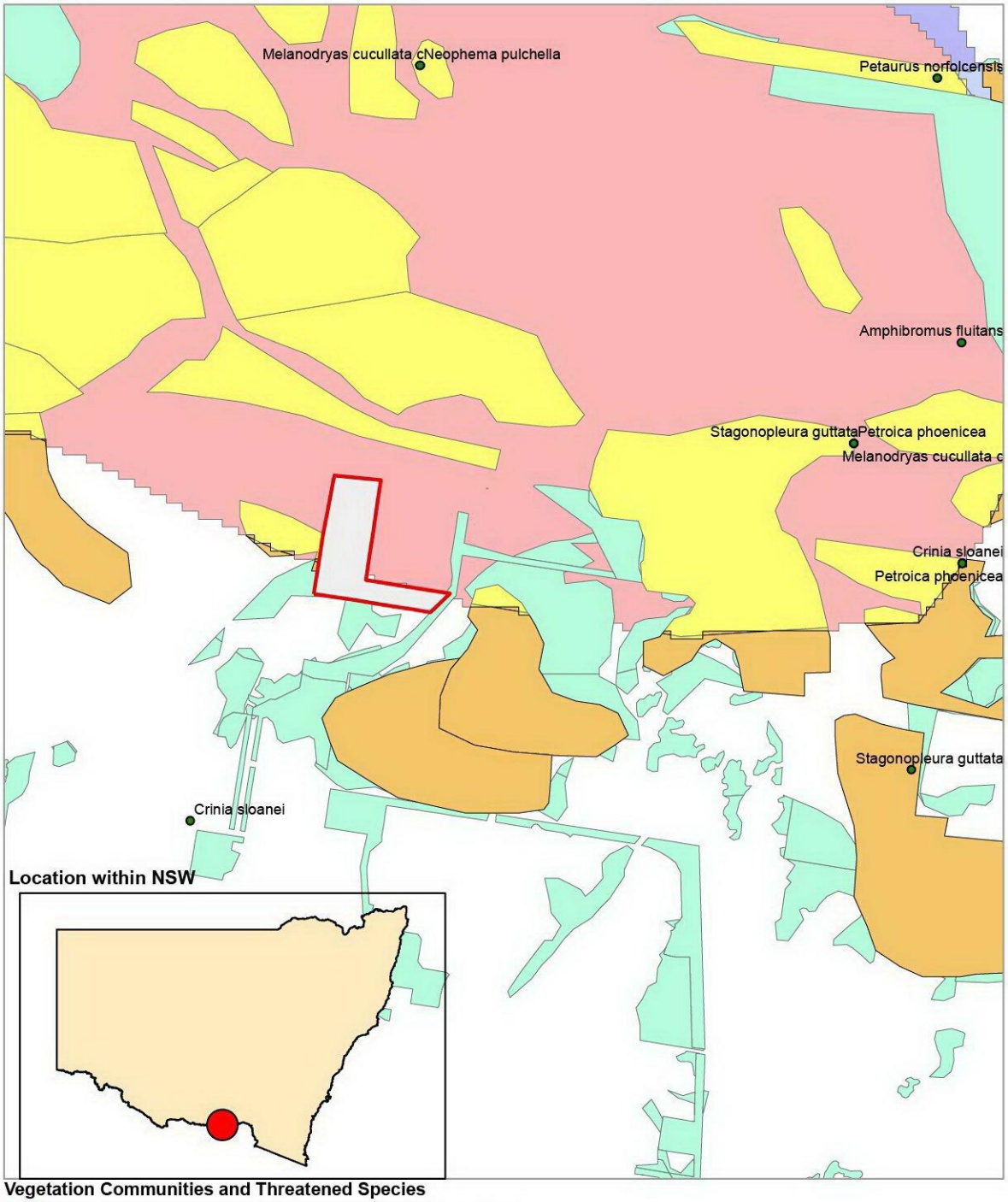


Figure 1 Vegetation Communities and Threatened Species within a 2km radius of the site

Note: White within the map refers to cleared land.

A total of 37 species of threatened fauna and four species of threatened flora have been previously recorded within ten kilometres of the proposal area (Bionet and EPBC search).



shows the location of records within 2km of the proposal area.

1.2.2 Field Survey

Vegetation Communities

There were two distinct vegetation communities identified in the proposal area during the field survey (Figure 2):

1. White Box Yellow Box Blakely's Red Gum Woodlands and derived native grassland (Box-Gum Woodland).
2. White Box - Blakely's Red Gum-Red Box-Red Stringybark Woodland.

In addition, there were two vegetation assemblages which do not conform with any native vegetation communities:

3. Exotic Vegetation.
4. Planted White Cypress Pine trees.

White Box Yellow Box Blakely's Red Gum Woodlands and derived native grassland (Box-Gum Woodland)

The dominant vegetation community within the property is White Box Yellow Box Blakely's Red Gum Woodlands and derived native grassland (Box-Gum Woodland). It covers approximately 3ha of the site within the south west and central sections. Its structure is that of a typical open woodland and a grassy understorey. The overstorey varies but is dominated by Blakely's Red Gum (*E. blakelyi*), with scattered White Box (*Eucalyptus albens*) and Apple Box (*E. bridgesiana*) present. Some parts are devoid of any overstorey vegetation. Some significant regeneration of Blakely's Red Gum was also observed. Grazing has changed components of the understorey and species observed included Wallaby Grasses (*Rytidosperma* sp.) and Three-awned grass (*Aristida sp*.). Rabbit and cattle droppings were observed across a number of areas of the site.

Figure 2 Vegetation Communities and Threatened Species within the proposal site

White Box - Blakely's Red Gum - Yellow Box grassy woodland of the NSW South Western Slopes	
Approximate extent within proposed footprint	This vegetation community covers approximately 3ha of the proposed area, and, prior to extensive historical clearing, would have covered a large area. Although the understorey was not surveyed to a great level of detail, it is estimated that the percentage foliage native cover is greater than 50% native making the cleared areas derived grassland.
Biometric condition	Moderate to good based on the overstorey percent foliage cover being >25% of the lower benchmark for the community. The ground layer comprises a combination of exotic and native species. Further assessment of the groundcover is required to confirm the biometric condition.
Conservation Status	This vegetation community is listed as an endangered ecological community under the TSC Act. Although a detailed understorey survey was not conducted, it is possible that it also conforms to the critically endangered ecological community (CEEC) under the EPBC Act (refer to Appendix A).
Threatened plant species habitat	This community provides marginal quality habitat for several threatened flora and fauna species; though none were recorded during the field survey.
Equivalent vegetation types	*White Box - Blakely's Red Gum - Yellow Box grassy woodland of the NSW South Western Slopes Bioregion (Benson 282)*. Robertson (2013) lists the community as *u19: Blakely's Red Gum - Yellow Box ± White Box tall grassy woodland of the Upper South Western Slopes and western South Eastern Highlands Bioregions*). Benson (2008) lists a similar vegetation type called *White Box grassy woodland mainly on hills in the Upper Slopes Sub-region of the NSW South Western Slopes Bioregion*
Fauna habitat	7 hollow bearing trees were recorded during the assessment, and provide habitat for arboreal mammals, some frogs and lizards and woodland birds. Fallen timber and leaf litter were common across the proposal area. Two areas of rocky outcrop were also identified during the survey.

White Box - Blakely's Red Gum - Yellow Box grassy woodland of the NSW South Western Slopes

Figure 3 Box-gum woodland within the proposal area

White Box - Blakely's Red Gum-Red Box-Red Stringybark Woodland

The other native vegetation community within the proposal area is White Box - Blakely's Red Gum-Red Box-Red Stringybark Woodland. It covers approximately 1.83 hectares of the site within the north and central sections. The overstorey in the property is dominated by Red Stringybark (*E. macrorhyncha*) and Red Box (*E. polyanthemos subsp. vestita*) with scattered White Box (*Eucalyptus albens*), and Blakely's Red Gum (*E. blakelyi*) also present. The community in the proposal area supports a shrubby understorey and sparse ground layer. Grazing has changed components of the understorey and species observed included ferns (*Cheilanthes sieberi*) and Raspwort (*Gonocarpus sp.*).

White Box - Blakely's Red Gum-Red Box-Red Stringybark Woodland	
Approximate extent within proposed footprint	This vegetation community covers approximately 1.83 hectares.
Biometric condition	Estimated to be moderate to good based on the overstorey percent foliage cover being >25% of the lower benchmark for the community. The ground layer is a combination is mostly native species with exotics present.
Conservation Status	This vegetation community is not an endangered ecological community under the TSC Act or EPBC Act.

White Box - Blakely's Red Gum-Red Box-Red Stringybark Woodland	
Equivalent vegetation types	Benson (2008) White Box - Blakely's Red Gum shrub-grass shallow soil hillside woodland of the Albury region in the NSW South Western Slopes Bioregion (Benson 269).
Fauna habitat	This community provides foraging and nesting habitat for birds and arboreal fauna. Two hollow-bearing trees were observed within the proposal site. The shrub and ground layer provides some foraging and refuge habitat for small-medium sized mammals and reptiles. Fallen timber is common throughout the proposal area and provides shelter and foraging habitat for terrestrial and avian fauna.

Figure 4 White Box - Blakely's Red Gum-Red Box-Red Stringybark Woodland within the proposal area

Planted White Cypress Pine

An area which has been previously planted with White Cypress Pine (*Callitris glaucophylla*) was identified in the central prat of the proposal area. It covers approximately 0.5 hectares. Although White Cypress Pine does occur naturally in the locality, the plants on the proposal site have been planted and do not comprise of any native vegetation community.

Figure 5 illustrates an example of the planted white cypress pine within the proposal area.

Exotic dominated vegetation

An area of vegetation dominated by exotic species (identified as cleared within Figure 1 and exotic dominated in Figure 2) is present in the south east part of the proposal site. This covers an area of about 2 hectares within the proposal area.

This area has been highly modified from its pre-European state and comprises mostly exotic forbs and grasses, with little to no native overstorey or understorey remaining.

Figure 6 illustrates an example of exotic (non-indigenous) dominated vegetation within the proposal area, in front of the water body.

Threatened Flora and Fauna Habitat

No listed threatened flora or fauna species were observed during the field survey or are known from the proposal site. Several potential threatened species habitats were identified.

The database searches identified four threatened plant species known from within a 10 km radius of the proposal site. Habitat within the proposal area was considered to be suitable for:

- Woolly ragwort (*Senecio garlandii*)
- Crimson Spider Orchid (*Caladenia concolor*)

It is unlikely that these species are present due to the history of grazing at the site.

The database searches identified 37 threatened fauna species known from within a 10 km radius of the proposal site. A total of nine hollow-bearing trees were observed (Figure 2). Two small dams are also present at the site. Fallen timber and leaf litter was also common across areas of the proposal site. Two rock outcrops were also present. Red box was flowering. In general, fauna habitat quality within the proposal site is considered to be moderate to high, given the presence of mature hollow-bearing trees, the availability of fallen timber and water, and structurally diverse vegetation.

Based on these habitats and resources, the proposal area supports habitat for the following threatened fauna species (Figure 2):

- Sloane's Froglet (*Crinia sloanei*)
- Pink-tailed Legless Lizard (*Aprasia parapulchella*)
- Several woodland birds (particularly Brown Treecreeper)
- Bats (Corben's Long-eared Bat)
- Squirrel Glider

Koala

No primary feed trees were observed within the proposal site. Secondary feed trees dominate much of the proposal site and include White Box, Blakely's Red Gum, and Apple Box (DECC 2008). Red Stringybark, recorded in lower abundance within the property, is considered a supplementary feed tree species.

White box is listed in Schedule 2 of SEPP 44 and the density of this species within the proposal area is much less than 15% of the total number of trees in the upper or lower strata of the tree component. The area is therefore not considered 'potential Koala habitat' as defined under SEPP 44. It is considered unlikely that the proposal area supports a resident population of Koalas, evidenced by attributes such as the presence of animals, and recent and historical records of a population. The proposal area therefore is likely not to be considered 'core Koala habitat'. The EPBC Referral Guidelines for the Koala (DoE 2014) documents the 'Koala habitat assessment tool' to assist proponents in determining if a proposal may impact on habitat critical to the survival of the Koala.

Limitations of the Survey

Survey timing was not suitable for ephemeral species such as orchids and lilies and few other species carried flowers or fruit including grasses. No plant identification was undertaken of understorey species to assist in confirming the vegetation communities present at the site. Biobanking sites were also not established to confirm vegetation community identification particularly for the Box-gum woodland community and to confirm if it meets the criteria for derived grassland.

1.3 POSSIBLE CONSTRAINTS AND RECOMMENDATIONS

Below is a table which illustrates constraints, issues and level of risk to development at the site. Specifically, the following issues could limit the development, or at least cause some time and cost impacts to any Development Application.

Constraint	Potential issue	Level of risk
Areas of Aprasia (legless lizard) habitat, if the reptile is found there	If the reptile is found during a spring survey then a Species Impact Statement (SIS) may be required to be submitted with the Development Application. There is a significant process associated with a SIS.	**Low**
Areas of Sloane's Froglet habitat, if the frog is found there	If the frog is found during a spring survey then a Species Impact Statement (SIS) may be required to be submitted with the Development Application. There is a significant process associated with a SIS.	**Low**.
Box Gum Woodland in moderate-good condition	If the spring survey (which would include biobanking plots) of the Box Gum Woodland shows that this community meets the criteria for classification under the TSC and/or EPBC Act, then further work would be required. This would include; • TSC Act – 7-part test (if the community meets percent native ground cover criteria) • EPBC Act– Possible referral to the Federal Minister (if it meets the requirements of patch size, species composition and ground layer dominated by native species for derived grasslands). • NVC Act– if the community meets the criteria as an endangered ecological community in moderate-good condition based on a biometric assessment, then Consent to clear from OEH is required. This consent can be	TSC Act – **Low Risk** EPBC Act – **Low Risk** Native Vegetation Act - **Moderate to High Risk**

	hard to obtain due to legal constraints.	

Other Threatened species may be found during the spring flora and fauna survey (low risk) which may require a 7-part test assessment of significance test.

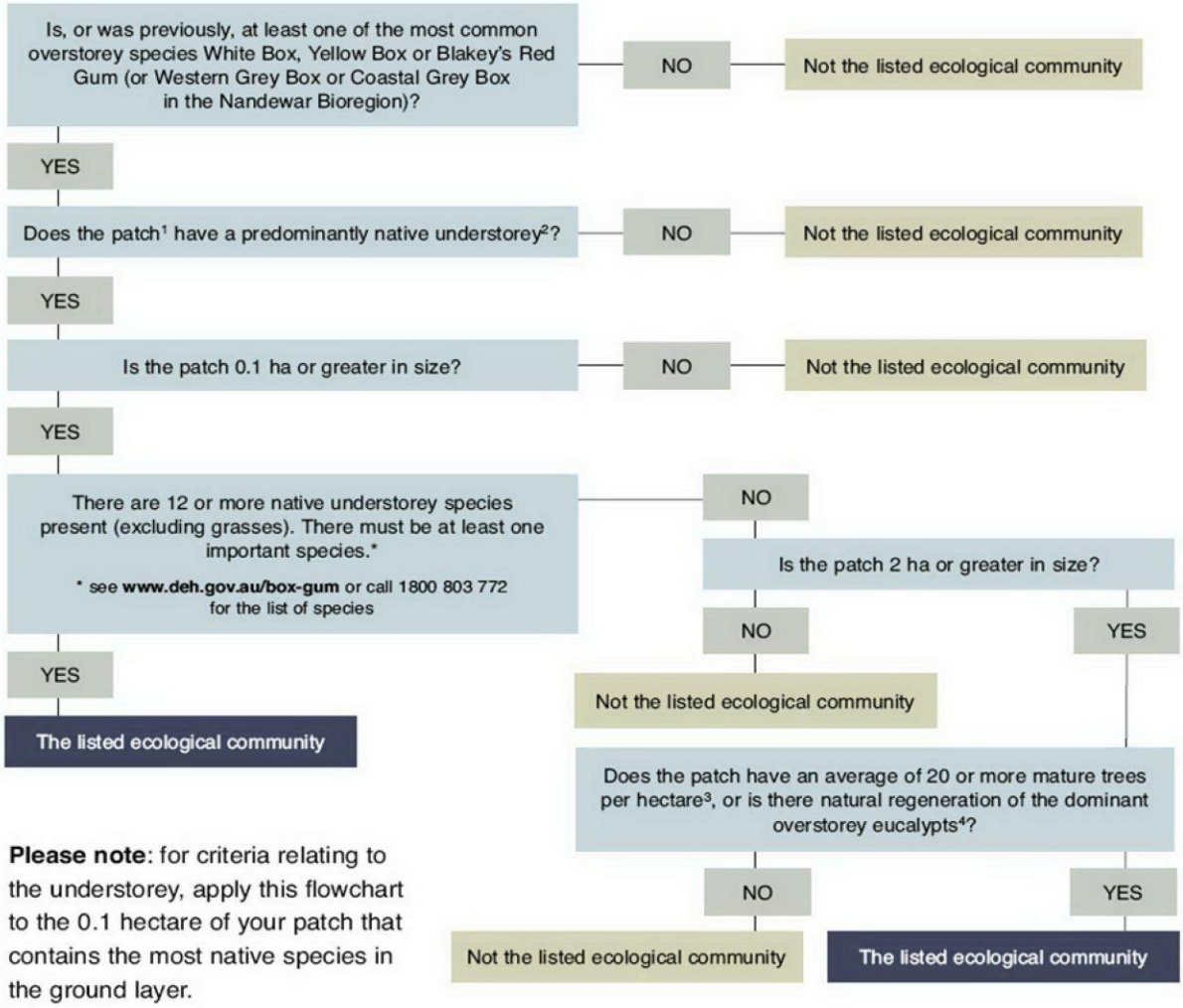
Should development within these constraint areas be proposed, it is recommended the following actions be undertaken:

- A spring survey to assess the possibility of Sloane's Froglet (*Crinia sloanei*) within and adjacent to the small dams and Pink-tailed Legless Lizard (*Aprasia parapulchella*) within the rock outcrops.
- A biobanking plot survey be undertaken during spring, particularly within the Box-Gum woodland to determine whether it meets the community definitions under both the TSC and EPBC Acts. This would clarify the extent of the Box-Gum woodland on the site and its quality. This information would then inform the Assessment of Significance under both TSC and EPBC acts. It would also determine whether Consent is required from OEH under the *Native Vegetation Act* 2003.
- A detailed flora and fauna assessment should be prepared to assess the impacts of the proposed development under the TSC and EPBC Acts.

APPENDIX A - FLOW CHART FOR DISTINGUISHING BOX GUM WOODLANDS (EPBC ACT)

The flowchart below represents the lowest condition at which patches are included in the listed ecological community. This is not the ideal state of the ecological community. Large patches, those that link remnants in the landscape, those that occur in highly cleared areas, those that contain rare, declining or threatened species, and those that represent the entire range of the ecological community, are important for the long-term future of the ecological community.

Determining if your land has an area of the listed ecological community



Please note: for criteria relating to the understorey, apply this flowchart to the 0.1 hectare of your patch that contains the most native species in the ground layer.

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1 Patch – a patch is a continuous area containing the ecological community (areas of other ecological communities such as woodlands dominated by other species are not included in a patch). In determining patch size it is important to know what is, and is not, included within any individual patch. The patch is the larger of:
- an area that contains five or more trees in which no tree is greater than 75 m from another tree, or
- the area over which the understorey is predominantly native.

Patches must be assessed at a scale of 0.1 ha (1000m^2) or greater.

2 A predominantly native ground layer is one where at least 50 per cent of the perennial vegetation cover in the ground layer is made up of native species. The best time of the year to determine this is late autumn when the annual species have died back and have not yet started to regrow. (At other times of the year, you can determine whether something is perennial or not is if it is difficult to pull out of the soil. Annual species pull out very easily.)

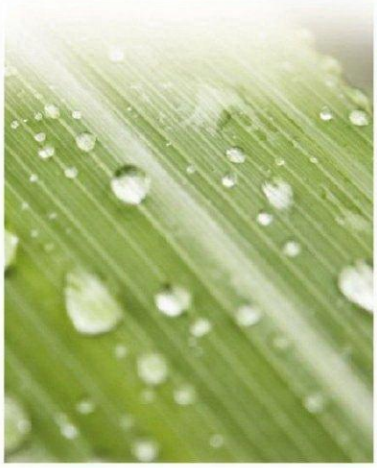
3 Mature trees are trees with a circumference of at least 125 cm at 130 cm above the ground.

4 Natural regeneration of the dominant overstorey eucalypts when there are mature trees plus regenerating trees of at least 15 cm circumference at 130 cm above the ground.

APPENDIX B – SEARCH RESULTS

ngh environmental

28 September 2018



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Dear Tara,

RE – Targeted Threatened Species Surveys – Anderson's Clay Mine VGT 17-244

Please find attached the methodology, results, and impact assessment associated with the future expansion of the clay mine at Anderson's Clay Mine. In 2016, NGH Environmental completed flora and fauna surveys across the site. The subsequent report made the following recommendations:

- A spring survey to assess the possibility of Sloane's Froglet (*Crinia sloanei*) within and adjacent to the small dams and Pink-tailed Legless Lizard (*Aprasia parapulchella*) within the rock outcrops.
- A biobanking plot survey be undertaken during spring, particularly within the Box-Gum woodland to determine whether it meets the community definitions under both the TSC and EPBC Acts. This would clarify the extent of the Box-Gum woodland on the site and its quality. This information would then inform the Assessment of Significance under both TSC and EPBC acts. It would also determine whether Consent is required from OEH under the *Native Vegetation Act 2003*.
- A detailed flora and fauna assessment should be prepared to assess the impacts of the proposed development under the TSC and EPBC Acts.

This report aims to address these recommendations. Targeted surveys were undertaken on foot at the areas of threatened species habitat identified in Figure 2. The survey found no evidence of Sloane's Froglet *Crinia sloanei* or Pink-tailed Legless Lizard *Aprasia parapulchella*. Plot surveys identified about 2.64 ha of TSC listed Box Gum Woodland which would be cleared. Of this, 1.6 ha also meets the criteria for the EPBC listed community. Assessments of Significance were conducted for these communities which concluded a significant impact is unlikely.

If you have any questions, please do not hesitate to contact me, or Lizzie Olesen-Jensen (Project Manager) on (02) 6923 1508.

Yours sincerely,

NGH Environmental

Jess Murphy
Environmental Consultant
(02) 6923 1535

Reviewer:	EB/SA
Date:	28/09/18

METHODS

Two NGH Environmental ecologists attended the Anderson's Clay Mine site on two occasions, Friday 24 August and Friday 14 September. The purpose of the site visits was to conduct targeted threatened species surveys for Sloane's Froglet *Crinia sloanei*, and Pink-tailed Legless-lizard *Aprasia parapulchella*, in the habitat areas identified in a previous survey (Figure 2). Opportunistic sightings of other fauna species were also recorded throughout site visits.

On the first visit, call playback surveys for Sloane's Froglet were conducted within and adjacent to the two small dams in the subject land. In accordance with current best practice survey methods, recorded calls were played around each dam followed by a period of listening for responses by this species, between dawn and midday during the survey window.

On the second visit, an active search under surface rocks for Pink-tailed Legless Lizard was conducted in and around the rock outcrops in the subject land. In accordance with the *Survey Guidelines for Australia's Threatened Reptiles* (Commonwealth of Australia, 2011), between 150 and 200 shallowly-embedded surface rocks were turned and the ground beneath searched for this species, during warm spring conditions.

RESULTS

No Sloane's Froglets were heard calling in or around either dam during the August targeted survey.

No Pink-tailed Legless Lizards were found in or around either rock outcrop during the September targeted survey.

It is therefore concluded that the proposal area does not support either of these species. An impact on these species, or their habitat is therefore unlikely from the proposed development. As a result, no Assessment of Significance is required for either species.

No other threatened species were recorded during the site visits. However, Eastern Striped Skink *Ctenotus robustus* (Figure 1) was recorded sheltering under surface rocks at both rock outcrops.

Figure 1: Eastern Striped Skink Ctenotus robustus.

About 2.64 ha of TSC Act listed Box Gum woodland, of which 1.6 ha also conforms with the EPBC Act listing, would be impacted by the proposal. Assessments of Significance were completed and are presented in the Appendix of this report. This assessment found that the impact on this endangered ecological community would not be significant, and so no Species Impact Statement or referral to the Minister is required.

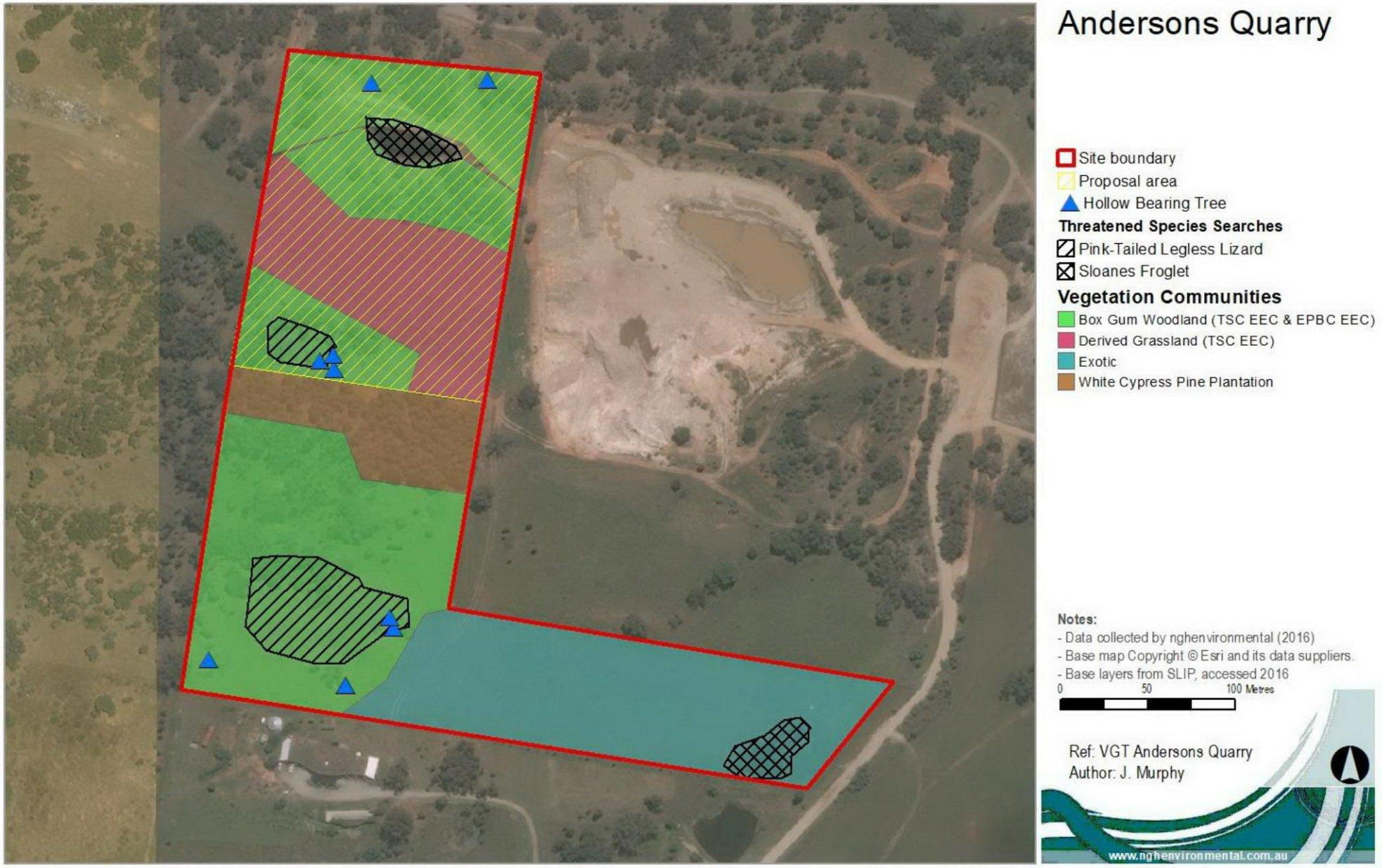

Figure 2 Vegetation communities and threatened species habitat in the proposal area.

APPENDIX

BC Act: White Box – Yellow Box – Blakely's Red Gum Woodland

a) In the case of a threatened species, whether the action proposed is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction.

Not applicable.

b) In the case of an endangered population, whether the action proposed is likely to have an adverse effect on the life cycle of the species that constitutes the endangered population such that a viable local population of the species is likely to be placed at risk of extinction.

Not applicable.

c) In the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:

i. is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction.

ii. Is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction

I. The proposal would result in the removal of around 2.64 ha of the extent of this EEC. This area is a small proportion of the habitat that would remain on site and on adjacent and nearby land, and its removal is not likely to place the local occurrence of this EEC at risk of extinction.

II. The proposal would result in the clearing of a small area of this EEC, and no selective clearing that would modify the composition of this EEC on site. The area is already disturbed as a result of previous activity on the site. The proposal is not likely to modify the EEC to the extent that would place the local occurrence of this EEC at risk of extinction.

d) In relation to the habitat of a threatened species or ecological community:

i. the extent to which habitat is likely to be removed or modified as a result of the action proposed, and

ii. whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed action, and

iii. the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species, population or ecological community in the locality.

I. The proposal would result in the removal of around 2.64 ha of the local occurrence of this EEC. This EEC is already disturbed as a result of previous activity on the site, with the existing quarry and associated roads, fences and dams, and so is already modified from its natural condition.

II. The proposal would result in the clearing of a small area of disturbed EEC which is part of a larger contiguous patch of remnant woodland. The proposal would not result in the fragmentation or isolation of this EEC.

III. The habitat within the study area has been previously disturbed, and the amount of habitat to be removed is very small in the local context. The habitat to be removed is not considered to be important to the long-term survival of the EEC in the locality.

e) Whether the action proposed is likely to have an adverse effect on critical habitat (either directly or indirectly).

No areas of critical habitat occur within the proposal area. There would be no direct or indirect adverse effects on any declared areas of critical habitat.

f) Whether the action proposed is consistent with the objectives or actions of a recovery plant or threat abatement plan.

The recovery objectives for the National Recovery Plan for this EEC include:

I. Achieving no net loss in extent and condition of the ecological community throughout its geographic distribution.

II. Increasing protection of sites with high recovery potential.

III. Increasing landscape functionality of the ecological community through management and restoration of degraded sites.

IV. Increasing transitional areas around remnants and linkages between remnants.

V. Bringing about enduring changes in participating land manager attitudes and behaviours towards environmental protection and sustainable land management practices to increase extent, integrity and function of Box Gum Grassy Woodland.

The proposal would not significantly interfere with any of these objectives.

EPBC Act – White Box – Yellow Box – Blakely's Red Gum Woodlands and derived native grassland

a) Will the action lead to a reduction in the extent of an ecological community?

The proposal would result in the removal of around 1.6 ha of the extent of this EEC. This area is a small proportion of the habitat likely to be present in the locality, and its removal is not likely to substantially reduce the extent of this EEC.

b) Will the action fragment or increase fragmentation of an ecological community, for example by clearing vegetation for roads or transmission lines?

The proposal would result in the clearing of a small area of disturbed EEC which is part of a larger contiguous patch of remnant woodland in the subject land. The proposal would not result in the fragmentation or isolation of this EEC.

c) Will the action adversely affect habitat critical to the survival of an ecological community?

The habitat within the study area has been previously disturbed, and the amount of habitat to be removed is very small in the local context. The habitat to be removed is not considered to be important to the long-term survival of the EEC in the locality. There is no listed critical habitat for this EEC listed in the study area.

d) Will the action modify or destroy abiotic (non-living) factors (such as water, nutrients, or soil) necessary for an ecological community's survival, including reduction of groundwater levels or substantial alteration of surface water drainage patterns?

The proposal would result in the clearing of a small area of disturbed EEC. This would result in impacts to the area of EEC within the proposal area, but given the limited scope of the proposal and the existing disturbance on site, is not likely to significantly modify abiotic factors necessary to the survival of the local extent of this EEC.

e) Will the action cause a substantial change in the species composition of an occurrence of an ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting?

The proposal would result in the clearing of a small area of this EEC, and no selective clearing that would modify the composition of this EEC on site. The area is already disturbed as a result of previous activity on the site. The proposal is not likely to cause a substantial change in the species composition of the local occurrence of this EEC.

f) Will the action cause a substantial reduction in the quality or integrity of an occurrence of an ecological community, including but not limited to:

- **Assisting invasive species, that are harmful to the listed ecological community, to become established; or**
- **Causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological community which kill or inhibit the growth of species in the ecological community?**

The proposal has the potential to contribute to the introduction or spread of invasive species to the proposal area through the transfer and introduction of plant material and soil on machinery. Standard mitigation measures would reduce the risk of spreading weeds on site. The proposal would not involve the regular use of chemicals or pollutants such as fertilisers or herbicides.

g) Will the action interfere with the recovery of an ecological community?

Around 1.6 ha of disturbed EEC would be cleared as a result of the proposal, but given the minimal amount of habitat to be removed and the extent of habitat that would remain in the local area, the proposal is not likely to interfere with the recovery of this EEC.

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