Appendix 11

Ardmore Park Quarry – Modification 3

Framework for Biodiversity Assessment Survey

prepared by

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Framework for Biodiversity Assessment Survey

Ardmore Park Quarry – Modification 3

5152 Oallen Ford Road, Bungonia.

May 2018

1. Introduction

On behalf of Multiquip Quarries Pty Ltd ("Multiquip"), RW Corkery Pty Ltd (RWC) has prepared and submitted an *Environmental Assessment* to the Department of Planning and Environment (DPE) to assess Multiquip's proposal to expand its quarry operations at the Ardmore Park Quarry ("the Quarry"), 5152 Oallen Ford Road, Bungonia.

RWC engaged Kevin Mills and Associates (KMA) to undertake a flora and fauna assessment of a proposed 3.1ha extension to the extraction area of the Quarry (referred to hereafter as the subject site). KMA (2017) found that there were no ecological constraints to the proposal as the subject site was vegetated with exotic pasture and was not the habitat of any threatened species, populations or communities.

On review of KMA (2017), the NSW Office of Environment and Heritage (OEH) submitted to the DPE that the assessment does not conform to the Secretary's Environmental Assessment Requirements which stipulated that the proposal be assessed using the Framework for Biodiversity Assessment (OEH, 2014) by an accredited person. OEH has requested that the biodiversity values of the subject site be assessed up to and including *Section 5.3.3* of the FBA. Accordingly, RWC engaged Aquila Ecological Surveys, whose principal Paul Burcher is an accredited BioBanking Assessor (No.226), to undertake an FBA survey of the subject site.

2. Methods

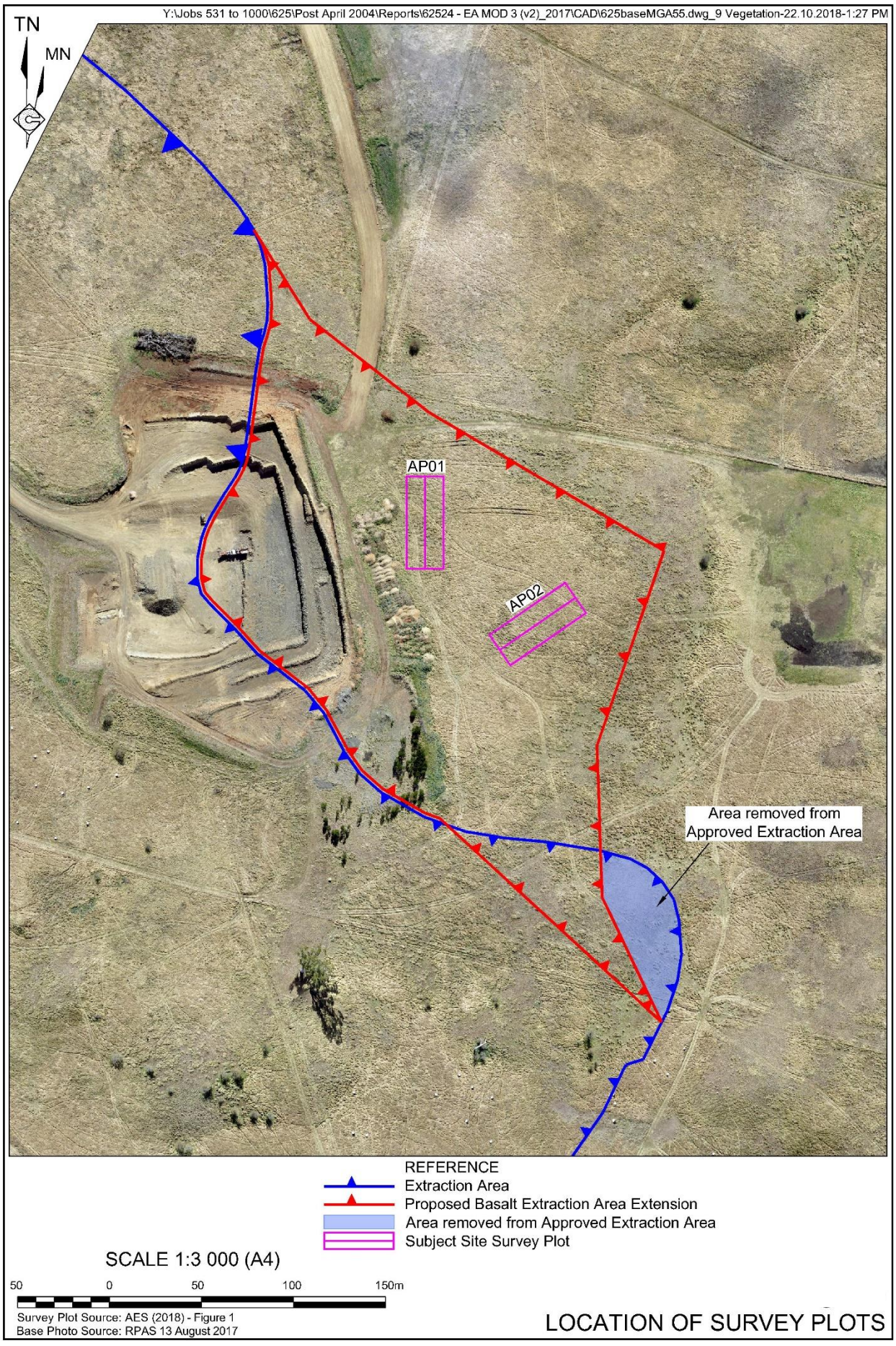
The subject site was surveyed by Paul Burcher $_{B.App.Sc}$ on May 2, 2018. Two 50 m x 20 m BioBanking plots were surveyed (**Figure 1**). The following data were collected in accordance with the methods detailed in the BioBanking survey manual (DECC, 2008).

- The number of native flora species within a 20 m x 20 m plot sub-plot.
- Groundcover at 1 m intervals along the 50 m axis.
- Shrub and canopy cover at 5 m intervals along the 50 m axis.
- The number of hollow-bearing trees.
- Total length of fallen logs (>0.5 m length and > 0.1 m diameter).
- Over-storey regeneration within the subject site.

Subsequent to the field survey the data collected were entered into the BioBanking credit calculator along with the following:

- the Applicant's details;
- the catchment management area (CMA), CMA Sub-region and Mitchell Landscape within which the site is located;

Figure 1. Location of Survey Plots



- the native vegetation cover, connectivity and condition within 100 ha and 1000 ha assessment circles around the site;
- the area and condition of the affected vegetation; and
- the presence/absence of threatened species based on site attributes.

3. Results and Discussion

3.1 Assessment of Native Vegetation

As described by KMA (2017), the vegetation of the site is dense grassland dominated by the introduced pasture species Phalaris (*Phalaris aquatica*) and other exotic grasses and broad-leaf herbs. The data collected are presented in **Appendix 1**. No native plant species were found in either of the plots. The survey found that the vegetation within the subject site cannot be considered native vegetation. Therefore, in accordance with *Section 5.1.1.3* of the FBA, the vegetation does not require further assessment except where it is assessed for habitat for threatened species according to *Section 6.4* of the FBA.

Nevertheless, to demonstrate diligence, the data were entered into the credit calculator. As exotic pasture does not conform to any plant community type listed in the BioNet Vegetation Classification (OEH, 2018), this was done using a possible pre-existing plant community type, *Silvertop Ash - Blue-leaved Stringybark shrubby open forest on ridges, north east South Eastern Highlands Bioregion*, as a surrogate. Due to the low condition of the vegetation, no ecosystem credits were generated (**Attachment 1**).

3.2 Assessment of Threatened Species

In accordance with the findings of KMA (2017), the subject site is also unlikely to be habitat for any threatened species. The subject site does not contain habitat features or components associated with any threatened species. None of the candidate species generated by the BioBanking credit calculator, nor any other threatened species, are likely to occur at the subject site. Therefore, no species credits were generated by the calculator.

4. Conclusion

An assessment of the subject site's biodiversity value has been completed in accordance with the Framework for Biodiversity Assessment. It confirmed the findings of KMA (2017) that the vegetation present has no conservation significance and does not generate any ecosystem or species credits when data collected from it is entered into the BioBanking Credit calculator.

References

DECC (2008) *BioBanking Assessment Methodology and Credit Calculator Operational Manual*. NSW Department of Environment and Climate Change, Sydney.

KMA (2017) *Flora and Fauna Report, Proposed Modification, Ardmore Park Quarry, via Bungendore.* Unpublished report prepared by Kevin Mills and Associates for RW Corkery Pty Ltd.

OEH (2014). *Framework for Biodiversity Assessment. NSW Biodiversity Offsets Policy for Major Projects*. Office of Environment and Heritage, Sydney.

OEH (2018) *BioNet Vegetation Classification* http://www.environment.nsw.gov.au/NSWVCA20PRapp/search/pctsearch.aspx. Accessed May 2018

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Appendix 1. Extract from BioBanking Credit Calculator showing survey results from the two plots.

Assessment type	Major project
Proposal ID	226/2018/4820MP
Proposal name	Ardmore Park Quarry
Major Catchment Area	Southern Rivers
Street address	5152 Oallen Ford Road Bungonia NSW 2580

Vegetation Zone	SR624_Low
Plant community type	Silvertop Ash - Blue-leaved Stringybark shrubby open forest on ridges, north east South Eastern Highlands Bioregion
Minimum number of plots	1

Benchmarks

	Native plant species	Native over-storey cover	Native mid-storey cover	Native ground cover (grass)	Native ground cover (shrubs)	Native ground cover (other)	Exotic plant cover	Number of trees with hollows	Over-storey regen	Total length of fallen logs	Remove Multipliers	
	>=32	**15.0 to 45.0**	**5.0 to 25.0**	**5.0 to 30.0**	**5.0 to 50.0**	**20.0 to 80.0**	**See Manual**	**>=2**	**1.00**	**>=70**	☐	Edit

Vegetation Transect / Plot

Transect / Plot	Native plant species*	Native over-storey cover*	Native mid-storey cover*	Native ground cover (grass)*	Native ground cover (shrubs)*	Native ground cover (other)*	Exotic plant cover*	Number of trees with hollows*	Over-storey regen*	Total length of fallen logs*	Easting*	Northing*	Zone*		
1A	0	0.00	0.00	0.00	0.00	0.00	98.00	0	0.00	0.00	770147	6133822	55	Edit	Remove
1b	0	0.00	0.00	0.00	0.00	0.00	100.00	0	0.00	0.00	770209	6133767	55	Edit	Remove

Attachment 1. Full BioBanking Credit Report

Biodiversity credit report

This report identifies the number and type of biodiversity credits required for a major project.

Date of report: 7/05/2018 Time: 4:52:44PM Calculator version: v4.0

Major Project details

Proposal ID:	226/2018/4820MP
Proposal name:	Ardmore Park Quarry
Proposal address:	5152 Oallen Ford Road Bungonia NSW 2580
Proponent name:	Multiquip Pty Ltd
Proponent address:	260 Tenth Ave Austral 2179
Proponent phone:	(02) 9606 0557
Assessor name:	Paul Burcher
Assessor address:	24 Alberta Ave Cowan NSW 2081
Assessor phone:	9456 3853
Assessor accreditation:	226

Summary of ecosystem credits required

Plant Community type	Area (ha)	Credits created
Silvertop Ash - Blue-leaved Stringybark shrubby open forest on ridges, north east South Eastern Highlands Bioregion	3.10	0.00
Total	3.10	0

Credit profiles

1. Silvertop Ash - Blue-leaved Stringybark shrubby open forest on ridges, north east South Eastern Highlands Bioregion, (SR624)

Number of ecosystem credits created 0

IBRA sub-region Bungonia - Southern Rivers

Offset options - Plant Community types	Offset options - IBRA sub-regions
Messmate dry shrubby forest on sandstone, far southern South East Corner Bioregion, (SR577) Silvertop Ash - Blue-leaved Stringybark shrubby open forest on ridges, north east South Eastern Highlands Bioregion, (SR624) White Stringybark - Narrow-leaved Peppermint dry open forest on hinterland hills, far south of the South East Corner Bioregion, (SR668)	Bungonia - Southern Rivers and any IBRA subregion that adjoins the IBRA subregion in which the development occurs