

Brendan Pratt
Director
Alphitonia Pty Ltd
Supplied by email

12 July 2019

Re: Request to waive the need for a BDAR, Farmland Drive (Lot 2 // DP 1244925 & part of Lot 1 // DP 1244925), Schofields, NSW

Dear Brendan,

The location for the proposed new school on Farmland Drive, Schofields, in the Alex Avenue Precinct of the North West Growth Centre ('the project') is to be assessed as a State Significant Development (SSD) under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). While the biodiversity certification was conferred on the site in 2007, this does not negate the need to consider the NSW *Biodiversity Conservation Act 2016* (BC Act). In October 2018, the Secretary's Environmental Assessment Requirements (SEARs) (SSD 18_9368) for the school were received from the NSW Department of Planning and Environment (DPE). The SEARs required the biodiversity impacts to be assessed in accordance with the Biodiversity Assessment Method ('BAM'; OEH 2017) and documented in a Biodiversity Development Assessment Report (BDAR). Biodiversity assessment required for an SSD is described in Section 7.9 of the BC Act. Clause 2 of Section 7.9 indicates that an application for development consent for an SSD:

"...is to be accompanied by a biodiversity development assessment report [BDAR] unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values.

This letter has been prepared to provide information for the Planning Agency Head and the Environment Agency Head to assist them in determining whether the development is likely to have any significant impact on biodiversity values and whether a BDAR is required for the proposed development.

Biodiversity values are defined in Section 1.5 of the BC Act and Clause 1.4 of the NSW Biodiversity Conservation Regulation 2017 (BC Reg) as the following:

Vegetation integrity – being the degree to which the composition, structure and function of vegetation at a particular site and the surrounding landscape has been altered from a near natural state,

Habitat suitability – being the degree to which the habitat needs of threatened species are present at a particular site,

Threatened species abundance – being the occurrence and abundance of threatened species or threatened ecological communities, or their habitat, at a particular site,

Vegetation abundance – being the occurrence and abundance of vegetation at a particular site,

Habitat connectivity – being the degree to which a particular site connects different areas of habitat of threatened species to facilitate the movement of those species across their range,

Threatened species movement – being the degree to which a particular site contributes to the movement of threatened species to maintain their lifecycle,

Flight path integrity – being the degree to which the flight paths of protected animals over a particular site are free from interference, and

Water sustainability – being the degree to which water quality, water bodies and hydrological processes sustain threatened species and threatened ecological communities at a particular site.

Site location and description

Lot 2 // DP 1244925 and part of Lot 1 // DP 1244925 covers a total area of approximately 2 ha. The lots are regular in shape and is bound by Farmland Drive to the north, with future development in areas to the east, west and south (**Figure 1**). The subject land is the area directly impacted by the construction of new school facilities for Alex Avenue Public School, occupying an area of approximately 1.81 ha within the northern-most portions of both lots (**Figure 1** and **2**).

A long grazing history has reduced the floristic diversity of the subject land (Alphitonia 2019). The subject land has been cleared and currently supports exotic grassland with one native tree (*Eucalyptus crebra*). Exotic ground covers have replaced native species and reduced the structural complexity of flora on the site. In the north half, the subject land is generally flat, and the southern half of the subject land slopes gently to the south. Within the lots, but outside of the subject land, are other remnant trees (**Figure 3**).

The associated riparian buffer calculated in accordance with Appendix 3 of the Biodiversity Assessment Method (OEH 2017) and the NSW *Water Management Act 2000* (WM Act) is outside of the proposed development footprint and does not form part of the subject land (**Figure 1**).

No part of the subject land is mapped as Biodiversity Values (BV) on the BV map (OEH 2019).

The proposed development

The subject land is within a rapidly developing urban area for new residential housing. With an increase in population in the local area an increase in facilities ensues, thus, the school

campus of Alex Avenue Public School is proposed to be constructed on Farmland Drive (Lot 2 // DP 1244925).

The proposed development (**Figure 2**) includes a number of buildings and built infrastructure, including carparking along Pelican Road, an area of courtyards and playing court, and services and infrastructure including perimeter roadworks, site stormwater and drainage and civil engineering works.

The proposal will require vegetation clearing to construct the proposed Alex Ave Public School. However, this vegetation clearing is limited to approximately 1.81 ha of exotic grassland (i.e. the subject land) and the remnant tree within the subject land will be retained. The proposal will not remove any native vegetation communities (i.e. Shale Plains Woodland – CPW) that is mapped outside the subject land, but occurs within the lot.

Assessment of biodiversity values of the subject land

An assessment of the biodiversity values of the subject land, as defined in Section 1.5 of the BC Act and Clause 1.4 of the BC Reg, is included in **Appendix A**. The proposed development footprint (i.e. the subject land) is confined to an of exotic dominated grassland with very limited biodiversity values (as outlined in **Appendix A**) and is not likely to have any significant impact on biodiversity values. As such a 'waiver' under Section 7.9 of the BC Act is requested such that a Biodiversity Development Assessment Report (BDAR) is not required for the proposed development.

If you have any queries regarding any of this information, please do not hesitate to contact me.

Yours sincerely,

Bruce Mullins

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References

Alphitonia (2019). *Flora and Fauna Assessment – Alex Avenue Public School, Pelican Road, Schofields*.

NSW Office of Environment and Heritage (OEH) (2017). *Biodiversity Assessment Method*. Office of Environment and Heritage for the NSW Government.

NSW Office of Environment and Heritage (OEH) (2019). *Biodiversity Values Map*. Accessed online (25/01/2019): <https://www.lmbc.nsw.gov.au/Maps/index.html?viewer=BVMap>.





Figure 3: Validated vegetation map.

Appendix A Biodiversity values within the subject land

Legislation criteria	Values within the subject land and the lot
<i>NSW Biodiversity Conservation Act 2016 (Clause 1.5)</i>	
2a) vegetation integrity - being the degree to which the composition, structure and function of vegetation at a particular site and the surrounding landscape has been altered from a near natural state	<p>The vegetation integrity on the subject land is very low. Native vegetation across the subject land has been heavily impacted by clearing and grazing. The vegetation present within the subject land is predominantly exotic grassland with one native tree. The exotic grassland does not contain the structure or function of a vegetation community in a natural or near natural state. The remnant within the subject land will not be removed. While there are remnant native tree species present in the south-east corner of the lot, they are outside of the subject land and would not be removed under the current proposal.</p> <p>The subject land was composed of grassland dominated by exotic grass species including <i>Cenchrus clandestinus</i> (Kikuyu), <i>Eragrostis curvula</i> (African Lovegrass), <i>Trifolium repens</i> (White Clover), <i>Lolium rigidum</i> (Annual Ryegrass), <i>Trifolium dubium</i> (Yellow Suckling Clover) and <i>Paspalum dilatatum</i> (Paspalum). One <i>Eucalyptus crebra</i> (Narrow-leaved Ironbark) occurs within the subject land. The ground cover under this tree and other trees outside the subject land is described below. The tree is characteristic of Shale Plain Woodland.</p> <p>Shale Plains Woodland within the subject site and the lot was characterised by a canopy of <i>Eucalyptus crebra</i> over a ground layer composed of <i>Cenchrus clandestinus</i> (Kikuyu), <i>Microlaena stipoides</i> var. <i>stipoides</i>, <i>Sida rhombifolia</i> (Paddy's Lucerne), <i>Plantago lanceolata</i> (Plantain), <i>Cerastium glomeratum</i> (Mouse-eared Chickweed) and <i>Rytidosperma</i> sp. Shrubs were virtually absent with a single <i>Lycium ferocissimum</i> (African Boxthorn) present outside the subject land. Shale Plains Woodland is a sub-community of the critically endangered ecological community (CEEC) Cumberland Plain Woodland (listed under the BC Act) and Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest (listed under the EPBC Act) (both referred to as CPW). The grazing history on the site has modified the vegetation to such an extent that the community is degraded. While the community still meets the criteria to be considered part of the BC Act listed entity, the cover of native species has been reduced such that the community does not meet the 30% cover threshold to be considered part of the EPBC Act listed community.</p>



Legislation criteria	Values within the subject land and the lot
	The current proposed development will retain the <i>Eucalyptus crebra</i> within the subject land and construct and deck around it.
b) habitat suitability - being the degree to which the habitat needs of threatened species are present at a particular site	<p>A target survey was undertaken for threatened flora. The survey involved traverses of the entire lot and, in particular, targeted threatened species previously recorded within 600 m of the subject land, including <i>Grevillea juniperina</i> subsp. <i>juniperina</i> (Juniper-leaved Grevillea) and <i>Syzygium paniculatum</i> (Magenta Lilly Pilly) (Appendix B). No threatened flora species were observed during targeted survey on the site and, based upon the highly modified nature of the habitat present and the surveys conducted, it is unlikely that any threatened flora species are present within the subject land and the remain parts of the lot.</p> <p>Threatened fauna species which may potentially use the subject land have been identified (Appendix B) based upon species previously recorded within a 10 km radius of the subject land. The exotic grassland within the subject land is unsuitable for the threatened fauna species predicted to occur within 10 km of the subject land. The exotic grassland within the subject land does not include the habitat complexity, micro-habitats and ecological features used by the threatened fauna species such as hollow-bearing trees, fallen logs, rocky outcrops or canopy and shrub layer vegetation.</p> <p>The single <i>Eucalyptus crebra</i> has the potential to provide foraging resources and roosts for some threatened fauna. The tree is not hollow bearing. However, as biocertified land, the loss of vegetation on site has been previously assessed and offset elsewhere in the Growth Centres, which further supports the assessment that the vegetation on site is of low value to threatened species.</p>
NSW Biodiversity Conservation Regulation 2017 (Clause 1.4)	
a) threatened species abundance - being the occurrence and abundance of threatened species or threatened	A remnant of CPW occurs in the south-east corner of the lot, with one tree of this community (that will be retained) occurring within the subject land. The remnant is described in 2a above, and is a degraded form of the community. Exotic grassland is not a threatened ecological communities.



Legislation criteria	Values within the subject land and the lot
ecological communities, or their habitat, at a particular site	<p>Very limited areas of potential habitat for threatened flora occur within the subject land, however, targeted surveys have been conducted across the subject land and no threatened flora species were recorded. The absence of threatened flora species is likely due to the high level of disturbance and modification of the subject land.</p> <p>As outlined above, habitat within the subject land has very low habitat value for threatened fauna species predicted to could occur within 10 km of the subject land. The exotic grasslands within the subject land do not include the micro-habitats and ecological features used by these threatened fauna species including hollow-bearing trees, fallen logs, rocky outcrops or canopy and shrub layer vegetation. The single <i>Eucalyptus crebra</i> has the potential to provide foraging resources and roosts for some threatened fauna. The tree is not hollow bearing.</p>
b) vegetation abundance - being the occurrence and abundance of vegetation at a particular site	<p>The vegetation within the subject land is highly modified and not in a natural or near-natural state. It consists of exotic dominated grassland with one native canopy species. The proposed development would only involve impacts to this highly modified vegetation, with the single <i>Eucalyptus crebra</i> being retained. The remaining remnant CPW outside the subject land will be retained.</p> <p>The impact of proposed development on vegetation abundance is negligible.</p>
c) habitat connectivity - being the degree to which a particular site connects different areas of habitat of threatened species to facilitate the movement of those species across their range	<p>The habitat within the subject land is heavily modified with very few native elements or habitat values. In its current state the subject land it highly unlikely to facilitate the movement of any threatened species across their range. Consequently, the proposed development is highly unlikely to impact habitat connectivity for any threatened species.</p> <p>Further, as biocertified land, clearing of native vegetation within biocertified land is permitted. Therefore, retained vegetation on site may become more isolated over time. Retained trees on the lot are will provide a stepping stone across the landscape for mobile species.</p>

Legislation criteria	Values within the subject land and the lot
d) threatened species movement - being the degree to which a particular site contributes to the movement of threatened species to maintain their lifecycle	As outlined above, the heavily modified habitat within the subject land is unlikely to provide habitat for threatened species and, in its current state, is unlikely to facilitate the movement of any threatened species across their range. Consequently, the proposed development is unlikely to impact the movement of threatened species to maintain their lifecycle.
e) flight path integrity - being the degree to which the flight paths of protected animals over a particular site are free from interference,	The subject land has not been identified as being part of the flight path of any protect animals. Nonetheless, the proposed development includes construction of buildings from one to two storeys, which are similar to building height across the surrounding residential development of Schofields. Consequently, the proposed development is unlikely to interfere with the flight path of any threatened species that may currently use the subject land and Schofields area as a flight path.
f) water sustainability - being the degree to which water quality, water bodies and hydrological processes sustain threatened species and threatened ecological communities at a particular site.	<p>The subject land does not include any drainage lines. The closest water body is an un-named 3rd order stream approximately 350 m south of the lot. This un-named stream and the 30 m buffer extending perpendicular from the top of bank does not form part of the subject land for the proposed development or the lot and no impacts to this drainage line are proposed.</p> <p>As no impacts are proposed to any watercourses or associated riparian buffers within the subject land, the proposed development is unlikely to impact water quality, water bodies or hydrological processes or threatened species and communities sustained by these abiotic factors.</p>

Appendix B Threatened species recorded within a 10 km radius of the subject land or associated plant community type

Scientific	Common Name	BC Act Status	EPBC Act Status	Number of Records within 10 km	Closest Record (km)	Most Recent record
AMPHIBIA						
<i>Heleioporus australiacus</i>	Giant Burrowing Frog	V	V	-	-	-
<i>Litoria aurea</i>	Green and Golden Bell Frog	E	V	6	2.3	21/05/2012
<i>Pseudophryne australis</i>	Red-crowned Toadlet	V	-	9	5.7	21/09/2015
AVES						
<i>Anthochaera phrygia</i>	Regent Honeyeater	CE	CE	-	-	-
<i>Apus pacificus</i>	Fork-tailed Swift	-	M	3	1.9	15/06/2018
<i>Puffinus pacificus</i>	Wedge-tailed Shearwater	-	M	1	7.6	22/04/2015
<i>Artamus cyanopterus cyanopterus</i>	Dusky Woodswallow	V	-	49	0.4	10/08/2018
<i>Botaurus poiciloptilus</i>	Australasian Bittern	E	E	1	5.1	3/12/2002
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	-	M	48	4.7	8/10/2016
<i>Calidris ferruginea</i>	Curlew Sandpiper	E	CE	4	4.9	23/10/2016
<i>Calidris melanotos</i>	Pectoral Sandpiper	-	M	10	4.7	24/12/2015
<i>Calidris ruficollis</i>	Red-necked Stint	-	M	11	1.6	3/10/2016
<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo	V	-	1	8.1	8/05/2006
<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo	V	-	6	1.7	16/03/2018
<i>Chthonicola sagittata</i>	Speckled Warbler	V	-	2	3.2	5/02/2018
<i>Circus assimilis</i>	Spotted Harrier	V	-	4	4.7	6/04/2014

Scientific	Common Name	BC Act Status	EPBC Act Status	Number of Records within 10 km	Closest Record (km)	Most Recent record
<i>Climacteris picumnus victoriae</i>	Brown Treecreeper (eastern subspecies)	V	-	1	5.8	29/09/1998
<i>Cuculus optatus</i>	Oriental Cuckoo	-	M	-	-	-
<i>Daphoenositta chrysoptera</i>	Varied Sittella	V	-	42	1.5	29/10/2016
<i>Dasyornis brachypterus</i>	Eastern Bristlebird	E	E	-	-	-
<i>Falco subniger</i>	Black Falcon	V	-	3	4.9	25/08/2013
<i>Gallinago hardwickii</i>	Latham's Snipe	-	M	14	1.8	31/08/2018
<i>Glossopsitta pusilla</i>	Little Lorikeet	V	-	14	1.4	10/07/2018
<i>Grantiella picta</i>	Painted Honeyeater	V	V	-	-	-
<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle	V	C	8	2.4	17/12/2018
<i>Hieraaetus morphnoides</i>	Little Eagle	V	-	13	1.7	24/04/2016
<i>Hirundapus caudacutus</i>	White-throated Needletail		M	3	2.7	23/01/2016
<i>Lathamus discolor</i>	Swift Parrot	E	E	25	1.2	23/08/2017
<i>Lophoictinia isura</i>	Square-tailed Kite	V	-	11	5.0	25/05/2018
<i>Melithreptus gularis gularis</i>	Black-chinned Honeyeater	V	-	3	2.2	25/08/2013
<i>Motacilla flava</i>	Yellow Wagtail	-	M	-	-	-
<i>Neophema pulchella</i>	Turquoise Parrot	V	-	2	2.9	8/02/2017
<i>Ninox strenua</i>	Powerful Owl	V	-	42	4.4	26/10/2018
<i>Pandion haliaetus</i>	Osprey	V	-	-	-	-
<i>Petroica boodang</i>	Scarlet Robin	V	-	3	1.6	1/01/2013
<i>Petroica phoenicea</i>	Flame Robin	V	-	1	8.1	16/05/2018
<i>Plegadis falcinellus</i>	Glossy Ibis	-	M	3	4.7	30/10/2016

Scientific	Common Name	BC Act Status	EPBC Act Status	Number of Records within 10 km	Closest Record (km)	Most Recent record
<i>Pluvialis fulva</i>	Pacific Golden Plover	-	M	8	4.7	8/11/2015
<i>Rostratula australis</i>	Australian Painted Snipe	E	E	5	4.7	20/10/2012
<i>Tringa glareola</i>	Wood Sandpiper	-	M	6	4.7	24/12/2015
<i>Tringa nebularia</i>	Common Greenshank	-	M	1	4.7	1/11/2012
<i>Tringa stagnatilis</i>	Marsh Sandpiper	-	M	3	4.8	13/12/2015
<i>Tyto novaehollandiae</i>	Masked Owl	V	-	2	8.5	16/09/2015
GASTROPODA						
<i>Meridolum corneovirens</i>	Cumberland Plain Land Snail	E	-	183	0.2	10/07/2018
<i>Pommerhelix duralensis</i>	Dural Land Snail	E	E	16	5.1	26/10/2018
MAMMALIA						
<i>Chalinobus dwyeri</i>	Large-eared Pied Bat	V	V	7	1.4	11/09/2015
<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	V	E	7	7.1	13/09/2005
<i>Falsistrellus tasmaniensis</i>	Eastern False Pipistrelle	V	-	32	1.4	4/10/2017
<i>Micronomus norfolkensis</i>	Eastern Freetail-bat	V	-	81	0.6	25/05/2018
<i>Miniopterus australis</i>	Little Bentwing-bat	V	-	23	0.9	25/10/2018
<i>Miniopterus schreibersii oceanensis</i>	Eastern Bentwing-bat	V	-	98	0.4	9/08/2018
<i>Myotis macropus</i>	Southern Myotis	V	-	54	0.6	25/05/2018
<i>Petaurus australis</i>	Yellow-bellied Glider	V	-	4	5.0	14/09/2018
<i>Petaurus norfolcensis</i>	Squirrel Glider	V	-	1	2.6	22/10/2011
<i>Petauroides volans</i>	Greater Glider	E	V	-	-	-
<i>Petrogale penicillata</i>	Brush-tailed Rock-wallaby	E	V	-	-	-
<i>Phascolarctos cinereus</i>	Koala	V	V	4	3.5	17/04/2018

Scientific	Common Name	BC Act Status	EPBC Act Status	Number of Records within 10 km	Closest Record (km)	Most Recent record
<i>Pseudomys novaehollandiae</i>	New Holland Mouse	-	V	-	-	-
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V	V	300	0.9	26/10/2018
<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheath-tail-bat	V	-	20	0.9	4/04/2018
<i>Scoteanax rueppellii</i>	Greater Broad-nosed Bat	V	-	41	1.7	25/05/2018
<i>Vespadelus troughtoni</i>	Eastern Cave Bat	V	-	1	5.3	20/08/2015
FLORA						
<i>Acacia bynoeana</i>	Bynoe's Wattle	E	V	6	8.8	22/01/2008
<i>Acacia pubescens</i>	Downy Wattle	V	V	15	8.2	12/05/2010
<i>Callistemon linearifolius</i>	Netted Bottle Brush	V	-	1	6.4	12/09/2016
<i>Darwinia biflora</i>		V	V	279	5.7	20/09/2017
<i>Dillwynia tenuifolia</i>		-	V	338	2.4	28/02/2018
<i>Epacris purpurascens</i> var. <i>purpurascens</i>		-	V	54	5.6	4/06/2018
<i>Eucalyptus nicholii</i>	Narrow-leaved Black Pepper-mint	V	V	3	5.1	18/11/2009
<i>Eucalyptus</i> sp. <i>Cattai</i>		E	CE	437	6.7	28/02/2019
<i>Grevillea juniperina</i> subsp. <i>juniperina</i>	Juniper-leaved Grevillea	V	-	974	0.5	8/05/2018
<i>Hibbertia puberula</i>		E	-	3	8.1	28/02/2018
<i>Hibbertia superans</i>		E	-	63	6.4	23/09/2015
<i>Leucopogon fletcheri</i> subsp. <i>fletcheri</i>		E	-	6	7.1	9/10/2007

Scientific	Common Name	BC Act Status	EPBC Act Status	Number of Records within 10 km	Closest Record (km)	Most Recent record
<i>Marsdenia viridiflora</i> subsp. <i>viridiflora</i>	<i>Marsdenia viridiflora</i> R. Br. subsp. <i>viridiflora</i> population in the Bankstown, Blacktown, Camden, Campbelltown, Fairfield, Holroyd, Liverpool and Penrith local government areas	E	-	5	7.0	27/02/2017
<i>Melaleuca deanei</i>	Deane's Paperbark	V	V	1	9.2	11/12/2007
<i>Micromyrtus minutiflora</i>		E	V	9	3.8	30/07/2004
<i>Persoonia hirsuta</i>	Hairy Geebung	E	E	8	5.9	28/04/2016
<i>Persoonia nutans</i>	Nodding Geebung	E	E	54	8.3	19/12/2016
<i>Pimelea curviflora</i> var. <i>curviflora</i>		V	V	20	5.4	13/03/2019
<i>Pimelea spicata</i>	Spiked Rice-flower	E	E	70	1.5	23/11/2015
<i>Pultenaea parviflora</i>		E	V	429	1.0	28/02/2018
<i>Syzygium paniculatum</i>	Magenta Lilly Pilly	E	V	9	0.6	18/07/2018
<i>Tetradlea glandulosa</i>		-	V	30	8.1	1/11/2011

CE = Critically Endangered; E = Endangered; M = Migratory; V = Vulnerable;