

Topa Property Pty Ltd
Attention: Olga Masella

Date: 12 July 2022

Via Email: olga@topaproperty.com.au

Our Ref: 2389.01

Dear Olga,

Response Letter to the Stage 1 Pre-lodgement Assessment Summary (PLRZ: RZ/1/2022) addressing Council's additional requirements and BCD's recommendations for the rezoning proposal located at 1377 Hue Hue Road, Wyee, NSW.

As requested, AEP has addressed the Lake Macquarie City Council's (LMCC) additional requirements and Biodiversity Conservation Division's (BCD) recommendations, 13 April, 2022 Ecology for the above matter in **Table 1** below.

This Addendum is to be read in conjunction with the Biodiversity & Riparian Assessment Rev 02 (June, 2022) (BAR) and Bushfire Threat Assessment Report Rev 02 (June, 2022) (BTA) for 1377 Hue Hue Road, Wyee, NSW (Lot 437 DP755242) in the Lake Macquarie Local Government Area.



AEP

ECOLOGY | BIOBANKING | OFFSETS | BUSHFIRE

Table 1: Response to Council's Additional Requirements & BCDs recommendations

Lake Macquarie Council's additional requirements and BCDs recommendations	AEP Comments	Documents relied upon
Lake Macquarie Council's Additional Biodiversity Impact Assessment Requirements 13 April 2022		
The biodiversity report should include an assessment of the area clearing thresholds if the land is to be rezoned and developed as proposed (including the road unless the vegetation on the road is avoided). It is important at this stage to ascertain whether the biodiversity offsets scheme would apply to the development of the land in accordance with the proposed zone. The BCD are requiring a Stage 1 BAM assessment for rezoning proposals.	Error in previous clearing calculations, including the vegetation on Digary Road the total vegetation to be cleared is 0.21ha, which is less than 0.5ha for the minimum lot size of 1ha to <40ha. As the area is below the area clearing threshold it does not meet the requirements for a Stage 1 BAM assessment.	Page 7 - Biodiversity & Riparian Assessment Rev 03 July 2022.
Climatic conditions leading up to and during surveys including rainfall for amphibians are to be indicated.	A general nocturnal survey was carried out, targeting forest owls, Koala and Squirrel glider in July 2021 and May 2022 for Wallum Frog. Seven (7) days prior to May 2022 there was 41mm of rainfall, ample rainfall for Wallum Froglet to be calling. A Songmeter was also placed in the Subject Area over a two-week period in July-August 2021. These surveys were carried out irrespective of rainfall conditions given the degraded nature of the farm dam within the Subject Site.	Section and 7.4, 9 and Appendix D of the Biodiversity & Riparian Assessment Rev 02 June 2022
A map of habitat trees is required including tree species, hollow number and size dimensions.	Refer to Figure 4 and Table 6 in the Biodiversity & Riparian Assessment (BAR) Rev 01 for location, tree species, hollow number and sizes.	Figure 4 and Table 6 of the Biodiversity & Riparian Assessment Rev 03 July 2022.
A map of species recorded is required.	The requirement if the No listed species and or listed communities were identified within the Study Area, therefore a map showing the location of the listed species cannot be provided. Appendix C within the BAR provides a list of species sighted, heard or recorded within the Subject Site.	Appendix C of the Biodiversity & Riparian Assessment Rev 03 July 2022.
The existing dam is to be assessed for aquatic species including frogs.	Habitat assessment of the farm dam has been undertaken, July 2021 and May 2022, the habitat within the farm dam was deem not suitable for aquatic fauna and amphibians, due to the lack of aquatic flora and structures such as logs / rocks. The horses use the farm dam as their main water source trampling flora on the edges which would otherwise provide habitat. Nocturnal surveys of the dam were undertaken both in July 2021 and May 2022, the rainfall seven (7) days prior to the surveys in May 2022 was 41mm hence had Wallum Froglet been located	Section 7.4 and 9 of the Biodiversity & Riparian Assessment Rev 03 July 2022

Lake Macquarie Council's additional requirements and BCDs recommendations	AEP Comments	Documents relied upon
	within the dam, its call would have been recorded. Surveys also extended to Mannering Creek.	
Time spent undertaking amphibian and reptile searches needs to be indicated.	Amphibians and reptile surveys were undertaken during nocturnal surveys in July 2021 and May 2022 (4x hour spotlighting searches). Fauna was recorded during diurnal and dusk surveys over a period of four days in July 2021 and May 2022.	Section 6.2.4 of the Biodiversity & Riparian Assessment Rev 03 July 2022
Results are to be provided in such a way that it can be ascertained where each species was recorded. A species list for each quadrat is preferred for plants and a species list for fauna that can be linked to survey sites on a map. Quadrats should also be numbered on the map.	<p>The <i>Biodiversity Conservation Act, 2016</i> (BC Act), the <i>Biodiversity Regulation 2017</i> (Regulations) and associated survey guidelines do not require the detailed locations for non-listed species. AEP did not detect any listed species and / or non-listed species associated with listed species were identified within the Study Area.</p> <p>AEP provides a detailed list flora list composed of species identified in the BAM Plot, flora transects and incidental records throughout the surveys (refer Appendix B). The list comprises of both native and exotics. Figure 4 has been amended to provide BAM Plot numbers and field data Appendix F.</p> <p>AEP also provides Expected Fauna List, comprising of both listed and non-listed species that may occur within the Site (Appendix C). This list also provide details of the fauna sighted, heard or recorded (with equipment). Figure 4 has been amended to show location of Camera trapping / Songmeter to assist in location of non-listed species.</p> <p>Therefore, it has been determined that a figure showing the location of non-listed species is not required.</p>	Appendix B, C, F and Figure 4 of the Biodiversity & Riparian Assessment Rev 03 July 2022 and AEP Cover Letter July 2022
Additional information needs to be provided stating how each species was observed and where.	<p>Refer to sections 7.2 for descriptions of vegetation within different areas of the site and 7.6 for fauna records.</p> <p>Also as previously stated, the <i>Biodiversity Conservation Act, 2016</i> (BC Act), the <i>Biodiversity Regulation 2017</i> (Regulations) and associated survey guidelines do not require the detailed locations for non-listed species. AEP did not detect any listed species and / or non-listed species associated with listed species were identified within the Study Area.</p> <p>AEP provides a detailed list flora list composed of species identified in the BAM Plot, flora transects and incidental records throughout the surveys (refer Appendix B). The list comprises of both native and exotics. Figure 4 has been</p>	Appendix B, C and Figure 4 of the Biodiversity & Riparian Assessment Rev 03 July 2022.

Lake Macquarie Council's additional requirements and BCDs recommendations	AEP Comments	Documents relied upon
	<p>amended to provide BAM Plot numbers and field data Appendix F.</p> <p>AEP also provides Expected Fauna List, comprising of both listed and non- listed species that may occur within the Site (Appendix C). This list also provides details of the fauna sighted, heard or recorded (with equipment). Figure 4 has been amended to show location of Camera trapping / Songmeter to assist in location of non-listed species.</p> <p>Therefore, it has been determined that a figure showing the location of non-listed species is not required.</p>	
<p>The method of identification for the Sugar Glider on p. 23 needs to be clarified and the inconsistency with Appendix B needs to be rectified, as it does not indicate Sugar Gliders were recorded. More emphasis should be placed on local records – in this case a population of Squirrel Gliders is known to occur on the adjacent land.</p>	<p>Section 7.6 has been amended to provide details on identification process of the Sugar Glider. Appendix C has been updated. Appendix D shows photo of Sugar Glider at Camera Trap 2. Squirrel Gliders have been assessed more extensively in the report and it is likely this species would utilise the E2 lands in the south of the site.</p>	<p>Section 7.6, Appendix C and D of the Biodiversity & Riparian Assessment Rev 03 July 2022</p>
<p>The proposal should state how indirect impacts/edge effects will be managed e.g., maintenance of existing hydrology and water quality, perimeter roads and rehabilitation noting that this will influence BALs.</p>	<p>Stormwater management has been proposed, likely in the form of a detention pond that will meet both Lake Macquarie City Council and NSW state guidelines for Water Sensitive Urban Design. All proposed stormwater management and Asset Protection Zones will be outside of C2 zoned land. It should also be noted that the detention basin and surrounding area must be managed in accordance with Appendix 4 of the Planning for Bush Fire Protection, 2019 Inner and Outer Protection Zones.</p>	<p>Section 13 of the Biodiversity & Riparian Assessment Rev 03 July 2022, Bushfire Threat Assessment Report Rev 02 July, 2022 (BTA).</p>
<p>A section on the limitations should be included in the report.</p>	<p>The Subject Site has been deemed appropriate for proposed rezoning given there is limited to no Biodiversity Value within the proposed residential area. The proposal will also include the regeneration of the riparian area along Mannering Creek, assisting with improved water quality, habitat and foraging for listed species such as Squirrel Glider.</p> <p>The do-nothing option, will retain marginal habitat, however it is likely that the riparian area along Mannering Creek will continue to be grazed, limiting regeneration of important feed tree for Squirrel Gliders due to horse trampling and grazing on new shoots. The impact from hard hooved animals also impacts on erosion of the creek banks and bed along with reduce water quality downstream.</p> <p>Therefore, the Planning Proposal is considered likely to improve the water quality, regeneration of plant</p>	<p>Section 2.0 of the Biodiversity & Riparian Assessment Rev 03 July 2022,</p>

Lake Macquarie Council's additional requirements and BCDs recommendations	AEP Comments	Documents relied upon
	communities providing both habitat and foraging opportunities within the Study Area.	
Further explanation as to what is meant by an indicator or subject species is required – was this species targeted during survey?	<p>All species within Table 6 of the BRA were targeted during the field surveys in 2021 and 2022, habitat surveys were conducted focusing on all species listed below, if habitat was recorded and the species may be present, they are deemed “Subject Species” and target surveys were undertaken, such as:</p> <ul style="list-style-type: none"> • Flora transects; • Fauna searches; • Camera trapping; • Songmeter; • Diurnal searches; • SAT's; and • Nocturnal. 	Section 7.7 of the Biodiversity & Riparian Assessment Rev 03 July 2022,
Additional information needs to be provided regarding which flora species, apart from <i>Tetratheca juncea</i> , were targeted during the survey, e.g. <i>Angophora inopina</i> and ground orchids.	Table 8 lists species that were considered to occur on site, this is based on field data and desktop information. Searches were carried out for trees and shrubs such as <i>Angophora inopina</i> and <i>Eucalyptus paramattensis</i> given the low number of trees and the extensive surveys within the Subject Site (SATs, HBTs) all trees were survey. It is also noted that these species can be identified all year and are easily distinguished. Targeted searches carried out for <i>Tetratheca juncea</i> were undertaken in September and orchids such as <i>Thelymitra adorata</i> were not detected during field surveys. Further the heavily grazed paddocks are considered unsuitable for orchids due to compaction of the soil from grazing.	Table 8 and Section 7.7.1 of the Biodiversity & Riparian Assessment Rev 03 July 2022
Figure 3 should map and label the exotic grazed pasture area and provide a list of species occurring in this polygon.	Figure 3 has mapped the extent of the grazed paddock area which has been labelled. A list of species is provided in Appendix B and F .	Section 7.2.4, Figure 3, Appendix B and F of the Biodiversity & Riparian Assessment Rev 03 July 2022, and AEP Cover Letter 12 July 2022
The relative areas of each polygon i.e. cleared area and native vegetation communities should be calculated and presented.	Refer to Table 5 in the BAR	Table 5 of the Biodiversity & Riparian Assessment Rev 03 July 2022
The report should deal with serious and irreversible impacts on threatened species likely to use the site.	<p>Given the Planning Proposal does not trigger the Biodiversity Offsets Scheme (BOS) for the following reasons:</p> <ul style="list-style-type: none"> • The proposed area which is to be rezoned for residential purposes 	Not applicable to this application.

Lake Macquarie Council's additional requirements and BCDs recommendations	AEP Comments	Documents relied upon
	<p>(impact areas) is not mapped Biodiversity Values Map (BV Map);</p> <ul style="list-style-type: none"> The proposed area which is to be rezoned for residential purposes (impact areas) has a minimum lot size is 20ha, therefore the area clearing threshold is >0.5ha. As the area of vegetation to be removed totals approx. 0.33ha and is therefore under the 0.5ha threshold, the BOS is not triggered; Desktop and field assessment in accordance with <i>Section 7.3</i> of the <i>Biodiversity Conservation Act, 2016</i> (BC Act) determined that the Planning Proposal will not result in a Significant Impact on listed species or communities. <p>As a result of the above assessment, it has been determined that A Biodiversity Development Assessment Report (BDAR) is not required, hence assessment of SAIL is not required under 7.3 of the BC Act.</p> <p>It should be noted that all listed species identified on BioNet (2021 and 2022) have been assessed at both desktop and field and as stated above the 5-Part Test in Section 9.0 of the BRA showed the Planning Proposal will not have a significant impact on any listed species or community.</p>	
<p>The impact of the proposal on the unformed road area needs to be assessed and the impacts of clearing this land included.</p>	<p>Both reports have been updated to include this area.</p>	<p>Biodiversity & Riparian Assessment Rev 03 July 2022, Bushfire Threat Assessment Report Rev 02 July, 2022 (BTA)</p>
<p>The application of the State Environmental Planning Policy (Koala Habitat Protection) 2020 and State Environmental Planning Policy (Koala Habitat Protection) 2021 (now Chapter 3 and Chapter 4 of the State Environmental Planning Policy (Biodiversity and Conservation) 2021) needs to be reviewed. These State Environmental Planning Policies (SEPPs) appear to have not been applied properly in this case. Koala Habitat Protection 2020 is relevant for rural land (i.e. the RU2 land). If the C2 land is to be included in the rezoning then SEPP Koala Habitat Protection 2021 applies to this portion. The heading to section 10 of the Biodiversity and Riparian Assessment Report (prepared by AEP 29/9/2021) refers to SEPP Koala Habitat Protection 2020 but deals with SEPP Koala Habitat Protection SEPP 2021. Page 31 of the Planning Proposal also needs correction.</p>	<p>Updates have been made Section 10.0</p>	<p>Section 10.0 of the Biodiversity & Riparian Assessment Rev 03 July 2022</p>

Lake Macquarie Council's additional requirements and BCDs recommendations	AEP Comments	Documents relied upon
Part 4 of SEPP Koala Habitat Protection 2020 applies to the RU2 land (i.e. the site) and should be dealt with in detail.		
Council's Other Matters to be considered		
Matters regarding biodiversity and the C2 zoned land Council advises that the vegetation on the site and/or adjacent to the site would be foraging habitat for the Regent Honeyeater, Swift Parrot. Certain bat species would forage over the site and have been recorded in the area, and the Black Necked Stork has been recorded on open floodplains in similar habitat not far from the site.	<p>Appendix G shows the Subject Site is not mapped Important Habitat for Regent Honeyeater, Swift, Migratory Shorebirds or Plains-wanders. Therefore, no further assessment is required.</p> <p>A total of six (6) The Black -necked Stork records are located 1 – 1.km to the east and 5 – 6km to the north west of the Subject Site. However, these records range from 1991 to 1993. Given the species was not recorded within the Subject Site during both 2021 and 2022 surveys undertaken by AEP and there are no recent records it has been determined that the Subject Site's severely degraded habitats from past and current land use provides limited to no foraging opportunities As a result no further assessment is required.</p>	<p>Section 7.7 and Appendix G of the Biodiversity & Riparian Assessment Rev 03 July 2022, Bushfire Threat Assessment Report Rev 02 July, 2022 (BTA)</p>
A perimeter road for the entire southern boundary of the proposed development should be depicted to link up with Hodges Street within the adjacent development to the east. The pathway should also be continued particularly as this will increase bushfire resilience and assist in managing edge impacts.	The Planning proposal has been updated to include a perimeter road as request.	<p>Figure 2 Bushfire Threat Assessment Report Rev 02 July, 2022 (BTA)</p>
The rehabilitation of the native vegetation corridor parallel to Mannering Creek that has commenced on the adjacent development, should continue across Lot 1377 in addition to rehabilitation/enhancement (via weed removal) of the existing land zoned for conservation to extend the Manning Creek Corridor Conservation land. The recommendation in the Biodiversity and Riparian Assessment Report that this land should be rehabilitated is supported. The future ownership and management of the C2 Conservation land needs to be addressed. Given the future Council ownership of the land adjacent (to the east) this option is one that should be considered as long as the land is rehabilitated and maintained in accordance with a management plan for a set period (probably 10 years). The C2 land would become part of the Manning Creek Corridor Conservation land. Should this option be preferred a planning agreement would be required to ensure rehabilitation and dedication of the land.	<p>A Vegetation and Fauna Management Plan (VFMP) should be enacted over the retained land within the C2 zone, in order to mitigate for any vegetation and habitat loss within the development footprint. The VFMP will focus on removal of weeds and other exotic species to promote natural regeneration, detail requirements for the installation of supplementary fauna habitat (nest boxes), and specify monitoring requirements. Given the current condition of the proposed C2 land it is proposed that the VFMP should be able to reach 80% benchmark targets in 5-year time frame with an aim of improving biodiversity values within the remaining vegetation on the site.</p> <p>Ownership of the C2 land is recommended to be dedicated to LMCC on reaching the 80% benchmark targets.</p>	<p>Section 12 of the Biodiversity & Riparian Assessment Rev 03 July 2022</p>
The boundary of the proposed residential development and zone appears to leave a gap between the proposed zone and the	Given the lack of biodiversity values within this area of land this land will be	Biodiversity & Riparian Assessment Rev 03

Lake Macquarie Council's additional requirements and BCDs recommendations	AEP Comments	Documents relied upon
existing C2 zone. Outside any stormwater quality control structure. This area should be zoned Conservation C2 and rehabilitated as above.	zoned for a Zone suitable for services such as stormwater and APZs.	July 2022, Bushfire Threat Assessment Report Rev 02 July, 2022 (BTA)
BCDs recommendations		
BCD recommends the proposal includes further assessment of impacts on EECs and that the test of significance is updated to assess the proposed direct impacts on EEC vegetation.	The BAR has been updated to include the direct impacts to EEC vegetation on Digary Road.	Biodiversity & Riparian Assessment Rev 03 July 2022
BCD recommends further information is provided on the proposed delivery and possible extension of Digary Rd and potential future impacts on biodiversity values within the C2 land.	Digary Road is not proposed to be extended further south beyond what is currently proposed. Impacts to biodiversity within the retained lands is addressed in the BAR in the 5-part test.	Biodiversity & Riparian Assessment Rev 03 July 2022
BCD recommends that the proposal includes further assessment of squirrel glider potential impacts on the species from the proposed development.	Section 7.6 has been amended to provide details on identification process of the Sugar Glider. Appendix C has been updated. Appendix D shows photo of Sugar Glider at Camera Trap 2. Squirrel Gliders have been assessed more extensively in the report and it is likely this species would utilise the E2 lands in the south of the site.	Biodiversity & Riparian Assessment Rev 03 July 2022
BCD recommends that the proposal includes further details about the locations of the stormwater detention basin. It is recommended that the stormwater detention infrastructure is located outside of the proposed C2 zone.	Stormwater management has been proposed, likely in the form of a detention pond that will meet both Lake Macquarie City Council and NSW state guidelines for Water Sensitive Urban Design. All proposed stormwater management and Asset Protection Zones will be outside of C2 zoned land. It should also be noted that the detention basin and surrounding area must be managed in accordance with Appendix 4 of the Planning for Bush Fire Protection, 2019 Inner and Outer Protection Zones.	Section 13 of the Biodiversity & Riparian Assessment Rev 03 July 2022, Bushfire Threat Assessment Report Rev 02 July, 2022 (BTA).
BCD recommends the proposal includes further details on koala surveys and a minimum of 3 SAT survey sites undertaken within the subject area.	Updates have been made Section 10.0	Section 10.0 of the Biodiversity & Riparian Assessment Rev 03 July 2022
BCD recommends the proposal includes further details on frog and refer to the <i>NSW Survey Guide for Threatened Frogs</i> (DPIE, 2020) to ensure frog surveys are adequate.	Habitat assessment of the farm dam has been undertaken, July 2021 and May 2022, the habitat within the farm dam was deem not suitable for aquatic fauna and amphibians, due to the lack of aquatic flora and structures such as logs / rocks. The horses use the farm dam as their main water source trampling flora on the edges which would otherwise provide habitat. Nocturnal surveys of the dam were undertaken both in July 2021 and May 2022, the rainfall seven (7) days prior to the surveys in May 2022 was 41mm hence had Wallum Froglet been located within the dam, its call would have been	Section 6.2.4, 7.4 and 9 of Biodiversity & Riparian Assessment Rev 03 July 2022

Lake Macquarie Council's additional requirements and BCDs recommendations	AEP Comments	Documents relied upon
	<p>recorded. Surveys also extended to Mannering Creek.</p> <p>Amphibians and reptile surveys were undertaken during nocturnal surveys in July 2021 and May 2022 (4x hour spotlighting searches). Fauna was recorded during diurnal and dusk surveys over a period of four days in July 2021 and May 2022</p>	

We thank you for the opportunity to be involved in this project. Should you require any further clarification on this matter, please contact Natalie Black (AEP Senior Environmental Manager – 0431 249 360).

Regards



Natalie Black

Senior Environmental Manager

BAAS No. 19076

Attachment 1: AEP BRA (June 2022)

Attachment 2: AEP BTA (June 2022)