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Bryan Garland
Senior Development Manager
Johnson Property Group
114 Avondale Road
Cooranbong NSW 2265

**RESPONSE TO DECC COMMENTS ON EXHIBITED PLAN FOR THE
PROPOSED REDEVELOPMENT OF WAHROONGA ESTATE**

Dear Bryan

The purpose of this letter is to provide comments on the DECC response to the recently exhibited concept plan for the redevelopment of Wahroonga Estate. The comments provided within this letter are based on a revised concept plan that has been produced following consideration of responses from DECC as well as Kuring-gai Council and various other State and Commonwealth Government Agencies. The ecological impacts resulting from the revised concept plan have been considerably reduced, as described below.

**1. IMPACTS ON REMNANTS OF ENDANGERED AND CRITICALLY
ENDANGERED ECOLOGICAL COMMUNITIES**

The impacts upon the C/EECs have been reduced significantly through the removal of the residential development in the eastern precinct. This has reduced the areas of C/EECs to be cleared to 0.51 ha for Blue Gum High Forest (BGHF) and 0.28 ha for Sydney Turpentine Ironbark Forest (STIF). Development is proposed to continue along the fringes of the C/EECs adjacent to the currently developed roadways and some impacts will occur on these communities under the preferred concept plan, much of this impact is necessary to protect current development from bushfire risk through establishing APZs. The total area of C/EECs to be modified for the establishment of additional APZs as a result of the preferred concept plan is approximately 1.05 ha for BGHF and 0.34 ha for STIF.

Two large buildings currently located adjacent to the BGHF east of Fox Valley Road are proposed to be demolished and APZs in this area will be reduced to the minimum width required. As a result there is potential to establish an onsite offset of EECs through the planting of native mid-storey and ground cover species within some areas that are currently managed as APZs. Consequently, as a result of the proposed changes to the concept plan, the total area of good quality BGHF on the eastern side of the site could potentially increase by approximately 1.37 ha. This

Cumberland Ecology
PO Box 2474
Carlingford Court 2118
NSW Australia
Telephone (02) 9868 1933
Mobile 0425 333 466
Facsimile (02) 9868 1977
Email: david@cumberlandecology.com.au

is significant because the patch of BGHF on the eastern side of Fox Valley Road is considered to be one of the larger patches of BGHF in the Sydney region and to restore a large portion of this vegetation to a good quality condition would further increase the local viability of this patch of the CEEC. As indicated above the total area of BGHF to be impacted from the development is 1.05 ha (0.51 to be cleared and 0.54 ha as APZs) indicating that more BGHF (1.15 ha) could be re-established under the preferred concept plan than would be impacted.

Due to the removal of development from the eastern precinct the impacts of edge effects and fragmentation are not likely to be greatly increased from the sites current situation and the reduced amount of clearing and earth works required will reduce potential impacts on the BGHF through erosion, sedimentation and run-off.

West of Fox Valley Road, the impacts on BGHF from the proposed sports field and detention basin located adjacent to the school have been reduced in the preferred concept plan through the relocation of the sports field and the incorporation of the detention basin within the sports field. This adjustment has resulted in a reduced impact on the area of good quality BGHF in this location. The impacts of the preferred concept plan on BGHF are no longer considered to be significant on a regional scale as indicated in the exhibited Environmental Assessment.

A comparison of the impacts upon the C/EECs and other vegetation communities on the subject site under the exhibited and revised concept plan is provided in Table 1, while a visual representation of the impacted areas under the preferred concept plan is provided in Figure 1.

Table 1 COMPARISON OF IMPACTS ON VEGETATION TYPES BETWEEN THE EXHIBITED AND PREFERRED PLANS

Vegetation Type	Vegetation to be Retained (ha)		Vegetation to be Cleared (ha)		Additional Vegetation Managed for Bush Fire Hazard Reduction (ha)	Potential C/EEC Regenerated (ha)
	Exhibited Plan	Preferred Plan	Exhibited Plan	Preferred Plan	Preferred Plan	Preferred Plan
Blue Gum High Forest	0.17	0.42	1.64	0.51	0.54	1.15
Sydney Turpentine-Ironbark Forest	0.40	0.31	0.79	0.28	0.06	0.23
Blackbutt – Turpentine – Smooth-bark Apple Open Forest	9.67	16.85	2.97	1.48	4.71	
Sydney Peppermint – Red Bloodwood Open Forest	0.57	1.87	0.35	0.36	1.55	
Riparian Vegetation	2.78	2.79	0.03	0.17	0.04	
Total	13.59	22.23	5.78	2.80	6.91	1.37

2. IMPACTS ON GOOD QUALITY VEGETATION

A large proportion of the good condition vegetation that exists on the subject site is present within the eastern precinct. Under the revised concept plan much of this vegetation is now not going to undergo any direct modification. The southern portion of this eastern precinct, including much of the good quality STIF, is proposed to be modified as an APZ. This wide APZ is necessary due to the steep slope that exists here and is required to protect existing dwellings from bushfire hazard. The proponent recognises the ecological significance of this good condition C/EEC, however sees the protection of human life and assets as the highest priority in this area of bushfire prone land.

A similar situation occurs in the Coups Creek corridor where good condition vegetation will undergo modification to reduce bushfire risk. Here the vegetation will be managed to protect the aged care facility and other residential dwellings.

3. IMPACTS ON SIGNIFICANT CORRIDOR VALUES

The vegetation corridors across the site provide an important link for fauna movement as well as flora dispersal to Lane Cove National Park. However, a large portion of the Coups Creek corridor backs on to existing development including the aged care facility and other residential dwellings. At present these properties, including the aged care facility, are subject to significant bushfire risk. Due to the steep slope of the land adjacent to Coups Creek large areas of vegetation are required to undergo bushfire hazard reduction management.

The Coups Creek corridor will also undergo modification due to development to occur on the western side of the creek. This development includes the upgrade of the hospital and associated infrastructure; the development of a new school; and residential dwellings – all seen as essential in the upgrade of the town centre. Minimal vegetation clearing will occur while further vegetation will undergo management for APZs to protect structures. The width of all riparian corridors and uses within buffer zones comply with the Ku-ring-gai Council Riparian Policy (2004) under both the exhibited and revised concept plan. While the width and potentially the functionality of the Coups Creek corridor will be reduced under the proposed development it is considered likely that the corridor will still maintain its value for flora and fauna.

The impacts on the corridor within the eastern precinct will be significantly reduced under the revised development. With the removal of residential development in this precinct, the bushland maintains its link with the Lane Cove National Park and the Coups Creek corridor across Fox Valley Road. The extremities of the corridor will be modified due to clearing and the creation of APZs. The largest of these modifications is proposed to occur at the southern edge of the corridor along Commenarra Parkway. The APZs at this location need to be established to protect the existing residential dwellings from bushfire risk. Under the revised concept plan the viability of the corridor in the eastern precinct is considered unlikely to change significantly.

4. IMPACTS ON THREATENED SPECIES HABITATS

4.1 Powerful Owls

The impacts on the nesting and roosting locations of the Powerful Owls have been significantly reduced through the removal of the residential development on the eastern side of Fox Valley

Road to the north of the riparian corridor. The revised smaller scale development significantly reduces disturbance in the vicinity of the nest location thereby further reducing the likelihood of impacting upon the breeding success of the owls if they continue to nest in that location.

The vegetation to the south of the riparian corridor is proposed to be managed as an asset protection zone (APZ) in an effort to reduce the potential hazard of bushfire on existing dwellings. Therefore the nest location will be separated from development by approximately 50m of undisturbed bush land and 60m of land managed as APZs. While this does not comply with DECC's recommendations of a 200m buffer around a nest, roads and development currently exist at a distance of approximately 150m to the nest. Far fewer impacts are also likely to occur on Powerful Owl prey species under the revised proposal due to the retention of suitable habitat.

4.2 Grey-headed Flying Fox and Eastern False Pipistrelle

Significant areas of suitable foraging/roosting habitat will remain on the subject site under the revised proposal for these species, particularly within the eastern precinct. Numerous potential feed trees for the Grey-headed Flying-fox will now be retained that were proposed to be removed as will large numbers of habitat trees providing roosts for Eastern False Pipistrelle. While some loss of habitat will occur for these species under the preferred concept plan, this is proposed to be mitigated through landscaping the site with flowering eucalypt species as a food source for the Grey-headed Flying-fox and an attractant for insect prey of microchiropteran bats.

4.3 Habitat Trees

The habitat trees retained under the revised concept plan will provide nesting/roosting locations for numerous other species identified on the subject site. The impacts described in the DECC response from controlled burn management of APZs is likely to be considerably as the reduced area of vegetation to undergo APZ management is reduced. Any tree hollows lost due to the development will be replaced by nest boxes.

5. OFFSETS

The need for offsets is significantly reduced under the revised concept plan and a high proportion of compensatory measures for the reduced footprint can be achieved on site for EEC matters. This is because areas of Blue Gum High Forest and Sydney Turpentine Ironbark Forest can be regenerated within approximately 1.37 ha of redundant APZ land.

6. CONCLUSION

The ecological impacts under the revised concept plan have been significantly reduced. Large portions of vegetation previously to undergo modification are now proposed to be retained. This vegetation provides extensive areas of habitat for the threatened species Grey-headed Flying-fox, Eastern False-pipistrelle, Powerful Owl and the species they prey upon as well as other more common fauna. This vegetation also assists in the maintenance of the corridor connectivity values in the eastern portion of the site. Impacts on the C/EECs BGHF and STIF have been reduced extensively through a reduction in development footprint and relocation of certain features of the development. The reduction in footprint of the proposed development has allowed for the potential reestablishment of significant areas of the two C/EECs in the eastern precinct resulting in a considerable onsite offset. It is considered that the preferred concept plan results in a manageable and sustainable ecological outcome that will not jeopardise the long term viability of threatened flora and fauna on the site.

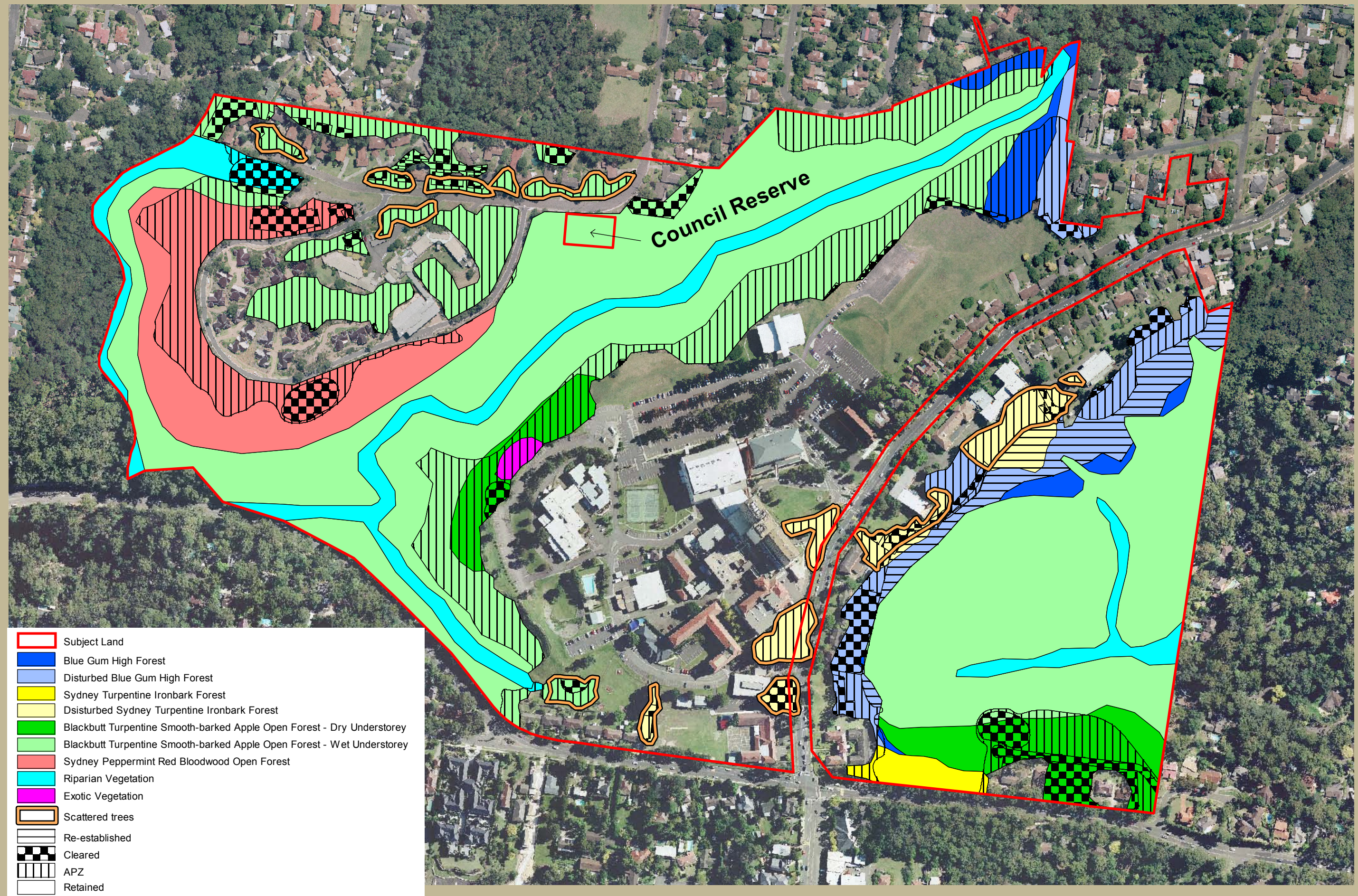
Yours sincerely



Dr David Robertson

Director

david.robertson@cumberlandecology.com.au



- Subject Land
- Blue Gum High Forest
- Disturbed Blue Gum High Forest
- Sydney Turpentine Ironbark Forest
- Disturbed Sydney Turpentine Ironbark Forest
- Blackbutt Turpentine Smooth-barked Apple Open Forest - Dry Understorey
- Blackbutt Turpentine Smooth-barked Apple Open Forest - Wet Understorey
- Sydney Peppermint Red Bloodwood Open Forest
- Riparian Vegetation
- Exotic Vegetation
- Scattered trees
- Re-established
- Cleared
- APZ
- Retained

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Figure 1. Impacts of the preferred development on Native Vegetation

