15 October 2012

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SYDNEY ADVENTIST HOSPITAL ANCILLARY BUILDING AREA: 7-PART TEST

Dear Mark,

Cumberland Ecology has been requested by Morris Bray Martin Ollman Architects to prepare an Assessment of Significance or 7-part test to assess the potential impacts on threatened ecological communities, flora and fauna of the proposed ancillary building area ('the subject site') within the Sydney Adventist Hospital site (Lot 621 DP 1128314) at Wahroonga Estate (**Figure 1.1**).

Based upon a recent site inspection as well as previous ecological assessments conducted by Cumberland Ecology for the rezoning of the Wahroonga Estate Concept Plan, the subject site is almost entirely cleared of native flora and fauna so ecological issues are minimal. The vegetation of the subject site consists largely of disturbed grassland with some scattered trees and landscaping, which provides minimal, low quality foraging habitat for native fauna. The trees present on the subject site are young (<20 m high) and lack hollows, and thus provide minimal shelter and nesting habitat for birds, bats and arboreal mammals.

No threatened flora or fauna species were recorded within the subject site. A small, degraded patch of Sydney Turpentine Ironbark Forest (STIF), a listed Endangered Ecological Community (EEC) under the TSC Act exists as scattered, remnant canopy trees along the southern and south-western edges of the subject site (**Photo 1**). Although STIF is listed as a Critically Endangered Ecological Community (CEEC) under the EPBC Act (as *Turpentine-Ironbark Forest in the Sydney Basin Bioregion*), the vegetation on the subject site is not considered to meet the listing requirements of the EPBC Act due to its small size and highly disturbed nature.

Photograph 1 **Remnant *Syncarpia glomulifera* (Turpentine), a characteristic tree species of STIF, at the southern boundary of the subject site.**

Other canopy trees on the subject site include planted trees such as *Eucalyptus microcorys* (Tallowwood) and exotic oak trees (*Quercus* sp.) along the northern and north-western edges.

The current development application (DA) will remove two exotic Oak trees (*Quercus* sp.) from a landscaped area to the north of the subject site and retain the remainder of the canopy trees present along the western and southern boundaries. Although the remnant STIF EEC is to be retained as part of the proposal, an assessment of significance (7 part test) was nonetheless prepared to assess the potential impacts of the proposal on this EEC. No significant impacts on STIF are likely as a result of the proposed DA. The details of the 7-part test are provided in **Appendix A**.

However, it is our understanding that the remnant STIF canopy trees present along the south the subject site are to be removed as part of a separate proposal for the widening of the Comenarra Parkway, which runs along the southern boundary of the subject site. The removal of the remnant STIF community for this proposed action will require its own separate Assessment of Significance to determine the impacts on the STIF EEC.

If you require further information please feel free to contact myself or Gitanjali Katrak on (02) 9868 1933.

Yours sincerely

Dr David Robertson
Director
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Coordinate System: MGA Zone 56 (GDA 94)

Legend

Subject Site

Grid North

Image Source:
Nearmaps dated 20/09/2012

CUMBERLAND ECOLOGY

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Figure 1.1. Location of the Subject Site

10 0 10 20 30 40 m

Appendix A

Assessment of Significance

A.1 Assessement of Significance – Sydney Turpentine Ironbark Forest

Sydney Turpentine-Ironbark Forest (STIF) typically occurs on the shale/sandstone boundary on the more fertile shale influenced soils, in higher rainfall areas on the higher altitude margins of the Cumberland Plain, and on the shale ridge caps of sandstone plateaus (OEH 2012). Dominant canopy trees include *Syncarpia glomulifera (*Turpentine), *Eucalyptus punctata (*Grey Gum), *Eucalyptus paniculata* (Grey Ironbark) and *Eucalyptus eugenoides (*Thin-leaved Stringybark). In areas of high rainfall (over 1050 mm per annum) *Eucalyptus saligna* (Sydney Blue Gum) is more dominant. The shrub stratum is usually sparse and may contain mesic species such as *Pittosporum undulatum* (Sweet Pittosporum) and *Polyscias sambucifolia* (Elderberry Panax).

STIF has a very highly restricted geographic distribution, and is currently estimated to cover an extant area of just over 200 ha (Tozer, 2003). Less than 5% of the original forest is intact and retains the structural integrity of the vegetation. Existing remnants continue to be threatened by clearing and weed invasion. STIF is listed as an Endangered Ecological Community (EEC) under the TSC Act (as *Sydney Turpentine-Ironbark Forest*) and a Critically Endangered Ecological Community (CEEC) under the EPBC Act (as *Turpentine-Ironbark Forest in the Sydney Basin Bioregion*).

The STIF on the subject site lacks any native shrub or groundcover species and contains 7, scattered *Syncarpia glomulifera* (Turpentine) trees, a characteristic species of the community, predominantly, along the southern and south-western edges. Other canopy trees on the subject site include planted trees such as *Eucalyptus microcorys* (Tallowwood) and exotic oak trees (*Quercus* sp.) along the northern and north-western edges.

The STIF on the subject site is considered to represent a highly degraded remnant of the community as listed under the TSC Act. However, as the vegetation covers an area of < 1 ha, it is not considered to meet the listing requirements of the EPBC Act due to its small size and highly disturbed nature.

Assessment of Significance

(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 to endangered communities.

(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 to endangered communities.

(c) in the case of an endangered ecological community or critically endangered ecological community, whether the action proposed:

(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, or

(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

The STIF vegetation on the subject site consists of 7, scattered *Syncarpia glomulifera* (Turpentine) trees, a characteristic species of the community. As these individual trees are not being removed as part of the proposal, the proposed action is considered unlikely to have an adverse affect on or substantially and adversely modify the composition or extent of the local occurrence of the STIF EEC.

(d) in relation to the habitat of a threatened species, population 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, and

The proposed action will not result in the removal of any of the remenant STIF canopy trees. No areas of habitat will become fragmented or isolated as a result of the proposed action as the subject site is surrounded by disturbed/developed lands and not interconnected to any nearby bushland and trees present are not considered to be important to the long term survival of the STIF EEC.

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

No critical habitat for the STIF EEC has been identified by the Director-General of OEH under the TSC Act. The subject site does not constitute critical habitat for this EEC.

(f) whether the action proposed is consistent with the objectives or actions of a recovery plan or threat abatement plan

No recovery plan or threat abatement plan has been prepared for STIF EEC. The main objective of recovery planning for EECs is to avoid further loss of these communities and to facilitate their recovery. The proposal is considered to be consistent with these objectives as no remenant canopy tree species are to be removed as part of the proposed action.

(g) whether the action proposed constitutes or is part of a key threatening process or is likely to result in the operation of, or increase the impact of, a key threatening process

As the proposal does not entail removal of any remnant STIF canopy tree species, the proposed action does not constitute or form part of a key threatening process and is not likely to result in the operation of, increase the impact of a key threatening process.

Conclusion

The proposed action will not result in any loss of remnant, canopy tree species that are characteristic species of the STIF EEC. Furthermore, the proposed action will not isolate or fragment any habit for STIF as the subject site is surrounded by disturbed/developed lands and not interconnected to any nearby bushland. No significant impact is predicted to occur to EEC vegetation as a result of the proposal.