

Monday, 13 January 2020

RE: RESPONSE TO SUBMISSIONS - LANDSCAPE

The following letter provides response to all submissions received that are relevant to the proposed landscape design.

COMMENT / RECOMMENDATION RECEIVED	RESPONSE
Biodiversity and Conservation Department (BCD)	
<i>2a. The BMP should be amended to specify where the single stinking Cryptocarya plant (sapling) to be removed from along the Cudgen Road boundary windrow has, or will be, translocated to, including mapping this location in Figure 4. If it has already been translocated, then the Biodiversity Development Assessment Report (BDAR) should report on how successful the translocation has been.</i>	The Cryptocarya has yet to be translocated. The proposed location of the translocated Cryptocarya will be in close proximity to the retained sapling also along the southern of site frontage boarding Cudgen Road. It will be in a similar placement in terms of its depth into the buffer and distance from the road. However, as a bush land restoration contractor has yet to be awarded and the works complete, as such the final location of the Cryptocarya will be formalised upon their advice.
<i>4a. Consideration be given to opportunities to create more 'stepping stone' habitats throughout the lawn areas of the site and elsewhere if appropriate and expand landscaping area in the south west corner and along the perimeter road are not required to be managed for bushfire asset protection</i>	<p>The current landscape design is based on a collaborative design process with project ecologist. It has been advised by the project ecologist that “from a biodiversity/habitat connectivity perspective the bio-detention basins, vegetation buffers and garden bed plantings will contribute sufficiently to the stepping-stone habitat connectivity and ‘moist corridors’ across the site.” (13th June 2019)</p> <p>Notwithstanding the above, additional landscaping to the base of tree clusters in Zone 10 will be provided for increased stepping stone habitat. This planting will:</p> <ul style="list-style-type: none"> • Be of an area equal to the mature tree canopy spread for each cluster. • Be locally indigenous native rainforest trees, shrubs and groundcovers; • Consist of only species approved by the Bushfire consultant (within the APZ) • Include habitat features such as rocks that have been salvaged from other areas of the Site (cleared windrows) that will create habitat for ground dwelling species.
<i>4b. The turf report should provide details of how many koala food trees will be planted and the locations of these plantings</i>	A total of 42 koala food trees will be planted, evenly distributed within landscape zones 7 and 10. Refer BCD4c below for further details, and “Koala Food Trees Markup” plan attached.
<i>4c. Consideration be given to planting koala food trees in the south west corner (area 7 in the landscape zonal plan (LZP)) and lawn area</i>	Planting of Koala food trees has been considered in these areas, and the following approach is proposed...

(labelled 10 in the LZP) along the northern boundary adjacent to the retained vegetation.

LZP Zone 7:

Koala food tree species Tallowwood (*Eucalyptus microcorys*) and Small-fruited grey gum (*Eucalyptus propinqua*) will be included in the species mix for vegetated buffers. This is consistent with SSD2 EIS Landscape Report (S9.12 and Plant Schedules LS-SCH-90-001) and Stage 2 BMP (Appendix B).

A total of 22 koala food trees (11 of each species) will be planted in locations as shown on the landscape zonal plan.

This is considered to be the highest canopy tree density viable to simultaneously establish diverse, dense understorey planting in accordance with agricultural buffer requirements.

LZP Zone 10:

From a bushfire perspective, use of koala feed trees is possible within this area as long as they meet the landscaping requirements of PBP Pre-release 2018. Rather than including clusters of koala feed trees, these would need to be single trees (due to requirement for 2-5 m canopy separation). Koala feed trees within the Inner Protection Area (IPA) is not recommended.

The Stage 2 BMP Appendix B recommended koala food tree species for Zone 10 are:

Primary food trees:

Tallowwood *Eucalyptus microcorys*;
Swamp Mahogany *Eucalyptus robusta*.

Secondary/supplementary food tree species:

Small-fruited grey gum *Eucalyptus propinqua*

A total of 20 Koala food trees (an even mix of available recommended species, evenly distributed throughout the zone) will be integrated into the existing tree planting general arrangement, in accordance with the above canopy separation requirements. Refer "Koala Food Trees Markup" plan attached.

Tweed Shire Council (TSC)

47. Apart from the entry courtyard and the northern courtyard there are few other public domain spaces of varying scales and functions for the use by patients, visitors, hospital staff as well as surrounding

The landscape masterplan provides a range of open spaces – diverse in their scale, aspect, and intended use (responding to adjacent hospital program).

land uses including TAFE. Rather than being located along circulation paths between the car parking areas and hospital these should be in higher amenity areas as places of retreat and relaxation to enjoy view and aspect.

For clarification, design intent for the range of spaces is provided below:

- **Green Spine;** is considered an important public domain place in its own right. In addition to its important function as a connector between car parks and hospital buildings, it is a gently grading pathway connection to a range of open space assets – including the Village Green, Aboriginal Courtyard (intimate space adjacent western lobby entry), and a series of ‘pause points’ along the eastern green spine that take advantage of elevated landscape views to the north. The location of these important destinations along primary movement paths is considered essential for their ongoing activation and for optimal CPTED outcomes.
- **Health Hub;** similarly to the Green Spine, this zone of the site provides a combination of open areas and more intimate spaces with varying microclimates. The main entry from Cudgen Rd bus stop features a small tree grove and lawn with feature tree, and opens out to the north with open lawns framed by seating walls and generous planting to the roadway edge. These lawns allow flexible use of the space for social activities and events. Places of retreat in this area include the smaller scaled lawn and seating node between the two buildings, and the Aboriginal Courtyard breaking out from the building on the far eastern edge.
- **Internal Courtyards;** range in scale and purpose – from outlook amenity to physical connection with landscape and blue sky. Their distribution throughout the building maximises opportunities for engagement with landscape.
- **Cudgen Rd Pocket Park;** the proposed pocket park immediately west of the main roadway entry provides an informal public open space that is offline from the hospital environment. We see this as an important place for those who wish to temporarily disengage from the hospital environment, and also as an offering to the surrounding neighbourhood/TAFE

<p>76. Condition B7 states “The site plan and the landscape masterplan for the Stage 2 application must include the following as identified in the approved Landscape Zonal Plan prepared by Turf Design Studio dated 03/05/2019:</p> <p>(i) details of ‘Koala food trees’ to be planted in proximity to the identified potential koala habitat locations in vegetation Zone 6 of the Biodiversity Development Assessment Report prepared by Greencap dated January 2019.”</p>	<p>(as mentioned in the comments).</p> <p>A total of 20 koala food trees are incorporated into the adjacent Zone 10 planting area (refer landscape zonal plan), spacing in accordance with canopy separation requirements for APZ.</p> <p>In addition to this, 22 Koala food trees are proposed in Zone 7, adjacent to Zone 10.</p> <p>For specific details of proposed locations for Koala food trees, please refer BCD 4c above, and “Koala Food Trees Markup” plan attached.</p>
<p>77. This condition is not clearly addressed. Koala food trees appear in broad planting species lists, but the Landscape Plans and BMP do not provide specific detail or direction on the use of these trees in the location required by this condition. It is suggested that the relevant plans are revised to provide this detail.</p>	<p>For specific details of proposed locations for Koala food trees, please refer BCD 4c above, and “Koala Food Trees Markup” plan attached.</p>

DPIE – Key Issues	
<p><u>Built form and landscaping</u> <i>The proposed landscaping on the site should also address the amenity of the users and improve the legibility of the “Green Spine” within the building as well as the car parks, consistent with the Concept Proposal.</i></p>	<p>The current proposal includes internal landscaped courtyards that continue the green spine through built form, and car park concept includes vertical greening of the car park facade, as recommended.</p>
<p><u>Built form and landscaping</u> <i>The proposed multi-decked car park should introduce further articulation through changes in massing, greater variation in materials and / or additional use of green walls.</i></p>	<p>The current car park concept includes vertical greening of the car park facade, as recommended.</p>
<p><u>Biodiversity Management</u> <i>The submitted landscape plans should be updated to include:</i></p> <ul style="list-style-type: none"> - <i>details of all proposed koala food trees, including location, species and number of plantings.</i> - <i>the mitigation measures outlined in the Concept Proposal Biodiversity Assessment Report including new and additional stepping stone habitats for the fauna in the locality, in the form of raingardens within the cleared areas of the site.</i> 	<p>Refer “Koala Food Trees Markup” plan attached.</p> <p>Refer BCD4a above for further details regarding stepping stone habitats</p>
<p><i>As recommended by the State Design Review Panel, the Department considers that the following elements should be introduced to connect the building with outdoor spaces and contribute towards a landscaped appearance of the building:</i></p>	
<ul style="list-style-type: none"> - <i>additional planting / canopy trees and landscaped elements to offset and mitigate the visual impacts of the hospital building, roads and carparks.</i> 	<p>Retained vegetation along the northern and eastern boundaries will mitigate visual impacts of the new development. Proposed vegetated buffers to the Western boundary (10m wide) and Cudgen Rd (30m wide) will significantly mitigate visual impacts of the hospital from the West and South.</p> <p>Canopy tree planting and landscaped elements within the APZ (generally zones north of the building) is currently proposed to the maximum extent that complies with APZ requirements.</p> <p>Canopy tree planting and other landscape elements throughout the site are proposed to maximise greenery and shade, whilst ensuring appropriate sight lines are maintained for safety and legibility.</p>
<ul style="list-style-type: none"> - <i>additional landscaping at the ground level improved outdoor amenity areas for patients, staff and visitors.</i> 	<p>Refer response provided for Tweed Shire Council (item 47), providing additional information regarding outdoor amenity areas proposed.</p>

- *a feasible walking loop within the site.*

A range of walking routes / loops have been provided – refer design report page 35 for examples of typical circuits that have been provided (ranging in distance and experience).

These responses have been developed in collaboration with the consultant team, in particular Greencap (Ecologist) and GeoLINK (Bushfire Consultant). If any further information or clarification is required we would be happy to assist.



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8. LANDSCAPE MASTERPLAN

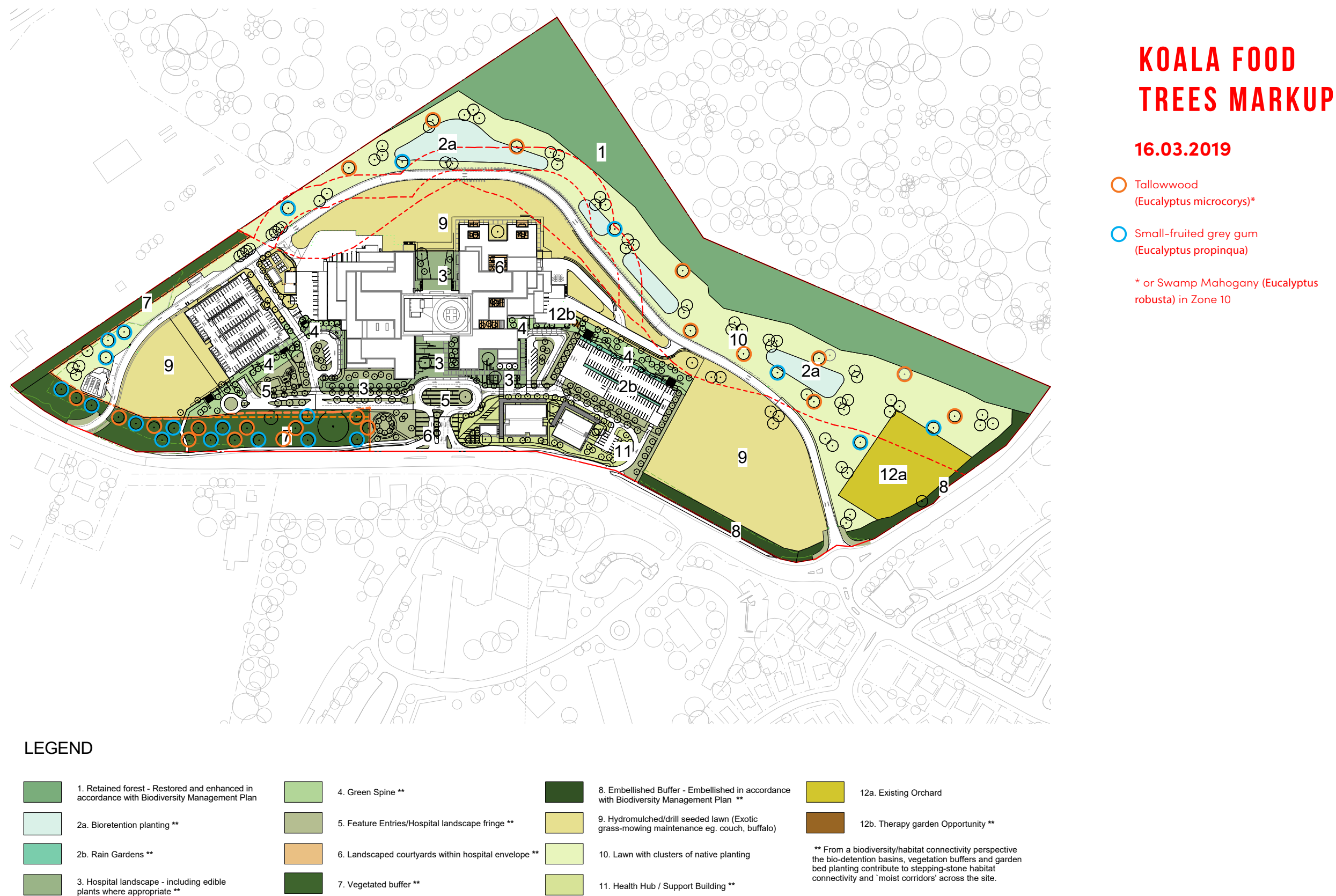


Fig 8.1 Landscape Zonal Plan