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KINGS FOREST RESIDENTIAL DEVELOPMENT RESPONSE TO THE NSW DEPARTMENT OF PLANNING & ENVIRONMENT RECOMMENDED CONDITIONS OF APPROVAL FOR PART 3A SECTION 75W MODIFICATION APPLICATION (MP08_0194 MOD 4)

FEBRUARY 2019

A REPORT PREPARED FOR PROJECT 28 PTY LTD

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1 Introduction

James Warren & Associates have been engaged by Project 28 Pty Ltd to prepare a report which addresses the New South Wales Department of Planning & Environment Part 3A 75W Modification Assessment (MP08_0194 MOD 4).

The background to the report is as follows:

- The Kings forest Concept Plan was approved in 2010;
- The Kings Forest Stage 1 Major Project Application MP08_0194 was approved in 2013:
- EPBC Act approval 2012/6328 was issued by the Commonwealth Department of Environment in 2015;
- Reconciliation of Commonwealth and NSW approval conditions as they related to the Koala Plan of Management (KPoM) and Wallum sedge frog Management Plan (WSFMP) occurred during 2015, 2016, 2017 and 2018;
- Project 28 lodged a section 75W modification request (MP08_0194 MOD 4) in June 2017 seeking approval to implement a revised KPoM and amend a series of conditions within this KPoM;
- A revised MOD 4 (including the KPoM and RTS) was placed on exhibition in June 2018;
- NSW DoPE provided consolidated submissions to Project 28 in September 2018;
- The NSW DoPE MOD 4 assessment report and recommended conditions of approval were provided to Project 28 in December 2018;
- The MOD 4 assessment report considered submissions from NSW Office of Environment & Heritage (OEH), Tweed Shire Council (TSC) and Team Koala (local interest group). DoPE also considered advice provided to them by their consultant Dr Steven Ward; and
- The DoPE report noted that:
 - the proponent has appropriately responded to the key issues raised by the independent expert (Ward) as well as issues raised in public and agency submissions;
 - that while the key issues have been appropriately addressed, further revisions to the KpoM are required to address the recommendations contained the the DoPE report; and
 - the modification request is referred to the Independent Planning Commission (the Commission) for determination.

It is the further revisions referred to above and the recommended conditions of approval which are subject to analysis in this report. The agency submissions are discussed in Section 2 of this report.

2 RESPONSES TO NSW DOPE RECOMMENDATIONS

The DoPE evaluation of submissions from OEH, TSC, Team Koala and Dr Steven Ward has resulted in the following statement in the DoPE report to the IPC:

"While the key issues associated with the proposal have been appropriately addressed, further revisions to the KPoM are required to address the recommendations contained in this report. This includes securing the delivery and timing of the offsets, verifying mapping, ensuring Koala fencing is appropriately located and updating the Contingency Strategy. The Department's assessment, therefore, concludes the modification request is approvable, subject to conditions (outlined in **Appendix D**)."

Appendix D is the recommended DoPE Modification of Project Approval instrument.

Project 28 does not raise any issues with many of the recommended conditions contained in the Modification of Project Approval instrument. The conditions which are problematic to Project 28 are discussed below:

2.2 CONDITION A18

2.2.1 DoPE Recommendation

(a) Schedule 2 Administrative Conditions, Condition A18 is amended by the insertion of the <u>bold and underlined</u> words and deletion of the <u>struckout</u> words/numbers as follows:

Recommended Condition

A18.

- 1. Despite any other condition of the Project Approval, but subject to sub-conditions (2)-(5) below, a construction certificate may be issued under the Project Approval for Investigatory and Monitoring Work relating to the works authorised by this Project Approval. Any other conditions precedent imposed by this Project Approval for the issue of a construction certificate do not apply to a construction certificate issued pursuant to this condition.
- 2. A construction certificate issued pursuant to this condition must not authorise work that is the use of heavy duty equipment for the purpose of breaking ground for bulk earthworks or infrastructure.
- 3. Prior to the issue of a construction certificate pursuant to this condition for any works, the Environmental Management Plans referred to in conditions 40, 41, 42, 43, 44, $45\underline{A}$, 47 and the Summary of Management Plans referred to in condition 48 of this Project Approval must be submitted to the Secretary in accordance with those conditions.

- 4. A construction certificate pursuant to this condition for any clearing of vegetation must not be granted prior to the approval of the Environmental Management Plans referred to in conditions 40, 41, 42, 43, 44, 45<u>A</u>, 47 and the Summary of Management Plans referred to in condition 48 of this Project Approval by the Secretary.
- 5. Any work authorised by a construction certificate issued pursuant to this condition must be consistent with the Environmental Management Plans submitted to the Secretary in accordance with sub-condition (3) above and any approved Environmental Management Plans.

2.2.2 Response

On the 24th January 2019 Construction Certificate application No. 1 for the Kings Forest Stage 1 Major Project Approval 08_0194 (as modified) for preliminary monitoring and investigation work was submitted to Civil Certification (Mr Mike Shaw). It is anticipated that Mr Shaw will issue a Construction Certificate prior to determination of MOD 4 by the NSW IPC. No change is sought by Project 28 in relation to condition A18. However, Project 28 does (later in this document) propose a change in the related new proposed condition 45C.

2.3 Condition 45(6)

2.3.1 DoPE Recommendation

(b) Schedule 2 Part Two - Bulk Earthworks and Civil Works (All Precincts), Condition 45- Koala Plan of Management is amended by the insertion of the <u>bold and underlined</u> words and deletion of the <u>struckout</u> words/numbers as follows:

Recommended Condition

Koala Offsets

- 6. The following offsets must be provided to compensate for the loss of 1.59 ha of primary and 6.42 ha of secondary (Class A) koala habitat on-site:
- a) the restoration and planting of koala food trees on 27 ha of land within Cudgen Nature Reserve; or where the full 27 ha cannot be planted within Cudgen Nature Reserve, the balance of the koala food tree planting will be undertaken on other lands in a Koala Activity Precinct or Koala Linkage Precinct in the Tweed Shire Council local government area, as approved by the Secretary.
- b) the creation of 6.26 ha of compensatory koala habitat within the east-west corridor
- c) the creation of 62.51 ha of compensatory koala habitat on residual lands on-site
- d) the on-site compensatory koala habitat, inclusive of the east-west corridor must comprise:

i. 65.44 ha of primary koala habitat;

ii. 3.33 ha of secondary koala habitat; and

iii. the planting of primary and secondary koala food trees.

2.3.2 Response

The introductory text indicates that it is intended to insert the text as a new condition 45 (replacing the existing condition 45). However, the new text begins with a number '6'. This appears to be an error. The number '6' should be replaced with a '1' to avoid confusion with the unrelated condition 6.

In response to point a) above, the amended condition does not allow for the <u>entire</u> 27 hectares to be planted outside of the Cudgen Nature Reserve, <u>does not allow for the planting to occur on the Kings forest site itself</u>, nor does it allow for financial offsetting as prescribed in the Biodiversity Offsets Scheme of 2016.

It should be recognised that OEH is unlikely to allow Project 28 to carry out planting in the Cudgen Nature Reserve (this has been the OEH"s position in separate negotiations over a planning agreement for the dedication of additional land to the reserve). Project 28 has been negotiating a planning agreement with the OEH for the dedication of lands to the nature reserve for the past two years. This process has been costly and prolonged. The agreement is still not resolved. Accordingly, even if the planting is to be carried out in the Cudgen Nature Reserve, it will be carried out by the OEH on the basis of a financial contribution by Project 28. The condition does not transparently say this. Instead it creates an obligation for Project 28 to carry out the planting on land that it does not own and to which it does not have access. It leaves the nature of the financial contribution that Project 28 would need to make to OEH to secure its cooperation undetermined.

Project 28 submits that it should not be put in a position where it needs to negotiate a new planning agreement with OEH. If offsetting is to be achieved, (wholly or in part) by planting in the Cudgen Nature Reserve, the obligation to carry out this work should not be placed on Project 28 (as the OEH's preference is that Project 28 not be permitted to carry out such work itself). Instead, any required planting in the Cudgen Nature Reserve should be expressed as a monetary contribution — calculated objectively on the basis of the methodology of averaging quotes from two restoration specialist (approved by the Secretary) to plant and maintain to sustainability Koala food trees at a density of 1/9m².

It should be noted that I have recently been informed by OEH that only a small area of land is now available for Koala food tree planting in the Cudgen Nature Reserve. This means that the condition relating to planting in the Cudgen Nature Reserve is ineffective. This means that most, if not all, of the 27 ha must be found in a KAP or

KLP in the Tweed Shire LGA. OEH have indicated that they are unable to assist Project 28 and they will need to contact TSC for assistance. If Tweed Shire Council are unable to assist then Project 28 may have no option but to plant the 27 hectares on the Kings Forest site. An allowance for this option must be contained in this part of the condition.

Point d)i. above, relates to the area and type of Koala habitat to be planted in the compensatory habitat areas. Before discussing this matter, it should be noted that in 2014 (during the Commonwealth assessment phase) Project 28 engaged Terrestria to prepare a Pre-clearing map of the Kings Forest site i.e. mapping of the original site vegetation. This map would allow Project 28 to determine what PCT (Koala Habitat) could be regrown in the most suitable location. Groundwater modelling was also completed to allow predictions of post development groundwater levels as this may have implications for the selected re-planting strategy.

During the exhibition and submission stages in 2017/18, Tweed Shire Council insisted that the planting methodology be varied to allow for:

- The planting of high densities of primary koala food tree species (i.e. Forest red gum) at the expense of those listed in the plant communities which research showed were preferable for planting in the designated compensatory habitat areas; and
- The increase in the density of the actual tree plantings from 1 tree/25 m² to 1 tree/9 m² with no plantings of shrubs or groundcovers.

The aim was to significantly increase the number of primary browse species in the compensatory habitat areas, with reliance on the natural regeneration of shrubs and groundcovers over time. Specifically, TSC insisted that high densities of Forest red gum be planted, despite this species not having been previously recorded in these areas of the site or indicated in pre-clearing mapping (Terrestria 2014). The condition mandates the quantum (65.44 ha) of primary habitat to compensate for the loss of 1.59 ha of primary habitat on the basis that Project 28 Pty Ltd is agreeing to the planting of Forest red gum (FRG) and Swamp mahogany in large numbers, the FRG to be planted in areas where Scribbly gum originally occurred. Project 28 may not be able to comply with this condition, regardless of their best efforts, because FRG may simply not be suited to the conditions. If the FRG plantings fail, then Project 28 can never be compliant.

Project 28 have therefore commissioned a report on the viability of FRG plantings within the proposed compensatory habitat planting areas. A report by Terrestria (February 2019) is attached as **APPENDIX 1**. The findings of this report are that FRG will be unlikely to be viable in certain areas of the proposed compensatory habitat.

JWA Pty Ltd have subsequently analysed the findings of the Terrestria report with consideration of the Post Development Groundwater Modelling Report (Gilbert and Sutherland 2014). The following methodology was utilised:

- Terrestria Figure 4 'Likelihood of Eucalyptus tereticornis establishing' was overlayed on the Koala compensatory habitat mapping to allow categorisation of each Koala compensatory habitat type into likely, possible and unlikely to be suitable for FRG plantings;
- The resultant areas were then overlayed with pre-development and postdevelopment groundwater levels and the difference between pre-development and post-development groundwater levels was then calculated;
- Pre-development and post-development groundwater levels were categorised as either wet (0 to 1m depth to groundwater) or dry (1m to >2m depth to groundwater); and
- Each area of Koala compensatory habitat considered likely, possible and unlikely
 was then assessed to determine which areas will become wetter postdevelopment and therefore less suitable for FRG establishment.

Results of the JWA assessment are provided in **APPENDIX 2**. The results of the analysis showed the following:

- 9.69 ha was likely to be suitable for Forest red gum;
- 30.74 ha was suitable for Swamp mahogany;
- 25.01 ha was possibly suitable for Forest red gum and therefore we contend that secondary species such as Scribbly gum and Pink bloodwood would be viable as they have been recorded in these areas of the site;
- 3.33 ha was suitable for secondary Koala food trees only.

Although the table in **APPENDIX 2** shows that 15.52 ha is likely to be suitable for Forest red gum 5.83 ha of this 15.52 ha is already designated for the primary food tree Swamp mahogany.

The recommended condition does not allow for any long term failures of FRG. This is not acceptable given the scientific advice states that FRG has a likelihood of failure in some areas of the compensatory habitat. The condition should, therefore, be based on these scientifically derived planting areas of primary and secondary habitat.

In summary, it should be understood that the recommended condition will expose Leda to an unreasonable economic risk that is not justified by the available scientific information.

Further discussion of this matter is contained under "45 A (8). Contingency and Offset Strategy."

2.3.3 Requested Amended Condition

Amend the proposed Condition 45(6) as follows:

- 1. The following offsets must be provided to compensate for the loss of 1.59 ha of primary and 6.42 ha of secondary (Class A) koala habitat on-site:
- a) the creation of 6.26 ha of compensatory koala habitat within the east-west corridor
- b) the creation of a minimum of 62.51 ha of compensatory koala habitat on residual lands on-site
- c) the on-site compensatory koala habitat, inclusive of the east-west corridor must comprise:
- i. 9.69 ha of primary koala habitat (Forest red gum dominant);
- ii. 30.74 ha of primary koala habitat (Swamp mahogany dominant);
- iii. 25.01 ha of primary koala habitat (Forest red gum/secondary species); and
- iv. 3.33 ha of secondary koala habitat.
- d) the restoration and planting of koala food trees on 27 ha of land within Cudgen Nature Reserve; or where the full 27 ha cannot be planted within Cudgen Nature Reserve, the entire or balance of the koala food tree planting will be undertaken on other lands in a Koala Activity Precinct or Koala Linkage Precinct in the Tweed Shire Council local government area or on the Kings Forest site, as approved by the Secretary.
- e) consistent with the provisions of the Biodiversity Conservation Act (BCA) (2016), Project 28 maintain the right to provide a full or partial financial settlement of their off-site offset obligation. The amount to be determined by averaging quotes from two restoration specialists (approved by the Secretary) to plant and maintain to sustainability Koala food trees at a density of 1/9m² in 27 ha of land identified by Project 28 as being suitable for the purpose.
- f) The financial contribution referred to in e) is to be calculated by averaging the two quotes as described in e) above, according to the area of land that the OEH confirms that it intends to restore and plant within the Cudgen Nature Reserve (and does not apply if no areas are to be restored and planted). If the OEH does not confirm this area of land in writing to the proponent by the end of July 2019 then, in the absence of an agreement between the proponent and OEH, it should be taken (for the purposes of this approval) that none of the 27 ha can be restored and planted within the Cudgen Nature Reserve. Once the area has been confirmed by the OEH it may be varied in writing by the OEH, but only with the written agreement of the proponent.

2.4 Condition 45(7)

2.4.1 DoPE Recommendation

Recommended Condition

7. All compensatory koala habitat must be located in the areas identified in the updated Koala Plan of Management approved by the Secretary under Condition 45A of this approval.

2.4.2 Response

This is supported, subject to an administrative issue. This paragraph would be the second paragraph of recommended Condition 45A. Accordingly, it should be labelled '2', rather than '7'.

2.4.3 Requested Amended Condition

2. All compensatory koala habitat must be located in the areas identified in the updated Koala Plan of Management approved by the Secretary under Condition 45A of this approval.

2.5 Condition 45A(1a)

2.5.1 DoPE Recommendation

(c) Schedule 2 Part Two - Bulk Earthworks and Civil Works (All Precincts), insert new Condition 45A - Koala Plan of Management Update(s) after Condition 45 as follows:

Recommended Condition

45A Koala Plan of Management Update(s)

Prior to the issue of any Construction Certificate, the Proponent must submit an updated Koala Plan of Management to the Secretary for approval. The updated Koala Plan of Management must address the following:

- 1. Verification of Habitat and Vegetation Mapping
- a) the boundaries of the retained koala habitat and the compensatory koala habitat identified in Figures 19 to 21 of the Koala Plan of Management dated 4 October 2018,



2.5.2 Response

No objections subject to correction of the typographical error - 'within' should be 'with'.

2.5.3 Requested Amended Condition

45A Koala Plan of Management Update(s)

Prior to the issue of any Construction Certificate, the Proponent must submit an updated Koala Plan of Management to the Secretary for approval. The updated Koala Plan of Management must address the following:

- 1. Verification of Habitat and Vegetation Mapping
- a) the boundaries of the retained koala habitat and the compensatory koala habitat identified in Figures 19 to 21 of the Koala Plan of Management dated 4 October 2018, must be verified by a suitably qualified independent ecologist, with skills in GIS mapping; and

2.6 Condition 45A(1c)

2.6.1 DoPE Recommendation

Recommended Condition

- c) the updated KPOM must include GIS shapefiles, including metadata describing each shapefile and what it represents, and how each polygon is coded for the following GIS layers:
- i. retained koala habitat;
- ii. compensatory koala habitat;
- iii. retained Wallum Sedge Frog habitat;
- iv. compensatory Wallum Sedge Frog habitat;
- v. retained heathland;
- vi. heathland regeneration areas; and
- vii. any other conservation outcomes affecting the implementation of the Koala Plan of Management.

Note: For clarity, the management outcomes identified within the GIS layers required under b) iii) to v) above will not form part of the final Koala Plan of Management approved by the Secretary.

These layers will be used to confirm:

- there are no overlaps between the retained and compensatory koala habitat, or the compensatory Wallum Sedge Frog habitat as outlined in Section 10.5.3 of the Koala Plan of Management dated 4 October 2018, and
- overlaps between the compensatory koala habitat and heathland regeneration areas do not exceed 10% of the total on-site offset area, as identified in the Koala Plan of Management dated 4 October 2018.

2.6.2 Response

There is an error in the **Note** i.e. the reference should be to c) iii) to vi) **not** b) iii) to v).

2.6.3 Requested Amended Condition

- c) the updated KPOM must include GIS shapefiles, including metadata describing each shapefile and what it represents, and how each polygon is coded for the following GIS layers:
- i. retained koala habitat:
- ii. compensatory koala habitat;
- iii. retained Wallum Sedge Frog habitat;
- iv. compensatory Wallum Sedge Frog habitat;
- v. retained heathland;
- vi. heathland regeneration areas; and

vii.any other conservation outcomes affecting the implementation of the Koala Plan of Management.

Note: For clarity, the management outcomes identified within the GIS layers required under c) iii) to v) above will not form part of the final Koala Plan of Management approved by the Secretary.

These layers will be used to confirm:

- there are no overlaps between the retained and compensatory koala habitat, or the compensatory Wallum Sedge Frog habitat as outlined in Section 10.5.3 of the Koala Plan of Management dated 4 October 2018, and



- overlaps between the compensatory koala habitat and heathland regeneration areas do not exceed 10% of the total on-site offset area, as identified in the Koala Plan of Management dated 4 October 2018.

2.7 Condition 45A(2)

2.7.1 DoPE Recommendation

Recommended Condition

2. Offsite Offset

Update Section 10 of the Koala Plan of Management dated 4 October 2018, to include a framework for securing and implementing the 27 ha off-site required under Condition 45A above. This framework must specify:

- a) That 27 ha of koala food tree planting will be undertaken in Cudgen Nature Reserve, and where the full 27 ha cannot be planted in Cudgen Nature Reserve, the balance of the koala food tree planting will be undertaken on other lands within a Koala Activity Precinct or Koala Linkage Precinct in the Tweed Shire Council local government area;
- b) If 27 ha of suitable land is not identified within the Cudgen Nature Reserve prior to the issue of the first Construction Certificate for either vegetation clearing or bulk earthworks, the Proponent will request the Secretary's approval to undertake any residual koala food tree planting on an alternate site within a Koala Activity Precinct or Koala Linkage Precinct within the Tweed Shire Council local government area. Any request to undertake koala food tree planting outside Cudgen Nature Reserve must be lodged within six months of the issue of the first Construction Certificate permitting vegetation clearing or bulk earthworks;
- c) All koala food tree planting that will occur:
- i. in Cudgen Nature Reserve must commence within 24 months of the OEH identifying the lands available for koala food tree planting;
- ii. in an alternate offset location as approved by the Secretary pursuant to Condition 45 of this approval, planting must commence within 24 months of the Secretary approving an alternate offset location; and
- d) all off-site koala food tree planting will be finalised within 3 years of planting commencing in accordance with c) above; and
- e) the mechanisms required to secure the in-perpetuity conservation of any koala food tree planting(s) located outside Cudgen Nature Reserve.

2.7.2 Response

A response to 2. a) has been provided in Section 2.3.2 above.

Changes are proposed in line with earlier comments.

As Project 28 is unlikely to be given access to Cudgen Nature Reserve to carry out planting, it is not appropriate for the project approval to try and regulate the timing of any planting in the Cudgen Nature Reserve. The project approval only binds the proponent of a development, it does not bind the OEH.

Accordingly, inasmuch as there will be planting in the Cudgen Nature Reserve, the project approval should merely regulate the timing of the financial contribution that would be paid by the proponent to the OEH.

2.7.3 Requested Amended Condition

2. Offsite Offset

Update Section 10 of the Koala Plan of Management dated 4 October 2018, to include a framework for securing and implementing the 27 ha off-site required under Condition 45A above. This framework must specify:

- a) that a financial contribution (in accordance with condition 45A) is to be made to OEH for the 27 ha of koala food tree planting in:
- Cudgen Nature Reserve; or
- Where none (or only part) of the 27 ha can be planted within Cudgen Nature Reserve (in accordance with condition 45A) the entire (or balance) of the koala food tree planting will be undertaken on other lands in the Tweed Shire Council local government area either: in a Koala Activity Precinct, Koala Linkage Precinct or on the Kings forest site as approved by the Secretary;
- b) if the full 27 ha of suitable land is not identified within the Cudgen Nature Reserve (in accordance with condition 45A), the Proponent will request the Secretary's approval to undertake the full (or part) koala food tree planting on an alternate site, within the Tweed Shire Council local government area, either: in a Koala Activity Precinct or Koala Linkage Precinct, or on the Kings Forest site, as approved by the Secretary. Any request to undertake koala food tree planting outside Cudgen Nature Reserve must be lodged within thirty-six months of the issue of the first Construction Certificate permitting vegetation clearing or bulk earthworks;
- c) that if koala food tree planting is to occur in the Cudgen Nature Reserve, the financial contribution required under condition 45A must be paid within 36 months of the date by which confirmation must be given by the OEH under condition 45A;
- d) that all koala food tree planting that is to occur in an alternate offset location as approved by the Secretary pursuant to condition 45A of this approval, must commence within 36 months of the Secretary approving an alternate offset location;
- e) that all off-site koala food tree planting will be finalised within 5 years of planting commencing in accordance with d) above; and

f) the mechanisms required to secure the in-perpetuity conservation of any koala food tree planting(s) located outside Cudgen Nature Reserve.

2.8 Condition 45A(3)

2.8.1 DoPE Recommendation

Recommended Condition

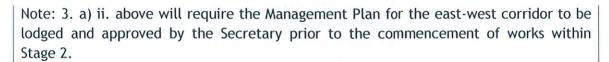
- 3. Staging of Retained and Compensatory Koala Habitat
- a) Update the Staging Plan in Table 10 of the Koala Plan of Management dated 4 October 2018, to:
- i. ensure compensatory koala habitat is provided at a ratio of at least 1:8.6 for each stage of the project where koala habitat clearing is proposed;
- ii. require koala food tree planting within the east-west corridor prior to the commencement of works within Stage 2; and
- i. clarify all retained koala habitat will be managed in accordance with the approved Vegetation Management Plan following the commencement of the project, as per the requirements of Condition A13.
- Note: 3. a) ii. above will require the Management Plan for the east-west corridor to be lodged and approved by the Secretary prior to the commencement of works within Stage 2.

2.8.2 Response

There appears to be a numbering error i.e. should be i. ii. iii. not i. ii. i.

2.8.3 Requested Amended Condition

- 3. Staging of Retained and Compensatory Koala Habitat
- a) Update the Staging Plan in Table 10 of the Koala Plan of Management dated 4 October 2018, to:
- i. ensure compensatory koala habitat is provided at a ratio of at least 1:8.6 for each stage of the project where koala habitat clearing is proposed;
- ii. require koala food tree planting within the east-west corridor prior to the commencement of works within Stage 2; and
- iii. clarify all retained koala habitat will be managed in accordance with the approved Vegetation Management Plan following the commencement of the project, as per the requirements of Condition A13.



2.9 Condition 45A(4)

2.9.1 DoPE Recommendation

Recommended Condition

- 4. Vegetation Management
- a) Update Appendix 6 of the Koala Plan of Management dated October 2018, to specify:
- i. the performance indicators, performance criteria and corrective actions only apply to the compensatory koala habitat (i.e. the koala offset plantings)
- ii. the following Biodiversity Assessment method (BAM) vegetation integrity scores for each vegetation zone must be achieved for the relevant plant community types: composition 100, structure 50, and function 25;
- iii. where natural regeneration of native shrub and groundcover species has not occurred within the first 7 years of management, planting of suitable native shrub and groundcovers will be undertaken to achieve compliance with the vegetation integrity scores for each plant community type (PCT);
- iv. the management measures required to ensure the removal of slash pine will not result in the clearing of retained koala habitat;
- v. the tree species selection and planting densities for all planting proposed within the off-site offset area; and
- vi. the details of any on-going monitoring and management measures, and the standards for achievement for all off-site koala food tree planting.

2.9.2 Response

Conditions 4. a) ii. and iii. relate to the performance of the compensatory habitat over time. Any discussion of these conditions must consider the issues raised in Response 2.3.2.

Condition 4. a) ii. Refers specifically to Vegetation Integrity Scores (VIS) as described in the Biodiversity Assessment Methodology (BAM). As background, importantly, it should be re-stated that TSC required Project 28 to plant high densities of the primary Koala food tree Forest red gum. TSC stated that Project 28 would not be required to plant shrubs and groundcovers because of the density of tree plantings. TSC stated that the shrubs and groundcovers would colonise naturally over time.

In relation to performance, monitoring methodology requires the use of the Biodiversity Assessment Methodology (BAM). As part of the BAM certain data must be input to determine Vegetation Integrity Scores (VIS). Composition, Structure and Function are the three metrics utilized to determine the VIS. If a full complement of these metrics are found during monitoring then the VIS will be 100:100:100. Perfect VIS scores are only achievable when the PCT reaches maturity (possible >50 years). Composition is a measure of all species in the canopy, shrub (midstorey) and ground layer components. As Project 28 will not be planting shrubs and groundcovers, a composition score of 100 is not achievable. To allow for the lack of shrubs and groundcovers in the structural (or first) part of the VIS, Project 28 (and TSC) recommended a composition score of 25. The lack of maturity of the planted communities also mean that lower scores are recommended for Structure and Function as well.

Conditions 4. a) ii. and iii. do not recognise the differentiation between:

- 1. areas where natural regeneration of shrubs and groundcovers is occurring; and
- 2. areas where natural regeneration of shrubs and groundcovers is poor.

If shrubs and groundcovers are regenerating naturally then the VIS score for composition are likely to be achieved in the short to medium term, but, if there is no or little recolonization of shrubs and groundcovers due to high density tree plantings then the composition VIS score of 100 will not be reached (if ever) for a very long time.

The only way to allow for this poor performance is to allow for an "adapted assessment" to be completed, whereby benchmark shrub and groundcover data, with reference to relevant Plant Community Type, is entered automatically. This method was included in the KPoM in the event that the increased tree planting density requested by OEH and TSC (i.e. 1 tree per 9 m²) resulted in the shading-out of naturally regenerating shrubs and groundcovers.

Condition 4. a) iii. refers to the planting of shrubs and groundcovers if, after 7 years the VIS scores have not been achieved. This condition is contrary to the stated position when Project 28 agreed to plant high densities of Forest red gum i.e. that there would be no need to plant shrubs or groundcovers if high densities of Forest red gum were planted.

Project 28 are strongly of the view that they should not be required to plant shrubs or groundcovers for the following reasons:

- Project 28 (until 2018) proposed to plant trees, shrubs and groundcovers as integral to the restoration of Plant Community Types (PCT's) which mimicked the pre-clearing vegetation types.
- TSC (and OEH) insisted on replacing this proposal with the proposal to plant high densities of primary food trees, especially Forest red gum.

- This high density would provide substantially more food trees than previously proposed.
- The high density of primary food tree plantings would make the planting of shrubs and groundcovers impractical.
- TSC, OEH and DoPE agreed that no shrubs or groundcovers would be planted.
- Project 28 agreed to amend their planting proposal on the basis that there would be no shrub or groundcover plantings.
- It should be noted that TSC recommendation of Composition 25, Structure 50 and Function 25 has not been adopted in the MOD 4 conditions.

The Recommended condition above requires Project 28 to plant shrubs and groundcovers if they do not colonise naturally. Project 28 are, therefore, being required to correct failures of a proposal that they did not develop. It would be safer and more cost effective for Project 28 to revert to their original proposal to plant the tree, shrub and groundcover components of the pre-clearing PCT's, at a sustainable density.

The Recommended condition also states as follows:

the following Biodiversity Assessment method (BAM) vegetation integrity scores for each vegetation zone must be achieved for the relevant plant community types: composition 100, structure 50, and function 25;

It should be noted that TSC recommendation of Composition 25, Structure 50 and Function 25 has not been adopted in the Recommended conditions.

The above condition 4. a) v. and vi. requires details of the offsite offset planting area which can only be provided once the site has been selected. A detailed discussion of the off-site offset matters is contained in Section 2.3.2 and 2.3.3.

2.9.3 Requested Amended Condition

- 4. Vegetation Management
- a) Update Appendix 6 of the Koala Plan of Management dated October 2018, to specify:
- i. the performance indicators, performance criteria and corrective actions only apply to the compensatory koala habitat (i.e. the koala offset plantings)
- ii. the following Biodiversity Assessment method (BAM) vegetation integrity scores for each vegetation zone must be achieved for the relevant plant community types: composition 25, structure 50, and function 25;
- iii. where the relevant vegetation integrity scores have not been achieved within the first 7 years of management, planting of suitable growth forms eg. trees, shrubs or

groundcovers will be undertaken to achieve compliance with the vegetation integrity scores (as described in ii above) for each plant community type (PCT);

- iv. the management measures required to ensure the removal of slash pine will not result in the clearing of retained koala habitat;
- v. at the appropriate time, the tree species selection and planting densities for all planting proposed within the off-site offset area will be provided to the Department for the Secretary's approval; and
- vi. at the appropriate time, the details of any on-going monitoring and management measures, and the standards for achievement for all off-site koala food tree planting will be provided to the Department for the Secretary's approval.

2.10 Condition 45A(8)

2.10.1 DoPE Recommendation

Recommended Condition

- 8. Contingency and Offset Strategy
- a) Revise section 13.1 of the Koala Plan of Management dated 4 October 2018, to specify:

Contingency Measures for the establishment of the Compensatory Koala Habitat

- i. offsets will be provided on a pro-rata basis, for any compensatory koala habitat that does not meet the maintenance period performance targets within 10 years; and
- ii. identify the timing for providing any offsets required to achieve consistency with i) above.

Contingency Measures to Address a Decline in Koala Numbers On-Site

- iii. a bond or bank guarantee must be provided for the implementation of suitable conservation measures in the event there is a statistically significant decline in koala numbers on-site until five years after the project is complete;
- iv. the sum of the bond must be agreed by the Secretary prior to the issue of the first Construction Certificate permitting the clearing of vegetation on-site; and
- v. the bond must be paid to and held by the Secretary from the issue of the first Construction Certificate permitting the clearing of vegetation, until five years after the project is complete and the Proponent has demonstrated that there has been no statistically significant reduction in koala number on-site to the satisfaction of the Secretary.



2.10.2 Response

Condition 8 a) i. relates to the provision of pro rata compensatory Koala habitat if part of the compensatory habitat fails to reach maintenance period performance targets. Obviously, an important component in this performance will be the shrubs and groundcovers. As discussed above in Section 2.9.2 Project 28 do not agree with the amended condition relating to the requirement to plant shrubs and groundcovers if they do not naturally regenerate within seven years. The proposal to plant high densities of primary food trees in areas of the site where other species occurred, prior to European intervention, is not attributed to Project 28. Project 28 has included the high density Forest red gum planting program based on the recommendation of Tweed Shire Council and DoPE. The continued replacement of primary food tree species which fail in areas of the site where the pre-clearing assessment showed they did not occur, is not warranted. The condition needs to reflect the possibility that the high densities of primary food trees may suffer high failure rates regardless of the best endeavours of Project 28.

There is a high likelihood that self-thinning of high density (1 tree/9m²) tree plantings will occur within the first ten years. It is pointless to continually replace trees that fail because of the high density of planting. The contingency measure should be based on an ultimate aim to achieve sustainable densities of Koala food trees. Baseline tree planting density information should be collected from the accepted pre-clearing vegetation types e.g. *Eucalyptus racemosa* (Scribbly gum) forest and woodland. This data should be collected prior to the commencement of any Koala compensatory habitat plantings. The contingency measure should state that re-plantings would occur whenever the tree density falls below the baseline densities. Obviously, there is a good likelihood that the baseline densities will be exceeded at the 10 year stage. As discussed in Section 2.3.2 Project 28 believe that, in accordance with the BCA 2016, they should be able to provide a financial settlement to any compensatory habitat areas where there has been long term (10 years) non-compliance with performance criteria.

Condition 8 a) iii. refers to the possibility of the significant reduction in Koala occupancy rates over time.

It is important to note that the Tweed Coast Endangered Koala population is under threat of extinction. This is the case prior to commencement of the Kings Forest development. It will be impossible to determine the role of the Kings Forest development (if any) in an ultimate extinction of the population (should such an event arise). It is, therefore, impractical and unfair to require Project 28 to provide a large sum of bond money to be lost to Project 28 if extinction occurs. Just because Koala occupancy rates decline on the Kings Forest site in no way means that the Kings Forest development is specifically the cause of the decline. A wider (Tweed Coast) decline trend would ultimately cause a decline on the Kings Forest site, just as it has on the Koala Beach site near Pottsville to the south.

This matter is particularly moot given the low numbers of food trees being removed for the development and the significant numbers of trees being planted in compensation.

2.10.3 Requested Amended Condition

- 8. Contingency and Offset Strategy
- a) Revise Section 13 of the Koala Plan of Management dated 4 October 2018, to specify:

Contingency Measures for the establishment of the Compensatory Koala Habitat

- i. offsets will be based on the baseline tree density data for the relevant pre-clearing PCT in the locality. This data will be collected during the baseline surveys prior to commencement. Tree density must be a minimum of the pre-clearing PCT densities and meet all maintenance period performance targets within 10 years. If any or part of compensatory koala habitat does not meet the maintenance period performance targets within 10 years then a financial contribution may be made to settle the offset obligation. The financial settlement to be determined as described in 2.3.3; and
- ii. identify the timing for providing any offsets required to achieve consistency with i) above.

Contingency Measures to Address a Decline in Koala Numbers On-Site

- iii. An investigation of threatening processes, an assessment of the success of management strategies and consultation with all stakeholders will commence immediate upon monitoring showing that there has been a statistically significant decline in koala occupancy rates on the Kings forest site. This contingency measure will in force until the completion of the project; and
- iv. a report containing recommendations will be prepared and lodged with the Department, OEH and Tweed Shire Council.

2.11 Condition 45A(9)

2.11.1 DoPE Recommendation

Recommended Condition

- 9. Administrative Changes
- a) remove all references to a "horticultural or environmental specialist" confirming "substantial establishment" of compensatory koala habitat has occurred, and replace them with references to a "an independent restoration ecologist approved by the Secretary";
- b) remove all references to the Proponent forfeiting the environmental bond where substantial establishment of the compensatory koala habitat is not achieved;

- c) ensure establishment and maintenance phase performance criteria are identified for all mitigation actions included in the updated Koala Plan of Management;
- d) remove all references to the Proponent nominating a representative to sit on the Tweed Coast Management Committee;
- e) confirm the Friends of the Koala are the relevant licenced koala care group in the Tweed local government area;
- f) specify corrective actions for implementation if the forest red gum plantings do not initially survive on-site; and
- g) address the relevant administrative changes recommended in Tweed Shire Council's submission dated 15 November 2018, to the satisfaction of the Secretary.

2.11.2 Response

- a) No objections.
- b) Project 28 requires certainty in the progress of the development. To that end, Project 28 will ensure that all compensatory habitat is substantially established. At the same time, Project 28 need to be able move ahead with the development as market forces dictate. The condition to enable the lodgement of a bond of 150% of the rehabilitation costs on a Precinct basis provides surety of compliance. The condition would require the lodgement of the bond if Project 28 wished to move to a subsequent Precinct and the compensatory habitat in the current Precinct had not reached sustainable establishment. The condition would require Project 28 to continue to progress any compensatory habitat plantings to completion even after moving to the next Precinct. The bond would be returned as soon as the subject compensatory plantings reached sustainability.
- c) No objection.
- d) No objection.
- e) No objection.
- f) The October KPoM (Appendix 6-Table 6-Performance Targets and Corrective Actions) states that the Target during the establishment period is that, in relation to survival and continued growth of planted stock, greater than 90% survival of koala tree plantings during all monitoring events with the exception of Forest red gum within Dry Primary compensatory habitat areas). Forest red gum replacement plantings within Dry Primary compensatory habitat areas will not occur if losses are greater than 15%. See comments above under Contingency and Offset Strategy.
- g) The "administrative changes" in the Tweed Shire council submission are assumed to be the sixty-two (62) dot points titled "Specific Issues" at the bottom of page 19 of the submission. These dot points are numbered as DP1, DP2, DP3 etc. up to DP62. These dot points are discussed as follows:



- DP1 10: No objections.
- DP11: The comment was meant to state that the amount of primary Koala habitat on the Kings Forest site is only 20 hectares. No implication as to the significance, or not, of this 20 hectares is offered in the paragraph.
- DP12: It would seem obvious that a KPoM dealing with a property development in a landscape containing an endangered Koala population would highlight the entities who control/manage the most significant Koala habitats containing this endangered population. The entities are NSW government agencies i.e. NSW OEH and Tweed Shire Council.
- DP13 14: No objections.
- DP15: A discussion on Koala Activity Levels and Occupancy Rates on the Tweed Coast must include a discussion on the current (2011 to 2015) data analysis. The dire situation being described for this population is relevant to the significant positive response elicited from Project 28. The planting of over 60000 Koala food trees for the loss of only 1.59 ha of primary habitat and only 6.82 ha of secondary habitat is a disproportional (positive) response to the current poor situation facing the Tweed Coast Koalas.
- DP16 21: No objections.
- DP22: There is no literature specific to this matter available.
- DP23 28: No objections.
- DP29: The Department of Environment Species Profile and Threats Database (SPRAT Profile) (2014) lists Increased risk of vehicle strike after development as a threat to Koalas. The Kings Forest Koalas are part of the Endangered Tweed Coast Koala population. A discussion of traffic impacts on Koalas in the locality of Kings Forest is pivotal to a proper understanding of impacts which may occur to Kings Forest Koalas. The current Kings Forest sub population cannot be viewed in isolation. Paragraphs 4, 6 and 7 should remain.
- DP30 31: No objections.
- DP32: Clarification as to which definition of commencement is to be relied upon i.e. Commonwealth or State. The KPoM does state that all management plans relevant to the creation of the compensatory habitat will need to be amended and approved prior to any "preliminary" management actions occurring on the site....

This statement has been inadvertently included in the KPoM. Condition A18 expressly authorises the preliminary investigation and monitoring work to be undertaken prior to approval of the revised Environmental Management Plans. The KPoM is to be amended.

- DP 33 36: No objections.
- DP 37: Forest red gum is found on sand substrates along the NSW coast but not at Kings Forest.
- DP38: The ratios noted in Section 10.5.4 are a very accurate indicator of the level of tree offset being provided.
- DP39: Discussed in 8. Contingency and Offset Strategy above.
- DP40: No objection;
- DP41: Saving our Species (SOS) is our state-wide (NSW OEH) program that aims to secure threatened plants and animals in the wild in NSW. It is obviously relevant to Koala conservation matters.
- DP42: Section 10.9.3 and TABLES 12 and 13 state that wildlife (including Koalas) will be able to access the golf course area in case of wildfire affecting the Environmental protection zones. All gates will be opened and/or fencing panels lifted.
- DP43: No objections.
- D44 45: No objections.
- DP46: Project Approval MP08_0194 (as modified) shows that the golf course includes the entirety of the 50 metre buffer zone. Although the proposed golf course layout does not occur in the entire 50 buffer zone it is unrealistic for the fencing to follow the exact line of the golf course boundaries. Far better from a management point of view for the fence to be located at the buffer zone/EPZ interface.
- DP47: No objection.
- DP48: Condition C2 (3) (f) states "For each stage of development an update to the KPoM shall be provided to the satisfaction of the Secretary......(3) the update must provide stage specific detail on the following:.....(f) specifications for any offleash dog exercise areas to ensure appropriate separation from Koala habitat;"

The condition does not mandate the provision of such detail with the approved KPoM other than for the approved KPoM to state that the off-leash area will not be provided in Stage 1 of the development. Obviously, it is likely that the detail will be provided in the updated KPoM for Stage 2 or 3.

- DP49 51: No objections.
- DP52: The Tweed Coast Koala Habitat Study (Phillips 2011) was funded by Tweed Shire Council in order to provide a solid data driven background for the Tweed Coast Comprehensive Koala Plan of Management. This sentence should remain.

- DP53: The statement on Friends of the Koala belongs in both sections i.e.
 10.11 and 10.14. The sentence should remain where it is currently located.
- DP54: No objection.
- DP55: The last paragraph on page 86 states "The provisions contained in the TCCKPoM are:
 - (i) Council shall establish a KMC to advise and assist Council with implementation and review of the Plan, including any contiguous IKPoM's."

It should be recognised that the Kings Forest KPoM will be a "contiguous IKPoM."

It is appropriate to leave this paragraph in the KPoM.

- DP56: No objection.
- DP57: It appears that there has been a mistake in the allocation of comments between DP57 and DP58. We have assumed that the comment under DP58 should be under DP57.

There is no objection if the request is to note FOK being the group to provide services relating to injured Koalas.

- DP58: We have assumed that the comment under this dot point is actually the comment under DP57. If this is the case, then Project 28 are clear in their preference for the inclusion of the EPBC Act definition of "commencement".
- DP59 60: No objections.
- DP61 "Benchmark" means the estimate of habitat occupancy rate established by baseline monitoring.
- DP62 No objection.

2.11.3 Requested Amended Condition

- 9. Administrative Changes
- a) remove all references to a "horticultural or environmental specialist" confirming "substantial establishment" of compensatory koala habitat has occurred, and replace them with references to a "an independent restoration ecologist approved by the Secretary";
- b) remove all references to the Proponent forfeiting the environmental bond where substantial establishment of the compensatory koala habitat is not achieved;



- c) ensure establishment and maintenance phase performance criteria are identified for all mitigation actions included in the updated Koala Plan of Management;
- d) remove all references to the Proponent nominating a representative to sit on the Tweed Coast Management Committee;
- e) confirm the Friends of the Koala are the relevant licenced koala care group in the Tweed local government area;
- f) specify corrective actions for implementation if the forest red gum plantings do not initially survive on-site; and
- g) Address the following administrative changes referred in Tweed Shire Council submission dated 15 November 2018 to the satisfaction of the Secretary, being the "Specific Issues" at the bottom of Page 19 of the Submission:

DP1 to 10, DP13-14, DP16 to 21, DP23 to 28, DP30 to 36, DP40, DP43 to 45, DP47, DP49 to 51, DP54, DP56, DP59 and 60 and DP62.

2.12 Condition 45C

2.12.1 DoPE Recommendation

(e) Schedule 2 Part Two - Bulk Earthworks and Civil Works (All Precincts), insert new Condition 45C - Environmental Management Plan Updates after new Condition 45B as follows:

Recommended Condition

45C Environmental Management Plan (EMP) Updates

1. The Proponent must update the residual EMPs to incorporate the relevant koala management measures identified in the Koala Plan of Management approved by the Secretary under Condition 45A, prior to the issue of any Construction Certificate issued under Condition A18.

2.12.2 Response

Condition A18 was recently inserted in the project approval as a result of an agreement reached in Land and Environment Court proceedings in July 2018: *Project 28 Pty Ltd v Minister for Planning* [2018] NSWLEC 1364.

As part of that agreement, the Minister for Planning recognised that it was necessary for various investigative and monitoring activities to take place (with the benefit of a construction certificate) before a construction certificate could be issued for more substantiative activities.

It was agreed — and condition A18 says — that a construction certificate for investigative and monitoring activities may be issued after the **lodgement** of environmental management plans, but **prior** to their approval. The only exception was for any investigative and monitoring activities that included the clearing of vegetation.

The text of the proposed condition 45C appears to back-track on the position that the Minister agreed to in only July 2018. It does this by preventing the issue of **any** construction certificate for investigative and monitoring activities until the revised KPoM has been **approved** — even if the activities do not include the clearing of vegetation.

We submit that this is an oversight and that the Department is not intending to recommend a change to the outcome agreed in the Land and Environment Court. For this reason we have proposed the insertion of text ensuring that the requirement imposed by condition 45C only applies to a construction certificate issued for the clearing of vegetation.

2.12.3 Requested Amended Condition

45C Environmental Management Plan (EMP) Updates

1. The Proponent must update the residual EMPs to incorporate the relevant koala management measures identified in the Koala Plan of Management approved by the Secretary under Condition 45A, prior to the issue of any Construction Certificate issued for the clearing of vegetation under Condition A18. This does not affect the status of any construction certificate issued prior to the insertion of this condition 45C into the project approval.

2.13 Condition 46

2.13.1 DoPE Recommendation

(f) Schedule 2 Part Two- Bulk Earthworks and Civil Works (All Precincts), Condition 46- Koala Infrastructure is amended by of the insertion of bold and underlined words and deletion of the struckout words/numbers as follows:

Recommended Condition

46. Koala Infrastructure

1. <u>Koala infrastructure must comply with the following requirements</u> Any roads through the environmental areas of the site must include:

- a) fencing on both sides of the road of a design that will prevent the crossing by dogs and koalas; prior to the commencement of construction works in each precinct the Proponent must install the fencing identified for that precinct in the updated Koala Plan of Management approved by the Secretary;
- b) prior to the issue a Subdivision Certificate for each precinct, the Proponent must install all permanent koala fencing identified for that precinct in the updated Koala Plan of Management approved by the Secretary;
- c) fauna underpasses installed at intervals sufficient to allow unimpeded movement by wildlife including koalas across roads. Such fencing and underpasses within Environmental Protection Areas are to be constructed prior to the commencement of bulk earthworks in the southern and/or western development precincts. fauna underpasses must be constructed in the locations identified in the updated Koala Plan of Management approved by the Secretary. All fauna underpasses must be constructed concurrent to the road works approved under the Construction Certificates for precincts 2-5, 6, 11 and 12 14 of the project.
- 2. Precinct 1 and 5 Fauna exclusion fencing must be integrated with fencing at Tweed Coast Road. Such fencing is to be constructed at the completion of bulk earthworks.
- 3. The design and precise location of fauna exclusion fencing must ensure that the buffer area available to fauna is maximised and makes provision for a functional maintenance zone each side of the fencing in order to allow sufficient room for replacement and maintenance of the infrastructure.
- 4. Precinct 1 fauna exclusion fencing should be sited at the outer edge of the 50m ecological buffer.
- 5. Signage shall be erected in strategic locations within Precincts 1, 2, 3, 4 and 5, such as in the public open space areas within Precinct 5 and at fauna underpasses, advising residents that Koalas are active in the area and dogs should be kept on a leash at all times and encourage residents to keep dogs in enclosed yards between the hours of 6pm and 6am.
- 6. Erection of permanent vandal proof signs shall be erected at regular intervals to inform people about the purpose of the Koala exclusion fencing and the importance of maintaining the fence.

2.13.2 Response

Item 3 is not considered practical, particularly in the golf course precinct. As discussed above the only practical location for the fencing in this portion of the site is along the Buffer/EPZ interface. The approved Concept Plan allows for the entire 50 metre buffer zone to be utilised for golf course.

Item 5 is not required i.e. the entire Environmental Protection Zone will be fenced from the development area. There will be no opportunities for residents to access the EPZ habitats.

2.13.3 Requested Amended Condition

46. Koala Infrastructure

- 1. <u>Koala infrastructure must comply with the following requirements</u> Any roads through the environmental areas of the site must include:
- a) fencing on both sides of the road of a design that will prevent the crossing by dogs and koalas; prior to the commencement of construction works in each precinct the Proponent must install the fencing identified for that precinct in the updated Koala Plan of Management approved by the Secretary;
- b) prior to the issue a Subdivision Certificate for each precinct. the Proponent must install all permanent koala fencing identified for that precinct in the updated Koala Plan of Management approved by the Secretary;
- c) fauna underpasses installed at intervals sufficient to allow unimpeded movement by wildlife including koalas across roads. Such fencing and underpasses within Environmental Protection Areas are to be constructed prior to the commencement of bulk earthworks in the southern and/or western development precincts. fauna underpasses must be constructed in the locations identified in the updated Koala Plan of Management approved by the Secretary. All fauna underpasses must be constructed concurrent to the road works approved under the Construction Certificates for precincts 2-5, 6, 11 and 12 14 of the project.
- 2. Precinct 1 and 5 Fauna exclusion fencing must be integrated with fencing at Tweed Coast Road. Such fencing is to be constructed at the completion of bulk earthworks.
- 3. The design and precise location of fauna exclusion fencing must ensure that the buffer area available to fauna is maximised and makes provision for a functional maintenance zone each side of the fencing in order to allow sufficient room for replacement and maintenance of the infrastructure.
- 2. Precinct 1 fauna exclusion fencing should be sited at the outer edge of the 50m ecological buffer.
- 5. Signage shall be erected in strategic locations within Precincts 1, 2, 3, 4 and 5, such as in the public open space areas within Precinct 5 and at fauna underpasses, advising residents that Koalas are active in the area and dogs should be kept on a leash at all times and encourage residents to keep dogs in enclosed yards between the hours of 6pm and 6am.
- 3. Erection of permanent vandal proof signs shall be erected at regular intervals to inform people about the purpose of the Koala exclusion fencing and the importance of maintaining the fence.



APPENDIX 1 - DETERMINATION OF FOREST RED GUM ESTABLISHMENT ON KINGS FOREST SITE (TERRESTRIA, 2019)

APPENDIX 2 – JWA ANALYSIS OF TERRESTRIA (2019) REPORT

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