

**ARBORIST REPORT
for
GOSFORD KIBBLEPLEX DEVELOPMENT**

***LOT 6 in DP 598833
and
LOT 1 in DP 540292***

***Henry Parry Drive
GOSFORD***

***PREPARED BY
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February 2020***

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EXECUTIVE SUMMARY

An Arborist report was undertaken for the Gosford Kibbleplex Development which is to be located at Henry Parry Drive at Gosford – Lot 6 in DP 598833 and Lot 1 in DP 540292 – in the Central Coast LGA.

This report has assessed nine (9) trees which are of concern with regard to a proposed multi storey unit development on the site. The recommendation is for the removal of all nine trees due to constraints caused by inappropriate locations, and the replacement of these trees with more suitable species. Alternative recommendations have been provided should Council not agree to the initial recommendations.

1.0 INTRODUCTION

Tattersall Lander Pty Ltd has been commissioned to undertake an Arborist Report for the proposed “Gosford Kibbleplex Development” which is to be located at Henry Parry Drive, Gosford, in the Central Coast Local Government Area; the specific lots upon which this development is proposed are Lot 6 in DP 598833 and Lot 1 in DP 540292.

This assessment and Arborist Report has been undertaken and prepared by Benjamin Folbigg as an employee of Tattersall Lander. Ben has a Diploma (AQF Level 5) in Arboriculture obtained from NSW TAFE in 2010 – the business address being 2 Bourke Street, Raymond Terrace, and the business phone number being 0249871500, mobile 0402 905 322.



Figure 1 – Site Location

2.0 SITE DESCRIPTION

The subject site is situated on the corner of Henry Parry Drive and Donnison Street at Gosford, with the northern aspect of the site being bounded by William Street. The development site has an area of approximately 1.4 hectares and currently contains the Gosford Town Centre shopping centre and car park. Lot 1 is currently a vacant site.

There is vegetation within the site, however, this vegetation does not form part of this assessment. The adjacent road reserve is relevant to this report as this is the location of the trees relevant to this report – five (5) trees being located within the Donnison Street road reserve, three (3) trees being located

within the Henry Parry Drive road reserve, and one tree being located within the road reserve of William Street.

3.0 THE PROPOSAL

The proposal is for the demolition of the existing development and the construction of five residential towers which range from 15 to 27 storeys in height. The proposal also includes car parking, landscaping, and all relevant infrastructure. The proposal is a State Significant Development (SSD-9813).

A site plan illustrating the proposal from a birds eye view is attached in Appendix B and this plan identifies the approximate location of each tree assessed within this report.

4.0 METHODOLOGY

A site investigation was conducted on Tuesday 10 February 2020 at approximately 3pm; during this site visit, nine (9) trees were identified as requiring assessment for the proposal, these trees are identified as Trees 1-9. No aerial inspection, root investigation (other than a cursory examination of what roots are visible), digging or probing was undertaken for any of the trees as part of this assessment.

Measurements were taken and recorded, species identified, and these measurements were used to calculate the Structural Root Zone (SRZ) and Tree Protection Zone (TPZ). The subsequent calculations, combined with the on-site observations have been utilised to make recommendations regarding the removal or retention of these trees. *AS4970 – Protection of Trees on Development Sites* has been considered in making these recommendations.

Photographs were taken on site of the trees identified in this report and these photographs are included in Appendix A.

The aim of this report is to determine whether the relevant trees as assessed should be removed or retained and to provide justification for this determination.

5.0 RESULTS/DISCUSSION

The attached plan identifies the trees by number and the details of these trees are identified in Table 1 (below).

Table 1 – Trees measurements for trees included in Arborist Report

Tree	Tree ID	Approx. height (m)	DBH (cm)	Diameter above buttress (cm)	Approx. canopy cover (sqm)
1	<i>Eucalyptus robusta</i> (Swamp Mahogany)	11	36	43	50
2	<i>Eucalyptus robusta</i> (Swamp Mahogany)	16	51	58	132
3	<i>Eucalyptus robusta</i> (Swamp Mahogany)	11	25	28	63
4	<i>Eucalyptus robusta</i> (Swamp Mahogany)	12	32	38	60
5	<i>Eucalyptus robusta</i> (Swamp Mahogany)	12	43	43	95
6	<i>Eucalyptus robusta</i> (Swamp Mahogany)	16	52	56	63
7	<i>Eucalyptus robusta</i> (Swamp Mahogany)	16	62	69	143
8	<i>Eucalyptus robusta</i> (Swamp Mahogany)	9	30	32	38
9	<i>Podocarpus elatus</i> (Plum Pine)	6	16	31	4

Table 2 – Tree spread and GPS co-ordinates

Tree	Approx. Spread (metres)				GPS Co-ordinates (approximate)	
	North	South	East	West	Easting	Northing
1	2.5	5	5.5	3	346181	6300096
2	5	8	7	6	346170	6300106
3	3	5	3	7	246168	6300108
4	3.5	6	5	3	346142	6300120
5	3	7	8	4	346136	6300118
6	3	4	5	6	346087	6300160
7	8	4	9	6	346083	6300171
8	5	2	3	4	346084	6300182
9	1	1.5	1	1	346114	6300229

Table 3 – Tree notes

Tree	Comment
1	Mature. Damage to trunk and branch, assumed mechanical from maintenance equipment and vehicles. Poor form. Asymmetrical. Average vigour. Slight lean.
2	Mature. Good Vigour. Slight root girdling. Damage to gutter.
3	Semi mature. Average vigour. Asymmetrical. Poor form. Damage to path.
4	Semi mature. Average vigour. Very slight lean. Small deadwood. Damage to path suspected from tree roots.
5	Mature. Average vigour. Significant small deadwood. Slight lean over road. Asymmetrical.
6	Mature. Poor vigour. Damage to path. Root girdling. Significant small deadwood. One medium break. Significant epicormic growth.
7	Mature. Excellent vigour. Slight root girdling. Significant damage to path and kerb and gutter.
8	Semi mature. Asymmetrical. Very slight lean. Good vigour. Slight root girdling.
9	Mature. Excellent vigour. Damage to path, not conclusive that tree roots are the cause.

Table 4 – Tree Protection Zones and Structural Root Zones

Tree	TPZ (metres)	SRZ (metres)
1	4.32	2.32
2	6.12	2.63
3	3.00	1.94
4	3.84	2.20
5	5.16	2.32
6	6.24	2.59
7	7.44	2.83
8	3.60	2.05
9	2.00	2.02

Table 5 – Proposed Tree Status

Tree	Remove/Retain	Reason
1	Remove	Works will be within the SRZ and the TPZ. Additionally, the tree has relatively significant damage to the trunk and the location of the tree is such that it is likely that such damage may be reoccurring. The location of the tree is such that it is highly constrained and will undoubtedly damage the adjacent kerb and gutter as it increases in size should it remain.
2	Remove	Works will be within the SRZ and the TPZ. The location of the tree is such that it is highly constrained and will undoubtedly damage the adjacent kerb and gutter (further to which it has already) as it increases in size should it remain.
3	Remove	Works will be within the SRZ and the TPZ. The location of the tree is such that it is highly constrained and will undoubtedly damage the adjacent kerb and gutter (further to which it has already) as it increases in size should it remain.
4	Remove	Works will be within the SRZ and the TPZ. The location of the tree is such that it is highly constrained and will undoubtedly damage the adjacent kerb and gutter (further to which it has already) as it increases in size should it remain.
5	Remove	Works will be within the SRZ and the TPZ. The location of the tree is such that it is highly constrained and will undoubtedly damage the adjacent kerb and gutter as it increases in size should it remain.
6	Remove	Works will be within the SRZ and the TPZ. The location of the tree is such that it is highly constrained and will undoubtedly damage the adjacent kerb and gutter (further to which it has already) as it increases in size should it remain.
7	Remove	Works will be within the SRZ and the TPZ. The location of the tree is such that it is highly constrained and will undoubtedly damage the adjacent kerb and gutter (further to which it has already) as it increases in size should it remain.
8	Remove	Works will be within the SRZ and the TPZ. The tree is easily replaceable in the short to medium term.
9	Remove	Works will be within the SRZ and the TPZ. The tree is easily replaceable in the short to medium term.

Whilst the SRZ and TPZ have been calculated for each tree, a plan has not been detailed illustrating these zones in relation to the proposed development; despite this, it is noted that the proposal will involve the removal of concrete and bitumen path ways within both the TPZ and the SRZ for all trees and it may be safely stated therefore that there will be significant works within both the TPZ and the SRZ for all trees assessed – these works are

likely to include excavation works for the replacement of pathways to a suitable standard.

Whilst the trees assessed are street trees, Trees 1 – 8 (inclusive) have been inappropriately planted far too close to the kerb and gutter such that there is no possible way of retention without further significant damage occurring to the kerb and gutter and likely the road pavement. Several of the trees are already showing negative effects which are likely the result of their inappropriate planting location. Tree 9 could potentially be retained, however, it is considered that this tree has little significance in the way of potential habitat and it is also noted that the leaves have a needle point which has the potential to present liability (potential eye injury for pedestrians) for Council.

6.0 RECOMMENDATIONS

The following recommendations are considered appropriate for the development in its current position:

- Remove all tree assessed – this is an opportunity for Council to have inappropriately located trees removed at the cost of the developer.
- Replace the removed trees with species more appropriate for the location – this is an opportunity for Council to have these works undertaken at the cost of the developer. Such replacement/compensatory plantings should be determined with consultation of Council and an appropriately qualified landscape consultant.

Should Council consider the retention of these trees, at the cost of future repair works to infrastructure, preferable, then the following recommendations are deemed appropriate:

- Remove all significant deadwood from all trees (ie any deadwood greater than 40mm).
- Ensure no mechanical excavation works are undertaken within the SRZ of any tree – such excavations are to be undertaken by hand with a consulting arborist present.
- Care is to be taken during excavation within the TPZ (but outside of the SRZ) to prevent severance or other damage to any roots greater than 40mm in diameter.
- Only flexible and permeable pavement is to be utilised within the TPZ (outside of the road pavement).
- No Stockpiling is to occur within the TPZ.
- No vehicular movements are to occur within the TPZ (excluding the road pavement areas).
- Trees are to be reassessed every 2 years by an AQF 5 arborist.

7.0 CONCLUSION

This Arborist report was prepared for the “Gosford Kibbleplex Development” which is proposed to be located at Lot 6 in DP 598833 and Lot 1 in DP 540292 in the Gosford FGA. The trees as relevant to this assessment are located within the road reserve as street trees for Henry Parry Drive, William Street, and Donnison Street.

The recommendation is that all nine trees assessed be removed and replaced with alternative tree species, all at the cost of the developer. Alternative recommendations have been provided should Council wish to retain these trees, however, given the location of the trees, the retention is considered to be a relatively short term option and will likely result in significant ongoing costs, prior to their ultimate removal.

8.0 DISCLAIMER

All effort has been made to ensure the accuracy of this report, however, it is noted that arboriculture is an inexact science. This report in no way guarantees the safety of any of the trees relevant to this report, or otherwise on the subject or adjoining sites, now or post construction works.

It is reiterated that no aerial inspection or invasive testing was carried out on any of these trees.

It is noted that no incentive has been given, offered, or suggested to provide outcomes within this report, and no arrangement has been entered into, offered or suggested regarding the removal of these trees or other further works, either relating to this specific development or other developments.

Appendix A:

Photographs



Photograph 1 – Tree 1 (damage/scarring at base)



Photograph 2 – Tree 1 (damage/scarring)



Photograph 3 – Tree 1 and adjacent damage to path



Photograph 4 – Tree 1 canopy



Photograph 5 – Tree 1 root between path and kerb



Photograph 6 – Tree 2



Photograph 7 – Tree 2 canopy



Photograph 8 – Tree 2 slight root girdling



Photograph 9 – Tree 2 damage to kerb and gutter



Photograph 10 – Tree 3



Photograph 11 – Tree 3 canopy



Photograph 12 – Tree 3 damage to path adjacent



Photograph 13 – Tree 4 damage to kerb and gutter



Photograph 14 – Tree 5 damage/scarring



Photograph 15 – Tree 6 roots behind kerb



Photograph 16 – Tree 6 lifting of paved path



Photograph 17 – Tree 6 canopy and epicormic growth



Photograph 18 – Tree 6 medium break



Photograph 19 – Tree 7 damage to pavement



Photograph 20 – Tree 7 damage to kerb and gutter



Photograph 21 – Tree 8



Photograph 22 – Tree 8 slight root girdling



Photograph 23 – Tree 8 canopy



Photograph 24 – Tree 9



Photograph 25 – Tree 9



Photograph 26 – Tree 9 and adjacent damage to pavement

Appendix B:

Site Plan

/ ILLUSTRATIVE STAGE 1 MASTERPLAN

Legend

1

Tree Assessed

