

3 December 2020

General Manager
Byron Shire Council

**Tree Removal
Development Consent 5.1989.451.1
Lot 10, DP 285748
33/24 Scott Street
Byron Bay**

This report is written in response to conditions A.3, B.1, C.1, C.2 of the above mentioned DA for Lot 10 of the subdivision.

1. EXECUTIVE SUMMARY

The following is a summary of this report and the situation with this site:

- Prior approval has been given for the building of a dwelling on this site.
- Since the approval was given a number of trees have regrown onto the site. A full list of flora on site has been provided.
- In all, to accommodate the building of a dwelling within the existing building envelope 36 Native Trees require removal. The trees required for removal and those to remain are identified.
- Every effort has been made to retain as many trees as possible. This includes allowing for the retention of trees that are very close to the building envelope. This is possible because of the “treetop” pillar building technique.
- Recommendations in relation to tree removal have been provided.
- The size of the site, and the bushfire issues, mean that compensatory plantings consistent with Councils policy are impracticable in this situation.
- Despite this limitation, a landscaping plan with 12 native trees sourced from the site and another 12 native shrubs is provided.
- Provides for a tree protection measures to ensure that existing trees are not damaged in the construction process.
- Identifies major weed species on site.

2. BACKGROUND

Consent for the construction of nine (9) cabins was provided by Byron Shire Council under DA Number 89/451. In 2002, the cabin lots were subdivided onto individual titles under Neighbourhood Plan DP 285748. This current DA arises from the approval of Lot 10 of the 1989 consent.

To this end, the consent provides a building envelope and contemplates the removal of trees to allow for the construction of the dwelling.

Relevant to this report are the following conditions of the 1989 consent:

A.3 The following conditions will be required to be complied with before the release of any Building Application...

- 3. Submission of a detailed landscape plan (in triplicate) for approval in conjunction with the relevant building application indicating the locations, names, mature heights of shrubs and tree species to be planted, and the location of grassed and paved areas.*

B. The following conditions are to be complied with prior to occupation of the building...

- 1. The site being landscaped. In accordance with the approved landscape plan prior to occupying the development and maintained at all times to the satisfaction of the Works and Services Director.*

C. The following conditions will need to be complied with at all times.

- 1. No tree to be ringbarked, cut down, lopped, removed or damaged or caused to be ringbarked, cut down, lopped, removed or damaged in contravention of the tree preservation order applicable to the land. Council consent is necessary for construction of roads, parking areas and cabins.*
- 2. No scribbly gum trees are to be removed from the site. Minor lopping should be carried out only with the consent of the Planning Director.*

3. TREE REMOVAL

The DA requires the following in relation to Tree Removal:

C. The following conditions will need to be complied with at all times.

- 1. No tree to be ringbarked, cut down, lopped, removed or damaged or caused to be ringbarked, cut down, lopped, removed or damaged in contravention of the Tree Preservation Order applicable to the land. Council consent is necessary for construction of roads, parking areas and cabins.*
- 2. No scribbly gum trees are to be removed from the site. Minor lopping should be carried out only with the consent of the Planning Director.*

To accommodate the building envelope, and the driveway provided in the consent 36 native trees have to be removed from the site (this number does not including the three (3) dead trees and the weed species that are identified in **Table 1** below). The relevant part of the site has been surveyed and the trees identified. **Attachment 1** is a site survey with the trees numbered. **Attachment 2** is a site survey with the trees numbered and the building envelope of the dwelling included. **Table 1** below provides a list and identification of the trees relevant to this application, and whether the tree needs to be removed or can be retained to allow for the building of the dwelling. **Attachment 3** is the list of trees including the DBH and height of each tree.

Table 1: List of Trees on Survey

NO.	COMMON NAME	SCIENTIFIC NAME	COMMENT
1	Paperbark	<i>Melaleuca quinquenervia</i>	Retain
2	<i>No Longer Present (on neighbours property)</i>		
3	Scentless rosewood	<i>Synoum glandulosum</i>	Neighbours Property (retain)
4	Swamp box	<i>Lophostemon suaveolens</i>	Retain
5	Scentless rosewood	<i>Synoum glandulosum</i>	Remove
6	Scentless rosewood	<i>Synoum glandulosum</i>	Retain
7	Camphor Laurel	<i>Cinnamomum camphora</i>	Weed - remove
8	Blueberry Ash	<i>Elaeocarpus reticulatus</i>	Remove
9	Scentless rosewood	<i>Synoum glandulosum</i>	Retain
10	Scentless rosewood	<i>Synoum glandulosum</i>	Remove
11	Swamp box	<i>Lophostemon suaveolens</i>	Remove
12	Blueberry Ash	<i>Elaeocarpus reticulatus</i>	Remove
13	Blueberry Ash	<i>Elaeocarpus reticulatus</i>	Retain
14	Blueberry Ash	<i>Elaeocarpus reticulatus</i>	Retain
15	Scentless Rosewood	<i>Synoum glandulosum</i>	Remove
16	Scentless Rosewood	<i>Synoum glandulosum</i>	Remove
17	Blueberry Ash	<i>Elaeocarpus reticulatus</i>	Remove
18	Blueberry Ash	<i>Elaeocarpus reticulatus</i>	Remove
19	Swamp box	<i>Lophostemon suaveolens</i>	Remove
20	Scentless Rosewood	<i>Synoum glandulosum</i>	Remove
21	Beach Acronychia	<i>Acronychia Imperforata</i>	Remove
22	Scentless Rosewood	<i>Synoum glandulosum</i>	Remove
23	Unid Rainforest		Remove
24	Bangalow palm	<i>Archontophoenix cunninghamiana</i>	Retain
25	Scentless Rosewood	<i>Synoum glandulosum</i>	Retain
26	Scentless Rosewood	<i>Synoum glandulosum</i>	Retain
27	Bangalow palm	<i>Archontophoenix cunninghamiana</i>	Retain
28	Tuckeroo	<i>Cupaniopsis anacardioides</i>	Retain
29	Tuckeroo	<i>Cupaniopsis anacardioides</i>	Retain
30	Celery Wood	<i>Polyscias elegans</i>	Retain
31	Paperbark	<i>Melaleuca quinquenervia</i>	Remove
32	Pink Eudioa	<i>Melicope elleryana</i>	Remove
33	Bangalow Palm	<i>Archontophoenix cunninghamiana</i>	Remove
34	Blueberry Ash	<i>Elaeocarpus reticulatus</i>	Remove
35	Camphor Laurel	<i>Cinnamomum camphora</i>	Weed - remove
36	Beach Acronychia	<i>Acronychia Imperforata</i>	Remove
37	Beach Acronychia	<i>Acronychia Imperforata</i>	Retain
38	Beach Acronychia	<i>Acronychia Imperforata</i>	Retain
39	Beach Acronychia	<i>Acronychia Imperforata</i>	Retain
40	Umbrella Tree	<i>Schefflera actinophylla</i>	Weed - remove
41	Beach Acronychia	<i>Acronychia Imperforata</i>	Retain
42	Beach Acronychia	<i>Acronychia Imperforata</i>	Retain
43	Beach Acronychia	<i>Acronychia Imperforata</i>	Retain
44	Scentless Rosewood	<i>Synoum glandulosum</i>	Remove
45	Dead		Remove
46	Paperbark	<i>Melaleuca quinquenervia</i>	Remove
47	Paperbark	<i>Melaleuca quinquenervia</i>	Remove

48	Scentless Rosewood	<i>Synoum glandulosum</i>	Remove
49	Scentless Rosewood	<i>Synoum glandulosum</i>	Remove
50	Camphor Laurel	<i>Cinnamomum camphora</i>	Weed - Remove
51	Blueberry Ash	<i>Elaeocarpus reticulatus</i>	Retain
52	Tuckeroo	<i>Cupaniopsis anacardioides</i>	Retain
53	Scentless Rosewood	<i>Synoum glandulosum</i>	Remove
54	Scentless Rosewood	<i>Synoum glandulosum</i>	Retain
55	Blueberry Ash	<i>Elaeocarpus reticulatus</i>	Remove
56	Scentless Rosewood	<i>Synoum glandulosum</i>	Remove
57	Scentless Rosewood	<i>Synoum glandulosum</i>	Remove
58	Scentless Rosewood	<i>Synoum glandulosum</i>	Remove
59	Scentless Rosewood	<i>Synoum glandulosum</i>	Remove
60	Scentless Rosewood	<i>Synoum glandulosum</i>	Remove
61	Scentless Rosewood	<i>Synoum glandulosum</i>	Remove
62	Scentless Rosewood	<i>Synoum glandulosum</i>	Remove
63	Scentless Rosewood	<i>Synoum glandulosum</i>	Retain
64	Scentless Rosewood	<i>Synoum glandulosum</i>	Remove
65	Bangalow Palm	<i>Archontophoenix cunninghamiana</i>	Retain
66	Bangalow Palm	<i>Archontophoenix cunninghamiana</i>	Retain
67	Paperbark	<i>Melaleuca quinquenervia</i>	Remove

Most of the trees proposed for removal are under 20 years in age, and are likely to have regenerated in the time since development consent was granted.

Vegetation Communities

At the time of the approval of the development application for the treetop house development that provides approval for this dwelling this site had two distinct remnant vegetation communities identified: (i) Littoral Rainforest and (ii) Mid-high Open Forest (*Eucalyptus signata*). In terms of the part of the site that is proposed for the building envelope the dominant community at the time of DA approval was Mid-high Open Forest. There are no Scribbly Gums (*Eucalyptus signata*) on this site, although there is a prominent example in the allotment to the south-east. An extract from the *Landscape Management Plan for Treetop Houses, The Oasis Resort – Byron Bay* prepared by the Geolink Group in September 1993 is attached to this report and marked **Attachment 4**. **Attachment 4** maps the vegetation communities on the site. Lot 10 is highlighted by me on the Attachment

Nevertheless, most of the trees currently on site are relatively recent regrowth plants. Largely less than 20 years of age. And dominated by Scentless Rosewood (*Synoum glandulosum*) and Blueberry Ash (*Elaeocarpus reticulatus*).

A list of flora species identified on the site are attached to this report and marked **“Attachment 5”**. *No threatened flora species are on the site.*

Tree removal procedures

Care should be taken to ensure that native fauna is not harmed during the site clearing/tree removal process. In particular, the trees must be removed by a qualified arborist in accordance with Australian Standard 4373-2007 and must be carefully visually inspected prior to removal.

Each of the trees within the building envelope and requiring removing has been marked with a yellow tag (this is in addition to the numbering of all the trees on site). **Photograph 1**

highlights the tags that are in use.



Photograph 1: tagged and numbered trees. The pink tape includes the tree numbering system and the yellow tape indicates the tree is within the building envelope

Measures to protect the trees remaining on the site have been proposed further in this report.

It is important to note that every attempt has been made to ensure that all trees that are outside the building envelope of the original DA building envelope have been retained. This has been made possible because the nature of the construction of these types of tree top houses means that even though some of the footings will be within the TPZ of the existing trees – the limited ground penetration required for these builds means that they will not infringe within 10% of the root zone.

The exception to this is Tree 67 & Tree 32 they are on the edge of the driveway – however, it would not be possible to construct the driveway without significantly impacting on those trees root zone.

Tree Protection Measures

A tree protection area should be fenced off prior to the commencement of construction.

The fence is to be constructed as follows:

- with a minimum height of 1.2 metres,
- outside the dripline of the trees,

- of steel star pickets at a maximum distance of 2 metres between pickets,
- using a minimum of 3 strands of steel wire,
- with orange barrier mesh, or similar, attached to the outside of the fence and continuing around its perimeter

The fence is to be maintained for the duration of the site clearing, preparation and construction works.

4. LANDSCAPING PLAN

4.1. Introduction

This section provides a landscaping plan that assists with screening the neighbours dwelling from this proposed dwelling. The major limitation for landscaping this site is bushfire considerations. To assist with bushfire protection, and to improve the ecology of the site, the major weeds on the site have been identified.

4.2. Intent behind landscape plan

The following important considerations are central to the landscape plan:

- Flora species consistent with existing vegetation community (ie. endemic rainforest species);
- Flora species of local provenance;
- Be consistent with Part B9 of Development Control Plan 2014;
- Provide a degree of screening from the existing dwelling to the south of the proposed dwelling;
- Being consistent with the principles of Appendix 5 of 'Planning for Bush Fire Protection 2006'.

4.3. Weed Control

The following weed species have been identified on site:

Common Name	Scientific Name
Umbrella Tree	<i>Schefflera actinophylla</i>
Camphor Laurel	<i>Cinnamomum camphora</i>
Winter Senna	<i>Senna pendula var. glabrata</i>
Golden Cane Palm	<i>Dypsis lutescens</i>
Edible passionfruit	<i>Passiflora edulis</i>
Monstera	<i>Monstera Sp</i>
Foxtail Palm	<i>Wodyetia bifurcata</i>
Maidenhair Fern	<i>Adiantum spp</i>
Asparagus fern	<i>Asparagus aethiopicus</i>
Tobacco Bush	<i>Solanum mauritianum</i>
Castor Oil Plant	<i>Ricinus communis</i>
Bracken	<i>Pteridium sp</i>

Many of these weeds will be removed during the preparation of the site for the construction of the dwelling.

Removal of these weeds will assist in reducing the bushfire risk of the site and provide a better ecological outcome.

4.4. Landscape Plan

The relevant condition of consent for this site provides the following in relation to landscaping:

A.3 The following conditions will be required to be complied with before the release of any Building Application...

3. *Submission of a detailed landscape plan (in triplicate) for approval in conjunction with the relevant building application indicating the locations, names, mature heights of shrubs and tree species to be planted, and the location of grassed and paved areas.*

A landscape plan has been prepared for this site. It is attached to this report and marked **Attachment 5**.

The plan is self explanatory. It provides the following information:

- Location of each tree & shrub proposed for planting
- Scientific and common name of each proposed planting
- The estimated mature height and width of each planting (this is also reflected in both the diagram and the landscaping schedule)

In the event the Table within **Attachment 5** is difficult to read, I provide Table 2 for clarity:

Table 2: Landscaping Schedule

Scientific Name	Common Name	Max. Height	Max. Width	Quantity
<i>Synoum glandulosum</i>	Scentless Rosewood	6m	4m	6
<i>Elaeocarpus reticulatus</i>	Blueberry Ash	8m	4m	6
<i>Dianella caerulea</i> *	Blue Flax Lily	700mm	400mm	Min 12

*Dianella not marked on the plan, it is to be intersperced between the plantings

The site for the landscaping is identified in **photograph 2**.



Photograph 2: location of screening plantings

4.5. Compensatory Plantings

Under the Byron Shire Councils no net vegetation loss policy the removal of the 36 native trees would ordinarily require compensatory plantings of approximately 1:5 for each tree removed. However, this level of compensatory plantings is impracticable due to (i) the additional fuel load this would add, leading to unnecessary bush fire risk, and (ii) it is an urban allotment that would not come close to accommodating the planting of a 180 additional trees and shrubs.

Accordingly, we are requesting that Council support the recommendation that there be a reduced compensatory planting schedule for this site. It should be noted that ever effort has been made to ensure that none of the trees within close proximity to the approved building envelope are removed.

A landscaping plan is attached to this report, and it allows for 12 native plantings from within the site be transplanted to the southern border. This would also allow the owner to transplant many of the saplings (**Photograph 3**) on the site into the landscaping plan. Ensuring the genetic integrity of the plantings. In the event that additional plantings are required, they should be of local provenance. That is, sourced from seed or propagative material of plants indigenous to the local area. To avoid doubt, this means: *be sourced from a local native plant nursery using genetic material collected within 20km of the site.*



Photograph 3: Examples of juvenile Scented Rosewoods from the site

4.6. Bushfire Considerations

A Bush Fire Assessment Report dated 12 August 2020 has been provided. The report prepared by Bushfire Consultancy Australia provides the following in relation to landscaping:

10. Landscaping

The site is currently completely vegetated. All new landscaping should be designed in accordance with the principles of Appendix 4 of Planning for Bushfire Protection 2019. It is recognised some of the trees within the site do hold environmental and ecological value, however, the APZ principles described within Appendix 4 of should still be applied. These principles include;

- *Trees (at maturity) should not touch or overhang the building*
- *Lower limbs should be removed up to a height of 2m above the ground*
- *Canopies should be separated*
- *Preference should be given to smooth barked and evergreen trees*

- *Shrubs should not form more than 10% ground cover*
- *Leaves and vegetation debris should be removed*

To this end, we have recommended the retention of as many existing trees as possible – even if they are close to the building envelope, and not include extensive plans to landscape with additional trees around the site. Although canopies will need to be trimmed as required.

The landscaping plan takes into account Appendix 5 “Planning for Bushfire Protection 2006”. The principles of landscaping for bush fire protection aims to:

- prevent flame impingement on the dwelling
- provide a defendable space for property protection
- reduce fire spread
- deflect and filter embers
- provide shelter from radiant heat
- reduce wind speed.

Specific design characteristics of this plan include:

- Compensatory plantings are rainforest species with high moisture content;
- Weed control to further reduce the fuel load on site, and increase canopy separation;
- Mulch for landscaping will not be stored on-site.

The majority of the plantings will be sourced from existing plants on site (ie. transplanted Blueberry Ash & Scentless Rosewood saplings). These rainforest species have relatively high moisture content and are consistent with the principles of Appendix 5 of ‘Planning for Bush Fire Protection 2006’.

Consistent with the principles of Appendix 5 of ‘Planning for Bush Fire Protection 2006’

Under Appendix 5 of Planning for Bush Fire Protection 2006 the broad principles of landscaping for bush fire protection aims to:

- Prevent flame impingement on the dwelling;
- Provide a defendable space for property protection;
- Reduce fire spread;
- Deflect and filter embers;
- Provide shelter from radiant heat; and
- Reduce wind speed.

A number of measures are being proposed in relation to ensure that the landscaping plan is consistent with the principles; Including:

Specific design characteristics of this plan include:

- Compensatory plantings are rainforest species with high moisture content;
- Weed control to further reduce the fuel load on site, and increase canopy separation;
- Mulch for landscaping will not be stored on-site.

This report also contains and annexes a Landscape Plan Checklist related to the requirements of Section B9 of the 2014 DCP (**Attachment 6**) and planting guidelines – to the extent they are relevant given we are seeking to transplant the majority of plantings (**Attachment 7**).

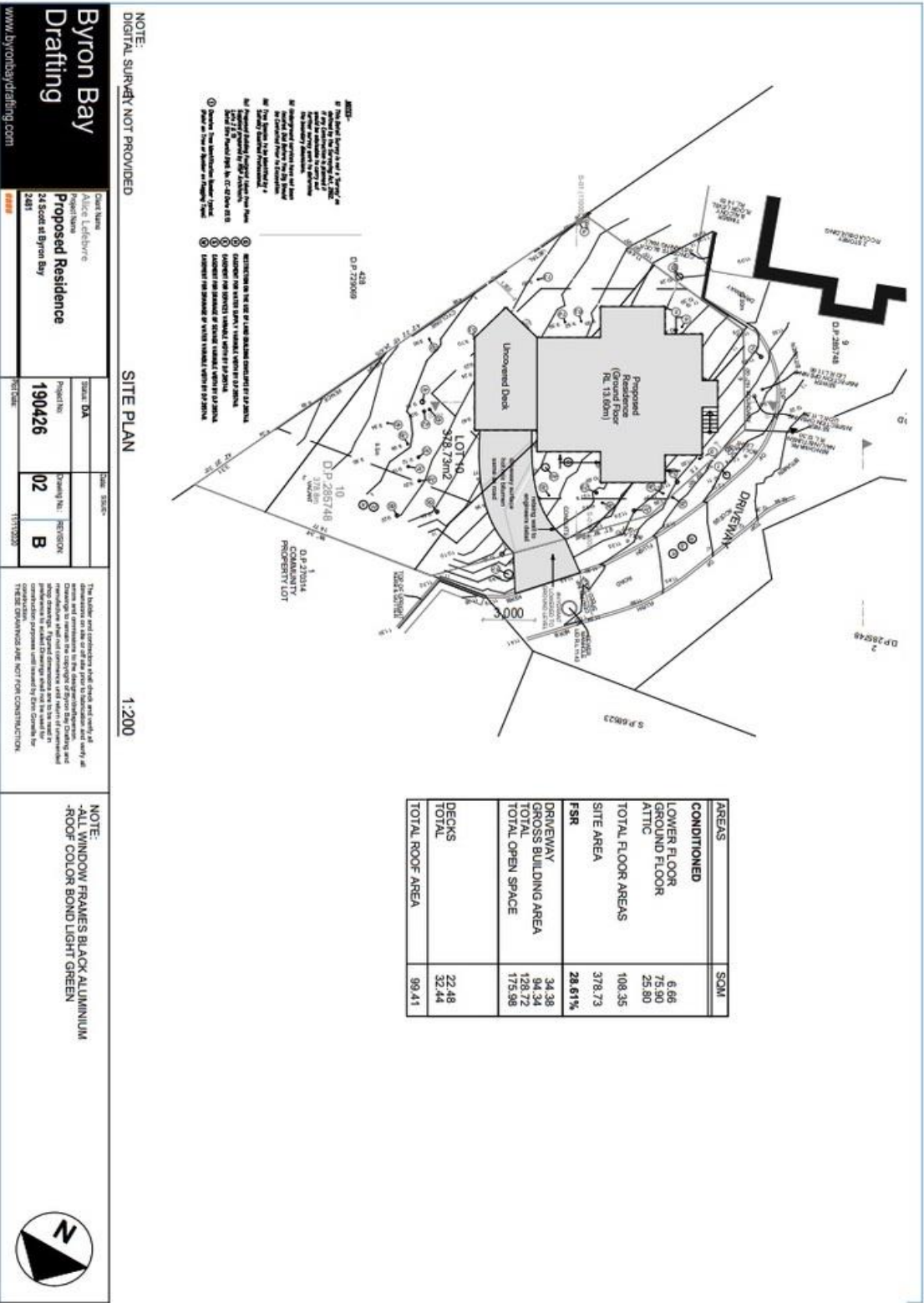
I can be contacted on 0421 619 197 if you have any queries or concerns about the above.

Yours sincerely

A handwritten signature in black ink, appearing to read 'David Sweet', with a stylized, cursive script.

David Sweet
M.Env. Sci, Llb, B.Com

ATTACHMENT 2: SURVEY WITH BUILDING ENVELOPE OVERLAY



ATTACHMENT 3: SURVEY TREE LIST (INCL. DBH & HEIGHT)

Tree Number (survey)	Common Name	Scientific Name	DBH	Height
1	Paperbark	<i>Melaleuca quinquenervia</i>	36cm	16m
2	Doesn't exist			
3	Scentless rosewood	<i>Synoum glandulosum</i>	16cm	8m
4	Swamp box	<i>Lophostemon suaveolens</i>	12cm	13m
5	Scentless rosewood	<i>Synoum glandulosum</i>	5cm	7m
6	Scentless rosewood	<i>Synoum glandulosum</i>	6cm	7m
7	Camphor Laurel	<i>Cinnamomum camphora</i>		
8	Blueberry Ash (twin trunk)	<i>Elaeocarpus obovatus</i>	4cm, 3cm	6m
9	Scentless rosewood	<i>Synoum glandulosum</i>	8cm	8m
10	Scentless rosewood (twin trunk)	<i>Synoum glandulosum</i>	6cm, 5cm	8m
11	Swamp box	<i>Lophostemon suaveolens</i>	20cm	12m
12	Blueberry Ash (twin trunk)	<i>Elaeocarpus obovatus</i>	10cm, 2cm	10m
13	Blueberry Ash	<i>Elaeocarpus obovatus</i>	8cm	10m
14	Blueberry Ash (twin trunk)	<i>Elaeocarpus obovatus</i>	10cm, 6cm	11m
15	Scentless Rosewood	<i>Synoum glandulosum</i>	7cm	8m

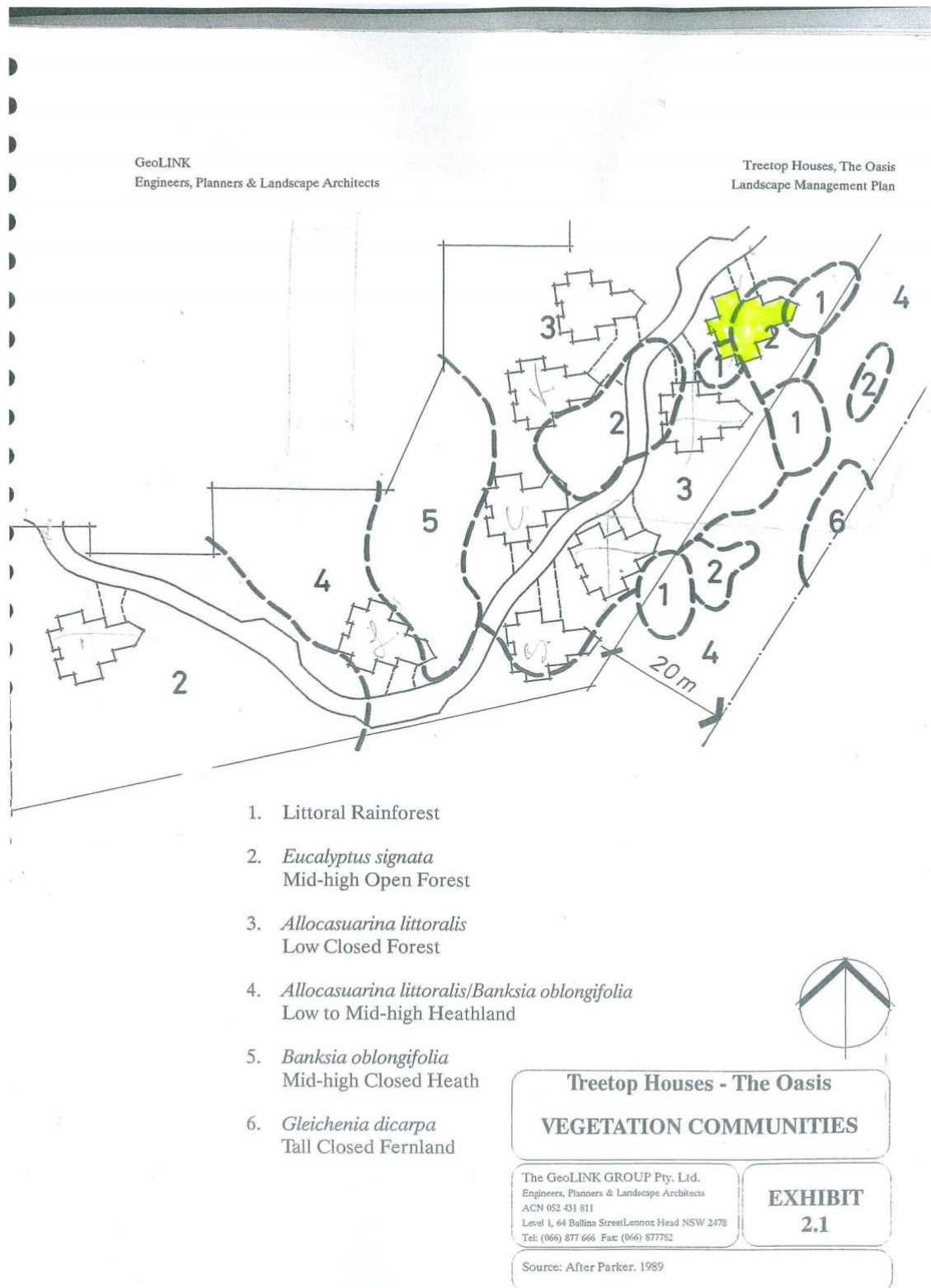
16	Scentless Rosewood	<i>Synoum glandulosum</i>	5cm	8m
17	Blueberry Ash	<i>Elaeocarpus obovatus</i>	10cm	8m
18	Blueberry Ash	<i>Elaeocarpus obovatus</i>	11cm	9m
19	Swamp box	<i>Lophostemon suaveolens</i>	16cm	14m
20	Scentless Rosewood	<i>Synoum glandulosum</i>	6cm	8m
21	Beach Acronychia	<i>Acronychia imperforata</i>	6cm	12m
22	Scentless Rosewood	<i>Synoum glandulosum</i>	4cm	6m
23	Unid Rainforest		16cm	12m
24	Bangalow palm	<i>Archontophoenix cunninghamiana</i>	20cm	13m
25	Scentless Rosewood	<i>Synoum glandulosum</i>	8cm, 6cm	9m
26	Scentless Rosewood	<i>Synoum glandulosum</i>	7cm	8m
27	Bangalow palm	<i>Archontophoenix cunninghamiana</i>	22cm	14m
28	Tuckeroo	<i>Cupaniopsis anacardioides</i>	10cm	11m
29	Tuckeroo	<i>Cupaniopsis anacardioides</i>	13cm	13m
30	Celery Wood	<i>Polyscias elegans</i>	8cm	6m
31	Paperbark	<i>Melaleuca quinquenervia</i>	26cm	14m
32	Pink Eudioa	<i>Melicope elleryana</i>	24cm	15m

33	Bangalow Palm	<i>Archontophoenix cunninghamiana</i>	16cm	7m
34	Blueberry Ash (broken main trunk)	<i>Elaeocarpus obovatus</i>	6cm	8m
35	Camphor Laurel	<i>Cinnamomum camphora</i>		
36	Beach Acronychia	<i>Acronychia imperforata</i>	14.5	12m
37	Beach Acronychia	<i>Acronychia imperforata</i>	11	10.5m
38	Beach Acronychia	<i>Acronychia imperforata</i>	12cm,13cm	11m
39	Beach Acronychia	<i>Acronychia imperforata</i>	10	10m
40	Umbrella Tree	<i>Schefflera actinophylla</i>		
41	Beach Acronychia	<i>Acronychia imperforata</i>	20cm	14m
42	Beach Acronychia	<i>Acronychia imperforata</i>	15cm	12m
43	Beach Acronychia	<i>Acronychia imperforata</i>	11cm	9m
44	Scentless Rosewood	<i>Synoum glandulosum</i>	5.5cm	6.5m
45	Dead			
46	Paperbark	<i>Melaleuca quinquenervia</i>	32cm,34cm, 18cm	16m
47	Paperbark	<i>Melaleuca quinquenervia</i>	17cm, 33cm	14m
48	Scentless Rosewood	<i>Synoum glandulosum</i>	4cm	6m
49	Scentless Rosewood	<i>Synoum glandulosum</i>	8cm, 5cm, 7cm	9m

50	Camphor Laurel	<i>Cinnamomum camphora</i>		
51	Blueberry Ash (check – dead and dying)	<i>Elaeocarpus obovatus</i>	5cm	7m
52	Cheese Tree	<i>Glochidion ferdinandi</i> var. <i>ferdinandi</i>	8cm	8m
53	Scentless Rosewood	<i>Synoum glandulosum</i>	6cm	7m
54	Scentless Rosewood	<i>Synoum glandulosum</i>	4cm	6.5m
55	Blueberry Ash	<i>Elaeocarpus obovatus</i>	14cm, 11cm	14m
56	Scentless Rosewood	<i>Synoum glandulosum</i>	4cm	9m
57	Scentless Rosewood	<i>Synoum glandulosum</i>	4cm	6m
58	Scentless Rosewood	<i>Synoum glandulosum</i>	9cm, 9cm, 11cm	14m
59	Scentless Rosewood	<i>Synoum glandulosum</i>	7cm	9m
60	Scentless Rosewood	<i>Synoum glandulosum</i>	4.5cm	7m
61	Scentless Rosewood	<i>Synoum glandulosum</i>	4cm, 4cm	8m
62	Scentless Rosewood	<i>Synoum glandulosum</i>	5cm, 3cm	8m
63	Scentless Rosewood	<i>Synoum glandulosum</i>	6cm	8m
64	Scentless Rosewood	<i>Synoum glandulosum</i>	3cm	4m
65	Bangalow Palm	<i>Archontophoenix cunninghamiana</i>	23cm	12m
66	Bangalow Palm	<i>Archontophoenix cunninghamiana</i>	21cm	11m

67	Paperbark	<i>Melaleuca quinquenervia</i>	44cm	15m
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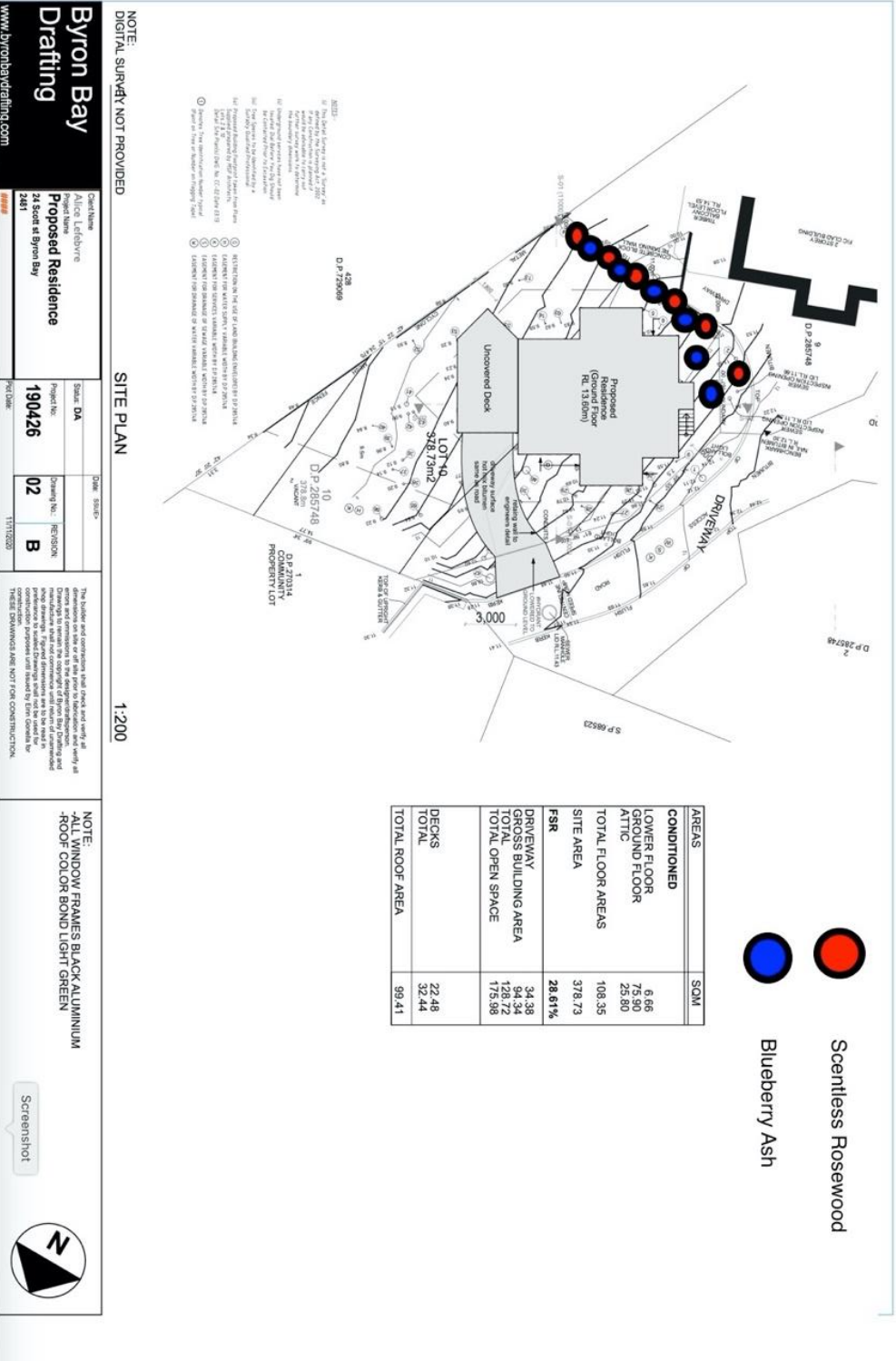
ATTACHMENT 4: 1993 VEGETATION MAPPING



ATTACHMENT 5: FLORA LIST

COMMON NAME	SCIENTIFIC NAME
<u>Tree</u>	
Macaranga	<i>Macaranga tanarius</i>
Swamp Box	<i>Lophostemon suaveolens</i>
Beach Acronychia	<i>Acronychia imperforata</i>
Bangalow palm	<i>Archontophoenix cunninghamiana</i>
Celery Wood	<i>Polyscias elegans</i>
Pink Eudioa	<i>Melicope elleryana</i>
Cheese Tree	<i>Glochidion ferdinandi</i> var. <i>ferdinandi</i>
Tree Fern	<i>Dicksonia antartica</i>
Scentless Rosewood	<i>Synoum glandulosum</i>
Sweet Pittosporum	<i>Pittosporum undulatum</i>
Blackwood	<i>Acacia melanoxylon</i>
Blueberry Ash	<i>Elaeocarpus reticulatus</i>
Umbrella Tree	<i>Schefflera actinophylla</i>
Camphor Laurel	<i>Cinnamomum camphora</i>
Paperbark	<i>Melaleuca quinquenervia</i>
Tuckeroo	<i>Cupaniopsis anacardioides</i>
<u>Mid Level</u>	
Winter Senna	<i>Senna pendula</i> var. <i>glabrata</i>
Split Leaf Philodendron	<i>Philodendron selloum</i>
Tobacco Bush	<i>Solanum mauritianum</i>
Castor Oil Plant	<i>Ricinus communis</i>
<u>Palms</u>	
Golden Cane Palm	<i>Dypsis lutescens</i>
Bangalow Palm	<i>Archontophoenix cunninghamiana</i>
Cocos Palm	<i>Syagrus romanzoffianum</i>
Foxtail Palm	<i>Wodyetia bifurcata</i>
<u>Ground Cover/Lower Strata</u>	
Bracken	<i>Pteridium sp</i>
Blue Flax Lily	<i>Dianella caerulea</i>
Lomandra	<i>Lomandra longifolia</i>
Dianella	<i>Dianella caerulea</i>
Bromeliad	<i>Bromeliad sp</i>
Maidenhair Fern	<i>Adiantum sp</i>
Asparagus fern	<i>Asparagus aethiopicus</i>
Sagittaria	<i>Sagittaria Sp</i>
Monstera	<i>Monstera Sp</i>
<u>Vines</u>	
Edible passionfruit	<i>Passiflora edulis</i>
Smilax	<i>Smilax Australis</i>

ATTACHMENT 6: LANDSCAPE PLAN



ATTACHMENT 7: LANDSCAPE PLAN CHECKLIST

This checklist summarises requirements of Chapter B9 of the DCP 2014. Specifically the following information is provided:

<u>Background information</u>	<u>Reference</u>
<i>Scale, north point, legend, context of development (adjoining roads and land uses), photograph of site.</i>	Provided in this report.
Existing conditions	
<i>Soil type and moisture conditions</i>	Soil type etc described in engineering report.
<i>Existing trees;</i>	Plan with trees and trees approved for removal in Attachment 1 and Table 1 . In addition, the trees are numbered and marked on-site.
<i>Watercourses</i>	N/a
<i>Services & Other encumbrances</i>	As per the engineering plans. It is clear of power lines, or underground services.
Compliance with minimum requirements	
<i>Compliance with the minimum landscaped requirements specified by the Planning Scheme and/or;</i>	N/A
<i>Compliance with conditions of a development approval</i>	DA Number 89/451 contains conditions of consent
Extent of Works	
<i>Any vegetation removal</i>	Tree removal approval required.
<i>Surface materials; Structures, and Other details.</i>	Discussed as relevant to the landscaping plan in report
Levels	
<i>Spot levels, and/or Contours are to be indicated</i>	Contours not relevant to plans. However, are indicated in survey report provided.
Planting Plan	
<i>Locations of proposed plantings; Number and density of plants; and Dimensions of planting beds</i>	Locations and dimensions are contained in Attachment 6 and Table 2 .
Planting Schedule	
<i>Botanic and common names; Numbers; Planting sizes; and Tree canopy spread</i>	Information provided in Table 2 .
Designer	David Sweet, M.Env.Sci, RedBrownGreen
Cost Estimates	\$2000

ATTACHMENT 8: PLANTING GUIDELINES

[PLEASE NOTE: THE MAJORITY OF THE PLANTINGS SHOULD BE TRANSPLANTED FROM THE SITE]

1. SITE PREPARATION

The groundcover at each planting location should be manually removed to allow for a planting circle of around 300mm in diameter. Shovels or mattocks can be used to dig a hole in the cleared site that is 200mm deeper than the container and double the width. The soil on the base, and side of the hole, should be loosened to allow for easier root penetration. The dug out soil should be retained and stored near the hole for re-use in the planting process.

2. STOCK

Plants listed are native to this area. It is preferable to use sun hardened plant stock. Seedlings should be about 30cm in height. Water stock before planting to ensure the roots are moist.

3. SPACING OF PLANTINGS

The landscape plan at Attachment 1 to this report provides a guide to spacings between each species, it accounts for maximum widths etc. The plantings to the north of the site should be randomly spaced. Seedlings should not be planted within 1metre of an existing tree.

4. FERTILISING

Fertilisers are often not recommended for native plantings. However, in this site, a small amount of slow-release fertiliser might assist plant health. Fertilise at no more than the recommended rates by the manufacturer. The fertiliser is placed into the hole prior to the planting, it should be mixed with the back-filled soil, so that root contact is not made directly with the fertiliser.

5. PLANTING

Thoroughly soak the plant before planting. Soak planting hole prior to planting, but allow to drain. If the soil is very dry *fill* with water and allow to drain completely. Carefully tap the plant out of its container, and gently loosen any pot bound or tangled circular roots. Place the plant into the hole with the water and fertiliser (if applicable) and fill in with crumbly, loose soil dug out from the hole. Ensure that the plant is firmed into the soil by hand.

6. MULCHING

Mulch is important for water retention, weed suppression and soil development. Lay the mulch material approx 75mm thick around the plant. The native trees removed from this site can be used for mulch. Plastic not to be used beneath mulch as this interferes with biotic functions of the soil, which are essential to the maintenance of healthy plants.

7. STAKING

Tree stock should be staked. Two (1.8m hardwood) stakes required per palm and tree over 1 metre in height. Plants requiring staking will be supported by loose hessian strips looped around the plant and connected to 2 stakes set in the ground 300 mm from the plant. This will enable the young tree to sway slightly in the wind which is important as it stimulates root growth and ensures that the tree has greater stability when the stakes are later removed.

8. WATERING

New plantings should be watered for a few weeks after planting if there is insufficient rain during that period. After the first few weeks of planting watering may be necessary if unseasonally dry periods occur.