

- (ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed action, and**
- (iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species, population or ecological community in the locality,**

The development will not isolate any known or potential threatened species habitat from adjoining areas of similar habitat.

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

No critical habitat for any species occurs at the Subject site.

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

Threat abatement has been managed via amelioration measures

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

The proposed development will not involve clearing native vegetation already present onsite, which is listed as a threatening process under Schedule 3 of the Threatened Species Conservation Act (1995).

Conclusion

The proposed development will not involve removing regenerated vegetation. The Subject site is not connected to native vegetation; and that areas of native vegetation are to be retained and improved where possible at the Subject site, the proposed development is unlikely to have a significant effect on any threatened species. Consequently, a Species Impact Statement is not necessary.

Table 9. Occurrence in selected north coast conservation reserves of threatened fauna species that may possibly occur at the Subject site. X = recorded from reserve.

Source: NPWS (2005)

Scientific name	Common name	Fortis Creek NP	Bungawal bin NR	Bungawal bin NP	Cathedral Rock NP	Guy Fawkes River NP	Mann River NR	Washpool NP	Chaclundi NP	Bundjalung NP	Yuraygir NP	Cudgen NR	Myall Lakes NP
<i>Atrichornis rufescens</i>	Rufous Scrub-bird	X	X	X	X	X	X	X	X	X	X	X	X
<i>Coraciina lineata</i>	Barred Cuckoo-shrike	X	X	X	X	X	X	X	X	X	X	X	X
<i>Ptilinopus magnificus</i>	Wompoo Fruit-Dove	X	X	X	X	X	X	X	X	X	X	X	X
<i>Ptilinopus regina</i>	Rose-crowned Fruit-Dove	X	X	X	X	X	X	X	X	X	X	X	X
<i>Ptilinopus superbus</i>	Superb Fruit-Dove	X								X	X	X	X
<i>Monarcha leucotis</i>	White-eared Monarch	X	X	X	X	X	X	X	X	X	X	X	X
<i>Menura alberti</i>	Albert's Lyrebird										X	X	X
<i>Podargus ocellatus</i>	Marbled Frogmouth								X		X		
<i>Ninox strenua</i>	Powerful Owl	X	X	X	X	X		X	X	X	X		X
<i>Tyto tenebricosa</i>	Sooty Owl	X	X	X					X	X	X		
<i>Assa darlingtoni</i>	Pouched Frog						X	X					

<i>Philonia loveridgei</i>	Loveridge's Frog													
<i>Phascogale tapoataia</i>	Brush-tailed Phascogale	X	X	X	X		X	X	X	X	X			
<i>Petaurus norfolcensis</i>	Squirrel Glider		X	X		X	X	X	X	X	X	X	X	
<i>Phascogale cinereus</i>	Koala		X			X	X	X	X	X		X	X	
<i>Syconycteris australis</i>	Common Blossom-bat	X	X	X	X		X	X	X	X	X			
<i>Miniopterus australis</i>	Little Bentwing-bat									X	X	X		
<i>Miniopterus schreibersii oceanensis</i>	Eastern Bentwing-bat						X			X	X	X		
<i>Nyctophilus bifax</i>	Eastern Long-eared Bat	X	X	X			X	X	X	X	X			
<i>Hoplocephalus stephensii</i>	Stephens' Banded Snake	X								X	X	X	X	

5.2 SEPP 44

State Environmental Planning Policy 44 – Koala Habitat Protection – aims to “encourage the proper conservation and management of area of natural vegetation that provide habitat for Koalas, to ensure permanent free-living populations over their present range and to reverse the current trend of population decline.”

A number of criteria in the SEPP are to be addressed

1. Does the policy apply?

Does the Subject land occur in an LGA identified in Schedule 1?

The site occurs in the Coffs Harbour LGA, which is listed under Schedule 1.

Is the landholding to which the DA applies greater than 1 hectare in area?

Yes

2. Is the land potential Koala habitat?

Does the site contain areas of native vegetation where the trees of types listed in Schedule 2 constitute at least 15% of the total number of trees in the upper or lower strata of the tree component?

Yes

3. Is there core Koala habitat on the Subject land?

“Core Koala habitat” means an area of land with a resident population of koalas, evidenced by attributes such as breeding females (that is, females with young) and recent sightings of and historical records of a population. Signs of koalas – were not observed at the Subject site, there are no historical records of a koala populations at the site. Consequently, the Subject site does contain core Koala habitat.

4. Is there a requirement for the preparation of a Plan of Management for identified core Koala habitat?

No

5.3 Commonwealth Environment Protection and Biodiversity Conservation Act (1999)

5.3.1 Introduction

Under the Commonwealth Environment Protection and Biodiversity Conservation Act (1999), a person must not, without an approval under the Act, take an action that has or will have, or is likely to have, a significant impact on a matter of National Environmental Significance (NES). These matters are listed as:

- (a) the world heritage values of a declared World Heritage property,
- (b) the ecological character of a declared Ramsar wetland,
- (c) a threatened species or endangered community listed under the Act,
- (d) a migratory species listed under the Act, or
- (e) the environment in a Commonwealth marine area or on Commonwealth land.

The EPBC Act (1999) does not require Commonwealth approval for the rezoning of land. It does, however, suggest that when rezoning land, planning authorities should consider whether to allow actions that could significantly affect NES matters or the environment of Commonwealth land.

Matters of NES in NSW are:

- (a) Declared World Heritage Areas;
- (b) Declared Ramsar Wetlands;
- (c) Listed threatened Species under the EPBC Act (1999);
- (d) Listed Ecological Communities under the EPBC Act (1999);
- (e) Listed migratory species (JAMBA and CAMBA)

5.3.2 Site assessment

Commonwealth Assessment will be required for proposed activities on the site if they affect any matter of NES. The Subject site is not a Declared World Heritage Area nor does it contain any Declared Ramsar Wetlands. No threatened species listed under the EPBC Act (1999) may possibly occur at the Subject site.

5.3.3 Listed ecological communities in NSW

None of the ecological communities currently listed in the EPBC Act (1999) occur at the Subject site.

5.3.4 Listed migratory species

Listed migratory species in NSW are considered predominantly in the Japan-Australia Migratory Bird Agreement (JAMBA) and China-Australia Migratory Bird Agreement (CAMBA).

An action has, will have, or is likely to have a significant impact on a migratory species if it does, will, or is likely to:

- substantially modify (including by fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat of the migratory species, or
- result in invasive species that are harmful to the migratory species becoming established in an area of important habitat of the migratory species, or
- seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of the species.

An area of important habitat is:

1. habitat utilised by a migratory species occasionally or periodically within a region that supports an ecologically significant proportion of the population of the species, or
2. habitat utilised by a migratory species which is at the limit of the species range, or

3. habitat within an area where the species is declining.

No CAMBA or JAMBA species are known to occur or – in view of the absence of wetlands – likely to occur at the site. The proposed development is therefore unlikely to have a significant impact on any CAMBA or JAMBA species.

5.3.5 Requirement for Commonwealth Assessment

In light of the considerations discussed above, Commonwealth Assessment is not required for the proposed development of the site.

6.0 Conclusion

Bushfiresafe was engaged by Sapphire Beach Development Pty. Ltd. to complete a Flora and Fauna Assessment for Lots 100 & 101 DP 629555 and lot 2 DP 800836 Pacific Hwy, Coffs Harbour.

The assessment involved the following:

- Determining the threatened flora species recorded from the locality
- Assessing the nature and condition of vegetation at the site, and searching for threatened flora species
- Determining the threatened fauna species occurring in the locality
- Searching for threatened fauna species
- Assessing the habitat value of the site for threatened species
- Addressing statutory requirements including State Environmental Planning Policy No. 44 (SEPP 44 – Koala Habitat Protection), State Environmental Planning Policy No. 14 (SEPP 26 – Littoral Rainforest), Section 5A of the Environmental Planning & Assessment Act (1979) and the Commonwealth Environment Protection and Biodiversity Act (1999)

The Subject site – the area subject to the proposed development, currently known as Pelican Beach Resort, is located between Korora and Sapphire, 6km north of Coffs Harbour in the Coffs Harbour Local Government Area on the North Coast of NSW. The Subject site is located adjacent to Campbell's Beach on the Pacific Ocean. The majority of the subject site is zoned 2(e) Residential with a small portion zoned 7(a) Environmental Protection under the Coffs Harbour LEP. The site occupies an area of 41503sq.M. The vegetation at the Subject site is mainly of landscape nature except for two Hoop Pines, regarded as significant landscape signature trees, the small area of dry sclerophyll forest within the 7(a) Environmental Protection zone and another small area of dunal vegetation adjacent to the beach.

Soils in the area are Aeolian sands and arillite with moderate erosion hazard.

The Subject site is located on the southern peninsula of Campbell's Beach approximately at or above sea level. The subject site is connected to Solitary Island's Marine Park which is located along the coastline of Campbell's Beach. The site generally slopes east with a gradient between 10 and 15 Degrees.

The site is currently occupied by the Pelican Beach Resort. The resort comprises 114 suites.

A site survey was undertaken by Craig Harman B.Sc. Hort on the 8th and 9th of June 2006. The survey involved walking a random meander through the resort including thorough investigation of the 7(a) zoned portion and the dunal vegetation along the foreshore.

The nature and condition of vegetation at the Subject site was assessed, and all threatened flora species – as well as all flora species, threatened or not, encountered during the meander– were recorded. All individuals of threatened flora species were marked with flagging tape. Plants were identified by Craig Harman.

Based on an assessment of the type and condition of habitat present, it was concluded that 29 threatened fauna species may possibly occur at the Subject site.

An assessment of significance under Section 5A of the NSW EP&AA (1979) was completed for the threatened flora species known to occur, and the 29 threatened fauna species assumed to occur, at the Subject site. The assessment concluded that the proposed development is unlikely to have a significant effect on any of these species. A Species Impact Statement (SIS) is therefore not required.

A SEPP 44 assessment concluded that the Subject site does not support core Koala habitat, and that there is therefore no need for of a plan of management for core Koala habitat.

An assessment under the Commonwealth Environment Protection and Biodiversity Conservation Act (1999) concluded that the Proposed development will not have a significant impact on any matters of National Environmental Significance. Commonwealth assessment of the proposal is therefore not required.

It is recommended that building envelopes be positioned to minimise the need to clear vegetation for units, houses and for bushfire buffers. A Draft Plan Management (DPM) has been prepared for the entire Site. The Draft Plan of Management has addressed:

- Headland and hind-dune area
- Rehabilitation of Environmental Protection Zone
- Weed control in developed areas and areas of retained habitat.
- Landscape and embellishment plantings of local endemic species.
- Buffer plantings to hind-dune and environmental protection zone areas.

Additional amelioration measures have been recommended in this report. These include:

- All stormwater from development to be diverted away from coastal area and stored onsite to allow dissipation through dunal area over a period of time
- Rehabilitation of sections of the low-lying areas of the site and the revegetation of the grassed area adjacent to the beach as a physical boundary to buffer the coastline

- Suitable traffic control measures should be incorporated into the re-development.
- Retention and enhancement of areas of natural habitat, Banksias, native coastal grasses and other flowering trees and shrubs throughout the development area.
- Lighting from the proposed development should be designed to minimise disturbance to the coastal foreshores to reduce impacts on turtles and birds may possibly nest on the beach.
- Fencing to be provided to limit entry to vegetation areas and to provide physical separation between residential development and natural areas

7.0 References

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 Flora & Fauna report for Pelican Beach Resort lot 100 & 101 DP629555 and lot 2
 DP800836 Pacific hwy Coffs Harbour

Appendix 1: Plant species recorded during site survey

(Asterisks indicate species not naturally found on the North Coast of NSW)

Family	Species	Common Name
PALMAE	<i>Archontopopheonix Cunninghamiana</i>	Bangalow Palm
EUPHORBIACEAE	<i>Omalanthus nutans</i>	Bleeding Heart
ARALIACEAE	<i>Polyscias elegans</i>	Celerywood
ZINGIBERACEAE	<i>Alpinia coerulea</i>	Native Ginger
EUPOMATIACEAE	<i>Eupomatia laurina</i>	Bolwarra
LAURACEAE	<i>Cryptocaria triplinervis</i>	Three Veined Cryptocaria
SAPENDACEAE	<i>Alectryon coriaceus</i>	Beach alectryon
	<i>Cupaniopsis anacardioides</i>	Tuckeroo
BLECHNACEAE	<i>Blechnum cartilagineum</i>	False Bracken
MELIACEAE	<i>Synoum glandulosum</i>	Scentless Rosewood
ADIANTACEAE	<i>Adiantum diaphanum</i>	Maidenhair Fern
BLECHNACEAE	<i>Blechnum cartilagineum</i>	Gristle Fern
	<i>Lantana camara</i>	Lantana
LAURACEAE	<i>Cinnamomum camphora</i>	Camphor Laurel
CAESALPINIACEAE	<i>Senna gaudichaudii</i>	Winter Senna
EUCALYPTUS	<i>Eucalyptus tereticornis</i>	Forest Red Gum
MYRTACEAE	<i>Lophostemon confertus</i>	Brush Box
CAESALPINIOIDEAE	<i>Senna coluteoides</i>	Winter Senna
CONVULVOLACEAE	<i>Ipomoea cairica</i>	Mile-a-minute
DILLENIACEAE	<i>Hibbertia riparia</i>	
	<i>Hibbertia scandens</i>	Climbing guinea flower
	<i>Hibbertia vestita</i>	
ELEOCARPACEAE	<i>Elaeocarpus reticulatus</i>	Blueberry ash
EPACRIDACEAE	<i>Monotoca scoparia</i>	Broom heath
EUPHORBIACEAE	<i>Glochidion sumatranum</i>	Umbrella cheese tree
FABACEAE	<i>Acacia irrorata</i>	
	<i>Acacia melanoxylon</i>	Blackwood wattle
	<i>Acacia sophorae</i>	Coastal wattle
	<i>Desmodium uncinatum</i>	Silver-leaved desmodium
	<i>Jacksonia scoparia</i>	Dogwood
PITTOSPORACEAE	<i>Pittosporum revolutum</i>	Hairy pittosporum
	<i>Pittosporum undulatum</i>	Sweet pittosporum
PROTEACEAE	<i>Banksia integrifolia</i>	Coast banksias
	<i>Persoonia stradbokensis</i>	Geebung
RUBIACEAE	<i>Psychotria loniceroides</i>	Hairy psychotria
RUTACEAE	<i>Acronychia imperforata</i>	Beach acronychia
	<i>Acronychia littoralis</i>	Scented acronychia
	<i>Flindersia schottiana</i>	Cudgerie

Appendix 2: Fauna species recorded during site survey

(Asterisks indicate species not naturally found on the North Coast of NSW)

Family	Species	Common Name
Artamidae	<i>Cracticus nigrogularis</i>	Pied Butcherbird
Artamidae	<i>Gymnorhina tibicen</i>	Australian Magpie
Artamidae	<i>Gymnophina Tibicen</i>	Magpie
Artamidae	<i>Serepera graculina</i>	Pied Currawong
Apodidae	<i>Hirundinus Cavdactus</i>	White Throated Needletail
Anhingidae	<i>Anhinga Melanogaster</i>	Common Darter
Acanthizidae	<i>Acanthiza Pusilla</i>	Brown Thornbill
Campephagidae	<i>Coracina novaehollandiae</i>	Black-faced Cuckoo-shrike
Columbidae	<i>Leucosarcia melanoleuca</i>	Wonga Pigeon
Corvidae	<i>Corvus orru</i>	Torresian Crow
Charadriidae	<i>Vanellus Miles</i>	Masked Lapwing
Dicaeidae	<i>Dicaeum hirundinaceum</i>	Mistletoebird
Dicruridae	<i>Rhipidura leucophrys</i>	Willy Wagtail
Dicruridae	<i>Rhipidura Albiscapa</i>	Grey Fantail
Halcyonidae	<i>Dacelo novaeguineae</i>	Laughing Kookaburra
Hirundinidae	<i>Hirundo neoxena</i>	Welcome Swallow
Maluridae	<i>Malurus cyaneus</i>	Superb Fairy-wren
Meliphagidae	<i>Acanthorhynchus tenuirostris</i>	Eastern Spinebill
Meliphagidae	<i>Lichmera indistincta</i>	Brown Honeyeater
Meliphagidae	<i>Manorina melanocephala</i>	Noisy Miner
Meliphagidae	<i>Melithreptus albogularis</i>	White-throated Honeyeater
Meliphagidae	<i>Myzomela sanguinolenta</i>	Scarlet Honeyeater
Meliphagidae	<i>Philemon corniculatus</i>	Noisy Friarbird
Pachycephalidae	<i>Falcunculus frontatus</i>	Eastern Shrike-tit
Pachycephalidae	<i>Pachycephala rufiventris</i>	Rufous Whistler
Pardalotidae	<i>Acanthiza chrysorrhoa</i>	Yellow-rumped Thornbill
Pardalotidae	<i>Pardalotus punctatus</i>	Spotted Pardalote
Passeridae	<i>Neochmia temporalis</i>	Red-browed Firetail
Podargidae	<i>Podargus strigoides</i>	Powerful Owl
Psittacidae	<i>Alisterus scapularis</i>	Australian King Parrot
Psittacidae	<i>Platycercus eximius</i>	Eastern Rosella
	<i>Dasyornis Brachypterus</i>	Eastern Bristlebird
	<i>Glossopsitta pusilla</i>	Little Lorikeet

Appendix 3: Night survey results

STAG WATCHES

None of the hollow-bearing trees watched were being used by any fauna species on the night of observation (Table 1a and b).

Table 6: Details of Trees Watched and Results of Stag Watching on 8th June, 2006

Tree(s)	Description of location	Observer	Fauna observed entering/exiting hollows
Dead tree	South of Property Entrance across road	Craig Harman	-
Flooded Gum with potential hollows	Near south-western boundary	Craig Harman	-

Table 6a: Details of Trees Watched and Results of Stag Watching on 9th June, 2006

Tree(s)	Description of location	Observer	Fauna observed entering/exiting hollows
Dead tree	South of Property Entrance across road	Craig Harman	-
Flooded Gum with potential hollows	Near south-western boundary	Craig Harman	-

SPOTLIGHTING/CALL PLAYBACK

The results of spotlighting/call playback surveys are presented in Table 2a. The most notable record is that of a powerful Owl, which was heard during call playbacks on the night of the 8th June 2006.

Table 7: Fauna species recorded during spotlighting and call playback surveys on 8th June, 2006

Class	Species	Method of Detection	Comments
Birds	Powerful Owl	Seen	Individual responded to call playback above ephemeral wetland

BAT ELOCATION

Table 7a: Details of Bat Echolocation Observations on June 2006, and Results of Anabat Recordings

Date	Time	Description of Location	Observer	Observations Recordings
8/6/06	19:30 – 20:35	Northern point of Open Grassland	Craig Harman	No sightings or recordings of bat activity
8/6/06	21:00 – 22:05	North-Western point of 7(a) zone	Craig Harman	No sightings or recordings of bat activity
9/6/06	19:00 – 20:00	Fig Tree Adjacent to old restaurant	James Harrison / Craig Harman	No sightings or recordings of bat activity
9/6/06	20:05 – 21:05	Adjacent to South-eastern point of 7(a) zone	James Harrison / Craig Harman	No sightings or recordings of bat activity

BIRD SURVEY

One threatened species was recorded during the bird surveys (Powerful Owl during call-back). Species recorded during the bird survey are presented in Appendix 2.

Appendix 4: Powerful Owl

Ninox strenua

New South Wales Legislative Status: Vulnerable

Description: Powerful Owls are large, nocturnal birds up to 65cm in length. The upperparts are dark, greyish-brown with indistinct off-white bars. The underparts are whitish with dark greyish-brown V-shaped markings. Juveniles have white crown and underparts that contrasts with its small, dark streaks and dark eye patches. The call is slow, deep and resonant woo-woo, which can be heard over a great distance in the forest at night.

Distribution: Powerful Owls are found throughout eucalypt forests and woodland in south-eastern Australia but are uncommon and occur at low densities. The eucalypt forest of north-east NSW now provide the stronghold for the species.

Habitat: Powerful Owls have large home-ranges (more than 1000 hectares) and occupy a variety of vegetation types, from woodlands and open forest to tall moist forest and rainforest. They roost by day in dense vegetation, commonly along drainage lines. They nest in large tree-hollows (at least 50cm deep) in large eucalypts. Adult birds appear to be faithful to nesting sites, remaining in one large home-range all their lives. The Powerful Owl's main prey are medium sized arboreal marsupials, particularly Greater Gliders, Common Ringtail Possums, Sugar Gliders and Flying Foxes.

Threats:

- Destruction of suitable forest and woodland habitat.
- Forest management practices that reduces the availability of food or that results in the loss of old trees and large tree-hollows.
- High frequency burning.
- Disturbances during breeding period, such as clearing, logging and burning.

Conservation actions

- Retain stands of forest and woodland habitat, especially those containing hollow-bearing trees.
- When clearing or logging, ensure sufficient hollow-bearing and large, mature trees (future hollow-bearing trees) are maintained within stands.
- Retain creekside vegetation.
- Retain a buffer of native vegetation of at least 200m radius around known nest sites.



Assessment of Significance (7 Part Test)

Threatened species impact assessment is an integral component of environmental impact assessment. The ultimate objective of the application of section 5A of the *Environmental Planning and Assessment Act 1979* (EP&A Act), the Assessment of Significance, is to improve the standard of consideration afforded to threatened species, populations and ecological communities, and their habitats through the planning and assessment process, and to ensure this consideration is transparent. Under the *Threatened Species Conservation Amendment Act 2002*, the factors to be considered when determining whether an action, development or activity is likely to significantly affect threatened species, populations or ecological communities, or their habitats (known previously as the "8-part test"), have been revised. This affects s5A EP&A Act, s94 *Threatened Species Conservation Act 1995* (TSC Act) and s220ZZ *Fisheries Management Act 1994* (FM Act).

The revised factors maintain the same intent but focus consideration of likely impacts in the context of the local rather than the regional environment as the long-term loss of biodiversity at all levels arises primarily from the accumulation of losses and depletions of populations at a local level. This is the broad principle underpinning the TSC Act, State and Federal biodiversity strategies and international agreements. The consideration of impacts at a local level is designed to make it easier for local government to assess, and easier for applicants and consultants to undertake the Assessment of Significance because there is no longer a need to research regional and statewide information. The Assessment of Significance is only the first step in considering potential impacts. Further consideration is required when a significant effect is likely and is more appropriately considered when preparing a Species Impact Statement.

Definitions

Local population

For the purposes of the TSC Act (1995) a local population is defined as “a population that occurs within the study area, unless the existence of contiguous or proximal occupied habitat and the movement of individuals or exchange of genetic material across the boundary of the study area can be demonstrated” (NPWS 1996).

Region

The Subject site is located within the New South Wales North Coast bioregion (Thackway and Cresswell 1995), which extends from the Queensland/NSW border south to about Port Stephens, and west to the Great Dividing Range.

One species of threatened fauna was found at the subject site.

- (a) in the case of a threatened species, whether the action proposed is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,**

Powerful Owls are highly mobile, wide-ranging animals which are able to cross stretches of open ground and are unlikely to have populations placed at risk of extinction by the clearing of a relatively small area of vegetation.

- (b) **in the case of an endangered population, whether the action proposed is likely to have an adverse effect on the life cycle of the species that constitutes the endangered population such that a viable local population of the species is likely to be placed at risk of extinction,**
This factor is essentially identical to factor (a) except that it refers only to endangered populations listed on Part 2 of Schedule 1 of the TSC Act and Part 2 of Schedule 4 of the FM Act, whereas factor (a) refers to species.

No.

- (c) **in the case of an endangered ecological community or critically endangered ecological community, whether the action proposed:**
(i) **is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or**
(ii) **is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,**

The Powerful Owl occurs in the vicinity of the Subject site. In relation to the regional distribution of habitat, the area to be modified or removed is not significant.

- (d) **in relation to the habitat of a threatened species, population or ecological community:**
(i) **the extent to which habitat is likely to be removed or modified as a result of the action proposed, an**
(ii) **whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed action, and**
(iii) **the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species, population or ecological community in the locality,**

The development will not isolate any known or potential threatened species habitat from adjoining areas of similar habitat.

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

No critical habitat for any species occurs at the Subject site.

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

Threat abatement has been managed via amelioration measures

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

The proposed development will not involve clearing native vegetation, which is listed as a threatening process under Schedule 3 of the Threatened Species Conservation Act (1995).

Conclusion

The proposed development will not involve removing regenerated vegetation. The Subject site is not connected to native vegetation; and that areas of native vegetation are to be retained and improved where possible at the Subject site, the proposed development is unlikely to have a significant effect on any threatened species. Consequently, a Species Impact Statement is not necessary.



Bushfiresafe (Aust)
Pty Ltd
20 McLachlan Street
Maclean NSW 2463

Project:
Bushfire Risk Management
Assessment for proposed
redevelopment of Pelican
Beach Resort
Coffs Harbour

Client:
Sapphire Beach
Development Pty Ltd
North Sydney

[Appendix 5
Aerial](#)

APPENDIX 6: ONSITE WEATHER SUMMARY

DATE:8/06/2006 TIME:18:00hrs TEMP:19.1 HUMIDITY 56%
WIND: (Strong/**Moderate**/Mild/Calm) DIRECTION: S/E
CLOUD COVER %: 50% COMMENT: _____

DATE: 8/06/2006 TIME: 21:00hrs TEMP: 16.3° HUMIDITY 59%

WIND: (Strong/**Moderate**/Mild/Calm) DIRECTION: S/E_____

CLOUD COVER %: 50% COMMENT:

DATE: 8/06/2006 TIME: 24:00hrs TEMP: : 14.1° HUMIDITY 66%
WIND: (Strong/Moderate/**Mild**/Calm) DIRECTION: S/E
CLOUD COVER %: 50% COMMENT:

DATE: 9/06/2006 TIME: 06:00hrs TEMP: 13.8° HUMIDITY 61%

WIND: (Strong/Moderate/**Mild**/Calm) DIRECTION: S/E_____
 (Circle appropriate)

CLOUD COVER %: 60% COMMENT:

DATE: 9/06/2006 TIME: 18:00hrs TEMP: 13.8° HUMIDITY 62%

WIND: (Strong/Moderate/**Mild**/Calm) DIRECTION: S/W
(Circle appropriate)

CLOUD COVER %: 10% COMMENT:

DATE: 9/06/2006 TIME: 21:00hrs TEMP: 13.8° HUMIDITY 76%

WIND: (Strong/Moderate/Mild/**Calm**) DIRECTION: _____
 (Circle appropriate)

CLOUD COVER %: 0% COMMENT:

Prepared By Bushfiresafe (Aust) P/L, Environmental Services: 02) 6645 1088 38
Flora & Fauna report for Pelican Beach Resort lot 100 & 101 DP629555 and lot 2
DP800836 Pacific hwy Coffs Harbour

Appendix 7: TRAP SUMMARY

JOB NAME: Pelican Beach Resort DATE: 8/06/2006 SHEET No; 1

TRAP TYPE	#	LOCATION-G/R	HABITAT TYPE	SET TIME	CHECK TIME	CHECK TIME	CHECK TIME	CHECK TIME	RESULTS
Elliot	701	See Map		18:00	23:00	05:00			1)
“	702	“							2)
“	703	“							3)
“	704	“							4)
“	705	“							1)
“	706	“							2)
“	707	“							3)
“	708	“							4)
“	709	“							1)
“	710	“							2)
“	711	“							3)
“	712	“							4)
“	713	“							1)
“	714	“							2)
“	715	“							3)
“	716	“							4)
“	717	“							1)
“	718	“							2)
“	719	“							3)
“	720	“							4)

TRAP SUMMARY

JOB NAME: Pelican Beach Resort

DATE: 8/06/2006

SHEET No; 2 Continued

“	721	“							1)	
“	722	“							2)	
“	723	“							3)	
“	724	“							4)	
“	725	“							1)	
TRAP TYPE	#	LOCATION-G/R	HABITAT TYPE	SET TIME	CHECK TIME	CHECK TIME	CHECK TIME	CHECK TIME	CHECK TIME	RESULTS
Lg Elliot	41	See Map		18:30	22:30	06:00				1)
“	42	“								2)
“	43	“								3)
“	44	“								4)
“	45	“								1)
“	46	“								2)
“	47	“								3)
“	48	“								4)
“	49	“								1)
“	50	“								2)
Harp		“								1)
Anabat		“								2)
Hair	1	“								3)
“	2	“								4)
“	3	“								5)

Prepared By Bushfiresafe (Aust) P/L, Environmental Services: 02) 6645 1088

Flora & Fauna report for Pelican Beach Resort lot 100 & 101 DP629555 and lot 2 DP800836 Pacific hwy Coffs Harbour

TRAP SUMMARY

JOB NAME: Pelican Beach Resort

DATE: 9/06/2006

SHEET No; 1

TRAP TYPE	#	LOCATION-G/R	HABITAT TYPE	SET TIME	CHECK TIME	CHECK TIME	CHECK TIME	CHECK TIME	CHECK TIME	RESULTS
Elliott	701	See Map		18:00	21:00	24:00	03:00	06:00	1)	
“	702	“							2)	
“	703	“							3)	
“	704	“							4)	
“	705	“							1)	
“	706	“							2)	
“	707	“							3)	
“	708	“							4)	
“	709	“							1)	
“	710	“							2)	
“	711	“							3)	
“	712	“							4)	
“	713	“							1)	
“	714	“							2)	
“	715	“							3)	
“	716	“							4)	
“	717	“							1)	
“	718	“							2)	
“	719	“							3)	
“	720	“							4)	

TRAP SUMMARY

JOB NAME: Pelican Beach Resort

DATE: 9/06/2006

SHEET No; 2 Continued

“	721	“								1)
“	722	“								2)
“	723	“								3)
“	724	“								4)
“	725	“								1)
TRAP TYPE	#	LOCATION-G/R	HABITAT TYPE	SET TIME	CHECK TIME	CHECK TIME	CHECK TIME	CHECK TIME	CHECK TIME	RESULTS
Lg Elliot	41	See Map		19:00	22:00	01:00	04:00	07:00		1)
“	42	“								2)
“	43	“								3)
“	44	“								4)
“	45	“								1)
“	46	“								2)
“	47	“								3)
“	48	“								4)
“	49	“								1)
“	50	“								2)
Harp		“								1)
Anabat		“								2)
Hair	1	“								3)
“	2	“								4)
“	3	“								5)

Prepared By Bushfiresafe (Aust) P/L, Environmental Services: 02) 6645 1088

Flora & Fauna report for Pelican Beach Resort lot 100 & 101 DP629555 and lot 2 DP800836 Pacific Hwy Coff's Harbour

Appendix 11: ACTIVE TREE SERVICE REPORT



FAR NORTH COAST OFFICE

9TH August 2006

Our Ref. ch06-12945/3

To: Craig Harman
Bushfiresafe Pty Ltd.
20 McLaughlan St
Maclean NSW 2463

Dear Craig,

Results of Testing for Mundulla Yellows (MY) Syndrome in Pines at Pelican Beach Resort

Testing for the dieback syndrome, Mundulla Yellows (MY), was undertaken by Southern Cross University Plant Pathology Department analysing soil and tissue samples from the two pine trees located adjacent to the old restaurant building in the north-eastern corner of the Pelican Beach Site.

All samples were tested for the presence of fungi, nematodes, bacteria, phytoplasmas, viruses and virus-like organisms. Insects were collected from tree foliage and understorey vegetation to investigate the presence of pests and disease vectors at the site. Topsoil and subsoil was collected from each of the trees, and soil properties and chemistry were assessed. Foliage chemistry from both trees was also investigated.

The results of biotic and abiotic testing were compared to analysis from known MY infected plants held by the Department of the Environment and Sustainability, enabling determination of the presence of Mundulla Yellows in the pines at Pelican Beach.

The results revealed that Mundulla Yellows Syndrome is present in the pines onsite. In addition, fungi, nematodes, bacteria, phytoplasmas, viruses and virus-like organisms effected by MY were detected in samples as far away as fifteen (15) Meters from the pines.

As a result of such findings, it is recommended that the pines be removed and surrounding area be cleared to an area of eighteen Meters in radius from the effected trees. Unfortunately the pines seem to be adversely effected beyond salvation and limiting the spread of MY is paramount. Furthermore, future plantings of the area need to be implemented using plants known not to be effected by any type of dieback syndrome.

If you would like to contact us to discuss any of the above, please contact Wayne Elliot at our Coffs Harbour Office on 1300 130 287, he will be happy to help.

Regards,

A handwritten signature in blue ink, appearing to read "Mark Thomas".

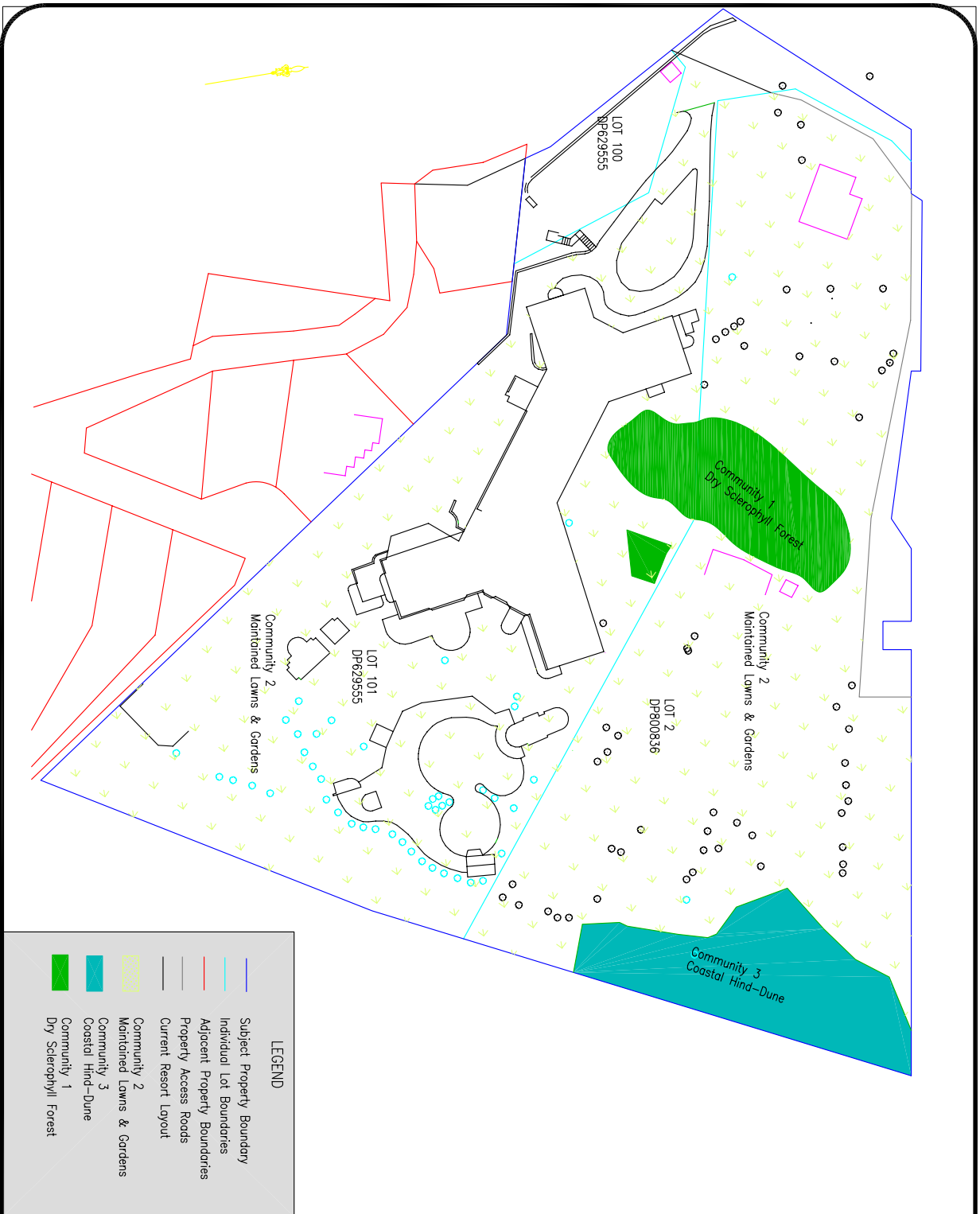
Mark Thomas

PO Box 1332, Mona Vale NSW 2102

Phone: (02) 6582 3220

Mobiles: 0418 623 132

Fax: (02) 6582 2673



General Notes
 This drawing was prepared by Bushfiresafe (Aust) P/L to demonstrate the identified vegetation communities within the development property and should not be used for any other purpose.

APPENDIX 8
Vegetation Communities /Current Site Layout

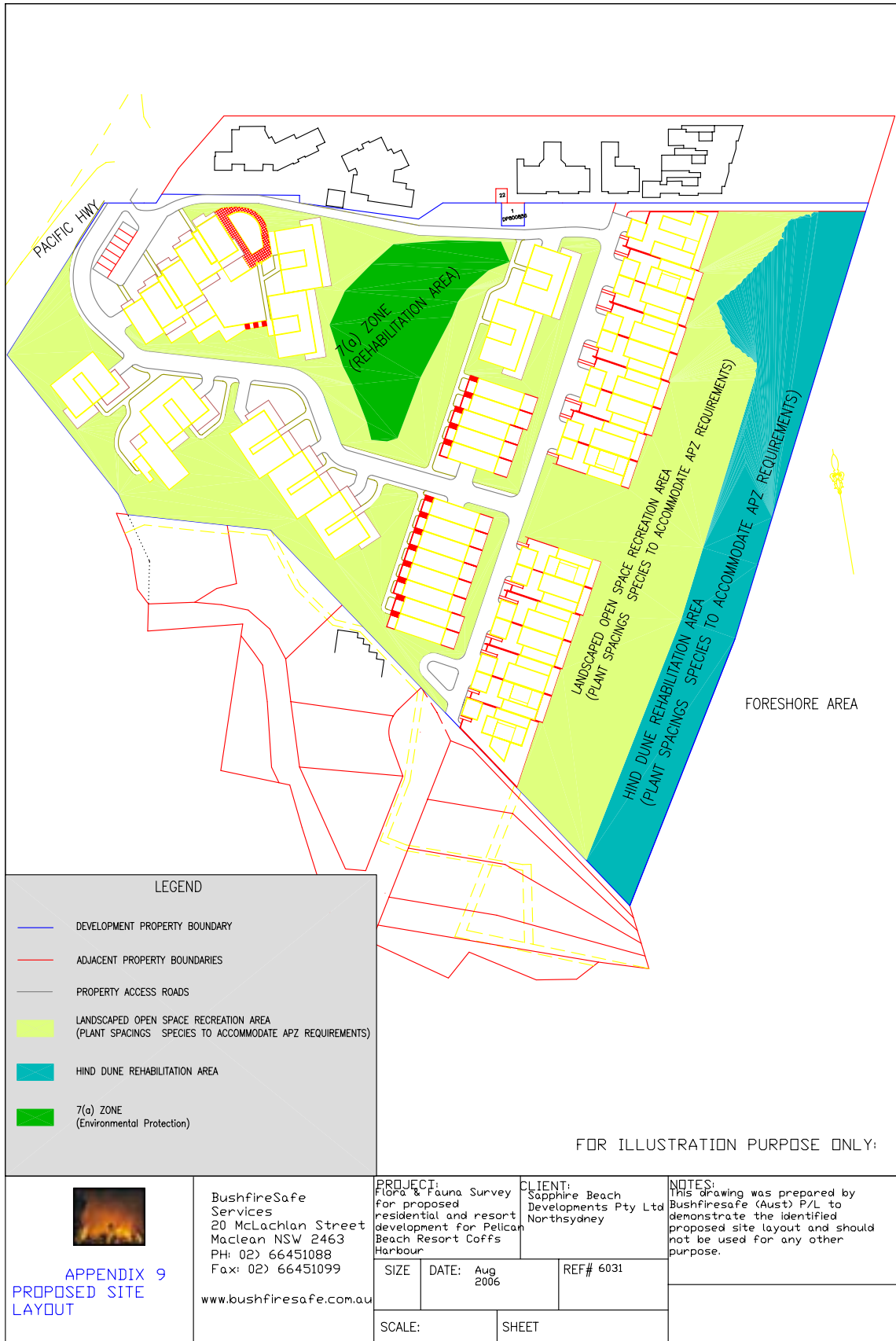
Bushfiresafe (Aust) P/L
 20 McLachlan St
 Maclean NSW 2463
 Ph: 02) 66451088
 Fax: 02) 66451099

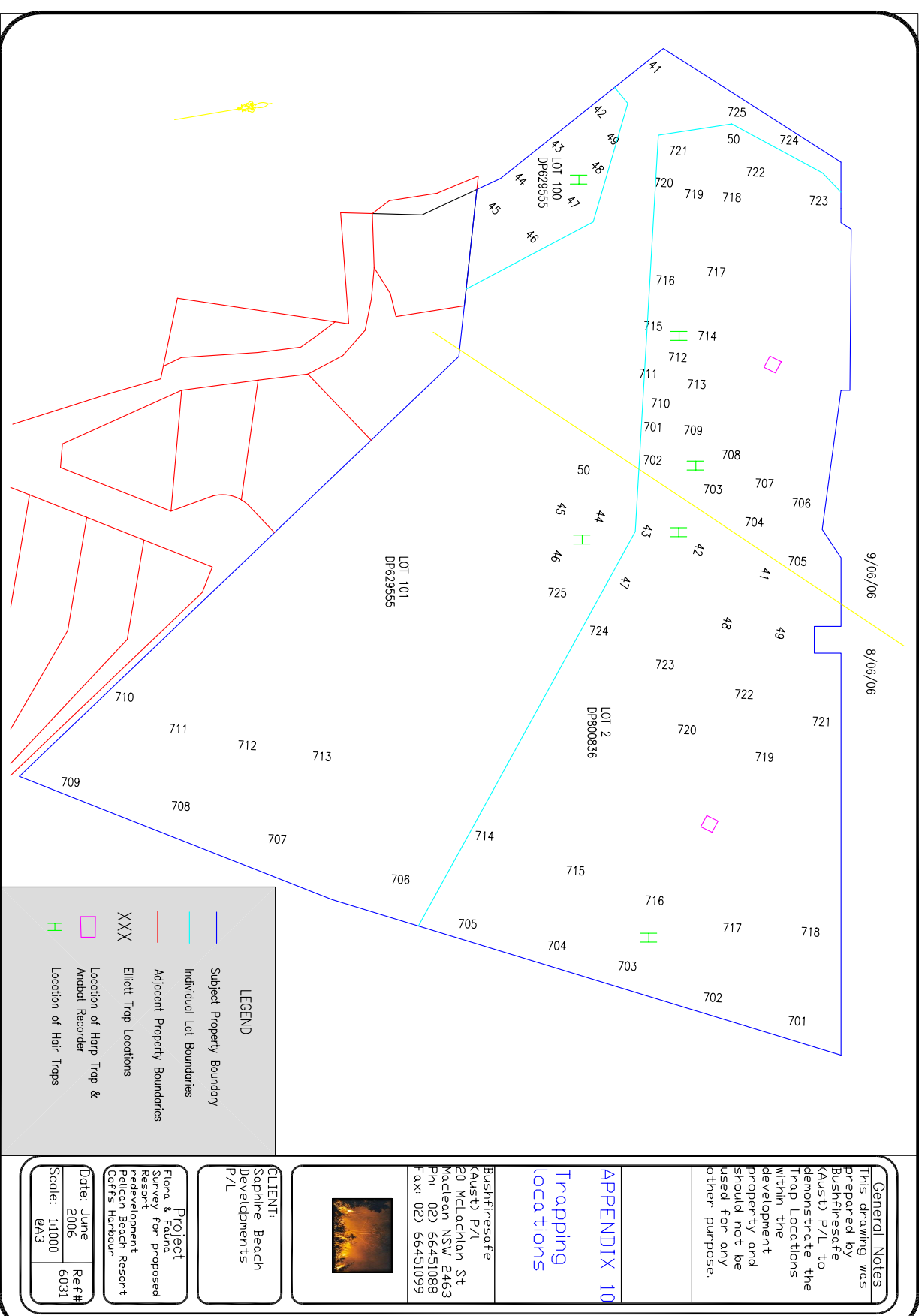


CLIENT:
 Sapphire Beach Developments P/L

Project:
 Flora & Fauna Survey for proposed Resort Redevelopment Pelican Beach Resort Coffs Harbour

Date: June 2006
Scale: 1:1000
Ref#: 6031
@A3





Volumes 1

8. Sapphire Draft Plan of Management

SAPPHIRE PLAN OF MANAGEMENT

Pelican Beach Redevelopment

Lots 100 & 101 DP 629555

and lot 2 DP 800836

Pacific Hwy, Coffs Harbour.

for

Sapphire Beach Development Pty. Ltd

June 2006

Prepared by

Bushfire**safe (Aust) P/L**

Environmental Services

DOCUMENT CONTENTS

- 1 Introduction- Why A Plan of Management
- 2 Site Location
- 3 Executive Summary
- 4 Consultation Process
- 5 Desired Outcomes
- 6 Restoration Methodology
 - 6.1 Dune Rehabilitation
- 7 Relevant Legislation and Policies
 - 7.1 Environmental Planning and Assessment Act 1979
 - 7.1.1 The State Environmental Planning Policy No 71- Coastal Protection
 - 7.1.2 Coffs L.E.P 2000
 - Waterways – Land adjoining the Solitary Islands Marine Park
 - 7.2 NSW Coastal Policy 1997
 - 7.3 North Coast Regional Environmental Plan (NCREP)
 - 7.4 Other Relevant Legislation and policies
- 8 Land Description and Analysis
 - 8.1 Recent History of Beach and environmental protection Zone
 - 8.2 Recreational Use
 - 8.2.1 Existing Facilities and Use
 - 8.2.2 Access
 - 8.3 Visual Amenity
 - 8.4 The Physical Environment
 - 8.4.1 The Dunes and Beach
 - 8.4.2.1 Foreshore
 - 8.4.2.2 environmental protection Environmental Significance Zone
 - 8.4.3 Vegetation
 - 8.4.3.1 Weeds
 - 8.4.3.2 Native Animals
 - 8.5 Fire Management
- 9 Values of the Coastal Reserve
- 10 Proposed Management Strategies and Actions
 - 10.1 Access to Beach
 - 10.2 Access to Campbells Beach Dunal Area
 - 10.3 Visual Amenity
 - 10.4 Vegetation Management
 - 10.5 Weed Management
 - 10.6 Fire Management
 - 10.7 Signage
- 11.0 Landscape Masterplan
- 12.0 Stormwater retention/ infiltration Systems

Attachments

Attachment 1 Native Plants recommended for Campbells Beach Foreshore

Bibliography**Figures**

Figure 1 Location of Beach Foreshore

Figure 2 Northern portion of dune

Figure 3 Middle portion of dune

Figure 4 Weed infestation of dune

Figure 5 Campbells Beach looking North

Figure 6 Campbells Beach looking South

Figure 7 Eastern edge of the area is zoned environmental protection

Figure 8 Western edge of the area is zoned environmental protection

Figure 9 Existing Site Analysis

Figure 10 Topographical Analysis

Figure 11 Typical Rehabilitated Section

Figure 12 Typical Rehabilitated Cross Section

Figure 13 Landscape Masterplan.

1.0 INTRODUCTION- WHY A PLAN OF MANAGEMENT

This plan of management is for the Beach foreshore Reserve and environmental protection Environmental Protection zone located on the northern shores of Coffs Harbour. It is approximately 4.15ha (41503m²) in area. All land included in this Plan of Management is located along the foreshore of Campbells Beach on the Pelican Beach Resort site.

This Plan of Management is being developed to ensure that the future development of the reserve is consistent with relevant legislation, policies, guidelines and community expectations.

This Plan of Management will guide the future use and development of the reserve. It outlines how Council, in consultation with the Department of Lands and the developer, intends to use, develop and manage the land, and determine the scale and intensity of development for today and the future.

As a planning tool it provides both Council and the Department of Lands and the developer goals to work towards in achieving agreed outcomes for the management of the land. A Plan of Management can be used to identify projects that could be achieved through working groups as well as providing supporting documentation when applying for grants.

2.0 SITE LOCATION

Pelican Beach is located on the northern shores of Coffs Harbour, approximately 4 hours drive from Sydney and a 5 minute drive from Coffs Harbour.

Pelican Beach resort is situated between Coffs Harbour and Korora and Sapphire, on the eastern side of the Pacific Highway and fronts Campbells Beach.



Illustration 1 - Site Location

3.0 EXECUTIVE SUMMARY

The Sapphire Foreshore Plan of Management is the first stage in the development of a plan that will guide the future use, development and management of the foreshore and environmental protection zone. The management strategies and actions in this Draft Plan are presented for public discussion.

This Draft Plan has been developed in accordance with the environmental, cultural heritage, recreational, visual, and tourism values that have so far been identified for the foreshore area. These values are the qualities of the foreshore that are significant, special or important, and that the community desires to protect or enhance.

The plan proposes that Sapphire foreshore be rehabilitated over a 4 to 5 year period. During this time, gardens built into the foreshore area will be removed and the area mown will be reduced to a maximum of 6 metres from private property boundaries. Consideration will be given to the social impact on adjoining residents when deciding when to remove garden plantings from the area.

The foreshore will be replanted with native coastal vegetation to enhance wildlife habitat and to provide a visual buffer between the beach and neighbouring residences. View corridors from neighbouring residents will be retained.

The management of noxious and environmental weeds is an issue of concern to both Coffs Harbour Council and the developer. A program of progressively removing weeds from the foreshore and environmental protection is proposed. Neighbouring residents will be encouraged to plant species that will not spread from private gardens into the foreshore area.

Ensuring the stability of the Sapphire foreshore dune system is recognized as being a high priority. This Plan of Management does recognize that all works, plantings and landscaping must be undertaken in accordance with management and rehabilitation techniques recommended by the *Coastal Dune Management Manual* (NSW Department of Land and Water Conservation 2001).

The plan provides for improved public access to the beach. Construction of beach access way fencing and adjacent vegetation rehabilitation is recommended to improve the visual amenity of the coastline. Beach access will be enhanced by the provision of a walking track along the north-side of the foreshore extending from the council access to the north to the beach. The track will be natural in appearance with no treatment to the walking surface. Council will determine the final routing of the track. Markers to delineate between private land and the public space and improved signage will be installed to improve public use of the foreshore area.

The Draft Plan encourages the use of the foreshore for informal recreation by providing for tree planting for shade and space delineation.

No fire mitigation works are proposed as the majority of land is mapped as minor bushfire risk and insignificant risk to community assets.

The plan proposes a future management regime for the foreshore that aims to protect the values of the environment for current and future generations.

4.0 CONSULTATION PROCESS

The Sapphire Foreshore has had little history of public participation in its development and management. Community consultation is therefore an important part of the preparation of this Plan of Management. This Plan of Management will be presented in conjunction with the Part 3A application and the public exhibition process.

5.0 DESIRED OUTCOMES

The desired outcomes of this plan are:

- To conserve biodiversity and maintain ecosystem function of the reserve;
- To rehabilitate and maintain the land to its natural state and setting;
- To provide for appropriate linkages with vegetation & access corridors;
- To ensure that the use and management of the foreshore and environmental protection areas is in keeping with NSW Coastal Policy 1997, The Guiding Principles of Ecologically Sustainable Development and other relevant legislation and policies;
- To provide for community use of and access to the land in such a manner that will facilitate the ecologically sustainable use of the foreshore and to minimise and mitigate any disturbance on the foreshore caused by community use;
- To maintain the foreshore as a transition area between the aquatic and the terrestrial environment, and to protect and enhance all functions associated with the foreshore's role as a transition area;
- To ensure the principal values of the foreshore are protected and enhanced:
Environmental Cultural heritage Recreational Visual / Scenic Tourism

6.0 RESTORATION METHODOLOGY

“Coastal Dune Management: A Manual of Coastal Dune Management and Rehabilitation Techniques” (Department of Land and Water Conservation, 2001) is the primary reference material for creation of suitable pedestrian access ways and ecological restoration of degraded dunal systems. This report is recognised by relevant State Agencies as providing “best practice” guidance in management and rehabilitation of dunal complexes.

A number of publications of the North Coast Weeds Advisory Committee were also reviewed to provide for consistency with regional weed management programmes. Specifically the “Draft Coastal Weeds Regional Weed Management Plan, 2004”

6.1 DUNE REHABILITATION

Ecological restoration works will be undertaken in accordance with the following parameters to ensure efficient and ecologically sustainable outcomes:

1. Strategic and targeted control of environmental weeds 20 metres either side of the dunal area.
2. Revegetation of dune with an appropriate selection of local provenance fire retardant species. Establishment of mixed plantings of small to medium height, local provenance littoral rainforest species to retard any potential bushfires and enhance habitat values of the area in and around landscaped areas close to the rehabilitation area.

7.0 RELEVANT LEGISLATION AND POLICIES

It is essential in preparing this plan that the relevant legislation and Government policies are taken into consideration, of which the *NSW Coastal Policy 1997* is the most significant. These documents stress the conservation of natural resources and their management in an ecologically sustainable manner, while at the same time providing appropriate opportunities for public use.

This plan must also address the requirements of the *Environmental Planning and Assessment Act 1979* and *State Environment Planning Policy 71*. These establish the statutory planning framework that must be followed in the management of foreshore reserves in the planning area. Other important State policies include the *NSW Coastline Hazard Policy 1998*.

There are other policies that examine the local environmental conditions and impose restrictions and conditions on the type of development that is possible on the Campbells Beach foreshore. These include the *Coffs Harbour Local Environment Plan 2000*.

7.1 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act) forms the framework within which planning occurs within NSW. Works proposed on the reserve may require development consent under Part 4 of the EP&A Act.

The EP&A Act sets up environmental planning instruments which provide a basis for development control at state-wide (State Environmental Planning Policy- SEPP), regional (Regional Environmental Plans-REP) and local levels (Local Environmental Plans-LEP and Development Control Plans-DCP). Consent granted by Council must be in accordance with the planning instruments gazetted for the area.

7.1.1 THE STATE ENVIRONMENTAL PLANNING POLICY NO 71- COASTAL PROTECTION

The State Environmental Planning Policy No 71- Coastal Protection (SEPP 71) commenced in November 2002. SEPP 71 has been made under the *Environmental Planning and Assessment Act 1979* and aims to ensure that the coastal zone is protected in accordance with the principles of ecologically sustainable development.

This Policy aims to:

- Protect and manage the natural, cultural, recreational and economic attributes of the New South Wales coast,
- Protect and improve existing public access to and along coastal foreshores to the extent that this is compatible with the natural attributes of the coastal foreshore,
- Ensure that new opportunities for public access to and along coastal foreshores are identified and realised to the extent that this is compatible with the natural attributes of the coastal foreshore,
- Protect and preserve Aboriginal cultural heritage, and Aboriginal places, values, customs, beliefs and traditional knowledge,
- Ensure that the visual amenity of the coast is protected,
- Protect and preserve beach environments and beach amenity,
- Protect and preserve native coastal vegetation,
- Protect and preserve the marine environment of New South Wales,
- Protect and preserve rock platforms,

- Manage the coastal zone in accordance with the principles of ecologically sustainable development (within the meaning of section 6 (2) of the *Protection of the Environment Administration Act 1991*),
- Ensure that the type, bulk, scale and size of development is appropriate for the location and protects and improves the natural scenic quality of the surrounding area, and
- Encourage a strategic approach to coastal management.

SEPP 71 provides for the Minister for Natural Resources to have over-riding consent authority for developments up to 100m above the mean high water mark of the sea, a bay or an estuary.

7.1.2 LOCAL ENVIRONMENT PLAN

Council has mapped the subject land as 2E Residential Tourist and 7A Environmental Significance under the Local Environmental Plan 2000 (LEP 2000). Council has classified the area as having low risk sediments (Class 5) for Acid Sulphate Soils.

The objectives of 2E Tourist zone are:

- to enable tourist development and other development that is compatible with the surrounding environment
- to provide for development that is within the environmental capacity of a high density residential environment and can be adequately serviced

The objectives of the 7A Environmental Protection Habitat and Catchment Zone are:

- To protect habitat values and water quality and enable development which does not adversely affect these;
- To enable development that is within the environmental capacity of the land that can be adequately serviced.

Waterways – Land adjoining the Solitary Islands Marine Park

The objectives of this clause are:

To protect the amenity of waterways and the Solitary Islands Marine Park and provide protection from coastal hazards.

Consent must not be granted to the subdivision of, or the erection of a building or the carrying out of a work on, land adjoining the Solitary Islands Marine Park unless certain objectives of the Marine Parks Act 1997 have been considered by the consent authority.

7.2 THREATENED SPECIES CONSERVATION AMENDMENT ACT 2002

Threatened species impact assessment is an integral component of environmental impact assessment. The ultimate objective of the application of section 5A of the *Environmental Planning and Assessment Act 1979* (EP&A Act), the Assessment of Significance, is to improve the standard of consideration afforded to threatened species, populations and ecological communities, and their habitats through the planning and assessment process, and to ensure this consideration is transparent. Under the *Threatened Species Conservation Amendment Act 2002*, the factors to be considered when determining whether an action, development or activity is likely to significantly affect threatened species, populations or ecological communities, or their habitats (known previously as the "8-part test"), have been revised. This affects s5A EP&A Act, s94 *Threatened Species Conservation Act 1995* (TSC Act) and s220ZZ *Fisheries Management Act 1994* (FM Act).

The revised factors maintain the same intent but focus consideration of likely impacts in the context of the local rather than the regional environment as the long-term loss of biodiversity at all levels arises primarily from the accumulation of losses and depletions of populations at a local level. This is the broad principle underpinning the TSC Act, State and Federal biodiversity strategies and international agreements

7.3 NSW COASTAL POLICY 1997

The NSW Coastal Policy was adopted in November 1997 and provides a policy framework through which effective, balanced and co-ordinated management of the N.S.W. Coastal Zone can occur.

The central focus of the policy is the Ecologically Sustainable Development (ESD) of the Coastline. The Coastal Council of NSW is a body set up by the NSW Government which is responsible for ensuring all parties involved in the implementation of the Coastal Policy (State agencies, local councils, other public authorities and non-governmental organisations) perform their tasks effectively.

Objectives and key actions from the Policy of particular relevance to this plan are:

- To identify coastal lands with conservation values and implement management strategies and controls to ensure that those values are protected
- To identify and protect areas of high natural or built aesthetic quality
- To ensure that risks to human safety from the use of coastal resources is minimized
- To encourage towns to reinforce or establish their particular identities in a form which enhances the natural beauty of the coastal zone
- Beaches, frontal dunes and undeveloped headlands will be protected and only minor developments will be permitted for essential public purposes eg surf life saving facilities.
- To design and locate development to complement the surrounding environment and to recognise good aesthetic qualities
- Development proposals will have to conform to specified design and planning standards to control height, setback and scale to ensure public access and to ensure that beaches and foreshore open spaces are not overshadowed.
- State Government agencies, when preparing policies, programs and procedures for coastal zone planning and management, will be required to ensure they are consistent with the Coastal Policy and have regard for national and international strategies, policies and agreements.

The plan of management process is an effective way in which Council and State Government can implement the requirements of the Coastal Policy and enable Council to co-ordinate the effective management of its extensive and diverse coastal reserve system.

7.4 NORTH COAST REGIONAL ENVIRONMENTAL PLAN (NCREP)

The following provisions of the NCREP are relevant to Council's consideration of the Development Application:

Clause 15 - Wetlands or fishery habitats

The council shall not consent to an application to carry out development for any purpose within, adjoining or upstream of a river or stream, coastal or inland wetland or fishery habitat area or within the drainage catchment of a river or stream, coastal or inland wetland or fishery habitat area unless it has considered the following matters:

- a. the need to maintain or improve the quality or quantity of flows of water to the wetland or habitat;
- b. the need to conserve the existing amateur and commercial fisheries;
- c. any loss of habitat which will or is likely to be caused by the carrying out of the development;
- d. whether an adequate public foreshore reserve is available and whether there is adequate public access to that reserve;
- e. whether the development would result in pollution of the wetland or estuary and any measures to eliminate pollution;
- f. the proximity of aquatic reserves dedicated under the Fisheries Management Act 1994 and the effect the development will have on these reserves;
- g. whether the watercourse is an area of protected land as defined in section 21AB of the Soil Conservation Act 1938 and any measures to prevent soil erosion;
- h. the need to ensure that native vegetation surrounding the wetland or fishery habitat area is conserved, and
- i. the recommendations of any environmental audit or water quality study prepared by the Department of Water Resources or the Environment Protection Authority and relating to the river, stream, wetland, area or catchment.

Clause 35B – Coastal Lands

- a. This clause applies to land within the region to which the NSW Coastal Policy 1997 applies;
- b. In determining an application for consent to carry out development on such land, the council must take into account:
 - i. the NSW Coastal Policy 1997,
 - ii. the Coastline Management Manual, and
 - iii. the North Coast Design Guidelines;
- c. The council must not consent to the carrying out of development which would impede public access to the foreshore;
- d. The council must not consent to the carrying out of development:
 - i. on urban land at Tweed Heads, Kingscliff, Byron Bay, Ballina, Coffs Harbour or Port Macquarie, if carrying out the development would result in beaches or adjacent open space being overshadowed before 3pm midwinter (standard time) or 6.30pm midsummer (daylight saving time), or
 - ii. elsewhere in the region, if carrying out the development would result in beaches or waterfront open space being overshadowed before 3pm midwinter (standard time) or 7pm midsummer (daylight saving time).

Clause 33 – Coastal Hazards Areas

Before granting consent to development on land affected or likely to be affected by coastal processes, the council shall:

- take into account the Coastline Management Manual;
- require as a condition of development consent that disturbed foreshore areas be rehabilitated, and
- required as a condition of development consent that access across foredune areas be confined to specified points.

Clause 43 - Residential development

- a. The council shall not grant consent to development for residential purposes unless:
 - i. it is satisfied that the density of the dwellings have been maximised without adversely affecting the environmental features of the land,
 - ii. it is satisfied that the proposed road widths are not excessive for the function of the road,
 - iii. it is satisfied that, where development involves the long term residential use of caravan parks, the normal criteria for the location of dwellings such as access to services and physical suitability of land have been met,
 - iv. it is satisfied that the road network has been designed so as to encourage the use of public transport and minimise the use of private motor vehicles, and
 - v. it is satisfied that site erosion will be minimised in accordance with sedimentation and erosion management plans.

The erosion and sedimentation control will be prepared for the entire Sapphire development, in accordance with staging strategy.

7.5 OTHER RELEVANT LEGISLATION AND POLICIES

Threatened Species Conservation Act 1995

The main object of this Act is to conserve biological diversity and promote ecological sustainable development. The Act lists threatened species, endangered populations and endangered ecological communities. It is an offence under the *National Parks and Wildlife Act 1974* to harm any animal, or pick any plant that is a threatened species, population or ecological community.

Heritage Act 1977

Given the extent and limited impact of the proposed works and previous disturbance associated with the resort it is unlikely any item of State Heritage Significance listed on the State Heritage Register under the *Heritage Act 1977* exists in the vicinity of the works.

Noxious Weeds Act 1993

Under the Act a public authority that is an occupier of land must control noxious weeds on the land to the extent necessary to prevent the weeds from spreading to adjoining land. As the occupiers of land during construction the control of noxious weeds is the responsibility of the contractors.

Fisheries Management Act 1994

The Act applies to all waters that are within the limits of the State. This applies to the proposal, as there are minor waterways within the limits of the work. No work will be undertaken near these waterways or culverts within the area of the proposed works. Erosion and sedimentation controls will be put in place to prevent any pollution of these local waterways.

Coastline Management Manual

The main objective of the manual is to assist local councils in developing balanced plans of management for the coastline. The majority of the manual outlines the management system which is advocated in the Coastline Hazard Policy. The manual also does have some information to assist present and potential users and occupiers of the coastline understand the nature of coastline hazards and the options available for their management.

A Coastal Erosion Report prepared for the site addresses the requirements of the Coastline Management Manual

Other Planning Policies

In addition to the matters of consideration set out in SEPPs, there are a number of policy and statutory planning documents that are appropriate to consider in the preparation of this development application.

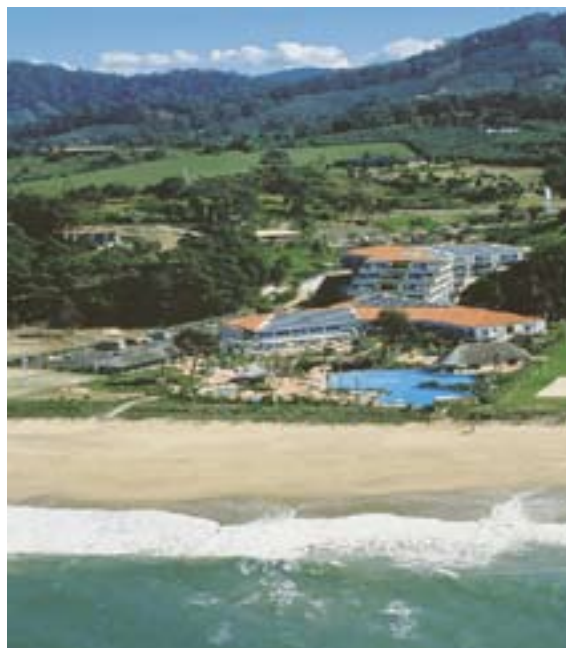
The NSW Coastal Policy 1997, The Coastline Management Manual and

The North Coast Design Guidelines are matters for consideration for the consent authority pursuant to Clause 32B of the North Coast Regional Environmental Plan.

8.0 LAND DESCRIPTION AND ANALYSIS

The Pelican Beach Resort site comprises of 3 lots (Lots 100 & 101 DP629555 and lot 2 DP800836).

The Land is zoned 2(e) Residential Tourist and environmental protection Environmental Protection under Council's Urban LEP 2000.



The Pelican Beach Resort Complex

8.1 RECENT HISTORY OF PELICAN BEACH RESORT DEVELOPMENT

The site is currently occupied by a tourist resort. This resort was constructed in 1986 and is in need of upgrading and refurbishment. It comprises of 114 suites in a part 3 storey and part 5 storey building. There are facilities including dining room, bar, and conference rooms on the ground floor.

Outside the main building there is a swimming pool and associated outbuildings, tennis courts and car parking areas. Approximately half the site area is currently vacant and is grassed and maintained by the resort. There is a former restaurant building fronting the Pacific Highway at the western end of the site.

The existing resort represents a small part of the almost continuous development that currently exists between Coffs Harbour and Sapphire, this development includes pockets of residential development, tourist facilities, public open space and reserve.

8.2 RECREATIONAL USE

8.2.1 EXISTING FACILITIES AND USE

Principal uses of the foreshore are:

- Swimming (although the beach is strictly not in the planning area);
- Walking;
- Picnicking;
- Fishing

The beach is popular with families and young children as the beach is generally clean and protected from south-easterly winds and ocean swells.

The foreshore enhances adjoining Surfside residents' properties and many have developed gardens extending onto the foreshore.

This provides a unique recreational area for the public, although its perception is limited to neighbouring residents. The site is typically open providing little shade or space definition either within the reserve or with adjacent land uses.

8.2.2 ACCESS

There are 2 public access points to the foreshore:

- One at the southern end of Pelican Beach Resort (via community property to the south of the resort)
- One at the northern end of Pelican Beach Resort via councils sewage plant access road.(this is not a legal access, but it is proposed to change this to legally allow public access)

Post and wire fences bordering the access way needs to be installed, as it crosses the dunal area, to prevent pedestrian access to the dune and causing damage to its vegetation.

8.3 VISUAL AMENITY

The landscape of the Sapphire development consists of 4 main landscape types; the beach, the vegetated sand dune, vegetated slope (7a zone) and the neighbouring houses. The dune vegetation provides an important visual buffer between the beach, the development and the neighbouring houses to the north.

The dune largely determines the visual character of the beach by providing a vegetated natural backdrop to the beach.

This allows the beach to integrate into the neighbouring natural landscape and provides a sense of privacy for users of the beach and the adjoining residents.

The vegetation on the sand dune is a mix of native indigenous species and exotic species that are established in gardens or escaped into the reserve. The colour and form of the exotic species visually contrast with the surrounding native vegetation. (Figure 3)

The visual landscape of the sand dunes is also highly valued by the neighbouring residents. The majority of houses allows a visual incorporation of the foreshore into the residential garden.

Additionally, the majority of houses have views of the bay through the vegetated sand dune – at least from their second level.

8.4 THE PHYSICAL ENVIRONMENT

8.4.1 THE DUNES AND BEACH

The foreshore generally consists of two distinct landform units – firstly the beach and secondly the vegetated sand dune separating the residential properties from Campbells Beach. The beach is a shifting and changing landscape that can affect the width and condition of the sand dune.

The extent of the sand dune is generally defined by the high water mark. The width of the sand dune varies between 16 and 32 metres along the length of the foreshore.



Figure 2-Northern portion of Dune



Figure 3-Middle Portion of Dune



Figure 4-Weed infestation of Dune

8.4.1.1 THE BEACH



Figure 5-Campbells Beach looking north from site



Figure 6-Campbells Beach looking south to peninsula

8.4.1.2 THE ENVIRONMENTAL PROTECTION ENVIRONMENTAL SIGNIFICANCE ZONE

This area represents the steepest part of the resort site with an approximate slope of 1:2. The area is east of the grassed spur and extends to just above the recreational facilities associated with the resort. The area is zoned environmental protection Environment Protection Habitat/Catchment. The vegetation is described as Dry Sclerophyll Forest and is mostly regrowth vegetation. This pocket of vegetation is approximately 4000 square metres in size. The vegetation pocket is currently weed infested, particularly at the edges. The area represents one of only two pockets of remnant vegetation on the site. It includes a number of mature trees.



Figure 7-Eastern edge of the area is zoned environmental protection Environment Protection Habitat/Catchment.



Figure 8-Western edge of the area is zoned environmental protection Environment Protection Habitat/Catchment

8.4.3 VEGETATION

The vegetation on the dunes is very important in stabilizing the sand dune and providing a visual buffer between the beach and the proposed adjacent residential area. The resort initiated the establishment of the dune vegetation when it was first developed.

Since then there has been regeneration of native indigenous trees, shrubs and groundcover species and some spread of exotic plants typically those that are garden escapees.

The vegetation structure is generally open coastal scrub with a grassy and scattered understorey and is typical of natural hind dune vegetation. The dominant species includes:

- *Banksias integrifolia* – Coastal Banksia
- *Acacia longifolia* subsp. *Sophorae* – Coastal Wattle
- *Lomandra longifolia* – Sword or Mat grass
- *Spinifex sericeus* - Spinifex
- *Themeda australis* - Kangaroo Grass
- *Carpobrotus glaucescens* – Coastal Pigface

The vegetation on the dune in some cases has been modified by activity such as pruning or removing of trees to open views to the beach and bay.

The understorey is also largely dominated by exotic ‘weed’ species and include;

- *Agapanthus* sp. - Agapantha
- *Agave americana* – Yakkas
- *Asparagus asparagoides* - Bridle Creeper
- *Asparagus plumosus* – Climbing Asparagus Fern Weed
- *Cortaderia selloana* - Pampas Grass (W2)₁
- *Hydrocotyle conariensis* - Penny wort
- Kikuya

The 7(a) community consists of predominately of regrowth forest that include:

- red gum
- brushbox
- bleeding heart
- blackwood wattle
- silver-leaved desmodium
- hairy pittosporum
- sweet pittosporum
- dogwood
- beach acronychia
- hairy psychotria

Shrubs and groundcovers include:

- bungalow palms
- celery wood
- scentless rosewood
- bolwarra
- three veined cryptocaria
- cudgerie
- native ginger
- bracken fern
- gristle fern
- maidenhair
- false bracken

8.4.3.1 WEEDS

While the ecological integrity of the dune vegetation contributes to stabilizing the dune system, it is only a small area, isolated and dominated by weeds.

The following weeds have been identified in the Sapphire Development Foreshore and 7(a) area:

- Kikuyu
- Daisies
- *Asparagus asparagoides* - Bridal Creeper
- *Asparagus plumosus* - Climbing Asparagus Fern
- *Cortaderia selloana* - Pampas Grass#
- Thistle
- *Agave americana* - Yucca Plant
- *Agapanthus* sp.
- *Hydrocotyle bonariensis* – Pennywort
- *Geranium* sp.
- wild tobacco
- lantana
- ochna
- winter senna

8.6.5 NATIVE ANIMALS

A Flora and Fauna study has been carried out on the area (Bushfiresafe,2006).

These include:

- Possums
 - Yellow Tailed Black Cockatoo
- Sulphur Crested Cockatoo
- Corella
- Galah
- Rainbow Lorikeet
- Australian King Parrot
- Crimson Rosella
- Laughing Kookaburra
- Superb Fairy Wren
- Red Browed Finch (Firetail)
- Satin Bowerbird
- Black Faced Cuckoo Shrike
- Australian Magpie
- Pied Currawong
- Hardhead Duck
- Regent Honeyeater
- White Breasted Pigeon

In addition to the above the area is likely to attract waders and water birds.

A bushfire risk management report prepared by Bushfiresafe (Aust) P/L recommends the Hind Dune area along the eastern property boundary, the environmental protection zone located approximately centre of the property (which are to be rehabilitated/revegetated) and the landscaped portions of the facility be revegetated to the standard of an asset protection zone as outlined in Planning for Bushfire Protection (2001). This will ensure the current non-bushfire hazard classification of the site will be maintained.

Figure 10-Existing Topographical Analysis

The Pelican Beach site is located between the Pacific Highway and Campbells Beach with a fall from 27.000 at the highway to 6.00 on the foreshore. The site has previously been developed with an Italian restaurant and carpark on the higher part of the site, the main resort buildings approximately halfway down and on the lower level of the site and the resort recreational facilities on the lower ground behind the beach. Illustration 3 provides an overview of the topography of the site.

