

this vegetation was not assessed as bushfire vegetation when assessing bushfire attack categories in relation to the proposed development.

3.3 LANDS TO THE SOUTH OF THE SUBJECT PROPERTY

The vegetation occurring within 140 metres of the subject property on the southern aspect of the proposed building envelopes is shown below in table 1.

TABLE 1

Community	Description	Vegetation Group as per PBP 2001	Vegetation structure as per PBP 2001
1	Open Forest	1	5

Community 1 * Open Forest

Location:

This community occurs adjacent to the southern boundary of the subject property and is situated approximately 60 metres (at the closes point) from the southern boundary of the development property with most of the vegetation occurring greater than 70 metres from the boundary. The Open Forest vegetation extends for a distance greater than 140 metres to the south east and approximately 50 meters to the south which is then followed by a residential area for a distance grater than 140 metres.

Description:

This community is an Open Forest vegetation which is dominated by Brush Box, Casuarina, Tallowwood, and various Eucalyptus species; the understorey consists of regrowth, native shrubs and Lantana.

3.4 ASSESSED DOMINANT BUSHFIRE VEGETATION

The bushfire risk assessment undertaken in relation to the proposed redevelopment of the residential and tourist facility concluded the dominant bushfire vegetation in regards to the designated building envelopes as being;

- A Group 1 Open Forest vegetation was assessed as being the dominant bushfire vegetation in relation to the proposed redevelopment.

4.0 SLOPE ASSESSMENT

A desktop assessment of the slope using a land based mapping program and an onsite assessment using a hand held clinometer verified the following;

4.1 ASSESSED DOMINANT SLOPE IN RELATION TO THE IDENTIFIED BUSHFIRE VEGETATION FOR PROPOSED REDEVELOPMENT

The terrain in relation to the Group 1 Open Forest vegetation on the southern elevation of the proposed redevelopment was assessed as having an upslope of greater than 10° for approximately 50m followed by generally flat for a distance greater than 140m.

5.0 ENVIRONMENTAL CONSIDERATIONS

Bushfiresafe (Aust) P/l environmental services has undertaken a flora & fauna survey for the subject property, no threatened or endangered species, or significant environmental features were identified within the development site; however the F&F identified the coastal and hind dune area will require rehabilitation/revegetation.

It is a recommendation from the bushfire risk assessment that preferably local endemic non-fire prone species be used for the rehabilitation/revegetation area and plant spacing are designed to accommodate canopy spacing required for an Asset Protection Zone.

6.0 BUSHFIRE ASSESSMENT FOR PROPOSED REDEVELOPMENT

A bushfire assessment using the methodology set out in planning for bushfire protection (2001) was carried out on the proposed redevelopment, to ascertain the viability of the development in the protection of life in a bushfire emergency.

6.1 ASSET PROTECTION ZONES (APZ)

Based on the vegetation communities and slopes present on and adjacent to the subject property, and in accordance with the methodology detailed in planning for bushfire protection (NSW RFS 2001) (Table A2.3 Minimum Specifications for Asset Protection Zones (APZ) for Special Protection Developments in Bushfire Prone Areas), it is recommended that Asset Protection Zones (APZ) should be established around the proposed designated building envelopes/footprints as follows;

6.1.1 PROPOSED REDEVELOPMENT OF RESIDENTIAL AND TOURIST RESORT

The 7(a) portion of the development property is not identified as bushfire prone vegetation due to the size and separation from any identified bushfire vegetation; a minimum of 5 metre separation from the foliage drip line and any proposed structures would be required on all elevations of the 7(a) area.

The 7(a) portion is well less than 1ha in area and has a current lateral separation of greater than 100 metres from any identified bushfire vegetation, the Bush Fire Prone Land Mapping Guidelines, (Version 1.1), section 5.2 D, indicates areas of vegetation groups 1, 2 and 3 that are less than 1 hectare and not less than 100m lateral separation from a Bushfire Vegetation Category 1 are excluded from being categorised as a Bushfire Category 1 vegetation.

The assessed Group 1, Open Forest bushfire vegetation has a current minimum separation of 60 metres from the development property consisting of well maintained lawns and landscaped areas of the adjoining residential properties; therefore an APZ will not be required within the development property.

The proposed redevelopment has a current lateral separation of greater than 60 m from the identified Open Forest vegetation occurring adjacent to the southern; which complies and in most cases exceeds the minimum recommendations of Planning for Bushfire Protection 2001 table A2.3 (Minimum Specifications for Asset Protection Zones (APZ) for Special Protection Development in Bushfire Prone Areas).

Note: The Hind Dune area along the eastern property boundary and the 7(a) zone located approximately centre of the property are to be rehabilitated/revegetated and landscaping of the open space portions of the facility will be undertaken as part of the development. Local native species will be utilised for the rehabilitation areas and within the landscaped portions of the property with all trees planted to accommodate the requirements of an asset protection zone with a minimum 2m canopy separation at maturity.

The Asset Protection Zones (APZ) must be established and maintained such that:

- There is minimal fine fuel at ground level that could be set alight by a bushfire (e.g. long grass, tree branches etc).
- Vegetation does not provide a path for the transfer of fire to the development.
- Trees are a minimum of 5 metres away from any building, measured from the edge of the foliage to the roof line or any open balconies.
- Bark chips and the like are not present within 2 metres of any building.
- Trees present have a minimum canopy separation of 2 metres.
- Trees present are not species that retain dead material or deposit excessive amounts of ground fuel in a short time.

6.2 BUILDING ENVELOPE

6.2.1 PROPOSED DEVELOPMENT AREA

It is envisaged that the project will be progressively developed with the early stages being build on the lower coastal section of land, then working up the hill to the flat section adjacent the Pacific Highway.

The proposed development area is comprised of six main built elements as follows;

- Main Resort Building shall be located on the western aspect of the subject property and highly visible from the highway traffic; 4 stories high with ground level car parking, between 30-60 apartments and facilities such as a swimming pool and gymnasium.
- Apartment Accommodation will consist of a variety of buildings each up to 4 storeys high stepping down to the beach.
- Beachfront housing will be located on the lowest portion of the subject property on the beach front property boundary.
- Semi-Beachfront housing or apartments are the two options being considered for the area between the beachfront homes and Environmental Protection 7(a).

6.3 ASSESSED BUSHFIRE ATTACK CATEGORY

A bushfire assessment using the methodology set out in Planning for Bushfire Protection (2001) was carried out on the proposed development, to ascertain the viability of the development in the protection of life and property in a bush fire emergency.

The assessment qualified the bushfire attack category as **"Medium"** for the proposed development from the following aspects:

- The bushfire risk assessment identified a Group 1 Open Forest, as the dominant bushfire vegetation.
- The terrain in relation to the identified dominant vegetation southern elevation occurs on an upslope of greater than 10° for a distance greater than 50 metres followed by generally flat.
- The proposed building envelopes can achieve the minimum Asset Protection Zones from the identified bushfire vegetation as outlined in Planning for Bushfire Protection 2001 table A2.3.
- The proposed tourist redevelopment is a Special Protection development as outlined in Planning for Bushfire Protection (2001).

6.4 ELECTRICITY SUPPLY

The electricity supply is currently connected to the existing resort by an underground easement.

6.5 ADEQUATE SITTING OF WATER SUPPLY

Reticulated water is available to the development and will be supplied through the town mains system in accordance with local water authority, council development control plans (DCPs) or any other relevant policies and procedures.

- a) External fire hydrants will be installed and located in accordance with Australian Standard 2419-1, the hydrants shall be installed so as a clear unobstructed path to each designated building envelope, and
- b) The fire hydrants shall be installed at a maximum distance of 80m from the furthest extremity of the building/s, and
- c) The location of fire hydrants shall be delineated by blue pavement markers in the centre of the road, and
- d) All delivery water lines shall be installed underground to a minimum depth of three hundred millimetres (300mm), with all points above ground using metal pipes or raisers with a minimum internal diameter of nineteen millimetres (19mm).

6.6 PROPERTY ACCESS ROAD/S AND EGRESS

The proposed tourist and residential resort facility shall have the main access via the Pacific Highway which has a two-way trafficable maintained bitumen surface, formed verges with room for off road parking/passing; the property access roads for the proposed

Prepared by: Bushfiresafe (Aust) Pty Ltd: (02) 66451088 12
Bushfire Risk Management Report for Proposed Redevelopment of Residential and
Tourist Resort DP629555, DP800836 Pacific Highway, Coffs Harbour

redevelopment shall be constructed and maintained to the following standard and complies with Planning for Bushfire Protection section 4.3 (Access);

- Roads should be two-wheel drive, all weather roads.
- Roads should be two-way to allow at least two traffic lane widths (8m minimum reserve) with shoulders on each side, allowing traffic to pass in opposite directions.
- Where possible the access road should be designed as a perimeter road allowing access to the bushfire prone elevation should be linked to the internal road system at an interval of no greater than 500 metres in urban areas.
- Restrict the use of speed humps and chicanes to control traffic.
- Roads should not be through roads. Dead end roads are not recommended, but if unavoidable, dead ends should not be more than 2300m in length, incorporate a minimum 12m radius turning circle, and should be clearly sign posted as dead ends.
- The capacity of the road surfaces and bridges should be sufficient to carry fully loaded fire fighting vehicles (approx 28 tonnes or 9 tonnes per axle).
- Curves should have a minimum inner radius of 6m and be minimal in number to allow for rapid access and escape.
- The minimum distance between inner and outer curves should be 6m.
- Maximum grades should not exceed 15° and preferably not more than 10° or gradient specified by road design standards, whichever is the lesser gradient.
- A minimum vertical clearance of 6m to any over hanging obstacles, including tree branches.
- Roads should be clearly sign-posted (with easily distinguished names) and buildings should be clearly numbered. Bridges should clearly indicate load ratings.
- Roads should not traverse through a wetland or other land potentially subject to periodic inundation.

PBP identifies tourist developments as Special Protection Developments, these type of developments require a secondary emergency access and egress road; a service road which adjoins the development property's northern boundary shall be utilised for the secondary emergency access and egress road once linked to the development's proposed access road. The service road is currently used by Council's maintenance trucks and vehicles and has a bitumen surface which allows access from the eastern portion of the property to the Pacific hwy to the west.

7.0 CONSTRUCTION STANDARDS

The bushfire risk management assessment undertaken in relation to the proposed development concluded "**Level 1**" construction standard in relation to AS3959 will be required for the residential and tourist development.

The bushfire construction standard was derived from;

- An identified Open Forest bushfire vegetation occurring on the southern aspect of the subject property.

- The terrain in relation to the identified dominant vegetation on the southern elevation occurs on an upslope of greater than 10° for a distance of approximately 50m followed by generally flat for a distance greater than 140m.
- The proposed development portion of the property can achieve an Asset Protection Zone (APZ) of greater 60 metres from the assessed Group 1 Open Forest bushfire vegetation occurring on a up slope terrain greater than 10°.
- The proposed tourist redevelopment is a Special Protection development as outlined in Planning for Bushfire Protection (2001).

8.0 EXTENT OF COMPLIANCE

The proposed redevelopment complies with the requirements for Asset Protection Zones detailed in Table A2.3 (Minimum Specifications for Asset Protection Zones for Special Protection Developments in Bushfire Prone Areas, Access in accordance with section 4.3 (Access) in Planning for Bushfire Protection 2001 and Construction Standards in Compliance with AS3959 (Construction of Buildings in Bushfire Prone Areas).

9.0 ADDITIONAL RECOMMENDATIONS

1. The proposed development comprises of tourist facility with large areas of open space recreation and landscaped areas; therefore the bushfire risk assessment concluded that prior to the issue of a construction certificate, a bushfire management plan is prepared to address the ongoing maintenance of the open space recreation and landscaped areas.
2. Prior to the issue of an occupation certificate for the proposed development a Bushfire Evacuation Plan for proposed development shall be prepared and submitted to the NSW Rural Fire Service for approval/comment.
3. A sprinkler system should be installed throughout the landscaped and open space recreation areas; the sprinkler system shall be utilised for bushfire protection from ember attack.
4. A stand alone diesel pump shall be installed and plumed to the to the facility's swimming pool; the stand alone pump shall have the capacity to supply a sufficient quantity of water to the sprinkler system in case of power failure in a bushfire emergency.
5. All areas within the proposed development not utilised for the construction of buildings and associated infrastructure, shall be maintained to the standard of an Inner Protection Area (IPA).

10.0 REFERENCES

NSW RFS (2001). *Planning for Bushfire Protection*, New South Wales Rural Fire Service and Planning NSW, Sydney.

NSW RFS (2004). *Guidelines: Bushfire Prone Land Mapping (Version 2.1)*, New South Wales Rural Fire Service, Sydney.

NSW RFS, *Coffs Harbour Rural Fire District Bushfire Risk Management Plan*, Coffs Harbour Local Environmental Plan, Coffs Harbour.

PTW Planning (2000). *Sapphire Beach Development Coffs Harbour*, Peddle Thorp & Walker P/L, Sydney.


Bushfiresafe (Aust) P/L Flora & Fauna report (June 2006)

COMMERCIAL IN CONFIDENCE

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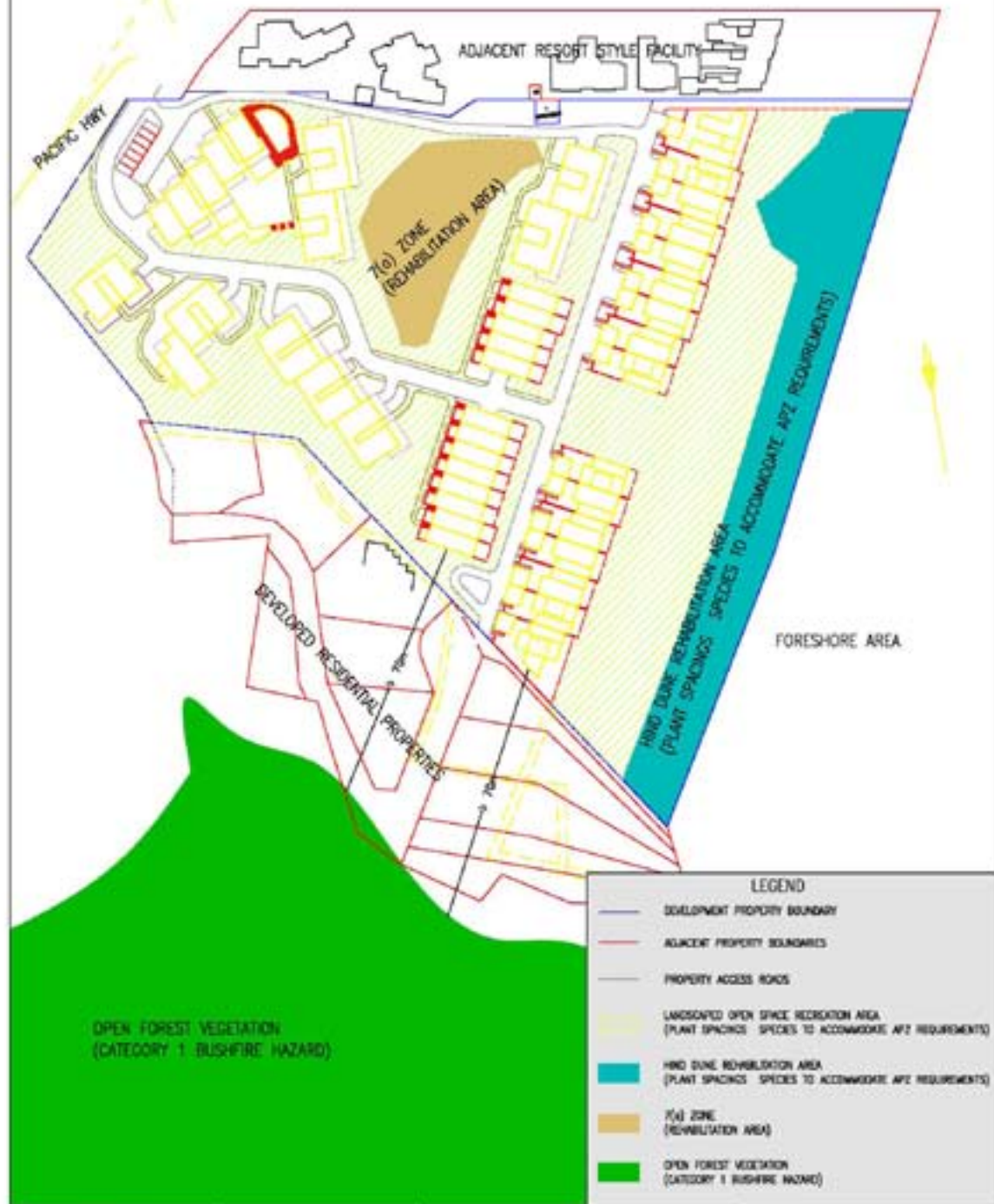


	Bushfiresafe (Aust) Pty Ltd 20 McLachlan Street Macleay NSW 2463	Project: Bushfire Risk Management Assessment for proposed redevelopment of Pelican Beach Resort Coffs Harbour	Client: Sapphire Beach Development Pty Ltd North Sydney	Appendix 1 Aerial
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Prepared by: Bushfiresafe (Aust) Pty Ltd: (02) 66451088
 Bushfire Risk Management Report for Proposed Redevelopment of Residential and
 Tourist Resort DP629555, DP806836 Pacific Highway, Coffs Harbour

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FOR ILLUSTRATION PURPOSE ONLY



**APPENDIX 2
VEGETATION
COMMUNITIES/
DWELLING LOCATION**

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PROJECT:
Bushfire Hazard
Assessment for
proposed residential
and resort development
for Pelican Beach
Resort Coffs Harbour

SIZE: DATE: Aug 2006

SCALE: SHEET

CLIENT:
Sapphire Beach
Developments Pty Ltd
North Sydney

REF# 6006

NOTES:
This drawing was prepared by
BushfireSafe (Aus) P/L to
demonstrate the identified
vegetation communities and site
layout of the proposed
development and should not be
used for any other purpose.

Volumes 1

10. Assessment of Historic Values Pelican Beach Resort

DAVIES HERITAGE CONSULTANTS PTY LTD

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**ASSESSMENT
OF
HISTORIC VALUES
PELICAN BEACH
RESORT
COFFS HARBOUR,
NORTHERN NEW
SOUTH WALES.**



**For
Sapphire Beach Development Pty Ltd**

**August, 2006
Report Reference JD262**

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1.0 INTRODUCTION

This report presents the results of an historic assessment of Pelican Beach Resort which is located six kilometres north of Coffs Harbour between Korora and Sapphire. The site extends from the Pacific Highway east to the oceanfront on Campbells Beach (see **Figure 1**).



Figure 1. Location of Pelican Beach Resort

2.0 TERMS OF REFERENCE

The study brief was to carry out historical research and undertake a non-indigenous cultural heritage assessment of the site.

A site visit was not included in the study brief. Photographs and site information was provided by the client.

3.0 THE STUDY AREA

Pelican Beach Resort which comprises a total area of 41503m², is located on three lots:

Lot 100 DP 629555;
Lot 101 DP 629555; and
Lot 2 DP 800836.

The site can be divided into three distinct areas: beach (level land), central area (steep slope) and escarpment (flat land). The site presently includes a former restaurant building, a resort building and associated recreational facilities associated with the resort.

3.1 Site Description

Pelican Beach Resort is located within a highly developed corridor of residential development, tourist facilities, public open space and reserve. It is located between two ridgelines, and much of the resort is tucked into a depression. An area of remnant littoral rainforest zoned 7A Environment Protection Habitat and Catchment Zone is in the central area of the site.

No items on the property are listed under the *NSW Heritage Act 1977* for state significance or by the Local Government and State Agencies for local heritage significance.

The site consists of the following items (see **Figure 2**):

➤ **Resort Building**

The existing development comprises a part three and part four storey resort building containing 114 hotel suites and conference facilities.

The building was constructed in 1986 and is mainly located on the lower part of the site with the upper levels stepping up and excavated into the slope (see Cover Photo).

The building is concrete and of steel frame construction with a low pitched tile roof. Part of the building contains a glass covered atrium between the changes of level. The building has a distinctive 'dog bone' shape.

External steel framed balconies with curved steel roofs are located on the outside of the structure. Ocean views are available from many of the balconies.



Figure 2. Items within the Study Area

➤ **Recreational Facilities**

The following recreational facilities are incorporated into the Resort:

Swimming pool;
Shaded children's pool and playground;
Indoor gym, sauna and spa;
Tennis courts (3);
Volleyball court;
Mini golf; and
Games room.

➤ **Former Restaurant (Seafood Mama's)**

This former restaurant building fronts the Pacific Highway in the north western corner of the site. This building is also a concrete and steel frame construction with a gable on hip tile roof rising to a glass-sided feature along the crest of the

gable (see **Figure 3**). This structure was built in 1984.



Figure 3. Seafood Mama's Restaurant Building

4.0 HISTORY

Aboriginal people of the Gumbayngirr tribe were in the Coffs Harbour area when cedar cutters arrived in the region in the 1840s. At Korora, James Small cut out the local supplies of cedar and pine, and as he had much softwood brush on his land, he decided to plant sugar cane. It is uncertain whether the Pelican Beach Resort land was ever under cane. Hermann Rieck purchased an 81 acre property which incorporated the present study area for eighty one pounds in 1886. Hermann Rieck introduced the Fiji variety of bananas into the area in the 1870s and hence it is most likely that bananas were grown on his land (and hence the present study area). Riecks Point at the northern end of Campbells Beach is most likely named after Hermann Rieck and may have marked the northern extent of the 81 acre property.

Gold was found west of the area in 1881 with the resulting gold rush ensuring the growth of many of the rural towns in the Coffs Harbour interior.

In the early years, cedar, gold and agricultural products were the foundations of the area's economy. Settlers found that bananas grew well and by the late 1960s, the banana industry reached its peak when NSW produced 80% of Australia's bananas. Bananas also brought to the Coffs Coast a substantial number of Indian migrants from Queensland who had originally come to Australia from the Punjab. These were the ancestors of Woolgoolba's now substantial Sikh community.

It is most likely that the study area was used for farming until the 1970s. The configuration of the lot originally purchased by Rieck changed through time as parts of the land were annexed for roads, water pipeline, sewer pipeline and easements including electricity and access. Former owners include John Boyle Hill ("Gentleman"), Norman John Hill, Edith Lucy Simpson, John Oswald Noble ("farmer"), Myrtle Phoebe Downton, Cyril John Lewis Fileman ("farmer") and Cecil Mary Fileman. In 1976 the northwestern portion abutting the Pacific Highway was sold to Lawrence Alfred Josephs (Real Estate Agent) and Gladys Mary Josephs. In 1983 a portion of the study area was owned by George Murray Mitchell and Sonia Mitchell (joint tenants, Motel Proprietor). An undated aerial shows what could be holiday huts or caravans on the southern, beachfront section of the block where the swimming pool and tennis courts are currently located (see **Figure 4**). This aerial may relate to the period when the Mitchell's owned a portion of the study area. Tourism had been important in the area from around 1884 when Bonville Reserve (now Sawtell) attracted tourists. As early as Christmas 1912, some 300 holiday makers gathered at the reserve.

Aetna Properties Ltd and S.W. Woods Holdings purchased the Mitchell's land in 1985 and the Pelican Beach Resort was constructed on the site in 1986. As noted above, the construction involved excavation of portions of the site to accommodate the buildings. Hence, relics which may have been present within

the footprint of this building and associated structures / items would have been removed and / or destroyed by the construction of the Resort. The resort was designed by Wolski Lycenko and Brecknock Architects. This architectural firm is still practicing (2006) and designs for a wide range of buildings including houses, shops, apartment and office buildings, retirement homes and villages and resorts.

The construction of the Pelican Beach Resort as well as other tourist complexes along the narrow coastal corridor firmly established the tourism industry in the area.

References:

England, G. 1976 *The Coffs Harbour Story*.

The Coffs Harbour Centenary 1861-1961, Coffs Harbour Advocate 1961.



Figure 4. Undated Aerial of Study Area