

Wollongong Local Planning Panel Assessment Report | 10 April 2019

WLPP No.	Item No.3
DA No.	DA-2017/830
Proposal	Additional long term site and amended community layout plan
Property	Oasis Caravan Park, 140-146 Windang Road, WINDANG NSW 2528
Applicant	Steven Fripp – I & H Investments P/L
Responsible Team	Development Assessment and Certification - City Centre Team (NL)

ASSESSMENT REPORT AND RECOMMENDATION

Executive Summary

Reason for consideration by Local Planning Panel - Determination

The proposal has been referred to Local Planning Panel pursuant to clause 2.19(1)(a) of the Environmental Planning and Assessment Act 1979. Under Schedule 2 of the Local Planning Panels Direction of 1 March 2018, the proposal involves land that is owned by Council.

Proposal

The development application relates to “Oasis Resort Caravan Park”, currently operating at 140-146 Windang Road Windang. Specifically, the application is described as “Additional long term site and amend Community Layout Plan” and seeks approval for 63 sites which are made up of 61 long-term sites and 2 short-term sites. The last approval from Council for the composition of the facility was a licence for 32 short-term, 32 long-term and 9 caravan sites for Oasis Resort under CP-2003/4 in 2009. No building works are proposed under the development application.

It is noted that caravan parks additionally require an approval to operate under section 68 of the Local Government Act. At the time of writing this report, an approval to operate was also being assessed by Council building inspector and any reference to an “approval to operate” in this report relates to that application.

Permissibility

Oasis Resort Caravan Park is located on land zoned RE2 Private Recreation on which caravan parks are permissible. There are a number of structures that have encroached upon an adjoining strip of Council owned land between the facility and the lake which is zoned RE1 Public Recreation. Caravan parks are also permitted in the RE1 zone. It is also noted that the community layout plan indicates the facility currently extends beyond the site boundary and into the adjacent road reserve zoned SP2 (see Attachment 3).

Planning controls and compliance

The following planning controls apply to the proposal:

- Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005
- State Environmental Planning Policy No. 21 – Caravan Parks
- State Environmental Planning Policy No. 55 – Remediation of Land
- State Environmental Planning Policy No. 71 – Coastal Protection (*in force at the time of lodgement of the application but now repealed*)
- Wollongong Local Environmental Plan (WLEP) 2009
- Wollongong Development Control Plan 2009

- Wollongong City Wide Development Contributions Plan 2018

Consultation

Submissions

The application did not receive any submissions following public exhibition.

Internal Council consultation

Council's Environment, Heritage, Property, BCA and Stormwater Officers have reviewed the proposal.

In respect of flooding, there is a long history of concern from Council regarding the operation of the park, particularly as it relates to intensification of the use of the site and long term residential occupation. This matter remains unresolved as further discussed at clause 7.3 of WLEP 2009 and Chapter E13 of the DCP of this report.

Council's BCA Officer has raised concerns in regard to the composition and character of the development in addition to concern around the practicalities of implementation of the recommended bushfire risk mitigation measures from the Rural Fire Service (RFS). This is discussed at section 1.6.1 of this report.

External consultation

The use is a special bushfire protection purpose under the Rural Fires Act and is integrated development requiring concurrence from the Rural Fire Service. They have issued a Bushfire Safety Authority under section 100B of the Rural Fires Act.

Main Issues

Determinative issues that remain outstanding are as follows:

- The facility does not comply with the Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005 in respect to setbacks of dwelling sites from the road (clause 89) and setbacks of sites from community buildings (clause 88).
- The long-term residential character of the caravan park is inconsistent with State Environmental Planning Policy No 21—Caravan Parks, clause 8(2)(a) in the suitability of the site for predominantly long term residence has not been adequately demonstrated.
- It is considered that the long term residential character of the caravan park is inconsistent with the RE2 and RE1 zone objectives.
- The long term residential character of the caravan park is considered to be inconsistent with Wollongong Local Environmental Plan Clause 7.3 flood planning as it does not adequately address how risks to life and property will be mitigated.
- The caravan park encroaches into the adjoining SP2 road corridor. Caravan parks are not a permitted use in that zone.
- The Bushfire Risk Assessment dated 7 July 2017 prepared by Set Consultants Pty Ltd recommends establishment of a 15m wide asset protection zone on Council owned land through a Plan of Management. This was reviewed by the RFS and supported as reflected in their Bushfire Safety Authority at Attachment 8. However, registering of an asset protection zone through such a mechanism is not supported by Council. Rather, an asset protection zone for a commercial operation should be achieved wholly within the boundaries of the site.
- Lots 18, 22, 24, 25, 9 and 10 contain structures which have been erected over a Council stormwater easement contrary to Section 11.4.4 of Chapter E14 of the Wollongong DCP 2009.

It is also noted that installations on the western side of the park closest to Lake Illawarra encroach onto a narrow strip of Council owned land. These encroachments have been previously considered by Council under previous applications including DA-2009/1355 and would generally be manageable through a lease arrangement whereby they can be removed over time.

The ownership of the facility has also changed since the lodgement of the application. The new owners have been advised of the status of the application and are in the process of negotiation to re-engage the consultants used to prepare the original submission.

RECOMMENDATION

It is recommended that the application be refused for the reasons outlined at Attachment 10.

1.2 DETAILED DESCRIPTION OF PROPOSAL

The development application relates to “Oasis Resort Caravan Park”, currently operating at 140-146 Windang Road Windang. Development consent under section 4.15 of the Act is sought for the operation of a caravan park which reflects the existing operations.

Specifically, the application is described as “Additional long term site and amend Community Layout Plan” and seeks approval for 63 sites which are made up of 61 long-term sites and 2 short-term sites.

The last approval from Council for the composition of the facility was for 32 short-term, 32 long-term and 9 caravan sites for Oasis Resort under CP-2003/4 in 2009 (for the licence of the park). No building works are proposed.

It is noted that caravan parks additionally require an approval to operate under section 68 of the Local Government Act. At the time of writing this report, an approval to operate was also being assessed by Council building inspector and any reference to an “approval to operate” in this report relates to that application. The approval to operate application was being recommended for refusal at the time of writing this report.

1.3 BACKGROUND

Development history relating to the site is detailed at Table 1 below.

Table 1: Detailed development history

Application	Description
LG-2017/55	Construction of colourbond wall on carport – withdrawn
LG-2017/1	Operate a caravan park – under assessment
LG-2014/48	Application to Operate Caravan Park – refused
LG-2014/14	Renew caravan park approval to operate – rejected
LG-2014/4	Proposed installation of carport on site 34 – refused
PL-2013/92	Demolish existing motel, convert existing restaurant into caretakers residence. Remove trees and undertake civil works (drainage and roads) to increase number of manufactured homes to 114 and provide laundry/refuge building.
LG-2013/60	Site 5 - Installation of two covered decks (with one partially enclosed with walls) – approved
LG-2013/59	Proposed installation of relocatable home and carport on Lot 66 – refused
LG-2013/33	Site 26 - install a 4 posted pre-fabricated carport to cover existing car parking tracks – approved
LG-2013/31	Site 5 - Decking to front and rear section of carport, awning over front deck section - Unit 5 - withdrawn
LG-2013/29	Moveable dwelling and attached carport - site 8 – refused
DA-2009/1355	Three (3) lot subdivision, new access point and associated drainage works – approved 13 July 2010 (<i>not commenced – lapsed?</i>)
LG-2003/1	Construction Of Temporary Structure – approved
LG-1998/25	Manufactured Home – no decision
DA-1994/654	With The Hire Of Four Wave Runners

Application	Description
R-1993/296	Alterations & Additions To Oasis Resort– Reconsideration – approved 7 November 1995 – (relates to additions to the motel component)
DA-1993/296	Alterations And Extensions To Oasis Resort Motel And Construction Of Tennis Court ** Reconsideration See R296/93 ** - refused 7 December 1993
BA-1989/1013	Marquee – approved
DA-1989/34	Extension Of Motel & Conference Facilities – approved (parking for 129 cars? 6 September 1989)
DA-1988/1186	Erection Of Marquee See Development History For Amendment D88/1186 - approved
BA-1988/655	Caravan Annex
BA-1988/82	Caravan Annex
BA-1986/841	Extension to Motel
DA-1986/187	Extension to Motel (and amendment)
DA-1985/679	Advertising Sign
DA-1983/6	Advertising Sign
DA-1982/410	Underground Fuel Storage Tank
DA-1980/10068	Illuminated "No Vacancy" sign
BA-1980/1238	Swimming Pool
DA-1980/386	Swimming Pool
BA-1979/1494	Awning To Service Station
BA-1979/1360	Caravan Park Additions (10 Motel Units) (approved)
DA-1979/532	New Awning To Existing Service Station - Rejected (Rec.21)
DA-1978/1079	Additions Of 10 Motel Units To Caravan Park (approved)
BA-1977/1329	Amenities Building for caravan park (approved) does not identify park layout
DA-1975/56	Car Sales Yard
BA-1973/288	Carport/Awning For S. Station
DA-1973/194	Caravan Park [similar to DA-1969/268, this applies to Lot B which was the reserve to the south]
BA-1971/2375	11 Motel Units
BA-1970/2886	Shop & Flat
DA-1970/263	Brick Veneer Existing Dwelling
DA-1969/268	Caravan park (lot layout in this includes part of the reserve to the south.. not consistent with existing layout however not sure this was ever acted on?)
DA-1968/299	Service Station
BA-1964/2461	Extensions To Shower & Laundry
BA-1964/1380	Additions To Service Station

Application	Description
BA-1959/1311	Additions
BA-1959/309	Shop
BA-1957/815	Service Station & Shop - Windang Road Windang Removal Of Dwelling To New Site - Atchison Street Wollongong
BA-1956/495	Toilets & Showers - S56/495 - Oasis Caravan Park - Windang Road Windang – Approved – no file
BA-1955/222	Dwelling

The most recent approval relating to the operation of the caravan park was the application for renewal to operate a caravan park/camping ground under section 68 of the Local Government Act 1993 (**CP-2003/4**) which was approved on 7 August 2009. That approval authorised of 31 short term, 32 long term dwelling sites and 9 camping sites.

Chapter 7, Division 3, clause 103(1) of the Local Government Act 1993 stipulates that an approval under that Part of the Act lapses:

- (a) 5 years after the date from which it operates, except as provided by paragraph (b), or
- (b) in the case of an approval that is subject to a condition under section 96 (2), 2 years after the date on which the last approval, consent or permission required to be obtained in accordance with the condition operates.

CP-2003/4 lapsed and three subsequent applications for approval to operate under the Local Government Act were unsuccessful (LG-2014/48 – refused, LG-2014/14 – rejected, LG-2014/4 – refused). Concerns in the latest refusal related to non-compliance with the Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005, flood risk management, and structures erected over a stormwater easement without consent.

Following on from this a further application for approval to operate under the Local Government Act (**LG-2017/1**) lodged on 20 January 2017 concurrently with the current DA. **LG-2017/1** is also being recommended for refusal.

On 13 July 2010, **DA-2009/1355** was approved for subdivision of the site into three lots, one containing the service station, one containing the motel, and the third containing the Oasis facility. This approval was never commenced and has lapsed.

No pre-lodgement meeting was held for the proposal.

1.4 SITE DESCRIPTION

The site is located at 140-146 Windang Road, Windang and the title reference is Lot 2 DP 610406.

The site area is 1.68 hectares and contains a service station adjacent to the entry from Windang Road and a two storey motel on the north eastern portion. The remainder is occupied by the Oasis Resort Caravan Park comprising 63 sites, access roads amenities block and community open space.

Adjoining development is as follows:

- Windang Road is located immediately to the east
- To the west, between the site and Lake Illawarra, is a narrow strip of land zoned RE1 and classified as operational land.
- To the north is a caravan park
- To the south of the site is a reserve owned by Wollongong City Council.

Access to the site is from Windang Road via separate entry and exit driveways.

Property constraints

Council records identify the land as being impacted by the following constraints:

- Contaminated land: The contaminated land affectation would relate to the service station situated on the Windang Road frontage. The proposal does not involve any earthworks or change of land use and there are no particular concerns raised in this regard.
- Acid sulfate soils: No earthworks are proposed and no concerns are raised in this regard.
- Medium to high flood risk precinct: There are concerns in respect of clause 7.3 of the LEP and Chapter E13 of the DCP regarding risk to life and property that remain unresolved.
- Bushfire: The land is bushfire affected due to the proximity to the Council reserve to the south. The RFS have issued a Bushfire Safety Authority under section 100B of the Rural Fires Act 1997. The recommended condition relating to the establishment of a plan of management over the Council land for the purpose of asset protection is however not supported as further discussed below.
- Drainage easement: There is a drainage easement running through the southern portion of the site. Structures have been erected on sites 9, 10, 18-25 over that easement contrary to the 88B.



- NPWS Aboriginal Heritage Register: The proposal does not involve any physical works and it is therefore considered unlikely to have Aboriginal Heritage Impacts. There is however concern regarding maintenance of asset protection area on the adjoining Council owned reserve. Any tree removal that might be required to establish that asset protection zone would have implications in regard to Aboriginal Heritage and would likely require a Aboriginal Cultural Heritage Assessment .

1.5 SUBMISSIONS

The application was notified in accordance with WDCP 2009 Appendix 1: Public Notification and Advertising and did not receive any submissions.

1.6 CONSULTATION

1.6.1 INTERNAL CONSULTATION

Heritage Officer

Council's Heritage Officer has reviewed the proposal and has raised concern regarding establishment of an asset protection zone on Council's reserve adjoining the development as any tree removal may require preparation of an Aboriginal Cultural Heritage Assessment.

Stormwater Officer

In respect of flooding, there is a long history of concern from Council regarding the operation of the park, particularly as it relates to intensification of the use of the site and long term residential occupation. This matter remains unresolved as further discussed at clause 7.3 of WLEP in the body of this report.

BCA Officer

Council's BCA Officer has raised concerns in regard to the composition and character of the development. Specifically, concern was raised in regard to the primary use of the land as residential accommodation rather than being tourist oriented.

In addition to concern was raised regarding the practicalities of implementation of the recommended bushfire risk mitigation measures provided by the RFS. In particular, concern was raised that the Manufactured home, moveable dwelling or associated structure within the meaning of the Local Government Act, 1993 are excluded from the definition of buildings under the Environmental Planning and Assessment Act. Design requirements for relocatable homes are specified by Part 3, Division 4 of the Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005. There is no requirement under the Regulation for relocatable dwellings to meet bushfire protection standards. The RFS were asked to consider this however have maintained their view that the recommended conditions are applicable and reasonable.

Property Officer

Council Property Officer has advised that in principle the occupation of the narrow portion of Council land is not objected to subject to a licence being entered into. It is noted that previous subdivision application DA-2009/1355 considered the same encroachments which were not opposed subject to a licence being entered into. That consent was however never commenced. That portion of land is categorised as operational.

Environment Officer

Council's Environment Officer reviewed the proposal and noted a controlled activity approval may be required from the Officer of Water in regard to structures within 40m of Lake Illawarra. Following discussions with the office of water it was found that this was not in fact required for the application.

1.6.2 EXTERNAL CONSULTATION

Rural Fire Service (RFS)

The proposal is integrated development as it requires development consent and authorisation under section 100B of the Rural Fires Act 1997 as the use is for a special fire protection purpose. The RFS issued a Bushfire Safety Authority under section 100B in respect of the proposal.

Roads and Maritime Services

The RMS reviewed the proposal in respect of potential road widening proposals for the locality. The RMS advised that they did not object to the application provided there be a condition of any consent

issued that should future road widening be required, removal of structures within the RMS road reserve will be at no cost to RMS or Council.

Office of Water

The caravan park is located within waterfront land and the Office of Water were consulted over potential requirement for a controlled activity approval under the Water Management Act 2000. It was advised by the Office of Water that given there were no works proposed and the structures themselves did not raise any particular environmental concerns, they wouldn't need to see the application.

2. ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 – 79C EVALUATION

2.1 SECTION 79C 1(A)(I) ANY ENVIRONMENTAL PLANNING INSTRUMENT

2.1.1 STATE ENVIRONMENTAL PLANNING POLICY NO 21—CARAVAN PARKS

A compliance table for this policy is provided in Appendix 1 of this report however non-compliant matters are addressed below.

8 Development consent required for caravan parks

(1) *Development for the purposes of a caravan park may be carried out only with the development consent of the Council.*

(2) *Before granting development consent to the use of land for the purposes of a caravan park, a Council must determine:*

(a) *the number of sites (if any) within that land that the Council considers are suitable for long-term residence, within the meaning of the Local Government (Caravan Parks and Camping Grounds) Transitional Regulation 1993,*

This regulation has been repealed and replaced by *Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005*. This regulation defines long term residence as follows:

long-term site means a dwelling site that is specified in the approval for a caravan park as being a long-term site.

Under the Council's primary concern to date with respect to long term sites has been that of flood risk. This is discussed in greater detail at clause 7.3 of WLEP 2009. Generally speaking, the proposed number of long term sites is considered unacceptable in respect of flooding.

10 Matters to be considered by Councils

A Council may grant a development consent required by this Policy only after it has considered the following:

(a) *whether, because of its location or character, the land concerned is particularly suitable for use as a caravan park for tourists or for long-term residence,*

During the assessment of the proposal, a primary concern in respect of the suitability of the site for long vs short term residence has been the issue of whether long term residence presents a greater risk to flooding than short term tourist accommodation. This is discussed in greater detail at clause 7.3 of WLEP 2009. It is considered that the long term residential character of the caravan park is not consistent with the objectives of that clause.

2.1.2 LOCAL GOVERNMENT (MANUFACTURED HOME ESTATES, CARAVAN PARKS, CAMPING GROUNDS AND MOVEABLE DWELLINGS) REGULATION 2005

A compliance table for this policy is provided in Appendix 2 of this report however non-compliant matters are addressed below.

71 Factors for consideration before approval is granted

...

- (2) *In deciding whether or not the approval for a caravan park or camping ground should allow the installation of a relocatable home, rigid annexe or associated structure on flood liable land, the council must have regard to the principles contained in the Floodplain Development Manual.*

The site is on flood liable land and there are a number of installations that have occurred without Council endorsement and without regard to the Floodplain development Manual.

Division 3 Caravan parks and camping grounds

Subdivision 2 Setbacks

88 Setbacks of community buildings

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (3) A community building must not in any case be located closer than 3 metres to the boundary of a caravan park or camping ground or 5 metres to the boundary of a dwelling site or camp site. | Sites 41, 63 and 64 do not comply.

It is noted that this is a matter that would require the concurrence of the Departmental Chief Executive pursuant to clause 82 of the Local Government Act 1993 No 30. |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

89 Setbacks of dwelling sites and camp sites from road frontages

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1) A dwelling site or camp site must not be located closer than 10 metres to a public road or 3 metres to any other boundary of the caravan park or camping ground unless the approval for the caravan park or camping ground so allows. | The setback of sites from the kerb of Windang Road is approximately 5m.

Sites on the southern boundary have no setback. |
| (2) The approval for a caravan park or camping ground must not allow a lesser distance unless the council is satisfied that the dwelling site or camp site has been or will be properly screened, fenced, enclosed or otherwise treated. | The boundary with the road has a colorbond fence and hedge. This would provide some relief in terms of acoustic screening. However, the proposal for the predominant use to be permanent residential rather than incorporating a mix of tourist oriented sites raises greater concern in regard to potential impacts of road noise on the development. This is further discussed at SEPP Infrastructure below. |

Subdivision 8 General

128 Fire hydrants

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| (1) No part of a dwelling site, camp site or community building within a caravan park or camping ground may be situated more than 90 metres from a fire hydrant. | The applicant has noted that this could be addressed via conditions of consent. |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|

129 Fire hose reels

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| (1) Fire hose reels must be installed so that each dwelling site or camp site in the caravan park or camping ground can be reached by a fire hose. | The applicant has noted that this could be addressed via conditions of consent. |
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2.1.3 STATE ENVIRONMENTAL PLANNING POLICY NO. 55 – REMEDIATION OF LAND

The contaminated land affectation relates to the service station situated on the Windang Road frontage. The proposal does not involve any earthworks or change of land use and there are no particular concerns raised in regards to this policy and requirements of clause 7.

2.1.4 STATE ENVIRONMENTAL PLANNING POLICY (COASTAL MANAGEMENT) 2018

This policy does not apply pursuant to clause 21 as follows:

21 Savings and transitional provisions

- (1) *The former planning provisions continue to apply (and this Policy does not apply) to a development application lodged, but not finally determined, immediately before the commencement of this Policy in relation to land to which this Policy applies.*

2.1.5 STATE ENVIRONMENTAL PLANNING POLICY NO. 71 – COASTAL PROTECTION

This policy has now been repealed however was still in place at the time of lodgement of the development application. The proposal is satisfactory with regard to the aims and matters for consideration under this policy as outlined below.

2 Aims of Policy

- (a) *to protect and manage the natural, cultural, recreational and economic attributes of the New South Wales coast, and*

Satisfactory

- (b) *to 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, and*

Satisfactory

- (c) *to 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, and*

No concerns.

- (d) *to protect and preserve Aboriginal cultural heritage, and Aboriginal places, values, customs, beliefs and traditional knowledge, and*

No ground disturbance or works are proposed.

- (e) *to ensure that the visual amenity of the coast is protected, and*

Satisfactory

- (f) *to protect and preserve beach environments and beach amenity, and*

Satisfactory

(g) to protect and preserve native coastal vegetation, and

Satisfactory

(h) to protect and preserve the marine environment of New South Wales, and

Satisfactory

(i) to protect and preserve rock platforms, and

Satisfactory

(j) to 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), and

Satisfactory

(k) to 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

Satisfactory

(l) to encourage a strategic approach to coastal management.

Satisfactory

8. Matters for consideration

The matters for consideration are the following:

Matters for consideration	Comment
(a) the aims of this Policy set out in clause 2,	
(b) existing public access to and along the coastal foreshore for pedestrians or persons with a disability should be retained and, where possible, public access to and along the coastal foreshore for pedestrians or persons with a disability should be improved,	The proposal seeks endorsement of unauthorised encroachments into the Council owned foreshore land on the western side of the facility. This is not considered to unreasonably restrict desired access to that area. If the proposal were to be supported, it would be subject to conditions that these encroachments be removed over time through a licence agreement.
(c) opportunities to provide new public access to and along the coastal foreshore for pedestrians or persons with a disability,	N/A
(d) the suitability of development given its type, location and design and its relationship with the surrounding area,	The application does not suitably address the suitability of the site for the development with respect to flooding and the zone objectives.

Matters for consideration	Comment
(e) any detrimental impact that development may have on the amenity of the coastal foreshore, including any significant overshadowing of the coastal foreshore and any significant loss of views from a public place to the coastal foreshore,	The proposal is not expected to detrimentally affect the coastal foreshore.
(f) the scenic qualities of the New South Wales coast, and means to protect and improve these qualities,	Satisfactory
(g) measures to conserve animals (within the meaning of the Threatened Species Conservation Act 1995) and plants (within the meaning of that Act), and their habitats,	Satisfactory
(h) measures to conserve fish (within the meaning of Part 7A of the Fisheries Management Act 1994) and marine vegetation (within the meaning of that Part), and their habitats	There are not expected to be any negative impacts on fish or marine vegetation and their habitats.
(i) existing wildlife corridors and the impact of development on these corridors,	No wildlife corridors are impacted by the proposal.
(j) the likely impact of coastal processes and coastal hazards on development and any likely impacts of development on coastal processes and coastal hazards,	Sea level rise and flood risk is not considered to be adequately addressed.
(k) measures to reduce the potential for conflict between land-based and water-based coastal activities,	The proposal is not expected to result in any conflicts between land and water based coastal activities.
(l) measures to protect the cultural places, values, customs, beliefs and traditional knowledge of Aboriginals,	Satisfactory
(m) likely impacts of development on the water quality of coastal waterbodies,	The proposal is not expected to impact on the water quality of any coastal waterbodies.
(n) the conservation and preservation of items of heritage, archaeological or historic significance,	No ground disturbance is proposed however maintenance of asset protection on the Council reserve to the south raises concerns with respect to potential Aboriginal Heritage.
(o) only in cases in which a council prepares a draft local environmental plan that applies to land to which this Policy applies, the means to encourage compact towns and cities,	Not applicable.
(p) only in cases in which a development application in relation to proposed development is determined:	
(i) the cumulative impacts of the proposed development on the environment, and	N/A
(ii) measures to ensure that water and energy usage by the proposed development is efficient.	N/A

2.1.6 STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2009

Consideration of this policy is required under clause 101 as the site has frontage to a classified road.

Clause 101 Development with frontage to classified road

(1) *The objectives of this clause are:*

- (a) *to ensure that new development does not compromise the effective and ongoing operation and function of classified roads, and*
- (b) *to prevent or reduce the potential impact of traffic noise and vehicle emission on development adjacent to classified roads.*

(2) *The consent authority must not grant consent to development on land that has a frontage to a classified road unless it is satisfied that:*

- (a) *where practicable and safe, vehicular access to the land is provided by a road other than the classified road, and*

The access from Windang Road is well established through previous approvals. The current application does not seek to alter that nor is it considered to result in an intensified use of the land that would generate additional traffic.

- (b) *the safety, efficiency and ongoing operation of the classified road will not be adversely affected by the development as a result of:*

- (i) *the design of the vehicular access to the land, or*

As at a) above.

- (ii) *the emission of smoke or dust from the development, or*

None expected.

- (iii) *the nature, volume or frequency of vehicles using the classified road to gain access to the land, and*

As at a) above.

- (c) *the development is of a type that is not sensitive to traffic noise or vehicle emissions, or is appropriately located and designed, or includes measures, to ameliorate potential traffic noise or vehicle emissions within the site of the development arising from the adjacent classified road.*

The Oasis Resort caravan park is of a type that would be sensitive to traffic noise and vehicle emissions. Whilst it is accepted that the historic use of the land and the general layout of the site has previously been endorsed by Council, the proposal seeks consent to make the site almost entirely permanent residential in character. This raises greater concern in respect of the likely amenity impacts described under this clause. This is particularly relevant given the traffic volumes as at 2018 are only narrowly below the threshold value of 20,000 vehicles a day which would trigger consideration of clause 102 below.

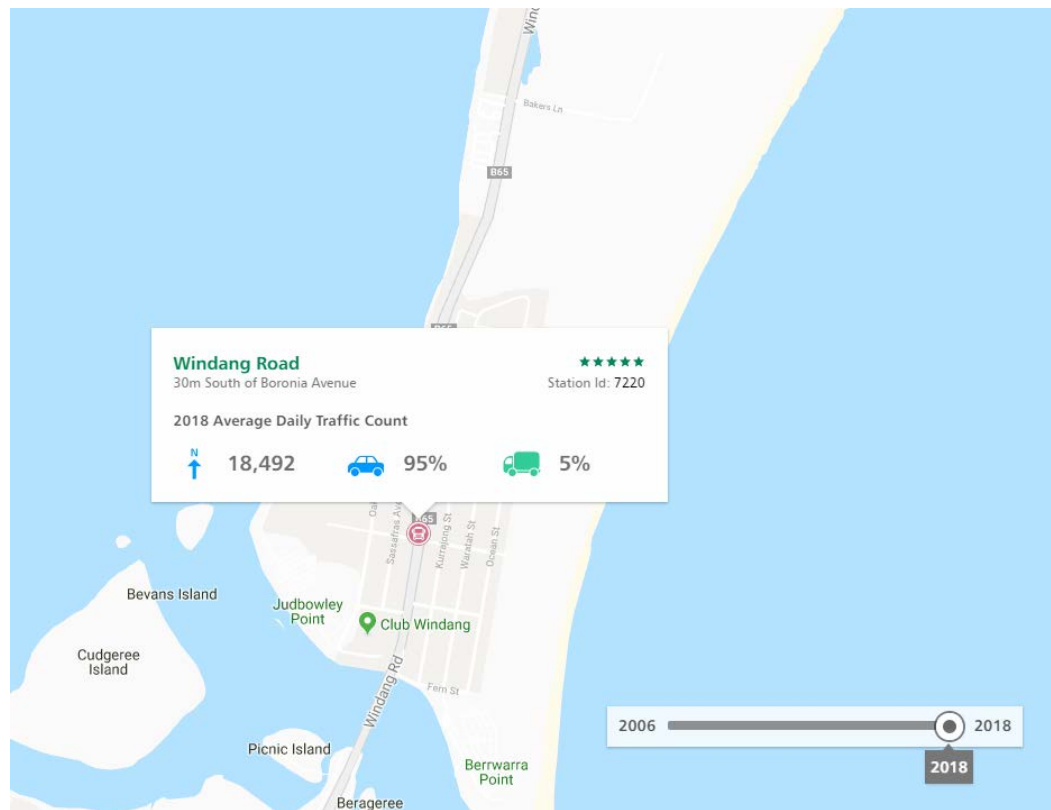
102 Impact of road noise or vibration on non-road development

(1) *This clause applies to development for any of the following purposes that is on land in or adjacent to the road corridor for a freeway, a tollway or a transitway or any other road with an annual average daily traffic volume of more than 20,000 vehicles (based on the traffic volume data published on the website of RMS) and that the consent authority considers is likely to be adversely affected by road noise or vibration:*

- (a) *residential accommodation,*
- (b) *a place of public worship,*
- (c) *a hospital,*

(d) *an educational establishment or centre-based child care facility.*

Windang Road does not have a daily traffic volume exceeding 20,000 vehicles on the traffic volume data on the RMS website (see below) therefore Clause 102 does not apply to the current application.



(2) *Before determining a development application for development to which this clause applies, the consent authority must take into consideration any guidelines that are issued by the Secretary for the purposes of this clause and published in the Gazette.*

Clause does not apply as outlined in subclause 1 above

(3) *If the development is for the purposes of residential accommodation, the consent authority must not grant consent to the development unless it is satisfied that appropriate measures will be taken to ensure that the following LAeq levels are not exceeded:*

(a) *in any bedroom in the residential accommodation—35 dB(A) at any time between 10 pm and 7 am,*

(b) *anywhere else in the residential accommodation (other than a garage, kitchen, bathroom or hallway)—40 dB(A) at any time.*

Clause does not apply as outlined in subclause 1 above

2.1.7 WOLLONGONG LOCAL ENVIRONMENTAL PLAN 2009

Part 2 Permitted or prohibited development

The development for which approval is sought is described in the application as a “caravan park”.

Clause 2.2 – zoning of land to which Plan applies

The zoning map identifies the land as being zoned RE2 Private Recreation with the narrow parcel between the site and the foreshore where there are building encroachments being zoned RE1.

Caravan parks are permissible in the both the RE1 and RE2 zone.

Clause 2.3 – Zone objectives and land use table

The objectives of the RE2 zone are as follows:

- *To enable land to be used for private open space or recreational purposes.*
- *To provide a range of recreational settings and activities and compatible land uses.*
- *To protect and enhance the natural environment for recreational purposes.*

The land use table permits the following uses in the RE2 zone.

*Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Camping grounds; **Caravan parks**; Cemeteries; Child care centres; Community facilities; Entertainment facilities; Environmental facilities; Environmental protection works; Extensive agriculture; Function centres; Kiosks; Markets; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Respite day care centres; Restaurants or cafes; Roads; Signage; Take away food and drink premises; Water recreation structures*

The proposal is described in the SEE as a caravan park. In order for the use to be categorised as a caravan park, the facility would need to include a minimum of two caravans with the remainder being able to be moveable dwellings (which can be manufactured homes). All sites within the facility are designated only for 'self-contained' dwellings and the existing dwelling sites contain a mixture of cabins, manufactured homes and caravans with annexes. Two sites are identified for short term which could accommodate caravans. The proposal is therefore considered to satisfy the definition of caravan park.

It is however noted that the character of the facility as being all residential is not consistent with the zone objectives.

The objectives of the RE1 zone are as follows:

- *To enable land to be used for public open space or recreational purposes.*
- *To provide a range of recreational settings and activities and compatible land uses.*
- *To protect and enhance the natural environment for recreational purposes.*
- *To cater for the development of a wide range of uses and facilities within open spaces for the benefit of the community.*

The RE1 zone permits the following land uses:

*Boat sheds; Camping grounds; **Caravan parks**; Child care centres; Community facilities; Environmental facilities; Environmental protection works; Extensive agriculture; Helipads; Information and education facilities; Kiosks; Markets; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreational facilities (outdoor); Respite day care centres; Restaurants or cafes; Roads; Signage; Take away food and drink premises; Water recreation structures*

The encroachments into the foreshore area zoned RE1 are minor in nature and are not considered to compromise public access or enjoyment of the lake or foreshore area.

It is noted that the Community Map 103385 dated 29 June 2017 indicates the site boundaries encroach into the adjacent road reservation for Windang Road which is zoned SP2 Infrastructure.

The SP2 zone objectives are:

- *To provide for infrastructure and related uses.*
- *To prevent development that is not compatible with or that may detract from the provision of infrastructure.*
- *To provide for key transport corridors.*

The following land uses are permitted in that zone:

The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose; Advertising structures; Business identification signs; Child care centres; Community facilities; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Respite day care centres; Roads

Caravan parks are not a permissible land use in the SP2 zone.

Clause 1.4 Definitions

caravan park means land (including a camping ground) on which **caravans** (or caravans and other moveable dwellings) are, or are to be, installed or placed.

“Caravan” is not defined in the LEP or the Standard Instrument.

The Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005 defines caravans as follows:

caravan means a **moveable dwelling** that is designed so as to be capable of being registered (within the meaning of the Road Transport Act 2013) as a trailer, but does not include a camper trailer.

Moveable dwelling is defined under the Local Government Act as follows:

moveable dwelling means:

- (a) any tent, or any **caravan** or other van or other portable device (whether on wheels or not), used for human habitation, or
- (b) a manufactured home, or
- (c) any conveyance, structure or thing of a class or description prescribed by the regulations for the purposes of this definition.

manufactured home means a self-contained dwelling (that is, a dwelling that includes at least one kitchen, bathroom, bedroom and living area and that also includes toilet and laundry facilities), being a dwelling:

- (a) that comprises one or more major sections, and
- (b) that is not a motor vehicle, trailer or other registrable vehicle within the meaning of the Road Transport Act 2013,

and includes any associated structures that form part of the dwelling.

In order for the development to be capable of being categorised as a caravan park, it would therefore require a minimum of 2 caravans that meet the definitions above. Two sites are identified as short-term and capable of containing caravans.

Part 4 Principal development standards

Clause 4.3 Height of buildings

No buildings are proposed.

Clause 4.4 Floor space ratio

There is no maximum FSR applicable to the land.

Part 5 Miscellaneous provisions

Clause 5.5 Development within the coastal zone

This clause has now been repealed however was in force and applicable at the time of lodgement of the DA. The proposal is considered to be inconsistent with clause (b)(iv) and (xi) as detailed below.

(1) The objectives of this clause are as follows:

(a) to provide for the protection of the coastal environment of the State for the benefit of both present and future generations through promoting the principles of ecologically sustainable development,

Satisfactory.

(b) to implement the principles in the NSW Coastal Policy, and in particular to:

(i) protect, enhance, maintain and restore the coastal environment, its associated ecosystems, ecological processes and biological diversity and its water quality, and

Satisfactory.

(ii) protect and preserve the natural, cultural, recreational and economic attributes of the NSW coast, and

Satisfactory.

(iii) provide opportunities for pedestrian public access to and along the coastal foreshore, and

The proposal does not unreasonably restrict access to the coastal foreshore.

(iv) recognise and accommodate coastal processes and climate change, and

Flooding concerns (including sea level rise) have not been suitably addressed.

(v) protect amenity and scenic quality, and

Satisfactory.

(vi) protect and preserve rock platforms, beach environments and beach amenity, and

N/A

(vii) protect and preserve native coastal vegetation, and

N/A

(viii) protect and preserve the marine environment, and

No impacts expected.

- (ix) *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*

Satisfactory.

- (x) *ensure that decisions in relation to new development consider the broader and cumulative impacts on the catchment, and*

Satisfactory.

- (xi) *protect Aboriginal cultural places, values and customs, and*

The proposed asset protection zone on the adjoining Council reserve raises concerns with regard to Aboriginal heritage and would require an Aboriginal Heritage Assessment.

- (xii) *protect and preserve items of heritage, archaeological or historical significance.*

Satisfactory.

Part 7 Local provisions – general

Clause 7.1 Public utility infrastructure

No particular concerns are raised in regard to utility provision. Connection to utilities for the dwellings is managed under the Local Government Act approvals.

Clause 7.3 Flood planning area

The proposal is unacceptable in regard to this clause as outlined below.

(1) The objectives of this clause are as follows:

- (a) *to maintain the existing flood regime and flow conveyance capacity,*

Satisfactory

- (b) *to enable evacuation from land to which this clause applies,*

A suitable Flood Emergency Response Plan for the facility has not been provided.

- (c) *to avoid significant adverse impacts on flood behaviour,*

Satisfactory.

- (d) *to avoid significant effects on the environment that would cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses,*

Satisfactory.

- (e) *to limit uses to those compatible with flow conveyance function and flood hazard.*

The predominant residential character of the facility proposed under the application is not considered acceptable in regard to risk to life and property.

(2) This clause applies to:

- (a) *land identified as “Flood planning area” on the Flood Planning Map, and*

- (b) *other land at or below the flood planning level.*

The site is identified as being below the flood planning level.

(3) Development consent must not be granted for development on land to which this clause applies unless the consent authority is satisfied in relation to all the following matters:

(a) all habitable floor levels of the development will be above the flood planning level,

The development application does not propose any installations or construction of any buildings. It is however noted that structures on sites number 8, 23, 24, 65 and 66 have been erected without proper consent and would not appear to meet the design floor level requirement of 3.54 AHD.

(b) the development will not adversely affect flood behaviour resulting in detrimental increases in the potential flood affectation of other development or properties,

No concerns.

(c) the development will not significantly alter flow distributions and velocities to the detriment of other properties or the environment of the floodplain,

(d) the development will not affect evacuation from the land,

A suitable Flood Emergency Response Plan has not been provided.

(e) the development will not significantly detrimentally affect the floodplain environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses,

No concerns.

(f) the development will not result in unsustainable social and economic costs to the community as a consequence of flooding,

The risk to property as it relates to the predominantly long term residential character of the development has not been suitably addressed.

(g) if located in a floodway area—the development will not be incompatible with the flow conveyance function of, or increase a flood hazard in, the floodway area.

No concerns.

Clause 7.5 Acid Sulfate Soils

The land is identified as being affected by class 2 acid sulphate soils. No concerns are raised in this regard as there are no earthworks proposed.

Clause 7.7 Foreshore building line

There are no works proposed under this application however there have been unauthorised encroachments of structures into the foreshore building line as illustrated below.



Consideration of those encroachments against this clause is outlined below.

- (1) *The objective of this clause is to ensure that development in the foreshore area will not impact on natural foreshore processes or affect the significance and amenity of the area.*

Satisfactory.

- (2) *Development consent must not be granted for development on land in the foreshore area except for the following purposes:*

- (a) *the extension, alteration or rebuilding of an existing building wholly or partly in the foreshore area,*

The encroachments of dwellings into the foreshore building line have by and large previously been endorsed by Council under previous approvals. This includes DA-2009/1355 which consented to the encroachment of the structures subject to a lease agreement with the following conditions:

- The existing cabins on the land may remain for the life of the structure, unless otherwise removed;
- No alterations or improvements are to be made to the structures, unless otherwise removed;
- The cabins cannot be on-sold; and
- Public access to the land is to be maintained.

- (b) *the erection of a building in the foreshore area, if the levels, depth or other exceptional features of the site make it appropriate to do so,*

As noted at a).

- (c) *development for the purposes of boat sheds, sea retaining walls, wharves, slipways, jetties, waterway access stairs, swimming pools, fences, cycleways, walking trails, picnic facilities or other recreation facilities (outdoor).*

N/A

- (3) *Development consent must not be granted under subclause (2) unless the consent authority is satisfied that:*

- (a) *the development will contribute to achieving the objectives for the zone in which the land is located, and*

The proposal is not consistent with the zone objectives. However, as noted at 2(a) above, the encroachments have generally been previously endorsed by Council.

- (b) the appearance of any proposed structure, from both the waterway and adjacent foreshore areas, will be compatible with the surrounding area, and*

Satisfactory

- (c) the development will not cause environmental harm such as:*

- (i) pollution or siltation of the waterway, or*

Satisfactory

- (ii) an adverse effect on surrounding uses, marine habitat, wetland areas, flora or fauna habitats, or*

Satisfactory

- (iii) an adverse effect on drainage patterns, and*

Satisfactory

- (d) the development will not cause congestion of, or generate conflicts between, people using open space areas or the waterway, and*

Satisfactory

- (e) opportunities to provide continuous public access along the foreshore and to the waterway will not be compromised, and*

Access to the foreshore is not unreasonably restricted by the proposal.

- (f) any historic, scientific, cultural, social, archaeological, architectural, natural or aesthetic significance of the land on which the development is to be carried out and of surrounding land will be maintained, and*

No physical works are proposed.

- (g) in the case of development for the alteration or rebuilding of an existing building wholly or partly in the foreshore area, the alteration or rebuilding will not have an adverse impact on the amenity or aesthetic appearance of the foreshore.*

Satisfactory.

2.2 SECTION 79C 1(A)(II) ANY PROPOSED INSTRUMENT

State Environmental Planning Policy (Coastal Management) 2018

This policy was in draft form at the time of lodgement of the application and is not captured under this DA pursuant to the savings provisions of the policy as noted below.

21 Savings and transitional provisions

- (1) The former planning provisions continue to apply (and this Policy does not apply) to a development application lodged, but not finally determined, immediately before the commencement of this Policy in relation to land to which this Policy applies.*

2.3 SECTION 79C 1(A)(III) ANY DEVELOPMENT CONTROL PLAN

2.3.1 WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

A full assessment against the provision of the DCP is contained at Appendix 3 however non-compliant matters are addressed below.

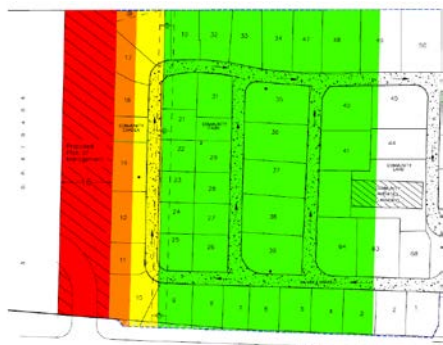
CHAPTER E16: BUSH FIRE MANAGEMENT

The land is bushfire affected due to the Council reserve located immediately to the south of the site.

The proposal is integrated development under Section 91 of the Environmental Planning and Assessment (EP&A) Act 1979 and requires a Bush Fire Safety Authority under Section 100B of the Rural Fires (RF) Act 1997.

A Bushfire Report was submitted in this regard. The most notable recommendation of that report being:

Wollongong City Council Plan establish a Plan of Management over Windang Peninsula Heritage Park to establish a minimum 16m APZ from the northern boundary of the public reserve Lot 6 DP610406 to achieve a minimum bushfire attack level of BAL 29 on the site. Section 63 of Rural Fires Act sets out the duties of public authorities and states that "It is the duty of the owner or occupier of land to take the notified steps (if any) and any other practicable steps to prevent the occurrence of bush fires on, and to minimise the danger of the spread of bush fires on or from, that land".



The RFS have reviewed the application and have issued their Bush Fire Safety Authority under Section 100B of the Rural Fires Act 1997.

This mechanism for provision of an asset protection zone on the adjoining Council land is however not supported.

CHAPTER E10 ABORIGINAL HERITAGE

The maintenance of asset protection zone on the Council reserve, particularly in respect of tree removal, raises concerns in regard to potential impacts on Aboriginal Heritage. An Aboriginal Heritage Assessment would likely be required were the application to be supported.

CHAPTER E13 FLOODPLAIN MANAGEMENT

Objectives

1. The key objectives of this chapter are to:

- a) *Minimise the potential impact of development and other activity upon the aesthetic, recreational and ecological value of the waterway corridors.*
- b) *Improve riparian corridors during redevelopment and to ensure the ecological values of the creek systems are enhanced without adverse impact on existing development.*
- c) *Increase public awareness of the hazard and extent of land affected by all potential floods, including floods greater than the 100 year average recurrence interval (ARI) flood and to ensure essential services and land uses are planned in recognition of all potential floods.*
- d) *Inform the community of Council's policy for the use and development of flood prone land.*
- e) *Reduce the risk to human life and damage to property caused by flooding through controlling development on land affected by potential floods.*

- f) *Provide detailed controls for the assessment of applications lodged in accordance with the Environmental Planning and Assessment Act 1979 on land affected by potential floods.*
- g) *Provide different guidelines, for the use and development of land subject to all potential floods in the floodplain, which reflect the probability of the flood occurring and the potential hazard within different areas.*
- h) *Apply a “merit-based approach” to all decisions relating to flood affected development which take account of social, economic and ecological as well as flooding considerations.*
- i) *To control development and activity within each of the individual floodplains within the LGA having regard to the characteristics and level of information available for each of the floodplains, in particular the availability of FRMS’s and FRMP’s prepared in accordance with the FDM and its predecessor, the FMM.*
- j) *Deal equitably and consistently with applications for development on land affected by potential floods, in accordance with the principles contained in the FMM, issued by the NSW Government.*

The proposal is not considered to have regard to the objectives of this chapter, particularly with regard to reducing the risk to human life and damage to property. Dwellings occupied by permanent residents will more than likely contain a greater number of personal property items than would be the case for a tourist oriented development where the sites are occupied on a short term basis.

The flood emergency response plan submitted recommends evacuation in place rather than offsite in the event of significant flooding. This is not a position that is supported by Council.

As detailed at clause 7.3(3)(a) of WLEP 2009, structures on sites number 8, 23, 24, 65 and 66 have been erected without proper consent and would not appear to meet the design floor level requirement of 3.54 AHD.

2.3.2 WOLLONGONG DEVELOPMENT CONTRIBUTIONS PLAN 2018

There are no physical works proposed and a levy is not applicable under this plan.

2.4 SECTION 79C 1(A)(IIIA) ANY PLANNING AGREEMENT THAT HAS BEEN ENTERED INTO UNDER SECTION 93F, OR ANY DRAFT PLANNING AGREEMENT THAT A DEVELOPER HAS OFFERED TO ENTER INTO UNDER SECTION 93F

There are no planning agreements entered into or any draft agreement offered to enter into under S93F which affect the development.

2.5 SECTION 79C 1(A)(IV) THE REGULATIONS (TO THE EXTENT THAT THEY PRESCRIBE MATTERS FOR THE PURPOSES OF THIS PARAGRAPH)

92 What additional matters must a consent authority take into consideration in determining a development application?

N/A

93 Fire safety and other considerations

N/A

94 Consent authority may require buildings to be upgraded

Requirements under clause 94 are to be managed through approvals under section 68 of the Local Government Act.

2.6 SECTION 79C 1(B) THE LIKELY IMPACTS OF DEVELOPMENT

The proposal is not considered acceptable in regard to the likely impacts in respect of flooding, bushfire management and residential amenity.

2.7 SECTION 79C 1(C) THE SUITABILITY OF THE SITE FOR DEVELOPMENT

Does the proposal fit in the locality?

The proposed residential character of the development is considered acceptable in respect of adjoining uses and the locality.

Are the site attributes conducive to development?

The flooding affectation for the land is not considered suitable for the proposed residential facility.

2.8 SECTION 79C 1(D) ANY SUBMISSIONS MADE IN ACCORDANCE WITH THIS ACT OR THE REGULATIONS

No submissions were received.

2.9 SECTION 79C 1(E) THE PUBLIC INTEREST

The application is not considered to be in the public interest for the reasons outlined in the draft refusal at Attachment 10.

3. RECOMMENDATION

This application has been assessed as unsatisfactory having regard to the Heads of Consideration under Section 79C(1) of the Environmental Planning and Assessment Act 1979, the provisions of Wollongong Local Environmental Plan 2009 and all relevant Council DCPs, Codes and Policies.

It is recommended that the development application be refused for the reasons outlined in Attachment 10.

4. ATTACHMENTS

1. Aerial photograph
2. WLEP 2009 Zoning map
3. Community layout plan
4. Statement of Environmental Effects
5. Flood Emergency Response Plan
6. CP-2003/4
7. Bushfire Risk Assessment
8. RFS bushfire safety authority
9. Consent from Roads and Maritime Services
10. Draft reasons for refusal

APPENDIX 1 – STATE ENVIRONMENTAL PLANNING POLICY NO 21—CARAVAN PARKS

3 Aims, objectives etc.

(1) *The aim of this Policy is to encourage:*

- (a) *the orderly and economic use and development of land used or intended to be used as a caravan park catering exclusively or predominantly for short-term residents (such as tourists) or for long-term residents, or catering for both, and*
- (b) *the proper management and development of land so used, for the purpose of promoting the social and economic welfare of the community, and*
- (c) *the provision of community facilities for land so used, and*
- (d) *the protection of the environment of, and in the vicinity of, land so used.*

(2) *The strategies by which that aim is to be achieved are:*

- (a) *(Repealed)*
- (b) *by requiring that development consent be obtained from the local Council for development for the purposes of caravan parks, and*
- (c) *by providing that development consent may be granted that will authorise the use of sites for short-term stays (whether or not by tourists) or for long-term residential purposes, or for both, and*
- (d) *by requiring that development consent be obtained from the local Council for the subdivision of land for lease purposes under section 289K of the Local Government Act 1919.*

The development proposal is considered to be consistent with these objectives.

4 Land to which this Policy applies

(1) *This Policy applies to all land in the State that is within a local government area.*

5 Relationship to other environmental planning instruments

- (1) *In the event of an inconsistency between this Policy and another environmental planning instrument (whether made before or after this Policy) this Policy prevails to the extent of the inconsistency. This subclause is subject to section 36 of the Environmental Planning and Assessment Act 1979.*
- (2) *This Policy repeals State Environmental Planning Policy No 21—Movable Dwellings.*
- (3) *This Policy amends State Environmental Planning Policy No 26—Littoral Rainforests by omitting clause 10 (5).*
- (4) *Nothing in State Environmental Planning Policy No 36—Manufactured Home Estates prevents development consent from being granted pursuant to this Policy for the use of land as a caravan park in which manufactured homes are or are to be installed or placed.*

6 Definition

In this Policy:

caravan park means land (including a camping ground) on which caravans (or caravans and other moveable dwellings) are, or are to be, installed or placed.

Caravans are defined under the Regulation as follows:

*caravan means a **moveable dwelling** that is designed so as to be **capable of being registered** (within the meaning of the Road Transport Act 2013) **as a trailer**, but does not include a camper trailer.*

moveable dwelling has the same meaning as it has in the Local Government Act 1993.

The Local Government Act 1993 defines moveable dwelling as follows:

moveable dwelling means:

- (a) *any tent, or any caravan or other van or other portable device (whether on wheels or not), used for human habitation, or*
- (b) *a manufactured home, or*
- (c) *any conveyance, structure or thing of a class or description prescribed by the regulations for the purposes of this definition.*

manufactured home means a self-contained dwelling (that is, a dwelling that includes at least one kitchen, bathroom, bedroom and living area and that also includes toilet and laundry facilities), being a dwelling:

- (a) *that comprises one or more major sections, and*
- (b) *that is not a motor vehicle, trailer or other registrable vehicle within the meaning of the Road Transport Act 2013,*

and includes any associated structures that form part of the dwelling.

In order for the use to be categorised as a caravan park, the facility would need to include a minimum of two caravans with the remainder being able to be moveable dwellings (which can be manufactured homes). All sites within the facility are designated only for 'self-contained' dwellings and the existing dwelling sites contain a mixture of cabins, manufactured homes and caravans with annexes. The composition is therefore considered to be capable of satisfying the definition of caravan park.

7 Application of certain planning controls to places licensed for movable dwellings

In any environmental planning instrument (whether made before or after this Policy), references (however expressed) to caravan parks or to camping grounds, or to caravan parks and camping grounds, include references to caravan parks, within the meaning of this Policy.

8 Development consent required for caravan parks

- (1) *Development for the purposes of a caravan park may be carried out only with the development consent of the Council.*
- (2) *Before granting development consent to the use of land for the purposes of a caravan park, a Council must determine:*
 - (a) *the number of sites (if any) within that land that the Council considers are suitable for long-term residence, within the meaning of the Local Government (Caravan Parks and Camping Grounds) Transitional Regulation 1993,*

This regulation has been repealed and replaced by *Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005*.

This regulation defines long term residence as follows:

long-term site means a dwelling site that is specified in the approval for a caravan park as being a long-term site.

Under the Council's primary concern to date with respect to long term sites has been that of flood risk. This is discussed in greater detail at clause 7.3 of WLEP 2009. Generally speaking, the proposed number of long term sites is considered unacceptable in respect of flooding.

- (b) *the number of sites (if any) within that land that the Council considers are not suitable for long-term residence, but are suitable for short-term residence, within the meaning of that Regulation.*

Short term is defined as follows under *Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005*

short-term site means a dwelling site on which a moveable dwelling that is ordinarily used for holiday purposes may be installed and that is specified in the approval for a caravan park as being a short-term site..

As discussed at a) above, the primary concern with suitability of the land is in respect of flooding. No concerns are raised in regard to the mix of short and long term sites.

- (3) *A Council must not grant development consent to the use of land for the purposes of a caravan park unless it imposes as a condition of that consent a condition specifying the maximum number of sites (if any) within that land that may be used for long-term residence.*

Could be managed through condition of consent.

- (4) *The holder of an approval under Part 1 of Chapter 7 of the Local Government Act 1993 to operate a caravan park or camping ground on land must not, without the development consent of the Council, allow a person to occupy a site within that land:*

- (a) *for a continuous period of more than 3 months, except as provided by paragraph (b), or*
(b) *for a continuous period longer than the period (if any) for which the person is allowed to be accommodated within the land by an extension that has been granted under clause 19 (6) of the Local Government (Caravan Parks and Camping Grounds) Transitional Regulation 1993, if such a use of that site was not lawful under the Environmental Planning and Assessment Act 1979 when this Policy commenced.*

This is a matter for the approval to operate which is pending the determination of the development application.

- (4A) *Except as provided by subclause (4), nothing in this Policy or any other environmental planning instrument requires separate development consent to be obtained for the installation or placement of a moveable dwelling on land on which development for the purposes of a caravan park is being lawfully carried out.*

No comment required.

- (5) *This clause does not apply to any land that is authorised to be used for the purposes of a manufactured home estate by a development consent granted pursuant to State Environmental Planning Policy No 36—Manufactured Home Estates or dedicated or reserved under the National Parks and Wildlife Act 1974.*

No comment required.

10 Matters to be considered by Councils

A Council may grant a development consent required by this Policy only after it has considered the following:

- (a) *whether, because of its location or character, the land concerned is particularly suitable for use as a caravan park for tourists or for long-term residence,*

During the assessment of the proposal, a primary concern in respect of the suitability of the site for long vs short term residence has been the issue of whether long term residence presents a greater risk to flooding than short term tourist accommodation. This is discussed in greater detail at clause 7.3 of WLEP 2009. It is considered that the long term residential character of the caravan park is not consistent with the objectives of that clause.

- (b) *whether there is adequate provision for tourist accommodation in the locality of that land, and whether existing or potential tourist accommodation will be displaced by the use of sites for long-term residence,*

Existing tourist accommodation will not be displaced by the proposal as the park is currently utilised for predominantly long term accommodation, albeit without Council endorsement. The question of whether there is adequate provision for tourist accommodation in the locality is considered to be outside the scope of this assessment.

- (c) *whether there is adequate low-cost housing, or land available for low-cost housing, in that locality,*

As at point b), the availability of low cost housing in the locality is a strategic planning matter rather than one that can be assessed for this individual DA.

- (d) *whether necessary community facilities and services are available within the caravan park to which the development application relates or in the locality (or both), and whether those facilities and services are reasonably accessible to the occupants of the caravan park,*

Being longer term residential in nature, dwellings will largely be self-contained and there will not be a reliance on communal laundry facilities.

The park provides community areas and direct access to Lake Illawarra to the west.

In regard to public transport, a bus stop is available within 50m of the entry/exit driveways for the park.

Windang village provides a small corner shop, takeaway food outlets and a number of other independent shops, services and recreational opportunities within 1.7km of the subject site. Additional services are available in Warilla and Warrawong, all within 5km radius and connected by public and private transport options.

- (e) *any relevant guidelines issued by the Director, and*

None applicable

- (f) *the provisions of the Local Government (Caravan Parks and Camping Grounds) Transitional Regulation 1993.*

This regulation was repealed by *Local Government (Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 1995*, which was then repealed by *Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005*. An assessment against this regulation is provided below.

APPENDIX 2 - LOCAL GOVERNMENT (MANUFACTURED HOME ESTATES, CARAVAN PARKS, CAMPING GROUNDS AND MOVEABLE DWELLINGS) REGULATION 2005

3 Object

The object of this Regulation is to provide opportunities for affordable alternatives in short-term and long-term accommodation:

- (a) by continuing in force (in amended form) the standards for the design of manufactured home estates, caravan parks and camping grounds established by the former Regulations, and*
- (b) by continuing in force (in amended form) the standards for the design and construction of manufactured homes and other moveable dwellings and for their siting established by the former Regulations, and*
- (c) by continuing in force (in amended form) the standards to promote the health, safety and amenity of the occupiers of manufactured homes and other moveable dwellings established by the former Regulations.*

The site has less than 10% of the site area reserved for recreational and other activities as recommended under clause 84(1) as detailed below. Further, the sites on the eastern side are less than the minimum setback recommended under clause 89(2).

4 Definitions

caravan means a moveable dwelling that is designed so as to be capable of being registered (within the meaning of the Road Transport Act 2013) as a trailer, but does not include a camper trailer.

holiday van means a moveable dwelling (other than a tent) that is or usually is continuously located on a short-term site and used primarily by its owner for occasional occupancy for holiday purposes.

long-term site means a dwelling site that is specified in the approval for a caravan park as being a long-term site.

self-contained moveable dwelling means a moveable dwelling that contains its own shower and toilet facilities.

short-term site means a dwelling site on which a moveable dwelling that is ordinarily used for holiday purposes may be installed and that is specified in the approval for a caravan park as being a short-term site.

Part 3 Caravan parks, camping grounds and moveable dwellings

Division 1 Application of Part

70 Application of Part

This Part applies to the operation of caravan parks and camping grounds, and to the installation of moveable dwellings (including manufactured homes) in caravan parks and camping grounds and elsewhere, but does not apply to the installation of manufactured homes in manufactured home estates.

71 Factors for consideration before approval is granted

- (1) The council must not grant an approval to operate a caravan park or camping ground unless it is satisfied that it will be designed, constructed, maintained and operated:*
 - (a) in accordance with the relevant requirements of Subdivisions 1–8 of Division 3, or*
The approval to operate a caravan park is the subject of a separate application under the Local Government Act.
 - (b) in the case of a primitive camping ground, in accordance with the relevant requirements of Subdivision 9 of Division 3.*

N/A

- (2) In deciding whether or not the approval for a caravan park or camping ground should allow the installation of a relocatable home, rigid annexe or associated structure on flood liable land, the council must have regard to the principles contained in the Floodplain Development Manual.

The site is on flood liable land and there are a number of installations that have occurred without Council endorsement and without regard to the Floodplain development Manual.

72 Matters to be specified in approval

- (1) In addition to any other matters it must contain, an approval to operate a caravan park or camping ground must specify the following:

(a) whether the approval allows:

- (i) the operation of a caravan park only, or

Yes

- (ii) the operation of a camping ground only, or

N/A

- (iii) the operation of both a caravan park and a camping ground,

N/A

(b) in the case of an approval that allows the operation of a caravan park:

- (i) the number, size and location of long-term sites allowed by the approval, and

The proposal seeks approval for 61 long term sites. It is noted however that the long term residential character of the development is not consistent with the zone objectives or flooding controls.

- (ii) the number, size and location of short-term sites allowed by the approval, and

The proposal seeks approval for 2 short term sites. No objection is made in this regard.

- (iii) the number, size and location of dwelling sites (whether long-term or short-term) to be reserved for self-contained moveable dwellings, and

A self-contained moveable dwelling is defined under this legislation as “a moveable dwelling that contains its own shower and toilet facilities”. The proposal designates all sites within the facility for ‘self-contained’ dwellings. No concern is raised in this regard.

- (iv) the location of any off-site parking spaces for dwelling sites,

The site plan illustrates parking spaces.

(c) in the case of an approval that allows the operation of a camping ground:

- (i) whether the camping ground is to be a primitive camping ground, and

- (ii) in the case of an approval for the operation of a primitive camping ground that designates camp sites, the number, size and location of the camp sites allowed by the approval, and

- (iii) in the case of an approval for the operation of a primitive camping ground that does not designate camp sites, the maximum number of caravans, campervans and tents that are permitted to use the camping ground at any one time, and

- (iv) the location of any off-site parking spaces for camp sites,

(d) the location of any flood liable land in the caravan park or camping ground.

N/A

- (2) The numbers, sizes and locations referred to in subclause (1) must be specified by reference to a community map.

A community map has been provided indicating

- (i) the number, size and location of long-term sites, and

- (ii) the number, size and location of short-term sites, and

- (iii) the number, size and location of dwelling sites (whether long-term or short-term) to be reserved for self-contained moveable dwellings, and [2]
- (iv) the location of any off-site parking spaces for dwelling sites,
- (3) *The approval is to specify that, in the calculation for the purposes of subclause (1) (c) (iii) of the number of tents using a camping ground, 2 or more tents occupied by a group of not more than 12 persons camping together as a group are to be counted as only one tent.*

N/A

73 Conditions of approval to operate caravan park or camping ground

- (1) *An approval to operate a caravan park or camping ground is subject to the following conditions:*

- (a) *the caravan park or camping ground must be designed, constructed, maintained and operated:*

- (i) *in accordance with the relevant requirements of Subdivisions 1–8 of Division 3,*

See below

- (ii) *in the case of a primitive camping ground, in accordance with the relevant requirements of Subdivision 9 of Division 3,*

N/A

- (b) *a person must not be permitted to stay in a moveable dwelling that occupies a short-term site or camp site for a total of more than 150 days in any 12 month period, unless the moveable vehicle is a holiday van and the person is the owner of that holiday van,*

This is a matter that could be managed through conditions of consent were the application to be supported.

- (c) *the owner of a holiday van that occupies a short-term site or camp site must not be permitted to stay in the holiday van for a total of more than 180 days in any 12 month period,*

This is a matter that could be managed through conditions of consent were the application to be supported.

- (d) *a person must not be permitted to stay in a moveable dwelling in a primitive camping ground for a total of more than 50 days in any 12 month period.*

N/A

- (2) *For the purposes of this clause, only overnight stays are to be counted in calculating the number of days a person spends in a moveable dwelling.*

- (3) *This clause does not apply to the operation of a caravan park or camping ground for a period of not more than 6 weeks if the caravan park or camping ground is being operated solely in connection with the use of the land for a sporting, recreational or cultural event.*

- (4) *Subclauses (1) (b), (c) and (d) and (2) do not apply to a resident owner, manager, operator or caretaker of the caravan park or camping ground.*

Note. The council may also impose conditions on the grant of an approval under section 94 of the Act.

Subdivision 2 Installation of moveable dwellings and associated structures in caravan parks and camping grounds

No installations are proposed under the development application.

Subdivision 3 Installation of moveable dwellings elsewhere than in caravan parks or camping grounds

N/A

Division 3 Caravan parks and camping grounds

Subdivision 1 Land and site requirements

83 Minimum size of caravan park or camping ground

- (1) A caravan park must not have an area of less than one hectare or, if a lesser area is prescribed by a relevant environmental planning instrument, that lesser area.
- (2) There is no minimum size for a camping ground.

Complies

84 Community amenities

- (1) Of the total land area of a caravan park or camping ground:
 - (a) at least 10 per cent, or
 - (b) such lesser proportion (but not less than 6 per cent) as the approval for the caravan park or camping ground may allow,

must be reserved for recreation or other communal activities.
- (2) In deciding whether to allow a lesser proportion, the council must have regard to the type and range of amenities to be provided and to such other matters as it considers relevant.

Approximately 6.8% is proposed

The Regulation permits 6% and the park provides this minimum. The space provided is considered feasible to be adapted for various uses should the demand/need arise.

85 Size of dwelling sites and camp sites

- (1) A long-term site must have an area of at least 80 square metres.
- (2) A short-term site must have an area of at least 65 square metres.
- (3) A camp site must have an area of at least:
 - (a) 40 square metres, in the case of a camp site for which a separate parking space is provided within 30 metres of the camp site, or
 - (b) 50 square metres, in any other case.

Complies

Complies

N/A

86 Site identification

- (1) A dwelling site or camp site must be numbered or identified and its site boundaries clearly delineated.
- (2) The site identification must be conspicuous.

This matter is relevant to the approval to operate.

As above.

Subdivision 2 Setbacks

87 Dwelling sites to have road frontage

A dwelling site must have vehicular access to an access road.

88 Setbacks of community buildings

- (1) A community building must not be located closer than 10 metres to the boundary of a caravan park or camping ground, or to the boundary of a dwelling site or camp site, unless the approval for the caravan park or camping ground so allows.

Satisfactory

(2) The approval for a caravan park or camping ground must not allow a lesser distance than 10 metres unless the council is satisfied that the community building has been or will be properly screened, fenced, enclosed or otherwise treated.	N/A
(3) A community building must not in any case be located closer than 3 metres to the boundary of a caravan park or camping ground or 5 metres to the boundary of a dwelling site or camp site.	Sites 41, 63 and 64 do not comply.
<u>89 Setbacks of dwelling sites and camp sites from road frontages</u>	
(1) A dwelling site or camp site must not be located closer than 10 metres to a public road or 3 metres to any other boundary of the caravan park or camping ground unless the approval for the caravan park or camping ground so allows.	The setback of sites from the kerb of Windang Road is approximately 5m. Sites on the southern boundary have no setback.
(2) The approval for a caravan park or camping ground must not allow a lesser distance unless the council is satisfied that the dwelling site or camp site has been or will be properly screened, fenced, enclosed or otherwise treated.	The boundary with the road has a colorbond fence and hedge. This would provide some relief in terms of acoustic screening. However, the proposal for the predominant use to be permanent residential rather than incorporating a mix of tourist oriented sites raises greater concern in regard to potential impacts of road noise on the development. This is further discussed at SEPP Infrastructure below.
<u>90 Use of buffer zones</u>	
Nothing in this Regulation prevents land within a buffer zone arising from the setbacks required by this Division from being used:	N/A
(a) for community amenities, access roads, car parking spaces, footpaths or landscaping, or (b) for any similar purpose allowed by the approval for the caravan park or camping ground.	
<u>91 Separation distances</u>	
(1) A moveable dwelling must not be installed closer to any other moveable dwelling than: (a) 3 metres, if it is situated on a long-term site, or (b) 2.5 metres, if it is situated on a short-term site or camp site.	This is a matter for consideration under the Local Government Act approval.
(2) This clause does not prohibit the installation of semi-detached relocatable homes on adjoining dwelling sites so long as they are separated by construction conforming to the fire safety and sound insulation provisions relating to class 1 buildings contained in Section 3.7.1 and 3.8.6 of Volume Two of the Building Code of Australia.	As above.
(3) (Repealed)	

Subdivision 3 Roads

92 Entrance and exit roads

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| (1) A road that forms an entrance to or exit from a caravan park or camping ground must be at least 7 metres wide. | Complies |
| (2) In the case of a divided road, the width of the sealed portion of the road on either side of the median strip must be at least 5 metres. | N/A |
| (3) The arrangement for the width of an entrance or exit road to taper into or meet the width of the sealed portion of the access roads leading to the entrance or exit must be as specified in the approval for the caravan park or camping ground. | N/A |

93 Forecourt

A caravan park must have a forecourt, measuring at least 4 metres by 20 metres, to accommodate incoming vehicles.	Satisfactory
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94 Width of roads

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|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| (1) The width of an access road must be:
(a) at least 6 metres for a two-way access road, and
(b) at least 4 metres for a one-way access road. | Satisfactory. |
| (2) The direction of travel for a one-way access road must be indicated by means of conspicuous signs. | |

95 Speed limits

The speed limit applicable to an access road: (a) must not exceed 15 kilometres per hour, and (b) must be indicated by means of conspicuous signs.	Satisfactory
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96 Resident parking

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| (1) A caravan park or camping ground must contain at least one resident parking space for each dwelling site or camp site. | Complies |
| (2) The parking space for a dwelling site or camp site may be on-site (that is, forming part of the site) or off-site (that is, not forming part of the site). | Satisfactory. |
| (3) An off-site space must be marked (for example, by means of line marking, marker pegs or similar means) to identify the particular dwelling site or camp site to which it relates. | Satisfactory. |
| (4) An off-site parking space for a dwelling site or camp site must be situated in the location specified in the approval for the caravan park or camping ground. | Complies |
| (5) Each off-site parking space is to have, at minimum, dimensions of:
(a) 5.4 metres by 2.5 metres, in the case of angle parking, and
(b) 6.1 metres by 2.5 metres, in any other case. | Complies |

97 Visitor parking

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| (1) A caravan park or camping ground must contain no fewer visitor parking spaces than the following: <ul style="list-style-type: none">(a) one visitor parking space for each 10 (and any remaining fraction of 10) long-term sites in the caravan park or camping ground,(b) one visitor parking space for each 20 (and any remaining fraction of 20) short-term sites in the caravan park or camping ground,(c) one visitor parking space for each 40 (and any remaining fraction of 40) camp sites in the caravan park or camping ground. | Complies |
| (2) The minimum number of visitor parking spaces to be provided is 4. | |
| (3) Each parking space is to have, at minimum, dimensions of: <ul style="list-style-type: none">(a) 5.4 metres by 2.5 metres, in the case of angle parking, and(b) 6.1 metres by 2.5 metres, in any other case. | Complies |
| (4) Visitor parking spaces must be clearly identified as such. | Complies |

98 Visitor parking for people with disabilities

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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| (1) A caravan park or camping ground must contain at least one visitor parking space for people with disabilities. | complies |
| (2) A caravan park or camping ground that contains more than 100 sites must contain at least one visitor parking space for people with disabilities for each 100 sites or fraction of 100 sites. | N/A |
| (3) Such parking is to be provided in accordance with AS/NZS 2890.1:2004 Parking facilities—Off street parking. | Complies |
| (4) Visitor parking spaces for people with disabilities must be clearly identified as such. | complies |
| (5) Visitor parking spaces provided under this clause may be counted for the purposes of clause 97. | Satisfactory |

99 Road surfaces

All access roads, including all passing and parking bays, must have an all-weather sealed or other surface finish specified in the approval for the caravan park or camping ground, and must be adapted to the topography to allow for adequate drainage and to eliminate excessive grades.	Complies
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100 Lighting

All access roads must be adequately lit between sunset and sunrise.	Satisfactory
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Subdivision 4 Utility services

101 Water supply

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| (1) A caravan park or camping ground: <ul style="list-style-type: none">(a) must be connected to a mains water supply, or(b) must be provided with an alternative water supply service as specified in the approval for the caravan park or camping | Yes |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|

ground.	
(2) A dwelling site must be connected to the water supply service for the caravan park or camping ground.	Satisfactory
(3) A camping ground must have water supply connections for the camp sites at the rate of one connection for every 4 camp sites. Connections must be located so that no camp site is more than 30 metres from a connection.	N/A
(4) The water supply connections must include a standpipe and hose tap.	Satisfactory
(5) The water supply service must comply with:	Satisfactory
(a) the Plumbing and Drainage Act 2011 and any regulations under that Act, and	
(b) the requirements of any relevant statutory body.	
(6) The water supplied for human consumption or domestic purposes must comply with the Australian Drinking Water Guidelines published in 2004 by the National Health and Medical Research Council.	
<u>102 Sewerage</u>	
(1) A caravan park or camping ground:	Sites are capable of being connected to sewer. This is to be managed through the approval to operate.
(a) must be connected to a main sewer, or	
(b) must be provided with an alternative sewage disposal system as specified in the approval for the caravan park or camping ground.	
(2) A long-term site must be provided with a connection to the sewage disposal system for the caravan park or camping ground.	Satisfactory
(3) A caravan park or camping ground that includes any short-term sites or camp sites must be provided with at least one common soil waste dump point for the disposal of closet waste from caravan holding tanks and the like. The common soil waste dump point must be located so as to permit adequate access by caravans and campervans.	Satisfactory
(4) A short-term site must be provided with a disposal point, as specified in the approval, for the disposal of sullage (that is, domestic waste from baths, basins, showers, laundries and kitchens, including floor wastes from those sources) from any moveable dwelling installed on the site. More than one short-term site may be provided with the same disposal point.	Satisfactory
(5) The sewage disposal system must comply with:	Satisfactory
(a) the Plumbing and Drainage Act 2011 and any regulations under that Act, and	
(b) the requirements of any relevant statutory body.	
<u>103 Drainage</u>	
(1) A caravan park or camping ground must be provided with a stormwater drainage system.	Sites are capable of being connected to drainage. This is managed through the approval to operate.
(2) All dwelling sites and camp sites must be adequately drained.	Satisfactory

Note. The Act requires stormwater drainage work to be carried out only with the approval of the council. The Local Government (General) Regulation 2005 specifies further requirements with respect to drainage.

104 Electricity supply

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <p>(1) A dwelling site must be supplied with electricity from a reticulated electricity service.</p> | <p>Sites are capable of being connected to electricity. This is managed through the approval to operate.</p> |
| <p>(2) In the case of a long-term site, the electricity must be supplied by means of an electrical circuit connected to a separate electricity meter.</p> | <p>Not a matter for consideration under this DA.</p> |
| <p>(3) Any such electrical circuit must be installed in accordance with the requirements of:</p> <ul style="list-style-type: none"> (a) the Electricity Code of Practice, in the case of a long-term site, and (b) AS/NZS 3001:2001, Electrical installations—Relocatable premises (including caravans and tents) and their site installations, as in force on 1 September 2005, in the case of a short-term site. | <p>Not a matter for consideration under this DA.</p> |
| <p>(4) If a dwelling site is provided with electricity otherwise than by way of direct connection to the local electricity supply authority's electricity main, the maximum amount that may be charged for the supply of electricity during a particular period is the amount that the standard retail electricity supplier for the relevant district would have charged under a standard form customer supply contract for that supply during that period.</p> | <p>Not a matter for consideration under this DA.</p> |

105 Common trenches

<p>A common trench may be used for the installation of services in accordance with guidelines set out in AMCORD.</p>	<p>Not a matter for consideration under this DA.</p>
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Subdivision 5 Shower and toilet facilities

106 Modification of calculations under this Subdivision

- In calculating the facilities to be provided in accordance with this Subdivision:
- (a) 2 camp sites are taken to be the equivalent of one dwelling site, and
 - (b) dwelling sites reserved for use by self-contained moveable dwellings, and dwelling sites provided with ensuite facilities, are to be disregarded.

107 Number of showers and toilets to be provided

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| <p>(1) A caravan park or camping ground with fewer than 200 dwelling sites must be provided with facilities specified in the Table to this clause according to the number of dwelling sites in the caravan park or camping ground.</p> <p>(2) A caravan park or camping ground with 200 dwelling sites or more must be provided with those facilities as specified in the approval for the caravan park or camping ground.</p> <p>(3) In considering the facilities to be provided in accordance with subclause (2), the council must have regard to the rate of</p> | <p>All the sites are designated for self-contained dwellings.</p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|

increment of quantities set out in the Table to this clause.

- (4) For the purposes of this clause:
- (a) a requirement for a shower may be met by the provision of a bathtub, and
 - (b) a requirement for a urinal may be met by the provision of an individual unit or by each 600 millimetre width of a larger facility.

108 Facilities for people with disabilities

- (1) A caravan park or camping ground must be provided with shower, toilet and associated facilities, designed in accordance with AS 1428.1—2001, Design for access and mobility Part 1: General requirements for access—New building work, as in force on 1 September 2005.
- (2) A caravan park or camping ground with fewer than 100 dwelling sites must be provided with:
- (a) one of each facility for each sex, or
 - (b) one of each facility for use by both sexes.
- (3) A caravan park or camping ground with 100 dwelling sites or more must be provided with:
- (a) two of each facility for each sex, or
 - (b) two of each facility for use by both sexes, or
 - (c) one of each facility for each sex and one of each facility for use by both sexes.
- (4) Facilities provided in accordance with this clause may be counted for the purposes of clause 107.
- (5) This clause applies in respect of a caravan park or camping ground only if it has at least one dwelling site (other than a dwelling site that is disregarded under clause 106 (b)) or at least one camp site.

The applicant states that “No new dwelling sites are proposed therefore no new amenities are required”. It is noted that all sites are identified for self-contained dwellings

All sites are identified for self-contained dwellings

N/A

109 Other facilities

- (1) All showers and handbasins required by this Subdivision must be supplied with hot and cold running water.
- (2) A mirror must be provided:
- (a) for each handbasin provided, or
 - (b) if 2 or more handbasins are provided together, for each pair of handbasins.
- (3) Means for sanitary napkin disposal must be provided in each communal facility that contains water closets for female use and, in a facility containing 10 or more water closets, must be provided at the rate of one for each 10 (or remaining fraction of 10) water closets.

N/A

110 Construction of shower blocks and toilet blocks

- (1) Except as otherwise provided by the approval for the caravan park or camping ground, the shower and toilet facilities provided for a caravan park or camping ground must be housed in a shower block or toilet block:
- (a) that is constructed of brick or concrete masonry block, and

None proposed

<ul style="list-style-type: none"> (b) that has a non-slip floor of tile or other impervious material adequately drained to outlets, and (c) that has smooth, hard, durable and water-resistant interior finishes, and (d) that has shower recesses with tile or other impervious finishes to a height of at least 1.8 metres, and (e) that has tile or other impervious skirtings around water closet cubicle walls, and (f) that has tile or other impervious finish around wash basins, and (g) that has adequate lighting (both inside and outside) and adequate ventilation at all times, and (h) that has all its walls, ceilings and floors, fixtures, fittings and appliances maintained in a clean and sanitary condition at all times. <p>(2) Subject to clause 108 (2) and (3), if male and female shower or toilet facilities are located in the same building, that building must be divided for separate use by each sex.</p> <p>(3) Water closets must be provided in individual cubicles having a minimum floor area of 1.1 square metres and a minimum width of 0.8 metre.</p>	
<p><u>111 Proximity of dwelling sites to shower blocks and toilet blocks</u></p> <p>(1) A long-term site must not be situated more than 75 metres (measured in a straight line) from a shower block or toilet block.</p> <p>(2) A short-term site or camp site must not be situated more than 100 metres (measured in a straight line) from a shower block or toilet block.</p> <p>(3) This clause does not apply in respect of dwelling sites reserved for use by self-contained moveable dwellings and dwelling sites provided with ensuite facilities.</p>	N/A

Subdivision 6 Laundry facilities

<p><u>112 Modification of calculations under this Subdivision</u></p> <p>In calculating the facilities to be provided in accordance with this Subdivision, 2 camp sites are taken to be the equivalent of one short-term site.</p>	
<p><u>113 Washing machines</u></p> <p>(1) A caravan park or camping ground must be provided with:</p> <ul style="list-style-type: none"> (a) at least one washing machine for each 25 (and any remaining fraction of 25 greater than 12) long-term sites, and (b) at least one washing machine for each 30 (and any remaining fraction of 30 greater than 15) short-term sites. <p>(2) The minimum number of washing machines to be provided is 2.</p>	<p>2 proposed</p> <p>1 proposed</p> <p>Could be conditioned</p>
<p><u>114 Laundry tubs</u></p> <p>(1) A caravan park or camping ground must be provided with:</p> <ul style="list-style-type: none"> (a) at least one laundry tub for each 50 (and any remaining fraction of 50) long-term sites, and (b) at least one laundry tub for each 60 (and any remaining 	<p>1</p> <p>1</p>

Subdivision 6 Laundry facilities

fraction of 60) short-term sites.	
(2) The minimum number of laundry tubs to be provided is one.	Could be conditioned
<u>115 Clothes dryers</u>	
(1) A caravan park or camping ground must be provided with:	
(a) at least one mechanical clothes dryer for each 60 (and any remaining fraction of 60 greater than 30) long-term sites, and	1
(b) at least one mechanical clothes dryer for each 80 (and any remaining fraction of 80 greater than 40) short-term sites.	1
(2) The minimum number of mechanical clothes dryers to be provided is one.	
<u>116 Drying areas</u>	
(1) A caravan park or camping ground must be provided with clothes line space at the rate of 2 metres of line for each dwelling site.	All sites are for self-contained dwellings and as such will have their own dedicated drying lines.
(2) The minimum length of clothes line space to be provided is 50 metres.	
<u>117 Water supply</u>	
Washing machines and laundry tubs required by this Subdivision must be supplied with both hot and cold water.	Satisfactory
<u>118 Ironing facilities</u>	
A caravan park or camping ground must be provided with ironing boards, electric irons and power points available for connection to electric irons at the rate of one for every 60 (or remaining fraction of 60) short-term sites.	All sites are for self-contained dwellings and as such will have their own dedicated ironing facilities.
<u>119 Construction of laundry blocks</u>	
Except as otherwise provided by the approval for the caravan park or camping ground, the laundry facilities provided for a caravan park or camping ground must be housed in a laundry block:	There is an amenities building within the site that could accommodate this.
(a) that is constructed of brick or concrete masonry block, and	
(b) that has a non-slip floor of tile or other impervious material adequately drained to outlets, and	
(c) that has smooth, hard, durable and water-resistant interior finishes, and	
(d) that has adequate lighting (both inside and outside) and adequate ventilation at all times, and	
(e) that has all its walls, ceilings and floors, fixtures, fittings and appliances maintained in a clean and sanitary condition at all times.	
<u>120 Maintenance</u>	
The laundry facilities required by this Subdivision that are housed in a laundry block must be maintained in a serviceable and safe condition.	Satisfactory

Subdivision 7 Management

<u>121 Maximum number of persons per dwelling site or camp site</u>	
(1) No more than 12 persons may be allowed to stay overnight at a dwelling site or camp site at any one time.	This matter could be managed through conditions

Subdivision 7 Management

<p><u>122 Register of occupiers</u></p> <p>(1) A register of occupiers must be kept for a caravan park or camping ground.</p> <p>(2) Each person who alone occupies a dwelling site or camp site, must be registered under this clause.</p> <p>(3) However, if more than one person occupies the same dwelling site, or camp site only one such person must be registered (although the other persons may be registered).</p> <p>(4) The register must include the following particulars in relation to a person whose occupation of a site is registered under this clause:</p> <ul style="list-style-type: none">(a) the person's name and address,(b) the dates of arrival and departure of the person,(c) the site identification of the site occupied by the person,(d) the registration number (if any) of the moveable dwelling, in the case of a caravan or campervan,(e) particulars of the relevant compliance plate, in the case of a relocatable home. <p>(5) The register must be available for inspection by any authorised person without cost during normal working hours.</p>	<p>of consent.</p> <p>This matter could be managed through conditions of consent.</p> <p>This matter could be managed through conditions of consent.</p> <p>This matter could be managed through conditions of consent.</p> <p>This matter could be managed through conditions of consent.</p>
<p><u>123 Information to be given to prospective occupiers</u></p> <p>(1) Before the holder of the approval for a caravan park or camping ground enters into an agreement with a person relating to the person's occupation of a dwelling site or camp site, the holder of the approval must ensure that the person is given written notice of the conditions of occupation.</p> <p>(2) This clause does not apply if the agreement relates to the person's occupation of a long-term site, unless the person is proposing to occupy that site for holiday purposes.</p> <p>(3) The notice must include the following particulars:</p> <ul style="list-style-type: none">(a) the site identification of the dwelling site or camp site allocated to the person,(b) the date (if any) on which it is agreed that the person's occupation of the dwelling site or camp site will cease,(c) in the case of an agreement relating to occupation of a short-term site or camp site, advice as to the maximum number of days that the person may stay in a moveable dwelling on the site in any 12 month period (being the maximum number provided for by clause 73 or a smaller number determined by the holder of the approval to operate the caravan park or camping ground),(d) the rules (if any) of the caravan park or camping ground,(e) a telephone number on which the holder of the approval for the caravan park or camping ground, or his or her agent, may be contacted in the event of an emergency,	<p>This matter could be managed through conditions of consent.</p> <p>Satisfactory.</p>

Subdivision 7 Management

- (f) whether or not pets may be kept in the caravan park or camping ground and, if so, on what conditions,
- (g) the nature and location of the amenities available for use by the person as an occupier of the dwelling site or camp site and the charges, if any, for use of those amenities,
- (h) the location of each fire extinguisher, fire hose reel and fire hydrant that is installed within the park or ground,
- (i) if the holder of the approval to operate the caravan park or camping ground has been notified in writing by the council that any of the land in the caravan park or camping ground is flood liable land or bush fire prone land, the location of that flood liable land or bush fire prone land within the caravan park or camping ground,
- (j) any other matters affecting the person's occupation of the dwelling site or camp site or use of the caravan park or camping ground and its amenities.

Note. The Residential Parks Act 1998 and the regulations under that Act apply to certain residential tenancy agreements under which the residential premises consist of a moveable dwelling, or a site on which a moveable dwelling is situated, or both. That Act does not apply to premises ordinarily used for holiday purposes. The Residential Parks Act 1998 also provides rights to information for prospective residents of residential parks.

124 Use of caravan parks and camping grounds

- (1) A caravan park or camping ground must not be used:
 - (a) for any commercial purpose other than a caravan park or camping ground or an associated purpose, or
 - (b) for the manufacture, construction or reconstruction of moveable dwellings.
- (2) This clause does not prevent the carrying out of work on a moveable dwelling that is installed in a caravan park or camping ground for the purpose of its renovation, maintenance or repair (such as painting, replacement of wall cladding or roof sheeting and the like).

125 Community map

The council must be given a copy of the current community map:

- (a) as soon as practicable after any amendment is made to the map, and
- (b) at such other times as the council may reasonably require.

126 Access to approval and community map

- (1) The holder of an approval to operate a caravan park or camping ground must ensure that copies of the following documents are readily available for inspection without cost in a location in the caravan park or camping ground specified in the approval for the caravan park or camping ground:
 - (a) the approval for the caravan park or camping ground,
 - (b) the current community map,
 - (c) this Regulation.

Subdivision 7 Management

- (2) A copy of the current community map must also be displayed in a prominent position in the caravan park or camping ground.

Satisfactory

Subdivision 8 General

127 Garbage removal

Arrangements specified in the approval for the caravan park or camping ground must be instituted and maintained for the removal of garbage and for the maintenance of garbage receptacles in a clean and sanitary condition.

Satisfactory

128 Fire hydrants

- (1) No part of a dwelling site, camp site or community building within a caravan park or camping ground may be situated more than 90 metres from a fire hydrant.
- (2) Any fire hydrant located within a caravan park or camping ground must:
- (a) be a double-headed pillar-type fire hydrant, and
 - (b) be maintained to the standard specified in the approval for the caravan park or camping ground.

The applicant has noted that this could be addressed via conditions of consent however this is considered to be a threshold matter that requires compliance in order for the proposal to be supported.

129 Fire hose reels

- (1) Fire hose reels must be installed so that each dwelling site or camp site in the caravan park or camping ground can be reached by a fire hose.
- (2) The fire hose reels must be constructed in accordance with AS/NZS 1221:1997, Fire hose reels and installed in accordance with AS 2441—1988, Installation of fire hose reels, as in force on 1 September 2005.
- (3) The holder of the approval for the caravan park or camping ground must cause the council to be given a certificate (a fire hose reel certificate) in relation to the fire hose reels once every calendar year. If a fire hose reel is newly installed, the certificate must be provided within 7 days of the completion of its installation.
- (4) A fire hose reel certificate is to state, in relation to each fire hose reel installed in the caravan park or camping ground:
- (a) that the fire hose reel has been inspected and tested by a person (chosen by the holder of the approval) who is properly qualified to carry out such an inspection and test, and
 - (b) that, as at the date on which the fire hose reel was inspected and tested, the fire hose reel was found to have been

The applicant has noted that this could be addressed via conditions of consent however this is considered to be a threshold matter that requires compliance in order for the proposal to be supported.

Satisfactory.

Satisfactory

Subdivision 8 General

capable of performing to a standard not less than that required by this Regulation.	
<u>130 Car washing bay</u> A caravan park must be provided with an area for use for washing vehicles.	Provided.
<u>131 Buildings</u> (1) A building must not be erected in a caravan park or camping ground unless the approval for the caravan park or camping ground so allows. (2) The approval for a caravan park or camping ground is to allow community buildings to be erected only in the caravan park or camping ground. (3) The approval for a caravan park or camping ground is not to allow the erection of a community building (other than an ensuite facility) on a dwelling site or camp site. Note. The erection of a building (including a community building or brick or masonry wall) may require development consent under the Environmental Planning and Assessment Act 1979.	Satisfactory

APPENDIX 3 WDCP 2009 COMPLIANCE TABLES

CHAPTER A2 – ECOLOGICALLY SUSTAINABLE DEVELOPMENT

Generally speaking, the proposal does not raise any particular concerns in relation to the principles of Ecologically Sustainable Development.

CHAPTER C4: CARAVAN PARKS, CAMPING GROUNDS AND MANUFACTURED HOME ESTATES

Controls/objectives	Comment
6 Planning controls / development controls caravan parks & camping grounds <i>caravan park means land (including a camping ground) on which caravans (or caravans and other moveable dwellings) are, or are to be, installed or placed.</i>	
6.1 Minimum Land Requirement for a Caravan Park	
1. The minimum lot size for the development of a caravan park is 1 hectare.	Complies
6.2 Minimum Size of Dwelling Sites	
1. A long –term site must have an area of at least 80 square metres.	Complies
2. A short –term site must have an area of at least 65 square metres.	Complies
3. A camping site must have an area of at least:	
(a) 40 square metres in the case of a camp site for which a separate parking space is provided within 30 metres of the camp site or	N/A
(b) 50 square metres, in any other case.	N/A
6.3 Maximum Number of Short –Term and / or Long-Term Sites	
1. Any Development Application for a caravan park must specify the number of short-term sites and the number of long-term sites proposed within the caravan park. The number of short-term and long-term sites shall be consistent with the minimum size requirements for both short–term and long-term sites.	Provided
2. The location of the short-term and long-term sites shall be clearly shown on the site plan. The site plan shall also clearly number each dwelling and / or camping site and its site boundaries, as proposed within the park.	Provided
6.4 Minimum Building Line Setbacks to Public Roads, Foreshore Areas and Boundaries to other lots not associated with the Development	
1. The minimum front building line setback for a caravan park or camping ground to any public road shall be 10 metres.	Does not comply.

Controls/objectives	Comment
2. A dwelling site or camping site must be setback at least 10 metres from any public road and at least 3 metres to any other boundary of the caravan park or camping ground	<p>The setback to Windang Road is approximately 5.6m. This is however an existing situation and there is limited scope to address it under this application. It is noted that Windang Road is a classified road and the RMS have not raised any objection to the proposal.</p> <p>The southern side boundary setbacks are less than the recommended 3m. The land to the south is a Council reserve zoned RE1. The primary concern in this regard is the provision for a bushfire asset protection zone as discussed elsewhere in this report.</p>
3. For sites adjacent to a waterway, a minimum building line setback of 10 metres is required for any dwelling site or community building from the mean high water mark or any prescribed foreshore building line under this plan or Wollongong Local Environmental Plan 2009, whichever is the greater.	All the western row of dwellings are located within the foreshore building line. See discussion at clause 7.7 of WLEP 2009 above.
4. A community building must not be located closer than 10 metres to the boundary of a manufactured home estate or the boundary of a dwelling site within the estate, except where in the opinion of Council, the community building will be properly screened by way of fencing and / or dense landscaping along the perimeter boundary or boundary with a dwelling site. However, the absolute minimum building setback requirement from a perimeter property boundary or a boundary with dwelling site within the estate shall be 2 metres	N/A
5. The minimum driveway width for a combined entry / exit access point into / from a caravan park or camping ground is 8 metres. In the case of a divided road, the minimum width of the sealed road carriageway shall be 5 metres on either side of the median strip.	Complies
6. The internal access road must be at least 6 metres for a two-way access road and at least 4 metres for a one-way access road. The direction of travel for a one-way access road must be indicated by means of directional signage.	Complies.
<u>6.5 Community Amenities / Facilities</u>	
1. A minimum of 10% of the total site area of the subject caravan park or camping ground shall be reserved for recreation or other communal activities.	<p>The application seeks consent for approximately 6.8% of the site being reserved for recreation or communal activities. Clause 84 of the Regulation permits a minimum 6% to be provided for recreation or communal activities. The Regulation is the higher order control.</p>

<i>Controls/objectives</i>	<i>Comment</i>
2. Each park shall make provision for children's playground equipment (i.e. with equipment catering for a range of children's ages) at a rate of 1 children's playground per 200 metre walking distance radius from any dwelling site or camping site.	The park does not contain children's playground equipment. It is noted that the SEPP and Regulation do not include any requirements in respect of playground equipment. Installation of playground equipment is feasible in future should the need / demand arise.
3. At least one (1) community building (ie designed to function as a multi-purpose centre with kitchen and indoor recreation facilities) is required commensurate with the size and nature of the park	"No community buildings are proposed, however the administration office, restaurant and function centre spaces would be capable of use for community purposes should the demand arise.
4. The provision of other recreational facilities such as tennis courts and / or swimming pools is also encouraged provided such facilities are well lit and are enclosed by suitable enclosure fencing to prevent children gaining entry without parent supervision.	Given the use is primarily for longer term residence, such recreational facilities are not considered as being a necessary.
6.6 Car Parking	
1. A caravan park or camping ground shall provide a minimum of one (1) resident car parking space per dwelling site or camping site.	Complies
2. The parking space for a dwelling or camping site may be provided on-site or off-site (not forming part of the dwelling or camping site boundaries). Any off-site resident parking space must be clearly marked by hard-wearing labelling as a resident parking space attached to the particular dwelling site.	Complies
3. A caravan park or camping ground must contain the following minimum visitor parking spaces: (a) 1 visitor parking space for each 10 (or part thereof) long-term sites in the caravan park or camping ground; (b) 1 visitor parking space for each 20 (or part thereof) short-term sites in the caravan park or camping ground; (c) 1 visitor parking space for each 20 (or part thereof) camp sites in the caravan park or camping ground;	Complies
4. The minimum number of visitor parking spaces in a caravan park and / or camping ground is 4 visitor parking spaces.	Complies
5. All visitor parking spaces must be clearly identified to ensure that visitors park in those spaces and do not take resident parking spaces.	Complies
6. The visitor parking spaces should be provided throughout the park, in order to minimise the visitor walking distance to / from dwelling sites and / or camp sites within a park	Complies
7. A caravan park or camping ground must also provide at least one (1) visitor parking space for people with disabilities.	Complies

<i>Controls/objectives</i>	<i>Comment</i>
8. If a caravan park contains more than 100 sites, one (1) parking space for people with disabilities must be provided for each 100 sites or part thereof.	N/A
9. The disabled car parking spaces must be provided in accordance with Australian Standard 2890.1 – 2004 Parking Facilities – Off-street Parking and shall be clearly delineated as disabled parking spaces.	Complies
6.7 Development on Flood Liable Land	
1. A flood study will be required to be submitted with a Development Application for any proposed caravan park and / or camping ground upon flood liable land. The flood study is recommended to be prepared by a suitably qualified civil engineer who is experienced in the preparation of flood studies.	A Flood Emergency Response Plan has been prepared and submitted with the application. There are however concerns remaining in regard to the risk posed by long term residential accommodation and insufficient mechanism for evacuation.
2. The required flood study must also take into consideration the provisions of Council's Development on Floodplain Management Chapter of this DCP, the NSW Floodplain Management Manual: The Management of Flood Liable Land 2001, the NSW State Government's Flood Prone Land Policy, any relevant State Environmental Planning Policy and Wollongong Local Environmental Plan 2009.	See commentary at clause 7.3 and Chapter E13.
Note: Council will not support the placement of a dwelling site or camping site in any caravan park or camping ground upon any flood prone land which is classified as being within a high or low hazard floodway or flood storage area and / or the site is subject to velocities of 1.5 metres / per second or greater.	
3. Any relocatable home proposed upon a dwelling site within a portion of site classified as flood prone (excluding high hazard or low hazard floodway or flood storage areas) shall be designed to withstand the likely flood water velocities as determined by the flood study.	It is proposed that all structures be structurally certified to withstand the forces of flood water. For existing developments it is proposed that this be completed through a schedule of works.
4. In the event that Council ultimately supports an application for a caravan park and / or camping ground involving caravans / moveable dwellings upon land classified as flood fringe land, a condition of consent will be imposed requiring the removal of caravans / moveable dwellings up to flood free land, during flood periods.	N/A
5. Council will also require that each site occupant is provided with a flood information map for display in each long-term or short-term site which sets out information on water depths likely to be experienced in the park, public warning procedures in the park, evacuation routes from the park and advice on when to take appropriate action.	Could be addressed via a condition of consent.

CHAPTER E1: ACCESS FOR PEOPLE WITH A DISABILITY

There are no particular considerations for accessibility under the DA.

CHAPTER E2: CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

The proposal does not raise any concerns in regard to safety or security.

CHAPTER E3: CAR PARKING, ACCESS, SERVICING/LOADING FACILITIES AND TRAFFIC MANAGEMENT

Car parking and servicing requirements for caravan parks are discussed at Chapter C4 above.

CHAPTER E14 STORMWATER MANAGEMENT

No changes are proposed to stormwater disposal.

CHAPTER E20 CONTAMINATED LAND MANAGEMENT

No concerns are raised in regard to contamination.

DA-2017/830

Attachment 1– Aerial photograph



Attachment 2– Wollongong Local Environmental Plan 2009 zoning map

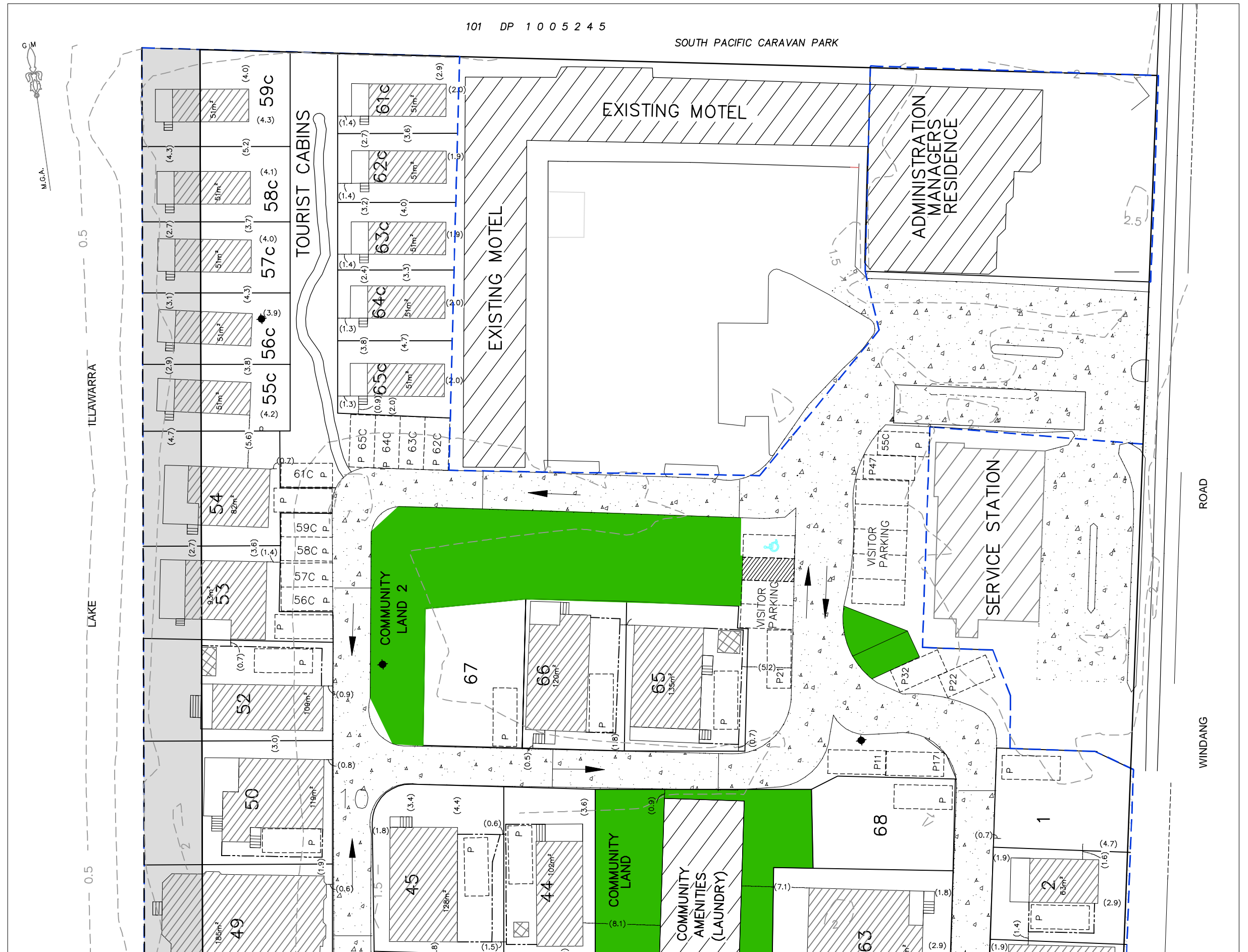




SCALE 1:250 @ A1 1:500 @ A3		WARNING NOTE: THE INFORMATION SHOWN ON THIS PLAN (OR THE DATA TRANSMITTED HEREWITH) IS CORRECT AS AT 06/04/17 AND HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF I & H INVESTMENTS PTY LTD. THESE WARNING NOTES MUST NOT BE REMOVED FROM THIS ELECTRONIC FILE. IF THESE NOTES ARE REMOVED SET CONSULTANTS PTY LTD IS RELIEVED OF ALL RESPONSIBILITY AND LIABILITY RELATING TO ANY SUBSEQUENT USE OF THE INFORMATION CONTAINED WITHIN THIS FILE. THIS ELECTRONIC FILE SHALL NOT BE TRANSMITTED TO ANY THIRD PARTY WITHOUT THE EXPRESS PERMISSION OF SET CONSULTANTS PTY LTD.		SURVEY OTHERS		AMENDMENTS		BY		DATE		19/01/17 06/04/17 10/05/2017 23/06/2017		SET SET SET SET		Z:\JOBS\1404\SET\A1 A SET CONSULTANTS.jpg		Beware - Damage to telephone cables can disrupt communication services and cost you money. For prompt location of telephone cables ring - 1100		Calls to this number are free.		COMMUNITY MAP FOR OASIS RESORT CARAVAN PARK LOT 2 DP 610406 140-146 WINDANG ROAD, WINDANG FOR I & H INVESTMENTS PTY LTD		A1 SHEET 1 OF 1 SHEETS REF. No. 103385	
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LEGEND

- EXISTING ROAD PAVEMENT
- APPROX. SITE AREAS
- AREA WITHIN COUNCIL LEASE
- TRAFFIC FLOW DIRECTION
- DRAINAGE EASEMENT 4.57 WIDE
- EASEMENT FOR SEWER 6 WIDE
- EXISTING CONTOURS 0.5m AHD
- EXISTING FIRE HOSE REELS
- PARKING SPACES
- RECREATION/COMMUNAL AREAS
- OPERATING BOUNDARY
- SITE COVERAGE AREA
- OUTLINE OF ROOF OVER
- SETBACK DISTANCES IN METRES

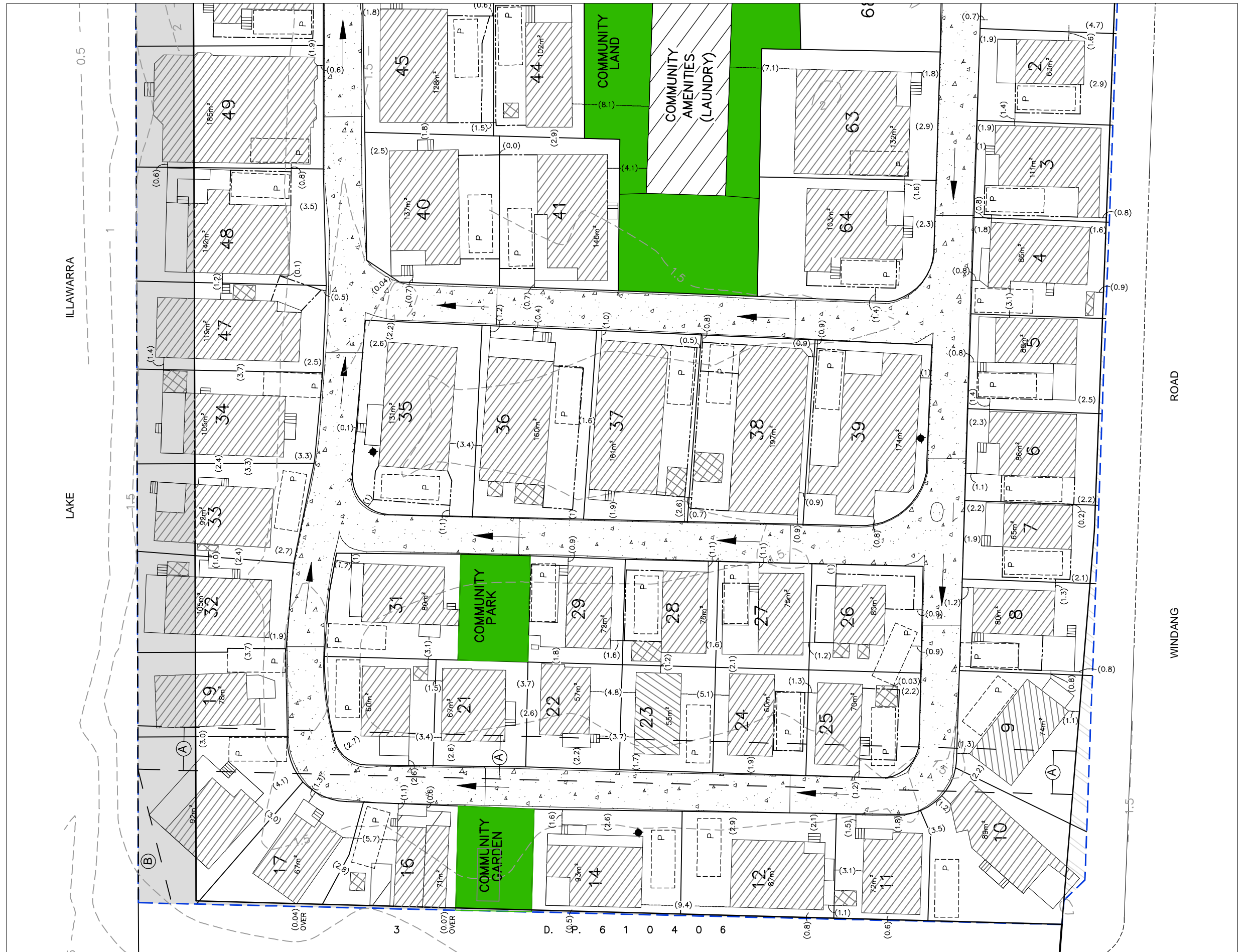


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SCALE 1:200 @ A1 1:400 @ A3		WARNING NOTE: THE INFORMATION SHOWN ON THIS PLAN (OR THE DATA TRANSMITTED HEREWITH) IS CORRECT AS AT 06/04/17 AND HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF I & H INVESTMENTS PTY LTD. IF THESE NOTES ARE REMOVED SET CONSULTANTS PTY LTD IS RELIEVED OF ALL RESPONSIBILITY AND LIABILITY RELATING TO ANY SUBSEQUENT USE OF THE INFORMATION CONTAINED WITHIN THIS FILE. THIS ELECTRONIC FILE SHALL NOT BE TRANSMITTED TO ANY THIRD PARTY WITHOUT THE EXPRESS PERMISSION OF SET CONSULTANTS PTY LTD.		SURVEY OTHERS DESIGN KH DRAWN MN CHECKED DC APPROVED		AMENDMENTS A - ORIGINAL ISSUE B - PLANS UPDATED C - PLAN UPDATED D - PLAN UPDATED		BY SET SET SET		DATE 19/01/17 06/04/17 10/06/2017 23/06/2017		BEWARE - Damage to telephone cables can disrupt communication services and cost you money. For prompt location of telephone cables ring - 1100 DIAL 1100 BEFORE YOU DIG Calls to this number are free.		Z:\JOBS\icad\SET\A1 A SET CONSULTANTS.jpg		INSTALLATION PLAN FOR OASIS RESORT CARAVAN PARK LOT 2 DP 610406 140-146 WINDANG ROAD, WINDANG FOR I & H INVESTMENTS PTY LTD		A1 SHEET 1 OF 2 SHEETS REF. No. 103385	
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LEGEND

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- APPROX. SITE AREAS
- AREA WITHIN COUNCIL LEASE
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STATEMENT OF ENVIRONMENTAL EFFECTS

**Additional Long-term Sites and
Amended Community Layout
at Oasis Resort Caravan Park**

Lot 2 DP 610406
146 Windang Road
Windang 2528

7 July 2017
Reference: L103385

SET Consultants Pty Ltd

NOWRA

51 Graham Street
Nowra 2541
Tel: (02) 4421 4500

KIAMA

44 Manning Street
Kiama 2533
Tel: (02) 4233 2006

Email: mail@setconsultants.com.au

Document Control Table:

Prepared By	Reviewed By	Revision Number	Date
Kristin Holt (B.Sc, Grad. Dip. Urban and Regional Planning) Town Planner	David Cannon (M.Env.Eng.Sc, Grad Dip (Bushfire Protection), B.Env.Sc.Adv (Hons 1)) Environmental Engineer BPAD-A (Level 3) Certified Practitioner BPA-PA-23829	Ver 0.1 - Draft	6 July 2017
Kristin Holt	David Cannon	Ver 1.0 - FINAL	7 July 2017

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Annexures

Annexure A - Part 3 of the Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Manufactured Homes) Regulation 2000

Annexure B - Assessment of the proposal against Chapter C4 (WCC DCP)- caravan parks, camping grounds and manufactured home estates

Supporting Documents

Document	Issue	Dated	Prepared By
Signed Application Form		6 July 2017	Steven Fripp
Submission under Section 82 Local Government Act	2	6 July 2017	SET Consultants Pty Limited
Remedial work/action programme	2	6 July 2017	SET Consultants Pty Limited
Acid Sulphate Soil Management Plan		25 June 2010	Douglas Partner Pty Ltd
Community Map		29 June 2017	SET Consultants Pty Limited
Fire Safety Assessment Report		29 December 2016	GN Consulting Pty Ltd
Flood Emergency Response Plan	1	October 2015	Rienco Consulting
Proposed Leased Plan		19 January 2017	SET Consultants Pty Limited
Installation Plan		29 June 2017	SET Consultants Pty Limited

1. INTRODUCTION

1.1. General

This Statement of Environmental Effects has been prepared by SET Consultants Pty Ltd for I & H Investments. This Statement is to accompany a development application to Wollongong City Council seeking consent to an increase in the number of long-term dwelling sites and amended community layout over Lot 2 DP 610406, known as No. 146 Windang Road, Windang (*subject site*).

The purpose of this Statement is to address the planning issues associated with the development proposal. Specifically, the Statement is to assess the likely impacts of the development on the environment in accordance with the requirements of the Environmental Planning & Assessment (EP&A) Act, 1979.

1.2. Applicant

The applicant is the property owner, I & H Investments. SET Consultants Pty Ltd have been engaged to act as project managers for the development application and copies of all correspondence should be forwarded to SET Consultants.

2. THE PROPOSAL

2.1. Background

A search of Council's development files relating to the subject site reveals a long development history, including the following list of applications:

- 55/222 – Dwelling house – approved
- Min 402 (1956) – Service Station – approved conditionally
- Min 36 (1957) – Holiday Camping Area – approved conditionally
- 56/S495 – Closets and Showers for Caravan Park – approved
- 57/815 – Service Station and Shop – approved conditionally
- 59/309 – Shop – REFUSED
- Additional Petrol Pump – approved 1959
- 59/1311 – Additions – approved
- 64/1380 – Additions to Service Station – approved
- 64/2461 – Extensions to Shower and Laundry – approved
- 68/299 – Service Station – approved
- 70/263 – Brick Veneer Existing Dwelling – approved conditionally
- 70/2886 – Shop and Flat – approved conditionally
- 71/2375 – 11 Motel Units – approved conditionally
- 73/288 – Carport/Awning for Service Station – approved
- 75/56 – Car Sales Yard – REFUSED
- 77/1329 – Amenities Building – approved
- 78/1079 – Addition of 10 Motel Units to Caravan Park – approved conditionally
- 79/1360 – Caravan Park Additions (10 Motel Units) – approved
- 79/532 – New Awning to Existing Service Station – approved conditionally
- 79/1494 – Awning to Service Station – approved

- 80/386 – Swimming Pool – approved
- 80/1238 – Swimming Pool – approved
- DE80/68 – Advertising Sign – approved
- 82/410 – Underground Fuel Storage Tank – approved conditionally
- 83/6 – Advertising Sign – approved
- 85/679 – Advertising Sign – approved
- 86/187 – Extensions to Motel – approved conditionally
- 86/187(am) – Amended Consent – approved conditionally
- 88/1186 – Erection of Marquee – current application
- 89/34 – Extension of Motel and Conference Facilities – approved
- 93/296 – Alterations and Additions to Oasis Resort – approved

In an attempt to determine the development history a number of GIPA requests were submitted, however it appears that Council's development records of earlier consents were incomplete.. The earliest consent provided from the file at the time of writing this report is D69/268, which applies to Lot B DP 106403. Lot B includes part of the southern section of what is now Lot 2. Lot 2 was registered in 1977 as a subdivision of Lot A and part Lot B in FP 406403. The subdivision was undertaken to create a public reserve lot along the waterfront adjacent to Lot 2, which was dedicated to Council.

Copies of the 1956 and 1957 consents have not been able to be located. The first DA available on Council's files relating specifically to Lot 2 is from 1986 (D86/187), which approved extensions to the motel. This application makes reference to the existing motel, service station, approved caravan park (161 sites) and dwelling house.

The 1986 consent to motel extensions related primarily to the motel, restaurant and conference centre, requesting consent to a restaurant (seating capacity of 60), 10 new motel rooms (resulting in a total of 30 motel rooms) and a conference centre (seating capacity of 50). The conditions of consent required a total of 73 parking spaces be provided on the site.

The 1988 consent was for a marquee to be used for wedding receptions, social functions and school excursions. This consent required parking for a total of 117 cars to be provided along with two coach parking bays on the eastern side of the amenities building. It also stipulated that the marquee was not to be used when the 'central grassed area was in use for camping'.

The 1989 consent to further extensions of the motel, additional conference rooms (function centre), a tennis court, upgrades to the service station and landscaping was partially approved. The conditions of consent required 129 car parking spaces to be provided.

The last consent on Council's file relates to alterations and additions and specifically to the use of the function centre, in 1993, required that overflow parking be available on the grassed areas at the centre of the site, as shown on the approved plans (Figure 1). The function centre is noted as 'not to be used while the area is in use for camping, or when the marquee approved in DA88/1186 is erected'.

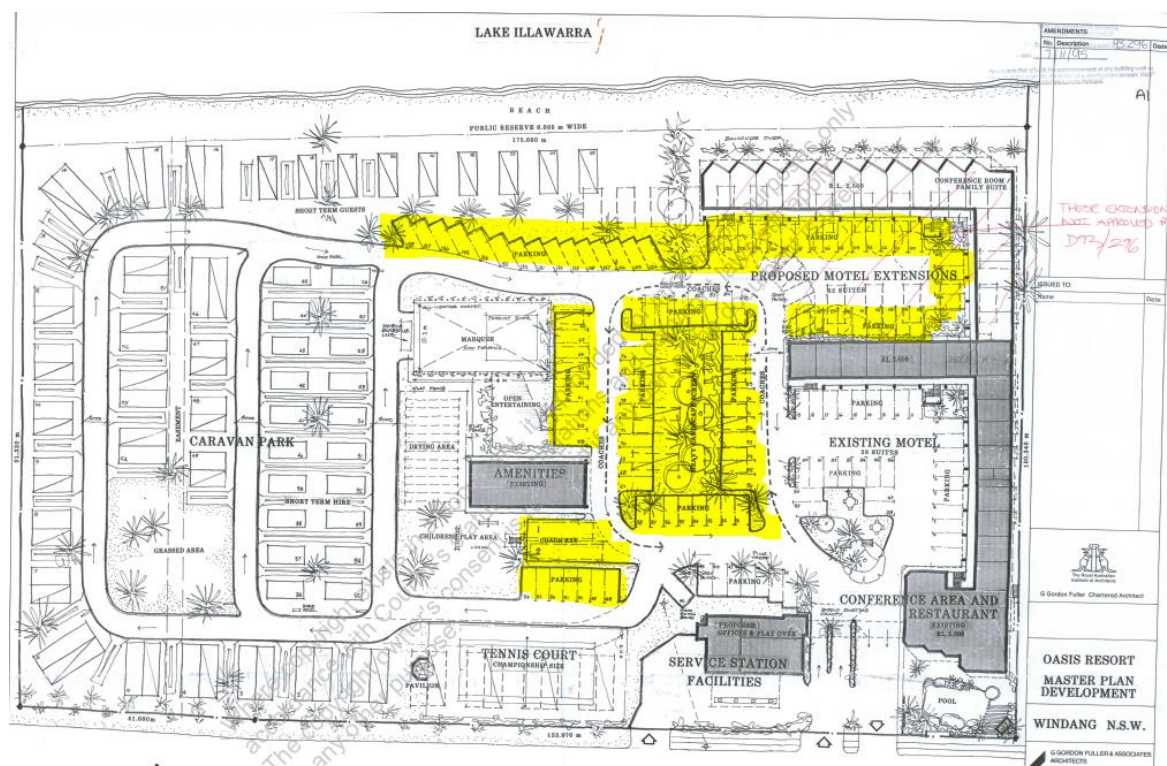


Figure 1: Stamped plans approved under DA93/296 showing the parking areas to be provided for the function centre, restaurant and motel

In addition to the development consents relating to the caravan park, the Local Government Act requires caravan parks to obtain an approval to operate under Clause 68 F (2). Oasis Resort Caravan Park had obtained these approvals through Council as required until 2008/2009 when Council became aware that the development within Oasis Resort extended into Council land along the Lake Illawarra foreshore. Council informed the owners of the park that they would not renew/extend the approval to operate until such time as a lease arrangement over the Council owned land was established. A letter from Council, dated 1 October 2009 stated that a lease agreement would be negotiated following the reclassification of the land to operational.. The reclassification process was not completed prior to the lapsing of the approval to operate.

Numerous applications since 2009 have been made to Wollongong City Council for a new approval to operate, however each application has been refused or required to provide additional information that would not have been necessary had the approval to operate not lapsed..

2.2. Description

This development application aims to address outstanding issues relating to the number of long and short term sites proposed within Oasis Resort Caravan Park with the aim to bring current operations into line with an operational consent and allow Council confidence in granting an approval to operate. This development application seeks consent to the increased number of long term sites and an approval under Section 68 of the Local Government Act 1993 to operate a caravan park.

While the previous consents for the caravan park do not appear to set a maximum of short or long term sites within the park, the last approval to operate approved 32 short term, 32 long term dwelling sites and 9 camping sites. Council have indicated that they are not willing to approve any more than 32 long term sites on the site without prior development consent. The current proposal includes an application for 61 long term and 2 short term dwelling sites, as shown on the Community Map (reproduced Figure 2).

All sites, short and long term, within the park are to be designated only for 'self-contained' dwellings. The communal shower and toilet facilities currently in the centre of the park will then be locked, leaving only laundry facilities open for communal use. Currently all existing dwellings within the park are self-contained dwellings, therefore no upgrading works are required to comply with this proposal.

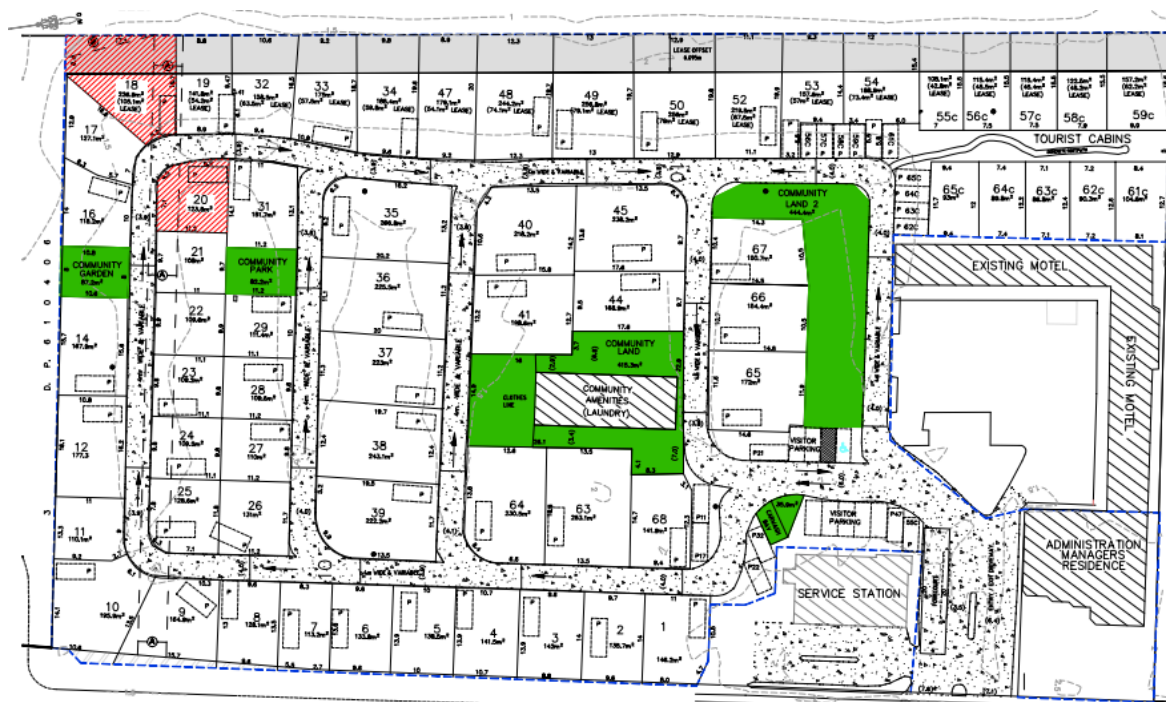


Figure 2: Community Map of Oasis Resort Caravan Park showing designated short term sites hatched red. Note that the motel and service station are considered 'separate' entities to the caravan park despite being located on the same parcel of land.

It is noted that sites 44, 45, 47-50, 52-54, 55c – 59c, 61c – 65c, 63, 65, 66, 67 and 68 all occur over the parking spaces associated with DA/296 and sites 40, 41, 44 and 45 occur over land approved for the installation of a marquee under DA88/1186 (highlighted yellow in Figure 1). As a result, it is proposed that as part of this application DA88/1186 (marquee) be surrendered and the function centre and restaurant continue to not operate until they are able to comply with the parking provisions included in the consents. The motel units are provided with 30 parking spaces outside the caravan park operational boundary and it is intended that the motel units continue operating as a tourist facility, as approved.

In addition to the application for development consent and an approval to operate, the operational boundary of Oasis Resort Caravan Park will require establishing a lease with Council and a separate lease from the RMS for the land affected by encroachments. A site

survey completed by KFW in 2014 identified the encroachments, including 1,069m² of land along the western boundary, 17.2m² at the western end of the southern boundary and 66.4m² at the southern end of the eastern boundary (Figure 3).

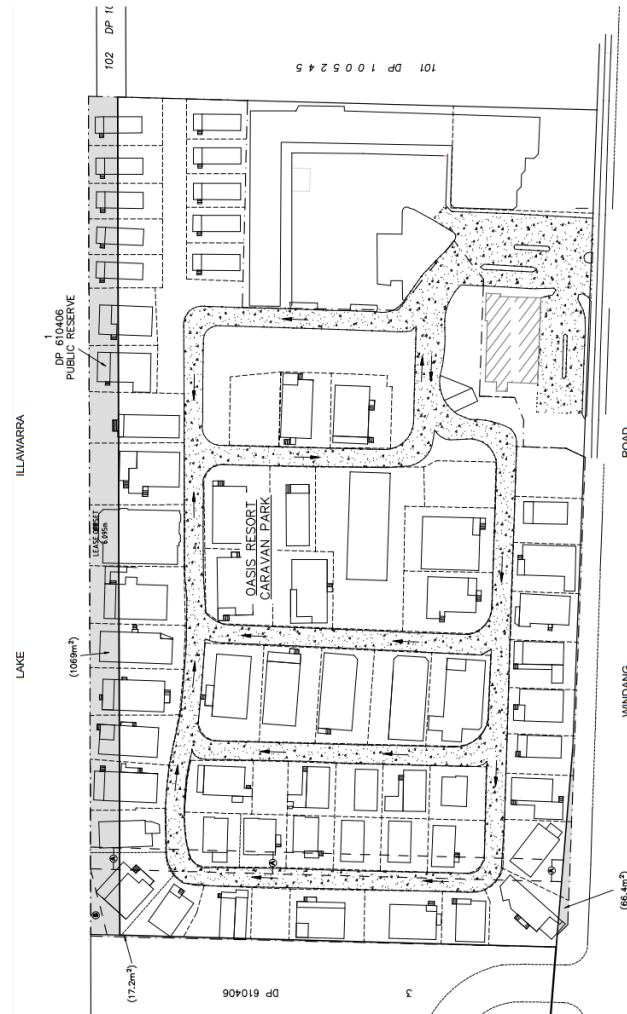


Figure 3: Survey plan showing the extent of encroachments into neighbouring lots shaded in grey.

For the purpose of this application we have proceeded with the assumption of owners consent given the preliminary support provided by the relevant land owners (see submitted letters). Leases over these portions of land will be negotiated, however cannot be finalised until the a valid approval to operate is issued.

3. SITE ANALYSIS AND CONTEXT

3.1. The Site

The subject site is located between the eastern foreshore of Lake Illawarra and the western edge of the Windang Road reserve, roughly 630m north of Boundary Road and 100m south of Bakers Lane (Figure 4, left image). Windang is on the southern end of the peninsula at the ocean entrance to Lake Illawarra (Figure 4, right image).

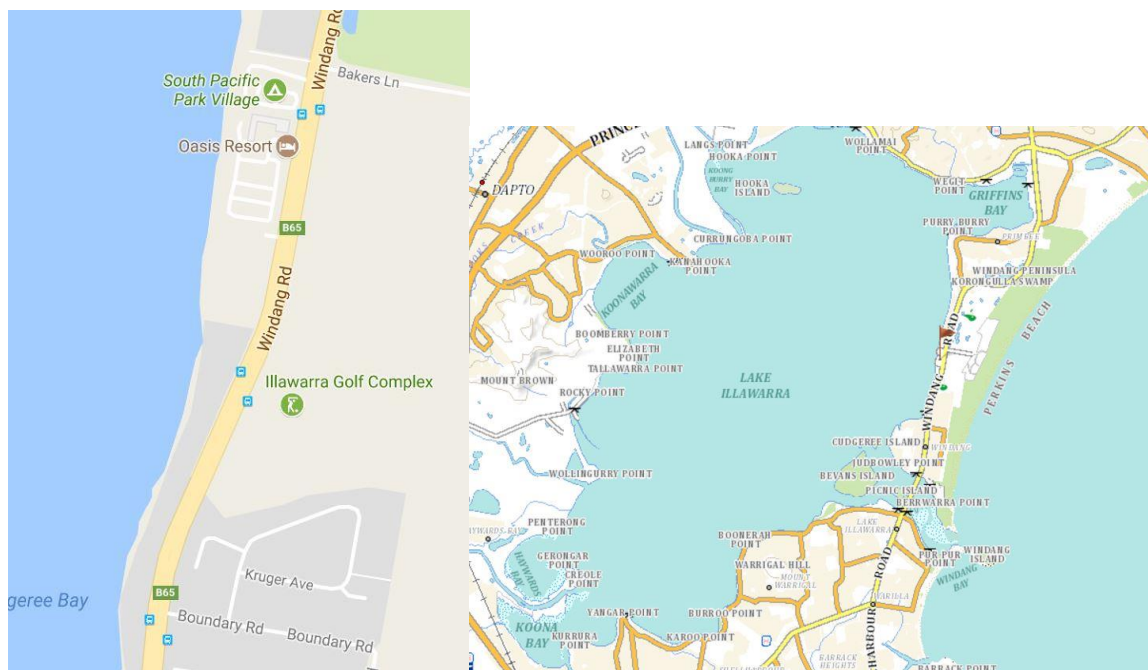


Figure 4: Locality maps showing the location of Oasis Resort Caracan Park on the eastern shore of Lake Illawarra. Marked with the red flag in the right image.

The site contains an existing motel, conference centre, restaurant, service station and caravan park and is surrounded by various land uses. To the north is the South Pacific Village Caravan Park, to the west is a Council owned parcel of operational land and Lake Illawarra, to the south is the Windang Peninsula Heritage Park and the east is Windang Road.

All development on the site has access directly to Windang Road. The service station has a separate entry point adjacent to dwelling site 1. The access point for the motel, conference centre, restaurant and caravan park is split with a 7.6m entry crossover and a 7.1m exit crossover at the Windang Road frontage. The service station does not have a separate exit and therefore shares the exit point with the motel/caravan park. This results in the whole site having two entry points from Windang Road and one exit point.

The motel, conference centre and restaurant are located in the north east of the lot while the service station is located immediately to the south of the entry/exit point, on the eastern boundary. The remainder of the site is identified as within the caravan park operational boundary, as indicated by the blue dashed operational boundary shown in the community map. It should be noted that the administration office, managers residence and pool are also included in the caravan park operational boundary, however this area is

shared between the motel and caravan park rather than being specific to one operation or the other.

The caravan park currently contains sixty one dwellings, amenities building (including showers, toilets and laundry) and three vacant dwelling sites. The existing dwelling sites contain a mixture of cabins, manufactured homes and caravans with annexes.

The site is serviced by, and connected to, relevant services including sewer, stormwater, electricity and telecommunications.

3.2. Context

A site analysis has been prepared for the subject land, the main findings are provided below:

- Topographically, the site slopes to the west, toward Lake Illawarra, with ground levels around 1.5m - 2m AHD across the park.
- The nearest towns to provide access to doctors, supermarkets, schools etc are Warilla and Warrawong, approximately 3.5km to the south and 4.5km to the north respectively.
- Public open space is available immediately to the south and along the foreshore of Lake Illawarra, with a 6m wide reserve between Lake Illawarra and the western boundary of the site.
- Perkins Beach can be accessed via walking tracks at the end of Bakers Lane, with public recreational areas present along most of the ocean foreshore from Red Point at Port Kembla to the headland at Lake Illawarra inlet
- Recreational spaces are provided within the park for the sole use of park patrons, including a swimming pool, community garden and open grass areas
- Bus services are provided along Windang Road, with the nearest stops located near the boundary between Oasis Resort and South Pacific Village Caravan Parks, within 50m of the entry/exit driveways.
- The closest hospitals are Port Kembla and Shellharbour hospitals, both within 6km of the site.

3.3. Site Constraints

Baseline information in relation to the site's environmental conditions has been drawn from the following sources:

- Site inspection
- Review of Wollongong City Councils planning documentation;
- Review of previous development consents and operational licences/approvals;
- Review of existing services to adjoining land.

The subject property is generally flat with a high point of 2m AHD to the west of the amenities building and the remainder of the site around 1.5m AHD, dropping to 1m AHD at the foreshore of Lake Illawarra.

The site is considered to contain unhealthy building land and therefore is subject to SEPP 55 – Remediation of Land.

The site is flood prone and is located within the medium and high risk flood precincts. It is also located within an isolation zone area. Flooding is a major concern for this development given the proximity to Lake Illawarra and the finished floor levels of existing dwellings on the site.

The site is bushfire prone land on the LEP mapping (Figure 5). The proposed development is therefore integrated development and requires referral under the Rural Fires Act 1997 and Planning for Bushfire Protection guidelines.



Figure 5: Bushfire Prone Land Map showing the subject site outlined in green.

Wollongong Local Environmental Plan 2009 also maps the site as containing Class 2 Acid Sulphate Soils (Figure 6).



Figure 6: Acid Sulphate Soils Map showing the subject site outlined in bold black.

The site is located within the Coastal Zone, and in the Draft NSW Coastal Management SEPP Maps the site is mapped as being both a Coastal Environment Area and a Coastal Use Area.

The site is not mapped in the Wollongong LEP as containing an item of heritage significance and to the best of our knowledge there are no known Indigenous or non-Indigenous Heritage issues on the site.

4. MATTERS FOR CONSIDERATION

Caravan Parks require a development consent under the Environmental Planning and Assessment Act 1979 as well as operational approval under section 68 of the Local Government Act 1993. In addition to these approvals caravan parks are required to comply with Local Environmental Plans, the Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005 and State Environmental Planning Policy 21.

In accordance with Section 79C of the Environmental Planning and Assessment Act (as amended) 1979 the relevant matters for consideration are addressed as follows:

4.1. *Relevant Planning Controls*

4.1.1. Water Management Act 2000

The development proposed is within 40m of the top of the bank of Lake Illawarra therefore a controlled activity approval would be required for any works in this area. The proposal for conversion of existing dwelling sites from short term to long term does not require a controlled activity permit. The car parking spaces to be established adjacent to the existing visitor parking areas are located outside the 40m buffer from the shore of Lake Illawarra, therefore those works do not require a controlled activity permit.

4.1.2. Local Government Act 1993

Under Clause 68 Part F (2) an approval must be sought for the operation of a caravan park or camping ground. This development application seeks both consent *and* approval, as permitted under Clause 78A (3) of the Environmental Planning and Assessment Act 1979.

It is recognised that as a result of the historic pattern of development on the site, there are a number of non-compliances with the Regulations applying to caravan parks. Much of these result from the fact that many structures were erected before the Regulations came into force, however due to the lapsing of the approval to operate the park is now required to comply with the Regulations in full. This is not entirely possible. Therefore this application includes a number of section 82 variation requests and a suggested schedule of works for those items that will be brought into compliance.

4.1.3. Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005

Clause 71 of this Regulation sets out the factors that must be considered by the determining authority (in this case, Wollongong City Council) before approval for the operation of a caravan park or camping ground is granted. The Council must not grant approval unless it is satisfied that the caravan park and/or camping ground complies with the requirements of Division 3 (subdivisions 1-8) of these Regulations. In addition, the Council should have regard to the principles contained in the Floodplain Development Manual before granting approval for the installation of a relocatable home, rigid annex or associated structure on flood liable land.

The subject site is flood liable and Council have indicated is it within an isolation risk precinct. A Flood Emergency Response Plan prepared by Rienco Consulting was prepared in 2015 to demonstrate how operation of the park was able to comply with the DCP and the Lake Illawarra Floodplain Risk Management Study. The park operation assessed by the 2015 report included 50 long term dwelling sites, 10 short term dwelling sites and 30 motel units, and it was concluded that the development *was* consistent with applicable flood controls. A copy of the Rienco report has been submitted with the application.

See Annexure A at the end of the report for an assessment of the proposal against Division 3, subdivisions 1-8.

It is recognised that as a result of the approval to operate expiring, the existing development within the park is now subject to the full controls of the Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005 and there are a number of compliance issues that will require rectification works. A number of section 82 variation requests have been put to Council with the remaining issues to be rectified through the schedule of works appended to the approval to operate. A copy of the proposed schedule of works has been submitted with the application.

4.1.4. State Environmental Planning Policy 21 – Caravan Parks

Clause 10 of this SEPP requires the Council to consider the following issues prior to granting development consent for a caravan park:

- (a) *Whether, because of its location or character, the land concerned is particularly suitable for use as a caravan park for tourists or for long-term residence*

The site already contains an approved caravan park and tourist facility (caravan park, cabins and motel) with consent for an unknown number of caravan park dwelling sites and a 30 room motel. The last approval to operate for the caravan park development listed 32 short term, 32 long term and 9 camping sites. This proposal applies for 61 long term and 2 short term sites.

Windang was once a highly sought after tourist destination with demand for caravan and camping sites extremely high, as evidenced by the number of caravan parks located in the area. With the improved road connections and urban sprawl of recent years the tourist economy of Windang has begun to reduce. People are living further south of Wollongong and Sydney and commuting to work and then travelling further afield when holidaying (to areas such as the Shoalhaven and Eurobodalla). This has reduced the demand for short term sites. At the same time the aging population is nearing retirement age and looking to downsize to smaller homes in well serviced areas thereby increasing the demand for long term sites.

Demographic data from the 2001 census showed that Windang is the second most popular suburb for older persons in the Wollongong LGA, with 22.7% of the population in Windang aged 65 or over. Conversely, only 34.1% of the population of Windang consists of families with dependent children, making Windang the third last ranked suburb for this indicator. These data indicate that 55.7% of the Windang population is made up of families with dependent children and people aged 65 or over.

Oasis Resort Caravan Park is located in a well serviced, coastal location within proximity of existing established communities (Windang, Warilla and Warrawong). The proximity to services, within and surrounding the park, makes this site a desirable location for both tourist and residential development.

The increased number of long term dwelling sites in the caravan park component of the site will not prevent operation of the motel facility as tourist accommodation. The changes are consistent with the site characteristics and locality, given proximity to existing services and the desirable coastal location.

(b) Whether there is adequate provision for tourist accommodation in the locality of that land, and whether existing or potential tourist accommodation will be displaced by the use of sites for long-term residence

While many of the privately operated caravan parks in Windang have been moving toward permanent residencies, the Windang Beach Tourist Park remains a primarily tourist development.

It must be recognised however that currently the vast majority of sites in Oasis Resort caravan park are privately owned, even short term sites. Therefore, even while these sites are in operation as a short term, they are not open to general tourism use, but rather as private holiday homes. The impact of converting these sites to long term permanent residences is therefore likely to have minimal impact on tourism in the area.

The site will still have 30 short term stay motel rooms available for tourist visitors. The proposal will not affect the provision of tourist accommodation on other sites in the locality.

(c) *Whether there is adequate low-cost housing, or land available for low-cost housing, in that locality*

Council's housing study 2005 identifies a need for increasing affordable housing options in the Windang area.

In 2001 the majority of homes in Windang were either standard detached homes (50.4%) or 'other' styles of housing (33.1%), which would include manufactured homes. Of the homes in Windang, 58.6% are fully owned by the occupants. The supply of social housing (State and Territory) in Windang is less than 1% of homes available, the lowest supply of any town/village in the Wollongong LGA.

Of particular interest, in 2001 the percentage of households in Windang suffering household stress was 51.3% for mortgage holders and 50.4% for renters (Table 1). This indicates that the need for additional affordable housing options in the area is high, particularly for older persons and renters.

Table 1: Number and Type of Households in Stress, 2001. Reproduced from Wollongong City Housing Study, page 71.

Postcode/Suburbs		Mortgage Stress				Rental Stress			
		Family HH	Lone HH	Group HH	Total	Family HH	Lone HH	Group HH	Total
2526: Cordeaux Heights, Farnborough Heights, Kembla Grange, Mt Kembla, Unanderra	No.	107	10	0	117	183	68	11	262
	% of total Low Income HH	56.9	76.9	-	58.2	39.4	34.9	100	39.1
2528: Windang	No.	174	20	3	197	531	319	29	879
	% of total Low Income HH	51.6	50.0	100	51.8	44.4	62.8	74.4	50.4
2530: Dapto, Horsley, Kanahooka, Koonawarra, Penrose	No.	288	21	0	309	413	151	11	575
	% of total Low Income HH	55.5	48.5	-	54.7	51.6	63.2	47.8	54.1

Source: ABS

(d) *Whether necessary community facilities and services are available within the caravan park to which the development application relates or in the locality (or both), and whether those facilities and services are reasonably accessible to the occupants of the caravan park,*

The existing tourist park provides a pool, community garden, open grass areas and direct access to Lake Illawarra to the west. A bus stop is available within 50m of the entry/exit driveways for the park.

Windang village provides a small corner shop, takeaway food outlets and a number of other independent shops, services and recreational opportunities within 1.7km of the subject site. Additional services are available in Warilla and Warrawong, all within 5km radius and connected by public and private transport options.

(e) *Any relevant guidelines issued by the Director, and*

No guidelines issued by the Director are applicable to the site or the proposed development.

(f) The provisions of the Local Government (Caravan Parks and Camping Grounds) Transitional Regulation 1993

The transitional regulation has been repealed and replaced by the Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) 2005. The proposal has been assessed against the Local Government Regulations with the assessment included with the application.

4.1.5. State Environmental Planning Policy No. 55 – Remediation of Land

Council's files indicate that Lot B (which makes up part of the southern portion of Lot 2) was proclaimed unhealthy land under the Public Health Act. The early development files for Lot 2, and what would have been Lot A have not been able to be located, therefore it is not clear if the entirety of the subject site is affected, or if this applies only to the southern portion of the land. Regardless, the development history for Lot B indicates that the land was filled, to an average of 0.9m (maximum of 1.52m), using coal wash from the Windang Road frontage to roughly 6m from the forewhore of Lake Illawarra. The final 6m at the waterfront was filled with clean soil.

As evidenced by the development history outlined in Section 2.1 above, Council has previously deemed the site suitable for a caravan park. The current proposal does not increase the density of housing on the site nor will it change the use of the site, rather, it will convert existing caravan park dwelling sites from short term to long term.

It is acknowledged that given the classification of the land any further development of the site, or increase in living densities may trigger the need for an assessment under Clause 7 of the SEPP.

4.1.6. State Environmental Planning Policy No. 71 – Coastal Protection

The subject site falls within the 'Coastal Zone' under SEPP No. 71 and thus *SEPP No. 71 – Coastal Protection* applies to the property. This SEPP aims to protect the coastal area and requires certain development applications to be referred to the Director-General for comment. The matters set out in Clause 8 should be taken into account by the consent authority when determining development applications on land to which this policy applies.

Clause 2 of the SEPP sets out the aims of the policy. The way in which the proposal addresses these aims is provided below:

- a) To protect and manage the natural, cultural, recreational and economic attributes of the New South Wales coast, and*

The subject site is not affected by any natural environmental constraints and to the best of our knowledge does not contain any items or areas of heritage significance. The proposal is not of a scale or type that would have any impact on the recreational or economic attributes of the NSW coast or the immediate locality. All dwelling sites are currently in existence, no increased density or scale is proposed.

- b) To 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, and*

The proposal will not impact any public access points to Windang or Perkins Beach or Lake Illawarra.

While any future approval to operate Oasis Resort Caravan Park will entail a lease over part of the waterfront public reserve to Lake Illawarra, the conditions of this lease are likely to stipulate that any further development of the affected sites are contained fully within Lot 2. This will assist in improving public access along the foreshore, however even with the encroachments in place there is still sufficient width available along the foreshore for public access.

- c) To 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, and*

A public reserve already exists along the foreshore of Lake Illawarra. Granting consent to long term residences within Oasis Resort Caravan Park will not affect the ongoing preservation of the existing reserve.

- d) To protect and preserve Aboriginal cultural heritage, and Aboriginal places, values, customs, beliefs and traditional knowledge, and*

To the best of our knowledge there are no items or areas of cultural significance to Aboriginal persons on or immediately surrounding the site that would be affected by the proposal.

- e) To ensure that the visual amenity of the coast is protected , and*

The proposal will have no impact on the visual amenity of the coast. Development within the park is not visible from the coastal foreshore. While it is recognised that the development is visible from the foreshore of Lake Illawarra, the development has been in place on the site in excess of 40 years, and the scale and density of development is not increasing as a result of this proposal.

It is not considered that the proposed conversion of existing dwelling sites within Oasis Resort Caravan Park will have a detrimental effect on the amenity of Lake Illawarra.

- f) To protect and preserve beach environments and beach amenity, and*

Development on the site is not visible from Windang or Perkins Beach. All dwelling sites are already in place and are capable of being developed with manufactured homes or caravan and annex structures, however given the sites location on the western side of Windang Road, even large structures on the site would not be visible from the beach.

Under the Local Government Regulations, any development over one storey will need prior Council approval, therefore visual impacts of development on beach amenity can be assessed on a site-by-site basis.

g) To protect and preserve native coastal vegetation, and

No remnant native vegetation will be removed or affected by the proposal. The application seeks consent for conversion of existing sites to long term and approval to operate the caravan park.

h) To protect and preserve the marine environmental of NSW, and
The proposal will have no impact on the marine environment.

i) To protect and preserve rock platforms, and

No rock platforms are located within proximity to the site. No offsite impacts are expected from the proposal given its location and scale.

j) To 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), and

Nothing in the proposal would be considered as contrary to the principles of ecologically sustainable development.

k) To 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

The proposal will have the same bulk, size and scale as the existing caravan park. While the type of habitation of the dwelling sites would change from short term visitors/tourists to permanent residences, this would not impact on the scenic qualities of the site or local area.

l) To encourage a strategic approach to coastal management.

The proposal is consistent with the relevant coastal management strategies.

Response

The Clause 8 – Matters for Consideration are:

a) The aims of this Policy as set out in Clause 2

The aims set out in clause 2 are addressed above. The project is consistent and/or complies with the aims of the SEPP.

- b) Existing public access to and along the coastal foreshore for pedestrians or persons with a disability should be retained and, where possible, public access to and along the coastal foreshore for pedestrians of persons with a disability should be improved,*

The public reserve along the western boundary of the site is subject to a partial lease for the existing encroachments, however these structures do not affect the ability of the land to be used for public access to Lake Illawarra. Additionally the schedule of works, and likely the terms of the lease, will require that any redevelopment of the affected sites is contained wholly within Lot 2, thereby reinstating the public access reserve to its full width.

- c) Opportunities to provide new public access to and along the coastal foreshore for pedestrians or persons with a disability*

The site is not located in an area that would be suitable for providing public access points to the beach, however a public access reserve to Lake Illawarra exists along the western boundary of the site. Granting Consent to the proposed long term sites will not affect the operation of this public reserve.

- d) The suitability of development given its type, location and design and its relationship with the surrounding area*

The proposal does not increase the overall number of dwelling sites or their location/arrangement within the park. The previous approval to operate approved 32 short term sites, 32 long term sites and 9 camp sites (73 sites total) while this application includes 61 long term, 2 short term and zero camp sites (63 sites total). The site has therefore been assessed as appropriate for a higher density of development than the current application seeks.

- e) Any detrimental impact that development may have on the amenity of the coastal foreshore, including any significant overshadowing of the coastal foreshore and any significant loss of views from a public place to the coastal foreshore*

The proposal has no capacity to cause overshadowing of the coastal foreshore and any development over single storey height will require Council approval under the Local Government Regulations. The likelihood of any development on the site impinging on coastal views is negligible.

- f) The scenic qualities of the NSW coast, and means to protect and improve these qualities*

No impact on the scenic qualities of the NSW coast are likely given the scale of the proposed development.

- g) Measures to conserve animals (within the meaning of the Threatened Species Conservation Act 1995) and plants (within the meaning of that Act), and their habitats*

All dwelling sites are currently in place. No vegetation removal or impacts on nearby habitat structures are involved with the proposed changes.

- h) Measures to conserve fish (within the meaning of Part 7A of the Fisheries Management Act 1994) and marine vegetation (within the meaning of that Part), and their habitats*

No changes to the existing or future development potential on the site are inherent in the proposal. Short term and long term dwelling sites are both capable of development as manufactured homes with the same site coverage percentages and height controls. No construction activities are proposed in this application, however three vacant dwelling sites are present within the park. These sites are already cleared and level, and any construction works will be required to consider acid sulfate soils, flooding and erosion and sedimentation, thus it is not likely that three new dwellings (whether manufactured homes or caravan/annexes) would have a significant impact on fish stock, the marine environment or habitats.

- i) Existing wildlife corridors and the impact of development on these corridors*

The subject site is not part of, or located in close proximity to any wildlife corridors.

- j) The likely impact of coastal processes and coastal hazards on development and any likely impacts of development on coastal processes and coastal hazards*

The proposed changes to the Oasis Resort Caravan Park will not be more likely to be affected by coastal processes or hazards than the existing approved development.

- k) Measures to reduce the potential for conflict between land-based and water-based coastal activities*

There is no likelihood of a conflict between land and water based land uses originating from the use of the site.

- l) Measures to protect the cultural places, values, customs, beliefs and traditional knowledge of Aboriginals,*

To the best of our knowledge there are no items or places of Aboriginal cultural significance related to the site or immediate surrounds. The proposal is entirely contained within the existing development footprint and does not include any further construction work.

m) Likely impacts of development on the water quality of coastal waterbodies

The proposal does not increase the level of development likely to be undertaken on site. No offsite water quality impacts are expected from the proposal.

n) The conservation and preservation of items of heritage, archaeological or historic significance,

To the best of our knowledge there are no items or places of cultural significance related to the site or immediate surrounds. The proposal is entirely contained within the existing development footprint and does not include any construction work.

o) Only in cases in which a Council prepares a draft local environmental plan that applies to land to which this Policy applies, the means to encourage compact towns and cities,

Wollongong City Council does not have a draft local environmental plan. The proposal has been assessed against the adopted Local Environmental Plan in section 4.1.6 below.

p) Only in cases in which a development application in relation to proposed development is determined:

- i. The cumulative impacts of the proposed development on the environment, and*
- ii. Measures to ensure that water and energy useage by the proposed development is efficient*

This application seeks consent and approval to Oasis Resort Caravan Park, which has a long development history, as outlined in section 2.1 of this report. No new sites or structures are proposed however, therefore the environmental and social impacts associated with the development are negligible.

While the long term sites will allow for permanent habitation by single users of those sites, short term sites can be utilised continuously (with regular turnover of tourist guests). Given that it is common for tourist visitors to be less likely to recycle, conserve water and energy while on holiday, the conversion to long term sites does not necessarily equate to an increased demand for energy or water resources. As such, it is considered that the proposal will have negligible effect on the demand for services.

4.1.7. Draft State Environmental Planning Policy (Coastal Management) 2016

The draft Coastal Management State Environmental Planning Policy (SEPP) and draft maps of the coastal management areas that make up the coastal zone were publicly notified from 11 November 2016 to 20 January 2017. In this regard for the purposes of section 79C(1)(a)(ii) of the Environmental Planning and Assessment Act 1979 (the EP&A Act) the requirements contained with the Draft SEPP are to be take into consideration as part of this application.

As identified in section 3.3 of this report, the draft SEPP identifies the site as being within both the Coastal Environment Area and the Coastal Use Area. The site is also mapped as being a Proximity Area for Coastal Wetlands (Figure 7).



Figure 7: Coastal Wetlands and Littoral Rainforests Map from the Draft Coastal Management SEPP 2016.

Under the Draft SEPP, the site is subject to the controls in Clause 12 (Proximity Area for Coastal Wetlands), Clause 14 (Coastal Environment Area) and Clause 15 (Coastal Use Area).

Clause 12 (1) of the Draft SEPP requires the consent authority to be satisfied that the proposed development will not significantly impact on:

- (a) The biophysical, hydrological or ecological integrity of the adjacent coastal wetland or littoral rainforest, or
- (b) The quantity and quality of surface and ground water flows to the adjacent coastal wetland or littoral rainforest if the development is on land within the catchment of the coastal wetland or littoral rainforest.

Clause 14 (1) requires the consent authority to be satisfied that:

- (a) is not likely to cause adverse impacts on the biophysical, hydrological (surface and groundwater) and ecological environment, and
- (b) is not likely to significantly impact on geological and geomorphological coastal processes and features or be significantly impacted by those processes and features, and (c) is not likely to have an adverse impact on the water quality of the marine estate (within the meaning of the Marine Estate Management Act 2014), in particular, having regard to the cumulative impacts of the proposed development on the marine estate including sensitive coastal lakes, and

- (c) is not likely to have an adverse impact on native vegetation and fauna and their habitats, undeveloped headlands and rock platforms, and
- (d) will not adversely impact Aboriginal cultural heritage and places, and
- (e) incorporates water sensitive design, including consideration of effluent and stormwater management, and
- (f) will not adversely impact on the use of the surf zone

Clause 15 (a) requires the consent authority to be satisfied that:

- i) if near a foreshore, beach, headland or rock platform—maintains or, where practicable, improves existing, safe public access to and along the foreshore, beach, headland or rock platform, and
- ii) minimises overshadowing, wind funnelling and the loss of views from public places to foreshores, and
- iii) will not adversely impact on the visual amenity and scenic qualities of the coast, including coastal headlands, and
- iv) will not adversely impact on Aboriginal cultural heritage and places, and
- v) will not adversely impact on use of the surf zone, and

Response

Given the proposal relates to a definitional change from short term to long term occupation, it is unlikely that any increased environmental impacts to the mapped coastal wetlands will occur. It is important to note that short term sites within a caravan park are able to be occupied continuously with the limit on length of occupation placed on the occupant themselves, not the number of days the dwelling itself is 'lived' in. Therefore, simply changing from a regular turn over of occupants to one full-time occupant doesn't necessarily increase the intensity of occupation on the site. The likely impact of the caravan park has therefore already occurred.

The proposal does not require any vegetation clearing, it does not contain any known heritage items, does not require any significant earthworks and is not located on, or near the 'surf zone'. The park does adjoin a 6m wide public reserve along the foreshore of Lake Illawarra, into which a number of structures encroach, however this will be improved over time as structures are modified or replaced and moved back into Lot 2.

The site is connected to stormwater, sewer and reticulated water.

4.1.8. Wollongong Local Environmental Plan 2009

The site is subject to the provisions of Wollongong LEP 2009, under which it is zoned RE2 (Private Recreation). As noted on the proposed lease plan, submitted with the application, a number of the structures extend into the RE1 zones. Figure 8 shows the zoning map of the subject and surrounding lands.



Figure 8: Zoning map reproduced from the Wollongong LEP 2009 showing the subject site outlined in bold black.

The objectives of the RE2 zone are:

- *To enable land to be used for private open space or recreational purposes*
- *To provide a range of recreational settings and activities and compatible land uses*
- *To protect and enhance the natural environment for recreational purposes*

The objectives of the RE1 zone are:

- *To enable land to be used for public open space or recreational purposes.*
- *To provide a range of recreational settings and activities and compatible land uses.*
- *To protect and enhance the natural environment for recreational purposes.*
- *To cater for the development of a wide range of uses and facilities within open spaces for the benefit of the community.*

Response

Caravan Parks are permitted with Consent in both zones.

Clause 5.5 – Development within a Coastal Zone

The subject site is located within the coastal zone and is subject to the controls of SEPP 71 and this clause of the LEP. An assessment of the proposal against the controls of SEPP 71 – Coastal Protection, in section 4.1.5 of this report, found the proposal to be satisfactory. The proposed development is not likely to have a significant impact on the coastal foreshore or coastal hazards. The site is connected to sewer and will not result in the discharge of effluent into the water.

Clause 7.3 – Flood Planning

The subject site flood prone and contains both medium and high flood risk zones. The site is also located in a flood isolation risk area which effectively isolates the Windang peninsula during large flood events.

A flood assessment prepared by Rienco in 2015, found the park would be able to operate in accordance with the flood controls in the Wollongong LEP 2009, the 2012 Flood Study and Plan and Chapter E13 of the Wollongong DCP 2009.

Under this clause of the LEP, Council cannot grant consent to development on land to which this clause applies unless it is satisfied in relation to the following matters:

(a) All habitable floor levels of the development will be above the flood planning level

This is an issue that has been identified on the site previously. A number of existing dwellings within the park have been installed with finished floor levels lower than the applicable flood planning level.

Had the approval to operate not lapsed as a result of the encroachment issues, older structures within the park would have retained the benefit of 'existing use' type rights for the floor levels. Furthermore, the flood study prepared by Rienco did not recommend lifting of floor levels for any structures on the site in 2015, therefore we believe it reasonable for Council to approve the existing floor level for structures installed prior to 2015 with any new, or significant modifications to existing structures required to meet relevant flood planning levels.

(b) The development will not adversely affect flood behaviour resulting in detrimental increases in the potential flood affectation of other development or properties

No new permanent structures are proposed on the site. While there are three vacant sites within the park, which will likely be developed in the future, the overall site capacity in this application is 63 dwelling sites. The previous approval to operate approved 64 dwelling sites and 9 camp sites, therefore this application results in a net *decrease* in the number of potential dwellings on the site.

No filling of land or changes to surface levels are proposed therefore the impact on flood behaviour are considered negligible.

(c) The development will not significantly alter flow distributions and velocities to the detriment of other properties or the environment of the floodplain

The overall dwelling capacity of the site is decreasing and any future structures will be required to be installed above the flood planning level. The potential for three additional manufactured homes within the park is not likely to significantly alter flows or velocities of flood waters.

(d) The development will not affect evacuation from the land

The flood evacuation management plan prepared by Rienco determined that evacuation from the site is not necessarily the preferred option when given the site specific attributes. The report concluded that given the number of areas available on the site with floor levels above the flood planning level and the 'shelter in place' policies of both the SES and Wollongong City Council, that residents of the park would be better protected by 'sheltering in place'.

Regardless, the proposed conversion of existing dwelling sites to long term occupancies will not affect the evacuation potential of the site in the event it becomes necessary.

(e) The development will not significantly detrimentally affect the floodplain environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses

There is nothing in the proposal that would increase the likelihood of erosion or siltation in the event of a flood. No riparian vegetation exists in proximity to the subject site.

Ongoing use of the site as a caravan park will allow for ongoing maintenance of the waterfront to Lake Illawarra and early detection and amelioration of any erosion or bank instability. By giving residents of this property a 'sense of ownership' over this section of waterfront it is likely to be better maintained due to the sense of pride over ones surroundings.

(f) The development will not result in unsustainable social and economic costs to the community as a consequence of flooding,

The proposal is not likely to have any social or economic costs to the community resulting from flooding. The caravan park is already in place, converting the sites from short to long term will have no impact on flood affectation.

(g) If located in a floodway area – the development will not be incompatible with the flow conveyance function of, or increase a flood hazard in, the floodway area.

The caravan park is already in place, converting sites from short to long term will have no impact on flood affectation, flow rates or hazards.

Clause 7.5 – Acid Sulfate Soils

The objective of this clause is to ensure that development does not disturb, expose or drain acid sulfate soils and cause environmental damage.

Response

Previous site investigation undertaken by Douglas Partners Pty Lts indicates the presence of PASS within the underlying natural soils (below depths of 1.75m, 1.5m and 1.2m). The results of the detailed (Full Chromium Suite) testing indicate exceedances of the ASSMAC guideline for 1 — 1000 tonnes of soil disturbed and hence necessitate the preparation of an ASSMP for the development. The ASSMP (submitted with application)

has been prepared to provide a framework for achieving environmental objectives in order to minimise the risk of harm to human health and the environment during and following the proposed development.

This proposal does not involve any construction work.

Any future development within the park which involves excavation greater than 1m will be undertaken in accordance with the ASSMP.

Clause 7.7 – Foreshore Building Line

The subject site is affected by a foreshore building line, as mapped in the Wollongong LEP 2009, Figure 9.

Development consent must not be granted for development on land in the foreshore area except for development for the purpose of:

- (a) The extension, alteration or rebuilding of an existing building wholly or partly in the foreshore area,



Figure 9: Foreshore Building Line map reproduced from the Wollongong LEP 2009 showing the subject site outlined in green.

Response

No new dwelling sites or structures within the affected foreshore building line area are proposed. Any future development in this area would need to be located wholly within the boundaries of Lot 2 and therefore would move away from the waterfront, however they would still be located in the foreshore building line zone.

4.1.9. Wollongong Development Control Plan (2009)

The proposal is subject to a number of Chapters in the Wollongong Development Control Plan 2009. The applicable sections of the Wollongong DCP are as follows:

DCP Chapter	Response
Chapter A1 – Introduction	<p>A site analysis was undertaken to identify the site constraints, section 3.2 and 3.3.</p> <p>The site is not within any view corridors, however it is visible from the public reserve around Lake Illawarra.</p> <p>Boudaries, easements, installations within the site and lease areas are shown on the community and installations plans submitted with the application.</p> <p>The entire site is flood prone, subject to ASS, is located within the coastal zone and the southern portion of the site is bushfire prone (Figure 4).</p> <p>No vegetation is required to be removed.</p>
Chapter C4 – Caravan Park, Camping Ground and Manufactured Home Estates	See Annexure B at the end of the report for an assessment of the proposal against this Chapter of the DCP.
Chapter D1 – Suburb Character Statement	<p>Complies</p> <p>The desired future character of Windang includes recommendations that the existing caravan parks be upgraded and all new installations have finished floor levels compliant with the relevant flood controls.</p> <p>The proposed conversion from short term to long term sites may assist in the upgrading of the site, as people are more likely to upgrade their principle place of residence over their holiday home.</p> <p>The increased, and guaranteed revenue associated with permanent residents over the fluctuating nature of tourism will also assist in providing the park owners with the funds for upgrades to the park.</p>
Chapter E1 – Access for People with a Disability	No new structures are proposed as part of the current application.

	<p>It is recognised that any future development will require upgrading of existing facilities to meet current standards for accessibility.</p> <p>Accessible car parking, compliant with the Australian Standard, is provided at the entry to the park as required under the Regulations.</p>
Chapter E2 – Crime Prevention through Environmental Design	<p>No new structures or modifications to existing structures are proposed.</p> <p>The existing dwellings within Oasis Resort address the road/pedestrian network and provide natural surveillance.</p> <p>Furthermore, records are kept of residents and visitors to the park and motel, in accordance with management practices and the requirements of the Regulations.</p> <p>Any future application for community structures such as amenities, meeting rooms etc will need to consider the controls of this Chapter.</p>
Chapter E3 – Car Parking, Access, Servicing/Loading Facilities and Traffic Management	<p>The proposed development is not likely to significantly alter traffic generation as there is an overall reduction in dwelling capacity over the site.</p> <p>The access and internal road system are existing and are signposted and line marked in accordance with the Regulations (details shown on community map).</p> <p>Additional resident parking spaces will be established on the site as indicated on the community plan submitted with the application.</p> <p>As discussed in sections 2.1 and 2.2 of this report, the proposed layout of the caravan park includes land that was approved and parking areas for the marquee, function centre and restaurant. Until these parking spaces are re-instated elsewhere on the site it is recognised that the function centre and restaurant must not operate.</p>

	The consent for the marquee will be surrendered.
Chapter E6 - Landscaping	<p>Landscaping exists along the eastern side of the boundary fence along Windang Road, with shrubs obscuring almost the entire length of the fence. Trees are also present along the southern and northern ends of the street frontage.</p> <p>Additional landscaping is present around the visitor parking area to the south west of the administration office and port-cochere.</p> <p>Within the park itself landscaping is predominantly on individual dwelling sites and maintained by the owners of each site. Even the community garden between sites 14 and 16 is maintained by the residents of the park.</p>
Chapter E7 – Waste Management	<p>Complies</p> <p>No changes to the existing waste management processes currently in place are required.</p> <p>While a number of sites will be converted from short to long term occupancies, recycling rates are much lower in tourist developments than residential premises, therefore the generation rate of putrescible waste is not likely to increase greatly. Additionally the number of dwelling sites is decreasing from the previously approved 74 sites to 63.</p> <p>A waste minimisation management plan has been prepared and is submitted with the application.</p>
Chapter E13 – Floodplain Management	<p>Under this chapter, long term dwelling sites in a caravan park are classified as 'residential' development.</p> <p>Residential development is permitted in medium flood risk areas, such as the subject site, provided floor levels meet the relevant flood planning level (1 in 100 year flood level <i>plus</i> freeboard), use of flood compatible materials below the flood</p>

	<p>planning level, structures are certified to withstand the force of floodwaters, storage areas provided above the PMF and external storage of potentially contaminating materials are prohibited.</p> <p>As all structures are existing it is proposed that compliance with these matters be addressed through the schedule of works attached to the approval to operate. The deadline for submission of this development application prevented engineering certifications from being completed for each dwelling prior to submission however appending this condition to the approval to operate will provide Council a method of ensuring compliance is achieved prior to the issue of an extension of the approval to operate.</p> <p>As mentioned earlier, the finished floor levels of many structures on the site are below the flood planning level. These structures would have the benefit of 'existing use' type rights had the approval to operate not been caused to lapse. Additionally the owners indicate that none of the homes have been inundated during flood events during their time operating the park therefore we suggest these homes be permitted to stay at their current levels. Any significant modifications to, or replacement of the homes will trigger the need for the floor levels to be increased to the relevant flood planning level adopted by Council at the time.</p> <p>Additionally, applicants must demonstrate that development will not increase flood affectation elsewhere. No new structures are proposed and to the best of our knowledge, no flood management issues have been identified on the site.</p>
Chapter E17 – Preservation and Management of Trees and Vegetation	No trees or other vegetation is proposed to be removed.
Chapter E20 – Contaminated Land Management	The site has been identified as potentially contaminated land and also contains a

	service station, therefore any increase in the residential density or the sensitivity of the use of land would require a preliminary hazard assessment. As the site has already been assessed as suitable for a caravan park with 32 short term, 32 long term and 9 camping sites as recently as 2008 we do not believe the current application warrants preparation of a contamination assessment.
Chapter E22 – Soil and Erosion and Sediment Control	No new structures are proposed in this application. Minor sealing of car park areas will be undertaken and an erosion and sedimentation control plan, prepared in accordance with the Blue Book, will be submitted with the construction certificate documentation.

4.2. The Likely Impacts of That Development

4.2.1. Context and Setting

The subject site is located between Lake Illawarra (western boundary) and Windang Road (eastern boundary). The surrounding development consists of a caravan park to the north (South Pacific Village Caravan Park) immediately to the north followed by larger lot residential developments stretching toward Primbee. To the east lies Windang Road, then vacant land surrounding the telecommunications tower and electricity lines. To the west lies a 6m strip of public reserve along the foreshore of Lake Illawarra then the body of the Lake. To the south is a publicly owned reserve known as the Windang Peninsula Heritage Park with poor quality remnant vegetation.

The site and the neighbouring South Pacific Village Caravan Park mark the northern extent of Windang, however they are immediately adjacent to the residential area of Primbee, therefore there is no visual transition between the two villages.

Windang itself is characterised by primarily low density single and double storey dwellings interspersed with caravan parks and manufactured home estates. The proposed caravan park with predominantly long term residents is consistent with the existing and developing pattern of development in Windang.

4.2.1. Public Domain

The site does not form part of the public domain nor will its development impact on surrounding public lands. The impact of converting existing short term sites to long term sites will not detrimentally impact on the public's ability to use or enjoy the use the surrounding public spaces (Windang Peninsula Heritage Park and the public foreshore adjacent to the site).

The sites proposed to be converted to long term stay are already operating within the park and the overall site numbers being sought approval to in this application are less than the number previously approved, therefore there is no extra demand for existing public amenities associated with the proposal.

4.2.2. Access and Traffic

(1) Access

Access to the existing tourist development is from Windang Road via a two-way, bitumen sealed driveway with entry and exit separated by a small traffic island. This access was approved to accommodate the likely traffic flow from the approved caravan park, motel, function centre, restaurant and service station. The current proposal will generate similar traffic flows (as a reduce total number of sites are proposed), therefore we believe the existing arrangement is sufficient for the proposal.

(2) Transport

The park is located on a public transport route with bus services available from Windang Road, within 50m walking distance of the entry/exit driveway of the park.

Taxi services are also available to the site as well as courtesy busses from the local clubs and public services (such as health services).

No train stations or train lines are located near Windang.

(3) Traffic

The overall number of sites proposed are less than the previous approval to operate allowed. The conversion of 29 existing short term to long term sites will not greatly increase traffic flows, but will rather 'average' traffic flows.

To the best of our knowledge, no traffic issues have been reported as originating from the site, therefore any minor changes resulting from the proposal are likely to be absorbed by the existing road network.

4.2.3. Utilities

The exiting development is serviced by reticulated water and sewer. It is also connected to mains electricity and telecommunications infrastructure. All existing dwelling sites have access to individual service connections, and future dwellings can make connections as required.

The relevant authorities will be consulted during the detailed engineering design of the long-term site connections to ensure that their requirements are satisfied.

4.2.1. Waste

No additional dwelling sites are proposed. Any minor changes in waste generation can be managed through the existing waste servicing arrangements.

4.2.1. Natural Hazards

The subject site is identified as bushfire prone land and as such a Bushfire Risk Assessment is required. As a tourist facility the development is classified as 'Special Fire Protection Purpose' development and thus requires referral to the Rural Fire Service. A Bushfire Risk Assessment is currently being prepared and will be submitted under separate instruction.

Initial investigations indicate that the development will not be capable of complying with the APZ requirements for 'Special Fire Protection Purpose' development, due to the vegetation to the south of the site. There is no ability to increase the size of the APZs. However it needs to be recognised that the tourist facility was approved prior to 2001. PBP 2006 recognises that alterations to an existing SFPP's facility cannot always comply with the preferred standards and in such circumstances an appropriate combination of bush fire protection measures are required to achieve a better bush fire risk outcome, and satisfy the specific objectives for the type of development being assessed. The conversion of short term sites to long term sites can achieve a better bushfire outcome in the following manner:

- Long term sites are more likely to comprise manufactured homes which are capable of be constructed in accordance with AS 3959. Such structures provide an increased level of protection compared to tents and caravans which are predominantly used in short term accommodation.
- The long term sites will be occupied by permanent residents rather than tourists. Permanent residents will have a better understanding of the local area and conditions.
- A site specific bushfire emergency and evacuation plan can be prepare to identify the risk to the occupants of the park and outline the early triggers for closure of the park and evacuation.
- Infrastructure within the park can be upgraded, for example installation of a ring main hydrant system for the park and upgrades to the fire hose reel system to bring the park into compliance with the Local Government Regulations.

It is considered that the proposal provides an opportunity to improve a better bushfire outcome for occupants of the site and surrounding area.

The site is also identified as flood prone. It is proposed that existing dwellings remain on the site with structural certification provided to demonstrate footings and tie-downs are suitable to withstand the forces of flood water and that flood compatible materials have been used below the flood planning level. Any new installations, replacement or significant modifications to existing dwellings will require finished floor levels to meet the relevant adopted flood planning levels.

4.2.1. Water

(1) Potable Water

The subject site has access to reticulated mains water.

(2) Stormwater Runoff

No new sites or structures are proposed. As no existing concerns with stormwater management have been identified it is reasonable to assume that the existing management strategies are effective and will continue to be so.

4.2.2. Soils

The only physical works proposed is minor sealing for resident car parking, however these areas are already cleared and level. No significant soil excavation is required, therefore the risk of contact with contaminated or acid sulphate soils is negligible.

4.2.3. Air and Microclimate

The proposal will not have a measurable impact on air quality.

4.2.4. Flora and Fauna

The proposal will not result in the loss of any critical habitat, or any Endangered or threatened flora or fauna.

4.2.5. Noise and Vibration

No construction activities are required as part of this proposal, however noise and vibration can be controlled by conditions in the consent that stipulate time constraints and relevant hours of operation.

4.2.1. Heritage

The site does not contain any known heritage items.

4.2.2. Safety, Security and Crime Prevention

The proposed development will not result in an increased level of risk in crime or safety issues than would normally be expected in this area. The increased permanent habitation rates will actually increase the number of 'eyes on the street' and result in an increase in feelings of safety and reduced crime levels.

4.2.3. Social Impact in the Locality

The proposed development is fully compatible with the site constraints and surrounding environment and will have no impact on the health and safety of the community in the general area or the wider community.

The proposed development will not disadvantage nor displace any particular socio-economic group. It does not have the potential to adversely affect the community structure, community values or beliefs.

4.2.4. Economic Impact on Locality

There will be no negative economic impact on the locality.

4.2.5. Cumulative Impacts

Cumulative impacts of this proposal are expected to be negligible. The caravan park is well established on the site and conversion from short to long term residents will have little capacity to create offsite impacts.

5. SUITABILITY OF THE PROPOSAL FOR THE ENVIRONMENT

5.1. *Does the Proposal Fit in the Locality*

The subject site is located between the villages of Windange and Primbee with excellent access to the public road network and scenic recreational areas. The locality is well serviced by existing shops, medical services, restaurants and recreational facilitators. It is a high demand retirement and tourist destination as well as having demand for greater numbers of affordable housing options.

It is considered that the proposal is in character with the existing and developing character of the area.

5.2. *Are the Site Attributes Conducive to the Development?*

The site is well located for both long term and short term tourist residents. Proximity to beaches and coastal lagoons, shopping, public amenities and a well-connected public road network make the site well suited to the proposed development.

Oasis Resort Caravan Park has been in operation from the site for over 40 years, and there is no indication in Council's development files that any complaints about the operation or offsite impacts have been reported. The location of the park, within 12km of the city centre and less than 6km from both Warilla and Warrawong, with good public transport options, makes the site desirable for affordable housing and retirement homes.

While it is recognised that the site is flood prone, all of Windang village and much of the Wollongong LGA in general is flood prone. This constraint alone is not sufficient to sterilise the development potential of the land. Future development on the site can be designed and constructed with appropriate materials and floor heights to limit the flood risk to the property.

6. PUBLIC INTEREST

There are no features of this proposal that could be interpreted as detrimental to the public interest. The proposal is simply utilising existing infrastructure to provide the opportunity for additional accommodation options within an existing caravan park. The additional long term sites will provide greater affordable housing options for first home buyers and retirees alike.



Annexure A

Part 3 of the Local Government
(Manufactured Home Estates,
Caravan Parks, Camping Grounds and
Manufactured Homes)
Regulation 2000

Proposal: NEW SITE LAYOUT, REDUCED FRONT SETBACK AND CONVERSION OF SHORT TERM TO LONG TERM SITES

Site: Wairo Beach Caravan Park, Princes Highway Lake Tabourie

Assessment against Part 3 of the Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Manufactured Homes) Regulation 2005

Clause	Requirement	Comment
Land and Site Requirements		
83	<u>Minimum site of park:</u> A caravan park must not have an area of less than 1ha No minimum size applies to camping grounds	The subject site has an area of approximately 1.68ha, with an operational area for the caravan park of approx.. 1.57ha and therefore complies.
84	<u>Community Amenities:</u> At least 10%, or such lesser portion (but not less than 6%) of the total land area must be reserved for recreation and other communal activities.	10% of the site area would equate to 1,570m ² . The existing recreational areas (including the community garden, community park, area 1 and 2 and the car wash bay) exceed 6.8%. Given the proximity of public recreational space surrounding the site we request Council's support to the 6.8% proposed.
85	<u>Site Area:</u> Long Term – 80m ² Short Term – 65m ² Camp Site – 40m ² if car space within 30m, otherwise 50m ²	All long term sites exceed the 80m ² minimum. All short term sites exceed the minimum requirements.
86	<u>Site Numbering</u> All sites must be conspicuously numbered and site boundaries clearly delineated	The proposed community map identified as reference number: L103385_revision D, dated: 29/06/2017 will form the community map when approved. Sites will be appropriately marked to comply with the requirements.
	Site boundaries to match details on community map	
87	Dwelling sites must have road frontage	All dwelling sites have road frontage
88	<u>Setback of Community Buildings</u> Community buildings must be no less than 10m from the park boundary unless the consent allows. The absolute minimum is 3m to park boundary and 5m to a dwelling/camp site boundary	Community building means a building (such as a shower block, toilet block or laundry block) that is used or intended to be used in connection with a community amenity, and includes a building that is to be used as a managers or caretakers office or residence.

Proposal: NEW SITE LAYOUT, REDUCED FRONT SETBACK AND CONVERSION OF SHORT TERM TO LONG TERM SITES

Site: Wairo Beach Caravan Park, Princes Highway Lake Tabourie

		<p><i>Community amenity means a space or facility that is required to be provided within a MHE, caravan park or camping ground for administration or servicing, recreational or other communal purposes.</i></p> <p>No community buildings are proposed within 10m of a property boundary.</p>
89	<p><u>Setback to dwelling/camp sites from park boundaries</u> Sites must not be closer than 10m to a public road or 3m to any other boundary of the park, unless the approval for the park allows</p>	<p>No new dwelling sites are proposed. Previously approved dwelling sites will retain their current footprint.</p>
90	<p><u>Use of Buffer Zones:</u> Setback buffer zones can be used for community amenities, roads, car parking, footpaths and landscaping or any other use permitted by the approval for the caravan park or camping ground.</p>	<p>No new community amenities or the like are proposed within setback buffer zones.</p>
91	<p><u>Separation Distances</u> A moveable dwelling must not be installed closer to any other moveable dwelling than: (a) 3m for long term sites (b) 2.5m for short term or camp sites</p>	<p>The operators are aware of the requirements and will notify prospective occupiers of the requirements when they construct dwellings. For dwellings already installed with setbacks less than required we have applied for a section 82 variation and identified that future development of these sites must comply with the Regulations. It is intended that setbacks be achieved through natural attrition where fire safety measures can be met.</p>
92	<p><u>Entrance and Exit Roads:</u> A road that forms an entrance or exit must be at least 7m wide. In the case of a divided road, the sealed portion must be at least 5m wide either side of the median strip.</p>	<p>No new entry or exit roads are proposed. The existing entry/exit to Windang Road was approved under a previous consent. The proposal does not increase the number of dwelling sites within the park, and the traffic generation rate is not likely to change significantly, therefore the existing arrangement will remain suitable for the proposed development.</p>

Proposal: NEW SITE LAYOUT, REDUCED FRONT SETBACK AND CONVERSION OF SHORT TERM TO LONG TERM SITES**Site:** Wairo Beach Caravan Park, Princes Highway Lake Tabourie

93	<u>Forecourt:</u> A caravan park must have a forecourt, measuring at least 4m by 20m to accommodate incoming vehicles.	A visitor/incoming vehicle parking area is provided within the site, adjacent to the reception office. Both a forecourt area for long vehicles and visitor parking spaces are provided. This area has been installed as approved and no change to the number of dwellings is proposed
94	<u>Width of Roads</u> Minimum width of 6m for two-way traffic Minimum width of 4m for one-way traffic	The road network is as shown on the community plan. No new roads are proposed. The direction of travel has been appropriately marked on site.
95	<u>Speed Limits</u> Must not exceed 15km/h and indicated with conspicuous signage	A speed sign indicating the 10km/h speed limit is installed at the entry to the park and the speed limit is painted on the road throughout the park.
96	<u>Resident Parking</u> One parking space per dwelling/camp site. If off-site the space must be clearly identified and shown on community map. Car space minimum dimensions: 5.4m x 2.5m for angle parking 6.1m x 2.5m in any other case	All dwelling sites have parking allocations, predominantly on site however a number of sites have offsite parking spaces.
97	<u>Visitor Parking:</u> 1 for each 10 long term sites 1 for each 20 short term sites 1 for each 40 camp sites With a minimum of 4 visitor spaces. Car space minimum dimensions: 5.4m x 2.5m for angle parking 6.1m x 2.5m in any other case	The proposal would need to provide: 8 visitor parking spaces, including 1 for persons with disability Eight visitor parking spaces are provided in a central location, one of which is suitable for persons with disability (and compliance with AS2890.1)
98	<u>Visitor parking for people with disabilities</u> Minimum of one space per 100 (or fraction of 100)	This has been provided within the site.
99	<u>Road Surfaces</u> All access roads must have an all-weather sealed or other surface finish specified in the approval for the caravan park or camping ground, and	All roads are existing. No new developments are proposed.

Proposal: NEW SITE LAYOUT, REDUCED FRONT SETBACK AND CONVERSION OF SHORT TERM TO LONG TERM SITES**Site:** Wairo Beach Caravan Park, Princes Highway Lake Tabourie

	must be adapted to the topography to allow for adequate drainage and to eliminate excessive grades	
100	<u>Lighting</u> All access roads must be adequately lit between sunset and sunrise	Lighting can be conditioned in the consent.
Utility Services		
101	<u>Water Supply</u> Dwelling sites one connection for each site, Camping grounds must provide one water connection for every 4 campsites with a maximum distance of 30m between sites and connection points	Each site is capable of servicing in accordance with these requirements. This can be conditioned in any consent.
102	<u>Sewerage</u> Long term sites must be connected to the sewage disposal system A common soil waste dump must be provided for short-term and camp sites. Short-term sites with installed dwellings must be provided with a disposal point for sullage waste. More than one short-term sites may be provided with the same disposal point	Each site is capable of servicing in accordance with these requirements. This can be conditioned in any consent.
103	<u>Drainage</u> All dwelling sites and camp sites must be adequately drained	Each site is capable of servicing in accordance with these requirements. This can be conditioned in any consent.
104	<u>Electricity Supply</u> Dwelling sites must be supplied with a reticulated electricity service. In the case of long-term sites, the electricity may be supplied by means of an electrical circuit connected to a separate electricity meter.	Each site is capable of servicing in accordance with these requirements. This can be conditioned in any consent.

Proposal: NEW SITE LAYOUT, REDUCED FRONT SETBACK AND CONVERSION OF SHORT TERM TO LONG TERM SITES**Site: Wairo Beach Caravan Park, Princes Highway Lake Tabourie**

105	<u>Common Trenches:</u> A common trench may be used for the installation of services in accordance with guidelines set out in AMCORD.	Noted																																																																														
Shower and Toilet Facilities																																																																																
106	For the purpose of calculating the required amenities for the park: 2 camp sites are the equivalent of one dwelling site and dwelling sites with self-contained dwellings can be disregarded. Therefore, does the dwelling contain: Toilet Shower Bathtub Handbasin	No new dwelling sites are proposed therefore no new amenities are required. All sites are intended to be designated for only self-contained dwellings.																																																																														
107	<u>Number of toilets/showers to be provided</u> A caravan park or camping ground with fewer than 200 dwelling sites must be provided with facilities specified in the Table below. A park with more than 200 dwelling sites must be provided with those facilities as specified in the approval. Two camp sites = one dwelling site. Dwelling sites with self-contained services are excluded from the calculations. <table><tr><th rowspan="2">Sites</th><th colspan="2">Water closets</th><th rowspan="2">Urinals</th><th colspan="2">Showers</th><th colspan="2">Handbasins</th></tr><tr><th>Female</th><th>Male</th><th>Female</th><th>Male</th><th>Female</th><th>Male</th></tr><tr><td>1–25</td><td>3</td><td>2</td><td>1</td><td>2</td><td>2</td><td>2</td><td>2</td></tr><tr><td>26–50</td><td>5</td><td>3</td><td>2</td><td>3</td><td>3</td><td>3</td><td>3</td></tr><tr><td>51–75</td><td>6</td><td>4</td><td>2</td><td>4</td><td>4</td><td>3</td><td>3</td></tr><tr><td>76–100</td><td>7</td><td>4</td><td>2</td><td>5</td><td>5</td><td>4</td><td>4</td></tr><tr><td>101–125</td><td>8</td><td>5</td><td>3</td><td>6</td><td>6</td><td>4</td><td>4</td></tr><tr><td>126–150</td><td>9</td><td>6</td><td>3</td><td>7</td><td>7</td><td>5</td><td>5</td></tr><tr><td>151–175</td><td>10</td><td>6</td><td>4</td><td>8</td><td>8</td><td>5</td><td>5</td></tr><tr><td>176–199</td><td>11</td><td>7</td><td>4</td><td>9</td><td>9</td><td>6</td><td>6</td></tr></table>	Sites	Water closets		Urinals	Showers		Handbasins		Female	Male	Female	Male	Female	Male	1–25	3	2	1	2	2	2	2	26–50	5	3	2	3	3	3	3	51–75	6	4	2	4	4	3	3	76–100	7	4	2	5	5	4	4	101–125	8	5	3	6	6	4	4	126–150	9	6	3	7	7	5	5	151–175	10	6	4	8	8	5	5	176–199	11	7	4	9	9	6	6	No new dwelling sites are proposed therefore no new amenities are required.
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108	<u>Facilities for people with a disability</u> A caravan park with fewer than 100 dwelling sites must be provided with one facility for each sex or one of each facility for use by both sexes	No new dwelling sites are proposed therefore no new amenities are required.																																																																														

Proposal: NEW SITE LAYOUT, REDUCED FRONT SETBACK AND CONVERSION OF SHORT TERM TO LONG TERM SITES**Site:** Wairo Beach Caravan Park, Princes Highway Lake Tabourie

	<p>A caravan park or camping ground with 100 dwelling sites or more must be provided with two of each facility for each sex, or Two of each facility for use by both sexes, or One of each facility for each sex and one of each facility for use by both sexes Facilities provided in accordance with this clause may be counted for the purposes of clause 107</p>	
109	<p><u>Other facilities (mirrors/handbasins)</u> All showers and hanbasins must be supplied with hot and cold water. A minor must be provided for each handbasin, or if two or more handbasins provided together, one mirror for each pair Means for sanitary napkin disposal must be provided in each communal facility that contains toilets for female use at a rate of one per 10 toilets (or part thereof)</p>	No new dwellings are proposed therefore no new amenities are required.
110	<p><u>Toilet and shower blocks:</u></p> <ul style="list-style-type: none">• Constructed of concrete masonry block, and• Have a non-slip floor of tile or other impervious material adequately drained to outlets. And• Have a smooth, hard, durable and water-resistant interior finish, and• Have shower recesses with tile of other impervious finishes to a height of at least 1.8m, and• Have tole or other impervious skirtings around water closet cubicle walls, and• Have tile or other impervious finish around wash basins, and• Have adequate lighting and adequate ventilation at all times, and• Have all its walls, ceiling and floors, fixtures, fittings and appliances maintained in a clean and sanitary condition at all times	Existing amenities buildings are constructed as approved.

Proposal: NEW SITE LAYOUT, REDUCED FRONT SETBACK AND CONVERSION OF SHORT TERM TO LONG TERM SITES**Site:** Wairo Beach Caravan Park, Princes Highway Lake Tabourie

	<ul style="list-style-type: none">Toilets must be provided in individual cubicles having a minimum floor area of 1.1sqm and a minimum width of 0.8m	
111	<p><u>Distance to amenities</u></p> <p>Long-term sites must not be situated more than 75m (measured in a straight line) from a shower block or toilet block</p> <p>Short-term or camp sites must not be situated more than 100m (measured in a straight line) from a shower block or toilet block</p> <p>This clause does not apply in respect of dwelling sites reserved for use by self-contained moveable dwellings and dwelling sites provided with ensuite facilities.</p>	No new dwelling sites are proposed, therefore the distance from dwelling sites to amenities are as approved. New dwellings on long term sites will be self-contained and therefore will not rely on communal amenities, thus negating the need to be within 75m of those services.
Laundry Facilities		
112	In calculating the facilities to be provided in accordance with this Subdivision, 2 camp sites are taken to be the equivalent of one short-term site	All laundry facilities are installed as approved. It is reasonable to assume that long-term dwellings will be self-contained, thereby reducing the demand for communal laundry facilities. For this reason it is not considered necessary for any additional facilities to be provided in association with the proposal.
113	<p><u>Washing Machines</u></p> <p>A caravan park or camping ground must be provided with:</p> <p>At least one washing machine for each 25 (and any remaining fraction of 25 greater than 12) long-term sites, and</p> <p>At least one washing machine for each 30 (and any remaining fraction of 30 greater than 15) short-term sites</p> <p>The minimum number of washing machines to be provided is 2</p>	
114	<p><u>Laundry tubs</u></p> <p>A caravan park or camping ground must be provided with:</p> <p>At least one laundry tub for each 50 (or part thereof) long-term sites</p> <p>At least one laundry tub for each 60 (or part thereof) short-term site</p> <p>The minimum number of laundry tubs to be provided is one</p>	
115	<p><u>Clothes Dryers</u></p> <p>A caravan park or camping ground must be provided with</p>	

Proposal: NEW SITE LAYOUT, REDUCED FRONT SETBACK AND CONVERSION OF SHORT TERM TO LONG TERM SITES

Site: Wairo Beach Caravan Park, Princes Highway Lake Tabourie

	<p>At least one mechanical clothes dryer for each 60 (and any remaining fraction of 60 greater than 30) long-term sites, and</p> <p>At least one mechanical clothes dryer for each 80 (and any remaining fraction of 80 greater than 40) short-term sites</p> <p>The minimum number of mechanical clothes dryers to be provided is one</p>	
116	<p><u>Drying Lines</u></p> <p>A caravan park or camping ground must be provided with clothes line space at the rate of 2m of line for each dwelling site. The minimum length of clothes line space to be provided is 50m.</p>	
117	<p><u>Water Supply</u></p> <p>Washing machines must be connected to hot and cold water</p>	
118	<p><u>Ironing Facilities</u></p> <p>A caravan park or camping ground must be provided with ironing boards, electric irons and power points available for connection to electric irons at the rate of one for every 60 (or part thereof) short-term sites</p>	
119	<p><u>A laundry block should be:</u></p> <ul style="list-style-type: none">• Constructed of brick or concrete masonry block, and• Have a non-slip floor of tile or other impervious material adequately drained to outlets, and• Have smooth, hard, durable and water-resistant interior finished, and• Have adequate lighting and adequate ventilation at all times, and• Have all its walls, ceiling and floors, fixtures, fittings and appliances maintained in a clean and sanitary condition at all times	

Proposal: NEW SITE LAYOUT, REDUCED FRONT SETBACK AND CONVERSION OF SHORT TERM TO LONG TERM SITES**Site:** Wairo Beach Caravan Park, Princes Highway Lake Tabourie

120	<u>Maintenance:</u> The laundry facilities required by this Subdivision that are housed in a laundry block must be maintained in a serviceable and safe condition.	
Management		
121	No more than 12 persons may be allowed to stay overnight at a dwelling site or camp site at any one time	Noted.
122	A register of occupiers must be kept for a caravan park or camping ground	Noted.
123	Information to be given to prospective occupiers Before an operator of a caravan park or camping ground enters into an agreement with a person relating to the person's occupation of a dwelling site or camp site, the holder of the approval must ensure that the person is given written notice of the conditions of occupation. This clause does not apply for occupiers of long-term sites unless the person is proposing to occupy that site for holiday purposes.	Noted.
124	Use of caravan parks and camping grounds A caravan park/camping ground must not be used for any commercial purpose other than a caravan park or camping ground. A caravan park/camping ground shall not be used for the manufacture, construction or reconstruction of moveable dwellings	Noted.
125	Community Map Council must be provided with a copy of the community map as soon as possible after any amendment is made to the map and at any such time as the Council may reasonably require.	An updated community map showing the changes as proposed is included with this application.
126	A copy of the current community map must also be displayed in a prominent position in the caravan park or camping ground.	Noted.

Proposal: NEW SITE LAYOUT, REDUCED FRONT SETBACK AND CONVERSION OF SHORT TERM TO LONG TERM SITES

Site: Wairo Beach Caravan Park, Princes Highway Lake Tabourie

Subdivision 8 - General		
127	<u>Garbage Removal:</u> Arrangements specified in the approval for the caravan park or camping ground must be instituted and maintained for the removal of garbage and for the maintenance of garbage receptacles in a clean and sanitary condition.	Existing waste management activities will remain unaffected. Long term sites are more likely to recycle than short term tourist sites, therefore the increase in waste generation rates is likely to be minimal.
128	<u>Fire Hydrants</u> No part of a dwelling site, camp sites or community building within a caravan park or camping ground may be situated more than 90m from a fire hydrant	It is recognised that installation of a fire hydrant within the park will be a condition of the consent.
129	<u>Fire Hose Reels</u> Fire hose reels must be installed so that each dwelling site or camp site in the caravan park or camping ground can be reached by a fire hose	Hose reels are provided within the park, as indicated on the community plan. Expansion of these services will be required.
130	<u>Car Washing Bay</u> A caravan park must be provided with an area for use for washing vehicles	A car washing bay is provided on the site as shown on the community plan.
131	<u>Buildings:</u> A building should not be erected without approval. An approval for a community building must not allow their construction on a dwelling or camp site.	Noted. No new community buildings are proposed (or required).



Annexure B

Assessment of the proposal against Chapter
C4 (WCC DCP)- caravan parks, camping
grounds and manufactured home estates

ANNEXURE B

ASSESSMENT OF THE PROPOSAL AGAINST WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

CHAPTER C4 – CARAVAN PARKS, CAMPING GROUNDS AND MANUFACTURED HOME ESTATES

Advice	Proposed
6 Development Controls – Caravan Parks and Camping Grounds	
6.1 Minimum Land Requirement for Caravan Park	
1. The minimum lot size for the development of a caravan park is one hectare	Lot 2 has a site area of 1.689ha, however the 'operational footprint' of the caravan park covers 1.45ha
6.2 Minimum Size of Dwelling Sites	
1. A long –term site must have an area of at least 80 square metres.	Complies.
2. A short –term site must have an area of at least 65 square metres.	Complies
3. A camping site must have an area of at least: (a) 40 square metres in the case of a camp site for which a separate parking space is provided within 30 metres of the camp site or (b) 50 square metres, in any other case.	No camping sites proposed.
6.3 Maximum Number of Short Term and/or Long Term Sites	
1. Any Development Application for a caravan park must specify the number of short-term sites and the number of long-term sites proposed within the caravan park. The number of short-term and long-term sites shall be consistent with the minimum size requirements for both short–term and long-term sites.	The development application requests consent to 61 long term and 2 short term sites. All proposed sites meet the minimum size requirements.
2. The location of the short-term and long-term sites shall be clearly shown on the site plan. The site plan shall also clearly number each dwelling and / or camping site and its site boundaries, as proposed within the park.	The submitted community plan indicated the two short term sites proposed (numbers 18 and 20). The remaining dwelling sites will be designated long term.

ANNEXURE B

ASSESSMENT OF THE PROPOSAL AGAINST WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

Advice	Proposed
6.4 Minimum Building Line Setbacks to Public Roads, Foreshore Areas and Boundaries to other Lots not Associated with the Development	
1. The minimum front building line setback for a caravan park or camping ground to any public road shall be 10 metres.	<p>A variation to this control is required. Oasis Resort Caravan Park has been in operation, with a valid consent, from the site for over 40 years.</p> <p>A variation request under section 82 of the Local Government Act has been prepared and submitted with the application.</p>
2. A dwelling site or camping site must be setback at least 10 metres from any public road and at least 3 metres to any other boundary of the caravan park or camping ground.	<p>A variation to this control is required. Oasis Resort Caravan Park has been in operation, with a valid consent, from the site for over 40 years.</p> <p>A variation request under section 82 of the Local Government Act has been prepared and submitted with the application.</p>
3. For sites adjacent to a waterway, a minimum building line setback of 10 metres is required for any dwelling site or community building from the mean high water mark or any prescribed foreshore building line under this plan or Wollongong Local Environmental Plan 2009, whichever is the greater.	<p>A variation to this control is required. Oasis Resort Caravan Park has been in operation, with a valid consent, from the site for over 40 years.</p> <p>The sites along the western boundary are entirely located within the foreshore building line. It is proposed that existing development be permitted to stay however any significant modifications or replacement of these dwellings be required to comply with the 10 setback from the mean high water mark.</p>
4. A community building must not be located closer than 10 metres to the boundary of a manufactured home estate or the boundary of a dwelling site within the estate, except where in the opinion of Council, the community building will be properly screened by way of fencing and / or dense landscaping along the perimeter boundary or boundary with a dwelling site. However, the absolute minimum building setback requirement from a perimeter property boundary or a boundary with dwelling site within the estate shall be 2 metres.	<p>A variation request under section 82 of the Local Government Act has been prepared for this control. The existing amenities building is located closer than 5m from surrounding dwelling sites, however these sites are fenced with colourbond style fencing.</p> <p>No communal amenities are located within 10m of a park boundary.</p>
5. The minimum driveway width for a combined entry / exit access point into / from a caravan park or camping ground is 8 metres. In the case of a divided road, the minimum width of the sealed road carriageway shall be 5 metres on either side of the median strip.	<p>Entry and exit points to Oasis Resort Caravan Park are divided with a width of 7.6m at the entry and 7.1m at the exit.</p>

ANNEXURE B

ASSESSMENT OF THE PROPOSAL AGAINST WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

Advice	Proposed
6. The internal access road must be at least 6 metres for a two-way access road and at least 4 metres for a one-way access road. The direction of travel for a one-way access road must be indicated by means of directional signage.	<p>All roads within the caravan park are one-way with the exception of the small area of road at the visitor parking bays.</p> <p>Road widths are shown on the community plan submitted with the application. Some narrow points were identified on the survey, with the one-way road varying from 3.8 – 4.1m in width. The small section of two-way road meets the minimum 6m carriageway width.</p> <p>A variation request under section 82 of the Local Government Act has been prepared for this control.</p>
6.5 Community Amenities/Facilities	
1. A minimum of 10% of the total site area of the subject caravan park or camping ground shall be reserved for recreation or other communal activities.	<p>The submitted community plan shows 6.8% of the site reserved for recreation and other communal activities. The Local Government (Manufactured Homes Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005 allows recreation space of less than 10% (but not less than 6%) provided Council consents to the lesser amount.</p> <p>The current application seeks Council support to a communal recreational space of 6.8% for Oasis Resort Caravan Park.</p>
2. Each park shall make provision for children's playground equipment (ie with equipment catering for a range of children's ages) at a rate of 1 children's playground per 200 metre walking distance radius from any dwelling site or camping site.	<p>No children's playground is proposed. If required as a condition of consent a playground could be installed within the open grass areas of the park, however the owners have indicated that there is no demand for children's play equipment at this time.</p>
3. At least one (1) community building (ie designed to function as a multi-purpose centre with kitchen and indoor recreation facilities) is required commensurate with the size and nature of the park.	<p>No community buildings are proposed, however the administration office, restaurant and function centre spaces would be capable of use for community purposes should the demand arise.</p> <p>Given that the restaurant and function centre are not capable of operating in accordance with their consents without significant redesign of the site to provide appropriate parking, these spaces will be vacant and available for use by residents of the caravan park.</p>
4. The provision of other recreational facilities such as tennis courts and / or swimming pools is also encouraged provided such facilities are well lit and are enclosed by suitable enclosure fencing to prevent children gaining entry without parent supervision.	<p>A swimming pool was approved between the administration building and the front boundary, however presently it does not appear that this facility is open to the residents of the caravan park.</p> <p>Insufficient space is available for provision of a tennis court within the proposed site layout, however considering the availability of recreational opportunities within close proximity to the site it is not considered necessary for these facilities to be provided.</p>

ANNEXURE B

ASSESSMENT OF THE PROPOSAL AGAINST WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

Advice	Proposed
6.6 Car Parking	
1. A caravan park or camping ground shall provide a minimum of one (1) resident car parking space per dwelling site or camping site.	The submitted community plan shows one resident parking space for each dwelling site.
2. The parking space for a dwelling or camping site may be provided on-site or off-site (not forming part of the dwelling or camping site boundaries). Any off-site resident parking space must be clearly marked by hard-wearing labelling as a resident parking space attached to the particular dwelling site.	Most dwelling sites have on-site parking, however as the community plan shows, sites 11, 17, 21, 22, 32, 47, 55-59c and 62-65c have off-site parking spaces.
3. A caravan park or camping ground must contain the following minimum visitor parking spaces: (a) 1 visitor parking space for each 10 (or part thereof) long-term sites in the caravan park or camping ground; (b) 1 visitor parking space for each 20 (or part thereof) short-term sites in the caravan park or camping ground; (c) 1 visitor parking space for each 20 (or part thereof) camp sites in the caravan park or camping ground;	The caravan park is required to provide eight visitor parking spaces, as per previous correspondence from Council. The community plan indicates the location of the eight visitor spaces.
4. The minimum number of visitor parking spaces in a caravan park and / or camping ground is 4 visitor parking spaces.	Eight visitor parking spaces are provided.
5. All visitor parking spaces must be clearly identified to ensure that visitors park in those spaces and do not take resident parking spaces.	Visitor spaces are identified as such with paint markings on the ground.
6. The visitor parking spaces should be provided throughout the park, in order to minimise the visitor walking distance to / from dwelling sites and / or camp sites within a park.	Given the size of the park it is reasonable for visitor parking spaces to be provided in a central location. The maximum walking distance to a site is 137m, to site 18.
7. A caravan park or camping ground must also provide at least one (1) visitor parking space for people with disabilities.	One parking space for people with disabilities is provided, as shown on the community map. This space complies with AS2890.1
8. If a caravan park contains more than 100 sites, one (1) parking space for people with disabilities must be provided for each 100 sites or part thereof.	The park does not contain more than 100 sites, therefore only one parking space for people with disabilities is required.

ANNEXURE B

ASSESSMENT OF THE PROPOSAL AGAINST WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

Advice	Proposed
9. The disabled car parking spaces must be provided in accordance with Australian Standard 2890.1 – 2004 Parking Facilities – Off-street Parking and shall be clearly delineated as disabled parking spaces.	The space provided complies with this Australian Standard.
6.7 Development on Flood Liable Land	
1. A flood study will be required to be submitted with a Development Application for any proposed caravan park and / or camping ground upon flood liable land. The flood study is recommended to be prepared by a suitably qualified civil engineer who is experienced in the preparation of flood studies.	A flood study was prepared by Rienco in 2015 and has been submitted with the application.
2. The required flood study must also take into consideration the provisions of Council's Development on Floodplain Management Chapter of this DCP, the NSW Floodplain Management Manual: The Management of Flood Liable Land 2001, the NSW State Government's Flood Prone Land Policy, any relevant State Environmental Planning Policy and Wollongong Local Environmental Plan 2009.	The flood study considered the relevant flood control documents.
3. Any relocatable home proposed upon a dwelling site within a portion of site classified as flood prone (excluding high hazard or low hazard floodway or flood storage areas) shall be designed to withstand the likely flood water velocities as determined by the flood study.	As already discussed, it is proposed that existing structures be structurally certified but remain at the current heights. Any significant modifications or replacement of these dwellings, or new installations will need to comply with the relevant adopted flood height applicable at the time.
4. In the event that Council ultimately supports an application for a caravan park and / or camping ground involving caravans / moveable dwellings upon land classified as flood fringe land, a condition of consent will be imposed requiring the removal of caravans / moveable dwellings up to flood free land, during flood periods.	<p>None of the existing structures on the site are capable of relocation on short notice, ie. They are all fixed to the ground with anchors, chains or other footings.</p> <p>All structures affixed to land in this way will need to be structurally certified to withstand the forces of flood water. For existing developments it is proposed that this be completed through a schedule of works attached to the approval to operate.</p>
5. Council will also require that each site occupant is provided with a flood information map for display in each long-term or short-term site which sets out information on water depths likely to be experienced in the park, public warning procedures in the park, evacuation routes from the park and advice on when to take appropriate action.	This can be a condition of consent.

Rienco Consulting

Providing Specialist Services in the Fields of Hydrology and Hydraulics

Flood Emergency Response Plan

Oasis Resort, 146 Windang road, Windang NSW

Ref: 15011 Report 001 Rev P0 FERP.doc

Rienco Consulting

ABN: 14 000 960 850

PO Box 3094, Austinmer NSW 2515.

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1 INTRODUCTION

1.1 BACKGROUND

Oasis Resort operates a mixed accommodation/tourism business that has been operational for over 35 years. The family of current owners bought the property in 1976 and it has been family owned since that time. The business currently operates 30 short stay motel rooms, 10 short stay cabins, and 50 long stay/permanent homes within the park. There is also an 82 seat restaurant and 160 seat conference centre that currently are not in operation. An operational service station is also located on the property

Recently, Wollongong City Council (WCC) has written to Oasis, and amongst other things, has requested the following:

Submit a comprehensive professional technical floodplain management report prepared by a suitably qualified consulting civil engineer demonstrating how park operations will meet requirements of Clause 6.4.1 - Objectives, Clause 6.4.2 - Performance Criteria of Chapter E13 of the Wollongong Development Control Plan and recognise the applicable Prescriptive Controls within Appendix E of the Lake Illawarra Floodplain Risk Management Study (2012). The report is to include a Flood Emergency Response Plan (FERP). Whilst not limited to, the FERP is to include:

- a) The location of all exits, for any part of the area, building or temporary structure;*
- b) How the residents/visitors and vehicles are to be evacuated from the area, building or structure to a place of shelter outside of the floodplain in the event of a flood;*
- c) Details of a reliable, predictive rainfall and flood warning process including a trigger for evacuation, monitoring of rainfall and flood levels, method of directing patrons to evacuate and available time frame for evacuation with consideration to the rate of rise of floodwaters and implementation of the FERP;*
- d) The management of vehicles on site and how vehicles are to be relocated from the floodplain in a timely and controlled manner prior to evacuation routes being cut off by flood waters;*
- e) A plan mapping details of reliable evacuation routes from the site to a place of sheltered refuge outside of the floodplain;*
- f) Details of the personnel responsible for maintaining and coordinating the flood emergency response process and procedure;*
- g) Details of any ongoing maintenance requirements for equipment/components associated with the flood warning system to ensure that this system will be effective when needed.*

Oasis Resort has engaged Rienco Pty Ltd (us) to review WCC's request and provide the requested information where such information is appropriate and can be provided.

1.2 PURPOSE OF THIS REPORT

In response to this request from WCC, this report has been prepared. It is structured as follows to best respond to WCC's request for information:

- **Section 2** provides background information and sets the flooding context for the report. It summarises the existing flood related affectation across the Oasis site, as documented in the Lake Illawarra Floodplain Risk Management Study (2012).
- **Section 3** responds to the first part of the WCC request, which demonstrates how park operations will meet requirements of Clause 6.4.1 - Objectives, Clause 6.4.2 - Performance Criteria of Chapter E13 of the Wollongong Development Control Plan.
- **Section 4** responds to the second part of the WCC request, which describes the Flood Emergency Response Plan.

1.3 LIMITATIONS

This report has been strictly prepared for the purposes stated in this report for exclusive use by the client. No other warranty, expressed or implied, is made as to the advice included in this report. This study specifically focuses on the quantification of flood behaviour at the subject site, given current conditions. This study does not address flood behaviour for other sites within the overall catchment.

2 BACKGROUND INFORMATION

2.1 CATCHMENT DESCRIPTION

Lake Illawarra is a large coastal lagoon located on the rolling plains between the ocean and the Illawarra Escarpment. The Lake has a catchment area of approximately 35 km² (including its own water area) and rises from ocean level to over RL +700m AHD at the top of the Illawarra escarpment. The catchments land use is a mix of rural, residential, grazing and tourism land uses. The site itself is approximately adjacent to Cudgerie Bay on the eastern side of the Lake. Cudgerie Bay is a known 'reporting' point for flood related information in the Lake Illawarra Flood Study (2001) and Floodplain Risk Management Study (2012), and as such is a useful reference.

2.2 SITE DESCRIPTION

The site is approximately 20,000 m² and is located in Windang, NSW. It is bounded to the east by Windang Road and west by the foreshore of Lake Illawarra. It is further bounded to the north by existing urban development and to the south by scrub known as the Windang Peninsula Heritage Park. **Figure 2.2-1** describes the subject site and its surrounds.



Figure 2.2-1 Site Plan

2.3 SITE SURVEY

Detailed site surveys have been undertaken by KF Williams at multiple periods in time across the subject site. These surveys all provide levels to m AHD and detail all topographic features as well as floor levels of the majority of permanent and temporary structures across the site. These site surveys are included as **Appendix A**.

Additionally, Airborne Laser Scan (ALS) data is available from the NSW's Land and Property Information department. This ALS data is the same data as used by WCC in their LIFPRMS (2012). Where required in this report for levels outside that of the subject site (and the extent covered by the KF Williams survey) this dataset has been used for the purposes of ground levels only.

Figure 2.3-1 below describes the survey from the ALS data for the site and its surrounds. The shaded areas begin at RL +1.0m AHD (green), and go to RL +4.0m AHD (red). Areas below RL +1.0m AHD have not been shaded. As can be seen, the site is quite high relative to its surrounds, and has a significant area at approximately RL +2.0m AHD or above. The site also adjoins a high-point on Windang Road.

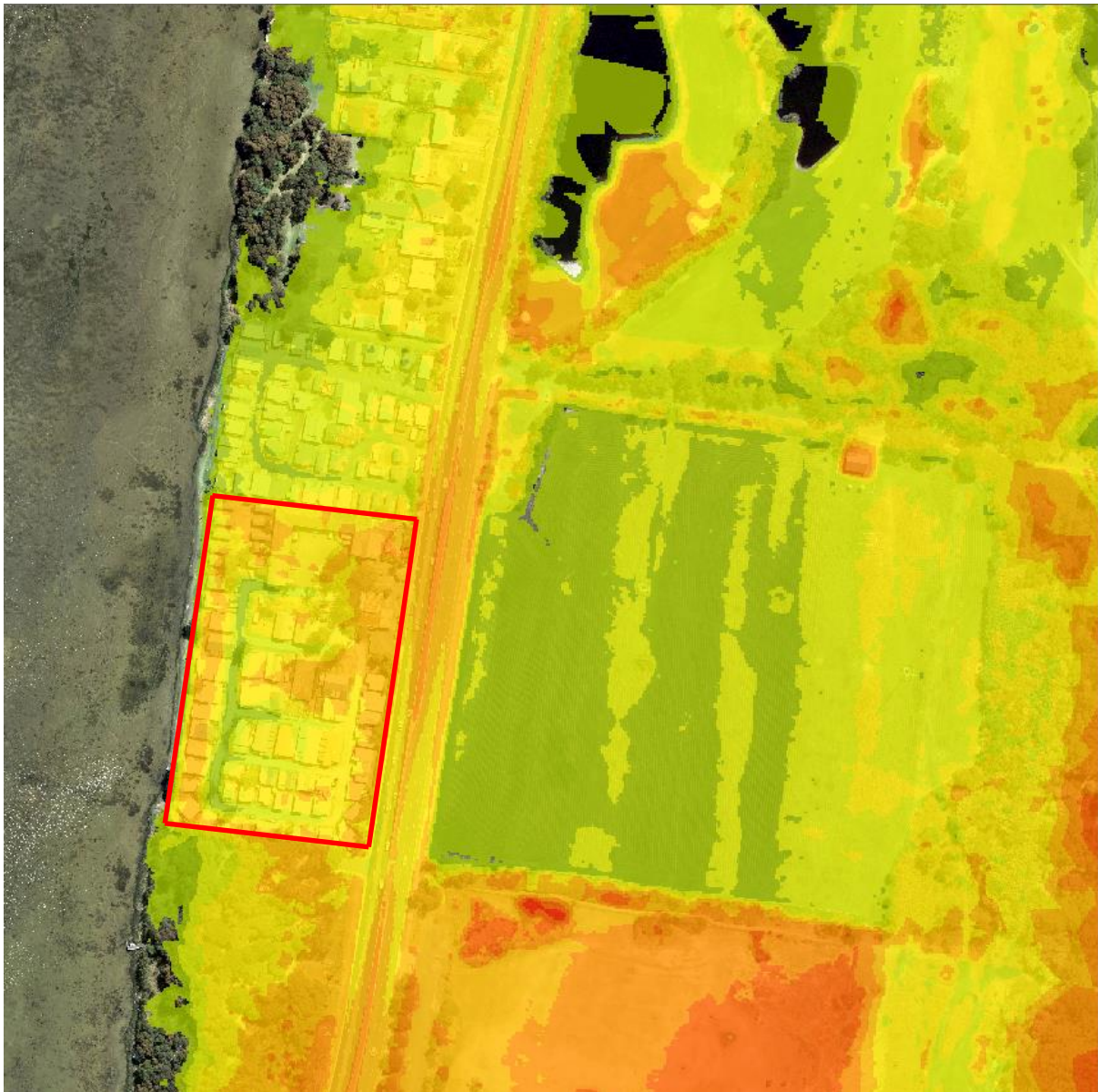


Figure 2.3-1 ALS Survey Details

3 COMPLIANCE WITH COUNCIL POLICIES

3.1 POLICY AND STUDY CONTEXT

Existing flood studies of relevance to the subject site have already been completed on behalf of WCC, as follows:

- Lake Illawarra Flood Study (July 2001)
- Lake Illawarra Floodplain Risk Management Study (January 2012)
- Lake Illawarra Floodplain Risk Management Plan (January 2012)

These studies were prepared for the Lake Illawarra Authority, on behalf of Wollongong City Council and Shellharbour City Council. The July 2001 'Lake Illawarra Flood Study' presents the results of event-based flood modelling of Lake Illawarra and surrounds, based on the Lake conditions in 1997. The January 2012 Lake Illawarra Floodplain Risk Management Study provides a more detailed assessment of flood risk and presents a range of flood management measures. The 2012 Study also considers the effects of climate change.

For clarity in this report:

- The July 2001 'Lake Illawarra Flood Study' is referred to as the 2001 Study.
- The January 2012 'Lake Illawarra Floodplain Risk Management Study' is referred to as 2012 Study
- The January 2012 'Lake Illawarra Floodplain Risk Management Plan' is referred to as the 2012 Plan.

3.2 DETERMINATION OF FLOOD LEVELS

The calculated 100 year flood levels in the 2001 Study relate to pre-2001 entrance works and existing climatic conditions. The 2012 Study considered climate change effects on flood levels resulting from sea level rise and from increases in flood-producing rainfall intensities. The dominant impact on Lake related flood behaviour was sea level rise. The climate-changed 100 year ARI flood levels in the 2012 Study are as follows:

- RL +2.30 m AHD for a 1% AEP event that occurs today (i.e. 2015). Notwithstanding that this flood level relates to the levels prior to the 2001 entrance works being carried out, and since the works were executed the 1% AEP flood levels are now lower. WCC still asks the community to maintain the use of the 'pre entrance works' flood levels due to ongoing funding concerns, which means the community does not get to utilise the benefits of works their rates were used to carry out.
- RL +2.63 m AHD for a 'medium level ocean rise' scenario (sea level of 0.55 m over a 100-year planning period).
- RL +3.04 m AHD for a 'high level ocean rise' scenario (sea level of 0.91 m over a 100-year planning period)
- RL +3.19m AHD for the PMF (which was not updated from the 2001 study).

It should be noted that the current site owners have occupied the site for over 35 years, and have witnessed the major flood events of 1984 and 1998. We also note that the 1984 event was a PMF event in the Dapto area, with an estimate ARI of up to 1 in 10,000 years. The owners advise us that there was minimal inundation across the site in either event, and no flood damages were recorded for either event.

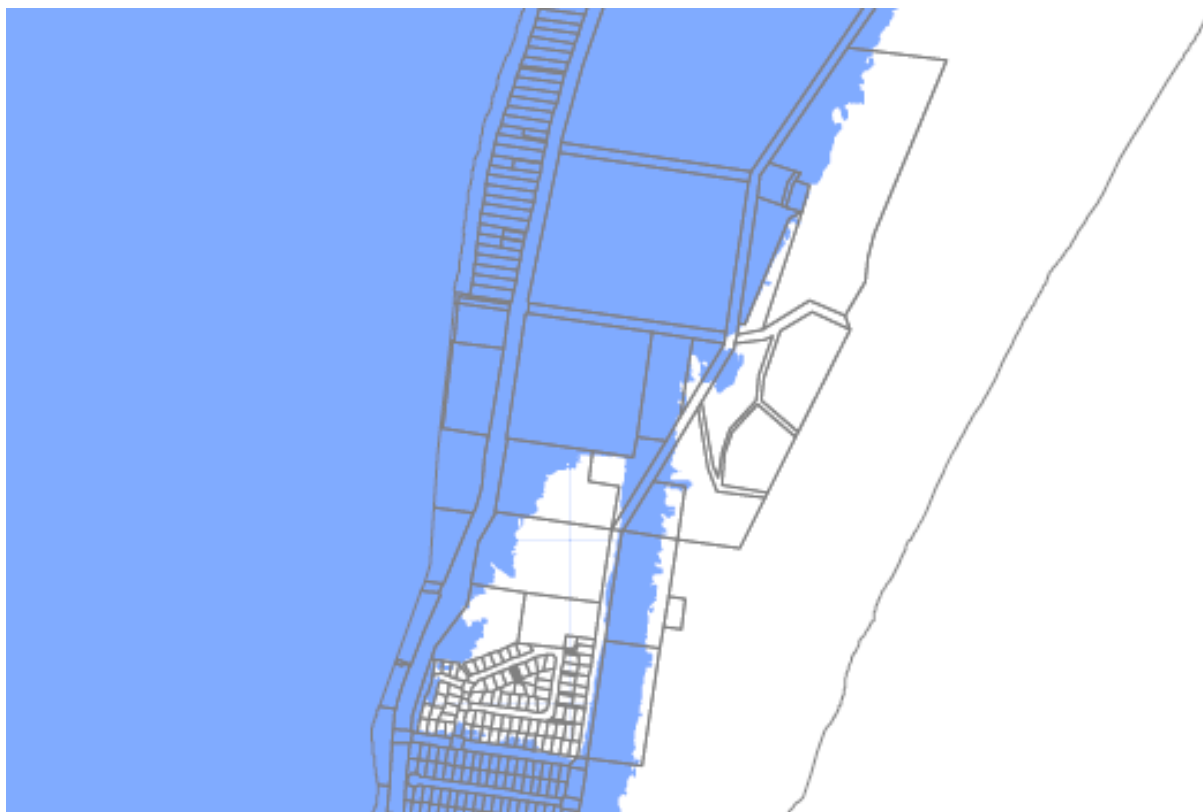


Figure 3.2-1 1% AEP Flood Extents – No SLR

Note: Flood extents mapped as per the 2012 Study.

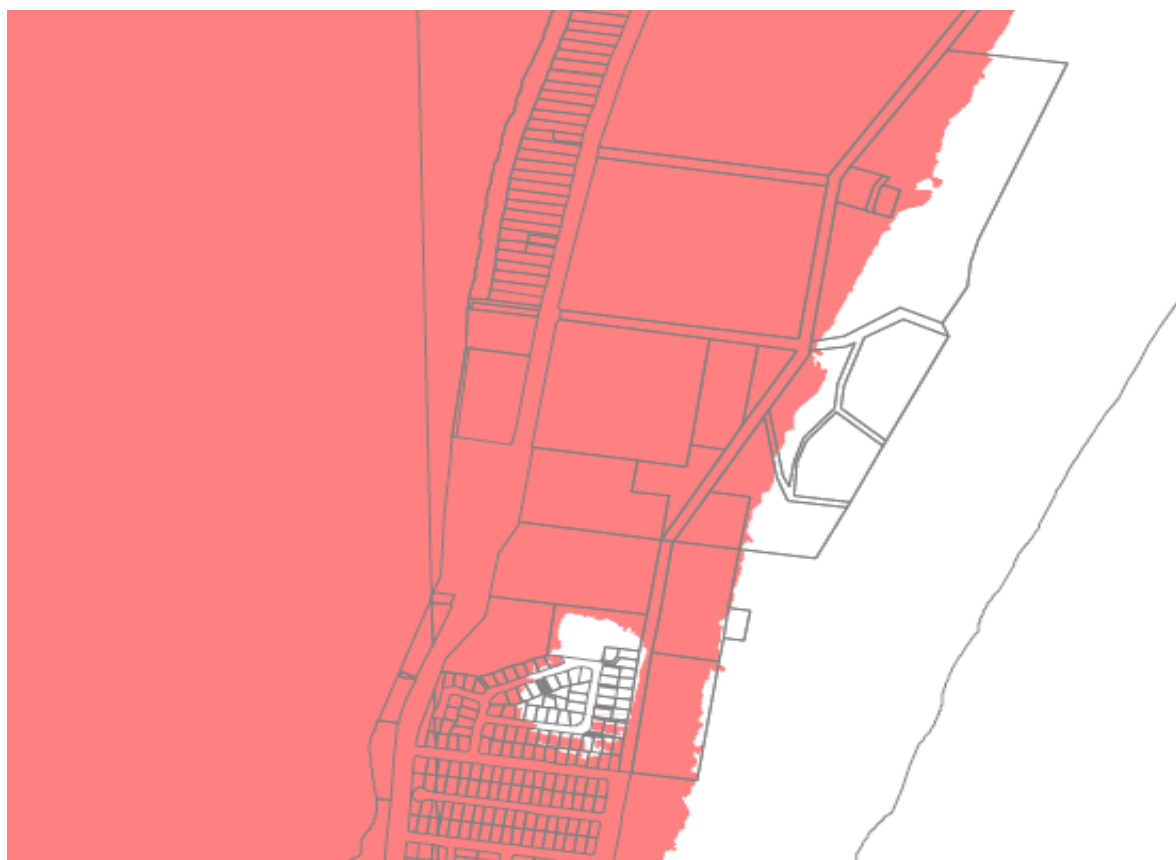


Figure 3.2-2 PMF Extents – No SLR

Note: Flood extents mapped as per the 2012 Study.



Figure 3.2-3 1% AEP Flood Extents under Various SLR Scenarios

Note: Purple is the existing 1% AEP extent, Pink is the 0.18m SLR, Green is the 2050 SLR and Yellow is the 2100 SLR. Taken from the 2012 Study.

3.3 DETERMINATION OF FLOOD HAZARD AND RISK PRECINCTS

The 2012 Plan recommends use of different flood levels in defining flood risk precincts for concessional and non-concessional development, as follows:

- For Concessional Development, use 100 Year ARI flood event with medium sea level rise plus 0.5m freeboard.
- For all Other Development (Non-concessional development), use 100 Year ARI flood event with high sea level rise plus 0.5m freeboard.

Whether or not the Oasis Resort is classified as a short-term or long-term style of development, the DCP matrix categorises both types as non-concessional land uses, so the highrange sea level rise scenario applies (+3.04 m AHD).

This site is Low Provisional Hydraulic Hazard, as detemriend by the 2012 study for the 1% AEP flood event. **Figure 3.3-1** below describes the extent of Provisional Hydraulic Hazard across the site and its surrounds.

Even with the full 2100 SLR taken into account, the site is classified as a Medium Risk Preinct in the Study (2012). **Figure 3.3-2** below describes the extent of Medium Risk Precinct classification across the site and its surrounds.



Figure 3.3-1 1% AEP Provisional Hydraulic Hazard

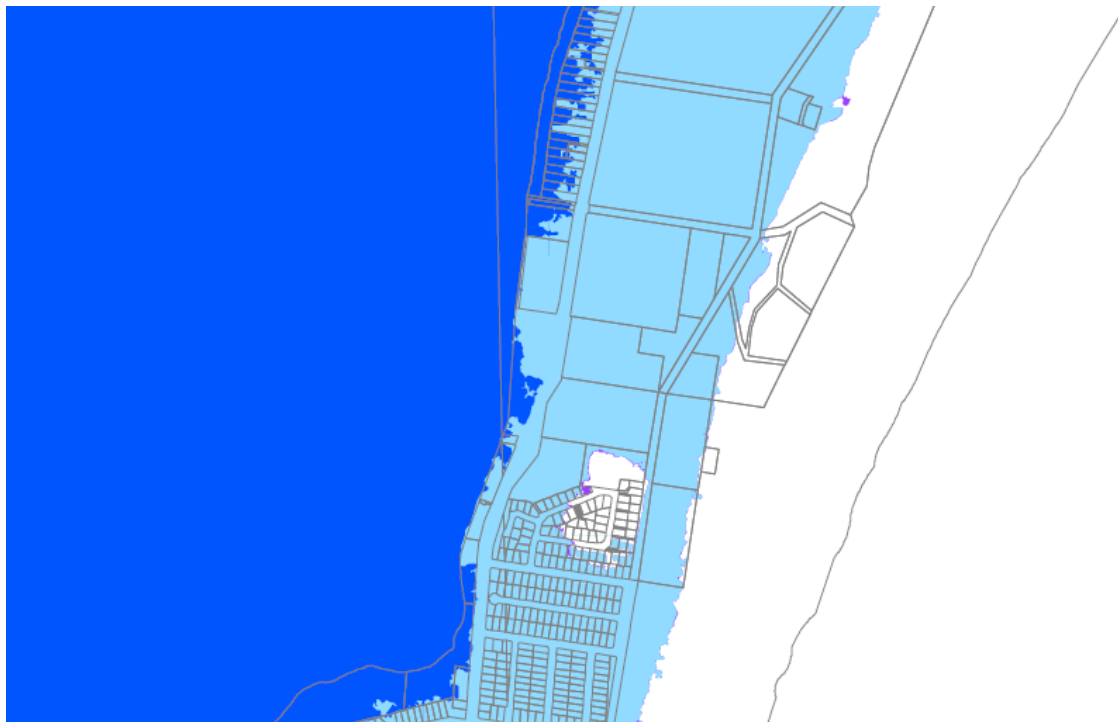


Figure 3.3-2 Flood Risk Precincts with Full 2100 SLR

When using the Study's (2012) Development Control Matrix, and WCC's classification of the site as a Medium Risk Precinct, no matter whether Oasis Resort is classified as a short-term or long-term style of development, it is considered suitable as a development, with controls as outlined in the DCP matrix.

3.4 COMPLIANCE WITH DCP 2009 CHAPTER E13 OBJECTIVES

WCC's DCP 2009 (Chapter E13) sets forth its objectives for all development on the floodplain. **Table 3.4-1** describes each objective, together with comments describing how it can be demonstrated that the Oasis Resort meets those objectives. It should be noted that WCC has requested an assessment on how the existing Oasis Resort complies with objectives and controls for new development. Some interpretation is therefore required when carrying out this assessment.

Table 3.4-1 – Oasis Resort Performance against DCP Objectives

DCP Objective	How the Proposal Meets the Objective
To ensure the proponents of development and the community in general are fully aware of the potential flood hazard and consequent risk associated with the use and development of land within the floodplain	<p>This has been taken to mean <i>the operators of the resort and the community in general are fully aware of the potential flood hazard and consequent risk associated with the use and development of land within the floodplain</i></p> <p>Site management are acutely aware of the flood constraint in Windang. The current owners have been on site for over 35 years and have witnessed the major floods of 1984 and 1998.</p>
To require developments with high sensitivity to flood risk (e.g. critical public utilities) be sited and designed such that they are subject to no or minimal risk from flooding and have reliable access	<p>The Oasis Resort is not classified as a development with a high sensitivity to flood risk.</p> <p>The current operation therefore meets this Objective.</p>
Allow development with a lower sensitivity to the flood hazard to be located within the floodplain, subject to appropriate design and siting controls, provided that the potential consequences that could still arise from flooding remain acceptable having regard to the State Government's Flood Policy and the likely expectations of the community in general	<p>The development is a permissible land use under the WLEP. The site is located within a Medium Risk Precinct, and WCC has classified the existing development as a suitable land use in the DCP matrix. This is still the case even when the full 2100 SLR impacts are taken into account.</p> <p>The current operation therefore meets this Objective.</p>
To prevent any intensification of the use of High Flood Risk Precinct or floodways, and wherever appropriate and possible, allow for their conversion to natural waterway corridors	<p>The Oasis Resort is not classified as a being within a High Flood Risk precinct, nor is any development proposed.</p> <p>The current operation therefore meets this Objective.</p>
To ensure that design and siting controls required to address the flood hazard do not result in unreasonable impacts upon the amenity or ecology of an area	<p>No additional controls for flood related hazards are proposed, except the provision of a FERP. As this is not built form, it cannot impact on the amenity or ecology of an area.</p> <p>The current operation therefore meets this Objective.</p>
To minimise the risk to life by ensuring the provision of appropriate access from areas affected by flooding up to extreme events.	<p>A FERP has been developed to assist compliance with this objective.</p> <p>The current operation therefore meets this Performance Criteria.</p>

It can be seen from **Table 3.4-1** that the existing development meets or exceeds WCC's assessment criteria.

3.5 COMPLIANCE WITH DCP 2009 CHAPTER E13 PERFORMANCE CRITERIA

WCC's DCP 2009 (Chapter E13) sets forth its performance criteria for all development on the floodplain. **Table 3.5-1** describes each objective, together with comments describing how it can be demonstrated that the proposed development meets those performance criteria.

Again, it should be noted that WCC has requested an assessment on how the existing Oasis Resort complies with objectives and controls for new development. Some interpretation is therefore required when carrying out this assessment.

Table 3.5-1 – Oasis Resort Performance against DCP Performance Criteria

DCP Performance Criteria	How the Proposal Meets the Performance Criteria
The proposed development should not result in any increased risk to human life.	<p>This has been taken to mean <i>the continued operation of the resort should not result in any increased risk to human life.</i></p> <p>The existing risk to life under current operations will not increase as there are no proposed changes being nominated by the resort. The current operation therefore meets this Performance Criteria.</p>
The additional economic and social costs which may arise from damage to property from flooding should not be greater than that which can reasonably be managed by the property owner and general community.	<p>This has been taken to mean <i>the economic and social costs which may arise from damage to property from flooding should not be greater than that which can reasonably be managed by the property owner and general community.</i></p> <p>It should be noted that the current site owners have occupied the site for over 35 years, and have witnessed the major flood events of 1984 and 1998. We also note that the 1984 event was a PMF event in the Dapto area. The owners advise us that there was minimal inundation across the site in either event, and no flood damages were recorded for either event.</p>
The proposal should only be permitted where effective warning time and reliable access is available for the evacuation of an area potentially affected by floods. Evacuation should be consistent with any relevant or flood evacuation strategy where in existence.	<p>A FERP has been developed to assist compliance with this Performance Criteria. The current operation therefore meets this Performance Criteria.</p>
Development should not detrimentally increase the potential flood affectation on other development or properties either individually or in combination with the cumulative impact of development that is likely to occur in the same floodplain.	<p>This has been taken to mean <i>the continued operation of the resort should not detrimentally increase the potential flood affectation on other development or properties either individually or in combination with the cumulative impact of development that is likely to occur in the same floodplain.</i></p> <p>The off-site impacts under current operations will not increase as there are no proposed changes being nominated by the resort. The current</p>

	operation therefore meets this Performance Criteria.
Development should not result in significant impacts upon the amenity of an area by way of unacceptable overshadowing of adjoining properties, privacy impacts (eg. By unsympathetic house-raising) or by being incompatible with the streetscape or character of the locality.	<p>This has been taken to mean <i>the continued operation of the resort should not result in significant impacts upon the amenity of an area by way of unacceptable overshadowing of adjoining properties, privacy impacts or by being incompatible with the streetscape or character of the locality.</i></p> <p>The off-site impacts under current operations will not increase as there are no proposed changes being nominated by the resort. The current operation therefore meets this Performance Criteria.</p>
Proposed development must be consistent with ESD principles.	<p>This has been taken to mean <i>the continued operation of the resort must be consistent with ESD principles</i></p> <p>As there are no specific ESD principles relating to the existing operation, it is only reasonable to conclude that the current operation meets this Performance Criteria. If WCC considers there are such ESD principles applicable, then they need to be specifically nominated such that they can be responded to.</p>

It can be seen from **Table 3.5-1** that the existing development meets or exceeds WCC's assessment criteria.

3.6 COMPLIANCE WITH DCP 2009 CHAPTER E13 PRESCRIPTIVE CONTROLS

The Study (2012) sets forth its prescriptive controls for all development on the floodplain. WCC has requested details on how Oasis resort recognises these controls. **Table 3.6-1** describes each prescriptive control, together with comments describing how it can be demonstrated that the Oasis Resort recognises each control.

Table 3.6-1 – Prescriptive Controls for Proposed Development

DCP Prescriptive Control	How Oasis resort Recognises the Prescriptive Control
Floor Level - Habitable floor levels to be equal to or greater than the 100 year ARI flood plus 0.5m (freeboard).	<p>The majority of existing development meets or exceeds this requirement, as shown in Appendix B.</p> <p>The current development largely meets this prescriptive control.</p>
Building Components - All structures to have flood compatible building components below or at the PMF level.	This prescriptive control relates to new dwelling construction and is not reasonable to apply retrospectively to existing development.
Structural Soundness - IEAust NPER Structural Engineers report to demonstrate that any structure can withstand the forces of floodwater, debris & buoyancy up to & including a PMF event.	To be issued under separate cover.

<p>Flood Affection - Reliable access for pedestrians or vehicles is required from the building, commencing at a minimum level equal to the lowest habitable floor level to an area of refuge above the PMF, or a minimum of 20 m² of the gross floor area of the dwelling to be above the PMF level.</p>	<p>Ample refuge is available on site for all park occupants. This is described in Appendix B.</p> <p>The current development meets this prescriptive control.</p>
<p>M&D 1 - Site Emergency Response Flood Plan required (except for single dwelling-houses) where floor levels are below the PMF</p>	<p>This report constitutes such a plan. The current development meets this prescriptive control.</p>
<p>M&D 2 - Applicant to demonstrate that area is available to store goods above the 100 year ARI flood plus 0.5m (freeboard)</p>	<p>There is ample area for goods storage at the required level. This is described in Appendix B.</p> <p>The current development meets this prescriptive control.</p>

4 FLOOD EMERGENCY RESPONSE PLAN

4.1 REQUIREMENTS

WCC's request for information states they require the following information:

- a) The location of all exits, for any part of the area, building or temporary structure;
- b) How the residents/visitors and vehicles are to be evacuated from the area, building or structure to a place of shelter outside of the floodplain in the event of a flood;
- c) Details of a reliable, predictive rainfall and flood warning process including a trigger for evacuation, monitoring of rainfall and flood levels, method of directing patrons to evacuate and available time frame for evacuation with consideration to the rate of rise of floodwaters and implementation of the FERP;
- d) The management of vehicles on site and how vehicles are to be relocated from the floodplain in a timely and controlled manner prior to evacuation routes being cut off by flood waters;
- e) A plan mapping details of reliable evacuation routes from the site to a place of sheltered refuge outside of the floodplain;
- f) Details of the personnel responsible for maintaining and coordinating the flood emergency response process and procedure;
- g) Details of any ongoing maintenance requirements for equipment/components associated with the flood warning system to ensure that this system will be effective when needed.

4.2 REQUIREMENT FOR A FLOOD WARNING SYSTEM

The Study (2012) reviewed many different ways of mitigating the impacts of flooding on the community, ranging from further large-scale entrance works to voluntary house raising. The Study recommended that the development of a FWS that provided access to the entire community be provided by WCC and SCC under the Plan (2012). Subsequently, the recommendations under the final Plan (2012) state that *it is recommended that the current flood warning system in place at the Caravan Park areas be expanded to be publicly accessible and to allow residents to register for an email or SMS alert.*

This was not always the case, and throughout the development of the final 2012 Study and Plan, it was originally WCC's position that a detailed FWS be developed for all residents in Lake Illawarra. Such a system was fully scoped for another private development in Windang and costed at ~\$200,000 (Barthelmess & Nichols, 2008). In this instance, the developer offered to design and construct the FWS, and hand it over to WCC and/or SES and/or LIA, such that all of the Lake Illawarra catchment could benefit from it. All government agencies refused to take ownership of the system, despite it (at the time) being recommended under the Study and fully funded by the developer.

However, in the years that have elapsed, the recommendations under the different versions of the Study have changed. After due consideration by WCC, it was determined that such a detailed FWS was not worthy of implementation and the recommendations in the Study (2012) are that:

Detailed consideration of expanding the current Caravan Park flood warning system to an email or SMS flood information service for all residents in the floodplain.

Given the above, if WCC deem it unnecessary to have a detailed FWS available to all residents in the catchment, and are comfortable with merely 'considering' a simple SMS 'alert' system, then it is unreasonable to require that a local business implement a *reliable*,

predictive rainfall and flood warning process including a trigger for evacuation, monitoring of rainfall and flood levels, method of directing patrons to evacuate and available time frame for evacuation with consideration to the rate of rise of floodwaters. This request is inconsistent with WCC's own adopted Study (2012), even more so when considering a FWS (nor a basic 'alert' system) is not required for new similar development under the Study (2012).

It is therefore unclear as to why WCC have now requested that the Oasis Resort develop yet another privately owned FWS, considering considering:

- a) WCC have made it a medium priority in their Plan (2012) to develop a flood 'alert' system that would allow Oasis Resort direct access.
- b) The capital costs of a FWS are high, with WCC's own estimates being \$15,000 up front and \$10,000 annual to maintain for a basic alert system. It is our view these costs are well under that required to develop a suitable FWS for public access, with our estimates being in the order of \$200,000 (Barthelmess & Nichols, 2008).
- c) Any capital spent on developing the system would be wasted, as soon as WCC implement their 'alert' system.
- d) If the oasis Resort were a new development proposal, it is a permissible land-use under Wollongong Council's LEP. Further, when considering it as a new proposal under the DCP matrix in the Study (2012), the site is a Medium Risk Precinct and the development is deemed suitable for the site by WCC (subject to adequate controls being met as per the DCP matrix). Interestingly, a FWS is not required under these controls. We would contend that if a FWS is not required for new, identical development on the site, a FWS should not be required retrospectively.

We recommend WCC revisit their requirements for a FWS at Oasis Resort.

4.3 DEVELOPMENT OF A FLOOD EMERGENCY RESPONSE PLAN

The following Trigger Action Response Plan is proposed as the sites Flood Emergency Response Plan. It has been developed based on the information contained in the Study (2012) and a review of other, similar FERP's from (for example) Oaklands Caravan Park.

Table 4.3-1 – FERP Trigger Action Response Plan

Observational Triggers	Normal	Level 1	Level 2
Monitor Lake Levels	Lake Level under RL +1.0m AHD	Lake Level above RL +1.0m AHD and under RL +1.3m AHD	Lake Level above RL +1.6m AHD and trending higher
Monitor Rainfall and Forecasts	Not raining, or no more than 100mm forecast within a 24 hour period	Received 100mm of rainfall, more forecast over next 24 hours.	Received 200mm of rainfall, more forecast over next 24 hours.
Inundation On Site	No inundation from Lake	No inundation from Lake, very minor (still trafficable) inundation on Windang Road, closer to Windang centre.	Beginnings of inundation from Lake, Windang Road starting to be inundated closer to Windang centre.

Actions			
Site Manager	Continue to monitor observational triggers	Continue to monitor observational triggers. Notify resident via door-knocking that minor flooding in Windang expected, no flooding across the site will occur. Request residents stay in their homes as a preference to travelling off site where roads may be inundated.	Continue to monitor observational triggers. Notify resident via door-knocking that minor flooding in Windang expected, possible flooding across the site will occur. Request residents stay in their homes or other buildings on site with a second storey as a preference to travelling off site where roads may be inundated. Respond to any direction from the SES.

No evacuation should be required for existing residents. There is ample room to shelter in place on site, and the isolation plans contained in the Study (2012) show that residents are only 'isolated' from accessing Windang Road and other areas in Windang for no more than 4 hours in a 1 in 100yr event. Nearly every road in the Wollongong LGA would be impassable for a similar duration during such a major flood, which makes this site no different from the majority of the LGA. A plan showing ample shelter in place refuges for the 1% AEP and PMF events is shown in **Appendix B**.

The observational triggers are readily determinable from the real-time data provided by Manly Hydraulics laboratory (MHL). There are a multitude of rainfall recorders around the Lake, as well as several Lake water surface level recorders. This can be readily changed to align with WCC's SMS 'alert' system when it is implemented in line with its Study (2012).

4.4 OTHER FERP INFO REQUESTED BY WCC

Additional information, not addressed elsewhere in this report, has been requested by WCC in relation to flood emergency response. **Table 4.4-1** identifies each request, together with the provision of information satisfying WCC's concerns.

Table 4.4-1 – Additional FERP Information

Request for Information	Provision of Information
The location of all exits, for any part of the area, building or temporary structure;	A plan of the requested information is included as Appendix A .
How the residents/visitors and vehicles are to be evacuated from the area, building or structure to a place of shelter outside of the floodplain in the event of a flood;	Evacuation is not necessarily the preferred option, as there is ample 'shelter in place' PMF free refuge available on site for all residents (see plan in Appendix B). The need to evacuate is also not required under the DCP Matrix for new, similar development in Windang.

<p>The management of vehicles on site and how vehicles are to be relocated from the floodplain in a timely and controlled manner prior to evacuation routes being cut off by flood waters;</p>	<p>The removal of vehicles from the floodplain is not a development control placed on any development in Windang. To ask residents to relocate their cars, then (for example) walk back to their homes at Oasis entails hazards and risks not able to be quantified.</p>
<p>A plan mapping details of reliable evacuation routes from the site to a place of sheltered refuge outside of the floodplain;</p>	<p>Evacuation is not necessarily the preferred option, as there is ample 'shelter in place' PMF free refuge available on site for all residents. The need to evacuate is also not required under the DCP Matrix for new, similar development in Windang.</p> <p>It is acknowledged in the Wollongong Local Flood Plan (SES, 2010) that <i>the nature of flooding experienced in the Wollongong area is that of flash flooding so evacuations will typically be small in number and isolated but be required at very short notice.</i></p> <p>Further, in Wollongong Council's request to the Department of Planning for an exemption to the recent Section 117 direction, their primary argument for the exemption was:</p> <p><i>Wollongong's catchments have short response times which as a result, provide little to no warning time for residents to take appropriate action to save themselves and their possessions. The August 1998 storm event was the latest example to prove that again. In consultation with the SES, Council has adopted the approach that it is safer for occupiers to remain in their dwellings for the duration of the event (unlikely to be longer than two hours)</i></p> <p>This recent WCC request seems unreasonable given the SES has a stay in place policy, as does Council.</p>
<p>Details of the personnel responsible for maintaining and coordinating the flood emergency response process and procedure;</p>	<p>The site manager has been assigned actions and responsibilities under the FERP TARP.</p>
<p>Details of any ongoing maintenance requirements for equipment/components associated with the flood warning system to ensure that this system will be effective when needed.</p>	<p>No ongoing requirements, with the exception of continued internet access.</p>

5 CONCLUSIONS AND RECOMMENDATIONS

Based on the information contained within this report, it can be concluded that:

- WC has written to Oasis Resort management seeking further information and additional work be carried out, in relation to flood emergency planning for the Oasis Resort complex.
- WCC's 2012 Study and Plan describes flood levels, flood hazard and flood risk precincts across the subject site. Such information has been extracted and presented in this report for the subject site.
- Were the development to be submitted to WCC in 2015, and purely related to flooding issues:
 - The site is permissible from the zoning in the WLEP.
 - The site is a medium flood risk precinct as determined by WCC's 2012 Study and Plan.
 - The development would be categorised as suitable based on the Development Control Matrix in the 2012 Study.
 - The development meets or exceeds the Objectives and Performance Criteria of WCC's DCP 2009 (Chapter E13).
 - The development generally meets or exceeds the Prescriptive Criteria in the 2012 Study (which relates to new development and should not be retrospectively applied).
- A Flood Warning System (FWS) has been requested by WCC, but this request appears unreasonable as:
 - WCC's own Study and Plan (2012) have stated that a FWS is not required for the Lake (nor any resident within its catchment), and has recommended to stick with the existing 'SMS Alert' network only.
 - Such a request is therefore inconsistent with WCC's 2012 Study and Plan.
 - Such a FWS is not a requirement of any new development in the Wollongong LGA. It is not required under any LEP or DCP. If a DA was lodged in 2015 to replicate the existing development as new, a FWS would not be required.
- Nonetheless, a Flood Emergency Response Plan has been developed and is presented in this report.
- All other matters in WCC's request for information have been addressed comprehensively in this report.

Based on the information contained within this report, it is recommended:

- This report be submitted to WCC to address their concerns described in their recent correspondence.

Prepared by:



Anthony Barthelmess
Dip. Eng, MEng (Civil) MIEAust
Managing Director

APPENDIX A – SITE PLAN OF EXITS FROM BUILDINGS



Figure Showing Entries and Exits from Main Buildings. Red star denotes exit location. All homes have exits (not shown for clarity)

APPENDIX B – ASSESSMENT OF FFL's AND FLOOD LEVELS



Extent of 1% AEP Refuge On-Site. Green Shading denotes existing FFL above the 2015 1% AEP flood level. Yellow star denotes PMF free FFL in the 2015 scenario.

41 Burelli Street Wollongong • Post Locked Bag 8821 Wollongong NSW 2500 • Phone (02) 4227 7111 • Fax (02) 4227 7277
DX 27811 Wollongong Court • Email council@wollongong.nsw.gov.au • Web www.wollongong.nsw.gov.au • ABN 63 139 525 939 - GST Registered



013

I & H Investments Pty Ltd
C/- Oasis Caravan Park
140-146 Windang Rd
WINDANG NSW 2528

Approval		CP-2003/4
Approval Type	Caravan Park/Camping Ground	
Date	7 August 2009	

Dear Sir/Madam

Application for Renewal to Operate Caravan Park


Council's records indicate that your caravan park/camping ground approval will expire on 31 August 2008.

Location	Lot 2 DP 610406
	Oasis Caravan Park, 140-146 Windang Road, WINDANG NSW 2528

Please find enclosed an Application for Renewal to Operate a Caravan Park/Camping Ground. Please verify all details on the form, attach your fire hose reel certificate in accordance with Clause 129 of the Regulation and return to Council's Environment and Health Division by 1 September this year.

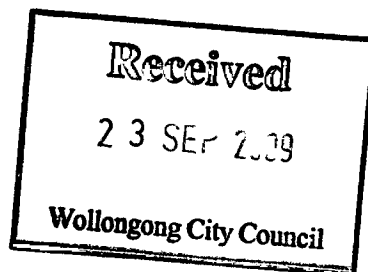
An inspection will be carried out on your premise after the Renewal to Operate form has been received by Council. Your early attention to the above matter would be appreciated. For further information please contact the officer whose name and telephone number appears below.

Yours faithfully



Michele Hyde
Customer Service Officer
Wollongong City Council
Direct Line (02) 4227 7737

enc



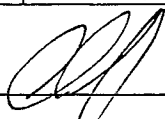
APPLICATION FOR RENEWAL TO OPERATE CARAVAN PARK

Name of Complex OASIS BY THE LAKE
Location of Complex Oasis Caravan Park, 140-146 Windang Road, WINDANG NSW 2528
Details of Applicant(s) I & H Investments Pty Ltd
Phone/Email/Fax C/- Oasis Caravan Park, 140-146 Windang Rd, WINDANG NSW 2528
Details of Land Owner Error! Not a valid filename.
I & H Investments Pty Ltd
C/- Oasis Caravan Park, 140-146 Windang Rd, WINDANG NSW 2528

FACILITIES PROVIDED

	Joint Facilities (where shared by long and short term residents)	FOR EXCLUSIVE USE OF		
		LONG TERM RESIDENTS	SHORT TERM RESIDENTS	
		Long term sites	Short term sites	Camp sites
Number of sites and camp sites	72	32	31	9
Community Map provided	Y			
Fire Hydrant/Hose Reel Map	N			
Communal Facilities				
Toilets				
Female	7			
Male	5			
Urinals	3			
Disables	1			
Showers				
Female	6			
Male	6			
Handbasins				
Female	7			
Male	7			
Laundry				
Washing Tubs	5			
Washing Machine	2			
Clothes Drier	2			
Line Space	Y			
Ironing Facilities	From Reception			
Irons				
Ironing Boards	AS ABOVE			

Signature of Applicant



Date

22/9/09



BUSHFIRE RISK ASSESSMENT

**Additional Long-term Sites and Amended
Community Layout
at Oasis Resort Caravan Park**

Lot 2 DP 610406
146 Windang Road
Windang 2528

7 July 2017
Reference: L103385



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SET Consultants Pty Ltd

51 Graham Street Nowra 2541

Tel: (02) 4421 4500

Mail: mail@setconsultants.com.au

BUSHFIRE RISK ASSESSMENT

Additional Long-term Sites and Amended Community Layout at Oasis Resort Caravan Park

LOT 149 AND 153 DP 755972 PRINCES HIGHWAY LAKE TABOURIE 2539

Prepared By:



David Cannon (M.Env.Eng.Sc, Grad Dip (Bushfire Protection), B.Env.Sc.Adv (Hons 1))
Environmental Engineer
BPAD (Level 3) Certified Practitioner BPD-PD-23829



Peter Dowse (B.Sc)
Environmental Scientist

Date: 24 August 2017

This report has been prepared for I & H Investment to accompany a development application to increase the number of long-term dwelling sites and to amend the community layout over Lot 2 DP610406, No. 146 Windang Road Windang. The report has been prepared in accordance with the scope of services provided by Mr. S Fripp.

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Attachments

- Attachment 1 Community Map
- Attachment 2 Bushfire Model
- Attachment 3 Bushfire Mitigation Plan
- Attachment 4 Construction Standards
- Attachment 5 Fire Safety Assessment Report

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1 INTRODUCTION

This report has been prepared by SET Consultants Pty Ltd for I & H Investments. This Bushfire Risk Assessment is to accompany a development application to Wollongong City Council seeking consent to an increase in the number of long-term dwelling sites and amended community layout over Lot 2 DP 610406, known as No. 146 Windang Road, Windang (subject site).

Wollongong City Council's Bushfire Prone Land Map indicates the subject site is bushfire prone (*Figure 1*). For this assessment, the proposal is considered alterations and additions to an existing tourist facility (i.e infill development) and therefore is classified as a 'Special Fire Protection Purpose' development. It should be noted that Alterations and Additions to existing SFPP's (i.e approved prior to 1st August 2002), including their external appearance or finish, which may involve an increase in size and footprint of the building or redevelopment of an existing building, are considered to be infill development.

The proposal is integrated development under *Section 91* of the *Environmental Planning and Assessment (EP&A) Act 1979* and requires a Bush Fire Safety Authority under *Section 100B* of the *Rural Fires (RF) Act 1997*. This Bushfire Risk Assessment has been prepared in accordance with *Clause 44* of the *Rural Fires Regulation 2013*, which specifies the information requirements for consideration of a bush fire safety authority under section *100B* of the RF Act 1997.



Figure 1: Wollongong City Council Bushfire Prone Land Map. The subject lot is outlined in green.

The assessment of the site is based on the results of a field survey conducted by Mr Peter Dowse and Mr David Cannon on 1st August 2017. The following current legislation and guidelines were referred to when preparing this report:

- *Planning for Bushfire Protection, A Guide for Council, Planners, Fire Authorities and Developers' (NSW Rural Fire Service (RFS) in cooperation with the Department of Planning (2006);*
- *Rural Fires Act 1997;*
- *Australian Standard 3959-2009 Construction of Buildings in Bushfire Prone Areas; and*
- *Rural Fires Regulation 2013.*

NOTE: that the 'Planning for Bushfire Protection, A Guide for Council, Planners, Fire Authorities, and Developers (NSW Rural Fire Service (RFS) in cooperation with the Department of Planning (NSW) (2006)' mentioned above, will herein be referred to as the '**PBP 2006**'.

1.1 Background

A search of Council's development files relating to the subject site reveals a long development history, including the following list of applications:

- 55/222 – Dwelling house – approved
- Min 402 (1956) – Service Station – approved conditionally
- Min 36 (1957) – Holiday Camping Area – approved conditionally
- 56/S495 – Closets and Showers for Caravan Park – approved
- 57/815 – Service Station and Shop – approved conditionally
- 59/309 – Shop – REFUSED
- Additional Petrol Pump – approved 1959
- 59/1311 – Additions – approved
- 64/1380 – Additions to Service Station – approved
- 64/2461 – Extensions to Shower and Laundry – approved
- 68/299 – Service Station – approved
- 70/263 – Brick Veneer Existing Dwelling – approved conditionally
- 70/2886 – Shop and Flat – approved conditionally
- 71/2375 – 11 Motel Units – approved conditionally
- 73/288 – Carport/Awning for Service Station – approved
- 75/56 – Car Sales Yard – REFUSED
- 77/1329 – Amenities Building – approved
- 78/1079 – Addition of 10 Motel Units to Caravan Park – approved conditionally
- 79/1360 – Caravan Park Additions (10 Motel Units) – approved
- 79/532 – New Awning to Existing Service Station – approved conditionally
- 79/1494 – Awning to Service Station – approved
- 80/386 – Swimming Pool – approved
- 80/1238 – Swimming Pool – approved
- DE80/68 – Advertising Sign – approved
- 82/410 – Underground Fuel Storage Tank – approved conditionally
- 83/6 – Advertising Sign – approved
- 85/679 – Advertising Sign – approved
- 86/187 – Extensions to Motel – approved conditionally
- 86/187(am) – Amended Consent – approved conditionally

- 88/1186 – Erection of Marquee – current application
- 89/34 – Extension of Motel and Conference Facilities – approved
- 93/296 – Alterations and Additions to Oasis Resort – approved

To determine the development history a number of GIPA requests were submitted, however it appears that Council's development records of earlier consents were incomplete. The earliest consent provided from the file at the time of writing this report is D69/268, which applies to Lot B DP 106403. Lot B includes part of the southern section of what is now Lot 2. Lot 2 was registered in 1977 as a subdivision of Lot A and part Lot B in DP 406403. The subdivision was undertaken to create a public reserve lot along the waterfront adjacent to Lot 2, which was dedicated to Council.

Copies of the 1956 and 1957 consents have not been able to be located. The first DA available on Council's files relating specifically to Lot 2 is from 1986 (D86/187), which approved extensions to the motel. This application refers to the existing motel, service station, approved caravan park (161 sites) and dwelling house.

The 1986 consent to motel extensions related primarily to the motel, restaurant and conference centre, requesting consent to a restaurant (seating capacity of 60), 10 new motel rooms (resulting in a total of 30 motel rooms) and a conference centre (seating capacity of 50). The conditions of consent required a total of 73 parking spaces be provided on the site.

The 1988 consent was for a marquee to be used for wedding receptions, social functions and school excursions. This consent required parking for a total of 117 cars to be provided along with two coach parking bays on the eastern side of the amenities building. It also stipulated that the marquee was not to be used when the 'central grassed area was in use for camping'.

The 1989 consent to further extensions of the motel, additional conference rooms (function centre), a tennis court, upgrades to the service station and landscaping was partially approved. The conditions of consent required 129 car parking spaces to be provided.

The last consent on Council's file relates to alterations and additions and specifically to the use of the function centre, in 1993, required that overflow parking be available on the grassed areas at the centre of the site, as shown on the approved plans (Figure 1). The function centre is noted as 'not to be used while the area is in use for camping, or when the marquee approved in DA88/1186 is erected'.

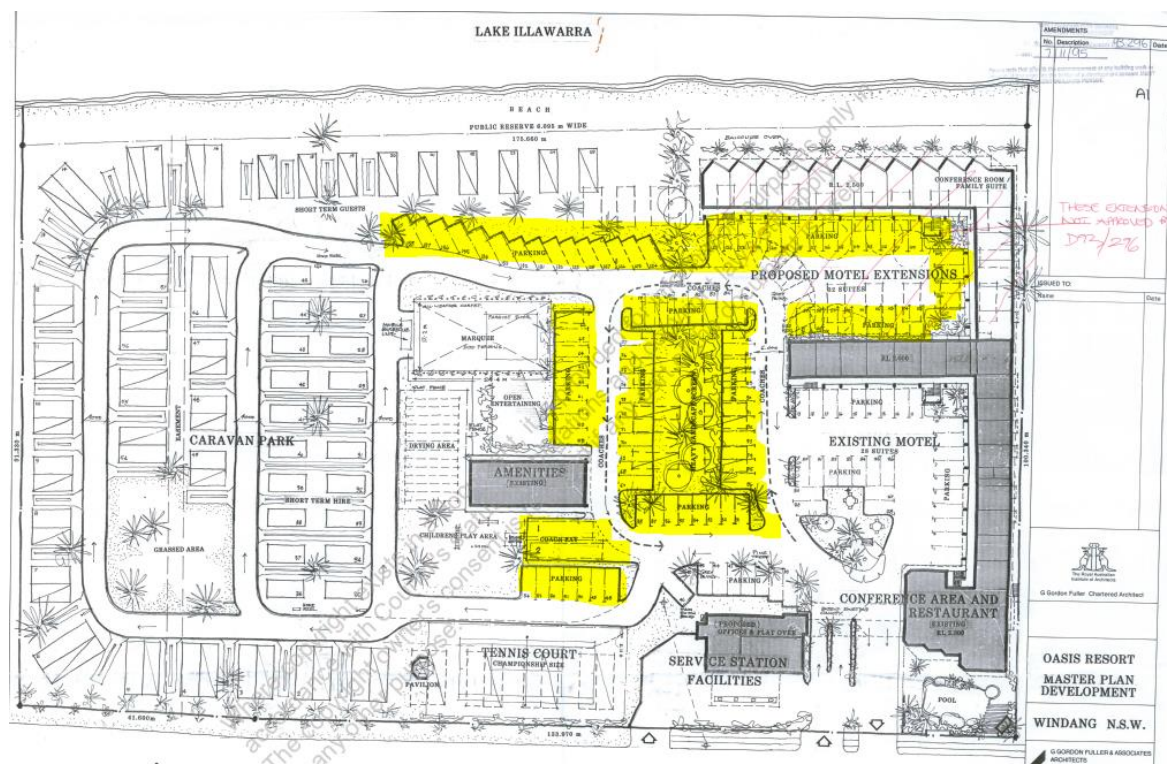


Figure 2: Stamped plans approved under DA93/296 showing the parking areas to be provided for the function centre, restaurant and motel

In addition to the development consents relating to the caravan park, the Local Government Act requires caravan parks to obtain an approval to operate under Clause 68 F (2). Oasis Resort Caravan Park had obtained these approvals through Council as required until 2008/2009 when Council became aware that the development within Oasis Resort extended into Council land along the Lake Illawarra foreshore. Council informed the owners of the park that they would not renew/extend the approval to operate until such time as a lease arrangement over the Council owned land was established. A letter from Council, dated 1 October 2009 stated that a lease agreement would be negotiated following the reclassification of the land to operational. The reclassification process was not completed prior to the lapsing of the approval to operate.

Numerous applications since 2009 have been made to Wollongong City Council for a new approval to operate, however each application has been refused or required to provide additional information that would not have been necessary had the approval to operate not lapsed.

The development history of the site is incomplete, however it appears that the first consent for the use of the land as a tourist facility was back in 1957, when a holiday camping area was approved. In 1956 a consent was issued for an amenities building within a caravan park (therefore sometime between 1956 and 1957 the defined use of the park changed). In addition to consent for the use of land under the EPA Act 1979, caravan parks are also required to hold an approval to operate under the LG Act 1995 (Clause 68 F (2)). Oasis Resort Caravan Park had obtained these approvals through Council as required until 2008/2009 when Council became aware that development within Oasis Resort extended into Council land along the Lake Illawarra foreshore. Council informed the owners of the park that they would not renew/extend the approval to operate until such time as a lease arrangement over the Council owned land was established. A letter from Council, dated 1 October

2009 stated that a lease agreement would be negotiated following the reclassification of the land to operational. The reclassification process was not completed prior to the lapsing of the approval to operate.

A new development application has therefore been lodged to regularise the use of the park and support the application for an increase to the number of long-term designated dwelling sites within the park from the previously approved (under the LG Act 1995) 32 long term, 32 short term to the proposed 61 long-term, 2 short-term dwelling sites.

As part of the development assessment the proposal needs to be referred to the Rural Fire Service as the land is mapped as bushfire prone on the LEP maps (Figure 2). As the mapping shows, the bushfire threat to the property is coming from the Windang Peninsula Heritage Park.

The existing (and proposed) development footprint extends right up to this southern property boundary. This layout was approved by Council under the approvals to operate as recently as 2008/2009. The homes along this boundary are however in the flame zone, as indicated in Figure 3.



Figure 3: Aerial photograph of the site in 2014 showing the bushfire threat on Council's property to the south

The neighbouring property is Council owned, and has been regenerated/revegetated significantly since the original tourist development was approved on the site in 1957 (Figure 4). While it is recognised that in 1977 the dwelling sites along the southern boundary did not have permanent structures installed, permanent structures were in place before the revegetation was allowed to occur. Windang Peninsula Heritage Park was established in 1996.



Figure 4: Aerial photograph of the site and neighbouring Windang Peninsula Heritage Park in 1977

1.2 OBJECTIVES

All development on Bushfire Prone Land must satisfy the aim and objectives of *PBP 2006*. *PBP 2006* states:

"The aim of PBP is to use the NSW development assessment system to provide for the protection of human life (including firefighters) and to minimise impacts on property from the threat of bushfire, while having due regard to development potential, on-site amenity and protection of the environment."

More specifically, the objectives are to:

- a) afford occupants of any building adequate protection from exposure to a bushfire;*
- b) provide for a defensible space to be located around buildings;*

- c) provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent direct flame contact and material ignition;*
- d) ensure that safe operational access and egress for emergency service personnel and residents is available;*
- e) provide for ongoing management and maintenance of bushfire protection measures, including fuel loads in the asset protection zone (APZ); and*
- f) ensure that utility services are adequate to meet the needs of firefighters (and others assisting in bushfire fighting).*

For tourist development the biggest challenge is evacuation of people who may have no comprehension of the danger or knowledge of the area in which they find themselves. The specific objectives in relation to tourist developments are to:

- Provide for the special characteristics and needs of occupants. Occupants may be less educated in relation to bush fire impacts, they may have reduced capacity to evaluate risk and to respond adequately to the bush fire threat and they may present organisational difficulties for evacuation and or management. Tourists staying in tourist accommodation have been known to evacuate late or travel down inappropriate roads with fatal results.*
- Provide for safe emergency evacuation procedures. Tourist developments are highly dependent on suitable emergency evacuation arrangements, which require greater separation from bush fire threats. During emergencies, the risk to firefighters and other emergency services personnel can be high through prolonged exposure, where door-to-door warnings are being given and exposure to the bush fire is imminent. A better strategy may either be staying within a resilient building as a refuge or having coordinated escorted evacuation.*

In circumstances where alterations or additions to existing SFPP's facilities are proposed, the RFS requires an appropriate combination of bush fire protection measures and compliance with the intent and performance criteria of each measure within section 4.3.5 of PBP 2006. However, it is also acknowledged that existing circumstances may make the preferred standards difficult to achieve. In such cases, the specific objectives in Section 4.2.3 of PBP 2006 are to be followed. This type of development should also seek to achieve a better bush fire risk outcome (such as improved construction standards) than if the development did not proceed. The new building work should comply with AS 3959 - 2009 or be no closer to the hazard than the existing building. Existing facilities such as water supply should also be upgraded.

This assessment includes an analysis of the potential hazard persisting and affecting the subject site and the standards and bushfire mitigation measures that should be introduced to address the objectives of the *PBP 2006* and *AS3959-2009*. The mitigation measures have been derived from the provisions (performance criteria and acceptable solutions) as outlined within the *PBP 2006* and *AS3959-2009*.

1.3 PROPOSAL

This development application aims to address outstanding issues relating to the number of long and short-term sites proposed within Oasis Resort Caravan Park with the aim to bring current operations into line with an operational consent and allow Council confidence in granting an approval to operate. This development application seeks consent to the increased number of long term sites and an approval under Section 68 of the Local Government Act 1993 to operate a caravan park.

While the previous consents for the caravan park do not appear to set a maximum of short or long-term sites within the park, the last approval to operate approved 32 short term, 32 long term dwelling sites and 9 camping sites. Council have indicated that they are not willing to approve any more than 32 long term sites on the site without prior development consent. The current proposal includes an application for 61 long term and 2 short term dwelling sites, as shown on the Community Map (reproduced Figure 2).

All sites, short and long term, within the park are to be designated only for 'self-contained' dwellings. The communal shower and toilet facilities currently in the centre of the park will then be locked, leaving only laundry facilities open for communal use. Currently all existing dwellings within the park are self-contained dwellings, therefore no upgrading works are required to comply with this proposal.

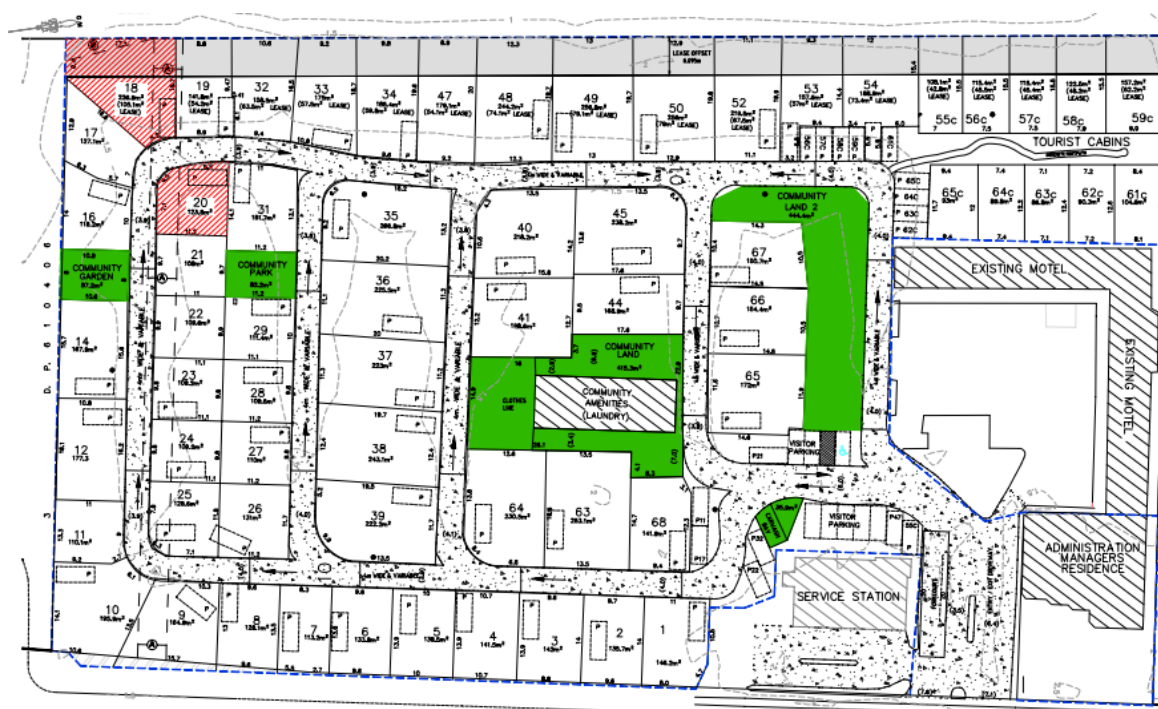


Figure 5: Community Map of Oasis Resort Caravan Park showing designated short-term sites hatched red. Note that the motel and service station are considered 'separate' entities to the caravan park despite being located on the same parcel of land.

It is noted that sites 44, 45, 47-50, 52-54, 55c – 59c, 61c – 65c, 63, 65, 66, 67 and 68 all occur over the parking spaces associated with DA/296 and sites 40, 41, 44 and 45 occur over land approved for the installation of a marquee under DA88/1186 (highlighted yellow in Figure 2). As a result, it is proposed that as part of this application DA88/1186 (marquee) be surrendered and the function

centre and restaurant continue to not operate until they are able to comply with the parking provisions included in the consents. The motel units are provided with 30 parking spaces outside the caravan park operational boundary and it is intended that the motel units continue operating as a tourist facility, as approved.

In addition to the application for development consent and an approval to operate, the operational boundary of Oasis Resort Caravan Park will require establishing a lease with Council and a separate lease from the RMS for the land affected by encroachments. A site survey completed by KFW in 2014 identified the encroachments, including 1,069m² of land along the western boundary, 17.2m² at the western end of the southern boundary and 66.4m² at the southern end of the eastern boundary (Figure 3).

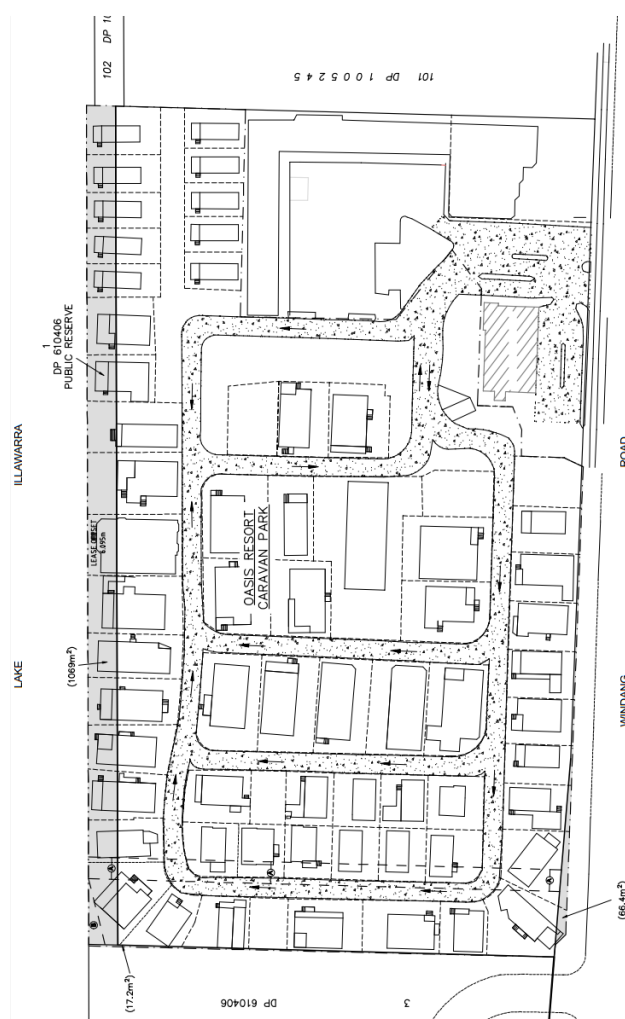


Figure 6: Survey plan showing the extent of encroachments into neighboring lots shaded in grey.

For this application, we have proceeded with the assumption of owner's consent given the preliminary support provided by the relevant land owners (see submitted letters). Leases over these portions of land will be negotiated, however cannot be finalised until a valid approval to operate is issued.

2 PROPERTY DETAILS

2.1 DESCRIPTION OF PROPERTY

The subject site is located between the eastern foreshore of Lake Illawarra and the western edge of the Windang Road reserve, roughly 630m north of Boundary Road and 100m south of Bakers Lane (Figure 4, left image). Windang is on the southern end of the peninsula at the ocean entrance to Lake Illawarra (Figure 4, right image).

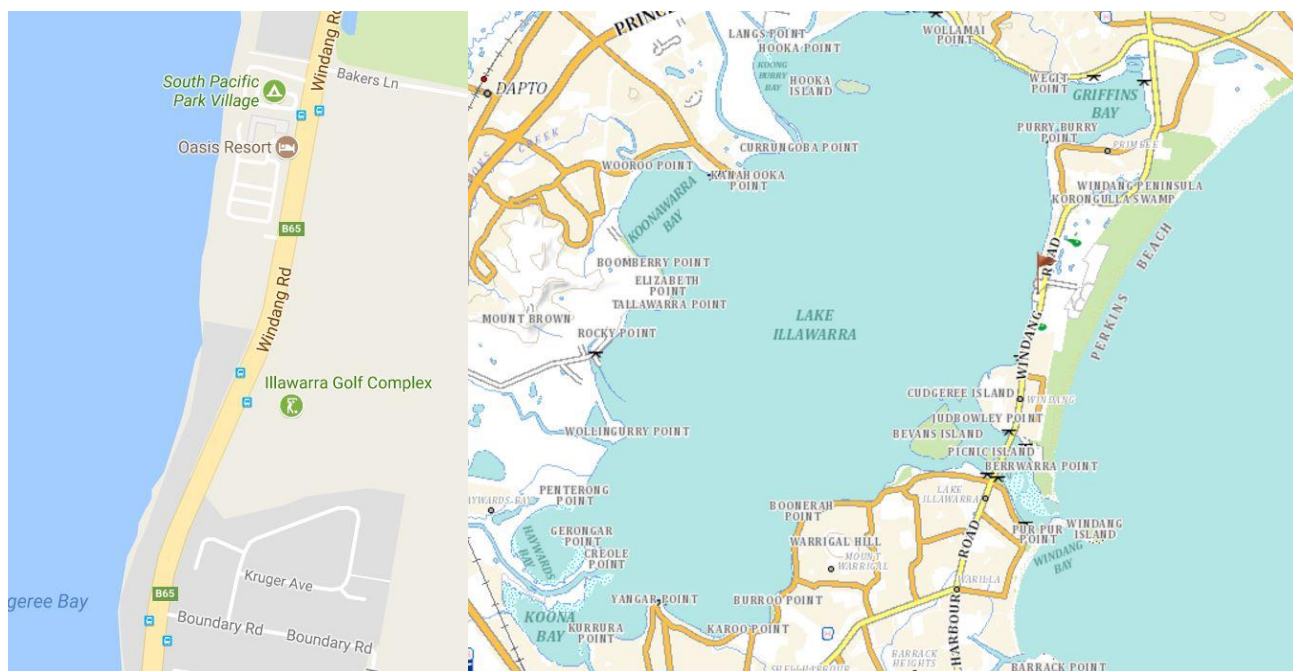


Figure 7: Locality maps showing the location of Oasis Resort Caravan Park on the eastern shore of Lake Illawarra. Marked with the red flag in the right image.

The site contains an existing motel, conference centre, restaurant, service station and caravan park and is surrounded by various land uses. To the north is the South Pacific Village Caravan Park, to the west is a Council owned parcel of operational land and Lake Illawarra, to the south is the Windang Peninsula Heritage Park and the east is Windang Road.

All development on the site has access directly to Windang Road. The service station has a separate entry point adjacent to dwelling site 1. The access point for the motel, conference centre, restaurant and caravan park is split with a 7.6m entry crossover and a 7.1m exit crossover at the Windang Road frontage. The service station does not have a separate exit and therefore shares the exit point with the motel/caravan park. This results in the whole site having two entry points from Windang Road and one exit point.

The motel, conference centre and restaurant are located in the north east of the lot while the service station is located immediately to the south of the entry/exit point, on the eastern boundary. The remainder of the site is identified as within the caravan park operational boundary, as indicated by the blue dashed operational boundary shown in the community map. It should be noted that the administration office, managers residence and pool are also included in the caravan park operational

boundary, however this area is shared between the motel and caravan park rather than being specific to one operation or the other.

The caravan park currently contains sixty-one dwellings, amenities building (including showers, toilets and laundry) and three vacant dwelling sites. The existing dwelling sites contain a mixture of cabins, manufactured homes and caravans with annexes.

The site is serviced by, and connected to, relevant services including sewer, stormwater, electricity and telecommunications.

2.2 CLASS OF VEGETATION

The vegetation types have been classified using the formations and sub-formations provided in Table A2.1 of the bushfire guideline. Vegetation descriptions are as per Keith D, 2004 in Keith (2004) "Ocean Shores to Desert Dunes" published by DECC (except heathlands which is provided two sub-formations rather than one based largely on vegetation height) the main categories are as follows:

- Forests (wet sclerophyll forests and dry sclerophyll forests);
- Woodlands;
- Forested wetlands;
- Tall heaths;
- Freshwater wetlands
- Short heaths;
- Alpine complex;
- Semi-arid woodlands;
- Arid shrublands;
- Rainforests; and
- Grasslands.

Where a mix of vegetation types exist the type providing the greatest bushfire hazard has been used. Vegetation that is to be cleared as part of the development has not been included in this assessment. It should also be noted that remnant vegetation (a parcel of vegetation < 1 ha or fire run of < 50m) and riparian vegetation are considered a low hazard and APZ setbacks and building construction standards for these will be the same as required for rainforest vegetation.

As part of this assessment the following are not considered a hazard or a predominant vegetation class/formation and can be included within an asset protection zone:

- (a) non-vegetated areas including roads, footpaths, cycleways, waterways, buildings, rocky outcrops and the like; and
- (b) reduced vegetation including maintained lawns, golf course fairways, playgrounds or sports fields, vineyards, orchards, cultivated ornamental gardens and commercial nurseries.

In accordance with the Addendum to *Appendix 3* of the *PBP (2010)* the vegetation classifications have been converted from David Keith's to the AUSLIG Pictorial Analysis in *AS3959-2009*. This conversion is based on what is considered the best representation of similar bush fire behaviour potential.

Table 1: Vegetation conversion from Keith's to AUSLIG

David Keith's <i>Ocean Shores to Desert Dunes</i>	AUSLIG (1990) Pictorial Analysis (AS3959-2009)
Forests (Wet & Dry Sclerophyll)	Forest
Pine Plantations	
Forested Wetlands	
Woodlands (Grassy, Semi-Arid)	Woodland
Tall Heath (Scrub)	Scrub
Freshwater Wetlands	
Short Heath (Open Scrub)	Shrubland
Arid Shrubland	Mallee/Mulga
Alpine Complex (Sedgeland)	Tussock Moorland
Rainforest	Rainforest
Grassland	Grassland

The details of the predominant vegetation in all directions, to a distance of 140m from the subject site are provided in **3.2**. In general, the site is cleared of vegetation except for few isolated trees.

The vegetation posing this dominated bushfire threat to the proposed and existing development comes from the adjoining council reserve lot to the south. It should be noted that the public reserve lot was clear of vegetation at the time of the original approval of the caravan park. Since that time council has allowed the site to revegetation. Vegetation in this area would be classified as Swamp Oak Forest.

According to Keith (2004) the vegetation type would be classified as Forested Wetland, when converted to AUSLIG Pictorial Analysis in AS3959-2009 the vegetation is Forest.

2.3 ASSESSMENT OF SLOPE

The slope in all directions over a distance of 100m from the existing property boundary or building footprint has been assessed in terms of the following classes:

- (i) all upslope vegetation (considered 0°)
- (ii) >0 to 5° downslope vegetation
- (iii) >5 to 10° downslope vegetation
- (iv) >10 to 15° downslope vegetation
- (v) >15 to 18° downslope vegetation.

During assessment of the slope, if it was found that there were a number of different slope classes present over 100m in any one direction, the slope of the area which will most significantly influence fire behavior has been adopted. Topographically, the site is undulating with a gradual slope in a south westerly direction.

Planning for Bushfire Protection 2006 acknowledges that there may be varying slope and in this regard the “gradient within the hazard (vegetation) which will most significantly influence the fire behaviour of the site having regard to the vegetation found” can be used.

The effective bushfire slope associated with the Swamp Oak Forest adjoining the site to the south is level.

2.4 SIGNIFICANT ENVIRONMENTAL FEATURES

The site is within Wollongong Councils foreshore which aims to restrict development within the foreshore area. No new dwelling sites or structures within the affected foreshore building line area are proposed. Any future development in this area would need to be located wholly within the boundaries of Lot 2 and therefore would move away from the waterfront, however they would still be located in the foreshore building line zone.

The subject site flood prone and contains both medium and high flood risk zones. The site is also located in a flood isolation risk area which effectively isolates the Windang peninsula during large flood events.

Vegetation adjoin the site shows similar characteristics of Swamp Oak Forest which is an endangered ecological community.

2.5 THREATENED SPECIES

Vegetation adjoin the site shows similar characteristics of Swamp Oak Forest which is an endangered ecological community.

2.6 ABORIGINAL HERITAGE

There are no known aboriginal relics located on the subject land.

2.7 ZONING

The site is subject to the provisions of Wollongong LEP 2009, under which it is zoned RE2 (Private Recreation). As noted on the proposed lease plan, submitted with the application, a number of the structures extend into the RE1 zones. Figure 8 shows the zoning map of the subject and surrounding lands. The objectives of the SP3 zone are:

The objectives of the RE2 zone are:

- *To enable land to be used for private open space or recreational purposes*
- *To provide a range of recreational settings and activities and compatible land uses*
- *To protect and enhance the natural environment for recreational purposes*

The objectives of the RE1 zone are:

- *To enable land to be used for public open space or recreational purposes.*
- *To provide a range of recreational settings and activities and compatible land uses.*
- *To protect and enhance the natural environment for recreational purposes.*
- *To cater for the development of a wide range of uses and facilities within open spaces for the benefit of the community.*



Figure 8: Zoning map reproduced from the Wollongong LEP 2009 showing the subject site outlined in bold black.

Response

Caravan Parks are permitted with Consent in both zones.

3 PROPERTIES ADEQUACY FOR BUSHFIRE PROTECTION

3.1 ASSESSMENT METHODOLOGY

A site inspection was conducted to determine the direction and scale of any potential bush fire event based on an analysis of slope, aspect, vegetation type and density, current fuel loading and evidence of past fire history.

Alternate Solution

The information contained in the appendices of the PBP 2006 has been used to categorise vegetation type and slope class in the locality, as discussed in Sections 2.2 and 2.3 of this report.

The application seeks to utilise the detailed method (Method 2) for determining the bushfire attack level outlined in Appendix B of AS 3959-2009. The NBC Bushfire Attack Assessor v2.1 is proposed to be used to calculate the required APZs for forested wetland and the bushfire exposure level (construction requirements). The output of the NBC Bushfire Attack Assessor v2.1 has been provided in **Attachment 2**.

The alternate solution seeks to use the fuel loads for forested wetland (20 Tonnes/Ha) provided in Appendix 2 of PBP 2006 to calculate the APZ requirements for each respective BAL level. The vegetation adjoining the site is dominated by large Shea Oak trees with limited under storey and resembles a parcel of Swamp Oak Floodplain Forest. We are of the opinion that the fuel load of 20 Tonnes/Ha is a true presentation of the fuel loads present within the adjoining Swamp Oak Floodplain Forest.

Detailed Design Fire

The following inputs were used in the NBC Bushfire Attack Assessor (**Attachment 2**) to reflect the site-specific conditions.

Southerly Direction

- **Vegetation Classification.** Forest Wetland
 - Surface Fuel – 15t/ha
 - Overall Fuel – 20t/ha
- **Effective Slope** - Level.

Note. The effective bushfire slopes have been determined for the vegetation outside of the established APZ. The effective slope is that slope which most significantly influences fire behaviour.

- **Site Slope** – Level.
- **Elevation of Receiver** – Default
- **Temperature** – 1090K

Based on the detailed design fire outline above the following separations distance are required to achieve each respective BAL Rating;

- **BAL 12.5** – 32m Inner Protection Area (IPA);
- **BAL 19** – 23m (IPA); and
- **BAL 29** – 16m (IPA).

3.2 SPECIFICATIONS FOR ASSET PROTECTION ZONE

The aim of APZs is to ensure that there is a progressive reduction in flammable material towards any building. In relation to Special Fire Protection Development the intent of the measures are to provide sufficient space for firefighters and other emergency services personnel, ensuring radiant heat levels permit operations under critical conditions of radiant heat, smoke and embers, while supporting or evacuating occupants. In circumstances where alterations or additions to existing SFPP's facilities are proposed, the intent and performance criteria of each measure within section 4.3.5 of *PBP 2006* are to be achieved.

In relation to APZs for infill development the performance criteria is to provide a defensible space onsite and to provide and maintain asset protection zones for the life of the development to prevent the spread of a fire toward buildings. The acceptable solution is for the APZ to be determined in accordance with *Appendix 2 of PBP 2006*. The performance criteria and acceptable solutions for asset protection zones for Special Fire Protection Development in accordance with *PBP 2006* are provided in *Table 2*.

Table 2: Provides the performance criteria and acceptable solutions for APZ for Special Fire Protection Development in accordance with *PBP 2006*.

Performance Criteria	Acceptable Solutions	Compliance
<p>The intent may be achieved where:</p> <p>Radiant heat levels of greater than 10kW/m2 will not be experienced by occupants or emergency services workers entering or exiting a building.</p>	<ul style="list-style-type: none"> • an APZ is provided in accordance with the relevant tables and figures in Appendix 2 of PBP 2006. • exits are located away from the hazard side of the building. • the APZ is wholly within the boundaries of the development site. 	<p>The proposed development does not comply with Appendix 2 of <i>PBP 2006</i>.</p> <p>The proposal is for the conversion of a portion of the existing approved short-term sites to long term sites.</p> <p>The long term sites will comprise manufactured dwellings which are capable of construction in accordance with BAL 29 of AS3959 - 2009.</p> <p>Such structures provide a greatly increased level of protection compared to tents and caravans which are able to be used on the short-term sites for accommodation purposes.</p> <p>Furthermore, the long-term sites will be occupied by permanent residents rather than tourists.</p> <p>For the site to achieve an acceptable level of property protection a plan of management will be require over Lot 3 DP610406 (council owned public reserve lot).</p> <p>It is noted that council has allowed the adjoining site to regenerate after the site gained it original approval to operate. Section 63 of Rural Fires Act 1997 sets out the duties of public authorities and states that "It is the duty of the owner or occupier of land to take the notified steps (if any) and any other practicable steps to prevent the occurrence of bush fires on, and to minimise the danger of the spread of bush fires on or from, that land".</p>
<p>Applicants demonstrate that issues relating to slope are addressed: maintenance is practical, soil stability is</p>	<ul style="list-style-type: none"> • mechanisms are in place to provide for the maintenance of the APZ over the life of the development. 	<p>The entire property will be maintained as an inner protection area.</p>

not compromised and the potential for crown fires is negated.	<ul style="list-style-type: none"> the APZ is not located on lands with a slope exceeding 18 degrees. 	The site does not contain any areas with slopes greater than 18 degrees.
APZs are managed and maintained to prevent the spread of a fire towards the building.	APZ are maintained in accordance with the requirements of 'Standards for Asset Protection Zones (RFS 2005).	The recommended APZs are to be maintained in accordance with the requirements of 'Standards for Asset Protection Zones' (RFS 2005).
Vegetation is managed to prevent flame contact and reduce radiant heat to buildings, minimise the potential for wind driven embers to cause ignition and reduce the effect of smoke on residents and fire-fighters.	Compliance with Appendix 5 (Landscaping) of PBP 2006.	Any future landscaping shall be undertaken in accordance with Appendix 5 (Landscaping) of PBP 2006.

Table 3 provides a breakdown of the vegetation type, slope class and the required APZ for the proposed new long-term sites in the southern area. Table 4 provides a breakdown of the vegetation type, slope class and the required APZ for the proposed long-term sites. The APZs have been calculated for the Shoalhaven Region using a FDI of 100. The distance for the asset protection zone/separation distance has been measured in accordance with Addendum: Appendix 3 (2010) A3.5 (Site assessment methodology for determine level of bushfire attack) which is between each of the vegetation formations identified (from the edge of the foliage cover) and the building. The separation distances have been measured onsite using a Nikon Forestry Pro Laser Rangefinder.

Table 3: Breakdown of the vegetation type, slope class, the required APZ in accordance with Appendix 2 (Table A2.6 ($\leq 10\text{kW/m}^2$) of PBP 2006) and Table 2.4.2 of AS 3959 – 2009 for BAL 29 for the new long-term sites in the southern area (Long term sites).

Direction	Dominate Vegetation Type	Effective Bushfire Slope	Required APZ (m)	Required APZ (m) for BAL 29	APZ provided (m)	Comments
North	Forest	Level	60	25	0	The existing layout on the site does not provide separation between sites and the boundary. The approved layout cannot comply for SFPP, the sites will be used for permeant residences and the manufactured homes will be constructed to a minimum of BAL 29.

3.3 ASSESSING THE BUSHFIRE RISK

The main factors directly affecting the behavior of fire are:

- Wind (strength and direction);
- Fuel moisture and content (how dry it is, relative humidity);
- Type, quantity and arrangement of fuel (vegetation density); and
- Slope (fire spreads quicker upslope due to preheating).

The prevailing weather conditions associated with the bushfire season in the Illawarra Region are strong north-westerly winds, low relative humidity and high temperatures. With the combination of the vegetation (post development) and slope, the overall bushfire risk associated with the Existing tourist facility is **Extreme**, with the foremost bushfire risk coming from the Forest vegetation located to the south of the site.

The dwelling sites located along the southern boundary are located in the Flame Zone as a result of the vegetation contained within the public reserve lot immediate to the south (Figure 3). As demonstrated in Figure 4 the public reserve lot was cleared of vegetation when the caravan park was approved. Over the 60 years of operation Council has allowed the site to be revegetated, creating the bushfire threat. While it is recognised that in 1977 the dwelling sites along the southern boundary did not have permanent structures installed, permanent structures were in place before the revegetation was allowed to occur. Windang Peninsula Heritage Park was established in 1996.

It is therefore recommended that Wollongong City Council Plan establish a Plan of Management over Windang Peninsula Heritage Park to establish a minimum 16m APZ from the northern boundary of the public reserve Lot 6 DP610406 to achieve a minimum bushfire attack level of BAL 29 on the site. Section 63 of Rural Fires Act sets out the duties of public authorities and states that “It is the duty of the owner or occupier of land to take the notified steps (if any) and any other practicable steps to prevent the occurrence of bush fires on, and to minimise the danger of the spread of bush fires on or from, that land”.

The development site is predominately cleared of vegetation and will be managed as Inner Protection Zone and will comply with section 4.1.3 and *Appendix 5 of Planning for Bush Fire Protection 2006* and the NSW Rural Fire Service's document '*Standards for asset protection zones*' for the life of the development as outlined below:

- Existing larger trees (at least 150mm in diameter measured at chest height) may remain within the APZ provided that:
 - They do not occur within 4m of a building;
 - Lower limbs are removed;
 - Shrubs beneath the trees are removed; and
 - Crowns do not form a continuous canopy.
- Smaller trees, shrubs, fallen trees, tree limbs and stumps are to be removed
- The presence of a few shrubs is acceptable provided that they are at least 10m from the structure, are well spread out, do not form a contiguous pathway to the dwelling and do not constitute more than 5% of the total APZ area.
- Vegetable gardens or fruit trees may be located within the APZ. Any other gardens should not occupy more than 5% of the APZ and only contain low flammability species.

- A minimal ground fuel is to be maintained including mowed grass, paving, concrete, bare ground or less than 4 tonnes per hectare of fine fuel.
- Any structures within the APZ are to be non-combustible
- Any structures storing combustible materials such as firewood must be sealed to prevent entry of burning debris.
- Gutters, roofs and roof gullies shall be kept free of leaves and other debris.
- Paths from cabins to the refuge area are safe, with management of surface fuels to ≤ 4 tonnes/ha.

It is acknowledged that the development cannot comply with the APZ requirements for 'Special Fire Protection Purpose' development, however it needs to be recognised that the tourist facility was approved prior to 2001. There is no ability to increase the size of the APZs within the subject site however, it is our opinion that Wollongong City Council should prepare a Plan of Management for the adjoining public reserve lot which includes establishment of APZs.

PBP 2006 recognises that alterations to an existing SFPP's facility cannot always comply with the preferred standards and in such circumstances an appropriate combination of bush fire protection measures are required to achieve a better bush fire risk outcome, and satisfy the specific objectives for the type of development being assessed (refer to Section 1.2). The following sections of this report will discuss the combination of bush fire protection measures which will be employed to achieve a better bush fire risk outcome for the tourist development.

We are of the opinion that the redevelopment does achieve a better bushfire outcome for the following reasons:

- The long-term sites will have the ability to comprise manufactured homes which are capable of construction in accordance with AS 3959. Such structures provide greatly increased levels of protection compared to tents and caravans which are currently able to be used on those sites for accommodation purposes.
- The long-term sites will be occupied by permanent residents rather than tourists. Permanent resident will have a better understanding of the local area and conditions.
- A site-specific bushfire emergency and evacuation plan will be prepared to reflect the increased risk to the occupants of the park and will set early triggers for closure of the park and evacuation.
- Existing buildings will be upgraded to reduce their susceptibility to fire attack, measures will be implemented in accordance with the recommendations of Section 3.4 of this report.
- The current arrangement of hydrants on the site will be upgraded to comply with the design and prescriptive requirements of AS2419.1-2005.
- Council have an obligation to maintain Lot 3 DP610406. Pursuant of Section 63 of Rural Fires Act sets out the duties of public authorities and states that "It is the duty of the owner or occupier of land to take the notified steps (if any) and any other practicable steps to prevent the occurrence of bush fires on, and to minimise the danger of the spread of bush fires on or from, that land". As such, a Plan of Management should be pursued over Council Reserve Lot 3 DP610406.

3.4 CONSTRUCTION STANDARDS

The construction standards and associated performance criteria for infill development require that the proposed building can withstand bushfire attack in the form of wind, smoke, embers, radiant heat and flame contact. The *Addendum to Appendix 3 of PBP 2006 (2010)* requires that the construction standards be determined in accordance with *AS3959 - 2009*.

AS3959 - 2009 states that the construction requirements for the next lower BAL than that determined for the site may be applied to an elevation of a building where the elevation is not exposed to the source of bushfire attack. An elevation is deemed as not exposed to the source of bushfire attack if all the straight lines between that elevation and the source of bushfire attack are obstructed by another part of the building. The construction requirements for a shielded elevation shall be not less than that required for BAL—12.5, except where the exposed elevations have been determined as BAL—LOW.

Recommendations

The proposal is for alteration and additions to an existing approved tourist park, changes to the site include the conversion of approved short-term sites to long term. The proposed changes to the development will not increase the size of the development footprint. The approved footprint of the caravan park does not provide separation between sites and the boundary (vegetation), therefore there are number of sites are currently located in the Flame Zone. The change from short term sites to long term sites provides the ability to construct future manufactured homes to higher construction standard (i.e providing a better bushfire outcome).

The recommendations relating to construction requirements of the site will be subject to negotiations with Wollongong City Council for a Plan of Management over Lot 6 DP610406, as demonstrated on the attached Bushfire Mitigation Plan (**Attachment 3**).

It is therefore recommended that any new construction comply with the following:

- It is recommended that the existing structures over sites 3 – 41, 47 – 49, 63, and 64 shall be upgraded (where required) to improve protection against bushfires by complying with the following recommendations:
 - Existing windows are to be screened with bronze or corrosion resistant steel mesh with maximum aperture size of 1.8mm. Screens shall be placed over the openable part of the window to prevent the entry of embers;
 - Vents, weep holes and the like are to be screened with bronze or corrosion resistant steel with a maximum aperture of 1.8mm, to prevent the entry of embers;
 - External doors are to be sealed with draft excluders to prevent the entry of embers; and
 - Guttering and valleys are to be screened to prevent the build-up of flammable material. Any materials used shall have a Flammability Index of no greater than 5 when tested in accordance with Australian Standard AS 1530.2-1993 'Methods for Fire Tests on Building Materials, Components and Structures - Test for Flammability of materials.
- Any new works over sites 10 – 18 shall be designed and constructed to comply with section 7 (BAL 29) Australian Standard AS3959-2009 'Construction of buildings in bush fire-

prone areas' and the relevant sections of section A3.7 Addendum Appendix 3 of 'Planning for Bush Fire Protection.

- Any new works over sites 19 – 41, 47 – 49, 63, and 64 shall be designed and constructed to comply with section 5 (BAL 12.5) Australian Standard AS3959-2009 'Construction of buildings in bush fire-prone areas' and the relevant sections of section A3.7 Addendum Appendix 3 of 'Planning for Bush Fire Protection.

The specific construction requirements for BAL 12.5, and BAL 29 are provided in **Attachment 4**. In addition to the construction requirements set out in AS3959-2009, Addendum: Appendix 3 (PBP) (2010) sets out additional construction requirements for development within NSW.

3.5 SITING AND ADEQUACY OF WATER ELECTRICITY AND GAS SUPPLIES

The performance criteria and acceptable solutions for water, electricity and gas for special fire protection purposes in accordance with *PBP 2006* are provided in *Table 5*. The intent of the measures are to provide adequate water services for the protection of buildings during and after the passage of a bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to buildings.

Table 5: Provides the performance criteria and acceptable solutions for water, electricity and gas for special fire protection purposes in accordance with sections 4.2.7 (2) of PBP 2006.

Performance Criteria	Acceptable Solutions	Compliance
<p><u>reticulated water supply areas</u></p> <p>Water supplies are easily accessible and located at regular intervals.</p>	<ul style="list-style-type: none"> Access points for reticulated water supply to SFPP developments incorporate a ring main system for all internal roads. Fire hydrant spacing, sizing and pressures comply with <i>AS 2419.1 – 2005</i>. Where this cannot be met, the RFS will require a test report of the water pressures anticipated by the relevant water supply authority, once development has been completed. In such cases, the location, number and sizing of hydrants shall be determined using fire engineering principles. 	<p>Apart of the proposal involved engagement of GN Consulting a specialized fire safety engineering firm. The assessment included an assessment of the current arrangement of hydrants.</p> <p>The investigation into the current water supply found that hydrant spacing does not comply with the requirements of the Local Government Regulation as stipulated in Clause 128 whereby, each dwelling, community building and campsite must be located with 90m of a hydrant.</p> <p>Further to Clause 128 of the Local Govern Regulation, Clause 129 further stipulates that all structures and camp sites must be in reach of reached by a fire hose reel. Fire hose reels need to be constructed in accordance with AS/NZ 1221:1997 and installed in accordance with AS 2441-1988.</p> <p>Currently hydrant spacing does not comply with the requirements of AS2419.1, a suitably qualified consultant will need to be engaged to design and construct the system.</p>

Performance Criteria	Acceptable Solutions	Compliance
<u>Electricity Services</u> <ul style="list-style-type: none"> Location of electricity services limits the possibility of ignition of surrounding bushland or the fabric of buildings Regular inspection of lines is undertaken to ensure they are not fouled by branches. 	<ul style="list-style-type: none"> where practicable, electrical transmission lines are underground. 	<p>The augmentation of that service to the proposed new sites will have no problem satisfying the acceptable solution for electricity.</p>
<u>Gas services</u> <p>Location of gas services will not lead to ignition of surrounding bushland or the fabric of buildings</p>	<ul style="list-style-type: none"> reticulated or bottled gas is installed and maintained in accordance with AS 1596 and the requirements of relevant authorities. Metal piping is to be used. All fixed gas cylinders are kept clear of all flammable materials to a distance of 10 metres and shielded on the hazard side of the installation. If gas cylinders need to be kept close to the building, the release valves are directed away from the building and at least 2 metres away from any combustible material, so that they do not act as a catalyst to combustion. Connections to and from gas cylinders are metal. Polymer sheathed flexible gas supply lines to gas meters adjacent to buildings are not used. 	<p>Reticulated gas is not available to the subject site. From our site inspection we are of the opinion that future bottled gas connection to the individual sites should have no problem satisfying the requirement set out in the acceptable solution.</p>

3.6 ADEQUACY OF ACCESS AND EGRESS FROM SITE FOR EMERGENCY REPONSES

In relation to access requirements for Special Fire Protection Development the intent of measures is to provide safe operational access for emergency services personnel in suppressing a bush fire, while residents are accessing or egressing an area. PBP requires that internal access should comply with the performance criteria for access roads in 4.2.7 (2) of PBP 2006.

Table 6: Provides the performance criteria and acceptable solutions for Access – Internal Roads in accordance with sections 4.2.7 (2) of PBP 2006.

Performance Criteria	Acceptable Solutions	Compliance
<u>Internal Roads</u> <ul style="list-style-type: none"> Internal road widths and design enable safe access for emergency services and allow crews to work with equipment about the vehicle. 	<ul style="list-style-type: none"> internal roads are two-wheel drive, sealed, all-weather roads; internal perimeter roads are provided with at least two traffic lane widths (carriageway 8 metres minimum kerb to kerb) and shoulders on each side, 	<p>The site is located immediately adjacent the main North – South arterial road (Windang Road).</p> <p>The park is serviced by existing internal roads approved and constructed under the original</p>

Performance Criteria	Acceptable Solutions	Compliance
	<p>allowing traffic to pass in opposite directions;</p> <ul style="list-style-type: none"> Roads are through roads. Dead end roads are not more than 100 metres in length from a through road, incorporate minimum 12 metres outer radius turning circle, and are clearly sign posted as a dead end; Traffic management devices are constructed to facilitate access by emergency services vehicles. A minimum vertical clearance of four metres to any overhanging obstructions, including tree branches, is provided. Curves have a minimum inner radius of six metres and are minimal in number to allow for rapid access and egress. The minimum distance between inner and outer curves is six metres. Maximum grades do not exceed 15 degrees and average grades are not more than 10 degrees. Crossfall of the pavement is not more than 10 degrees. roads do not traverse through a wetland or other land potentially subject to periodic inundation (other than flood or storm surge). roads are clearly sign-posted and bridges clearly indicate load ratings. the internal road surfaces and bridges have a capacity to carry fully-loaded firefighting vehicles (15 tonnes). 	<p>approval. Roads are generally 4m wide all weather sealed and are looped roads.</p> <p>The internal road network does not comply with the requirements for internal roads. Despite this the location and size of the current internal road network was approved with the original park approved.</p>

3.7 ADEQUACY OF BUSHFIRE MAINTENANCE PLANS FOR EMERGENCY

Illawarra Rural Fire District (Fire Control Centre No. 37 Airport Road, Albion Park) currently administers bushfire maintenance plans and fire emergency procedures in this particular area. currently administers bushfire maintenance plans and fire emergency procedures in this particular area.

Legislation requires occupants of land to immediately extinguish fires or notify fire-fighting authorities, on becoming aware of fire during a fire danger period. The most appropriate course of action is to telephone “000” and report the fire.

Considering the nature of the subject development and potential occupancy, should a bushfire emergency impact upon this area, the implementation of the existing Illawarra Sect. 52 Operations & Risk Plan would not be specific enough for emergency procedures associated with a bushfire event. It is in our opinion the application / implementation of a fire emergency plan and a bushfire maintenance plan should be in place to ensure the safety of all occupants. Therefore, in the author’s opinion a site-specific Bush Fire Emergency Management Plan is required. Bush Fire Emergency

Management Plan shall be prepared in accordance with the RFS Guidelines for Emergency/Evacuation and account for additional occupant's due to future development.

The Bush Fire Emergency Evacuation Management Plan is to provide a systematic procedure in the event of a bushfire emergency event that can be followed by employees, visitors and be easily understood by emergency services that may attend. The BFEMP is to contain procedures to determine whether to evacuate or shelter-in-place and gives the occupants instruction prior to and in the event of evacuation. The BFEMP is to address the following five (5) stages of evacuation:

- **Decision to evacuate** - Analyse event intelligence and make an assessment on the necessity to evacuate residents.
- **Warning** - Notifications of event conditions and appropriate actions required are conveyed to the residents.
- **Withdrawal** - The physical movement of at risk residents to safer locations.
- **Shelter** - The provision of refuge to evacuees in a safer location.
- **Return** - Assessment of the facility and managed return of evacuees.

The Bush Fire Emergency Evacuation Management Plan should recognise and incorporate the following:

- Where an FDI is predicted to be greater than 50 (Severe), early evacuations should be considered.
- Signage simply outlining the basic concept of the Fire Emergency and Evacuation Procedures Plan for Kings Point Retreat should be displayed at the main entrance point(s) to the development.
- The most important action for on-site refuge during a bushfire event is the timely extinguishment of any small fire that may ignite a building or its immediate environment.
- The following Personal Protective Equipment should be utilised during a bushfire event:
 - Sturdy leather footwear;
 - Long pants and long-sleeved shirt or jumper (pure wool or cotton offers the best protection from sparks or embers);
 - Broad brimmed hat;
 - Goggles for eye protection;
 - Heavy duty gloves;
 - Handkerchiefs or cloth nappies to tie over nose and mouth;
 - Wet towels to drape over neck;
 - Bottled drinking water.

3.8 LANDSCAPING

The performance criteria is for landscaping to be designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind driven embers to cause ignitions. *PBP 2006* states that "*the principles of landscaping for bushfire protection aim to:*

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

- *Reduce wind speed".*

It is recommended that any future landscaping around the park be designed and maintained in accordance with the following practices:

- maintaining a clear area of low cut lawn or pavement adjacent to the units;
- keeping areas under fences, fence posts and gates and trees raked and cleared of fuel;
- utilising non-combustible fencing and retaining walls;
- breaking up the canopy of trees and shrubs with defined garden beds;
- organic mulch should not be used in bushfire prone areas and non-flammable material should be used as ground cover, eg Scoria, pebbles, recycled crushed bricks.
- planting trees and shrubs such that:
 - the branches will not overhang the roof; and
 - the tree canopy is not continuous.

3.9 PBP 2006 SPECIFIC OBJECTIVE ASSESSMENT

All development on Bushfire Prone Land must satisfy the aim and objectives of *PBP 2006*. *Table 7* demonstrates the proposal complies with the specific objectives of *PBP 2006*.

Table 7: Compliance with the specific objectives of *PBP 2006*.

PBP 2006 Specific Objective	Assessment / Comment
Afford occupants of any building adequate protection from exposure to a bushfire.	<p>Areas of the site are located within the flame zone, therefore early evacuation should be considered as the best approach to managing the site.</p> <p>In saying that, there are areas of the site that are afforded adequate protection from exposure to a bushfire. In this respect, fire fighters or occupants remaining within the subject development should reasonably be afforded an acceptable level of protection.</p>
Provide for a defensible space to be located around buildings.	The proposed changes are contained within the existing development footprint and internal road network, as a result there is limited defensible space around dwelling site adjacent to the boundary.
Provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent direct flame contact and material ignition.	A number of the long term sites will be located within the flame zone. The future manufactured homes on these sites will be constructed to the relevant BAL level which is a better outcome than currently exists on site.
Ensure that safe operational access and egress for emergency service personnel and residents is available.	<p>The internal site roads are existing and previously approved for caravan park use. The proposed change from short term to long term sites is expected to reduce the average number visitors to the park.</p> <p>The current access does not comply with the requirements for internal roads and was approved prior to the release of PBP. Despite this access is provided which limit dead end road and provides access and egress away from the bushfire threat.</p>

Provide for ongoing management and maintenance of bushfire protection measures, including fuel loads in the asset protection zone (APZ).	<p>Where the recommendations relating to construction standards and APZ areas stated by this report are reasonably and adequately incorporated, it would be reasonable to assume that regular maintenance works within the subject development would ensure ongoing management and maintenance of bush fire protection measures.</p> <p>It is therefore recommended that Wollongong City Council Plan establish a Plan of Management over Windang Peninsula Heritage Park to establish a minimum 16m APZ from the northern boundary of the public reserve Lot 6 DP610406 to achieve a minimum bushfire attack level of BAL 29 on the site.</p> <p>Should the standard or upkeep of APZ areas, vegetation maintenance or vehicle access (required for bushfire safety compliance) become compromised during the life of the development, it would also be reasonable to assume such matters would be addressed by the Council or local Fire Authorities through their hazard mitigation policies and notifications.</p>
Ensure that utility services are adequate to meet the needs of firefighters (and others assisting in bushfire fighting").	<p>Currently hydrant spacing does not comply with the requirements of AS2419.1, a suitably qualified consultant will need to be engaged to design and construct the system.</p> <p>Similarly, where the installation or connection to electrical and gas services incorporates the recommendations as stated by this report, both emergency services personnel or occupants assisting in bush firefighting should safely be able to manage potential electrical and gas hazards during a bushfire event.</p>
Provide for the special characteristics and needs of occupants (SFPP Development).	Where all recommendations relating to emergency evacuation procedures (planning) as stated by this report are reasonably and adequately incorporated, occupants or staff located within the subject development site during or preceding a bushfire event should be reasonably aware of safe access / egress options and associated activities to be undertaken.
Provide for safe emergency evacuation procedures (SFPP Development).	As above.

4 CONCLUSION AND RECOMMENDATIONS

This report has been prepared by SET Consultants Pty Ltd for I & H Investments. This Bushfire Risk Assessment is to accompany a development application to Wollongong City Council seeking consent to an increase in the number of long-term dwelling sites and amended community layout over Lot 2 DP 610406, known as No. 146 Windang Road, Windang (subject site).

This development application aims to address outstanding issues relating to the number of long and short-term sites proposed within Oasis Resort Caravan Park with the aim to bring current operations into line with an operational consent and allow Council confidence in granting an approval to operate. This development application seeks consent to the increased number of long term sites and an approval under Section 68 of the Local Government Act 1993 to operate a caravan park.

With the combination of the vegetation (post development) and slope, the overall bushfire risk associated with the Existing tourist facility is **Extreme**, with the foremost bushfire risk coming from the Forest vegetation located to the south of the site. The dwelling sites located along the southern boundary are located in the Flame Zone as a result of the vegetation contained within the public reserve lot immediate to the south.

The public reserve lot was cleared of vegetation when the caravan park was approved. Over the 60 years of operation Council has allowed the site to be revegetated, creating the bushfire threat. While it is recognised that in 1977 the dwelling sites along the southern boundary did not have permanent structures installed, permanent structures were in place before the revegetation was allowed to occur. Windang Peninsula Heritage Park was established in 1996.

It is therefore recommended that Wollongong City Council Plan establish a Plan of Management over Windang Peninsula Heritage Park to establish a minimum 16m APZ from the northern boundary of the public reserve Lot 6 DP610406 to achieve a minimum bushfire attack level of BAL 29 on the site. Section 63 of Rural Fires Act sets out the duties of public authorities and states that “It is the duty of the owner or occupier of land to take the notified steps (if any) and any other practicable steps to prevent the occurrence of bush fires on, and to minimise the danger of the spread of bush fires on or from, that land”.

PBP 2006 recognises that alterations to an existing SFPP’s facility cannot always comply with the preferred standards and in such circumstances an appropriate combination of bush fire protection measures are required to achieve a better bush fire risk outcome, and satisfy the specific objectives for the type of development being assessed (refer to Section 1.2). We are of the opinion that the redevelopment does achieve a better bushfire outcome for the following reasons:

- The long-term sites will have the ability to comprise manufactured homes which are capable of construction in accordance with AS 3959. Such structures provide greatly increased levels of protection compared to tents and caravans which are currently able to be used on those sites for accommodation purposes.
- The long-term sites will be occupied by permanent residents rather than tourists. Permanent resident will have a better understanding of the local area and conditions.
- A site-specific bushfire emergency and evacuation plan will be prepared to reflect the increased risk to the occupants of the park and will set early triggers for closure of the park and evacuation.

- Existing buildings will be upgraded to reduce their susceptibility to fire attack, measures will be implemented in accordance with the recommendations of Section 3.4 of this report.
- The current arrangement of hydrants on the site will be upgraded to comply with the design and prescriptive requirements of AS2419.1-2005.
- Council have an obligation to maintain Lot 3 DP610406. Pursuant of Section 63 of Rural Fires Act sets out the duties of public authorities and states that “It is the duty of the owner or occupier of land to take the notified steps (if any) and any other practicable steps to prevent the occurrence of bush fires on, and to minimise the danger of the spread of bush fires on or from, that land”. As such, a Plan of Management should be pursued over Council Reserve Lot 3 DP610406.

The following combination of mitigation measures have been recommended to provide an appropriate level of safety for the tourist development at a level consistent with that required by *PBP 2006*:

- That Wollongong City Council Plan establish a Plan of Management over Windang Peninsula Heritage Park to establish a minimum 16m APZ from the northern boundary of the public reserve Lot 6 DP610406 to achieve a minimum bushfire attack level of BAL 29 on the site.
- For the life of the development the entire property shall be maintained as an inner protection area and shall comply with *section 4.1.3* and *Appendix 5 of Planning for Bush Fire Protection 2006* and the NSW Rural Fire Service's document 'Standards for asset protection zones':
- Any future landscaping shall be designed and maintained in accordance with the following practices:
 - maintaining a clear area of low cut lawn or pavement adjacent to the units;
 - keeping areas under fences, fence posts and gates and trees raked and cleared of fuel;
 - utilising non-combustible fencing and retaining walls;
 - breaking up the canopy of trees and shrubs with defined garden beds;
 - organic mulch should not be used in bushfire prone areas and non-flammable material should be used as ground cover, e.g. Scoria, pebbles, recycled crushed bricks.
 - planting trees and shrubs such that:
 - the branches will not overhang the roof; and
 - the tree canopy is not continuous.
- The existing structures over sites 3 – 41, 47 – 49, 63, and 64 shall be upgraded (where required) to improve protection against bushfires by complying with the following recommendations:
 - Existing windows are to be screened with bronze or corrosion resistant steel mesh with maximum aperture size of 1.8mm. Screens shall be placed over the open able part of the window to prevent the entry of embers;
 - Vents, weep holes and the like are to be screened with bronze or corrosion resistant steel with a maximum aperture of 1.8mm, to prevent the entry of embers;

- External doors are to be sealed with draft excluders to prevent the entry of embers; and
 - Guttering and valleys are to be screened to prevent the build-up of flammable material. Any materials used shall have a Flammability Index of no greater than 5 when tested in accordance with Australian Standard AS 1530.2-1993 'Methods for Fire Tests on Building Materials, Components and Structures - Test for Flammability of materials.
- Any new works over sites 10 – 18 shall be designed and constructed to comply with section 7 (BAL 29) Australian Standard AS3959-2009 'Construction of buildings in bush fire-prone areas' and the relevant sections of section A3.7 Addendum Appendix 3 of 'Planning for Bush Fire Protection.
 - Any new works over sites 19 – 41, 47 – 49, 63, and 64 shall be designed and constructed to comply with section 5 (BAL 12.5) Australian Standard AS3959-2009 'Construction of buildings in bush fire-prone areas' and the relevant sections of section A3.7 Addendum Appendix 3 of 'Planning for Bush Fire Protection.
 - A ring main hydrant system shall be installed for the long term sites. The hydrants shall be installed in accordance with the spacing, sizing and pressures set out in AS 2419.1 – 2005.
 - Any future gas bottles shall be installed and maintained in accordance with AS 1596. Gas cylinder relief valves shall be directed away from the building and away from any hazardous materials such as firewood, etc.
 - A Bush Fire Emergency Management Plan shall be prepared in accordance with the RFS Guidelines for Emergency/Evacuation.

If the proposed development is constructed and managed in accordance with the recommendations outlined in this report it will provide a better bushfire outcome than currently exist for the development.

This Bushfire Risk Assessment should remain current for a period of five years (2021), at which time it should be subject to review to take into account changing land use and vegetation patterns. Any major bushfire event that affects the subject site should also trigger a review in order to determine the effectiveness of protection measures and annual hazard reduction activities.

The findings contained within this report are the result of discrete/specific methodologies used in accordance with recognised practices. To the best of our knowledge they represent a reasonable interpretation of the general conditions of the site. However, having stated this, it is important to note that although designing houses to have an improved level of fire resistance will increase the likelihood of their survival in a bushfire, their survival and that of the occupants cannot be guaranteed and therefore the decision as to whether to *stay* or *go* should be based on an understanding that the adoption of solutions outlined in this report will not guarantee safety.



ATTACHMENT 1

COMMUNITY MAP



MAXIMUM SPEED WITHIN PARK 10KM/H

NOTE:
ALL SURVEY INFORMATION SHOWN HAS BEEN
SUPPLIED BY I & H INVESTMENTS PTY LTD.
SET CONSULTANTS HAS NOT CARRIED OUT
SURVEY WORKS ON THIS PROPERTY

- 166.3m²
APPROX. SITE AREAS
PROPOSED COUNCIL LEASE
PROPOSED RMS LEASE

- LEGEND**
- TRAFFIC FLOW DIRECTION
 - (A) DRAINAGE EASEMENT 4.57 WIDE
 - (B) EASEMENT FOR SEWER 6 WIDE
 - 1.5-- EXISTING CONTOURS 0.5m AHD
 - EXISTING FIRE HOSE REELS
 - PARKING SPACES - to AS2890.6
 - 10 SPEED LIMIT (PAINTED ON ROAD)
 - SHORT TERM SITES
 - RECREATION/COMMUNAL AREAS
 - OPERATING BOUNDARY

SCALE 1:250 @ A1 1:500 @ A3		WARNING NOTE: THE INFORMATION SHOWN ON THIS PLAN (OR THE DATA TRANSMITTED HEREWITH) IS CORRECT AS AT 06/04/17 AND HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF I & H INVESTMENTS PTY LTD IF THESE NOTES ARE REMOVED SET CONSULTANTS PTY LTD IS RELIEVED OF ALL RESPONSIBILITY AND LIABILITY RELATING TO ANY SUBSEQUENT USE OF THE INFORMATION CONTAINED WITHIN THIS FILE. THIS ELECTRONIC FILE SHALL NOT BE TRANSMITTED TO ANY THIRD PARTY WITHOUT THE EXPRESS PERMISSION OF SET CONSULTANTS PTY LTD.		SURVEY OTHERS DESIGN KH DRAWN MN CHECKED DC APPROVED		AMENDMENTS A - ORIGINAL ISSUE B - PLAN UPDATED C - PLAN UPDATED D - PLAN UPDATED		BY SET SET SET		DATE 19/01/17 06/04/17 10/05/2017 23/05/2017		 BEWARE - Damage to telephone cables can disrupt communication services and cost you money. For prompt location of telephone cables ring - 1100 Calls to this number are free.		Z:\JOBS\10406\SET\A1 A SET CONSULTANTS.jpg		COMMUNITY MAP FOR OASIS RESORT CARAVAN PARK LOT 2 DP 610406 140-146 WINDANG ROAD, WINDANG FOR I & H INVESTMENTS PTY LTD		A1 SHEET 1 OF 1 SHEETS REF. No. 103385	
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TABLE SHEET OF PARK CONDITIONS
FOR OASIS RESORT CARAVAN PARK
PREPARED BY SET CONSULTANTS
FOR I & H INVESTMENTS PTY LTD

RECREATIONAL AREAS	
COMMUNITY GARDEN	87.2m ²
CUMMUNITY PARK	82.2m ²
COMMUNITY LAND (1)	415.3m ²
COMMUNITY LAND (2)	444.4m ²
CAR WASH BAY	35.8m ²
TOTAL	1064.9m ²

OPERATIONAL AREAS	
TOTAL OPERATIONAL AREA OF PARK	1.57ha
PERCENTAGE OF RECREATIONAL AREA	6.8%

LAUNDRY FACILITIES	
WASHING MACHINES	5
CLOTHES DRYERS	2
WASHING TUBS	5
CLOTHES LINE (LINEAL METRES)	108
IRONS	1
IRONING BOARDS	1
NOTES: ALL WASHING MACHINES AND WASH TUBS ARE CONNECTED TO HOT AND COLD WATER. IRONS AND IRONING BOARDS ARE AVAILABLE FROM MANAGERS OFFICE UPON REQUEST	



ATTACHMENT 2

BUSHFIRE MODEL

NBC Bushfire Attack Assessment Report V2.1

AS3959 (2009) Appendix B - Detailed Method 2

Printed: 15/08/2017 Assessment Date: 9/08/2017



Site Street Address: Lot 2 DP610406, Windang

Assessor: David Cannon; Set Consultants

Local Government Area: Wollongong

Alpine Area: No

Equations Used

Transmissivity: Fuss and Hammins, 2002

Flame Length: RFS PBP, 2001

Rate of Fire Spread: Noble et al., 1980

Radiant Heat: Drysdale, 1985; Sullivan et al., 2003; Tan et al., 2005

Peak Elevation of Receiver: Tan et al., 2005

Peak Flame Angle: Tan et al., 2005

Run Description: South

Vegetation Information

Vegetation Type: Forest

Vegetation Group: Forest and Woodland

Vegetation Slope: 0 Degrees

Vegetation Slope Type: Downslope

Surface Fuel Load(t/ha): 15

Overall Fuel Load(t/ha): 20

Site Information

Site Slope: 0 Degrees

Site Slope Type: Downslope

Elevation of Receiver(m): Default

APZ/Separation(m): 32

Fire Inputs

Veg./Flame Width(m): 100

Flame Temp(K): 1090

Calculation Parameters

Flame Emissivity: 95

Relative Humidity(%): 25

Heat of Combustion(kJ/kg): 18600

Ambient Temp(K): 308

Moisture Factor: 5

FDI: 100

Program Outputs

Category of Attack: LOW

Peak Elevation of Receiver(m): 6.81

Level of Construction: BAL 12.5

Fire Intensity(kW/m): 18600

Radiant Heat(kW/m2): 12.5

Flame Angle (degrees): 75

Flame Length(m): 14.1

Maximum View Factor: 0.205

Rate Of Spread (km/h): 1.8

Inner Protection Area(m): 32

Transmissivity: 0.804

Outer Protection Area(m): 0

Run Description: South	
<u>Vegetation Information</u>	
Vegetation Type: Forest	Vegetation Group: Forest and Woodland
Vegetation Slope: 0 Degrees	Vegetation Slope Type: Downslope
Surface Fuel Load(t/ha): 15	Overall Fuel Load(t/ha): 20
<u>Site Information</u>	
Site Slope 0 Degrees	Site Slope Type: Downslope
Elevation of Receiver(m) Default	APZ/Separation(m): 23
<u>Fire Inputs</u>	
Veg./Flame Width(m): 100	Flame Temp(K) 1090
<u>Calculation Parameters</u>	
Flame Emissivity: 95	Relative Humidity(%): 25
Heat of Combustion(kJ/kg) 18600	Ambient Temp(K): 308
Moisture Factor: 5	FDI: 100
<u>Program Outputs</u>	
Category of Attack: MODERATE	Peak Elevation of Receiver(m): 6.67
Level of Construction: BAL 19	Fire Intensity(kW/m): 18600
Radiant Heat(kW/m2): 19	Flame Angle (degrees): 71
Flame Length(m): 14.1	Maximum View Factor: 0.301
Rate Of Spread (km/h): 1.8	Inner Protection Area(m): 23
Transmissivity: 0.83	Outer Protection Area(m): 0
Run Description: South	
<u>Vegetation Information</u>	
Vegetation Type: Forest	Vegetation Group: Forest and Woodland
Vegetation Slope: 0 Degrees	Vegetation Slope Type: Level
Surface Fuel Load(t/ha): 15	Overall Fuel Load(t/ha): 20
<u>Site Information</u>	
Site Slope 0 Degrees	Site Slope Type: Downslope
Elevation of Receiver(m) Default	APZ/Separation(m): 16
<u>Fire Inputs</u>	
Veg./Flame Width(m): 100	Flame Temp(K) 1090
<u>Calculation Parameters</u>	
Flame Emissivity: 95	Relative Humidity(%): 25
Heat of Combustion(kJ/kg) 18600	Ambient Temp(K): 308
Moisture Factor: 5	FDI: 100
<u>Program Outputs</u>	
Category of Attack: HIGH	Peak Elevation of Receiver(m): 6.28
Level of Construction: BAL 29	Fire Intensity(kW/m): 18600
Radiant Heat(kW/m2): 29	Flame Angle (degrees): 63
Flame Length(m): 14.1	Maximum View Factor: 0.446
Rate Of Spread (km/h): 1.8	Inner Protection Area(m): 16
Transmissivity: 0.855	Outer Protection Area(m): 0



ATTACHMENT 3

BUSHFIRE MITIGATION PLAN



NOTE:
THE PLOTTED EXTENTS OF BAL ZONES ARE
BASED ON THE ESTABLISHMENT OF A 16m
APZ WITHIN THE PUBLIC RESERVE LOT.

NOTE:
ALL SURVEY INFORMATION SHOWN HAS BEEN
SUPPLIED BY I & H INVESTMENTS PTY LTD.
SET CONSULTANTS HAS NOT CARRIED OUT
SURVEY WORKS ON THIS PROPERTY

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BUSHFIRE
ATTACK LEVELS
UNDER AS3959

- BAL-FLAME ZONE
- BAL-40
- BAL-29
- BAL-19
- BAL-12.5

SCALE 1:250 @ A1 1:500 @ A3		WARNING NOTE: THE INFORMATION SHOWN ON THIS PLAN (OR THE DATA TRANSMITTED HEREWITH) IS CORRECT AS AT 24/08/17 AND HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF I & H INVESTMENTS PTY LTD IF THESE NOTES ARE REMOVED SET CONSULTANTS PTY LTD IS RELIEVED OF ALL RESPONSIBILITY AND LIABILITY RELATING TO ANY SUBSEQUENT USE OF THE INFORMATION CONTAINED WITHIN THIS FILE. THIS ELECTRONIC FILE SHALL NOT BE TRANSMITTED TO ANY THIRD PARTY WITHOUT THE EXPRESS PERMISSION OF SET CONSULTANTS PTY LTD.		SURVEY N/A		AMENDMENTS		BY DATE		SET 24/08/17		BEWARE - Damage to telephone cables can disrupt communication services and cost you money. For prompt location of telephone cable ring - 1100 DIAL 1100 BEFORE YOU DIG Calls to this number are free.		SET consultants SURVEYING ENGINEERING TOWN PLANNING		SET CONSULTANTS PTY LTD 51 Graham Street Nowra PO Box 495 Nowra NSW 2541 p 02 4421 4500 Kiaira 02 4233 2006 mail@setconsultants.com.au www.setconsultants.com.au ABN 54 982 364 017		BUSHFIRE MITIGATION PLAN FOR OASIS RESORT CARAVAN PARK LOT 2 DP 610406 140-146 WINDANG ROAD, WINDANG FOR I & H INVESTMENTS PTY LTD		A1 SHEET 1 OF 1 SHEETS REF. No. 103385	
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ATTACHMENT 4

CONSTRUCTION STANDARDS

SECTION 7 CONSTRUCTION FOR BUSHFIRE ATTACK LEVEL 29 (BAL—29)

7.1 GENERAL

A building assessed in Section 2 as being BAL—29 shall comply with Section 3 and Clauses 7.2 to 7.8.

A3

‘Text deleted’

Any element of construction or system that satisfies the test criteria of AS 1530.8.1 may be used in lieu of the applicable requirements contained in Clauses 7.2 to 7.8 (see Clause 3.8).

NOTE: BAL—29 is primarily concerned with protection from ember attack and radiant heat greater than 19 kW/m^2 up to and including 29 kW/m^2 .

7.2 SUBFLOOR SUPPORTS

This Standard does not provide construction requirements for subfloor supports where the subfloor space is enclosed with—

A2

- (a) a wall that complies with Clause 7.4, except that sarking is not required where specified in Clause 7.4.1 (c); *or*
- (b) a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium; *or*
- (c) a combination of Items (a) and (b) above.

Where the subfloor space is unenclosed, the support posts, columns, stumps, piers and poles shall be—

- (i) of non-combustible material; *or*
- (ii) of bushfire-resisting timber (see Appendix F); *or*
- (iii) a combination of Items (i) and (ii) above.

NOTE: This requirement applies to the principal building only and not to verandas, decks, steps, ramps and landings (see Clause 7.7).

C7.2 Combustible materials stored in the subfloor space may be ignited by embers and cause an impact to the building.

7.3 FLOORS

7.3.1 Concrete slabs on ground

This Standard does not provide construction requirements for concrete slabs on ground.

7.3.2 Elevated floors

7.3.2.1 Enclosed subfloor space

This Standard does not provide construction requirements for elevated floors, including bearers, joists and flooring, where the subfloor space is enclosed with—

A2

- (a) a wall that complies with Clause 7.4, except that sarking is not required where specified in Clause 7.4.1 (c); *or*
- (b) a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium; *or*

- (c) a combination of Items (a) and (b) above.

7.3.2.2 Unenclosed subfloor space

A1 Where the subfloor space is unenclosed, the bearers, joists and flooring, less than 400 mm above finished ground level, shall be one of the following:

- (a) Materials that comply with the following:
- (i) Bearers and joists shall be—
 - (A) non-combustible; *or*
 - (B) bushfire-resisting timber (see Appendix F); *or*
 - (C) a combination of Items (A) and (B) above.
 - (ii) Flooring shall be—
 - (A) non-combustible; *or*
 - (B) bushfire-resisting timber (see Appendix F); *or*
 - (C) timber (other than bushfire-resisting timber), particleboard or plywood flooring where the underside is lined with sarking-type material or mineral wool insulation; *or*
 - (D) a combination of any of Items (A), (B) or (C) above.

A2 *or*

- (b) A system complying with AS 1530.8.1

This Standard does not provide construction requirements for elements of elevated floors, including bearers, joists and flooring, if the underside of the element is 400 mm or more above finished ground level.

7.4 EXTERNAL WALLS

A2 7.4.1 Walls

The exposed components of external walls shall be:

- (a) Non-combustible material.
- A3 NOTE: Examples include, but are not limited to, the following (with a minimum of 90 mm in thickness):

- (a) Full masonry or masonry veneer walls with an outer leaf of clay, concrete, calcium silicate or natural stone.
- (b) Precast or in situ walls of concrete or aerated concrete.
- (c) Earth wall including mud brick.

or

- (b) Timber logs of a species with a density of 680 kg/m³ or greater at a 12 percent moisture content; of a minimum nominal overall thickness of 90 mm and a minimum thickness of 70 mm (see Clause 3.11); and gauge planed.

or

- A3 (c) Cladding that is fixed externally to a timber-framed or a steel-framed wall that is sarked on the outside of the frame and is—
- (i) fibre-cement a minimum of 6 mm in thickness; *or*
 - (ii) steel sheeting; *or*
 - (iii) bushfire-resisting timber (see Appendix F); *or*

A3 (iv) a combination of any of Items (i), (ii) or (iii) above.

A2 *or*

(d) A combination of any of Items (a), (b), or (c) above.

7.4.2 Joints

All joints in the external surface material of walls shall be covered, sealed, overlapped, backed or butt-jointed to prevent gaps greater than 3 mm.

A2

7.4.3 Vents and weepholes

A3 Vents and weepholes in external walls shall be screened with a mesh with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium, except where the vents and weepholes have an aperture less than 3 mm (see Clause 3.6), or are located in an external wall of a subfloor space.

7.5 EXTERNAL GLAZED ELEMENTS AND ASSEMBLIES AND EXTERNAL DOORS

7.5.1 Bushfire shutters

Where fitted, bushfire shutters shall comply with Clause 3.7 and be made from—

- (a) non-combustible material; *or*
- (b) bushfire-resisting timber (see Appendix F); *or*
- (c) a combination of Items (a) and (b) above.

A1

7.5.1A Screens for windows and doors

Where fitted, screens for windows and doors shall have a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium. Gaps between the perimeter of the screen assembly and the building element to which it is fitted shall not exceed 3 mm.

The frame supporting the mesh or perforated sheet shall be made from—

- (a) metal; *or*
- (b) bushfire-resisting timber (see Appendix F).

7.5.2 Windows

A3

Window assemblies shall comply with one of the following:

- (a) They shall be completely protected by a bushfire shutter that complies with Clause 7.5.1.

or

- (b) They shall comply with the following:

A2

- (i) Window frames and window joinery shall be made from:

(A) Bushfire-resisting timber (see Appendix F).

or

(B) Metal.

or

- A3 (C) Metal-reinforced PVC-U. The reinforcing members shall be made from aluminium, stainless steel, or corrosion-resistant steel, and the frame and any sash shall satisfy the design load, performance and structural strength of the member.
- (ii) Externally fitted hardware that supports the sash in its functions of opening and closing shall be metal.
- (iii) Glazing shall be toughened glass minimum 5 mm.
- A3 NOTE: Where double-glazed units are used, the above requirements apply to the external face of the window assembly only.
- A1 (iv) Where glazing is less than 400 mm from the ground or less than 400 mm above decks, carport roofs, awnings and similar elements or fittings having an angle less than 18 degrees to the horizontal and extending more than 110 mm in width from the window frame (see Figure D3, Appendix D), that portion shall be screened externally with a screen that complies with Clause 7.5.1A.
- (v) The openable portions of windows shall be screened internally or externally with screens that comply with Clause 7.5.1A.

A2 **C7.5.2** *Screening of the openable portions of all windows is required in all BALs to prevent the entry of embers to the building when the window is open. Screening of the openable and fixed portions of some windows is required in some BALs to reduce the effects of radiant heat on some types of glass.*

If the screening is required to reduce the effects of radiant heat on the glass, the screening has to be external so that the glass in the openable portion of the window will be 'protected' when it is shut.

*If the screening is required **only** to prevent the entry of embers, the screening may be fitted externally or internally.*

7.5.3 Doors—Side-hung external doors (including French doors, panel fold and bi-fold doors)

Side-hung external doors, including French doors, panel fold and bi-fold doors, shall comply with one of the following:

- A2 (a) Doors and door frames shall be protected by bushfire shutters that comply with Clause 7.5.1.
- or*
- (b) Doors and door frames shall be protected externally by screens that comply with Clause 7.5.1A.
- or*
- (c) Doors and door frames shall comply with the following:
- (i) Doors shall be—
- (A) non-combustible; *or*
- (B) a solid timber, laminated timber or reconstituted timber door, having a minimum thickness of 35 mm for the first 400 mm above the threshold; *or*
- (C) a door, including a hollow core door, protected externally by a screen that complies with Clause 7.5.1A; *or*
- A3

(D) a fully framed glazed door, where the framing is made from non-combustible materials or from bushfire-resisting timber (see Appendix F).

A1, A3

- (ii) Externally fitted hardware that supports the panel in its functions of opening and closing shall be metal.
- (iii) Where doors incorporate glazing, the glazing shall be toughened glass minimum 6 mm in thickness.
NOTE: Where double-glazed units are used, the above requirements apply to the external face of the window assembly only.
- (iv) Where glazing is less than 400 mm from the ground or less than 400 mm above decks, carport roofs, awnings and similar elements or fittings having an angle less than 18 degrees to the horizontal and extending more than 110 mm in width from the door (see Figure D3, Appendix D), that portion shall be screened externally with screens that comply with Clause 7.5.1A.
- (v) Door frames shall be made from:
 - (A) Bushfire-resisting timber (see Appendix F).
 - or*
 - (B) Metal.
 - or*
 - (C) Metal-reinforced PVC-U. The reinforcing members shall be made from aluminium, stainless steel, or corrosion-resistant steel and the door assembly shall satisfy the design load, performance and structural strength of the member.
- (vi) Doors shall be tight-fitting to the door frame and to an abutting door, if applicable.
- (vii) Weather strips, draught excluders or draught seals shall be installed at the base of side-hung external doors.

7.5.4 Doors—Sliding doors

Sliding doors shall comply with one of the following:

A3

- (a) They shall be completely protected by a bushfire shutter that complies with Clause 7.5.1.

or

A1

- (b) They shall be completely protected externally by screens that comply with Clause 7.5.1A.

or

A1

- (c) They shall comply with the following:

A2

- (i) Both the door frame supporting the sliding door and the framing surrounding any glazing shall be made from:
 - (A) Bushfire-resisting timber (see Appendix F);
 - or*
 - (B) Metal;
 - or*

- A1 (C) Metal-reinforced PVC-U. The reinforcing members shall be made from aluminium, stainless steel, or corrosion-resistant steel and the door assembly shall satisfy the design load, performance and structural strength of the member.
- (ii) Externally fitted hardware that supports the panel in its functions of opening and closing shall be metal.
- A2 (iii) Where sliding doors incorporate glazing, the glazing shall be toughened glass minimum 6 mm.
- (iv) Sliding doors shall be tight-fitting in the frames.

7.5.5 Doors—Vehicle access doors (garage doors)

The following apply to vehicle access doors:

- (a) Vehicle access doors shall be made from—
- (i) non-combustible material; *or*
 - (ii) bushfire-resisting timber (see Appendix F); *or*
 - (iii) fibre-cement sheet, a minimum of 6 mm in thickness; *or*
 - (iv) a combination of any of Items (i), (ii) or (iii) above.
- (b) Panel lift, tilt doors or side-hung doors shall be fitted with suitable weather strips, draught excluders, draught seals or guide tracks, as appropriate to the door type, with a maximum gap no greater than 3 mm.
- (c) Roller doors shall have guide tracks with a maximum gap no greater than 3 mm and shall be fitted with a nylon brush that is in contact with the door (see Figure D4, Appendix D).
- (d) Vehicle access doors shall not include ventilation slots.

7.6 ROOFS (INCLUDING VERANDA AND ATTACHED CARPORT ROOFS, PENETRATIONS, EAVES, FASCIAS, GABLES, GUTTERS AND DOWNPIPES)

7.6.1 General

The following apply to all types of roofs and roofing systems:

- (a) Roof tiles, roof sheets and roof-covering accessories shall be non-combustible.
- (b) The roof/wall junction shall be sealed, to prevent openings greater than 3 mm, either by the use of fascia and eaves linings or by sealing between the top of the wall and the underside of the roof and between the rafters at the line of the wall.
- (c) Roof ventilation openings, such as gable and roof vents, shall be fitted with ember guards made of non-combustible material or a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium.
- (d) A pipe or conduit that penetrates the roof covering shall be non-combustible.

7.6.2 Tiled roofs

Tiled roofs shall be fully sarked. The sarking shall—

- (a) be located on top of the roof framing, except that the roof battens may be fixed above the sarking;
- (b) cover the entire roof area including ridges and hips; and
- (c) extend into gutters and valleys.

7.6.3 Sheet roofs

- A2 Sheet roofs shall—
- (a) be fully sarked in accordance with Clause 7.6.2, except that foil-backed insulation blankets may be installed over the battens; and
 - A2 (b) have any gaps greater than 3 mm (such as under corrugations or ribs of sheet roofing and between roof components) sealed at the fascia or wall line and at valleys, hips and ridges by—
 - (i) a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium; *or*
 - (ii) mineral wool; *or*
 - (iii) other non-combustible material; *or*
 - (iv) a combination of any of Items (i), (ii) or (iii) above.

A2 **C7.6.3** *Sarking is used as a secondary form of ember protection for the roof space to account for minor gaps that may develop in sheet roofing.*

7.6.4 Veranda, carport and awning roofs

The following apply to veranda, carport and awning roofs:

- (a) A veranda, carport or awning roof forming part of the main roof space [see Figure D1(a), Appendix D] shall meet all the requirements for the main roof, as specified in Clauses 7.6.1, 7.6.2, 7.6.3, 7.6.5 and 7.6.6.
- (b) A veranda, carport or awning roof separated from the main roof space by an external wall [see Figures D1(b) and D1(c), Appendix D] complying with Clause 7.4 shall have a non-combustible roof covering and the support structure shall be—
 - (i) of non-combustible material; *or*
 - (ii) bushfire-resisting timber (see Appendix F); *or*
 - (iii) timber rafters lined on the underside with fibre-cement sheeting a minimum of 6 mm in thickness, or with material complying with AS 1530.8.1; *or*
 - (iv) a combination of any of Items (i), (ii) or (iii) above.

7.6.5 Roof penetrations

The following apply to roof penetrations:

- A3 (a) Roof penetrations, including roof lights, roof ventilators, roof-mounted evaporative cooling units, arials, vent pipes and supports for solar collectors, shall be adequately sealed at the roof to prevent gaps greater than 3 mm. The material used to seal the penetration shall be non-combustible.
- A2 (b) Openings in vented roof lights, roof ventilators or vent pipes shall be fitted with ember guards made from a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium.
- A3 This requirement does not apply to the exhaust flues of heating or cooking devices with closed combustion chambers.

In the case of gas appliance flues, ember guards shall not be fitted.

NOTE: Gasfitters are required to provide a metal flue pipe above the roof and terminate with a certified gas flue cowl complying with AS 4566. Advice may be obtained from State gas technical regulators.

- | | |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A1 | <p>(c) All overhead glazing shall be Grade A safety glass complying with AS 1288.</p> <p>(d) Glazed elements in roof lights and skylights may be of polymer provided a Grade A safety glass diffuser, complying with AS 1288, is installed under the glazing. Where glazing is an insulating glazing unit (IGU), Grade A toughened safety glass minimum 4 mm, shall be used in the outer pane of the IGU.</p> |
| A2 | <p>(e) Flashing elements of tubular skylights shall be non-combustible. However, they may be of an alternative material, provided the integrity of the roof covering is maintained by an under-flashing made of non-combustible material.</p> |
| A3 | <p>(f) External single plane glazed elements of roof lights and skylights, where the pitch of the glazed element is 18 degrees or less to the horizontal, shall be protected with ember guards made from a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium.</p> |
| A3
A1 | <p>(g) Evaporative cooling units shall be fitted with non-combustible butterfly closers as close as practicable to the roof level, or the unit shall be fitted with non-combustible covers with a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium.</p> |
| A3
A2 | <p>(h) ‘Text deleted’</p> |

7.6.6 Eaves linings, fascias and gables

A3 The following apply to eaves linings, fascias and gables:

- | | |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A3 | <p>(a) Gables shall comply with Clause 7.4.</p> <p>(b) Fascias and bargeboards shall—</p> <ul style="list-style-type: none"> (i) where timber is used, be made from bushfire-resisting timber (see Appendix F);
<i>or</i> (ii) where made from metal, be fixed at 450 mm centres; <i>or</i> (iii) be a combination of Items (i) and (ii) above. <p>(c) Eaves linings shall be—</p> <ul style="list-style-type: none"> (i) fibre-cement sheet, a minimum 4.5 mm in thickness; <i>or</i> (ii) bushfire-resisting timber (see Appendix F); <i>or</i> (iii) a combination of Items (i) and (ii) above. <p>(d) Eaves penetrations shall be protected the same as for roof penetrations, as specified in Clause 7.6.5.</p> <p>(e) Eaves ventilation openings greater than 3 mm shall be fitted with ember guards made of non-combustible material or a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium.</p> <p>(f) Joints in eaves linings, fascias and gables may be sealed with plastic joining strips or timber storm moulds.</p> |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

7.6.7 Gutters and downpipes

A3 This Standard does not provide requirements for downpipes.

If installed, gutter and valley leaf guards shall be non-combustible.

With the exception of box gutters, gutters shall be metal or PVC-U.

Box gutters shall be non-combustible and flashed at the junction with the roof, with non-combustible materials.

7.7 VERANDAS, DECKS, STEPS, RAMPS AND LANDINGS

7.7.1 General

A1

Decking may be spaced.

There is no requirement to enclose the subfloor spaces of verandas, decks, steps, ramps or landings.

C7.7.1 Spaced decking is nominally spaced at 3 mm (in accordance with standard industry practice); however, due to the nature of timber decking with seasonal changes in moisture content, that spacing may range from 0–5 mm during service. The preferred dimension for gaps is 3 mm (which is in line with other 'permissible gaps') in other parts of this Standard. It should be noted that recent research studies have shown that gaps at 5 mm spacing afford opportunity for embers to become lodged in between timbers, which may contribute to a fire. Larger gap spacings of 10 mm may preclude this from happening but such a spacing regime may not be practical for a timber deck.

7.7.2 Enclosed subfloor spaces of verandas, decks, steps, ramps and landings

A2

7.7.2.1 Materials to enclose a subfloor space

The subfloor spaces of verandas, decks, steps, ramps and landings are deemed to be 'enclosed' when—

- (a) the material used to enclose the subfloor space complies with Clause 7.4, except that sarking is not required where specified in Clause 7.4.1 (c); and
- (b) all openings greater than 3 mm are screened with a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium.

7.7.2.2 Supports

This Standard does not provide construction requirements for support posts, columns, stumps, stringers, piers and poles.

7.7.2.3 Framing

This Standard does not provide construction requirements for the framing of verandas, decks, ramps or landings (i.e., bearers and joists).

A1

7.7.2.4 Decking, stair treads and the trafficable surfaces of ramps and landings

Decking, stair treads and the trafficable surfaces of ramps and landings shall be—

- (a) of non-combustible material; *or*
- (b) of bushfire-resisting timber (see Appendix F); *or*
- (c) a combination of Items (a) and (b) above.

7.7.3 Unenclosed subfloor spaces of verandas, decks, steps, ramps and landings

7.7.3.1 Supports

Support posts, columns, stumps, stringers, piers and poles shall be—

- (a) of non-combustible material; *or*
- (b) of bushfire-resisting timber (see Appendix F); *or*
- (c) a combination of Items (a) and (b) above.

7.7.3.2 Framing

Framing of verandas, decks, ramps or landings (i.e., bearers and joists) shall be—

- (a) of non-combustible material; *or*

- (b) of bushfire-resisting timber (see Appendix F); *or*
- (c) a combination of Items (a) and (b) above.

A1

7.7.3.3 Decking, stair treads and the trafficable surfaces of ramps and landings

Decking, stair treads and the trafficable surfaces of ramps and landings shall be—

- (a) of non-combustible material; *or*
- (b) of bushfire-resisting timber (see Appendix F); *or*
- (c) a combination of Items (a) and (b) above.

7.7.4 Balustrades, handrails or other barriers

Those parts of the handrails and balustrades less than 125 mm from any glazing or any combustible wall shall be—

- (a) of non-combustible material; *or*
- (b) bushfire-resisting timber (see Appendix F); *or*
- (c) a combination of Items (a) and (b) above.

A2

Those parts of the handrails and balustrades that are 125 mm or more from the building have no requirements.

7.8 WATER AND GAS SUPPLY PIPES

Above-ground, exposed water and gas supply pipes shall be metal.

ADDITIONAL CONSTRUCTION REQUIREMENTS ADDENDUM: APPENDIX 3 (PBP) (2010).

SARKING

Any sarking used for BAL-12.5, BAL-19, BAL-29 or BAL-40 shall be:

- a. Non-combustible; or
- b. Breather-type sarking complying with AS/NZS 4200.1 and with a flammability index of not more than 5 (see AS1530.2) and sarked on the outside of the frame; or
- c. An insulation material conforming to the appropriate Australian Standard for that material.

SUBFLOOR SUPPORTS

For Bal 12.5 and BAL 19, Clause 5.2 and 6.2 shall be replaced by the provisions of Clause 7.2. In this regard, Clause 7.2 states:

“7.2 SUBFLOOR SUPPORTS

This Standard does not provide construction requirements for subfloor supports where the subfloor space is enclosed with:

- a. a wall that complies with **(Clause 5.4 or 6.4 as appropriate)**; or*
- b. a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion resistant steel, bronze or aluminium; or*
- c. a combination of Items (a) and (b) above.*

Where the subfloor space is unenclosed, the support posts, columns, stumps, piers and poles shall be:

- (i) of non-combustible material; or*
- (ii) of bushfire-resisting timber; or*
- (iii) a combination of Items (i) and (ii) above.*

NOTE: This requirement applies to the principal building only and not to verandas, decks, steps, ramps and landings (see Clause 7.7).”

ELEVATED FLOORS

For Bal 12.5 and BAL 19, Clause 5.3 and 6.3 shall be replaced by the provisions of clause 7.3. In this regard, clause 7.3.2 states:

7.3.2 Elevated floors

7.3.2.1 Enclosed subfloor space

This Standard does not provide construction requirements for elevated floors, including bearers, joists and flooring, where the subfloor space is enclosed with:

- a. a wall that complies with **(Clause 5.4 or 6.4 as appropriate)**; or*
- b. a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion resistant steel, bronze or aluminium; or*
- c. a combination of Items (a) and (b) above.*

ADDITIONAL CONSTRUCTION REQUIREMENTS ADDENDUM:
APPENDIX 3 (PBP) (2010).

7.3.2.2 Unenclosed subfloor space

Where the subfloor space is unenclosed, the bearers, joists and flooring, less than 400 mm above finished ground level, shall be one of the following:

a. Materials that comply with the following:

(i) Bearers and joists shall be:

A. non-combustible; or

B. bushfire-resisting timber or

C. a combination of Items (A) and (B) above.

(ii) Flooring shall be:

A. non-combustible; or

B. bushfire-resisting timber; or

C. timber (other than bushfire-resisting timber), particleboard or plywood flooring where the underside is lined with

sarking-type material or mineral wool insulation; or

D. a combination of any of Items (A), (B) or (C) above. or

b. A system complying with AS 1530.8.1

This Standard does not provide construction requirements for elements of elevated floors, including bearers, joists and flooring, if the underside of the element is 400 mm or more above finished ground level.”

VERANDAS, DECKS, STEPS, RAMPS AND LANDINGS

For Bal 12.5 and BAL 19, Clause 5.2 and 6.2 shall be replaced by the provisions of clause 7.2. In this regard, clause 7.2 states:

7.7 VERANDAS, DECKS, STEPS, RAMPS AND LANDINGS

7.7.1 General

Decking may be spaced.

There is no requirement to enclose the subfloor spaces of verandas, decks, steps, ramps or landings.

7.7.2 Enclosed subfloor spaces of verandas, decks, steps, ramps and landings

7.7.2.1 Materials to enclose a subfloor space

The subfloor spaces of verandas, decks, steps, ramps and landings are considered to be ‘enclosed’ when:

a. the material used to enclose the subfloor space complies with (Clause 5.4 or 6.4 as appropriate); and

ADDITIONAL CONSTRUCTION REQUIREMENTS ADDENDUM:
APPENDIX 3 (PBP) (2010).

b. *all openings greater than 3 mm are screened with a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium.*

7.7.2.2 Supports

This Standard does not provide construction requirements for support posts, columns, stumps, stringers, piers and poles.

7.7.2.3 Framing

This Standard does not provide construction requirements for the framing of verandas, decks, ramps or landings (i.e., bearers and joists).

7.7.2.4 Decking, stair treads and the trafficable surfaces of ramps and landings

Decking, stair treads and the trafficable surfaces of ramps and landings shall be:

- a. of non-combustible material; or*
- b. of bushfire-resisting timber;;*
- or*
- c. a combination of Items (a) and (b) above.*

7.7.3 Unenclosed subfloor spaces of verandas, decks, steps, ramps and landings

7.7.3.1 Supports

Support posts, columns, stumps, stringers, piers and poles shall be:

- a. of non-combustible material; or*
- b. of bushfire-resisting timber;*
- or*
- c. a combination of Items (a) and (b) above*

7.7.3.2 Framing

Framing of verandas, decks, ramps or landings (i.e., bearers and joists) shall be:

- a. of non-combustible material; or*
- b. of bushfire-resisting timber; or*
- c. a combination of Items (a) and (b) above.*

7.7.3.3 Decking, stair treads and the trafficable surfaces of ramps and landings

Decking, stair treads and the trafficable surfaces of ramps and landings shall be:

- a. of non-combustible material; or*
- b. of bushfire-resisting timber; or*
- c. a combination of Items (a) and (b) above.*

ADDITIONAL CONSTRUCTION REQUIREMENTS ADDENDUM:
APPENDIX 3 (PBP) (2010).

7.7.4 Balustrades, handrails or other barriers

Those parts of the handrails and balustrades less than 125 mm from any glazing or any combustible wall shall be—

- a. of non-combustible material; or*
- b. bushfire-resisting timber; or*
- c. a combination of Items (i) and (ii) above.*

Those parts of the handrails and balustrades that are 125 mm or more from the building have no requirements.”



ATTACHMENT 5

FIRE SAFETY ASSESSMENT REPORT

Fire Safety Assessment Report

I & H Investments

In care of



for

**140-146 Windang Road,
Windang NSW 2528**

CLIENT: I & H Investments c/o
SET Consultants
PO Box 495,
NSW 2541

FIRE SAFETY
ENGINEERS: GN Consulting Pty Ltd
Suite 8/38 Rowe Street
Eastwood NSW 2122

Document Verification History

Project: 140-146 Windang Road, Windang
Project No: 9498
Title: Fire Safety Assessment Report

Revision	Issue Date	Comments	Prepared	Approved
Draft	29/12/16	For comment	J. Hoang	

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1 INTRODUCTION

GN Consulting Pty Ltd (GNC) was commissioned to provide a fire safety assessment for the existing dwellings at the Oasis Resort Caravan Park located at 140-146 Windang Road, Windang. The scope of this report includes assessing the compliance status of the caravan park with respect to fire separation, evacuation and egress capacity, and fire services as required by the legislative provisions noted with the Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation (LGR) 2005, and the Building Code of Australia (BCA) 2016.

The Oasis Resort Caravan Park consists of a block of Class 1a dwellings and a Class 3 motel. This report will only assess the Class 1a portion of the premises. See below for an overall site plan.



Figure 1 - Site plan

All identified non-compliances have been identified with options for rectification to achieve full compliance.

It is important to note that no physical tests were performed for any of the existing fire safety measures to verify performance as it is expected that all services are maintained as part of routine maintenance.

2 REPORT BASIS

The subject building was assessed based on the following:

1. Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005 – Part 3;
2. Local Government Act 1993 No 30;
3. Building Code of Australia (BCA) 2016 Volume 2 (Class 1 and 10 buildings);

4. Building Code of Australia (BCA) 2016 Volume 1 (Class 2 to 9 buildings);
5. Council inspection and summarised table of issues to be resolved – email correspondence dated – 16/11/2016 from Kristin Holt;
6. Evacuation plan of the Oasis Resort; and
7. Geospatial images – <https://maps.six.nsw.gov.au>.

3 PROJECT DETAILS

The site inspection of the Oasis Resort Caravan Park was conducted on Monday the 21st of November to Tuesday the 22nd of November by GNC.

The Class 1a portion of the Oasis Resort Caravan Park incorporates a total of 51 dwellings, however only 24 of the 51 dwellings were assessed with respect to fire separation requirements under direction from the client on the basis of items specifically noted by Wollongong Council. Evacuation, egress capacity and required fire services were assessed throughout the entire Class 1a portion only. Figure 2 below shows the tenancy plan of the Class 1a portion of the site.

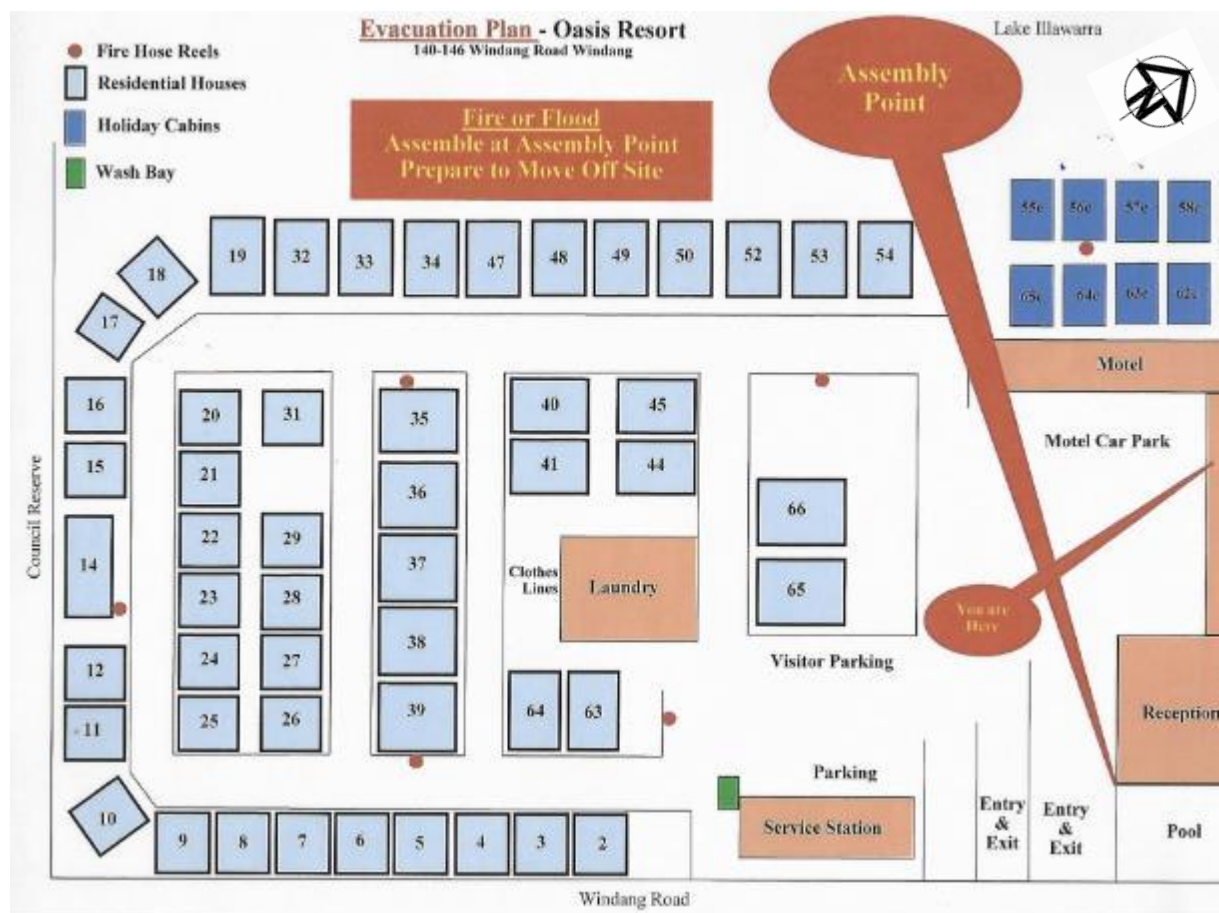


Figure 2 - Tenancy plan

4 FIRE SEPARATION

During Wollongong Council's inspection of Oasis Resort Caravan Park it was noted that various dwellings exhibited non-compliances with respect to setback distances. This section of the report discusses the required fire separation between dwellings, garages and carports.

The clauses below have been used as part of GNC's assessment regarding fire separation between dwellings, garages and carports.

- (1) Clause 91 of the LGR 2005 stipulates that A moveable dwelling must not be installed closer to any other moveable dwelling than 3 metres, if it is situated on a long-term site. Furthermore, the clause states:

"This clause (91) does not prohibit the installation of semi-detached relocatable homes on adjoining dwelling sites so long as they are separated by construction conforming to the fire safety and sound insulation and provisions relating to class 1 buildings contained in Section 3.7.1 and 3.8.6 of Volume Two and Building Code of Australia."

- (2) The Local Government Act (LGA) 1993 defines a moveable dwelling to include for any associated structures such as carports, garages, sheds, pergolas, verandas or other structures which are attached to or integrated with, or located on the same site as, the dwelling concerned. Therefore, the required separation distance between each dwelling including any associated structure is 3m. The existing layout of the caravan park, indicates all Class 1a dwellings and associated structures to be closer than the minimum 3m separation.

- (3) The LGR 2005 allows for a garage to abut a site boundary, a shared double carport, or shared double garage may extend over a site boundary and adjacent garages may abut each other along a shared site boundary in consideration of the following:

"If a relocatable home and garage are situated on the same dwelling site such that the garage is situated closer than 900 millimetres to the relocatable home and closer than 900 millimetres to the site boundary of an adjoining dwelling site:

(a) the external walls of the relocatable home that face the garage must comply with the provisions relating to class 1 buildings contained in Section 3 of Volume Two of the Building Code of Australia, or

(b) the external walls of the garage that face the relocatable home must comply with the provisions relating to class 10 buildings contained in Section 3 of Volume Two of the Building Code of Australia."

- (4) With respect to a carport structure, Clause 141 of the LGR 2005 requires that its construction consist of the following:

(a) The roof covering and any ceiling lining, wall cladding or gable of a carport must be non-combustible;

(b) Have at least 2 sides open and at least one-third of its perimeter open (a side is considered to be open if the roof covering of the carport is at least 500 millimetres from a relocatable home, annexe, associated structure or site boundary);

(c) A carport must not provide direct vertical support to any part of a relocatable home; and

(d) If a carport has a common roof structure with a relocatable home and the carport does not have a ceiling, the opening between the top of the wall of the relocatable home and the underside of the roof covering of the carport must be infilled with:

- a non-combustible material, or
- construction clad with non-combustible material on the carport side.

Due to the lack of information, GNC could not determine the location site boundaries between dwellings. Hence, it has been conservatively assumed that the associated structures are located within 0.5m of the site boundary.

The table which can be found in Appendix A consists of dwellings which Wollongong Council have noted to be non-compliant with respect to separation distances. Wollongong Council have noted that: *“Setbacks between structures on adjacent sites appear to be less than required (therefore), partial demolition or a section 82 variation will be required”*. GNC inspected the various setback distances between dwellings, garages and carports which Wollongong Council had noted and some minor discrepancies were recorded.

In general, GNC agrees with the majority of setback distances noted by Wollongong Council based on site measurements during inspection. Furthermore, the majority of setback distances for all Class 1a dwellings does not comply with the minimum 3m separation required by Clause 91 of the LGA 2005.

The majority of attached structures cannot comply with the requirements of a carport i.e. have less than 1/3 open perimeter, have only 1 open wall, and/or have openings which are less than 500mm from a site boundary. Therefore, these attached structures are required to be considered as garages.

The remainder of the attached structures which comply with the requirements for carports in accordance with Clause 141 of the LGR 2005 are proposed to be converted into garages, which facilitates a means to achieve compliance with the Regulation i.e. allowing the use of fire separation through construction. Where a wall of either a dwelling or an attached structure cannot meet the 3m minimum setback, construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2 is proposed to be retrofitted.

Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.

Appendix A provides greater prescriptive details about triggers for non-compliances and rectification details for each dwelling specifically.

5 FIRE SERVICES

Clause 128 of the LGR 2005, Stipulates that no part of a dwelling site, camp site or community building within a caravan park or camping ground may be situated more than 90 metres from a fire hydrant, and any fire hydrant located within a caravan park or camping ground must:

- (a) be a double-headed pillar-type fire hydrant, and
- (b) be maintained to the standard specified in the approval for the caravan park or camping ground.

Additionally, Clause 129 of the LGR 2005, states that Fire hose reels must be installed so that each dwelling site or camp site in the caravan park or camping ground can be reached by a fire hose. The fire hose reels must be constructed in accordance with AS/NZS 1221:1997 and installed in accordance with AS 2441-1988.

The LGR 2005 further emphasises that the holder of the approval for the caravan park or camping ground must cause the council to be given a certificate (a fire hose reel certificate) in relation to the fire hose reels once every calendar year. If a fire hose reel is newly installed, the certificate must be provided within 7 days of the completion of its installation. Furthermore, the fire hose reel certificate is to state:

- (a) that the fire hose reel system has been inspected and tested by a person (chosen by the holder of the approval) who is properly qualified to carry out such an inspection and test, and
- (b) that, as at the date on which the fire hose reel was inspected and tested, the fire hose reel was found to have been capable of performing to a standard not less than that required by this Regulation.

5.1 Fire Hydrant System

During GNC's site inspection it was noted that there was no an onsite fire hydrant system installed. Plans requested from Sydney Water indicate that there are two street hydrants located external to the site, however they would be insufficient in providing total site coverage. Notwithstanding the above, an external fire hydrant system is proposed to service the Oasis Resort Caravan Park. Refer to Figure 3 below for the locations of the existing street hydrants.

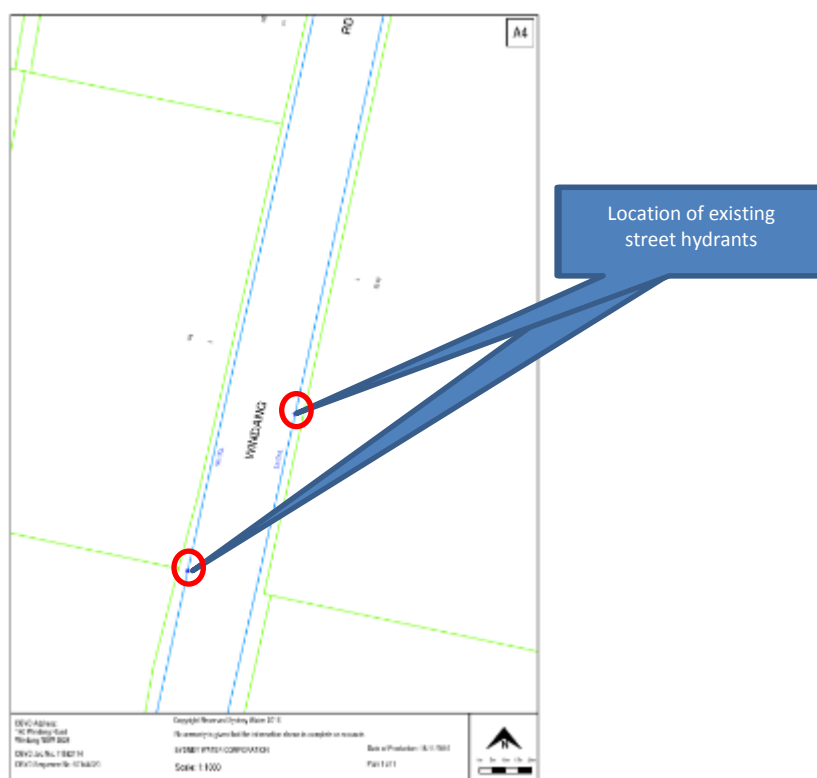


Figure 3 - Location of street hydrants

Clause 128 of the LGR 2005 does not reference any Australian Standards in which the fire hydrant system is to be installed. From discussions with Wollongong Council and industry best practice, an onsite fire hydrant system shall be installed and is to comply with the design and prescriptive requirements of AS2419.1-2005.

GNC recommends a licensed professional to design and install the proposed fire hydrant system. GNC can assist with this process if required. Additionally, GNC recommend the proposed fire hydrant system shall be maintained in accordance with AS1851-2012.

5.2 Fire Hose Reel System

During GNC's site inspection it was noted that an existing fire hose reel system was installed on the subject premises. A total of six fire hose reels were installed onsite with one of the fire hose reels used to protect the Class 3 portion of the site.

A preliminary fire hose reel coverage assessment was carried out and it was determined that the existing fire hose reel system does not provide total site coverage to the Class 1a dwellings. Rectification works to relocate and install additional fire hose reels is required for compliant site coverage.

The fire hose reel rectification works shall be designed and constructed to AS2441-1988 in accordance with Clause 129(2) or the LGR 2005.

GNC recommends a licensed professional to design and install the proposed fire hydrant system. GNC can assist with this process if required. Additionally, GNC recommend the proposed fire hose reel system shall be maintained in accordance with AS1851-2012.

6 EVACUATION AND EGRESS CAPACITY

The LGR 2005 does not make reference specifically to evacuation and egress capacity of caravan parks and camping grounds, however it does make reference to the width of roads. Clause 94 of the LGR 2005 stipulates the following:

“(1) The width of an access road must be:

- (a) At least 6 metres for a two-way access road, and*
- (b) At least 4 metres for a one-way access road.*

(2) The direction of travel for a one-way road must be indicated by means of conspicuous signs.”

During GNC's site inspection, it was noted that all the access roads were one way and were at least 4m wide, except for one section adjacent dwellings 40 and 45 which was measured to be 3.9m. Refer to Figure 4.

As part of the Oasis Resort Caravan Park's evacuation plan, the assembly point is located adjacent the reception, in front of the main entry and exit. Given the LGR 2005 does not comment specifically about evacuation, it is assumed that the access roads are to be utilised as paths of travel to a place of safety (being the public road network). As such, Clause D1.6(d) of the BCA 2016 stipulates the following:

“In a required exit of path of travel to an exit...if the storey, mezzanine or open spectator stand accommodates more than 200 persons, the aggregate unobstructed width, except for doorways, must be increased to -

- (i) 2m plus 500mm for every 60 persons (or part of) in excess of 200 persons if egress involves a change in floor level by a stairway or ramp with a gradient steeper than 1 in 12; or*
- (ii) in any other case, 2m plus 500mm for every 75 persons (or part) in excess of 200;”*

There are 51 dwellings in the Class 1a portion of the subject premises. If it is assumed that there are four occupants per dwelling (two occupants per living space, two living spaces per dwelling) then this equates to a total of 204 occupants. Under Clause D1.6(d)(ii), the aggregate unobstructed width of the path of travel to an exit is required to be 2.5m wide. Considering the width of the access roads are at least 3.9m, the existing pathways are at least 1.5 times the required minimum requirements of the BCA 2016. Due to the layout of the

subject premises, it is anticipated that occupants will be able to evacuate safely due to the different egress routes available to the assembly point.

Legend



-  Greater than or equal to 4m wide
-  Less than or equal to 4m wide



Figure 4 - Access road widths

7 SUMMARY OF DTS NON-COMPLIANCES

Several non-compliance issues have been identified in the subject premises, which need to be rectified in order to satisfy the requirements of the LGR 2005. They are as follows:

1. Clause 91 Separation distances
2. Clause 128 Fire hydrants
3. Clause 129 Fire hose reels

8 CONCLUSION

The report identifies all fire safety and access items which are applicable to the subject premises under the LGR 2005. If compliance with the prescriptive requirements of the LGR 2005 is not possible, GN Consulting may formulate an "Performance Solution" for specific non-compliance items and will provide a fire engineering assessment in the form of a Fire Engineering Report that will demonstrate compliance with the Performance Requirements of the BCA, which will be lodged alongside a section 82 of the LGA 1993.

We trust the above information is useful and will assist the client and the Council in determining the required level of fire safety.

Please do not hesitate to contact the undersigned if you have any further questions.

Signed on behalf of,

GN Consulting Pty. Ltd.



John Hoang

BEng (Mech), DipEngPrac
Consulting Engineer

Q.A. Reviewed

GN Consulting Pty. Ltd.



Leonard Tunhavasana

BEng(Civil & Enviro), DipEngPrac,
MEngMgmt
Associate

Approved

GN Consulting Pty. Ltd.

9 APPENDIX A

Fire separation of dwellings and recommendations

Tenancy	Notes	Comments in Relation to Compliance Status
2	Setback from carport to site 3 is 1.38m – 1.42m	<p>GNC agrees with council's measured distances. The setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. Additionally, the attached structure is enclosed on all sides with solid construction, hence, is required to be classified as a garage.</p> <p>GNC recommends that the southern garage wall and the dwelling northern external wall incorporate an FRL of at least 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution shall be prepared by a C10 accredited fire safety engineer. The performance solution shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>
3	<p>Distance from carport to dwelling is 0.78m.</p> <p>Distance from dwelling 3 to dwelling 4 is 1.059m</p>	<p>GNC agrees with council's measured distances. The setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. Additionally, the attached structure is enclosed on three sides with solid construction, hence, is required to be classified as a garage.</p> <p>GNC recommends that the southern garage wall and the dwelling northern external wall incorporate an FRL of at least 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution shall be prepared by a C10 accredited fire safety engineer. The performance solution shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>
5	<p>Setback from dwelling 5 to 6 is 1.479m.</p> <p>Setback from carport to dwelling 6 is 1.386m</p>	<p>GNC agrees with council's measured distances. The setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. Additionally, the attached structure is enclosed on three sides i.e. two sides with solid construction and a third side located within 500mm of the southern site boundary. Therefore, the structure is required to be classified as a garage.</p> <p>GNC recommends that a new southern garage wall be formed and the dwelling northern external wall both be retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>

Tenancy	Notes	Comments in Relation to Compliance Status
6	Setback from carport to dwelling 7 is 0.143m – 0.15m	<p>GNC agrees with council's measured distances. The setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. The attached structure is enclosed on two sides i.e. one side with solid construction and the second side located within 500mm of the southern site boundary. As the structure does not provide the minimum 1/3 open perimeter for a carport, it is required to be classified as a garage.</p> <p>GNC recommends that a new southern garage wall be formed and the dwelling northern external wall both be retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>
7	Setback from carport to dwelling 8 is 1.245 – 1.263m	<p>GNC agrees with council's measured distances. It is recommended that the carport to be converted to a garage to allow compliance to be achieved via fire rated construction in accordance with Clause 140 of the LGR 2005. Conversion is proposed by enclosing the rear (eastern) side of the structure.</p> <p>Post the garage conversion, GNC recommends that a new southern garage wall be formed and the dwelling northern external wall both be retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>
8	<p>Setback from carport to corner of dwelling 9 is 0.948m</p> <p>Setback from deck to dwelling 9 is 0.793m</p>	<p>GNC agrees with council's measured distances. Furthermore, the setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. It is recommended that the carport to be converted to a garage to allow compliance to be achieved via fire rated construction in accordance with Clause 140 of the LGR 2005. Conversion is proposed by enclosing the rear (eastern) side of the structure.</p> <p>Post the garage conversion, GNC recommends that a new southern garage wall be formed and the dwelling northern external wall both be retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>

Tenancy	Notes	Comments in Relation to Compliance Status
10	<p>Setback to dwelling 9 is 2.318m-2.512m.</p> <p>Setback from carport (detached) to dwelling 11 is 1.069m</p>	<p>GNC agrees with council's measured distances. Furthermore, the setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. It is recommended that the carport to be converted to a garage to allow compliance to be achieved via fire rated construction in accordance with Clause 140 of the LGR 2005. Conversion is proposed by enclosing the eastern and western sides of the structure.</p> <p>Post the garage conversion, GNC recommends that the proposed western garage wall and the dwelling eastern external wall both be retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>
23	<p>Setback to shed on site 28 is 1.2m.</p> <p>Setback to dwelling on site 28 is 2.16m.</p>	<p>GNC agrees with council's measured distances with the addition of the setback distance from dwelling 23 to 28 being 2.014m as measured during GNC's inspection. Furthermore, the setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. It is recommended that the carport to be converted to a garage to allow compliance to be achieved via fire rated construction in accordance with Clause 140 of the LGR 2005. Conversion is proposed by enclosing the rear (north end) and (east end) side of the structure.</p> <p>Post the conversion, GNC recommends that the new garage walls (north and east sides), dwelling northern and western external walls, be retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>

Tenancy	Notes	Comments in Relation to Compliance Status
24	<p>Setback from carport to dwelling 25 is 1.3m.</p> <p>Setback to dwelling 27 is 2.04m.</p>	<p>GNC have measured the setbacks from the carport to dwelling 25 as 1.505m and from dwelling 24 to dwelling 27 as 3.026m. All other setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGA 2005. It is recommended that the carport to be converted to a garage to allow compliance with Clause 140 of the LGR 2005. Conversion is proposed by enclosing the rear (north end) and side (east end) of the structure. Given that the rear of dwelling 24 is located more than 3m away from dwelling 27, the proposed construction is not required to be fire rated.</p> <p>Post the conversion, GNC recommends that the new side (eastern end) garage wall and the dwelling western external wall, be retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>
25	<p>Setback to carport on site 24 is 1.3m.</p> <p>Setback to carport of site 26 is 0.3m</p> <p>Setback to shed on site 26 is 2.72m, to dwelling is 4.2m.</p>	<p>GNC agrees with council's measurements excluding the setback from the carport on dwelling 24 to be 1.505m. Furthermore, the setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. It is recommended that the carport to be converted to a garage to allow compliance to be achieved via fire rated construction in accordance with Clause 140 of the LGR 2005. Conversion is proposed by enclosing the rear (north end) and side (east end) of the structure.</p> <p>Post the conversion, GNC recommends that the proposed northern garage wall, as well as the dwelling northern and western external wall, be retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>

Tenancy	Notes	Comments in Relation to Compliance Status
26	<p>Setback to shed on site is 0.03 from carport, from shed is 2.72m.</p> <p>Setback to dwelling 27 is 1.2m</p>	<p>GNC agrees with council's measurements excluding the setback to shed on dwelling 25 being 0.3m. Furthermore, the setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. The attached structure is enclosed on three sides i.e. all sides is within 500mm of building structures / site boundaries. Therefore, the structure is required to be classified as a garage.</p> <p>GNC recommends that new garage walls on the northern, southern and western sides of the structure be erected, and that these walls as well as the existing southern and western external walls of the dwelling, are all retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>
27	<p>Setback to deck on site 26 is 1.2m, setback to dwelling on site 24 is 2.04m.</p> <p>Setback to dwelling in site 28 is 1.67m.</p>	<p>GNC agrees with council's measurements excluding the setback to dwelling 24 being 3m. All other setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. The attached structure is enclosed on three sides i.e. two sides with solid construction and a third side located within 500mm of the southern site boundary. Therefore, the structure is required to be classified as a garage.</p> <p>GNC recommends that a garage western wall be erected, and that this wall and the dwelling eastern external wall, be retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>

Tenancy	Notes	Comments in Relation to Compliance Status
28	<p>Setback to dwelling 27 is 1.67m.</p> <p>Setback to dwelling 29 is 1.47m.</p> <p>Setback from shed to dwelling 23 is 1.21m.</p>	<p>GNC agrees with council's measurements. These setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. The attached structure is enclosed on three sides with solid construction, therefore, the structure is required to be classified as a garage.</p> <p>GNC recommends that the existing garage western wall and dwelling eastern external and southern wall, are retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>
29	<p>Setback to carport on site 28 is 1.47m.</p> <p>Setback to dwelling 22 is 1.79m</p>	<p>GNC agrees with the setback distances. Furthermore, these setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. The attached structure is enclosed on three sides i.e. two sides with solid construction and a third side located within 500mm of the southern site boundary. Therefore, the structure is required to be classified as a garage.</p> <p>GNC recommends that western and southern garage walls are to be erected, and that these walls as well as the dwelling eastern and southern external walls, are retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>
40	<p>Setback from stairs to dwelling 45 is 1.8m.</p> <p>Setback from carport to carport on site 44 is 3.09m.</p>	<p>GNC agrees with the setback distances. All other setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. The attached structure is enclosed on three sides with solid construction. Therefore, the structure is required to be classified as a garage.</p> <p>GNC recommends that the northern and eastern garage walls, and the dwelling northern external wall, is retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>

Tenancy	Notes	Comments in Relation to Compliance Status
41	<p>Setback between carports of site 41 and 41 is zero (touching)</p> <p>Setback to dwelling 44 is 2.9m.</p>	<p>GNC agrees with the setback distances. Furthermore, these setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. The attached structure is enclosed on two sides i.e. one side with solid construction and the second side located (touching) within 500mm of the southern site boundary. As the structure does not provide the minimum 1/3 open perimeter for a carport, it is required to be classified as a garage.</p> <p>GNC recommends that a new northern garage wall be erected, and that this wall as well as the existing western garage wall and dwelling northern external wall, is retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>
44	<p>Setback to dwelling 41 is 2.9m.</p> <p>Setback between carports to site 45 is 0.6m.</p>	<p>GNC agrees with the setback distances excluding the setback between the dwelling and the carport of dwelling 45 to be 1.48m. These setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. The attached structure is enclosed on two sides i.e. both sides located within 500mm of the site boundary's. As the structure does not provide the minimum 1/3 open perimeter for a carport, it is required to be classified as a garage.</p> <p>GNC recommends that new western and southern garage walls to be erected, and that these walls as well as the dwelling southern external wall, be retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>

Tenancy	Notes	Comments in Relation to Compliance Status
45	<p>Setback to carport on site 44 is 0.6m.</p> <p>Setback to steps on site 40 is 1.8m, setback to dwelling is 2.9m</p>	<p>GNC agrees with the measured distances. These setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. The attached structure is enclosed on two sides i.e. both sides located within 500mm of the site boundary's. As the structure does not provide the minimum 1/3 open perimeter for a carport, it is required to be classified as a garage.</p> <p>GNC recommends new eastern and southern garage walls to be erected, and that these walls as well as the dwelling southern external wall, be retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>
50	<p>Setback to dwelling 49 is 2.85m to wall, 0.78m to carport.</p> <p>Setback to dwelling 52 is 3.008m</p>	<p>GNC agrees with the measured distances excluding the setback to dwelling 49 being 3.2m to the wall and 1.7m to the attached structure. These setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. The attached structure is enclosed on two sides i.e. one side with solid construction and the second side located within 500mm of the southern site boundary. As the structure does not provide the minimum 1/3 open perimeter for a carport, it is required to be classified as a garage.</p> <p>GNC recommends new southern wall to be erected, and that this wall as well as the dwelling northern external wall, be retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>

Tenancy	Notes	Comments in Relation to Compliance Status
52	Setback to dwelling on site 53 is 0.77m	<p>GNC have measured the setback to dwelling 53 to be 0.826m. All setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. The attached structure is enclosed on three sides with solid construction. Therefore, the structure is required to be classified as a garage.</p> <p>GNC recommends that the northern garage wall as well as the dwelling southern external wall is retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>
63	<p>Setback to dwelling 64 is 1.54m.</p> <p>Setback to amenities is 7.08m</p>	<p>GNC agrees with council's measured distances. The setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. Additionally, the attached structure is enclosed on all sides with solid construction, hence, is required to be classified as a garage.</p> <p>GNC recommends that the southern garage wall incorporate an FRL of at least 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution shall be prepared by a C10 accredited fire safety engineer. The performance solution shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>
64	<p>Setback to dwelling 63 is 1.54m.</p> <p>Setback to amenities is 8.66m.</p>	<p>GNC agrees with council's measurements. Furthermore, the setback distances are less than the minimum 3m separation requirements of Clause 91 of the LGR 2005. It is recommended that the carport to be converted to a garage to allow compliance in accordance with Clause 140 of the LGR 2005. Conversion is proposed by enclosing the rear (western) and southern side of the structure. Given that the associated structure is more than 3m from another dwelling, the proposed construction does not require to be fire rated.</p> <p>Post the conversion, GNC recommends that the dwelling northern external wall, be retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>

Tenancy	Notes	Comments in Relation to Compliance Status
65	Setback to carport on site 66 is 1.53m	<p>GNC agree with the setback distances with the western setback distance being less than the minimum 3m separation requirements of Clause 91 of the LGR 2005.</p> <p>GNC recommends that the dwelling western external wall, be retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>
66	Setback to dwelling 65 is 1.53m	<p>GNC agree with the setback distances with the eastern setback distance being less than the minimum 3m separation requirements of Clause 91 of the LGR 2005.</p> <p>GNC recommends that an eastern garage wall be erected and is retrofitted with construction having a minimum FRL of 60/60/60 in accordance with Clause 3.7.1.4 of the BCA 2016, Volume 2.</p> <p>Alternatively, a performance solution may be proposed to be developed to satisfy the performance requirements of the BCA (pending Wollongong Council's approval). The solution is to be prepared by a C10 accredited fire safety engineer and shall be submitted alongside a Section 82 – Objections to applications of regulations and local policies of the LGA 1993. GNC can assist with the above if required.</p>



NSW RURAL FIRE SERVICE



The General Manager
Wollongong City Council
Locked Bag 8821
WOLLONGONG DC NSW 2500

Your reference: DA-2017/830
Our reference: D17/3000

6 June 2018

Attention: Nigel Lamb

Dear Sir/Madam,

Amend community layout of a caravan park – 140-146 Windang Road, Windang

Reference is made to Council's correspondence dated 29 August 2017 seeking general terms of approval for the above application for integrated development in accordance with Section 4.47 of the *Environmental Planning and Assessment Act 1979*.

The New South Wales Rural Fire Service has considered the information provided. This response is a Bush Fire Safety Authority issued under Section 100B of the *Rural Fires Act 1997* and is subject to the following conditions:

Asset Protection Zones

The intent of measures is to provide sufficient space and maintain reduced fuel loads so as to ensure radiant heat levels of buildings are below critical limits and to prevent direct flame contact with a building. To achieve this, the following conditions shall apply:

1. Prior to operating under this approval, an easement under section 88B of the *Conveyancing Act 1919* or Plan of Management (PoM) shall be established for the ongoing maintenance of a 16-metre wide Asset Protection Zone (APZ) along the northern boundary of Windang Peninsula Heritage Park.

The easement or PoM shall conform to the provisions of section 3.3(b) of *Planning for Bush Fire Protection 2006* and *Community Resilience Fast Facts 6/07: Plans of Management*. For easement(s), the owner/occupier of the land who has benefited from the easement shall be responsible for maintaining the APZ, and the power to release, vary or modify the instrument shall be Wollongong City Council.

The APZ shall be maintained in perpetuity as an inner protection area (IPA) as outlined in *Planning for Bush Fire Protection 2006* and the NSW Rural Fire Service's document *Standards for asset protection zones*.

Postal address

NSW Rural Fire Service
Records Management
Locked Bag 17
GRANVILLE NSW 2141

Street address

NSW Rural Fire Service
Planning and Environment Services (East)
42 Lamb Street
GLENDENNING NSW 2761

T 1300 NSW RFS
F (02) 8741 5433
E records@rfs.nsw.gov.au
www.rfs.nsw.gov.au

2. The entire property shall be managed in perpetuity as an inner protection area (IPA) as outlined in *Planning for Bush Fire Protection 2006* and the NSW Rural Fire Service's document *Standards for asset protection zones*.

Water and Utilities

The intent of measures is to provide adequate services of water for the protection of buildings during and after the passage of a bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building. To achieve this, the following conditions shall apply:

3. Water, electricity and gas are to comply with section 4.1.3 and 4.2.7 of *Planning for Bush Fire Protection 2006*.

Evacuation and Emergency Management

The intent of measures is to provide suitable emergency and evacuation (and relocation) arrangements for occupants of special fire protection purpose developments. To achieve this, the following conditions shall apply:

4. Arrangements for emergency and evacuation are to comply with section 4.2.7 of *Planning for Bush Fire Protection 2006*.

Design and Construction

The intent of measures is that buildings are designed and constructed to withstand the potential impacts of bush fire attack. To achieve this, the following conditions shall apply:

5. Any existing structures (including manufactured/demountable/relocated homes) on Sites 3-12, 16-29, 31-41, 44-45, 47-49, 63-64 and the Community Garden, Community Park, Community Land and Community Amenities (Laundry) shall be upgraded to improve ember protection. This is to be achieved by enclosing all openings (excluding roof tile spaces) or covering openings with a non-corrosive metal screen mesh with a maximum aperture of 2mm. Where applicable, this includes any sub floor areas, openable windows, vents, weepholes and eaves. External doors are to be fitted with draft excluders.
6. Any future structures (including manufactured/demountable/relocated homes) on the following sites shall comply with the respective construction requirements in accordance with *Planning for Bush Fire Protection*, and *Australian Standard: Construction of buildings in bushfire-prone areas* (AS 3959) or *NASH Standard Steel Framed Construction in Bushfire Areas*:
 - BAL 29 (29 kW/m²): Sites 10-12, 16-18 and the Community Garden.
 - BAL 19 (19 kW/m²): Sites 9 and 19-25.
 - BAL 12.5 (12.5 kW/m²): Sites 3-8, 26-29, 31-41, 44-45, 47-49, 63-64, Community Park, Community Land and Community Amenities (Laundry).
7. Any existing structures (including manufactured/demountable/relocated homes) on the following sites shall be brought into total conformity with the respective construction requirements in accordance with Addendum: Appendix 3 of *Planning for Bush Fire Protection* (2010), and *Australian Standard: Construction of buildings in bushfire-prone areas* (AS 3959-2009) or *NASH Standard Steel Framed Construction in Bushfire Areas 2014* (1.7.14 updated):
 - BAL 19 (19 kW/m²): Sites 23 and 24.
 - BAL 12.5 (12.5 kW/m²): Sites 8.
8. Any new class 10b structures as defined under the *Building Code of Australia* shall be non-combustible in accordance with section 4.3.6(f) of *Planning for Bush Fire Protection 2006*.

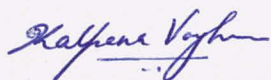
Landscaping

The intent of measures for public roads is to provide safe operational access to structures and water supply for emergency services, while residents are seeking to evacuate from an area. To achieve this, the following conditions shall apply:

9. Landscaping to the site is to comply with the principles of Appendix 5 of *Planning for Bush Fire Protection 2006*.

If you have any queries regarding this advice, please contact Simon Derevnin, Development Assessment and Planning Officer, on 1300 NSW RFS.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Kalpana Varghese'.

Kalpana Varghese
A/Manager Planning and Environment Services (East)

Our Ref: STH09/02560/02
Contact: Melissa Steep 4221 2771
Your Ref: LG-2017/1



Transport
Roads & Maritime
Services

18 April 2017

Conny Gissel
Wollongong City Council
council@wollongong.nsw.gov.au

**SECTION 68 (PART F2) APPLICATION – LOT 2 DP 610406, 140-146 WINDANG,
OPERATION OF ESTABLISHED CARAVAN PARK AND CAMPING GROUND**

Dear Conny,

Roads and Maritime Services (RMS) refers to your letter dated 7 March 2017 regarding the subject application.

RMS has reviewed the information provided, including the additional information provided on 11 April 2017 by SET Consultants (see attached) and notes the following:

- Survey has been undertaken and determined that the existing structures (homes) previously thought to lie within the road reserve are actually located within the closed road area.
- The existing fence line and adjoining land exist within the RMS road reserve.

RMS does not object to the Section 68 (Part F2) application provided the following conditions are included in the consent:

- Should future road widening be required, removal of structures within the RMS road reserve will be at no cost to RMS or Council.

Upon determination of this matter, it would be appreciated if Council could email a copy of the Notice of Determination to RMS via development.southern@rms.nsw.gov.au.

Yours faithfully,

Melissa Steep
A/Manager Land Use
Southern Region

Roads & Maritime Services

Attachment 10 - DA-2017/830 – Draft refusal reasons

- 1 Pursuant to the provisions of Section 4.15 (1)(a)(ii) of the Environmental Planning and Assessment Act 1979, it is considered that the proposed development is inconsistent with the State Environmental Planning Policy No. 21 Caravan Parks with respect to clause 8(2)(a). It is not considered that the suitability of the site for long term residence has not been adequately demonstrated.
- 2 Pursuant to the provisions of Section 4.15 (1)(a)(ii) of the Environmental Planning and Assessment Act 1979, it is considered that the proposed development is inconsistent with the State Environmental Planning Policy No. 21 Caravan Parks, clause 10(a) and clause 10(f). The facility does not comply with the Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005 in respect to setbacks of dwelling sites from road frontages under clause 89 and setbacks of sites from community buildings under clause 88.
- 3 Pursuant to the provisions of Section 4.15 (1)(a)(ii) of the Environmental Planning and Assessment Act 1979, it is considered that the proposed development is inconsistent with the State Environmental Planning Policy No. 71 with respect to clause 8(d), (j) and (n).
- 4 Pursuant to the provisions of Section 4.15 (1)(a)(i) of the Environmental Planning and Assessment Act 1979, it is considered that the long term residential character of the proposal is inconsistent with the objectives of the RE2 Private Recreation Zone under Wollongong Local Environmental Plan 2009.
- 5 Pursuant to the provisions of Section 4.15 (1)(a)(i) of the Environmental Planning and Assessment Act 1979, it is considered that the proposed development is inconsistent with Wollongong Local Environmental Plan 2009 with respect to encroachments of the facility into adjoining SP2 land. The use is not permitted in that zone.
- 6 Pursuant to the provisions of Section 4.15 (1)(a)(i) of the Environmental Planning and Assessment Act 1979, it is considered that the proposed development is inconsistent with Wollongong Local Environmental Plan 2009 with respect to clause 7.3 Flood Planning.
- 7 Pursuant to the provisions of Section 4.15 (1)(a)(i) of the Environmental Planning and Assessment Act 1979, it is considered that the proposed development is inconsistent with Wollongong Local Environmental Plan 2009 clause 5.5(b)(iv) and (xi) with respect to flooding and Aboriginal Heritage.
- 8 Pursuant to the provisions of Section 4.15 (1)(b) of the Environmental Planning and Assessment Act 1979, the proposed development fails to satisfactorily demonstrate how asset protection for bushfire risk mitigation will be suitably achieved.
- 9 Pursuant to the provisions of Section 4.15(1)(a)(iii) of the Environmental Planning and Assessment Act 1979, it is considered that the proposed development is inconsistent with the provisions of Section 11.4.4 of Chapter E14 of the Wollongong DCP 2009. A number of structures have been placed over a registered stormwater easement.
- 10 Pursuant to the provisions of Section 4.15(1)(a)(iii) of the Environmental Planning and Assessment Act 1979, it is considered that the proposed development is inconsistent with the objectives of Chapter E13 of the Wollongong DCP 2009.