



Solitary Islands Village Pty Ltd

Proposed Residential Aged Care Facility, Mullaway Road,
Mullaway

Application for Site Compatibility Certificate

June 2020

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1. Introduction

1.1 Overview

GHD Pty Ltd (GHD) has been engaged by Solitary Islands Village Pty Ltd (Solitary Islands Village) to prepare an application to the Secretary of the New South Wales (NSW) Department of Planning, Industry and Environment (DPIE) (formerly the Department of Planning and Environment) for a Site Compatibility Certificate (SCC). This report supports an application for a SCC for a proposed residential aged care facility (RACF) and associated facilities at Mullaway, NSW. This application is made under the terms of *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004* (the Seniors SEPP).

The site is formally described as Lot 1 DP1128964, 2 Mullaway Drive, Mullaway (referred to as 'the subject site') within the Coffs Harbour City local government area (LGA). The subject site is zoned RU2 Rural Landscape under the *Coffs Harbour Local Environment Plan 2013* (CHLEP). Seniors housing is not identified as a permissible use in the RU2 Rural Landscape Zone and, as such, is prohibited on the site unless a SCC is granted by DPIE.

To support the application, GHD has prepared a detailed town planning report that describes the site history, context and characteristics, the proposed development and strategic justification for the development in accordance with the requirements of Section 4 – Proposal information of the SCC Application form.

GHD has also undertaken a desktop review and site inspection to determine the potential environmental constraints and opportunities at the site. Possible management measures are identified where necessary. This SCC considers the following issues:

- Topography, geology and soils
- Flooding
- Flora and fauna
- Acid sulfate soils
- Bushfire
- Aboriginal cultural and European heritage
- Surface and groundwater
- Socio-economic
- Infrastructure
- Traffic

Whilst the above issues have been given consideration to inform the SCC application, more detailed investigations would be necessary should the DPIE issue a SCC.

This report should be read in conjunction with the completed SCC Application form.

1.2 Purpose of this report

This report constitutes an application to DPIE for a SCC under Clause 25 of the Seniors SEPP. A SCC is required to be issued by the Minister prior to the lodgement of a Development Application (DA) with a local Council for seniors housing on land that is zoned primarily for urban purposes upon which specific development types are permissible, or on land adjoining land zoned "*primarily for urban purposes*" where development is permitted for dwelling houses.

1.3 Proposal

This application relates to a proposal for seniors living development, involving:

- 64 bedroom RACF with central administration facility
- 32 bedroom independent care studio villas
- Health / medical care facilities for doctors and allied health care services
- Pool, gym and laundry for onsite resident use
- Onsite bus service
- Associated car parking and landscaping

1.4 Scope and limitations

This report has been prepared by GHD for Solitary Islands Village Pty Ltd and may only be used and relied on by Solitary Islands Village Pty Ltd for the purpose agreed between GHD and the Solitary Islands Village Pty Ltd as set out in Section 1 of this report.

GHD otherwise disclaims responsibility to any person other than Solitary Islands Village Pty Ltd arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

Specifically, this Report does not take into account the effects, implications and consequences of or responses to COVID-19, which is a highly dynamic situation and rapidly changing. These effects, implications, consequences of and responses to COVID-19 may have a material effect on the opinions, conclusions, recommendations, assumptions, qualifications and limitations in this Report, and the entire Report must be re-examined and revisited in light of COVID-19. Where this Report is relied on or used without obtaining this further advice from GHD, to the maximum extent permitted by law, GHD disclaims all liability and responsibility to any person in connection with, arising from or in respect of this Report whether such liability arises in contract, tort (including negligence) or under statute.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report on the basis of information provided by Solitary Islands Village Pty Ltd and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report, which were caused by errors or omissions in that information.

2. Project background

2.1 Overview

Solitary Islands Village is an over 55's community offering 2 and 3 bedroom villas with various onsite amenities in Mullaway. A permanent on-site manager is supported by maintenance service staff and specialised healthcare staff.

Construction of the first stage of Solitary Islands Village began in late 2018. The village is currently approved with 34 villas, a community hall and restaurant.

2.2 Development history

The development approval history for Solitary Islands Village is outlined below.

2.2.1 Development consent (DA 93/97)

CHCC granted development consent for 10 eco-tourism holiday cabins on part of the subject site on 12 February 1998 (Development Application No. 93/97). A copy of the approved plan is shown in Figure 2-1. The DA was approved with 14 conditions.

Each cabin is 2 bedrooms, with 1, two-way bathroom, a kitchen and a combined living /dining area. The development also consisted of a swimming pool, general recreation area, tennis court and children's play area.

The approved development retains the majority of the vegetation on the site with only some selective clearing.

The application was approved with an on-site effluent disposal system for all 10 cabins.

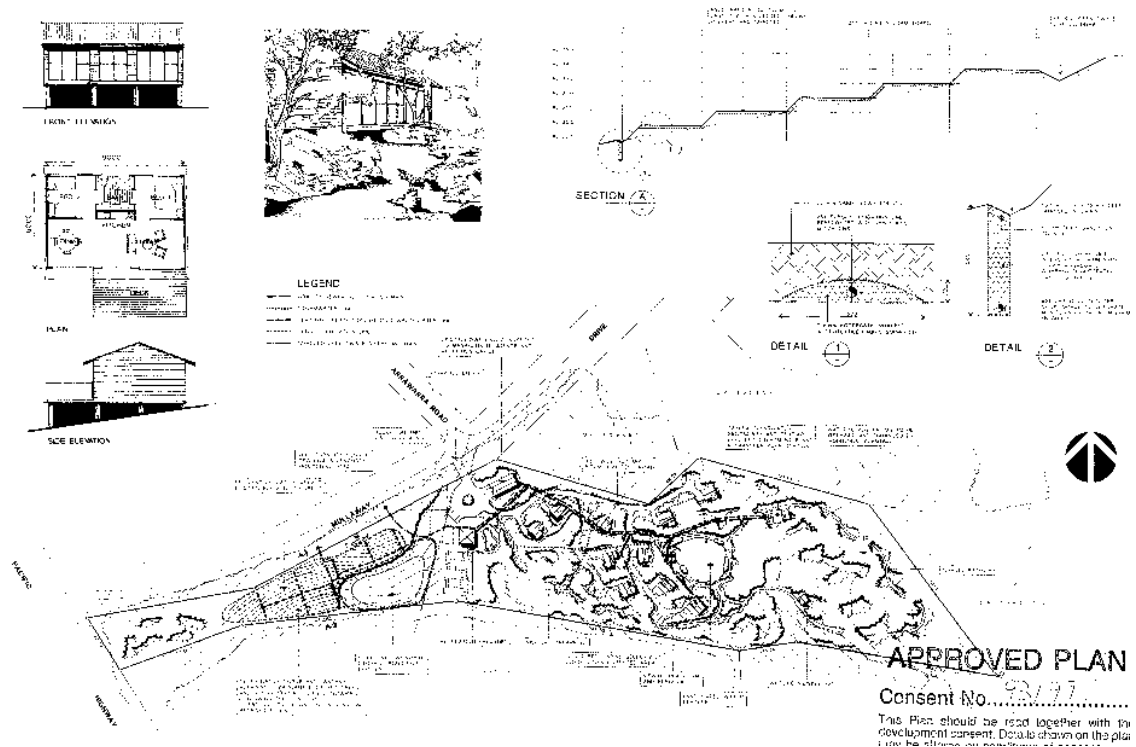


Figure 2-1 Approved plans for 10 eco-tourism holiday cabins

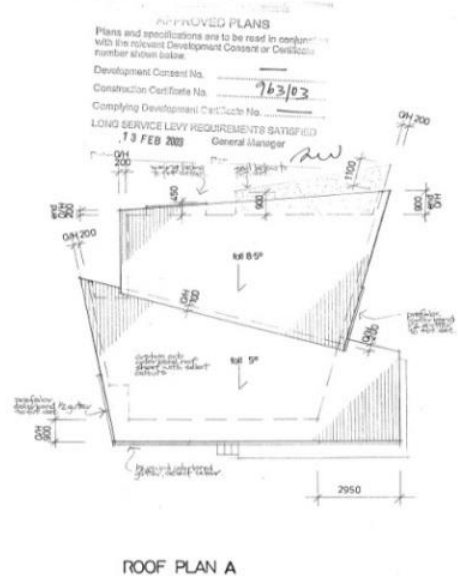
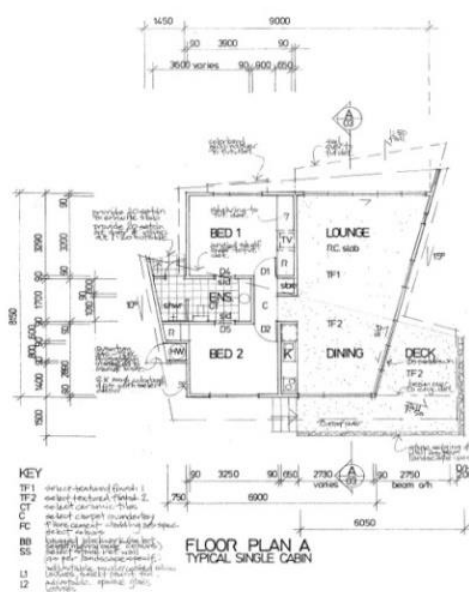
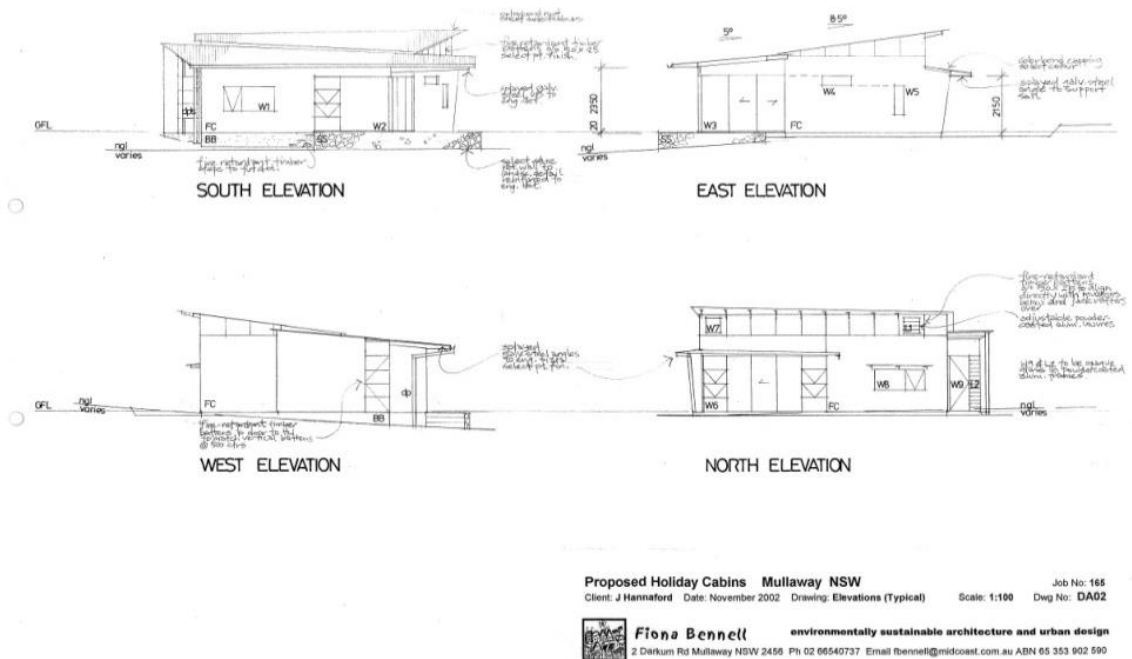


Figure 2-3 Approved plans for modified eco-tourism holiday cabins

2.2.3 Development consent (DA 217/12)

On 23 August 2012, development consent was granted for a 40 seat restaurant on the far western part of the site. It is intended that the proposed restaurant would cater to the proposed RACF and the previously approved seniors living development as well as to the general public.

The restaurant includes vehicular access from Whitton Place with 21 car spaces (including 3 accessible spaces), servicing bay, landscaping and signage, refer to Figure 2-4.

A construction certificate for the approved restaurant has been issued with construction underway.

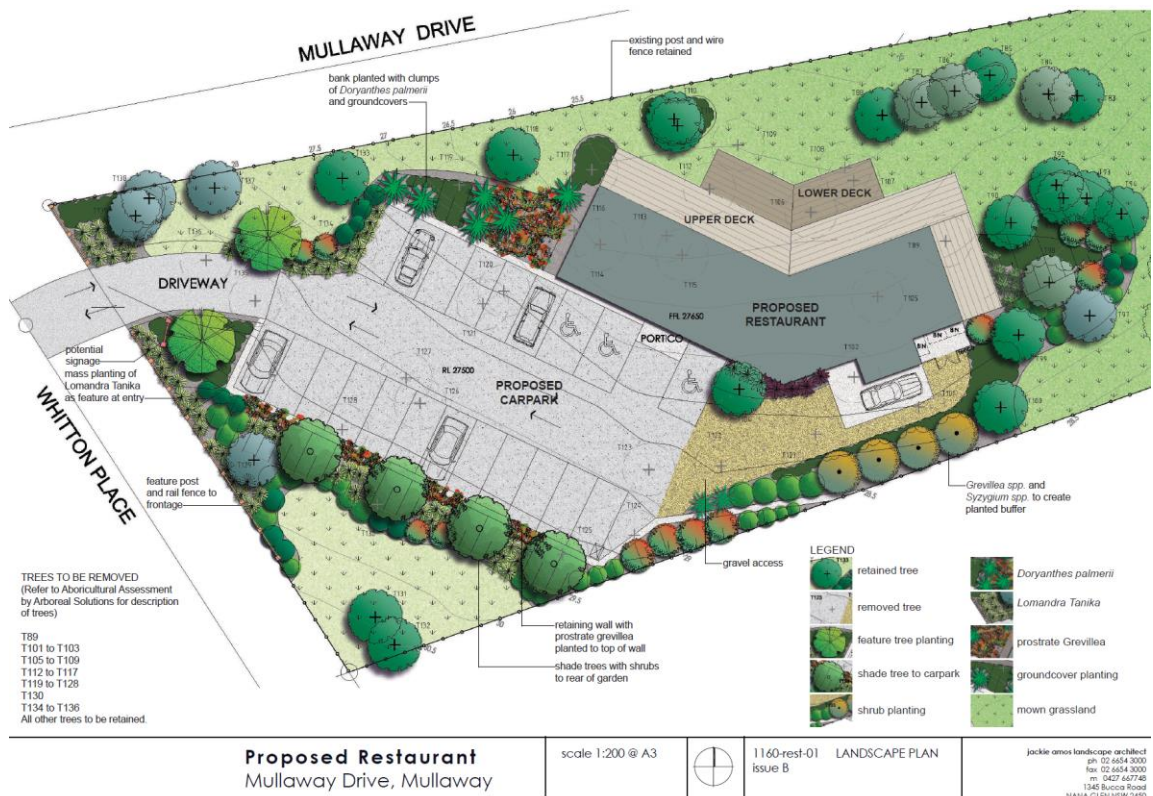


Figure 2-4 Approved plans for restaurant

2.2.4 Development consent (DA 700/12)

On 14 December 2012, development consent was granted for a seniors living development (34 serviced self-care housing units) located in the eastern portion of the site.

A subsequent modification was determined by Council on 22 December 2015 for the revised staging of the development.

Construction works for the previously approved seniors living development have commenced.

A copy of the approved plans illustrating the modified design of the holiday cabins is shown in Figure 2-5 and Figure 2-6.



Figure 2-5 Approved eco-tourism holiday cabins

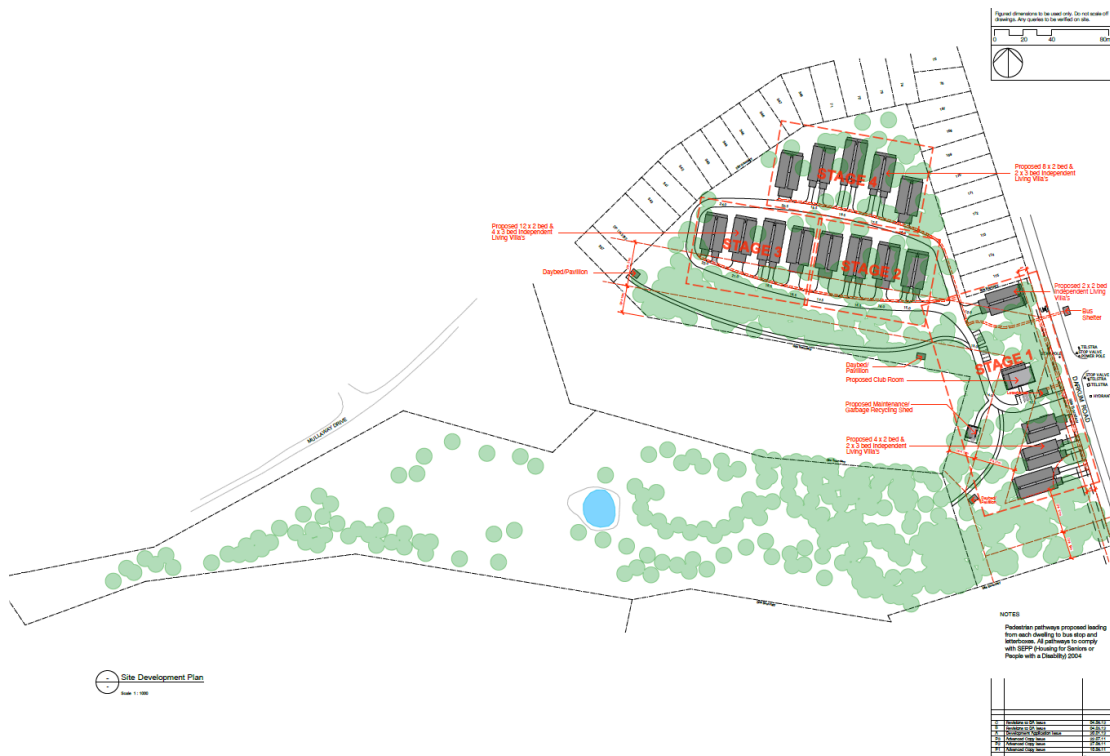


Figure 2-6 Approved plans for independent living units

On 5 September 2019 GHD lodged an application for a Section 4.55 Modification to Development Consent 700/12. The modifications related to:

- Revised staging
- Dwelling/unit design

The revised layout is shown below in Figure 2-7.



Figure 2-7 Modified independent living units

2.2.5 Previous request for site compatibility certificate

A request for a SCC was made in December 2018 for the proposed development. The proposed development was for a 96 bedroom seniors living development comprising a 64 bed RACF, 32 independent studio apartments and 12 x 3 bedroom independent living villas. The proposal also included a central administration facility including health and medical care area, pool and gym and laundry facilities for use by on-site residents, as shown in Figure 2-8. The application was refused on 27 August 2019.

The proposed development sought in this SCC offers a modified design to the originally proposed RACF in 2018. The reasons for refusal have been responded to in this SCC, as shown in Table 2-1.

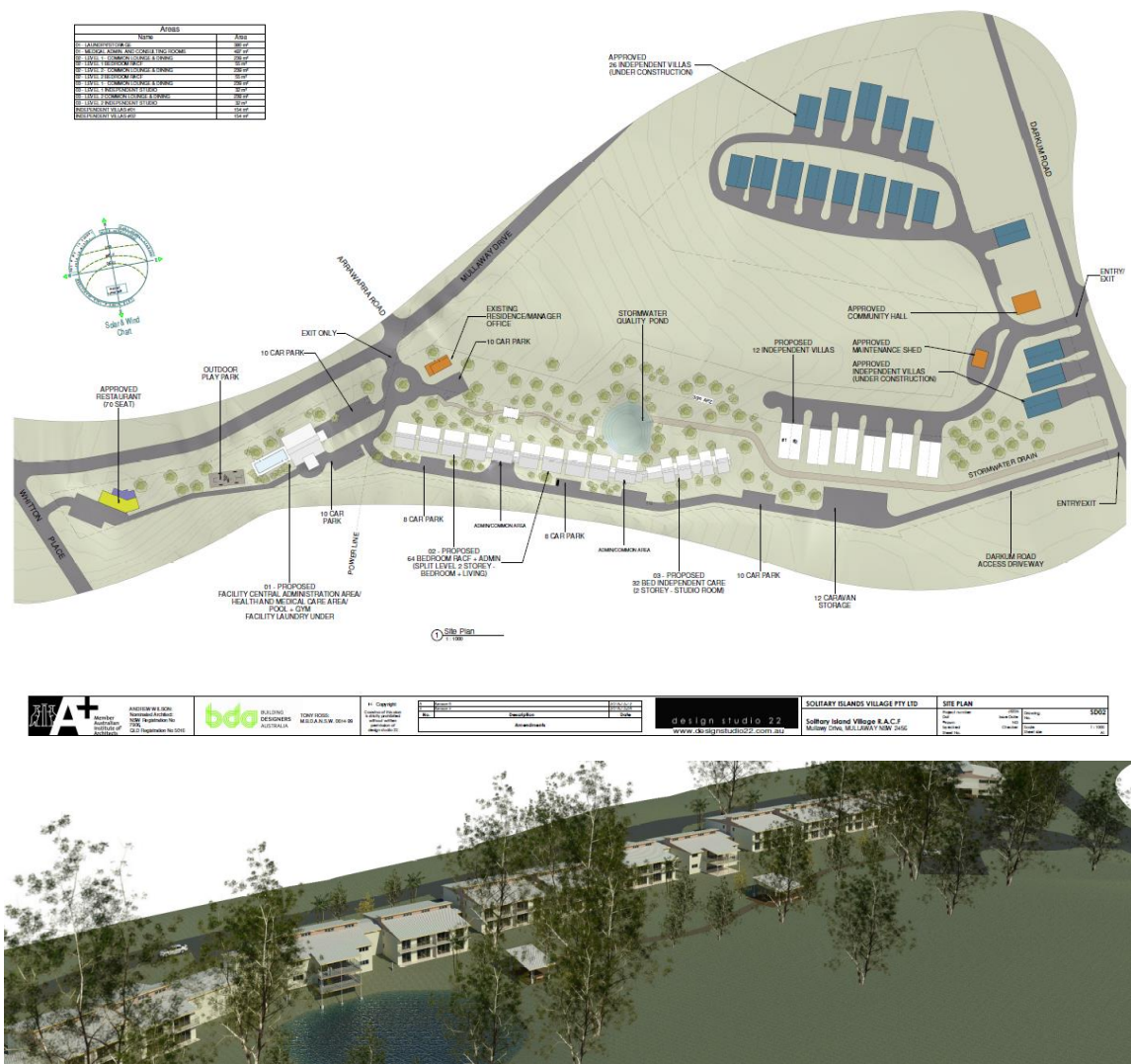


Figure 2-8 2018 RACF proposal

Table 2-1 Reasons for SCC refusal

Reason for Refusal	Report Section that addressed the reason for refusal
<p>Incompatibility with the natural environment of the land</p> <p><i>“The proposed development is not compatible with the natural environment on the land, as it would require extensive clearing and modification of the existing vegetation, which includes mature trees and identified secondary koala habitat. The land has significance environmental value, being mapped as “high environmental value” land in the North Coast Regional Plan 2036. The Coffs Harbour Koala Plan of Management objective is to minimise further loss, fragmentation or isolation of secondary koala habitat and the creation of barriers to koala movement.</i></p> <p><i>“The land is adjoined by other mapped “high environmental value” land. The likely impact of the proposed loss of vegetation on koala usage of the land and other high environmental value land in the vicinity, particularly the adjoining Lot 1 DP382303, was not addressed.”</i></p>	<p>The current proposal seeks to limit the amount of vegetation clearing on the site. It focuses the majority of the development within an area of the site which has been heavily disturbed from past agricultural activities and on land that has been the subject of past development approvals for holiday cabins. The proposed design also allows for the maintenance of a vegetated wildlife corridor through the south-eastern and northern portion of the site. Whilst the land has been mapped as high environmental value land, it has not been mapped as high biodiversity land nor has it been mapped as primary koala habitat and as such should be allowed to progress to the DA stage. Additional information can be found in Section 7.2</p>
<p>Aboriginal heritage</p> <p><i>“The potential impact of the proposal on Aboriginal heritage significance was not adequately addressed, noting the previous Aboriginal heritage study did not relate to this proposal.”</i></p>	<p>No sites of Aboriginal heritage significance have been identified within the proposal area. LGA based mapping has also not identified the site as having sites of Aboriginal heritage significance (refer Section 7.2.3). Ample natural areas exist on the site should artefacts be identified that may require reburial as part of an Aboriginal Heritage Impact Permit process.</p>
<p>Scale and Character</p> <p><i>“The scale and character of the proposed development is potentially incompatible with the village character and existing community of Mullaway.”</i></p>	<p>The size and scale of the proposed development has been reduced by removing the independent villas within the eastern more vegetated part of the site. This has allowed for better separation from adjoining properties and increased visual and acoustic privacy for future residents of the facility. Further details are provided in Section 7.5.</p>
<p>Council Services and Infrastructure</p> <p><i>“The possible need for financial arrangements towards provision of Council services and infrastructure was not addressed and none was proposed.”</i></p>	<p>Section 7.3.1 provides an analysis on the ability to adequately service the development under Council’s current water and sewer servicing regime.</p>



Figure 3-3 View across site looking north west from Darkum Road

3.2 Site context

3.2.1 Proximity to hospitals and ambulance services

Hospital services are provided in Coffs Harbour and Grafton. These services include 24-hour emergency response and ambulance dispatch. Travel distances from the site to these services are approximately 33 kilometres to Coffs Harbour (20 minutes by car) and 55 kilometres to Grafton (40 minutes by car). Paramedical services are also available in the township of Woolgoolga approximately 6 kilometres from the site (3 minutes by car).

3.2.2 Proximity to doctors/medical centres

Medical and paramedical services are available at Woolgoolga, Coffs Harbour and Grafton. Services include medical, paramedical, therapy, care services, dental and optical. A small fleet of vehicles servicing the residents of the proposed RACF would provide access to these 'off-site' services. Provision of 'onsite' medical services would also occur in the form of a 'respite residential care service' to assist in post medical, emergency, rehabilitation or carer needs of the RACF residents.

3.2.3 Proximity to community services and facilities

Community services and facilities are offered in Woolgoolga, Coffs Harbour and Grafton. Grafton and Coffs Harbour are major regional centres providing an array of shopping, medical, professional, banking, paramedical, hospital, social, sporting and entertainment services and attractions for all regional residents. Woolgoolga offers an array of social, sporting and entertainment activities and facilities as well as medical services mentioned above.

At a local scale, Mullaway is serviced by a general store, post office, service station, primary school and a range of support services provided by community organisations under the State and Commonwealth Government's Home and Community Care (HACC) programs including 'meals on wheels', home care and nursing.

In addition to the above facilities, once constructed, the approved restaurant on the site will provide an onsite 'bistro' type meals service as well as a home meals service for residents of the seniors living development.

3.2.4 Access to services and transport

Reticulated water, sewer, electricity and telecommunication services service the site.

The current Forest Bus Service route extends along Mullaway Drive to the bus stop adjacent to the corner store intersection at Primrose Avenue. Forest Bus Service operates a route network in the Mullaway/Arararra area that provides convenient access to the major shopping, retail, banking, commercial, professional, medical and paramedical services of Woolgoolga, Coffs Harbour and Grafton. Services also travel to neighbouring areas including Moonee, Emerald and Sandy Beaches, Arararra Headland and Darlington Park.

Forest Bus Service also offers an on-demand service called Woopi Connect which connects Mullaway to Woolgoolga and would service the approved seniors living development.

A bus stop has been approved on Darkum Road, which is being constructed as part of the approved seniors living development. A further bus stop is proposed on Mullaway Drive adjacent to the proposed RACF and will allow existing and future residents a more accessible bus stop to that currently provided in Mullaway.

In addition to the Forest Bus service, the operator would provide a suitable bus, together with smaller domestic scale vehicles (car and station wagon) that would provide a supplementary transport service for regular resident excursions, special community events and other services to meet the needs of the RACF residents.

3.3 Vegetation

The site supports 2 similar open forest vegetation communities and one swamp open forest community. All appear to have been modified by thinning of the overstorey, removal of most mature mid-stratum vegetation, disturbance of the ground layer in parts by grazing and invasion of the remaining ground layer by exotic herbs and grasses.

3.3.1 *Eucalyptus pilularis* (Blackbutt) open forest

Structure and composition

The community is an open forest to around 20 metres tall and generally appears to have been thinned by logging or clearing. It is dominated by Blackbutt, associated species include occasional Pink Bloodwood *Corymbia intermedia*.

Midstratum vegetation is generally absent although there are very occasional trees of Black Oak *Allocasuarina littoralis* and occasional mesophyllous shrubs in less disturbed areas.

Ground layer vegetation consists of sparse grass and herbs with small sclerophyllous shrubs in less disturbed areas, or a dense cover of exotic grasses where more disturbed.

Habitat and ecology

The community occurs on stony soils on low ridges throughout the study area

The dominance by trees in the late mature and overmature growth stages indicates that the area has never been subjected to broadscale clearing, however the absence of midstratum vegetation, stumps and large woody debris indicates that it has been modified.

The evidence on site suggests that the area has been subjected to a patchy fire regime within the previous 10 years or so, and more severe fires have occurred 50 or more years ago.

Classification and conservation status

The community falls within the North Coast Wet Sclerophyll Forest class of Keith (2004), albeit in a somewhat stunted form because of the effects of salt wind. The understorey is currently grassy rather than shrubby although there is evidence that it has been shrubby at times in the past.

The Biometric type is 'Blackbutt - Pink Bloodwood shrubby open forest of the coastal lowlands of the North Coast', with influences from the dry heathy open forests on sandy soils that occur nearby.

The community is not listed as Endangered, Vulnerable or rare either nationally or in the state or LGA.

3.3.2 *Eucalyptus pilularis* – *E. resinifera* (Blackbutt – Red Mahogany) Open Forest

Structure and composition

The community is an open forest to around 25 metres tall and also dominated by Blackbutt. It is denser and taller than Community 1 and has more mesophyllous shrubs and trees in the understorey.

The associated species include red mahogany *E. resinifera*, Tallowwood *E. microcorys*, Ironbark *E. siderophloia* and Brush Box *Lophostemon confertus*.

Midstratum vegetation includes Red Ash *Alphitonia excelsa* and Cheese Tree *Glochidion ferinandii*.

Ground layer vegetation consists of sparse blady grass and herbs over a mid-dense cover of soft grasses and ferns.

Habitat and ecology

The community occurs as an ecotone between the drier more exposed Blackbutt of Community 1 and the wetter areas supporting Community 3. It has been treated here as a separate community because of its taller denser tree cover and moister understorey.

The evidence on site suggests that the area has been subjected to a patchy fire regime within the previous 10 years or so, and more severe fires have occurred 50 or more years ago.

Classification and conservation status

The community falls within the North Coast Wet Sclerophyll Forest class of Keith (2004). The understorey is shrubby although there is still a good cover of grasses, probably because of recent disturbance.

The Biometric type is 'Blackbutt - Pink Bloodwood shrubby open forest of the coastal lowlands of the North Coast'.

The community is not listed as Endangered, Vulnerable or rare either nationally or in the state or LGA.

3.3.3 Melaleuca quinquenervia – Eucalyptus tereticornis – Lophostemon suaveolens (Paperbark – Forest Red Gum – Swamp Box) Open Forest

Structure and composition

The community is dominated by Paperbark on the lower elevations and by Swamp Box on the higher elevations. Forest Red Gum occurs throughout.

Midstratum vegetation is typically sparse to absent although there are occasional stands of both sclerophyllous and mesophyllous shrubs in less disturbed areas.

Ground layer vegetation ranges from sparse grass in the more elevated areas to dense cover of the Sword Sedge *Lepidosperma quadrangulatum* and Native Violet *Viola hederacea* in less disturbed lower areas, , to dense cover of exotic grasses on more disturbed lower areas.

Habitat and ecology

The community extends from lower areas mapped as alluvial soils (Soil Conservation Service 1979) or as alluvial deposits (Troedson and Hashimoto 2004), where it has an overstorey dominated by Paperbarks and understorey dominated by sedges, to adjoining slopes and low stony rises where the overstorey is dominated by Swamp Box and Pink Bloodwood and the understorey is dominated by grasses. There two overstorey communities form complex intergradations across this part of the study area and it is not possible to reliably separate them for the purpose of mapping.

The dominance by trees in the mature to overmature growth stages indicates that these areas have not been subjected to broadscale clearing, although there is evidence of selective clearing and slashing.

The ground layer over much of this community is dominated by Broadleaved Paspalum, an invasive exotic grass.

There is evidence of patchy fire within the past 10 years or so but little evidence of older severe fire, especially in the lower parts of this community.

Classification and conservation status

Where the community is dominated by Paperbark it is classified as Coastal Swamp Forest, and where it is dominated by Swamp Box or Forest Red Gum it is classified as Coastal Floodplain Wetland (Keith 2004).

The Biometric classifications for each of these are 'Paperbark swamp forest of the coastal lowlands of the North Coast' and 'Forest Red Gum - Swamp Box of the Clarence Valley lowlands of the North Coast' respectively.

Both of these Biometric communities are listed under the Biodiversity Conservation Act as Endangered Ecological Communities, the Paperbark community as 'Swamp Sclerophyll Forest on Coastal Floodplain' and the Swamp Box community as 'Sub-tropical Coastal Floodplain Forest of the NSW North Coast bioregion'.

3.3.4 Endangered populations and critical habitat

No endangered population or critical habitat is listed for the site.

3.3.5 Biodiversity values

The site does not contain any biodiversity values mapped by the NSW Government's Biodiversity Values Map and Threshold Tool as shown in Figure 3-4 below.



Figure 3-4 Biodiversity values map

4. Proposed development

4.1 Overview

Solitary Islands Village Pty Ltd intend provide additional aged care accommodation over the subject site in the form of a residential aged care facility (RACF), comprising:

- 64 x 1 bedroom RACF with central administration facility
- 32 independent care studio villas
- Health / medical care facilities for doctors and allied health care services
- Pool, gym and laundry for onsite resident use
- Onsite bus service
- Associated car parking and landscaping

A concept site plan, floor plans and perspectives of the proposed development are provided in Appendix A. A breakdown of the proposed development's gross floor area is provided below.

Table 4-1 Proposed development gross floor area

Component	Gross Floor Area per storey (development footprint)	Number of storeys	Total Gross Floor Area
Administration facility	240 m ²	1	240 m ²
RACF – Block A	1,385 m ²	2	2,770 m ²
RACF – Block B	1,385 m ²	2	2,770 m ²
Independent care studios	1,044 m ²	2	2,088 m ²
Health / medical care facilities	500 m ²	1	500 m ²
Pool, gym and laundry	380 m ²	1	380 m ²
Total			8,748 m²

The proposal design would encourage residents to enjoy the site's natural features including the natural bushland areas in and adjacent to the site. Access footpaths would allow chair based and mobility restricted residents, their families and carers access to the site's amenities.

The site's proximity to local beaches and other surrounding areas and amenities including the Golf Club would enhance the lifestyle of residents. There is also a CHCC-constructed pedestrian/cycle path from Arrawarra Headland to Woolgoolga, which passes the site and further enhances access to other local amenities.

One of the many advantages available to 'local residents' who will make the development their home is that they would still be able to access and maintain their personal local community links and social networks within a familiar environment. This is consistent with the objectives of ageing in place, which is a key government initiative for ageing.

The operational philosophy of the site would be to encourage and maintain the highest level of resident 'independence' through encouragement and support underpinned by continuing access to and involvement with the surrounding community.

The independent villas give residents the opportunity to sell the family home but continue to live independently in a dwelling with all the modern conveniences offered by the seniors living development in a community environment.

The single bedroom suites would cater for residents wishing to have more private space (lounge/dining and motel style kitchenette) to provide the opportunity to continue their 'home based social life' activities whilst the independent studio rooms offer a smaller but functional arrangement should a resident choose to downsize on-site.

The proposal would provide rooms for use by health and allied health service practitioners while treating residents. Another service to be offered would be a 'respite residential care service' to meet post medical, emergency, rehabilitation or carer needs of the surrounding community.

4.2 Summary of development aspects

4.2.1 Built form

The RACF component of the proposed development would present at 2 storey, townhouse style development with a central administration facility. The east and west wings of the RAF each house 32, one bedroom 50 m² apartments (16 per floor).

The 32 independent care villas will be 2 storeys, providing a smaller building footprint than the previously presented 2018 development. The independent care villas will be located north west of the proposed RACF.

Although attached, the design has used articulation to give the distinct impression of individual units that is consistent with the neighbouring residential development. The development would have a maximum building height of 8.5 m.

4.2.2 Landscaping

Landscaping would be incorporated around the proposed buildings, access road and car parking on the site to soften the appearance of the development and to present an inviting and pleasant address for residents and visitors alike. The landscaping to be chosen will be consistent and contribute to the existing native vegetation on the site.

4.2.3 Service infrastructure

Stormwater

The site generally drains to the south east towards Darkum Road. Provisions have been made to utilise the existing dam to act as a sediment basin during construction and longer term as a water quality feature.

Telecommunications and electricity

Mullaway is serviced by the NBN and an existing established electricity network capable of servicing the proposal.

4.2.4 Access, transport and parking

Access

No changes are proposed to the existing access points. The proposed development will be accessible for staff and visitors via Darkum Road's southern-most access point.

A one-way emergency and service vehicle internal access road is also provided for access via Mullaway Drive and Darkum for special vehicles only.

The access locations will be suitable for the development and are not expected to have an adverse impact on the surrounding road network.

Onsite bus service

In addition to the Forest Bus service, the Operator would provide a suitable bus, together with smaller domestic scale vehicles (car and station wagon) that would provide a supplementary transport service for regular resident excursions, special community events and other services to meet the needs of the residents. Initially, it is proposed that a 10-seat capacity bus is acquired to meet the need generated from the proposed development.

The provision of the site-based bus, car and station wagon services would enhance the community and social activity access of residents to the wide array of existing community attractions and services in the surrounding and neighbouring areas.

Parking

Car parking for staff and visitors will be provided adjacent to the proposed development. It is expected that the proposed car parking supply will be adequate to meet demand and is not expected to result in on-street parking or impacts to the safety, operation or amenity of the surrounding road network.

4.3 Differentiation from 2018 proposal

The proposed development offers a modified design to the originally proposed RACF in 2018. The 2018 proposal sought approval for a 62 bedroom, linear RACF and administration facility development following along the south-most internal access road. The proposal also sought approval for 12, single storey independent villas in a linear manner to the north east, accessible via a new internal access road.

The current proposal is more consolidated onsite and better integrates within the existing natural environment values, in that:

- The proposal will require the removal of only about 3 hectares of native vegetation.
- The proposed RACF and independent care villas' overall bulk is reduced (more centralised, no longer linear).
- The proposed independent care villas provide 32, 50 m² one-bedroom independent care villas over 2 storeys. The proposed independent care villas building footprint is 1,044 m² onsite, 804 m² less site cover than proposed in 2018.
- The independent care villas are now proposed west of the proposed RACF, in a more isolated onsite area.

5. Strategic planning framework

5.1 NSW Ageing Strategy 2016-2020

The NSW Ageing Strategy 2016-2020 (the Strategy) is the Government's response to the challenges and opportunities of the ageing population. The NSW population is ageing as a result of an increase in both the number of older people and general improvements in life expectancy. By 2031, more than one third of NSW residents will be aged 50 or above.

A key priority of the Strategy is ensuring housing choices for older people across NSW. Linked to this priority is enabling older people access appropriate housing and the ability to 'age in place', refer to Figure 5-1. Ageing in place is about ensuring older people can live and stay connected to their community and close to friends family and the services they need.

What is ageing in place?

The World Health Organisation's *World Report on Ageing and Health 2015* describes ageing in place as:

'A common preference among older people for remaining in their local community and maintaining their social networks throughout the ageing process. There are many ways for older people to age in place. Sometimes it means staying in place: that is, continuing to live in the same home. For others, it means moving to a home that is safer or more adapted to their needs while maintaining vital connections with their community, friends and family. In all cases the focus should be on the older person ageing in a place that is right for them.'¹⁹

Figure 5-1 NSW Ageing Strategy 2016-2020 Ageing in Place Definition

NSW is growing and the highest rates of growth are in metropolitan areas such as Sydney. Growth trends for older people are, however, very different. The Strategy explains that in the future the locations where older people chose to live in NSW will change, and the proportion of older people who live in regional and rural areas of NSW will actually grow faster than in metropolitan Sydney. This means that a number of rural and regional areas will experience a higher growth rate of older persons than in Sydney. In turn, this will create a need for additional accommodation, facilities and services to effectively cater for this growth.

Other key changes identified in the Strategy are the changing characteristics of older people in terms of economic, social and cultural influences, which will affect attitudes and lifestyle choices. Generally, this reflects the increasing 'standards' in aged care expected by the baby boomer generation in terms of facilities, location, quality, amenity and levels of services and care provided.

The proposal would support the broad priorities of the Strategy by increasing the choice and availability of seniors and aged care accommodation in a regional area to effectively promote ageing in place.

5.2 North Coast Regional Plan 2036

The *North Coast Regional Plan 2036* (the Plan) was finalised by DPIE on 17 March 2017 and identifies the government's strategy for the growth and development The Plan sets 4 key goals for the region being:

- The most stunning environment in NSW
- A thriving, interconnected economy
- Vibrant and engaged communities
- Great housing choice and lifestyle options

5.2.1 Direction 2: Enhance biodiversity, coastal and aquatic habitats, and water catchments

The Plan focuses on protecting the North Coast's biodiversity and environmental values as NSW's most biologically diverse region. Direction 2 of the Plan intends to map environmental values and important assets to consider opportunities for biodiversity offsetting and inform Council planning strategies.

The proposal is supportive of the 'avoid, minimise, offset' hierarchy for biodiversity actions for Direction 2 refer to Table 5-1. This hierarchy also aligns with the NSW Biodiversity Assessment Methodology (BAM) which is the adopted assessment methodology in NSW. The design of the proposal has been appropriately modified since 2018 to be more reflective of Direction 2.

Table 5-1 Avoid, minimise, offset biodiversity hierarchy

Biodiversity Hierarchy	Details
Avoid	The independent care villas have been sited in a more disturbed area (to the east of the proposed RACF) to avoid fragmentation of the natural environment in areas with natural connectivity to the surrounding 'high environmental value' areas.
Minimise	<p>The proposed RACF and independent care villas' overall bulk is reduced (more centralised, no longer linear) and oriented around the retention pond (water feature) to minimise the disturbance area onsite. The proposed independent care villas provide 32, 50 m² one-bedroom independent care villas over 2 storeys. The proposed independent care villas building footprint is 1,044 m² onsite, 804 m² less site cover than proposed in 2018.</p> <p>Mitigations measures have been developed to address impacts to the environment and will be adopted during the construction and operational phases, and captures in a Construction Environmental Management Plan (CEMP) prepared by the contractor. Refer to Section 4.2.2</p>
Offset	<p>Offsets for residual impacts to biodiversity would be secured in accordance with the relevant legislation. The Biodiversity Assessment Methodology (BAM) would be applied to assess the developments impacts on biodiversity and will determine biodiversity credits required to offset residual impacts. The biodiversity credits would be secured in accordance with the rule set and trading rules associated with the NSW Biodiversity Offsets Scheme (BOS).</p> <p>The Federal Government has also endorsed the use of the BAM and BOS via a bilateral agreement to also assess Matters of National Environmental Significance (MNES) as listed under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC). This means any impacts to MNES will also be offset via the BAM and BOS.</p>

5.2.2 Direction 23: Increase housing diversity and choice

The Plan identifies that the region will experience a rapid growth in the number of residents over the age of 65 in the next 20 years and that a suitable range of housing choice will be needed to cater for the increased proportion of persons falling within the 65 to 85 year age bracket.

Through Direction 23, the Plan outlines that Councils should consider local housing needs based on household and demographic changes. This means planning for a range of housing choices including retirement villages and nursing homes. New homes should also be liveable and promote adaptability and ageing in place.

The proposal is considered to be consistent in helping to deliver the required housing choice for the region's changing demographics, particularly in assisting in providing for increased housing choice for seniors and the ageing population. The development will also create employment opportunities within the region and provide a service supporting the ageing population.

5.3 Coffs Harbour LGA

The site is located within the Coffs Harbour LGA. Population projections by DPIE estimate that by 2036 the LGA is projected to grow by an additional 23,687 people to 92,650. Within this overall growth, is a significant increase in the number of persons aged over 65 which is projected to represent 42% of the overall projected growth.

In addition, individual percentage increases in the age cohorts for people over 70 is significant. As can be seen in Table 5-2 below, the greatest percentage increase is for the 80-84 age group, where a 115% increase on the 2016 population is projected.

Table 5-2 Extract of DPIE Coffs Harbour population projects

Age cohort	2016 population	2036 projection	Increase no.	Increase %
65 - 69	4,850	5,800	950	19.5%
70 - 74	3,650	5,650	2,000	54.7%
75 - 79	2,650	5,250	2,600	98.1%
80 - 84	1,900	4,100	2,200	115.7%
85 +	2,050	4,400	2,350	114.6%
Total	15,100	25,200	10,100	66.8%

CHCC is in the process of preparing a Positive Ageing Strategy to improve participation and involvement of older people in the community. As part of the development of the strategy a targeted survey of residents over 55 was undertaken.

The survey results found that 86% of persons surveyed had lived in the area for over 10 years. Of these persons, 75% plan to stay in the LGA for 15 or more years and 85.5% plan to stay for 10 to 15 years. The results of the survey correspond with the DPIE's ageing population projections and reflects a strong desire for older people in the LGA to age in place in order to stay in their community and retain connections with friends and family.

The forecast population changes will result in significant demand for a variety of aged care facilities, services and accommodation to effectively support ageing in place. Such accommodation is currently largely unplanned and under provided for within the LGA.

The proposal will support this need by providing varied aged care accommodation types into a single facility. The existing approval on the site for 34 self-care accommodation units and associated facilities will be effectively supported and complemented by the proposed additional residential aged care, independent accommodation studios and rooms for the use by health and allied health service practitioners. The consolidation of a diverse mix of seniors living accommodation and facilities on the site is an efficient use of the land and will positively contribute to the future growth demands of the aged population within Coffs Harbour LGA.

5.4 Coffs Harbour City Council strategic documents

5.4.1 MyCoffs Community strategic plan

The MyCoffs Community Strategic Plan (Plan) is a whole-of community Plan that sets out the long-term aspirations of the Coffs Harbour LGA community.

A key objective of the plan relates to community wellbeing and facilitating positive ageing in the community. Key outcomes include supporting senior residents in all aspects of community life and supporting opportunities for people to live independently. It is understood key measures associated with these outcomes will be addressed in the forthcoming Positive Ageing Strategy.

The proposal will support the broad objective and outcomes of the plan by providing a community oriented and supported residential care facility and independent living units in a location with high amenity and is supportive of positive ageing principles such as ageing in place.

5.4.2 Coffs Harbour Local Growth Management Strategy 2020

Council has adopted its Local Growth Management Strategy. The *Coffs Harbour Local Growth Management Strategy 2020* replaces the *Our Living City Settlement Strategy*.

A key emerging issue identified in the strategy is the growing and changing community, which will be characterised by an ageing population reflected by a higher proportion of the overall population falling with the 65 to 85 year age category. It is outlined by Council that this trend has a number of implications for future housing and service types provided for within the LGA and updated policy directions are needed to ensure planning provisions can provide for residential choice, quality and design options to allow for ageing, housing types and affordability as the population changes over time.

The review also found that as the population of the Coffs Harbour LGA continues to grow, so too will the demand for additional health/aged care facilities required to cater for the ageing population.

The proposal is consistent with the emerging direction of the strategy in that it will provide for much needed and consolidated aged care facilities to support increasing demand, and enable increased choice for residents seeking to access the aged/supported care market.

5.4.3 Our Living City Settlement Strategy (Coffs Harbour City Council 2008)

Council's 'Our Living City Settlement Strategy' was prepared pursuant to the requirements of the North Coast REP 1998. The strategy intends to concentrate growth in Central Business Districts and key centre. It offers a hierarchy of Coffs Harbour as Coast City; Woolgoolga, Moonee and Toormina as Coastal Towns; and other settlements generally as Coastal and Hinterland Villages.

The Strategy identified that the population of Coffs Harbour LGA would consistently increase over the next 20 years. Major issues potentially stemming from this growth include:

- *"The ageing of our population creates a dilemma for our labour force and implications for the provision of health and community services.*
- *As our population increases, there would be continuing issues of development pressures, competing land use pressures and land use conflicts.*
- *The community needs to be provided with a range of living options (for example, urban, suburban, village, rural residential and rural) to cater to their individual needs for living space.*
- *There is still a shortage of aged care accommodation within the Coffs Harbour LGA."*

The strategy suggests to reduce the impact of these potential population growth issues, the Council needs to put in place a land release program aligned to population thresholds. Additionally, to address ageing population pressures, support services need to be put in place including health services, housing and transport.

6. Statutory and policy compliance

6.1 Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act) provides the statutory basis for planning and environmental assessment in NSW. All development is assessed in accordance with the provisions of the EP&A Act and the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation). The EP&A Act institutes a system for environmental planning and assessment, including approvals and environmental impact assessment for proposed developments. The EP&A Act contains several relevant parts that impose requirements for planning approval. Part 4 provides for the control of development that requires development consent.

6.2 State environmental planning policies

6.2.1 State Environmental Planning Policy (Housing for Seniors or People with a Disability 2004

State Environmental Planning Policy (Housing for Seniors or people with a Disability) 2004 (the Seniors SEPP) aims to facilitate development of housing for seniors and people with a disability in a way that balances the growing demand for suitable accommodation with the need to maintain the local character of neighbourhoods. The SEPP responds to NSW's ageing population challenges and the importance to providing suitable housing now and into the future.

The Seniors SEPP permits development on certain land for housing for seniors and people with a disability. Clause 15 of the SEPP allows seniors housing to be carried out with consent on land zoned primarily for urban purposes. In addition Clause 2(2) provides that local environmental planning instruments are set aside where they would prevent the development of housing for seniors or people with a disability that meets the development criteria and standards specified in the Seniors SEPP under certain criteria being.

- That the development occurs on land which is zoned 'primarily for urban purposes,' or on land which adjoins land zoned 'primarily for urban purposes' where development is permitted for dwelling-houses.
- That the land is not subject to any of the environmental constraints listed in Schedule 1 (environmentally sensitive land) of the Seniors SEPP.

Therefore, subject to certain criteria, a SCC allows a DA for seniors housing to be considered on land where it would otherwise be prohibited.

The type of Seniors Housing proposed by the development is defined as 'self-contained dwellings' and 'residential care facilities', defined under the SEPP as:

***"Self-contained dwelling* is a dwelling or part of a building (other than a hostel), whether attached to another dwelling or not, housing seniors or people with a disability, where private facilities for significant cooking, sleeping and washing are included in the dwelling or part of the building, but where clothes washing facilities or other facilities for use in connection with the dwelling or part of the building may be provided on a shared basis."**

Residential care facility is residential accommodation for seniors or people with a disability “that includes:

- (a) meals and cleaning services, and
- (b) personal care or nursing care, or both, and
- (c) appropriate staffing, furniture, furnishings and equipment for the provision of that accommodation and care,

not being a dwelling, hostel, hospital or psychiatric facility.”

Clause 17 of the Seniors SEPP includes special provisions for the development of seniors housing on land adjoining land zoned primarily or urban purposes. This clause requires the development to only be used for the purposes of a hostel, residential care facility or serviced self-care housing. Self-care housing on land that adjoins land zoned primarily for urban purposes must provide accommodation for people with a disability. As identified in the indicative concept plan, the seniors housing subject to the SCC application will provide accommodation for persons with a disability.

Clause 24 requires that a SCC be obtained for seniors housing on land that adjoins land zoned primarily for urban purposes where the proposed development is not permissible under the relevant environmental planning instrument. As such, a SCC is required for the proposed development.

Clause 25(5) (b) lists criteria to be addressed in an application for a SCC. The criteria is addressed, in respect to the proposed development, in Section 7 of this report.

The contextual assessment and satisfaction of the various criteria under Clauses 24 and 25 of the Seniors SEPP within this SCC application provides the basis for a positive assessment of the proposed development that will be articulated in further detail in the relevant DA documentation required to be submitted to Council following SCC approval.

Amendment to the Seniors SEPP

On 1 October 2018, an amendment to the Seniors SEPP, passed by DPIE, was introduced. The amendments respond to community concerns about the incremental expansion of new senior development in urban fringe areas while balancing the need to deliver housing for our aging population. The new SCC rules apply to all land eligible to apply for and receive a SCC under the Seniors SEPP.

The amendments introduce new sub-clauses to Clause 25 (2) and (5) of the Seniors SEPP, the new sub-clauses have been introduced to:

- Limit the incremental expansion of land for seniors where a SCC has previously been issued, by requiring that any new SCC to include additional land cannot be issued unless:
 - The additional land independently meets the SCC criteria.
 - Meets new criteria that limits the type and scale of development on the additional land.
- Require a cumulative impact study to be provided when an application is lodged within a one-kilometre radius of a site of two or more SCC applications.
- Change the determining authority for all SCCs from the Secretary of the Department of Planning and Environment to the relevant Sydney District Planning Panel or Regional Planning Panel.

In relation to this SCC application, and in light of the amendments made to the Seniors SEPP, it is believed that the amendments will not significantly impact the outcome of the SCC as:

- The proposed RACF is being considered in light of the existing development on the subject site, however, additional studies are being conducted as previous studies are out of date and irrelevant.
- The proposed RACF development is on the same land and independently meets the SCC criteria.
- A cumulative impact study of the proposed seniors living development is not required as a DA has been determined and approved on the site with an approved SCC, and there are no sites located within a one or two kilometre radius of the site with an approved SCC.

Assessment against the provisions of the Seniors SEPP

The proposal complies with the requirements of the Seniors SEPP as shown in Table 6-1 below.

Table 6-1 Assessment against the Seniors SEPP Provisions

SEPP clause	Proposal
Clause 26 - Location and access to facilities	<p>The facilities required by Clause 26 are all outside the 400 m radius and are located at a variety of gradients and may not have pathway access. It is anticipated that this will be mitigated by:</p> <ul style="list-style-type: none"> • Provision of an on-site bus for use of residents of the proposed development. • An additional bus stop (located on Darkum Road) at the entrance of the proposed seniors living development has been approved by Council and will be serviced by Forest Bus Services. <p>The proposed development would satisfy the requirements of Clause 26 by the provision of a bus service with a carrying capacity of at least 10 passengers that would:</p> <p>Drop off and pick up passengers at a local centre that provides residents with access to the following:</p> <ul style="list-style-type: none"> • Shops, bank service providers and other retail and commercial services that residents may reasonably require. • Community services and recreation facilities. • The practice of a general medical practitioner. • Be available both to and from the proposed development to any such local centre at least once between 8 am and 12 pm each day and at least once between 12 pm and 6 pm each day. • Provide regular resident excursions, special community events and other services to meet the needs of the residents. • In addition to the above transport services, a new bus stop will be provided along the frontage of Darkum Road to serve the proposed development and the wider village of Mullaway.
Clause 30 - Site analysis	A Site Analysis has been provided above.

SEPP clause	Proposal
Clause 33 – Neighbourhood amenity and streetscape	<p>The proposed development will contribute to the “coastal village” identity of the area through its design and use.</p> <p>The proposed development has been designed to maintain reasonable neighbourhood amenity and appropriate residential character. The buildings have been designed in order to reduce the bulk and overshadowing of the proposed development. The proposed development will provide negligible overshadowing on adjoining land. The subject site has an undulating topography and as such the building form and siting that reflects to the site’s landform.</p> <p>Building heights at the street frontage are compatible in scale with existing adjoining development, in addition it is of modern design of which a number of residential developments have a similar bulk and scale to the proposed development.</p> <p>The buildings are setback to be consistent with existing development. Bulk is minimised by dividing the units across separate buildings and providing generous setbacks between these buildings as well as landscaping.</p> <p>The undulating topography, remnant vegetation and the proximity to the beach contributes to the site’s appealing character. The landscape design will seek to reinforce these positive site attributes through the use of indigenous vegetation, informal setting to planting and integration of retained trees. The landscaping materials to be incorporated within the site will reflect the ‘natural character of the site.</p>
Clause 34 – Visual and acoustic privacy	<p>The proposed development offers sufficient separation between proposed residential units and adjoining properties to ensure visual and acoustic privacy of existing and proposed residents is achieved.</p> <p>The design of the proposed development has been prepared to maximise the visual and acoustic privacy of neighbours in the vicinity through a layout and design that offers setbacks of proposed buildings and the provision of landscaping. Design solutions include appropriate building setbacks and heights, dwelling layouts, placement and sizes of window openings, fencing heights, screening and location of landscaping.</p> <p>The proposed dwellings have been designed in accordance with the requirements of the Building Code of Australia for sound and impact transmission so that acceptable noise attenuation between dwellings is achieved.</p>
Clause 37 – Crime prevention	<p>All units will be able to be locked separately.</p> <p>The design of the development has been informed having regard to the principles of “Crime Prevention through Environmental Design”.</p> <p>All dwellings are provided with living areas, bedrooms and decks, which have views of the surrounds. Natural surveillance from each dwelling is therefore possible to the surrounding public areas and internally within the development. Many dwellings would be clearly visible from the access road or pedestrian pathways which also facilitate natural surveillance from the public areas to the development. Lighting will be installed along the internal roads and will be supplemented with lighting along pathways to provide safe environments for residents and facilitate natural surveillance during the evening.</p> <p>The development has been designed to create an active community of which the communal areas are the focal points, providing central location for community activities as well as daily needs such as the mail collection point which encourages community interaction. In addition, there are landscaped areas scattered throughout the development in which residents can socialise. The design encourages pedestrian movements throughout the development facilitating surveillance. The development will be a managed retreat with maintenance and landscaping staff that will attend on a regular basis further adding to the level of activity around the development to provide informal surveillance.</p>

SEPP clause	Proposal
	<p>The development will employ a full time manager who is responsible for the day to day operation. This will include not only administrative functions but also the maintenance of the grounds and buildings and coordination of/ assistance with housework. The regular maintenance of the site, tending to landscaping and cleaning will ensure that the development is maintained and there is constant activity around the site.</p>
Clause 42 – Serviced self-care housing	<p>Appropriate staffing would be provided to co-ordinate the provision of home delivered meals, personal care and home nursing and assistance with housework. These services will be provided by either the on-site manager or local service providers in the area on a ‘user pays’ basis. Personal care and home nursing is proposed to be supplied via the on-site manager who will be qualified with a Certificate 3 in aged care and first aid certificate or will coordinate external personal care and home nursing from the local area. Additional services can be provided by allied health care professionals who have offered support to the development including Woolgoolga Natural Therapy Centre, Cathy Benn Podiatrist, Northern Beaches Physiotherapy Woolgoolga Medical Centre and Woolgoolga Chiropractic Clinic.</p> <p>Assistance with housework can also be arranged via the on-site manager. Businesses such as Houseproud cleaning are available to assist with housework should it be required. These services would be provided on a ‘user pays’ basis.</p>
Clause 43 – Transport services to local centres	<p>It is proposed to operate a bus capable of carrying at least 10 passengers that would satisfy the requirements of Clause 43(1). This bus would provide a service to Woolgoolga.</p> <p>Drop off and pick up passengers at a local centre that provides residents with access to the following:</p> <ul style="list-style-type: none"> • Shops, bank service providers and other retail and commercial services that residents may reasonably require. • Community services and recreation facilities. • The practice of a general medical practitioner. • Be available both to and from the proposal to any such local centre at least once between 8 am and 12 pm each day and at least once between 12 pm and 6 pm each day. • Provide regular resident excursions, special community events and other services to meet the needs of the residents.
Clause 44 – Availability of facilities and services	<p>The proposed development would satisfy the requirements of Clause 44 by the provision of a bus service with a carrying capacity of at least 10 passengers that would:</p> <ul style="list-style-type: none"> • Drop off and pick up passengers at a local centre that provides residents with access to the following: <ul style="list-style-type: none"> – Shops, bank service providers and other retail and commercial services that residents may reasonably require – Community services and recreation facilities – The practice of a general medical practitioner – Be available both to and from the proposed development to any such local centre at least once between 8 am and 12 pm each day and at least once between 12 pm and 6 pm each day; and – Provide regular resident excursions, special community events and other services to meet the needs of the residents.

6.2.2 State Environmental Planning Policy (Coastal Management) 2018

The *State Environmental Planning Policy (Coastal Management) 2018* (the Coastal Management SEPP) commenced on 4 April 2018. The Coastal Management SEPP replaces, updates and consolidates into one integrated policy SEPP 14 (Coastal Wetlands), SEPP 26 (Littoral Rainforests) and SEPP 71 (Coastal Protection), including clause 5.5 of the Standard Instrument – Principal Local Environmental Plan. The Coastal Management SEPP gives effect to the objectives of the *Coastal Management Act 2016*.

The application of the Coastal Management SEPP to the subject site is shown in Figure 6-1. The south east corner of the subject site is mapped with the 'coastal use area'. An assessment against the criteria of Clause 14 of the Coastal Management SEPP is provided below.

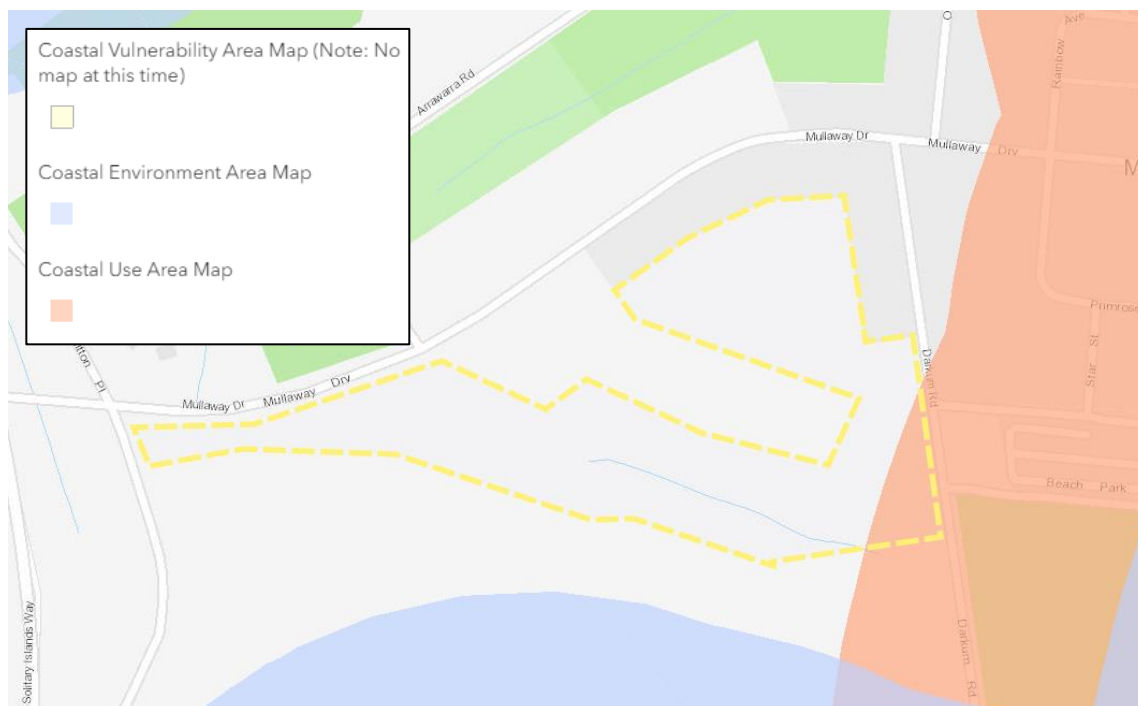


Figure 6-1 Coastal Management SEPP Mapping

Source: NSW ePlanning Spatial Viewer

Table 6-2 Clause 14 matters for consideration

Clause 14 – Development on land within the coastal use area	Response
(1) Development consent must not be granted to development on land that is within the coastal use area unless the consent authority—	Nil
(a) has considered whether the proposed development is likely to cause an adverse impact on the following—	Nil
(i) existing, safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability,	Not applicable. The subject site does not have direct access to or along the foreshore, beach, headland or rock platform.
(ii) overshadowing, wind funnelling and the loss of views from public places to foreshores,	Complies. The buildings associated with the proposed seniors living development would not block views from public places to foreshores.

Clause 14 – Development on land within the coastal use area	Response
(iii) the visual amenity and scenic qualities of the coast, including coastal headlands,	Complies. The proposed development remains generally consistent with development that is typically expected in the area.
(iv) Aboriginal cultural heritage, practices and places,	<p>Complies. A search of the Aboriginal Heritage Information Management System (AHIMS) and NSW Atlas of Aboriginal Places maintained by the NSW Environment, Energy and Science (formerly the Office of Environment and Heritage) was undertaken to determine the presence of any listed Aboriginal heritage items in or near the subject site.</p> <p>Aboriginal artefacts have previously been identified in the southern portion of the subject site, outside of the proposed development area.</p> <p>Construction of the proposed development is unlikely to impact any items as all works would be undertaken within the proposal area.</p> <p>An Aboriginal Cultural Heritage Assessment would be undertaken to assess the potential impacts of the proposal as part of a future DA.</p>
(v) cultural and built environment heritage, and	<p>Complies. The following databases / registers were searched to determine the presence of cultural and built heritage items in the vicinity of the site:</p> <ul style="list-style-type: none"> • Australian Heritage Database • State Heritage Register • Section 170 Register (undertaken via the State Heritage Inventory search tool) • CHLEP <p>An assessment would be undertaken to assess the potential impacts of the proposal as part of a future DA.</p>
(b) is satisfied that—	
(i) the development is designed, sited and will be managed to avoid an adverse impact referred to in paragraph (a), or	<p>The amenity of the subject site and surrounds have been taken into consideration throughout the design process of the proposal. The proposed development has been designed and sited to avoid any adverse impacts on the surrounding environment. As such, it is unlikely the proposal will negatively impact the visual amenity of the surrounding area.</p>
(ii) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or	
(iii) if that impact cannot be minimised—the development will be managed to mitigate that impact, and	
(c) has taken into account the surrounding coastal and built environment, and the bulk, scale and size of the proposed development.	
(2) This clause does not apply to land within the Foreshores and Waterways Area within the meaning of <i>Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005</i> .	Not Applicable. The subject site is not on land within the Foreshores and Waterways Area within the meaning of <i>Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005</i> .

6.2.3 State Environmental Planning Policy (Koala Habitat Protection) 2019

The *State Environmental Planning Policy (Koala Habitat Protection) 2019* replaces the SEPP 44 – Koala Habitat Protection. The SEPP Koala Habitat Protection commenced 1 March 2020, intended to update the controls that encourage the proper conservation and management of natural vegetation that provides habitat for koalas, ensure a permanent free-living population over their present range and reverse the current trend of koala population decline.

The SEPP mapping identifies the site and adjoining land within the Koala Development Application Map area and Site Investigation Area for Koala Plans of Management Map area, refer to Figure 6-2.



Figure 6-2 SEPP Koala habitat protection mapping

Source: DPIE

6.3 Other relevant state legislation

6.3.1 Biodiversity Conservation Act 2016

The *Biodiversity Conservation Act 2016* (BC Act) was passed by NSW Parliament in November 2016 and came into effect on 25 August 2017. The BC Act repeals the Threatened Species Conservation Act 1995, the Native Vegetation Act 2003, Nature Conservation Act 2001 and part 6 of the NPWS Act 1974. As a result, the matters relating to the listing of threatened species, threatened ecological communities, key threatening processes, biodiversity impact assessment, offsetting and related offences are now contained within the BC Act.

Projects assessed under Part 4 of the EP&A Act are required to address the requirements of the BC Act which includes provisions for offsetting once certain thresholds are met.

Under the BC Act, the assessment of biodiversity values on land and the impacts of activities on those biodiversity values are to be carried out in accordance with the Biodiversity Assessment Method (BAM). Where the proposed development or clearing has an impact on a mapped biodiversity value and/or on biodiversity values above a certain threshold, a Biodiversity Development Assessment Report (BDAR) will be required to be prepared by accredited assessors. The report will determine the impacts of proposed actions on biodiversity values, document measures undertaken to avoid or minimise impacts and calculate the number of credits to offset residual impacts. Refer to Section 5.2.1 for details.

The proposed development area will include the seniors living development and associated facilities. The development footprint is located within the south western portion of the subject site and will occupy a site area of approximately 1.7 hectares.

GHD has completed the following when preparing this SCC:

- Reviewed the NSW Biodiversity Values Map and determined the site is not identified on this map (refer Figure 3-4).
- Estimated the amount of potential clearing associated with the development and compared this to the Biodiversity Offset Scheme Thresholds – Area criteria table included in the BAM. This review indicates that the clearing of native vegetation will likely be greater than that allowed in the table meaning a BDAR would be required. In addition, the level of clearing means that offsets would need to be secured for the project in accordance with the Biodiversity Offsets Scheme (BOS).

Ecological assessments completed as part of the previous SCC application confirmed that the development footprint consists of native vegetation. It is assumed that for the purpose of this assessment, that the majority of trees within the development area would be removed, but every effort would be made to retain as much of the existing vegetation as possible.

6.3.2 Rural Fires Act 1997

The bushfire prone land mapping indicates the site is bushfire prone. Development on land that has been identified as bush fire prone must meet specific requirements under the *Rural Fires Act 1997* (Rural Fires Act) and the EP&A Act. The EP&A Act establishes a system for requiring bush fire protection measures on bush fire prone land at the DA stage. Section 79BA of the EP&A Act requires that a consent authority not grant approval for any development in a bush fire prone area (other than those developments covered by Section 100B of the *Rural Fires Act*) unless the proposal complies with *Planning for Bush Fire Protection 2019* (PBP).

The site is identified as bushfire prone land, as shown in Figure 6-3 below. The proposal is a 'Special Fire Protection Purpose'. To provide an indication of the impact bushfire would have on the proposal, a desktop assessment and site visit was undertaken.

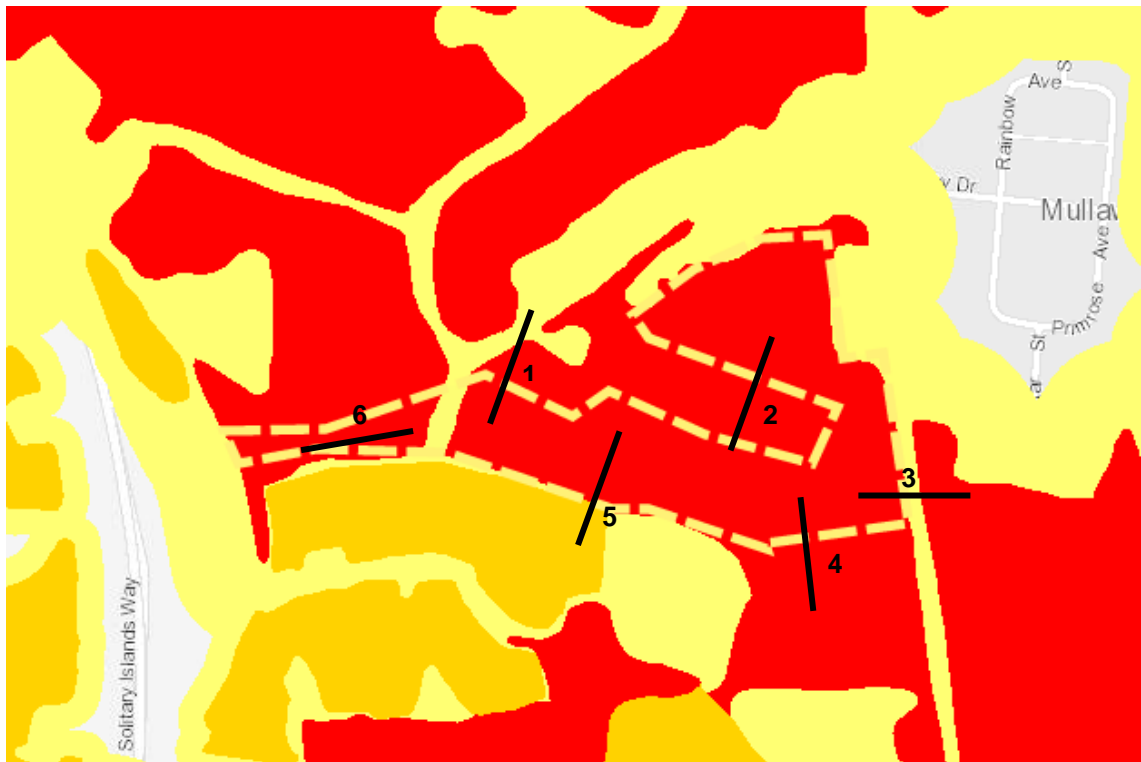


Figure 6-3 Bushfire prone land mapping

Source: NSW ePlanning Spatial Viewer

A summary of the bushfire hazard assessment and the required asset protection zones (APZ) is provided in Table 6-3.

Table 6-3 Summary of bushfire hazard for proposed development

Transect	Predominant Vegetation	Effective Slope	APZ (m)
1 (North)	Forest	Upslope	60
2 (North)	Forest	Upslope	60
3 (East)	Managed vegetation	>0-5° downslope	NA
4 (Southeast)	Forests	Upslope	60
5 (Southwest)	Managed vegetation	Upslope	NA
6 (West)	Managed vegetation	Upslope	NA

PBP 2019 requires all aged care facilities to meet a maximum of 10 kW/m² at the entry and exits to the buildings. The current concept plan provides entry and exits points away from the hazards and the separation distances generally meet the APZ requirements in Section 7.3.3, however the site would need to be partially cleared of vegetation. It is, therefore, considered that the concept design could meet PBP 2019 requirements.

The current concept plan also provides a through road to allow emergency access and egress, in case of a bushfire. This would need to be design and constructed in accordance with PBP 2019 requirements, and include fire hydrants.

A meeting was held with NSW Rural Fire Service's (RFS) in Coffs Harbour in May 2020 to discuss the above assessment. The RFS clarified what their expectations are in regards to aged care developments and the level of assessment required and did not offer any objections to the proposal.

The development would be considered 'Special Fire Protection Purposes' (SFPP). Pursuant to Section 100B of the *Rural Fires Act 1997*, Clause 44 of the *Rural Fires Regulation 2008* and PBP 2019 (NSWRFS, 2019), the bushfire protection provisions proposed for the development, as well as accompanying recommendations outlined in this report, generally comply with the 'Acceptable Solutions' for each Protection Measure. Where the proposal does not comply with the requirements, the non-conformance is considered marginal and the intent is achieved. The proposal and associated bushfire protection measures are, therefore, considered to achieve the intent of PBP 2019 and Section 100B of the *Rural Fires Act*. The proposal also reduces the bushfire risk to the existing neighbouring development'.

The proposed modification maintains all Inner and Outer Protection Areas and APZ. The access roads and internal roads in the development are identical to those in the original approval. For these reasons, the modified proposal complies with the requirements for PBP 2019.

6.4 Coffs Harbour Local Environmental Plan 2013

The CHLEP, prepared in accordance with the State Government's Standard Instrument template, came into effect in July 2013. The proposal was assessed against the relevant provisions of the CHLEP.

Under the CHLEP the proposal would be defined as 'seniors housing' which is defined as:

- (a) *"a residential care facility, or*
 - (b) *a hostel within the meaning of clause 12 of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004, or*
 - (c) *a group of self-contained dwellings, or*
 - (d) *a combination of any of the buildings or places referred to in paragraphs (a)–(c),*
 - (e) *and that is, or is intended to be, used permanently for:*
 - (f) *seniors or people who have a disability, or*
 - (g) *people who live in the same household with seniors or people who have a disability, or*
 - (h) *staff employed to assist in the administration of the building or place or in the provision of services to persons living in the building or place,*
- but does not include a hospital."*

6.4.1 Zoning

The subject site is zoned RU2 Rural Landscape under the CHLEP, as shown in Figure 6-4 below. The objectives of the RU2 Rural Landscape Zone are:

- *"To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *To maintain the rural landscape character of the land.*
- *To provide for a range of compatible land uses, including extensive agriculture.*
- *To minimise the fragmentation and alienation of resource lands."*

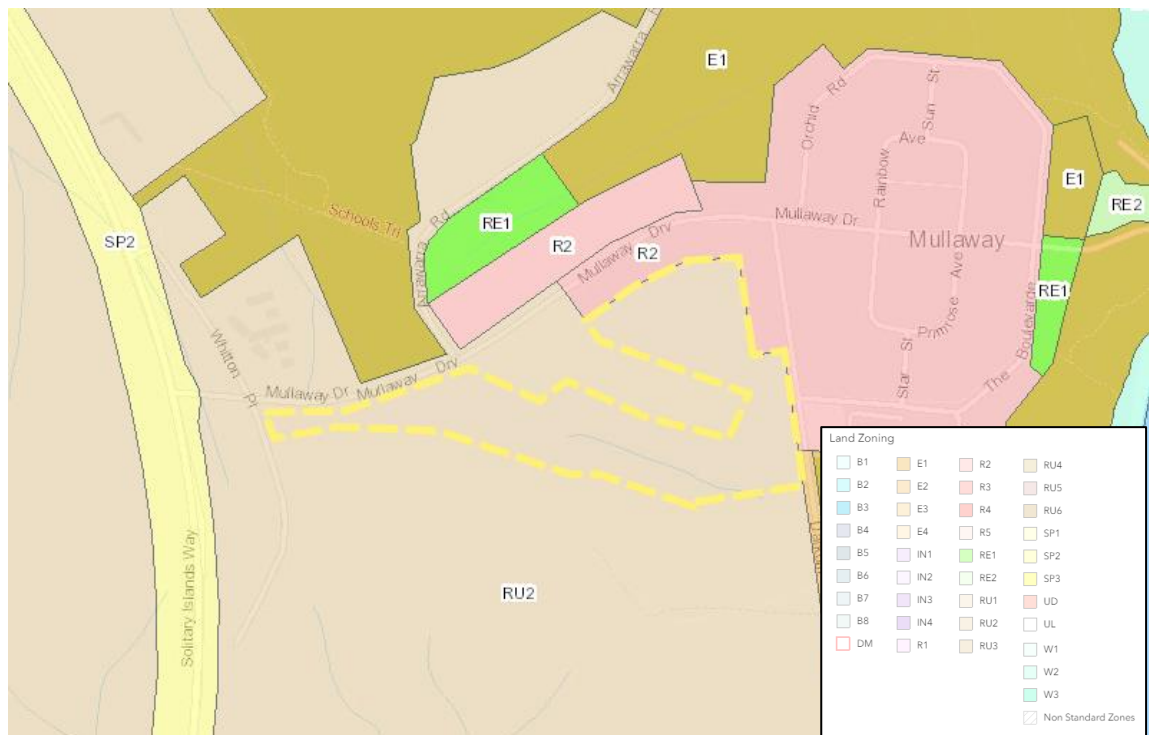


Figure 6-4 Site zoning

Source: NSW ePlanning Spatial Viewer

The proposed development is an appropriate land use outcome within the RU Rural Landscape Zone in that it is for an existing RACF use onsite. The proposed development will not obstruct or adversely impact the ability for nearby resource lands to operate for agricultural uses.

6.4.2 Permissibility


Seniors housing is not identified as a permissible use in the RU2 zone, and as such is prohibited on the site unless a SCC is granted by DPIE.

The bulk, scale and pattern of the proposed development remains consistent with the existing and future residential character of the locality adjacent to the site within the residential neighbourhood of Mullaway. The proposed development has been designed in accordance with the Seniors SEPP and no significant adverse impacts are expected. As such, it is considered that the density is reasonable in this instance.

Permissibility of the proposed development against the relevant clauses is demonstrated in Table 6-4 below.

Table 6-4 Response to CHLEP Provisions

Clause Objectives	Response
Clause 4.3 – Height of Buildings	
<p>The objectives of this clause are as follows:</p> <ul style="list-style-type: none"> • To ensure that building height relates to the land's capability to provide and maintain an appropriate urban character and level of amenity • To ensure that taller development is located in more structured urbanised areas that are serviced by urban support facilities • To ensure that the height of future buildings has regard to heritage sites and their settings and their visual interconnections • To enable a transition in building heights between urban areas having different characteristics • To limit the impact of the height of a building on the existing natural and built environment • To encourage walking and decreased dependency on motor vehicles by promoting greater population density in urban areas <p>The height of a building on any land is not to exceed the maximum height shown for the land on the Height of Buildings Map.</p>	<p>Complies. The CHLEP Height of Buildings Map identified a maximum building height of 8.5 m. The proposed development will not exceed 8.5 m.</p>
Clause 4.4 – Floor Space Ratio	
<p>"The objectives of this clause are as follows:</p> <ul style="list-style-type: none"> • To define the allowable development density of a site. • To encourage increased building densities through site amalgamation at certain locations. <p>The maximum floor space ratio for a building on any land is not to exceed the floor space ratio shown for the land on the Floor Space Ratio Map."</p>	<p>Not Applicable. The subject site is not identified on the CHLEP Floor Space Ratio Map.</p>

Clause Objectives	Response
Clause 7.8 – Koala Habitat	
<p>“The objective of this clause is to provide for the protection of koalas and their habitat.</p> <p>Development consent must not be granted to development on land to which this Plan applies unless the development is in accordance with Coffs Harbour City Koala Plan of Management, ISBN 0 7313 6050 8, published in November 1999.”</p>	<p>The CHLEP mapping identifies the subject site containing ‘secondary koala habitat’ only. Areas of secondary koala habitat generally have lower koala activity levels than those in primary habitat, but do support many koala populations, particularly away from coastal areas. They contribute to the overall habitat available to koalas and play a vital role in linking areas of Primary Koala Habitat.</p>  <p>The removal of koala habitat and impacts on koalas generally has been minimised with a reduced footprint and modified design to maintain a corridor through the site (see red arrow above), Potential impacts will be addressed through the utilisation of the Biodiversity Offsets Scheme. Refer to Section 5.2.1 for more details.</p>

6.5 Environment Protection and Biodiversity Conservation Act 1999

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) prescribes the Commonwealth’s role in environmental assessment, biodiversity conservation and the management of protected areas and species, populations and communities and heritage items.

The approval of the Commonwealth Minister for the Environment is required for an action:

- Which has, would have or is likely to have, a significant impact on ‘matters of national environmental significance’.
- Likely to have a significant impact on the environment in general (for actions by Commonwealth agencies or actions on Commonwealth land) or the environment on Commonwealth land (for actions outside Commonwealth land).

An EPBC Act protected matters search was undertaken on 6 March 2020 for a 1 km radius around the site. The results of the search are summarised in Table 6-5 below. No significant impacts are expected and, therefore, approval under the EPBC Act is not required.

Table 6-5 EPBC act protected matters located within 1 km of the subject site

Protected matter	Matter located within search radius	Comments	Potential impact
World Heritage Properties	None	There are no World Heritage Properties identified within a 1 km radius of the proposal.	Nil
National Heritage Places	None	There are no National Heritage Places identified within a 1 km radius of the proposal.	Nil
Wetlands of international significance (Ramsar sites)	None	There are no wetlands of international significance were identified within a 1 km radius of the proposal.	Nil
Great Barrier Reef Marine Park	None	Not applicable	Nil
Listed threatened species and ecological communities	69 species and 2 communities	An assessment of the potential impacts of the proposal on listed threatened species and communities has been previously undertaken. No significant impacts are expected from the works.	Nil
Listed migratory species	55 species	There are 55 migratory species within 1 km from the site. No significant impacts are expected from the works.	Nil
Nuclear actions	None	Not Applicable	Nil
Commonwealth Marine Areas	None	There are no Commonwealth marine areas identified within a 1 km radius of the proposal.	Nil
Commonwealth land	None	There is no Commonwealth land identified within a 1 km radius of the proposal.	Nil

7. Site compatibility criteria

7.1 Overview

Clause 25(5)(b) and (5A) of Seniors SEPP contains the 'heads of consideration' to be addressed in a SCC application.

- (5) *"The relevant panel must not issue a site compatibility certificate unless the relevant panel—*
- (a) has taken into account the written comments (if any) concerning the consistency of the proposed development with the criteria referred to in paragraph (b) that are received from the relevant General Manager within 21 days after the application for the certificate was made, and*
 - (b) is of the opinion that the proposed development is compatible with the surrounding land uses having regard to (at least) the following criteria—*
 - (i) the natural environment (including known significant environmental values, resources or hazards) and the existing uses and approved uses of land in the vicinity of the proposed development,*
 - (ii) the impact that the proposed development is likely to have on the uses that, in the opinion of the relevant panel, are likely to be the future uses of that land,*
 - (iii) the services and infrastructure that are or will be available to meet the demands arising from the proposed development (particularly, retail, community, medical and transport services having regard to the location and access requirements set out in clause 26) and any proposed financial arrangements for infrastructure provision,*
 - (iv) in the case of applications in relation to land that is zoned open space or special uses—the impact that the proposed development is likely to have on the provision of land for open space and special uses in the vicinity of the development,*
 - (v) without limiting any other criteria, the impact that the bulk, scale, built form and character of the proposed development is likely to have on the existing uses, approved uses and future uses of land in the vicinity of the development,*
 - (vi) if the development may involve the clearing of native vegetation that is subject to the requirements of section 12 of the Native Vegetation Act 2003—the impact that the proposed development is likely to have on the conservation and management of native vegetation,*
 - (vii) the impacts identified in any cumulative impact study provided in connection with the application for the certificate, and*
 - (c) in relation to an application that applies to land in respect of which a site compatibility certificate has previously been issued (the **previously certified land**) and other land (the **additional land**)—is of the opinion that—*
 - (i) the additional land (independently of the previously certified land) adjoins land zoned primarily for urban purposes or subclause (5A) applies, and*
 - (ii) if a site compatibility certificate was issued in respect of the previously certified land on the basis that the land adjoined land zoned primarily for urban purposes—the previously certified land continues to adjoin land zoned primarily for urban purposes.*

(5A) *This subclause applies for the purposes of subclause (5) (c) if—*

- (a) the proposed development on the additional land does not include any new or additional structures for use as accommodation, and*
- (b) where the previous site compatibility certificate specified a maximum number of dwellings for the previously certified land—the total number of dwellings on the additional land and previously certified land combined will not exceed that maximum number.”*

Each of these heads of criteria have been addressed below, having regard to the proposed development.

7.2 The natural environment

7.2.1 Vegetation

The site supports 2 similar open forest vegetation communities (Eucalyptus pilularis (Blackbutt) Open Forest and Eucalyptus pilularis – E. resinifera (Blackbutt – Red Mahogany) Open Forest) and one swamp open forest community (Melaleuca quinquenervia – Eucalyptus tereticornis – Lophostemon suaveolens (Paperbark – Forest Red Gum – Swamp Box) Open Forest).

All appear to have been modified by thinning of the overstorey, removal of most mature mid-stratum vegetation, disturbance of the ground layer in parts by grading and grazing and invasion of the remaining ground layer by exotic herbs and grasses.

Previous ecological assessments have confirmed that PCT 690 - Blackbutt - Tallowwood dry grassy open forest of the central parts NSW North Coast Bioregion (NR119) or PCT692 Blackbutt - Tallowwood moist ferny open forest of the coastal ranges of the NSW North Coast Bioregion (NR120) occurs at the site (detailed assessments as part of the BDAR will determine which).

The proposed development offers a modified design to the originally proposed RACF in 2018. This proposed development is more consolidated onsite and better integrates within the existing natural environment values.

The current proposal seeks to limit the amount of vegetation clearing on the site. It focuses the majority of the development within an area of the site which has been heavily disturbed from past agricultural activities and on land that has been the subject of past development approvals for holiday cabins. The proposed design also allows for the maintenance of a vegetated wildlife corridor through the south-eastern and northern portion of the site. Whilst the land has been mapped as high environmental value land it has not been mapped as high biodiversity land nor has it been mapped as primary koala habitat.

Further detailed reports for these and other elements will be commissioned for a future DA process upon receipt of a SCC.

7.2.2 Bushfire

Assessment of Asset Protection Zone (APZ) requirements

In our letter dated 15 February 2019, it was noted that the assessment of APZ requirements was undertaken using 6 transects extending in north, east, south and west directions from the proposed building construction footprint within the site, as shown in blue on Figure 7-1. Transects 3, 5 and 6 are, or will at the time of development be 'managed vegetation' (no longer bushfire prone). Transects 3 and 6 extend toward and into parts of the site which are proposed to be cleared of vegetation cover to facilitate construction. Transect 5 extends through vegetation which has been assessed to be 'managed vegetation' (cleared land with managed grass cover) to the south of the subject land. Therefore when the proposed development occurs the only vegetation along Transects 3, 5 and 6 within 100 metres of buildings will be managed vegetation and therefore no APZ will be required in those locations.

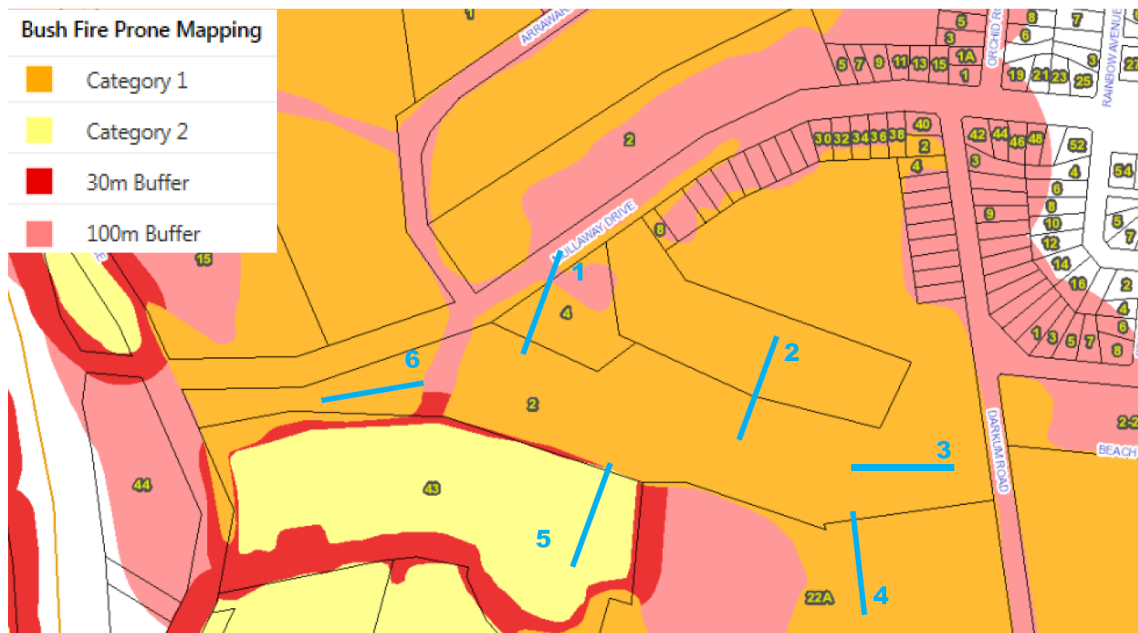


Figure 7-1 Bushfire prone land map with bushfire assessment transects

In relation to Transects 1, 2 and 4 (Figure 2), GHD conservatively assessed that vegetation along these transects was forest vegetation on an 'upslope' slope classification, and determined from AS3959 Method 1 BAL assessment, that an APZ of 60 metres would be required to separate buildings from bushfire-prone vegetation sufficiently to achieve BAL 10 which applies to Special Fire Protection Purpose developments.

Noting that Method 1 assessments are simple, look-up table approach (which is by design inherently conservative using worst-case slope and fuel input values), use of more detailed AS3959 Method 2 modelling provides for actual input values for slope and fuel parameters to be used and thus can provide more accurate BAL assessment which is less conservative. The use of Method 2 modelling may establish that a smaller APZ can achieve the BAL 10 performance standard, potentially small enough to be fully accommodated within the boundaries of the subject land. On this basis, AS3959 Method 2 modelling has been undertaken to determine more refined APZ requirements.

Following the approval of Development Consent No. 700/12 for the seniors living development, Figure 7-2 shows that significant changes in vegetation cover have occurred on the subject land. Firstly, vegetation in the north-eastern and eastern part of the subject land has now been cleared to construct 34 independent living villas.



Figure 7-2 Formerly-mapped bushfire-prone vegetation cleared from NE section of Lot 1

It is proposed that vegetation within the subject land (where Transects 1, 2 and 4 are located) will be modified to achieve RFS APZ standards for the proposed development. In relation to Transect 1 and 2, the only 'forest' classified vegetation remaining along those transects is on Lot 1, DP 329303 which constitutes a narrow strip (approximately 80 metres wide) of partially cleared/patchy forest (Eucalypt overstorey, but with a managed, low fuel understorey). The strip of 'forest' classified vegetation on this lot is isolated from other forest vegetation patches in the locality (by the subject land to the south and east, and by adjacent residential dwellings along Mullaway Drive to the north and west). Transect 4 is adjacent to a more extensive patch of 'forest' vegetation adjacent to Darkum Road.

Short fire run methodology

The RFS recognises that the fire behaviour modelling incorporated in AS3959 Method 1 for 'forest' assumes a head fire width at least 100 metres wide, spreading through forest with 25 tonnes per hectare of fuel in the understorey. RFS also recognise that use of the AS3959 methodology, in small or narrow patches of forest incapable of supporting fires of the dimensions assumed by AS3959, "can often result in unrealistic and onerous bushfire protection requirements" (RFS, 2017). Accordingly, the RFS have developed a modified BAL assessment methodology specifically for use in small or narrow bushfire hazard situations which can support fire runs of no more than 150 metres in run length, which the RFS calls *Short Run Fire* situations. The narrow 80 metre wide isolated strip of vegetation on Lot 1 adjacent to the subject land is most appropriate for assessment using the RFS Short Fire Run (SFR) methodology.

In support of the application for a Site Compatibility Certificate, GHD has undertaken a preliminary assessment of APZ requirements using the RFS SFR methodology. The SFR methodology has been applied for Transects 1 and 2 only, and we have used AS3959 Method 2 for refining APZ requirements for Transect 4.

Short Fire Run model input assumptions

In accordance with the RFS Short Fire Run methodology guidelines (RFS, 2017), GHD has used the following assumptions (Design Fire Brief) for modelling radiant heat flux (RHF) exposure and determining appropriate APZ width dimensions for the Short Fire Run situations along Transects 1 and 2 on the subject land.

Vegetation:	Dry Sclerophyll Forest (Shrub/Grass)
Fuel load:	14 t/ha (surface and elevated fuel component only)
Effective Slope:	3 degrees (perpendicular to contours, under vegetation)
Site slope:	0 (between vegetation and buildings being assessed)
FFDI:	80
SFR length:	80 metres
Flame temp:	1200 K (as for SFPP development)
Wind speed:	30 km/hr (as prescribed for SFR methodology)
L/B ratio:	2.82 (as per SFR methodology)
Head fire width:	28.4 m
Elevated fuel height:	Medium (<1.4 metres)

Transect 1 and 2 - Method 2 and SFR modelling results

1. Fully Developed Fire Radiation: 50 metre APZ achieves BAL 10 (RHF = 9.8 km/m²)

Using fully developed fire run assumptions (fire width of 100 metres) with published RFS fuel input values for North Coast Dry Sclerophyll Forest - Shrub/Grass sub-formation (Surface and Elevated Fuel = 14 t/ha; Overall Fuel = 25.93 t/ha), a Radiant Heat Flux < 10,000 kW/m² (BAL 10) is achieved using an APZ of **50 metres**.

2. Short Fire Run Fire Radiation: 32 metre APZ achieves BAL 10 (RHF = 9.96 km/m²)

Using NSW RFS Short Fire Run assumptions calculated for the site (fire width of 28.4 metres) with published NSW RFS fuel input values for North Coast Dry Sclerophyll Forest - Shrub/Grass sub-formation (Surface and Elevated Fuel = 14 t/ha; Overall Fuel = 25.93 t/ha), a Radiant Heat Flux < 10,000 kW/m² (BAL 10) is achieved using an APZ of **32 metres**.

Crown fire spread within the APZ is not a credible possibility due to the non-contiguous nature of scattered tree cover, variable nature of canopy gaps, and high-crown base without understorey ladder fuels. Retention of the existing residual tree cover is desirable from an environmental perspective, to retain habitat for arboreal fauna.

Full FPA Flamesol Method 2 modelling calculation sheets attached at Appendix B.

Transect 4 - Method 2 modelling results

1. Fully Developed Fire Radiation: 50 metre APZ achieves BAL 10 (RHF = 9.8 km/m²)

Using fully developed fire run assumptions (fire width of 100 metres) with published NSW RFS fuel input values for North Coast Dry Sclerophyll Forest - Shrub/Grass sub-formation (Surface and Elevated Fuel = 14 t/ha; Overall Fuel = 25.93 t/ha), a Radiant Heat Flux < 10,000 kW/m² (BAL 10) is achieved using an APZ of **50 metres**.

Full FPA Flamesol Method 2 modelling calculation sheets attached at Appendix B.

Distances at which BAL <10 is achieved (required APZ width)

Based on the modelled fireline intensity, a radiant heat flux/BAL of less than 10 is achieved at the following APZ width:

Transect 1:	32 metres
Transect 2:	32 metres
Transect 4:	50 metres

The above SFR and Method 2 modelling-determined APZ dimensions are all able to be achieved in full within the boundaries of the subject land. Accordingly, the APZ performance measures of Planning for Bushfire Protection (RFS, 2019) can be met.

Summary

GHD trusts that the additional AS3959 Method 2 and RFS Short Fire Run modelling and information provided in this supplementary advice satisfies DPE and RFS that the APZ requirements for the proposed seniors living development at the site can be met in full.

It is expected that confirmation of full compliance with the objectives of Planning for Bushfire Protection 2019 will be provided at DA stage.

Minimum APZ specifications

GHD clarifies that relevant SFPP APZ performance criteria are met as specified in Table 7-1.

Table 7-1 APZ performance criteria

PBP Performance Criteria	Acceptable solution/Current compliance	Future compliance
Radiant heat levels of greater than 10 kW/m ² will not be experienced by occupants or emergency services workers entering or exiting a building	✓ All proposed buildings compliant on the basis of RHF calculations (see RHF calculations at section 2.2 and 2.3) as shown in Appendix C.	Maintenance of APZ will achieve RHF < 10 kW/m ² in perpetuity
Issues relating to slope are addressed: maintenance is practical, soil stability is not compromised the potential for crown fires is negated	✓ Compliant Slopes within all APZs are < 5 degrees and readily maintained. Soils stabilised by maintained grass cover and widely spaced tree retention. Zero potential for crown fire or forest fire in APZ (fire in maintained grass understorey only). Elevated (ladder) fuels are absent and retained trees have a high crown-base.	Gentle site slopes and landscaped grassy groundcover are inherently conducive to APZ maintenance in perpetuity
APZs are managed and maintained to prevent the spread of a fire towards the building.	✓ Compliant Limited grass cover in APZ is to be continuously maintained in short condition by mowing or slashing. Canopies of retained trees cannot support fire spread (2-5 metre gaps) and a high crown-base.	APZ maintenance in perpetuity APZ's can be fully contained within Lot 1.
Vegetation is managed to prevent flame contact and reduce radiant heat to buildings, minimise ember-caused ignition and reduce the effect of smoke on residents and fire-fighters	✓ Compliant The only credible bushfire attack mechanism to the proposed new buildings on Lot 1 is ember attack. Ember and smoke impact is minimised through APZ maintenance and AS3959:2009 construction compliance.	Vegetation within APZ is maintained in perpetuity

7.2.3 Heritage

A search of the Aboriginal Heritage Information Management System (AHIMS) and NSW Atlas of Aboriginal Places maintained by the NSW Environment, Energy and Science (formerly the Office of Environment and Heritage) was undertaken to determine the presence of any listed Aboriginal heritage items in or near the subject site.

Aboriginal artefacts have previously been identified in the southern portion of the subject site, outside of the proposed development area. Previous Cultural Heritage Assessments have not identified any sites within the proposal area. LGA scale mapping produced in the vicinity of the site has also not identified the presence of any Aboriginal artefacts or sites (refer Figure 7-3 below which shows no yellow areas within the proposal area).

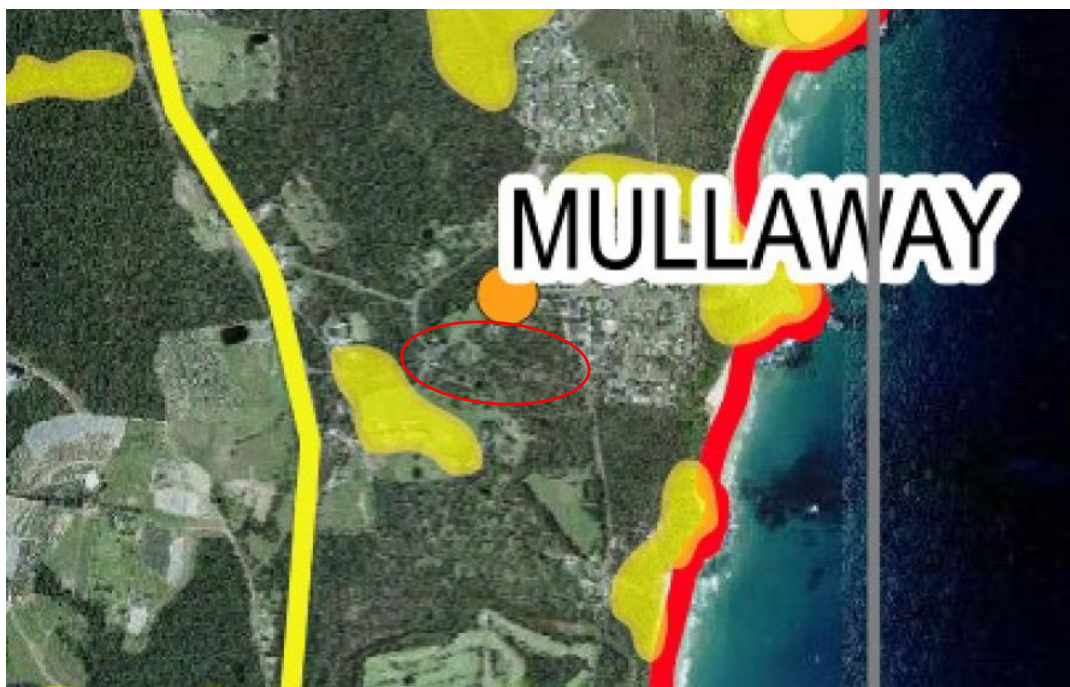


Figure 7-3 Aboriginal cultural mapping

Source: Ian Fox and Associates, 2018

Consultation with the local Aboriginal community and the preparation of an Aboriginal Cultural Heritage Assessment would be completed as part of the DA to be lodged should a SCC be issued for the proposal. Ample natural areas exist on the site should artefacts be identified that may require reburial as part of an Aboriginal Heritage Impact Permit process. It should be noted that the DA process will determine whether potential impacts can be mitigated or overcome or the proposal modified to minimise expected impacts.

The following databases / registers were searched to determine the presence of built heritage items in the vicinity of the site:

- Australian Heritage Database
- State Heritage Register
- Section 170 Register (undertaken via the State Heritage Inventory search tool)
- CHLEP

Construction of the proposed development would not impact any identified items within the site.

7.2.4 Built form

The *Coffs Harbour Local Growth Management Strategy 2020* identifies Mullaway as a coastal village with a distinctive natural environment. The subject site is in proximity to the following uses:

- North: Low density residential development on the urban fringe
- South: Rural residential development with single dwellings, scattered outbuildings and partially cleared land
- East: Low density residential development
- West: Agricultural development on cleared land, and State forest

The subject site has been approved for future urban development. The proposed development will form part of the Solitary Islands Village (seniors housing development) previously approved over the site.

7.2.5 Potential land use conflicts

The subject site is located within close proximity to a number of existing low density residential development and rural-residential development. Surrounding properties have been partially cleared as part of agricultural or lifestyle reasons. There are no land-use hazards in the immediate area (such as poultry operations, heavy or potentially hazardous or offensive industries), which could be considered as a potential land use conflict.

Lot 1 DP392303

The site wraps around Lot 1 DP392303 (refer Figure 7-4). It is currently undeveloped and is sparsely vegetated having been subject to clearing over recent years. The land is zoned RU2 Rural Landscape under Coffs LEP with a minimum lot size of 40 ha.



Figure 7-4 Lot 1 DP392303

The proposed development would not result in any land use conflicts with Lot 1 DP392303.

Lot 1 DP709465

The land adjoining the site and Lot 1 DP392303 is currently improved with a single detached dwelling, is predominantly cleared and is used for lifestyle purposes (refer Figure 7-5). The dwelling is located closer to Mullaway Drive and over 70 m away from the common boundary with the site. The land is zoned RU2 Rural Landscape under Coffs LEP with a minimum lot size of 40 ha.



Figure 7-5 Lot 1 DP709465

The proposed development would not result in any land use conflicts with Lot 1 DP709465.

Lot A DP 399587

Lot A DP 399587 is predominantly cleared and has previously been used for agricultural purposes. The property contains a number of dwellings and outbuildings (refer Figure 7-6) and is predominantly used for lifestyle purposes. The dwellings are located over 120 m from the common boundary with the proposed RACF. The land is zoned RU2 Rural Landscape under Coffs LEP with a minimum lot size of 40 ha.



Figure 7-6 Lot A DP399587

The proposed development would not result in any land use conflicts with Lot A on DP399587.

Lot 1 DP626756

Lot 1 DP626756 has been partially cleared for a dwelling and associated outbuildings and is predominantly used for lifestyle purposes. The dwelling is located over 70 m from the common boundary of the proposed RACF (refer Figure 7-7). The land is zoned RU2 Rural Landscape under Coffs LEP with a minimum lot size of 40 ha.



Figure 7-7 Lot 1 DP626756

The proposed development would not result in any land use conflicts with Lot 1 DP626756.

7.3 Impacts on the likely future uses of the land

The likely future use of the land is expected to be residential development similar to adjoining residential development established along northern and eastern boundaries of the subject site. The proposal is, therefore, consistent with the existing and future uses in close proximity to the site.

7.3.1 Services and infrastructure

Provided below is an assessment of the existing social infrastructure within the vicinity of the site. Consideration of the extent to which existing provisions in the surrounding catchment can cater for any additional demand, and how any on site provisions may cater to future demand.

The proposed seniors living development will generate the need for service infrastructure. New connections / upgrades will be required to service demands compatible with future development given that:

- The subject site is not currently covered by Council's water supply and sewerage servicing strategy, and any new infrastructure for the proposed development would be unplanned and may require alterations to existing infrastructure.
- The subject site is not currently covered by Council's developer contributions plans.

It is anticipated the following proposed service infrastructure will be compatible with the future demand of the development:

Water and sewer

Of the additional development facilities listed in Section 4.1, the following facilities have been assessed as they require Council's water and sewer services and infrastructure:

- 64 bedroom RACF with central administration facility
- 32 bedroom independent care studio villas
- Health / medical care facilities for doctors and allied health care services
- Pool, gym and laundry

Council's water and sewer development servicing plans (DSP), Appendix A -Table 3, was used to define the water and sewer equivalent tenement (ET) loadings for each of the development facilities. Table 7-2 below summaries the sewer and water ET loadings for each facility.

Table 7-2 Water and sewer equivalent tenement loadings

Facilities	Sewer ET	Water ET
Administration facility	1.56	1.56
Resource Access Control Facility (RACF) Rooms	35.20	35.20
Independent Care Rooms	17.60	17.60
Kitchen Dining in BLOCK A	0.49	0.49
Kitchen Dining in BLOCK C	0.49	0.49
Health / medical care facilities	2.50	2.50
Pool	3.50	3.50
Gym	0.38	0.38
Laundry	2.00	2.00
Total	63.73	63.73

Using the total ET loadings displayed in Table 7-2 above, Councils connected water and sewer infrastructure was assessed to determine if the existing infrastructure had capacity for the developments loads.

Sewer capacity assessment

The proposed Stage 2 (Residential Aged Care Facility) development will apply an additional 63.73 ET's to the existing gravity sewer network. To ensure that the existing sewer networks capacity is thoroughly checked the Stage 1 (Solitary Island Retreat) sewer ET's were also calculated and applied as part of the network capacity assessment.

Stage 1 comprises of 34 addition Self Care retirement units. Council's water and sewer development servicing plans (DSP), Appendix A -Table 3, was used to define the sewer equivalent tenement (ET) loadings of Stage 1 which resulted in 18.7 additional sewer ET's.

Both Stage 1 and stage 2 developments sewer loading is proposed to be connected into the newly built (8/4/2019) 40.6 m of sewer line (Line 2/B-3/B) which runs from the existing manhole out the front of 20 Darkum Road south along Darkum Road to out the front of the newly build unit 33/34 of Stage 1.

As part of the capacity assessment, GHD checked the existing gravity pipeline downstream of the connection point all the way to the transfer pumping station (SPS3021). Figure 7-8 below displays the size, slope and ET at each gravity sewer pipe downstream of the development connection.

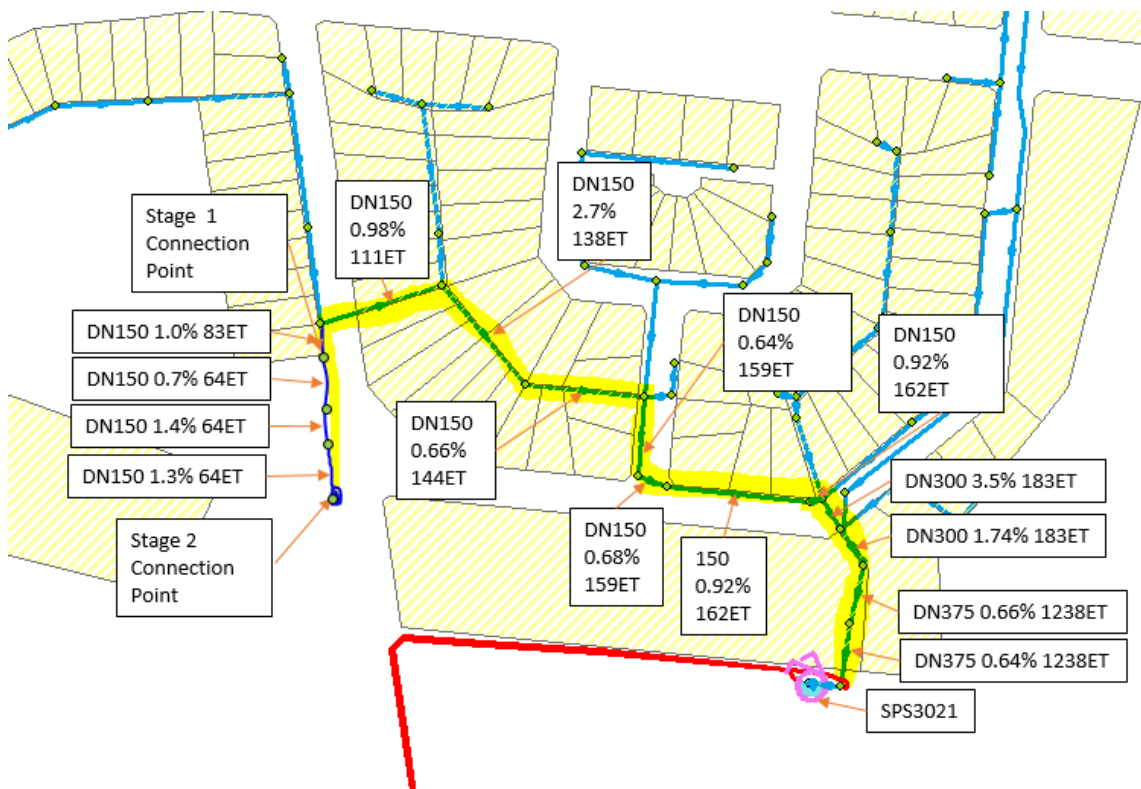


Figure 7-8 Existing downstream sewer details

The size, slope and ET in the pipes were then checked against Public Works Sewer Design Table 2(a) and 2(b) Percentage Grading Tables to ensure the pipes were not overcapacity. All downstream gravity sewer pipes were able to handle the current and additional ET's from the Stage 1 and 2 developments.

At the end of the downstream gravity main, SPS3021 then pumps the flows south to Woolgoolga's wastewater treatment plant. The capacity of the sewerage pumping station was also checked to ensure it could handle the addition loading.

SPS3021 consists of the two (2) pumps (duty standby) each with 104.8 L/s design flows. The peak wet weather flow (PWWF) of the existing ET as well as the addition ET was calculated to determine if the pump had adequate capacity for the additional flows.

The PWWF of the existing network was calculated using Public Works Sewer Design methodology to be 88.9 L/s and the addition PWWF from both stages of development is 13.2 L/s resulting in a total PWWF of 102.2 L/s which SPS3021 has adequate capacity to transfer during worst case peak wet weather events.

It was determined that Council's existing sewerage infrastructure has adequate capacity and does not require alterations or changes to take the load of the proposed development.

Water capacity assessment

The hydraulic criteria used are summarised below:

- All water mains shall be designed to satisfy the peak demand observed during modelling of the Peak Day, or firefighting flows (including background demands of 2/3 Peak Day Demand) – whichever is greater.
- Peak Day demand is equal to 2 x Average Day demand.
- A fire flow rate of 15 L/s has been assigned for a duration of 2 hours during the peak periods of stress on the network, using a background demand rate of 2/3 Peak Day demands, as shown in Table 7-3 below.
- The CHCC Code assumes a rate of 0.15 L/s/ET for an area supplying less than 1000 tenements, or 0.1 L/s/ET when supplying in excess of 1000 ET (refer extract from CHCC Standards presented in Figure 7-9 below. As such, the Average Day demand from this area has been calculated using a rate of 0.15 L/s/ET demand rate for the development, as shown in Table 7-3 below.

2.2 RETICULATION PRESSURE

Minimum static head

Reticulation systems shall be designed to supply peak instantaneous demand by gravity while maintaining a minimum static head of 200 kPa (20 m). (WSAA 03 Part 1, Section 2.4.3).

Water demand

A peak instantaneous demand of 0.15 L/s/tenement shall be used except that when supplying more than 1000 tenements, a demand of 0.10 L/s/tenement shall be used. Water demands for other industries shall be as detailed in the WSAA 03 Part 1, Section 2.2).

Maximum pressure

The maximum pressure applied to a component of a pipeline shall in-service not exceed the safe working pressure of the component. The effect of water hammer shall be taken into account for the maximum pressure.

The maximum pressure applied to a component for field testing, including water hammer, shall not exceed the field test pressure recommended by the component manufacturer.

The maximum pressure during field testing or in-service along a pipeline shall take into account the permitted forces that can be applied to pipeline support structures such as trust blocks.

Desirable maximum pressure

The desirable maximum pressure is 600 kPa. Zoning of the reticulation system by means of pressure reducing valves (PRV's) may be necessary to achieve these pressures across the development.

Fire fighting

Water mains required for fire-fighting purposes in the development shall be designed in accordance with the Building Code of Australia.

Network analysis

The Designer shall provide a network analysis of the reticulation system detailing the pressure and velocity distribution after consultation with the Water Authority.

Figure 7-9 Extract from CHCC Document 0071 – Reticulation and Pump Stations (Design)

In order to comply with WSA Standards, the following limits must not be exceeded:

- Maximum design head loss shall be limited to 3 m per 1 km of pipeline for pipes 200 mm and greater, or 5 m/km for pipes of smaller diameters.
- Pipelines shall be designed for flow velocities within the range of 0.5 to 3.0 m/s.
- A maximum allowable service pressure of 60 m (i.e. 588 kPa) is recommended in the WSA Code, however the CHCC network operates under higher pressures under normal operation. Due to this accepted operational level by the client, high pressures have not been highlighted as a non-conformance.
- The minimum residual pressure of 12 m at each node during fire flows has been used.
- The minimum static pressure according to the WSA Code states a desirable minimum service pressure of 20 m head (i.e. 196 kPa) for Residential use (refer WSA 02–2011-3.1 Table 2.3). The minimum water pressure during peak domestic demand is taken at ground level at the proposed building platform for each lot.

Demands have been calculated using CHCC and WSA Codes as presented in the Table 7-3 below.

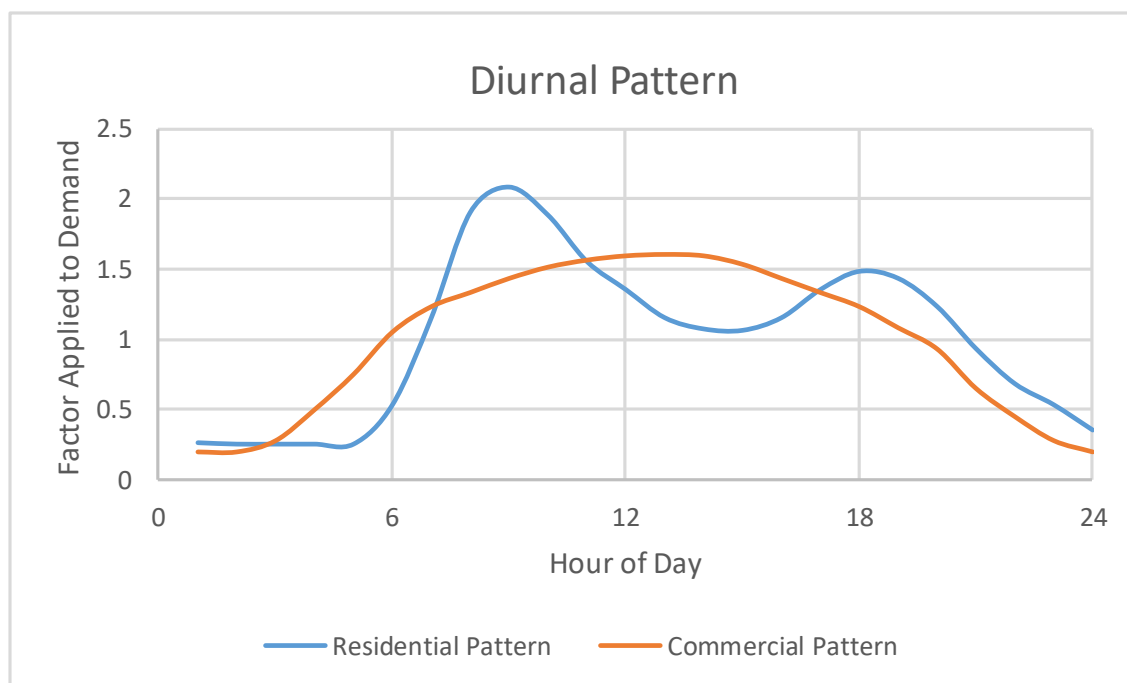
Table 7-3 Water demands

Stage	Development Load (ET)	Average Day Demand* (L/s)	Peak Day Demand (L/s)	Fire Flow at Hydrant	Fire Flow Background Demand (L/s)
1	18.7	2.8	5.6	15 L/s for 2 hours during peak demand	3.7
2	63.7	9.6	19.1	15 L/s for 2 hours during peak demand	12.7

**Note: Average Day Demand has been calculated using the 0.15 L/s/ET rate prescribed by Coffs Harbour City Council, as shown in Figure 7-9 above.*

Modelling of the networks represents the load from both Stage 1 and 2 of this development under the 'ultimate' time horizon scenario representing the network in the year 2020.

Average diurnal patterns were used to represent general patterns of consumption by residential and non-residential land uses across the network, as shown below.

**Figure 7-10 Diurnal patterns used in water modelling**

It was determined that the existing water infrastructure does not have adequate pipe sizing to meet standards if the proposed development is serviced from the Darkum Road connection point with the current network infrastructure. Due to the high flow requirements for water assessments of new developments, the tapered diameters of pipework in place along Darkum Road are unable to provide adequate flow whilst remaining within velocity and head loss limits.

Two options to service this development to provide water access are discussed as follows with results shown below in Table 7-4:

- Option 1: (Preferred Option) via connection to Mullaway Drive – for modelling purposes a point opposite Arrawarra Drive has been used – with the augmentation of a DN200 pipe (approximate length 300 m) installed between the DN375 trunk main and the offtake point to this development, parallel to existing DN250 pipework. This parallel pipework augmentation is required to meet unit head loss criteria:
 - DN275 pipework from the connection point into the development is required in order to remain under unit head loss limits.

- Option 2: via the connection point initially proposed along Darkum Road, with augmentation along Mullaway Drive (approximate length 800 m) and along Darkum Road up to the connection point (approximate length 320 m) with parallel pipework of DN250 pipes alongside existing infrastructure allowing increased flows:
 - Slightly higher (5.2 m/km) than allowable (5 m/mk) in the WSA standard will still persist at peak periods in DN100 original pipework along Darkum Road to service the large demands modelled at this development.

It is noted that recent upgrade works to the water mains by Council have occurred along Mullaway Drive to address the capacity issues at Mullaway.

Table 7-4 Water assessment results for augmentation options

Criteria	Option 1 Results	Option 2 Results
Maximum Peak Day Pressure (m)	72.7*	72.7*
Minimum Peak Day Pressure (m)	63.2*	60.9*
Maximum Velocity (m/s)	0.87	0.93
Maximum Unit Head Loss (m/km)	3.9	5.2**
Minimum Fire Servicing Pressure (m)	63.9*	61.7*

*Within CHCC normal operating pressure range.

**Slightly higher (5.2 m/km) than allowable (5 m/mk) in the WSA standard will still persist at peak periods in the original DN100 pipework along Darkum Road even with augmentation, in order to service the large demands modelled at this development.

With augmentation to the network and/or moving the connection point to infrastructure with greater capacity, the network would be able to provide adequate capacity to meet the demand of the proposed development whilst meeting planning criteria.

7.3.2 Transportation

Public transportation

The subject site is located approximately 500 m south west of the Mullaway General Store and the current bus stop serviced by Forest Bus Service. Forest Bus Service operates a route network in the Mullaway/Arararra area that provides convenient access to Woolgoolga, Coffs Harbour and Grafton. Services also travel to neighbouring areas including Moonee, Emerald and Sandy Beaches, Arararra Headland and Darlington Park.

Forest Bus Service also offers an on-demand service called Woopi Connect which connects Mullaway to Woolgoolga and would service the approved seniors living development.

Council has subsequently approved the development of a bus stop along Darkum Road, which is being constructed as part of the Stage 1 development. A further bus stop is proposed on Mullaway Drive adjacent to the proposed RACF and will allow existing and future residents a more accessible bus stop to that currently provided in Mullaway.

In addition to the Forest Bus Service, the Solitary Islands Village will provide a private bus service, together with smaller domestic scale vehicles (car and station wagon) that would provide a supplementary transport service for regular resident excursions, special community events and other services to meet the needs of residents.

Private transportation

All access into the proposed development will be via Darkum Road and Mullaway Drive. Access to the proposed seniors living development onsite will be via an internal road network. Car parking for staff and visitor vehicles would be located throughout the subject site.

7.3.3 Roads

Road network

Existing road network

Solitary Islands Way is a collector road that links townships and provides collector road access to local communities along its length. At Mullaway Drive, the road has an undivided carriageway with 1 northbound lane and a right turn lane and 1 southbound lane, plus a southbound left turn lane.

Currently, Mullaway Drive intersects Solitary Islands Way within an 80 km/h speed zone. The intersection is constructed as a Type CHR Rural Intersection with painted medians on Solitary Islands Way, a sheltered right turn bay and a long deceleration and left turn lane for southbound vehicles turning into Mullaway Drive to minimise delay to following southbound traffic.

Since the opening of the Pacific Highway upgrade, traffic volumes on Solitary Islands Way have significantly reduced, as a result of the separation between highway traffic and local traffic.

Traffic generation

Existing traffic generation

Traffic counts provided by Coffs Harbour City Council for Mullaway Drive 50 m west of Darkum Road (see attachment), reveal that average daily traffic (ADT) in 2014 was 1,733 vehicles per day (vpd) whilst peak traffic was 151/hr in the pm. Applying a 2% annual growth to traffic numbers to reflect likely 2019 rates, the average daily traffic (ADT) in 2019 is likely to be 1,907 vehicles per day (vpd) whilst peak traffic was 166/hr in the pm.

Expected traffic generation

The RTA Guide to Traffic Generating Developments (2002) provides a traffic generation rate for aged care facilities of 1 to 2 daily movements per dwelling and 0.1 to 0.2 evening peak hour movements, per dwelling.

Given that the proposal includes a RACF, where residents are unlikely to own or drive a car, traffic movements are expected to be significantly less than that of self-care senior housing developments. Nevertheless, the standard has been used, in the instance, to offer a conservative estimate of traffic likely to be generated by the proposal and to determine the potential impacts to the surrounding road network.

Applying the RTA Guide to Traffic Generating Developments standard, the proposed development would have the potential to generate an additional 108 to 216 vehicle movements per day or 11 to 22 evening peak hourly movements.

It is considered that Darkum Road would have capacity to accommodate the additional traffic generated by the proposal.

Traffic management controls

Existing traffic management controls

The proposed private access road into the site will form a T-junction with Darkum Road. Traffic travelling along Darkum Road will be subject to the T-junction rule at the intersection with Mullaway Drive. The existing traffic management controls are details in Table 7-5.

Table 7-5 Existing traffic management controls

Traffic Management Control	Details
Signal Control	There is no signal control.
Give-Way Control	There is a Give-Way control currently signposted, at the intersection of Mullaway Drive and Solitary Islands Way.
Priority Control	Darkum Road access to Mullaway Drive and Mullaway Drive access to Solitary Islands Way.
Sign-Posted Speed Limits	100 km/hr speed limit along Solitary Islands Way 50 km/h urban area speed limit for the whole of the Mullaway area

The existing traffic management controls are sufficient for the additional traffic generated.

Road performance

Existing and proposed road performance

The performance of Mullaway Drive has been assessed in terms of Level of Service (LOS). The LOS is a qualitative assessment of the quantitative effect of factors such as speed, volume of traffic, geometric features, traffic interruptions, delays and freedom to manoeuvre experienced by motorists. There are 6 levels of service (LOS), as described in Table 7-6 below, from AUSTROADS *Guide to Traffic Engineering Practice - Part 2: Roadway Capacity*, (1988).

The LOS criteria has been based on peak hour flows per direction for urban roads and peak hour flows on 2-lane, 2-way roads (with design speed of 100 km/h) for rural roads, as defined in RTA's *Guide to Traffic Generating Developments* and detailed in Table 7-7 and Table 7-8 respectively.

Table 7-6 Levels of service

Level of Service	Description
Level of Service A.	The top level is a condition of free flow in which individual drivers are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to manoeuvre within the traffic stream is extremely high, and the general level of comfort and convenience provided is excellent.
Level of Service B.	This level is in the zone of stable flow and drivers still have reasonable freedom to select their desired speed and to manoeuvre within the traffic stream, although the general level of comfort and convenience is little less than that of the level of Service A.
Level of Service C.	This service level is also in the zone of stable flow, but most drivers are restricted to some extent in their freedom to select their desired speed and to manoeuvre within the traffic stream. The general level of comfort and convenience declines noticeably at this level.
Level of Service D.	This level is close to the limit of stable flow but is approaching unstable flow. All drivers are severely restricted in their freedom to select their desired speed and to manoeuvre within the traffic stream. The general level of comfort and convenience is poor, and small increases in traffic flow will generally cause operational problems.
Level of Service E.	This occurs when traffic volumes are at or close to capacity and there is virtually no freedom to select desired speeds or to manoeuvre within the traffic stream. Flow is unstable and minor disturbances within the traffic stream will cause a traffic-jam.
Level of Service F.	This service level is in the zone of forced flow. With it, the amount of traffic approaching the point under consideration exceeds that which can pass it. Flow breakdown occurs and queuing and delays result.

Table 7-7 Urban road peak hour flows per direction

Level of Service	One Lane (vehicles/hour)
A	200
B	380
C	600
D	900
E	1,400

Source: RTA Guide to Traffic Generating Developments, October 2002, Version 2.2 Table 4.4.

Table 7-8 Peak hour flow on 2-lane rural road and level terrain

Level of Service	Veh/hr (5% HV)	Veh/hr (10% HV)	Veh/hr (15% HV)
B	590	560	530
C	970	920	870
D	1,550	1,480	1,410
E	2,500	2,390	2,290

Source: RTA Guide to Traffic Generating Developments, October 2002, Version 2.2 Table 4.5

The LOS criteria in Table 7-6 is based on the following assumptions:

- Design speed of 100 kph
- Terrain level with 20% no overtaking
- 3.7 metre traffic lane widths
- 60/40 directional split of traffic

Assuming that the peak hourly 2-way flow is 10% of the annual average daily traffic (AADT), then it is clear that current traffic density is well short of the hourly counts in the 2 tables above for both Mullaway Drive and Darkum Road.

Traffic generation from the proposal will increase evening peak hour volume in Mullaway Drive in 2019 from 166 to 188 vehicles per hour (vph), an increase of 13% and in 2029 from 199 to 226 vph, an increase of 13%.

Intersection capacity

Existing and proposed intersection capacity

It is anticipated that 80% of the total traffic volume at the Mullaway Drive/Darkum Road intersection would be generated from north and east of Mullaway Drive while Darkum Road/The Boulevard area contributes approximately 20% of the total. If it is assumed that the 2029 traffic volume along Mullaway Drive is 226 vph (pm peak), then this corresponds to 181 vph from north and east of Mullaway Drive. The corresponding volumes in Darkum Road in the vicinity of the proposed development would be 46 vph. These volumes are well below the threshold volumes identified in Table 7-9 below.

For these low combinations of flows, the busier streets can comfortably absorb the minor road traffic at a good level of service. These combinations of flows are below the threshold values, where intersection capacity analysis is normally required as shown below.

Table 7-9 Intersection volumes below which capacity analysis is unnecessary

Type of Road	Light Cross and Turning Volumes	Maximum Design Hour Volumes	Vehicles per hour (2-way)
2-lane major road	400	500	650
Cross road	250	200	100
4-lane major road	1,000	1,500	2,000
Cross road	100	50	25

Source: Austroads Part 2, Table 8.1 Roadway Capacity

7.3.4 Site access

The site has direct frontage to Darkum Road (196 m), commencing approximately 190 m south from Mullaway Drive and ending approximately 380 m south from Mullaway Drive. The length of Mullaway Drive from Solitary Islands Way to Darkum Road is 950 m. Mullaway Drive is a 2-way, 2-lane sealed surface road, approximately 5.9 m to 7.4 m wide, with gravel shoulders of varying width.

Darkum Road is a 7.5 m wide, sealed road with roll kerb on both sides, the full width from Mullaway Drive to approximately 24 m past the intersection of the Boulevard. Of the 190 m frontage of the development site to Darkum Road, 76 m is kerbed. South of the end of the kerbed frontage, the road has a 5.9 m seal and grassed verges and table drains.



Figure 7-11 View south along Darkum Road with The Boulevard LHS in background

Source: GHD

Solitary Islands Way Intersection with Mullaway Drive

The intersection of Solitary Islands Way with Mullaway Drive is constructed as a rural type CHR intersection. The highway has a single northbound lane and dual lanes southbound, plus a separate right turn lane sheltered by a painted median, a short left turn southbound acceleration taper and a southbound deceleration and left turn lane.

- The right turn lane has a deceleration and storage length of 170 m
- The auxiliary left turn lane has a length of 135 m
- The left turn acceleration taper has a length of 45 m

Sight distance

The adequacy of the existing sight distance at intersections and along the route from Solitary Islands Way to the site access in Darkum Road is fundamental to the assessment of traffic safety for the access route. The specific sight distance criteria used in the report has been extracted from the Austroads Publication “Guide to Road Design – Part 4A Unsignalised and Signalised Intersections” (2009) which specifies the following:

“Approach Sight Distance (ASD)”

This is the minimum level of sight distance which must be available on the minor road approaches to all intersections to ensure that drivers are aware of the presence of an intersection.”



Figure 7-12 Drivers sight line from Mullaway Drive north along Solitary Islands Way

Source: Google Maps



Figure 7-13 Drivers sight line from Mullaway Drive South along Solitary Islands Way

Source: Google Maps

“It is also desirable on the major road approaches to an intersection so that the driver of a vehicle has adequate distance to observe the road layout, including pavement markings, kerbs, islands, etc., in sufficient time to react and stop if necessary before entering the conflict area. Approach Sight Distance is measured from driver eye height (1.1 m) to 0.0 m (i.e. the road surface).

*It is the same as **Stopping Sight Distance** (SSD) except that SSD is measured from 1.1 m to 0.2 m being a nominal object height.*

Safe Intersection Sight Distance (SISD)

SISD provides sufficient sight distance for a driver of a vehicle on the major road to observe a vehicle from the minor road approach moving into a collision situation (e.g. in the worst case stalling across the traffic lanes), and to decelerate to stop before reaching the collision point. Safe Intersection Sight Distance is measured from the driver eye height (1.1 m) to a car height of 1.25 m.”

The whole of Mullaway from the intersection with Solitary Islands Way is a designated urban zone with a speed limit of 50 km/h. Solitary Islands Way at this location has a posted speed limit of 100 km/h.

A comparison of the required and available ASD and SISD for vehicles approaching and departing the proposed access driveway in Darkum Road, the intersection of Darkum Road with Mullaway Drive and the intersection of Mullaway Drive with Solitary Islands Way is set out in Table 7-10 for a vehicle speed of 100 km/h on the highway and 50 km/h in the urban zone.

Table 7-10 Sight distance

Location	ASD (desirable requirement)		SISD (minimum requirement)	
	Desirable	Measured	Desirable	Measured
Solitary Islands Way Northbound at Mullaway Drive	221 m	150 m	262 m	>300 m
Solitary Islands Way Southbound at Mullaway Drive	221 m	165 m	262 m	>300 m
Mullaway Drive Eastbound at Darkum Road	55 m	125 m	97 m	125 m

Location	ASD (desirable requirement)		SISD (minimum requirement)	
	Desirable	Measured	Desirable	Measured
Mullaway Drive Westbound at Darkum Road	55 m	>160 m	97 m	>160 m
Internal driveway access to Darkum Road*	N/A	N/A	45 m to 69 m	>100 m
Individual garage driveways access to Darkum Road*	N/A	N/A	40 m	>100 m

*** Per AS2890.1:2004 Fig. 3.2 1.15 m to 1.15 m.

7.3.5 Medical practitioners and hospitals

There are no medical practitioners or hospitals located within a 400 m radius of the subject site.

The proposal includes the provision of a health centre that will be utilised by staff and health and allied health service practitioners. The health centre consists of a number of medical treatment rooms that will be primarily utilised by a number of health service providers while treating residents. The space will also be used to train staff at the facility and will also include an onsite laundry to ensure that all hygiene standards are maintained and to minimise the risk of infection.

The majority of medical services are located within the regional towns of Coffs Harbour and Grafton. There are medical services provided in the nearby local centre of Woolgoolga, however medical services are limited.

Hospital services are provided in Coffs Harbour and Grafton. Services include 24-hour emergency response and ambulance dispatch.

The Coffs Harbour Base Hospital and Coffs Harbour Health Campus is located approximately 33.5 km south of the subject site (20 minutes by car) and offer a range of emergency services.

The Baringa Private Hospital, also in Coffs Harbour, is located approximately 30.8 km (27 minute drive) from the subject site and offers medical, surgical and rehabilitation services for its patients.

In 2018, the NSW Government committed \$156 million to the Coffs Harbour Health Campus Expansion. The redevelopment project will see enhancements to the existing surgical and operating theatres in addition to new theatres, a short stay surgical unit, orthopaedic and vascular unit, ambulatory care area and the expansion of community health. These upgrades will ensure that the growing population of the region has access to the necessary health care services.

The Grafton Base Hospital is located approximately 58.4 km north of the subject site (46 minutes by car) and provides a range of accessible healthcare services to the public. On 24 January 2018, a development application for the development of the Grafton Private Hospital was approved by Clarence Valley Council. The Grafton Private Hospital is due to open in 2020.

In addition to the medical services provided in Coffs Harbour and Grafton, Woolgoolga local centre also provides a range of medical services (e.g. dental, medical, paramedical, optometry, pathology, physiotherapy).

Access to “off-site” services would be provided by small fleet of vehicles. The provision of “on-site” medical services would also occur in the form of a “respite residential care service” to assist in post medical, emergency, rehabilitation or carer needs of residents.

The local medical and health practitioners have expressed their support for the development and their interest in using its facilities for treating the residents of the seniors living development.

7.3.6 Shopping centres and supermarkets

There are no shopping centres or supermarkets located within a 400 m radius of the subject site.

The Mullaway General Store is located approximately 500 m south of the subject site and is easily accessible by foot as both Darkum Road and Mullaway Drive are quiet local roads.

In May 2015, the Woolgoolga Woolworths supermarket opened servicing residents within Woolgoolga and the surrounding suburbs. The Woolgoolga Woolworths is located approximately 5.6 km south (7 minute drive) of the subject site. The supermarket is wheelchair accessible and also provides disabled parking. The Woolgoolga local centre also provides a number of shopping services.

Park Beach Plaza, Coffs Harbour is located approximately 28.2 km south of the subject site, includes Woolworths, ALDI, Target, Big W, JB Hi-Fi and over 120 specialty stores. The shopping centre is wheelchair accessible and also provides disabled parking and toilet facilities.

Grafton Shoppingworld, Grafton is located approximately 56 km north of the subject site, includes, Woolworths, Coles, Target, Big W and over 120 specialty stores. The shopping centre is wheelchair accessible and also provides disabled parking and toilet facilities.

7.3.7 Community services and facilities

Community services and facilities are offered in Woolgoolga, Coffs Harbour and Grafton. Grafton and Coffs Harbour are major regional centres providing an array of shopping, medical, professional, banking, paramedical, hospital, social, sporting and entertainment services and attractions for all regional residents. Woolgoolga local centres offers an array of social, sporting and entertainment activities and facilities as well as a number of medical services previously mentioned.

At a local scale, Mullaway is serviced by a general store, service station, primary school and a range of support services provided by community organisations under the State and Commonwealth Government's Home and Community Care (HACC) programs; including 'meals on wheels,' home care and nursing.

In addition to the above facilities, once constructed the approved restaurant on the site will provide an on-site 'bistro' type meals service as well as a home meals service for residents of the seniors development.

7.3.8 Parks and recreation facilities

There are numerous parks and open spaces located within close proximity to the subject site, as identified in the figure below.

Whilst there are limited parks and open space located within 400 m, the seniors housing development will provide passive recreation opportunities for walking and cycling. Furthermore, the subject site is located within easy walking distance along The Boulevard, to Mullaway Beach. In addition, there is a walkway to the south of the caravan park (opposite the proposed development) towards Cabins Beach. Access to Safety Beach and the Woolgoolga Golf Course is also available along Darkum Road.

7.3.9 Libraries

There are no libraries located within a 400 m radius of the subject site.

The Woolgoolga Library is located in Woolgoolga local centre approximately 6.7 km south (9 minute drive) from the subject site.

The Harry Bailey Memorial Library in Coffs Harbour is located approximately 31.1 km south (29 minutes) from the subject site. In addition to book lending services both the Woolgoolga and Harry Bailey Memorial Library provides CD, DVD, magazines and books in a variety of different languages. Additionally, the library provides a home library service which includes delivery to nursing homes and aged care facilities throughout the region. The library is wheelchair friendly accessible and disabled parking is available for Mobility Parking Scheme permit holders.

7.3.10 Banks and post offices

There are no banks or post offices within a 400 m radius of the subject site.

Woolgoolga town centre has multiple banking services including Commonwealth Bank, NAB Bank and BCU Bank. There is also an Australia Post located within the Woolgoolga town centre.

7.3.11 Essential services

As the subject site is located immediately adjacent to an existing urban area, existing sewer, water, electricity and telecommunication services are immediately available to the site and capable of servicing the proposed development.

7.4 Impacts on the provision of land for open space or special uses

The subject site is currently zoned RU2 Rural Landscape under CHLEP and, therefore, this criteria does not apply.

7.5 Impact on bulk, scale, built form and character

Indicative built form diagrams and perspectives have been prepared showing the future built form relationship between the proposed development and existing uses of land in the vicinity of the site. This built form has resulted from a site analysis and has responded to opportunities and constraints of the site and immediate area in a manner that demonstrated its compatibility with the existing uses of the area.

The following considerations have been carefully considered in the design of the proposed development:

- Building location and orientation.
- The location of open space to ensure that they are readily accessible.
- Preservation of the environmental integrity and amenity of the subject site.
- Existing and potential views and vistas.
- The site's relationship with adjoining and adjacent residential development.

The proposed development's compatibility with the above matters is shown within the built form diagrams, however the following describes why the proposal is both compatible and worthy of certification:

- The site has an area of 9.8 ha and is irregular in shape, and flexibility in spatial master planning is limited. The detailed designs of the new buildings at DA stage will ensure that all buildings are orientated and designed in a way that creates a positive architectural expression for the site and the broader area, whilst preserving the natural amenity of the area through the incorporation of large outdoor areas.
- The character of adjoining residential development is low density consisting of single and double storey detached dwellings. As shown in Appendix A, the proposed buildings will remain sympathetic to the residential interface in terms of height, bulk and character.
- The proposal incorporates significant areas of landscaped open spaces at ground level throughout the site. Open space areas would be easily accessible to all persons residing on site. Furthermore, the retention of large trees and natural vegetation will ensure that the natural and pristine amenity of the subject site is maintained. Furthermore, it would assist in breaking up the mass and visual bulk of the buildings when viewed from Mullaway Drive and Darkum Road.
- All buildings on the subject site will range from one (1) to two (2) storeys in height. The retention of vegetation throughout the site would shield the development from adjacent residential and rural development and traffic along Mullaway Drive and Darkum Road. Therefore, it is unlikely that the proposed RACF would detract from the amenity of the area.
- The proposed use of the site remains compatible with the surrounding land uses.
- The building envelopes are sited in a manner that allows adequate privacy between the adjoining buildings on site the incorporation of dense low lying vegetation throughout the development would also reduce the potential for overlooking.

7.6 Clearing of native vegetation

The proposal is predominantly located in an area that has been previously subjected to logging activities and/or partially cleared through underscrubbing, therefore only minimal clearing approximately 3 ha would be required for the proposal.

Should the proposal progress to DA stage the assessment of biodiversity values on land and the impacts of activities on those biodiversity values are to be carried out in accordance with the BAM. Where proposed development or clearing has an impact on mapped biodiversity values and/or impacts on biodiversity values above a certain threshold, a Biodiversity Development Assessment Report (BDAR) will be required to be prepared by accredited assessors. The report will determine the impacts of proposed actions on biodiversity values, document measures undertaken to avoid or minimise impacts and calculate the number of credits required to offset the residual impacts.

This review indicates the clearing of native vegetation will be greater than that allowed in the Biodiversity Offsets Scheme Report for the site meaning a BDAR would be required. In addition, the level of clearing means that offsets would need to be secured for the project in accordance with the Biodiversity Offsets Scheme.

It is noted that as part of the development approval DA 700/12 a Biobanking Site (BA351), located at the southern end of Darkum Road, was established and there is existing capacity at this site which would be suitable to provide biodiversity credits to offset residual impacts from this proposal.

The BAM has replaced the BioBanking Assessment Methodology (BBAM) as part of the NSW Governments Biodiversity Reform package. The BAM includes a new credit calculator which has different credit impact and generation rates than the previous BBAM credit calculator. The DPIE Biodiversity Conservation Division (BCD) has developed a credit conversion (equivalency) tool and GHD has completed the following credit estimate for the proposal based on interpreting results from the BBAM assessment for the original development as well as recent BAM assessments completed by GHD and BAM equivalence assessments completed by the BCD.

- The proposal will impact on PCT690 Blackbutt - Tallowood dry grassy open forest of the central parts NSW North Coast Bioregion (NR119) or PCT692 Blackbutt - Tallowood moist ferny open forest of the coastal ranges of the NSW North Coast Bioregion (NR120).
- The area of impact will be approximately 3 hectares.
- The previous BBAM assessment had a credit impact rate for NR119 of approx. 48 credits per hectare. This would equate to approx. 144 credits for the current proposal (3 ha).
- GHD's analysis of BAM assessments and credit equivalence assessments indicates credit impact rate has reduced by approx. 40%. This would equate to approximately 86 BAM credits being required for the current proposal.
- No species credits were required for the original development however this may change as the BAM does include several threatened species as species credit matters which were not considered under the BBAM.

Note: The estimate above is based on interpreting results from other assessments and GHD knowledge of the BAM. The final credit impact required can only be determined by completing a full BDAR for submission with a DA for the proposal.

7.6.1 Credits available from existing Darkum Road biobank site for the proposal

The existing biobank has the following BBAM ecosystem credits available:

- 36 credits of NR119
- 2 credits of NR161
- 29 credits of NR217

The BAM has a lower credit generation rate and GHD has estimated that the following credits would be available when converting these to BAM credits:

- 22 credits NR119
- 1 credit NR161
- 17 credits NR217

This means there would likely be a shortfall of credits required to offset the development from the existing site (not all of the credits above will be permitted to trade as offsets for NR119 or NR120). The options available to source any shortfall in offsets for the proposal in accordance with NSW legislation include the following:

- Complete a variation to the existing biobank site to increase the size of the biobank and generate additional credits.
- Source credits from the open market from another site in accordance with the relevant trading rules associated with the BAM and BOS.
- Place funds in the Biodiversity Conservation Fund (BCF).

These options mean the ability to satisfy any offsets required for the project will not be difficult.

7.7 Cumulative impact study

On 1 October 2018, DPIE introduced amendments to the Seniors SEPP that responds to community concerns about new seniors developments in urban fringe areas.

The changes introduced the requirement for a cumulative impact study to be submitted as part of any SCC application to DP&E where the subject land (or any part of the land) is located within 1 km or 2 km or more of other SCC sites.

The cumulative impact study must include an assessment of the impact of the proposed development on the capacity of existing or future services to meet demands arising from the proposed development.

At minimum the cumulative impact study must consider the impacts on:

- Water and reticulated sewers
- Public transport
- Existing and future road infrastructure

To meet any anticipated increases as a result of the proposed development.

As a DA is determined on a subject site with an approved SCC, and there are no sites located within a 1 km or 2 km radius of the subject site with an approved SCC, a cumulative impact study is not required.

7.8 Additional land adjoins land zoned primarily for urban purposes

As the subject site adjoins land zoned primarily for urban purposes, assessment against the requirements of Clause 25(5A) are not required.

8. Conclusion

GHD has prepared this report, on behalf of Solitary Islands Village Pty Ltd, to support an application for a SCC under Clause 24 of the Seniors SEPP for the development of a seniors living development (RACF, independent care villas, health and medical care, pool and gym and associated facilities) at 2 Mullaway Drive, Mullaway.

Solitary Islands Village at Mullaway provides a holistic approach to providing suitable housing for persons aged over 55. The subject site is close to services and is likely to service those persons ageing in the northern beaches of Coffs Harbour, thereby, fostering the 'aging in place' policies established under the *North Coast Regional Plan 2036* and CHCC's strategic planning framework. The residents will be closer to family and friends while the site characteristics provide a high degree of amenity and quality of life.

It is widely recognised that demand for a range of housing to suit seniors (persons aged 55 years and over) and people with a disability will grow significantly over the next 40 years, as baby boomers move into retirement and older generations continue to enjoy greater longevity.

The overall effects of the proposed development on the future residents of the senior living development are expected to be positive. The proposed development will provide housing diversity, affordability and appropriate design catering to the needs of a range of older people.

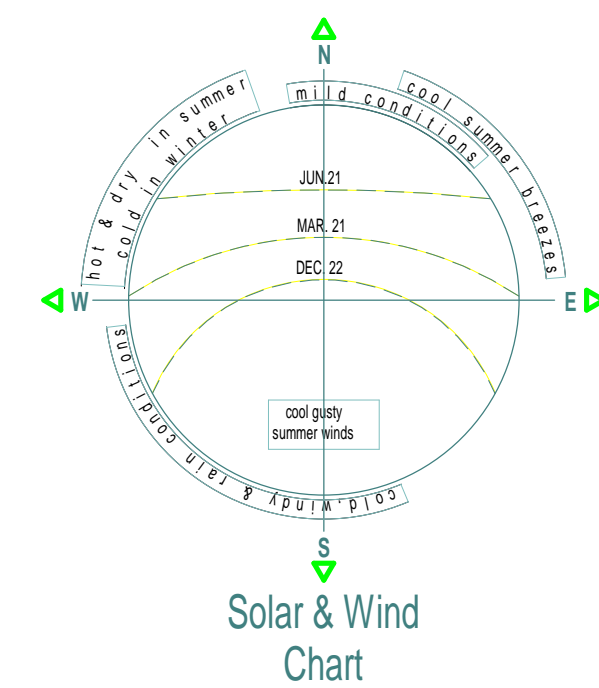
The report demonstrates that the proposed RACF, independent care villas and associated facilities meets the 'heads of consideration' under Clause 25 of the Seniors SEPP. The proposed development will be compatible with the surrounding land uses.

It is recommended DPIE issue a SCC, for the subject site, under the terms of Seniors SEPP.

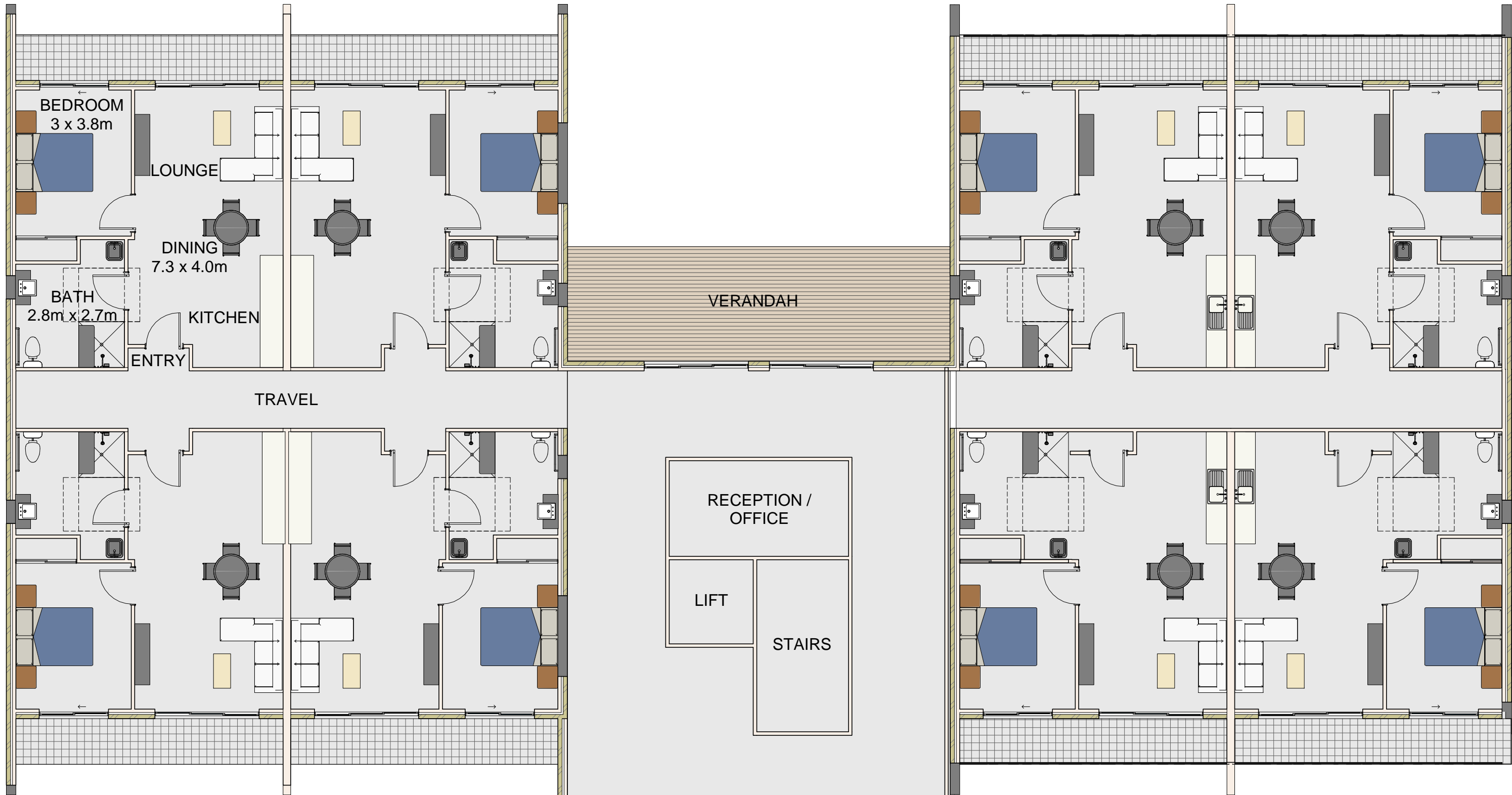
Appendices

Appendix A – Proposal plans

Mullaway Dr MULLAWAY NSW 2456



UNIT AREA 50m²



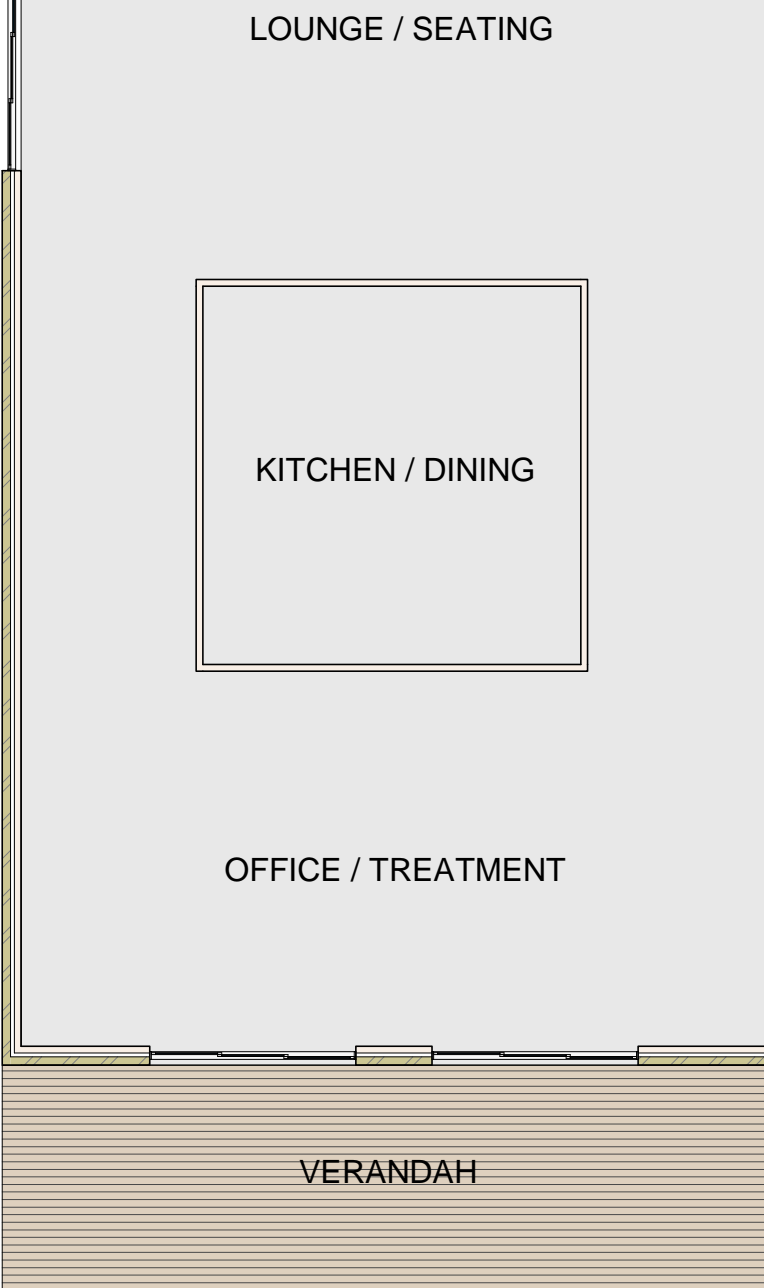
2 BLOCK A - 3D

BLOCK A - AREAS

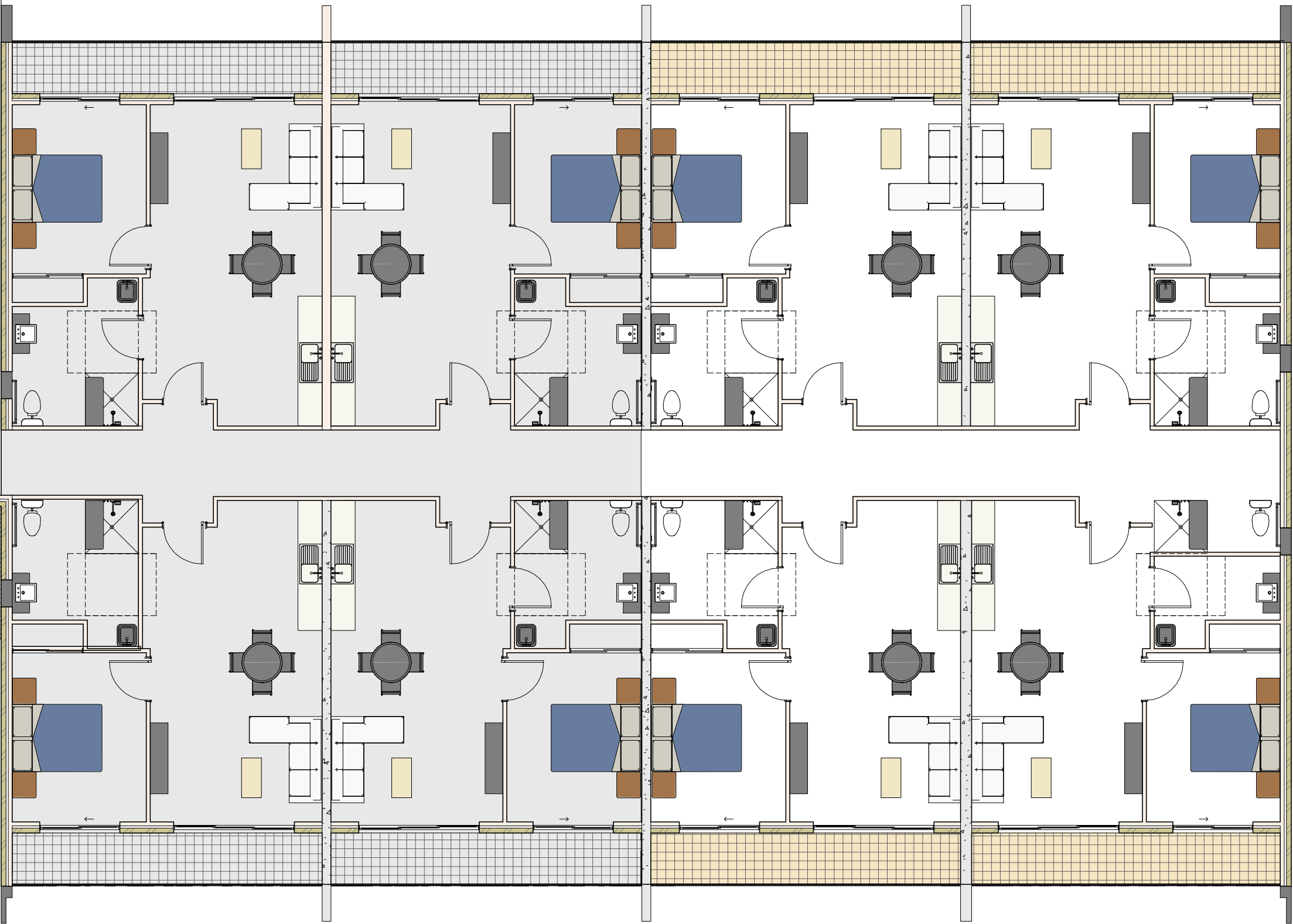
1385m² PER FLOOR

TOTAL = 2770m²

16 ONE BEDROOM APARTMENTS
PER FLOOR



1 BLOCK A - FLOOR PLAN
1 : 100



6990
4055 90 2845

3820
90 645 7255
2700

5	AMENDED SITE COMBATABILITY PLAN	2020-03-04
4	AMENDED - SITE COMBATABILITY PLAN	2020-02-28
No.	Description	Date
Amendments		

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erawn	Author	Checker	
checked	Checker	Scale	1 : 100
Sheet No.		Sheet size	A1

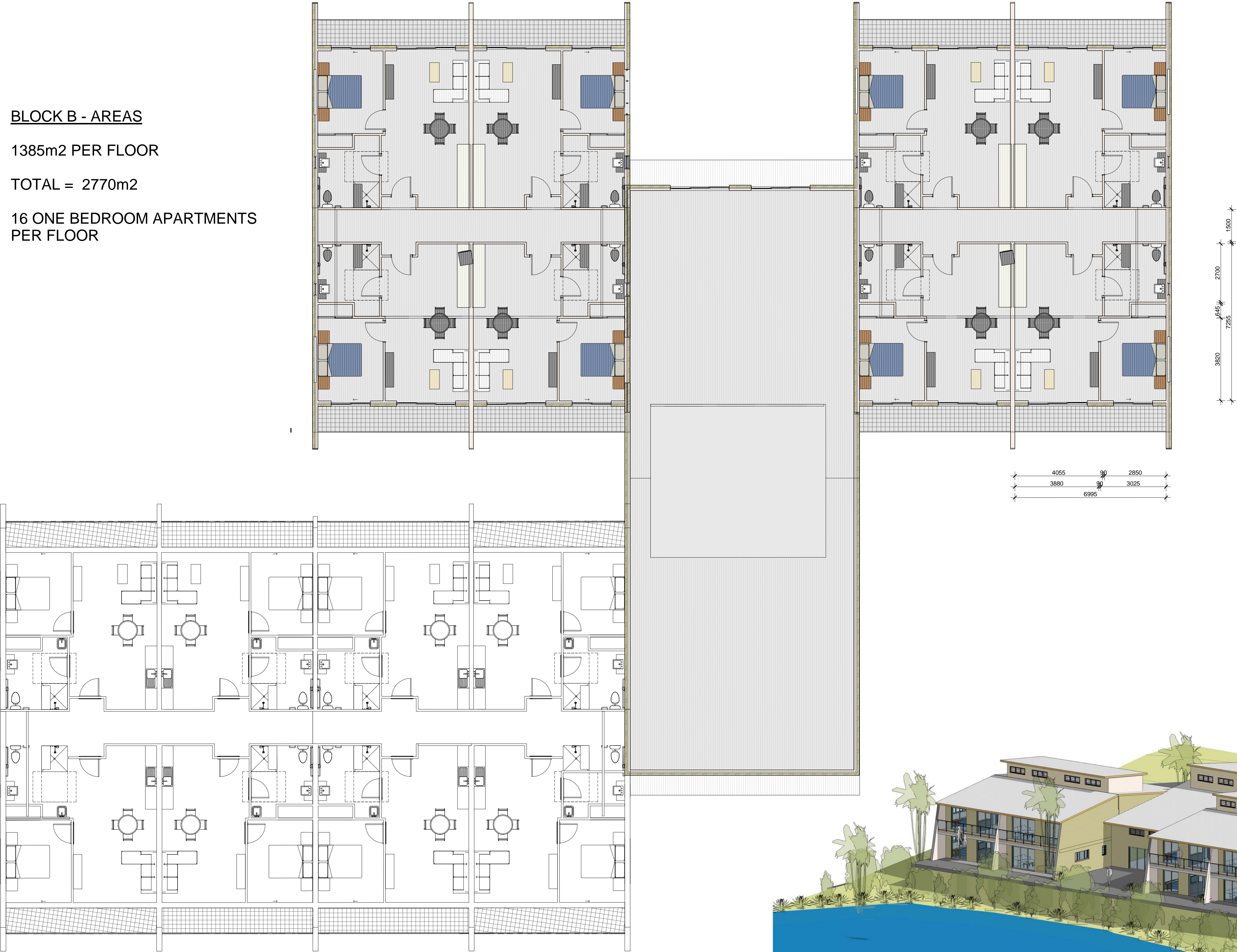
BLOCK B - AREAS

1385m2 PER FLOOR

TOTAL = 2770m2

16 ONE BEDROOM APARTMENTS
PER FLOOR

UNIT AREA 50m²



1 BLOCK B - FLOOR PLAN
1 : 100

2 BLOCK B - 3D

BLOCK C - AREAS

1044m2 PER FLOOR

TOTAL = 2088m2

16 STUDIO APARTMENTS
PER FLOOR

UNIT AREA 33m²



1 BLOCK B - T.O.W GL
1 : 100

2 BLOCK C - 3D



2 BLOCK A - ELEVATION B
1 : 100



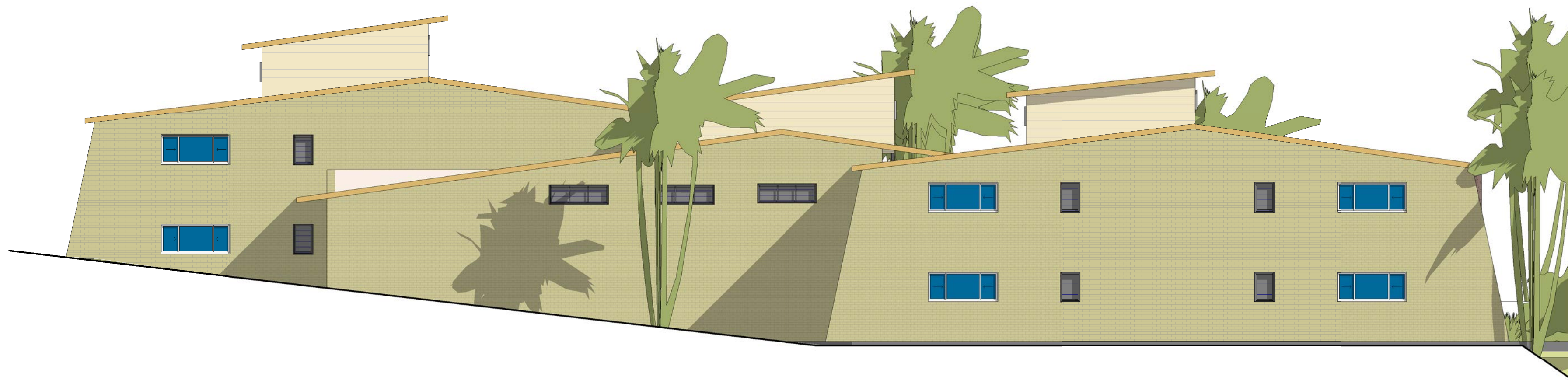
1 BLOCK A - ELEVATION A
1 : 100



3 BLOCK A - ELEVATION C
1 : 100

5	AMENDED SITE COMBATABILITY PLAN	2020-03-04
4	AMENDED - SITE COMBATABILITY PLAN	2020-02-28
No.	Description	Date
Amendments		

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Checked	NG	Scale	Sheet size
Sheet No.	NG	Scale	Sheet size



3 BLOCK B - ELEVATION C
1 : 100



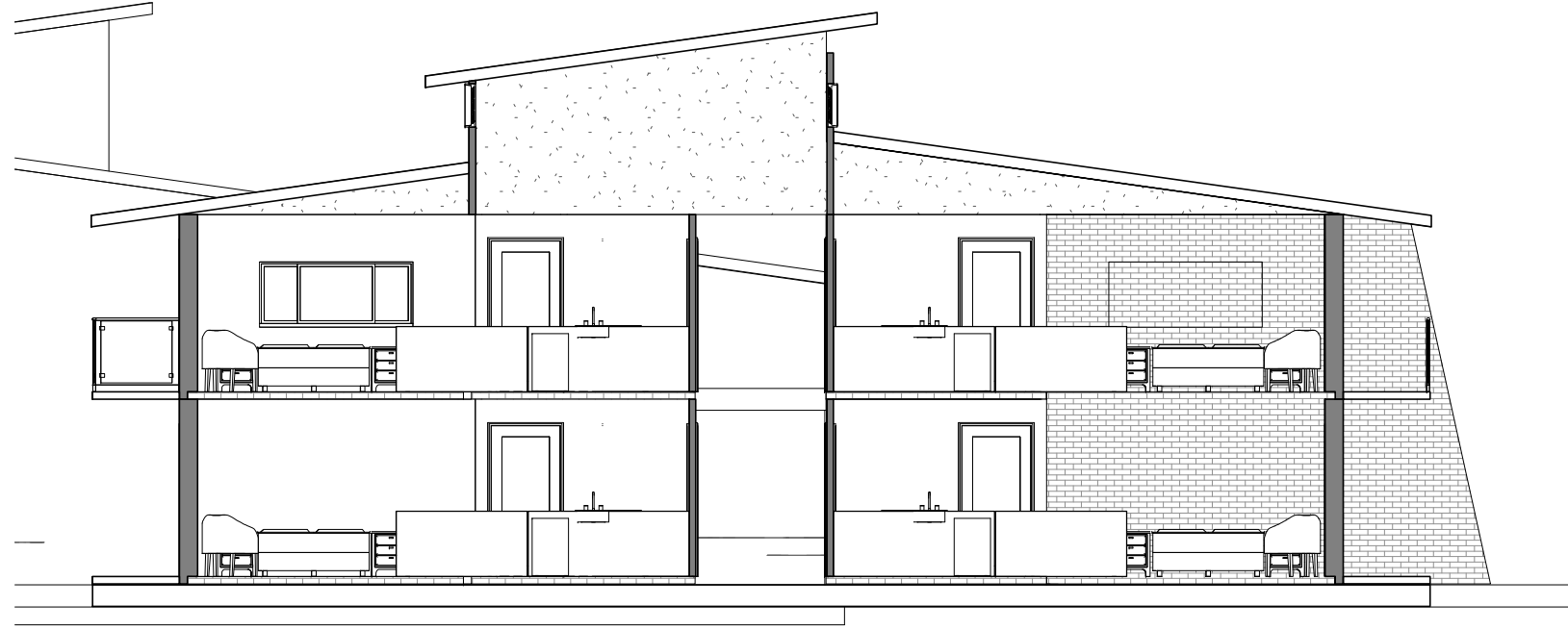
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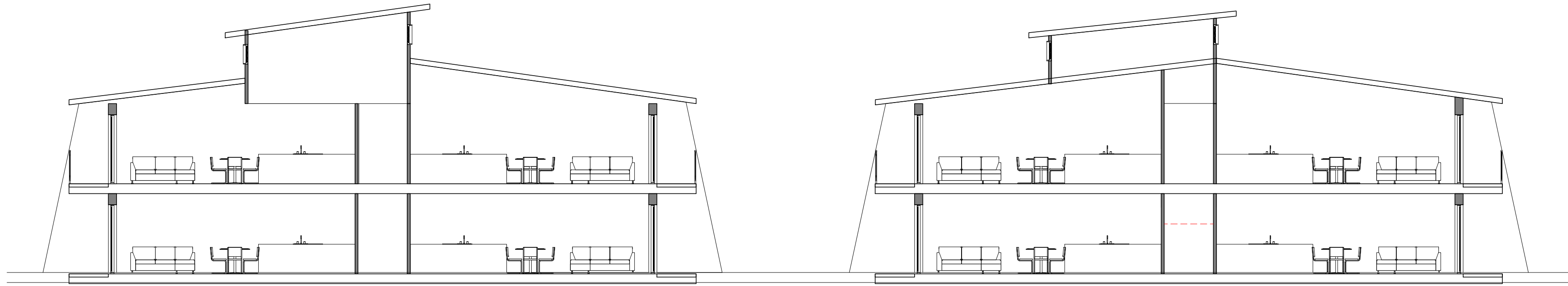
2 BLOCK B - ELEVATION B
1 : 100

5	AMENDED SITE COMBATABILITY PLAN	2020-03-04
4	AMENDED - SITE COMBATABILITY PLAN	2020-02-28
No.	Description	Date
	Amendments	

Project number	J0226	Drawing No.	WD06
Date drawn	Issue Date	NG	
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Sheet No.	Sheet size		A1



3 BLOCK C - SECTION A
1 : 100



2 BLOCK A - SECTION B
1 : 100



1 BLOCK A - SECTION A
1 : 100

Appendix B – Fire Protection Association of Australia - Flamesol radiant heat flux and bushfire attack level calculation sheets

Calculated April 3, 2019, 11:21 am (BALc v.4.8)

Fully Developed Fire

Bushfire Attack Level calculator - AS3959-2009 (Method 2)			
Inputs		Outputs	
Fire Danger Index	80	Rate of spread	1.65 km/h
Vegetation classification	Forest	Flame length	13.85 m
Surface fuel load	14 t/ha	Flame angle	79 °
Overall fuel load	25.93 t/ha	Panel height	13.6 m
Vegetation height	n/a	Elevation of receiver	2 m
Effective slope	3 °	Fire intensity	22,146 kW/m
Site slope	0 °	Transmissivity	0.78
Distance to vegetation	50 m	Viewfactor	0.1124
Flame width	100 m	Radiant heat flux	9.800000000000001 kW/m ²
Windspeed	n/a	Bushfire Attack Level	BAL-12.5
Heat of combustion	18,600 kJ/kg		
Flame temperature	1,200 K		

Rate of Spread - Mcarthur, 1973 & Noble et al., 1980

Flame length - NSW Rural Fire Service, 2001 & Noble et al., 1980

Elevation of receiver - Douglas & Tan, 2005

Flame angle - Douglas & Tan, 2005

Radiant heat flux - Drysdale, 1999, Sullivan et al., 2003, Douglas & Tan, 2005



Calculated April 3, 2019, 11:25 am (BALc v.4.8)

Short Fire Run

Bushfire Attack Level calculator - AS3959-2009 (Method 2)			
Inputs		Outputs	
Fire Danger Index	80	Rate of spread	1.65 km/h
Vegetation classification	Forest	Flame length	13.85 m
Surface fuel load	14 t/ha	Flame angle	67 °
Overall fuel load	25.93 t/ha	Panel height	12.75 m
Vegetation height	n/a	Elevation of receiver	2 m (user defined value)
Effective slope	3 °	Fire intensity	22,146 kW/m
Site slope	0 °	Transmissivity	0.8149999999999999
Distance to vegetation	32 m	Viewfactor	0.1094
Flame width	28.4 m	Radiant heat flux	9.960000000000001 kW/m ²
Windspeed	n/a	Bushfire Attack Level	BAL-12.5
Heat of combustion	18,600 kJ/kg		
Flame temperature	1,200 K		

Rate of Spread - Mcarthur, 1973 & Noble et al., 1980

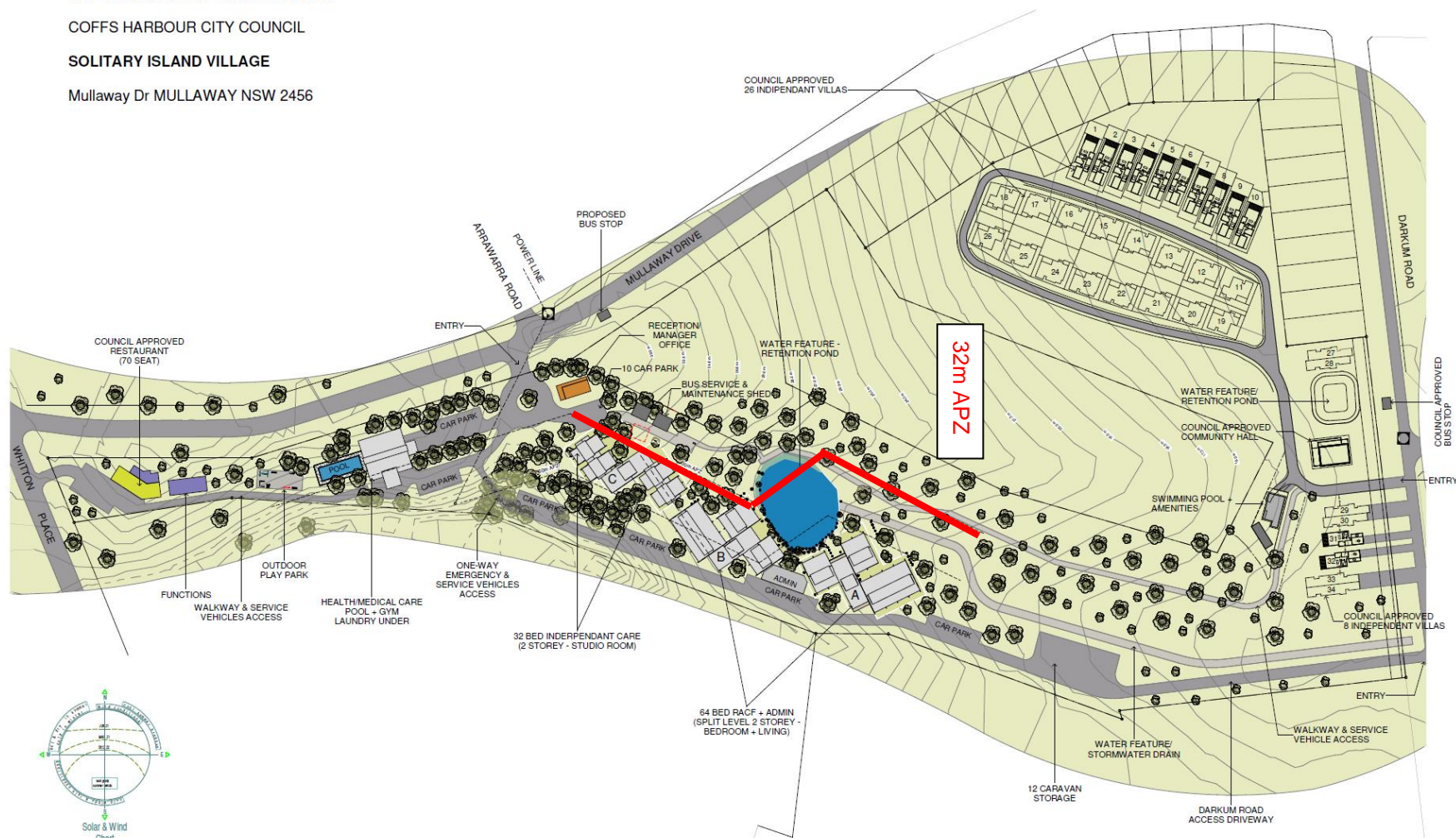
Flame length - NSW Rural Fire Service, 2001 & Noble et al., 1980

Flame angle - Douglas & Tan, 2005

Radiant heat flux - Drysdale, 1999, Sullivan et al., 2003, Douglas & Tan, 2005

Appendix C – Site plan and mapped APZs

Mullaway Dr MULLAWAY NSW 2456



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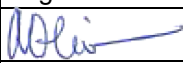
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		Name	Signature	Name	Signature	Date
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