

Meeting Attachments

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Ordinary Meeting

Meeting Date: Monday, 12 September, 2022

Location: Council Chambers, City Administrative Building, Bridge Road, Nowra

Attachments (Under Separate Cover)

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1. Purpose

The purpose of this Policy is to clarify for:

- i) the public
- ii) the governing bodies that make up the South Coast Cooperative Libraries (Shoalhaven City Council, Kiama Municipal Council)
- iii) the library staff

The criteria used for collection development, selection, de-selection and collection maintenance.

The Collection Development Policy is the master plan for building, and maintaining and accessing the collections of the South Coast Cooperative Libraries to meet community needs. The Policy will need to be revised over time to take into account changing information needs of the community interests, budget constraints, space limitations, advances in technology, and the large volume of publishing

2. Statement

A Collection Development Policy is the framework which underpins the direction and the development of the Library Collections to assist in meeting our Community community needs. This policy contains information about each of the partner Libraries and the environments in which we_they operate_¬ including demographic and client data and establishes criteria for each collection area.

3. Provisions

3.1.3.1 Definition of Collection Development

Collection Development is the process of ensuring a well-balanced collection that meets the information; <u>literacy</u>, <u>and</u>_recreational <u>and cultural</u> needs of its—<u>population</u> <u>community</u>, building diverse collections in print and non-book formats, also e-collections and resources using a consistent approach.

The objectives of this Collection Development Policy are to:

- inform the public of the library's selection parameters and the nature and scope of the collection to meet community needs
- ensure the library meets the information needs of its population community
- determine the criteria for collection development and collection maintenance within the Library Service
- identify the scope, depth and utility of the collection
- · prepare a guide and a basis for future collection development
- set standards for inclusion and exclusion
- aid in de-selection and the ongoing evaluation of the collections relevance
- provide Council with an information tool for Library Service evaluation
- · assist with budgetary allocations and funding priorities
- guide staff in handling collection content queries
- guide and train staff in collection development and maintenance



3.2.3.2 Library Overview South Coast Cooperative Libraries & Communities

The South Coast Cooperative Libraries consists of two local government areas working together to provide quality library services to their communities. These Local Government Areas are Shoalhaven City Council and Kiama Municipal Council.

Under the terms of the South Coast Cooperative Libraries Agreement, Shoalhaven Libraries — Nowra—takes primary responsibility for the selection, purchasing and processing of items and is also responsible for the maintenance of the database and Systems administration. The varying needs of each LGA are accounted for in the selection process.

All service points have on-line access to the Library Management System (LMS) hosted by LIBERO at—and managed by Shoalhaven City Council. The Shoalhaven Libraries Mobile Library Services operates on a standalone laptop using wireless technology.

There are eight service points, plus 2two Mobile Libraries within the Cooperative Libraries:

Shoalhaven	Kiama
Nowra (Central Library)	Kiama (Central Library)
Ulladulla	Gerringong
Sanctuary Point	
Milton	
Mobile Library North	
Mobile Library South	

Each of the two library services is managed by a Library professional, appointed by each particular Council. The Manager of Shoalhaven Libraries is also the Cooperative Library Manager and in collaboration with the Library Manager of Kiama, takes responsibility for the development and maintenance of the collections of the Cooperative.

The South Coast Cooperative Libraries Committee consists of an elected representative (Councillor) of each participating Council; Group Director or equivalent responsible for library services at each Council and the Library Managers from each Council.

Each library service employs a mix of professional librarians, paraprofessionals, full time and part time library assistants as well as casual library assistants. Volunteers are also used across the library services as necessary.



3.3. Population Analysis of the LGA

Figures used have been gathered using the ABS Census of Population and Housing 2016.

The communities served by the Shoalhaven, and Kiama Libraries are diverse and include sea changers, baby boomers, Aboriginal & Torres Strait Islanders, small CALD populations, students and retirees. A breakdown of age groups and related community profile statistics are shown in the table below.

-	Shoalhaven LGA	Kiama LGA	NSW Average
Area	4,561 sq kms	259 sq kms	
Population	99,490	21,464	
0-4 years	5.1%	4.6%	6.2%
5-9years	5.7%	4.6%	6.4%
10-14 years	5.5%	5.4%	5.9%
15-19 years	5.3%	5.5%	6.0%
20-24 years	4.6%	4.8%	6.5%
25-34 years	9.4%	8.0%	14.2%
35-49 years	15.9%	16.6%	20.0%
50-59 years	14.1%	14.3%	12.8%
60-69 years	16.2%	15.5%	10.7%
70-84 years	14.8%	16.2%	8.9%
85 and over	3.2%	4.5%	2.2%
Median Age	48	50	38
Aboriginal & Torres Strait Islanders	5.5%	1.6%	2.9%
Unemployed*	6.6%	5.0%	6.3%
Internet Connection	77.5%	83.6%	82.5%
Library Membership (2015)	37.35%	52.27%	40.25%
High (Household) income*(\$3000+)	6.8%	15.0%	18.7%
Low (Household) Income (\$650 or less per week)*	27.9%	22.3%	19.7%
Non English Speaking background (CALD)	5.8%	7.0%	26.5%

^{*}Based on 2016 figures. New release figures due 2021

3.4. Issues

- ageing population
- relatively large indigenous population in the Shoalhaven LGA
- lack of public transport/reliance on cars for commuting
- high unemployment in the Shoalhaven LGA
- below average internet connection in the Shoalhaven LGA
- LGA large and dispersed geographic area



3.5.3.3 Library Client Profile

Our Libraries run a number of programs and services activities which cater to:

- · babies & pre-schoolers
- · primary and secondary school students
- · tertiary students
- · those with special needs, including the frail, aged and housebound
- · lifelong learners
- · recreational readers and information seekers
- researchers
- businesspeople and owners
- Aboriginal and Torres Strait Islanders
- small CALD (Culturally & Linguistically Diverse) communities

Population profiles impact on the collection development process and should be are considered when purchasing and collecting items for the libraries

4. Implementation

4.1.4.1 Collection Responsibility

The Manager of Shoalhaven Libraries as the Cooperative Library Manager, in collaboration with the Library Manager of Kiama, takes overall responsibility for the development of the collections of the Cooperative.

4.2.4.2 Collection Management

Ongoing evaluation and management of each of the collections is the responsibility of professional staff at each of the partner libraries.

Collections must be maintained to preserve its <u>currency_relevance_and</u> presentation by maximising shelving and floor-space and so they <u>are relevant_remain_current_to</u> to their Communities. Old, damaged and underused materials should be discarded (de-selected).

4.3.4.3 Selection Responsibility

The Senior Management Team at Nowra <u>Library</u> takes primary selection responsibility for each branch of Shoalhaven Libraries and for Kiama Library Services.

The selection of non-book items is primarily through standing orders. with some individual selection during onsite visits from Specialist Suppliers., online catalogues and book supplier database selection.

All Branch Library Managers have input into the selection process by identifying subject gaps, and specific titles. Staff who have expertise in a subject area, also assess resources for selection as required.

A small percentage of items are selected at the local Branch level.



4.4.4.4 Suggestions from the Public

Community input to the collection is encouraged through the suggestions for purchase. scheme. Requests are always considered and are purchased if they conform to the criteria adopted in this policy.

Inter Library Loans are also available for customers where the suggestion for purchase will not be met.

4.5.4.5 Collection Management and Evaluation

The collection needs to be constantly evaluated to identify subject gaps and to maintain its relevance to the community. A balanced up to date collection of materials is essential to a quality library.

The emphasis on popular materials to meet local needs is important. Community and social expectations are constantly changing, and information needs to be kept up to date with changing trends.

The management and evaluation of the collection is an ongoing activity, the purpose of which is to maintain the quality of the collection. Involved in collection evaluation is the experience and knowledge of staff, familiarity with the community, other library resources available, the existing collection and the resource budget. The libraries collections are evaluated using a variety of methods and are examined as part of the whole collection with consideration given to the specific and unique needs of each branch and their demographic characteristics.

Each type of material is considered on its own merits and the audience for whom it is intended. No single standard can be applied to all items.

Involved in collection evaluation is the experience and knowledge of staff, familiarity with the community and its needs and demands, other library resources available, the existing collection and the resource budget.

Each area of the collection is examined as part of the whole collection with consideration also given to the specific and unique needs of each branch and their demographic characteristics.

When evaluating collection areas, the following factors are considered:

- clientele/usage
- scope of the collection
- · selection criteria
- de-selection requirements
- format
- future plans
- availability elsewhere
- cost
- diversity

4.6.4.6 De-Selected Items



De-selected items are cancelled and the record-Items no longer considered relevant to the collection are removed from the Library Management System. Items are sold to the public, donated to relevant community groups or disposed of in an environmentally sustainable manner, on a continuous basis at most libraries of the South Coast Co-operative.

Selection Methodology 4.7 Selection Methodology

A number of resources are used to select items for the collection:

- online databases
- library suppliers onsite visits and online ordering.
- local retailers bookshop visits
- standing orders large print, non-book items, popular authors (children's & adult) and some reference material
- · catalogues, promotional materials and pre-publication advice (hard copy and online)
- bibliographies
- professional library & publishing journals
- · customer requests, suggestions, recommendations
- best seller lists
- media reviews / coverage
- usage and satisfaction surveys
- evaluation of donations
- · social media/websites
- suggestions from the public

Unsolicited items will be considered and added to the collection if they meet the selection criteria in this policy.

4.7. 4.8 Censorship / Controversial Material

The South Coast Cooperative Libraries aim to provide resources representing all views in all fields, including political, social and religious, regardless of topic.

The primary objective of the Public Library is to serve as a place where free and open access to ideas and information on all subjects is available. The Library will select a range of items and make them available for the education, information and enrichment of the Community, for all ages and levels of ability and interest.

Our Libraries respect the rights of individuals to pursue their own interests, and to explore any and all ideas. The role of censor lies with the appropriate State and Federal bodies. The Library will ensure that items prohibited by law are not purchased for the Library collection. Parents and guardians are responsible for the suitability of library items or information accessed by their children.

The selection of items will not be inhibited by the possibility that inappropriate items may inadvertently come to the possession of children.

The South Coast Cooperative Libraries supports the Australian Library and Information Association's (ALIA) Statement on free access to information



https://www.alia.org.au/about-alia/policies-standards-and-guidelines/statement-free-access-information

4.8. 4.9 Text Books / Educational Materials

The South Coast Cooperative Libraries support individuals of all ages pursuing independent learning, from pre-schoolers to retirees.

School libraries remain the primary source of curricula material in the community, with the public library collection acting as a supplementary source for homework help. Resources to assist high school students in relevant study areas are also purchased.

Academic curriculum textbooks are generally not purchased but may be considered if they satisfy a wider interest. Open learning and individual research is also supported.

4.9. 4.10 Formats

Resources are collected in whatever format is suitable for the target audience. Some titles are collected in a number of formats to satisfy community expectations.

Formats collected include but are not limited to:

- Aaudio-book CD (adult, youth, children); MP3; playback devices
- CD music
- digital formats e-books, e-audiobooks, e-magazines
- DVDs adult and children
- Dyslexiae Friendly
- eEmergent technologies as applicable
- gGames (selected branches)
- Home Education
- Images
- kit book and audio format
- Large print hardback, trade paperback
- mMaps (Local Studies)
- mMicroform microfiche and microfilm Genealogy
- <u>mM</u>onograph hardback, trade paperback
- Music CD's
- nNewspapers, physical and online subscriptions
- •__eOnline resources —and subscription databases
- Oral Histories
- pamphlet
- photograph Local Studies
- serials adult, youth, junior; online subscriptions
- Various Digital formats (eBooks, eAudioboooks, eMagazines)

4.10. 4.11 Adult Selection (Fiction and Non-Fiction)

Books recognised as literary classics are retained even though they may contain outdated concepts. Items can also be selected that use unacceptable terms or inappropriate language. Some fiction titles are considered to be standard and are replaced as they wear out.



Resources (book and non-book) relevant to the adult collection are selected based on the following criteria:

- Ceurrency
- Ppopular interest / demand
- Rrelevance appropriateness to Library and/or community
- Ssuitability of the format
- Ceos
- Australian content particularly material of local interest
- Locally written published works

Non-fiction content is also assessed on:

- Reliability of content / author
- Existing subject coverage in the collection
- Current trends
- Locally written published works

4.11. 4.12 Children's Selection (0-12 years) (Fiction and Non-Fiction)

Books and non-book materials chosen for children (0-12) are selected based on the following criteria:

- Currency
- Popular Interest / Demand
- Relevance appropriateness to the age (0-12)
- Suitability of the format
- Cost
- · Australian content particularly of local interest

The selection criteria used for children's resources also includes an assessment of:

- appropriateness of language and themes for the target group (simplicity does not necessarily equate to inferior quality)
- integrity
- · extension of the child's experiences

Items which meet school curricula demands are considered and purchased if they meet the collection development criteria.

As with Adult Fiction, books recognised as literary classics are retained even though they may have outdated concepts. Items can also be selected that use unacceptable terms or inappropriate language. The reliability of the author and content plus existing subject coverage is also a consideration with selection of children's non-fiction items.



Series are also included in the collection. They are popular and are used as steppingstones to other resources. Children's series titles are continually reviewed to keep up with community expectations.

4.12. 4.13 Young Adults Selection (13-20)

Books and non–book materials (fiction and non-fiction) chosen for young adults are assessed using the same criteria as for Adults and Cehildren. The appropriateness to the age is taken into account at point of selection.

4.13. 4.14 Multiple Copies

Because of the geographic distribution of the branches of the South Coast Cooperative and the heavy usage of some resources, duplicate copies of items in heavy demand are purchased in each collection area.

Standing order lists for popular Adult Fiction and Children and Youth Fiction authors are also collated to ensure receipt of best seller titles.

4.14. 4.15 The Collections

The Library Collection consists of two major sections:

Not for Loan Collection-(Reference)— non-fiction books, Local Studies, Family History/Genealogy, pamphlets, newspapers, some periodicals, online databases and other formats as available.

Lending Collection - adult, junior and youth fiction, adult, junior and youth non-fiction collections, large print books, audio-books, in multiple formats, e-audiobooks and e-Book download access; magazines, downloadable magazines, music CDs, DVDs, kits-Home Education Collection and Dyslexiea Friendly Collection plus Oother collection areas, in a range of formats, are added as required.

4.15. 4.16 Gifts/Donations

Donated material can be a valuable addition to the library's collection. South Coast Cooperative Libraries accept donations of items on the understanding that these will only be included in the collection if they meet the selection criteria applied to the collection areas outlined in this policy.

Donated items must be in good condition. Generally donated stock published more than 3 years previously is not accepted unless they meet the selection criteria for that specific area.

All donations become the property of the South Coast Cooperative Library with the library reserving the right to dispose of donated material if it is not required for inclusion in the collection. Such material would be included in the Library's book sale, donated to other organisations or charities or disposed of though appropriate means.

General exclusions from the collection will include material which is

- a duplication of not needed titles
- Published in an unsuitable format



- Highly technical in nature
- · Impractical i.e. too large or too small
- In poor condition
- Not related to current Collection Development Policy guidelines

4.17 Self-published works (physical) - book and non book

Self-publishing is a growth area and the South Coast Cooperative Libraries actively supports writers in the community. The library will consider the acquisition (through purchase or donation) of self-published works where the item adds value to the library collection, is local in content, is published in a suitable format, is professionally edited, has appeal to readers and generally meets the Library's library's selection criteria as outlined in this policy. Duplicate copies of titles by local authors may be purchased for other branches and/or Local Heritage collections if the title contains local content and is of high local interest.

Self-published works (e-books/e-audio)

Currently the South Coast Cooperative Library Service is not able to accept self-published electronic works. In the future it is anticipated that this service will be available and the above criteria regarding self-published works will be used to select suitable items.

4.16. 4.18 Stack Collection

<u>Kiama Library maintains a stack collection A number of Branches of the South Coast Cooperative Libraries have items stored away from the main circulation area and housed in a 'Stack' area. Shoalhaven Libraries Nowra holds a large collection of stack items. Most of the items held in Stack are accessible through the online catalogue. The Collection includes:</u>

- additional copies of series or complete sets of older series
- items still used but in poor condition (replacements are purchased when available)
- literary classics for adults and children
- Australian Celassic Fictions
- items of historical significance
- non-fiction items Australian and international considered to be of value
- valuable items
- literary award winners fiction and non-fiction
- Books that are out of print which have a local or Australian significance

The Stack collection is continually evaluated, using the Collection evaluation criteria to ensure the stock continues to meet the needs of the community.

4.17. 4.19 Future Policy Directions

The aims of collecting must be user access and service provision, evolving <u>customer needs</u> and <u>trends</u>, and <u>current library trends</u> e.g. a <u>client-customer</u> centred approach to collection development and effective resource utilisation.

We are facing a time of continuous technological change and e-resources and associated emergent digital technologies associated with these resources will impact on our-future



collection development. These technologies are increasingly significant within the collection profile and this trend is sure to continue.

De-selection recommendations mentioned in the collection profile should be used in conjunction with the De-selection Guidelines established for the libraries of the South Coast Cooperative.

Regular User Surveys and Focus Groups should be carried out and examined to ensure community needs are being met by the collections of the South Coast Cooperative Libraries.

Current Public Library trends also need to be allocated for.

4.18. 4.20 Appendices

Appendices to this policy include:

Appendix one Collection Profile
Appendix-two_one Supporting Links
Appendix three Shoalhaven Libraries De Selection Guidelines.

5. Review

To be reviewed within one year of the election of a new Council.



Appendix One - COLLECTION PROFILE

Access to all holdings is available through the online library catalogue.

Print Collection

1. Reference	
Locations	All Branches, except the Mobile Library
Scope	Factual information on a wide range of topics.
	Specialist subject areas at some Branches.
Clientele	All users
Access	Not for loan unless through prior arrangement with the Information Access Librarian.
Formats	All formats
Related Collections	Non-fiction, Local Heritage/Family Heritage
Selection Criteria	Evaluation criteria: Purpose, Authority, Scope, Timeliness, Format (arrangement, indexing, organisation, consistency, ease of use), Cost
Deselection Criteria	Average life span: 5 years, 3 years for Legal & Health titles as per NSW State Library (NSWSL) recommendations. Specific NSWSL Collections deselected as per NSWSL guidelines. Items may be deselected if easily replaced by online resources.



	Internet resources/Databases assessed regularly to ensure access and relevancy
Replacement Criteria (If applicable)	-Replacement as updated editions become available, this may be in eresource format or other formats as technologies allow.
Future Plans	Maintain the currency of the collection. Continue to identify and fill subject gaps. Assess the collection to include a variety of media types, including databases and Internet resources. Replacement of book format by e- resources

2. Local Heritage	
Locations	Primary collection at Nowra Library & Kiama Family History Centre
	Smaller collections are held at each of the Co-operative Libraries
Scope	Resources about the Local area and/or by Local residents.
Clientele	All users
Access	Not for loan
Formats	All formats
Related Collections	Adult non-fiction, Reference, On-line resources
Selection Criteria	Resources about the Local area and/or by Local residents.
Deselection Criteria	Preservation methods should be employed for primary source materials.
	Delicate/fragile materials should be



	copied or digitised if possible, and the original copy stored securely.
Replacement Criteria	Missing or damaged items are replaced if available.
Future Plans	To continue to source materials about the Local area to build a comprehensive Local Studies collection.
	To digitise fragile/rare copies to preserve local history
	To optimise the collection and include oral histories and sound recordings.
	Continue to build an image collection

3. Family History/ Genealogy	
Locations	Primary collection at Nowra Library & Kiama Family History Centre. Smaller collections are held at each of the Branch Libraries
Scope	Resources to assist family history researchers in genealogy studies
Clientele	All users
Access	Not for loan ; 48 hour loan periods
Formats	All formats
Related Collections	Adult non-fiction ; online resources
Selection Criteria	Resources to assist family history researchers in genealogy studies



Deselection Criteria	Minimal weeding
Replacement Criteria	Missing or damaged items are replaced if available
Future Plans	To continue to build the Genealogy collection and include oral histories and sound recordings. Investigate digital storage options. Investigate optimising access and preservation options. Expand on the library website for optimum access to Family History Resources.

4. Newspapers	
Locations	All Branches, except the Mobile Library
Scope	A selection of the major national, daily and weekly newspapers.
	All local newspapers
Clientele	All users
Access	Not for loan
	Local newspapers bound and microfilmed.
	Current bound newspapers are South Coast Register (SCR), Milton and Ulladulla Times (MUT) and The Shoalhaven and Nowra News (SNN).
Formats	All formats, including:
	Paper copy
	Online resources
	Microfilm



	Digital
Related Collections	Non-Fiction, Local Studies, online resources
Selection Criteria	A selection of the major national, daily and weekly newspapers.
	All local newspapers
Deselection Criteria	National, daily and weekly newspapers (not including local) retained for 4 weeks then recycled.
	The retention of newspapers at Branch Libraries varies at each location.
Replacement Criteria (if applicable)	N/A
Future Plans	Continue to index local newspapers.
	Greater use of online newspaper titles.
	Evaluate titles annually to meet community expectations.
	To digitise newspapers.
	Optimise access.
	Investigate alternate storage options.

5. Serials / Magazines	
Locations	All Branches have a selection of titles
Scope	Adult, young and junior magazines to support the non-fiction collection in areas of general interest. This includes but is not limited to magazines on: Popular interests



	Current affairs
	Australian subjects
	Reference, research, literary and Library Science serials
	Online resources
Clientele	All users
Access	Reference serial collection not for loan
	Other serial titles for loan
	Online lending available
Formats	All formats, including:
	Physical
	Online resources (subscriptions and back issues)
Related Collections	Non-Fiction / Reference / Local Studies
Selection-Criteria	Each branch selects serial titles within their budget allocation.
	Popular mass market weeklies are not generally purchased, however, the emagazine collection may hold titles of this genre.
	Currency and regularity
	Popular Interest / Demand
	Relevance - appropriateness to target group
	Suitability of the format
	Cost
	Focus on Australian content
	Existing subject coverage
	Reputation of the journal
	Value to the community and/or target group



Deselection Criteria	Lending copies of magazines are removed when damaged.
	The retention of serials at Branch Libraries varies at each location
	Where the subject matter does not date magazines may be kept for two years.
	Previous issues of magazines may be deselected after two years depending on publication.
	Research, Literary and Library Science and other selected journals are retained and moved to stack after two years
Replacement Criteria	Magazines are not replaced if damaged, lost or overdue.
	Subscriptions are continually reviewed.
Future Plans	To monitor the collection to ensure titles are relevant and meet community expectations
	Monitor collection closely to enable client preferences to be initiated
	Examine all research journals and use online if appropriate and within budget
	Monitor physical and downloadable magazines to avoid duplication.

6. Home Education Collection	
Location	Collections are held at Nowra, Ulladulla and Milton Libraries.
Scope	Junior Fiction and Junior Non-fiction
Clientele	Junior Home Schooling Community



Access	For loan
Format	Print
	Cards
	Workbooks
Related Collections	Junior Fiction
	Junior Non-Fiction
Selection Criteria	Based on school curriculum
Deselection Criteria	Outdated
	Damaged
	Level of currency
Replacement Criteria	Recommended titles are replaced as needed.
	As new titles become available.
Future Plans	Build collection in line with the NSW School curriculum.
	Continue to promote collection through Home Schooling Network.

7. Non-Fiction	
Locations	All Branches Youth non-fiction is not held on the Mobile
Scope	Non-fiction resources that meet community needs
Adult	Resources or access to resources for: Information/lifelong learning



	Recreation/lifestyle
	Tertiary/Open learning students
	Resources concerning recreation, lifestyle and issues that affect young people (13-20 years)
Young	Resources or access to resources for information and recreation suited to children (0-12 years)
	Resources from recommended reading lists
Junior	Home Education Collection
Clientele	
Adult	All users
Young	Young people (13-20 years)
Junior	Children from primary to early secondary level (0-12 years).
Access	For loan
	To ensure equity of access the library reserves the right to limit the number of titles which may be borrowed in a subject area.
Formats	All formats including e-books, e- audiobooks and electronic resources
Related Collections	
Adult/Youth	Adult non-fiction ; e-book ; e-audio ; physical audiobooks



Junior	Youth non-fiction ; e-book ; e-audio ; physical audiobooks
Selection Criteria	
Adult / Youth	Currency
	Popular Interest / Demand
	Relevance - appropriateness to collection and/or community
	Suitability of the format
	Cost
	Focus on Australian content
	Existing subject coverage
	Controversial subjects included, presenting both sides of an issue.
Junior	Preference is given to books with contents and index pages Titles are not excluded because of bias against an author or subject matter. It is the responsibility of parents or guardians not library staff, to make a final decision as to what is suitable reading for their child.
Reasons for Non inclusion	Cost, format
Deselection Criteria	Outdated/inaccurate
	Usage
	Damaged material
	Older resources of value and classics considered for the stack collection



	Average life : 3 years
Young / Junior	
Replacement Criteria	Standard works and classics are replaced with new editions if available
	Missing or long overdue items may be replaced with similar up-to-date materials.
	Recognised non-fiction authors are retained
	or
	Replaced with newer editions or other titles on the same subject if available
Future Plans	To build the collections in line with the expressed interest and needs of the partner LGAs
	Target collections in each Branch towards subjects which are of interest to the Community

8. Fiction	
Locations	All Branches
Scope	
Adult	Resources include popular, contemporary and classic novels to accommodate a wide range of reading interests
	Award winning novels
	Australian authors
	Resources include popular, contemporary and classic novels to accommodate a wide range of reading interests (13-16 years)
Verman	Award winning novels
Young	Australian authors



Could Coast Cooperative Libraries - Conection Development Folicy	
	HSC Reading list titles
	Resources include popular, contemporary and classic novels to accommodate a wide range of reading interests (0-12 years)
	Award winning novels
	Australian authors
	Recommended Reading list titles, e.g. Premier's Reading Challenge
Junior	Junior Series
	Easy to Read and First Readers
Clientele	
Adult	All users / Adult patrons
Youth	Young people (13-20)
	High School Students
Junior	Children from primary to early secondary level (0-12 years).
Access	For loan
	Popular and best seller fiction purchased in multiple copies for allocation to branches
	To ensure equity of access the library may restrict the loan period of titles which have a high ratio of reserves
Formats	All formats, including
Adult	Paperback
	Hardback
Youth / Junior	All formats
	Paperback format is preferred



·	<u> </u>
	e-book and e-audiobook
Related Collections	
Adult	Large Print ; e-book ; e-audio ; physical audiobooks
Youth	Adult fiction ; e-book ; e-audio ; physical audiobooks
Junior	Young Fiction : e-book ; e-audio ; physical audiobooks
Selection Criteria	Currency
	Popular Interest / Demand
	Suitability of the format
	Cost
	Recommendations by reviewers
	Literary merit (Award Winners)
	Appearance
	Standing orders for selected popular authors
Young / Junior	
roung / dumor	Criteria the same as for adult fiction
	Standing orders for selected popular authors and series
	Imaginative and original writing
	Titles are not excluded because of bias against an author or subject matter. It is the responsibility of parents or guardians, not library staff, to make a final decision as to what is suitable reading for their child.
Reasons for non-inclusion	Format, Cost, Age



Deselection Criteria	Outdated
	Usage
	Read-out
	Damaged material
Adult	Average life: 5 years
Young / Junior	Average life: 4 years
Replacement Criteria	Missing or long overdue items are replaced if available.
Adult	Retain Australian authors, classics, titles/authors with ongoing interest, prize winners.
	Titles considered to be standards are replaced if available
	Recommended reading list titles are retained
Young / Junior	
Future Plans	To build the collections in line with the expressed interest and needs of the target groups

9. Large Print	
Locations	All Branches
Scope	Resources include popular, contemporary and classic novels to accommodate a wide range of reading interests Award winning novels Australian authors



	A selection of non-fiction titles
	The only distinction between material in this collection and the adult fiction collection is the size of the font. For this reason the collection largely mirrors the adult fiction in regard to collection development.
Clientele	All users Patrons with a visual impairment
Access	For loan
Formats	All formats, primarily print
Related Collections	Adult Fiction ; e-books
Selection Criteria	Currency Popular Interest / Demand Suitability of the format Cost Recommendations by reviewers Literary merit (Award-Winners) Appearance Standing Orders from Specialist suppliers for a selection of large print titles
Reasons for non-inclusion	Cost, format, age
Deselection Criteria	Average life span : 3 years
	Outdated Usage Read-out Damaged-material



	Read out items may be transferred for use by the Home Library Service
	De-selected items may be used to supplement the collections of the hospitals and aged care facilities in the community
Replacement Criteria	Missing or long overdue items are replaced if still in demand, and available for purchase.
Future Plans	To build the collection in line with the expressed interest and needs of the target group
	To include e-resources which support those with a visual impairment

10. Graphic Novels	
Locations	All Branches (Varying Collection size)
Scope	Material with a high image content Aimed at young adult and junior readers
Clientele	Young adults; Junior readers
Access	For loan
Formats	All formats Comic book graphics with fiction/non-fiction storylines
Related Collections	Youth / Junior Collections
Selection Criteria	Currency Popular Interest / Demand



	Suitability of the format / content
	Cost
	Language/Themes
	Quality of images
	Quality of the publication
	Titles should not be excluded because of bias against an author or subject matter. It is the responsibility of parents or guardians, not library staff, to make a final decision as to what is suitable reading for their child.
Deselection Criteria	Outdated
	Usage
	Read out
	Damaged material
Replacement Criteria	Replace outdated, read out titles as needed
Future Plans	To monitor collection usage and demand.
	Investigate e-resources and databases in this format.

11. Picture Books (Easies)	
Locations	All Branches
Scope	Provide resources suitable for non- readers and picture story books for parents to read to babies and pre- schoolers (0-5).
	Resources include popular, contemporary and classic picture books, life themes
	Award winning titles
	Australian authors



	Recommended Reading list titles
	Early reading materials
	Australian titles
	Illustrated resources that are more suitable for older children and adults are purchased and placed in other categories.
	Resources for story time
Clientele	Parents and children – birth to early independent reading
Access	For loan
Formats	All formats, including
	Hardback
	Quality paperbacks
	Board books.
Related Collections	Junior Fiction ; Storybox database ; e- books ; e-audiobooks
Selection Criteria	Three levels of picture books purchased – E1, E2, E3
	Currency
	Popular Interest / Demand
	Suitability of the format Cost
	Recommendations by reviewers
	Literary merit (Award Winners)
	Appearance



	Titles are not excluded because of bias against an author or subject area. It is the responsibility of parents or guardians, not library staff, to make a final decision as to what is suitable for their child
Deselection Criteria	Average life span : 3 years
	Outdated Usage
	Damaged
Replacement Criteria	Missing or long overdue items are replaced if still in demand, and available Prize winners, classics and popular stories will be retained and replaced if available
Future Plans	To build the collection in line with the expressed interest and needs of the target group

12. Dyslexic Friendly Collection	
Location	Nowra and Ulladulla Libraries
Scope	Provide resources to those in the community diagnosed with Dyslexia
Clientele	Junior and Youth
Access	For loan
Format	Dyslexic font
Related Collections	Audiobooks, Online resources



Selection Criteria	Popular interests, award winning children's and youth stories
Deselection Criteria	Damaged Outdated Read-out
Replacement Criteria	Replace with updated titles as they become available.
Future Plans	Continue to promote through school networks and community groups which may have an interest.

Non-Book Collection

1. Electronic Resources	
Locations	24/7 Digital Library available through the library catalogue and Shoalhaven Libraries App.
Scope	Provide electronic resources to library members both full and digital 24/7 through the library catalogue and Shoalhaven Libraries App Factual information on a wide range of topics. Specialised information. Recreational information
Clientele	All library members
Access	All databases can be accessed by users whilst in the library. Some databases can be accessed by users at home on their personal device



Formats	Various electronic databases for adults and children that include fiction, non- fiction, reference and Local Heritage resources, e-books, e-audiobook, e- magazines, newspapers and films
Related Collections	All other library collections
Selection Criteria	Information need or gap.
	Relevance to our library clientele.
	Currency of Information.
	Ease of use.
	Accessibility - in-house or remote access.
	Cost
	Continued Usage – usage figures assessed annually.
Deselection Criteria	No longer relevant
	Cost
	Poor support
	Poor usage
	Outdated
Replacement Criteria (if applicable)	Monitored on a regular basis and assessed annually before subscription renewal
Future Plans	Monitor usage
	Investigate and trial other databases
	Continue to identify and subscribe to e- resources with specific relevance to community needs.
	Maintain currency of the collection.
	Continue to promote e-resources as an alternate means of information access



2. DVD's	
Locations	All Branches
Scope	Includes but not limited to: Feature films and television shows Music and dance Documentaries Classic films Self help Australian titles Films on school reading lists
	Foreign
Clientele	All users Titles are not excluded because of bias against an author or subject matter. It is the responsibility of parents or guardians, not library staff, to make a final decision as to what is suitable for their child.
Access	For loan To ensure equity of access the library reserves the right to limit the number of titles borrowed Items with an restricted classification (eg M+) are not permitted to be borrowed by members under 18 years
Formats	DVDs Online resources
Related Collections	Non-Fiction
Selection Criteria	Standing Orders from Specialist suppliers for a selection of titles



	Currency Popular Interest / Demand Cost Merit (Award Winners) Focus on Australian content
Deselection Criteria	Outdated Usage Damaged Untraceable missing discs
Reasons for Non-Inclusion	Cost Incompatible with Australian standards
Replacement Criteria	Popular / In Demand titles Titles considered to be standards are replaced if available
Future Plans	To build the collection in line with the expressed interest and needs of the Community To include all media formats for film

3. Audio-Books	
Locations	All Branches
Scope	This collection supports the fiction collections and provides members with access to fiction in an alternate format.
	Resources include popular, contemporary and classic novels to accommodate a



	wide range of reading interests
	Award winning novels
	Australian authors
	A selection of non-fiction titles
	Resources include popular, contemporary and classic novels to accommodate a wide range of reading interests (0-20 years)
Young/Junior	Award-winning novels
	Australian authors
	Recommended Reading list titles
	Multi media kits including text
	main model into moleculing text
Clientele	All users
	Patrons with a visual impairment
Young	Young people (13-20 years)
	High School Students
Junior	Children from babies to early secondary level (0-12 years).
Access	For loan
Formats	-CD's, playaways, e-audio, MP3
Related Collections	Fiction, Large Print, Non-Fiction, Junior, online resources
Selection Criteria	Standing Orders from Specialist suppliers for a selection of titles
	Abridged titles are generally not purchased
I .	1



	Currency
	Popular Interest / Demand
	Cost
	Recommendations by reviewers
	Literary merit (Award Winners)
	Appearance
	Quality of sound recording (professional)
Young/Junior	Standing Orders from Specialist suppliers for a selection of titles
	Titles are not excluded because of bias against an author or subject matter. It is the responsibility of parents or guardians, not library staff, to make a final decision as to what is suitable for their child.
Reasons for Non-Inclusion	Cost, Abridged version
Deselection Criteria	Outdated
	Usage
	Damaged
	Untraceable missing discs
Replacement Criteria	Replacement media purchased if available
	Missing or long overdue items are replaced if still in demand, and available
	Titles considered to be standards are replaced if available
Future Plans	Continue to extend the collection and source best value to meet community expectations
	Source alternate media such as downloadable options
	Investigate online databases/resource options



4. Music	
Locations	All-Branches
Scope	Music collection, primarily on CD, including but not limited to contemporary and past composers and performers from all musical genres
	Music popular with young people
Youth	Music popular with children
Junior	
Clientele	All users
Access	For loan
Formats	CD, DVD
Related Collections	-Non-Fiction, DVD
Selection Criteria	
Adult / Young	Popular Interest / Demand
	Cost
	Recommendations by reviewers
	Merit (Award Winners)
	Quality of sound recording
	Standing Orders from Specialist suppliers for a selection of titles



Junior	Titles are not excluded because of bias against a composer or performer. It is the responsibility of parents or guardians, not library staff, to make a final decision as to what is suitable for their child.
Reasons for Non inclusion	Cost, Age, Format/Size
Deselection Criteria	Outdated Usage Damaged Untraceable missing discs
Replacement Criteria	Missing or long overdue items are replaced if still in demand, and available Titles considered to be standards are replaced if available
Future Plans	Ensure all branches have adequate stock of music formats to satisfy local demand Explore alternate media sources



Appendix two-One- Supporting Links

Access to Information in New South Wales public libraries guidelines https://www.sl.nsw.gov.au/sites/default/files/accesstoinformation2007.pdf

ALIA core values statement

https://www.alia.org.au/about-alia/policies-standards-and-guidelines/alia-core-values-statement

ALIA Statement on online content regulation

https://www.alia.org.au/about-alia/policies-standards-and-guidelines/alia-online-content-regulation

Internet Policy Guidelines for NSW Public Libraries

https://www.sl.nsw.gov.au/sites/default/files/internet_guidelines_2011.pdf

Libraries and information services and Indigenous peoples

https://www.alia.org.au/about-alia/policies-standards-and-guidelines/libraries-and-information-services-and-indigenous-peoples

Library and information services for people with a disability

https://www.alia.org.au/about-alia/policies-standards-and-guidelines/library-and-information-services-people-disability

Living Learning Libraries: standards and guidelines for NSW public libraries Statement on free access to

https://www.sl.nsw.gov.au/sites/default/files/pol_living_learning_libraries_v_7.3_2020.pdf

Statement on free access to information

https://www.alia.org.au/about-alia/policies-standards-and-guidelines/statement-free-access-information

Statement on information literacy for all Australians

https://www.alia.org.au/about-alia/policies-standards-and-guidelines/statement-information-literacy-all-australians

Statement on public library services

https://www.alia.org.au/about-alia/policies-standards-and-guidelines/statement-public-library-services

UNESCO Public library manifesto

https://www.ifla.org/publications/iflaunesco-public-library-manifesto-1994



Appendix three - De-Selection Guidelines

De-selection is a valuable and integral part of collection development and is used in conjunction with the Collection Development Policy. Collections must be maintained so that they are attractive and relevant to their Communities.

Old, damaged, out of date and underused materials should be discarded (de-selected).

These guidelines have been written to assist the staff in weeding (or de-selecting items) in the collection.

De-Selection is essential to:

- · optimize space in the library
- · reflect the changing needs of the community
- maintain reliability by having up-to-date collections
- remove the illusion of a well stocked library which rebuffs bids for improved budgets for purchasing new resources in all formats
- give the library a fresh, inviting appearance where clients can find up-to-date information

The rate at which resources become unusable or obsolete varies. Information can become obsolete or irrelevant due to:

- new developments and discoveries, eg Science, Technology, Social Sciences
- changes in tastes, interests and emphases within society, eg. once popular sports people, entertainers
- · predictions on the course of world politics and events for a specific time period
- design (house/fashion) trends
- hard line attitudes to groups now accepted by society

Living, Learning Libraries Update (2020) recommends as a baseline standard that 50% of the collection should have been purchased in the last 5 years. This excludes Local Studies and Family History collections.

The following benchmarks can be used to assess stock for de-selection:

- outdated material (5 years +)
- outdated concepts
- older or outdated editions of the same title or subject (law, health, travel)
- damaged stock
- stock which has either not been loaned or loaned very little
- read out, ie location stamp shows that transferred to all Branches in the Shoalhaven
- duplicate copy no longer in demand

Items to be retained can be considered for Stack collections or items returned from Branches can replace existing copies, dependent on the condition.

Standard works and classics should not be discarded based on usage. They are basic to a public library collection, even if rarely loaned.

Disposal of De-Selected Items

Unwanted de-selected items are cancelled and the record deleted from the Library Management System as well as Libraries Australia (where applicable).

D-selected stock is sold to the public at various times through the year. Damaged items are recycled. Large print is distributed to local nursing homes and other aged care facilities as required.



De-Selection Guidelines for Library Classification Areas

Genre	Examples	De-Selection	Comments
		Guidelines	
Reference			Average life : 3
			years
			Considered for
			Reference Stack or
			another Branch if
			appropriate
	Bibliographies and		Average life : 3 years
	encyclopaedias		Some topics may be
	encyclopaedias		relevant for up to 15
			years, e.g. Art
			(encyclopaedias)
	Almanacs /	Superseded editions	Now mostly available
	Yearbooks		online
	University / TAFE	Superseded editions	Now mostly available
	handbooks/calendars		online
	Job Search	Superseded	Now mostly available
	handbooks	editions	online
Adult Non-Fiction		Outdated / inaccurate	
		/ damaged	
		Memoirs and essays	
		Subjects no longer	
		popular	
		Unused volumes of	
		sets	
		Multiple copies	
	Australian material	Superseded editions Careful evaluation	
	Australian material	required	
	Self published books	Unless local value	
	E-resources	Low usage statistics	
		Cost	
		Poor Support	
		Lack of information	
		Currency	

Guidelines for Specific Non-Fiction Classes

Non-Fiction Class	Examples	De-Selection Guidelines	Comments
Computer Science (001-006)		Maximum of 5 years	The Computer School
	Awareness of new programs	Older materials	
		Superseded editions	Not sent on to Branches
Religion and Philosophy (100- 200)	Retain systems of philosophy		Check usage of this subject area
		Superseded editions	World Book Online



		of Historical and	
		explanatory texts	
		Discard older:	
		Theology	
		Commentaries on the	
		Bible	
		Sectarian literature,	
		Sermons	
		Conduct of life	
		Older Self help	
		psychology and	
		guides to living	
Social Sciences (300s)			Average life : 5 years
	Law	2 years	Guidelines from LIAC
	Basic materials on		Retained - high
	customs and folklore		usage, replace when
			needed
	Economics,	Need regular review	
	investments, taxation	J 12.1.2.	
	Historical works on	Retained if high	Evaluate
	economics, political	usage	
	science, education,	3	
	transportation		
	World politics and	1900's	
	events for a specific	20th_Century	
	time period which		
	has passed		
Language (400's)		Superseded editions	Check usage
		Damaged material	Mango Languages Database
Pure Sciences	_	Average 3-5 years	Retain classical
(500s)		Average 3-3 years	works in this field
	Books with absolute	Outdated	
	information or		
	theories		
	Textbooks	Superseded works	
		3 years	
	HSC texts	-2-3 years	Monitor curriculum changes
	Botany and natural		Evaluate
	history		
	Astronomy	Dates rapidly	
Applied Science			
(600s)			
	Technology	3-5 years	
	Medical information	3 years unless	Science Reference
		personal journey	Centre, Consumer
		_	Health Complete
	Inventions, radio,	5 years	
	television	0.5	5
	Business	3-5 years	Retain classical texts
	Dusiness	o o years	rtotain olassical texts
	Business materials	1990's	Trotain oldosiour toxto



	written for a specific time period which has passed	20 th century	
	Cookbooks, gardening, craft	Superseded editions Outdated Damaged	
Arts, Music, Hobbies (700s)			Retain Australian content
	Fine Arts	Consider de- selection carefully	Retain classics
	Music, engravings, fine illustrated books		Retain
	Interior design	Superseded editions Outdated concepts	Hobbies & Craft Reference Centre
	Coffee table books	Superseded editions Outdated concepts	
Literature (800s)			Retain unless superseded edition
	Literary history		
	Australiana – poets, dramatists and writers		
	Collected works		
	Academic reading lists		
	Poets and dramatists	No longer regarded in literary history No longer read	
	Minor Novelists	Low readership	

History (900s)			
	Historical works	Summaries; not authoritative	
	Travel	5 years	Retain classics
	Travel Guides	2-4 years	
	Literary Histories		Retain
	Local Studies Regional History		Do Not Deselect
	Contemporary writings of war	Damaged Superseded editions or subject matter	Retain classics
Geography (900s)		5 years Needs to be up to date to be relevant Superseded edition	Retain classics
Biographies (B/AAA-B/ZZZ)		Superseded editions Person no longer significant Self published authors – low readership	



Table AWorks recommended for acquisition

	DHC2000.02 Angus Adameitis, Untitled 1999 oiled steel From graduating exhibition at NAS H160cm?
M	DHC2001.05 Angus Adameitis, Blue Black with a Little Bit 2001 painted steel
10	DHC2001.04 Angus Adameitis, Compression IV, 2000, oiled steel
	DHC1997.01 Richard Allen, Wind Break, 1997, acrylic on canvas, 121 x 41 cm
	DHC1997.03 George Barker, Islands - The Long Black Ship, 1991, etching 1/1, 55 x 74 cm
	DHC2012.05 May Barrie, Granite Fragment 2011 polished granite 25 x 13 x 13 cm
	DHC2016.01 May Barrie, <i>Topsy</i> c. late 1950's black conte on paper 17x17cm
and the same of th	DHC2016.02 May Barrie, Wallaby (multiple views) c.1940's pencil on paper 30 x19cm
	DHC1994.06 Malcolm Benham, Witness – Night Drawing 1994 acrylic on paper 45 x 35 cm
	DHC1994.07 Malcolm Benham, Witness – Till it is struck 1994, acrylic on paper, 38 x 53 cm
	DHC1994.03 Malcolm Benham, Witness – The Messenger, 1994, acrylic on linen on board, 182 x 210 cm
	DHC1994.05 Malcolm Benham, Witness – Study for Messenger, 1994, acrylic on paper, 61x47cm
	DHC1995.03 Malcolm Benham, untitled (Witness series -pink), 1994, acrylic on paper, 60 x 70 cm
	DHC1996.07 Malcolm Benham, Black Water Dam, 1995, oil crayon on paper, 30 x 40 cm



	DHC1996.08 Malcolm Benham, Untitled – Bloodwood, 1995, oil crayon on paper, 30 x 40 cm
	DHC1996.09 Malcolm Benham, Untitled – Waterlily, 1995, oil crayon on paper, 40 x 30 cm
	DHC1996.10 Malcolm Benham, Untitled – Dam series, 1995, oil crayon on paper, 40 x 30 cm
	DHC1996.11 Malcolm Benham, Granite Falls, 1996, oil crayon on paper, 61 x 47 cm
	DHC1996.12 Malcolm Benham, Granite Falls – pink & blue 1996 oil crayon on paper 61 x 47 cm
•	DHC2002.06 Janik Bouchette, Le Chene et le Roseaux, 2001, steel, 180 x 90 x 50 cm (approx)
1	DHC2001.08 Janik Bouchette, Self Portrait, 2001, painted steel, 150 x 60 x 60 cm (approx)
	DHC1965.03 Guy Boyd, Coffee Set c.1950, Set of six coffee cups and saucers, earthenware
	DHC1996.02 Grace Burzese, Markings 1996 acrylic and iron oxide on linen 137 x 157 cm
EA.	DHC1996-03 Grace Burzese, Temple 1995 acrylic and beeswax on linen 156 x 124 cm
	DHC1997.02 Grace Burzese, Lines of Violet 1997 acrylic on linen 59 x 58 cm
	DHC1999.03 Grace Burzese, Untitled 1999 acrylic on paper 16.5 x 16.5 cm
	DHC2001.02 Grace Burzese, Crossing Paths 2001 acrylic on board 137.5 x 137.5 cm
	DHC2002.02 Grace Burzese, Bone Factory 2002 acrylic on canvas 64cm diameter
	DHC2018.04 Grace Burzese, Untitled 2015 25 x 25 x 25 cm approx painted metal on painted wood base



	Kathy Cavaliere, day dreams: camera obscura – negative, and day dreams: camera obscura – contact print,2005, black and white photograph created from room sized camera obscura, 129 x 161 cm (framed)
1	DHC1994.02Virginia Coventry, Unbounded No 10 1994, 50 x 37.5 cm lithograph on rag paper, edition of four
	DHC1996.01 Virginia Coventry, Second Nature, 1996, acrylic on canvas, 88 x 110cm
	DHC1999.02 Virginia Coventry, Percussion #2 1998, 27.5 x 27.5 cm, acrylic gesso, silverpoint, pencil, beeswax crayon, oil pastel on rag paper
Z	DHC2021.03 Virginia Coventry, <i>Torso,</i> 1990, acrylic on plywood, 40 x 60cm
M	DHC1994.02 Virginia Coventry, Unbounded No 14 1994, 50 x 37.5 cm, lithograph on rag paper. Edition of four
100	DHC2001.05 Pamela Cowper, Side Link, 2001, mixed media, 32 x 32.5 cm
	DHC2001.06 Pamela Cowper, Red Track, 2001, mixed media 32 x 32.5 cm
	DHC2003.02 Pamela Cowper, Moon over Hornibrook 2003, timber, bronze, acrylic, oil paint, 57 x 80 x 5 cm
	DHC1995.06 Michael Cubey, <i>Three Ways,</i> 1995, 50 x 147cm, oil on board Triptych
	DHC1993.01 Liz Cuming, Kuring-gai Bush, 1993, 150 x 120cm, oil on canvas
	DHC1994.01 Liz Cuming, <i>Bundanon X,</i> 1994, 76 x 60cm, oil on canvas
consideration and an action	DHC1996.06 Elisabeth Cummings, See-Saw, 1995, oil on board, 35 x 35 cm
	DHC2000.03 Elisabeth Cummings, Untitled (Stovetop), 2000, oil on board, 62 x 70 cm
	DHC2002.04 Elisabeth Cummings, Kimberly Water Hole, 2002, oil on canvas, 51 x 56 cm



0	DHC2019.04 Jann Dark, <i>The Wave</i> , 1990, oil on canvas, 41 x 61cm
	DHC2003.01 Lachlan Dibden, <i>Autumn</i> , 2003, acrylic and graphite on canvas, 152 x 46 cm
	DHC2000.07 Ignatia Djanghara, Wanjina, carved slate item, No 1123, c. 1995
	DHC2000.04 Rachael Douglass, <i>Tsunami</i> , 2000, forged and welded steel, 60 x 60 x 40 cm
	DHC2000.05 Rachael Douglass, Avesbury Solstice, 2000 steel painted, 50 x 53 x 41 cm
	DHC1965.01 Margaret Dredge, St Joan, 1965, oil on board, 185 x 124 cm
	DHC1967.01 Margaret Dredge, Untitled 1967, acrylic on board, 70 x 48 cm
Marie Control of the	DHC2001.01 Margaret Dredge, <i>Ajax</i> , 1965, oil on board, 114 x 76.5 cm
	DHC1979.01 Margaret Dredge, Untitled, 1979, etching, edition 2/12, 87 x 72 cm
	DHC1982.02 Margaret Dredge, Shadow on the Door, 1982, etching 1/12 87 x 73 cm
	DHC2005.03 Margaret Dredge, Untitled 1985 acrylic on canvas, 61 x 152 cm
	DHC2012.01 Margaret Dredge, No's Doorway, 1997, acrylic on canvas, 122x152cm
	DHC2018.01 Margaret Dredge, Richmond Gothic, 1981, etching, 95 x 75 cm approx
	DHC2018.02 Margaret Dredge, Untitled (red pole), 1995 acrylic paper, 76 x 56cm
	DHC2018.03 Margaret Dredge, <i>Macquarie Island</i> , 1997, acrylic paper, 63x44cm
	DHC1964.01 Margaret Dredge, Death of Patroclus, 1964, oil on board, 124 x 93 cm
	DHC1967.02 Margaret Dredge, Forward March, 1967, oil on board, 70 x 70 cm



	DHC1973.01 Margaret Dredge, Leif, 1974, stoneware, 16 x 14 x 20 cm
	DHC1971.01 Margaret Dredge, <i>Untitled,</i> 1971, glass tile mosaic, 93 x 90 cm
	DHC1970.01 Margaret Dredge, <i>Untitled orange and blue</i> , 1970, acrylic on board, 123.5 x 32 cm
	DHC1975.01 Margaret Dredge, Untitled – blue grey, c. 1975, acrylic on canvas, 122 x 91 cm
	DHC1981.01 Margaret Dredge, Nomadic Journey, 1981, etching 3/7, 92 x 120 cm
	DHC1982.01 Margaret Dredge, Homunculus through the Looking Glass, 1982,etching1/12,95 x 72.5
	DHC2012.02 Margaret Dredge, Untitled (black & brown), 1991, acrylic on canvas, 122x182cm
	DHC1996.14 EJ, Coolamon or "Piti" wood carved with burnt / incised design, 56 x 19 x 10
33033	DHC1977.02 Doug Erskine, A State of Love. Used and Abused, 1977, 30 x 35 cm, frame, meat hook, glass, wood glaze
	DHC1973.03 Ruth Faerber, Something passes – Some things remain, screen print and pressed paper, 60 x 90 cm approx
	DHC1975.03 Diogenes Farri, <i>Totem,</i> 1975, fired stoneware, 59cm diameter x 7cm thick
6	DHC1975.04 Diogenes Farri, Untitled – Vase, 1975 ceramic made at St Albans Studio
	<i>DHC1999.01</i> Vivienne Ferguson, <i>Goings on,</i> 1999, acrylic on canvas, 110 x 90cm
i.	DHC2000.08Vivienne Ferguson, No such thing, 2000, acrylic on canvas, 152 x 152 cm
	DHC2003.05 Peter Gardiner, debris field VI, 2003, enamel on board, 120 x 120 cm



	DHC2005.10 Tom Gleghorn, Untitled – Suburban Sun, 1959, oil on canvas, 50 x 60cm
	DHC1980.01 Victor Greenaway, Untitled, c. 1980, stoneware
	DHC1993.05Philip Gudthaykudthay, Minytji – Landscape, 1993, etching 1/16, 55 x 74 cm framed
	DHC1990.01 Jose Guerreo, Untitled – black, c.1980's, screen print, 100 x 80 cm
A.	DHC1999.06 Nigel Harrison, <i>Coerseive Steel Life,</i> 1999, painted steel, 60 x 70 x 40cm
	DHC1996.15 Steve Harrison, But I know so little, 1996, Porcelain bowl, 8 x 28 (diameter) cm
	DHC1994.09 Brian Hartigan, <i>"14.3.94"</i> , <i>1994</i> , acrylic on paper, 75 x 56 cm
	DHC1992.03 John Hatton, Cudmirrah Beach, c.1992, oil on canvas
	DHC1991.02 John Hatton, Berrara Beach, c.1991, oil on canvas
	DHC1989.03 John Hatton, Jervis Bay, c. 1988, oil on canvas
	DHC1974.04 Doug Hawkins, Blossom Jar, 1974, stoneware
P	DHC2020.03 Jenny Herbert-Smith, Attached Detachment, 2010, painted steel
	DHC2011.03 Jenny Herbert-Smith, it will be alright on the night, 2011, painted steel
	DHC1962.01 William Hick, Untitled – vase, c.1962, stoneware
	DHC2002.07 Dave Hickson, Lighting the Barbeque, 2002, mild steel, 47 x 31 x 25cm
	DHC2006.06 Estelle Hogan, Spinifex Basket, 2006, dyed spinifex grass, 30 cm diameter x 11 cm high



	DU00004.00
	DHC2004.03 Paul Hopmeier, Kith and Kin, 1990's, Welded and painted steel, 100 x 50 x 250 cm
	DHC1999.04 David Horton, <i>Tapia</i> , 1999, steel 100 x 30 x 25cm
R	DHC2000.06 David Horton, Connon, 2000, painted steel, 65 x 80 x 47cm
	DHC2004.01 David Horton, Goreki's Cantabellisimo, 2004 painted steel, 36 x 79 x 40 cm
	DHC2005.04 David Horton, Bison 2005 steel 23 x 55 x 27 cm
	DHC2008.04 David Horton, Untitled (for Gavin), 2008, timber, plaster, found objects, 20 x 10 x 10cm
70	DHC1986.01 Melanie Howard, Mind's eye, 1986, Acrylic on canvas, 80 x 100 cm
00	DHC1991.03 Melanie Howard, Untitled (Shell), 1988 / 89, 60 x 30 cm approx
	DHC2012.13 Melanie Howard, Untitled (Crystal), 1988 / 89, 60 x 30 cm approx
	DHC1994.04 Melanie Howard, Contemplation I - Synergy Series, 1994, oil on 4 (each 14 x 14cm) timber tiles in glass fronted frame, 42x42cm.
	DHC2011.04 Melanie Howard, Untitled – Yellow Circle, 1991, oil on linen, 190 cm x 190 cm
	DHC1984.01 Floy Hubble, Bowls – Gum blossom and leaves, C. 1912, hand painted gum blossoms and leaves with gold edging on porcelain bowls.
	DHC1988.01 Calvin Hunt, Kwakiutl Sea Eagle Drum, screen print, Artist Proof 110 / 88, 50 x 50 cm
	DHC1996.05 Roy Jackson, Vasana, 1996, acrylic, gouache, watercolour and pencil on paper, 38 x 51cm
	DHC1968.01 Louis James, Window Shopping, 1968, etching, edition 13 of 100, 60 x 80cm approx



	DHC2012.06 Caroline Karlsson, Off the Wall, 2012, mixed media, 30 x 24 x 24 cm
	DHC2008.07 Nicole Kelly, Woman with Green Thigh, 2008, enamel and oil on canvas, 131 x 120 cm
L	DHC2009.01 Nicole Kelly, Untitled – Sussex Inlet Bush 1, oil crayon on paper
	DHC2009.02 Nicole Kelly, Untitled – Sussex Inlet Bush 2, oil crayon on paper
A	DHC2009.03 Nicole Kelly, Untitled – Sussex Inlet Bush 3, oil crayon on paper
	DHC2009.04 Nicole Kelly, Untitled – Sussex Inlet Bush 4, oil crayon on paper
	DHC1998.03 Jan King, Nude and the Mountains, 1998, steel and slate, 36 x 81x 30 cm
•	DHC1999.05 Jan King, <i>Aurelia</i> ,1999, painted steel, 156 x 40 x 17 cm
	DHC2002.10 Tara Klein, Glutinous, 2002, acrylic on board, 30 x 30 cm
	DHC2002.11 Ron Lambert, Eyeades, 1986, oil on canvas
震烈	DHC1995.01 Ross Laurie, <i>Django</i> , 1995, oil on canvas, 153x92cm
	DHC2002.01 Ross Laurie, Winter II, 1995, oil on canvas, 60x50cm
	DHC2005.01 Ross Laurie, On the Anvil, 2005, oil on canvas, 150x90cm
	DHC1970.04 Ken Leveson, Wine decanter, c.1970, glazed ceramic, 30 x 16 x 12 cm
YY	DHC1970.02 Ken Leveson, Chalice - one stem band, c.1970, glazed ceramic DHC1970.03 Ken Leveson, Chalice - two stem band, c.1970, glazed ceramic
	DHC1968.02 Ken Leveson, <i>The Bludger and the Virgin</i> , c1968, etching 50 x 60cm
	DHC1965.02 Sandra Leveson, Untitled (Blue and silver stripes), c.1965, screen print, 90 x 114 cm
	DHC1971.03



	Sandra Leveson, <i>Untitled (green & blue stripes)</i> , c 1971, screen print, 95.5 x 76.5 cm
	DHC1971.02
	Sandra Leveson, <i>Untitled (Optical Art)</i> , c.1971, screen print 98 x 146
	CM PUGGGG GG
	DHC2005.06 Michael Le Grand, Nabatean, 2005, painted steel, 120x 85 x 77cm
H-A	DHC2012.04
	Peter Liiri, <i>Fresno Street</i> , 2007, mixed media on board, 92 x 60 cm
	DHC1963.01
	Judy Lorraine, <i>Untitled – vessel</i> , c1963, ceramic glazed on inside, 15 cm diameter
	DHC1991.01
	Euan Macleod <i>Black & White against Dark & Light,</i> 1991, oil on paper
	DHC1992.04
	Tim Maguire, Fin de Siecel Study 5, 1992, pastel on paper, 42 x 43cm
	DHC2004.04
	Kevin Malloy, <i>Untitled Spaces</i> , 2004, acrylic on canvas, 35 x 25cm
	DHC2007.03
	Michael Marris, <i>Germination (B)</i> , 2007, steel and concrete, 400 x 60 x 60 cm
	DHC2010.06
	James McCallum, Rape of Europa, 2010, rusted steel
N -	DHC2002.12
	Russell McQuilty, <i>Out Turn,</i> 2002, painted steel
300000	DHC1989.02
	Sally Morgan, <i>Ocean Fire,</i> 1989, screen print, 60 x 80cm
16	DHC2013.06
	Kyle Murrell, <i>Matter and Object III</i> 2013, oil on linen 46 x 61.5cm
IN NAME	DHC1992.05 Nancy Nararula, Bushtucker Corroboree at Coniston,
	undated c 1991, acrylic on canvas, 41 x 51 cm
	DHC1995.10
25.	Angus Nivison, <i>Talking to a Prawn</i> , c. 1995, acrylic on paper, 134 x 105 cm
10	DHC1987.01
	Bronwyn Oliver, <i>Husk</i> , 1986, paper cane resin, 200 x 30 (diam)cm approx



	DHC1977.01 Judy Overheu, Blue Water II, 1976, acrylic on canvas, 168 x 162 cm
	DHC2013.07 Judy Overheu, Untitled - Sussex Inlet bush, c.2013, oil crayon on paper
	DHC1993.02 Miranda Parkes, <i>Three Forms,</i> 1993, oil on canvas, 120 x 150 cm
	DHC1995.01 Miranda Parkes, Detour at Four Mile Creek, 1995, Oil, emulsion, collage on canvas, 2 joined panels, 176 x 400 cm
B	DHC2000.01 Miranda Parkes, Isadora, 2000, oil on canvas, 2 joined panels, 80 x 180 cm
	DHC1998.02 John Peart, Nocturne II, 1998, oil on board, 50x60cm
	DHC1996.17 John Peart, Formations II, 1996, oil on canvas, 35x25cm
	DHC2006.09 John Peart, Rhythms & Formations, 2006, oil on canvas, 12.5 x 18 cm
	DHC2008.08 Peter Poulet, Untitled (No 9), 2008, acrylic on canvas, 56 x 76 cm
	DHC1996.04 Peggy Randall, Spain, 1996, oil on canvas, 100 x 80 cm
	DHC1998.01 Peggy Randall, <i>More Room,</i> 1998, oil on canvas, 100 x 80 cm
4	DHC2003.06 Jimmy Rix, Construction Work at McLachlan Street (2002) exhibited as 5 pieces under the one title. parts b & c purchased. plastic & enamel, 20 x 25 x 11cm
	DHC2002.13 Oliffe Richmond, Two sketches,1958, ink on paper
	DHC1998.07 Campbell Robertson-Swann, <i>Manhatten</i> , 1998, painted steel, 76 x 45 x 19cm
	DHC2000.10 Campbell Robertson-Swann, US, 2000, painted steel, 37 x 34 x 24cm Ed. of 6
	DHC2014.02 Ron Robertson-Swann, From Both Sides Now, 2014, acrylic on paper, 30.7 x 21.5 cm



DUO0040 00
DHC2013.09 Ron Robertson-Swann, <i>Dingle Day,</i> 2013, 30cm diameter
DHC2007.01 Ron Robertson-Swann, For Monet and Matisse, 2007, decorated ceramic plate, 30 cm diameter NB broken and reglued
DHC1996.18 Vincente Rojo, <i>Museo – Diptych,</i> 1996
DHC2014.06 Katherine Rooke, <i>Memory Mapping #12,</i> 2014, Lambda print, 42 x 29.7 cm
DHC2014.01 Sue Smalkowski, <i>Refraction of Light</i> , 2014, oil on linen, 122 x 122 cm
DHC2016.06 Shannon Smith, <i>Away,</i> 2016, soapstone
DHC2011.02 Carly Snoswell, <i>Untitled – plastic ties</i> , 2011, plastic clothing ties - Size variable
DHC1962.02 June Stephenson, Draughts Players, c.1960, chalk and pastel on paper
DHC2016.05 Iodi Stewart, Forgotten, 2016, porcelain, 40 x 45 x 30cm
DHC2016.07 _aura Sutton, Spring Swell, 2016, poly methyl methacrylate acrylic paint
DHC 2022.3 Elyssa Sykes-Smith, <i>Mind Walk Study 1 (part of Mind Walk Studies 1 - 8),</i> 2019, ink on Perspex & timber panel, 55 x 90 cm
DHC2002.05 Dave Teer, <i>Shovel Dance,</i> 2002, Steel painted, 180 x 80 x 200cm
DHC2006.03 Dave Teer, Sentimental Streak, 2006, Steel, hot zinc sprayed and painted, 107 x 105 x 111cm
DHC2014.03 Dave Teer, <i>Fall and Float,</i> 2014, onglaze ceramic, 20 x 2cm
DHC2002.02 Daniel Templeman, <i>Friction</i> , 2004 acrylic on board 60 x 40 cm



DUC1002.06
DHC1993.06 Aida Tomescu, Black to White, 1993, ink on paper, 100 x 80 cm
DHC2002.14
Aida Tomescu, <i>Sweet Water III</i> , etching on paper, 1986, edition 10 / 10, 53 x 46 cm
DHC2012.03
Tony Tuckson, <i>Untitled TD2467</i> , 1959, oil wash on newsprint, 79.6 x 61cm
DHC2017.01
Tony Tuckson, <i>Untitled (Red and Black TD139</i>), c. 1965, gouache and newspaper (SMH, 5/6/65), 59 x 78 cm
DHC1963.02
Gerard Van Putten, <i>Untitled - earthenware pot</i>
DHC1963.03
Gerard Van Putten, Candle holder
DHC2019.08
Vicki Varvaressos, <i>Shoes,</i> 1984, linocut print, 45 x 49cm
DHC2019.07
Vicki Varvaressos, <i>Pink Wall,</i> 1982, linocut print, 45 x 52cm
DHC2019.09
Vicki Varvaressos, <i>Woman (arm over head),</i> 1990, woodcut print, 44 x 44cm
DHC2019.10 Vicki Varvaressos, <i>Woman with scarf and hat,</i> 1997, pencil on paper, 38 x 51cm
DHC2019.06
Vicki Varvaressos, <i>Chair with jardinier,</i> 1985, crayon on paper, 38 x 49cm
DHC2019.05
Vicki Varvaressos, <i>Woman (brown hair,</i> 1998, crayon on paper, 57 x 76cm
DHC2013.01 John Vickery, Invincible, c. 1959, gouache on hardboard, 76 x 50 cm
DHC2003.08
Robert Watson, <i>Consider the Road</i> , 2003, Acrylic & oil paint, printing ink, enamel paint on wallpaper, 700 x 52 cm
DHC1974.01 Bjorn Winblad, Untitled (green bowl), c. 1970's, 5 cm x 12 cm



	DHC2022.01 Maeve Woods, Mists, 1991, acrylic on two canvas panels
C L	DHC2022.02 Maeve Woods, Untitled (Triptych) c.1997, mixed media collage
O.I. CALL	DHC2005.12 Edward Woodley, Untitled (Protractor), 2005, – mixed media on board, 31 x 28 cm
	DHC2005.13 Edward Woodley, Untitled (Picasso pizza), 2005, texta, acrylic and plastic headed thumb tack on cardboard pizza box, 33 x 33 x 4 cm
	DHC1967.03 Boomerang, incised hardwood, c.1960, 7 x 62 x .7cm, Nyamal Language Group
	DHC1978.02 Oil bottle Persian, c.1250 AD, under glaze decoration earthenware
	DHC1973.04 Chinese export ware - from Indonesia, c.700 to 1000 AD
	DHC1974.05 Stoneware – Saddlebag, purchased at 1974 graduation exhibition, NAS Anonymous (can't remember)
	DHC1974.06 Stoneware bread bin – purchased at 1974 graduation exhibition NAS Anonymous (can't remember)

Table BWorks not recommended for Acquisition

DHC2001.03 Angus Adameitis, Compression 2002 painted steel, 90kg Length 1m
DHC2002.03 Angus Adameitis, <i>Elvis</i> 2003 oiled steel 60cmx20cm
DHC1969.01 Torbjorn Afdal Hunter Armchairs c. 1960 78cm h oak, brown leather cushions, leather arm straps, canvas sling back.
DHC1990.06 Flemming Bo Hansen, WATCH, 1989, Brushed steel, liquid crystal display, and leather



	DHC1974.02 Christopher Bishop, Studio Sketch - right 1974, ink on paper, 8 x 8cm DHC1974.03 Studio Sketch – left, 1974, ink on paper, 8 x 8cm both in one frame and mount
	DHC1994.08 Malcolm Benham, Witness – Trap of fire 1994, mixed media, acrylic, slate, cotton cloth, 51 x 51 cm
	DHC1995.04 Malcolm Benham, Scrap Culture- Fragments 6, 1995, acrylic on linen, 40 x 60 cm
	DHC1995.05 Philippe Brooks, Tray – Jarrah, c.1995, wood, 40 x 30 x 4 cm,
S. C.	DHC1992.01 Jeremy Boot, White backed Magpie, limited edition print, 255/500. Won in a retail promotion
The state of the s	DHC1992.02 Jeremy Boot, Kookaburra, limited edition print, 255/500. Won in a retail promotion
	DHC1988.02 Rio 88 (Favela), 1988, acrylic on canvas, 31 x 37cm. \$3 purchased on Copacabana Beach
*	DHC2007.02 Kyle Douglas, Untitled – Stacked, c 2005, small ceramic sculpture
	DHC2003.03 Hannah Dupree, Bush Rhythm, 2003, acrylic on linen, 2.5m wide
2	DHC2006.04 Suz Garvan, Clear to Starboard, 2006, welded steel, wood, string and paper, 140 x 40 cm
	DHC2010.01 Jane Gillings, Emotional Roller Coaster, 2010, plastic



	DHC2005.09 Paul Gilsenan, more mad, 2005, acrylic / soft pastel on paper, 115 x 90 cm
题	DHC1972.01 Donald Green, Untitled (Cheetah), 1971, etching on paper, 8 x 8 cm
POS GOODEN	DHC1990.02 Jose Guerreo, Untitled – blue soldiers, c.1980's, print, 100 x 80 cm
	DHC1977.03 Philip Hammial, Rolling, 1977, Tie Box, ink roller, timber, velvet, 40 x 25 cm
	DHC1994.09 Brian Hartigan, <i>"14.3.94", 1994,</i> acrylic on paper, 75 x 56 cm
	DHC 2011.01 Anna Herold Pola, White Orchid Blue, 2011, oil mixed media on board, 59 cm x 62 cm
	DHC2006.05 Rachel Hill, Untitled, 2006, acrylic and oil stick on canvas, 60 x 60 cm
	DHC2003.04 David Horton, Geisha, 2003, painted steel, 190 x 130 x 61 cm
	DHC2005.05 David Horton, After Lorenz, 2005, painted wood, 26 x 17 x 13 cm
	DHC1990.03 Arne Jacobsen, Creamer – Cylinda Line, 0.15 Litre, c.1972, steel DHC1990.04 Arne Jacobsen, Sugar bowl - Cylinda Line, c.1972, steel
	DHC1990.05 Arne Jacobson, Ash tray, c. 1972, steel
6	DHC1960.05 Goerg Jensen, Fob Chain – belt loop, c 1950 sterling silver, 16Cm (Length) silver ball on end 1 cm circumference.
	DHC1973.08 Georg Jensen, Neck chain – sterling silver, c1973, length 57 cm
	DHC1986.02 Jock, <i>First State</i> , c 1930's etching, 20 x 20cm



	BUIG0000 00
	DHC2009.06 Jason Kantek, Bath Towel, 2009, oil on canvas on shaped stretcher
	DHC2002.08 Tara Klein, Power to a definite going fourth, 2002, acrylic on board, 20x20cm
	DHC2002.09 Tara Klien, <i>Hidden Place</i> , 2002, acrylic on board, 20 x 20 cm
	DHC2013.04 Dmitry Kuznichenko, Untitled- Construct c. 1980 lnk on paper
	DHC1998.04 James Larsen, Dinner Set 3, 1998, acrylic on board, 60 x 27 cm
	DHC1967.04 Ken Leveson, Sandra Loves Flowers, 1967, acrylic and texta on board, 60 x 100cm
	DHC1970.05 Ken Leveson, experimental form, c.1970, ceramic in resin, 5 x 5x5cm
	DHC2006.07 Michael Marris, Germination I, 2006, steel, 89 x 69 x 72 cm
	DHC2006.08 Michael Marris, Germination II, 2006, steel, 89 x 73 x 72 cm
1	DHC1980.02 Frank Marinelli, Waiting at the Stairs, 1980, pencil on paper
	J Marshall, Gang-Gang Cockatoo, Proof Print, 1975, produced by the Australian Museum in the 1970's.
	DHC1996.16 Sue McLean, Untitled, c.1996, gourd, feathers, nails, timber, 50 x 25 x 5cm
	DHC 2019.13 Tania Morandini, Untitled – Black and timber, 2010, mixed media, 26 x 35 cm
	DHC1993.04 Stephen Morris, Untitled – Cobalt Blue Lamp, 1993, blown glass, 8 x 11cm
	DHC1993.03 Stephen Morris, Untitled - Blue Vase, 1993, blown glass, 12 x 9cm



	DHC1999.09 Alasdair Nicol, Mister Mobill keeps continuing from whence he came, 1999, oil and acrylic on ply board, 35 x 35 cm approx
	DHC2014.05 Britta Opel, \$2 – I need a Dollar, 2014, ink and collage on cardboard, 15 x 7 cm \$4 – I need a Dollar, 2014, ink and collage on cardboard, 18 x 11 cm
	DHC1972.03 Judy Overheu, <i>Tresca</i> , 1970's, B & W photograph, 37 x 48 cm
	DHC1973.04 Judy Overheu, Berenga, 1970's, hand coloured B & W photograph
M.	DHC2018.06 Judy Overheu, Untitled- vase, 2018, coloured resin on glass
	DHC1976.01 Murray Overheu, Jonah's Door, 1976, acrylic on canvas, 170 x 170 cm
	DHC1975.02 Judy Overheu, Self portrait with Glitter, 1975, acrylic on colour photograph
	DHC1973.02 Judy Overheu, Pub Rock, 1973, colour photograph
	DHC1988.05 Sara Peck, South Coast Dam, 1988, watercolour and crayon on paper, 40 x 45 cm
	DHC2007.04 Hildreth Potts, Bats Cradle, 2007, steel and sandstone, 95 x 120 x 45 cm
Comments of the Comments of th	DHC2002.15 Cerebellum, 2002, video, acquired from Performance Space
	DHC2002.16 Interlace- New work by Shaun Gladwell, Kate Murphy, Emil Gow, acquired from Performance Space
	DHC1984.03 Humphrey Price-Jones, Australian Birds of Prey, 1983, limited edition leather bound book No 69 of 250



	DUC4004 04
	DHC1984.04 Humphrey Price-Jones, Falcon, 1983, print, (69 of 250)
	DHC1989.01 Robyn Quinn, Desert Twilight, c 1989, Etching, 75 x 60cm
	DHC1994.10 Vicki Reynolds, Transition, 1994, etching on paper (map), 29 x 15 cm
	DHC1997.05 Campbell Robertson-Swann, Rear View, 1997, oiled steel, 27 x 27 x 26cm
	DHC2010.02 Maurice Schlesingr, <i>Piazza,</i> 2010, steel and glass
	DHC2021.01 Sakiori Obi, c.1850, silk, wool, 400 x 12 cm
	DHC2001.09 Hui Selwood, Gemini, 2001, oiled pigmented steel, 43 x 60 x 34 cm
	DHC2006.02 Sue Smalkowski, What Remains? (triptych) 2006, oil on canvas, 240 x 60 cm
100 E	DHC2003.07 Jai Smith, Untitled (Grape sorter), 2003, gesso and acrylic on canvas, 50 x 50 cm
	DHC2013.09 So-Jung Maria Kim, Serpentine, 2013, mild steel, 70 x 125 x 100 cm
	DHC2018.07 Lenore Stevenson, Quilt – Japan, 2018, patchwork
	DHC2019.14 Lenore Stevenson, Patchwork, 2019, patchwork table runner
	DHC1976.02 Jimmy Stuart, Untitled (Typewriter), c.1970, Typewriter parts, timber, 17 x 17 x 25 cm
	DHC2015.01 James Swan, Untitled – Sterling Engine, c. 2010, mixed media
	DHC1960.01 Joyce Thompson, Untitled undated (c. 1960) watercolour on paper, 37 x 25 cm



	DHC1964.02 Doreen Tolhurst, Mt. Macedon, 1964, watercolour on paper, 27 x 21 cm
TOUTE STOUT	Tooheys Posters DHC1978.05 Oatmeal Stout – still life c.1950 DHC1978.06 Pilsener Export - still life c.1950 DHC1978.07 Flag Ale c. 1950 DHC1978.08 Mrs 'arris & Mrs 'iggs c. 1930 DHC1978.09 Oatmeal Stout – Harvest c. 1950 DHC1978.10 Club Export Lager c1950 DHC1979.02 Country Special c 1979 DHC1979.03 Club Lager c. 1979 reproduction DHC1979.04 Flag Ale c.1979 reproduction DHC1979.05 Pilsener Export Lager – still life c.1979 reproduction DHC1979.06 Oatmeal Stout – Harvest c.1979 reproduction DHC1979.07 Oatmeal Stout – still life c.1979 reproduction
	DHC2006.10 Anabel Walters, Angophora, 2006, oil on canvas, 91 x 121 cm
	DHC2014.04 Siena White, <i>Sculpture Cat 172,</i> steel, 2014, 76 x 52 x 36cm
	DHC2005.11 Aimee Williams, Voluntary Confinement, 2005, fibreglass & polystyrene, 60 x 23 x 55cm
	DHC2003.09 Madelaine Williams, 8 Small Weapons, 2003, painted timber, 27x15x 5 cm
ATTENT OF THE PARTY OF THE PART	Whitall Tatum Company DHC1976.05, RESORCIN, c 1905, 13 cm x 4 cm DHC1976.07, SP.AETH.NIT. c 1905, 22 cm x 7 cm DHC1976.06 SANTONIN. c 1905, 22 x 7 cm
	DHC1980.03 Royal Worchester, Pair of Egg Coddlers – c 1956, porcelain
	DHC2004.05 John Wright, Dining Table, 2004, painted steel, 200 x 150 x 150 cm



	DHC2004.06 John Wright, <i>Landscape</i> , 2004, steel and ceramic, 100 x 250 x 300 cm
	DHC1988.03 Honey storage container – carved wood from Africa – purchased from "Art of Africa" exhibition at Australian Museum Shop in 1988
	DHC1981.02 Baluchi rug, c 1970, dyed wool, Iran
	DHC1988.04 Rug, Argentina, wool, indigenous
	DHC1987.02 Berry spoon c1770, silver DHC1987.03 Berry spoon c1775, silver
	DHC1981.03 Spoons – soup silver plate, boxed, circa 1897
	DHC1985.01 Tea pot, silver plate, Britannia metal, c.1920, Daniel & Arter
8	Carved and painted gourd, unknown New Zealand artist
	DHC1989.04 Cooking pot –Anonymous – Fiji purchased at Australian Museum Shop exhibition c.1989
	DHC1983.03 20 th C glass vase brown and green inlay
78	DHC1983.01 20 th C glass vase green swirl DHC1983.02 20 th C glass vase fluted and green swirl
	DHC1964.03 Untitled - Anonymous portrait – purchased for the antique frame by GBH in 1964
	DHC1978.01 timber die –Tooheys Brewery, c 1890, near Central Station
The second secon	DHC1976.03 Untitled Arabic, ink on paper, purchased1976
	DHC1985.02 Canoe prow - Solomon Islands, c.1984, present from Margaret Dredge in 1985



	DHC1986.03 Thylacoleo carnifex, Hand coloured by Lorain book illustration Peter Schouten, 1983
R. F.	DHC1989.05 Medici Horse -Met, NY – reproduction based on a model by Giovanni Bologna
	DHC1989.06 Japanese Horse, Met, NY, Metropolitan Museum resin reproduction
	DHC1989.07 Roman horse, Met, NY – Resin reproduction
	DHC1995.09 Zuni horse fetish, c1994, carved stone
	DHC1989.08 Neolithic Horse -Met.NY DHC1989.09 Japanese netsuke- Met.NY resin reproductions
	DHC1995.07 USA folk art horse white DHC1995.08 USA folk art horse black – wooden carved horses
22	DHC1998.05 Chinese horse, wood, c.1960, carved timber on timber stand
	DHC1998.06 Chinese Buddha - swastika divinity c.1960 carved timber
	DHC1999.07 Oaxaca Jaguar - wood fetish 1999 (Mexico)
\bigcirc	DHC1985.03 Snake bracelet circa 1870 silver Indonesian.
	DHC1999.08 Pewter Bowl, c.1995 pewter purchased by GBH 1999
	DHC1983.04 Bowl – Flowers Royal Staffordshire acquired 1983 from Rose Hughes
	DHC1987.04 Wine Glasses lead crystal, c.1980, Met.NY Portuguese 1770 set of 12 (replica?)



	DHC1963.04 (or DHC1964.04) Chinese Horse – running ink on silk on parchment c. 1950's DHC1963.05 (DHC1964.05) Chinese Horse – grazing ink on silk on parchment c.1950's purchased in Hong Kong in 1964
B. Carrier	DHC2012.14 Chinese Horse – greenstone
	DHC1985.04 Indonesian Ikat c1970's purchased Australian Museum artifact suppliers in 1985
	DHC1987.05 Captains Decanter, c. 1950, glass
	DHC1973.05 Vase – In the spirit of Chawan, 1973, stoneware
	DHC1978.03 Printing Block – Indonesian, c 1960, Carved timber for on printing fabrics
	DHC1972.05 Fish Dinner Set – Export ware c 1960 Chinese dinner set.
	DHC1976.04 Soup Ladle, c1915, Hamilton & Inches, Edinburgh, Silver Plate
*	DHC1975.05 Celtic Crucifix, c1970, Anonymous
	DHC1976.06 Scales – postal, c1885, brass and timber
	DHC1977.06 Mask, c.1970, Ksuite soapstone, Kenya
	DHC1983.05 Ruby Glass bowl, c 1925 DHC1983.06 Ruby Glass cup, c 1925
	DHC1960.02 Picture Frame -French, c.1800, timber, gilt, mirror
***	DHC1960.03 Sapphire & Gold Shirt Studs (3)



	DHC1960.04
	Swank tie pin
	DHC1966.01
1,35	Opal Tie clasp and cuff links - Opal and 9kt gold
	DUCAGE 02
№ №	DHC1966.02
	Cat's eye cuff links
	DHC1976.08
3 3 3	Shirt studs Rose Gold and mother of pearl
	DHC1976.09
333	Shirt studs Gold and celluloid (3)
	DHC1980.04
	Horse medallion, anonymous maker
	DHC1961.01
	Chamber Candle Holder
2	DHC1971.04
60	Untitled (Cat), circa 1900, watercolour and ink on silk

Table CWorks recommended to be considered as archival and acquired as part of the Archives associated with the Dingle Hughes Collection

	DHC1978.04 Metamorphosis 1978 street poster, 60 x 77cm
	DHC2006.01 Richard Beck, Portrait of Margaret Dredge in her Studio, Sandringham Victoria 1972, 22.4 x 30.6cm black and white digital print
Particular Section Sec	DHC1985.05 Set of 26 postcards - numbers BU-14 through to BU-39.From BUGA UP postcards a series of 39 cards.
	DHC2017.02 Grace Burzese, Sway 2017 122 x 134 cm silk Edition 10 / 50
	DHC1970.6 – DHC1970.12 Postcards – Invitations to exhibitions held at the CAS in 1970
	DHC1996.13 Comparsa 1996 etching on paper 67 x 53 cm. signed in pencil lower right "T Cázak", in centre "Comparsa" and on left "35/100"



	DHC1972.02 Rhonda Dredge, <i>Untitled - man & bee</i> , 1972 ink drawing, 30 x 50cm
	DHC2018.05 Rhonda Dredge, Untitled (Easter)
	DHC2019.11 Rhonda Dredge, <i>Survival</i>
	DHC2001.07 Monica Epstein, Festivities, print un-numbered, 20 x14 cm, in the form of a card sent by artist Christmas 2001
2	DHC2019.12 Monica Epstein, <i>Xmas 93,</i> etching, 1993 18 x 14 cm
	DHC2004.07 Marianna Garabello, <i>Älchimia di Luce</i> (female), 2004, 11 x 16.5cm, advertising card
and the second second	DHC2004.08 Marianna Garabello, <i>Älchimia di Luce</i> (male) 2004 11 x 16.5, advertising card
	DHC1997.04 Geoff Goldie, Untitled – life drawing, c.1990's, double sided ink drawing on page torn from note book
	DHC2008.02
	Untitled, 2008, Gavin Hughes, acrylic on canvas, 25 x 35cm
	DHC2008.03 Untitled, 2008, Gavin Hughes, acrylic on canvas, 25 x 35cm
	DHC2008.05
	Gavin Hughes, Untitled Blue Monolith, acrylic on canvas
	DHC2008.06 Gavin Hughes, <i>Untitled Red Monolith</i> , acrylic on canvas
	DHC2021.02 Deborah Kelly, Liturgy of the Saprophyte, 2021, set of 8 printed cards
	DHC2013.05 Dmitry Kuznichenko, Max 2013 oil on canvas
1	DHC2010.04 Annasophia Larsen, Precious I, 2010, colour photocopy on paper



	DHC2010.05 Annasophia Larsen, Precious II, 2010, colour photocopy on paper
-	DHC2010.05 Annasophia Larsen, Precious II, 2010, colour photocopy on paper
	DHC2009.05 Sean Lowry, Lapdancer2: A collection of popular songs reinterpreted within the moving image, 2009, Video art on DVD (Free with gallery visit) 11 separate videos on the DVD.
which the services per comments of the services per correct species of the services services and services servi	DHC1977.04 Alastair MacLennan, As is, 1977, Envelopes, feather, dried clover leaf, broken shell. From the Secret exchange program part of the Biennale of Sydney.
and the state of t	DHC1977.05 Alastair MacLennan, Seman, 1977, envelope, press clip, cotton wool swab in plastic bag tagged 'SEMAN OVER RITE PAY', photocopy of photograph in plastic bag. Response from A. Maclennan when contacted via the secret exchange
	Joanne Makas, Set of six 'limited' edition postcards, 2013, each 10.5 x 15cm DHC2012.07 - DHJC2012.12
	DHC2008.09 Michael Marris, Making Sculpture – CD, 2008, CD of electronic music produced by the artist
	DHC2000.09 Maggie McCormick, Untitled Pack Age,2000, Photocopy on matchbox, 6x4x2 cm
	DHC2019.01 Natalie McDonagh, It was one of those uncompromising windows that went all the way round so that you couldn't possibly miss anything that you'd like to, 2019, collage
**	DHC2019.02 Natalie McDonagh, we collapsed onto her turreted bosum and howled, 2019, Collage
	DHC2020.01 Natalie McDonagh, Songs divine and moral for the use of children, 2020, Collage on postcard, 15 x 21 cm.
Thursday,	DHC2020.02 Natalie McDonagh, <i>Principles of Uncertainty</i> , 2012, Oblique Inspirations. Set of nine cards with illustrations / collage and quotations on verso.
	DHC2020.03 Natalie McDonagh, <i>Figure 10</i> , 2020, Collage on card, 10.5 x 15 cm



	DHC2021.03
	Natalie McDonagh, <i>Tete de reine</i> , 2021, Collage on postcard,
	10 x 14.5 cm
REMINISTRATION AND ADMINISTRATION OF THE PROPERTY OF THE PROPE	DHC2010.07
IN YOR OUT E	Paul Morrisey, La Trilogie – Flesh, Heat, Trash, New York
HEAT 3	Underground, 1968 to 1972, Limited edition No767. 4 DVDs
an control	, , , , , , , , , , , , , , , , , , , ,
NEW YORK	
	DHC2005.07
	Raquel Ormella, Who's Afraid of the Avant Garde? White
	board, 2005, photocopy
	DHC2005.08
	Raquel Ormella, Who's Afraid of the Avant Garde? Tree
	poster, 2005, photocopy
	DHC2016.03
1 The The State of	Judy Overheu, Computer art red, 2016, ink on paper
	Judy Overneu, Compater art rea, 2010, link on paper
	DHC2016.04
201.4	
	Judy Overneu, Computer art yellow, 2010, link on paper
	DUC4072.06
The No.	Judy Overneu, Cat, 1979, brooth, resim
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CRAID OF THE SECOND SEC	DHC1982.03 - DHC1982.14
NAME OF THE PROPERTY OF THE PR	
	on card,10x16cm
	DHC2013.08
	Ayako Saito, Untitled, 2013 water colour on paper, 7.5 x 19.5
	cm
West remote the second	
	Lenore Stevenson, <i>Max's Quilt</i> , 2011, patchwork
	DHC1973.06 Judy Overheu, Cat, 1973, brooch, resin  DHC1973.07 Judy Overheu, MAX, 1973, brooch, resin  DHC1982.03 - DHC1982.14 Robert Pearce, A Man About the House postcards, 1980, print on card,10x16cm  DHC2013.08 Ayako Saito, Untitled, 2013 water colour on paper, 7.5 x 19.5



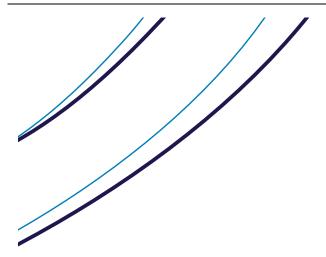


# Shoalhaven 2032 Community Strategic Plan

**Draft Post Exhibition** 







# **Acknowledgement** of Country

We acknowledge the traditional owners and custodians of this country and their continuing connection to the land through culture and community. We pay our respects to Elders past, present and future.



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# I am pleased to report Council have reviewed and updated the Community Strategic Plan following consultation with our community.

We heard from residents, businesses, visitors, workers, and other key stakeholders, who provided valuable input into the Plan to ensure it reflects as closely as possible the needs and desires for our wonderful city. We heard you would like to see a balance of sustainable development, protection of our environment, affordable housing, reduced traffic and better roads.

Your Councillors understand the importance of working together on the matters you are concerned about, including the impacts from climate change, sustainable use of our resources, resilience and wellbeing. We are also committed to a renewed focus on management of our infrastructure and assets for long term sustainability.

Council are working in partnership with other levels of government, community groups and organisations, and individuals, to achieve our vision for the city.

This Community Strategic Plan contains the core themes and key priorities as outlined by our community. I look forward to working with the community, my fellow Councillors and Council staff to achieve these important goals and bring our aspirations to life.

#### **Amanda Findley**

Mayor





# Our Future - **Shoalhaven 2032**

Shoalhaven 2032 is the roadmap devised by our community for the future of Shoalhaven City.

Council has collaborated closely with our community in developing this plan. The overall success of Shoalhaven 2032 relies on the participation and commitment of our community, including individuals, businesses, community groups and other levels of government working together to make the vision a reality. It emphasises that partnerships are essential to achieve the outcomes that our community wants.

Council will measure progress across each key priority through the indicators presented within each section of the plan. Measuring our progress provides an assessment of the quality of life and levels of satisfaction of our residents. We will regularly update information about current projects and report our progress and achievements at regular intervals through our progress reporting.





## Collaboration

We enjoy working together to deliver for our community

# Adaptability

We are ready for change and willing to embrace a new situation

## Integrity

We are committed to maintain high ethics and standards

# Respect

We are mindful of and care about the feelings, wishes and rights of others

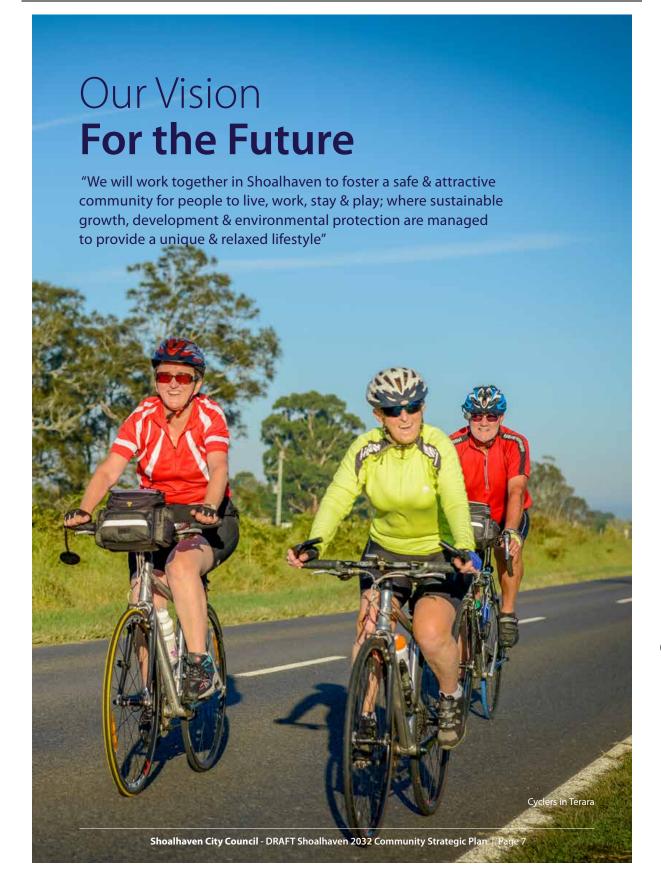
# Values are the fundamental beliefs of a person or organisation.

These principles guide behaviour and help organisations to determine if they are on the right path and fulfilling their goals by creating an unwavering guide for all to follow.

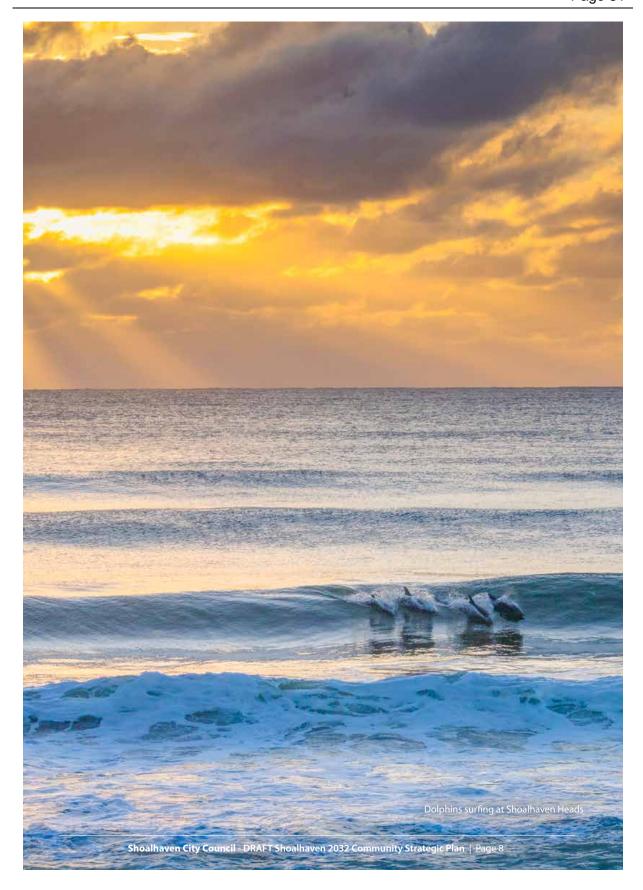
Shoalhaven City Council has chosen four Core Values: Council's Core Values are reflected throughout the Code of Conduct.













# Our **Guiding Principles**

Key priorities identified within this plan have been developed under the social justice principles of:

## Equity

We will apply fairness in decision making, prioritising and allocation of resources, particularly for those in need.

## Participation

Everyone will be given genuine opportunities to participate in decisions which affect their lives.

#### Access

We will strive to provide fair access to services, resources and opportunities to improve the quality of life for all people.

## Rights

We will promote equal rights and provide opportunities for all people from all backgrounds.

The Community Strategic Plan also considers the principles of the quadruple bottom line, addressing social, environmental, economic and civic leadership considerations:

### Social

We will strive towards everyone having access and equity to facilities and services.

### **Economic**

We will contribute to maintaining a strong and stable economy and ensure the delivery of infrastructure is financially sustainable.

#### **Environmental**

We will protect the natural, cultural and built heritage and work to decrease consumption of resources

#### **Civic Leadership**

We will consider decision-making principles, levels of service and community consultation and participation.



# Our **Shoalhaven**

# Shoalhaven is unique with its spectacular natural environment, growing population and robust economy.

It is a wonderful place to live, work, stay and play. From Berry in the north to Durras in the south, the coastal strip sustains diversity of places, people and environments.

Shoalhaven is located on the south coast of New South Wales, with the regional centre of Nowra-Bomaderry located 160 kilometres south of Sydney. Most of the population is concentrated along the coastal fringe, which is traversed by the Princes Highway. The major centres include Nowra-Bomaderry, Milton-Ulladulla, Huskisson-Vincentia, St Georges Basin District, Culburra Beach and Sussex Inlet.

The area encompasses 4,531 square kilometres, including substantial areas of national park, state forest, bushland, beaches and lakes. The natural amenity of the area is a strong attractor, for both new residents, holiday makers and day trippers.

The original inhabitants of the Shoalhaven area are the Wodi Wodi, Wandandian and Murramarang Aboriginal people. European settlement dates from 1822 when land was taken up near the mouth of the Shoalhaven River.

The Shoalhaven is blessed with perhaps the most scenically beautiful landscapes on the east coast of Australia, ranging from the lush rainforests, woodlands, rocky terrain, coastal plains, farmland and floodplains. The area also has more than 165 kilometres of coastline, the longest of any local government area in NSW. The coast is very diverse in its character, with major estuaries, many coastal lakes, long wild beaches and small pocket beaches, extensive coastal dune systems, towering sandstone headlands and rugged bluffs.

The Shoalhaven population has a strong sense of community, a desire to help one another, friendly, welcoming and caring. Community involvement in Council and community activities is reflective of the large numbers attending key events held throughout the year.







# Our **People**



Population **107,191** 

**12.8%** born overseas **7.7%** need disability assistance

**Average Age** 



**19.7%** aged 0-17 years **34.3%** aged 60+ years

Population Increase

+10,308 by 2031



20% increase for aged 65+ years



of the Shoalhaven's population identify as Aboriginal and Torres Straight Islander



**33.9%** completed year 12

**25.8%** vocational qualification

**12.1%** university education

35,751

**47%** in workforce **7.5%** unemployed





21.6% of households are made up of couples with children

**17%** couples without children

**26.7%** single person **10.6%** single-parent

40,935 total households

25.3% mortgage 23.8% renting

**3.8%** social housing

**279** individuals homeless

Additional Households

+**5,408**households
by 2031

Single person households increasing to

30.7%

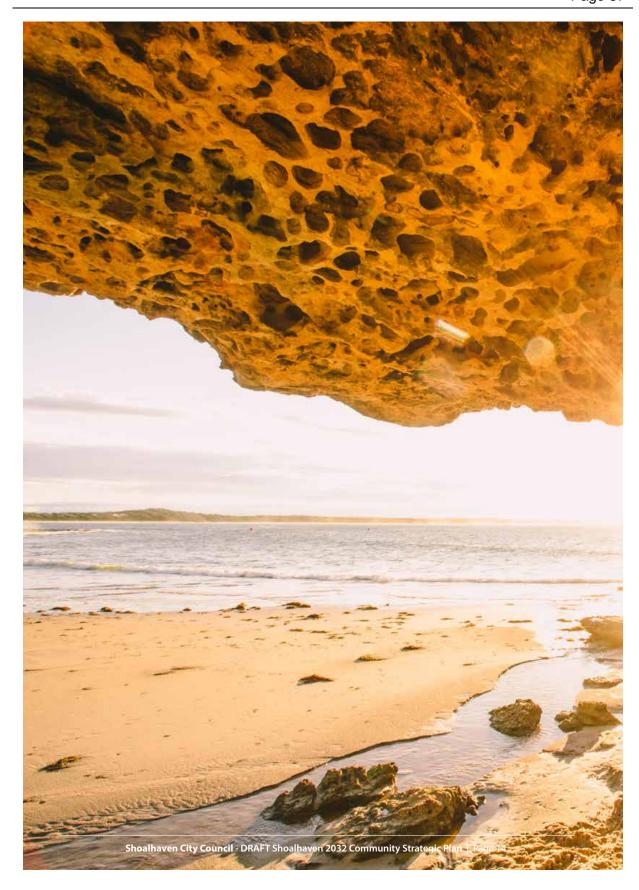


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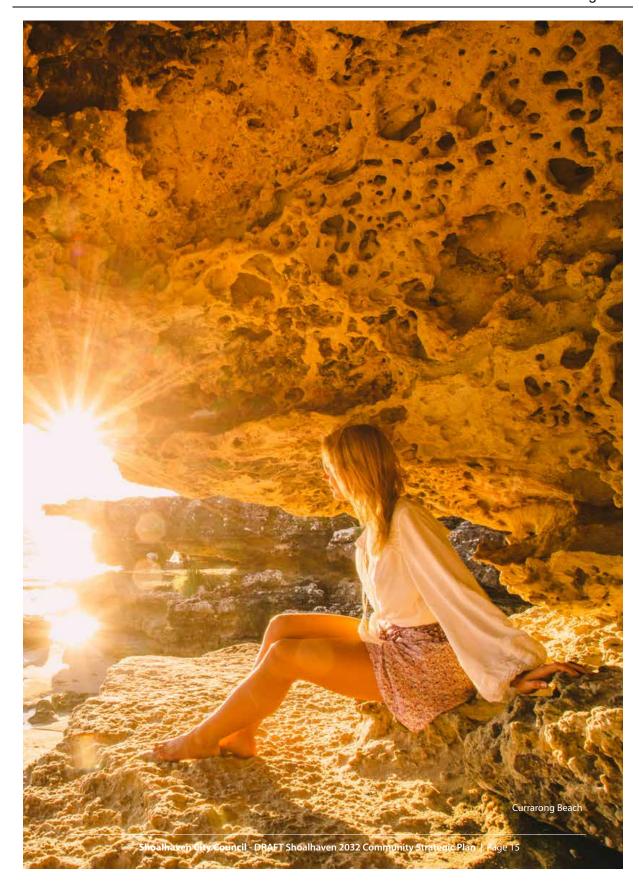














# Community Engagement Outcomes

The Community Strategic Plan is developed with and on behalf of the community. Council is committed to authentic and effective engagement with our community and stakeholders in the development of our plans and strategies.

This 2032 Community Strategic Plan has been built on the comprehensive engagement program that was undertaken to develop the Community Strategic Plan (CSP) Shoalhaven 2027. The purpose of the recent engagement was to review and update the current plan, rather than drafting a whole new Plan.

Council has engaged and consulted with the community on many different projects over the last few years and these consultation findings have been utilised in shaping the priorities of Shoalhaven 2032.

2017

Apr-Jun

**2020**₋**2021** 

Jun

Nov

What we did to develop the last Community Strategic Plan -Shoalhaven 2027

Workshops /
Public meetings

B Drop-in sessions

2,000 Pop-up surveys

305 submissions

70,000 Social media awareness reach

Insights from key community engagements held over the last 18 months were used to inform the review

Community Satisfaction Survey 2020

400 residents

Disability Inclusion Action Plan (DIAP)

120 surveys completed

Community Voices

14 communities

surveys completed

Local Strategic Planning Statement (LSPS)

**263** submissions

Shoalhaven Community Wellbeing Plan

450 participants

Recovery Into Resilience Project (RRP)

surveys completed





- · What do you love about Shoalhaven City?
- What would you like to see in Shoalhaven City by 2032?
- What would you like to see less of in Shoalhaven City by 2032?
- What are the challenges facing Shoalhaven City in the next 5-10 years?

2021 Nov-Dec

2022

May-Jun

**Community Engagement to review** and update CSP 2032

14,100 postcards to

12,607 through social media

visits to the Get Involved project page 1,000

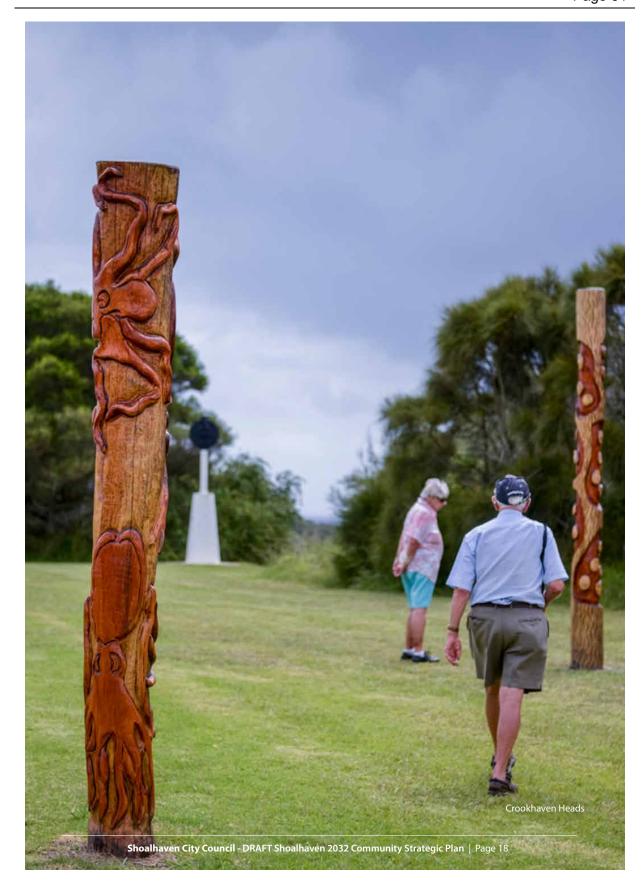
**Engagement during public exhibition** 

17,923 reached through social media

1,129 visits to Get Involved webpages

formal submissions







# **What** Our Community Said

## We love



- Natural landscapes and bushland
- Beaches, coastline and foreshore
- Friendly people and community spirit
- Relaxed lifestyle
- Small communities and villages

## We want to see

- Balanced sustainable development
- Improved cycleways and pathways



- · Reduced traffic and better roads
- More public transport services
- Affordable housing
- Jobs close to home



## We are concerned about



- Housing affordability
- Population growth and change
- Over development
- Loss of our natural environment
- Sustainable use of our resources
- Impacts of climate change



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# Key **Challenges**

Alongside the benefits of living in the Shoalhaven, there are many challenges that we face including accessibility to appropriate housing and employment opportunities. We will need to work in collaboration to address them.

#### Resilience, wellbeing and inclusion

- The COVID-19 pandemic has been an unexpected stress that we have had to cope with over the past two years along with impact of bushfire and floods. Building resilient communities will strengthen our ability to survive, adapt and thrive.
- Risk of social isolation particularly affecting older people and people with a disability in the community
- Equitable access to health, family and aged care services across the Shoalhaven
- Developing sense of community and social cohesion in growing communities
- Impacts of drug and alcohol intake on our public health and wellbeing, including safety risks in public places
- Increased prevalence of mental health issues amongst the community
- Lack of community knowledge and awareness on how to support the inclusion of people with a disability, people with dementia and other vulnerable population groups in community life

## Climate change and environmental sustainability

- Increase in frequency and severity of extreme storm events, bushfires and droughts with associated risks to life and property
- Impacts of sea level rise on local flooding and coastal management
- Potential impacts of heatwaves on the health and wellbeing of people vulnerable to extreme temperatures
- Decline in biodiversity caused by threats such as extreme temperatures, pest plants and feral animals
- Erosion and associated risks to property, infrastructure and natural areas
- Impacts of drought on community, agriculture and industry

#### Housing affordability and diversity

- Ever increasing price of housing and lack of affordable stock and housing options, particularly for people on low incomes, people with a disability and young people
- Limited crisis and short term housing options to accommodate people in need of housing and shelter





#### The natural environment

- Cumulative impacts of urban development on our beaches, creeks and lagoons including impacts of pollution and sedimentation and habitat loss
- Impacts of erosion and landslips on public and private places and property
- Balancing the impacts of hazard reduction measures on environmental values with the need for property protection (i.e. managing back burning, flood mitigation and seawalls in an environmentally sensitive way)
- Opposition from property owners to the implementation of hazard mitigation development controls (e.g. risk mapping and planning)
- Pressures on bushland and biodiversity through loss of core areas of vegetation because of development and illegal land cleaning

#### Traffic, transport and connectivity

- Distance between settlements presents challenges in connecting communities, including single road access during emergencies
- Limited public transport connectivity in several areas
- Ensuring continued investment in transport infrastructure to improve regional connections such as the Milton-Ulladulla bypass and Nowra bypass
- Peak summer tourism visitation results in increased traffic and pressure on road network
- Facilitating delivery of sustainable transport options including provision of footpath and cycleway networks







# Key Priorities

The community came up with several priorities that are important. These were categorised into four themes for our city.



# Resilient, Safe, Accessible & Inclusive Communities

- 1.1 Support inclusive, safe and connected communities
- **1.2** Preserve, support and develop cultural and creative vitality across our communities
- **1.3** Support community wellbeing through fostering active and healthy communities



# Sustainable, Liveable Environments

- **2.1** Manage our infrastructure for long term sustainability to meet community need
- **2.2** Manage growth and development with respect for environmental & community values
- 2.3 Protect the natural environment and enhance sustainability



# Thriving local economies that meet community needs

- 3.1 Strengthen and diversify the economy
- 3.2 Deliver safe, vibrant & attractive public spaces



# Effective, Responsible & Authentic Leadership

- **4.1** Deliver reliable, high quality services
- **4.2** Provide transparent leadership through effective government and administration
- **4.3** Inform and engage with the community about the decisions that affect their lives



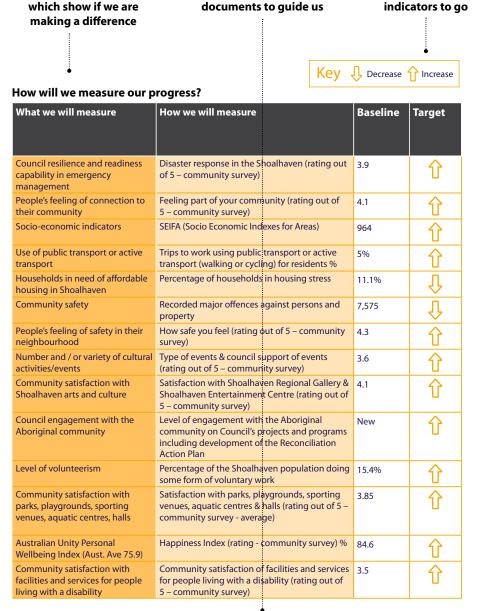
# How to Read this Plan



The direction we want



**Community indicators** 



Council's existing

- · Arts Centre Strategic Plan
- Community Infrastructure Strategic Plan
- · Crime Prevention Plan
- Disability Inclusion Action Plan
- Shoalhaven Libraries Strategic Plan
- Shoalhaven Entertainment Centre Business Plan
- Shoalhaven Affordable Housing Strategy
- Wellbeing Plan





Key l	Priority	Outcomes	Council's Role	Our Partners
1.1	Support inclusive, safe and connected communities	Communities are more prepared and more resilient following disruptive events  Equitable access to opportunities to participate  Improvement in socioeconomic status  Improvements to transport services and connectivity  A variety of affordable housing options  Improved community safety	Leader Advocate Service provider Facilitator Capacity builder Planner Regulator	NSW Government Resilience NSW Response agencies Developers Community housing providers Community members Community groups Council advisory committees
1.2	Preserve, support and develop cultural and creative vitality across our communities	<ul> <li>Active participation in an inclusive arts community</li> <li>Provision of cultural facilities</li> <li>Greater awareness, understanding and respect of local Aboriginal and Torres Strait Islander culture, heritage and histories</li> </ul>	Leader Advocate Service provider Facilitator Capacity builder	NSW Government Community members Community groups Council advisory committees
1.3	Support community wellbeing through fostering active and healthy communities	Improved access to opportunities for lifelong learning and to help others     Provision of recreation and leisure facilities     Increased opportunities to be healthy and active     Improved access to places and activities for people with disability	Service provider Facilitator Capacity builder Planner	NSW Government Community members Community groups Council advisory committees





What we will measure	How we will measure	Baseline	Target
Council resilience and readiness capability in emergency management	Disaster response in the Shoalhaven (rating out of 5 – community survey)	3.9	Û
People's feeling of connection to their community	Feeling part of your community (rating out of 5 – community survey)	4.1	Û
Socio-economic indicators	SEIFA (Socio Economic Indexes for Areas)	964	Û
Use of public transport or active transport	Trips to work using public transport or active transport (walking or cycling) for residents %	5%	Û
Households in need of affordable housing in Shoalhaven	Percentage of households in housing stress	11.1%	Û
Community safety	Recorded major offences against persons and property	7,575	Û
People's feeling of safety in their neighbourhood	How safe you feel (rating out of 5 – community survey)	4.3	Û
Number and / or variety of cultural activities/events	Type of events & council support of events (rating out of 5 – community survey)	3.6	Û
Community satisfaction with Shoalhaven arts and culture	Satisfaction with Shoalhaven Regional Gallery & Shoalhaven Entertainment Centre (rating out of 5 – community survey)	4.1	Û
Council engagement with the Aboriginal community	Level of engagement with the Aboriginal community on Council's projects and programs including development of the Reconciliation Action Plan	New	Û
Level of volunteerism	Percentage of the Shoalhaven population doing some form of voluntary work	15.4%	Û
Community satisfaction with parks, playgrounds, sporting venues, aquatic centres, halls	Satisfaction with parks, playgrounds, sporting venues, aquatic centres & halls (rating out of 5 – community survey - average)	3.85	Û
Australian Unity Personal Wellbeing Index (Aust. Ave 75.9)	Happiness Index (rating - community survey) %	84.6	Û
Community satisfaction with facilities and services for people living with a disability	Community satisfaction of facilities and services for people living with a disability (rating out of 5 – community survey)	3.5	Û

- Arts Centre Strategic Plan
- Community Infrastructure Strategic Plan
- · Crime Prevention Plan
- Disability Inclusion Action Plan
- Shoalhaven Libraries Strategic Plan
- Shoalhaven Entertainment Centre Business Plan
- Shoalhaven Affordable Housing Strategy
- Wellbeing Plan





Key l	Priority	Outcomes	Council's Role	Our Partners
2.1	Manage our infrastructure for long term sustainability to meet community need	Public infrastructure is maintained for its current purpose and for future generations	Leader Advocate Service provider Planner	NSW Government Federal Government
2.2	Manage growth and development with respect for environmental & community values	<ul> <li>Improved collaborative strategic planning with the community</li> <li>Development contributes to and enhances neighbourhood character</li> </ul>	Leader Advocate Service provider Facilitator Planner Regulator	NSW Government Developers Community members Businesses
2.3	Protect the natural environment and enhance sustainability	Greenhouse gas reduction targets for Council and community are met  Natural environment is improved  Community involvement in environmental enhancement programs is increased  Resource consumption is reduced and waste minimised  Biodiversity and urban green cover are enhanced	Leader Advocate Service provider Facilitator Capacity builder Planner Regulator	NSW Government Businesses Community members Community groups Council advisory committees





What we will measure	How we will measure	Baseline	Target
Community satisfaction with roads	Community satisfaction maintenance of sealed & unsealed local roads (rating out of 5 – community survey)	2.6	Û
Length of footpaths and cycleways	Total length of footpaths and cycleways in kms	246.8	Û
Community satisfaction with provision of cycleways	Community satisfaction with provision of cycleways (rating out of 5 – community survey)	3	Û
Backlog of repair and renewal of community assets	Infrastructure backlog as a percentage of total infrastructure assets (audited results)	2.6%	Û
Community satisfaction with the strategic planning process	Community satisfaction with strategic planning within Shoalhaven (rating out of 5 - community survey)	2.8	矿
Urban canopy cover on public land	Urban canopy on public land (%)	New	Û
Community satisfaction with management of natural environment	Community satisfaction with management of natural environment (rating out of 5 – community survey)	3.2	矿
Community satisfaction with environmental protection and enforcement (e.g. building site inspections, illegal dumping, tree vandalism or clearing)	Community satisfaction with environmental protection and enforcement (rating out of 5 – community survey)	3.1	Û
Waterway environmental health	Percentage of water samples that meet the AS/NZ water quality guidelines as captured by Aqua Data	75%	Û
Council's greenhouse gas emissions	Council's Greenhouse gas emissions (tonnes CO2e-) baseline 2020-21, reported annually	77,567	Û
Community's greenhouse gas emissions	How: Greenhouse gas emissions (tonnes CO2e-) (baseline to be established)	New	Û
Participation in environmental programs	Number of participants in environmental events and projects	New	Û
	Number of active bushcare groups on Council managed land	60	Û
Diversion of waste from landfill	% of waste diverted from landfill	36%	Û

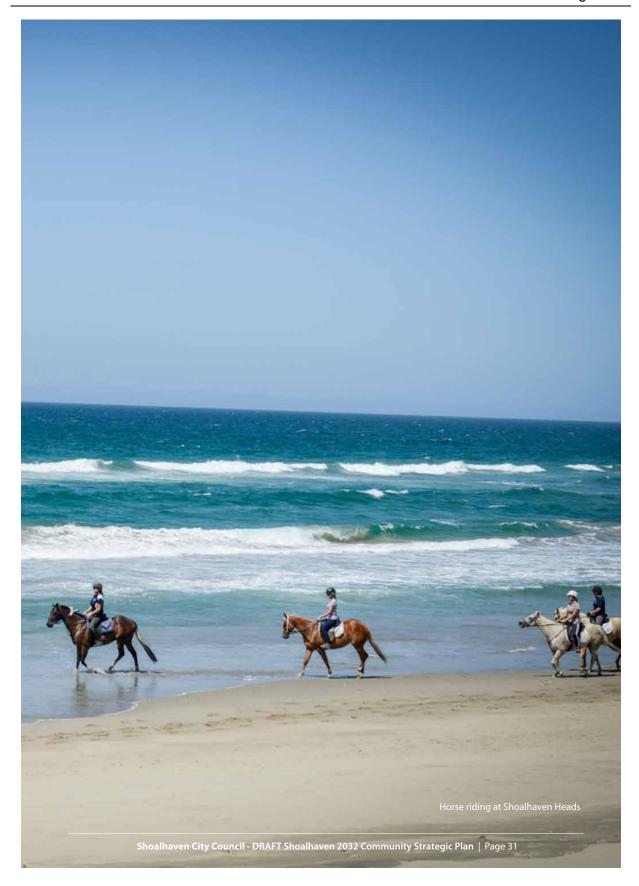
- · Asset Management Plans
- Bushcare Action Plans
- · Coastal Zone Management Plan
- Coastal Management Programs
- Estuary Management Plans
- Flood Studies and Risk Management Plans
- Heritage Conservation Plans

- · Local Strategic Planning Statement
- Pedestrian Access and Mobility Plan (PAMP)
- Public Domain and Open Space Plans
- Public Reserves Plans
- Shoalhaven Growth Management Strategy
- Structure plans and settlement strategies
- Sustainability Policy













Key I	Priority	Outcomes	Council's Role	Our Partners
3.1	Strengthen and diversify the economy	<ul> <li>Increased investment and new businesses</li> <li>Provision of employment for people of all ages and abilities</li> <li>Enhanced opportunities for a diverse sustainable visitor economy</li> </ul>	Leader Advocate Facilitator Capacity builder	NSW Government Businesses Chambers of Commerce
3.2	Deliver safe, vibrant & attractive public spaces	<ul> <li>Strong commercial centres and active CBDs</li> <li>Neighbourhoods, streets and public spaces provide quality places and facilities</li> <li>Increased participation in the civic and cultural life of the City</li> </ul>	Leader Advocate Service provider Facilitator Capacity builder	Businesses Chambers of Commerce Community members



Key 🖟 Decrease 🕆 Increase
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What we will measure	How we will measure	Baseline	Target
Shoalhaven Economic Indicators	Gross regional product (\$M)	6,040	Û
	Total number of people employed in the Shoalhaven (id profile)	38,103	仓
	Total value of construction and complying development certificates issues (\$M)	462.7	仓
	Number of new businesses that employ one or more people	New	仓
	Percentage of total jobs across the top 10 employing industries	83%	Maintain
People's perception of Shoalhaven as liveable city	People's perception of Shoalhaven as liveable city (% community survey)	81%	Û
Community's satisfaction with Shoalhaven's CBDs	Community satisfaction with Shoalhaven's CBD (rating out of 5 – community survey)	3.1	Û
People's perception, that the Shoalhaven is a vibrant place to live and work	Shoalhaven is a vibrant city (rating out of 5 – community survey)	3.4	Û

- Economic Development Strategy
- Nowra CBD Revitalisation Strategy
- Property Strategy
- Tourism Destination Management Plan





Key	Priority	Outcomes	Council's Role	Our Partners
4.1	Deliver reliable, high quality services	<ul> <li>Our community continues to have access to high quality public services</li> </ul>	Service provider Planner Regulator	
4.2	Provide transparent leadership through effective government and administration	Decision-makers lead, govern and regulate in an ethical, equitable, transparent and accountable way     Provide equity of access to employment opportunities to improve the diversity of Council's workforce	Leader Advocate Service provider Planner Regulator	
4.3	Inform and engage with the community about the decisions that affect their lives	<ul> <li>All community members have the opportunity to shape our future</li> <li>Increased awareness of the key issues impacting our community</li> </ul>	Advocate Capacity builder Planner	Businesses Community members Community groups

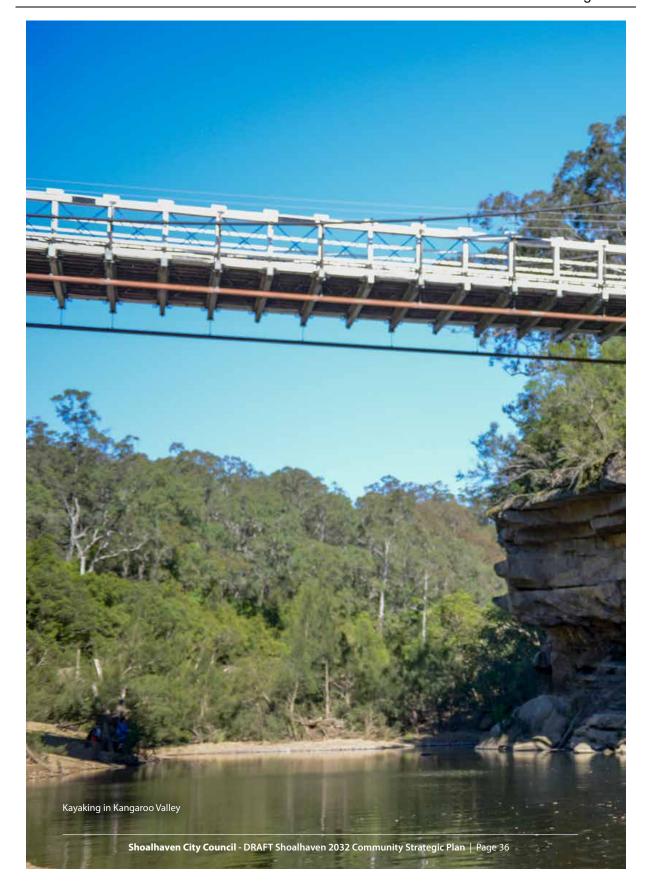


Key	Decrease	1 Increase
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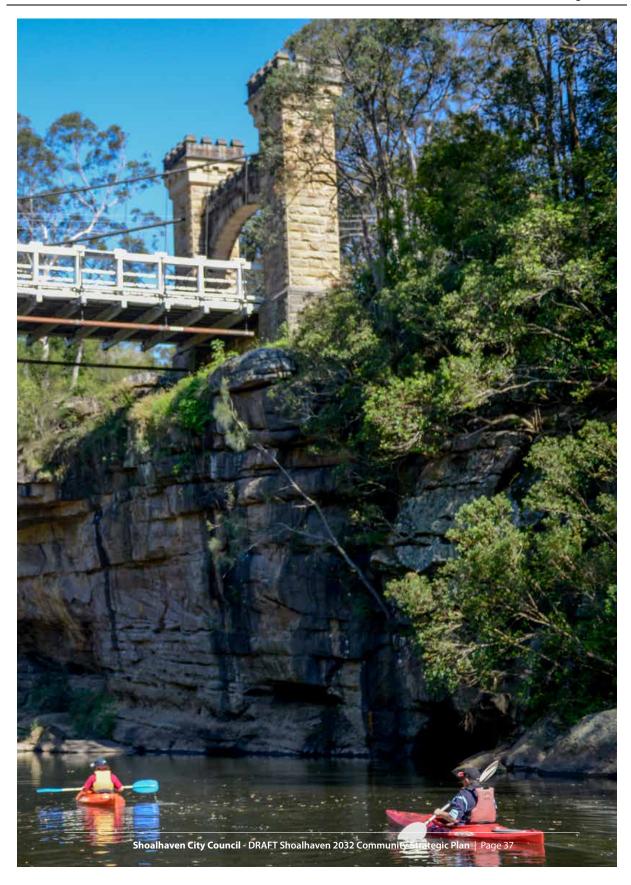
What we will measure	How we will measure	Baseline	Target
Community's satisfaction with basic council services	Overall satisfaction with Shoalhaven City Council (rating out of 5 – community survey)	3.3	Û
Community expectations about customer service	Overall performance of council in dealing with your request (rating out of 5 – community survey)	3.6	Û
	Timeliness of council responding to community requests (rating out of 5 – community survey)	3.5	仓
Development Applications assessment times	Percentage of Development Applications determined within 40 days (council records - %) Target 65%	62%	Û
Identified positions within Council	Number of identified positions within Council	6	Û
Council's financial benchmarks	Number of financial benchmarks that meet the six target ratios (2020-21)	5	Û
Community's engagement in decisions that affect their lives	Community's awareness of community engagement projects and initiatives (percentage – community survey)	34%	Û
	Active participation in community engagement projects/initiatives (percentage – community survey)	26%	Û
Community's satisfaction with Council's leadership	Community satisfaction with Council's leadership (rating out of 5 - community survey)	New	仓

- Community Engagement Policy and Strategy
- Community Participation Plan
- Resourcing Strategy
  - Long Term Financial Plan
  - Asset Management Policy, Strategy and Plans
  - Workforce Strategy
  - Information Communications Technology Strategy











# **Implementation**

Council does not have the sole responsibility for implementing or resourcing all the community aspirations identified within the Plan. While Council takes a lead role in the development and implementation of the Plan, responsibility for achieving our long-term objectives rests with the collective commitment of all levels of government, businesses, industry groups, community organisations and individuals.

## Integrated Planning & Reporting Framework

Council's role in the delivery of services, facilities and programs is outlined in the Delivery Program and Operational Plan as well as Council's supporting strategies and plans. These strategies must be developed through consultation and engagement with our community.

Council is committed to understanding our community's desired level of service and demand for key facilities and programs via genuine engagement. The desired level of service is the balance between the service provided; the level of service the community expect and what the community is prepared to pay for. The desired level of service will inform and the actions within all of Council's plans.

Councils are required by the NSW Government to undertake long-term planning based on community

engagement and backed up by comprehensive plans for finances, assets and workforce. This is known as the Integrated Planning and Reporting (IP&R) framework. Council operates in an increasingly complex environment, with responsibilities under more than 50 different pieces of legislation and direct relationships with over 20 NSW and Commonwealth Government agencies.

The IP&R framework allows councils to navigate these complexities in a meaningful and purposeful way and to:

- integrate community priorities into council strategies and plans
- support community and stakeholders to play an active role in shaping the future of their community
- articulate the community's vision and priorities
- assign resourcing to support delivery of the vision and priorities, while also balancing aspirations with affordability
- maintain accountability and transparency by regular monitoring and reporting

The Delivery Program and Operational Plan are the focus of how Council will act to implement our 2032 vision. These plans detail the actions and projects that will be delivered to work towards the Shoalhaven 2032 key priorities.

Document	Purpose	
Shoalhaven 2032 - Community Strategic Plan	Articulates the community's vision and aspirations for the next 10 years for our community, environment, economy and civic life	
Delivery Program	Defines Council's objectives to support Shoalhaven 2032 over a four- year period	
Operational Plan	Details what Council will do over the next 12 months to deliver on the objectives defined in the Delivery Program and allocates budget and resources to achieve them	
Resourcing Strategy	Addresses how Council will implement and resource the Delivery Program through planning for our finances, assets and workforce	
Supporting Strategies & Plans	Inform priority actions in the Delivery Program and Operational Plan with more detailed strategic activities	



#### **Reporting and Accountability**

Council is accountable to the community on progressing towards the community's vision. The quarterly performance and annual reports detail progress against the objectives and actions in the Delivery Program and the Operational Plan. The Community Strategic Plan will also be evaluated through the State of the City report which is produced at the end of each Council term and presented to the incoming Council. The Plan will also be updated at the commencement of each Council term to ensure it remains relevant and continues to reflect community aspirations.

#### **Council's many different roles**

Council plays many different roles in helping achieve our Community vision and aspirations. These are varied and evolve over time.

**Leader** - plans direction through developing and implementing policy and strategy, guides the way forward to achieve our community's vision

**Advocate** - elevates concerns to different levels of government reinforcing community needs

**Service Provider** - delivers facilities, services and infrastructure in an efficient manner to meet community needs

**Facilitator** - connects diverse interests and encourages activities to achieve positive community outcomes

**Capacity builder** - mentors, motivates and funds community-led initiatives which help deliver the community vision

**Planner** - works with our community stakeholders to develop well-researched solutions to our community needs

**Regulator** - implements legislation to work towards environmental protection and community wellbeing



Shoalhaven City Council - DRAFT Shoalhaven 2032 Community Strategic Plan | Page 39



# **Alignment with** Other Plans & Strategies

As part of the development of the CSP2032, a review was undertaken of the following strategies and plans to identify opportunities and risks for Shoalhaven City.

National		
Australian Water Safety Strategy		
Indigenous Advancement Strategy		
Standards and guidelines for Australian Public Libraries 2020		
Strategic Plan 2020-23 - National and State Libraries Australasia		
Australia Council for the Arts Strategic Plan 2014-2019 and Corporate Plan 2019-2023		
Australia's Youth Policy Framework		

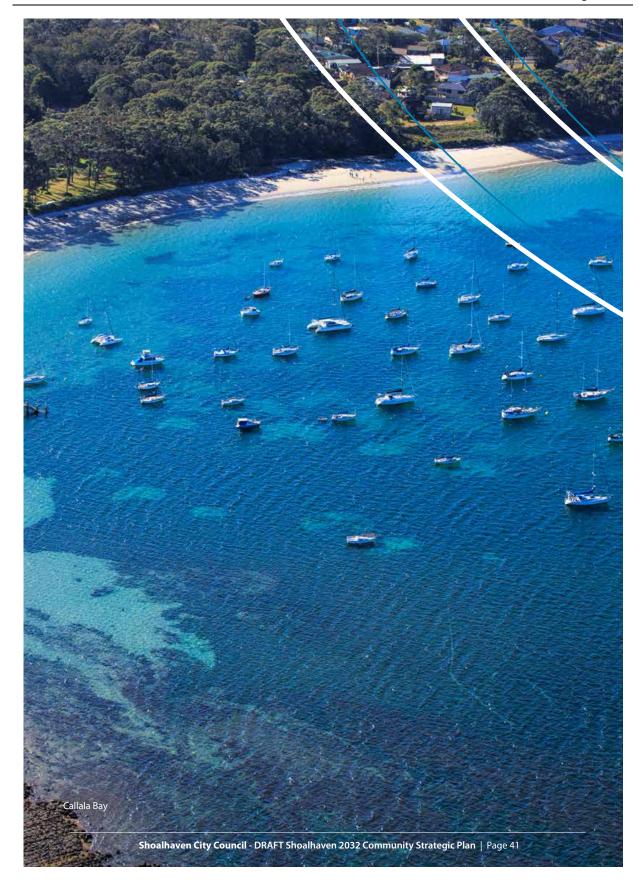
Regional
Illawarra-Shoalhaven Regional Plan 2041
Illawarra-Shoalhaven Regional Transport Plan
Regional NSW Services and Infrastructure Plan
Southeast Regional Strategic Pest Animal Management Plan
Southeast Regional Strategic Weed Management Plan 2017 - 2022

State	
Regional Economic Development Strategy	Premiers Priorities
State Infrastructure Strategy	Practice Note 15 water safety
Future Transport Strategy	NSW Coastal Water Safety Council
NSW Marine Estate Management Strategy	Her sport her way
Better Placed	NSW Heritage Act 1977
Greener Places	Indigenous spaces in library places - NSW public libraries
NSW Energy Efficiency Action Plan	Building on the Bookends Scenarios
Net Zero Plan Stage 1	Living Learning Libraries 7th edition 2020 update
Shoalhaven and Illawarra Enabling Regional Adaptation Plan	Create NSW: Arts and Culture Policy Framework
South Coast Regional Conservation Plan	Create NSW: Cultural Infrastructure Plan 2025+
NSW State Health Plan	Office of Sport Strategic Plan 2020-2024
NSW Health Strategic Priorities	Future Directions 2019-2022 (Sport NSW)
NSW Department of Education Strategic Plan	Ageing Well in NSW – Seniors Strategy
NSW Higher Education Strategy	NSW Volunteering Strategy
Department of Communities and Justice Strategic Direction	NSW Disability Inclusion Plan
NSW Aboriginal Health Plan	NSW Biodiversity Values mapping
NSW Implementation Plan for Closing the Gap	EPA Resource Recovery
NSW Intergenerational Report	

### Community – Led Plans Ray and Basin Community Le

Bay and Basin Community Led Strategic Plan 2021
Berry Community Strategic Plan 2016
Conjola District Strategic Action Plan 2014-2030
Shoalhaven Heads - Our Future - Strategy 2013
Sussex Inlet and District strategic Action Plan 2015-2030



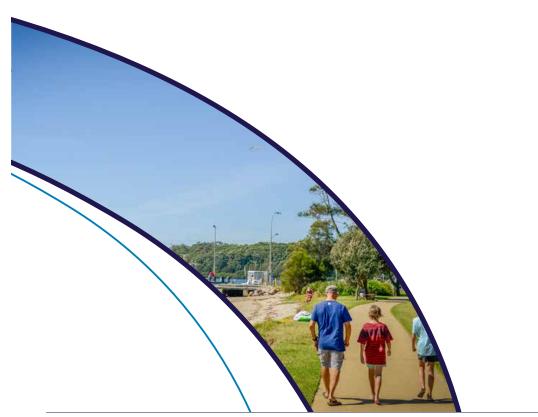




# Part of a **Global Community**

Australia has joined with 192 other countries and committed to a global roadmap to work toward a better world for current and future generations.

The Sustainable Development Goals (SDGs) were developed by the United Nations to work towards a more sustainable future which promotes prosperity and protection of the planet. The 17 Goals guide efforts to increase global well-being through addressing some of society's key challenges. The key priorities and actions outlined in this Community Strategic Plan will help to realise global goals through local action.



Shoalhaven City Council - DRAFT Shoalhaven 2032 Community Strategic Plan | Page 42





Resilient, Safe, Accessible & Inclusive Communities



Sustainable, Liveable Environments



Thriving Local Economies



Effective, Responsible & Authentic Leadership

























































## PLANNING PROPOSAL – PP058

Shoalhaven Local Environmental Plan 2014 Housekeeping 2022

Prepared by City Futures

File: 64164E

Version: Pre-Gateway Date: September 2022



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#### **Attachments**

Attachment A – Evaluation	Criteria for the	Delegation of	of Plan	Making	<b>Functions</b>

Attachment B - Council Report and associated Minute supporting the PP (TBA)

Attachment C - SEPP Checklist

Attachment D - s9.1 Ministerial Direction Checklist

Attachment E – Review of mapping and description for Heritage Item 407 (General): Former Nowra Sailing Club site and Timber Wharf and Heritage Item A7 (Archaeological): Nowra Wharf.

Attachment F – Heritage Assessment: Former BTU Torpedo Workshop

Attachment G – Agency Response – WaterNSW



#### 1 Introduction

This Planning Proposal (PP) seeks to amend Shoalhaven Local Environmental Plan (SLEP) 2014 to improve the operation and accuracy of the Plan. The amendment responds to a range of instrument and mapping issues that have arisen since the previous housekeeping amendment commenced.

It is requested that Council be given delegation for plan making functions for this PP. The evaluation criteria for delegation is located at  ${\bf Attachment} \ {\bf A}$ .

#### 1.1 Subject Land

The PP applies to the whole of the City of Shoalhaven (Figure 1).

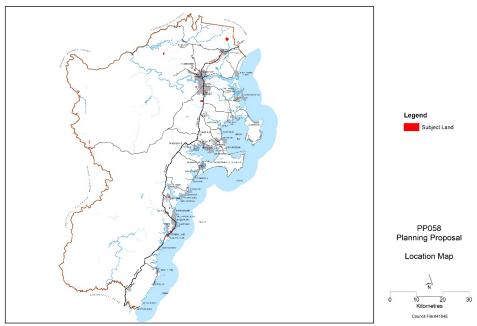


Figure 1: Subject Land

#### 1.2 Background

SLEP 2014 commenced on 22 April 2014. The process essentially consolidated existing planning controls into the one LEP in the NSW Government's Standard Instrument LEP format.

On 3 June 2014, Council's Development Committee resolved to commence the process to make necessary housekeeping amendments to SLEP 2014 and report these for consideration as required. In line with this, reviews to SLEP 2014 are continuously undertaken to ensure accuracy and operation are upheld and improved, and positive outcomes for the community are delivered in line with applicable strategic documents.



On [Insert Date here], Council resolved (Insert MIN here) at its Ordinary Meeting to submit this PP to the NSW Department of Planning and Environment for a Gateway determination. Refer to **Attachment B** for a copy of the Council Report and Minutes.

#### 2 Part 1 – Intended Outcome

The intended outcome of this PP is to amend a number of clauses and maps in SLEP 2014 in order to correct identified anomalies or inconsistencies within the LEP and improve the Plan's operation. These anomalies or inconsistencies have arisen since the Plan's commencement in 2014 and have been identified through staff feedback, development assessment processes, the registration of new land titles, landowner requests and as resolved by Council.

A detailed explanation and justification for each proposed amendment is included in Section 3 (Part 2: Explanation of Provisions) of this PP.

#### 3 Part 2 – Explanation of Provisions

To achieve the proposed objectives, the PP proposes to amend SLEP 2014 via a number of instrument and mapping amendments as shown in the following sections.

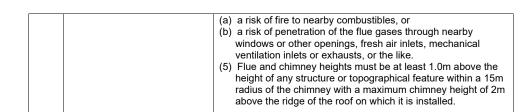
#### 3.1 Changes to Existing Provisions – Instrument Only

One (1) item has been identified that requires administrative amendments to SLEP 2014. These amendments are explained in **Table 1** with proposed changes identified in red.

Table 1: Instrument Amendments - Administrative Anomalies

Item	Clause	Proposed Amendment	
1.	Schedule 2 Exempt Development	Issue and Justification: Schedule 2 of SLEP 2014 contains provisions for different types of exempt development. Provisions for solid fuel heaters (including oilfired appliances) make reference to Australian Standards that have now been superseded.	
		<b>Proposed Amendment:</b> Ensure the references to the relevant Australian Standards are up to date. The relevant section of Schedule 2 should be amended as follows:	
		Solid fuel heaters (including oil-fired appliances)  (1) Must be tested to comply with AS/NZS 4012:19992014  Domestic solid fuel burning appliances—Method for determination of power output and efficiency and AS/NZS 4013:19992014  Domestic solid fuel burning appliances—Method for determination of flue gas emission.  (2) Must be installed in accordance with AS/NZS 2918:20012018  Domestic solid fuel burning appliances—Installation.  (3) If a boiler or pressure vessel—must be installed in accordance with AS/NZS1200:20002015  Pressure equipment.  (4) Flues and chimneys must not terminate in such a position	





#### 3.2 Changes to Existing Provisions - Mapping Only

Planning Proposal PP058 - SLEP 2014 - Housekeeping 2022

Thirty (30) items have been identified that require mapping amendments to SLEP 2014. These include amendments to the Land Zoning (LZN), Lot Size (LSZ), Height of Building (HOB), Clauses (CLS), Terrestrial Biodiversity (BIO), Land Reservation Acquisition (LRA), Scenic Protection Area (SCP) and Heritage (HER) maps. These are outlined in **Tables 2-10**.



Table 2: Mapping Amendments - Land Zoning

#### 1. Part of Lot 101 DP 1071707, 4 Brereton St, Nowra **Subject Land Aerial Photo** Part of Lot 101 DP 1071707 IRT Road Part of Lot 101 DP 1071707 CAMPBELL PLACE STREET BRERETON Legend 0 5 10 15 20 N Metres Council File 64164E Subject Land Subject Land Existing SLEP2014 LZN **Proposed LZN Changes** Part of Lot 101 DP 1071707 R3 Part of Lot 101 DP 1071707 R3 RE1 RE1 Part of Lot 101 DP 1071707 Part of Lot 101 DP 1071707 CAMPBELL PLACE CAMPBELL PLACE R3 R3 Legend Legend Subject Land Subject Land Land Zoning (LZN) Land Zoning (LZN) Zone B4 Mixed Use B4 Mixed Use **B4** В4 R3 Medium Density Residential Medium Density Residential 5 10 15 20 N Metres Council File 64164E 5 10 15 20 A Metres Council File 64164E RE1 Public Recreation RE1 Public Recreation

**Issue and Justification:** The subject lot is privately-owned and the majority of the lot is zoned R3 Medium Density Residential. However, a smaller fragmented portion of the subject lot is zoned RE1



Public Recreation. The RE1 zone is not considered appropriate for privately-owned land that is not intended to be used or acquired for public recreation. The fragmented portion of the lot should be rezoned to be consistent with the rest of the lot.

**Proposed Amendment:** Rezone the smaller portion to R3 Medium Density Residential for consistency with the rest of the lot and zone of adjoining land.





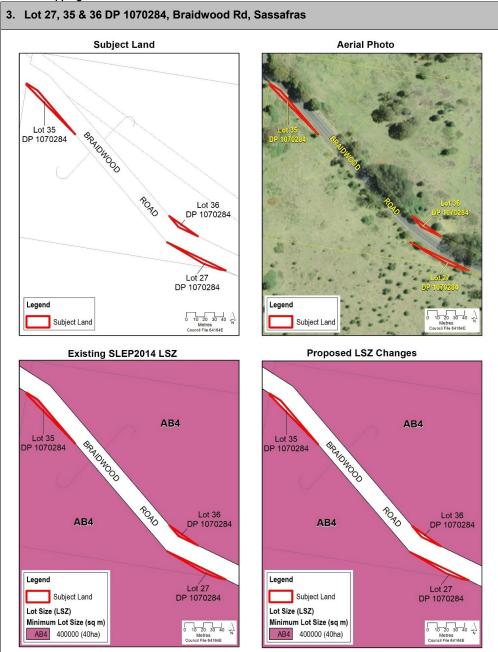


**Issue and Justification:** The subject lot is currently zoned RE1 Public Recreation. This zoning was likely applied as the lot is in the ownership of Council. However, given the current medium density residential use of the land, this zoning is not considered appropriate.

**Proposed Amendment:** Rezone to R3 Medium Density Residential for consistency with the current use of the land and adjoining associated development.



Table 3: Mapping Amendments - Minimum Lot Size

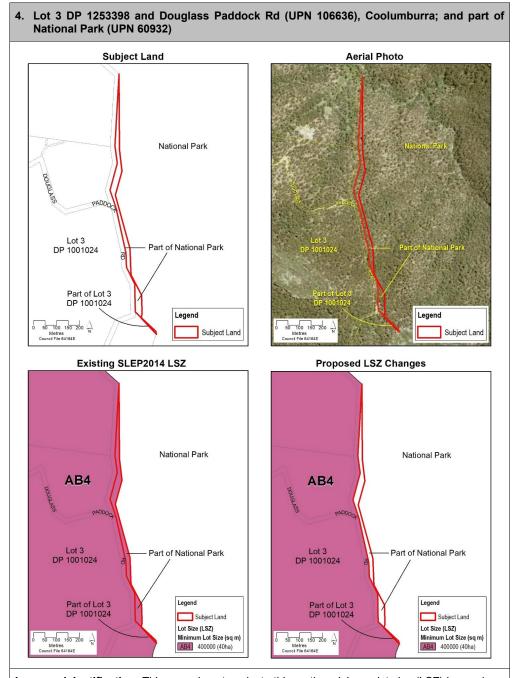




**Issue and Justification:** These lots have been declared a Controlled Access Road/Public Road and are zoned SP2 Infrastructure (Road) with a minimum lot size (LSZ) of AB4 (40 ha). However, the minimum lot size is not required for this zone/use.

Proposed Amendment: Remove the minimum lot size from each lot.





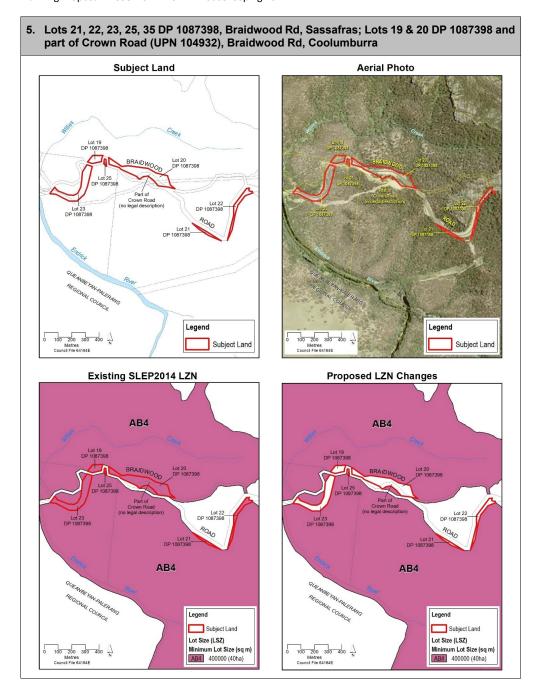
**Issue and Justification:** This amendment seeks to tidy up the minimum lot size (LSZ) layer where it doesn't align with current lot boundaries. LSZ AB4 (40 ha) should apply to Lot 3 DP 1253395 and



to Douglass Paddock Rd (UPN 106636) as it is appropriate for the zoning and private ownership. LSZ AB4 should not apply to the adjacent National Park (UPN 60932). The minimum lot size layer should be snapped to the relevant lot boundaries as appropriate.

**Proposed Amendment:** Extend LSZ AB4 to the entirety of Lot 3 DP 1253395 and remove the LSZ AB4 from the National Park (UPN 60932).





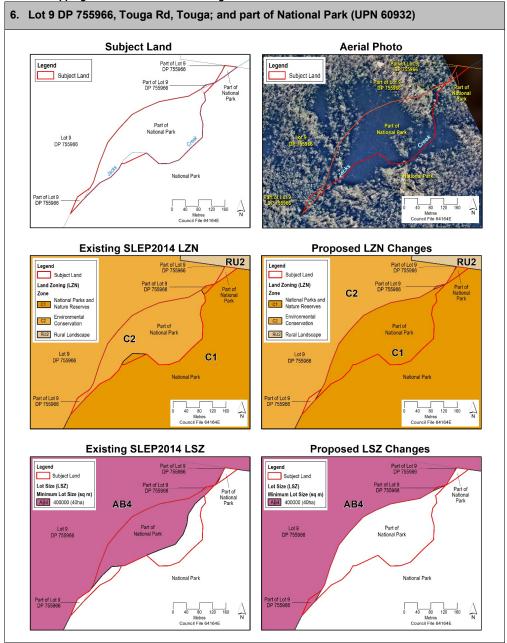


**Issue and Justification:** These lots are zoned SP2 Road and each has been dedicated as public road. These lots currently have a minimum lot size of LSZ AB4 (40 ha). However, the minimum lot size is not required for this zone/use.

Proposed Amendment: Remove the minimum lot size from each lot.



Table 4: Mapping Amendments - Land Zoning and Minimum Lot Size



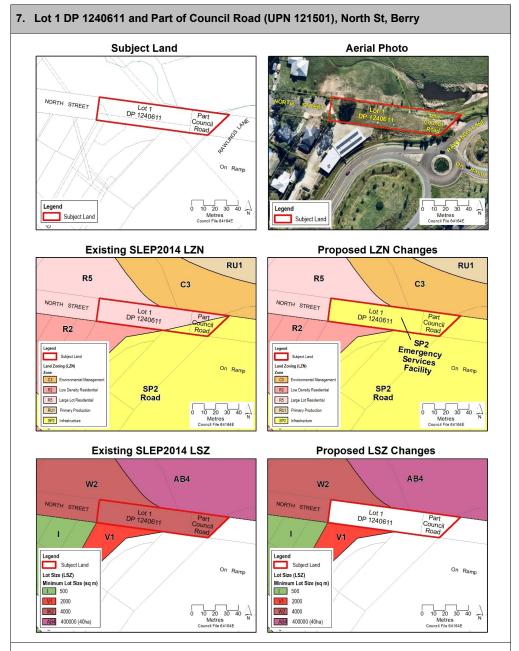
**Issue and Justification:** This amendment seeks to tidy up the land use zone (LZN) and minimum lot size (LSZ) layers where they do not align with current lot boundaries. The LZN layer C2 Environmental Conservation and LSZ layer AB4 (40 ha) should apply to Lot 9 DP 755966 as it is



appropriate for the zoning and private ownership, whereas the adjacent National Park (UPN 60932) should be zoned C1 National Parks and Nature Reserves with no minimum lot size. The LZN and LSZ layers should be snapped to the relevant lot boundaries as appropriate.

**Proposed Amendment:** Extend LZN C2 and LSZ AB4 to the entirety of Lot 9 DP 755966; apply LZN C1 to the National Park (UPN 60932) and remove LSZ AB4 from this lot.





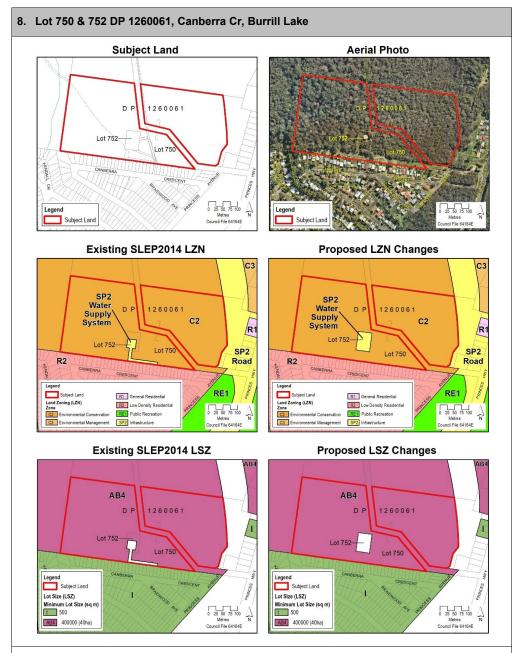
**Issue and Justification:** Lot 1 DP 1240611 is currently zoned part R5 Large Lot Residential and part SP2 Infrastructure (Road) with a minimum lot size of W2 (4000 m2). Construction of the Rural Fire Brigade Station (Emergency Services Facility) has been approved for the lot and as such a more



appropriate zone is required. Additionally, small portions of the R5 zone and minimum lot size layer W2 extend into the adjacent road reserve (UPN 121501) which should be tidied up.

**Proposed Amendment:** Rezone Lot 1 DP 1240611 to SP2 Infrastructure (Emergency Services Facility) and remove the minimum lot size layer. Rezone the R5 portion of the road reserve (UPN 121501) to SP2 Infrastructure (Road) and remove the minimum lot size layer.





**Issue and Justification:** Lot 752 DP 1260061 contains the Burrill Lake water reservoir. This lot was created through a recent subdivision and Council has resolved (MIN21.665) to acquire the lot. Part of the lot is zoned SP2 Infrastructure (Water Supply System) and part C2 Environmental Conservation with a minimum lot size of AB4 (40 ha).



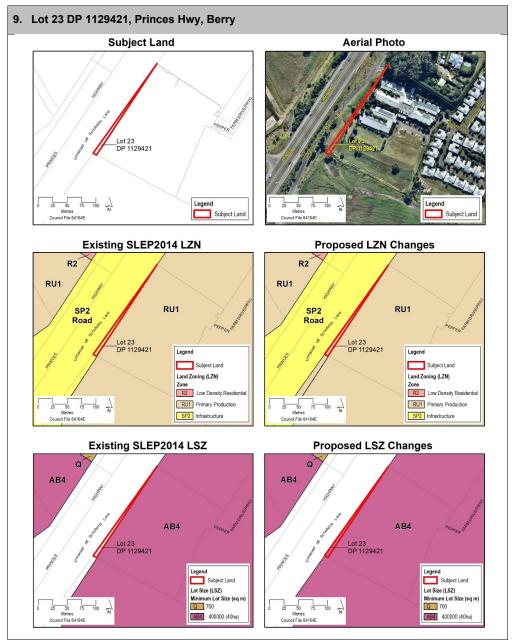
Part of Lot 750 DP 1260061 is zoned SP2 Infrastructure (Water Supply System). This part of the lot was originally intended to be an access handle for the Burrill Lake water reservoir, however this zoning is no longer required as there are easements to provide access to the water reservoir.

The zoning and minimum lot size layers should be updated to reflect the current uses and boundaries for each lot.

**Proposed Amendment:** Rezone all of Lot 752 DP 1260061 to SP2 Infrastructure (Water Supply System) to reflect its current use and remove the minimum lot size layer.

Remove the SP2 Infrastructure (Water Supply System) zoning from Lot 750, rezone this section to C2 Environmental Conservation and apply the minimum lot size AB4 for consistency with the rest of the lot.





**Issue and Justification:** This lot is in private ownership and is zoned SP2 Infrastructure (Road), however Transport for NSW (TfNSW) has confirmed this land is not required for road widening or a similar purpose. The zoning should be amended for consistency with the adjoining lot which is also in private ownership. The subject lot is currently not assigned a minimum lot size but this should be



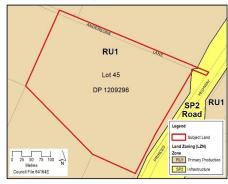
also added for consistency with the proposed RU1 Primary Production zone. *Note: adjoining lot is addressed in Mapping Item 18.* 

**Proposed Amendment:** Rezone Lot 23 DP 1129421 to RU1 Primary Production and apply minimum lot size AB4 (40 ha).

#### 10. Lot 45 DP 1209296, UPN 114463, Andersons Lane, Jaspers Brush











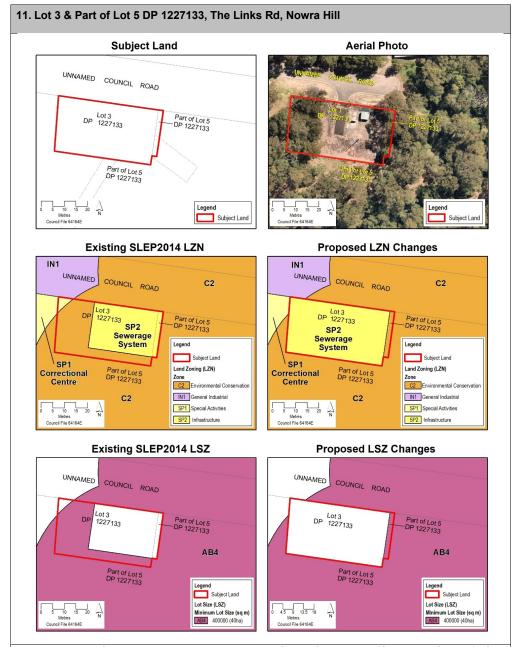




**Issue and Justification:** A small portion of Lot 45 DP 1209296 is zoned SP2 Infrastructure (Road), however TfNSW has confirmed this land is not required for road widening or a similar purpose. The zoning should be amended and an appropriate minimum lot size applied for consistency with the remainder of the lot. The zoning and minimum lot size layers should also be tidied up on Andersons Lane (UPN 114463) so that they align neatly with the zoning and minimum lot size layers on adjacent lots.

**Proposed Amendment:** Rezone this small portion of Lot 45 DP 1209296 to RU1 Primary Production and apply the minimum lot size AB4 (40 ha). Tidy up the zoning and minimum lot size layers on Andersons Lane (UPN 114463) so that they align neatly with the zoning and minimum lot size layers on adjacent lots.





**Issue and Justification:** Lot 3 is currently zoned SP2 Infrastructure (Sewerage System), SP1 Correctional Centre and C2 Environmental Conservation. The C2 component of the land has a minimum lot size of AB4 (40 ha). Lot 3 is the location of a sewer pumping station which serves the nearby correctional facility. The zoning of Lot 3 should more accurately reflect its use.

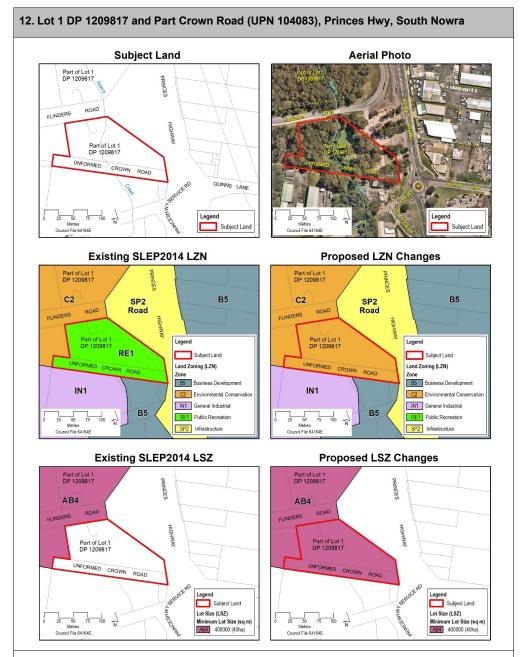


Lot 5 is zoned C2 Environmental Conservation but has a small portion of the SP2 Infrastructure (Sewerage System) zone which 'spills over' from Lot 3. This portion of SP2 is not required on this lot. Any infrastructure on Lot 5 that is related to the sewer pumping station is contained within easements which were created to address the existence of this infrastructure.

**Proposed Amendment:** Rezone the entirety of Lot 3 to SP2 Infrastructure (Sewerage System) and remove the minimum lot size from the entire lot as is appropriate in that zone.

Rezone the SP2 portion on Lot 5 to C2 Environmental Conservation and apply the minimum lot size of AB4 (40 ha) for consistency with the rest of the lot.





**Issue and Justification:** Lot 1 DP 1209817 is predominately zoned C2 Environmental Conservation, but a smaller, fragmented part of the lot is zoned RE1 Public Recreation and is currently the location of South Nowra Rotary Roadside Park. The land is now in private ownership and as such the RE1 zone is no longer considered appropriate. C2 is an appropriate zone for consistency with the rest of



the lot and to recognise the environmental values that have been identified within and near to the subject land. Recreation areas remain a permitted use in the C2 zone.

**Proposed Amendment:** Rezone the RE1 portion of Lot 1 DP 1209817 to C2 Environmental Conservation and apply the minimum lot size AB4 (40 ha) for consistency with the rest of the lot. Additionally, a corresponding amendment should be made to rezone the RE1 portion of the adjacent road casement UPN 104083 to C2 and apply LSZ AB4.





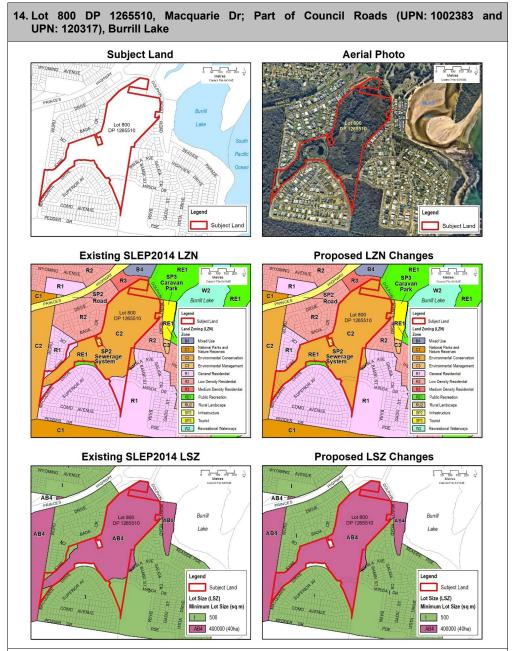
**Issue and Justification:** The subject lot is currently zoned part C2 Environmental Conservation, part SP2 Infrastructure (Sewerage System) and part RE1 Public Recreation. The lot is in private ownership and Council has no intention to acquire the RE1 portion of the land, therefore this portion should be rezoned to a zone more suitable for privately-owned land. The SP2 zone applies where a



sewer pumping station is located and Council is in the process of acquiring this portion of the land. The SP2 zoned land currently has the minimum lot size AB4 applied, but this is not required in that zone and should be removed.

**Proposed Amendment:** Rezone the portion currently zoned RE1 Public Recreation to C2 Environmental Conservation and apply the minimum lot size AB4 (40 ha) to this portion for consistency with the rest of the lot. Remove the minimum lot size AB4 from the SP2-zoned land.





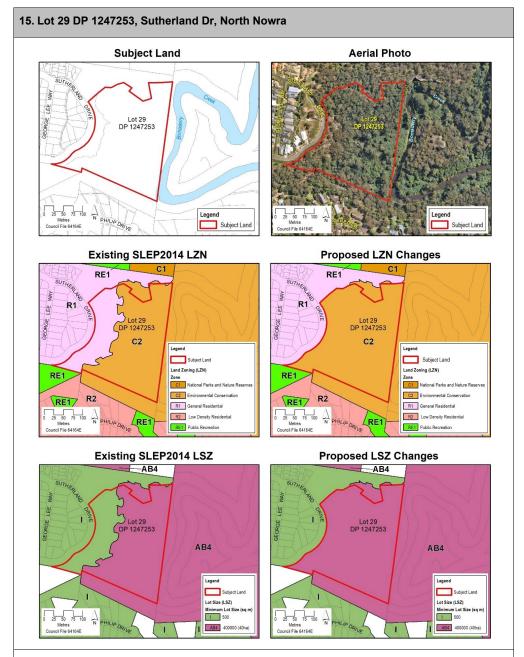
**Issue and Justification:** As part of a recently registered subdivison (SC21/1058), Lot 800 DP1265510 was dedicated to Council as a Public Reserve. The land is categorised as a natural area (wetland) and most of the lot is currently zoned C2 Environmental Conservation, however some of the lot remains zoned R1 General Residential with a minimum lot size of I (500sqm). The R1 portions



and the corresponding minimum lot size should be amended to reflect the purpose and intended use of the land.

**Proposed Amendment:** Apply the C2 Environmental Conservation zone and minimum lot size AB4 (40ha) to the entirety of Lot 800 DP 1265510. Tidy up zoning and minimum lot size layers in the road reserve at Bimbla Av and Wuru Dr for consistency with Lot 800.





**Issue and Justification:** Lot 20 DP 1247253 was dedicated to Council as a Public Reserve and categorised as a natural area (bushland) following registration of plan of subdivision DP 1247253. The lot is mostly zoned C2 Environmental Conservation which reflects the ecological value of the land. The remaining portion of the lot zoned R1 General Residential should now be rezoned due to

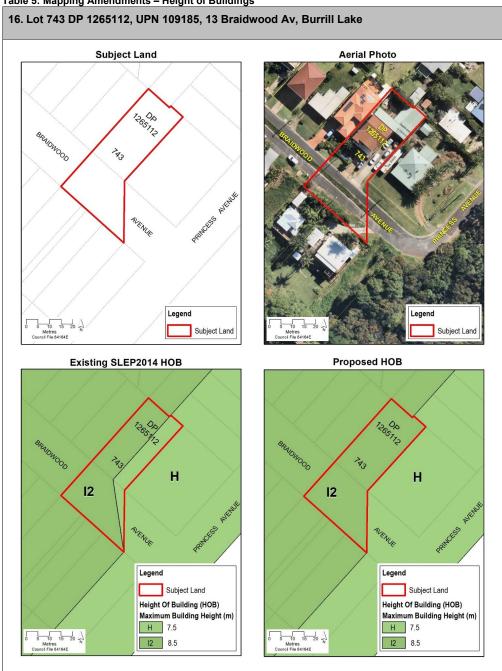


change of ownership, intended future use of the land and to reflect the objectives of s36C and s36E of the *Local Government Act 1993*.

**Proposed Amendment:** Apply the C2 Environmental Conservation zone to the entire lot and also apply the minimum lot size AB4 (40ha) which is appropriate for that zone.



Table 5: Mapping Amendments - Height of Buildings





**Issue and Justification:** Following a recent subdivision, the subject lot currently has two Height of Buildings layers: I2 (8.5m) and H (7.5m). The majority of the lot is I2 (8.5m) and the lot should have a clear and consistent Height of Buildings layer.

**Proposed Amendment:** Apply the Height of Buildings layer I2 (8.5m) to the entire lot. Additionally, tidy up the Height of Buildings layers that occur in the road reserve along Braidwood Av (UPN 109185) to neatly align with the property boundary of the subject lot.



Table 6: Mapping Amendments - Land Zoning, Minimum Lot Size and Terrestrial Biodiversity 17. Lot 322 DP 1176956, Lot 7 DP 740045, UPN 119268, Browns Rd; Lots 311-317 DP 1176956, Somerset Av, South Nowra Subject Land **Aerial Photo** 25 50 75 100 N Metres 0 25 50 75 100 Metres ELAN Existing SLEP2014 LZN Proposed LZN Changes RE1 RE1 R1 R1 C2 C2 B5 R2 SP2 R2 0 25 50 75 100 N Metres 0 25 50 75 100 N Metres Sewerage System SP2 Infrastructur Existing SLEP2014 LSZ Proposed LSZ Changes 740045 740045 AB4 Legend Subject Land Legend Subject Land Lot Size (LSZ) Lot Size (LSZ) Minimum Lot Size (sq m) Minimum Lot Size (sq m) 0 25 50 75 100 N Metres Council File 64164E 0 25 50 75 100 N Metres Council File 64164E AB4 400000 (40ha) AB4 400000 (40ha) Existing SLEP2014 BIO Proposed BIO Changes 311 312 313 314 315 316 317 40045 DP 40045 CR 0 25 50 75 100 A Metres Council File 64164E ELMN



**Issue and Justification:** Currently Land Zoning, Minimum Lot Size and Terrestrial Biodiversity layers are slightly misaligned with the relevant lot boundaries, resulting in 'slithers'. This can create a degree of uncertainty as to the intended permissible uses for the land. Tidying up these slithers by snapping the relevant layers to the lot boundary will create greater certainty for landowners without compromising strategic planning objectives.

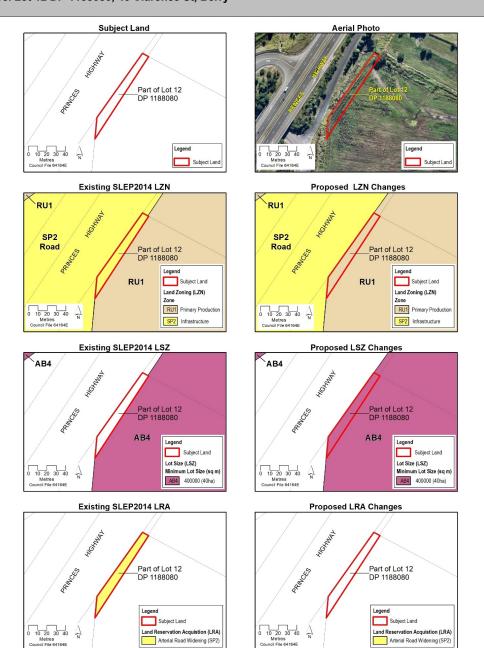
## **Proposed Amendment:**

- Lot 322 DP 1176956: Remove slithers of RE1 Public Recreation and R1 General Residential layers from the lot and ensure the following existing layers are snapped to the lot boundary: C2 Environmental Conservation, Minimum Lot Size (AB4) and Terrestrial Biodiversity (habitat corridor, significant vegetation, excluded land).
- Lot 7 DP 740045: Remove slithers of Terrestrial Biodiversity (habitat corridor, significant vegetation, excluded land) layers and Minimum Lot Size (AB4) from lot and snap existing B5 Business Development layer to lot boundary.
- Lots 311-317 DP 1176956: Remove slithers of C2 Environmental Conservation, Minimum Lot Size (AB4) and Terrestrial Biodiversity (habitat corridor, significant vegetation, excluded land) layers from each lot, and ensure existing R1 General Residential and Minimum Lot Size (I) layers are snapped to lot boundary.
- Tidy up layers in road reserve on Browns Rd (UPN 119268) by aligning C2 Environmental Conservation and Minimum Lot Size AB4 layers with the property boundaries of Lot 322 DP 1176956.



Table 7: Mapping Amendments – Land Zoning, Minimum Lot Size and Land Reservation Acquisition

18. Lot 12 DP 1188080, 46 Clarence St, Berry





**Issue and Justification:** Some of this land is zoned SP2 Infrastructure (Road) and has been identified on the Land Reservation Acquisition (LRA) Map as being required for Arterial Road Widening (SP2). However, TfNSW has confirmed this land is not required for the road. *Note: adjoining lot is addressed in Mapping Item 9*.

**Proposed Amendment:** Remove the LRA layer, rezone the SP2 zone to RU1 Primary Production and apply minimum lot size AB4 (40ha) for consistency with the rest of the lot.



Table 8: Mapping Amendments - Land Reservation Acquisition

## 19. Lot CP SP 56839, 210 Penguins Head Rd, Culburra Beach **Subject Land Aerial Photo** Tilbury Lot CP SP 56839 Legend 0 10 20 30 40 N Metres Subject Land Existing SLEP2014 LRA **Proposed LRA Changes** Tilbury Tilbury Cove Cove Lot CP Lot CP SP 56839 SP 56839 Legend Subject Land Legend Land Reservation Acquistion (LRA) Local Open Space (RE1) Subject Land

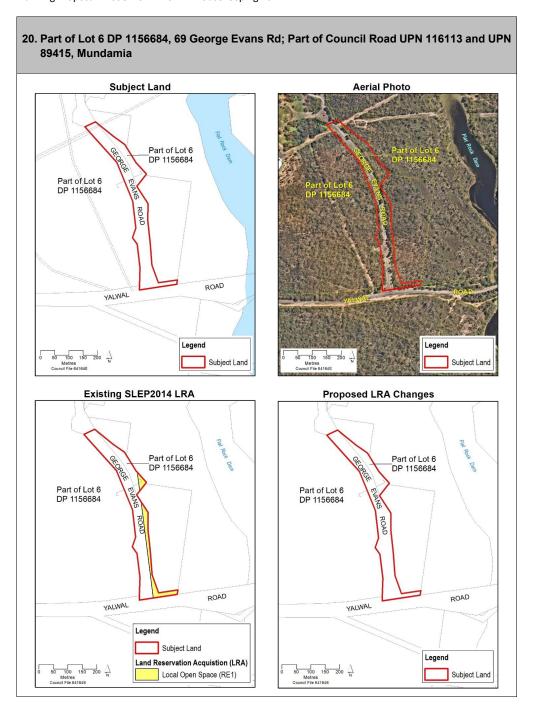
**Issue and Justification:** The Land Reservation Acquisition (LRA) layer currently applies to a portion of the subject land. Under SLEP 1985 this part of the land, together with land to the west, was zoned



6(d) Open Space - Recreation (Reserve) Zone with the intention that it was to be acquired for public open space. At a point in the past, Council acquired the adjoining land but not the subject land where the LRA layer currently applies. Public access to the beach and public reserve is now provided via a right of way over nearby land (owned by Council) and Council does not intend to acquire land from the subject site. A previous housekeeping amendment (PP011) resolved the land use zoning for the subject land but the LRA layer remains. The LRA layer can now be removed.

Proposed Amendment: Remove the LRA layer from Lot CP SP 56839.



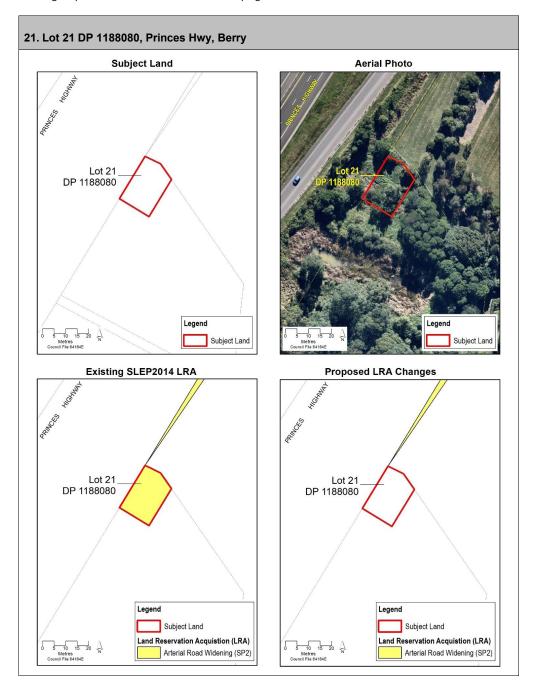




**Issue and Justification:** The Land Reservation Acquisition (LRA) mapping layer currently applies to part of the subject land. This small portion was originally part of a larger area of land which, under SLEP 1985, was zoned Recreation 6(d) (Open Space – Reserve) and later transferred to the LRA layer under SLEP 2014 as a "best fit" arrangement. A previous housekeeping amendment (PP022) removed the LRA layer from most of the affected land on neighbouring lots as the land was no longer intended to be acquired for future public recreation areas. However, a small portion of the original LRA layer remains in Lot 6 DP 1156684 as well as in the road reserve along George Evans Rd (UPN 116113) and Yalwal Rd (UPN 89415). This portion of the LRA layer should also be removed.

**Proposed Amendment:** Remove the LRA layer from Lot 6 DP 1156684 and from George Evans Rd (UPN 116113) and Yalwal Rd (UPN 89415).



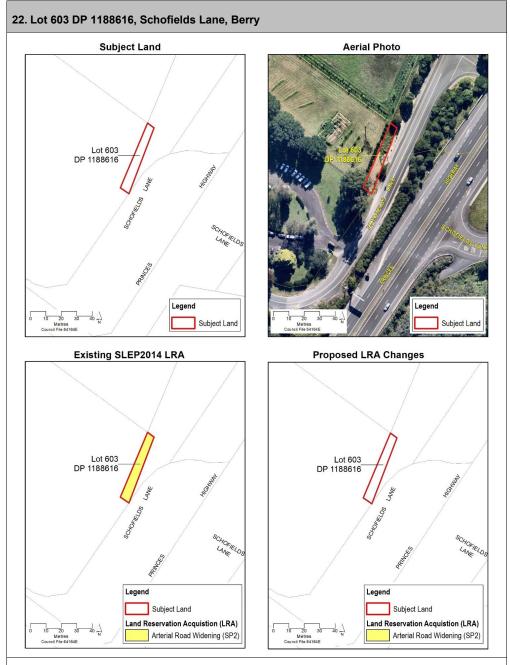




**Issue and Justification:** The Land Reservation Acquisition (LRA) mapping layer, associated with land intended to be acquired for future road development, currently applies to the lot. However, as this land is now in the ownership of TfNSW (nee RMS/RTA) the LRA layer is no longer required.

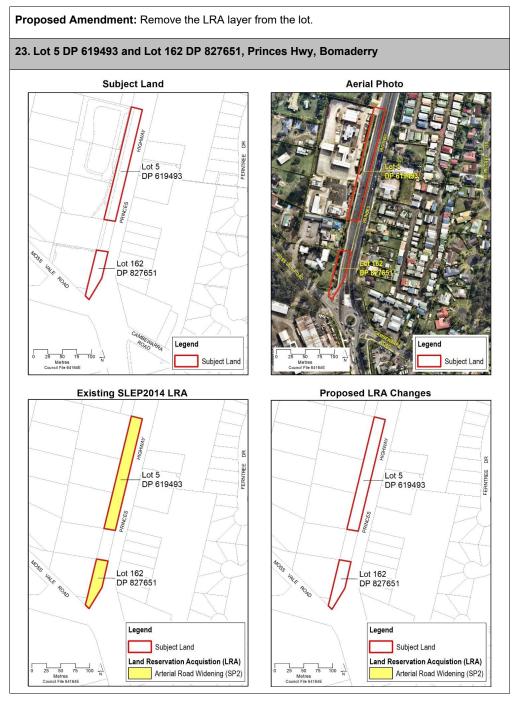
Proposed Amendment: Remove the LRA layer from the lot.





**Issue and Justification:** The Land Reservation Acquisition (LRA) mapping layer, associated with land intended to be acquired for future road development, currently applies to the lot. However, as this land is now in the ownership of TfNSW (nee RMS/RTA) the LRA layer is no longer required.



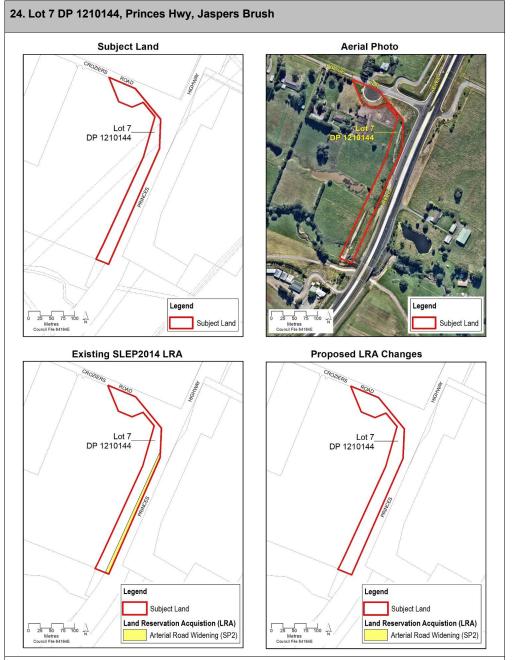




**Issue and Justification:** The Land Reservation Acquisition (LRA) mapping layer, associated with land intended to be acquired for future road development, currently applies to the lots. However, as this land is now in the ownership of TfNSW (nee RMS/RTA) the LRA layer is no longer required.

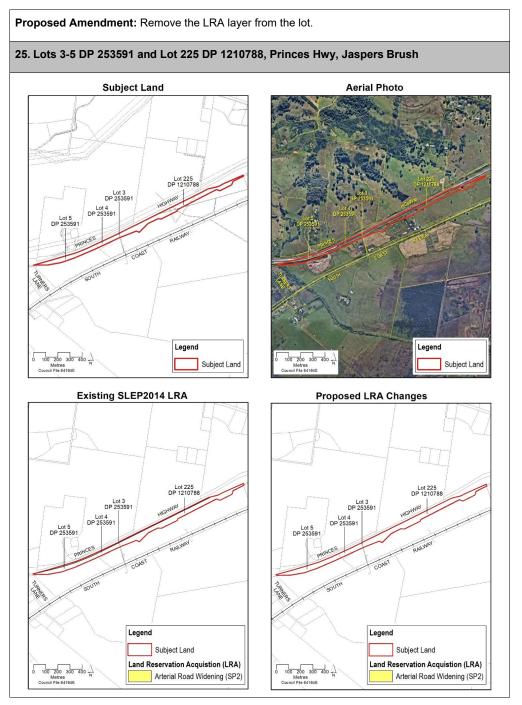
Proposed Amendment: Remove the LRA layer from each lot.





**Issue and Justification:** The Land Reservation Acquisition (LRA) mapping layer, associated with land intended to be acquired for future road development, currently applies to part of the lot. However, as this land is now in the ownership of TfNSW (nee RMS/RTA) the LRA layer is no longer required.





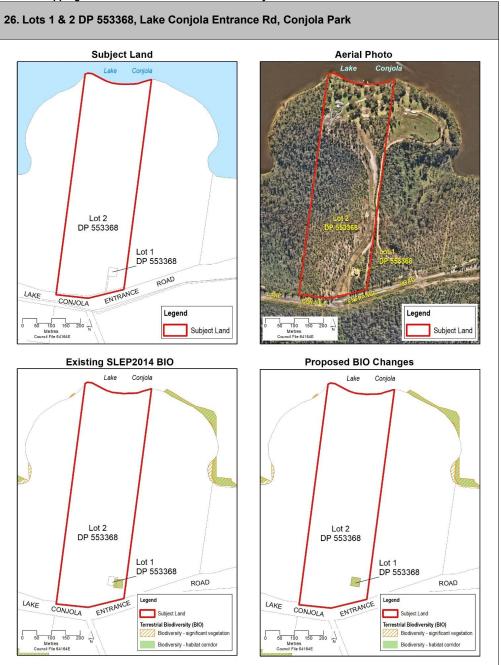


**Issue and Justification:** The Land Reservation Acquisition (LRA) mapping layer, associated with land intended to be acquired for future road development, currently applies to part of the lots. However, as this land is now in the ownership of TfNSW (nee RMS/RTA) the LRA layer is no longer required.

Proposed Amendment: Remove the LRA layer from each lot.



Table 9: Mapping Amendments – Terrestrial Biodiversity

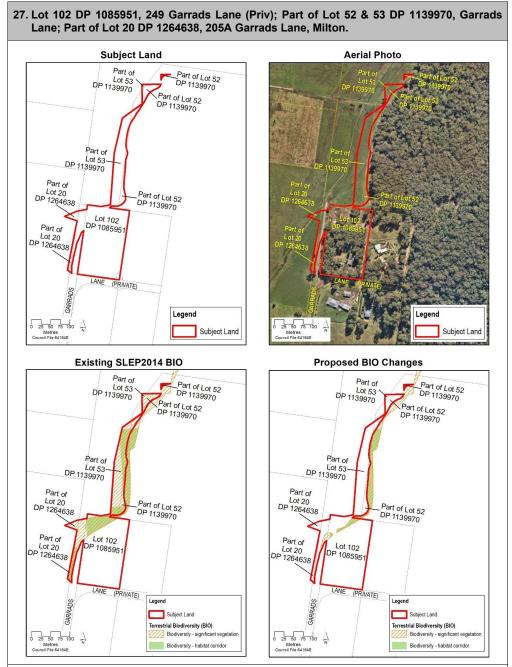




**Issue and Justification:** Terrestrial Biodiversity layers (habitat corridor, significant vegetation) have shifted outside of cadastre boundary (for Lot 1 DP 553368). These layers should be realigned with the relevant lot.

**Proposed Amendment:** Realign Terrestrial Biodiversity layers to ensure they fit entirely within Lot 1 and are removed from Lot 2.





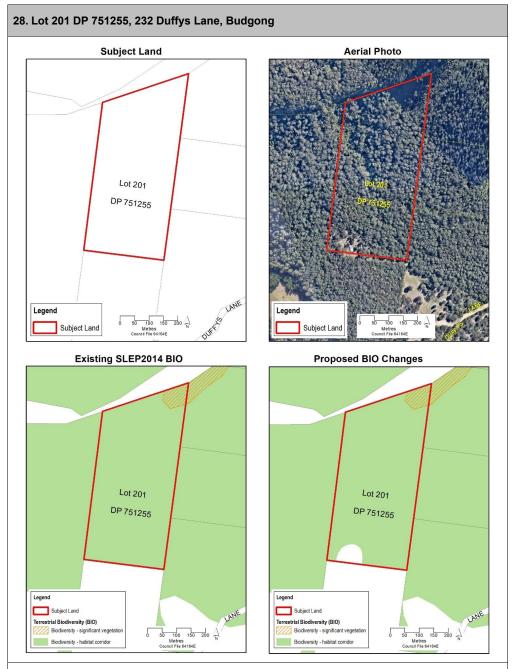
**Issue and Justification:** Council received a request from the landowner at Lot 102 DP 1085951 for removal of the Terrestrial Biodiversity (TB) layers (habitat corridor, significant vegetation) from the lot as much of the land where these layers apply is already cleared. Some, but not all, of the land



where the existing TB layers apply has been identified as containing vegetation classified as an Endangered Ecological Community (EEC) under the *Biodiversity Conservation Act 2016*. Upon consideration of the request, it would be acceptable to refine but not entirely remove the TB layer so that this layer still captures the EEC where it has been identified but excludes cleared areas. As part of the refinement of the TB layers, it is considered to be appropriate to also follow the same approach on adjacent lots.

**Proposed Amendment:** Refine TB layer to generally exclude cleared areas but retain the TB layer over identified EEC areas.





**Issue and Justification:** Council received a request from the landowner at Lot 201 DP 751255 for removal of the Terrestrial Biodiversity (TB) layer (habitat corridor) to reflect the cleared area near the southwest corner of the lot, in a similar manner to the approach taken to other properties nearby.



Upon consideration of the request, it would be acceptable to remove TB layer (habitat corridor) from the cleared area only, but retain existing TB layers over the remainder of the lot. It is also worth noting that there are Category 2 streams either side of the cleared area. A 40m buffer from the western branch encroaches into the cleared area, therefore a portion of this cleared area may still be covered by the terrestrial biodiversity clause 7.5(2)(b) in SLEP 2014.

**Proposed Amendment:** Refine TB layer (habitat corridor) to generally exclude the cleared areas of the lot.



Table 10: Mapping Amendments - Miscellaneous

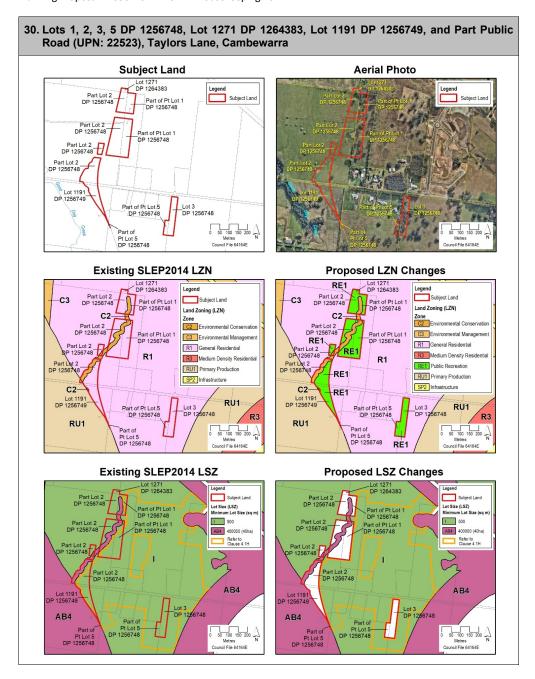




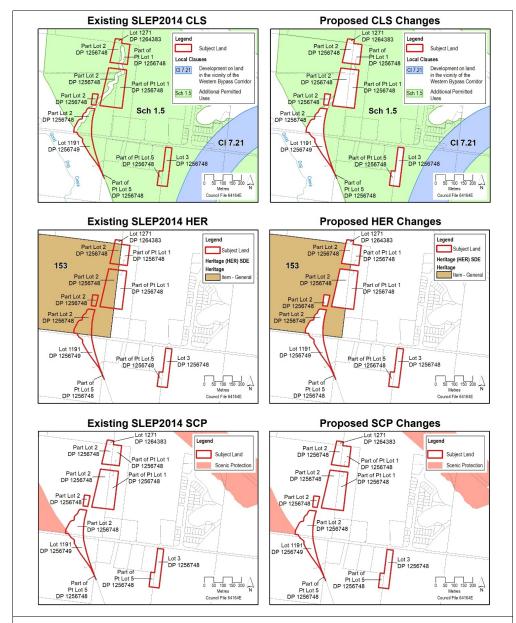
**Issue and Justification:** The Clauses layer (CL 7.21) extends slightly into the subject lots creating a 'slither' at their northern boundaries. This slither of the Clauses layer is not required on the subject lots and should therefore be removed to provide greater certainty for landowners.

Proposed Amendment: Remove the Clauses layer (CL 7.21) from Lots 7-10 DP 271072.









**Issue and Justification:** These lots are located in the Moss Vale Road South Urban Release Area and have been acquired by Council for open space/recreation. Part of each of these lots is currently zoned R1 General Residential but this should be updated to reflect ownership and intended future use. Corresponding amendments to other mapping layers such as Minimum Lot Size (LSZ) and Clauses (CLS) should also be made. Additionally, the Heritage mapping layer applies to Lot 2 DP 1256748. The neighbouring property (Lot 7 DP 1256748) contains a heritage item (Evison's Dairy Farm Complex) and prior to subdivision the land that is now Lot 2 was part of Lot 7. The heritage item



is not located on Lot 2, therefore the Heritage mapping layer is not required. The Heritage mapping layer and details listed under Schedule 5 of SLEP 2014 will remain applicable to Lot 7. There are also small portions of RU1 Primary Production and the Scenic Protection Area (SCP) layer on Lot 2 DP 1256748. These layers are very minor in extent and can be amended for consistency with the rest of the lot.

**Proposed Amendment:** On each lot, rezone the R1 General Residential portion to RE1 Public Recreation and remove the minimum lot size layer from the land to be rezoned RE1, which includes modifying LSZ Clauses 4.1H boundary. Remove Clauses layer (Sch 1.5) from each lot. Additionally in relation to Lot 2 DP 1256748, rezone RU1 portion to C2 Environmental Conservation, remove SCP layer, remove Heritage layer.

#### 3.3 Changes to Existing Provisions – Instrument and Mapping

Five (5) items have been identified for amendment that relate to both the instrument (Schedule 5 of SLEP 2014) and the associated heritage mapping (HER). These amendments are outlined in **Table 11**, with proposed changes to the instrument identified in red.

Table 11: Instrument and Mapping Amendments - Heritage

1. Lot 10 & 11 DP 1080453, 10 West Berry Street and 3 Holme Street, Terara Schedule 5 Heritage Item No. 475: "Solway House"





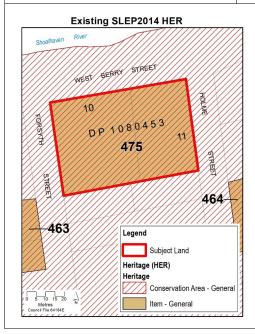
**Issue and Justification:** Both lots are identified under Schedule 5 of SLEP 2014 as the location of heritage item No. 475 'Solway House'. However, following a boundary adjustment in 2005 Solway House is now located wholly within Lot 10 DP 1080453. The land that is now Lot 11 DP 1080453 was previously the location of a vegetable garden but this vegetable garden no longer exists, and in any case does not form part of the heritage significance of Solway House. Lot 11 DP 1080453 does not

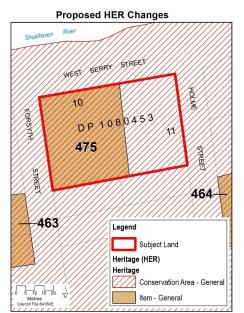


possess heritage significance associated with Solway House and the property description for item 475 under Schedule 5 of SLEP 2014 should be amended accordingly. However, Lot 11 DP 1080453 will remain within the Terara Village Heritage Conservation Area.

**Proposed Amendment:** Update the property description for item 475 under Schedule 5 SLEP 2014 to remove Lot 11 DP 1080453 and update Heritage Map (Sheet HER_019C) to remove the Heritage overlay from Lot 11 DP 1080453.

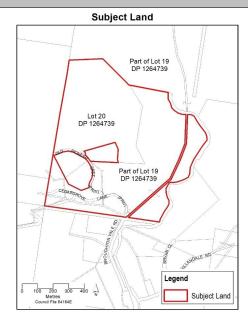
Existing Schedule 5	Proposed Schedule 5
Item No: 475	Item No: 475
Item: "Solway House"—late Victorian Brick Residence and Store	Item: "Solway House"—late Victorian Brick Residence and Store
Address: 10 West Berry Street and 3 Holme	Address: 10 West Berry Street and 3 Holme Street
Street	Locality: Terara
Locality: Terara	Property Description: Lots 10 and 11, DP
Property Description: Lots 10 and 11, DP	1080453
1080453	Significance: Local
Significance: Local	

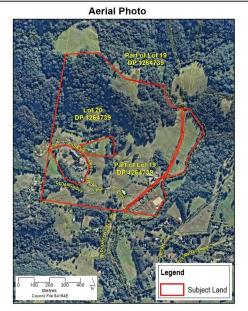






# 2. Lot 19 & 20 DP 1264739, Old Pioneer Cst (Priv), Broughton Vale Schedule 5 Heritage Item No. 143: Broughton Vale Cemetery



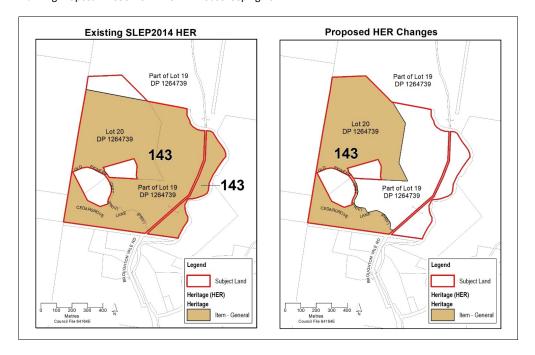


**Issue and Justification:** Under Schedule 5 of SLEP 2014, Broughton Vale Cemetary (Item 143) is currently identified as being located at Lot 1934 DP 1100783 and the corresponding Heritage Map layer reflects this information. However, following subdivision in 2020, this information is no longer accurate and needs to be updated. The Heritage Map currently affects part of Lot 19 & 20 DP 1264739 but this is based on the boundary of the former Lot 1934 DP 1100783. Broughton Vale Cemetery is located wholly within Lot 20 DP 1264739. Therefore, Schedule 5 of SLEP 2014 and the Heritage Map should be amended accordingly.

**Proposed Amendment:** Update the address and property description for item 143 under Schedule 5 SLEP 2014 and update Heritage Map (Sheet HER_018) to remove this layer from Lot 19 DP 1264739 and extend across the entirety of Lot 20 DP 1264739.

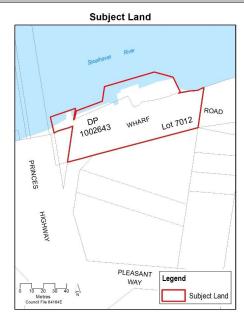
Existing Schedule 5	Proposed Schedule 5
Item No: 143	Item No: 143
Item: Broughton Vale Cemetery	Item: Broughton Vale Cemetery
Address: 350 Broughton Vale Road	Address: 350 Broughton Vale Road Old Pioneer
Locality: Broughton Vale	Crst (Priv)
Property Description: Lot 1934, DP	Locality: Broughton Vale
1100783	Property Description: Lot 1934, DP 1100783 Lot
Significance: Local	20 DP 1264739
	Significance: Local







Lot 7012 DP 1002643 and Part Waterway, Wharf Rd, Nowra
 Schedule 5 Archaelogical Site No. A7: Nowra Wharf
 Schedule 5 Heritage Item No. 407: Former Nowra Sailing Club site and Timber Wharf





**Issue and Justification:** The Heritage Map and item descriptions for Heritage Item 407 and Archaeological Site A7 under Schedule 5 in SLEP 2014 are to be modified as a result of a Council resolution (MIN21.604). The intention of this resolution, as it relates to Heritage Item 407 and Archaeological Site A7, is to identify the Public Wharf and curtilage and exclude the foreshore reserve.

In light of the above resolution, advice was sought from Louise Thom Heritage (**Attachment E**) to help identify an appropriate revised description of the heritage item, define the extent of its curtilage, and to revise the Heritage Map accordingly.

**Proposed Amendment:** Update the item descriptions for Items 407 and A7 under Schedule 5 in SLEP 2014 and amend the relevant Heritage Map (HER_013E).

Existing Schedule 5	Proposed Schedule 5	
Item No: A7	Item No: A7	
Item: Nowra Wharf	Item: Nowra Wharf, former Illawarra Steam	
Address: 6 Wharf Road	Navigation Co store and wharf and former Nowra Sailing Club	
Locality: Nowra	Address: 6 Wharf Road	
<b>Property Description:</b> Lot 7012, DP 1002643 and adjacent waterway	Locality: Nowra	
Significance: Local	<b>Property Description:</b> Part Lot 7012, DP 1002643 and adjacent waterway	
	Significance: Local	



Item No: 407

Item: Former Nowra Sailing Club site and

**Timber Wharf** 

Address: 6 Wharf Road

Locality: Nowra

Property Description: Lot 7012, DP

1002643 and adjacent waterway

Significance: Local

Item No: 407

Item: Former Nowra Sailing Club site and Timber Wharf Nowra Wharf, former Illawarra Steam Navigation Co store and wharf and former Nowra Sailing Club

Sailing Club

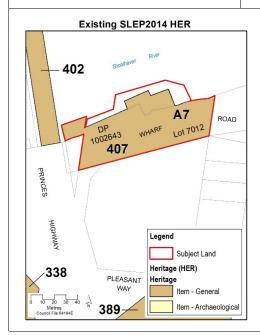
Address: 6 Wharf Road

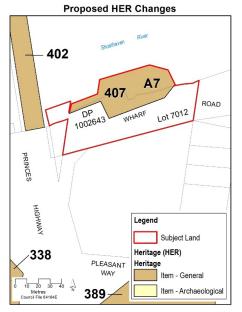
Locality: Nowra

Property Description: Part Lot 7012, DP 1002643

and adjacent waterway

Significance: Local







#### 4. Lot 3 DP 1154597, 50 BTU Rd, Nowra Hill

# DP 1154597 Lot 3 BTU ROAD PRINCES HIGHWAY BY O STI DIO 150 200 Metres Council File 64164E



**Issue and Justification:** A Heritage Assessment of the subject site, prepared by Louise Thom Heritage, found that: the site of the former Torpedo Workshop at 50 BTU Road, Nowra Hill is considered to have heritage value for its historic, technological and research potential and is rare in the Shoalhaven. 50 BTU Road, Nowra Hill has heritage value at a local level and is recommended to be included in the heritage schedule of Shoalhaven Local Environmental Plan 2014 as a heritage item of local significance (see **Attachment F**).

At its Ordinary Meeting on 1 February 2022 (MIN22.102), Council resolved to:

Endorse the progression of an amendment to Schedule 5 of Shoalhaven LEP 2014 to include 50 BTU Road, Nowra Hill as an item of environmental heritage, as part of the next appropriate housekeeping amendment.

**Proposed Amendment:** As per Council resolution MIN22.102 and the recommendation of the Heritage Assessment Report, the Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill should be listed in Schedule 5 of SLEP 2014 as a heritage item of local significance. The listing should cover the whole site to protect the significant layout as well as significant structures of the original WWII facility. Update the Heritage Map (Sheet HER_013F and HER_14C) with the heritage layer applied to the entire site.

#### **Proposed Schedule 5**

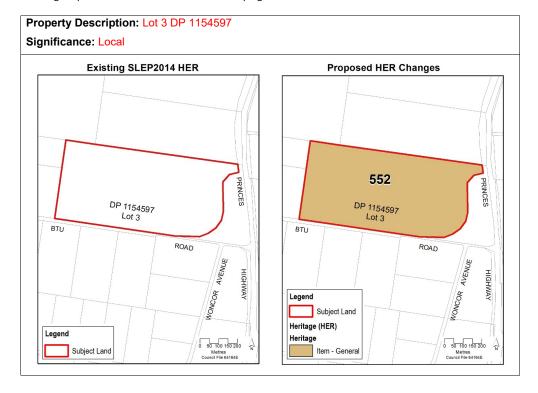
Item No: 552

Item: Former BTU Torpedo Workshop: WWII structures including Maintenance Workshop, 4 Torpedo Runkers, 1 War Head Bunker and 1 Compresses House and their layout on the site.

Bunkers, 1 War Head Bunker and 1 Compressor House and their layout on the site.

Address: 50 BTU Road Locality: Nowra Hill







# 5. Lot 23 DP 375126, 10 King Street, Berry Schedule 5 Heritage Item No. 44

# Subject Land 23 DP 375126 Subject Land Council Fize SITISE



**Issue and Justification:** Heritage Item 44 under Schedule 5 of SLEP 2014 is described as a turpentine tree of significant height and age located at Lot 23 DP 375126. However, this tree was removed in 2005 when works associated with development consent DA05/1696 were carried out. As the tree the subject of the heritage listing no longer exists, the heritage listing should be removed.

**Proposed Amendment:** Remove the heritage item from Schedule 5 of SLEP 2014 and remove the associated mapping.

#### **Proposed Schedule 5**

Item No: 44

Item: Syncarpia glomulifera (Turpentine tree)

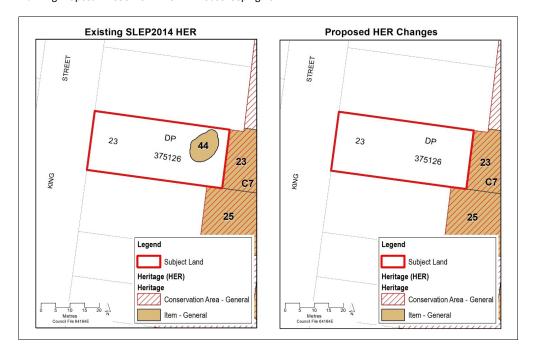
Address: 40 King Street

Locality: Berry

Property Description: Part of Lot 23, DP 375126

Significance: Local







#### 4 Part 3 – Justification

#### 4.1 Need for the Planning Proposal (Section A)

#### 4.1.1 Is the Planning Proposal a result of any strategic study or report?

While most of these amendments are not the result of a strategic study or report, they are consistent with Council's policy position and will help achieve the expected outcomes of SLEP 2014. The proposed amendments cover a range of mapping and instrument related matters, which have been identified as housekeeping issues that need to be addressed to ensure that the SLEP 2014 operates as originally intended or to improve its operations. Instrument and Mapping Items 3 and 4 of this PP are each supported by a Heritage Assessment or professional heritage advice (Attachment E and Attachment F).

# 4.1.2 Is the Planning Proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

Yes. The PP is the best and only means of addressing the instrument adjustments, mapping errors and anomalies that have been identified within SLEP 2014.

There is no other way to achieve the required outcomes.

#### 4.2 Relationship to strategic planning framework (Section B)

# 4.2.1 Is the Planning Proposal consistent with the objectives and actions contained within the applicable regional or sub-regional strategy (including the Sydney Metropolitan Strategy and exhibited draft strategies)?

Yes. The PP is consistent with the objectives and actions of the Illawarra-Shoalhaven Regional Plan (ISRP) 2041. The plan applies to the whole Shoalhaven Local Government Area (LGA) and aims to grow the economy, provide affordable housing, secure agricultural land, build infrastructure and protect the natural and cultural environments.

The proposed amendments will better align SLEP 2014 with the aims of this plan and cater for future development more effectively by way of improving the efficiency and operational integrity of the instrument which will enable for more streamlined processes.

# 4.2.2 Is the Planning Proposal consistent with the local council's Community Strategic Plan, or other local strategic plan?

#### Shoalhaven 2027

The PP is consistent with Council's Community Strategic Plan, Shoalhaven 2027, and the relevant themes and actions below:

- Theme 1: Resilient, safe and inclusive communities
  - 1.3 Support active, healthy liveable communities.
- Theme 2: Sustainable, liveable environments
  - 2.1 Improve and maintain road transport infrastructure;
  - 2.2 Plan and manage appropriate and sustainable development;
  - 2.3 Protect and showcase the natural environment.
- Theme 3: Prosperous communities
  - 3.1 Maintain and grow a robust economy with vibrant towns and village.
- Theme 4: Responsible governance



- 4.1 Deliver reliable services;
- 4.3 Inform and engage with the community about the decisions that affect their lives.

#### Shoalhaven 2040 Local Strategic Planning Statement

The Shoalhaven Local Strategic Planning Statement (LSPS) sets out the vision and priorities for land use planning in Shoalhaven over the next 20 years. The PP is consistent with the Shoalhaven LSPS and the relevant planning priorities outlined in the LSPS, including:

- Planning Priority 10: Protecting the environment
- Planning Priority 13: Protecting and enhancing neighbourhoods
- Planning Priority 14: Heritage items and places CW14.1 Administration and management of heritage items, heritage conservation areas, and archaeological sites

#### Other Local Strategic Plans

Given the housekeeping nature of the PP, the PP is considered consistent with Council's other Local Strategic Plans:

- Shoalhaven Growth Management Strategy
- Nowra Bomaderry Structure Plan
- Jervis Bay Settlement Strategy
- Milton Ulladulla Structure Plan
- Shoalhaven Affordable Housing Strategy

# 4.2.3 Is the Planning Proposal consistent with applicable state environmental planning policies?

The PP is consistent with the applicable State Environmental Planning Policies (SEPPs). A full list of SEPPs is provided at **Attachment C**.

#### SEPP (Resilience and Hazards) 2021

Chapter 2 of the SEPP sets out matters for consideration for development in the coastal zone. A number of residentially zoned and non-residentially zoned lots in the PP fall within the coastal zone area, as defined by the *Coastal Management Act 2016*.

There are no provisions in this SEPP that directly apply to the PP, however it is noted that the SEPP will need to be taken into consideration as part of any future development application on the land. This includes Clause 16 which requires the Shoalhaven Coastal Zone Management Plan to be considered prior to the issuing of development consent for a development application in the coastal zone.

#### Exempt and Complying Development Codes 2008

The SEPP sets out a number of Codes which enables certain development to be undertaken without Council approval via the exempt or complying development streams.

The Codes SEPP applies to this PP as a heritage listing or C2 Environmental Conservation zone (for example) effectively 'turn off' most forms of complying development under the SEPP. This means that development that is not exempt will require full merit assessment by Council. Other amendments in this PP that refine certain mapping layers, for example Mapping Items 17, 27 and 28, will assist in the use of Codes SEPP.

#### SEPP (Biodiversity and Conservation) 2021



Relevant sections in this SEPP include: Chapter 2 which seeks to protect the biodiversity values of trees and other vegetation in non-rural areas in Shoalhaven, as well as the amenity they provide; and Chapter 8 which applies to the development of land within the Sydney drinking water catchment. The SEPP will need to be taken into consideration prior to the clearing of native vegetation in non-rural areas, and when development is proposed in the Sydney drinking water catchment, as specified by the SEPP. However, there are no provisions in this SEPP that directly apply to this PP, and therefore the PP is not inconsistent in this regard.

# 4.2.4 Is the Planning Proposal consistent with applicable Ministerial Directions (s.9.1 directions)?

The s.9.1 Ministerial Directions are considered at  $\bf Attachment \ D$  and those specifically relevant to this PP are discussed in greater detail below.

#### Direction 1.1 Implementation of Regional Plans

The Illawarra Shoalhaven Regional Plan (ISRP) applies to the Shoalhaven Local Government Area. The PP is consistent with the ISRP as discussed in Section 4.2.1 above. The PP is therefore consistent with this direction.

#### Direction 3.1 Conservation Zones

This direction applies as the PP affects land within a conservation zone or land otherwise identified for environmental conservation or protection. PP058 intends to alter existing conservation zones through the following amendments:

Mapping Item 8	Rezone some land zoned C2 Environmental Conservation to SP2 Infrastructure (Water Supply System) and rezone other land zoned SP2 Infrastructure (Water Supply System) to C2 Environmental Conservation.
Mapping Item 11	Rezone some land zoned C2 Environmental Conservation to SP2 Infrastructure (Water Supply System) and rezone other land zoned SP2 Infrastructure (Water Supply System) to C2 Environmental Conservation.
Mapping Item 12	Rezone land zoned RE1 Public Recreation to C2 Environmental Conservation.
Mapping Item 13	Rezone land zoned RE1 Public Recreation to C2 Environmental Conservation.
Mapping Item 14	Rezone land zoned R1 General residential to C2 Environmental Conservation.
Mapping Item 15	Rezone land zoned R1 General residential to C2 Environmental Conservation.



Mapping Item 17	Tidying up 'slithers' including land use zone C2 Environmental Conservation and Terrestrial Biodiversity layers by snapping these layers to relevant lot boundaries.
Mapping Item 26	Realign Terrestrial Biodiversity layers to ensure they fit entirely within Lot 1 and are removed from Lot 2.
Mapping Item 27	Refine Terrestrial Biodiversity layers to generally exclude cleared areas but retain a mostly contiguous overlay that captures identified EEC areas.
Mapping Item 28	Refine Terrestrial Biodiversity layer to generally exclude cleared areas in the southwest corner of the lot.
Mapping Item 30	Rezone small area of RU1 Primary Production to C2 Environmental Conservation.

The majority of the above amendments are either neutral or beneficial in terms of contributing to land for environmental conservation.

The PP is considered to be generally consistent with this direction. Where the amendment involves the modification of development standards that apply to the land, for example by refining the Terrestrial Biodiversity layers on land in conservation zones (Items 27 and 28), these changes are considered to be of minor significance as the land in question has been cleared.

#### **Direction 3.2 Heritage Conservation**

This direction applies as the PP is proposing to amend the listing and associated mapping of heritage items within Schedule 5 of SLEP 2014 through the following amendments:

Mapping Item 30	Refine Heritage layer by removing it from Lot 2 DP 1256748.
Instrument and Mapping Item 1	Update the property description for item 475 under Schedule 5 SLEP 2014 to remove Lot 11 DP 1080453 and update Heritage Map (Sheet HER_019C) to remove the Heritage overlay from Lot 11 DP 1080453.
Instrument and Mapping Item 2	Update the address and property description for item 143 under Schedule 5 SLEP 2014 and update Heritage Map (Sheet HER_018) to remove the Heritage overlay from Lot 19 DP 1264739 and extend across the entirety of Lot 20 DP 1264739.
Instrument and Mapping Item 3	Update the item descriptions for Items 407 and A7 under Schedule 5 in SLEP 2014 and amend the relevant Heritage Map (HER_013E).
Instrument and	List Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill under Schedule 5 of SLEP 2014 as a heritage item of local significance and apply the Heritage Map (Sheet HER_013F and HER_14C) to the entire site.



Mapping Item 4	
Instrument and Mapping Item 5	Remove the heritage item from Schedule 5 of SLEP 2014 and remove the associated mapping.

The PP is generally consistent with this direction as it will strengthen the conservation of heritage items within the Shoalhaven Local Government Area. This will be achieved through ensuring Council's heritage listings and associated mapping are accurate and reflect current data on both Council's and Heritage NSW's websites. The proposed changes include both the listing and delisting of heritage items, as well as changes to the description of existing items.

Those items that are inconsistent with the direction tend to be the result of administrative errors or physical changes (e.g. subdivision) that have altered the heritage significance of the subject land and are either justified by a heritage assessment report or are considered to be of minor impact.

#### **Direction 3.3 Sydney Drinking Water Catchments**

This direction applies as Mapping Items 3, 5 and 6 in this PP relate to land within the Sydney Drinking Water Catchment. These amendments make changes to the minimum lot size for consistency with the applicable land use zone or to be better aligned with cadastral boundaries. These amendments are not inconsistent with the direction and are of minor significance. Preliminary consultation has been undertaken with WaterNSW, in line with the requirements of this direction (see **Attachment G**). Refer to Section 4.4.2 of the PP for more information.

#### Direction 4.1 Flooding

This direction applies as the PP seeks to alter planning provisions for land that is identified as flood prone. In addition, Mapping Items 1, 11 and 17 (in the table below) propose to rezone land from a Special Use, Special Purpose, Recreation, Rural or Environmental Protection Zone to a Residential, Business, Industrial, Special Use or Special Purpose Zone, which is considered inconsistent with the direction.

Mapping Item 1	Rezone part of the lot from RE1 Public Recreation to R3 Medium Density Residential.
Mapping Item 11	Rezone land from SP1 Special Activities and C2 Environmental Conservation to SP2 Infrastructure (Sewerage System).
Mapping Item 17	Tidy up slithers, including rezoning some C2 Environmental Conservation land to R1 General Residential.

Given the housekeeping nature of the PP, the provisions that are inconsistent are considered to be of minor significance. Any future development carried out on the future residential lots will require development consent, which will require consideration of environmental constraints, such as flooding, as part of the development assessment process.



#### Direction 4.2 Coastal Management

This direction applies as the PP affects land within the coastal zone, as defined under the *Coastal Management Act 2016*. Additionally, Mapping Items 19 and 27 (set out in the table below) apply to land affected by coastal hazards and coastal wetlands, respectively.

Mapping Rei	Remove the LRA layer from Lot CP SP 56839. (Coastal hazards)	
	Mapping Item 27	Refine TB layer to generally exclude cleared areas but to retain a contiguous TB overlay that captures identified EEC areas. (Lot 53 coastal wetlands)

However, the relevant amendments:

- Do not make changes relevant to/inconsistent with the Coastal Management Act 2016, NSW Coastal Management Manual and associated Toolkit, NSW Coastal Design Guidelines 2003 or any Coastal Zone Management Plan certified by the Minister or under the Coastal Protection Act 1979.
- Do not seek to amend any maps under chapter 2 of the State Environmental Planning Policy (Resilience and Hazards) 2021.
- Do not rezone land to enable increased or more intensive development on applicable land specified in the direction.

The PP is therefore not inconsistent with this direction.

#### Direction 4.3 Planning for Bushfire Protection

The direction applies as the PP affects land across the LGA that is (or is in proximity to) land mapped as bushfire prone land. The PP:

- · Has regard to Planning for Bushfire Protection 2019.
- Does not result in controls that place inappropriate developments in hazardous areas.
- Does not prohibit bushfire hazard reduction within an APZ.

Consultation is expected to be undertaken with the NSW Rural Fire Service following receipt of a Gateway determination, and prior to undertaking community consultation.

The PP is not inconsistent with this direction.

#### Direction 4.4 Remediation of Contaminated Land

This direction applies as the PP relates to various land across the City, some of which may be potentially contaminated. The PP is not inconsistent with this direction as the proposed changes are of a housekeeping nature and any development assessment process for future development would consider these matters (as relevant).

#### Direction 4.5 Acid Sulfate Soils

This direction applies as the PP affects land that has a probability of containing acid sulfate soils as shown on the Acid Sulfate Soils Map.

The PP is considered consistent as it:

- Does not propose to introduce provisions to regulate works in acid sulfate soils.
- Does not proposed to intensify land uses on land identified as having a probability of containing acid sulfate soils on the Acid Sulfate Soils Planning Maps.



The PP is therefore not inconsistent with this direction.

#### Direction 5.1 Integrating Land Use and Transport

This direction applies as the PP proposes to create, alter or remove a zone or provision relating to urban land, including land zoned for residential, business, industrial, village or tourist purposes.

The PP is not inconsistent with this direction as the proposed changes are of a housekeeping nature and are not inconsistent with the aims, objectives and principles of *Improving Transport Choice – Guidelines for Planning and Development 2001*, and *The Right Place for Business and Services – Planning Policy 2001*.

#### Direction 5.2 Reserving Land for Public Purposes

The direction requires the approval of the Secretary or his delegate of the Department of Planning and Environment for planning proposals that seek to create new zonings or reservations of land for public purposes. The direction applies as the PP seeks to create, alter or remove existing zonings or reservations of land for public purposes. These rezonings are of a housekeeping nature and respond to changes in land ownership or intended future uses of the land. Further consultation will be undertaken with relevant public authorities as part of the Gateway process. The PP is not inconsistent with this direction.

#### Direction 5.3 Development Near Regulated Airports and Defence Airfields

This direction requires PPs to ensure the effective and safe operation of regulated airports and defence airfields and ensure development does not compromise aircraft operations or is adversely affected by aircraft noise.

The direction isn't clear what 'near' means. There are a few items in this PP that could be considered 'near' HMAS Albatross air station, however, these amendments are of a housekeeping nature only and do not impact on the operations of any nearby airfield. As such, it is considered that the PP is not inconsistent with this direction.

#### Direction 6.1 Residential Zones

This direction applies as the PP affects land within an existing residential zone. The PP is generally consistent with the objectives of this direction. The amendments are of a housekeeping nature and seek to address anomalies and improve the operation of SLEP 2014.

The following mapping changes may be considered inconsistent with this direction, specifically part 2(b), although the departure is of minor significance as discussed below:

Mapping Item 7	Rezone R5 Large Lot Residential land to SP2 Infrastructure (Road).
Mapping Item 14	Rezone R1 General Residential land to C2 Environmental Conservation and apply minimum lot size AB4 (40ha).
Mapping Item 15	Rezone R1 General Residential land to C2 Environmental Conservation and apply minimum lot size AB4 (40ha).
Mapping Item 17	Tidy up slithers, including rezoning some R1 General Residential land.



Mapping Item 30	Rezone R1 General Residential land to RE1 Public Recreation.
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Whilst the PP contains provisions which will reduce the permissible residential density of land in a general sense, this only relates to a handful of lots across the City and the land generally cannot be developed for that purpose. Given there are significant residential development opportunities available across Nowra-Bomaderry and Milton-Ulladulla in infill areas and endorsed Urban Release Areas, the departure is considered of minor significance. Additionally, much of the land is being rezoned from residential for the purpose of established and/or dedicated public recreation and services, which will contribute to improving the quality of life of surrounding residents. There are also a number of other items in this PP which increase the amount of residentially-zoned land.

#### Direction 7.1 Business and Industrial Zones

This direction applies as the PP affects land within an existing or proposed business or industrial zone. The PP is generally consistent with the direction as it:

- Gives effect to the objectives of Direction 1.1, including encourage employment growth in suitable locations, and protect employment land in business and industrial zones;
- · Retains the area and locations of existing business and industrial zones;
- Does not propose to reduce the total potential floor space area for employment uses, related public services or industrial uses in existing business or industrial zones.

Amendments to existing business or industrial zones are of a housekeeping nature and any inconsistency with 1(b) in this direction is considered to be of minor significance.

#### Direction 9.2 Rural Lands

This direction applies as the PP affects land within an existing or proposed rural or conservation zone and makes changes to the existing minimum lot size on land in those zones. In keeping with the housekeeping nature of this PP, these amendments generally address anomalies or inconsistencies in the application of land use zones or the minimum lot size or respond to changes in the ownership or intended purpose of the land. Some amendments remove rural and conservation zones but other items increase land with rural or conservation zones. These amendments are considered to be of minor significance and are set out in the table below.

Mapping Item 4	Remove minimum lot size from land zoned C1 National Park
Mapping Item 6	Remove minimum lot size from land zoned C1 National Park
Mapping Item 8	Rezone some land from C2 Environmental Conservation to SP2 and remove minimum lot size, and rezone other land from SP2 to C2 and apply minimum lot size
Mapping Item 9	Rezone land zoned SP2 to RU1 Primary Production and apply minimum lot size (40ha)



Mapping Item 10	Rezone land zoned SP2 to RU1 Primary Production and apply minimum lot size (40ha)
Mapping Item 11	Rezone some land from C2 Environmental Conservation to SP2 and remove minimum lot size, and rezone other land from SP2 to C2 and apply minimum lot size
Mapping Item 12	Rezone land zoned RE1 Public Recreation to C2 Environmental Conservation and apply minimum lot size (40ha)
Mapping Item 13	Rezone land zoned RE1 Public Recreation to C2 Environmental Conservation and apply minimum lot size (40ha)
Mapping Item 14	Rezone land zoned R1 General Residential to C2 Environmental Conservation and apply minimum lot size (40ha)
Mapping Item 15	Rezone land zoned R1 General Residential to C2 Environmental Conservation and apply minimum lot size (40ha)
Mapping Item 17	Tidy up slithers including land zoned C2 and minimum lot size layers
Mapping Item 18	Rezone land zoned SP2 to RU1 Primary Production and apply minimum lot size (40ha)
Mapping Item 30	Rezone land zoned RU1 Primary Production to C2 Environmental Conservation

The PP is generally consistent as it:

- Is consistent with the applicable strategic plans (see section 4.2.2).
- Does not result in controls that infringe upon a farmer's right to farm.
- Does not prohibit the use of rural zoned land for the purpose of agriculture and primary production.

#### 4.3 Environmental, Social and Economic Impact (Section C)

# 4.3.1 Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

The likelihood that critical or threatened species, populations or ecological communities, or their habitats will be adversely affected as a result of the PP is very low. The PP proposes to make amendments to SLEP 2014 that are of a housekeeping nature. Mapping Items 27 and 28 propose to refine Terrestrial Biodiversity mapping layers but these items are unlikely to adversely impact on threatened species or their habitat as the intent is to remove the TB layer from cleared areas only and not from areas with identified endangered ecological communities. Mapping Item 17 seeks to tidy up Terrestrial Biodiversity layers but is very minor in impact. Other proposed amendments, such as Mapping Items 12-15 seek to extend land zoned C2 Environmental Conservation which may arguably result in beneficial outcomes for threatened species, ecological communities and habitats.



Any future use of the land will consider environmental impacts as part of the development assessment process.

# 4.3.2 Are there any other likely environmental effects as a result of the Planning Proposal and how are they proposed to be managed?

Other environmental impacts are not anticipated, and any future development would consider environmental impacts as part of the development assessment process.

### 4.3.3 How has the Planning Proposal adequately addressed any social and economic effects?

The PP is likely to have positive social and economic effects due to SLEP 2014 operating in a more efficient manner which will better align the objectives of the instrument with appropriate development. Resolution of a range of mapping anomalies may also result in positive social and economic benefits through the ability to utilise the Codes SEPP for certain development.

#### 4.4 State and Commonwealth Interests (Section D)

#### 4.4.1 Is there adequate public infrastructure for the Planning Proposal?

The PP does not create additional requirements for public infrastructure. It facilitates development in areas that already have an urban zone; the public infrastructure requirements have or will be considered as these areas are considered for development.

### 4.4.2 What are the views of state and Commonwealth public authorities consulted in accordance with the Gateway determination?

Council will consult with relevant State and Commonwealth authorities in accordance with the conditions of the Gateway determination. The PP will be updated prior to public exhibition, if required, to incorporate the view of any public authority.

Consultation with WaterNSW occurred during the preparation of the PP. WaterNSW provided a response, see **Attachment G**. WaterNSW has not raised any objection regarding items 3 and 5. Whilst WaterNSW supports the intent of item 6, it has requested consultation with National Parks and Wildlife Service regarding the appropriate boundary for the zoning and minimum lot size for that item. The consultation is underway, and it would be appropriate for the Gateway determination to require formal consultation with the National Parks and Wildlife Service in this regard. WaterNSW will be sent another referral during the public exhibition period as a follow up to the initial referral.

#### 5 Part 4 – Mapping

There are a number of mapping amendments identified within this PP. These are shown in **Part 2 – Explanation of Provisions (Section 3 of this PP)**.

#### 6 Part 5 - Community Consultation

Council proposes to exhibit the PP in accordance with the requirements of Schedule 1 of the *Environmental Planning and Assessment Act 1979* and any other requirements as



determined by the Gateway determination. It is intended that an exhibition period of 28 days would apply.

The exhibition would include public notification and a package of exhibition material on Council's website.

All stakeholders, including relevant Community Consultative Bodies and any directly affected landowners, will be advised of the public exhibition arrangements.

#### 7 Part 6 - Project Timeline

The anticipated timeline for the PP is as follows:

**Table 12: Project Timeline** 

Task	Anticipated Timeframe
Commencement date (date of Gateway determination)	October 2022
Completion of Gateway determination requirements	January 2023
Public exhibition	February/March 2023
Consideration of submissions	April/May 2023
Post exhibition consideration of PP	June/July 2023
Finalisation and notification of Plan	August/September 2023



#### **ATTACHMENTS**

#### Attachment A - Evaluation Criteria for the Delegation of Plan Making Functions

#### **Local Government Area:**

Shoalhaven City Council

#### Name of draft LEP:

Shoalhaven Local Environmental Plan 2014 PP058 – 2022 Housekeeping Amendment

#### Address of Land (if applicable):

The PP applies to all land in the Shoalhaven Local Government Area.

#### Intent of draft LEP:

The intent of the Planning Proposal is to amend a number of clauses in SLEP 2014 and related mapping, to correct identified anomalies or inconsistencies within SLEP 2014 that have arisen since its commencement in 2014.

<b>Evaluation criteria for the</b>	Council Respo	Council Response D		
issuing of an	Y/N	Not relevant	Agree	Not agree
Authorisation				agree
(Note: where the matter is identified as				
relevant and the requirement has not been				
met, council is attach information to explain				
why the matter has not been addressed)				
Is the Planning Proposal consistent with the Standard Instrument Order, 2006?	Υ			
Does the Planning Proposal contain an adequate				
explanation of the intent, objectives, and	Υ			
intended outcome of the proposed amendment?				
Are appropriate maps included to identify the				
location of the site and the intent of the	Υ			
amendment?				
Does the Planning Proposal contain details	Υ			
related to proposed consultation?	ī			
Is the Planning Proposal compatible with an				
endorsed regional or sub-regional strategy or	Y			
local strategy endorsed by the Director-General?				
Does the Planning Proposal adequately address				
any consistency with all relevant S9.1 Planning	Y			
Directions?				
Is the Planning Proposal consistent with all				
relevant State Environmental Planning Policies	Y			
(SEPPs)?				



Minor Mapping Error Amendments			
Does the Planning Proposal seek to address a minor mapping error and contain all appropriate maps that clearly identify the error and the manner in which the error will be addressed?	Y		

manner in which the error will be addressed?			
Heritage LEPs			
Does the Planning Proposal seek to add or remove a local heritage item and is it supported by a strategy / study endorsed by the Heritage Officer?	Y –Instrument and Mapping Item 4 supported by Heritage Assessment; N - Instrument and Mapping Item 5 (10 King St) - no heritage report		
Does the Planning Proposal include another form of endorsement or support from the Heritage Office if there is no supporting strategy/study?	N		
Does the Planning Proposal potentially impact on item of State Heritage Significance and if so, have the views of the Heritage Office been obtained?		N/A	
Reclassifications			
Is there an associated spot rezoning with the reclassification?		N/A	
If yes to the above, is the rezoning consistent with an endorsed Plan of Management POM) or strategy?		N/A	
Is the Planning Proposal proposed to rectify an anomaly in a classification?		N/A	
Will the Planning Proposal be consistent with an adopted POM or other strategy related to the site?		N/A	
Will the draft LEP discharge any interests in public land under Section 30 of the Local Government Act, 1993?		N/A	
If so, has council identified all interests; whether any rights or interests will be extinguished; any trusts and covenants relevant to the site; and, included a copy of the title with the Planning Proposal?		N/A	
Has the council identified that it will exhibit the Planning Proposal in accordance with the Department's Practice Note (PN09-003) Classification and reclassification of public land		N/A	



through a local environmental plan and Best		
Practice Guidelines for LEPs and Council Land?		
Has council acknowledged in its Planning Proposal that a Public Hearing will be required and agree to hold one as part of its documentation?	N/A	
Spot Rezonings		
Will the proposal result in a loss of development potential for the site (i.e. reduced FSR or building height) that is not supported by an endorsed strategy?	N/A	
Is the rezoning intended to address an anomaly that has been identified following the conversion of a principal LEP into a Standard Instrument LEP format?	N/A	
Will the Planning Proposal deal with a previously deferred matter in an existing LEP and if so, does it provide enough information to explain how the issue that lead to the deferral has been addressed?	N/A	
If yes, does the Planning Proposal contain sufficient documented justification to enable the matter to proceed?	N/A	
Does the Planning Proposal create an exception to a mapped development standard?	N/A	
Section 73A matters		
Does the proposed instrument:  a. Correct an obvious error in the principal instrument consisting of a misdescription, the inconsistent numbering of provisions, a wrong cross-reference, a spelling error, a grammatical mistake, the insertion of obviously missing words, the removal of obviously unnecessary works or a formatting error?;	N/A	
b. Address matters in the principal instrument that are of a consequential, transitional, machinery or other minor nature?;	N/A	
c. Deal with matters that do not warrant compliance with the conditions precedent for the making of the instrument because they will not have any significant adverse impact on the environment or adjoining land?	N/A	
(NOTE – the Minister (or delegate) will need to form an Opinion under section 73(A)(1)(c) of the Act in order for a matter in this category to proceed).		

Any other relevant documentation e.g. letters of support from State Government agencies.



Attachment B – Council report and resolution (MIN22.XXX) supporting the PP



#### Attachment C - SEPP Checklist

SEPP	Name	Applicable	Relevant	Not inconsistent
65	Design Quality of Residential Apartment Development	✓	×	n/a
	Building Sustainability Index: BASIX 2004	<b>✓</b>	×	n/a
	Exempt and Complying Development Codes 2008	<b>√</b>	✓	Refer to s4.2.3
	Housing 2021	✓	×	n/a
	Primary Production 2021	✓	×	n/a
	Resources and Energy 2021	✓	×	n/a
	Resilience and Hazards 2021	<b>√</b>	✓	Refer to s4.2.3
	Industry and Employment 2021	✓	×	n/a
	Transport and Infrastructure 2021	<b>√</b>	×	n/a
	Biodiversity and Conservation 2021	<b>√</b>	✓	Refer to s4.2.3
	Planning Systems 2021	✓	×	n/a
	Precincts – Eastern Harbour City 2021	×	×	n/a
	Precincts – Central River City 2021	×	×	n/a
	Precincts – Western Parkland City 2021	×	×	n/a
	Precincts – Regional 2021	✓	×	n/a



#### Attachment D - s9.1 Ministerial Direction Checklist (28 February 2022 Version)

Direc	ction	Applicable	Relevant	Not inconsistent
1 P	Planning Systems			
1.1	Implementation of Regional Plans	✓	✓	Refer to s.4.2.4
1.2	Development of Aboriginal Land Council land	×	×	n/a
1.3	Approval and Referral Requirements	✓	*	n/a
1.4	Site Specific Provisions	×	*	n/a
1 P	lanning Systems – Place-based			
1.5	Parramatta Road Corridor Urban Transformation Strategy	×	*	n/a
1.6	Implementation of North West Priority Growth Area Land Use and Infrastructure Implementation Plan	×	×	n/a
1.7	Implementation of Greater Parramatta Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	×	*	n/a
1.8	Implementation of Wilton Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	×	*	n/a
1.9	Implementation of Glenfield to Macarthur Urban Renewal Corridor	×	*	n/a
1.10	Implementation of Western Sydney Aerotropolis Plan	×	*	n/a
1.11	Implementation of Bayside West Precincts 2036 Plan	×	*	n/a
1.12	Implementation of Planning Principles for the Cooks Cove Precinct	×	×	n/a
1.13	Implementation of St Leonards and Crows Nest 2036 Plan	*	*	n/a
1.14	Implementation of Greater Macarthur 2040	*	×	n/a
1.15	Implementation of the Pyrmont Peninsula Place Strategy	×	*	n/a
1.16	North West Rail Link Corridor Strategy	×	*	n/a
1.17	Implementation of the Bays West Place Strategy	×	*	n/a
2 D	esign and Place			
3 B	liodiversity and Conservation			
3.1	Conservation Zones	✓	✓	Refer to s.4.2.4
3.2	Heritage Conservation	✓	✓	Refer to s.4.2.4
3.3	Sydney Drinking Water Catchments	✓	✓	Refer to s.4.2.4
3.4	Application of C2 and C3 Zones and Environmental Overlays in Far North Coast LEPs	×	*	n/a
3.5	Recreation Vehicle Areas	×	*	n/a
4 R	esilience and Hazards			
4.1	Flooding	✓	✓	Refer to s.4.2.4



Direc	tion	Applicable	Relevant	Not inconsistent
4.2	Coastal Management	✓	✓	Refer to s.4.2.4
4.3	Planning for Bushfire Protection	✓	✓	Refer to s.4.2.4
4.4	Remediation of Contaminated Land	✓	✓	Refer to s.4.2.4
4.5	Acid Sulfate Soils	✓	✓	Refer to s.4.2.4
4.6	Mine Subsidence and Unstable Land	×	×	n/a

5 T	ransport and Infrastructure			
5.1	Integrated Land Use and Transport	✓	✓	Refer to s.4.2.4
5.2	Reserving Land for Public Purposes	✓	✓	Refer to s.4.2.4
5.3	Development Near Regulated Airports and Defence Airfields	<b>✓</b>	✓	Refer to s.4.2.4
5.4	Shooting Ranges	×	×	n/a
6 H	lousing			
6.1	Residential Zones	✓	✓	Refer to s.4.2.4
6.2	Caravan Parks and Manufactured Home Estates	✓	×	n/a
7 li	ndustry and Employment			
7.1	Business and Industrial Zones	✓	✓	Refer to s.4.2.4
7.2	Reduction in non-hosted short-term rental accommodation period	×	×	n/a
7.3	Commercial and Retail Development along the Pacific Highway, North Coast	×	×	n/a
8 F	Resources and Energy			
8.1	Mining, Petroleum Production and Extractive Industries	×	×	n/a
9 F	Primary Production			
9.1	Rural Zones	✓	×	n/a
9.2	Rural lands	✓	✓	Refer to s.4.2.4
9.3	Oyster Aquaculture	×	×	n/a
9.4	Farmland of State and Regional Significance on the NSW Far North Coast	×	×	n/a



Attachment E – Review of mapping and description for Heritage Item 407 (General): Former Nowra Sailing Club site and Timber Wharf and Heritage Item A7 (Archaeological): Nowra Wharf.





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#### Amendment to Shoalhaven Local Environmental Plan 2014

Review of mapping and description for Heritage Item 407 (General): Former Nowra Sailing Club site and Timber Wharf and Heritage Item A7 (Archaeological): Nowra Wharf.

#### Brief

A resolution by Shoalhaven City Council (MIN21.604) was made as follows:

That Council exclude Lot 263 DP 755952 and the adjacent Crown foreshore reserve as a heritage item in the proposed amendment to the Shoalhaven Local Environment Plan 2014.

Part of the intention of the above resolution is that the amended heritage listing and mapping in relation to existing heritage items 407 and A7 should exclude everything on the foreshore with the exception of the Public Wharf and curtilage.

In the light of the resolution above, we would like to ask you to assist with identifying an appropriate description of the heritage item and the extent of its curtilage.

#### Background

A report prepared in May 2020¹ provided an assessment of the significance of the site of former Illawarra Steam Navigation Co. store and wharf, Nowra Wharf, Sandstone ramp and sea walls, former Boatshed Restaurant and site of former boatshed, slipway and jetty. The report assessed their heritage significance as follows:

Nowra wharf, the site of the Nowra Sailing Club, the former Boatshed Restaurant and their setting provide important historical evidence of the early growth of Nowra and the reliance upon the Shoalhaven River for transport of goods and passengers. The original location of Nowra Wharf and the offices of the Illawarra Steamship Navigation Company on the south side of the Shoalhaven River from 1884 played a vital role in the historical development of Nowra at the end of the 19th century and the early 20th century. The former Boatshed Restaurant building has historical value as the surviving remains of Elyard's jetty, boatshed and residence, constructed between 1892 and 1906, which provided essential river transport for goods and boat hire for tourists.

The former Wharf and Sailing Club have strong association with the Illawarra Steamship Navigation Company which had its offices and a store at the wharf and was a prominent shipping company that serviced the south coast of New South Wales, Australia from 1858 to the early 1950s.

 $^{^1}$  Heritage assessment of the former Boatshed Restaurant, 10 Wharf Road, Nowra. Lots 263 and 383 DP 755952, Review of significance of Nowra Wharf, Update of heritage data sheet for Item 407 by Louise Thom Heritage dated 8/5/2020 for Shoalhaven City Council



The former Boatshed Restaurant is associated with Walter Raleigh Elyard, a saw miller and boat builder who was a known identity on the Shoalhaven River and in for his role in local affairs, as an Alderman on Nowra Council and in the Shoalhaven Agricultural Society and his association with the Graham family through his marriage to Rebecca Graham, daughter of James Graham.

There is potential for archaeological evidence relating to the former jetty and boatshed constructed by Walter Elyard. This evidence may shed light on boat building and maintenance activities of the period from 1892 to 1926. There is potential for the boatshed building to be left under the dining area addition behind the crib lock wall. There is potential for maritime archaeology to be found along the river front that relates to the Illawarra Steamship Navigation Company. The stone retaining wall along the river bank was reportedly backfilled with rubbish which has potential to provide information about daily life in 1908.

The Nowra Wharf including the stone retaining wall and slipway, former Sailing Cub site, former Boatshed Restaurant and the site of the former Elyard's jetty and boatshed and their setting are rare as a surviving grouping of riverside structures in their original location which demonstrate the historical development of Nowra that was made possible by river transport.

The Nowra Wharf, former Sailing Cub site and former Boatshed Restaurant and their setting are a good example of a grouping of interdependent riverside structures that facilitated river transport at the end of the 19th century and in the early 20th century.

#### Existing description in SLEP2014

#### Schedule 5 Environmental heritage

#### Part 1 Heritage items

Locality	Item	Address	Property description	Significance	Item no
Nowra	Former Nowra Sailing Club site and Timber Wharf		Lot 7012, DP 1002643 and adjacent waterway	Local	407

#### Part 2 Archaeological Sites

Suburb	Item	Address	Property description Significance	ltem no
Nowra	Nowra Wharf	6 Wharf Road	Lot 7012, DP 1002643 Local and adjacent waterway	A7



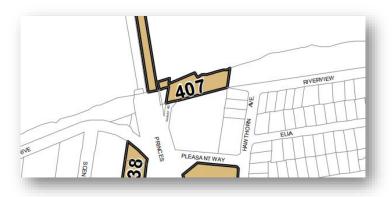


Figure 1. SLEP 2014 Heritage Map HER_013E

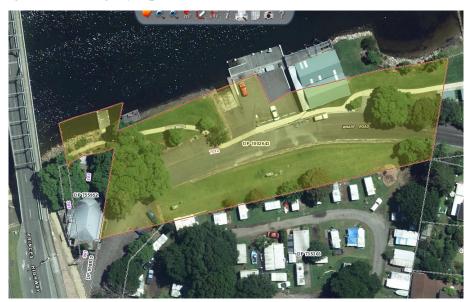


Figure 2. The area highlighted yellow is Lot 7012 DP 1002643 which is currently on schedule 5 as a heritage item and an archaeological site.



#### Mapping analysis based on significance



Figure~3. Mapping~of~zones~in~Lot~7012~and~Lots~263~and~383~and~the~adjoining~waterway.~See~Table~1~for~key~to~zones.



Table 1. Key to areas shown in Figure 3.

Zone	Description	Explanation
Area A	Heritage Curtilage of Site of former Illawarra Steam Navigation Co. store and wharf, Nowra Wharf, Sandstone ramp and sea walls,	The curtilage is based upon historic documents researched in the 2020 heritage assessment and discussions held with Senior Maritime Archaeologist Brad Duncan, Heritage NSW. According to Mr Duncan there is a very high potential for archaeology in and around the surviving wharf structures. The reclaimed land to the east is included for its potential as an archaeological site. The sea wall is included as part of the Nowra Wharf curtilage as seen in an aerial photograph from 1937 (Fig.21 in the 2020 Assessment)
Area B	Heritage Curtilage of former Boatshed Restaurant and site of former boatshed, slipway and jetty	This area has been assessed as significant however Council has determined not to include it at this time.
Area C	Remainder of Lot 7012.	The remainder of Lot 7012 has been dramatically modified and does not contribute to the heritage significance of the item.

#### Recommendations

Table 2. Recommendations for each area.

Zone	Description	Recommendation
Area A	Heritage Curtilage of Site of former Illawarra Steam Navigation Co. store and wharf, Nowra Wharf, Sandstone ramp and sea walls,	Retain as curtilage for heritage item 407 and archaeological item A7.
Area B	Heritage Curtilage of former Boatshed Restaurant and site of former boatshed, slipway and jetty	If feasible and supported by SCC, include this area at a later date.
Area C	Remainder of Lot 7012.	Remove from heritage listing



#### Revised Description in Schedule 5 of SLEP 2014

Schedule 5

#### Part 1 Heritage items

Locality	Item	Address	Property description	Significano	e Item no
Nowra	Nowra Wharf, former Illawarra Steam Navigation Co store and wharf and former Nowra Sailing Club	6 Wharf Road	Part Lot 7012, DP 1002643 and adjacent waterway	Local	407

#### Part 2 Archaeological Sites

Suburb	Item	Address	Property description	Significance	ltem no
Nowra	Nowra Wharf, former Illawarra Steam Navigation Co wharf, sandstone ramp and sea walls	6 Wharf Road	Part Lot 7012, DP 1002643 and adjacent waterway	Local	A7

#### Changes to heritage map.

Restrict shading of item 407 and A7 to zone shown as Area A in Figure 3.

#### Other recommendations

- The significance of Elyard's boatshed, residence and wharf and sea wall, should be made the subject of interpretation to capture the history of the place and make it known to the public.
   The site is adjacent to Bens Walk which provides an opportunity for interpretive information easily accessed by pedestrians.
- The State Heritage Inventory Data Sheet should be updated to reflect the changes in the heritage schedule. The statement of significance in the May 2020 report should be amended according to the new description in the heritage schedule and adopted as the statement of significance for item 407 and A7.

Louise Thom Heritage consultant 14 January 2022



Planning Proposal PP058 – SLEP 2014 – Housekeeping 2022

Attachment F - Heritage Assessment: Former BTU Torpedo Workshop





# Former BTU Torpedo Workshop

Heritage Assessment,

Timber Mill, 50 BTU Road, Nowra Hill





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Cover: Top Image: Torpedo Maintenance Workshop 1943 (Sgt.Smith)

Bottom Image: The Torpedo Workshop building in 2021

This Page: Top: Moving torpedoes on the site, torpedo storage bunker in the background.

Bottom: Torpedo storage bunker at 50 BTU Road today.

FORMER BTU TORPEDO WORKSHOP, 50 BTU RD, NOWRA HILL – HERITAGE ASSESSMENT			
ISSUE	ISSUE DESCRIPTION DATE ISSUED SENT TO		
Α	Version 1	1/10/2021	Peta Brooks, Strategic Planner,
			Shoalhaven City Council







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# 1. Executive Summary

The Base Torpedo Unit (BTU) was initially formed as part of the RAAF Air Station Nowra as part of the General Reconnaissance (Torpedo) Squadron in 1942. The BTU was responsible for training of personnel and for the maintenance, and research and development of torpedoes to be used on aircraft such as the RAAF Beaufort Bombers and USSAC and Netherlands East Indies Air Force B26 aircraft. The maintenance, storage, research and development of torpedoes was undertaken at the Torpedo Workshop which was based at the site now known as 50 BTU Road, Nowra Hill. The term Torpedo Workshop was used to describe the function of the BTU dedicated to the physical handling of torpedoes, being storage and maintenance. The buildings and structures at the Torpedo Workshop are referred to by their function, for example the Torpedo Maintenance Workshop or the Torpedo Storage Bunkers. 50 BTU Road, Nowra Hill is therefore referred to in this report as the former Torpedo Workshop, which refers to the whole site.

The Torpedo Workshop was laid out in three zones. The Torpedo Maintenance Workshop and its ancillary buildings were located in Area "A" of the site, whereas the Torpedo Storage Bunkers were scattered throughout the bush away from the workshop area in area "B". There was a 'dummy' workshop building in Area "C". A camp with accommodation, mess and recreation facilities was located to the south across BTU Road. Structures surviving from the Torpedo Workshop at 50 BTU Road include four Torpedo Storage Bunkers, one War Head Bunker, the Compressor House and the framework of the Torpedo Maintenance Workshop. Shown on a site plan in Figure 20 . There are more structures on adjoining sites but they have not been included in this assessment.

The former Torpedo Workshop site contains rare evidence of the maintenance and storage of torpedoes during WWII. The size of the facility together with the number of torpedo storage buildings surviving on the site is not known to occur elsewhere in NSW. The former Torpedo Workshop as part of the BTU is rare in the Shoalhaven as a training facility, maintenance workshop and a research and development unit for torpedoes.

The former Torpedo Workshop site has historic significance as a torpedo maintenance facility used in World War Two, representing a change in policy when Japan entered the war and became an immediate threat in the Pacific and on the home front. The site has significance as an important part of the network of defence sites on the NSW east coast. The BTU played an integral role in the training of RAAF personnel and in provision of torpedoes for use with the RAAF Beaufort Bomber aircraft. The former Torpedo Workshop site has research potential in its ability to provide evidence of the now defunct WWII practice of storage of torpedoes. The design of torpedo dump buildings, together with the site layout of the surviving structures has the potential to reveal information about the logistics of torpedo operations and about changes in the approach to ammunitions storage and movement during WWII.

The site of the former Torpedo Workshop at 50 BTU Road, Nowra Hill is considered to have heritage value for its historic, technological and research potential and is rare in the Shoalhaven. 50 BTU Road, Nowra Hill has heritage value at a local level and is recommended to be included in the heritage schedule of Shoalhaven Local Environmental Plan 2014 as a heritage item of local significance.

Shoalhaven Council should hold discussions with the owner of 50 BTU Road to determine if any significant WWII structures are proposed for alteration or removal. In the event that harm to these structures is likely then Council should consider placing an Interim Heritage Order on the site so that the LEP can be amended to include the place as a heritage item.



# 2. Introduction

## 2.1. Report Objectives

This report is intended to provide Shoalhaven City Council with a preliminary heritage assessment of the Former Torpedo Workshop, 50 BTU Road, Nowra Hill. This heritage assessment will show that the place is likely to be of heritage significance and should be included in the heritage schedule of the Shoalhaven Local Environmental Plan.

# 2.2. Methodology and Structure

This assessment of the heritage significance of 50 BTU Road, Nowra Hill follows the guidelines of the document *Assessing Heritage Significance* by Heritage NSW, 2001. It is also guided by the document *Local Government Heritage Guidelines*, also published by Heritage NSW, 2002.

The assessment of heritage significance is founded in the principles of the Australia ICOMOS Burra Charter.

# 2.3. Authorship

This report was prepared by Louise Thom, Heritage Consultant. All photographs unless otherwise specified were taken by Louise Thom. A site inspection was undertaken by Louise Thom on 28 September 2021 in the company of Rodney Jones, Acting Site Manager, Boral.

Louise Thom Has over 25 years' experience as a heritage professional and is a full member of Australia ICOMOS.

# 2.4. Report limitations

This report is by necessity limited to the study area – 50 BTU Road, Nowra Hill Lot 3 DP 1154597. At a later stage the heritage assessment should be expanded to include the three original Commonwealth acquired lots which made up the rest of the BTU site. This will be explained in more detail in the historical background.

This report does not include an assessment of historical archaeology or Aboriginal archaeology.

# 2.5. Acknowledgements

Thanks to Cris George for providing a wealth of information about the history of the BTU. Thanks to Edward Trickett and Rodney Jones from Boral for facilitating my visit to the site.

# 2.6. Terms and Acronyms

RAAF	Royal Australian Air Force
BTU	Bombing and Torpedo Unit
No.6 OTU	No.6 Operational Training Unit
USAAC	United States Army Air Corp
RNAS	Royal Navy Air Station
NAS	Naval Air Station
RAN	Royal Australian Navy



# 2.7. Location

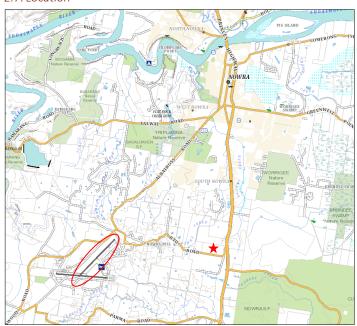


Figure 1. Location, site marked by a red star. HMAS Albatross is indicated with a red circle. (SIX Maps, 2021)

# 2.8. Study Area

This report will focus on Lot 3 DP 1154597 as shown in Figure 2. Details of the land originally purchased by the Commonwealth is contained in the history section of this report.





Figure 2. Lot 3 DP 1154597 on the north side of BTU Road, Nowra Hill (SIX Maps, 2021)

# 3. Heritage Status

## 3.1. Heritage Items in the vicinity

Intimately connected with the former Torpedo Workshop is the airbase now known as HMAS Albatross, a naval air station. HMAS Albatross is listed on Shoalhaven Local Environmental Plan 2014 schedule of heritage items. The description in schedule 5 reads:

HMAS Albatross—military defence complex and aviation museum 489A Albatross Road Nowra Hill, Lot 102, DP 842713; Lot 2, DP 1002996 Local 418

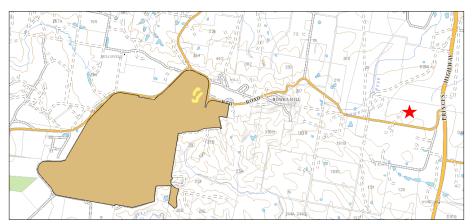


Figure 3. HMAS Albatross shown on the heritage map of Shoalhaven LEP 2014. 50 BTU Road is marked with a red star. (ePlanning Spatial Viewer)

Louise Thom Heritage

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# 4. Historical Background

## 4.1. General historical background

Aboriginal people of the Shoalhaven region have always lived in the area. Using knowledge passed down from their ancestors the Salt Water people lived comfortably off the land, the rivers and the sea until the arrival of the European settlers. After this time the life of Aboriginal people changed dramatically. The earliest European settler of significance was Alexander Berry who set up his estate on the side of Coolangatta Mountain (Cullunghutti) in the 1822-6, with a large convict and Aboriginal work force. The Berry family eventually moved the Aboriginal community from Coolangatta to Roseby Park (Orient Point).

## Early European History

George Bass had sailed past the mouth of the Shoalhaven River in 1797 but it wasn't until 1805 that government surveyor James Meehan and Lieutenant Kent inspected the Shoalhaven Valley, noting the Cedar in the area. Cedar getters started harvesting in the area from 1811.

Shoalhaven was originally noted for the timber that encouraged logging to supply the need for sleepers for the early railways. Later wool and wheat, as well as fresh vegetables and fruit were shipped to Sydney from Jervis Bay Harbour. Goods were hauled from as far away as the Highlands and Jervis Bay was considered a rival port to Sydney Harbour. Dairying became the mainstay of agriculture in the late 19th century and continued throughout the 20th century.

## Second World War, 1939-1945

On 3 September 1939 Prime Minister Robert Gordon Menzies announced the beginning of Australia's involvement in the Second World War.

Approximately one million Australian men and women served in the Second World War. Campaigns were fought against Germany and Italy in Europe, the Mediterranean and North Africa, as well as against Japan in South-East Asia and the Pacific. The war with Germany ended in May 1945 and the war with Japan in August the same year. The Royal Australian Navy (RAN) participated in operations against Italy after its entry into the war in 1940. (Australian War Memorial)

Japan entered the war in 1941 and within a year had occupied most of South-East Asia and large areas of the Pacific. When Japan bombed Darwin in March 1942 all RAN ships deployed in the Mediterranean returned to defend Australia. The Australian government responded with economic, domestic and industrial policies which gave added powers to the government for defence of Australia. The Australian government also sought the aid and friendship of the United States in defending itself. Military bases were subsequently built or expanded in Australia to accommodate the armed forces of the United States. The United States signed a Lend-Lease agreement which allowed the USA to supply food, stores and other services and Australia to reciprocate with goods and services. Included in this was work done by the Civil Constructional Corps. (Robertson and Hindmarsh Pty Ltd, 2004-2006)

Allied victories helped loosen Japan's hold on South-East Asia in 1943 and in 1944 the Australian Army began campaigns against isolated Japanese garrisons from Borneo to Bougainville. Meanwhile



the RAAF still had airmen fighting in Europe and the Middle East in the Bomber Command's offensive, of which 3,500 were to lose their lives.¹ (Australian War Memorial)

In 1941 the Women's Auxiliary Australian Air Force (WAAAF) was established along with the employment of female telegraphists, which lead to the Women's Royal Australian Naval Service (WRANS) in 1942. (Australian War Memorial)

On 22 December 1941 the War Cabinet decided that torpedoes would be manufactured on Australian shores. This decision reflected an expansion of precision mechanical engineering across Australia throughout the Second World War. (Skinner, 2021)

#### 4.2. Nowra

## **RAAF Base Nowra**

Small aircraft aviation in Nowra was centred at a place known as 'McDonalds Paddock' from as early as 1930. The civil airfield officially opened in 1935 for aero club activities and commercial aircrafts with limited passengers. (George, 2021)

In 1938 a survey of the Shoalhaven was made by the Department of Civil Aviation for the Royal Australian Air Force (RAAF) Advance Operational Base. The location chosen was known as 'Brown's Hole' on Braidwood Road and would replace the 1935 airfield which was deemed to be unsuitable. The Commonwealth acquisition of 357 acres took place in June 1939 and an additional 118 acres was added when war was declared. Although the site was developed for use by the RAAF permission was also given to Nowra Municipal Council to use the airfield for civil use. A camp for 734 personnel was constructed and the RAAF Nowra became operational in May 1942. (Royal Navy Research Archive) The cost of the construction of the Air Station was estimated to be £229,860, and was approved by the Minister for Air 10 Oct 1941. (Royal Australian Air Force, 1942)

The conversion from the civil air base was originally intended to accommodate two General Reconnaissance Squadrons however from a strategic and training viewpoint the Nowra/Jervis Bay area offered the best facilities for a Torpedo Bomber Squadron. One General Reconnaissance Squadron and the Torpedo Bomber Squadrons were to be based at Nowra with a Marine Section and Torpedo Dropping Range located at Jervis Bay for training exercise. (RAAF)

The establishment of the air base was intended to facilitate the provision of Torpedo Bomber training, which commenced on 13 August 1942. The No. 2 Beaufort Course consisting of 10 crews with 12 aircraft from the General Reconnaissance (Torpedo) Squadron also commenced training in August 1942. The air station operated RAAF Beaufort Bombers and USSAC and Netherlands East Indies Air Force B26 aircraft. Later the Bomber and Torpedo Unit (BTU) was formally established. See sections 4.4 and 4.5 for more detail about the BTU. (RAAF)

¹ RAF Bomber Command. During the Second World War, Britain's Royal Air Force was divided into a number of functional and geographic commands in line with an organisation that had first been implemented in 1936. Bomber Command was based in Great Britain and was responsible for bombing targets in enemy-controlled Europe. At the height of its operations in late 1944 Bomber Command comprised over 80 operational squadrons. These squadrons were organised into several groups on the basis of their role, the type of aircraft they operated, and the locations of the airfields from which they operated. In 1939 these groups were numbered 2-5 and by the end of the war Bomber Command comprised 1, 2, 3, 4, 5, 6 (Canadian), 8 (Pathfinder), 100 (Special Duties), and 91, 92 and 93 (Training) groups. Approximately 10,000 Royal Australian Air Force personnel served with Bomber Command and 3,486 were killed. (Australian War Memorial)



In 1943 the No. 6 Operational Training Unit was established to provide better coordination of air training. Heavy rain had caused flooding and damage to runways in October 1942 and May 1943 resulting in substantial drainage works. Eighteen aircraft hide-outs and joining taxi-ways were completed in September 1943 with funds from the reciprocal U.S. lend-lease arrangement. (RAAF) In 1944 as the war against Japan escalated the Admiralty began deploying mobile naval air support units to provide aviation repair and servicing facilities for the British Pacific Fleet (BPF). Initially the units would be installed on the mainland and then called forward as the front line moved closer. Nowra and Jervis Bay RAAF stations were chosen to become Royal Navy (RN) support units. (Royal Navy Research Archive)



Figure 4. Nowra c. late 1945. View of the SE dispersal with Corsairs, Avengers and Hellcats parked in rows. The Igloo and small Bellman hangar are clearly visible. (Royal Navy Research Archive)

# Royal Naval Air Station Nowra (RNAS)

In 1944 the British Admiralty directed certain forces to the South West Pacific Area which then required shore-based facilities for the Royal Navy and its Fleet Air Arm in Australia. It was proposed to have a Fleet Air Arm and Torpedo Bombing and Fighter Training base at Nowra and a Torpedo and Dive Bombing Training Base at Jervis Bay. The Royal Navy inspected the RAAF Station Nowra in July 1944 and planned a substantial upgrade to the station including 5 Bellman hangers, hardstands, resealing runways and accommodation for an additional 600 personnel.

The RAAF Station Nowra was transferred to RN control in September 1944 with the personnel from Mobile Naval Air Base I (MONAB I) arriving in December /January and the last of the RAAF left in



January 1945. The Station was commissioned as HMS NABBINGTON, Royal Naval Air Station Nowra. (Royal Navy Research Archive)

## 4.3. History of 50 BTU Road, Nowra Hill

Located in the Parish of Nowra in the County of St Vincent the subject lot is located in Nowra Hill, a suburb located to the south west of Nowra on the western side of the Princes Highway. On the Parish Map the land is referred to as portions 16 and 20. These portions, along with portion 21, were purchased by David Galloway in 1889. (CT 923-23)

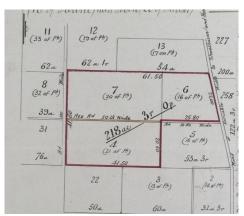


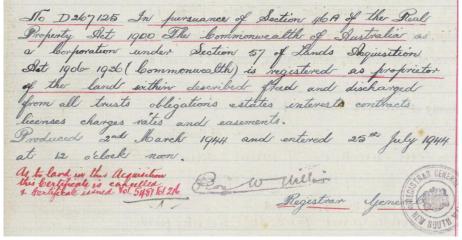
Figure 5. Extract diagram from Certificate of Title Vol.931 Fol. 23. Numbered lots 6 and 7 refer to portions 16 and 20 on the Parish Map and contain the subject lot. (NSW Land Registry Services, 2021)

David Galloway was the son of Alexander Galloway who owned portion 28 of the Parish of Nowra also located at Nowra Hill. Alexander Galloway died in 1885 at his residence at Nowra Hill. (Shoalhaven Telegraph, 1885) David Galloway was a dairy farmer who was also living at Nowra Hill at this time, most likely in the family home elsewhere, rather than at portion 20 or 16. Galloway owned the land until 1893 when he sold it to a farmer from Jaspers Brush, Charles Knilands. It is unlikely Galloway undertook any development of the land in the short four years of his ownership. Charles Knilands was an established farmer from Jaspers Brush with a large family. He owned lands at Jaspers Brush and Broughton Vale, it is unclear why he purchased land at Nowra Hill. The portions he purchased are those shown in Figure 5. 135 acres (CT948-145) and 83 acres (CT 948-128) both purchased on 19 November 1889. Charles Knilands died at Jaspers Brush at 80 years of age, after an illness. He was survived by a widow and grown-up family.

In November of 1920 the Shoalhaven Telegraph advertised the sale of 'Town Block and Paddocks at a Milton Road Grazing Property'. Auctioneers, Stewart and Morton received instructions from Mrs. Knilands to sell 219 acres of land fronting Milton Road and Nowra Hill Road. The advertisement described the land as fenced, well-watered, generally cleared and a good grazing run. (The Shoalhaven Telegraph, 1920) The auction must not have been successful as the land remained in the ownership of Mrs. Knilands until in 1939 when the land was transferred to Richard Knilands, one of the sons of Charles and Martha Knilands.



In 1944 the Commonwealth acquired the 219 acres owned by Richard Knilands. The land transfer is dated 2 March 1944 a copy of the notation is shown in Figure 6. The land had been occupied by the Torpedo Workshop of the RAAF Air Station Nowra for the two years preceding the acquisition. Contrary to the real estate description in the advertisement from 1920 the land was not 'generally cleared'. The land was chosen as it was heavily timber and provided good camouflage from the air.



(Air Board, 1942) Figure 6. Certificate of Title Vol. 948 Fol. 128 showing the acquisition by the Commonwealth in 1944.

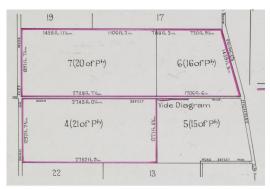


Figure 7. Parcels of land acquired by the Commonwealth in 1944 (Certificate of Title Vol.5481 Fol.216)

In 1963 Portions 16 and 20 (Lot 6 and Lot 7) were purchased by a timber company, Davis and Herbert Pty Ltd of Tomerong who established a sawmill on the site. John "Toby" Davis came from a family with sawmills at Shallow Crossing, Yerriyong, Woollamia, Cockrow Creek, Kangaroo Valley, Lake Conjola and Tomerong. He had his own mill at Tomerong until 1962. John Herbert had been working in the timber industry in New Guinea and when he returned, he and Davis formed a partnership. The purchase of the former Torpedo Workshop site at Nowra Hill facilitated creation of one of the company's main saw mills, employing up to 100 people. Every year the company would host a woodchop in the lead up to the Royal Easter Show. In 2005 the company sold the sawmill to Boral Limited. (South Coast Register, 2016)



# 4.4. No.1 Mobile Torpedo Unit, Mobile Torpedo Section and Base Torpedo Unit

The RAAF, Nowra Air Station was established as an Air Operational Training Base on land suited to the purpose because of its elevation. An integral part of the Station was bomber training for personnel. Intimately associated with this was the maintenance and repair of torpedoes used by the bombers, which necessarily took place away from the main air field.

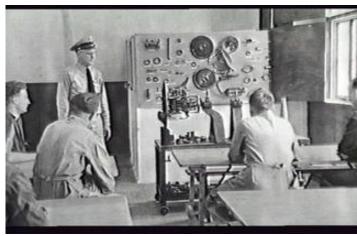


Figure 8. Interior of lecture room at the Base Torpedo Unit, RAAF Air Station, Nowra (Australian War Memorial)

The RAAF, Nowra Air Station, Operations Book provides an insight into the movement of personnel, vehicles and aircraft at the Air Station. Table 1 provides a selection of entries that show the formation of the Mobile Torpedo Unit and its subsequent name changes and restructuring within RAAF, Nowra Air Station. Before 7 September 1942 all torpedo facilities came under two sections — Torpedo Workshops and Torpedo Range Section. The Torpedo Workshops were responsible for all Torpedo running and aircrew training and were commanded by Wing Commander N.C. Walker.

Table 1. Notes from RAAF Air Station Operations Record Book May 1942 to October 1944 (Royal Australian Air Force)

Date	Log Entry	Notes
7-5-1942	RAAF Station Nowra formed with a strength of 51. Wing Commander N.C. Walker Specialist Torpedo Engineer.	First mention of specialist torpedo engineer at the Station.
1-6-1942	Mobile Torpedo Unit formed at this station. Notation: A Mobile Torpedo Section is being added to R.A.A.F. Station Nowra from 1-6-42 as a temporary measure and will be detached for duty at another location. (see Organisation memo. 118/42 File 151/2/360.)	Formation of Mobile Torpedo Unit.
4.6.1942	Name of No.1 Mobile Torpedo Unit changed to Mobile Torpedo Section of RAAF Station Nowra.	Name change to Mobile Torpedo Section



Date	Log Entry	Notes
7-6-1942	F/O Campey proceeded on duty to North Eastern Area with Mobile Torpedo Section.	This is the first mention of the North Eastern Area in the context of the Mobile Torpedo Section. This is presumed to be a reference to the location of the Torpedo Workshop 4 km to the north east of the Air Station.
16 & 17 /6/1942	Chief Gunner Andrews (USN) and Lieutenant Drake (U.S.N.) commenced duties in the torpedo section.	This entry shows that United States Navy officers and airmen were working in the Torpedo Section.
21/6/1942	USA Aircraft B26-1532 arrive. Total of 16 US officers on base and 62 US enlisted men. Aircraft to remain whilst personnel trained in torpedo dropping	Torpedo training for US
7-9-42	Base Torpedo Unit established under command of Squadron Leader J.O.P. Dibbs. Movement of personnel to the BTU	Formal establishment of Base Torpedo Unit to control and administer all activity and personnel associated with torpedoes.
8/9/42	More personnel to BTU	Movement of personnel throughout September to BTU.
6 June 1943	Aircrew Training moved out of BTU into No. 6 Operational Training Unit (no.6 OTU)	Torpedo maintenance stayed with BTU and was referred to as the Torpedo Workshop. Responsibility for Air training given to No. 6 OTU.
25/10/43	Air Board member Mr Jones visited BTU	Official delegation came to inspect the BTU.
Nov 43	The account of vehicles, lists separately BTU 24 vehicles.	The monthly account of transport vehicles on the Station has a separate list for the BTU.
Feb 44	No of BTU vehicles reduced to 8	Reduction in assigned vehicles
15/10/44	RAAF Station Nowra Disbanded	

The work of the BTU Torpedo Workshop took place in a location approximately 4 km to the east of the RAAF air station at a property now known as 50 BTU Road and 19-21 Nowra Hill Road, Nowra Hill. (Latitude -34.939905 Longitude 150.596993) Land on the southern side of BTU Road was where training facilities and living quarters were located.



## 4.5. Base Torpedo Unit (BTU)

#### The BTU

The No.1 Mobile Torpedo Unit was formed at the RAAF Station, Nowra on 1 June 1942. Just 3 days later its name officially changed to Mobile Torpedo Section located in the 'North Eastern Area'. The Base Torpedo Unit was established on 7 September 1942 under the command of Squadron Leader J. O. P. Dibbs, this time a restructure accompanied the name change. The Base Torpedo Unit (BTU) became highly active throughout September with the transfer of personnel to the Unit.

Established as part of the RAAF Station Nowra, the Base Torpedo Unit carried out training as well as being responsible for the maintenance and repair of torpedoes. Material sourced from the National Archive of Australia also refers to the BTU having a role in research and development. (Royal Australian Air Force, 1942)

The Base Torpedo Unit provided the RAAF maintenance personnel and aircrew with maintenance and training. The training was supported offsite by target ships in Jervis Bay, recovery vessels and the vehicle fleet which transported torpedoes and personnel to Jervis Bay.

Whilst the Unit was to maintain and supply 18-inch torpedoes for use in Beaufort Torpedo Bombers the facility also worked with the US Navy who had 21-inch torpedoes.

After the RAAF disbanded the RAAF Air Station in October 1944 the BTU Torpedo Workshop continued to play a role at the site by conducting trials of Australian manufactured torpedoes. With the establishment of the Royal Navy Air Station HMAS Nabbington the BTU provided torpedo maintainer training for Mark 13 torpedoes used by the RN's Grumman Avenger aircraft as well as British torpedo used by the Fairey Barracuda. The Royal Navy operated from Nowra until March 1946. (George, 2021)

After the Royal Navy vacated in 1946 the BTU Torpedo Workshop took on a caretaker role in preparation for a handover to the Department of Navy in 1947. (George, 2021)

# Establishing the Torpedo Workshop

By March 1942 it was evident that an area removed from the aerodrome was required for the establishment of a torpedo workshop. The decision to create a General Reconnaissance Torpedo Squadron also involved additional building facilities for the maintenance of torpedoes located nearby but separate from the aerodrome. The area now known as 50 BTU Road, Nowra was requisitioned for the Torpedo Workshop.

The workshop buildings and store houses for torpedoes, will be located in heavily timbered country approximately 3 ½ miles east of the aerodrome. To provide access from the aerodrome a new road will be required, this road will provide alternate access to the aerodrome. (Air Board, 1942)

The land was commandeered by the RAAF under the provisions of the National Security (General) Regulations, with the intention to later submit a proposal for the acquisition of the land. The Commonwealth did not formally acquire the land until two years later.

A revised budget was submitted to the War Cabinet seeking an additional £48,174 for a Torpedo Workshop which included the provision of fit out to existing buildings for the marine section of the GR Torpedo Squadron at Jervis Bay. The funds were approved by the Air Board on 13 March 1942, the cost of buildings was estimated to be £20,325 and engineering services £25,555. (Air Board, 1942)



# The construction of the Torpedo Workshop

Referred to as the Workshop Section, the following buildings were established from March 1942.

- Maintenance Workshop
- Compressor House
- Dummy Store
- Gyroscope, tools and consumable store,
- · Administration building,
- Emergency Power House
- Torpedo Store (8 in total)
- Inflammable Store
- War Head Dump (4 in total)
- Combined latrine.

The area was divided into 3 areas referred to as area "A", area "B", and area "C". Areas A and B accommodated all buildings except for the dummy store which was to be located in area C. The accommodation camp was not established until a later date. The site was heavily timbered, and the establishment crew were under strict orders to ensure it retained as much natural cover as possible. No lopping or felling trees was permitted without the approval of the "camoufleur". Access ways between buildings were formed on the best natural surface and under no circumstance was gravel permitted.

The <u>Maintenance Workshop</u> was the largest, most costly building on the site. It was  $120' \times 60'$  (36.5m x 18.2m) with timber framed walls and was erected in area A. The lower section of the walls to clerestory window sill height was double framed and sheeted and filled with earth with a timber sill top, see Figures 9 and 10. Note the trees in close proximity to the building and the camouflage paint.



Figure 9. Exterior of the torpedo maintenance workshop (Sgt.Smith)



The building had a concrete floor slab and steel trussed roof with asbestos cement roof sheeting which was pre-coloured for the camouflage team. Fixed glazing was provided with sliding blackout screens and ventilation openings were light baffled. Compressed air, water, electricity was provided and there were hoists and tracks.

The <u>Compressor House</u> was a reinforced concrete construction with a roof of concrete. Whilst the plans are not available for this assessment the description of the structure prepared by the Director of Works and Buildings is as follows:

Reinforce concrete construction in accordance with plan on drawing No. 41/42/2051. Roof to be of reinforced concrete, inverted T beam construction with approximately 3'0" depth of earth filling between beams, and 6" burster slab poured over same at level of top of beams. See engineering services schedule for installation of compressor, storage bottles, overhead hoists, electrical installation, etc. Building to be located in area "A" and situated no nearer than 250 feet from any other building. (Air Board, 1942)

The dummy store building was to be constructed in area C to the same specification as the maintenance workshop but without windows.



Figure 10. Personnel at BTU circa 1942. The torpedo workshop is on the left of the picture, the other building is possibly the latrines. (Sgt.Smith)





Figure 11. The interior of the torpedo maintenance workshop circa 1942-1943 (Sgt.Smith)



Figure 12. Inside the torpedo maintenance workshop at the BTU Torpedo Workshop circa 1942-1943 (Sgt.Smith)

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The <u>Gyroscope</u>, <u>Tool and Consumable Store</u> was a timber framed building with a wooden floor and a corrugated asbestos cement roof, located in area A. The Gyro room had high fixed glazed windows with blackout screens and wall and ceiling linings. The room had to be as air tight as possible, so it had an air lock entry. The tool and consumable store rooms were also timber framed but unlined.

The <u>Administration Building</u> was also located in area A but a distance from the maintenance workshop. It was a timber framed building with an asbestos cement hipped roof. It was lined internally with a hardboard dado to 4' and had standard windows with blackout screens.

The <u>Emergency Power House</u> was a reinforced concrete building with steel sheet sliding door. The building was located in area A and proposed to be protected by an 8' earth mound. The structure was to have power, lights and light baffled vents.

<u>Torpedo Store</u> – there were 8 of this type of building constructed to the same specification as the emergency powerhouse. They were also intended to be covered by earth mounds. They had steel sliding doors and ventilation ducts with light baffled vents at the apex of vertical end walls. Power was provided to operate overhead hoists. The Torpedo Stores were located in areas A and B, dispersed to provide maximum protection and cover.



Figure 13. Moving torpedo on a trolley circa 1943. (Sgt.Smith)

<u>Inflammable Store</u> – this was a reinforced concrete building similar to the torpedo store but with a central partition and 2 pairs of sheet steel double doors. Vents above the doors were light baffled and the building was to be protected by an earth mound. The inflammable store was located in area B, 200 feet away from the nearest building.

<u>War Head Dump</u> – these 4 buildings are similar to the torpedo dumps, but smaller at 20'0" long internally. No runway hoists were provided, and they were located in area B at a minimum of 1000 feet from other building and at least 300 feet from each other.

Latrines – The building was 13'0" x 10'0" and in close proximity to the workshop.

<u>Water supply</u> – Water was provided through an extension to the Main from the aerodrome to a 5000 galvanised corrugated iron tank on a stand, which then provided gravity fed water to buildings as required.



## Provision of accommodation at the Torpedo Maintenance Section

By November 1942 it was becoming clear that transporting personnel on a daily basis back to the aerodrome each evening for sleeping and messing was time consuming and an inefficient use of vehicles. It was therefore proposed to erect a small camp at the Torpedo Maintenance Section providing sleeping, messing, ablution and latrine facilities for 55 personnel. The camp buildings were to be erected from the standard prefabricated "C" series camp buildings. All buildings were located within the boundaries of the existing Torpedo Section land. Camp buildings included Officers, Sergeants and Airmen sleeping quarters; Laundry, ablutions and latrines; Lecture Hut; Guard houses and sentry box. (Air Board, 1942) It is believed the camp was built on the lot south of BTU Road.

## The role of the BTU and Torpedo Workshop in WWII

RAAF Air Station Nowra was established at an important time during the Second World War. The Battle of the Coral Sea and the Battle of Midway along with Japanese submarine attacks on Australia created a threat that had to be addressed with urgency. The torpedo training role of RAAF Nowra was essential if Australia was to mount a successful defence. There were however some challenging issues to overcome. Parts and torpedoes for the Beaufort aircraft were difficult to source. Airmen faced unfamiliarity with the aircraft due to it only being used by RAAF since 1941. The US Navy torpedoes were bigger than the aircraft had been designed to release. Throughout 1942 the USN and the RAAF persisted with the two types of torpedoes despite the USN Mark 3 failing on a regular basis. The RAAF 8 and 100 Squadrons dropped 56 torpedos in attacks against enemy shipping. Only nine of these were claimed to be "hits". The cost of these operations was 7 aircraft lost and 26 aircrew killed or Missing in Action. In June 1943 RAAF decided that the Beaufort's torpedo role would be discontinued. RAAF Air Station Nowra's personnel and aircraft were reduced and the aircrew training function ceased by mid-1944. By then RAAF Nowra Base Torpedo Unit and 6 Operational Training Unit had trained 145 Beaufort flight crews and 450 torpedo maintainers. (George, 2021)

The BTU subsequently played an important role in the last year of the war in the Pacific, by providing bomber training to RAN and USN personnel and maintaining the torpedoes used by the RAN in their role with the British Pacific Fleet until the decisive victory in August 1945.





Figure 14. United States Army Air Corp, 22 Bombardment Group B26 Martin Marauder armed with a Mark 13 torpedo. (Dannecker, 1942-1944)



Figure 15. Employees of the Commonwealth Aircraft Corporation fitting a practice torpedo into the bomb bay of a Beaufort Bomber, Melbourne June 1942. (Australian War Memorial)



## 4.6.50 BTU Road after 1963

When Toby Davis and John Herbert bought the property in 1963 the site took on a new function as a saw mill, under the trading name Herbert and Davis Pty Ltd. In May 2005 the sawmill was sold to Allen Taylor and Company Limited trading as Boral Timber.

Over the years modifications have been made at the site which are summarised in the table below. The changes in the site can be seen in the series of aerial photographs in Appendix One.

Table 2. Summary of modifications at 50 BTU Road, Nowra Hill

File No.	Modifications	
DA87/1057	Demolition of sawmill building No. 2 and erection of new sawmill.	
BA87/1397	Metal clad sawmill to replace existing No.2 Mill	
DA99/1010	Copper-chromate-arsenate (CCA) Plant	
DA05/1217	Extension to No 1 Sawmill Building to house new "Line-bar saw" – no increase in number of logs milled or timber production	
DA14/2117	Demolition of shed	
DA06/1521	Temporary Site Office and new sewer and drainage works	
DA15/2307	Demolition of 3 surplus buildings, above ground only. Includes no. 1 mill, storage shed near no.1 mill and storage shed in CCA area.	
DA16/1536	Three drying kilns near CCA Plant	
CC16/1514	Three drying kilns	



Figure 16. No.2 Mill before it was demolished in 1987. (Shoalhaven City Council)



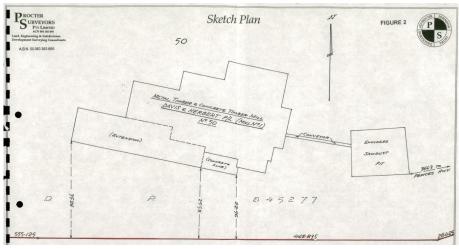


Figure 17. DA05/1217 Extension to Mill No. 1 (Proctor Surveyors, 2005)



Figure 18. Interior view of sawmill no. 1 in 2005. (CowmanStoddart Pty Ltd)



# 5. Physical Evidence

## 5.1. Fabric remaining from former BTU Site at 50 BTU Road

There are 4 former Torpedo Storage Bunkers located on the west of the site. These buildings are concrete barrel vault bunkers, often described as igloos. One is located in the bush near the site of an old dam and the other three are in the western area of the site. There is one War Head Dump Bunker next to the parking area for large machinery. The Compressor House is still in-situ and is located at the chipper.

The No.1 Mill on the sawmill site was originally the Torpedo Maintenance Workshop. The building has undergone significant changes since its original function was abandoned. Since 1963 the building was used as a timber sawmill and housed the main Canadian saw. In 2005 the No.1 mill was extended to house a new "Line-bar saw". See Figure 17. The former workshop has been extended in all directions. The No.1 Mill is no longer in use as a mill and is currently used as a storage area.



Figure 19. The current aerial photograph showing No.1 Mill, the former Torpedo Maintenance Workshop area is indicated by the red dotted line. According to RAAF records the maintenance workshop was 36.8 metres long and 18 metres wide.

The former Torpedo Workshop site itself has changed dramatically due to the clearing of trees which were left in place by the BTU when the Torpedo Section was established to provide camouflage. The camp was set up under strict instructions to keep clearing to a minimum and to even let trees grow through buildings if necessary.





Figure 20. Survey Plan. Elements shaded brown are from the BTU period and still extant today. (Proctor Surveyors, 2005)

Key: A = Torpedo Storage Bunkers; B = War Head Store Bunker; C = Compressor House; D = Torpedo Maintenance Workshop



# 5.2. Photographic Evidence (Photographs taken 28/09/2021) Torpedo Maintenance Workshop



Figure 21. Southern view of former Torpedo Maintenance Workshop.

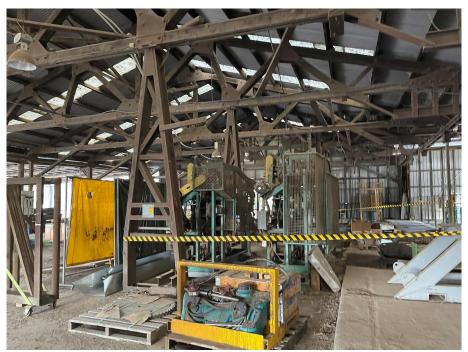


Figure 22. Interior of Torpedo Maintenance Workshop showing surviving structure.

The Torpedo Maintenance Workshop has been extended in all directions except the east. The original windows and double framed timber blast walls have been removed. Some timber framing is still extant on the east and west walls. All cladding including the roof has been removed or covered over. The steel structure and concrete floor is original.





Figure 23. The eastern wall of the Torpedo Maintenance Workshop



Figure 24. The western wall of the Torpedo Maintenance Workshop

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# War Head Dump Bunker



Figure 25. War Head Dump Bunker

# Compressor House



Figure 26. The northern wall of the Compressor House

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Figure 27. Southern view of the Compressor House



Figure 28. Internal view of the Compressor House



# Torpedo Storage Bunkers



Figure 29. Torpedo Storage Bunker (marked A1 on the site plan)



Figure 30. Interior of Torpedo Storage Bunker A1





Figure 31. Torpedo Storage Bunker A2



Figure 32. Interior of Torpedo Storage Bunker A2





Figure 33. Entrance to Torpedo Storage Bunker A2



Figure 34. Torpedo Storage bunker A3

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Figure 35. Detail of the entrance to Torpedo Storage Bunker A3. Steel doors would have run along the steel rail.



Figure 36. The same door detail is repeated on the other side of Torpedo Storage Bunker A3.

The other Torpedo Storage Bunker was not inspected during the view of the site as it was located in thick scrub. The 2005 survey noted its location so it is expected that the bunker is still extant.

# 5.3. Integrity

The Torpedo Workshop was in operation at 50 BTU Road for a period of about 5 years. During that time, the subject site was developed along with adjoining lots from the original acquisition by the Commonwealth. Physical evidence from the original Torpedo Workshop facility is still extant today. The more robust concrete structures have survived relatively intact. The Torpedo Maintenance Workshop building has undergone considerable change as it was used as the No. 1 Mill on the



sawmill site since 1963. The building retains its structure and its floor but its defining features such as the double timber blast walls filled with earth, have been removed.

The property has been used as a timber mill for 60 years, and this has introduced considerable alteration to the site. During the time of the Torpedo Workshop the site would have been much more densely wooded, without the large areas of cleared land present today.

# 5.4. Fabric remaining from former BTU Site on adjoining sites

Three more Torpedo Storage Bunkers are on the adjoining two lots to the west – Lot 11 and 12 DP1266190, currently occupied by the Shoalhaven Animal Shelter and Pound and owned by Shoalhaven City Council. These two lots were originally part of the Torpedo Workshop. There is also at least one War Head Dump Bunker located on the southern side of BTU Road. No inspection has been undertaken of these to establish their degree of intactness of the adjoining sites and whether any other Torpedo Workshop structures survive.



Figure 37. One of the Torpedo Storage Bunkers on the adjoining property at 19 BTU Road, Nowra Hill.



Figure 38. One of the War Head Dumps located to the south at 49 BTU Road, Nowra Hill. Opposite the subject site.



# 6. Comparative Assessment

# Comparative themes and types

NSW Heritage has a list of historical themes which provide a thematic framework for historic research. These themes provide typologies which are useful in comparing similar places throughout the Shoalhaven and NSW. Shoalhaven Heritage Study 1995-1998 provides local themes keyed to the State Themes. (Shoalhaven City Council)

Themes relevant to the former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill.

- Air Travel Military
- o Defence Commonwealth forces
  - Torpedo training
  - Munitions (Torpedo) maintenance, storage, research and development.
- Industry Sawmill

Themes from Thematic History, World Wars 1 & 2 Survey of Buildings sites and cultural landscapes. (Robertson and Hindmarsh Pty Ltd, 2004-2006)

- Shifting the technology of war.
- Training for war.
- o Constructing defence works.
- Manufacturing war material.
- o Providing for allied military forces.

Site and Building Types relating to the historic themes.

- Operational air bases
- Workshops
- Material storage
- Torpedo storage bunkers or Bomb Dumps
- Torpedo workshop
- Administration buildings.
- Defence sites in the Shoalhaven.
- Camp buildings, recreation hall, mess hall, canteen, accommodation, amenities

# Local Defence Sites

# Jervis Bay

General Reconnaissance Torpedo Squadron had a section based at Jervis Bay as well as at the RAAF Air Station Nowra. When the Torpedo Workshop was established, provision was made for the establishment of facilities at Jervis Bay. Testing of torpedoes occurred at Jervis Bay and the BTU had collection transport to bring the salvaged torpedoes back to the BTU workshop. The station is now a Naval Training Base called HMAS Creswell. HMAS Creswell is a Commonwealth Territory and is not within the Shoalhaven. Jervis Bay Territory is listed on the Commonwealth heritage List for natural and Indigenous values – the description states the airfield and associated infrastructure are no longer present.



# Wireless Transmission Station

A reinforced concrete semi-underground bunker operated as a wireless transmission station nearby the RAAF Air Station, Nowra. It is believed to be still extant and located in Gannet Lane but was not inspected for this study. This structure is likely to have heritage value.

## **HMAS Albatross**

The history of the existing RAN Air Station at Nowra is intimately associated with the BTU Torpedo Workshop. The BTU was responsible for torpedo training and maintenance which was one of the primary functions of the RAAF Air Station when it was established in 1942. The BTU continued this role when the site passed into RAN control in 1944. HMAS Albatross has been recognised and the site is protected on the Shoalhaven Local Environmental Plan heritage schedule for its historical values as the former RAAF Air Station and RAN Air Station. BTU was an essential part of the RAAF and RAN at Nowra between 1942 and 1947.

# Comparison with NSW Defence sites

# Bankstown aerodrome and former RAAF Base

Bankstown aerodrome and former RAAF Base was part of the defence of Sydney from aerial and naval attack in World War 2 by coordinating armed forces response to an enemy attack. The site includes transmission and receiving stations and underground bunker, and provided aircraft manufacturing and assembly in wartime Australia. The site is used as an airport but has retained a considerable amount of WWII infrastructure. The site is not associated with munitions or torpedoes.

## **Training**

One of the most significant tasks of the BTU was training. The thematic history of World War Two sites has not identified any other torpedo training facilities in NSW.

# Newington Armaments Depot

Newington Armaments Depot and Nature Reserve is listed on the State Heritage Register.



Figure 39. Buildings 57 and 56 at Newington, part of the US Navy installation. (NSW Heritage, 2021)

The former Royal Australian Navy (RAN) Armament Depot - Newington known as Newington Armament Depot and including the area now known as the Newington Nature Reserve, is potentially of State heritage significance as a place which demonstrates the historical and technical



development of systems and regulations of explosives handling and storage from the 1890s to 1999 and also demonstrates the importance of Sydney as a Navy Port. Newington Armament Depot and Nature Reserve is historically significant as it contains physical evidence demonstrating the history of European occupation through to the end of the 20th century. The site is a valuable tool for research relating to the early settlement.

Within the site are two precincts related to WWII, one was used by the Royal Australian Navy and the other by the United States. The site is comparable to the BTU due to the storage of munitions in underground bunkers. However, the site was not a training facility and did not have a torpedo repair and development arm as at the Nowra an RAAF or RAN Air Station.

# Moruya, former RAAF No. 11 Operational Air Base

From mid-1942, No 11 Operational Base Unit was located at Moruya to provide support for RAAF aircraft utilising the airfield. The airfield was used infrequently for coastal patrols, and also as a refuelling point for aircraft in transit. In October 1944, the airfield was downgraded to an emergency landing ground. There are four concrete bunkers surviving.



Figure 40. One of four concrete bunkers at the former RAAF site in Moruya. This example is in the race course. The bunkers are described as Bomb Dumps. (NSW Heritage, 2021)



Figure 41. Former WWII Radio Operations Building – No 11 Operational Base Unit RAAF (Royal Australian Air Force) Moruya established circa 1942 (NSW Heritage, 2021)



The site is listed on the Eurobodalla Local Environmental Plan 2012 as a heritage item of local significance.

The Moruya bunkers are comparable to the BTU site as they had a similar role in storage of munitions and were associated with an RAAF Air Station. The same degree of weapon maintenance and training was not a function of Moruya RAAF.

# HMAS Platypus, High St, North Sydney, NSW, Australia

In 1942, the Royal Australian Navy (RAN) Torpedo Factory, located at Neutral Bay, Sydney commenced operations. Previously, the Torpedo Depot at Garden Island across the Harbour had been the main site responsible for managing torpedo maintenance and storage. Additionally, a torpedo range established at Pittwater in Northern Sydney had responsibility for testing torpedoes from late 1943. (Skinner, 2021)

Formerly a gasworks (1877-1932), torpedo factory (1942-1999) and submarine base (1967-1999). The Torpedo Factory (formerly known as the RANTME or Royal Australian Navy Torpedo Maintenance Establishment Factory) was constructed in the early 1940s to house offices and facilities for Naval staff with a large factory for torpedo manufacture and maintenance. From 1945 the facility remained in service as a support facility for submarines based at HMAS Penguin and for the RAN destroyer fleet. (Dept of Agriculture, Water and the Environment, n.d.)

The property is listed as a heritage item on North Sydney LEP 2013.



Figure 42. The HMAS Platypus former Torpedo Factory (Harbour Trust, 2021)

The HMAS Platypus Torpedo Factory was responsible for manufacture of torpedoes on a large scale. It was not associated with the RAAF.

# **HMAS** Rushcutter

The oldest Naval Base in Australia with a number of significant elements including a torpedo workshop which was established in an existing recruitment hall during WWII. HMAS Rushcutter is two storey building located on Sydney Harbour.



# 7. Significance Assessment

# 7.1. Significance Assessment Criteria

The following criteria have been used in the assessment of cultural heritage significance. These criteria are the standard criteria for use in NSW that have been prepared for use by the Heritage Division of the NSW Office of Environment and Heritage and adapted here to apply to Shoalhaven. ²

For a place to be deemed to be significant to Shoalhaven it must meet at least one of the following criteria:

- a) an item is important in the course, or pattern, of Shoalhaven's cultural or natural history;
- b) an item has strong or special association with the life or works of a person, or group of persons, of importance in Shoalhaven's cultural or natural history;
- an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in Shoalhaven;
- d) an item has strong or special association with a particular community or cultural group in Shoalhaven for social, cultural or spiritual reasons;
- e) an item has potential to yield information that will contribute to an understanding of Shoalhaven's cultural or natural history;
- f) an item possesses uncommon, rare or endangered aspects of Shoalhaven's cultural or natural history;
- an item is important in demonstrating the principal characteristics of a class of Shoalhaven's
   cultural or natural places; or cultural or natural environments.

The item can also be significant to the Region, the State of NSW or the Nation.

a) an item is important in the course, or pattern, of Shoalhaven's cultural or natural history; The former Torpedo Workshop at 50 BTU Road Nowra Hill has historic significance as a torpedo maintenance facility established in World War Two, representing a change in policy when Japan entered the war and became an immediate threat in the Pacific and on the home front. The site has significance as an important part of the network defence sites on the NSW east coast. The Base Torpedo Unit (BTU) played an integral role in the training of RAAF personnel and provision of torpedoes for use with the aircraft such as the Beaufort Bomber.

The BTU Torpedo Workshop demonstrates the historic relationship between Australia and its Allies the USA, who had air force and army personnel training with the RAAF at the BTU.

The former Torpedo Workshop site is historically significant as part of the RAAF Air Station, Nowra and the RAN Air Station, Nowra which provided important roles in coastal defence during WWII.

The former Torpedo Workshop contributed to the research and development of torpedoes used in aircraft such as the Beaufort Bomber.

The site of the former Torpedo Workshop demonstrates the practice of the Commonwealth requisitioning land for defence purposes during WWII under the National Security Regulations.

² See www.heritage.nsw.gov.au for more information.



50 BTU Road provides historic evidence of the timber industry and the evolving practices of timber milling since the 1960s.

b) an item has strong or special association with the life or works of a person, or group of persons, of importance in Shoalhaven's cultural or natural history.

The former Torpedo Workshop is historically associated with RAAF Air Station Nowra from 1942 to 1944 and the RAN Air Station Nowra from 1944. The Torpedo Workshop site is associated with No. 6 Operational Training Unit which provided training of personnel after the BTU was divided into a practical maintenance unit and a unit responsible for training. The Torpedo Workshop has direct historical association with the original RAAF BTU facility at Jervis Bay.

The Torpedo Workshop is associated with Royal Australian Navy HMAS Nabbington which was established at the Air station after the RAAF left the site in 1944. After the RAAF disbanded the RAAF Air Station in October 1944 the Torpedo Workshop continued to play a role at the site by conducting trials of Australian manufactured torpedoes.

The former Torpedo Workshop has historical association with Australian allies the United States Army Air Corp who commenced Torpedo training with the RAAF in mid mid-1942.

The former Torpedo Workshop is historically associated with HMAS Albatross, which continues to occupy the Air Station.

50 BTU Road is associated with Toby Davis, a well-known figure in the timber industry of the Shoalhaven.

 an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in Shoalhaven.

The former Torpedo Workshop site demonstrates the building technology adopted for the storage of torpedoes during WWII. The site layout is specific to the maintenance and storage of the torpedoes and demonstrates unique building types and their arrangement on site.

The surviving structures from the former Torpedo Workshop are specialist building types specific for torpedo and war head storage and maintenance. They demonstrate the technical development of systems and regulations of explosives handling and storage from 1942-1947

d) an item has strong or special association with a particular community or cultural group in Shoalhaven for social, cultural or spiritual reasons.

The former Torpedo Workshop is significant for its association with veteran groups and RAAF and WAAAF personnel that served at the Air Station during WWII.

The former Torpedo Workshop site is likely to have special significance for the descendants of those in the RAAF BTU who worked in the Torpedo Workshop.

e) an item has potential to yield information that will contribute to an understanding of Shoalhaven's cultural or natural history.

The former Torpedo Workshop site has research potential in its ability to provide evidence of the now defunct WWII practice of storage of torpedoes. The design of torpedo storage buildings, together with the site layout of these buildings has the potential to reveal information about the logistics of torpedo operations and about changes in the approach to ammunitions storage and movement during WWII.



f) an item possesses uncommon, rare or endangered aspects of Shoalhaven's cultural or natural history.

The former Torpedo Workshop site contains rare evidence of the maintenance and storage of torpedoes during WWII. The size of the facility together with the number of torpedo storage buildings surviving on the site is not known to occur elsewhere in NSW. The former BTU and Torpedo Workshop is rare in the Shoalhaven as a training facility, maintenance workshop and a research and development unit for torpedoes.

g) an item is important in demonstrating the principal characteristics of a class of Shoalhaven's - cultural or natural places; or - cultural or natural environments.

The former Torpedo Workshop site retains fabric of the original facility that demonstrates the characteristics of a WWII Torpedo Workshop.

The site is representative of the practice of land acquisition by the Commonwealth for defence purposes during WWII.

# 7.2. Summary Statement of Significance

The former Torpedo Workshop site has historic significance as a torpedo maintenance facility used in World War Two from 1942, representing a change in policy when Japan entered the war and became an immediate threat in the Pacific and on the home front. The site has significance as an important part of the network of defence sites on the NSW east coast. The Torpedo Workshop has significance as part of the Base Torpedo Unit (BTU) which played an integral role in the training of RAAF personnel and provision of torpedoes for use with aircraft and contributed to the research and development of torpedoes. The establishment of the Torpedo workshop in 1942 demonstrates the historic relationship of Australia's Allies the USA, who had air force and army personnel training at the BTIJ.

The former Torpedo Workshop site contains rare evidence of the maintenance and storage of torpedoes during WWII. The size of the facility together with the number of torpedo storage buildings surviving on the site is not known to occur elsewhere in NSW. The former BTU is rare in the Shoalhaven as a training facility, maintenance workshop and a research and development unit for torpedoes from 1942 to 1947.

The site is historically associated with the RAAF Air Station, Nowra and the RAN Air Station, Nowra which provided important roles in coastal defence during WWII. The Torpedo Workshop is associated with No. 6 Operational Training Unit which provided training of personnel after the BTU was divided into a practical maintenance unit and a unit responsible for training. The Torpedo Workshop has direct historical association with the original RAAF BTU facility at Jervis Bay.

The surviving bomb dumps and torpedo dumps at the former Torpedo Workshop are specialist building types specific for torpedo and war head storage. They demonstrate the technical development of systems and regulations of explosives handling and storage from 1942-1947. The site layout is specific to the maintenance and storage of the torpedoes and demonstrates the arrangement on site of these unique building types.

The former Torpedo Workshop site has research potential in its ability to provide evidence of the now defunct WWII practice of storage of torpedoes. The design of torpedo dump buildings, together with the site layout of these buildings has the potential to reveal information about the logistics of torpedo operations and about changes in the approach to ammunitions storage and movement during WWII.



The former Torpedo Workshop is significant for its association with veteran groups and RAAF and WAAAF personnel that served at the Air Station during WWII.

The site is representative of the practice of land acquisition by the Commonwealth for defence purposes during WWII.

50 BTU Road has heritage value at a local level.

# 8. Curtilage

The heritage curtilage of the former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill should cover the whole site to protect the significant layout as well as significant structures of the original WWII facility. Further research may reveal other structures which are currently not mapped.

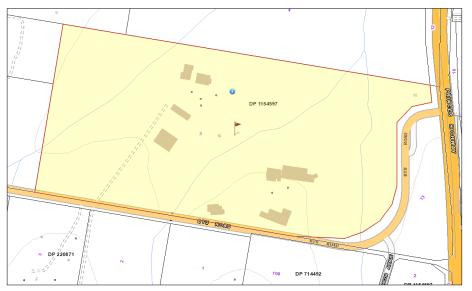


Figure 43. Recommended heritage curtilage

# 9. Interim Heritage Order

Shoalhaven City Council has authorisation to make an Interim Heritage Order over an item, place or area, whilst it assesses whether statutory protection is warranted via a listing in a heritage schedule of a local environmental plan.

Interim Heritage Orders can only be made where a potential heritage item:

- Is or is likely to be of heritage significance
- Is under threat of demolition or unsympathetic alteration
- Does not have statutory heritage protection under the Environmental Planning and Assessment Act 1979 or the Heritage Act 1977.



The heritage assessment made in this report has found that the former BTU Torpedo Workshop at 50 BTU Road, Nowra Hill has heritage significance at a local level. The site layout and the remaining structures from the Torpedo Workshop are considered to be of local heritage significance.

Proposed demolition or damage to any of the WWII Torpedo Workshop structures would lead to a loss of significance which would trigger the need for an Interim Heritage Order.

In the first instance Council should hold discussions with the owner to determine whether there are any plans which would impact any significant structures as an Interim Heritage Order may only be made if the potential heritage item is being or is likely to be harmed.

If an Interim Heritage Order is made the following conditions apply:

- a) The Interim Heritage Order will lapse six months from the date that it is made unless the local council has passed a resolution before that date, either:
  - In the case of an item which, in the council's opinion, is of local significance, to place the item on the heritage schedule of a local environmental plan with appropriate provisions for protecting and managing the item; and
  - ii. In the case of an item which in the council's opinion, is of State heritage significance, nominate the item for inclusion on the State Heritage Register."

Procedures for making an Interim Heritage Order are contained within Part 5.6 of the Local Heritage Guidelines. ³

# Implications of heritage listing for the owner

The existing saw mill operations at 50 BTU Road would be unchanged by the heritage listing. The heritage listing will add an additional layer of assessment if any development at the mill is proposed. For example, a development application for any future works would need to be accompanied by a heritage impact assessment to determine if the proposed works would affect the heritage significance of the site. Development at the site has been ongoing since it became a saw mill in 1963, the saw mill activities and works are consistent with the proposed heritage listing.

The listing in the heritage schedule of Shoalhaven LEP is proposed to be descriptive so that it is clear which structures on the site have heritage value. This will ensure the saw mill activities on the site can continue unhindered.

Maintenance and minor works do not require the consent of Council.

Heritage listing places no legal restriction on the sale or leasing of properties.

https://www.heritage.nsw.gov.au/search-for-heritage/publications-and-resources/

³ The Local Government Heritage Guidelines (including the delegation of certain Heritage Council functions under the NSW Heritage Act 1977 and the authorisation to make Interim Heritage Orders)



# 10. Conclusion

50 BTU Road, Nowra Hill meets all seven of the heritage criteria as defined by Heritage NSW, Department of Premier and Cabinet.

The former BTU Torpedo Workshop is a rare example of a World War Two site dedicated to the research and development, maintenance and storage of torpedoes designed to be carried by aircraft such as the Beaufort Bomber. Despite the site only being in operation from 1942-1947 the site retains enough evidence to demonstrate the layout and function of the BTU Torpedo Workshop.

The site provides evidence of the important role played by Nowra in the defence of the nation during World War Two when Japan entered the war and the focus of Australian Armed Forces shifted to the Pacific and South-East Asia.

The former BTU Torpedo Workshop at 50 BTU Road, Nowra Hill is significant historically, technically, socially and for its research potential and is both rare and representative.

# 11. Recommendations

 The Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill should be listed in schedule 5 of Shoalhaven Local Environmental plan 2014 as a heritage item of local significance. The listing should cover the whole site to protect the significant layout as well as significant structures of the original WWII facility. The curtilage shown in Figure 43 should be the curtilage of the heritage item.

The addition to Schedule 5 of Shoalhaven LEP 2014, Part 1 Heritage Items should read

Locality	Item	Address	Property Description	Significance
Nowra Hill	Former BTU Torpedo Workshop: WWII structures including Maintenance Workshop, 4 Torpedo Bunkers, 1 War Head Bunker and 1 Compressor House and their layout on the site.	50 BTU Road	Lot 3 DP 1154597	Local

- 2. Council should hold discussions with the owner to determine whether there are any plans which would impact any significant structures relating to the former Torpedo Workshop use of the site. If the significant fabric of the place is being or is likely to be harmed then Council should protect the heritage significance of the site with an Interim Heritage Order and commence an amendment to schedule 5 of Shoalhaven LEP 2014 to include 50 BTU Road, Nowra Hill as a heritage item.
- The other lots acquired by the Commonwealth in 1944 should be inspected to determine what Torpedo Workshop fabric is still extant. These lots include Lot 11 DP1266190, Lot 12 DP1266190, Lot 1 DP220871, Lot 2 DP220871, Lot 3 DP220871, Lot 4 DP220871.



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# Appendix 1

# History of modifications shown in aerial photography

The following sequence of aerial photographs shows how the BTU site at Lot 3 DP has changed since it was sold by the Commonwealth and used as a sawmill.



Figure 44. 1969 Aerial Photograph

The secondary road to access the area where the CCA Plant was constructed in 1999 wasn't constructed until after 1969 and before 1975. The Torpedo Storage Bunkers in that area were accessed by an internal road on the north of the existing buildings.





Figure 45. 1979 Aerial photograph



Figure 46. 1980 aerial photograph





Figure 47. 1993 Aerial photo



Figure 48. 2021 aerial

Louise Thom Heritage

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Planning Proposal PP058 – SLEP 2014 – Housekeeping 2022

Attachment G - Agency Response - WaterNSW





PO Box 398, Parramatta NSW 2124 Level 14, 169 Macquarie Street Parramatta NSW 2150 www.waternsw.com.au

3 August 2022

Contact: Stuart Little

Telephone: 0436 948 347

Our ref: D2022/66858

Mr Richard Carter Strategic Planner Shoalhaven Council PO Box 42 NOWRA NSW 2541

Dear Mr Carter

# Pre-Gateway Agency Consultation - Planning Proposal PP058 - Shoalhaven LEP 2014 - Housekeeping 2022

I refer to your email and letter of 4 July 2022 seeking Pre-Gateway comments on Planning Proposal PP058 – Shoalhaven LEP 2014 – Housekeeping 2022. We also refer to an updated version of the Proposal, received by us on 29 July 2022, after we sought clarification of minimum lot size (MLS) boundaries for one of the Items affected by the housekeeping amendments. We now provide our comments with respect to the updated Proposal.

The Planning Proposal seeks to correct relevant clauses and maps in the *Shoalhaven Local Environmental Plan 2014* (LEP) to address identified anomalies or inconsistencies and to improve the LEP's functionality. We note that the anomalies or inconsistencies have been identified through staff feedback, development assessment processes, the registration of new land titles, landowner requests and as resolved by Council. Of the 30 amendments, Items 3, 5 and 6 include land within the Sydney Drinking Water Catchment (SDWC).

Items 3 and 5 both concern remote rural roads, seeking to remove the stated lots from the relevant MLS map as a MLS is not required for the SP2 Infrastructure zone. WaterNSW has no objection to this aspect of the Proposal.

Item 6 concerns Lot 9 DP 755966, Touga Rd, Touga, and part of National Park (UPN 60932). The Proposal seeks to adjust the zoning and MLS boundary to accord with the current lot boundaries between the National Park and Lot 9 DP 755966. Affected land in private ownership is to be afforded a C2 Environmental Conservation zoning and a 40 ha MLS while the adjacent National Park Estate land is to be zoned C1 National Parks and Nature Reserves with no MLS. WaterNSW supports the intent of this aspect of the Proposal. However, we note that the proposed zoning and MLS do not exactly accord with the property boundaries based on the cadastre layer we hold (see Attachment 1). We recommend that Council verify the cadastre and liaise with the National Parks and Wildlife Service regarding the appropriate boundary for the zoning and MLS.

# **Direction 3.3 Sydney Drinking Water Catchment**

The Planning Proposal responds to section 9.1 Ministerial Direction 3.3 Sydney Drinking Water Catchment, noting that the Proposal applies to Mapping Items 3, 5 and 6 as these relate to land within the SDWC. The Proposal notes that the amendments are of minor significance and are not inconsistent with the Direction. We agree with this conclusion. Changing the MLS requirements and zoning for these Items as described will have minimal to no implications for water quality. The changes have minimal to no implications for application of the Neutral or Beneficial Effect (NorBE)



test on water quality to future developments and activities under Chapter 8 of State Environmental Planning Policy (Biodiversity and Conservation) 2021 (B&C SEPP). For completeness, Strategic Land and Water Capability assessments are not relevant to this Proposal given the nature of Proposal affecting minor MLS and zoning adjustments in remote locations.

# Sydney Drinking Water Catchment - Chapter 8 of the B&C SEPP

The Proposal considers the SDWC provisions of Chapter 8 of the B&C SEPP. Chapter 8 requires new development in the SDWC to have a NorBE on water quality. The Proposal notes that there are no provisions in the B&C SEPP that directly apply to this PP. With respect the SDWC provisions of Chapter 8 of the SEPP, we agree with this conclusion. We make no comment on the other aspects of the SEPP.

We do not need to review the Proposal further prior to exhibition. However, we ask to be notified when the Proposal is publicly exhibited so we can have an opportunity to further examine it and understand how Item 6 has been reconciled.

Should you have any questions regarding the above matters please contact Stuart Little (stuart.little@waternsw.com.au).

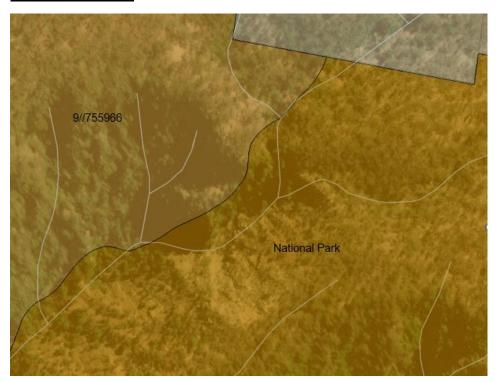
Yours sincerely

**ALISON KNIHA** 

**Catchment Protection Planning Manager** 



# **ATTACHMENT 1 - MAP**



Map 1-Item 6: Cadastre (in black) showing the boundary between Lot 9 DP 755966 and adjoining National Park



Appendix 1 – Fire Engineering Report



# 'BUILDINGS A, C AND D' 10 CENTRAL AVENUE

SOUTH NOWRA NSW 2541

Fire Engineering Report

For Revision 1.5 Issued 4th February 2022 Report No. 16245_FER

Mobius Fire Safety Pty Ltd Suite 13, 165 Argyle Street, Camden NSW 2570 ABN 14 167 027 072



# Revision History

Revision Date	Details	Name/Position	Signature
22-Feb-2017	Draft FER	Daniel Turhanlar	
		Director	
		C10: BPB2150	
15-Mar-2017	Final FER – incorporating	Daniel Turhanlar	
		Director	
	to Appendix	C10: BPB2150	
9-May-2017	Draft FER for review –	Daniel Turhanlar	
	addition of Solution 3	Director	
		C10: BPB2150	
7-Jul-2017	Final FER	Daniel Turhanlar	m
		Director	
		C10: BPB2150	LO
10-Jul-2017	Final FER – modified Figure	Daniel Turhanlar	m
	9 only	Director	
		C10: BPB2150	L
04-Feb-2022	Final FER – addition of	Daniel Turhanlar	m
	Solution 4	Director	
		C10: BDC2150	LU
	22-Feb-2017  15-Mar-2017  9-May-2017  7-Jul-2017	22-Feb-2017 Draft FER  15-Mar-2017 Final FER – incorporating Council comments, and addition of hydrant design to Appendix  9-May-2017 Draft FER for review – addition of Solution 3  7-Jul-2017 Final FER  10-Jul-2017 Final FER – modified Figure 9 only  04-Feb-2022 Final FER – addition of	22-Feb-2017 Draft FER Daniel Turhanlar Director C10: BPB2150  15-Mar-2017 Final FER – incorporating Council comments, and addition of hydrant design to Appendix Daniel Turhanlar Director C10: BPB2150  9-May-2017 Draft FER for review – addition of Solution 3 Daniel Turhanlar Director C10: BPB2150  7-Jul-2017 Final FER Daniel Turhanlar Director C10: BPB2150  10-Jul-2017 Final FER — modified Figure 9 only Daniel Turhanlar Director C10: BPB2150  04-Feb-2022 Final FER – addition of Solution 4 Daniel Turhanlar Director C10: BPB2150



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# 1 Executive Summary

This Fire Engineering Report (FER) documents the objectives, trial design, methods of analysis, acceptance criteria and assessment of the Performance Solution required to address the DtS deviations in the existing buildings A, C and D in the industrial/commercial complex at 10 Central Avenue, South Nowra 2541.

 $This fire \ engineering \ assessment \ has \ been \ undertaken \ using \ the \ methodologies \ outlined \ within \ the \ International \ Fire \ undertaken \ using \ the \ methodologies \ outlined \ within \ the \ undertaken \ using \ the \ methodologies \ outlined \ within \ the \ undertaken \ using \ the \ undertaken \ undertaken \ using \ the \ undertaken \ using \ the \ undertaken \ undertake$ Engineering Guidelines 2005^[1].

The following DtS deviations have been identified and are the subject of this assessment:

Table 1 - Details of the Performance Solution

Solution	Description of the Solution	BCA DtS Provision	Performance Requirement (A1.5)	Method of meeting the Performance Requirement (A0.3)	Assessment Method (A0.5)	IFEG Sub- systems*
Solution 1	Permit continuous vehicular access that is in excess of 18 m from the building (22 m).	C2.4	CP9	(a)(ii)	(d)	F
Solution 2	Permit extended travel distance of:  up to 25 m to a single exit in lieu of 20 m in Unit 5; and  Up to 44 m to the closest exit in lieu of 40 m; and  Up to 70 m between alternative exits in lieu of 60 m.	D1.4 and D1.5	DP4 and EP2.2	(a)(ii)	(d)	A, C, D and E
Solution 3	Permit reduced egress width through storage unit access corridors in Units 7 and 8	D1.6	DP6	(a)(ii)	(d)	E
Solution 4	Permit the automatic fire brigade signal to be sent on the simultaneous activation of two smoke detectors in lieu of single activation	E2.2a, Table E2.2a and Spec E2.2a	EP2.2	(a)(ii)	(d)	A, C, D, E ad F

^{*}Refer Appendix A for an excerpt from the IFEG  $^{[i]}$  which shows the IFEG Sub-systems.

The fire engineering assessment proposed for the building will be undertaken using the Trial Design at Table 6. These fire safety measures will form the basis of the fire engineering assessment and therefore must be included in the building's Fire Safety Schedule.



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# 2 Introduction

#### 2.1 Appointment

This Fire Engineering Report (FER) documents the objectives, trial design, methods of analysis, acceptance criteria and assessment of the Performance Solution required to address the DtS deviations in the existing buildings A, C and D in the industrial/commercial complex at 10 Central Avenue, South Nowra 2541.

Mobius Fire Safety Pty Ltd has been appointed by Performance Solution to the National Construction Code: Volume 1 Building Code of Australia [ii] (BCA) Deemed-to-Satisfy (DtS) Provisions identified in Table 5 of this report, in order to demonstrate that the building meets the Performance Requirements of the BCA.

The BCA provides a set of prescriptive requirements, Deemed-to-Satisfy (DtS) Provisions, that provides a level of safety which is deemed to be acceptable for assumed compliance with the BCA Performance Requirements. The BCA also provides flexibility to address variations from the BCA DtS Provisions as Performance Solutions if it can be demonstrated that they comply with the applicable Performance Requirements of the BCA.

The BCA states that assessment of a Performance Solution can be undertaken using a variety of methods as outlined in Clause A0.5. One or more, or a combination of these methods can be adopted to determine whether the proposed Performance Solution complies with the BCA Performance Requirements. The relevant BCA Performance Requirements are determined in accordance with BCA Clause A1.5. Compliance with BCA Performance Requirements is undertaken in accordance with BCA Clause A0.3.

This FER documents the objectives, trial designs, the methods of analysis, acceptance criterion and assessments used to justify the proposed variations to DtS provisions which have been identified in the design of the proposed building.

This report assumes that all other fire safety measures other than those modified herein are to be compliant to the

## 2.3 Applicable Legislation

The primary legislation applicable to the building upgrade is the National Construction Code 2016: Building Code of Australia Volume 1 Regulatory Framework.

The following New South Wales Legislation is applicable:

- NSW Environmental Planning and Assessment Act, 1979 and subsequent amendments; and
- NSW Environmental Planning and Assessment Regulation, 2000 and subsequent amendments

This document has been prepared by Mobius Fire Safety to assess the selected items found to be deficient in the Fire Condition Report by Mobius Fire Safety dated 23rd November 2016 as required by Council's Notice of Intention to Serve and Order dated 20th April 2016.

Garon Irwin of Shoalhaven Council is the Authority Having Jurisdiction (AHJ) for purposes of assessing this FER.

# 2.4 Fire Engineering Process

In accordance with the IFEG, the fire engineer should undertake a Fire Engineering Brief (FEB) process for every project carried out. The Fire Engineering Brief is a process where the project objective, proposed trial designs, methods of analysis and acceptance criteria for any proposed Performance Solutions are documented for review by the relevant stakeholders. This process may be documented in an individual document, or combined into the Fire Engineering Report.

The Fire Engineering Report (FER) contains all the relevant design calculations and justifications to demonstrate that the proposed Performance Solution complies with the relevant BCA Performance Requirements. Stakeholder approval





of the FER is to be gained before submission to the PCA for their assessment of compliance to the BCA Performance

Given the simple nature of the non-compliance all relevant aspects of the Fire Engineering Brief (FEB) will incorporated into this single Report for review by Stakeholders in the Draft form of the FER.

# 2.5 Objectives

The objective of the Fire Engineering process is to recognise variations from the DtS Provisions and to present a way forward for resolution of each in order to demonstrate compliance with the relevant BCA Performance Requirements. All design solutions are subject to formal approval by the relevant regulatory authorities.

In order to provide a robust fire engineering design that meets the BCA Performance Requirements, it is important that all stakeholders agree to the fire engineering design principles before the analysis is carried out and the design is finalised. Key features of this report are to be reviewed and agreed to by the stakeholders, including the assumptions, design fires, occupant characteristics, proposed fire and egress modelling scenarios (where applicable), methods of analysis and the proposed overall design philosophy.

#### 2.6 Stakeholders and Documentation

The relevant stakeholders in the design of this development are listed below in Table 2.

Table 2 - Relevant Stakeholders

Name	Organisation	Role
		Client
Garon Irwin	Shoalhaven Council	Authority Having Jurisdiction
Daniel Turhanlar	Mobius Fire Safety Pty Ltd	Registered Certifier (Fire Safety)

The relevant documents and drawings assessed as part of this report are listed in Table 3.

# 2.7 Information Sources

The following information has been used as reference documents in the formulation of this report (except where specifically referenced):

Table 3 - Relevant documentation

Ref	Name	Organisation	Date	Revision
CHP6470	Unit Site Plan	-	27/05/16	-
6589CC – sheet 20	Building D Unit 8 Ground Floor Plan	Crescent Home	03/07/17	-
6589CC – sheet 21	Building D Unit 8 First Floor Plan	Crescent Home	03/07/17	-
6589CC – sheet 17	Building C Unit 7 Ground Floor Plan	Crescent Home	03/07/17	-
6589CC – sheet 18	Building C Unit 7 First Floor Plan	Crescent Home	03/07/17	-

A copy of this drawing set is provided in Appendix B of this FER.





# **Building and Occupant Characteristics**

#### 3.1 Location

The Performance Solution is applicable to the existing mixed use commercial buildings A, C and D which are considered a United Building by the BCA. The united building is located at 10 Central Avenue, South Nowra 2541.

#### 3.2 BCA DtS Reference Criteria

The Fire Engineering Brief process identified the building information listed in Table 4.

Table 4 – BCA Deemed-to-Satisfy (DtS) reference criteria

BCA Clause		Description or Requirement
A1.1	Classification	Classes 7b and 8.  The building has minor Class 5 and 6 uses, however are less than 10 % of the floor area of the storey in which they are contained.
A3.2	Rise in Storeys	2
C1.1	Effective Height	Less than 12 m
C1.2	Construction Type	Type C
C2.2	Floor Areas	The total fire compartment floor area is approximately 8,369 m² and volume of approximately 75,000 m³, therefore the building is a deemed a Large Isolated Building under the BCA.

## 3.3 Occupant Characteristics

The occupants in the building are expected to be from two groups; staff and visitors/customers.

### 3.3.1 Staff

Staff are not expected to have received any specific emergency training however are likely to have a degree of familiarity to the layout and location of exits. They are expected to be alert and sober. Any hearing, visual or mobility impaired staff are assumed to be able to self-evacuate or be assisted by other staff members.

# 3.3.2 Visitors / customers

Visitors / customers will generally be aware of the route they entered the building and are more likely to evacuate the building via this route even if other exits are closer. Most visitors /customers, however, are expected to be transient and it cannot be guaranteed that all occupants would be familiar with the building, its layout and the exit points. On this basis, it is assumed that these occupants will be unfamiliar with the building.

Any hearing, visual or mobility impaired visitors / customers are assumed to be accompanied at all times or be able to





# 3.4 Proximity to Fire Stations

Attending FRNSW personnel can access the building via the private driveway entered from Central Avenue or Oxford Street as shown in Figure 1.



Figure 1: Fire brigade access

- Nowra Fire Station 69 Bridge Road, Nowra NSW 2541 (6 km); and
- Berry Fire Station 26 Prince Alfred Street, Berry NSW 2535 (22.6 km).





# **Building Fire Safety**

# **4.1** Summary of the Performance Solution

The Table 5 lists variation to the BCA DtS Provisions that has been identified in the fitout works and are addressed in this Performance Solution:

Table 5 – Summary of Performance Solution

Solution	Description of the Solution	BCA DtS Provision	Performance Requirement (A1.5)	Method of meeting the Performance Requirement (A0.3)	Assessment Method (A0.5)	IFEG Sub- systems*
Solution 1	Permit continuous vehicular access that is in excess of 18 m from the building (22 m).	C2.4	CP9	(a)(ii)	(d)	F
Solution 2	Permit extended travel distance of: up to 25 m to a single exit in lieu of 20 m in Unit 5; and  Up to 44 m to the closest exit in lieu of 40 m; and  Up to 70 m between alternative exits in lieu of 60 m.	D1.4 and D1.5	DP4 and EP2.2	(a)(ii)	(d)	A, C, D and E
Solution 3	Permit reduced egress width through storage unit access corridors in Units 7 and 8	D1.6	DP6	(a)(ii)	(d)	E
Solution 4	Permit the automatic fire brigade signal to be sent on the simultaneous activation of two smoke detectors in lieu of single activation	E2.2a, Table E2.2a and Spec E2.2a	EP2.2	(a)(ii)	(d)	A, C, D, E ad F

^{*}Refer Appendix A for Excerpt from IFEG  $^{[i]}$  which shows the IFEG Sub-systems.

# 4.2 Fire Safety Strategy

The building's main fire safety features are described in this Section.

# 4.3 Means of escape

The building is served by several exit points from each unit which discharge direct to open space. These are to be used as points of escape as well for entry by FRNSW.

Figure 2 provides a diagrammatic representation of the points of entry / egress as indicated by the green arrows.



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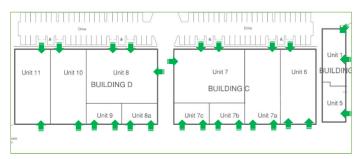


Figure 2: Means of escape / access

# 4.4 Fire Resistance

The building is permitted to be of Type C Construction with all building elements requiring a Fire Resistance Level (FRL) having an FRL as listed in Table 5 of Specification C1.1 of the BCA.

The fire engineering assessment undertaken in this FER is carried out using the Trial Design at Table 6. These fire safety measures form the basis of the fire engineering assessment and therefore must be included in the building's Fire Safety Schedule.

Fire Safety Measure	Description
Fire Resistance, Stability and Hazard Properties	The building is expected to be constructed typically consistent with the requirements of Type C Construction to BCA Specification C1.1.
	A Certificate shall be provided by an Accredited Structural Engineer to state that the tilt up construction complies with BCA Specification C1.11.
	The existing floor coverings must be demonstrated to have compliant smoke hazard properties, either by certifying the existing linings to BCA Spec C1.10, or replacing with compliant linings. This must take place within 6 months of the issuance of the Rev 1.1 FER.
Storage unit access doors (Units 7 and 8)	The doors used to access individual storage units in Units 7 and 8 must swing in the direction of egress through the corridor (as shown in Figure 12 on page 27)
Slip resistance	All stair treads must have nosing strips which have a slip-resistance classification not less than P3 when tested in accordance with AS 4586. All stairs within Units 7 and 8 to be complete before occupation of those Units.
Fire Hydrants	The united building is provided with an existing fire hydrant system which shall be upgraded to achieve compliance with BCA E1.3 and AS 2419.1-2005.
	A qualified hydraulic engineer has assessed the existing hydrant system and found that upgrade works are required to achieve compliance with BCA E1.3 and AS 2419.1-2005 (refer Appendix B). These works must be undertaken within 3 months of the issuance of the Rev 1.1 FER.





Fire Safety Measure	Description
Fire Hose Reels	The building shall be provided with additional fire hose reels to achieve compliance with BCA E1.4 and A5 2441-2005 in all areas except for Units 7 and 8 within 1 month of the issuance of the Rev 1.1 FER, with Units 7 and 8 to be complete before occupation of those Units.
Portable Fire Extinguishers	The building shall be provided with portable fire extinguishers (PFEs) in accordance with BCA E1.6 and AS 2444-2001.
Automatic Fire Detection and Alarm System	The building shall be provided with an automatic fire detection and alarm system in accordance with BCA Spec E2.2a Clause 4 and AS 1670.1-2015.
	This detection and building occupant warning system shall be installed in all areas except for Units 7 and 8 within 1 month of the issuance of the Rev 1.1 FER, with Units 7 and 8 to be complete before occupation of those Units.
	Automatic signal to FRNSW is to be via an approved monitoring service installed to AS 1670.3. The automatic signal is permitted to occur on the simultaneous activation of two detectors in lieu if a single detector. A single heat type detector shall activate the automatic signal to FRNSW.
Building Occupant Warning System	The building shall be provided with a Building Occupant Warning System (BOWS) in accordance with BCA Spec E2.2a Clause 6 and AS 1670.1-2015.
Emergency Lighting and Exit Signage	The building shall be provided with emergency lighting and exit signage in accordance with BCA Part E and AS 2293.1. Upgrades works shall be undertaken in all areas except for Units 7 and 8 within 1 month of the issuance of the Rev 1.1 FER, with Units 7 and 8 to be complete before occupation of those Units.
Paths of travel (house keeping)	A minimum egress width of 1 m shall be provided through all areas. The existing back of house areas are required to be cleared of stock and storage modified to provide this 1 m clear width to the exits.
Maintenance Programme	A maintenance program should be developed with all essential safety measures (active, passive and management) maintained in accordance with AS 1851.
Egress	The electric gates at the breezeway must be automatically opening on activation of the fire detection system and fail in the open position in the case of power loss
Management in Use	The use of the building must not include any of the hazardous processes, storage or Class 6 use (greater than 10% of the floor area of the storey it is within) as listed in BCA E1.5 and Table E1.5. This must be assessed by a suitability qualified independent person (not the building owner / operator) on an annual basis to ensure that the ongoing use of the building remains outside of all fire sprinkler triggers. This is to be listed on the building's Fire Safety Schedule and certified under the Annual Fire Safety Statement process annually.





# Fire Safety Schedule

Fire Safety Measure	Applicable BCA Clause	Applicable Standard		
Fail-safe devices (gates on breezeway openings)	BCA D2.21	AS 1670.1-2015		
Fire hydrant system	BCA E1.3	AS 2419.1-2005		
Fire hose reels	BCA E1.4	AS 2441-2005		
Portable fire extinguishers	BCA E1.6	AS 2444-2001		
Automatic fire detection and alarm system	BCA Spec E2.2a Cl 4	AS 1670.1-2015		
Fire System Monitoring	BCA Spec E2.2a Cl 7(e)	AS 1670.3-2004 and FER by Mobius Fire Safety P/L ref:16245 R1.5 dated 04.02.2022		
Emergency lighting	BCA E4.2 and E4.4	AS 2293.1-2005		
Exit signage	BCA E4.5, E4.6 and E4.8	AS 2293.1-2005		
Paths of travel	BCA D1.4 and D1.6	EP&A Reg 2000, Clause 186		
Occupancies of Excessive Hazard	The use of the building must not include any of the hazardous processes, storage or Class 6 use (greater than 10% of the floor area of the storey it is within) as listed in BCA E1.5 and Table E1.5. This must be assessed by a suitability qualified independent person (not the building owner / operator) on an annual basis to ensure that the ongoing use of the building remains outside of all fire sprinkler triggers			
Fire Engineering Report by Mobius Fire Safety P/L Ref: 16245 rev 1.5 dated 04.02.2022	Permit continuous vehicular access that is in excess of 18 m from the building (22 m); Permit extended travel distance of up to 25 m to a single exit in lieu of 20 m in Unit 5; Permit extended travel distance of up to 44 m to the closest exit in Unit 7/8 in lieu of 40 m; Permit extended travel distance of up to 70 m between alternative exits in lieu of 60 m; Permit extended travel distance of up to 70 m between alternative exits in lieu of 60 m; Permit reduced egress width through the storage unit access corridors in Units 7 and 8; and Permit automatic signal to FRNSW on second smoke detector activation in lieu of one.			





# **Performance Solution**

## 5.1 Solution 1 – Perimeter Access

# Introduction

Table 7 provides a summary of this Solution and the affected BCA DtS Provisions/Performance Requirements as well as the relevant IFEG sub-systems.

Table 7 - Summary of Solution 1

Solution	Description of non-compliance and variations from the DtS Provisions of the BCA	BCA DtS Provision	BCA Performance Requirement	IFEG Sub-systems
Solution 1	Permit continuous vehicular access that is in excess of 18 m from the building (22 m).	C2.2, C2.3 and C2.4	CP9	D and F

The building is currently provided with vehicular access around the perimeter of the building with the distance from the street to the front façade of the building facing Central Avenue being approximately 22 m, which is in excess of the maximum DtS permissible distance of 18 m. It is proposed to permit this DtS deviation in a Performance Based manner. It is noted that access is provided to the front of the building on central Avenue, however continuous travel in a single direction is not provided.

Figure 3 and provides a diagrammatic representation of the departures



Figure 3: Perimeter Access



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#### 5.1.2 Intent of the BCA

The following points provide excerpts from the BCA, detailing the applicable DtS Clause and Performance Requirement.

## 5.1.2.1 BCA Clause C2.2

## BCA Clause C2.2 states:

'(a) The size of any fire compartment or atrium in a Class 5, 6, 7, 8 or 9 building must not exceed the relevant maximum floor area nor the relevant maximum volume set out in Table C2.2 and C2.5 except as permitted in C2.3.1

Classification		Type of construction of building		
		Type A	Type B	Type C
5, 9b or 9c aged care building	max floor area—	8 000 m ²	5 500 m ²	3 000 m ²
	max volume—	48 000 m ³	33 000 m ³	18 000 m ³
6, 7, 8 or 9a (except for patient care areas)	max floor area—	5 000 m ²	3 500 m ²	2 000 m ²
	max volume—	$30\ 000\ m^3$	21 000 m ³	12 000 m ³

## Figure 4: BCA Table C2.2

## 5.1.2.2 BCA Clause C2.3

# BCA Clause C2.3 states that:

'The size of a fire compartment in a building may exceed that specified in Table C2.2 where—

- (a) the building does not exceed 18,000 m² in floor area nor exceed 108,000 m³ in volume, if—
  - (i) the building is Class 7 or 8 and-
    - (A) contains not more than 2 storeys; and
    - (B) is provided with open space complying with C2.4(a) not less than 18 m wide around the building; or
  - (ii) the building is Class 5 to 9 and is-
  - (A) protected throughout with a sprinkler system complying with Specification E1.5; and
  - (B) provided with a perimeter vehicular access complying with C2.4(b); or
- (b) the building is Class 5 to 9 and exceeds 18,000  $\rm m^2$  in floor area or 108,000  $\rm m^3$  in volume, if it is—
  - (i) protected throughout with a sprinkler system complying with Specification E1.5; and
- (ii) provided with a perimeter vehicular access complying with C2.4(b); or (c) there is more than one building on the allotment and—
  - (i) each building complies with (a) or (b); or
  - (ii) if the buildings are closer than 6 m to each other they are regarded as one building and collectively comply with (a) or (b).

# 5.1.2.3 BCA Clause C2.4

# BCA Clause C2.4 states that:

- '(a)An open space required by C2.3 must-
  - (i) be wholly within the allotment except that any road, river, or public place adjoining the allotment, but not the farthest 6 m of it may be included; and
  - (ii) include vehicular access in accordance with (b); and
  - (iii) not be used for the storage or processing of materials; and





(iv) not be built upon, except for guard houses and service structures (such as electricity substations and pump houses) which may encroach upon the width of the space if they do not unduly impede firefighting at any part of the perimeter of the allotment or unduly add to the risk of spread of fire to any building on an adjoining allotment.

## (b) vehicular access required by this part must-

- (i) must be capable of providing continuous access for emergency vehicles to enable travel in a forward direction from a public road around the entire building; and
- (ii) must have a minimum unobstructed width of 6 m with no part of its furthest boundary more than 18 m from the building and in no part of the 6 m width be built upon or used for any purpose other than vehicular or pedestrian movement; and
- (iii) must provide reasonable pedestrian access from the vehicular access to the building; and
- (iv) must have a load bearing capacity and unobstructed height to permit the operation and passage of fire brigade vehicles; and
- (v) must be wholly within the allotment except that a public road complying with (i), (ii), (iii) and (iv) may serve as the vehicular access or part thereof

The BCA Guide  $^{[ii]}$  states that the open space must be wholly within the allotment. However, the open space may also include everything except what is beyond a line drawn six metres from the farthest edge of a road, river or public place adjoining the allotment.

The open space must also include the vehicular access required by C2.4(b), not be used for storage or processing and not be built on, except as specified.

This provision requires the making of a "performance-style" judgement. It is the responsibility of the building proponent to satisfy the appropriate authority that any buildings on the open space will not unduly impede the activities of the fire brigade, nor add to the risk of fire spreading to a building on an adjoining allotment.

## 5.1.2.4 BCA Performance Requirement CP9

BCA Performance Requirement CP9 states that:

'Access must be provided to and around a building, to the degree necessary, for fire brigade vehicles and personnel to facilitate fire brigade intervention appropriate to—

- (a) The function or use of the building; and
- (b) The fire load; and
- (c) The potential fire intensity; and
- (d) The fire hazard; and
- (e) Any active fire safety systems installed in the building; and
- (f) The size of the fire compartment.

The BCA Guide provides the following commentary on Performance Requirement CP9:

'The attending fire brigade must, in many cases, have access to and around a building during a fire, to undertake search and rescue and fire-fighting operations.

Consideration should be given to ensuring that the access is wide enough for a large fire truck, able to support the truck's weight, and incorporate a suitable hard stand area if the brigade needs to use pump units to fight the fire.

The need for the brigade to fight the fire, considering such factors as the size and type of the building, the nature of any fire safety systems in the building, and the contents of the building.

CP9 uses the term "to the degree necessary". This word usage is designed to provide flexibility in the way this provision is implemented. It means that the BCA recognises that buildings need different types of fire brigade access.

These differences depend on the matters listed in CP9.

Any decision made in this context can extend to not requiring an item to be installed or a particular level of performance to be achieved, if that is the appropriate action to be taken.



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Any access for the fire brigade must be appropriate to their needs and the type of vehicles and equipment to be used, having regard to the matters listed in CP9:

- the likelihood or risk of a fire occurring in the building;
- the size, load or intensity of any fire in the building; and the fire safety systems in the building, which can affect the rate of fire spread (e.g. if a sprinkler system is installed in a building, it will either extinguish the fire or reduce its growth rate).

#### Approach and assessment method

The approach is quantitative and comparative in nature using the assessment methods as shown in Table 5.

## Fire safety design requirements

The fire safety measures listed in the Trial Design shown in Table 6 form the holistic fire safety design for the building.

The acceptance criterion for this Performance Solution is that the perimeter access provided to the building is unlikely to impede FRNSW operations.

The main hazard associated with this Solution is that where compliant perimeter access is not provided, additional time may be required to move to other areas of the building to prevent fire spread to the neighbouring properties and buildings.

It has been assumed that all other hazards are comparable to those that would typically be expected in a building of this nature.

#### 5.1.7 Method of analysis

A qualitative and comparative analysis is undertaken comparing the proposed design to a DtS design which could include a 4 m wide awning, or extension installed along the external wall along the street frontage, which would result in DtS distance of 18 m to the perimeter access point along the road. The two designs are shown below in Figure 5.

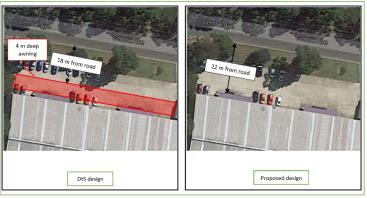


Figure 5: DtS vs Proposed designs

It will be shown that the proposed design is at least comparable to this DtS design by way of fire brigade access to the building by aerial appliance for fire-fighting operations





#### 5.1.8 Analysis

As described above, vehicular access is provided around the entire building however the continuous path along Central Avenue is 22 m away due to the carparking and grassed landscaped area.

This is a deviation to the DtS Clause C2.4(b) states that a public road may form part of the perimeter access as long as it is more than  $6\,\mathrm{m}$  wide and is not greater than  $18\,\mathrm{m}$  from the building. This means that if the building outline were to be extended by a 4 m wide awning across the building on the Central Avenue street frontage, there would no longer be a non-compliance as the building would be less than 18 m from the street, however providing an awning or building extension would provide no additional benefit to the attending fire brigade, and arguably present a slightly increased risk to these persons.

Figure 5 above provides a diagrammatic comparison of the DtS building which has a been provided with a 4 m wide awning. In both designs, fire fighter access is provided through from all sides of the building. Therefore, brigade access into the building is provided within 18 m of all other entry points where compliant vehicular access is provided and is the same distance from the road in both the DtS and proposed designs. \\

In a similar nature, the fire brigade appliance setback distance from the main building in the proposed design is the same as the DtS comparative design with a 4 m awning where the bulk of the combustibles would be located within the main building.

Additionally, the closest attending fire station is not equipped with an aerial appliance. Therefore, it is assumed that in the case of a fire, the operations would be conducted using pumpers and hoses, which can be staged in the private driveway to the rear, or along the carpark space on Central Avenue. This is shown below in Figure 6.



For information, the closest aerial appliance is a Telesquirt 15 m aerial pumper. This appliance has a maximum outreach of 15 m as stated on the FRNSW Website^[io] and shown in Figure 7. Therefore, this appliance would not have sufficient reach from the street in either the proposed design or DtS design and also not expected to have its capability impaired by the non-compliance.







Figure 7: Telesqurt 15 m (FRNSW 2016)

Additionally, the reason for the fire brigade vehicular access is to enable the brigade to intervene to fight the fire, assist with evacuation, and stop the spread of a fire to another building. The vehicular access also provides other emergency services personnel, such as ambulance officers, with the ability to access the building as necessary. The location of the non-compliance is across the street frontage only. Therefore, attending fire brigade personnel will have compliant access in all areas where protection of adjoining properties is of most importance and pedestrian movement is not impeded.

The above qualitative discussion covering the proposed design shows that perimeter access to the building for brigade ...e αυώνε γμαιπιατίνε discussion covering the proposed design shows that perimeter access to the building for b operations is comparable to the DtS design, therefore this Solution demonstrates compliance with Performance Requirement CP9.





#### 5.2 Solution 2 – Extended Travel Distance

Table 8 provides a summary of this Solution and the affected BCA DtS Provisions/Performance Requirements as well as the relevant IFEG sub-systems.

Table 8 - Summary of Solution 2

Solution	Description of non-compliance and variations from the DtS Provisions of the BCA	BCA DtS Provision	BCA Performance Requirement	IFEG Sub-systems
Solution 2	Permit extended travel distance of:  up to 25 m to a single exit in lieu of 20 m in Unit 5; and  Up to 44 m to the closest exit in lieu of 40 m; and  Up to 70 m between alternative exits in lieu of 60 m.	D1.4 and D1.5	DP4 and EP2.2	A, B, D, E and F

The existing Unit 5 layout results in the rear area of the tenancy where occupants are required to travel up to 25 m to a single exit which exceeds the maximum DtS permissible distance of 20 m.

Refer Figure 8 below for a diagrammatic representation of the deviation.



Figure 8: Diagram of the DtS deviation (Unit 5)







Figure 9: Diagram of the DtS deviation (Unit 7 Ground Floor)



Figure 10: Diagram of the DtS deviation (Unit 7 First Floor)

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#### 5.2.2 Intent of the BCA

The following points provide excerpts from the BCA, detailing the applicable DtS Clause and Performance Requirement

#### 5.2.2.1 BCA Clause D1.4

BCA Clause D1.4(c) states:

#### 'Class 5 to 9 buildings —

- (i) no point on a floor must be more than 20 m from an exit, or a point from which travel in different directions to 2 exits is available, in which case the maximum distance to one of those exits must not exceed 40 m; and
- (ii) in a Class 5 or 6 building, the distance to a single exit serving a storey at the level of access to a road or open space may be increased to 30 m

As per the BCA Guide^[v], the intent with D1.4 is to maximise the safety of occupants by enabling them to be close enough to an exit to safely evacuate. However, the guide acknowledges that the travel distances specified in the DtS Provisions are arbitrary.

#### 5.2.2.2 BCA Clause D1.5

BCA Clause D1.5 states:

#### Exits that are required as alternative means of egress must be—

- (a) distributed as uniformly as practicable within or around the storey served and in positions where unobstructed access to at least 2 exits is readily available from all points on the floor including lift lobby areas: and
- (b) not less than 9 m apart; and
- (c) not more than-
  - (i) in a Class 2 or 3 building 45 m apart; or
  - (ii) in a Class 9a health-care building, if such required exit serves a patient care area -45 m apart; or
  - (iii) in all other cases 60 m apart; and
- (d) located so that alternative paths of travel do not converge such that they become less than 6 m apart'

## 5.2.2.3 BCA Performance Requirement DP4

BCA Performance Requirement DP4 states:

Exits must be provided from a building to allow occupants to evacuate safely, with their number, location and dimensions being appropriate to-

- (a) the travel distance; and
- (b) the number, mobility and other characteristics of occupants; and
- (c) the function or use of the building; and (d) the height of the building; and
- (e) whether the exit is from above or below ground level.'

The BCA Guide states that the travel distance will affect the time taken to evacuate the building. Greater distances will require greater evacuation times.

## 5.2.2.4 BCA Performance Requirement EP2.2

BCA Performance Requirement EP2.2 states:

(a) In the event of a fire in a building the conditions in any evacuation route must be maintained for the period of me occupants take to evacuate the part of the building so that—

(i) the temperature will not endanger human life; and



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- (ii) the level of visibility will enable the evacuation route to be determined; and
- (iii) the level of toxicity will not endanger human life.
- (b) The period of time occupants take to evacuate referred to in (a) must be appropriate to—
  - (i) the number, mobility and other characteristics of the occupants; and
  - (ii) the function or use of the building; and
  - (iii) the travel distance and other characteristics of the building; and
  - (iv) the fire load; and
  - (v) the potential fire intensity; and
  - (vi) the fire hazard; and
  - (vii) any active fire safety systems installed in the building; and
  - (viii) fire brigade intervention.'

#### 5.2.3 Approach and assessment method

The approach is quantitative and comparative using the assessment methods as shown in Table 5.

#### 5.2.4 Fire safety design requirements

The fire safety measures listed in the Trial Design shown in Table 6 form the holistic fire safety design for the building.

Fire safety measures specific to this Solution are as follows

 The building shall be provided with an automatic fire detection and building occupant warning system in accordance with BCA Spec E2.2a Clause 4 and AS 1670.1-2015.

#### 5.2.5 Acceptance criteria

The acceptance criterion for this Performance Solution is that the risk to life safety of egressing occupants in the event of fire is equivalent to or better than that afforded by a similar building design that is compliant with BCA Clause D1.4(c) and D1.5.

#### 5.2.6 Hazards

The hazard specific to this Performance Solution is that with an extended travel distance, it could take longer for the occupants to evacuate than in a DtS compliant building, which may put occupants at undue risk in the event of fire.

It has been assumed that all other hazards are comparable to those that would typically be expected in a building of this nature.

#### 5.2.7 Method of analysis

 $The Performance Solution\ presents\ a\ qualitative\ and\ comparative\ analysis\ comparing\ the\ Performance\ Solution\ design\ and\ a\ DtS\ compliant\ building.$ 

In order to assess the DtS non-compliance the proposed design is compared with an almost identical BCA DtS design but with the following differences in the design:

- Occupants are required to travel an extended travel distance of up to 25 m in lieu of 20 m to a single exit in Unit 5;
- Occupants are required to travel up to 44 m to the closest exit on the First Floor of Unit 7 in lieu of 40 m;
- Occupants are required to travel up to 70 m between alternative exits on the Ground Floor of Unit 7 in lieu of 60 m; and
- The installation of an automatic smoke detection to AS 1670.1 in lieu of a natural smoke venting which is also
  permissible to satisfy BCA Table E2.2a (Large isolated building which does not exceed 18,000 m² nor exceed
  108.000 m³)

It is demonstrated that the benefits in the proposed design to detect a fire from anywhere in the building that could impact upon the occupants in Unit 5 and Unit 7 and provide automatic warning to them earlier than the DtS case are



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expected to offset the additional 10 m of travel required to reach the exit (worst case). This worst case distance will be used in the assessment, and those distances below will be deemed complaint with this Solution.

The travel distances exceed the maximum permissible DtS distances as listed above. The worst case is 10 m over the DtS permissible distance.

Considering the unimpeded travel speed of an occupant to be 1 m/s (1 m/s is the average walking speed for occupants with mobility impairments as discussed by Proulx^[iii]. This is conservative as Gwynne and Rosenbaum^[iiii] suggest an occupant flow speed of 1.19 m/s for level surfaces through corridors, aisles and ramps) the extra travel distance of 10 m results in approximately 10 s of additional travel time.

In considering the time taken to evacuate from a building, the first few critical factors for occupant movement in the evacuation phase depends on the time from ignition (the start of a fire) to detection, the time between detection to alarm and occupant pre-movement time

The time from ignition to detection in the Trial Design is governed by the size of the fire and the location of the installed smoke detectors, however this time is measurable and is expected to be consistent due to the installed fire safety measures no matter where occupants are in the building in relation to the area of fire origin. This is not the case in the DtS design, as the building would be permitted to have smoke vents only (with no detection or occupant warning). Therefore, the time from ignition to detection is solely dependent on the location of occupants, their proximity to the area of fire origin and their ability to hear, smell or see the fire cues. Therefore, the comparable DtS design time to detection is variable, with the worst case scenario being occupants in the furthest point in Units 5 and 7 (the affected areas), which is remote from many areas on the Ground Floor not noticing a fire which may grow to a large size before being noticed which could block the exit (or burn through the non-fire-rated inter-tenancy walls) before being noticed. Therefore, although not measurable in any time measurement, it is shown that the proposed design is likely to provide occupants with warning of a fire in all fire scenarios which is in excess of that provided in the

The second factor of evacuation; pre-movement, is also affected by the level of fire detection / warning system installed in a building. PD 7974^{[viii} provides times to first movement of the first few occupants to move within ar enclosure (the 1st percentile) and the pre-movement times of the last few occupants to move (99th percentile). This gives a normal distribution of occupant movement which can then be used to estimate occupant evacuation times. PD7974 provides times to be used in the estimation of pre-movement times dependent on the system installed. They

Automatic detection throughout the building, activating an immediate general alarm to all occupants of all affected

Automatic detection throughout the building providing a pre-alarm to management or security, with manually activated general warning system sounding throughout the affected occupied areas and a general alarm after a fixed delay.

Local automatic detection and alarm only near the location of the fire or no automatic detection, with a manually activated general alarm system sounding throughout the occupied area.

With these categories in mind, the proposed design satisfied a Level A1 alarm system as detection is provided throughout the building and the DtS design is a Level A3 alarm with no means of automatic detection and no warning

For buildings with awake occupants who are familiar the difference in the pre-movement times for these two systems in PD7974 is A1 will have all occupants moving towards the exit after 1 minute, where an A3 system is in excess of 15 minutes. Therefore, the additional 10 seconds required to reach an exit in the proposed design is more than offset with the additional detection and alarm system when compared to the potential of more than 14 additional minutes required to commence evacuation in the  $\operatorname{DtS}$  case.





Additionally, where occupants are provided with additional warning of a fire in its early stages of development, the chances of those occupants having the opportunity to carry out successful first attack firefighting (through the use of portable fire extinguishers) is more likely. Also, those occupants can call the fire brigade earlier and under potentially less duress, meaning that attendance by FRNSW would be expected to be comparably earlier than the DtS case when the building is occupied.

#### 5.2.9 Conclusion

Based on the qualitative and quantitative assessment above, the additional 10 s to reach an exit in the proposed design is considered acceptable with consideration to the installed automatic fire detection and alarm system. The Performance Solution is therefore considered to satisfy Performance Requirements DP4 and EP2.2.



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#### 5.3 Solution 3 – Reduced Egress Width

Table 9 provides a summary of this Solution and the affected BCA DtS Provisions/Performance Requirements as well as the relevant IFEG sub-systems.

Table 9 - Summary of Solution 3

Solution	Description of non-compliance and variations from the DtS Provisions of the BCA	BCA DtS Provision	BCA Performance Requirement	IFEG Sub-systems
Solution 3	Permit reduced egress width through storage unit access corridors in Units 7 and 8	D1.6	DP6	E

The swinging doors that provide access into the storage units open onto the path or travel to required exits in multiple areas in Units 7 and 8. These doors open onto the 1.5 m wide corridor and result in less than 1 m clear width when in the open position, which is not permitted by the DtS Provisions of the BCA. This results in an egress path through each of the corridors with a width of down to 580 mm past a single door when it is fully open to 90 degrees (920 mm wide door leaf), or the path being blocked when both doors are open (worst case).

Figure 11 provides an example of the door arrangement (not to scale) showing the door encroachment on the 1 m

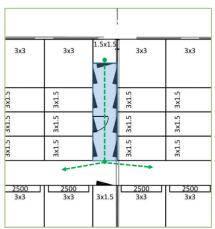


Figure 11: Doors in path to required exit



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#### 5.3.2 Intent of the BCA

The following points provide excerpts from the BCA, detailing the applicable DtS Clause and Performance Requirement.

#### 5.3.2.1 BCA Clause D1.6

#### BCA Clause D1.6 states:

(b) the unobstructed width of each exit or path of travel to an exit, except for doorways, must be not less

(i) 1 m; or

- (ii) 1.8 m in a passageway, corridor or ramp normally used for the transportation of patients in beds within a treatment area or ward area: and
- (iii) in a public corridor in a Class 9c aged care building, notwithstanding (c) and (d)—
  - (A) 1.5 m; and
  - (B) 1.8 m for the full width of the doorway, providing access into a sole occupancy unit or communal bathroom...'

The BCA Guide does not elaborate on the requirement for 1 m other than to say that the intent is to require exits and paths of travel to an exit to have dimensions to allow all occupants to evacuate within a reasonable time.

#### 5.3.2.2 BCA Performance Requirement DP6

BCA Performance Requirement DP6 states:

'So that occupants can safely evacuate the building, paths of travel to exits must have dimensions appropriate to—

- (a) the number, mobility and other characteristics of occupants; and
- (b) the function or use of the building.

#### 5.3.3 Approach and assessment method

The approach is qualitative and quantitative and deterministic comparative using the assessment methods as shown in Table 5.

#### 5.3.1 Fire safety design requirements

The fire safety measures listed in the Trial Design shown in Table 6 form the holistic fire safety design for the building.

# 5.3.2 Acceptance criteria

The acceptance criterion for the Performance Solution is that the expected population of occupants that are expected to pass through the pinch point to reach an exit in at least the same amount of time as a compliant 1,000 mm wide egress route.

#### 5.3.3 Hazards

The hazard specific to this Performance Solution is that where the exit width is reduced along the route, occupants may take longer to evacuate which may place them at undue risk during a fire.

#### 5.3.4 Method of analysis

This Solution presents a qualitative and quantitative discussion which compares the potential evacuation time with the potential occupant load in the DtS design with the expected occupant load passing through each of the pinch points in the proposed design to demonstrate an at least equivalent time to an exit.

The worst case pinch point in terms of number of units opening onto a single corridor will be used in the assessment. If it is demonstrated that the Solution is justified with this single corridor, it will be taken as representative of the entire tenancy.



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#### 5.3.5 Analysis

For the purposes of the assessment the worst reasonable case of 1 occupant in each of the storage units at the same time when an evacuation is required is used in this assessment. This equates to up to 9 persons passing through the side corridor with a single door in the fully open position at the time of an evacuation which is taken as the worst case

The analysis assumes a single door open on the corridor creating a pinch point of 580 mm. This is due to the nature of the building which is for the intermittent use of single tenants to store goods. Therefore, it is very unlikely that two opposite doors will be in the fully open position at any one time. For redundancy, all doors must swing in the direction of egress through the corridor as shown below in Figure 12. This means in the unlikely event of a door obstructing the corridor, it can be pushed by passing occupants, rather than those occupants having to stop to pull the door.

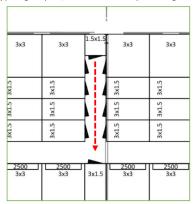


Figure 12: direction of door swings

#### 5.3.5.1 Anthropometric Data on body dimensions

Anthropometric Data reproduced from NFPA 101 Life Safety Code^[ix] as illustrated in Figure 13, indicates that the 97.5 percentile largest body dimensions of an adult (male or female) is  $0.51\,\mathrm{m}$ , hence the reduced width of  $0.58\,\mathrm{m}$  of the exit routes provide an additional width of  $0.07\,\mathrm{m}$  respectively.



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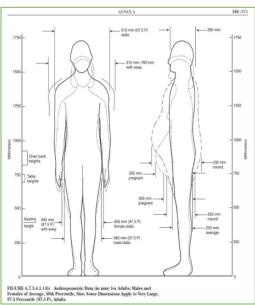


Figure 13: Anthropometric Data reproduced from NFPA 101

 $Adler^{[x]}\ found\ in\ a\ research\ /\ survey\ of\ key\ body\ dimensions\ was\ undertaken\ for\ people\ in\ the\ UK\ that\ shoulder\ widths$ of males and females did not exceed 510 mm for the  $95^{th}$  percentile range. Research/studies undertaken by Robert Feeney Associates  $^{(sd)}$  on anthropometric and strength measurement data from 'ADULTDATA – The handbook of adult anthropometric and strength measurements' (UK Department of Trade and Industry) also provide similar data on this, with a maximum shoulder width of 505 mm.

Whilst detailing anthropometric data from the US and UK, the results are considered to be applicable to the general Australian population. This is based on the data sources in the above mentioned publications, such as ADULTDATA, which sourced data from the UK, Brazil, China, France, Germany, Italy, Japan, Poland, Sri Lanka, Sweden, The Netherlands and the USA between 1981 and 1998 for persons aged 18-65 years old. The results suggest that the maximum shoulder width of occupants is unlikely to exceed 510 mm.

NFPA carried out studies of human behaviour in fire emergencies and from that review the maximum width across the shoulders with sway/gate of a body ellipse used to develop egress systems was 609 mm. This is in line (600 mm) with the HBN 00-04[still published by the UK Department of Health for the design of circulation and communication spaces in health care buildings.

Also, documentation associated with evacuation modelling software packages Simulex $^{[xiii]}$  and Pathfinder $^{[xiii]}$  also notes standard body breadth to be between 500 mm and 600 mm.

Therefore, neither an egress route having a width or 1 m in accordance with BCA Clause D1.6 or a width of 0.58 m is sufficient for two adults to egress side by side. They must be staggered in effectively single file as they pass though





It is therefore submitted that a reduction to 0.58 m should not have a significant impact on the total escape time as occupants are expected to still be evacuating in single file. The staggered single file spacing is illustrated in Figure 14 (note that this is not to scale and is meant to illustrate the concept only).

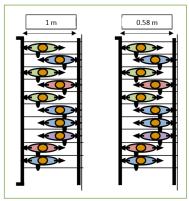


Figure 14: Staggered stair and egress though door (not to scale, for illustrative purposes only)

The above analysis addresses means of egress and evacuation in the event of a fire and does not address or intend to  $address\ any\ other\ requirements\ such\ as\ DDA\ or\ other\ third\ party\ certification\ /\ requirements.$ 

#### 5.3.5.2 Robustness and uncertainty

The method used is to determine the time it takes for occupants to egress from the building. As the DtS comparative design would be exactly the same floor plate with a 1,000 mm wide path, the travel time to the exit, and pre-movement time is ignored, as it is directly comparable. As such the assessment compares the travel time through the area of reduced exit width only.

The time to travel past the pinch point is calculated as follows:

$$t_{tr} = F_s W_e N_o$$

#### Where:

- $t_{tr}$ Time to travel past the pinch point.
- $F_s$ Specific flow of occupants through the area of reduced width (persons/s/m effective width)
- $W_c$ Effective width of route (m) (= actual width of point, less the boundary layer)
- Number of occupants

This is conservative as it ignores the installed smoke detection and building occupant warning system discussed in Solution 2, which is shown to provide an improvement of 14 minute or more on in terms of pre-movement times

Gwynne and Rosenbaum state in Table 59.5 of the SFPE handbook^[xv], for level surfaces (corridors, aisles, ramps and doorways), the maximum specific occupant flow is 1.3 persons/s/m effective width (this is the most conservative values provided). The boundary layer width from Table 59.1 (SFPE) for obstacles in a level egress route is 0.1 m (each

For a DtS 1 m wide corridor the calculated effective width is 0.8 m and the corresponding calculated occupant flow is 1.04 persons/s. The calculated effective width for a 0.58 m wide egress route is 0.38 m with a corresponding calculated occupant flow of 0.494 persons/s.

A comparison of the time taken to pass through the pinch point is given in Table 10.





Table 10: Summary of travel time through external path

Case	Occupant Load (persons)	Clear width (m)	Occupant flow rate (persons/s)	Time to travel through a section (t _{tr} ) (s)
DtS	100	1	1.04	96
Performance Solution	9 (assumed peak)	0.58 (minimum)	0.494	18

The calculations show that the Performance Solution with an exit routes shown above, with low occupancy numbers Ine calculations show that the Performance Solution with an exit routes shown above, with low occupancy numbers travelling through the pinch point result in an evacuation times that are reduced when compared to the DtS design based on the maximum number of occupants (100) permitted for a 1 m wide route. Additionally, up to 47 persons can evacuate through the pinch point based on the above calculations in the same time as 100 persons through a 1 m wide route (96 seconds).

#### 5.3.6 Conclusion

Based on the qualitative discussion above it is demonstrated that the reduced egress width in the subject tenancy with limited occupancy numbers using each corridor due to the layout of the building is at least equivalent to the DtS design and as such Performance Requirement DP6 is considered to be met.





#### 5.4 Solution 4 – Fire Brigade Signal

#### 5.4.1 Introduction

Table 11 below provides a summary of this Solution, the relevant BCA DtS Provisions, which are affected, and the relevant BCA Performance Requirements and IFEG sub-systems.

Table 11 - Summary of Solution 4

Solution	Description of non-compliance and variations from the DtS Provisions of the BCA	BCA DtS Provision	BCA Performance Requirement	IFEG Sub-systems
Solution 4	Permit the automatic fire brigade signal to be sent on the simultaneous activation of two smoke detectors in lieu of single activation	E2.2a, Table E2.2a and Spec E2.2a	EP2.2	A, C, D, E and F

The building is provided with an automatic fire detection and alarm system installed to AS 1670.1-2015 which is monitored in accordance with BCA Specification E2.2a(7) as it is a Large Isolated Building which does not exceed

This is causing a large number of spurious (false alarms) in the building due to the open nature and use of the building causing non-fire activation of the existing smoke detection.

In order to mitigate spurious alarms (false alarms) the smoke hazard management requirements within SOUs will not satisfy the DtS Provisions of the BCA. The DtS Provisions require smoke detectors in all rooms within the SOUs (except within permitted exceptions in the standard). The proposed design permits heat type detectors in lieu of smoke detectors, activation of which more likely represents a 'true' fire scenario.

#### 5.4.2 Intent of the BCA

The following points provide excerpts from the BCA, detailing the applicable DtS Clause and Performance Requirement.

#### 5.4.2.1 BCA Specification E2.2a

BCA Specification E2.2a requires Large Isolated Building which do not exceed  $18,000\,\mathrm{m}^2$  or  $108,000\,\mathrm{m}^3$  to be provided with smoke hazard management, where a Clause 4 system is an option (AS 1670.1). This requires smoke detectors to be installed throughout the building which are required to be connected to provide automatic signal to FRNSW.

#### 5.4.2.2 Performance Requirement EP2.2

BCA Performance Requirement EP2.2 states:

'(a) In the event of a fire in a building the conditions in any evacuation route must be maintained for the period of time occupants take to evacuate the part of the building so that—

- (i) the temperature will not endanger human life; and
- $\begin{tabular}{ll} \hbox{(ii)} & the level of visibility will enable the evacuation route to be determined; and \end{tabular}$
- (iii) the level of toxicity will not endanger human life.

(b) The period of time occupants take to evacuate referred to in (a) must be appropriate to -

- (i) the number, mobility and other characteristics of the occupants; and
- ${\it (ii)} \quad {\it the function or use of the building; and} \\$
- (iii) the travel distance and other characteristics of the building; and
- (iv) the fire load; and
- (v) the potential fire intensity; and
- (vi) the fire hazard; and



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(vii) any active fire safety systems installed in the building; and

(viii) fire brigade intervention.

#### 5.4.3 Approach and assessment method

The approach is qualitative, quantitative and comparative using the assessment methods as shown in Table 5.

#### 5.4.4 Acceptance criteria

The acceptance criterion for this Performance Solution is that occupants and FRNSW are provided with an automatic signal in the case of a fire in the building and conditions on attendance are at least equivalent to a comparable DtS compliant building.

#### 5.4.5 Fire safety design requirements

The fire safety measures listed in the Trial Design shown in Table 6 form the holistic fire safety design for the building.

#### 5.4.6 Hazards

Where reliance on a second detector activating to provide signal to FRNSW occurs, there could be a delay ion FRNSW response in the case of a fire.

It has been assumed that all other hazards are comparable to those that would typically be expected in a building of this nature.

#### 5.4.7 Method of analysis

The Performance Solution presents a qualitative and qualitative comparative analysis comparing the Performance Solution design and a DtS compliant building.

For the purpose of the assessment the automatic fire brigade signal activation times will be compared for a single sprinkler activation (DtS case) and a second smoke detector activation (proposed design) to demonstrate that the dual alarm in the proposed design is unlikely to result in delayed FRNSW response when compared to the comparable DtS Design.

In order to calculate the smoke detector and sprinkler head activation times, the gas temperature at the smoke detector and sprinkler heads will be determined using Alpert's equations; will defined below:

$$\begin{split} \frac{dT_s}{dt} &= \frac{\sqrt{U}}{RTI} \Big[ (T - T_0) - \Big( 1 + \frac{C}{\sqrt{U}} \Big) (T_s - T_0) \Big] \\ U &= 0.96 \Big( \frac{\dot{Q}}{H} \Big)^{1/3} \ for \ \frac{r}{H} \leq 0.15 \\ U &= 0.195 \Big( \frac{(\dot{Q}/H)^{1/3}}{(r/H)^{5/6}} \Big) \ for \ \frac{r}{H} > 0.15 \end{split}$$

# Where:

 $\frac{dT_S}{dt}$  change in sensor temperature over time (°C/s)

U gas speed at the sensing element (m/s)

RTI Response Time Index of the element ( $[m.s]^{1/2}$ )

T gas temperature (°C)

T₀ ambient temperature (°C)
C conduction factor ([m/s]^{1/2})

d heat release rate (kW)

Q heat release rate (kV)
H ceiling height (m)

r radial distance of sensor from fire (m)



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The 'temperature equivalent method' is used to calculate smoke detector activation, as detailed in the IFEG (page 2.7–5) where a smoke detector is assumed to activate when a temperature of 13 °C above ambient is generated at the  $\overset{,}{\text{detector}}$  location. The design parameters that are modelled are:

- Activation temperature: 37 °C (based on ambient temperature of 24 °C)
- RTI: 10 (m.s)^{1/2}

#### Analysis 5.4.8

#### 5.4.8.1.1 DtS Design

BCA Spec E2.2a permits the following options for the subject building to satisfy the DtS smoke hazard management requirements:

- 1. Automatic fire sprinkler system in accordance with AS 2118.1; or
- 2. Automatic fire detection and alarm system to AS 1670.1; or
- 3. Automatic smoke exhaust system to AS 1668.1; or
- 4. Automatic smoke/heat vents to AS 1668.1.

For the purpose of this assessment, a comparison between the AS 2118 and AS 1670 systems will be made as they are the two closest comparisons due to the requirement of smoke detectors and sprinklers in all areas including individual rooms, cupboards and concealed spaces.

Sprinkler heads in a an industrial and storage building would likely be installed in accordance with High Hazard requirements and would be generally located throughout the building on a 3 m x 3 m grid

For the purpose of this assessment an RTI of 135  $(m.s)^{1/2}$  is used for the sprinkler heads with an activation temperature of 68 °C. This is as recommended in the Fire Engineering Design Guide^[kovil] and considered to be in line with general industry practice and also conservative considering a DtS sprinkler head can have an RTI of up to 350 (m.s)^{1/2}.

#### 5.4.8.1.2 Proposed Design

The building is provided with a fire detection and alarm system to AS 1670.1-2015 throughout which is the second option under the DtS requirements as noted above. However, the proposed solution permits the automatic signal to be sent to FRNSW on the activation of a second smoke detector.

#### 5.4.8.1.3 Activation times results

The activation times in the DtS design and proposed design have been calculated for the two systems detailed above. The inputs used in the analysis and the results are presented below in Table 12.

Table 12 - Comparative analysis for activation times

Parameter	Input Data	
	DtS Design	Proposed Design
	(AS 2118.1)	(10 m grid)
RTI (m.s ^½ )	135	10
Ambient temperature (°C)	24	24
Activation temperature (°C)	68 °C	37 °C
Radial distance from fire (m)	3.24 m (first head)	10 m (second detector)
Height of detector above fire (m)	3.2 m	2.7 m
[height of fire of 0.3 m] with ceiling height of 3.5 m*		
Fire growth rates	Slow / Medium / Fast	Slow / Medium / Fast
Activation time for each t ² fire growth rate	Slow: <b>525 s</b>	Slow: <b>347</b> s
(seconds)	Medium: 294 s	Medium: 182 s
	Fast: 172 s	Fast: 98 s



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*it is noted that areas of the building have higher ceiling/roof areas however the worst case scenario is taken as the lowest point. This is due to the larger variation between activation times as a function of higher ceiling/roof heights.

The AS 1670.1 smoke detector on a 10 m grid with the second detector activation times above indicate that it consistently provides earlier fire trip signal to FRNSW than the DtS design of sprinklers to AS 2118.1 with the first head operation in all fire growth curves assessed. Therefore, the signal to FRNSW is shown to unlock earlier in the proposed design than a comparable DtS design.

#### 5.4.9 Conclusion

Based on the qualitative and quantitative assessment above, the automatic signal to FRNSW is received earlier in the proposed design with second detector activation than the comparable DtS sprinkler design. The Performance Solution is therefore considered to satisfy Performance Requirement EP2.2.



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# 6 Key Assumptions and Limitations

- The BCA does not address issues such as property protection, environmental impacts of fire, use of accelerants / explosives, multiple ignition sources, acts of terrorism, arson or interruption of business activities, and availability of insurance(s) and as such these have not been considered in this report.
- This Report has been prepared in accordance with the Terms and Scope of the Fee Proposal and Short Form Agreement issued in relation to Mobius Fire Safety's engagement on the project.
- This report is limited to considering evacuation and fire safety issues for people with disabilities to the same degree as the DtS provisions of the BCA.
- The goal of 'absolute' or '100%' safety is not attainable and there will always be a finite risk of injury, death or property loss. Furthermore, fire and its consequent effects on people and property are both complex and
- Protection against bushfires and compliance with any bushfire requirements is not included in this evaluation. Where required, it is recommended that advice is sought from an appropriately qualified professional in the relevant field.
- Design compliance with the Disabled Discrimination Act, Dangerous Goods Act, and Occupational Health and Safety Act as well as their associated regulations is not the subject of this evaluation. Where required, it is recommended that advice is sought from an appropriately qualified professional in the relevant field.
- If there are building alterations or additions, a change in use or changes to the fire safety systems in the future, a reassessment will be needed to verify consistency with the assessment in this report.
- It has been assumed by the author that all essential fire safety measures listed in the building's Fire Safety Schedule have been maintained in accordance with the relevant Australian Standards as well as the applicable Legislation and as such are expected to operate as originally designed.
- This report does not demonstrate compliance or performance of any fire safety system. No operation checks or verification of compliance of any system was undertaken in the preparation of this report.
- The assessments carried out herein demonstrate that the Performance Solution complies with the BCA and therefore achieves an acceptable level of fire safety. Performance Solutions and Deemed-to-Satisfy Solutions do not, and cannot provide an absolute level of fire safety.
- This Fire Engineering Report has been based upon information provided to Mobius Fire Safety. Mobius Fire Safety has not confirmed or verified the accuracy of the documentation and information provided and therefore assumes it is accurate and complete. Mobius Fire safety shall not be responsible for any errors or omissions which may be incorporated into this Report as a result.
- Mobius Fire Safety's engagement is limited to assessing the above non-compliances with the DtS Provisions of the BCA as well as the listed Performance Requirements. Fire safety issues, other than those mentioned herein are outside of the scope of our engagement and therefore are not covered by this document.
- The Trial design listed in Table 6 form the basis of the assessments carried out herein and are expected to be included on the buildings Fire Safety Schedule. Any modifications or changes to the building, the installed systems or the building use from those listed in this report may render the assessments void and may require re-assessment by a C10 Registered Certifier (Fire Safety).





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## Appendix A – IFEG Sub-systems



# Sub-system A SS-A Fire Initiation & Development & Control Chapter 1.4

Sub-system A (SS-A) is used to define design fires in the enclosure of fire origin as well as enclosures to which the fire has subsequently spread and how fire initiation and development might be controlled.



# Sub-system B

SS-B Smoke Development & Spread & Control Chapter 1.5

Sub-system B (SS-B) is used to analyze the development of smoke, its spread within the building, the properties of the smoke at locations of interest and how the development and spread might be controlled.



# Sub-system C

SS-C Fire Spread & Impact & Control Chapter 1.6

Sub-system C (SS-C) is used to analyze the spread of fire beyond an enclosure, the impact a fire might have on the structure and how the spread and impact might be controlled.



# Sub-system D

SS-D Fire Detection, Warning & Suppression Chapter 1.7

Sub-system D (SS-D) is used to analyze detection, warning and suppression for fires. This process enables estimates to be made of the effectiveness of suppression.



#### Sub-system E

SS-E Occupant Evacuation & Control Chapter 1.8

Sub-system E (SS-E) is used to analyze the evacuation of the occupants of a building. This process enables estimates to be made of the times required for occupants to reach a place of safety.



# Sub-system F SS-F Fire Services

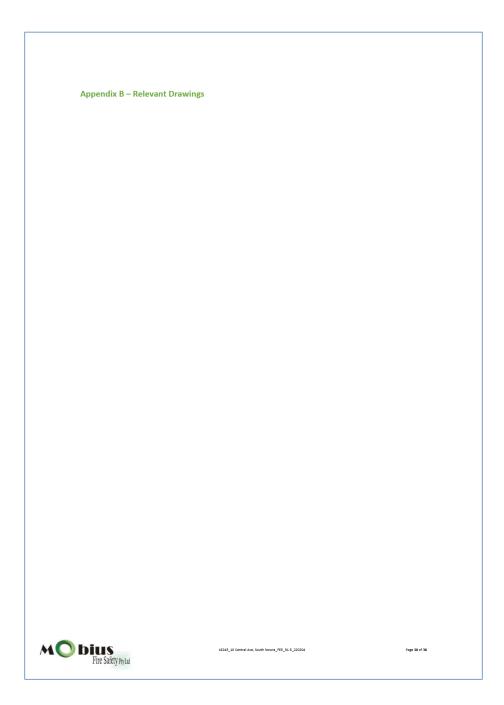
Intervention Chapter 1.9

Sub-system F (SS-F) is used to analyze the effects of the intervention activities of fire services on a fire including the effectiveness of suppression activities.



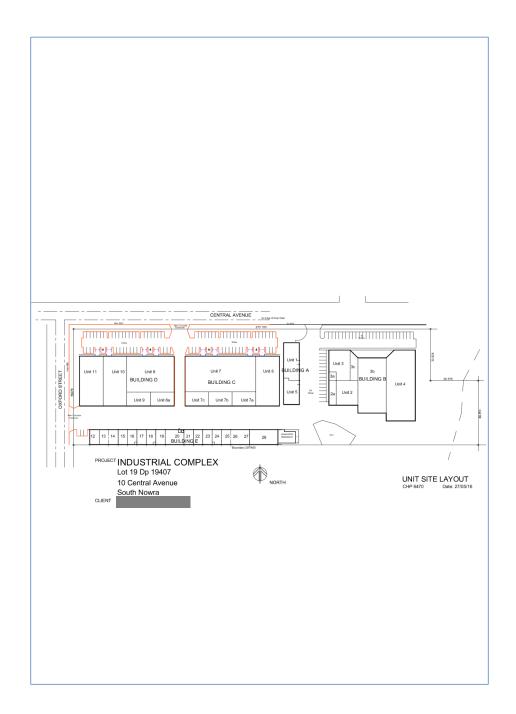
Fire Safety PtyLtd



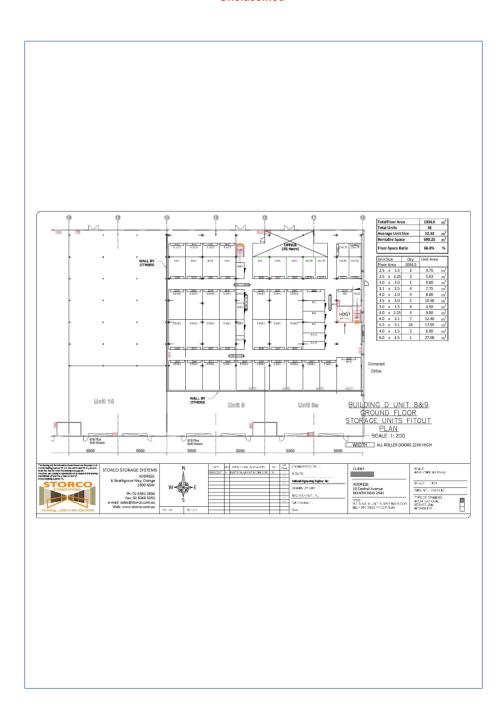


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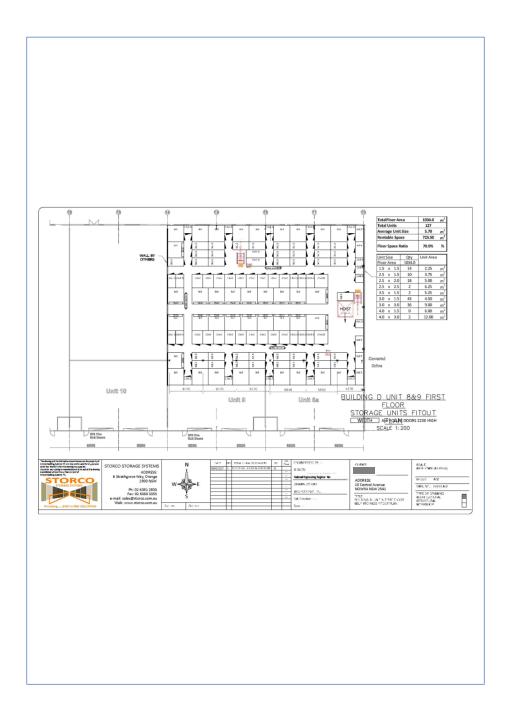




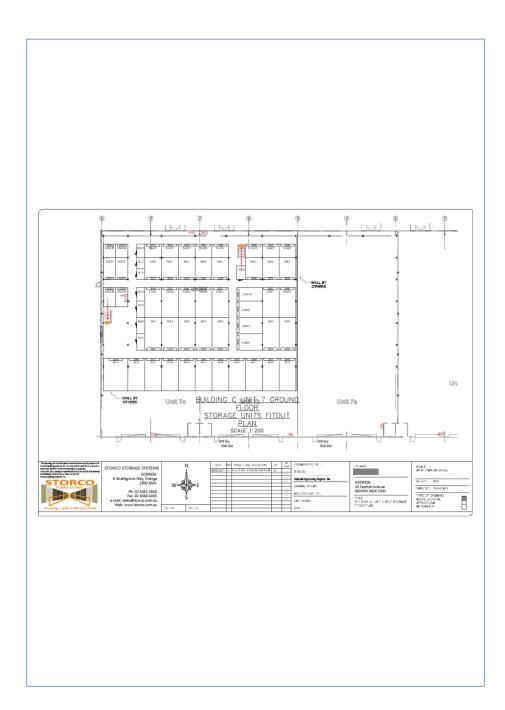




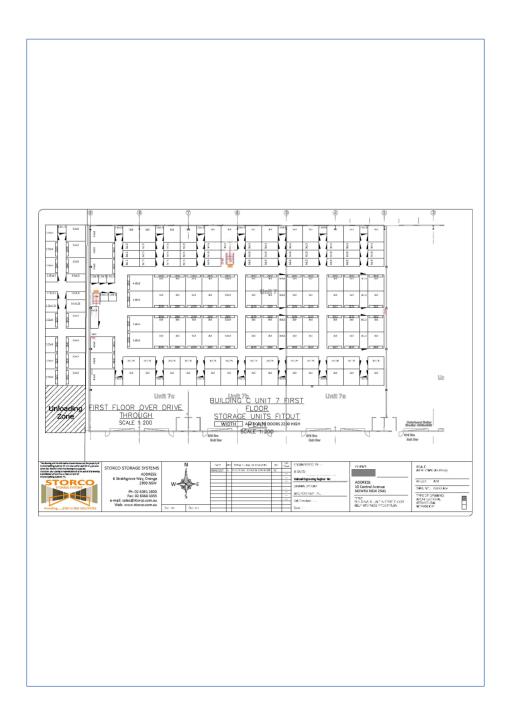




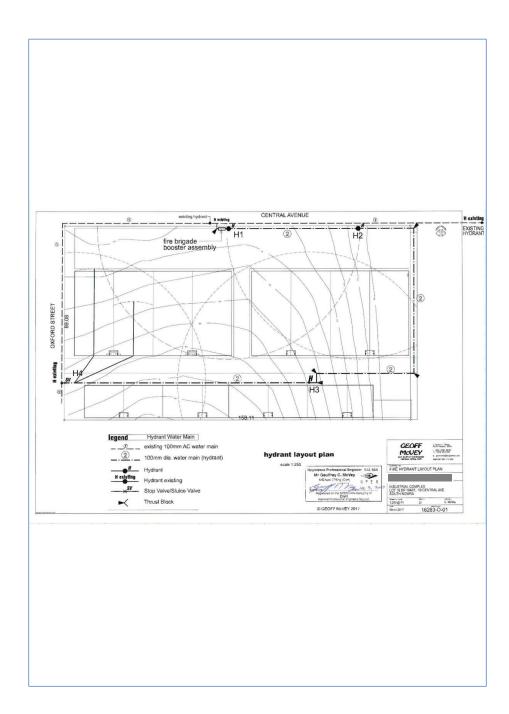




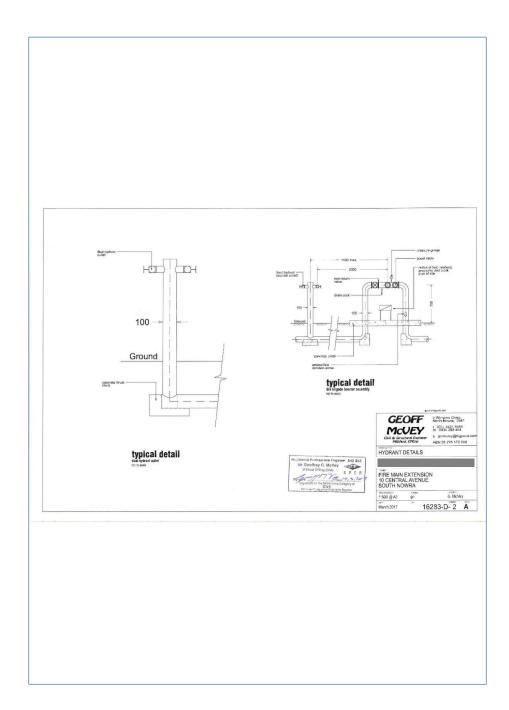




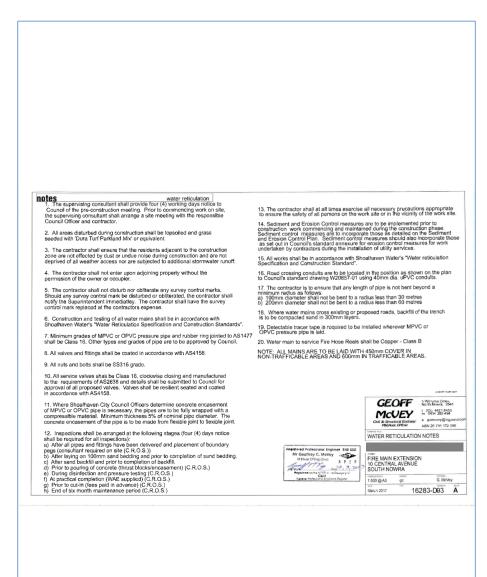














### COUNCIL ASSESSMENT REPORT

Panel Reference	PPSSTH-130
DA Number	RA21/1001
LGA	Shoalhaven City Council
Proposed Development	Proposed 47 Unit Industrial Development, Ancillary Café, access driveways, signage and landscaping
Street Address	17 Norfolk Avenue, SOUTH NOWRA - Lot 116 DP 1122371
Applicant/Owner	Shoalhaven City Council
Date of DA lodgement	17 November 2021
Total number of Submissions Number of Unique Objections	One (1)
Recommendation	Approval
Regional Development Criteria (Schedule 6 of SEPP (Planning Systems) 2021	Schedule 6 Clause 3 - Council related development over \$5 million  CIV = \$8,334,817
List of all relevant s4.15(1)(a) matters	State Environmental Planning Policy (Biodiversity and Conservation) 2021     State Environmental Planning Policy (Industry and Employment) 2021     State Environmental Planning Policy (Resilience and Hazards) 2021     State Environmental Planning Policy (Transport and Infrastructure) 2021     Shoalhaven Local Environmental Plan 2014     Shoalhaven Development Control Plan 2014
List all documents submitted with this report	Attachment 1 – Section 4.15 Assessment Report
for the Panel's	Attachment 2 – Recommended conditions of consent.
consideration	Attachment 3 – Assessment of Shoalhaven Development Control Plan 2014
	Attachment 3 – Architectural Plans
	Attachment 4 – Applicant-provided reports accompanying architectural plans
Clause 4.6 requests	N/A
Summary of key submissions	Council needs to carefully consider the intensification of the industrial area, particularly in relation to impacts of increased traffic, the interaction of light and heavy vehicles, and vehicle safety entering/exiting driveways.
Report prepared by	Tyson Ek-Moller (Creative Planning Solutions), Consultant Planner
Report date	17 August 2022
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Summary	of	s4.15	matters

Have all recommendations in relation to relevant s4.15 matters been summarised in the Executive Summary of the assessment report?

Yes

Legislative clauses requiring consent authority satisfaction
Have relevant clauses in all applicable environmental planning instruments where the consent authority must be satisfied about a particular matter been listed, and relevant recommendations summarized, in the Executive Summary of the assessment report?

Yes

e.g. Clause 7 of SEPP 55 - Remediation of Land, Clause 4.6(4) of the relevant LEP

Clause 4.6 Exceptions to development standards



If a written request for a contravention to a development standard (clause 4.6 of the LEP) has been received, has it been attached to the assessment report?	Not applicable
Special Infrastructure Contributions  Does the DA require Special Infrastructure Contributions conditions (S7.24)?  Note: Certain DAs in the Western Sydney Growth Areas Special Contributions Area may require specific Special Infrastructure Contributions (SIC) conditions	Not applicable
Conditions  Have draft conditions been provided to the applicant for comment?  Note: in order to reduce delays in determinations, the Panel prefer that draft conditions, notwithstanding Council's recommendation, be provided to the applicant to enable any comments to be considered as part of the appearance report.	Yes



#### **Executive Summary**

The subject site is located on the northwest side of Norfolk Avenue and forms part of the Flinders Industrial area. The land is identified by title as Lot 116 in Deposited Plan 1122371, and has a street address of 17 Norfolk Avenue, South Nowra.

The site comprises of an irregularly-shaped allotment with an area of 13,500m². The site does not contain any structures. The site is cleared of vegetation; historically, the site was heavily vegetated, with both the site and land to the rear/northwest being cleared in 2021. The entire site is bush fire prone land and is mapped as being affected by class 5 acid sulphate soils.

Sites within the Flinders Industrial Estate to the north, south and east of the subject site contain a range of industrial buildings and associated land uses; surrounding sites to the northwest, west and southwest are undeveloped and cleared, with sites further to the west and southwest being heavily vegetated.

Shoalhaven City Council (Council) is in receipt of Development Application no. RA21/1001, which was lodged on 17 November 2021. The DA proposes the construction of 47 industrial units, an ancillary café, civil works (including stormwater works, access driveways and parking), signage and landscaping. Aside from the ancillary café, the uses of the individual industrial units are not proposed and will be subject to separate consents.

The land is zoned IN1 General Industrial under the *Shoalhaven Local Environmental Plan 2014* (SLEP 2014). Development for the purpose of a "general industry" (as defined by SLEP 2014) is permissible with consent in the IN1 zone. A *café* is however prohibited within the zone, and it is not agreed that the proposed *café* is an ancillary use. Conditions are recommended that will require changes to the design and operation of the proposed *café* so that this part of the development operates as a "take away food and drink premises", which is a permissible land use in the IN1 zone.

Pursuant to cl. 3(b) of *State Environmental Planning Policy (Planning Systems) 2021*, the proposal constitutes regionally-significant development, as Council is the owner of the site and the Capital Investment Value (CIV) of the proposed development is \$8,334,817. As such, the Southern Regional Planning Panel (SRPP) is the consent authority for the DA.

The DA has been assessed against the following relevant environmental planning instruments and demonstrates compliance with the relevant provisions is achievable, subject to the recommended conditions of consent:

- Shoalhaven Local Environmental Plan 2014,
- State Environmental Planning Policy (Biodiversity and Conservation) 2021,
- State Environmental Planning Policy (Industry and Employment) 2021,
- State Environmental Planning Policy (Resilience and Hazards) 2021, and
- State Environmental Planning Policy (Transport and Infrastructure) 2021

The application has been assessed against the following chapters of the Shoalhaven Development Control Plan 2014 (SDCP 2014):

- G1: Site Analysis, Sustainable Design and Building Materials in Rural and Coastal Areas
- G2: Sustainable Stormwater Management and Erosion/Sediment Control
- G3: Landscaping Design Guidelines
- G7: Waste Minimisation and Management Controls
- G20: Industrial Development
- G21: Car Parking and Traffic
- G22 Advertising Signs and Structures



• G26 Acid Sulfate Soils and Geotechnical (Site Stability) Guidelines

The development demonstrates satisfactory compliance with each chapter of SDCP 2014. The planning assessment identified some non-compliances with Chapters G1, G20, G21 and G22. Such noncompliances relate to the lack of a site analysis plan, inadequate solar access information, a front setback variation, the length of unbroken walls along the side elevations of the building, inadequate pedestrian facilities, inadequate manoeuvring space for large vehicles, and the size of free-standing signage at the front of the site. This planning assessment has found that most noncompliances are either justifiable and/or can be addressed by conditions in the event of approval.

The proposed layout of the development is however inadequate to permit the access and internal circulation of articulated vehicles, therefore a condition is recommended that will prohibit access to the site by articulated vehicles.

The DA is also reliant upon the creation of easements on a Council-owned site that adjoins the rear boundary to both:

- Facilitate the discharge of stormwater from the southern part of the site to the public drainage system, and
- To facilitate the creation of an Asset Protection Zone (APZ) that is required to protect the rear
  of the site in the event of a bushfire within vegetated areas to the west.

The creation of easements to benefit the subject site are supported by Council's technical officers, however the easements are to be registered prior to the activation of any consent issued for the DA. The creation of the drainage easement(s) is therefore subject to deferred-commencement conditions in the event that the DA is approved.

The DA was notified in accordance with the Shoalhaven Council Community Participation Plan 2019 from 8 December 2011 until 7 January 2022. One (1) submission was received by Council during the notification period.

Subject to conditions, the site is suitable for the proposed development in its present form.

With regard to the above matters, the proposal is in the public interest.

It is recommended the application be approved in accordance with the reasons for approval attached to this report.



#### 1. Detailed Proposal

The Council is in receipt of a Development Application (DA) for the construction of an industrial development, that includes 47 industrial units, an ancillary café, civil works including onsite stormwater infrastructure and driveways, signage and landscaping.

As the site is a vacant allotment, demolition works are not proposed. Subdivision of the proposed development is not proposed.

The café and industrial units are to be contained within four (4) main buildings with varying numbers of industrial units. Two of the buildings are proposed to be built along the side boundaries and will extend from the front setback line to the rear boundary. The other two buildings are to be located at the rear of the site (i.e. at the site's widest point), between the aforementioned buildings that are to be built to the side boundaries; one of these buildings will be built to the rear boundary, with the other to be set back seven metres from the rear boundary. The four buildings are to be internally separated by internal driveways and parking areas.

The development is also proposed to include facilities for vehicular access and internal manoeuvring, which will utilise a single driveway layback and crossover and internal driveway throughout the site. 115 onsite car parking spaces (including two (2) accessible car parking spaces) are proposed. Onsite drainage includes onsite pits, pipes and three Onsite Stormwater Detention (OSD) systems, which will connect to two drainage easements (one of which is to be created) adjoining the rear boundary. Landscaping works are proposed, as is signage which includes:

- A double-sided freestanding pylon sign, which is proposed to be located on the northern side
  of the proposed driveway crossover,
- Wall signage on the front and southern-side elevations of the café,
- · Wall signage areas above each of the loading docks for each tenancy, and
- · Internal wayfinding signage.

Aside from the café, separate consents are to be attained for the uses of the industrial units.

The proposed hours of operation for the café are 7:00am to 5:00pm, Monday to Friday.

Extracts of the site plan, landscape plan, elevations, sections, and 3D perspectives of the development are provided in **Figures 1 to 6**.



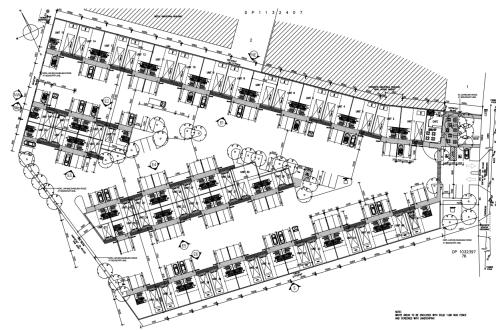


Figure 1 – Site/ground floor plan of the proposed development (Note: the plan extract is from the latest revision, dated 21 July 2022).



Figure 2 – First floor plan of the proposed development (Note: the plan extract is from the latest revision, dated 21 July 2022).





Figure 3 - Landscape plan of the proposed development (Note: the plan extract is from the latest revision, dated 29 July 2022).



Figure 2 – A 3D visual representation of the proposed development, as viewed from the east of the site.





Figure 3 – A 3D visual representation of the proposed development from the east within Norfolk Avenue.



Figure 4 – A 3D visual representation of the proposed development from within the site between the café and Unit 47.

## 2. Subject Site and Surrounds

The street address of the subject site is 17 Norfolk Avenue, South Nowra NSW, 2571. It comprises of one allotment identified by title as Lot 116 within Deposited Plan 1122371.

The site is located on the northwest side of Norfolk Avenue. The front boundary adjoins the Norfolk Avenue road reserve, and both side boundaries adjoin developed industrial sites. The rear boundary adjoins undeveloped allotments. The site has an area of  $13,500m^2$  (1.35 hectares) with a gentle front-to-rear slope varying between 1.3 and 2.2 metres. The site is irregularly shaped; progressively widening from a curved 40.435 metre front boundary to a split northwest/southwest-oriented rear boundary with a combined length of 137.19 metres.





Figure 7 – Aerial image of the subject site (outlined by the red border) in the local context (Source: Nearmap, 30 July 2022, modified by CPS 10 August 2022)



Figure 8 – Aerial image of the subject site (outlined by the red border) in the local context (Source: Nearmap, 30 July 2022, modified by CPS 10 August 2022)

The subject site and all adjoining sites are within the IN1 General Industrial zone under the Shoalhaven Local Environmental Plan 2014; the nearest zone boundary is a C3 Environmental Page 9 of 36



Management zone, approximately 30 metres west/southwest of the subject site. The site is mapped as being bushfire prone and affected by class 5 acid sulphate soils, however the site is not identified as being subject to any other environmental hazards or affectations. The site does not contain a heritage item, is not within a Heritage Conservation Area and is not located in close proximity to a heritage item.



Figure 9 – A photo of the subject site, taken from the southeast (i.e. opposite) side of Norfolk Avenue. (Source: CPS, 21 April 2022)



Figure 10 – A photo of the subject site, as viewed from the northwest side of the rear boundary (Source: CPS, 21 April 2022)

The subject site is currently undeveloped, and vehicular access is not currently provided to the site. There are also no trees on the subject site or within the road reserve to the front of the site. The western side of the Norfolk Avenue road reserve adjacent to the subject site's road frontage contains overhead 11kV power lines.

The subject site is located on the western side of the Flinders Industrial estate, which is located to the southwest of the Nowra town centre. Development on surrounding sites within this precinct include a variety of industrial buildings and associated activities.



The sites adjoining the northeast side boundary include 13 and 15 Norfolk Avenue; development on these sites include large warehouse and shed type structures. The site adjoining the southern boundary is 19 Norfolk Avenue; the forward part of this site contains a dwelling-type structure that is being used as an office, the centre of the site contains a large warehouse-type structure while the rear area includes a large at-grade area that is being used for heavy vehicle storage. The site on the eastern (i.e. opposite) side of Norfolk Avenue includes a variety of structures that form part of a concrete batching plant.



Figure 11 – A photo taken from the southeast (i.e. opposite) side of Norfolk Avenue looking north towards 15 and 11 Norfolk Avenue. (Source: CPS, 21 April 2022)



Figure 12 – A photo taken from the southeast (i.e. opposite) side of Norfolk Avenue looking southwest towards 19 and 21 Norfolk Avenue. (Source: CPS, 21 April 2022)



Sites within the wider area to the north, south and east of the site contain a wide range of industrial structures and associated uses. Sites to the west of the site are undeveloped; sites adjoining the rear boundary are both undeveloped and cleared of vegetation, while C3-zoned sites further to the west are heavily vegetated. Sites beyond those C3-zoned areas further to the southwest (i.e. approximately 230 metres from the site) contain large lot residential development.

#### Deposited Plan and 88B Instrument

There are no easements or restrictions on the subject site that would limit development of the site as proposed. The DA does however propose to connect the proposed stormwater system to a drainage easement on an adjoining allotment (Lot 117 in Deposited Plan 1122371); a second drainage easement is to also be created within an adjoining site (Lot 40 in Deposited Plan 802671) to enable drainage from southern parts of the site. The NSW Rural Fire Service (RFS) also recommends a condition that will impose a restriction on the use of the subject site and areas of adjoining land projecting 22 metres out from the subject site that will require such areas to be managed as an Inner Protection Area (IPA).

## 3. Background

#### Post-Lodgement

- 3 December 2021: A Request for Additional Information (RFI) was sent to the applicant, seeking additional and amended information relating to cost of works, clarification of café layout, changes to parking, information regarding heavy vehicle manoeuvring, a Water Cycle Management Plan and clarification on unit sizes.
- 10 December 2021: An RFI was sent to the applicant seeking additional and amended information relating to waste management (including ongoing storage and collection of waste).
- 10 March 2022: Amended and additional information received.
- 4 May 2022: Further additional information received.
- 21 April 2022: A site inspection was undertaken by the consultant planner.
- 1 July 2022: A response to the requested information received from the applicant.
- 7 July 2022: An RFI was sent to the applicant, seeking additional and amended information relating to matters including site layout, revised plans, bushfire related matters, setbacks, landscaped areas, boundary fences, revised colour schedule and information on the cost of works, clarification of the café layout, changes to parking, and general information to assist with the planning assessment.
- 29 July 2022: Additional information received.

#### Site History and Previous Approvals

14 August 2003: Subdivision Consent no. SF9327 approved for a six (6) lot industrial subdivision.

Council's online Development Application tracker does not have a record of any application for development upon the site since the approval of the subdivision that created the subject site.



## 4. Consultation and Referrals

Internal Referrals					
Referral	Required	Recommendation	Comment		
Building Surveyor	×	Approval, subject to conditions to address the following matters:  Stormwater Fire safety Long service levy Plumbing and drainage Retaining walls	Council has not been nominated for the Construction Certificate or as the certifying authority.  In this regard, no National Construction Code (NCC) assessment has been completed for the proposal. The proposal may be subject to performance base solutions provisions of the NCC.		
Development Engineer	$\boxtimes$	Deferred commencement approval.  Conditions are recommended to address the following matters prior to the activation of consent:  Drainage Easement registration  Conditions are recommended to address the following matters following activation of the consent: Stormwater and drainage Waste management Vehicle access and onsite manoeuvring Waste servicing	Conditions have been suggested below to deal with outstanding matters. The DAO may need to consider whether it is appropriate to condition establishment of an easement or if consent is required prior to determination.		
Environmental Health		Approval, subject to conditions regarding registration and regulation of food premises.	Environmental Health have reviewed this proposed development which includes an ancillary café and have no objections to this proposal. The inclusion of Master Document conditions for Food Business Regulations and Food Business Notification will suffice.		
City Services	$\boxtimes$	No objection, subject to conditions (imposed by both City Services and Development Engineering)	The City Services comments have been co-ordinated with the development engineering referral.		
Property	$\boxtimes$	Conditions are recommended for compliance with the NCC, fire	An easement for both the stormwater drainage and necessary APZ could both be		

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	safety and partial building upgrades to the existing building	dealt with as a deferred commencement condition, requiring evidence of registration of such easements over that neighbouring land, prior to operational consent. <b>Note:</b> Conditions recommended by the NSW RFS do not require title restrictions relating to APZs to be undertaken as a deferred-consent requirement.
Shoalhaven Water	No objection to proposal, subject to a condition requiring that a Certificate of Compliance be submitted in order to obtain a Water Development Notice.	A Certificate of Compliance is to be lodged prior to the issue of a Construction Certificate.

External Referrals				
Agency	Required	Recommendation	Comment	
Energy supply authority (Endeavour Energy)		A referral response was received on 20 December 2021 that indicated the proposal will require an extension and/or augmentation of the existing local network, though the extent of any works will not be determined until a final load assessment (subject to conditions) is completed. No objection was raised to the proposal, subject to conditions and advice in the event of approval.	No further action required.	
NSW Rural Fire Service (RFS)	$\boxtimes$	A final referral response was received by Council on 16 August 2022. No objection was raised to the proposal, subject to conditions and advice in the event of approval. The conditions require the entirety of the site being managed as an Inner Protection Area (IPA), and restrictions of land use on adjoining sites to the northwest and southwest that will require areas up to 22 metres from the subject site being managed as an IPA.	No further action required.	



## 5. Other Approvals

The proposed development is not integrated nor development under s.4.46 of the *Environmental Planning and Assessment Act 1979*.

#### 6. Statutory Considerations

This report assesses the proposed development against relevant State, Regional and Local Environmental Planning Instruments and policies in accordance with Section 4.15 (1) of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The following planning instruments and controls apply to the proposed development:

Instrument	Relevant	Instrument	Relevant
Shoalhaven LEP 2014	$\boxtimes$	State Environmental Planning Policy (Industry and Employment) 2021	$\boxtimes$
State Environmental Planning Policy SEPP (Planning Systems) 2021	$\boxtimes$	State Environmental Planning Policy (Resilience and Hazards) 2021	$\boxtimes$
State Environmental Planning Policy (Biodiversity and Conservation) 2021	$\boxtimes$	State Environmental Planning Policy (Transport and Infrastructure) 2021	$\boxtimes$

Additional information on the proposal's compliance with the above planning instruments is detailed below in Section 7 (Statement of Compliance/Assessment) of this report.

#### 7. Statement of Compliance/Assessment

The following provides an assessment of the submitted application against the matters for consideration under Section 4.15 of the EP&A Act.

## (a) Any planning instrument, draft instrument, DCP and regulations that apply to the land

Environmental Planning and Assessment Act 1979

## i) Environmental planning instrument

## SEPP (Planning Systems) 2021

Pursuant to cl. 3(b) of this SEPP, the proposal constitutes regionally-significant development, as the CIV of the proposal is \$8,334,817 and Council is the owner of the site. As such, the SRPP is the consent authority for the DA.

## SEPP (Biodiversity and Conservation) 2021

Pursuant to clauses 3.3 and 3.5, Chapter 3 of this SEPP applies to the site. With regard to cl. 3.6, as demonstrated by *Figure 8*, the site has already been cleared of all vegetation; neither of the adjoining sites contain any significant trees and vegetation, and there is a significant (i.e. minimum 30 metre) cleared buffer area between the rear boundary of the site and any significant trees. Pursuant to cl. 3.6(3) of this SEPP, Council can therefore be satisfied the land is not a potential koala habitat, and is not prevented from granting consent to the DA.

Chapter 4 (Koala habitat protection 2021) applies to the site. Pursuant to cl. 4.9(2), prior to granting consent Council must consider whether the development is likely to have any impact on koalas or Page 15 of 36



koala habitat. As indicated above and as demonstrated by *Figure 8*, the site does not constitute likely koala habitat; further, a lack of vegetation and the form of development on surrounding sites to the north, east and south of the site is such that it is unlikely that koalas will traverse the site in order to obtain access to habitats or food sources. It is therefore considered that the development is likely to have low or no impact on koalas or koala habitat, and consent may be granted to the proposed development.

## SEPP (Industry and Employment) 2021

The provisions of Chapter 3 (Advertising and signage) apply given the proposal includes signage that is visible from a public place (i.e. the Norfolk Avenue road reserve) that is not exempt development. Pursuant to cl. 3.6(b) this SEPP, the consent authority must not grant consent to signage unless it is satisfied that the assessment criteria of Schedule 5 (Assessment criteria) of this SEPP is met. An assessment of Schedule 5 is contained within the following table.

Schedule 5 Assessment criteria	Comment
1 Character of the area	
Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?	The design, placement and location of the signage is consistent with the Flinders Industrial precinct, noting that development on surrounding sites contains a variety of signage including
Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	pylon freestanding signs, free-standing signage structures and on-building signage.
2 Special areas	
Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	The proposed signage will not detract from the amenity or visual quality of the locality, noting that it is located within an industrial precinct. There are no heritage items, areas of environmental sensitivity or open areas that will be adversely affected by the signage.
3 Views and vistas	
Does the proposal obscure or compromise important views?  Does the proposal dominate the skyline and reduce the quality of vistas?	The proposed signs will not obscure important views and surrounding signage. The heights of all proposed signs will be less than the proposed buildings to which the signs relate, and therefore will not dominate the skyline.
Does the proposal respect the viewing rights of other advertisers?	will not dominate the skyline.
4 Streetscape, setting or landscape	
Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?	The scale, form and proportions of the signage are consistent with the streetscape setting within Norfolk Avenue. Advertising located at the front
Does the proposal contribute to the visual interest of the streetscape, setting or landscape?	of the site will be rationalised, noting that signs within this part of the site will both advertise and identify the café and other business on the site.
Does the proposal reduce clutter by rationalising and simplifying existing advertising?	All proposed signs will be located below the maximum heights of the proposed buildings with which the signs are to be associated, therefore



Does the proposal screen unsightliness?	they will not protrude above buildings, or structures.
Does the proposal protrude above buildings, structures or tree canopies in the area or locality?  Does the proposal require ongoing vegetation management?	The submitted information indicates that ongoing landscape maintenance will be unrelated to the proposed signage.
5 Site and building	
	The size and eagle of the proposed signs are
Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?	The size and scale of the proposed signs are consistent to the height and proportions of the associated buildings.
Does the proposal respect important features of the site or building, or both?	There are no special features within the area that signage is required to consider. The design and layout of the site and associated external finishes
Does the proposal show innovation and imagination in its relationship to the site or building, or both?	have considered sign placement, and the proposal shows innovation in this regard.
6 Associated devices and logos with advert	isements and advertising structures
Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?	Safety, structural and illumination equipment does not form part of the proposed signage.
7 Illumination	
Would illumination result in unacceptable glare?	The signs are not proposed to be illuminated.
Would illumination affect safety for pedestrians, vehicles or aircraft?	
Would illumination detract from the amenity of any residence or other form of accommodation?	
Can the intensity of the illumination be adjusted, if necessary?	
Is the illumination subject to a curfew?	
8 Safety	
Would the proposal reduce the safety for any public road?	Aside from centralised wayfinding signage (which is to be of heights and situated in locations that
Would the proposal reduce the safety for pedestrians or bicyclists?	will not adversely affect visibility of vehicles and pedestrians), the proposed signs are otherwise to be sited in locations that will not obscure
Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?	viewlines and create a safety hazard for road users.

SEPP (Resilience and Hazards) 2021



The site is not located within a coastal zone and the proposed development does not constitute hazardous or offensive development. Chapters 2 and 3 of the proposal therefore do not apply to the subject application.

With regard to Chapter 4 (Remediation of Land), clause 4.6(1) requires Council to consider whether the site is contaminated, and if so whether it is suitable for the proposed development purpose.

The subject site has not previously been developed, with the only previous work on the site consisting of tree clearing. Further, the nature of the uses on surrounding sites are such that it is unlikely that contaminants have migrated from those sites to the subject site. The inspection of the site by the consultant planner also did not identify any development or use of the subject site that has likely resulted in the site becoming contaminated, such as illegal dumping. Further, the consent authority would have been required to consider the relevant contamination provisions of *State Environmental Planning Policy No. 55 – Remediation of Land*, which was in effect at the time that consent was granted for subdivision which created the subject site and other allotments to the north for industrial purposes.

As such, further site investigations are not warranted, and the site is considered to be suitable for the proposed industrial use. A condition is however recommended in the event of approval to address the potential undiscovered finds during works.

#### SEPP (Transport and Infrastructure) 2021

The adjoining road reserve to the front of the site contains high-voltage 11kV overhead power lines. The proposed works are likely to occur within five metres of such lines. A referral was therefore made to the energy supply authority on 25 November 2021 pursuant to cl. 2.48(1) of the then Infrastructure SEPP. A referral dated 20 December 2021 was received in response, which supported the proposal subject to conditions.

The size of the proposed development and associated car parking facilities are such that the development does not constitute 'traffic generating development' under Schedule 3 of this SEPP. A referral to Transport for New South Wales (TfNSW) was therefore not required.

## Shoalhaven LEP 2014

## **Land Zoning**

The land is zoned IN1 General Industrial under the SLEP 2014; refer to Figure 13 below.



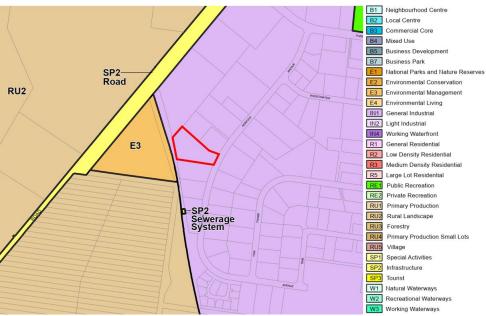


Figure 13 – Extract of SLEP 2014 land zoning map; the subject site is outlined by the red border)

## **Characterisation and Permissibility**

The proposed development is referred to by the applicant's Statement of Environmental Effects (SEE) as an 'industrial development' consisting of 'industrial units', however apart from the proposed 'café', the future land uses associated with the individual tenancies are not proposed as part of this DA.

The design of the development will provide each unit with storage areas, a loading bay and ancillary facilities such as car parking and mezzanine areas. The industrial units are therefore most appropriately defined by the SLEP 2014 as a 'general industry', the land use definition of which is as follows:

**general industry** means a building or place (other than a heavy industry or light industry) that is used to carry out an industrial activity.

#### Note-

General industries are a type of industry—see the definition of that term in this Dictionary.

For reference, the SLEP 2014 definitions for 'industry' and 'industrial activity' are as follows:

industry means any of the following-

- (a) general industry,
- (b) heavy industry,
- (c) light industry,

but does not include-

- (d) rural industry, or
- (e) extractive industry, or
- (f) mining.



industrial activity means the manufacturing, production, assembling, altering, formulating, repairing, renovating, ornamenting, finishing, cleaning, washing, dismantling, transforming, processing, recycling, adapting or servicing of, or the research and development of, any goods, substances, food, products or articles for commercial purposes, and includes any storage or transportation associated with any such activity.

'General industry' is a form of development that is permissible with consent within the IN1 zone under the SLEP 2014.

A 'café' is type of 'food and drink premises', which is defined as follows:

**food and drink premises** means premises that are used for the preparation and retail sale of food or drink (or both) for immediate consumption on or off the premises, and includes any of the following—

- (a) a restaurant or cafe,
- (b) take away food and drink premises,
- (c) a pub,
- (d) a small bar.

#### Note-

Food and drink premises are a type of **retail premises**—see the definition of that term in this Dictionary.

As per the note above, a 'food and drink premises' is a type of 'retail premises'. 'Retail premises' are prohibited within the IN1 zone under the SLEP 2014.

While the SEE provides that the café is ancillary to the industrial component (and is therefore permissible), it is not demonstrated how the café is ancillary to the industrial use. The café will operate independently of the proposed industrial tenancies and is not proposed to exclusively serve the occupants of the industrial tenancies on the subject site. As such, the café is an independent component of the development and is therefore not an ancillary use.

A 'take away food and drink premises' is however singled out and identified as being permitted with consent within the IN1 zone, and for reference is defined as follows:

take away food and drink premises means premises that are predominantly used for the preparation and retail sale of food or drink (or both) for immediate consumption away from the premises.

## Note-

Take away food and drink premises are a type of food and drink premises—see the definition of that term in this Dictionary.

To enable a food and drink offering on the site for the development, it is recommended the use and layout of the 'café' be modified so that it is in accordance with the SLEP 2014 'take away food and drink premises' land use definition. To facilitate this, a consent condition has been recommended that will require deletion of the references to a 'café' from the plans, so that the premises provides a layout that enables it to be predominantly used for the preparation and retail sale of food or drink (or both) for immediate consumption away from the premises.

If undertaken in accordance with the recommended conditions, the proposal is permitted within the zone with the consent of Council.



## Zone objectives

Ok	jective	Comment
•	To provide a wide range of industrial and warehouse land uses.	The size, nature and layout of the proposed tenancies will enable provision of facilities that are capable of accommodating a variety of industrial and warehouse-type uses on the site.
•	To encourage employment opportunities.	Aside from employment opportunities during construction, the tenancies will provide appropriate facilities for future employment-generating uses.
•	To minimise any adverse effect of industry on other land uses.	The physical form of the proposed development will not adversely affect surrounding sites nor affect their ability to support industrial activities. While the specific operations of future businesses/industries on the site will be subject to separate consents, the size and design of the proposed tenancies are such that their future use is unlikely to adversely affect surrounding sites and/or land uses. The operation of the proposed take away food and drink premises will be contained within the subject site boundaries, and both its size and hours of operation will not adversely affect surrounding land uses.
•	To support and protect industrial land for industrial uses.	The proposed development is to provide facilities to support individual small-to-medium industrial uses. The development more broadly will have no impact on the ability of surrounding sites and the locality to provide land for industrial-type uses.
•	To allow a diversity of activities that do not significantly conflict with the operation of existing or proposed development.	The varying sizes of the proposed tenancies will enable the site to be occupied by a diverse range of small-scale industrial activities. While the future uses of those tenancies would be subject to separate assessments, the size of such occupations are likely to be such that they will not significantly conflict with existing operations on surrounding sites.
•	To enable other land uses that provide facilities or services to meet the day to day needs of workers in the area.	The proposed development will not adversely affect the ability of surrounding sites to provide facilities or services that are capable of meeting the day-to-day needs of workers within the area.



## SLEP 2014 Clauses

Clause	Comments	Complies/Consistent
Part 2 Permitted or prol		
2.7 Demolition	The site is a vacant allotment. Demolition is	A1/A
requires development	not required.	N/A
Consent	ment standards	
Part 4 Principal develor 4.1 Minimum	Subdivision is not proposed by this subject	
subdivision lot size	application.	N/A
4.3 Height of buildings	(2A) If the <u>Height of Buildings Map</u> does not	
4.5 Floight of buildings	show a maximum height for any land, the	
	height of a building on the land is not to	
	exceed 11 metres.	Yes
	Maximum proposed building height: 7.82	
	metres	
Part 5 Miscellaneous pr		
5.10 Heritage	The subject site does not contain a heritage	
Conservation	item, is not within a heritage conservation	
	area and is not located in close proximity to a heritage item mapped under Schedule 5 of	
	the SLEP 2014.	
	the OLLI 2014.	
	An AHIMS check has confirms that there are	
	no items of indigenous heritage are located	
	on/in close proximity to the site, noting that	N/A
	both the subject site and most surrounding	
	sites have been subject to significant	
	disturbance. In the event of approval,	
	undiscovered finds can also be addressed via	
	conditions of consent.	
	No further assessment is required.	
Part 7 Additional local p		
7.1 Acid Sulfate Soils	The site is mapped being affected by Class 5	N/A
	Acid Sulphate Soils.	
	The site is not located within 500 metres of	
	sites affected by Class 1, 2, 3 or 4 acid	
	sulphate soils. Excavation works are not	
	proposed to exceed 5 metres, and are unlikely to lower the water table.	
	unlikely to lower the water table.	
	No further assessment is required, and an	
	acid sulphate soils management plan is not	
	required to be prepared for the proposed	
	works.	
7.2 Earthworks	Earthworks associated with the proposal are	
	limited to excavation for floor/driveway slabs,	
	footings and stormwater works. The depths of	.,
	such excavation are not significant, and both	Yes
	the scale of the earthworks and the relatively	
	level nature of the site is such that any potential impacts (e.g. sediment and erosion	
	potential impacts (e.g. Sediment and erosion	



	runoff) during works can be addressed through conditions of consent.	
7.5 Terrestrial biodiversity	The site is not mapped as being affected by terrestrial biodiversity, noting that the site has previously been cleared as part of the earlier subdivision of the site.	N/A
7.6 Riparian land and watercourses	The site is not mapped as being affected by, nor being in close proximity to, areas mapped as riparian land and/or watercourses.	N/A
7.9 HMAS Albatross airspace operations	The site is located approximately 3.5 kilometres northeast of HMAS Albatross. The height of the works is below the OLS surfaces for the airbase, and consent is not required from relevant Commonwealth bodies prior to determination.	N/A
7.10 Development in HMAS Albatross Military Airfield buffer area	The subject site is mapped as being outside of the HMAS Albatross buffer area.	Yes
7.11 Essential Services	The site is capable of being connected to all essential services required for the development. Adequate arrangements are capable for being made available when required.	Yes.
7.21 Development on land in the vicinity of the Western Bypass Corridor	The site is mapped as not being within the vicinity of the Western Bypass Corridor.	N/A
7.28 Development on land at South Nowra and Nowra Hill	The site is not listed as being affected by the provisions of the clause.	N/A

## ii) Draft Environmental Planning Instrument

There are no draft environmental planning instruments that are relevant to the proposal or the subject site

## iii) Any Development Control Plan

## Shoalhaven DCP 2014

The following chapters of Shoalhaven Development Control Plan 2014 (SDCP 2014) apply to the assessment of the DA:

- G1: Site Analysis, Sustainable Design and Building Materials in Rural and Coastal Areas
- G2: Sustainable Stormwater Management and Erosion/Sediment Control
- G3: Landscaping Design Guidelines
- G7: Waste Minimisation and Management Controls
- G20: Industrial Development
- G21: Car Parking and Traffic
- G22: Advertising Signs and Structures
- G26: Acid Sulfate Soils and Geotechnical (Site Stability) Guidelines



A detailed assessment of relevant DCP conditions is appended to this planning assessment as **Attachment 2**. A summary of the assessment against relevant DCP chapters is provided within the table below.

#### **Generic Chapters**

#### G1: Site Analysis, Sustainable Design and Building Materials in Rural and Coastal Areas

A site analysis has not been provided with the DA. Despite lacking such information, details contained within other documents (e.g. survey plan, bushfire assessment report, aerial imagery, etc.) is such that there is sufficient information for an assessment to identify hazards and constraints, noting that there are no trees on the site, and the site is not constrained by other planning matters such as views and natural hazards other than bushfires.

## **G2**: Sustainable Stormwater Management and Erosion/Sediment Control

The application is supported by stormwater drainage concept plans, which have generally been designed in accordance with Chapter G2. The site contains a slope to the rear of the site, therefore stormwater from the building roofs and other hardstand areas (i.e. parking, vehicle manoeuvring areas and pathways) is to be conveyed to OSD systems and discharged to the public drainage systems via two points at the northwest and southwest portions of the site.

Concern is raised by Council's Development Engineer that the design of proposed internal drainage systems may pose a flooding risk to Units 16, 17, 21 and 22 in the event that the system is blocked during an event greater than the 10% AEP. Further, the design of the system beneath common walls may also not allow for simplified access to the pipe in the event of that maintenance and/or clearance of pipe blockages is required. Conditions have therefore been recommended by Council's Development Engineer that will require modifications to the drainage system to ensure satisfaction within Section 5.1.1 of Part G2 of the DCP.

The drainage connection at the northwest part of the site is to an existing easement, which is satisfactory, subject to recommended conditions of consent. The plans however show that stormwater lines within the southwest part of the site encroach into part of an adjoining site (Lot 40 DP 802671) that is not covered by an easement to drain water; consent from the owner of that allotment has also not been provided. The creation and registration of a drainage easement on that adjoining site is therefore required before any consent for the proposed development becomes operational; a deferred commencement condition has therefore been recommended to in part address the requirements of Section 5.1.1 and 5.1.2 of Part G2 of the DCP.

Subject to the recommended conditions of consent from Council's Development Engineer, the stormwater disposal arrangements are considered to be satisfactory.

## **G3:** Landscaping Design Guidelines

There are no trees on the site, therefore provisions relating retention and/or removal of existing trees do not apply.

The submitted landscape plan (refer to *Figure 3*) is generally consistent with DCP requirements, however the layout of the landscape plan within the rear of the site is inconsistent with the architectural plans (refer to *Figure 2*), with the latter showing less space for the establishment and growth of trees. A condition is therefore recommended that will require construction plans to reflect the landscape layout of the landscape plans that are recommended for approval.

Street trees are not proposed, however this is acceptable in the circumstances of the proposal, given the presence of elevated 11kV electricity lines within the road reserve to the front of the site.



## **G7:** Waste Minimisation and Management Controls

Each proposed industrial unit is to provide for an internal waste storage area. While amendments to the plans have provided for an additional communal waste collection point (for a total of two such facilities), the travel distances to these facilities exceed the 75 metres specified by the *Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities*, which is referenced by Control A.1.1.

As a result, conditions are recommended that will require the following to enable compliance with Part G7 of the DCP

- Construction plans will be required to provide for the creation of an additional waste collection
  point to Unit 19 (this is attainable through the removal of three car parking spaces, noting that
  the site proposes parking that is well in excess of minimum DCP requirements under Part
  G21 of the DCP), and
- The provision of an amended Waste Minimisation and Management Plan (WMMP) that is prepared in accordance with Chapter G7 of the SDCP 2014. The WMMP must be approved by Council or an accredited certifier before the issue of a Construction Certificate.

Provided that the above is addressed, the requirements of Part G7 of the DCP will be satisfied.

## **G20:** Industrial Development

## 5.1 Site Suitability

## Performance Criteria

P1 The development is compatible with the character of the site

P2 The site has sufficient area and dimensions to accommodate all areas necessary for the proposed industrial development.

P3 Adjoining sites are not be negatively impacted by the proposed development and drainage works

<u>Comment</u>: the development is generally consistent with the above Performance Criteria. A non-compliance arises with regard to the lack of a site analysis plan, as required by Section A1.2.

Acceptable Solutions	Proposal	Compliance
A1.2 A site plan and site analysis plan is submitted with the development application.	A site analysis plan has not been submitted. Despite the lack of such information, the other information provided to Council (i.e. a survey plan, site plan, etc.) is otherwise sufficient for an assessment to identify hazards and constraints, noting that there are no trees on the site, and the site is not constrained by considerations such as views and natural hazards other than bushfires. The lack of a site analysis plan is therefore considered to be acceptable in this instance.	No



## 5.2 Building Setbacks

#### **Performance Criteria**

P4 The building setbacks are

consistent with adjoining development and enable:

- · the efficient use of the site;
- vehicle manoeuvring areas where vehicles can enter and exit the site in a forward direction;
- visible staff and visitor parking;
- an attractive streetscape character;
- the location of utility services, storage and drainage paths; and
- Unimpeded development of adjacent sites.

#### **Additional Area Specific Controls**

#### **Performance Criteria**

P5 The building setbacks are satisfactory to Council in the Flinders Industrial Estate, South Nowra.

<u>Comment</u>: The development is generally consistent with the above Performance Criteria, however a front setback variation is caused by the cantilevered roof above the front of the café (the front setbacks to the front building lines of the northern and southern-most buildings comply with the minimum 15 metre requirement specified by A5.2).

Acceptable Solutions	Proposal	Compliance
A5.2 For all other sites, a minimum front setback of 15m and minimum secondary setback of 10m is provided.	To café roof: 12.98m	No
	Secondary setback controls do not apply, as the site has only one road frontage.	

## Non-compliance

## Acceptable Solution proposed to be varied

A5.2 Minimum front setback of 15 metres.

## **Extent of variation**

2.02 metres (or 13.5%) variation caused by the cantilevered roof above the front of the café (the front setbacks to the front building lines of the northern and southern-most buildings comply with the minimum 15 metre requirement specified by A5.2).

## Applicant's justification for variation

None provided (the submitted SEE refers to the building line setback only).

## Council Consideration of the request to vary the acceptable solution

The element which breaches the 15-metre setback control is an open/lightweight element, as it is an open structure that is to be finished in contrasting colours and in a location that is well below the roof parapet at the front of the building. A large landscaped area is proposed within the front setback (and which will be further increased in size a result of the condition requiring deletion of



the outdoor dining area) that will also include two large trees, which will further screen the café roof and filter its visual impact from the public domain.

The element breaching the minimum 15 metre setback will subsequently not add to the height, bulk and scale of the development, and will not adversely affect the character of the streetscape.

The variation is therefore satisfactory and supportable on merit in this instance.

The proposal is therefore unlikely to set an undesirable precedent granted the specific nature of the variation and reasoning for the variation which are particular to the development.

#### 5.3 Building and Site Design

#### **Performance Criteria**

P11 The design incorporates the use of materials appropriate to the emerging character of the locality, with innovation being encouraged.

<u>Comment</u>: The development is generally consistent with the above Performance Criteria, however a non-compliance is caused by large and unbroken expanses of walls that are proposed along the side elevations addressing the northern and southern boundaries.

Acceptable Solutions	Proposal	Compliance
A11.3 Building design does not include large unbroken expanses of wall or building mass.	The DA proposes a variation, in that large unbroken expanses of walls are proposed along the side elevations addressing the northern and southern boundaries.	No

#### Non-compliance

## **Extent of variation**

A numerical control is not provided.

## Applicant's justification for variation

The proposal includes unbroken expanses of wall to the side boundaries. This practice is commonplace in the industrial estate. The design has been articulated to the public domain, being the front elevation, and articulated internally where visitors will venture. The building's articulation and schedule of materials provides interest whilst reflecting the industrial character of the area. Therefore, Performance Criteria P11 is satisfied. The proposal will foster economic growth through its development, and provides a well-designed, quality industrial development as designed by CK Architecture. There is no adverse impact to the amenity or privacy of adjoining industrial premises, and the application has been supported by a bushfire report to respond to natural hazards. The design provides adequate vehicular access and on-site manoeuvring.

## Council Consideration of the request to vary the acceptable solution

The visual impact of the development will be reduced to the north, as a result of existing development at 15 Norfolk Avenue that is already built with a zero-side setback to the common boundary. While the location of development on the adjoining site to the south (i.e. 19 Norfolk Avenue) will allow for the variation to be visible from the Norfolk Avenue road reserve, the



development controls for the locality likely envision the setbacks of future development to be more akin to that proposed by the subject DA.

It is agreed with the SEE's arguments that there are numerous other examples within the Flinders Industrial Estate where industrial developments have been permitted with large unbroken expanses on/close to side boundaries; a review of the area noted examples including:

- 11 Norfolk Avenue
- 35 Norfolk Avenue
- 10 Tom Thumb Avenue
- 28 Trim Street

It is also agreed that the variation will not adversely affect the amenity of surrounding sites (noting that such sites either contain other industrial developments or will remain undeveloped for the foreseeable future), nor will the variation adversely affect defence against bushfires.

While issues are noted with regard to onsite manoeuvring by articulated vehicles, this issue is unrelated to the subject variation proposed by this DA.

The proposal is unlikely to set an undesirable precedent for the reasoning outlined above. The proposed variation is therefore considered to be satisfactory and supportable on merit in this instance.

#### **Performance Criteria**

P13 The building design is energy efficient and provides good solar access to the development and surrounding development.

Comment: The development is consistent with the above Performance Criteria.

Acceptable Solutions	Proposal	Compliance
A13.2 A reliable and accurate shadow diagram may be required to demonstrate the impact of shadows resulting from existing and proposed building works between 9am and 3pm on June 21.	•	No

## **G21:** Car Parking and Traffic

## 5.1 Car Parking Schedule

The proposed development includes a mix of uses which are to be considered for the purposes of parking as follows:

Industry One (1) space per 100m² of GFA
 Cafe One (1) space per 100m² of GFA

Required car parking based on the above rates is as follows:

Industry



Excluding mezzanines: 54.7 (rounded up to 58)

Including mezzanines: 63.4 (rounded up to 64)

2. Café 5.7 spaces (rounded up to 6)

3. Total

Excluding mezzanines: 64Including mezzanines: 70

A total of 115 car parking spaces are provided on-site (including two (2) accessible spaces).

A recommended condition of consent will require that at least six (6) car parking spaces be made available at all times for café (take away food and drink premises) customers.

As discussed within the assessment of DCP Part G7, a recommended consent condition will require that an additional communal waste collection area be provided to reduce travel distances between units and collection points. As the proposed site layout provides limited landscaped areas and proposed parking rates that will significantly exceed minimum requirements, a condition is recommended that will require three (3) parking spaces to be converted to a communal waste storage area. A condition is therefore recommended that will require that at least 112 onsite car parking spaces be provided (as opposed to the 115 currently proposed).

#### 6.1 Traffic

<u>Comment:</u> The DA has been assessed by Council's Development Engineer and Traffic Unit. No objections are raised to the layout and design of car parking spaces, subject to recommended conditions.

#### 6.2 Access

Access to the site is proposed to be provided from Norfolk Avenue for all vehicles via a two-way driveway that is to be separated by a central island median.

<u>Comment:</u> While no issue is raised with the design of facilities for vehicular entry and egress, the proposed development does not demonstrate satisfactory provisions for pedestrian safety in accordance with Acceptable Solution A10.11. While the site provides for continuous and line-marked paths of travel between the front of the site and Units 1-15 and 36-37, line-marked pathways do not connect these pathways to buildings that will contain Units 18-22 and 23-30.

A condition is therefore recommended that will require amendments to be made to ensure that adequately-marked and connected pedestrian pathways are provided through the site in accordance with relevant standards; the condition will require such pathways not be permitted to encroach upon proposed landscaped areas, in order to both maximise landscaped area and visibility of pedestrian routes throughout the site.

## 6.3 Manoeuvrability

<u>Comment:</u> The submitted information does not satisfy the requirements of Acceptable Solutions A12.1 and A12.2. The swept path plans provided with the most recent amendments to the plans indicate that the DA seeks consent for access for vehicles up to and including 19-metre-long articulated vehicles (i.e. semi-trailers).

The submitted swept path plans are inadequate, as they indicate that:

Access from the south is only attainable by using the south-bound lane of Norfolk Avenue (i.e. access from the south requires using the wrong side of the road).



- Egress to the north is only attainable by using the south-bound lane of Norfolk Avenue (i.e. egress to the north requires using the wrong side of the road), and also requires encroachment upon the centre dividing island.
- Manoeuvring space around Unit 23 requires encroachment upon landscape areas (noting that the landscape plans propose wider landscaped areas within this location).
- Manoeuvring space around Unit 24 requires encroachment upon landscape areas.
- It has not been demonstrated that articulated vehicle access and associated manoeuvring to Units 10-15 and 16-19 is possible without reversing a significant distance within the site.
- The proposed loading areas within the industrial units are of insufficient lengths to accommodate a 19-metre-long vehicle without significant encroachment into the 'avenues' throughout the site, and no shared loading facilities for a 19-metre-long vehicle are proposed.

Swept path plans for Heavy Rigid Vehicles (HRVs) also show an impractical approach angle to the site in addition to encroachment upon landscaped areas in order to manoeuvre around Unit 23.

No justification has been provided with regard to the above.

In addition to recommended conditions of consent by Council's Development Engineer, the following consent conditions are recommended that will require the following:

- Prohibition of articulated vehicles from the site, with signage to be erected at the entrance to the site to advise incoming traffic of this restriction.
- Revised swept path plans for HRVs are to be submitted for Council's approval prior to the issue
  of a Construction Certificate.

#### 6.4 Service Areas

<u>Comment:</u> Proposed internal loading facilities within each unit are likely adequate for future proposed uses. Refer however to Section 6.3 (above) for comments regarding issues about onsite manoeuvrability by larger vehicles (i.e. semi-articulated trucks and HRVs).

## **G22:** Advertising Signs and Structures

## 5.5 General Controls

## All Business and Industrial Zones

## **Performance Criteria**

P1 To ensure advertising signs/structures:

- · are associated with a lawful use of the land; and
- · relates to the land, or to the premises situated on that land; or
- identifies a person residing or carrying on an occupation or business on the land or premises; and/or
- gives particulars of the goods or services dealt with or provided on the land or premises;
- is a directional sign for an approved tourist facility in the Shoalhaven; or
- Is an advertisement for a business located in the Shoalhaven.
- relate well to and integrates with existing built and vegetated forms
- do not dominate the streetscape or skyline
- do not adversely affect traffic safety
- do not restrict sight distances at entrance/exit to any property
- do not obstruct sightlines to signs on adjoining property
- do not detract from the heritage significance of the building or place
- do not project over windows or architectural features of a building
- are consistent with the design guidelines outlined in this Chapter are treated on the rear view of single-sided signs to blend with the surrounding streetscape or field of view



- reduce visual clutter
- achieve equity between property owners/occupiers
- have a design relationship between multiple signs
- have a design relationship to each other individual signs in the case of a free-standing directory sign
- are capable of accommodating the signs of other tenants in respect of any free-standing sign on a multi-tenanted site
- · Affixed to structures are wholly contained within the dimensions of the structure.

Acceptable Solutions	Proposal	Compliance
Free-Standing Signs A1.4 Maximum sign face area should not exceed 0.35m² of sign face area per linear metre of road frontage.	Frontage length: 40.435m ² Maximum permitted sign area: 14.15m ² Proposed sign area: 16.38m ² (per side)	No
A1.5 Maximum sign face area of any one (1) sign is not to exceed 8m². e.g. A 20m frontage will permit 7m² of sign face area for a freestanding sign.	Maximum permitted sign area: 8m ² Proposed sign area: 16.38m ² (per side)	No

## Non-compliance

## Acceptable Solution proposed to be varied

A1.4~Maximum sign face area should not exceed  $0.35\text{m}^2$  of sign face area per linear metre of road frontage.

A1.5 Maximum sign face area of any one (1) sign is not to exceed 8m².

#### **Extent of variation**

A1.4 - 2.23m² (or 15.8%) A1.5 - 8.38m² (or 104.8%)

## Applicant's justification for variation

None provided (the calculations within the SEE suggest that the area calculations are based upon each individual signage space on the free-standing sign, rather than the total area).

## Council Consideration of the request to vary the acceptable solution

The variation to the signage area is likely a consequence of the large number of proposed units (and the subsequent need to provide sufficient space on the free-standing sign to provide business identification signs for all proposed businesses), and the design of the free-standing sign will promote suitable rationalisation of signage in areas immediately visible from the public domain. Given the size of the site, site frontage and proposed development, the size of the proposed signage variation is not significant, therefore any variation to the permitted signage area will not be discernible when viewed from the public domain.

Having regard to the particular circumstances of the site, the proposal is unlikely to set an undesirable precedent. The proposed variation is therefore considered to be satisfactory and supportable on merit in this instance.



iiia) Any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4

None relevant.

## iv) Environmental Planning and Assessment Regulation 2000

**Note:** Pursuant to cl. 3 of Schedule 6 of the *Environmental Planning and Assessment Regulation* 2021, the *Environmental Planning and Assessment Regulation* 2000 applies to the subject application as it was lodged but not determined before 1 March 2022.

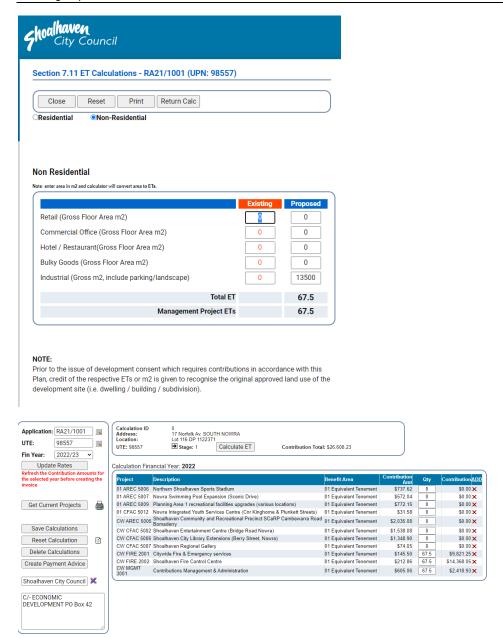
Clause 4 - What is designated development?	The proposed development does not constitute a form of designated development.
Clause 5 - Advertised development	The development was advertised for a period of 30 days in accordance with the Council Community Consultation Policy. One (1) submission was received during this period.
Division 3 Development applications for integrated development	The DA is not a form of integrated development under Section 4.46 of the EP&A Act.
Clause 92 Additional matters that consent authority must consider	Not applicable. As a vacant site, demolition works are not proposed, the site is not subject to Schedule 7 of the Act, the site is not within an LGA subject to the <i>Dark sky Planning Guideline</i> and the site is not located within the Penrith LGA.
Clause 93 Fire safety and other considerations	Not applicable, as a change of use is not proposed.
Clause 94 Consent authority may require buildings to be upgraded	Not applicable, as the proposal does not propose the upgrade of an existing building.
Division 8A Prescribed conditions of development consent	Prescribed conditions are to be imposed as required.

## v) Repealed

## Shoalhaven Contribution Plan 2019

The development is subject to the payment of s7.11 Development Contributions under Section 2.4 of the Shoalhaven Contribution Plan 2019 (Plan). Section 2.4 of the Plan is extracted below:





## Commercial & industrial development

When commercial or industrial subdivision is proposed, contributions will be levied at a rate of 1 ET per lot created.



Additional contributions may be levied upon finalisation of a development application for a specific use of a lot (i.e. building, warehouse, storage facility, etc.) which is greater development than the original 1 ET credited to the lot. These contributions are levied as per the rate detailed in Section 3.7 of this Plan.

For reference, industrial developments are levied at a rate of one Equivalent Tenement (ET) per 200m² of land to be developed (including car parks and landscaped areas).

A condition is recommended that will govern the S7.11 contributions to be paid.

Policy for the Assessment of Council's Own Development Applications Policy Number: POL16/226

The application relates to Council owned/managed land.

Council is the applicant.

The application is a major DA which is to be determined by the Southern Regional Planning Panel as required by SEPP (State and Regional Development) 2011.

External assessment of the application is not required under the policy. The assessing officer was not involved in the preparation or lodgement of the application with Council and determination of the application is to be via the Southern Regional Planning Panel.

The assessment is consistent with the Policy.

Nowra Bomaderry Structure Plan 2008

The proposed development is unlikely to impact the Nowra Bomaderry Structure Plan.

# (b) The Likely impacts of that development, including environmental impacts on the natural and built environments, and social and economic impacts in the locality

Head of Consideration	Comment
Natural Environment	The application will involve minimal disturbance to the natural environment. The site is not within an area of biodiversity significance, and tree removal is not proposed. New tree planting and landscaping is proposed within the site including the setback to Norfolk Avenue. The additional landscaping will have a positive impact on the natural environment. Potential environmental impacts during works and general environmental impacts (e.g. noise associated with plant equipment) will be mitigated via recommended conditions in the event of approval. Potential adverse impacts on the natural environmental and local amenity (e.g. noise) that are associated with the future occupation and use of industrial units will be separately addressed by future consents.
Built Environment	Impacts on the built environment are addressed within the detailed assessment of the SDCP 2014. The proposed development is however generally reflective of the built form and scale of industrial development in the locality, particularly newer industrial unit and warehouse-type developments to the east and southeast of the site within the Flinders Industrial Estate.
Social Impacts	The development will not give rise to adverse social impacts.
Economic Impacts	It is considered that there will be no adverse economic impacts. The proposal facilitates further industrial development that will



Head of Consideration	Comment
	provide adequate facilities for associated uses. The proposal will
	have positive economic impacts with regard to construction and economic development through new employment opportunities.

## (c) Suitability of the site for the development

The development is consistent with the applicable environmental planning instruments. The development is consistent with the objectives of the IN1 General Industrial zone and relevant clauses under SLEP 2014.

The development is generally consistent with the relevant chapters of SDCP 2014 and relevant Council Policy, and risks associated with the bushfire hazard affecting the site can be appropriately mitigated.

Subject to the recommended conditions of consent, the site will be suitable for the development.

## (d) Submissions made in accordance with the Act or the regulations

The DA was notified in accordance with Council's Community Participation Plan for a 30-day period that commenced on 8 December 2021 until 7 January 2022.

One (1) submission was received by Council. The submission does not specify whether it objected to the proposed development, however the matter for consideration that was raised is outlined below:

#### **Summary of Public Submissions Objection Raised** Comment The submission "... requests that Impacts of parking, traffic generation and both vehicular Council carefully consider the intensification of the industrial access and internal circulation are matters that have been considered by this planning assessment (refer to the area, particularly in relation to assessment of the SDCP 2014 for details). It has been found impacts of increased traffic, the that, subject to the recommended conditions of consent, the interaction of light and heavy proposed development: vehicles, and vehicle safety Will provide for adequate parking, entering/exiting driveways in the Will not result in excessive traffic generation within the vicinity of a busy concrete plant. surrounding road network, and Will allow for adequate vehicular access and egress in a manner that will not adversely affect surrounding

## (e) The Public Interest

The proposed development complies with the provisions of the SLEP 2014, is consistent with the objectives of the IN1 zone and is generally consistent with the SDCP 2014. Subject to conditions of consent, the development is not expected to have any unacceptable negative impacts on the environment, or the amenity of the locality as detailed in this report that would warrant refusal of the DA.

sites

## Recommendation



This application has been assessed having regard for Section 4.15 (Matters for consideration) of the Act.

This application has been subjected to detailed analysis of the main issues identified in this report. These issues have been resolved during the assessment of the DA, submission of amended documentation by the applicant and recommended conditions of consent.

Council is satisfied that the current proposal meets the provisions of relevant environmental planning instruments and is consistent with the relevant provisions and objectives within the SLEP 2014 and the SDCP 2014. Any potential impacts have been adequately addressed via recommended conditions of consent.

The application is considered capable of support as there are no substantive planning reasons to warrant refusal. The DA however relies upon the creation of easements on the allotment to the rear of the site both for bushfire defence and stormwater drainage purposes. Deferred commencement conditions are therefore recommended to ensure that the creation and registration of such easements occurs prior to the commencement of any consent issued by the SRPP.

As such, it is recommended that Development Application No. DA21/1001 be approved via deferred commencement, subject to conditions of consent as recommended at **Attachment 1**.





Address all correspondence to: The Chief Executive Officer, PO Box 42, Nowra NSW 2541 Australia

shoalhaven.nsw.gov.au/contact | 1300 293 111

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# NOTICE TO APPLICANT OF DETERMINATION OF APPLICATION DEVELOPMENT CONSENT

Environmental Planning and Assessment Act, 1979 RA21/1001

TO:

Richard Amos C/- SET Consultants P O Box 491 NOWRA NSW 2451

being the applicant(s) for RA21/1001 relating to:

17 Norfolk Av, SOUTH NOWRA - Lot 116 DP 1122371

#### APPROVED USE AND OR DEVELOPMENT:

Proposed 47 Unit Industrial Development, Ancillary Café, access driveways, signage and landscaping

DETERMINATION DATE: xx September 2022

Pursuant to the Section 4.18 of the Act, notice is hereby given that the above application has been determined by granting consent, subject to the conditions listed below.

CONSENT TO OPERATE FROM: xx September 2022

CONSENT TO LAPSE ON: xx September 2027

This consent is valid for five years from the date hereon.

In accordance with Section 4.53 of the Act, development consent for the use of the land or the erection of a building does not lapse if building, engineering or construction work relating to the building or work or the use is physically commenced on the land to which the consent applies before the lapse date.

## **DETAILS OF CONDITIONS:**

The conditions of consent and reasons for such conditions are set out as follows:



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#### **DEFERRED COMMENCEMENT**

Pursuant to s 4.16(3) of the *Environmental Planning and Assessment Act 1979*, the applicant must satisfy the following deferred commencement condition of consent prior to this development consent becoming operative:

Evidence that consent has been provided from the landowner of Lot 40 DP 802671 for the encroachment of stormwater lines into a part of that lot which is not covered by an easement to drain water.

An easement for drainage purposes that benefits the subject site at 17 Norfolk Avenue (Lot 116, DP 1122371) is to be created and registered on the adjoining site at Lot 40 DP 802671. The easement is to allow for a stormwater connection to be created which connects drainage infrastructure from the subject site to a public drainage system. If the creation of a single easement on Lot 40 DP 802671 will not provide for a connection to a public drainage system, then a second drainage easement is to be provided which connects:

- i) The new easement on Lot 40 DP 802671 as specified above, and
- An existing drainage easement, which is located at Lot 117 DP 1122371 adjacent to the common boundary that separates this site and the subject site at 17 Norfolk Avenue (Lot 116, DP 1122371).

Evidence that will sufficiently enable Council to be satisfied as to the compliance of these matters must be submitted to Council within 24 months of the date of determination of this deferred commencement consent, failing which, this deferred development consent will lapse pursuant to s4.53(6) of the *Environmental Planning and Assessment Act 1979*.

This development consent will not become operative until such time that the Council notifies the applicant in writing that the requirements of deferred commencement have been satisfied.

## **PART A: GENERAL CONDITIONS**

## 1. General

The consent relates to **47 Unit Industrial Development, access driveways, signage and landscaping** as documented on the stamped plans/documentation, or as modified by the conditions of this consent. The development must be carried out in accordance with this consent. If there is inconsistency between the stamped plans/documentation and the conditions of consent, the conditions prevail to the extent of that inconsistency.

Stamped plans/documents	Ref/sheet no.	Prepared by	Dated
Site Plan/Cover Sheet	Drawing no. CV, Job no. 21020, Rev. A	CK Architecture	21.07.2022
Ground Floor Plan	Drawing no. GF, Job no. 21020, Rev. A	CK Architecture	21.07.2022



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First Floor Plan	Drawing no. MEZ, Job no. 21020, Rev. A	CK Architecture	21.07.2022
Boundary Elevations	Drawing no. ELEV1, Job no. 21020, Rev. A	CK Architecture	21.07.2022
Elevations	Drawing no. ELEV2, Job no. 21020, Rev. A	CK Architecture	21.07.2022
Elevations	Drawing no. ELEV3, Job no. 21020, Rev. A	CK Architecture	21.07.2022
Elevations	Drawing no. ELEV4, Job no. 21020, Rev. A	CK Architecture	21.07.2022
Sample Colour Elevation	Drawing no. ELEV5, Job no. 21020, Rev. A	CK Architecture	21.07.2022
Proposed Landscape – Cover Sheet	Page L-01 D, Rev. D	DP Landscaping & Design	29.07.2022
Proposed Landscape – Detailed Plan 1	Page L-02 D, Rev. D	DP Landscaping & Design	29.07.2022
Proposed Landscape – Detailed Plan 2	Page L-03 D, Rev. D	DP Landscaping & Design	29.07.2022
Proposed Landscape – Planting Details	Page L-04 D, Rev. D	DP Landscaping & Design	29.07.2022
Proposed Landscape – Specification	Page L-05 D, Rev. D	DP Landscaping & Design	29.07.2022
Stormwater Plan	Ref. no. 103946/1, Sheet 1 of 6, Rev. C	SET Consultants	29.07.2022
Stormwater Long Sections and Detail	Ref. no. 103946/1, Sheet 2 of 6, Rev. C	SET Consultants	29.07.2022
Concrete Driveway and Carpark Plan	Ref. no. 103946/1, Sheet 3 of 6, Rev. C	SET Consultants	29.07.2022
Concept Driveway Long Sections and Detail	Ref. no. 103946/1, Sheet 4 of 6, Rev. C	SET Consultants	29.07.2022
Concept Sediment & Erosion Control Plan	Ref. no. 103946/1, Sheet 5 of 6, Rev. C	SET Consultants	29.07.2022
Concept Sediment & Erosion Control Details	Ref. no. 103946/1, Sheet 6 of 6, Rev. C	SET Consultants	29.07.2022
Waste Management Plan	-	Richard Amos	15.09.2021



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Bushfire Risk Assessment	Ref. no. L103946	SET Consultants	01.10.2021
Section J Compliance Report	-	Frys Energywise	13.09.2021

Note: Any alteration to the plans and/or documentation must be submitted for the approval of Council. Such alterations may require the lodgement of an application to amend the consent under section 4.55 of the Environmental Planning and Assessment Act, or a new development application.

#### 2. Prescribed Conditions

The development must comply with the <u>Prescribed Conditions of Development Consent</u>, Division 2 Subdivision 1, Environmental Planning and Assessment Regulation 2021, as applicable.

## 3. Occupation / Use

The development must not be occupied or used before an Occupation Certificate has been issued by the Principal Certifier. If an Occupation Certificate is not required, the use must not commence until all conditions of development consent have been met or other satisfactory agreements have been made with Council (i.e. a security).

## 4. Approved Use

This consent does not approve the use of the industrial units. Separate consent shall be obtained for the occupation and use of each industrial unit.

The café indicated on the plans is to be operated as a 'take away food and drink premises', as defined by the *Shoalhaven Local Environmental Plan 2014*; the land use definition for this activity is as follows:

**take away food and drink premises** means premises that are predominantly used for the preparation and retail sale of food or drink (or both) for immediate consumption away from the premises.

Amendments to the plans to enable the food and drink premises to operate as a 'take away food and drink premises' are as follows:

• Indoor seating within the food and drink premises shall be limited to a maximum of two (2) tables and eight (8) seats, and

The outdoor seating area is to be deleted (also refer to conditions requiring amendments to the landscaping plans).

These amendments must be captured in the Construction Certificate Drawings.

## 5. Approval of Signage

This approval notice does not grant consent to signage beyond that shown on the approved plans. Consent is to be obtained for any additional signage that is not 'exempt development' pursuant to the provisions of *State Environmental Planning Policy (Exempt and Complying Development Codes)* 2008.



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#### 6. Shoalhaven Water - Certificate of Compliance

A Certificate of Compliance must be obtained to verify that all necessary requirements for matters relating to water supply and sewerage (where applicable) for the development have been made with Shoalhaven Water. A Certificate of Compliance must be obtained from Shoalhaven Water after satisfactory compliance with all conditions as listed on the Notice of Requirements and prior to the issue of an Occupation Certificate.

An application for a Certificate of Compliance is to be made once the Development Consent has been granted.

#### 7. Bushfire Protection

From the commencement of building works, and in perpetuity to ensure ongoing protection from the impact of bush fires, the entire property must be managed as an inner protection area (IPA) in accordance with the requirements of Appendix 4 of *Planning for Bush Fire Protection 2019*.

When establishing and maintaining an IPA the following requirements apply:

- · tree canopy cover should be less than 15% at maturity;
- · trees at maturity should not touch or overhang the building;
- lower limbs should be removed up to a height of 2m above the ground;
- tree canopies should be separated by 2 to 5m;
- preference should be given to smooth barked and evergreen trees;
- large discontinuities or gaps in vegetation should be provided to slow down or break the progress of fire towards buildings;
- · shrubs should not be located under trees;
- shrubs should not form more than 10% ground cover;
- clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of the vegetation.
- grass should be kept mown (as a guide grass should be kept to no more than 100mm in height); and
- Leaves and vegetation debris should be removed.

## 8. Prohibition of Articulated Vehicle Access

This approval does not permit access to the site by any vehicle larger than a Heavy Rigid Vehicle (HRV), as defined by AS2890.2. A sign(s) is to be erected at the entrance to the site advising to incoming traffic of this requirement. Access to the site by articulated vehicles (semi-trailers) is not permitted unless written approval is gained from Council, supported by a swept-path analysis.

#### PART B: INTEGRATED DEVELOPMENT AND CONCURRENCE CONDITIONS

NIL



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### PART C: PRIOR TO THE COMMENCEMENT OF WORKS

#### 9. Construction Certificate

A Construction Certificate must be obtained from either Council or an accredited certifier before any building work can commence.

### 10. Appointment of Principal Certifier

Prior to the commencement of building or subdivision work, a Principal Certifier must be appointed.

#### 11. Notice of Commencement

Notice must be given to Council at least two (2) days prior to the commencement of building or subdivision work by completing and returning the form <u>'Commencement Notice for Building or Subdivision Work and Appointment of Principal Certifying Authority'</u>

### 12. Toilet Facilities - Temporary

Toilet facilities must be available or provided at the work site before works begin and must be maintained until the works are completed at a ratio of one toilet plus one additional toilet for every 20 persons employed at the site. Each toilet must:

be a standard flushing toilet connected to a public sewer, or

have an on-site effluent disposal system approved under the Local Government Act 1993, or

be a temporary chemical closet approved under the Local Government Act 1993.

### 13. Works within the Road Reserve

Prior to undertaking any works within an existing road reserve, the developer must obtain the consent of Council under section 138 of the Roads Act, 1993.

The following details must be submitted to Council as part of the application:

Any civil works design required by this consent.

Evidence of the contractor's Public Liability Insurance to an amount of \$20 million.

Name and contact information of the person responsible for all relevant works.

A Traffic Control Plan prepared, signed and certified by a person holding the appropriate Transport for NSW (TfNSW) accreditation.

Where the Traffic Control Plan requires a reduction of the speed limit, a 'Application for Speed Zone Authorisation' must be obtained from the relevant road authority.

#### 14. Construction Traffic Management Plan

Prior to the commencement of works, a Construction Traffic Management Plan detailing the proposed method of dealing with construction traffic and parking must be approved by Council. Details must include, but are not limited to:

Stabilised site construction access location

Proposed haulage routes for delivery of materials to the site



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Proposed haulage routes for spoil disposal from the site

Traffic control planning for each of the various phases of construction and/or vehicle movements associated with construction

Parking arrangements for construction employees and contractors

Proposed maintenance of the haulage routes and the name of the person responsible for such maintenance

Loading / unloading areas

Requirements for construction or work zones

Pedestrian and cyclist safety

Speed zone restrictions.

#### 15. Runoff and Erosion Controls

Prior to the commencement of site works, runoff and erosion controls must be implemented and maintained during construction to prevent soil erosion, water pollution or the discharge of loose sediment on the surrounding land by:

diverting uncontaminated runoff around cleared or disturbed areas.

erecting a silt fence and providing any other necessary sediment control measures that will prevent debris escaping into drainage systems, waterways or adjoining properties.

preventing the tracking of sediment by vehicles onto roads.

stockpiling topsoil, excavated materials, construction and landscaping supplies and debris within the lot.

Note: all implemented measures must not cause water pollution as defined by the *Protection of the Environment Operations Act 1997.* 

# 16. Dilapidation Report

Prior to the commencement of work, the developer must engage a competent person to prepare a dilapidation report in respect of the neighbouring premises and adjacent public infrastructure, including adjacent kerbs, gutters, footpaths (formed or unformed), driveways (formed or unformed), carriageway, reserves and the like to document evidence of any existing damage.

The dilapidation report must consider the impact of any excavation work that extends below the level of the base of the footings of any structure within 0.9metres of the shared boundary.

Before works commence, a copy of the dilapidation report must be provided to the Certifier and Council. The dilapidation report will be the benchmark for necessary repairs to damage caused during the development works. All repairs must be completed by the developer at the developer's cost

Not less than seven (7) days before works commence, the developer must notify the owner of any affected property of the intention to carry out approved works. The developer must also furnish the owner with details of the approved work.

However, if the occupier or owner of any neighbouring dwelling does not permit reasonable access for the purposes for the preparation of the dilapidation report, written evidence of the efforts taken to secure access may be submitted to the Principal Certifier and the Principal Certifier may waive the requirement in relation to the relevant property.



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Note: A dilapidation report can comprise of video footage and photos of adjacent public infrastructure and relevant structures on adjoining properties.

#### 17. Bushfire Protection

At the commencement of building works, and in perpetuity to ensure ongoing protection from the impact of bush fires, a suitable mechanism, such as an instrument pursuant to section 88 of the *Conveyancing Act 1919*, must be in place over the land immediately adjoining the subject sites south western and north western site boundaries projecting outwards for 22m, to ensure its ongoing management as an Inner Protection Area (IPA) in accordance with Appendix 4 of Planning for Bush Fire Protection 2019, until such time as the lots have been created, developed and sold (and the Bushfire hazard removed). The restriction to land use for the purpose of an asset protection zone may be extinguished upon commencement of future development over the affected areas. When establishing and maintaining an IPA the following requirements apply:

- · tree canopy cover should be less than 15% at maturity;
- · trees at maturity should not touch or overhang the building;
- lower limbs should be removed up to a height of 2m above the ground;
- tree canopies should be separated by 2 to 5m;
- preference should be given to smooth barked and evergreen trees;
- large discontinuities or gaps in vegetation should be provided to slow down or break the progress of fire towards buildings;
- · shrubs should not be located under trees;
- shrubs should not form more than 10% ground cover; and
- clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of the vegetation.
- grass should be kept mown (as a guide grass should be kept to no more than 100mm in height);
   and
- leaves and vegetation debris should be removed.

The name of authority empowered to release, vary or modify any instrument shall be Shoalhaven City Council

# PART D: PRIOR TO THE ISSUE OF A CONSTRUCTION CERTIFICATE

### 18. Evidence

A Construction Certificate must not be issued until the Certifier has received notification from, or evidence of, any Council approval that is required Prior to the Commencement of Works.

### 19. Local Infrastructure Contributions

This development will generate a need for the additional services and/or facilities described in Shoalhaven Contributions Plan 2019 and itemised in the following table:

Project	Description	Calculation	Amount
CWFIRE2001	Citywide Fire & Emergency services	\$145.50 * 67.5	\$9,821.25
CWFIRE2002	Shoalhaven Fire Control Centre	\$212.86 * 67.5	\$14,368.05



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(	CWMGMT3001	Contributions Management & Administration	\$605.06	67.5	\$2,418.93
				\$26	6,608.23

The total contribution, identified in the above table or as indexed in future years, must be paid to Council prior to the issue of a Construction Certificate. Evidence of payment must be provided to the Certifying Authority.

Contributions Plan 2019 can be accessed on Councils website <a href="www.shoalhaven.nsw.gov.au">www.shoalhaven.nsw.gov.au</a> or may be inspected on the public access computers at the libraries and the Council Administrative Offices, Bridge Road, Nowra and Deering Street, Ulladulla.

### 20. Long Service Levy

Prior to the issue of a Construction Certificate any long service levy payable under the <u>Building and Construction Industry Long Service Payments Act 1986</u> and prescribed by the <u>Building and Construction Industry Long Service Payments Regulation 2017</u> must be paid or, where such a levy is payable by instalments, the first instalment of the levy must be paid. Council is authorised to accept payment. Proof of payment must be submitted to the Certifying Authority.

#### 21. Waste Management Plan

Prior to the issue of a Construction Certificate, a revised Waste Management Plan (WMP) must be prepared in accordance with Chapter G7 of Shoalhaven Development Control Plan 2014 to account for changes of waste volumes as a result of changes since the creation of the original WMP. The WMP must be approved by the Certifier prior to demolition works commencing

### 22. Design Standards - Works Within Road Reserve

Prior to the issue of a Construction Certificate, all works proposed within road reserves must be approved by Council.

### 23. Access Driveway Design Standards - Urban

Prior to the issue of a Construction Certificate, certified engineering design plans must be prepared by a professional engineer, (as defined in the National Construction Code) or surveyor and approved by the Certifier. The access driveway design must comply with the following:

Council's Engineering Design Standard Drawings.

Width to be suitable for the entry and exit movements of the Heavy Rigid Vehicle (HRV) as the design vehicle. Left turn in and out movements must be able to occur without crossing the road centreline. Where a No Stopping zone is required to achieve necessary clearances and/or sight distance, a signage and line-marking plan must be submitted to Council for endorsement by the Shoalhaven Traffic Committee.

Constructed using minimum 25 MPa reinforced concrete, reinforced with SL82 mesh, on 150mm compacted base with centrally placed slab of minimum 150mm depth.

Removal of sufficient width of existing road seal and pavement to allow placing of formwork and laying/compaction of suitable pavement material for the driveway layback with a minimum 300mm offset to the kerb lip line.



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#### 24. Car Parking Design Standards

Prior to the issue of a Construction Certificate, certified engineering design plans and specifications must be prepared by a professional engineer, (as defined in the National Construction Code) or surveyor and approved by the Certifier.

The car parking and access design must comply with the following:

Constructed in accordance with the following:

- i) with a concrete pavement designed and constructed for a minimum traffic loading of 1 x 10⁶ ESA, or:
- ii) with an asphaltic concrete (AC) flexible pavement designed and constructed for a minimum traffic loading of 1 x 10⁶ ESA. Where asphaltic concrete surfaced pavements are likely to be subject to bogie-axle vehicles turning tightly, the asphaltic concrete is to include a rubber base to improve durability and manufacturer's product details.

Bordered in accordance with Council's Standard Drawings by:

 concrete kerbing, except where surface runoff is concentrated, in which case concrete integral kerb and gutter must be constructed.

Revised swept paths must be submitted demonstrating circulation of the Heavy Rigid Vehicle (HRV) as defined by AS2890.2 without encroachment onto landscaped areas or over kerbs.

### 25. Lighting Design - Internal Driveway and Carparking

Prior to the issue of a Construction Certificate, certified lighting design plans are to be submitted to the Certifier for approval. Lighting is to be provided to the internal driveway and car parking area in accordance with AS/NZS 1158.3.1 Lighting for roads and public spaces - Pedestrian area (Category P) lighting - Performance and design requirements.

### 26. Design Standards - Traffic Committee Referral

Prior to the issue of a Construction Certificate details of proposed traffic management and traffic control devices must be submitted to the satisfaction of Council for referral and endorsement of the Shoalhaven Traffic Committee.

Note: This process can take six to eight weeks.

# 27. Structural Design - Major Structures

Prior to the issue of a Construction Certificate, a detailed structural design for the following works must be certified professional engineer, (as defined in the National Construction Code) and approved by the Certifier.

Bridges and other major drainage structures, including pre-cast concrete culverts, headwalls, wing walls and stormwater tanks / pits / structures that require steel reinforcement.

The structural design must comply with the Council's Engineering Design Specification – Chapter 3 – Structures/Bridge Design and relevant Australian Standards.

#### 28. Existing Infrastructure

Prior to the issue of a Construction Certificate, all infrastructure, existing and proposed, is to be shown accurately on the engineering plans including longitudinal sections with clearances clearly



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labelled confirming that the proposed works do not affect any existing infrastructure. Any required alterations to infrastructure will be at the developer's expense.

#### Soil and Water Management Plans (SWMP)

Prior to the issue of a Construction Certificate, a Soil and Water Management Plan must be prepared by a Professional Engineer, (as defined in the National Construction Code) to the satisfaction of the Certifier.

All implemented measures must:

- a) prevent water pollution as defined by the Protection of the Environment Operations Act 1997 (POEO).
- b) be maintained at all times.
- c) not be decommissioned until at least 70% revegetation cover has been established.

### 30. Stormwater Drainage Design Standards (Urban)

Prior to the issue of a Construction Certificate, certified engineering design plans, specifications, and DRAINS model (or approved alternative) must be prepared by a professional engineer, (as defined in the National Construction Code) or surveyor and approved by the Certifier.

The stormwater drainage design must comply with the following:

- a) Major and minor drainage systems in accordance with Council's Engineering Design Specifications - Section D5 - Stormwater Drainage Design and utilising Australian Rainfall and Runoff (ARR, 2019) Guidelines.
- b) The minor and major systems must be designed for a 10% AEP and 1% Annual Exceedance Probability (AEP) rainfall events, respectively. Major flow paths must be identified on the stormwater plan, which must demonstrate that pit blockage or design storms up to and including the 1% AEP will not result in stormwater entering any unit.
- c) Pipes beneath buildings must be located such that they can be accessed without significant structural deterioration of the building. Placement beneath structural walls and supports should be avoided as far as practicable.
- d) Generally, in accordance with Integrated Water Cycle Management Plan prepared by SET Consultants on 04/03/2022.
- e) The existing stormwater drainage system within the easement and on to the point of discharge is to be confirmed as adequate to support the new works, or upgraded/augmented where required. In this regard the following is required:
- f) Existing drainage systems through lots draining public roads are to be upgraded where necessary to contain flows in accordance with Council's Engineering Design Specifications -Section D5.04.
- g) All relevant calculations are to be noted on the drainage plans to confirm the adequacy of the existing system, or the upgraded design.
- h) Owners' consent for works within Lot 117 DP 1122371, Lot 40 DP 802671 or any other lot not part of this application must be provided to Council and the Certifier prior to issue of the Construction Certificate.

### 31. On-Site Detention – Infill Subdivision and Development



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Prior to the issue of a Construction Certificate, certified engineering design plans and specifications must be prepared by professional engineer, (as defined in the National Construction Code) or surveyor and approved by the Certifier.

The on-site stormwater detention (OSD) design must comply with the following:

- a) Designed such that stormwater runoff from the site for design storm events up to and including the 1% AEP does not exceed the pre-developed conditions.
- b) Generally, in accordance with Integrated Water Cycle Management Plan prepared by SET Consultants on 04/03/2022.

### 32. Water Sensitive Urban Design (WSUD) Devices - Private Property

Prior to the issue of a Construction Certificate, detailed design of permanent stormwater quality improvement devices must be certified by a professional engineer, (as defined in the National Construction Code) demonstrating the appropriateness of the proposed design for the site in accordance with Council's Engineering Design and Construction Specifications and approved by the Certifier. Specifications can be found on Council's web site.

The design must be generally in accordance with Integrated Water Cycle Management Plan prepared by SET Consultants on 04/03/2022.

The drainage design must also not include any uncoated metal (i.e. Copper etc.) surfaces such as roofs, facades and/or downpipes.

### 33. Hydraulic Engineering Details for Water, Sewer & Drainage

Prior to the issue of a Construction Certificate, an application to carry out water supply works, sewerage works, and stormwater drainage works must be obtained from Council under Section 68 of the *Local Government Act 1993*. The application is to include hydraulic designed by a professional engineer (as defined by the National Construction Code) for water, sewerage and stormwater drainage for the development. The hydraulic detail must reference the following:

- a) The relevant National Construction Code such as NCC 2019 Volume 1, 2 & 3 Amendment One.
- b) Relevant Australian Standard/s and correct standard years.
- c) Must also reference the suite of AS 1170.
- d) List Signatory Qualification and Accreditation details.
- e) Must be National Engineers Register (NER) or NSW Fair Trading Registered Engineer.

### 34. Retaining Walls

Prior to the issue of a Construction Certificate for approved retaining walls exceeding 0.6m in height above ground level (existing) and/or within 1m of a property boundary, detailed design plans must be prepared and submitted to the Certifier for approval. The retaining walls must satisfy the following:

- a) For retaining walls exceeding 0.6m in height above natural ground level (existing) a
  professional engineer has certified the retaining walls as structurally sound, including in
  relation to (but not limited to) the ability to withstand the forces of lateral soil load; and
- b) For retaining walls less than 0.6m in height above natural ground level (existing) the Certifier must be satisfied that the retaining walls are structurally sound, including in relation to (but not limited to) the ability to withstand the forces of lateral soil load.
- c) Retaining walls, footings and drainage must be contained wholly within the development site.
- d) Construction within a registered easement is prohibited.



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e) Retaining walls not shown on the approved plan must meet the criteria for Exempt retaining walls and comply with the relevant criteria listed in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008, or be approved by way of Complying Development prior to construction and comply with the relevant criteria listed in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

### 35. Waste Storage Room

Prior to the issue of a Construction Certificate, detailed plans must be submitted to the Certifier that demonstrate that the waste storage room has been designed to be constructed in accordance with the Waste Minimisation and Management Guidelines, and that:

- a) the floor to be constructed of concrete at least 75mm thick and adequately graded to drain to a Shoalhaven Water approved drainage fitting.
- The floor to be finished so that it is non-slip and has a smooth and even surface covered at all intersections.
- The ceilings and walls to be finished with smooth faced non-absorbent material capable of being cleaned.
- d) The room to be provided with artificial light controllable within the room and adequate ventilation.
- The room to be provided with an adequate supply of hot and cold water mixed through a centralised mixing valve with hose cock.

#### 36. Internal pedestrian pathways

Prior to the issue of a Construction Certificate, the site plans are to be amended to provide for a continual and clearly indicated path of travel for pedestrians throughout the site. Direct pedestrian access is to be provided:

- a) Between the Buildings containing Units 1-15 and 18-22.
- b) Between the Buildings containing Units 18-22 and 23-30
- c) Between the Buildings containing Units 23-30 and 36-47, and
- d) Between all industrial units and communal waste collection areas.

Provision of such pedestrian pathways are to connect all proposed pedestrian walkways in accordance with relevant Australian Standards, shall not contain greater than 1:14 gradients and shall be segregated from internal driveways where possible.

Any pathways crossing areas accessible by vehicles (i.e. internal driveways and roadways, parking areas and manoeuvring areas) are to be located in areas that permits sufficient sightlines both for pedestrians and vehicular traffic. All pathways are to be designed for use by persons with disabilities, and are to be clearly line-marked where they cross areas accessible by vehicular traffic.

# 37. Amendments to Site Layout

All plans prepared for any Construction Certificate (including all site, floor and engineering plans) are to be amended to show the landscaped areas and dimensions shown within the approved landscape plans, in order to remove site layout inconsistencies between landscape and site layout plans.

### 38. Amendments to Landscaping



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In addition to modifications specified by other conditions within this consent, the following landscape amendments are to be made to plans prepared for any Construction Certificate:

- a) The outdoor dining area associated with the 'café' shall be deleted. With the exception of access pathways, all paved/unroofed areas shown within the front setback to the front of the café (i.e. on the northern side of the driveway) shall be deleted and replaced with landscaped and deep soil areas,
- b) Landscaping that interferes with electricity infrastructure is a potential safety risk and result in the interruption of supply. The landscape plans are to be amended to relocate large canopy trees within the front setback away from the front boundary. The placement of the trees and species selection is to ensure that both the height and canopy spread of those trees is located away from overhead powerlines within the adjoining road reserve in accordance with Endeavour Energy's requirements.

#### 39. Additional Communal Waste Collection Area

Construction Certificate plans are to be amended to provide for an additional communal waste collection area. Such an area is not to be located within approved landscaped areas; subject to the satisfaction of standards related to vehicular/pedestrian safety (i.e. sightlines, manoeuvring space, etc.), the additional waste management area must be sited within the three car-parking spaces to the east of Unit 19, in order to minimise travel distances from Units 18 and 28 and the nearest waste collection area. The design and construction of the additional waste collection area is to be in accordance with any requirements specified by this consent.

#### 40. Material and colour schedule

Prior to the issue of a Construction Certificate, the approved materials and colour schedule is to be amended so that all roofs are of metal construction and finished 'Colorbond Monument'.

# 41. Electricity Demand Application

The applicant is to submit an appropriate application to Endeavour Energy based on the maximum demand for electricity for connection of load. An extension and / or augmentation of the existing local network will be required. The extent of any works required will not be determined until the final load assessment is completed

### 42. Substation Design Requirements

The Architectural Plans show provision for 'Substation'. Any required padmount substation will need to be located within the property (in a suitable and accessible location) and be protected (including any associated cabling) by an easement and associated restrictions benefiting and gifted to Endeavour Energy. Please refer to Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights'.

### 43. Electricity Authority Requirements for Electricity Connection and Substation Design

Documentary evidence from Endeavour Energy is to be submitted to Council prior to the issue of a Construction Corticate, which confirms that satisfactory arrangements have been made for the connection of electricity and the design requirements for the substation.



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#### 44. Access - Property Access

Property access roads (driveway) must comply with the following requirements of Table 7.4a of *Planning for Bush Fire Protection 2019*:

- property access roads are two-wheel drive, all weather roads;
- the capacity of road surfaces is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes).
- hydrants are provided in accordance with the relevant clauses of AS 2419.1:2005;
- there is suitable access for a Category 1 fire appliance to within 4m of the static water supply where no reticulated supply is available;
- minimum 4m carriageway width;
- a minimum vertical clearance of 4m to any overhanging obstructions, including tree branches;
- property access must provide a suitable turning area in accordance with Appendix 3;
- curves have a minimum inner radius of 6m and are minimal in number to allow for rapid access and egress;
- the minimum distance between inner and outer curves is 6m; the crossfall is not more than 10 degrees;
- maximum grades for sealed roads do not exceed 15 degrees and not more than 10 degrees for unsealed roads; and
- Some short constrictions in the access may be accepted where they are not less than 3.5m wide, extend for no more than 30m and where the obstruction cannot be reasonably avoided or removed.

### PART E: PRIOR TO THE ISSUE OF A SUBDIVISION WORKS CERTIFICATE

NIL

# **PART F: DURING WORKS**

#### 45. Hours for Construction

Construction may only be carried out between 7.00am and 5.00pm on Monday to Saturday and no construction is to be carried out at any time on a Sunday or a public holiday. Proposed changes to hours of construction must be approved by Council in writing.

# 46. Aboriginal Objects Discovered During Excavation

If an Aboriginal object (including evidence of habitation or remains) is discovered during the course of the work:

All excavation or disturbance of the area must stop immediately.

Additional assessment and approval pursuant to the National Parks and Wildlife Act 1974 may be required prior to works continuing the affected areas(s) based on the nature of the discovery.

Work may recommence in the affected areas(s) if Heritage NSW advises that additional assessment and/or approval is not required (or once any required assessment has taken place or any required approval has been given).



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The Office of Environment, Energy and Science must be advised of the discovery in accordance with section 89A of the *National Parks and Wildlife Act 1974*.

#### 47. Archaeology Discovered During Excavation

If any object having interest due to its age or association with the past is uncovered during the course of the work:

All work must stop immediately in that area;

Work may recommence in the affected area(s) if Heritage NSW advises that additional assessment and/or approval is not required (or once any required assessment has taken place or any required approval has been given).

In accordance with the *Heritage Act 1997*, the Office of Environment, Energy and Science must be advised of the discovery.

#### **Waste Management Plan**

All waste must be contained within the site during construction and then be recycled in accordance with the approved Waste Management Plan (WMP) or removed to an authorised waste disposal facility. Waste must not be placed in any location or in any manner that would allow it to fall, descend, blow, wash, percolate or otherwise escape from the site. Compliance with the WMP must be demonstrated by the submission of tip receipts to the Certifier.

Note: "Waste" is defined in the Dictionary to the Protection of the Environment Operations Act 1997 (POEO Act).

#### 49. Maintenance of Site and Surrounds

During works, the following maintenance requirements must be complied with:

All materials and equipment must be stored wholly within the work site unless an approval to store them elsewhere is held.

Waste materials (including excavation, demolition and construction waste materials) must be managed on the site and then disposed of at a waste management facility.

Where tree or vegetation protection measures are in place, the protected area must be kept clear of materials and / or machinery.

The developer must maintain the approved soil water management erosion and sediment control measures to the satisfaction of the Certifier for the life of the construction period and until runoff catchments are stabilised.

During construction:

all vehicles entering or leaving the site must have their loads covered, and

all vehicles, before leaving the site, must be cleaned of dirt, sand and other materials, to avoid tracking these materials onto public roads.

At the completion of the works, the work site must be left clear of waste and debris.

#### 50. Earthworks and Excavation

Approved earthworks (including any structural support or other related structures for the purpose of the development):

must not cause a danger to life or property or damage to any adjoining building or structure on the lot or to any building or structure on any adjoining lot.



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must not redirect the flow of any surface or ground water or cause sediment to be transported onto an adioining property.

that is fill brought to the site, must contain only virgin excavated natural material (VENM) or excavated natural material (ENM) as defined in Part 3 of schedule 1 to the *Protection of the Environment Operations Act 1997 (POEO Act)*.

Documentation must be provided to the Certifier certifying that imported fill material is not contaminated and does not contaminants such as asbestos, chemicals or building waste.

that is excavated soil to be removed from the site, must be disposed of in accordance with any requirements under the *Protection of the Environment Operations (Waste) Regulation 2005.* 

Any excavation must be carried out in accordance with Excavation Work: Code of Practice (ISBN 978-0-642-78544-2) published by Safe Work Australia in October 2018.

#### 51. Survey Certification

A survey must be undertaken by a registered surveyor and provided to the Certifier on completion of the ground floor slab formwork prior to the concrete being poured.

The surveyor must certify all of the following:

the distance of the structure to all boundaries of the allotment are in accordance with the approved plans, and

the height of the floor level/s in relation to ground level (existing) are in accordance with the approved plans.

#### 52. Contamination - Unexpected Finds

If unexpected contaminated soil and/or groundwater is encountered during any works:

- All work must cease, and the situation must be promptly evaluated by an appropriately qualified environmental consultant.
- b) The contaminated soil and/or groundwater must be managed under the supervision of the environmental consultant, in accordance with relevant NSW Environment Protection Authority (EPA) Guidelines.

If unexpected contaminated soil or groundwater is treated and/or managed on-site; an appropriately qualified environmental consultant must verify that the situation was appropriately managed in accordance with relevant NSW EPA guidelines prior to recommencement of works. The verification documentation must be provided to the satisfaction of the Certifier and Shoalhaven City Council prior to the recommencement of any works.

If contaminated soil or groundwater is to be removed from the site, it must be transported to an appropriately licensed waste facility by an NSW EPA licensed waste contractor in accordance with relevant NSW EPA guidelines including the Waste Classification Guidelines (2014).

*Note:* An appropriately qualified environmental consultant will have qualifications equivalent to CEnvP "Site Contamination" (SC) Specialist - by Certified Environmental Practitioner or 'Certified Professional Soil Scientist' (CPSS CSAM) by Soil Science Australia (SSA).

### 53. Waste Management Plan



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All waste must be contained within the site during construction and then be recycled in accordance with the approved Waste Management Plan (WMP) or removed to an authorised waste disposal facility. Waste must not be placed in any location or in any manner that would allow it to fall, descend, blow, wash, percolate or otherwise escape from the site. Compliance with the WMP must be demonstrated by the submission of tip receipts to the Certifier.

Note: "Waste" is defined in the Dictionary to the Protection of the Environment Operations Act 1997 (POEO Act).

### 54. Building Construction Standards

The proposed buildings, precast concrete external walls, metal wall cladding, roof and roller doors must be constructed entirely of non-combustible materials.

#### 55. Building Construction Standards - Bushfire Protection

The proposed buildings must be constructed with ember protection, by enclosing all openings (excluding roof tile spaces) or covering openings with a non-corrosive metal screen mesh with a maximum aperture of 2mm. Where applicable, this includes any sub floor areas, openable windows, vents, weepholes and eaves. External doors are to be fitted with draft excluders.

### 56. Water and Utility Services

The provision of water, electricity and gas must comply with the following in accordance with Table 7.4a of *Planning for Bush Fire Protection 2019*:

- reticulated water is to be provided to the development where available;
- all above-ground water service pipes external to the building are metal, including and up to any taps;
- where practicable, electrical transmission lines are underground;
- where overhead, electrical transmission lines are proposed as follows:
  - a) lines are installed with short pole spacing (30m), unless crossing gullies, gorges or riparian areas; and
  - b) no part of a tree is closer to a power line than the distance set out in accordance with the specifications in ISSC3 Guideline for Managing Vegetation Near Power Lines.
- reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities, and metal piping is used;
- all fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side;
- connections to and from gas cylinders are metal;
- polymer sheathed flexible gas supply lines are not used; and -
- above-ground gas service pipes are metal, including and up to any outlets.

# 57. Landscaping Measures

Landscaping within the required asset protection zone must comply with Appendix 4 of Planning for *Bush Fire Protection 2019*. In this regard, the following principles are to be incorporated:

- A minimum 1-metre-wide area, suitable for pedestrian traffic, must be provided around the immediate curtilage of the building where zero-setbacks are provided;
- Planting is limited in the immediate vicinity of the building;



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- Planting does not provide a continuous canopy to the building (i.e. trees or shrubs are isolated or located in small clusters);
- Landscape species are chosen to ensure tree canopy cover is less than 15% (IPA), and less than 30% (OPA) at maturity and trees do no touch or overhang buildings;
- Avoid species with rough fibrous bark, or which retain/shed bark in long strips or retain dead material in their canopies;
- Use smooth bark species of trees species which generally do not carry a fire up the bark into the crown;
- Avoid planting of deciduous species that may increase fuel at surface/ ground level (i.e. leaf litter):
- · Avoid climbing species to walls and pergolas;
- Locate combustible materials and structures such as woodchips/mulch, flammable fuel stores away from the building; and
- Low flammability vegetation species are used

#### PART G: PRIOR TO THE ISSUE OF AN OCCUPATION CERTIFICATE

#### 58. Compliance

The Occupation Certificate must not be issued until all relevant conditions of development consent have been met or other satisfactory arrangements have been made with council (i.e. a security).

#### 59. Works in the Road Reserve - Evidence of completion

Prior to the issue of an Occupation Certificate, the developer must provide the Certifier with a Completion of Works in Road Reserve Letter provided by council, confirming compliance with the requirements of section 138 of the *Roads Act 1993*.

### 60. Damage to Public Assets

Prior to the issue of an Occupation Certificate, any infrastructure within the road reserve, along the frontage of the subject site, or in proximity, which has been damaged as a result of construction works, must be repaired by the developer to the satisfaction of Council.

### 61. Water Sensitive Urban Design Operation and Maintenance Manual

Adopted WSUD Management, Operation, Maintenance and Monitoring Manual/s for the permanent water quality facilities must be accepted by Council prior to issue of the Occupation Certificate. The manuals must be prepared by a suitably qualified professional in accordance with the objectives and criteria identified in the approved Integrated Water Cycle Management Plan.

# 62. Works as Executed - Stormwater Drainage

Works as Executed Plans and certification must be submitted to the Council by a licenced plumber, registered surveyor & professional engineer (as defined in the National Construction Code) certifying compliance of all drainage works with the approved design plans and the National Construction Code.



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The Works as Executed be shown in red on a copy of the approved plans. This plan must verify locations and sizes of all pipelines.

Where the system includes an underground tank, a certificate of structural adequacy must be prepared and provided by a professional engineer (as defined in the National Construction Code).

### 63. On-site Detention and WSUD System

Prior to the issue of the Occupation Certificate, the developer must:

- a) create a restriction on use under the Conveyancing Act 1919 over the on-site detention system and water quality treatment devices and provide it to the Certifier as follows:
  - i. The registered proprietor of the lot burdened must not make or permit or suffer the making of any alterations to any on-site stormwater detention system on the lot(s) burdened without the prior consent in writing of the authority benefited. The expression 'on-site stormwater detention system' must include all ancillary gutters, pipes, drains, walls, kerbs, pits, grates, tanks, chambers, basins and surfaces designed to temporarily detain stormwater as well as all surfaces graded to direct stormwater to those structures. Name of the authority having the power to release, vary or modify the restriction referred to is Shoalhaven City Council.
  - ii. The registered proprietor must not make or permit or suffer the making of any alterations to any stormwater treatment measures/ water sensitive urban design (WSUD) elements which is, or must be, constructed on the lot(s) burdened without the prior consent in writing of Shoalhaven City Council.
  - iii. The expression "stormwater treatment measures/ water sensitive urban design elements" means the infiltration systems, porous pavement, sediment basins, bio-retention swales, bioretention basins, rain gardens, landscaped or vegetated swales, vegetated buffers, swale/ buffer systems, sand filter, wetlands, ponds, retarding basins, aquifer storage and recovery, rainwater reuse tanks, stormwater reuse tanks, gross pollutant traps, pit inserts, silt/ oil arrestors or other proprietary products including all ancillary gutters, pipes, drains, walls, kerbs, pits, grates, tanks, chambers, basins or surfaces graded to direct stormwater to the stormwater treatment measures/ water sensitive urban design elements.
  - iv. create a positive covenant under the Conveyancing Act 1919, requiring the property owner(s) to undertake maintenance in accordance with the approved WSUD System Operation and Maintenance Manual.
- b) provide a certificate from a professional engineer, (as defined in the National Construction Code) to verify the structural and hydraulic adequacy of the on-site detention facility and water quality improvement devices and that the facility / devices have been constructed in accordance with the approved Construction Certificate plans.

### 64. Fire Safety

Prior to the issue of a partial or whole Occupation Certificate, a final fire safety certificate is to be issued to Council and Fire & Rescue NSW by or on behalf of the owner of a building to the effect that each essential fire safety measure specified in the current fire safety schedule for the building to which the certificate relates:

- a) has been assessed by a properly qualified person, and
- b) was found, when it was assessed, to be capable of performing to at least the standard required by the current fire safety schedule for the building for which the certificate is issued.



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#### 65. Plumbing & Drainage Requirements

All the conditions under Section 68 of the *Local Government Act 1993* are to be complied with prior to the issue of an occupation certificate.

### 66. Retaining Walls - Certification

Prior to the issue of a full Occupation Certificate, the Certifier must be satisfied that all retaining walls have been constructed in accordance with the relevant retaining wall plans and specifications, and in accordance with the requirements of any other conditions of this consent.

Note: This condition does not prevent a partial occupation certificate to be issued for the parts of the development that have been completed.

### 67. Dilapidation Report - Evidence

Prior to the issue of an Occupation Certificate, the developer must provide the Certifier and Council with evidence that any damage to neighbouring premises or adjacent public infrastructure, not previously identified as existing damage in the Dilapidation Report, has been repaired by the developer to the satisfaction of Council.

#### 68. Structural Elements - Certification

Prior to the issue of an Occupation Certificate, certification must be provided to the Certifier prepared by a professional engineer, (as defined in the National Construction Code), certifying that all structural elements (e.g. underground stormwater tanks) have been constructed in accordance with the approved engineering design plans.

# 69. Landscaping Compliance

Prior to the issue of an Occupation Certificate, the developer must provide the Certifier with written evidence from a suitably qualified landscape professional that all landscape works have been completed in accordance with the approved landscape plans.

### 70. Letter Boxes

A letterbox structure(s) must be provided and be designed to comply with the requirements of Australia Post, located close to the major pedestrian entry to the site, and built from materials that are non-reflective and blend in with the approved development.

### 71. Driveway- Evidence of Completion

Prior to the issue of a full Occupation Certificate, all driveway works internal to the site as shown on the approved plans must be completed.

### 72. Exterior Materials



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Roofing and other external materials must be of low glare and reflectivity. Details of finished external surface materials, including colours and texture must be provided to the Principal Certifying Authority prior to the release of the Construction Certificate.

#### 73. Shoalhaven Water - Certificate of Compliance

Prior to the issue of any Occupation Certificate, a Certificate of Compliance under section 307 of the *Water Management Act 2000* must be obtained from Shoalhaven Water to verify satisfactory compliance with all conditions for the supply of water and sewerage, as listed on the Notice of Requirements.

#### 74. Private Waste Collection Service

Prior to the issue of an Occupation Certificate, the developer/owner must provide evidence to the Certifier of a formal agreement with a licenced private waste contractor to service the development. A copy of the contract must be forwarded to Council.

The agreement must ensure:

- a) the removal of all waste from the developed property.
- b) the service is functional and meets the operational requirements for the developed property.
- the service minimises environmental nuisances including noise and other adverse impacts on the safety and amenity of residents and the public.
- d) the developer/owner indemnifies Council against claims for loss or damages, should Council take over provision of the service at some point in the future.

A restriction (via the *Conveyancing Act 1919*) must be emplaced on land title indicating that the waste collection arrangement for the development is by private arrangement. Shoalhaven City Council must be the nominated authority to modify, revoke or vary the restriction.

#### 75. Vehicle Access - Restriction

Prior to the issue of an occupation certificate, a permanent sign(s) is to be erected:

- · At the front boundary, adjacent to the driveway entrance point to the site, and
- At a height and location that enables it to be clearly visible to traffic entering the site.

The sign(s) is to clearly advise incoming traffic that access to the site by vehicles larger than a Large Rigid Vehicle (LRV) is prohibited.

### PART H: PRIOR TO THE ISSUE OF A SUBDIVISION / STRATA CERTIFICATE

NIL

# PART I: ONGOING USE OF THE DEVELOPMENT

### 76. Site Maintenance - Commercial/Industrial Development

The owner or operator must at all times be responsible for on-going site management and maintenance in accordance with the following:



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- a) loading and unloading in relation to the use of the premises must occur in the designated loading areas.
- goods or machinery must be stored, and all activities must occur, inside the building(s) and not in the carpark or driveway areas.
- maintenance and replacement (if necessary) of all landscaping in accordance with the approved landscape plan.
- d) maintenance of vehicular movement areas including driveways, carparking, manoeuvring areas, line marking, pedestrian facilities, lighting, to the standard specified by this consent.
- e) ongoing waste and recycling must be managed in accordance with the approved Waste Management Plan. Waste bins are not to be stored within the loading area/space that is visible from a public place.
- f) maintenance of stormwater drainage pipes and systems to ensure efficient discharge of stormwater in accordance with the approved stormwater drainage plan.
- maintenance of buildings, fencing, signage/markings to the standards specified in this consent.
- h) the removal of all graffiti within a maximum of 14 days of being notified by Council.

# 77. Hours of Operation

The approved hours of operation of the takeaway food and drink premises are 9:00am to 5:00pm, Monday to Friday.

#### 78. Waste Collection Hours

Hours of waste collection from the site are limited to the following times:

Monday to Friday: 7:00am to 7:00pm
Saturday and Sunday: 8:00am to 7:00pm

#### 79. Noise

The use of the approved development must not give rise to transmission of unacceptable vibration or an offensive noise to any place of different occupancy or the public in accordance with the NSW Environment Protection Authority's Noise Policy for Industry and Noise Guide for Local Government (guideline) and the Protection of the Environment Operations Act 1997 (POEO Act).

### 80. Provision of Parking

At least 112 onsite car parking spaces are to be provided at all times. At least six (6) spaces are to be allocated for use by customers of the takeaway food and drink premises at all times.

### 81. Vehicular Access - Restrictions

The registered proprietor must not permit ingress of any vehicle larger than a Heavy Rigid Vehicle (HRV) as defined by AS2890.2. Access to the site by articulated vehicles (semi-trailers) is not permitted unless written approval is gained from Council, supported by a swept-path analysis.



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#### 82. Food Business Notification

Prior to commencing any food handling operations, a <u>'Food Business Registration Form'</u> available on Councils' website will need to be submitted to Council as part of the NSW Food Partnership and for the purposes of regular food hygiene inspection.

#### 83. Food Business Regulations

Any premises used for the preparation and storage of food for sale to the general public must (where relevant) comply with:

- a) Shoalhaven City Council's Food Premises Policy
- b) Chapter 3 of the Australia/New Zealand Food Standards Code
- c) Food Act 2003 (NSW)
- d) Food Regulation 2015
- e) AS 4674 Construction and fit out of food premises
- AS 1668.2 The use of ventilation and air conditioning in buildings-Mechanical ventilation in buildings.

### 84. Stormwater Quality Improvement Devices - Ongoing Maintenance

The revisited proprietor must ensure the stormwater drainage system, inclusive of OSD tanks and stormwater quality improvement devices, is maintained in a functional condition for the life of the development. Routine maintenance must be undertaken in accordance with the approved WSUD System Operation and Maintenance Manual. Records of maintenance undertaken must be kept and furnished to Council upon request.

### 85. Overland Stormwater Flow, Redirecting and/or Concentrating Stormwater

All excavation, backfilling and landscaping works must not result in:

- a) any change to the overland stormwater flow path on your property and or a neighbouring property. If any change to the overland flow path occurs on a property, the stormwater runoff shall be collected and directed to a legal point of discharge.
- b) the redirection and/or concentration of stormwater flows onto neighbouring properties.

#### 86. Fire Safety - Annual Statement

A building owner must ensure that an annual fire safety statement prepared by a competent fire safety practitioner is issued each year and that a copy of the statement is provided to the Shoalhaven City Council and the Commissioner of Fire and Rescue NSW. An application form is available on Council's website.

Note: An annual fire safety statement is a declaration by, or on behalf of a building owner that an accredited practitioner – fire safety (APFS) has:

- a) assessed, inspected and verified the performance of each existing essential fire safety measure that applies to the building,
- b) inspected the exit systems serving the building and found that the exit systems within the building do not contravene the provisions of Division 7 of Part 9 of the *Environmental Planning* and Assessment Regulation 2000.



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Failure to give Council an annual fire safety statement by the due date constitutes a separate offence for each week beyond that date for which the failure continues. Substantial penalties for non-compliance apply under the *Environmental Planning and Assessment Act 1979*.

#### 87. Fencing - Asset Protection Zone

Barbed wire, electrified or solid metal fencing is not allowed around or within the property boundaries for the life of the development.

#### PART J: OTHER COUNCIL APPROVALS AND CONSENTS

NIL

#### PART K: REASONS FOR CONDITIONS

The application has been assessed as required by section 4.15 of the *Environmental Planning and Assessment Act 1979* and has been determined by the granting of conditional development consent.

#### Statutory requirements

The development proposal, subject to the recommended conditions, is consistent with:

the objects of the Environmental Planning and Assessment Act, 1979.

the aims, objectives and provisions of the applicable environmental planning instruments,

the aims, objectives and provisions of Shoalhaven Development Control Plan 2014 (SDCP 2014).

the aims, objectives and provisions of relevant Council policies.

### **Public notification**

The application was publicly notified in accordance with the *Environmental Planning and Assessment Regulation 2000* and Council's Community Consultation Policy for Development Applications (Including Subdivision) and the Formulation of Development Guidelines and Policies (POL 16/230).

### Submissions

Any submissions received during the public notification period are available on DA Tracking

### Community views

Issues and concerns raised by the community in submissions have been considered in the assessment of the application and, where appropriate, conditions have been included in the determination to mitigate any impacts.

#### Suitability of the Site



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The application has been approved because the development proposal is considered to be suitable for the site.

The relevant public authorities and the water supply authority have been consulted and their requirements met, or arrangements made for the provision of services to the satisfaction of those authorities.

The increased demand for public amenities and services attributable to the development has been addressed by the requirement to pay contributions in accordance with section 7.11 of the *Environmental Planning and Assessment Act 1979* and Council's Contribution Plan 2019. Contributions under Section 307 of the Water Management Act 2000 have been applied as required.

#### Impacts of the Development

The application was considered to be suitable for approval. Conditions have been imposed to ensure that:

the development will not result in unacceptable adverse impacts on the natural and built environments.

the amenity and character of land adjoining and in the locality of the development is protected.

any potential adverse environmental, social or economic impacts of the development are minimised.

all traffic, car parking and access arrangements for the development will be satisfactory.

the development does not conflict with the public interest.

#### PART L: RIGHTS OF REVIEW AND APPEAL

#### Determination under Environmental Planning and Assessment Act, 1979

Division 8.2 of the EP&A Act, 1979 confers on an applicant who is dissatisfied with the determination a right to request the council to review its determination. The request and determination of the review must be undertaken within the prescribed period.

Division 8.3 of the EP&A Act, 1979 confers on an applicant who is dissatisfied with the determination of a consent authority a right of appeal to the Land and Environment Court which can be exercised within the prescribed period.

An appeal under Division 8.3 of the EP&A Act, 1979 by an objector may be made only within the prescribed period.

#### PART M: GENERAL ADVICE

In this consent the term developer means any person or corporation who carries out the development pursuant to that consent.

### **Disability Discrimination Act 1992**

This application has been assessed in accordance with the Environmental Planning & Assessment Act, 1979. No guarantee is given that the proposal complies with the Disability Discrimination Act 1992.

The applicant/owner is responsible to ensure compliance with this and other anti-discrimination legislation.

The Disability Discrimination Act 1992 covers disabilities not catered for in the minimum standards called up in the Building Code of Australia which references AS1428.1 - "Design for Access and Mobility".



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### Disclaimer - Conveyancing Act 1919 - Division 4 - Restrictions on the Use of Land

The applicant should note that there could be covenants in favour of persons other than Council restricting what may be built or done upon the subject land. The applicant is advised to check the position before commencing any work.

Under Clause 1.9A of Shoalhaven Local Environmental Plan 2014 agreements, covenants or instruments that restrict the carrying out of the proposed development do not apply to the extent necessary to enable the carrying out of that development, other than where the interests of a public authority is involved.

# DBYD Enquiry - 'Dial Before You Dig'

In order to avoid risk to life and property it is advisable that an enquiry be made with "Dial Before You Dig" on 1100 or <a href="www.dialbeforeyoudig.com.au">www.dialbeforeyoudig.com.au</a> prior to any excavation works taking place to ascertain the location of underground services. You must also contact your Local Authority for locations of Water and Sewer Mains.

SIGNED on behalf of Shoalhaven City Council:

Signature

Name

Position Title City Development



# Attachment : Assessment of Shoalhaven Development Control Plan 2014

# **G1:** Site Analysis, Site Design and Building Materials

### 5.1 Site analysis

#### **Performance Criteria**

P1.1 The characteristics of the site and its surrounds have been adequately considered through preparation of a thorough site analysis plan.

P1.2 The site analysis informs the site design and layout.

P1.3 The site layout integrates with the surrounding environment through:

- Adequate pedestrian, cycle and vehicle links to street and open space networks.
- Buildings that face and address streets and the public domain.
- Buildings, streetscape and landscape design that relates to the site topography and to the surrounding neighbourhood character.

P1.4 The site layout enhances personal safety and minimises potential for crime and vandalism.

<u>Comment</u>: Notwithstanding the lack of a site analysis plan, the development is generally consistent with the above Performance Criteria.

Acceptable Solutions	Proposal	Compliance
<ul> <li>A1.1 A site analysis plan is provided with a development application that shows the following, as appropriate:</li> <li>Constraints (including but not limited to):  <ul> <li>Location of services such as power, sewer, water and drainage lines.</li> <li>Existing trees and vegetation within and adjacent to the land being developed.</li> <li>Natural hazards which are likely to impact upon the development such as bush fire prone land, coastal hazard areas or flood prone land</li> </ul> </li> <li>Opportunities (including but not limited to):  <ul> <li>Views from the site.</li> <li>Solar access.</li> <li>Existing mature trees and vegetation.</li> </ul> </li> <li>Context information for the site and adjoining/ adjacent development (including but not limited to):  <ul> <li>Height and use of buildings.</li> <li>Front setbacks.</li> <li>Driveways.</li> <li>Boundary treatments (including retaining walls).</li> <li>Easements.</li> <li>Stormwater management.</li> </ul> </li> </ul>	A site analysis plan has not been submitted with the application. Despite deficiencies with such information, the plans accompanying the application (i.e. the survey plan, site/floor plans, etc.) and accompanying reports (e.g. the bushfire risk management plan, etc.) contain sufficient information for an assessment to identify hazards and constraints, noting that there are no trees on the site, and the site is not constrained by considerations such as views and natural hazards other than bushfires. The lack of a site analysis plan is therefore considered to be acceptable in this specific instance.	No



<ul> <li>A1.2 For development other than for a single dwelling house and associated structures, a development application must detail, as appropriate:</li> <li>Topographical features such as slope, existing natural trees and vegetation and opportunities for the creation of views and vistas.</li> <li>Opportunities to orientate buildings and private open spaces having regard to solar access, winds and views.</li> <li>The character of the surrounding development, particularly to setbacks and subdivision layout.</li> <li>The likely impact on surrounding development, particularly with regard to overshadowing, privacy and obstruction of views.</li> <li>The extent to which driveways and/or parking areas are likely to dominate the appearance of the development.</li> <li>The visibility, width and design speed of proposed roads and/or driveways.</li> <li>Bush fire, flooding and drainage constraints, easements for services and extent of contaminated land.</li> <li>The character of any adjacent public land/reserves, particularly the location of mature trees in relation to the proposed developments</li> </ul>	Information submitted with the development application contains sufficient detail regarding relevant matters such as topographical/natural features, responsiveness to hazards and details of proposed structures and associated impacts.	Yes
A1.3 The proposed site layout responds to and implements the findings of the site analysis plan prepared in accordance with A1.1 and A1.2 (see example at Figure 3).	As indicated above, a site analysis plan has not been provided. Subject to recommended conditions, the proposed site layout is generally responsive to major site considerations.	No

# **G2:** Sustainable Stormwater Management and Erosion/Sediment Control

### 5.1 Stormwater

### 5.1.1 Minor and Major Systems Design

# Performance Criteria

P1 Minor and major drainage systems are appropriately designed to:

- Not increase the risk to life or safety of persons during a storm event. Note: Refer to Supporting Document 1: Sustainable Stormwater Technical Guidelines.
- Manage stormwater discharge from the development or work to safely convey stormwater flows.
- Discharge runoff from the development without adverse impacts on existing infrastructure and neighbouring properties.



- Ensure continuity of overland flow paths where possible.
- Ensure stormwater systems are designed in accordance with industry standards

Acceptable Solutions	Proposal	Compliance
General A1.1 Runoff from impervious areas must not be concentrated or directed onto neighbouring properties.	Subject to recommended conditions, the design of the proposed drainage system will not direct runoff onto adjoining sites.	Yes
A1.2 For residential and rural residential areas, drainage must be designed to cater for a 5 year Average Recurrence Interval (ARI) event.	The site is not located within a rural or residential area.	N/A
A1.3 For mixed residential/commercial, commercial and industrial development, the drainage must be designed to cater for a 10 year ARI event.	The site is not located within a commercial or residential area. The proposed drainage system us capable of satisfying the this requirement, subject to recommended conditions.	Yes
A1.4 Kerb and gutters are required where soil permeability is not sufficient to allow natural infiltration of stormwater runoff without causing adverse impacts onsite or to neighbouring properties.	The stormwater design does not rely upon soil permeability to avoid runoff impacts on surrounding sites.	N/A
A1.5 Runoff from roofs and other impervious areas shall be directed to an existing or proposed stormwater system when it can be proven to Council's satisfaction that the design capacity of the system is not exceeded.	Runoff is to be directed to a drainage easement that adjoins the rear boundary of the site. Capacity and design of the system is subject to conditions recommended by Council's Development Engineer.	Yes
A1.6 Where onsite infiltration / absorption is proposed for stormwater disposal, supporting geotechnical reports are submitted with a development application to assess the suitability of the proposal.	Not proposed; the development proposes an OSD system discharging to the public drainage system.	N/A
A1.7 Stormwater inlet structures must be designed with a blockage factor provision in accordance with the latest version of the Australian Rainfall and Runoff (ARR) guidelines.	Compliance is subject to conditions recommended by Council's Development Engineer.	Yes
Major System Drainage A1.8 Major system drainage must be designed for a 100 year ARI event.	Compliance is subject to conditions recommended by Council's Development Engineer.	Yes
A1.9 Trunk stormwater systems (e.g. open channels, large conduits and overland flow paths) are designed for storms up to 100 year ARI event.	Trunk stormwater systems are not shown, however conditions recommended by the Development Engineer will be required to identify major flow paths on revised stormwater plans, and how pit blockage or	Yes



	design storms will not result in the flooding of onsite units.	
<ul> <li>A1.10 The following overland flow paths shall be utilised as major system flow routes:</li> <li>Roadways including footpath.</li> <li>Pathways.</li> <li>Parkland or open space.</li> </ul>	As above.	N/A
A1.11 Flow paths must be designed to ensure a velocity depth product of less than 0.3m ² /s for a 100 year ARI storm event.	As above.	N/A
A1.12 The continuity of overland flow paths must not be obstructed by fences, walls, footpaths and the like.	As above.	N/A

# **5.1.2 Disposal of Stormwater from Development Sites**

#### **Performance Criteria**

P2 Stormwater is appropriately accommodated in the design including:

- Stormwater from roofed areas is collected, stored and/ or conveyed to appropriate discharge points or disposal areas.
- Paved/impervious areas associated with buildings and driveways are graded and drained to prevent the discharge of surface water onto adjoining land.
- Permeable areas are utilised to reduce stormwater runoff.

Acceptable Solutions	Proposal	Compliance
A2.1 Roof water is to be collected by gutter at downpipe systems, or other equivalent mean and conveyed to an approved discharge poin accordance with the requirements of Pa 3.1.2 of the Building Code of Australia and A 3500.3. This could be:  a) A gutter or table drain in a road reserve, b) A stormwater easement or easement drain water, or  c) A charged line system where (a) and (above are not available and the development site will have no more that two dwellings. Where a charged line system is proposed, the following must included with the development applicatio  Acknowledgement from adjoining property owners indicating a refusal grant a drainage easement. The acknowledgement must indicate that reasonable amount of compensation has been offered for the proposed drainage easement and that the advantages of creating as easement were explained.	collected via gutters and downpipes. The water is to be distributed via pits and pipes to three OSD systems towards the rear of the site. Two drainage connections are to be provided through an existing easement on an adjoining site (Lot 117 in Deposited Plan 1122371) and the creation of a second drainage easement on an adjoining site (Lot 40 in Deposited Plan 802671)  Detailed stormwater plans (prepared by SETS Consultants) have been submitted, and conditions are recommended by Council's Development Engineer to ensure that drainage arrangements are in accordance	Yes



г			
	Demonstrate a minimum of 1.8m of fall between the roof gutters and the front		
	boundary of the site.		
	<ul> <li>Demonstrate fall from the front boundary to the kerb line.</li> </ul>		
	<ul> <li>Detailed design, inclusive of site plan</li> </ul>		
	and longitudinal section including all		
	calculations, levels and further details		
	of pits, gutters and maintenance		
	facilities as required, or		
	d) A disposal/absorption trench, where (a), (b)		
	or (c) above are not available, and soil		
	conditions are suitable, or e) A water tank/on-site detention system with an		
	overflow connected to a disposal method in		
	(a), (b), (c) or (d), above.		
	A2.2 Surface water from paved areas including	As above; subject to	
	driveways is to be directed to an approved	recommended conditions,	
	discharge point (see A2.1) that minimises	proposed connection points will	Yes
	impact on adjoining land.	not adversely affect adjoining sites.	
	A2.3 Where the area of buildings, pavement	Not proposed. OSDs are to	
	and other impervious areas exceeds 65% of	minimise runoff during peak	
	the site area, the proposal is to include details	storm events.	
	of the methods to be used to harvest rainwater		
	and minimise increased runoff to surrounding		N/A
	land and public stormwater infrastructure. The		
	details are to include assessment of pre- development and post development		
	stormwater flows.		
	E 1 2 Climate Change Centrals		

# **5.1.3 Climate Change Controls**

# Performance Criteria

P3 Major system design must consider the impact of changes to rainfall intensity due to climate change.

P4 Where relevant, major and minor system design must consider the impact of sea level rise.

 $\underline{\text{Comment}}\text{: The development is consistent with the above Performance Criteria.}$ 

Acceptable Solutions	Proposal	Compliance
A3.1 Climate change impacts, such as changes to rainfall intensity, shall be considered in system design as per relevant policies and/or Australian Rainfall and Runoff Guidelines.	''	Yes
A4.1 Sea level rise shall be considered in system design as per relevant policies and/or Australian Rainfall and Runoff Guidelines.		N/A

# **5.1.4 Onsite Stormwater Detention**

# Performance Criteria



P3 Major system design must consider the impact of changes to rainfall intensity due to climate change.

P4 Where relevant, major and minor system design must consider the impact of sea level rise.

Ac	ceptable Solutions		Proposal	Compliance
A5.1 Onsite stormwater detention is to be sized to match pre-development peak flow rates for the 5, 20 and 100-year ARI rain events for the site.		To comply, subject to recommended conditions by Development Engineer.	Yes	
pre cal •	2 For development other and post-development culations must be based a Impervious percentages Actual impervious surfaction development plans greater.  Area impervious	ent peak flow on the: in Table 1, or e area as detailed	Stormwater peak flow calculations are to be based upon development plans, which shows impervious area of approximately 93.6%. To be subject to conditions in the event of approval.	
	Open space	25%		Yes
	Low and medium density residential	80%		
	Industrial areas	80%		
	Commercial areas	90%		
	Half width road reserve	95%		
	3 For subdivisions, velopment peak flow calcool on the impervious per		Subdivision is not proposed.	N/A
A5. cor	4 Onsite stormwater dete sider downstream bound 100-year ARI level of the	lary conditions for	Compliance is subject to conditions recommended by Council's Development Engineer.	Yes
	5 Detention storage musel above the 5-year ARI fl		The site is not flood prone.	N/A
A5. in I dep	6 If onsite stormwater del andscaped areas, the de oth of ponding under de omm.	ention is provided esirable maximum	OSD systems are proposed beneath driveway areas.	N/A
A5.	7 Despite A5.6, the de oth of ponding under desi increased to 1200mm pro	gn conditions can	As above.	N/A
be •	shallower (less than 1:6) The provided storage is	); or		



<ul> <li>Designed at the subdivision stage.         Constructed at the individual dwelling stage where OSD is proposed to be provided on each lot.     </li> <li>Constructed at the subdivision stage where OSD is proposed to be provided</li> </ul>		
through dedicated detention storage.  A5.9 50% of any retention volume can	Not applicable.	
contribute towards the onsite stormwater detention volume required for the development, where continual reuse of the retention volume can be demonstrated.		N/A

# 5.2.1 Erosion and Sediment Control

### Performance Criteria

P6 The development or work will not:

- Cause erosion and/or siltation.
- Have an adverse impact on receiving waterways from increased concentrations and loads of sediment.

<u>Comment</u>: The development is consistent with the above Performance Criteria.

Acceptable Solutions	Proposal	Compliance
A6.1 Where vegetation exists on the site, buffer zones of vegetation shall be retained along the boundaries of the site where practicable, particularly those adjacent to creeks and street gutters.	5	N/A
A6.2 Sediment and erosion control measures shall not adversely impact on stormwater management measures of the site or any existing public drainage structures or systems.	Council's Development	Yes

### 5.2.2 Stormwater Retention and Reuse

### Performance Criteria

P7 The development provides adequate retention storage where there is an increase in impervious surface area.

P8 The reuse of stormwater is optimised to provide an alternative water supply.

Acceptable Solutions	Proposal	Compliance
A7.1 The volume of retention storage provided is to be equal to or greater than: [storage depth at Table 2] X [increase in impervious surfaces compared to predevelopment].	l ·	Yes
A8.1 Residential development shall install rainwater tanks to meet a portion of supply such as outdoor use, toilets, laundry.	•	N/A



A8.2 Any overflow from rainwater tanks shall be directed into an existing stormwater system where possible, alternatively the overflow will be managed so that it does not cause nuisance to neighbouring properties.		Yes
A8.3 Stormwater use within public open space (e.g. irrigation, street cleaning, public amenities) is encouraged.	Not applicable.	N/A

# 5.2.4 Large Scale Development

### Performance Criteria

P10 Large scale development mitigates adverse impacts by:

- Minimising post development pollutant loads to not unduly impact on the quality of receiving waterways.
- Protecting stream stability and habitats through retention, infiltration and detention to limit post development flows.

Acceptable Solutions	Proposal	Compliance
A10.1 For development within Sydney's drinking water supply catchments, a neutral or beneficial effect must be demonstrated in accordance with the State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011.	Note: The SEPP has been repealed and replaced with SEPP (Biodiversity and Conservation) 2021.  The site is not within a Sydney drinking water catchment.	N/A
A10.2 For development outside Sydney's drinking water supply catchments, pollutant load reduction must be a minimum reduction of the post development average annual load of pollutants in accordance with Table 3, and the following as relevant:  • For greenfield sites or sites draining to a natural stream of 3rd order or lower, the 1.5 year ARI pre-development peak discharge must be maintained; and  • For development discharging to a natural stream, the post development duration of stream forming flows must be no greater than a stream erosion index of 2; and  • For development discharging to a tidal area or natural watercourse, outlets must be designed to limit erosion and sedimentation at the discharge point; and  • For development discharging to St Georges Basin, Swan Lake, Lake Conjola, Burrill Lake, Lake Tabourie, Willinga Lake and Wollumboola Lake, a higher Total Phosphorus reduction target of 65% must be achieved; and	The site is not within a greenfield area and the proposed development will not discharge to natural waterways, areas of biodiversity value. Uncoated metal roofs are however not proposed.	N/A



•	For development discharging into an area of significant biodiversity value, the post-development residual pollutant concentrations must not exceed the ecological trigger values listed in the Australian and New Zealand Guidelines for Fresh and Marine Water Quality; and Uncoated metal (i.e. copper etc) roofs, facades and/or downpipes are will not be	
	concentrations in stormwater runoff from these surfaces being harmful to receiving	
	waterways.	

# 5.2.5 Design and Maintenance of Stormwater Treatment Measures

### Performance Criteria

P11 Stormwater treatment measures for large scale development are appropriately designed and are able to be maintained appropriately to ensure their optimal efficiency including:

- Protection of permanent stormwater treatment against siltation/ sedimentation and clogging during construction.
- Not unduly increasing health and safety risks.
- Not unduly increasing maintenance requirements of stormwater infrastructure by Council.
- Design in accordance with best industry practices.
- Ensuring the ongoing reduction of stormwater pollutants.

Acceptable Solutions	Proposal	Compliance
A11.1 Where practicable, trunk drainage is to be provided as a naturally vegetated stable channel.	Trunk drainage from the site is to connect to the easements adjoining the rear of the site.	Yes
A11.2 Where practicable due to adequate catchment area, constructed wetlands are preferred over the use of bioretention basins and water quality ponds. The preference between a water quality pond and bioretention device will depend on site specific constraints.	Not proposed.	N/A
A11.3 An Operation and Maintenance Plan shall be submitted to Council for all stormwater treatment measures proposed, whether the asset is to remain in private ownership or to be handed over to Council.	To be satisfied by recommended conditions of consent if installed.	Yes
A11.4 System design shall allow for maintenance (i.e. access and room to operate safely) at all times.	As above.	N/A
A11.5 Stormwater treatment measures must not be connected until the majority of catchment infrastructure is completed and landforms stabilised with impervious or fully established grassed surfaces. Bioretention devices and constructed wetlands must be established offline from inflows until they are fully established.	As above.	N/A



A11.6 Where the development is staged, sacrificial zones must be included in the design of the stormwater treatment measures. Sacrificial zones are to be rectified upon completion of development at the developers cost.	As above.	N/A
A11.7 Structural stormwater treatment measures must be able to bypass flows in excess of the design discharge with negligible afflux resulting from over topping or blockage of the device.	As above.	N/A
<ul> <li>A11.8 Trash racks are generally preferred over proprietary gross pollutant traps (GPTs) by Council. In some circumstances Council may consider proprietary GPT devices where it can be demonstrated that</li> <li>The device can achieve the desired treatment performance; and</li> <li>The maintenance costs are less than that of an equivalent conventional device; and</li> <li>No specialist equipment is required to carry out maintenance activities; and</li> <li>Major consumable parts e.g. filters and cartridges are not required to be purchased by Council on a regular basis. Where a proprietary GPT is supported by Council, the developer must provide documentation from the supplier providing evidence that the proposed device has been appropriately sized for the contributing catchment.</li> </ul>	As above.	N/A
A11.9 In the event of a stormwater discharge, stormwater treatment structures must not allow the release of any previously trapped material.	As above.	N/A
A11.10 Stormwater treatment measures must consider mosquito control in the design, including:  • Permanent water ponding;  • Water depth;  • Exposure to sunlight and wind; and  • Proximity to residential development.	Not proposed.	N/A
A11.11 All filter media used in bioretention stormwater treatment measures must meet the current specifications for Filter Media in Adoption Guidelines for Stormwater Biofiltration Systems or a demonstrated and approved equivalent and be verified by a soil laboratory registered by the National Association of Testing Authorities.	Not proposed.	N/A
A11.12 Design of stormwater treatment measures must be in accordance with Supporting Document 1: Sustainable Stormwater Technical Guidelines.	Complies; no issue with the documentation has been raised by Council's Development Engineer.	Yes



A11.13 Development adjacent to a watercourse or stormwater drain addresses environmental impact on the waterbody.	The site is not in close proximity to a waterbody or watercourse.	N/A
A11.14 Constructed wetlands and bioretention basins must be located in a treatment train approach immediately downstream of a sediment basin/forebay that:  • Has been sized to capture approximately 75% of coarse sediment; and  • Is offline from the stormwater network to allow flows exceeding the capacity of the piped stormwater network to bypass the treatment devices.  The sediment basin/forebay can be either wet or dry. A trash rack can be incorporated into the sediment basin inlet structure provided the invert of the trash rack is above the permanent water level of the pond.	Not proposed.	N/A
A11.15 Bioretention devices must be designed in accordance with the latest version of the Adoption Guidelines for Stormwater Biofiltration Systems (CRC for Water Sensitive Cities) and Facility for Advancing Water Biofiltration (FAWB) Guidelines.	Not proposed.	N/A
A11.16 Constructed wetlands must be designed in accordance with the latest version of the Melbourne Water Wetland Design Manual or a demonstrated and approved equivalent.	Not proposed.	N/A

# **G3:** Landscaping Design Guidelines

# 5.1 Controls

# Performance Criteria

P1 Development minimises site disturbance and preserves the existing landscape elements which make a positive contribution to the character of the area, through appropriate site design and by retaining mature shade trees.

 $\underline{\text{Comment}}\text{: The development is consistent with the above Performance Criteria.}$ 

Acceptable Solutions	Proposal	Compliance
A1.1 Existing trees and landscape elements which make a positive contribution to the character of the area, especially semimature/mature shade trees, should be retained and integrated into the proposal.	There are no existing trees on site.	N/A
A1.2 Proposals to remove existing trees and landscape elements must propose suitable landscaping to retain streetscape character.	As above.	N/A
A1.3 Tree planting and landscaping considers amenity by providing summer shade and winter sun.	Tree planting includes species that will be capable of providing summer shade, while still	Yes



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#### **Performance Criteria**

#### P2.1 The landscape plan:

- Is designed to meet user requirements taking into account maintenance, exercise
  opportunities, shade provision and aesthetic quality.
- Enhances the appearance of the streetscape through the provision of substantial landscaping to the street frontage.
- Integrates the development into the streetscape.

#### P2.2 The landscape plan:

- Specifies the location and species of trees, shrubs and ground cover.
- Uses vegetation types and landscaping styles that blend the development in with the streetscape.
- Complements the functions of the street and reinforce desired traffic speed and behaviour.
- Is an appropriate scale relative to both the street reserve width and the building bulk.
- Considers personal safety (safety by design) by ensuring good visibility and lighting at dwelling
  entries, along paths and driveways and avoids shrubby landscaping near thoroughfares.
- Contributes to energy efficiency and amenity by providing substantial shade in summer especially to west facing windows and open car park areas and admitting winter sunlight to outdoor and indoor living areas.
- Improves privacy and minimises overlooking between dwellings.
- Minimises risk of damage to proposed buildings, overhead and underground power lines and other services.
- Minimises the risk of damage due to bushfire if the land is within a bushfire prone area as mapped by Council.
- Retains or plants mature shade trees to assist in reducing the urban heat effect.
- Reduces the removal of native vegetation and dominant locally occurring native trees.

Acceptable Solutions	Proposal	Compliance
A2.1 For development other than a new dwelling house or alterations and additions to a dwelling house, landscaping must be in accordance with an approved landscape plan for the site, prepared by a suitably qualified landscape professional.	some landscape areas	Yes
<ul> <li>A2.2 The landscape plan must:</li> <li>Relate to the site plan for the proposed development.</li> <li>Address P2.1 and P2.2.</li> </ul>	As above.	Yes
Include the landscape plan and planting schedule requirements at Section 6.1 of		



this Chapter, as appropriate to the scale of
the development.

### Performance Criteria

P3 Paving is designed to be fit for the intended purpose, low maintenance and complementary to the development.

Comment: The development is consistent with the above Performance Criteria.

Acceptable Solutions	Proposal	Compliance
<ul> <li>A3.1 Where paving is provided to driveways, walkways and in the vicinity of garbage bin enclosures, letterboxes and clotheslines such paving should:</li> <li>Use materials and colours which complement the development.</li> <li>Feature nonslip finishes and be suitable for use by people with disabilities.</li> <li>Minimise maintenance requirements where appropriate and practicable, taking into account the ownership of and proposed management of the landscaped area, particularly in bushfire prone areas.</li> </ul>	to be finished using concrete surfaces; such materials are to	Yes

# Performance Criteria

Street trees are included and retained/replaced, where appropriate, including in car parks, to provide shade and improve streetscape amenity.

Comment: The development is consistent with the above Performance Criteria.

Acceptable Solutions	Proposal	Compliance
A4.1 Street tree planting that provides summer shade, winter sun and enhances site lines for pedestrians shall be included and retained/replaced, where appropriate.	Street trees are not proposed, as the placement of such vegetation within the road reserve is limited by electricity infrastructure within the street that includes elevated 11kV electricity lines.	N/A
A4.2 Street trees and trees within the road reserve shall be positioned to maximise shade opportunities for pedestrians and car parking and minimise disturbance to service lines.	As above	N/A
A4.3 Shade trees should be provided at a rate of one tree per row of six (6) car parking spaces or through the provision of shade to at least 50% of the car park.	As above.	N/A

## **G7:** Waste Minimisation and Management Controls

# **5 Controls**

### Performance Criteria

P1 The development appropriately accounts for waste generation in a way that meets the objectives of this Chapter.



Comment: The development is consistent with the above Performance Criteria.			
Acceptable Solutions	Proposal	Compliance	
A.1.1 A waste management plan is submitted with the development application in accordance with the Waste Minimisation and Management Guidelines.		Yes	

# **G20:** Industrial Development

# 5.1 Site Suitability

### Performance Criteria

P1 The development is compatible with the character of the site.

P2 The site has sufficient area and dimensions to accommodate all areas necessary for the proposed industrial development.

P3 Adjoining sites are not be negatively impacted by the proposed development and drainage works.

Acceptable Solutions	Proposal	Compliance
A1.1 Cut and fill on the site does not exceed 1.0m.	Except for excavation required for footings and stormwater works, cut and fill for structures is limited to approximately 600mm.	Yes
A1.2 A site plan and site analysis plan is submitted with the development application.	A site analysis plan has not been submitted. Despite the lack of such information, the other information provided to Council (i.e. a survey plan, site plan, etc.) is otherwise sufficient for an assessment to identify hazards and constraints, noting that there are no trees on the site, and the site is not constrained by	No



	considerations such as views and natural hazards other than bushfires. The lack of a site analysis plan is therefore considered to be acceptable in this specific instance.	
A2.1 A site plan showing location and dimensions of buildings, parking area, service vehicle areas, storage and landscaping is submitted with the development application.	The submitted site and floor plans contain sufficient detail regarding the placement of structures and services. There are discrepancies between site and landscape plans with regard to the size and placement of landscaped areas on the site; a condition is therefore recommended that will require amendments to construction plans to show landscaped areas as shown on the landscape plans.	Yes
A3.1 Adequate drainage is designed and provided to ensure stormwater is discharged to an approved discharge point, easement or road drainage system.	Capable of compliance, subject to conditions recommended by Council's Development Engineer.	Yes
A3.2 A drainage plan is submitted with the development application.	Stormwater information (including plans and a Concept Water Cycle Management Plan) have been submitted as part of the application package; these will be subject to conditions of consent recommended by Council's Development Engineer.	Yes

#### 5.2 Building Setbacks

#### **General Controls**

#### **Performance Criteria**

P4 The building setbacks are consistent with adjoining development and enable:

- the efficient use of the site;
- vehicle manoeuvring areas where vehicles can enter and exit the site in a forward direction;
- visible staff and visitor parking;
- an attractive streetscape character;
- the location of utility services, storage and drainage paths; and
- Unimpeded development of adjacent sites.

<u>Comment</u>: The development is generally consistent with the above Performance Criteria.

Acceptable Solutions	Proposal	Compliance
A4.1 A minimum front setback of 10m is provided.	Refer to control A5.2 for development within Flinders Industrial estate.	N/A



provided.		
<ul> <li>The fire safety construction requirements of the Building Code of Australia for the proposed building, and</li> <li>Site development requirements for drainage, landscaping, vehicle access and manoeuvring.</li> </ul>	Zero side and rear setbacks are proposed. In the event of approval, subject to conditions the development is capable of satisfying fire safety construction requirements as stipulated by the BCA and NCC.  The proposed setbacks are also capable of providing sufficient space for drainage facilities.  The submitted swept path plans indicate that the setbacks of the building are insufficient for the onsite manoeuvring of articulated vehicles, therefore a condition is recommended that will prohibit access to the site by articulated vehicles.	Yes

#### **Additional Area Specific Controls**

#### **Performance Criteria**

P5 The building setbacks are satisfactory to Council in the Flinders Industrial Estate, South Nowra.

 $\underline{\text{Comment}}\text{: The development is consistent with the above Performance Criteria.}$ 

Acceptable Solutions	Proposal	Compliance
A5.1 Where a service road to Albatross Road applies, a minimum front setback of 10m is provided.	The site does not front Albatross Road.	N/A
A5.2 For all other sites, a minimum front setback of 15m and minimum secondary setback of 10m is provided.	Proposed setbacks: To café roof: 12.98m To building line: 15m  While the wall setbacks comply with the minimum 15m requirement specified by control A5.2 (see above), the roof above the outdoor dining area of the café has a minimum 12.98m setback to the road boundary.  The element which breaches the 15m setback requirement is an open/lightweight element, as it is an open structure that is to be finished in contrasting colours and in a location that is well below the roof parapet at the front of the building. A large	No



	landscaped area is proposed within the front setback (and which will be further increased in size a result of the condition requiring deletion of the outdoor dining area) that will also include two large trees, which will further screen the café roof and filter its visual impact from the primary domain.  The element breaching the minimum 15m setback will subsequently not add to the height, bulk and scale of the development, and will not adversely affect the character of the streetscape. The variation is therefore considered to be satisfactory and supportable on merit in this specific instance.	
A5.3 Only landscaping and minimal car parking are provided within the front/primary and secondary setbacks.	Secondary setback controls do not apply, as the site has only one road frontage.  Landscaped areas, vehicular access and carparking (i.e. seven (7) spaces; which equates to 6.1% of all proposed parking) and a substation are proposed within the front setback. Including an outdoor dining area that is to be deleted by condition, 43.6% of the front setback areas will consist of landscaped area that contains a number of vegetation types.  The proportion of landscaping contained within the front setback is considered to be appropriate in the context of this specific proposal.	Yes
Performance Criteria		
P6 The building setbacks are satisfactory to Co	ouncil in the South Ulladulla Industria	al precinct.
<u>Comment</u> : The subject site is not located w performance criteria therefore does not apply to		I precinct; the
A6.1 Sites west of the Princes Highway provide a minimum front setback of 18m.	Refer to control A5.2 for development within Flinders Industrial estate.	N/A



l	A6.2 Council may consider a reduced As	is above.	
	minimum front setback of 12.5m if it can be		
l	demonstrated that the mass and bulk of the		N1/A
l	main structure will be reduced through the		N/A
	addition of a lightweight structure (eg,		
l	showroom or office).		
	Performance Criteria		

P7 The building setbacks are satisfactory to Council in South Nowra (Bellevue Street, Prosperity Street, Jellicoe Street, Central Avenue, Quinns Lane and Browns Road, South Nowra).

 $\underline{\textit{Comment}} \text{: The subject site is not located within the nominated streets; the performance criteria}$ therefore does not apply to the proposal.

A7.1 The 10m front setback (the concessional zone) may be encroached into if it can be demonstrated that the development will not negatively impact on the amenity or character of the area.	Refer to control A5.2 for development within Flinders Industrial estate.	N/A
A7.2 The concessional zone has a minimum front setback of 6m and an average minimum front building line of 8m.	As above.	N/A
A7.3 Buildings within the concessional zone do not reduce the ability of service vehicles to manoeuvre onto, around and out of the site.	As above.	N/A
A7.4 Buildings within the concessional zone are single storey in height.	As above.	N/A
A7.5 The main use of the concessional zone is for landscaping. Car parking and manoeuvring areas are discouraged.	As above.	N/A

#### 5.3 Building and Site Design

#### **Additional Area Specific Controls**

#### **Performance Criteria**

P8 The building has a height and bulk consistent with the streetscape.

Comment: The development is consistent with the above Performance Criteria.

Acceptable Solutions	Proposal	Compliance
A8.1 The building complies with the height limits in the Shoalhaven LEP 2014.	Maximum permitted height pursuant to cl. 4.3(2A): 11 metres.	
	Maximum proposed building height: 8 metres (sign RL 63.1 to corresponding RL 55.1 ground level)	Yes
A8.2 If Shoalhaven LEP 2014 does not specify a height limit, the building does not exceed	As above.	Yes
11m above the natural ground level.  Performance Criteria		



P9 Visual elements are introduced to reduce the	e bulk, height and scale of the build	ling.
Comment: The development is consistent with	the above Performance Criteria.	
A9.1 The elevation closest to the road includes additional design relief or a lower scale building form.	Additional design relief is to be provided at the front of the building in the form of a contrasting parapet roof and signage, in addition to a lower roof feature that is to wrap around the northeast and southeast parts of the proposed café.	Yes
Performance Criteria		
P10 The front of the building addresses the roa	d frontage.	
Comment: The development is consistent with	the above Performance Criteria.	
A10.1 The main entry to the building is easily identifiable from the street and directly accessible through the front of the building.	The proposed development consists of multi-tenancy buildings with individual pedestrian and vehicular access points. The driveway entrance points that connect those tenancies to the road frontage are clearly identifiable and accessible.	Yes
A10.2 Street numbering that is at least 300mm high and easily visible for pedestrians and motorists in identifying the premises is provided.	Capable of compliance via conditions in the event of approval.	Yes
A10.3 Showroom display areas and other low scale building elements are located at the front of the building and face the road frontage.	'The 'café' is to be located at the front of the site and will address the Norfolk Avenue frontage.	Yes
Performance Criteria P11 The design incorporates the use of mater locality, with innovation being encouraged.  Comment: The development is generally consistent to the control of the cont		
A11.1 The building surfaces, texture, colours or material arrangement are sympathetic to the emerging character of the area.	External finishes are to consist of precast concrete, cladding and metal doors and windows. Such materials and associated colours are consistent with existing and likely future development within the Flinders Industrial Estate.	Yes
A11.2 Building materials provide interest and variation to complement the streetscape.	The proposed colours and materials, particularly on the front building elevations will provide interest and variation to the Norfolk Avenue streetscape.	Yes



A11.3 Building design does not include large unbroken expanses of wall or building mass.

The development application proposes a variation, in that large unbroken expanses of walls are proposed along the side elevations addressing the northern and southern boundaries.

The visual impact of the development will be reduced to the north, as a result of existing development at 15 Norfolk Avenue that is already built with a zero-side setback to the southern boundary. While the location of development on the adjoining site to the south (i.e. 19 Norfolk Avenue) will allow for the variation to be highly visible from the Norfolk Avenue road reserve, the development controls for the locality likely envision the setbacks of future development to be more akin to that proposed by the subject DA.

It is agreed with the SEE's arguments that there are numerous other examples within the Flinders Industrial Estate where industrial developments have been permitted with large unbroken expanses on/close to side boundaries; a review of the area noted examples including:

- 11 Norfolk Avenue
- 35 Norfolk Avenue
- 10 Tom Thumb Avenue
- 28 Trim Street

It is also agreed that the variation will not adversely affect the amenity of surrounding sites (noting that such sites either contain other industrial developments or will undeveloped for the foreseeable future), nor defence against bushfires.

While issues are noted with regard to onsite manoeuvring by articulated vehicles, such an No



	issue is unrelated to the variation proposed by this DA.	
	The proposed variation is therefore considered to be satisfactory and supportable on merit in this specific instance.	
A11.4 Council will not agree to the use of "zincalume" material on any industrial building if an adverse impact on amenity or traffic safety will result and/or if substantial glare nuisance occurs; the amenity of workers on the site is of primary importance.	Not proposed.	Yes
Council may consider the use of "zincalume" where it can be demonstrated that will not have substantial impact."		
Performance Criteria		
P12 The development recognises and impleme	nts energy and water conservation	principles.
Comment: The development is consistent with		
A12.1 The industrial development is designed to reduce reliance on energy consumption and water usage.	The development has been designed to minimise reliance upon energy and water consumption where necessary. A Section J compliance report has been prepared for the café, and compliance with this document will be conditioned in the event of approval.	Yes
Performance Criteria		
P13 The building design is energy efficient and provides good solar access to the development and surrounding development.  Comment: The development is consistent with the above Performance Criteria.		
<ul> <li>A13.1 Direct solar access must be maintained for at least 3 hours between 9am and 3pm on June 21 to:</li> <li>Existing rooftop solar systems;</li> <li>10m² of north facing roofs where a rooftop solar system is not yet in place.</li> </ul>	The proposed development will not result in overshadowing of roofs where future photovoltaic (PV) systems may be installed, on adjoining sites, noting that there are no existing PV systems on surrounding sites (refer to <i>figure 8</i> within the planning assessment report).	Yes
A13.2 A reliable and accurate shadow diagram may be required to demonstrate the impact of shadows resulting from existing and proposed building works between 9am and 3pm on June 21.	Solar access plans showing overshadowing impacts for 22 September rather than for June. Despite such a deficiency, the layout of development on the adjoining industrial site to the	No



P14 The roof/wall design and materials avoid glare hazard to traffic users in the adjacent road

Comment: The development is consistent with the above Performance Criteria.

A14.1 Roof and wall materials (especially	Subject to conditions of consent,	
uncoloured or light-coloured metal cladding)	the proposed external colours	Yes
do not cause excessive glare to traffic using	and materials will not cause	res
the adjacent roads.	excessive glare.	

#### Performance Criteria

P15 Car parking is located to avoid conflict and promote safety

<u>Comment</u>: The development is consistent with the above Performance Criteria.

A15.1 Visitor and customer car parking is	Onsite car parking will be	
separated from delivery and operational		Yes
vehicle movements.	loading areas of individual	100
	tenancies.	

#### 5.4 Provisions for Fences and Screen Walls

#### Performance Criteria

P16 The development provides fences and walls which:

- are attractive and blend with landscaping on the premises;
- consider location, height, materials and colours to provide compatibility with and compliment or enhance the streetscape;
- Do not impede the sight lines of vehicles using the driveway.
- provide effective screening of external storage areas or incompatible uses on the site, and
- Assist in highlighting entrances and paths.

<u>Comment</u>: The development is consistent with the above Performance Criteria.

Acceptable Solutions	Proposal	Compliance
A16.1 Fencing forward of the front building line is of an open form and a maximum of 2.4m in height above the natural ground level.	2.4-metre-high chain link fencing is proposed along the southern elevation forward of the building line. Front boundary fencing is not proposed.	Yes
A16.2 Fence materials do not conceal the area between the road frontage and the building.	As above.	N/A
A16.3 Fences do not obstruct sight distances for traffic, the entry and exit of vehicles or pedestrian safety.	As above.	N/A



A16.3 Fences do not obstruct sight distances for traffic, the entry and exit of vehicles or pedestrian safety.	As above.	N/A
A16.5 Where a site has direct frontage to the Princes Highway or other major road, gates are located away from the front boundary to allow the largest vehicle to normally use the premises to park onsite while the gate is opened.	As above, noting that the site does not adjoin a major road.	N/A
A16.6 Solid fences or screen walls are located along the side and rear site boundary (and around external storage areas) as long as they are behind the front building line.	2.4-metre-high chain link fencing is proposed within building openings along the rear elevation.	N/A
A16.7 Fence materials do not cause excessive glare to traffic using the adjacent roads.	No fencing is proposed on the front boundary.	N/A
A16.8 The location of fencing does not interfere with utilities, services, operational requirements or other sites.	Internal fence placement (such as around the substation) will be provided for safety purposes, and as such will not interfere with onsite activities.	Yes
5.5 Landscaping Performance Criteria P17 Landscaping softens the building/site w	rhen viewed from public roads a	nd provides a
Performance Criteria  P17 Landscaping softens the building/site w landscaping buffer where an industrial area is a  Comment: The development is consistent with the  A17.1 Landscaping is provided between the	djacent to residential areas. the above Performance Criteria.  Landscaped areas of varying	
Performance Criteria  P17 Landscaping softens the building/site w landscaping buffer where an industrial area is a Comment: The development is consistent with A17.1 Landscaping is provided between the front boundary and the building line.  A17.2 Defined landscaping beds are a minimum of 1m in width not including kerbs or	the above Performance Criteria.  Landscaped areas of varying sizes are located within the front setback.  Landscaped areas calculated within the front setback exceed	Yes
Performance Criteria  P17 Landscaping softens the building/site w landscaping buffer where an industrial area is a Comment: The development is consistent with A17.1 Landscaping is provided between the front boundary and the building line.  A17.2 Defined landscaping beds are a	the above Performance Criteria.  Landscaped areas of varying sizes are located within the front setback.  Landscaped areas calculated	Yes

maintenance

traffic circulation.

of

landscaping will be subject to conditions in the event of approval to prevent overgrowth and adverse impacts on internal



## G21: Car Parking and Traffic

## 5.1 Car Parking Schedule

The car parking rates in the following car parking schedule is a guide to typical minimum requirements that need to be provided onsite.

Acceptable Solutions	Proposal	Compliance
Required: Industry Ispace per 100m² of GFA. Café Ispace per 6.5m² of public dining area	Required parking:  Proposed GFA of site (excluding café)  Excluding mezzanines: 5,467.2m²  Including mezzanines: 6,342.5m²  Required parking spaces: Excluding mezzanines: 54.7 (rounded up to 58) Including mezzanines: 63.4 (rounded up to 64) Proposed area of café public dining area: 37.2m²  Minimum parking spaces required: 5.7 (rounded up to 6)  Total spaces required: 64-70 Total spaces proposed: 115  Note 1: Given that proposed parking rates significantly exceed minimum requirements, a condition is recommended that will require some parking spaces to be converted to communal waste storage areas. The provision of one additional waste storage areas. The provision of one additional waste storage areas will likely require the removal of three spaces, therefore a condition will be imposed requiring that at least 112 onsite car parking spaces be provided (as opposed to the 115 currently proposed).  Note 2: The outdoor dining area excluded from calculations, as this area is to be deleted via condition (refer to the planning assessment report).	Yes
5.3 Parking, Layout and Dimensions		

**General Controls** 



#### **Performance Criteria**

#### P1.1 The car park area:

- Provides safe and efficient circulation, manoeuvring and parking of vehicles.
- Ensures that a vehicle can safely enter and leave the parking space in no more than two manoeuvres.
- Minimises potential for pedestrian conflict.
- Ensures effective and safe use of speed humps.
- Ensures efficient operation and safety of parking and loading areas through appropriate signage.
- Includes appropriate lighting to ensure the safety of persons using, and security of vehicles parked within.
- P1.2 Any substantial loss of on-street carparking spaces are replaced within the development site.

Comment: The development is consistent with the above Performance Criteria.

Acceptable Solutions	Proposal	Compliance
A1.1 Car parking spaces are provided on-site and are readily accessible from the road frontage of the development.	All car parking spaces are located within site boundaries and are accessible via the proposed Norfolk Avenue crossover.	Yes
A1.2 Where a substantial loss of on-street car parking directly related to a development is proposed, these spaces are to be replaced on site.	Some on-street parking is expected to be lost as a result of the placement of the driveway layback and crossover; such a loss of parking is not considered to be significant, and replacement on-street parking is therefore not required.	N/A
A1.3 Entrance to parking areas must not be accessed through buildings or carports.	Access to parking will be obtainable directly via the front of each industrial tenancy.	Yes
A1.4 The proposed parking layout, including but not limited to access design, space dimensions, offsets, ramps, aisle dimensions, speed humps (and the like), shall be designed in accordance with AS2890.	Compliance is subject to conditions in the event of approval.	Yes
<ul> <li>A1.5 Stack parking of vehicles will only be supported when part of a mixed use, commercial, managed residential development or a mix of these uses, and where all the following criteria are met: <ul> <li>A management plan is in place.</li> <li>No more than two (2) cars are permitted to park in a stacked arrangement.</li> <li>The parking spaces in a stack configuration must be connected to a single unit or commercial shop or office.</li> <li>Have a maximum longitudinal grade of 5% and a maximum crossfall of 6.25%.</li> </ul> </li></ul>	Stack parking is not proposed.	N/A



	A1.6 Dead-end parking aisles longer than 15m are not permitted, unless used in situations of low vehicle turnover, such as employee parking and are to be sign posted accordingly.	Dead end parking aisles do not exceed 15 metres in length. The 'avenues' provided throughout the site are not considered to be parking aisles, as they provide driveway access to tenancy-dedicated loading and parking spaces.	Yes
	A1.7 Redundant areas within car parks should be considered for motorcycle parking. A maximum of 2% of total car parking provision can be provided as motorcycle parking.	Motorcycle parking is not proposed.	N/A
	A1.8 The location and availability of parking spaces must be clearly marked with line marking and signage (if restrictions are required to regulate or improve safety and/or efficiency) and must be installed in accordance with relevant standards.	Proposed car parking spaces are capable of being clearly indicated by markings and signage. Satisfaction of the control is capable of being achieved by conditions in the event of approval.	Yes
	A1.9 Vehicle entry and exit points to the site and desired traffic movements should be clearly marked with pavement arrows (preferably in a highly visible colour such as white (or yellow if there is a contrast issue)) and signage.	Subject to conditions in the event of approval.	Yes
	A1.10 Lighting must be incorporated into car park areas where required.	Subject to conditions in the event of approval.	Yes
пĺ	Performance Criteria		

P2 To ensure adequate provision of car parking is available for people with a disability.

<u>Comment</u>: The development is consistent with the above Performance Criteria.

Acceptable Solutions	Proposal	Compliance
A2.1 Where buildings and car parks are required to be accessible, the development and design will comply with the requirements of Part D3 of the Building Code of Australia.	Subject to conditions in the event of approval.	Yes
A2.2 Where access for people with a disability is expected, a minimum of 1 accessible space is required and thereafter one additional space per 100 spaces or part thereof.	Proposed number of car parking spaces: 115 Required number of accessible car parking spaces: 2 (rounded up from 1.15) Proposed number of accessible car parking spaces: 2	Yes
<ul> <li>A2.3 For Class 6 and 9b buildings:</li> <li>Up to 1000 car parking spaces – 1 accessible space is require for every 50 car parking spaces or part thereof.</li> <li>In excess of 1000 car parking spaces - 1 accessible space is required for each additional 100 car parking spaces or part thereof.</li> </ul>	The proposed café is classified as a Class 6 building  Required parking for café: 17 spaces  Proposed number of accessible car parking spaces: 2	Yes



<ul> <li>A2.4 Accessible parking shall be:</li> <li>Compliant with AS2890. Associated kerb ramps and path access must also be provided and need to comply with AS2890 and AS1428.</li> </ul>	close proximity to the café.	
<ul> <li>Located close to the entry of the building to minimise travel distances and maximise accessibility.</li> <li>Located at ground level.</li> <li>Identified through the use of signs, logos and colouring.</li> </ul>	AS1428 and AS2890 is capable of being addressed via conditions in the event of approval.	Yes

#### **Performance Criteria**

P3 Provision is made for charging facilities for electric vehicles.

Comment: The Performance Criteria is not applicable to the proposed development.

Acceptable Solutions	Proposal	Compliance
A3.1 The installation of electrical conduits for electric vehicle charging for each dwelling in a residential development (excluding single dwelling houses and, dual occupancies or boarding houses) to facilitate cost effective installation of vehicle charging stations and associated wiring at a later date.	The site does not include a residential component.	N/A
A3.2 Where 10 or more parking spaces are required for non-residential development within the B3 Commercial Core and B4 Mixed Use zones in the Nowra CBD, a minimum of 10% of spaces are to be designed and constructed so that electrical vehicle charging points/stations can be installed now, or at a later time.	The site is not within a B3 or B4 zone.	N/A

#### Performance Criteria

P4 Angled parking minimises impacts of vehicle fumes on alfresco dining areas and improves driveability.

Comment: The Performance Criteria is not applicable to the proposed development.

Acceptable Solutions	Proposal	Compliance
A4.1 Angled parking shall be "nose in" parking.	Angled parking is not proposed.	N/A
Performance Criteria		
P5 To encourage the use of bicycles.		
Comment: The Performance Criteria is not applicable to the proposed development.		
A5.1 New developments, particularly educational establishments, recreational facilities, shops and civic buildings, should provide appropriate bicycle parking/storage	Bicycle parking is not proposed.	N/A



facilities in accordance with current AUSTROADS Guidelines and or Australian Standards.	
A5.2 The design and installation of bicycle parking facilities should also comply with AS2890.3.	N/A
A5.2 The design and installation of bicycle parking facilities should also comply with AS2890.3.	N/A

#### 5.4 Car Park Landscape Design

#### Performance Criteria

P6 The car park landscape design:

- Lessens the visual impact of car park areas.
- Provides shade areas for cars and pedestrians.
- Ensures that the landscaping is an integral part of the car park design.

P7 Landscaping does not interfere with the proper functioning of car park areas.

Comment: The development is consistent with the above Performance Criteria.

Acceptable Solutions	Proposal	Compliance
A6.1 A development application must include detailed landscape plans indicating dimensions, levels and drainage, existing vegetation as well as location, type and character of proposed plantings.	Detailed landscape plans provided. A condition is recommended requiring that landscape and construction plans are consistent.	Yes
A7.1 Car parks should be located to complement existing streetscape qualities. Consideration should be given to the streetscape qualities of the locality and the possibility of locating a car park to the rear of a site, or the provision of suitable landscaping to minimise any visual intrusion.	108 of the 155 proposed onsite carparking are to be situated behind the proposed building lines.	Yes
A7.2 Perimeter planting to screen the proposed car park is to be defined in the landscape plan. The minimum width of perimeter planting is 1m and 0.5m for driveways.	Perimeter planting is proposed.	Yes
A7.3 Internal plantings in a car parking area are to be of a nature to shade cars and soften the impact of hard paved surfaces without obscuring visibility.	Internal plantings are of sufficient heights so as not to obscure sightlines.	Yes
A7.4 Consideration should be given to incorporating stormwater control measures in the design of landscaped areas to control and reduce the level of stormwater which enters Council's stormwater drainage systems.	Stormwater control measures are not incorporated with landscaped areas.	N/A
6.1 Traffic		

## Performance Criteria

P9 To ensure new development:



- Can be accommodated without adverse impact on the surrounding road network.
- Does not jeopardise the provision of future network requirements.

<u>Comment</u>: The development is consistent with the above Performance Criteria.

Acceptable Solutions	Proposal	Compliance
A9.1 A Traffic Study is provided as required by the relevant State Environmental Planning Policies (SEPPs), or in accordance with the Transport for NSW guidelines.	The proposal does not constitute 'traffic generating development' pursuant to Schedule 3 of SEPP (Transport and Infrastructure) 2021.	N/A
A9.2 A Traffic Statement is provided where the application falls outside SEPPs requirements, or where requested by Council.	A traffic statement has not been requested by Council.	N/A
A9.3 A Traffic Study or Statement must be prepared in accordance with the Transport for NSW, Australian Standards and AUSTROADS guidelines to the satisfaction of Council.	As above.	N/A

#### 6.2 Access

#### Performance Criteria

P10.1 To ensure that driveways relate to:

- Type of land use.
- · Frontage road type.
- Size of parking facility.
- Type of vehicle likely to enter the development.

P10.2 To ensure that traffic safety is preserved both on-site and within the local road network.

P10.3 To ensure that where any development has frontage to more than one road, access is provided to the lower order, lower traffic volume road, to protect the integrity and efficiency of the local and main road networks.

Comment: The development is consistent with the above Performance Criteria.

Acceptable Solutions	Proposal	Compliance
A10.1 The development must: Satisfy the provisions of AS2890, and Be designed so that vehicles enter and leave the premises in a forward direction (except for dwelling houses and dual occupancy development).	The driveway layout permits forward vehicular access and egress.  Compliance with AS2890 is capable of being satisfied by conditions in the event of approval.	Yes
A10.2 Each site must minimise the number of ingress and egress points to any street frontage.		Yes
A10.3 Where car parking exceeds 50 spaces separate provision must be made for ingress and egress.	One driveway access/egress point is proposed; a central island is proposed to separate the ingress and egress points.	Yes



A10.4 Where more than one access point is proposed to a site, the first driveway reached by traffic must be the entrance.	One driveway access/egress point is proposed.	N/A
A10.5 For all development that has frontage to more than one road, access is to be provided to the lower order, lower traffic volume road.	The site has a single road frontage to Norfolk Avenue.	N/A
A10.6 Vehicular access to parking areas will not be permitted in close proximity to traffic signals, major intersections or where sight distance is considered inadequate. Site distance requirements must comply with Figure 3.2 in AS2890.1.	There are no major intersections or traffic control measures located in close proximity to the site.	Yes
A10.7 Driveways must be located a minimum of six (6) metres from the corner of a building located on corner lots and a minimum of 1m from the side boundary.	The site is not a corner allotment.	N/A
A10.8 Buildings must be designed to ensure that there is adequate sight distance at intersections and driveways. In some instances this may require the provision of splay corners on buildings (e.g. where a driveway adjoins a building).	Capable of compliance, subject to conditions.	N/A
A10.9 The vehicular entrance to the development shall demonstrate satisfactory provisions for pedestrian safety, considering the anticipated volume of both vehicular and pedestrian traffic.	The vehicular entrance point is segregated from pedestrian access points from the public domain.	Yes
A10.10 Footpaths are to be continuous across driveways in accordance with AS2890.1.	Subject to conditions in the event of approval.	Yes
A10.11 Ramps must not extend across the footpath. The development must demonstrate satisfactory provisions for pedestrian safety.	The proposed development does not demonstrate satisfactory provisions for pedestrian safety. While the site provides for continuous and line-marked paths of travel between the front of the site and Units 1-15 and 36-37, line-marked pathways do not connect these units to the proposed buildings that will contain Units 18-22 and 23-30.  A condition is therefore recommended that will require amendments to be made to ensure that adequately-marked and connected pedestrian pathways are provided through the site in accordance with relevant standards; the condition will require such pathways not be	No
	permitted to encroach upon proposed landscaped areas, in order to both maximise landscaped area and visibility of	



	pedestrian routes throughout the site.	
A10.12 When new principal arterial roads (including sub-arterial roads, classified main roads, and designated regional roads) are provided, there shall be no direct access for new allotments where alternative access can be provided.	Road construction is not proposed.	N/A
A10.13 Where direct access from allotments to arterial roads currently exist (including subarterial roads, classified main roads, and designated regional roads), partial access may be considered when feasible, except where the access provisions cannot satisfy the requirements of State Environmental Planning Policy (Infrastructure) 2007.	Norfolk Avenue is not a major road that is subject to the provisions of SEPP (Transport and Infrastructure) 2021.	N/A

#### Performance Criteria

P11 To cater for pedestrian access and accessibility.

<u>Comment</u>: The development is consistent with the above Performance Criteria.

Acceptable Solutions	Proposal	Compliance
A11.1 Ensure pedestrians and cyclists can safely access the development and that passing pedestrians and cyclists safety is not compromised by the development.	route to the front of the site is	Yes
A11.2 Ensure the development considers relevant Council pedestrian access and mobility plans and strategies to provide the logical and practical extensions of the existing and proposed pathway network (where relevant) to provide safe and efficient connections between the development and the surrounding community.	strategies do not apply to the site or surrounding area more	N/A

#### 6.3 Manoeuvrability

#### Performance Criteria

P12 Adequate space is provided for the manoeuvring of vehicles, particularly rigid and articulated heavy vehicles.

<u>Comment</u>: The development is consistent with the above Performance Criteria.

Acceptable Solutions	Proposal	Compliance
A12.1 The minimum turning paths in Table 2 are achieved.  Commercial development Industrial Grant Industrial G	The swept path plans provided with the most recent amendments to the plans suggest that access for vehicles up to and including 19-metrelong articulated vehicles (i.e. semi-trailers) is proposed.	No



Such swept path plans are inadequate for the following reasons:

- Access from the south is only attainable by using the southbound lane of Norfolk Avenue (i.e. access from the south requires using the wrong side of the road).
- Egress to the north is only attainable by using the southbound lane of Norfolk Avenue (i.e. egress to the north requires using the wrong side of the road), and also requires encroachment upon the centre dividing island.
- Manoeuvring space around Unit 23 requires encroachment upon landscape areas (noting that the landscape plans propose wider landscaped areas within this location).
- Manoeuvring space around Unit 24 requires encroachment upon landscape areas.
- It has not been demonstrated that articulated vehicle access and associated manoeuvring to Units 10-15 and 16-19 is possible without reversing a significant distance within the site.
- The proposed loading areas within the industrial units are of insufficient lengths to accommodate a 19-metrelong vehicle without significant encroachment into the 'avenues' throughout the site, and no shared loading facilities for a 19-metre-long vehicle are proposed.

Swept path plans for Heavy Rigid Vehicles (HRVs) also show an impractical approach angle to the site in addition to encroachment upon landscaped areas in order to manoeuvre around Unit 23.



	No justification has been provided with regard to the above. A condition is therefore recommended that will require the following:  Prohibition of articulated vehicles from the site, with signage to be erected to advise incoming traffic of this restriction.  Revised swept path plans for HRVs are to be submitted for Council's approval prior to the issue of a Construction Certificate.	
A12.2 Turning paths for vehicles will be based upon the largest vehicles likely to utilise the premises.	Noted; also see above.	-
A12.3 For bus routes in all new subdivisions, a practical bus route with a minimum 9m width is to be designated. The route must satisfy swept paths for a 14.5m rigid bus with satisfactory turnaround provided for each stage of the development.	Subdivision is not proposed.	N/A

#### 6.4 Service Areas

#### Performance Criteria

P13 Suitable areas for safe and efficient loading/unloading of goods is provided.

 $\underline{\text{Comment}}\text{: The development is consistent with the above Performance Criteria.}$ 

Acceptable Solutions	Proposal	Compliance
A13.1 Service areas should operate independently of other parking areas.	Loading areas within each unit are capable of operating independently of car parking areas.	Yes
A13.2 The location of loading/servicing areas should be clearly indicated by the use of signs.	The location of loading areas is identifiable via large doors within each tenancy, in addition to wayfinding signage within the site.	Yes

#### Performance Criteria

P14 All servicing occurs on-site.

 $\underline{\text{Comment}}\text{: The development is consistent with the above Performance Criteria.}$ 

Acceptable Solutions	Proposal	Compliance
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A14.1 Internal roadways must be adequate in construction and design for the largest vehicle anticipated to utilise the site.		No
A14.2 Service docks are designed to cater for the largest vehicle anticipated to use the premises.		-
A14.3 Service areas are designed to avoid the need for service vehicles to reverse across the pedestrian desire lines.	Service areas such as common waste areas are to be separated from pedestrian passageways.	Yes

#### 6.5 Design of Driveways

#### Performance Criteria

P15 Driveways are designed to reflect the nature of development that they serve.

<u>Comment</u>: The development is consistent with the above Performance Criteria.

Acceptable Solutions	Proposal	Compliance
15.1 Driveway design is consistent with AS2890.1 and/or AS2890.2 as applicable to		Yes
the type of development.		
A15.2 Driveway types 1 and 2 shall be constructed as single driveway access points to minimise the number of driveway conflicts on the network.	Noted.	-

## **6.6 Construction Requirements**

#### **Performance Criteria**

P16 The construction of internal driveways, roads, car parks, service areas and works in the road reserve is of a suitable standard according to land use type.

<u>Comment</u>: The development is consistent with the above Performance Criteria.

Acceptable Solutions	Proposal	Compliance
A16.1 The construction of internal driveways, roads, car parks, service areas and works in the road reserve comply with Table 3.	Subject to conditions in the event of approval.	
<ul> <li>Industrial Construction Requirement:</li> <li>Heavy duty concrete; or</li> <li>Industrial asphaltic concrete AC10 with minimum pavement thickness of 200mm subject to pavement testing for a design load of 1 x 106.</li> </ul>		Yes
All with associated stormwater drainage designed in accordance with the relevant Australian Standards.		



in accordance with
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## **G22:** Advertising Signs and Structures

#### 5.5 General Controls

#### **All Business and Industrial Zones**

#### **Performance Criteria**

P1 To ensure advertising signs/structures:

- · are associated with a lawful use of the land; and
- relates to the land, or to the premises situated on that land; or
- identifies a person residing or carrying on an occupation or business on the land or premises; and/or
- gives particulars of the goods or services dealt with or provided on the land or premises;
- is a directional sign for an approved tourist facility in the Shoalhaven; or
- Is an advertisement for a business located in the Shoalhaven.
- relate well to and integrates with existing built and vegetated forms
- do not dominate the streetscape or skyline
- · do not adversely affect traffic safety
- do not restrict sight distances at entrance/exit to any property
- do not obstruct sightlines to signs on adjoining property
- · do not detract from the heritage significance of the building or place
- · do not project over windows or architectural features of a building
- are consistent with the design guidelines outlined in this Chapter are treated on the rear view of single-sided signs to blend with the surrounding streetscape or field of view
- · reduce visual clutter
- · achieve equity between property owners/occupiers
- have a design relationship between multiple signs
- have a design relationship to each other individual signs in the case of a free-standing directory sign
- are capable of accommodating the signs of other tenants in respect of any free-standing sign on a multi-tenanted site
- Affixed to structures are wholly contained within the dimensions of the structure.

Comment: The development is consistent with the above Performance Criteria.

Acceptable Solutions	Proposal	Compliance
On-Building Signs A1.1 For corner lots, maximum sign face area is to be calculated by taking the average building width when measured parallel to both the front property boundary and secondary street frontages.	The site is not a corner allotment.	N/A
A1.2 Maximum sign face area of any one (1) sign is not to exceed 8m ² .	Largest proposed signage area: 5m ²	Yes
A1.3 Maximum sign face area should not exceed 1.5m ² of sign face area per metre of		Yes



maximum building width which is measured parallel to the front property boundary.	<ul> <li>Elevation width: 13m</li> <li>Maximum permitted sign area: 19.5m²</li> <li>Proposed sign area: 4m²</li> <li>Side elevation:         <ul> <li>Elevation width: 6.65m</li> <li>Maximum permitted sign area: 9.975m²</li> <li>Proposed sign area: 4m²</li> </ul> </li> <li>Individual tenancies:         <ul> <li>Elevation width: 10-17m</li> </ul> </li> <li>Maximum permitted sign area: 15-25.5m²</li> <li>Proposed sign area: 5m²</li> </ul>	
Free-Standing Signs A1.4 Maximum sign face area should not exceed 0.35m² of sign face area per linear metre of road frontage.	Frontage length: 40.435m² Maximum permitted sign area: 14.15m² Proposed sign area: 16.38m² (per side)  The size of the proposed signage variation is not significant and will not be discernible when viewed from the public domain. The variation is therefore considered to be supportable on merit in the circumstances of this proposal.	No
A1.5 Maximum sign face area of any one (1) sign is not to exceed 8m ² . e.g. A 20m frontage will permit 7m ² of sign face area for a freestanding sign.	As above.	No
A1.6 Maximum height should not exceed:  • 40-99m frontage:  • Single sign: 7-10m  • Two or more signs: 5-7m  Minimum separation distance between freestanding signs is calculated by adding together the height of the proposed sign and the nearest adjacent sign as follows: Height of proposed sign + height of adjacent sign = separation distance required. e.g. The separation distance required between two free-standing signs (6m and 3m each) would be 9m.	Frontage length: 40.435m² Maximum permitted sign height (single sign): 7-10m Proposed sign height: 6.2m	Yes
A1.7 Minimum side boundary setback is 3m.	Minimum side setback (northeast boundary): 8.45m	Yes
Signs on Structures A1.8 Maximum sign face area should equal 1% of floor area or site area occupied.	Signage structures (other than free standing signs and on-building signs) are not proposed.	N/A
A1.9 Maximum sign face area of any one (1)	As above.	N/A



## Performance Criteria

P2 To ensure advertising signs/structures allow for multiple tenancies within a single building or development.

Comment: The development is consistent with the above Performance Criteria.

A2.1 Maximum sign face area should be calculated as follows:

 $\left[\begin{array}{c} \underline{a+b+c} \\ n \end{array}\right] \text{-d} \quad \div \quad \text{area occupied by} \\ \quad \text{each tenancy where:} \\$ 

a = maximum sign face area of on-building signs

b = maximum sign face area of free standing signs

c = maximum sign face area of signs on structures

n = 1, 2 or 3 according to the different types of signs on the property, e.g. on-building, freestanding and on-structures

d = all lawful existing and exempt signs

E.g. A site area of 800m², a building width of 10m and a frontage of 20m, three different types of signs (15m², 7m², 8m²) and two tenancies occupying 40% and 60% of the floor space respectively. There are 10m² of existing signs:

 $((15 + 7 + 8) \div 3) - 10 = 20$ 

One tenant is entitled to 8m² and the second tenant is entitled to 12m².

Maximum sign face area of any one (1) sign does not exceed 8m².

Proposed signage area: 215m² Proposed number of tenancies (incl. café): 43

Signage face for each unit: 5m² Maximum sign face area per unit: 4 97m²

Yes

#### **G26:** Acid Sulfate Soils and Geotechnical (Site Stability) Guidelines

#### 5.1 Acid Sulfate Soils

#### **Performance Criteria**

P1 Where land is identified on the Acid Sulfate Soils Map, proposed development doesn't disturb, expose or drain acid sulfate soils and cause environmental damage.

Comment: The development is consistent with the above Performance Criteria.

Acceptable Solutions	Proposal	Compliance
A1.1 Clause 7.1 of Shoalhaven LEP 2014 is complied with in any development application.		Yes



	management plan is therefore not required.	
A1.2 Where earthworks are proposed, Clause 7.2 of Shoalhaven LEP 2014 is complied with in any development application.	The scale and cut/fill depths of proposed earthworks are considered acceptable, and subject to conditions during construction will not result in adverse impacts on surrounding sites.	Yes
5.2 Geotechnical – Site Stability		

#### Performance Criteria

P2 Buildings and structures are designed to:

- Adequately address specific geotechnical difficulties that exist on site and in the surrounding
- Utilise construction techniques that are sympathetic to the natural slope of the land and minimise excessive disturbance of the site.

P3 The site works, including excavated and filled areas, will not have a significant detrimental visual impact on the streetscape or when viewed from adjoining properties.

P4 The building/structure and site works will not have a significant detrimental impact on surface or subsurface drainage on the site or on adjoining properties.

<u>Comment</u>: The development is consistent with the above Performance Criteria.

A2.1 Buildings and structures are to be located on land with a slope less than 20% and are not in an area known or likely to be subject to site stability problems. A geotechnical report is provided if requested by Council.	The site contains an average slope of approximately 1.1%. A geotechnical risk management assessment has not been requested by Council.	Yes
A2.2 An application for buildings/structures on land with a slope of 20% or greater, or proposed to be located in an area known or likely to be subject to site stability problems, is accompanied by a geotechnical report.		N/A
A3.1 Excavated and filled areas are retained by appropriately designed retaining walls or provided with a stabilised batter slope, and an effective drainage system.	Areas of cut and fill will be appropriately retained. A suitable onsite drainage system has been proposed.	Yes
A3.2 Measures are identified that will retain and/or establish vegetation for erosion control and visual amenity.	An Erosion and Sediment Control Plan has been submitted. Conditions are recommended in the event of approval that will require compliance with standards governing erosion and sediment control.	Yes
A4.1 A soil and water management plan is submitted that complies with Council's guidelines. The plan demonstrates what measures will be utilised both during and after construction to control erosion and		Yes



sedimentation of local water courses and drainage systems.		
A4.2 Erosion and sediment control devices are installed in accordance with Council's guidelines. The size, shape and slope of the allotment and the scale of the building will facilitate the installation of appropriate devices.	,	Yes



# Boongaree (previously Berry District Park) Summary - Car Parking Survey

Live on Council's Get Involved page from 9 June 2022 to Sunday 10 July 2022

Total Survey Responses - 94

One response is noted as being a resubmittal to amend a previous answer (IDs. 4264013 and 4264037)

Respondents were asked the following to begin:

- Name
- Email
- Phone number

The following questions have been broken down in terms of responses:

#### Question - What is your age group?

Age group	Number of responses	Percent
Under 12	0	-
13 – 17	0	-
18 – 24	0	-
25 – 34	4	4.3%
35 – 49	23	24.5%
50 plus	67	71.3%

#### Question - What is your town of residence?

Town/Village/Suburb	Number of responses	Percent
Bangalee	1	1.1%
Berrambool	1	1.1%
Berry Jerry	2	2.1%
Berry Mountain	2	2.1%
Berry	65	69.2%
Broughton Vale	3	3.2%
Broughton Village	1	1.1%
Coolangatta	1	1.1%
Culburra Beach	1	1.1%
Far Meadow	1	1.1%
Foxground	1	1.1%
Gerroa	1	1.1%
Jaspers Brush	2	2.1%
North Nowra	2	2.1%
Nowra DC	1	1.1%
Nowra East	2	2.1%
Nowra North	2	2.1%
Nowra	1	1.1%
Sydney	1	1.1%
Ulladulla	1	1.1%
Wattamolla	1	1.1%
Worrigee	1	1.1%



#### Question - What best describes you?

Respondents were given the following options, and prompted to tick all that apply.

- · I am a resident of Berry
- I am a business owner in Berry
- I am a regular user of Boongaree
- I am a resident of North Street, Berry or adjacent side street
- Other (please specify)

The below table provides an overview of the responses, and combinations received.

Association	Number of responses	Percent
Resident of Berry	47	50%
Business owner in Berry	3	3.2%
Regular User of Boongaree	13	13.8%
Resident of North Street, Berry or	3	3.2%
adjacent side street		
Resident and business owner	3	3.2%
Resident and regular user of	6	6.4%
Boongaree		
Resident and resident of North	5	5.3%
Street, Berry or adjacent side street		
Resident, business owner and	4	4.3%
regular user of Boongaree		
Resident, business owner and	0	-
resident of North Street, Berry or		
adjacent side street		
Resident, regular user of Boongaree	1	1.1%
and resident of North Street, Berry or		
adjacent side street		
Resident, business owner, regular	2	2.1%
user of Boongaree and resident of		
North Street, Berry or adjacent side		
street		
Other	7	7.5%

## Conditional - If Other, please provide details.

7 respondents, representing 7.5% of responses chose to identify as "Other", with details as below:

- Live in Nowra visit park regularly with grandchildren
- Council employee Assets and Works section, involved with Boongaree and the Reconciliation Garden
- I am a regular user of the Tennis Courts adjacent to Boongaree.
- Environmentalist concerned about the impact of inappropriate parking and lack of access to the shops for nearby residents
- Concerned resident
- Owner of property in Berry NSW
- Berry is our local town; visit regularly.



# Question – Do you support the proposal of additional 90-degree car parking spaces along North Street, 80m west of Alexandra Street?

Response	Number of responses	Percent
Yes	74	78.7%
No	20	21.3%

74 respondents, representing 78.7% of responses support the proposed additional 90-degree car parking along North Street.

#### Conditional - If No, please provide details.

20 respondents, representing 21.3% of responses do not support the proposal, with common reasons (as summarised) provided below:

- Additional Stage 7 parking can be delivered concurrently with future stages;
- Cars use this area currently the proposal will not provide more parking;
- · Decrease in amenity for North Street residents;
- Increase in congestion;
- Increase in vehicular and pedestrian traffic along North Street;
- Lack of adequate parking should have been addressed earlier;
- Long vehicles/caravans will need to use Showground for waste disposal;
- · Pedestrian traffic along North Street as dangerous;
- Suggestion for additional parking further towards eastern part of North Street;
- Suggestion for overflow parking to be provided at Showground;
- Suggestion to reconsider long vehicle parking;
- Unsafe pedestrian crossing from Boongaree to Berry Town Centre;
- · Vehicular traffic as danger to children as main users of Boongaree; and
- Will increase road user conflicts and dangerous manoeuvring.

Common is interpreted as having occurred two (2) or more times. Full responses have been provided as Attachment A.

# Question – Would you like to provide additional feedback on the future parking provisions at Boongaree, as outlined in the Master Plan?

Response	Number of responses	Percent
Yes	58	61.7%
No	36	38.3%

36 respondents, representing 38.8% of responses chose not to provide additional feedback.

#### Conditional - If Yes, please provide details.

58 respondents, representing 61.7% of responses chose to provide additional feedback.

Key themes that were discussed equal to, or greater than three times have been provided below. Majority of submissions made comments on multiple themes and issues. Full responses have been provided as Attachment B.

 Suggestion for long vehicle parking to be located near Showground and Caravan Park



- Support for additional parking
- · Reconsider long vehicle parking
- Remove long vehicle parking and replace with regular car park
- Increased pedestrian and vehicular traffic is becoming more dangerous
- General compliments on Boongaree
- Increased traffic congestion increases risk of vehicular and pedestrian accidents
- · Long vehicle parking already exists at Showground
- Long vehicle parking as dangerous in existing site
- Criticism on lack of consideration of parking for Boongaree
- · Parking should be priority
- Poor visibility around Boongaree
- · Proposed parking will still be insufficient

20 submissions (34.5%) that provided additional feedback contained general comments in relation to long vehicle parking, with 20 submissions (34.5%) particularly referring to issues relating to North Street. 8 submissions (13.8%) raised concerns and danger specifically to children. These submissions may be single submissions, or the same submission raising multiple issues.



#### Attachment A:

Why don't you invite the 'Luna Park Trust' to takeover operations, build a multi storey parking complex and be done with it!!

Adequate car parking should have been addressed earlier. Pedestrian traffic along North Street to park is dangerous. Accident will occur with small children. Need to look at parking whereby there is no need to be near busy road eg in Sports Field. Traffic acceleration along North Street looking for parking is a hazard for everyone departing Park particularly crossing over North Street to access towns facilities.

A disastrous project for residents of Berry. Specifically built for the benefit of local businesses and tourists. A mega sized project inflicted on a tiny town by a committee of equally tiny intellect.

The Alexandra and North Street intersection has always experienced a higher traffic volume than other side streets in Berry as it is used by locals and tourists alike to bypass congestion on Queen Street. Vehicular and pedestrian traffic at this intersection has now recently increased with the completion of the Boongaree Nature Play Park being a major attraction.

Adding additional parking to this area will only serve to increase traffic volumes in an already congested environment, likely to lead to safety issues for both commuters and local residents of Berry. The issue of safety and traffic congestion will only be exacerbated by the addition of the proposed Long vehicle parking lot in the same proximity for vehicles classified over 7.5m and known for their poor visibility and danger to children who are being encouraged to enjoy the facilities at Boongaree.

The Long Vehicle Parking bay will only accommodate approx. 6 long vehicles while removing the possibility to accommodate a greater number of additional 90-degree car parking spaces between the length of its entry and exit points east of Alexandra St along North Street. Removing the long vehicle parking would provide more 90-degree car parking availability east of Alexandra and in doing so, negate the need for additional car parking west of Alexandra St. This would also help to reduce potential safety and congestion issues by helping to limit the interfacing of vehicular and pedestrian traffic to Alexandra St and East on North Street as opposed to Alexandra St and East AND West on North St.

There is ample space within the Berry Showground for long vehicles, caravans and RVs to park for day use, free of charge. It is also understood that a Dump Point sign is to be erected in the proposed long vehicle parking lot directing the caravans and RVs to the Berry Showground to dump their black water. (Sewage). The caravans and RVs will need to cross five (5) intersections, namely North, Albert, Queen, Princess, and Victoria Streets to reach the Showground.

Unnecessary traffic congestion at these intersections could also result in accidents to both motor vehicles and pedestrians alike.

Berry is a popular destination given its unique character, history, current green space and natural setting. It's paramount that these values be preserved so people can continue to enjoy visiting the historic township of Berry, "the town of trees" and everything it offers long into the future. Just like any well known tourist destination or hot spot, there will never



be enough parking. The bigger question is how much is enough parking? I believe the parking allocation in the original Master Plan is already enough, and there is no need for the additional parking west of Alexandra St, certainly if the proposed long vehicle parking is removed and reconceived.

Thank you

**Name and address removed for privacy
Berry

The Alexandra and North Street intersection has always experienced a higher traffic volume than other side streets in Berry as it is used by locals and tourists alike to bypass congestion on Queen Street. Vehicular and pedestrian traffic at this intersection has now recently increased with the completion of the Boongaree Nature Play Park being a major attraction.

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NB - Resubmitted to update Item 6 correctly.

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The Long Vehicle Parking bay will only accommodate approx. 6 long vehicles while removing the possibility to accommodate a greater number of additional 90-degree car



parking spaces between the length of its entry and exit points east of Alexandra St along North Street. Removing the long vehicle parking would provide more 90-degree car parking availability east of Alexandra and in doing so, negate the need for additional car parking west of Alexandra St. This would also help to reduce potential safety and congestion issues by helping to limit the interfacing of vehicular and pedestrian traffic to Alexandra St and East on North Street as opposed to Alexandra St and East AND West on North St.

There is ample space within the Berry Showground for long vehicles, caravans and RVs to park for day use, free of charge. It is also understood that a Dump Point sign is to be erected in the proposed long vehicle parking lot directing the caravans and RVs to the Berry Showground to dump their black water. (Sewage). The caravans and RVs will need to cross five (5) intersections, namely North, Albert, Queen, Princess, and Victoria Streets to reach the Showground.

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Thank vou

**Name and address removed for privacy

Berry

Shoalhaven Community Infrastructure Strategic Plan 2017-2036 notes that "Shoalhaven is the most visited local government area in NSW outside of Sydney" Berry, at the gateway to the Shoalhaven and a reasonable day trip from Sydney, will always attract tourists and being a small historic village, will always have parking issues at peak tourist times. Locals want Berry maintained as Berry, town of trees, not Berry, town of parking bays." At peak times parking could be accommodated in the showground, such as it is on market days. If tourists want to come at peak times, they will understand that a short, attractive stroll to their desired destination is a likelihood. They don't need to park right alongside their destination, necessitating additional parking spaces and degradation to the ambiance and character of the town they have come to enjoy

It's not additional parking. Vehicles have been parking there since January. it's been established that the 200 bay car parking shown as stage 7 can be constructed simultaneously with the ramaining Boongaree stages

More parking is needed, however reverse-in angled parallel parking with the appropriate signage and yellow wheel stops would be safer, especially around children. This section of North Street also needs a pedestrian (zebra) crossing, with a raised platform (to help slow traffic), colour-differentiation and 'Children' signage to help raise awareness. Re the long-vehicle parking, it looks from the plan that turning-in from North Street will be quite problematic due to the narrowness and angle of the entrance. The small tree depicted on the plan to the west of the driveway entrance should be removed to aid in seeing pedestrians whilst turning-in and with sight-distance when exiting further along. I would also recommend making separate driveways for the long vehicles and cars to avoid congestion and conflict.



Unsure about service entry for Council vehicles, but please consider this in the design with swing gates/collapsible bollards as required.

Thanks

This cannot be classified in any way as "additional parking", as cars already park regularly in this location. The total site needs parking which is ADDUTIONAL to that which is already treated and used as parking. It has clearly been shown that the identified 200 bay parking can be constructed now and does not need to wait for further development stages.

It would make the road very busy and noisy for residents of North St. It is also more dangerous for children walking to the park if they have to walk to it in a street which is car park. There is also the problem of the playground area ,which is not secure, for children running around so close to a road which is a car thoroughfare.

This proposal provides no extra parking. motorists already park on that grass verge in North St

North Street was never proposed to be a parking station. It seems unfair that this has been thrust on the residents of North Street. The street is narrow and does not allow vehicles to park safely, especially with regard to pedestrians, both within the walking track or making their way to the walking track. The area is overcrowded already with cars parking in North Street. My suggestion is that parking is determined on the end of North Street that extends in the other direction, that is toward the eastern side of the park.

We feel concerned for the residents of the affected areas of North Street who will have to contend with the view of parked cars all day, particularly on weekends and the continuous flow of traffic looking for parking spaces and the hazard that this brings, particularly as the street is fairly narrow and people's impatience and frustration creates a possibility for dangerous situations. The suggestion of using the showground maybe preferable, particularly as Alexandra St is much wider with safer accessibility to the showground area.

I do not agree with the the proposed additional parking 80m West of Alexandra Street along North Street. I suggest that the plans should be pushed further along North Street towards Albany Street and Edward Street.

Residential housing is far less dense at the north end of both these streets. The T intersection at Alexandra Street is already fraught with safety issues due to the busyness and popuarity of the park areas, shops, restaurants, people looking for toilets etc. I am suggestionnig the copses of trees along that section in North Street should have already been cleaned up and removed by Council. Those trees and the privet are mostly all in the category of noxious weeds, including the self seeding from the stray roots of the invasive Camphor Laurel trees.

I am totally against long haul vehicle parking near the Showground. The increase in events and activities in the Showground already creates a problem with traffic congestion in this residential area. There have been on occasion long haul caravans parking inside the Showground near the play equipment area (north) which is very dangerous for the families that visit this playground. Having long haul vehicles allowed in this area could encourage more caravans to do this and indeed stay overnight in the proposed parking area. Surely the residents safety should take priority over long haul vehicles. Create an area out of town and a shuttle bus to deliver them to the township of berry.



Not needed, the novelty of the park is fading, compared to the earlier months. The long vehicle parking idea is a disaster, ruining the parks intended use of open space for residents activities. There is ample provision for long vehicles near the Showgrounds.

think it will cause more disruption with local & cars looking for a park..Danger of Reversing into passing traffic.

Car park will impact on residents on opersite side of road and surounding streets. Coucncil should have considered the car park before the park was built.

People are currently parking in this area and the area is already quite congested. This has a big impact on the residents of North St causing increased traffic and noise. The proper parking area should be with access from Woodhill Rd, for both vehicles and long vehicles.



Attachment B:
Long vehicle parking is needed as originally planned at Boongaree.
Look at parking within playing fields area
Any parking in North Street needs to be safe and accessible to the town centre i.e. clear directional signposting, accessible footpaths (including kerb ramps), and signposting and pedestrian crossings through the IGA car parking. The current access through the IGA car parking is not acceptable, with outdoor dining tables restricting access, insufficient and non-standard disabled parking, restricted parking outside The Garden, and insufficient short-term parking for local residents wishing to collect groceries. This whole area needs a re-think.
I am surprised that sufficient parking and the potential adverse impacts upon North Street residents if was not part of the original planning process for this park. I hope council will take into consideration the very understandable concerns of residents' along the whole North Street block from Prince Alfred Street to Alexandra St.
It doesn't seem to make sense to start providing extra parking spaces so far removed to the west of the Rotary Nature Play Park entrance. Currently the parking to enable access to the toilets including the disabled toilet is too far away on the eastern side of the Playground.
Please see above with regard to Long Vehicle Parking issue.

The Long Vehicle Parking bay will only accommodate approx. 6 long vehicles while removing the possibility to accommodate a greater number of additional 90-degree car parking spaces between the length of its entry and exit points east of Alexandra St along North Street. Removing the long vehicle parking would provide more 90-degree car parking availability east of Alexandra and in doing so, negate the need for additional car parking west of Alexandra St. This would also help to reduce potential safety and congestion issues by helping to limit the interfacing of vehicular and pedestrian traffic to



Alexandra St and East on North Street as opposed to Alexandra St and East AND West on North St.

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Unnecessary traffic congestion at these intersections could also result in accidents to both motor vehicles and pedestrians alike.

Please see above re Long Vehicle Parking issues.

Support additional parking on North St unreservedly. When the proposal for the park was announced, residents and business owners were assured that parking had been included in plans for the park, however neither were advised of the delayed timing of car park infrastructure (including myself). Advice regarding draining issues at the north end of the North St near the 'new' roundabout were also ignored. There has always drainage issues on this low lying area around the oval, but they were exacerbated when the roadabout was constructed at a raised height, and curb and gutter drainage was not installed on North St, to facilitate stormwater drainage. What is preventing the installation of parking (around the oval), and upgrades to road, curb and gutter etc, at the north end of North St, now?

I would also raise a safety issue. Around the footpath, leading to road and park, tall grasses have been installed which prevent a visual warning of children approaching the road. Its an extremely dangerous situation, particularly in light of the absolute chaos on the road due to pedestrians, parked cars and moving vehicles all trying to use the restricted road area around the park, at the same time. It is an accident waiting to happen, and must be urgently address.

The parking shown on the plan attached is different from master plan. The master plan shows parking to Albany St intersection, and this one shows parking to the north end of the oval. What is stopping the oval parking (plus improved drainage and road works) being constructed now? The road crossing is also dangerous due to obscurity by tall grasses.

Visitors come to Berry not solely for the Boongaree Park or for the shopping. They are also attracted by a town of historic rural character, vastly different to an area like Shellharbour for example or other urban settings.

The vista from the historic building on the corner of Queen and Alexandra Street, past other "'in character' commercial buildings and to the escarpment, is one of the town's important vistas.

A Long vehicle parking area at the end of Alexandra Street would impact this amenity with little practical result. The intersection of Alexandra and North street is becoming ever more dangerous with increased traffic flow and pedestrian traffic with many young children and parents with prams and dogs.

Long vehicles would be an uneconomical use of space where cars could 90 degree park, often driven by older couples wishing to experience a new area taking up spaces of cars with families of children wishing to visit the park.

There is already availability for long vehicle parking at the showground, with facilities for waste and an overnight stay if desired.



With the addition of car parking on Woodhill Mountain Road, sportspeople and locals wishing to access the sportsfield are likely to park there, thus freeing up space on North Street for visitor parking. Also, at present, parking spaces are being taken up by the works in the area such as the netball courts currently. Once completed more parking will be freed up.

The initial excitement of the park has already settled to a certain extent, although no doubt the area will always remain popular, especially at times such as this long weekend, weekends in general and at school holiday times. During the week it will be quieter and largely enjoyed and North Street accessed by local residents.

For this reason I hope that Council will consider containing concrete car parks to the car park bay area alongside the park and road base, such as that now used as an access for vehicles to the works at the Netball courts, for the 90 degree parking on North Street. One of the attractive aspects of Berry's historic rural character is the absence of kerb and guttering with instead, grass verges to the roadside. Concrete car parking bays along North Street would place a considerable adverse impact on the streetscape and rural environment and the visual amenity and heritage character of the town.

We as a family love the park and everything involved - never had an issue with parking and walking to the park even from far away the park equipment itself - every thing is great with it thanku

These few additional official car parking spaces are not going to change anything as this "red" area is already being used for car parking. Is there a potential for council to establish a new large car park outside of town and then offer free shuttle bus services, increased frequency on weekends, from there into the central shops, local attractions, to the play ground area, Showground etc.?

the plan to divert visitor cars to the Woodhill Mountain Rd car park is likely to exclude residents' use

Im a parent and i feel the parking you are suggesting in red should go ahead anyway but its too far for me to walk with young kids. Can more parking be added on the sth side of the footy fields right near the car park entrance? Theres a grass area with no kirb and guttering that could be utilised or on the otherside of the road in front of that swamp area could be turned i to parallel parking.

The removal of the planned Long Vehicle Parking in North Street, on Boongaree parkland, will result in NO Long Vehicle entry and exit points.

More vehicles will then be able to park at 90 degrees in North Street, in the vicinity of Alexandra Street, and continue 80 meters west in North Street.

This is plain common sense.

Also, everyone who uses the shared pedestrian/cycle pathway will be safer as long vehicles will not be crossing in front of them. There will be no need for an additional pathway to be constructed around the Long Vehicle Parking area.

There will be no need to construct a sealed parking area, dump point, or provide water taps and rubbish bins for the Long Vehicles, including caravans, trailers, motorhomes, and buses.



Traffic will move more freely along North Street as there will be no need to avoid the long vehicles entering and exiting. Especially on weekends and the holiday periods when North Street is so congested.

The view of Boongaree and the Illawarra Escarpment will remain for all to enjoy.

Picnic tables and relaxed seating would be better utilised than Long Vehicle Parking - not everyone wants to be amongst children in a playground. Presently, there is no seating or rest area along the length of the North Street pathway.

#### NO ... TO LONG VEHICLE PARKING ON BOONGAREE

(My suggestion is for the long vehicle parking to be located near the Showgrounds and Berry Caravan Park. It's only a short walk to town and all the facilities are in place.}

Additional parking is also required near the Tennis Courts and Sports Field on the eastern side of Boongaree.

My family use the Tennis courts two to three times a week and parking is always very difficult to get. Additional parking is also required by the sports field users. Too many different groups of users of the recreation/sporting facilities are trying to park in too few car spaces near the Tennis Courts. Some frustrated drivers are parking on the footpath and on the grass between the trees. I regularly see people sitting in idling cars for 20 minutes or more waiting for somewhere to park at busy after school times.

Additional parking in this area needs to be close to the Tennis Courts and the Sports Field (as well as Boongaree adventure park) rather than 100m to 200m or more walk from the sports facility being used.

Multiple, separate parking areas should be provided instead of having all users try to share the one small parking area. Boulders near the Tennis Court parking area which are preventing people from parking on the unsealed area along the Southern edge of the sports field (along North St) should be removed. Drivers are finding ways around the boulders and doing more damage than if you just allowed them to park there freely. (There is no-where else to park)!

We feel Boongaree is a fantastic, amazing development for Berry. But the car parking is a fiasco and has been very poorly thought out. Please fix the parking issues for all users of this wonderful area (Sports field users, Tennis court users, Dog walkers, and Bongaree adventure park users). The joy of using this area should not be tainted by frustrations over inadequate car parking.

We know you will get it right after all of the submissions are read. Thank you for listening.

Parking should be a priority

It's chaotic and dangerous in North Street and surrounds .



I support additional parking, but it should be staged in a manner that is consistent with the roll out of the precinct as a whole, not reactionary and out of sequence.

There is an urgent need to create additional OFF STREET parking in order to mitigate serious potential safety issues. This will also need to include parking restiction signage (eg no standing, no parking signs) otherwise drivers will continue to park anywhere they like, blocking driveways and access to homes in North and Prince Alfred Street.

The provision of any well planned all weather standard / hard stand parking within the vicinity of the park is highly welcomed. It is always a nightmare to park and a hassle to take kids from the car parked blocks away in sometimes muddy wet grounds. It is important that any existing trees are retained for shade of vehicles and to retain the natural characters of the area.

They remain insufficient.

Looks great. Trust your original extensive consultation and don't be too distracted by the thinly veiled self interest of a few immediate neighbours.

While I support extra parking, I'm concerned about potential conflict between bicycles and pedestrians as the area becomes more crowded. Please make the track around the northern side of the playing fields and playground wide enough for bicycles, to reduce safety issues with bikes riding beside the 90 degree parking area, where pedestrians linger and cross. Screen planting between the proposed long vehicle parking and North St would be good. This should also be designed to discourage people choosing to walk or ride across the entrance/exit roads instead of taking the longer pathway around.

I suggest that long vehicle parking be located in the Showgrounds site. North Street should be used to maximise the number of 90 degree parking spaces as it is clear that there is enormous demand for these.

With more car parking in North St and the Bus park entry opposite Alexandra, this is becoming a major intersection. Since there is already parking both sides of Alexandra. a roundabout or traffic lights will be necessary to prevent accidents. It would be much more sensible for parking to be extended in Woodhill Mountain Rd.

Move long vehicle parking to the Showground. To dangerous and unsightly in the site originally proposed



Move long vehicle parking to the Showground

Some time reasonable limitations on parking, particularly on weekends, would be useful to ensure the maximum number of people can enjoy Boongaree. With limited parking within the village and if there is no time limitation on parking at Boongaree day trippers would simply park in the new spots and leave their vehicle there for the day.

The need for parking is much greater than expected. Please reconsider also the long vehicle provision.

The car spaces planned for the southern and eastern edges of the sporting fields cannot come soon enough. Holiday and weekend traffic already overwhelms North St at the roundabout and there is a lot of "poor" parking by visitors. In wet weather the entire road is a quagmire.

I think the site projected for long vehicles is unnecessary. This is adequately provided at the Berry Showground. These vehicles take up huge space per person, and are probably unlikely to be using the Boongaree site. The parking is better used for smaller vehicles, especially those who use the site.

I believe the designated long vehicle parking would quickly become inadequate. We need a plan for Berry not just Boongaree. The weed infested eyesore between Broughton Mill Creek and the Bowlo is not a pleasant sight to those entering Berry from the North. Its value is minimal as it is flood prone. SCC should purchase this land for both long vehicle and long term parking for those visiting Berry and Boongaree.

It is essential that the parking issues be resolved as soon as possible. The current situation where cars mill around looking for parking spaces interferes with the flow of traffic, is hazardous to pedestrians (of whom there are always plenty at busy times), has caused road rage outbursts, and is simply messy.

Parking would be preferable closer to the park, however understand the constraints

Could the current long vehicle carpark be extended into the dog agility zone to gain some more car spaces? Long vehicle parking should be at the Berry Showground where there is plenty of space and plenty of toilets.



The parking, additional or original to the master, plan needs to be implemented now. On weekends and school holidays it has always been difficult to park in Berry proper and since Boongaree opened it is now impossible to park and has become very dangerous on the streets around the park as people look for a park or stroll down to Boongaree, having parked several blocks away.

The current parking spaces are ridiculously small for parents with children. You would think that more consideration for the main user's of the park would be taken into consideration. The current parking spots are not wide enough to saftey get children in and out of the vehicles and there is not enough of them either. More and (bigger) parking spots are definitely needed

Using open space to park long vehicles seems a misuse of limited open areas. Make the parking down near the creek 'Camp Quality' long parking. Also reduces movement of big vehicles across a pathway often used by children on scooters or parents with prams. There needs to be a traffic island at the entrance to playground with no parking within a safe distance from intersection on opposite corners and entrance eg two car lengths. Visibility around parked cars is tricky. Constantly dodging cars with little ones when entering park. Also would streamline people wandering vaguely down North St. as holiday makers seem to forget it is a functional road that residents of North St need to drive down. Am hearing on the Berry grapevine that locals are avoiding the park... too busy with tourists. Bit sad. Maybe once the complete site is developed people will spread out a bit... the playground has been beautifully designed.

The sooner additional parking is provided, the safer visitors to the site will be. Currently having to navigate from any available parking spot to the site involves walking on the already narrow stretch of North St. amongst the traffic and people looking to park.

I also stongly disagree with the plan of large vehicle parking opposite Alexandra Street. Provision for large vehicle parking is already available at the Berry Showground and Berry Railway station area and/or should be provided in those and around those areas. Bringing large vehicle trafffic along Alexandra Street, across Queen Street and then further along Alexandra Street towards North Street is inviting even more intense traffic and safety issues along Alexandra Street.

I would also like to mention that the "IGA" Car Park in Albert Street which currently has two entrances. This is also a major traffic hazzard as things get even busier in Berry. I would request a one way system by stopping vehicles turning right almost immediately after they turn the corner into Albert Street.

People already park on the nature strip on North St. It is poorly drained and muddy for many days after a rain event. with more improvements and facilities to the greater Boongaree Facility formal parking is a must

The location of the proposed RV park is inappropriate due to several safety concerns, primarily relating to the parking area being placed in a high pedestrian zone along North St. I note that the plan redirects the footpath around the parking area, however this will not work in practice and will result in the following pedestrian safety issues:

- a) People using the shared path along North St will tend to use the most direct route and will cross the parking area rather than following the path, resulting in two potential accident zones at the entry and exit to the parking area.
- b) Unaccompanied children regularly use the shared path and are often on bikes or scooters. Children are even more likely to take the most direct route and have reduce spatial awareness increasing the risk further.
- c) Given there is a slight downhill grade travelling west to east on the path, riders regularly



gather a good deal of speed. Adding 4x 90 degree turns into the route will cause young riders to overshoot into the parking area or crash - especially among young riders. The most likely outcome is that they will cross the entry and exit zones of the parking area at speed. Adding bollards or fences across this area is likely to encourage riders to divert into the adjacent proposed car park (to the west of Alexandra St) and onto the road to cross the RV parking area. The willingness of unaccompanied teenagers to jump on and off the road to maintain momentum is already observable in the area.

c) The reduced visibility of large vehicles and unknown experience of drivers in a high pedestrian area raises further safety concerns. Note that the high pedestrian area includes all of the parking area along north st which will include a high proportion of families arriving and leaving Boongaree with high turnover as well as unaccompanied children. It is irresponsible to willingly add large vehicle traffic to this zone.

In addition to the above safety concerns the proposed RV parking site

- reduces the visual connection between Berry and the escarpment. The view of the mountains from the shopping precinct down Alexandra St is one of the iconic Berry views and is part of what makes our town so popular. I note that the Berry bypass took this into account when designing the cut and embankment in their final plan. It seems a shame to undo their good work by adding a visual eyesore to the foreground now.
- does not provide many places, which will raise the prospect of inappropriate parking in the new parking spaces along North St. The alternative site is able to provide for more vehicles while providing the same level of access to the shopping precinct.

Parking spaces for caravans on North Street would take up too many car spaces and thus create more problems than it would solve. The Berry Showground is an ideal area for caravan parking.

I agree with the proposal of 90 degree parking as if there isn't locals will not find a parking spot in town. Since we pay rates we should have access to parking without having to walk distances to shops or have parking meters forced upon us. Pity no thought was given to this before spending millions and turning Berry but again into a circus.

Firstly this is a very limited survey skewed towards supporting a single question. I also object to age group identification as feedback is likely to be viewed with a bias based on age. This should not be a required field. The fundamental problem is the unintended consequences of building a facility which was not focused on the community of Berry, rather developed to support tourism/business interests, with the exception of improved sporting facilities which already existed. Berry is a small community and it is currently experiencing significant over utilisation of its facilities/infrastructure, including the local Showgrounds which are in a state of poor repair. However, I note some building works have been undertaken.

In relation to the actual development I understood that a key feature of the park was a reconciliation site. This appears to no longer be a key feature of the park. Considering the significant negative impact of colonisation on First Nations peoples in the local area, this is unfortunate.

Also I don't support adding additional long vehicle parking in a small rural town which can only create further congestion and road safety issues in urban streets. Berry is not a car park for Tourists it is a community.

Additionally, we appear to have lost a well used dog off-lead area.

In essence we appear to have lost site of the interests of the community which lives in the town, with the primary focus on tourism and business interests.



I am very disappointed that whole issue of parking was not addressed properly before the Park was opened The Sporting Clubs are once again struggling to provide the availability for parents & spectators I am of the opinion that this is very important for local parents are able to park with ease within their own community & as for parking long load parking at the Showground is ridiculous

The parking must be for passenger cars only, NO RV or caravans.

For the safety of children and families, council should consider reducing the speed in North St around the park to 40 kph. Residents have witnessed several near misses, exclusively involving children. With parking both sides of a quite narrow road, visibility is poor.

Also, some rubbish bins could be provided along the park side of North St to allow park users to dispose of their rubbish properly instead of leaving it outside residents' front fences or in their front gardens.

There is not enough room for long vehicle parking at Boongarree, plus there are safety issues with narrow streets and foot traffic - particularly from young children. Long vehicles/caravans should park away from the main centre of town, perhaps near the Showground.

Car park must be away from residential

EV. Charging stations should be part of the design; ditto cycle parking, ditto recycling facilities, ditto, solar power, tanks etc. The design almost completely ignores the challenges of climate change; this is very poor. We need young people to learn and assist.

Do not agree with long vehicle parking plan as shown. Extra long vehicles in a relatively narrow road near a

I approve of the 90 degree parking as long as it's nose to curb

Given that Berry generally has a chronic, unresolved parking problem, is 90 additional spaces enough?

Infrastructure planning in Australia seems to follow two basic rules - "think small and always play catch up."



Heavy vehicle proposed parking inappropriate when Showground is available for same.

Long vehicle parking should be provided at the Showgrounds as well.

Long vehicle parking should not be located opposite Alexandra Street.

Introducing long vehicles into the centre of town presents safety issues for North Street residents and all pedestrians in the town precinct, as well as for car drivers intent on finding a park, not necessarily concentrating on the restrictions of long vehicles.

We therefore suggest locating the long vehicle parking area where the bus parking area is currently planned, off Woodhill Mountain Road.

Once buses have dropped off their passengers, they do not need to park near the playground. All that is required is a drop off and pick up bus zone where it is safe to do so, possibly off Woodhill Mtn Rd.

Once buses have off-loaded their passengers, they should park somewhere suitable off site, possibly the showground (but could even be out of town), until the agreed pick-up time.

We anticipate there would be many fewer buses (some days none) than long vehicles, and because bus drivers take a break whilst waiting or possibly do a short interim run, parking close to Boongaree is not necessary.

Long vehicles, on the other hand, are cumbersome and are operated by drivers with more unpredictable levels of driving competence than bus drivers. We therefore think it is safer to locate long vehicle away from the centre of town, keeping them to the less trafficintense areas in the Boongaree precinct.

Thank you for this opportunity to comment **Name and address removed for privacy