

Ordinary Meeting

Meeting Date: Monday, 07 February, 2022

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

Attachments (Under Separate Cover)

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Local Government Remuneration Tribunal

Annual Report and
Determination

*Annual report and determination under sections
239 and 241 of the Local Government Act 1993*

23 April
2021

[NSW Remuneration Tribunals website](#)

CL22.52 - Attachment 1

Local Government Remuneration Tribunal

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Local Government Remuneration Tribunal

Executive Summary

The *Local Government Act 1993* (the LG Act) requires the Local Government Remuneration Tribunal (the Tribunal) to report to the Minister for Local Government by 1 May each year on its determination of categories of councils and the maximum and minimum amounts of fees to be paid to mayors, councillors, and chairpersons and members of county councils.

Categories

The Tribunal found the allocation of councils into the current categories appropriate. Criteria for each category is published in Appendix 1. These categories have not changed further to the extensive review undertaken as part of the 2020 review.

Fees

The Tribunal determined a 2 per cent increase in the minimum and maximum fees applicable to each category.

Local Government Remuneration Tribunal

Section 1 Introduction

1. Section 239 of the LG Act provides that the Tribunal determine the categories of councils and mayoral offices and to place each council and mayoral office into one of those categories.
2. Section 241 of the LG Act provides that the Tribunal determine the maximum and minimum amount of fees to be paid to mayors and councillors of councils, as well as chairpersons and members of county councils for each of the categories determined under section 239.
3. Section 242A (1) of the LG Act, requires the Tribunal to give effect to the same policies on increases in remuneration as those of the Industrial Relations Commission.
4. However, the Tribunal can determine that a council be placed in another existing or a new category with a higher range of fees without breaching the Government's wage policy as per section 242A (3) of the LG Act.
5. The Tribunal's determinations take effect from 1 July in each year.

Section 2 2020 Determination

6. Section 239 of the LG Act requires the Tribunal to determine the categories of councils and mayoral offices at least once every 3 years.
7. The Tribunal undertook an extensive review of the categories and allocation of councils into each of those categories as part of the 2020 review.
8. Like the review undertaken in 2017, the Tribunal examined a range of statistical and demographic data and considered the submissions of councils, Local Government NSW (LGNSW) and Regional Cities NSW.
9. The Tribunal determined to retain a categorisation model which differentiates councils primarily based on their geographic location and the other factors including population, the sphere of the council's economic influence and the degree of regional servicing.
10. The categories of general purpose councils were determined as follows:

Metropolitan	Non-Metropolitan
<ul style="list-style-type: none"> • Principal CBD • Major CBD • Metropolitan Large • Metropolitan Medium • Metropolitan Small 	<ul style="list-style-type: none"> • Major Regional City • Major Strategic Area • Regional Strategic Area • Regional Centre • Regional Rural • Rural

11. Given the impact of the bushfires and the COVID-19 pandemic on the state and federal economies and wellbeing of communities, the Tribunal determined no increase in the minimum and maximum fees applicable to each existing category.
12. The Determination was made on 10 June 2020 in accordance with the Local Government (General) Amendment (COVID-19) Regulation 2020 which extended the

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time for making of the determination to no later than 1 July 2020.

13. On 10 August 2020 the Tribunal received a direction from the Minister for Local Government, the Hon Shelley Hancock MP, to review the categorisation of Bayside Council. The Tribunal found that Bayside met the criteria to be classified as Metropolitan Large – having both a resident and non-resident working population (minimum 50,000) exceeding 200,000.
14. The Tribunal's 2020 determination was amended by the special determination on 17 August 2020 for Bayside Council be re-categorised as Metropolitan Large for remuneration purposes with effect from 1 July 2020.

Section 3 2021 Review

2021 Process

15. The Tribunal wrote to all mayors or general managers and LGNSW in February 2021 to advise of the commencement of the 2021 review and invite submissions. This correspondence advised that the Tribunal completed an extensive review of categories in 2020 and as this is only required every three years, consideration would be next be given in 2023. Submissions received requesting to be moved into a different category as part of the 2021 review would only be considered were there was a strong, evidence-based case.
16. Eighteen submissions were received – seventeen from individual councils and a submission from LGNSW. It was not possible from some submissions to ascertain if they had been council endorsed. The Tribunal also met with the President and Chief Executive of LGNSW.
17. The Tribunal discussed the submissions at length with the assessors.
18. The Tribunal acknowledged difficulties imposed by COVID19 and, on some councils the bushfires and floods.
19. Submissions from councils in regional and remote locations that raised the unique challenges experienced by mayors and councillors which included difficulties with connectivity and the travel required in sometimes very difficult circumstances were also acknowledged.
20. A summary of the matters raised in the received submissions and the Tribunal's consideration of those matters is outlined below.

Categorisation

21. Nine council submissions requested recategorisation. Four of these requests sought the creation new categories.
22. The Tribunal found that the current categories and allocation of councils to these categories remained appropriate. The Tribunal's finding had regard to the 2020 review, the current category model and criteria and the evidence put forward in the received submissions.
23. A summary of the individual council submissions that sought recategorisation is below.

Metropolitan Large Councils

24. Blacktown City Council requested the creation of a new category of Metropolitan Large – Growth Area.
25. Penrith City Council requested the creation of a new category Metropolitan Large –

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Growth Centre.

26. Liverpool City Council requested recategorisation to Major CBD.

27. The Tribunal noted that an extensive review of the current category model was completed in 2020 and would be next considered in 2023. The Tribunal noted that the criteria required for recategorisation was not yet met and that current council allocations remained appropriate.

Metropolitan Small Councils

28. The City of Canada Bay sought recategorisation to Metropolitan Medium. The Tribunal noted that the criteria required for recategorisation was not yet met.

Major Regional City Councils

29. The City of Newcastle requested review and creation of a new category of "Gateway City" with comparable characteristics to the Major CBD category and a similar fee structure. The Tribunal noted that an extensive review of the current category model was completed in 2020 and would be next considered in 2023.

Regional Centre

30. Tweed Shire Council requested recategorisation to Regional Strategic Area. The Tribunal noted that the criteria required for recategorisation was not yet met.

Rural Councils

31. Federation Council requested recategorisation into a new category of Regional.

32. Narromine Shire Council sought recategorisation but did not specify a category for consideration.

33. Yass Valley Council sought recategorisation to Regional Rural.

34. The Tribunal noted that an extensive review of the current category model was completed in 2020 and would be next considered in 2023. The Tribunal noted that the criteria required for recategorisation was not yet met and that current council allocations remained appropriate.

Fees

35. The Tribunal determined a 2.0 per centage increase in the minimum and maximum fees applicable to each category. A summary of the matters the Tribunal considered when making this determination is outlined below.

36. Submissions that addressed fees sought an increase of 2.5 per cent or greater. These submissions raised similar issues to warrant an increase which included the significant workload, responsibilities, capabilities, duties and expanding nature of mayor and councillor roles. Some submissions also suggested that an increase in remuneration may assist in improving the diversity of potential candidates.

37. The 2021-22 rate peg for NSW Councils was set at 2.0 per cent by the Independent Pricing and Regulatory Tribunal (IPART). The rate peg is the maximum percentage amount by which a council may increase its general income for the year.

38. Employees under the *Local Government (State) Award 2020* will receive a 2.0 per cent increase in rates of pay from the first full pay period to commence on or after 1 July 2021.

39. Section 242A of the LG Act provides that when determining the fees payable in each of the categories, the Tribunal is required to give effect to the same policies on increases in remuneration as the Industrial Relations Commission is required to give effect to under section 146C of the *Industrial Relations Act 1996* (IR Act), when making or

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varying awards or orders relating to the conditions of employment of public sector employees.

40. The current government policy on wages pursuant to section 146C(1)(a) of the IR Act is articulated in *the Industrial Relations (Public Sector Conditions of Employment) Regulation 2014* (IR Regulation 2014). The IR Regulation provides that public sector wages cannot increase by more than 2.5 per cent. As such, the Tribunal has discretion to determine an increase of up to 2.5 per cent.
41. On 31 March 2021, Premiers Memorandum M2021-09 issued the *NSW Public Sector Wages Policy 2021* reflecting the Government's decision to provide annual wage increases of up to 1.5 per cent. The IR Regulation has not been amended to reflect this position.

Conclusion

42. The Tribunal's determinations have been made with the assistance of Assessors Ms Kylie Yates and Mr Tim Hurst.
43. It is the expectation of the Tribunal that in the future all submissions have council endorsement.
44. Determination 1 outlines the allocation of councils into each of the categories as per section 239 of the LG Act.
45. Determination 2 outlines the maximum and minimum fees paid to councillors and mayors and members and chairpersons of county councils as per section 241 of the LG Act.



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Section 4 2021 Determinations

Determination No. 1 - Allocation of councils into each of the categories as per section 239 of the LG Act effective from 1 July 2021

Table 1: General Purpose Councils - Metropolitan

Principal CBD (1)	Major CBD (1)
Sydney	Parramatta
Metropolitan Large (12)	Metropolitan Medium (8)
Bayside	Campbelltown
Blacktown	Camden
Canterbury-Bankstown	Georges River
Cumberland	Hornsby
Fairfield	Ku-ring-gai
Inner West	North Sydney
Liverpool	Randwick
Northern Beaches	Willoughby
Penrith	
Ryde	
Sutherland	
The Hills	
Metropolitan Small (8)	
Burwood	
Canada Bay	
Hunters Hill	
Lane Cove	
Mosman	
Strathfield	
Waverley	
Woollahra	

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Table 2: General Purpose Councils - Non-Metropolitan

Major Regional City (2)	Major Strategic Area (1)	Regional Strategic Area (1)
Newcastle	Central Coast	Lake Macquarie
Wollongong		

Regional Centre (24)		Regional Rural (13)	
Albury	Mid-Coast	Bega	
Armidale	Orange	Broken Hill	
Ballina	Port Macquarie-Hastings	Byron	
Bathurst	Port Stephens	Eurobodalla	
Blue Mountains	Queanbeyan-Palerang	Goulburn Mulwaree	
Cessnock	Shellharbour	Griffith	
Clarence Valley	Shoalhaven	Kempsey	
Coffs Harbour	Tamworth	Kiama	
Dubbo	Tweed	Lithgow	
Hawkesbury	Wagga Wagga	Mid-Western	
Lismore	Wingecarribee	Richmond Valley Council	
Maitland	Wollondilly	Singleton	
		Snowy Monaro	

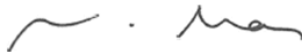
Rural (57)			
Balranald	Cootamundra-Gundagai	Junee	Oberon
Bellingen	Cowra	Kyogle	Parkes
Berrigan	Dungog	Lachlan	Snowy Valleys
Bland	Edward River	Leeton	Temora
Blayney	Federation	Liverpool Plains	Tenterfield
Bogan	Forbes	Lockhart	Upper Hunter
Bourke	Gilgandra	Moree Plains	Upper Lachlan
Brewarrina	Glen Innes Severn	Murray River	Uralla
Cabonne	Greater Hume	Murrumbidgee	Walcha
Carrathool	Gunnedah	Muswellbrook	Walgett
Central Darling	Gwydir	Nambucca	Warren
Cobar	Hay	Narrabri	Warrumbungle
Coolamon	Hilltops	Narrandera	Weddin
Coonamble	Inverell	Narromine	Wentworth

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Rural (57)	
	Yass

Table 3: County Councils

Water (4)	Other (6)
Central Tablelands	Castlereagh-Macquarie
Goldenfields Water	Central Murray
Riverina Water	Hawkesbury River
Rous	New England Tablelands
	Upper Hunter
	Upper Macquarie



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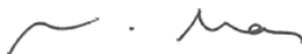
Determination No. 2 - Fees for Councillors and Mayors as per section 241 of the LG Act effective from 1 July 2021

The annual fees to be paid in each of the categories to Councillors, Mayors, Members and Chairpersons of County Councils effective on and from 1 July 2021 as per section 241 of the *Local Government Act 1993* are determined as follows:

Table 4: Fees for General Purpose and County Councils

Category		Councillor/Member Annual Fee (\$) effective 1 July 2021		Mayor/Chairperson Additional Fee* (\$) effective 1 July 2021	
		Minimum	Maximum	Minimum	Maximum
General Purpose Councils - Metropolitan	Principal CBD	28,190	41,340	172,480	226,960
	Major CBD	18,800	34,820	39,940	112,520
	Metropolitan Large	18,800	31,020	39,940	90,370
	Metropolitan Medium	14,100	26,310	29,950	69,900
	Metropolitan Small	9,370	20,690	19,970	45,110
General Purpose Councils - Non-Metropolitan	Major Regional City	18,800	32,680	39,940	101,800
	Major Strategic Area	18,800	32,680	39,940	101,800
	Regional Strategic Area	18,800	31,020	39,940	90,370
	Regional Centre	14,100	24,810	29,330	61,280
	Regional Rural	9,370	20,690	19,970	45,140
	Rural	9,370	12,400	9,980	27,060
County Councils	Water	1,860	10,340	4,000	16,990
	Other	1,860	6,180	4,000	11,280

*This fee must be paid in addition to the fee paid to the Mayor/Chairperson as a Councillor/Member (s.249(2)).



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Appendices

Appendix 1 Criteria that apply to categories

Principal CBD

The Council of the City of Sydney (the City of Sydney) is the principal central business district (CBD) in the Sydney Metropolitan area. The City of Sydney is home to Sydney's primary commercial office district with the largest concentration of businesses and retailers in Sydney. The City of Sydney's sphere of economic influence is the greatest of any local government area in Australia.

The CBD is also host to some of the city's most significant transport infrastructure including Central Station, Circular Quay and International Overseas Passenger Terminal. Sydney is recognised globally with its iconic harbour setting and the City of Sydney is host to the city's historical, cultural and ceremonial precincts. The City of Sydney attracts significant visitor numbers and is home to 60 per cent of metropolitan Sydney's hotels.

The role of Lord Mayor of the City of Sydney has significant prominence reflecting the CBD's importance as home to the country's major business centres and public facilities of state and national importance. The Lord Mayor's responsibilities in developing and maintaining relationships with stakeholders, including other councils, state and federal governments, community and business groups, and the media are considered greater than other mayoral roles in NSW.

Major CBD

The Council of the City of Parramatta (City of Parramatta) is the economic capital of Greater Western Sydney and the geographic and demographic centre of Greater Sydney. Parramatta is the second largest economy in NSW (after Sydney CBD) and the sixth largest in Australia.

As a secondary CBD to metropolitan Sydney the Parramatta local government area is a major provider of business and government services with a significant number of organisations relocating their head offices to Parramatta. Public administration and safety have been a growth sector for Parramatta as the State Government has promoted a policy of moving government agencies westward to support economic development beyond the Sydney CBD.

The City of Parramatta provides a broad range of regional services across the Sydney Metropolitan area with a significant transport hub and hospital and educational facilities. The City of Parramatta is home to the Westmead Health and Medical Research precinct which represents the largest concentration of hospital and health services in Australia, servicing Western Sydney and providing other specialised services for the rest of NSW.

The City of Parramatta is also home to a significant number of cultural and sporting facilities (including Sydney Olympic Park) which draw significant domestic and international visitors to the region.

Local Government Remuneration Tribunal**Metropolitan Large**

Councils categorised as Metropolitan Large will typically have a minimum residential population of 200,000.

Councils may also be categorised as Metropolitan Large if their residential population combined with their non-resident working population exceeds 200,000. To satisfy this criteria the non-resident working population must exceed 50,000.

Other features may include:

- total operating revenue exceeding \$200M per annum
- the provision of significant regional services to greater Sydney including, but not limited to, major education, health, retail, sports, other recreation and cultural facilities
- significant industrial, commercial and residential centres and development corridors
- high population growth.

Councils categorised as Metropolitan Large will have a sphere of economic influence and provide regional services considered to be greater than those of other metropolitan councils.

Metropolitan Medium

Councils categorised as Metropolitan Medium will typically have a minimum residential population of 100,000.

Councils may also be categorised as Metropolitan Medium if their residential population combined with their non-resident working population exceeds 100,000. To satisfy this criteria the non-resident working population must exceed 50,000

Other features may include:

- total operating revenue exceeding \$100M per annum
- services to greater Sydney including, but not limited to, major education, health, retail, sports, other recreation and cultural facilities
- industrial, commercial and residential centres and development corridors
- high population growth.

The sphere of economic influence, the scale of council operations and the extent of regional servicing would be below that of Metropolitan Large councils.

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Metropolitan Small

Councils categorised as Metropolitan Small will typically have a residential population less than 100,000.

Other features which distinguish them from other metropolitan councils include:

- total operating revenue less than \$150M per annum.

While these councils may include some of the facilities and characteristics of both Metropolitan Large and Metropolitan Medium councils the overall sphere of economic influence, the scale of council operations and the extent of regional servicing would be below that of Metropolitan Medium councils.

Major Regional City

Newcastle City Council and Wollongong City Councils are categorised as Major Regional City. These councils:

- are metropolitan in nature with major residential, commercial and industrial areas
- typically host government departments, major tertiary education and health facilities and incorporate high density commercial and residential development
- provide a full range of higher order services and activities along with arts, culture, recreation, sporting and entertainment facilities to service the wider community and broader region
- have significant transport and freight infrastructure servicing international markets, the capital city and regional areas
- have significant natural and man-made assets to support diverse economic activity, trade and future investment
- typically contain ventures which have a broader State and national focus which impact upon the operations of the council.

Major Strategic Area

Councils categorised as Major Strategic Area will have a minimum population of 300,000.

Other features may include:

- health services, tertiary education services and major regional airports which service the surrounding and wider regional community
- a full range of high-order services including business, office and retail uses with arts, culture, recreation and entertainment centres
- total operating revenue exceeding \$250M per annum
- significant visitor numbers to established tourism ventures and major events that attract state and national attention
- a proximity to Sydney which generates economic opportunities.

Currently, only Central Coast Council meets the criteria to be categorised as a Major Strategic Area. Its population, predicted population growth, and scale of the Council's operations warrant that it be differentiated from other non-metropolitan councils. Central Coast Council is also a

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significant contributor to the regional economy associated with proximity to and connections with Sydney and the Hunter Region.

Regional Strategic Area

Councils categorised as Regional Strategic Area are differentiated from councils in the Regional Centre category on the basis of their significant population and will typically have a residential population above 200,000.

Other features may include:

- health services, tertiary education services and major regional airports which service the surrounding and wider regional community
- a full range of high-order services including business, office and retail uses with arts, culture, recreation and entertainment centres
- total operating revenue exceeding \$250M per annum
- significant visitor numbers to established tourism ventures and major events that attract state and national attention
- a proximity to Sydney which generates economic opportunities.

Currently, only Lake Macquarie Council meets the criteria to be categorised as a Regional Strategic Area. Its population and overall scale of council operations will be greater than Regional Centre councils.

Regional Centre

Councils categorised as Regional Centre will typically have a minimum residential population of 40,000.

Other features may include:

- a large city or town providing a significant proportion of the region's housing and employment
- health services, tertiary education services and major regional airports which service the surrounding and wider regional community
- a full range of high-order services including business, office and retail uses with arts, culture, recreation and entertainment centres
- total operating revenue exceeding \$100M per annum
- the highest rates of population growth in regional NSW
- significant visitor numbers to established tourism ventures and major events that attract state and national attention
- a proximity to Sydney which generates economic opportunities.

Councils in the category of Regional Centre are often considered the geographic centre of the region providing services to their immediate and wider catchment communities.

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Regional Rural

Councils categorised as Regional Rural will typically have a minimum residential population of 20,000.

Other features may include:

- a large urban population existing alongside a traditional farming sector, and are surrounded by smaller towns and villages
- health services, tertiary education services and regional airports which service a regional community
- a broad range of industries including agricultural, educational, health, professional, government and retail services
- large visitor numbers to established tourism ventures and events.

Councils in the category of Regional Rural provide a degree of regional servicing below that of a Regional Centre.

Rural

Councils categorised as Rural will typically have a residential population less than 20,000.

Other features may include:

- one or two significant townships combined with a considerable dispersed population spread over a large area and a long distance from a major regional centre
- a limited range of services, facilities and employment opportunities compared to Regional Rural councils
- local economies based on agricultural/resource industries.

County Councils - Water

County councils that provide water and/or sewerage functions with a joint approach in planning and installing large water reticulation and sewerage systems.

County Councils - Other

County councils that administer, control and eradicate declared noxious weeds as a specified Local Control Authority under the *Biosecurity Act 2015*.



Summary of Submissions

DCP2014.45 – Chapter S8: Ulladulla Town Centre

Public Exhibition: Wednesday 18 August to Friday 17 September 2021.

No.	Submitter	Summary of Submission	Council Comment
PUBLIC SUBMISSIONS			
1	Individual (I. Carroll)	<ul style="list-style-type: none"> Table 1 does not mention setbacks for Precinct 2 Mixed Use (Commercial Residential). Map 3 average setback of 5m is very open ended. There is no mention of side setbacks. This should be included in S8 instead of relying on other chapters For Precinct 2 there is no differential in setbacks between commercial and residential. This should be considered. 	<p>Noted. Setbacks for Precinct 2 are noted in accompanying Map 3.</p> <p>The 5m average setback is intended to provide some flexibility site-by-site whilst forming a generally consistent building line along the street.</p> <p>Side setbacks are stipulated in the DCP Generic Chapters according to the type of development. The approach for the overall DCP is not to duplicate them in the Area Specific chapters like S8.</p> <p>Precinct 2 is mixed use, the same front setback applies to all developments so as to create a generally consistent building line.</p> <p>No changes recommended.</p>
2	Teraq Pty Ltd (22-24 Wason St Ulladulla)	<ul style="list-style-type: none"> Chapter S8 discriminates against subject site. 	<p>Noted. In general, the submission raises issues with the DCP controls across the broader town centre area, not those over the southern part of the town centre which are the focus for this proposed DCP Amendment. As noted below, it is recommended that the issues be considered as part of the future proposed housekeeping amendment to Chapter S8.</p>

No.	Submitter	Summary of Submission	Council Comment
		<ul style="list-style-type: none"> Objection to paragraph in 3.1.1 (p. 9) and Table 2 (p. 22) regarding a lower floor space ratio for sites of less than 1,600m² (FSR 1.0:1), compared to sites greater than 1,600m² (FSR of 1.9:1). We believe 1,600 should be replaced with 1,100m² in regard to FSR. 3.1.1 and Table 2 suggest that the difference in FSR will “encourage amalgamation of lots”. Yet the stated Objective (p. 13) are Economic, Environment, Built Form and Character, Accessibility, Urban Design/Lifestyle and Employment. Council provides no evidence that amalgamation of larger sites in Ulladulla has been effective in achieving the stated objectives. The arbitrary selection of 1,600sqm, should be reduced to 1,100sqm. There is plenty of evidence, national and international, where sites of 1,100sqm, with adequate width for vehicle turning circles, can achieve Council stated objectives. Table 2 (p. 22) is suggesting that sites under 1,600sqm will have a building height limit of 11m, yet larger sites will have height limit of 17m. We object to smaller sites be penalised. Council provides no evidence that larger sites, with greater height limits are more likely to achieve Council objectives. Map 3 (p. 18) notes “provision of future pedestrian pathway 6m wide” on our site. Previous plans, including DCP 56, provide for a “pedestrian flow”, but have not provided dimensions. By including width dimensions, Council is effectively putting an easement on our property, without any prior consultation and without any fair compensation. The imposition is inappropriate and an overreach of Council power. We object to the use of dimensions and demand “6m wide” be removed. 	<p>Noted. This issue is outside the scope of this proposed DCP Amendment.</p> <p>Recommendation: review FSR incentives for consolidation, including whether the incentive should apply to smaller lots, as part of the future housekeeping amendment to Chapter S8, to commence following the review of the Milton Ulladulla Structure Plan.</p> <p>Noted. Map 6 identifies the subject pedestrian pathway for possible acquisition by Council. The submitter was separately advised that the DCP controls are a guide and can be considered flexibly in any future DA. This issue is outside the scope of this proposed DCP Amendment but should be reviewed as part of the review of planned infrastructure improvements in the future housekeeping DCP amendment.</p> <p>Recommendation: planned pedestrian paths across the DCP area be reviewed and, if necessary, updated as part of the future proposed housekeeping amendment to Chapter S8.</p>

No.	Submitter	Summary of Submission	Council Comment
3	Individual (R. Olde)	<p><u>DCP Boundary</u></p> <ul style="list-style-type: none"> From Map 1, the proposed Residential Unit Living Precincts do not include any characteristics of a town centre and should not be included in this DCP. <p><u>Working waterfront precinct</u></p> <ul style="list-style-type: none"> From Map 4, Building Height Limits, It is proposed that a substantial area, if not all, of the waterfront on the south side of the harbour, with the exception of the breakwater and the wharves, will be developed by the introduction of two storey buildings with a height limit of 7.5 metres. From the area shown on Map 4, does this mean that the current tuna processing plant, retail outlets and the large slipway will be removed/replaced? Will the current trees on the south side of the harbour be removed? I understand that there is a mini-marina proposed/planned/approved for the south side of the harbour. Should this also be included in the DCP? <p><u>Building height limits</u></p> <ul style="list-style-type: none"> The apartment block (Pier 32) on the corner of Wason and Burrill Streets is five storeys in height. What safeguards will be in place to ensure that this height will not be used by developers as a precedent to override the height restrictions of this DCP relating to two, three and four storey constructions? The proposed Residential Unit Living Precinct (Map 1 Area 4) on the eastern side of Burrill Street should be limited to two storeys. 	<p>Change not supported. The subject precincts are identified for higher density residential development, an important component that supports commercial activity and assists in activating the town centre.</p> <p>Noted. Map 4 sets maximum permissible height of buildings – future development may or may not utilise the full permitted height. The detail of any future development (height, uses, tree removal etc) in the Working waterfront precinct would be considered as part of a DA process. In general though, any proposal would need to align with the land's IN4 Working Waterfront zoning and with the precinct objectives in section 3.6 of Chapter S8 (in addition to other planning controls applicable to the site).</p> <p>The need (or otherwise) for the DCP to reference a mini-marina would be considered as part of the detail of that project if it proceeds.</p> <p>Noted. Building height limits are controlled by Shoalhaven LEP 2014 Clause 4.3 and its associated Height of Buildings Map. Any proposal seeking to vary the building height would need to be justified under existing criteria in LEP clause 4.6 and would be considered on its merits by Council.</p> <p>Noted, however outside the scope of this DCP Amendment. The LEP height of buildings for this precinct is 11m (north) and 8m (south) and is replicated in the DCP. Building heights for the southern part of the town centre were reviewed in 2017, no changes were recommended for this precinct.</p>
4	Milton Ulladulla Bowling Club	<ul style="list-style-type: none"> Clarification of seventh bullet point under 3.3 Precinct 3 "Encourage tourist accommodation uses in conjunction 	<p>The Milton-Ulladulla Bowling Club is zoned RE2 Private Recreation which permits <i>tourist and visitor accommodation</i></p>

No.	Submitter	Summary of Submission	Council Comment
		<p>with private recreation facilities” that this would allow for some temporary accommodation (hotelling or serviced apartment style) to be part of a future development by the bowling club in Precinct 3.</p> <p>Request additions to Precinct 3 (Recreation and Special Activities precinct) – development in this area should:</p> <ul style="list-style-type: none"> • Demonstrate the compatibility of the proposed uses within a mixed-use development context with specific reference to adjoining and adjacent development such as leisure and entertainment uses. • Allow for a combination of temporary and short-term accommodation such as hotel and motel accommodation, serviced apartments and the like (also see Chapter G15 – Tourist and Visitor Accommodation). Accommodation must not dominate use of the site. • Compatible retail/commercial uses including restaurants and cafes, gift shops, galleries, personal services, leisure and indoor recreational facilities and the like. • Increase activity levels in the Town Centre outside of business hours and improve the quality of the urban environment adjacent to the retail area. • Promote shared use of privately funded facilities, new developments are encouraged to design future infrastructure so that it can be shared, particularly by adjoining users. <p>Reasoning for requested changes</p> <ul style="list-style-type: none"> • The Bowling club is a successful community-based organisation. Our mission is to provide Ulladulla with entertainment, bowling and recreational facilities, meeting spaces and dining services, and to support the towns tourism and commercial growth. • We share the Council's commitment to a design-led, place-based revitalisation process for Ulladulla, and we can specifically confirm our complete alignment with the DCP's objectives. 	<p>with development consent. This includes hotels/motels and serviced apartments.</p> <p>Noted, however outside the scope of this DCP Amendment.</p> <p>Recommendation: Consider including additional development objectives in the Context statement for Precinct 3 as part of the future broader housekeeping amendment. This would enable any proposed changes to be reviewed by other landowners in the precinct and the broader community.</p> <p>Noted. The bowling club is encouraged to have a pre-DA lodgement meeting/discussion with Council staff to discuss its future development proposal at the appropriate point.</p>

No.	Submitter	Summary of Submission	Council Comment
		<ul style="list-style-type: none"> The Bowling club is a significant landholder in Precinct 3 adjacent to the harbour foreshore and the Ulladulla commercial centre. We have the desire and the resources to work with Council to enhance our connection to the Town Centre. The Bowling club's location in Precinct 3 is appropriately identified as the "Northern Gateway to the Town Centre" from St Vincent Street. This "gateway" is not properly celebrated due to the disparate elements on the corner of Green Street. Without compromising the intent of Precinct 3, the Bowling club will (in the future) seek Council's planning support for integration of the Bowling club's development aspirations with the adjacent park on the corner of Green Street and St Vincent Street, and the Fossil House on Green Street. This integrated design approach is important in order to achieve highest and best use of the site in keeping with its 'gateway' status; Ensure access from the Town Centre to the recreational spaces and facilities for business and tourist users; Enhance the vista down Boree Street towards Millards Creeks, with accountability for view sharing; Provide a vibrant and safe street frontage to Green Street; and Improve the capacity in Precinct 3 for community events. A specific design is yet to be developed. Requested changes to the Draft Amendment No 45 are intended to ensure that the Bowling club's future plans are fully aligned to Council's aspirations. 	
5	Martin Morris & Jones (MMJ) Pty Ltd on behalf of IRT Group	<ul style="list-style-type: none"> Note there appears to be no direct changes to Precinct 4 or the site 60-88 Church Street, however, note the exhibition material states a future amendment to the whole of the Ulladulla Town Centre area is proposed. Note some discrepancies relating to this site (see below) and request they be addressed in the current or future housekeeping amendment. We note that the current DCP Chapter includes discrepancies in Table 2 Development Standards and 	<p>Noted, see further responses to the noted discrepancies below.</p> <p>Noted and agree with the recommendation.</p>

No.	Submitter	Summary of Submission	Council Comment
		<p>Maps 4 and 5. The current DCP Chapter S8 identifies a maximum building height of three stories and 11 m with no minimum lot size area and a FSR of 1.0:1 in Table 2. This conflicts with the maps included in Map 4 (Figure 4) and Map 5 (Figure 5) which identify a maximum building height of four stories and 11 metres and a FSR of 1.5:1 and the Shoalhaven LEP 2014 which maps a maximum 14 m maximum building height and an FSR of 1.5:1.</p> <ul style="list-style-type: none"> Recommend that Council amend the development standards in Table 2 for consistency with Maps 4 and 5 and Shoalhaven LEP 2014 controls It appears that the southern boundary line has been updated as a result of the updated boundary in Council's cadastre for the DCP mapping and LEP mapping and the IRT support this change. The maximum building heights in the current and draft DCP Chapter S8 are mapped relative to the riparian corridor & buffer from Millards Creek – request that Council review the mapping in the current or future DCP amendment and through a future Planning Proposal to the LEP maximum building height mapping that reflects the amended southern boundary and the 10 m riparian corridor and buffer from the top Millard Creek's bank as has generally been accepted by Council and NRAR. Adjust the location of creek boundary in the DCP mapping consistent with the amended survey plan and the 10m (from top of bank) agreed riparian corridor buffer with Council and NRAR from Millard's Creek. It is requested that the DCP refer to the <i>Water Management Act 2000</i> and separate approvals required rather than mapping a required distance in the DCP that is subject to change with 	<p>Recommendation: as part of the current DCP Amendment, amend/correct Table 2 to be consistent with the controls for Precinct 4 in Map 4, Map 5 and Shoalhaven LEP 2014.</p> <p>Noted.</p> <p>Noted, however this is outside the scope of the current DCP amendment. The mapping of the creek, riparian buffer and adjoining property boundaries in the draft DCP is based on the current cadastre and registered land titles. The Height of Building map can be reviewed, and if necessary, updated in light of the updated survey information as part of the future DCP housekeeping review. Any changes to the height of buildings map would also need to be reflected in the LEP via a future housekeeping Planning Proposal.</p> <p>Recommendation: Review the height of buildings map for Lot 20 DP 1132846 relative to the riparian corridor and buffer from the top of Millards Creek bank.</p> <p>Noted, see comments above.</p> <p>The DCP does not specifically mention the WM Act however this may still need to be considered as part of any DA process.</p>

No.	Submitter	Summary of Submission	Council Comment
		<p>other legislation or through approvals. The DCP maps and other parts of the DCP chapter should be amended to reflect the Water Management Act 2000 rather than stating riparian corridors of certain distances etc. that are subject to a separate approval process through Natural Resources Access Regulator (NRAR). Refer to previous Notice sent to Council's Ulladulla Assessment Team and Survey Plan, Biosis Report and Landscape Plan attached.</p> <ul style="list-style-type: none"> Recommend that Council update the DCP Chapter S8 maps and any relevant sections of the DCP Chapter to reflect the revised site boundary and 10 m riparian buffer from the top of bank to Millard's Creek as detailed in the Restoration and Revegetation Plan prepared by Biosis (14 December 2018). It is requested that the 14 m building height or four storeys be extended to the southern section of the site in DCP Chapter S8 Map 4 and Table 2 and through a future amendment to Shoalhaven LEP 2014. 	
6	Individual (J. Willmott)	<ul style="list-style-type: none"> Objection to the amended view sharing principles. I also remind you of the extensive work of DCP56 Amendment 4 as the legitimate DCP with extensive community involvement. You have seen the past decade of the watered-down Amendment 5 has not resulted in the needed urban consolidation as a result we have run out of low-density land. The average 5m setback is not as I remember a feature of Amendment 4. I and most of the town are happy with pier 32. We need to look at this and improve upon it. 	<p>Noted. There are significant views and vistas throughout the Ulladulla town centre. It is considered appropriate that developments consider views in line with the NSW Land and Environment Court Planning Principles and this was a recommendation of the Ulladulla Building Heights Review. It would also align with other DCP chapters which reflect the LEC planning principles, e.g. G13: Medium Density and Other Residential Development.</p> <p>The former DCP 56 Ulladulla Town Centre was repealed and replaced by the current DCP Chapter S8: Ulladulla Town Centre in 2014. It is noted that Amendment 4 to DCP 56 existed from August 2008 until March 2011. The following Amendment 5 was prepared with considerable community input resulting from concerns regarding the content of Amendment 4.</p> <p>Noted.</p>

No.	Submitter	Summary of Submission	Council Comment
		<ul style="list-style-type: none"> The face brick is not desirable especially on the levels where the building steps in and should read light weight. I would not want to see another building of this mass constructed. My assessment in hindsight is it needs a 6m separation in the middle dividing into two towers. This principal in future developments will open up view corridors provide better air circulation and light. Can we have some sort of workshop to review pier 32 with the aim of guiding bulk scale and mass of future residential. We all did a good job in the approval of Pier 32 I think it's a positive for us left to get together and determine what has worked and what hasn't. Building height is the least of it. 25% adaptable units is too great we need supply. 	<p>Face brick is already discouraged by the DCP (see A28.1) "Face brickwork is discouraged".</p> <p>Noted. The scope for the future DCP housekeeping review already includes reviewing built form controls and this issue will be considered at that time (see points listed under 'Proposed Future Housekeeping Amendment' in the report).</p> <p>The other issues raised are generally outside the scope of this DCP Amendment, as such no changes are recommended.</p>
7	Individual (M. Puglisi)	<ul style="list-style-type: none"> Objection to the view preservation clause - i.e. new Acceptable Solution for the Performance Criteria 'Maintain important views and vistas' (reproduced below): <p>A2.2 Any reduction in views from the public domain or private property is not to be severe or devastating based on the following NSW Land & Environment Court Planning Principles:</p> <ul style="list-style-type: none"> Views - General principles. Views - Impact on public domain views. <p>Note: Where compliance with the objective, performance criteria and acceptable solution is achieved, the expectation of there being no change to existing views is considered unreasonable.</p>	<p>Noted. There are significant views and vistas throughout the Ulladulla town centre. It is considered appropriate that developments consider views in line with the NSW Land and Environment Court Planning Principles and this was a recommendation of the Ulladulla Building Heights Review and is consistent with other existing DCP Chapters e.g. G13: Medium Density and Other Residential Development. The proposed amendment adds a new 'acceptable solution' to an existing performance criteria; there may be other ways of achieving the performance criteria which could be considered at DA stage.</p> <p>No change recommended.</p>
8	Visionata Architects on behalf of F. Fitch & Sons Pty Ltd	<ul style="list-style-type: none"> General concerns in relation to both the prescriptive controls outlined in the document specifically pertaining to 	<p>Noted. Further details and Council comments provided below.</p>

No.	Submitter	Summary of Submission	Council Comment
		<p>the Harbour Triangle precinct as well as the desired outcome of the control plan as a whole.</p> <ul style="list-style-type: none"> • Support the objective for Sustainable Investment in the Ulladulla Town centre and Harbour. • Believe the DCP unfairly encumbers the majority of land in the Harbour Triangle precinct. • There is no incentive to develop land in the precinct. • Land is encumbered by a network of height controls, setbacks, pedestrian thoroughfares, heritage constraints and contributions. <p>Important views and vistas</p> <ul style="list-style-type: none"> • Note that the Fitch development site provides no cross-site vistas or views from Wason St. Objection to 2 thoroughfares applied to the site. <p>Setbacks</p> <ul style="list-style-type: none"> • Have received correspondence from council detailing a proposed realignment of the council public foreshore walkway which will be positioned on council-controlled land approximately 150mm beyond our boundary. However, the DDCP appears not to be updated reflecting this modification. <p>Building height and floor space ratios</p> <ul style="list-style-type: none"> • The DCP encourages consolidation of land by way of offering FSR incentives to 1.5:1 FSR for land over 1,600m² however we believe the documents fail to recognize that it is extremely difficult to viably occupy levels above the ground level with anything other than a form of residential development in a regional township. Do not believe there is any incentive to capitalize on the available FSR without relaxing the controls on residential uses permitting Mixed use development in the commercial core. • An increase in the height control coupled with possible restrictions on footprint above the ground plane would 	<p>Noted. It is understood that the '2 thoroughfares' referenced in the submission are the 'panoramic views' from the rear of the site over the harbour as indicated on Map 2 of the DCP. At this point no changes are recommended.</p> <p>Noted. The DCP can be updated to reflect any changes to the walkway alignment once it is finalised.</p> <p>Recommendation: Update relevant maps and figures for the final harbourside walkway alignment as part of the future housekeeping amendment.</p> <p>Noted. The suggested changes to building height and building footprint are beyond the scope of the proposed housekeeping amendments and would best be considered as part of a holistic review of the planning controls applying to the precinct. They would possibly also require a Planning Proposal to amend the equivalent LEP building height controls. It is noted however that the DCP is a guide and there is the ability to consider the controls flexibly if alternate design solutions are proposed as part of a DA. At this point no changes are recommended. It is noted that there are no restrictions on having residential accommodation in the Harbour Triangle precinct under the current B4 zoning.</p>

No.	Submitter	Summary of Submission	Council Comment
		<p>encourage development to use the FSR and generate more permeable development with vistas and sightlines to the harbour between buildings from the ground plane upwards. This is far more equitable than placing a blanket height plane benefitting only the top floor of the next row of buildings behind the subject development.</p> <p>We encourage council consider alternate controls along these lines and relax height plane restrictions.</p> <p>Landscape</p> <ul style="list-style-type: none"> Do not believe the application of 25% of the site area being deep soil planting is appropriate in the commercial core or specifically the Harbour Triangle precinct. Suggest excluding the HTP from this obligation. <p>The public domain</p> <ul style="list-style-type: none"> Note the exclusion of permanent residential accommodation in the Harbour Triangle Precinct and request this is reconsidered. Council should develop a CBD beautification masterplan for the public domain in the HTP such that coordinated interface between council assets and private development is maintained. We do not believe this to be the responsibility of private landowners. <p>Land adjoining the foreshore</p> <ul style="list-style-type: none"> Relevant sections of the DCP should be amended to reflect the council proposed foreshore walkway realignment as issued to the landowners. 	<p>Noted. Issue is outside the scope of the current DCP amendment but can be reviewed as part of the future housekeeping amendment.</p> <p>Recommendation: Review the appropriateness of the requirement for 25% of site area to be deep soil planting in the commercial core precinct (specifically the Harbour Triangle sub-precinct)</p> <p>There are no restrictions on having permanent residential accommodation in the Harbour Triangle Precinct (HTP) in the LEP or DCP. The current B4 zoning permits a range of permanent residential accommodation types and there are no restrictions on ground floor uses in the B4 zone. (It is assumed the submission is referring to Clause 7.14 of the LEP 'Permanent occupation in mixed use developments' however clause 7.14 does not apply to the HTP sites.)</p> <p>Noted and generally agreed. Council could consider developing an Ulladulla CBD beautification masterplan for the public domain, subject to funding/resources and other priorities around the City.</p> <p>Noted. Any changes to the walkway as part of the current foreshore walkway project are minor and can be updated once plans have reached detailed design stage and this has been added to the scope for the future housekeeping amendment.</p>

No.	Submitter	Summary of Submission	Council Comment
		<ul style="list-style-type: none"> We believe a rationalization of the public access requirements through private land is required. The Fitch land is unfairly encumbered with many site specific controls which severely limit viable development of over 50% of the Harbour Triangle Precinct. 	<p>Noted. The suggested changes are beyond the scope of the proposed housekeeping amendments and would best be considered as part of a holistic review of the planning controls applying to the precinct. It is noted however that the DCP is a guide and there is the ability to consider the controls flexibly if alternate solutions are proposed as part of a DA. At this point no changes are recommended.</p>
INTERNAL SUBMISSIONS – SHOALHAVEN CITY COUNCIL			
9	Development Department	Services <ul style="list-style-type: none"> The reference to the pathway which is in the drainage reserve from North St to Church St Ulladulla in the maps should be removed as a recent DA for land on Church St that adjoins the reserve undertook flood modelling that indicated that it was not suitable for a future pedestrian pathway. 	<p>Noted. The reference to pathway can be deleted from Maps 2, 3 and 6 as part of the current DCP amendment.</p> <p>Recommendation: delete references to the pathway in the drainage reserve from North St to Church St from Maps 2, 3 and 6</p>

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POST EXHIBITION CHANGES ARE SHOWN HIGHLIGHTED IN YELLOW

Amendment history			
Version Number	Date Adopted by Council	Commencement Date	Amendment Type
1	14 October 2014	22 October 2014	New
2	23 June 2015	1 July 2015	Amendment
3			Amendment

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1 Purpose

The purpose of this chapter is to encourage and facilitate the vision for the Town Centre and harbour of Ulladulla as a vibrant mixed use shopping centre based on a maritime theme and focusing on its major asset – the harbour. It will have a diversity of business and quality residential and holiday apartments and convenient shopping which creates a place for people to work, live, meet, shop and enjoy life in an attractive, accessible, safe and sustainable environment.

2 Application

This Chapter applies to land generally bound by Parson Street, St Vincent Street, Church Street, the Harbour and Burrill Street South as shown in Figure 1 below.



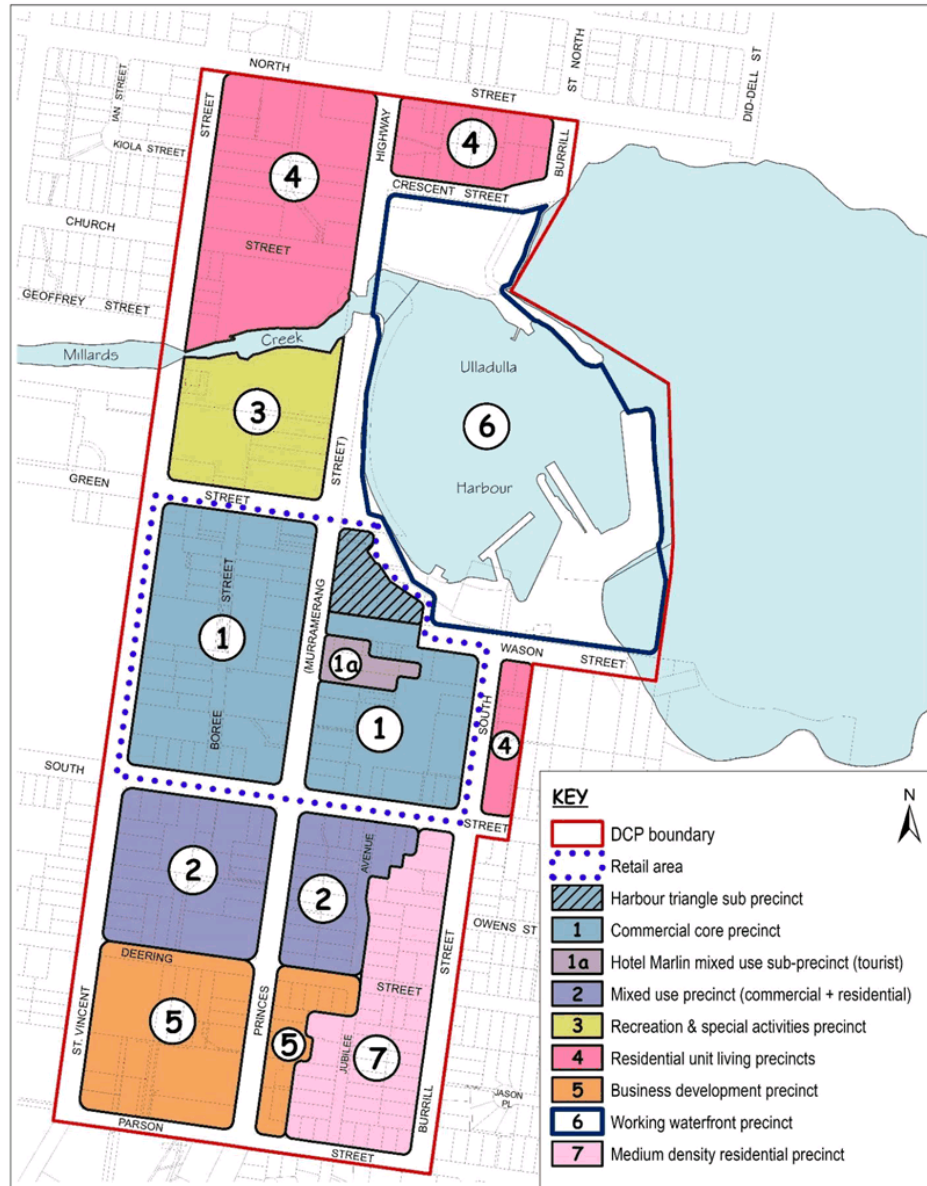
Figure 1: Subject Land Map

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3 Context

This chapter identifies seven land use precincts as shown on Map 1 below. Development within these precincts will need to comply with the following requirements.



Map 1: Land Use Precincts

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3.1 Retail Area

The retail area includes the commercial core precinct and the Marlin Hotel Tourist Accommodation sub precinct.

Development within the precinct should:

- Reinforce the retail area as the predominant shopping centre for the district and no major retail facility, including supermarkets, discount department stores, department stores and the like, will be permitted outside the retail area.
- Reinforce the harbour as an important asset to the town.
- New development should relate positively to the Harbour by way of quality building designs and permeability within the developments which allow for view sharing and ease of movement to principal activity nodes e.g. public car parks, civic open space, café precincts, etc.

3.1.1 Precinct 1: Commercial Core

The commercial core precinct identified on Map 1 is to be developed as a lively mixed retail use precinct with a clear identity shaped by the character of its maritime history, buildings, streets and public spaces and its location on the foreshores of Ulladulla Harbour. It may allow opportunities for tourist accommodation about the first storey.

Development within the precinct should:

- Not reduce opportunities for future retail floor space in the commercial core through incompatible land use or development.
- Only have commercial or retail development on the ground floor of developments and demonstrate compliance with Clause 7.16 in Shoalhaven LEP 2014.
- Sites with an area of less than 1600m² will be limited to a floor space ratio (FSR) of 1.0:1 to encourage amalgamation of lots and larger retail modules.
- Encourage opportunities for seniors living in the retail area. A minimum of 25% of the total number of residential units and apartments within any one development are to be designed for adaptable housing.

Note: Tourist and visitor accommodation may include temporary and short term accommodation such as hotel and motel accommodation, serviced apartments, backpackers' accommodation and the like (also see Chapter G15: Tourist and Visitor Accommodation).

3.1.2 Precinct 1a: Marlin Hotel accommodation sub-precinct

The Marlin Hotel Tourist Accommodation Sub Precinct includes the land on which the Marlin Hotel is situated being Lots A & B DP 155990, Lot 1 DP 743246 and Lots 11 & 12 DP 759018.

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Development in this precinct:

- May include a combination of tourist accommodation and permanently occupied residential accommodation. The number of permanently occupied residential units will not exceed 50% of the total number of units on the site.
- Any future development would need to maintain the historical significance of the existing Marlin Hotel.
- Tourist accommodation may include temporary and short term accommodation such as hotel and motel accommodation, serviced apartments, backpackers' accommodation and the like (*also see Chapter G15 – Tourist and Visitor Accommodation*).
- Compatible retail/commercial uses may include restaurants and cafes, gift shops, galleries, personal services and the like.

3.2 Precinct 2: Mixed Use (Commercial Residential)

Mixed use development encourages opportunities for residential living within or in close proximity to the commercial core and good mixed use involves the provisions of compatible land uses in a balanced way. Physically the precinct should include vertical and horizontal mix of uses. It may include higher density tourist and residential accommodation as well as commercial uses in any storey. Located on the southern side of the town centre, this area historically includes fringe commercial development associated with the commercial core (mixed use density residential/commercial precincts are shown as Precinct 2 on Map 1).

Development within the precinct should:

- Allow for a combination of tourist apartments, residential units and commercial businesses in any storey. Tourist accommodation may include temporary and short term accommodation such as hotel and motel accommodation, serviced apartments, backpackers' accommodation and the like (*also see Chapter G15 – Tourist and Visitor Accommodation*).
- Compatible retail/commercial uses including restaurants and cafes, gift shops, galleries, personal services, leisure and indoor recreational facilities and the like.
- Ensure that residential uses do not compromise the role of the retail area by limiting opportunities for larger type retail modules or by placing undue controls on trading hours or practice.
- Ensure that no single use dominates other uses.
- Demonstrate the compatibility of the proposed uses within a mixed use development context with specific reference to adjoining and adjacent development such as leisure and entertainment uses.

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3.3 Precinct 3: Recreation and Special Activities

This precinct includes Millards Creek Park, the Civic Centre, the bowling club and the Anglican Church. It acts as the Northern Gateway to the Town Centre. Future land use needs to reinforce the sense of arrival from the north by maintaining quality open space between the harbour foreshores and the civic precinct. It is strategically located to be accessible to the retail area and is one of the few large open spaces in the Ulladulla Town Centre that is capable of holding major festivals and events. There is also provision for long stay car parking, tourist coach parking and comfort facilities.

Development in this precinct should:

- Maintain the relationship of the civic precinct with the Ulladulla Harbour and reinforce the sense of arrival to the town centre.
- Streetscape and landscape works are to reinforce the maritime character of Ulladulla.
- Building and landscape designs need to aspire to the architectural standards that reflect and promote the vision for Ulladulla.
- Reduce the amount of surface level car parks within **public open space** areas by encouraging multi-level parking facilities that are suitable for both public and private land use activities and that cater predominately for long stay patrons.
- Ensure that the visual integrity is maintained between the harbour foreshore and Precinct 3. No permanent **structures** apart from directional signage, street furniture, public art elements and the like are to be located within the **view** lines of the civic precinct and the harbour foreshore or the Millards Creek environmental corridor.
- Makes provision for a future festival park/civic precinct with high quality civic spaces linked to the Ulladulla Harbour foreshore.
- Encourage tourist accommodation uses in conjunction with private recreation facilities where additional quality multi-purpose public facilities (Civic Centre/Tourist Information Centre) are to be retained in public ownership.
- Promote the environmental attributes of Millards Creek and recognise its contribution to the northern gateway to the town centre. adverse environmental impacts to Millards Creek are to be avoided and **development** proposals are to comply with the Millards Creek Plan of Management'.

3.4 Precinct 4: Higher Density Residential

The purpose of this precinct is to encourage permanent residential apartment living within and in close proximity to the retail area. This will increase activity levels in the Town Centre outside of business hours and improve the quality of the urban environment.

There are 3 areas of residential unit living that make up Precinct 4 in this Chapter.

Development within this precinct should:

- Include a range of apartment types and be **adaptable** to a range of uses, particularly an aging population. Generally 25% of all units in any one **development** should be designed for **adaptable** housing.

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- Have regard to existing and potential **development** opportunities on adjoining land – particularly in regards to achieving **view** sharing.

Note: The site specific higher density residential provisions contained in State Environmental Planning Policy No.65, the Apartment Design Guide will override any Council policies for medium density residential **development**.

3.5 Precinct 5: Business Development (Bulky Goods)

Precinct 5 is subdivided into large parcels and is well suited for bulky goods retailing. The area will become increasingly important to accommodate support activities for the retail area. Minimal public infrastructure is envisaged and most **developments** will need to provide what infrastructure they require themselves i.e. **car parking**, landscaping and the like on site or shared where possible with adjoining **owners**.

Development within this precinct should:

- Be uses that are normally located on the fringe of the **central business district** and which requires large sites for storage or display. Subdivision will generally be discouraged unless it relates to an approved **development** and shows how infrastructure requirements can be met.
- Promote a high quality public realm and maintains an appropriate character for the precinct. In this regard, **development** is to:
- Be visually attractive and have an active street interface and shopfront environment avoiding blank walls.
- Contribute to pedestrian amenity and **scale** of the town and through appropriately scaled signs and **advertising**.
- Maintain the character of existing streetscapes by avoiding excessive **setbacks** to the street frontage (also see Section 5.1.2 Building Setback of this chapter).
- Provide a continuous sheltered and attractive pedestrian environment.
- Provide landscaping and shade to at grade **car parks**.
- To minimise the need to provide publicly funded infrastructure and to promote shared use of privately funded facilities, new **developments** are encouraged to design future infrastructure so that it can be shared, particularly by adjoining users.

3.6 Precinct 6: Working Waterfront

Precinct 6 generally includes all the land fronting the harbour, currently zoned special purposes and public recreation. The Department of Lands has land use proposals for the area under their control. The harbour is strategically important to the commercial viability of the centre.

Development in this precinct should:

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- Maintain the viability of the harbour as an economic resource for the town. A variety of uses including recreational boating and industrial uses associated with fishing and related maritime activities and compatible commercial uses including boating and fishing related retail, office and commercial outlets including restaurants, cafes and the like.
- Establish opportunities for the local **community** and tourists alike to access the harbour foreshores in a way that is safe, convenient and accessible and develop a pedestrian network that provides access generally in accordance with the Ulladulla Harbour Landscape Master Plan.
- Protect existing and future visual linkages from the Civic domain to the Harbour as shown on Map 2, so that such **views** will be retained.
- Protects and enhances the existing passive nature of public recreation opportunities around the foreshore of the harbour. Existing areas of passive recreation are to be retained. Additional areas requiring an activity interface for recreation or operational boating usage will only be permitted in accordance with a publicly advertised and adopted Harbour Management Plan.

4 Objectives

The **objectives** are to:

4.1 Economic

- i. Provide appropriate controls and incentives to attract sustainable investment in the Ulladulla Town Centre and Harbour.
- ii. Encourage harbour related activities that stimulates new retail, tourist, leisure, commercial, and residential activities.
- iii. Encourage the efficient use of land and ensure that the necessary infrastructure is provided to facilitate sustainable growth.
- iv. Ensure an experience for tourists and residents generates value in economic and social terms.
- v. Maintain and promote Ulladulla as a major town centre in the hierarchy of business centres in Shoalhaven.

4.2 Environment

- i. Encourage **ecologically sustainable development**.
- ii. Sustain or enhance character in the townscape and landscape by responding to and reinforcing, where appropriate, locally distinctive patterns and forms of **development**, landscape, topography and harbour setting.
- iii. Encourage reasonable acoustic amenity for residents.
- iv. Address the likely impacts of climate change such as increased temperatures and less rainfall through appropriate building and landscape design features and sensitive urban **stormwater** measures.
- v. Protect and manage the cultural heritage of the area.
- vi. Encourage the use of roof tops to increase the amount of private open space within **mixed use developments**.

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4.3 Built Form and Character

- i. Establish a clear identity and maritime image for the Ulladulla Town Centre as a working port, tourist centre and service centre incorporating diverse residential activities and an enhanced public domain.
- ii. Development of linkages between the town and the harbour.
- iii. Establish an appropriate **scale** of **development** that is in proportion with projected growth and demand for infrastructure.
- iv. Control overshadowing of public spaces.
- v. Providing improvements to streetscapes.
- vi. Foster the creation of a sense of place and sustainable **community** through the promotion of a mix of land use and activities.
- vii. Foster and reinforce the town's potential competitive advantage centred on its highway and harbour context, coastal facilities and natural environment.

4.4 Accessibility

- i. Manage the traffic and parking for the benefit of visitors, residents and businesses, ensuring that both elements are functional.
- ii. Create a compact and accessible retail core which promotes diverse modes of travel and discourages major retail **development** outside this retail core.
- iii. Encourage residential apartments, bulky goods and fringe commercial uses to the south of South Street.
- iv. Provide for car parking within walking distance of the retail focal point (corner Wason Street and Princes Highway).
- v. Promote a public transport focus within the retail core.
- vi. Minimise pedestrian conflict by ensuring traffic volumes are limited to two lanes of traffic in any street, identifying a route for a highway bypass away from the business centre, and maintaining and improving off-street service access.

4.5 Urban Design/Lifestyle

- i. Encourage a well-designed, safe and active public domain that contributes to the wellbeing of the **community** and visitors and promotes an overall maritime theme.
- ii. Improve the quality and safety/accessibility of public places and their **views** to the harbour and other visual attractors.
- iii. Promote a quality built environment which is responsive to **community** values.

4.6 Employment

- i. Promote employment opportunities in the Ulladulla Town Centre and harbour relevant to the character and desired land use activities.

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5 Controls

The following **development** guidelines apply to any **development** under this Chapter.

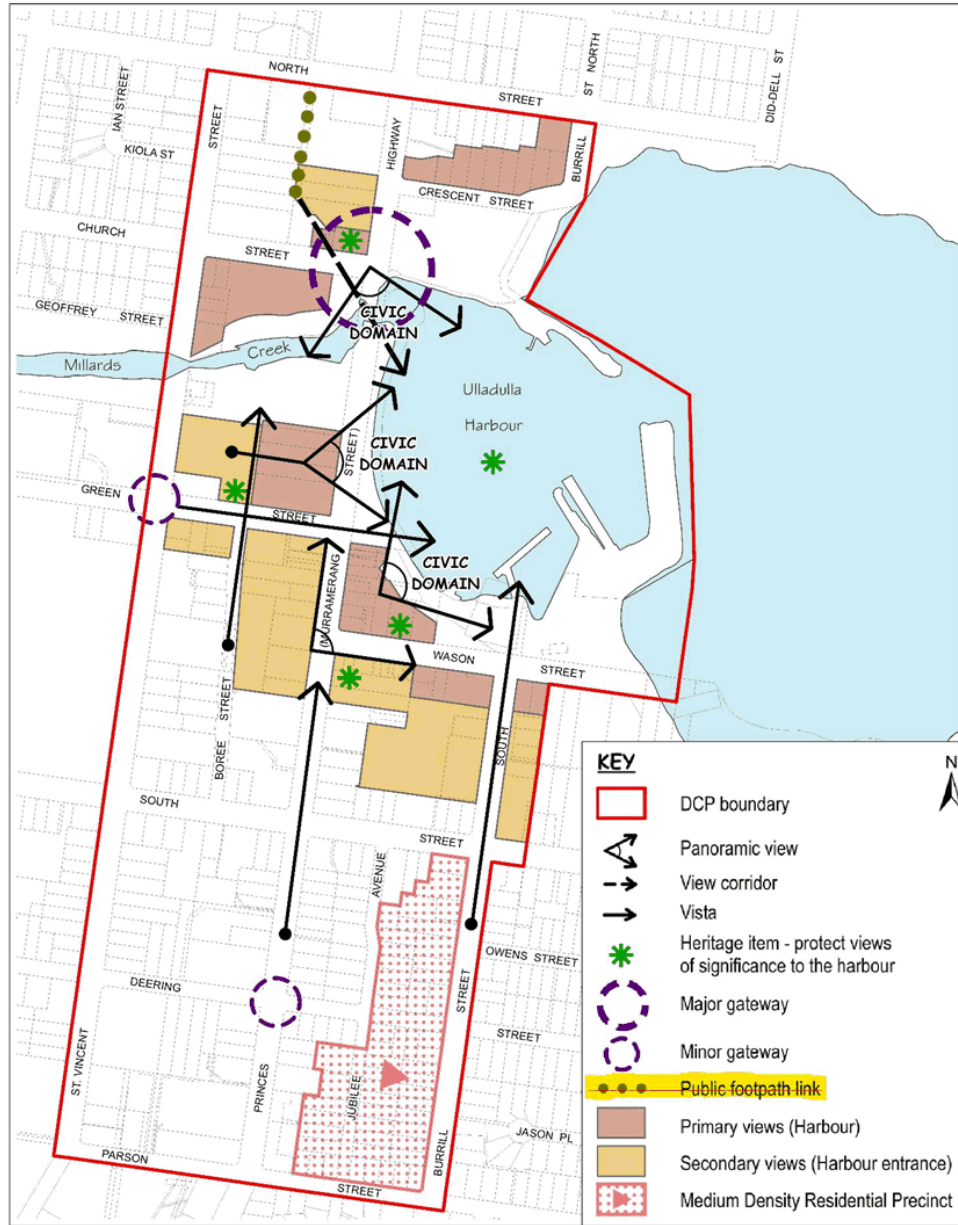
5.1 Subdivision

Any subdivision of land within the boundary of this Chapter is subject to the provisions of this plan.

Performance Criteria	Acceptable Solutions
P1 Land subdivision is to ensure that orderly development in the Town Centre is carried out to improve permeability and connectivity.	A1.1 As a general principle, you are encouraged to consolidate land under 2000m ² to create larger development parcels.
	A1.2 If you propose to subdivide land, including strata or community title subdivision , into parcels less than 2000m ² , you will need to demonstrate how the subdivision realises the objectives of this Chapter.
	A1.3 You must comply with <i>Chapter G11: Subdivision of Land</i>

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5.1.1 Important views and vistas (see Map 2)



Map 2: View Analysis

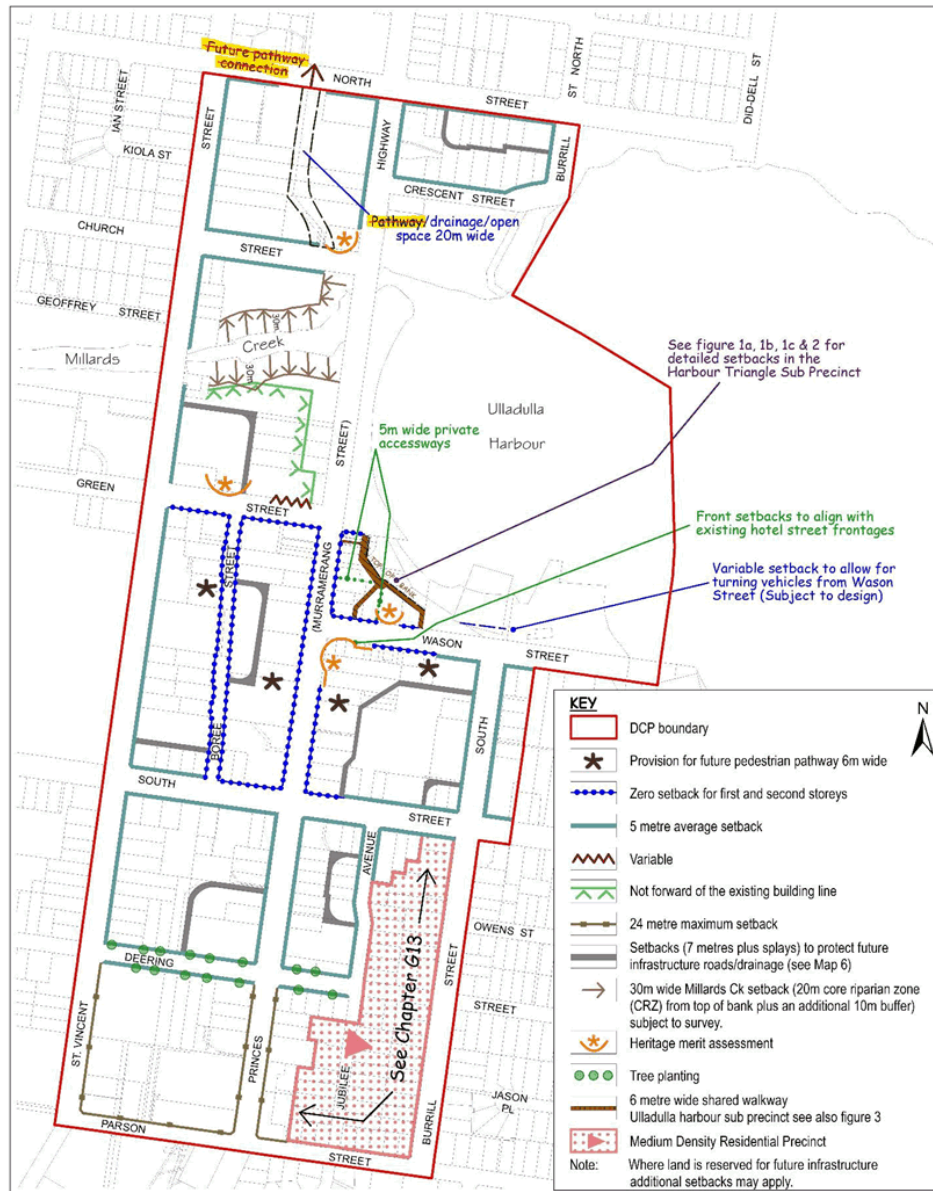
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Performance Criteria	Acceptable Solutions
P2 Maintain important views and vistas .	<p>A2.1 Views along public streets to the water and distant surrounding landscape are protected and embellished through framework planting and the like.</p> <p>A2.2 Any reduction in views from the public domain or private property is not to be severe or devastating based on the following NSW Land & Environment Court Planning Principles:</p> <ul style="list-style-type: none"> • Views - General principles. • Views - Impact on public domain views. <p>Note: Where compliance with the objective, performance criteria and acceptable solution is achieved, the expectation of there being no change to existing views is considered unreasonable.</p>
P3 Development will contribute to the careful management and retention of strategic view corridors and filtered views of the coast, harbour and treed backdrop.	<p>A3.1 You must consider opportunities to reinforce views to the harbour and mountains to the west as part of your development proposal.</p> <p>A3.2 You must consider the concept of view sharing in the siting and design of your development.</p> <p>A3.3 You must integrate large buildings with the scale of the overall built environment.</p> <p>A3.4 Your development should generally step buildings down the slope in line with the relevant contours.</p> <p>A3.5 Your development is to reinforce major or minor gateways as identified on Map 2 through high quality architectural and landscape design.</p> <p>A3.6 Development in the working harbour shall protect existing and future visual linkages from the Civic domain to the harbour as shown on Map 2.</p>

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5.1.2 Building setbacks (see Map 3)



Map 3: Setbacks

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Performance Criteria	Acceptable Solutions
P4 Principal setbacks shall enhance streetscape character, street, role and function. All developments are to consider impacts on view corridors.	A4.1 Your development must comply with the setbacks in Table 1 below and Map 3.

Note:

1. Rooftop areas resulting from setbacks may be used for landscaping and private or open space.
2. Balconies adjoining street frontage and integrated with the design of the building may encroach over the building setback line by no more than 450mm. Open balconies fronting harbour walkways may encroach over the building setback line by a max of 2m.
3. Sun shade devices and the like integrated with the development may encroach over the setback line by no more than 450mm.

Table 1: Setbacks

Land Use Precinct	Storey	Setback
Commercial Core Precinct 1 – Retail commercial office and residential above 1 st storey only	1 st Storey retail	Zero setback
	2 nd Storey	Zero setback from the principal street 5 metres from a service laneway
	Above 2 nd Storey	5 metre setback from street frontage or at a distance which cannot be seen from opposite side of the street whichever is greater
Harbour Triangle Sub Precinct (see Map 1)	1 st and 2 nd Storey for 86-94 Princes Highway	Min 8 – 12m (average 10m) setback as measured from the top of the bank; top of the bank as defined by the plan of acquisition.
	Above 2 nd Storey	5 metre setback from the frontage to the Harbour
	1 st and 2 nd storey 23-25 Wason Street	Min 4m setbacks as measured from the top of the bank
	Above 2 nd Storey	5 metre setback from the frontage to the Harbour
	1 st & 2 nd Storey Lot 51 DP 82822	Min 4m setbacks as measured from the top of the bank
	Above 2 nd Storey	5 metre setback from the frontage to the Harbour and 5 metre setback from Wason street or at a distance

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		which cannot be seen from opposite side of the street whichever is greater
Marlin Hotel Sub Precinct 1(a)	1-2 Storeys	To align with existing hotel setbacks to both street frontages
	Above two storeys	Setbacks to comply with a Conservation Management Plan for the Hotel
Residential Unit Living Precinct 4.	1 st Storey	Average 5 metre setback to principal street address
	2 nd storey	Average 5 metre setback to principal street address
	Above 2 nd Storey	5 metre setback from street frontage or at a distance which cannot be seen from opposite side of the street whichever is greater
Drainage corridor open space network Church to North street	N/A	A 5 metre setback from the rear boundary of properties fronting St Vincent Street between Church and North Streets and a 15 metre setback from the rear property boundary for properties fronting the Princes Highway. Lot 12 DP 565744 and Lot 2 DP 831274 Church street will have a variable setback consistent with an overall width of 20m (see Map 4).
Millards Creek	N/A	30m (20m core riparian zone (CRZ) from top of bank plus an additional 10m buffer) subject to survey.
Business Development Precinct 5.	N/A	Preferably setbacks should relate to the provision of visible onsite car parking on the street frontage but will be limited to a depth of 24m.
	N/A	A 5m setback to either side of Deering Street to allow for major ridge top tree planting.
Recreation and Special Activities Precinct 3 (Civic Centre site)	N/A	No permanent structures/buildings to be forward of the existing Civic Centre building. 5 metre setback to St Vincent Street.
Lot 2 DP 759018 Cnr. Princes Highway and Church Street	N/A	30 metre wide as measured along the southern boundary of Church Street from the corner of the Princes Highway being the western boundary of Lot 2 DP 759018 Sec 6A.
NE Corner Princes Highway and Wason Street	N/A	Variable setback: This is a prominent corner located in the retail focal point of the CBD and identifies an important entry point to the elevated Harbour walkway/shared way 'prow' or focal point on the walkway. Setbacks to Wason Street and the Princes Highway are to be balanced to achieve a high quality urban design outcome.
General See Map 6	N/A	Building setbacks to allow for future infrastructure 6m in width and key pedestrian links (service roads)

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5.1.3 Building height and floor space ratios (FSR)

The maximum height for any **development** in the area to which this Chapter applies is 5 **storeys** and 17 metres (as per the *Shoalhaven Local Environmental Plan (SLEP) 2014* Height of Buildings Map). This height excludes architectural roof features (see Clause 5.6 of *SLEP 2014*). The maximum **Floor Space Ratio (FSR)** is 2.0:1 (as per the *SLEP 2014* Floor Space Ratio Map).

The Ulladulla Harbour Triangle Sub Precinct is subject to a variable height plane and provides for a maximum of two **storeys** and 7.5m in height as measured from the top of kerb (TOK) in Wason Street and the Princes Highway adjoining the **footpath** and extending to a horizontal plane towards the Harbour. Height adjacent to the Harbour may be up to 3 **storeys** but will be subject to the slope of the land. Any **storeys** about the 2nd **storey** will be setback as detailed in Table 1.

To achieve implementation of the elevated walkway concept adjoining the harbour, an additional **storey** may be permitted on Lot 51 DP 828221 subject to the **development** site area being greater than 1600m².

Floor space ratios in the B5 Business Development zoned areas on the fringe of the commercial core are lower to encourage on site **car parking**.

The floor space ratio for Precinct 3: Recreational and Special Activities and the land to the north of Millard's Creek is less than the retail area to encourage a greater amount of open space at the northern gateway to the Town Centre.

Note: All heights are measured from the **natural ground level** except for the Harbour Triangle Sub Precinct (see above).

Performance Criteria		Acceptable Solutions	
P5.1	New buildings are appropriately scaled in relation to street widths and desired future character as detailed the Built Form and Character objectives at the start of this chapter.	A5.1	Building heights and FSRs are in accordance with the <i>SLEP 2014</i> Height of Building and Floor Space Ratio maps, Table 2 and Maps 4 & 5.
P5.2	Proposed building heights are designed to protect the amenity of the public and private open space.		
P6	Reduces the impact to the urban environment by minimising the apparent size of buildings when viewed from street level.	A6.1	Compliance with building setbacks as described in Table 1.

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P7	Urban development is at an appropriate scale which is in keeping with the surrounding natural features.	A7.1	Locating taller buildings on key corner site to mark the gateway to the retail centre.
P8	Development limits the effects of overshadowing and ensures that solar access is maintained to public open spaces and nearby residences.	A8.1	Ensure high quality residential amenity with good solar access and natural ventilation where development adjoins public open spaces and residential development .

Table 2: Building Heights and Floor Space Ratios

Land use Precinct (see Map 1)	Max Building Height		Max Floor Space Ratio (FSR)	
	Storeys	Metres	Min lot size m ²	Max FSR
Commercial Core Precinct 1.	2-5	7.5m, 11m, 14m, 17m	< 1600 1600-2000 + Orphan sites (see Dictionary) >2000	1.0:1 1.8:1 2.0:1
Ulladulla Harbour triangle sub-precinct	Two storeys and variable (see instrument)	7.5 m as measured from Wason Street or the Princes Highway top of kerb and horizontal plane	Up to 1600 >1600	1.0:1 1.5:1
Ulladulla Harbour triangle precinct Lot 51 DP828221 only (min site area 1600m ²)	Three to four storeys depending on slope of the natural surface	11 m as measured from Wason Street top of kerb & horizontal plane	>1600	1.5:1
Hotel Marlin Mixed Use Precinct (Tourist)	Three storeys	11m	As per commercial core	As per commercial core
Mixed use Precinct 2. (commercial + residential)	Three and Four	11 and 14	No minimum area	1.5:1
Recreation and Special activities Precinct 3.	Three and Four	11 and 14	No minimum area	1.5:1

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Residential unit living Precinct 4.	2-4	8m, 11m, 14m	No minimum area	1.0:1 1.5:1
Lots 50-54 DP 263391, Wason Street and Burrill Street South	Three	11	No minimum area	1.5:1
Lot 1 DP 529128, South Street and Burrill Street South	Two	8	No minimum area	1.0:1
Business development Precinct (5)	Three	11	No minimum area	1.5:1
Working waterfront Precinct (6)	Two	7.5	No minimum area	1.0:1
Medium density residential Precinct (7) (west of Burrill Street South)	Three	11	No minimum area	1.0:1

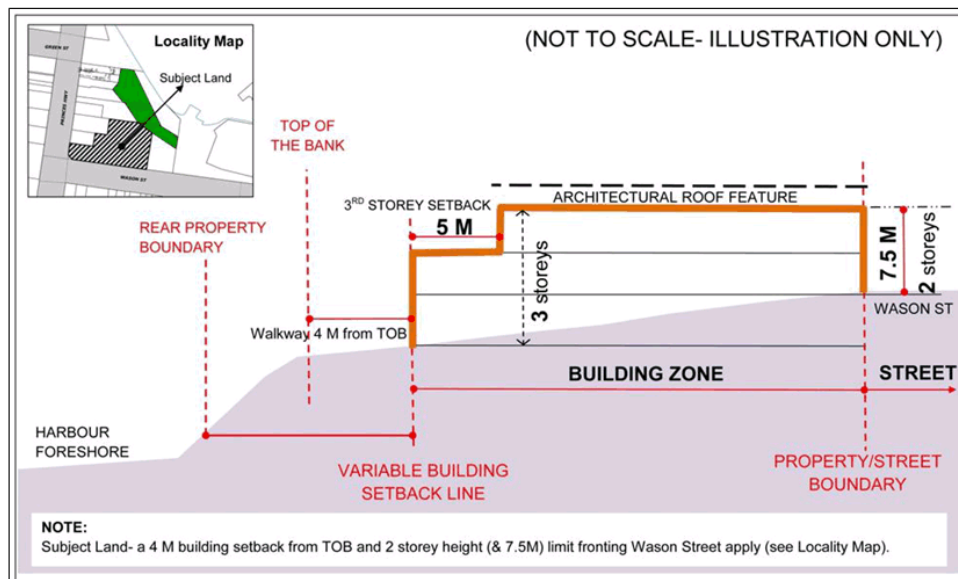


Figure 2: Ulladulla Harbour Triangle Zone Building Height Control

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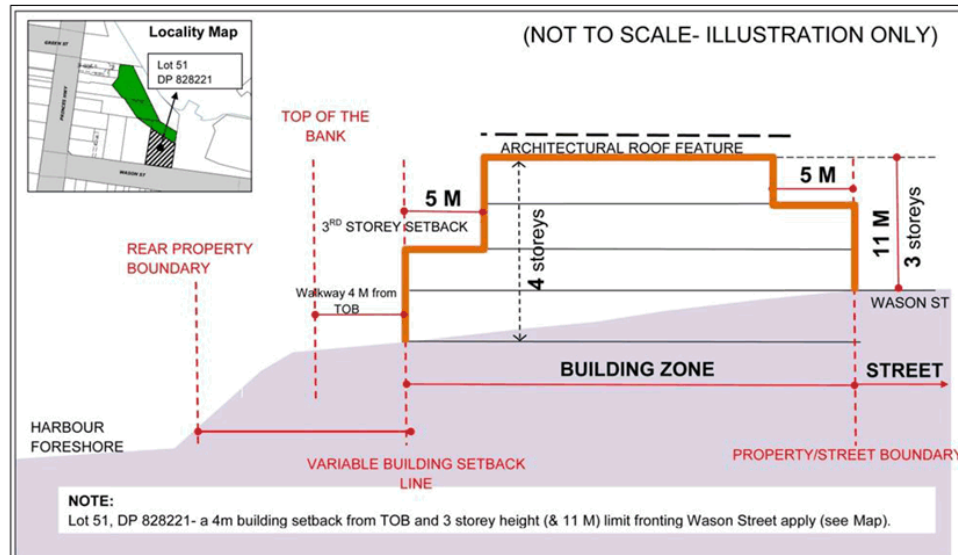


Figure 3: Ulladulla Harbour Triangle Zone Building Height Control (With Height Incentive): Lot 51 DP 828221 Only

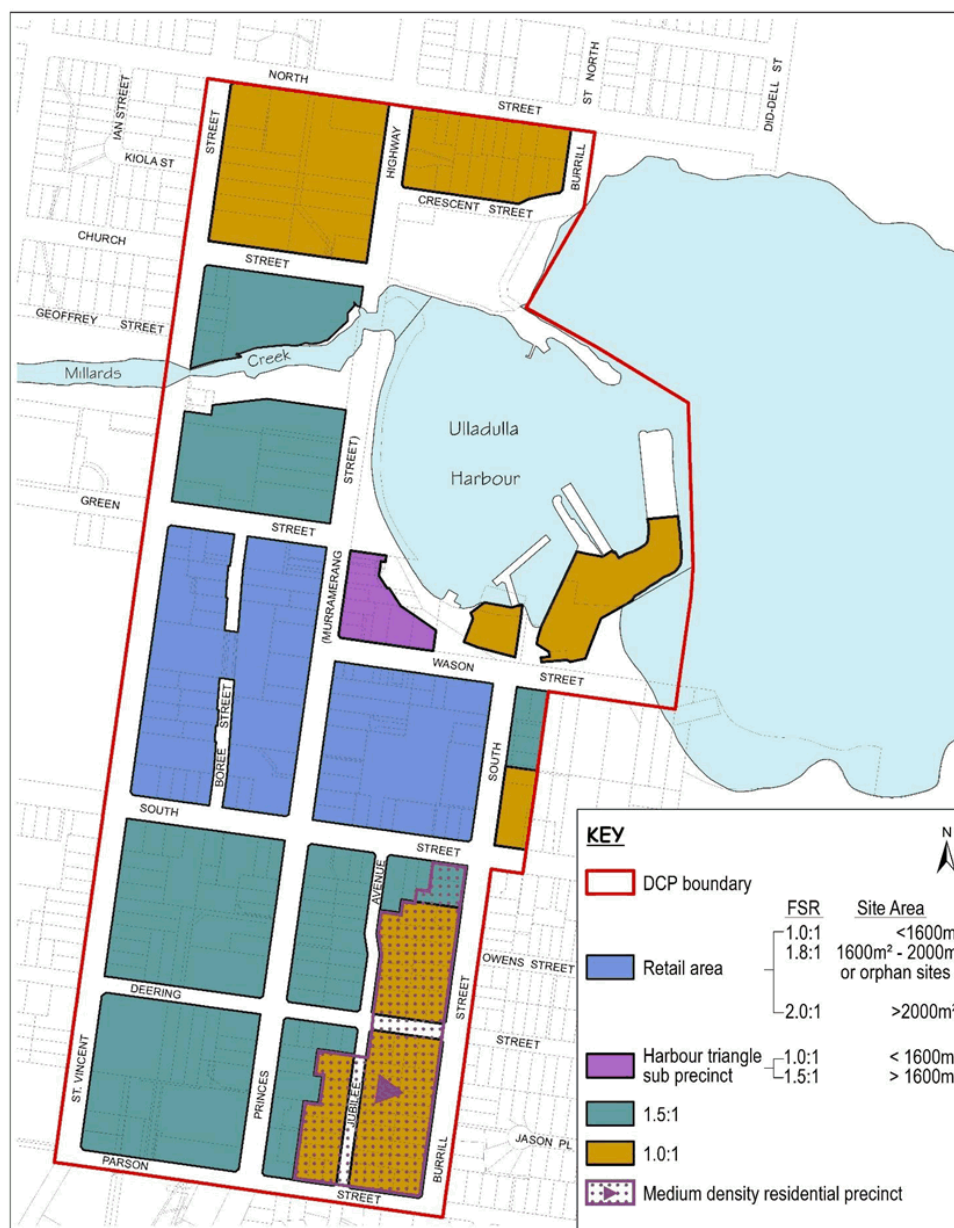
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Map 5: Floor Space Ratio

CL22.55 - Attachment 2

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5.1.4 Landscape

Performance Criteria	Acceptable Solutions
<p>P9 Landscaping shall provide a unifying framework and context for the revitalisation of the Town Centre. It will clearly define the street edge or space as well as creating a strong visual link with the public domain.</p>	<p>A9.1 Your development application must include a landscape plan that addresses:</p> <ul style="list-style-type: none"> Any adopted streetscape master plans. General planting schemes within the site and indicative species. Visual penetration into the site and embellishment of views. Hard surface materials within the site including paving, terracing, ornaments, street furniture and the like. Landscape management/maintenance strategies for short and long term. Protection and treatment of vegetation proposed to be retained or established on site.
<p>P10 Development should aspire to the highest standards in landscape design construction and maintenance, and exhibit themes that reflect and promote the achievement of the vision for the Town.</p>	<p>A10.1 You are to provide landscaping that is appropriately scaled and located relative to both the building bulk and incorporating existing vegetation where desirable or practical.</p> <p>A10.2 If you are planting adjacent to intersections and driveways, you must select vegetation that has a mature height of less than 900mm high to maintain safe sightlines.</p> <p>A10.3 Streetscape trees shall be tall branching species and be of a mature size (calliper width of 600mm minimum) and adequately staked to ensure survival from initial planting stage.</p> <p>A10.4 Ensure works are durable and resistant to damage.</p> <p>A10.5 If your development is a new development in Deering Street, it may need to be setback to accommodate future street tree planting of tall species (minimum mature height 15m) to</p>

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		accentuate the ridgeline e.g. Norfolk Island Pines.
P11	Landscaping should promote the latest ESD principles, improve air quality and improve microclimate and solar performance	A11.1 If providing at grade car parking spaces, you must provide shade trees.

5.1.5 The public domain

The creation of a distinct identity for the Ulladulla Town Centre is an important urban design principle of this Chapter. In doing so the Town Centre will be an attractive place to visit and stay longer, particularly into the evening and night time.

It is proposed to achieve this through the use of:

- A co-ordinated palette of paving, signage, lighting, street furniture and street planting.
- The use of public art in streetscape design.
- The use of banners, seasonal flowers and other elements to celebrate different events and activities.
- The creation of town activity nodes in each of the two principle retail blocks.
- A safer pedestrian environment with high amenity created by:
 - Active uses fronting streets and public places.
 - Widened paved footpaths for outdoor eating.
 - Continuous awnings where possible that incorporate pedestrian lighting.
 - The use of landscaping adjacent to the kerb to buffer traffic impacts.
- The creation of an attractive night time image through the use of distinctive street lighting, façade and shop window lighting, special effects and special events lighting.
- The undergrounding or bundling behind the awnings of overhead power lines.

The need to upgrade utility services, electricity, lighting, telephone, water, sewerage and drainage to service the needs of a diverse and increasingly residential based town centre will require careful planning and efficient use of resources. As these services will be provided at the time of development, streetscape masterplans will need to be considered at an early stage.

Performance Criteria	Acceptable Solutions
P12 Encourage street beautification measures in conjunction with development and improve the visual appearance of the Town Centre.	<p>A12.1 Where there is a relevant streetscape master plan, you should incorporate the relevant components of the master plan into your development application.</p> <p>A12.2 If your development is in the retail area, you are to underground utility services i.e. electricity, telecommunications, water and sewer.</p> <p>A12.3 You are to keep clear any tree planting reservation adjoining existing kerb lines</p>

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		of any utility services apart from street lighting.
	A12.4	Tree planning in the centre median south of Green Street and north of Church Street on the Princes Highway should occur following any highway bypass of the town.
	A12.5	Significant tree planning should be carried out on both sides of the St Vincent Street road reserve in locations which minimise impacts to resident's views .
P13	Streetscape and landscape works within public streets and places should be co-ordinated to reinforce the character of the Town and ensure the development of attractive, high quality, memorable and comfortable public places.	<p>A13.1 You should aspire to the highest standards in landscape design, construction and maintenance and exhibit themes that reinforce the maritime character of the Town Centre.</p> <p>A13.2 Future works in the public domain should relate to any adopted Urban Design Concept or master plan and paving and street planting should be carried out in accordance with Council's Landscaping Design Guidelines.</p> <p>A13.3 When planting within the retail area, you must maintain the following existing themes:</p> <ul style="list-style-type: none"> • Lophostemon conferta (Brushbox) on major thoroughfares interspersed with native or exotic shrubs. • Ground covers in garden beds. • Where appropriate, planting of annuals to give added colour.
P14	<p>Ulladulla Harbour Walkway Development in the Harbour Triangle Precinct integrates with the Harbour Walkway and future shared way.</p> <p>The walkway will primarily be used by pedestrians but a section may be a shared way and will be designed for use by light service vehicles, emergency access, cyclist, maintenance vehicles and the like. The shared way would be subject to the completion of a servicing management plan. Servicing from the highway will be discouraged where possible.</p>	<p>A14.1 You are to incorporate an open dining area adjoining the walkway/shared way. Public access must be guaranteed. Specifically:</p> <ul style="list-style-type: none"> • Your development should provide adequate at grade areas adjoining the pedestrian movement corridor to cater for outdoor sitting, cafes and other compatible activities. In this regard, development will be required to be set back a min 8-12m (average 10m) from the top of the bank facing the Harbour (see Figure 2). This area will be designed to allow a future shared way for light servicing,

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emergency access, maintenance vehicles and the like.

- The width of the pedestrian walkway shall be a minimum 3-4m (see Figure 2). The walkway component maybe partly cantilevered from the top of the bank.
- The width of the shared way from the top of the bank facing the Harbour will be 6m wide.
- The width of the shared way from the "Prow" on the walkway (see Figure 3) to Wason St will be 6m wide.
- Additional pedestrian thoroughfares (private) shall be provided to the walkway generally as shown on Figure 3 and Map 3.

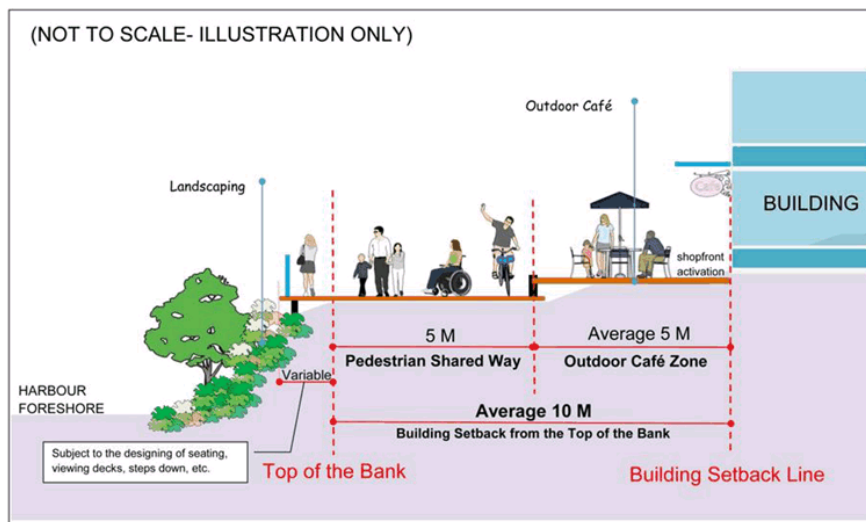
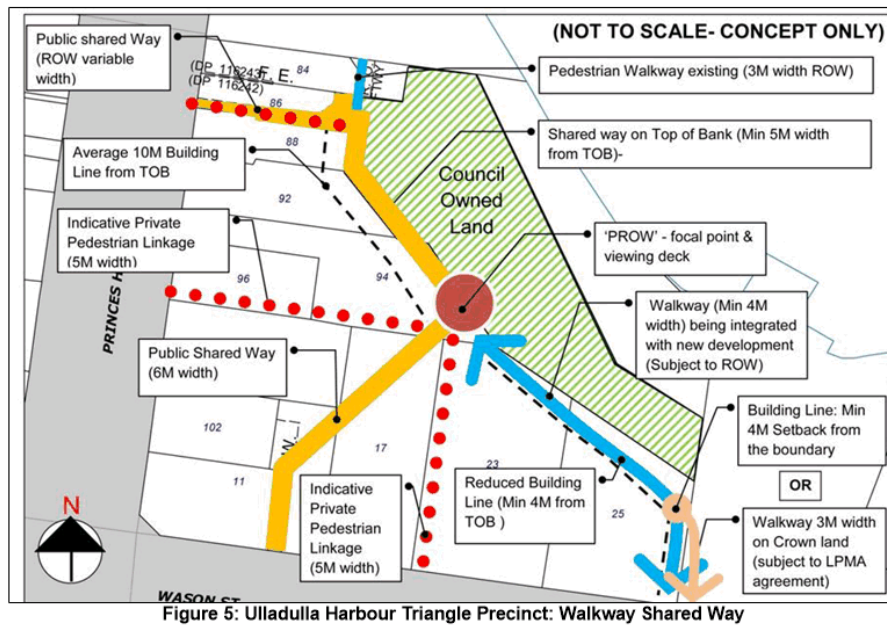


Figure 4: Ulladulla Harbour Triangle Zone Shared Way Concept (Typical Section)

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5.1.6 Land adjoining the harbour foreshore

Performance Criteria	Acceptable Solutions
P15 Development and activities should facilitate the use of the harbour foreshore as an available recreation and visual asset.	<p>A15.1 Your development must address the foreshore zone and ensure environmental values are maintained.</p> <p>A15.2 If your development adjoins the elevated walkways, you are to provide active frontages on the ground floor and balconies and terraces above. Awnings must be lightweight in construction and must not dominate the façade. Where possible, you are to provide transparent awnings to encourage natural light on the footpaths.</p> <p>A15.3 You must not construct permanent structures, car parks, garages or external storage on land having frontage to the harbour foreshore unless it is ancillary to the working harbour or unless a right-of-way is available across Crown land.</p> <p>A15.4 If your development adjoins public land, it is to be consistent with any adopted</p>

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harbour management plans and landscape master plans for the foreshore area around the Harbour.

A15.5 There shall be only one point of access from Crown land to Council land for the purpose of providing vehicle access to private land in the Harbour Triangle Sub Precinct, subject to legal access being able to be obtained.

5.1.7 Signage

Signs attached to buildings should be designed as an integral part of the building.

Performance Criteria	Acceptable Solutions
<p>P16 Signage provides structure and legibility and serve to reinforce the town's image and identity in an integrated manner.</p> <p>Signage does not increase visual clutter.</p>	<p>A16.1 All signage must conform with <i>Chapter G22: Advertising Signs and Structures</i> and <i>State Environmental Planning Policy No. 64 – Advertising and Signage (SEPP 64)</i>.</p>

Note: Certain signage is considered **exempt development** under State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

5.2 Residential Flat Buildings, Residential Tourist Mixed Use & Shop Top Housing

The following guidelines apply to residential flat buildings, residential tourist accommodation, serviced apartments, shop top housing and the like.

Note: In addition to complying with the requirements of this chapter, any **development** of this nature is to comply with State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development (SEPP 65) and the Apartment Design Guide.

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Performance Criteria	Acceptable Solutions
P17	A17.1
P18 Residential style tourist accommodation such as serviced apartments are to be designed to comply with the Apartment Design Guide to maintain high quality urban design and amenities for tourist and adjoining residential apartments.	A18.1 You must submit a local context analysis as part of your statement of environmental effects with any development application.

5.2.1 Ecologically sustainable developments

Performance Criteria	Acceptable Solutions
P19 Achieve energy and water efficient development by: <ul style="list-style-type: none"> Reducing the necessity for mechanical heating and cooling. Reducing reliance on fossil fuels. Minimising greenhouse gas emissions. Supporting and promoting renewable energy initiatives. 	<p>A19.1 You must consider the siting, layout and construction methods for your development to minimise the need for fuel based heating, cooling or lighting.</p> <p>A19.2 You should use water saving features and energy efficient water heating systems.</p> <p>A19.3 All buildings must:</p> <ul style="list-style-type: none"> Adopt waste recycling and water reuse strategies and actions. Adopt energy and water efficient fittings. Incorporate stormwater detention and treatment. Comprise walls, fencing and screens that are designed and located to allow penetration by winter sun and provide shade against summer sun. Set aside a waste recycling area. Incorporate appropriate industrial and commercial waste treatment (including grease traps for restaurants and food manufacturing uses) where necessary.
P20 Deep soil zone	A20.1 You must provide a minimum of 25% of the total area of open space within the site as a deep soil planting zone.

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P21	Mitigate against the future impacts of climate change.		<ul style="list-style-type: none"> Assist with management of water levels and quality, and to improve the amenity of developments.
		A20.2	Where possible you must locate deep soil planting zones next to adjoining deep soil zones on adjacent properties to maximise benefits.
		A20.3	You should provide sufficient deep soil planting zones to allow for the retention and/or planting of large and medium size trees .
		A21.1	If your development is located in the vicinity of the harbour foreshore, including frontage to Millards Creek, you must provide a coastal hazard assessment.

5.2.2 Building form/orientation

Performance Criteria		Acceptable Solutions	
P22	<p>Buildings should integrate harmoniously into the townscape and relate to one another through their architectural design quality, landscape or streetscape setting. They should optimise solar access to residential apartments and adjacent developments.</p> <p>Buildings are to be appropriately modulated and articulated in order to provide well-proportioned elevations and human scale when viewed along the street within the retail area.</p>	A22.1	Your building design must demonstrate continuity with neighbouring buildings through the use of similar floor and ceiling heights.
		A22.2	Your building design must respond to the streetscape and surrounding buildings through the use of a palette of similar elements and/or architectural styles in accordance with the built form and urban design objectives of this plan.
		A22.3	You are to avoid large areas of featureless walls and curtain walls.
		A22.4	You are to recess garage doors/loading docks so that they are not the dominant element in the overall presentation of the development and should not be located at the end of a street vista .
		A22.5	If your buildings are over two storeys in height, it must contain highly articulated façade elements to visually break down the scale of the street wall, clearly expressing base, middle and top. Development along active street frontages in the retail area is to provide building separation at 50m intervals and further modulation of facades at 15 – 20m intervals.
		A22.6	Arcades are encouraged to be provided, particularly where they provide access to activated areas such as off street car

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parks and the elevated harbour walkway (see Figure 5).

A22.7 You must plan your site to optimise **solar access** by positioning buildings to maximise north facing walls where possible (within 30 degrees east and 20 degrees west of north).

A22.8 Select **buildings** types or layouts which respond to the streetscape.

A22.9 Optimise **solar access** to living spaces and associated private open spaces by orientating them to the north.

5.2.3 Accessibility

Performance Criteria		Acceptable Solutions	
P23	Accessibility across common property is convenient and establishes comfortable conditions for pedestrian access.	A23.1	Your building must be connected to the public footpath network.
		A23.2	You must provide a separate entry to the residential component of your development for all residential and mixed use buildings . This entrance must be directly visible and address a permanently trafficable street or lane.
P24	All new buildings are accessible for people with disabilities.	A24.1	Any residential development is to provide an access plan demonstrating compliance with relevant access legislation, codes and standards.

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5.2.4 Building roofscapes

Performance Criteria	Acceptable Solutions
P25 Roof treatments form an unobtrusive yet visually interesting and landmark silhouette when viewed from adjoining streets and public vantage points within the Town Centre.	A25.1 You must break up massing of roofs.
P26 Rooflines, including architectural roof features, are designed to be compatible with the natural built environment and present an attractive screened or landscaped structure when viewed from nearby buildings or public places which overlook the development.	A26.1 You must minimise flat roofs and screen any flat roofs with parapets.
P27 Rooflines, including architectural roof features, should not adversely impact upon view corridors or view sharing of heritage items.	A27.1 Articulated parapets and cornice lines should emphasise the top of the building, combining to create a cohesive design and appropriate scale for the overall façade.

5.2.5 Building appearance, materials and finishes

Performance Criteria	Acceptable Solutions
P28 Development reflects the maritime character of the area and the positive contribution that the fishing industry and harbour infrastructure makes to the sense of place in the town.	<p>A28.1 Your building materials, colours, textures and styles reflect a distinctive, contemporary maritime theme. In particular:</p> <ul style="list-style-type: none"> Lapped weatherboard or equivalent combined with coloured gable metal roofing or similar is encouraged as is rendered brick or block work. Face brickwork is discouraged. Windows should be of timber construction or alternatively well detailed powder coated aluminium. <p>A28.2 High quality durable UV stabilised/corrosion-resistant building materials are favoured. Materials should be durable and low maintenance.</p> <p>A28.3 A well-considered mix of materials is encouraged.</p>

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P29	Minimal reflective materials are used.	A29.1	The reflectivity index for glass used externally in the construction of a building shall not exceed 20%.
P30	Colour palettes relate to the maritime character of the area.	A30.1	Your development should draw upon a colour palette that provides a tangible link to the character and history of the place as well as surrounding development and comprise of light hues of white or pastel colours (terracotta) with contrasting trims.
		A30.2	You must provide sample boards that provide details on materials and colours with your development application.

5.3 Infrastructure

It is proposed that short stay public car parks (up to 3 hours) are located within 150-200 metres walking distance of the retail focal point i.e. the intersection of Wason Street and the Highway. All day parking mainly for employees would also be provided within a radius of up to 400 metres (10 minutes walking distance) from the retail focal point. The two public car parks in Boree Street and South Street to the rear of the Marlin Hotel are identified as future infrastructure sites and are to be retained in public ownership unless the nominated infrastructure components (see Map 6) are integrated into a larger **development** proposal. Where possible, angle parking should be provided to maximise the amount of on street parking.

Within the commercial core, all **development** must provide rear service access which does not conflict with or reduce pedestrian or vehicle movements. The location of such service roads will be in accordance with the Infrastructure Plan (see Map 6). **Development** which does not have access to a service road will be required to provide off-street servicing within their property such that all vehicles can enter and leave the site in a forward manner.

All **car parking** areas and spaces shall be designed in accordance with the following provisions and in accordance with the *Chapter G21: Car Parking and Traffic*.

5.3.1 Car parking and access

Performance Criteria		Acceptable Solutions	
P31	Commercially orientated car parks are visually accessible and convenient for shoppers and employees.	A31.1	Provide public car parks (short stay) within 150-200 metres walking distance of the retail focal point i.e. the intersection of Wason Street and the Highway. Long stay car parking should be provided within 10 minutes walking time of the retail focal point (400 metre radius).

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P32 Car parking is adequate for the future requirements of the Town.	<p>A32.1 Allow for the construction of 200 additional car parking spaces within the CBD to the year 2035.</p> <p>A32.2 The Boree Street and South Street public car parks are to be retained for public car parking with provision for multi-level car parks.</p> <p>A32.3 A site for long stay multi-level car parks is to be retained at the rear of the Civic Centre site.</p> <p>A32.4 Notwithstanding the above, the public car parks may be integrated in a future larger development site provided that:</p> <ol style="list-style-type: none"> Identified infrastructure components are integrated into the development site including: <ul style="list-style-type: none"> the provision of all development generated car parking and the replacement of existing public car parking on site; and additional civic open space, typically 2000m²; and pedestrian linkages to the Princes Highway and/or Wason Street. provision of a next order retail facility e.g. discount department store; and inclusion or residential/tourist accommodation.
P33 Car park entries and driveways are to be kept to a minimum and where practicable are not located in pedestrian areas.	<p>A33.1 Car parking entries and driveways are to be avoided on the Princes Highway in favour of the provision of rear service access. Temporary access may be available until such laneways are available. Where alternative access via a secondary road or rear lane is available, access to the primary road frontage is to be avoided.</p> <p>A33.2 Where vehicle access across footpaths cannot be avoided, then a maximum of one access point for each road frontage for the development is provided.</p>

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P34	The 30m wide road reserves are used where possible for on street public car parking.	A34.1	On street car parking is to be maintained in the following streets: <ul style="list-style-type: none"> The Princes Highway between Deering Street and Millards Creek. Wason Street between Burrill Street South and the Princes Highway. Green Street between the Highway and St Vincent Street. South Street between Burrill Street South and St Vincent Street. St Vincent Street between Millards Creek and South Street.
P35	Prevent interruption to existing or potential active street frontages or public open spaces.	A35.1	Car parking structures at street level must present an active frontage preferably with ground level retail or residential tenancies and avoid being next to public places.
P36	Minimise the visual impacts of hard standing areas, maximise site area available for building footprints and maintain a compact and accessible centre.	A36.1	You must hide car parking areas from view. Car parking areas are ideally located in the basement of the building structure where possible.
		A36.2	Your development should not include basement car parks above the surface level. Basement car parks must be adequately screened by landscaping should this occur.
		A36.3	You should avoid at grade car parking or at least provide softening by generous landscaping and shade trees.

5.3.2 Traffic facilities, pedestrian movement and safety

Performance Criteria		Acceptable Solutions
P37	A balance is achieved between pedestrian amenity and traffic volumes.	<div>A37.1 Traffic movement on any street within the CBD shall be limited to two traffic lanes.</div> <div>A37.2 Future streetscapes and kerb reconstruction shall incorporate traffic calming devices which encourage speeds not exceeding 50kph.</div>

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		<p>A37.3 Where pedestrian desire lines cross roads, traffic lights should only require pedestrians to cross a maximum of five pedestrian lanes and a max of two traffic lanes in the case of pedestrian refuges.</p> <p>A37.4 The depth of any pedestrian refuge is to be designed to accommodate an aged person's electric cart or a parent with a baby's pram in accordance with Transport for NSW (TfNSW) and Council standards.</p> <p>A37.5 Mid-block pedestrian thresholds are to be provided to any street located within the retail core.</p> <p>A37.6 Wason Street, Boree Street and the area in Green Street between Boree Street and the Highway are to be designed as parking streets to improve pedestrian and tourist amenity and to allow for outdoor café precincts.</p> <p>A37.7 Traffic roundabouts are to be provided at the following intersections:</p> <ul style="list-style-type: none"> • Boree Street and South Street. • Jubilee Avenue and South Street together with the relocated entrance to the South Street car park.
P38	Minimises the impacts of pedestrian traffic conflicts within the Town Centre	<p>A38.1 Provision is made for median strips on the Princes Highway between Green Street and Parsons Street.</p> <p>A38.2 Traffic lights should be provided at the following intersections:</p> <ul style="list-style-type: none"> • South Street and the Princes Highway. • St Vincent Street and South Street. • Wason Street and Burrill Street. <p>A38.3 A mountable roundabout should be provided at the intersection of St Vincent Street and Parson Street.</p> <p>A38.4 Pedestrian facilities (mid-block crossing) should be provided at the following locations:</p> <ul style="list-style-type: none"> • On the Princes Highway south of Church Street (mid-block crossing).

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		<ul style="list-style-type: none"> • On St Vincent Street north of Millards Creek (mid-block crossing). • On the Princes Highway opposite the Civic Centre (mid-block crossing). • On the Princes Highway between Wason Street and South Street (mid-block crossing). • On the Princes Highway between South Street and Deering Street (mid-block crossing). • On Wason Street (double mid block crossing or wombat).
	A38.5	<p>The following key pedestrian links should be protected:</p> <ul style="list-style-type: none"> • In the vicinity of 22-24 Wason Street – South Street car park to Wason Street café precinct and elevated harbour walkway. • Lot CP SP 69933 existing link from South Street to the Highway. • Lot 46 DP 597282 Boree Street car park to the Highway proposed vehicle and pedestrian thoroughfare. • Lot 2 DP 525618 Boree Street car park to the St Vincent Street Community Centre.
P39	Identifies major traffic access routed to the Town Centre and minimises their impacts on residential amenity.	<p>A39.1 The main feeder roads to the business centre have been nominated as:</p> <ul style="list-style-type: none"> • The Princes Highway (note: access from proposed bypass to the southern end of the CBD should be via Kings Point Road). • St Vincent Street and its extension south to the Princes Highway (see Chapter S10: Ulladulla South). • Green Street to St Vincent Street (access from future bypass). <p>Where such streets are located in residential areas, traffic calming and noise reduction measures are to be undertaken to maintain satisfactory residential amenity.</p>

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P40	Ensures that pedestrian networks are accessible, safe and convenient and comply with the relevant Australian Standards.	A40.1	Ensure that all footpaths that contribute to the pedestrian network conform to the relevant Australian Standards.
		A40.2	Floor levels relating to future development are set in accordance with existing and proposed footpath designs.
		A40.3	All main entrances should be accessible from such footpaths .
P41	Encourages public transport which is accessible to the travelling public, safe and convenient.	A41.1	Extend the existing bus stop adjacent to the Marlin Hotel.
		A41.2	Provide a dedicated bus station in conjunction with the upgrade of the Civic Centre.
		A41.3	Provide bicycle parking facilities in accordance with the Australian Standard.
		A41.4	Provide shower and change room facilities with any commercial development having a minimum gross floor area of 500m ² .

5.3.3 Roads and rear service lanes

Performance Criteria		Acceptable Solutions	
P42	Ensures that the existing road network is able to service the needs of the projected growth for the area.	A42.1	St Vincent Street is identified to carry additional local traffic and the pavement be upgraded in accordance with expected traffic volumes.
P43	Ensures that the light of major arterial roads within the Town Centre are not diminished and traffic safety threatened by new developments requiring service and car parking access from these roads.	A43.1	Develop a system of rear service lanes and provide a series of infrastructure master plans allowing new developments to construct and integrate with adjoining developments . Where access is not available all vehicles must enter and leave the site in a forward direction.
		A43.2	Child care centres and schools are not encouraged on lots fronting the Princes Highway.

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Map 6: Infrastructure Improvements Concept Plan

CL22.55 - Attachment 2

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5.4 Utility Service, Waste Management and Soil and Stormwater Management

5.4.1 Waste

Waste generated on site should be reused where possible or disposed of in an environmentally responsible manner.

Performance Criteria	Acceptable Solutions
<p>P44 Waste facilities are provided that are adequate in size and conveniently located for residents, centre users, and visitors.</p> <p>Waste facilities are practical, attractively designed and easy to maintain.</p>	<p>A44.1 You are to provide rubbish and recycling bin enclosures which, together with other site facilities, must be adequate in size, durable, weatherproof, easily cleaned, visually integrated with the development and be located having regard to the protection of amenity, vehicle service access, visual impact and access.</p> <p>A44.2 You are not to locate rubbish storage areas between the front alignment of any building and any road or public space. Rubbish storage areas must include a bin wash down facility.</p> <p>A44.3 All service vehicles are to enter and leave any development in a forward direction unless rear service lanes have allowed service bays.</p>

5.4.2 Water supply

Town water supply is available for domestic, production and firefighting support purposes. In respect of production needs, the water supply system may need to be augmented to satisfactorily service the **development** where the levels of customer service are not achieved at the developer's full cost.

In respect of firefighting support, individual systems will need to be sized to support their respective **development**. This may require the augmentation of the water supply reticulated system at the developer's full cost.

Performance Criteria	Acceptable Solutions
<p>P45 Water supply infrastructure is provided to all development within the area to which this Chapter applies.</p>	<p>A45.1 You must make adequate provision for water supply:</p> <ul style="list-style-type: none"> • Provision of components (stops valves, hydrants etc.) to ensure flexible operation of the reticulation in minimising disruption to customers. • Ensure sizing of infrastructure to allow possible future expansion, to

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		<p>minimise pressure loss and maximise flows (within acceptable parameters).</p> <ul style="list-style-type: none"> • Design shall minimise long term operational costs. • Minimum 150 diameter water mains shall be provided to commercial development where reticulated system cannot provide adequate customer levels of service (including requirements for firefighting). • Water supply shall be extended from suitably sized water mains and interconnected to other suitable sized main as required by Shoalhaven Water. • Water mains shall be located within public road reserves. • Minimisation of dead ends.
P46	Water services shall be provided to development within the area to which this Chapter applies.	<p>A46.1 Water services shall be sized to support the overall development.</p> <p>A46.2 All metered services shall have unobstructed access at all times.</p> <p>A46.3 Commercial development shall minimise the number of connections to the water supply system.</p> <p>A46.4 Commercial developments will require backflow device(s).</p>

5.4.3 Sewerage

Town sewerage reticulation is available for connection. Where the sewerage system is not adequate to fully support the **development**, augmentation of the reticulation system will be required by the developer at their full cost.

Performance Criteria	Acceptable Solutions
P47 Sewerage infrastructure is provided to all development within the area to which this Chapter applies.	<p>A47.1 You must make adequate provision for sewerage infrastructure:</p> <ul style="list-style-type: none"> • Minimisation of lengths of sewers. • Sewer designs being above the minimum design limitations to provide tolerances during construction. • Ensure sizing of infrastructure to allow possible future expansion (within acceptable parameters).

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	<ul style="list-style-type: none"> • Provision of components to ensure minimum operational costs to the sewerage system, minimise infiltration and inflow into the system and disruption to customers. • Sewerage infrastructure shall be located within private lands. • All access points shall have unobstructed access at all times. • Easements for drainage of sewage in favour of Council are required to be dedicated to ensure all lands can access the town sewerage system. Width of easement to be determined at development application stage. • Easement for drainage of sewage shall be required to extend across the property(s) to ensure future upstream developments to extend and connect to the sewerage system. • Pressure sewer systems may be required to serve development which cannot drain to the gravity sewerage system. • Sewerage systems must be integrated to service the whole sewerage system.
P48	<p>Sewerage services shall be provided to development within the area to which this Chapter applies.</p> <p>A48.1 Commercial development shall have one connection point to the sewerage system.</p> <p>A48.2 Individual pressure sewer units not part of a pressure sewer system must connect to a manhole.</p> <p>A48.3 All connection points shall have unobstructed access at all times.</p> <p>A48.4 Commercial development may require trade waste approval.</p>

5.4.4 Soil and stormwater management

Performance Criteria	Acceptable Solutions
P49 Minimise impacts of development on the natural stream systems in Millards Creek and ensure that the water quality of discharges to surface and underground receiving waters, including	A49.1 Preparation of a Water Quality Management Strategy showing how the water quality in Ulladulla Harbour will be maintained and improved.

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<p>Ulladulla Harbour, is maintained both during and after construction.</p>	<p>A49.2 Hard engineering solutions involving overly large piped drainage systems should be avoided.</p>
<p>Prepare appropriate management strategies based on the principles of Ecologically Sustainable Development and Water Sensitive Urban Design.</p>	<p>A49.3 Reduce runoff from area to pre-developed levels up to 1:100 year event by on site detention.</p>
<p>Management strategies should be prepared by suitably qualified persons and address:</p>	<p>A49.4 Adequate provision is to be made during construction to ensure that landform is stabilised and erosion is controlled.</p>
<ul style="list-style-type: none"> • The reduction of runoff from the area to pre-development levels of up to 1:100 year events using on site detention. • On-site infiltration. • The ability of existing structures and the subsoil to withstand the effects of retained water on site. • A site drainage system which can be economically maintained with ready access provided to all relevant components. • The minimisation of detrimental impacts on existing water balance. • The safety and convenience of pedestrians and people with disabilities using the site. • Provision is made to ensure damage or nuisance flows to adjoining properties are not exacerbated but reduced where possible. • The design of the minor drainage system takes full account of both upstream and downstream systems. • Community benefit is maximised through the retention of natural watercourses and vegetation where possible. • The system design optimises the interception, retention and removal of water borne pollutants through the use of appropriate fitness for use criteria. • Stormwater systems which are effective in reducing the overall cost of drainage within the catchment. 	<p>A49.5 Drainage easements in favour of Council may be required to be dedicated and constructed by the developer.</p>
	<p>A49.6 Natural floodway of all creek and drainage systems are not to be altered except where alterations are required to ameliorate problems caused by existing development to clear restrictions in natural watercourses.</p>
	<p>A49.7 No untreated stormwater from any future development within the DCP boundaries will directly enter any creek or drainage line, which ultimately drains into Ulladulla Harbour.</p>
<p>P50 Identify areas where drainage systems are inadequate or need to be upgraded.</p>	<p>A50.1 To adequately manage stormwater generated from the higher density residential areas bounded by Church Street, St Vincent Street, the Princes Highway and North Street, a drainage reserve is to be acquired. This drainage</p>

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reserve will also act as a pedestrian movement corridor to the Town Centre.

5.4.5 Lighting

Performance Criteria	Acceptable Solutions
P51 Lighting is designed to relate to the type of activity and the time it will be used.	<p>A51.1 Strip neon flashing or moving lights should only be associated with activities that operate at night e.g. restaurants and bars. Neon type signs will not be permitted to be fixed to heritage items, except where they form part of the heritage significance of the item.</p> <p>A51.2 All external lighting must be of high energy efficiency.</p>

5.4.6 Statutory authorities

Performance Criteria	Acceptable Solutions
P52 The restoration of landscape and streetscape works associated with public utility infrastructure and maintenance activities should be ensured and should be undertaken to agree with the design or and vision for the public domain.	A52.1 Statutory authorities and utility providers are encouraged to consult with Council prior to undertaking any major service augmentation projects or maintenance programs to assist in the co-ordination of embellishment and redevelopment initiatives within the Town Centre.

6 Advisory Information

6.1 Other legislation or policies you may need to check

Note: This section is not exclusive and you may be required to consider other legislation, policies and other documents with your application.

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Council Policies & Guidelines	<ul style="list-style-type: none">• Shoalhaven Contributions Plan 2019
External Policies & Guidelines	<ul style="list-style-type: none">• Apartment Design Guide
Legislation	<ul style="list-style-type: none">• Shoalhaven Local Environmental Plan 2014• State Environmental Planning Policy No. 65 - Design Quality of Residential Apartment Development• State Environmental Planning Policy (Coastal Management) 2018

CL22.55 - Attachment 2



Former BTU Torpedo Workshop

Heritage Assessment,
Timber Mill, 50 BTU Road, Nowra Hill



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Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

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	DESCRIPTION	DATE ISSUED	SENT TO
A	Version 1	1/10/2021	Peta Brooks, Strategic Planner, Shoalhaven City Council



CL22.62 - Attachment 1

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

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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

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

2.7. Location

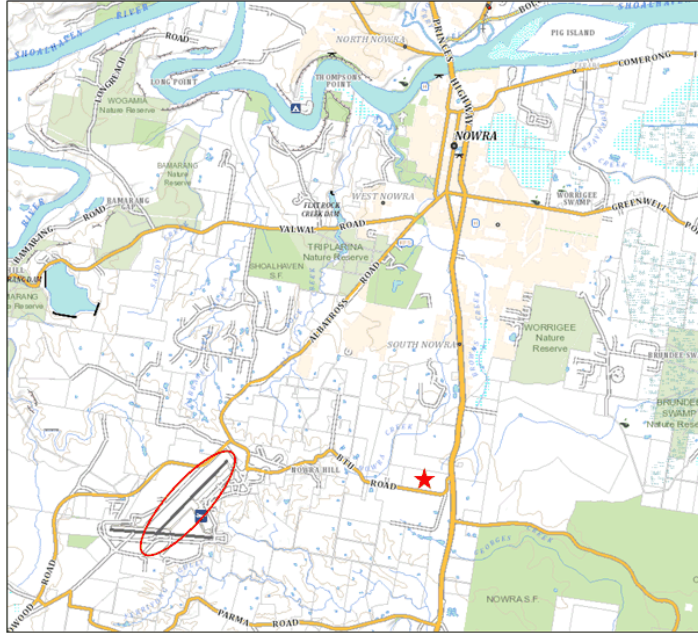


Figure 1. Location, site marked by a red star. HMAS Albatross is indicated with a red circle. (SIX Maps, 2021)

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.

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill



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

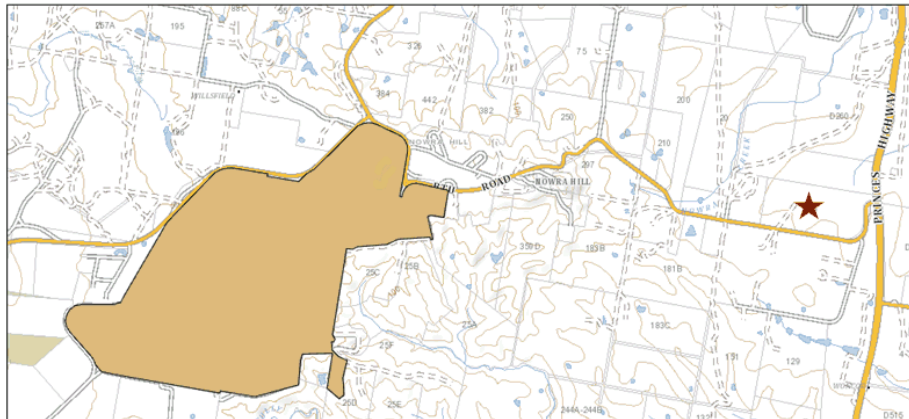


Figure 3. HMAS Albatross shown on the heritage map of Shoalhaven LEP 2014. 50 BTU Road is marked with a red star. (ePlanning Spatial Viewer)

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

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

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 led 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)

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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)

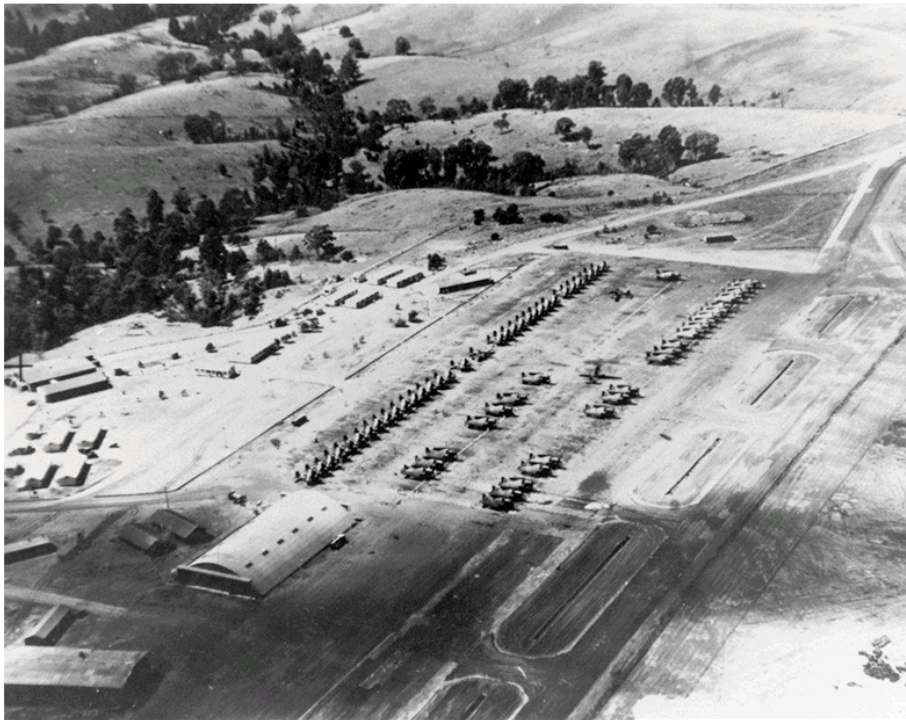


Figure 4. Nowra c. late 1945. View of the SE dispersal with Corsairs, Avengers and Hellcats parked in rows. The Igloo and small Bellman hangar are clearly visible. (Royal Navy Research Archive)

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 hangars, 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

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

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)

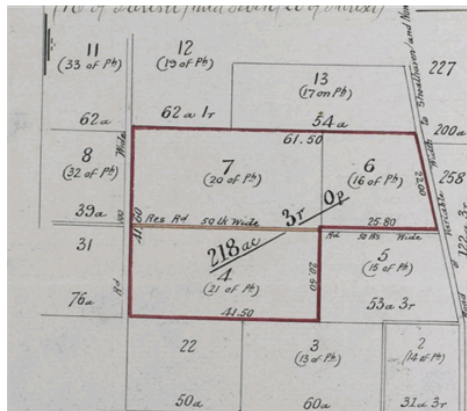


Figure 5. Extract diagram from Certificate of Title Vol.931 Fol. 23. Numbered lots 6 and 7 refer to portions 16 and 20 on the Parish Map and contain the subject lot. (NSW Land Registry Services, 2021)

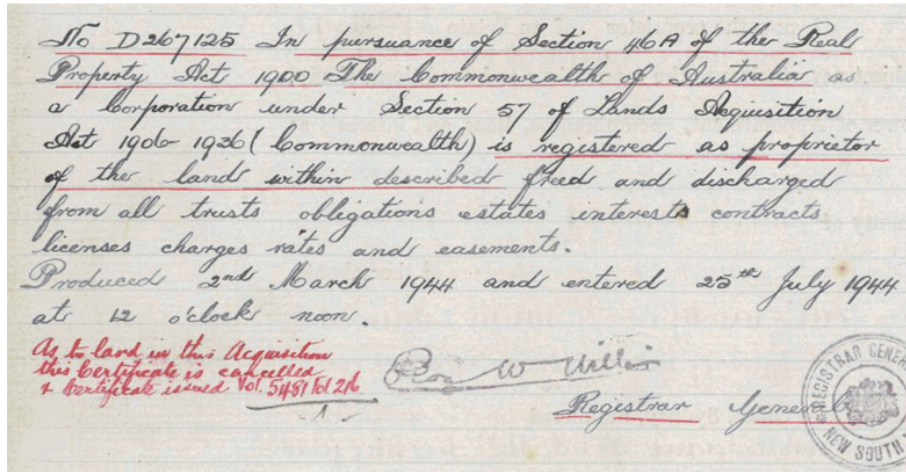
David Galloway was the son of Alexander Galloway who owned portion 28 of the Parish of Nowra also located at Nowra Hill. Alexander Galloway died in 1885 at his residence at Nowra Hill. (Shoalhaven Telegraph, 1885) David Galloway was a dairy farmer who was also living at Nowra Hill at this time, most 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 1939 when the land was transferred to Richard Knilands, one of the sons of Charles and Martha Knilands.

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

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.

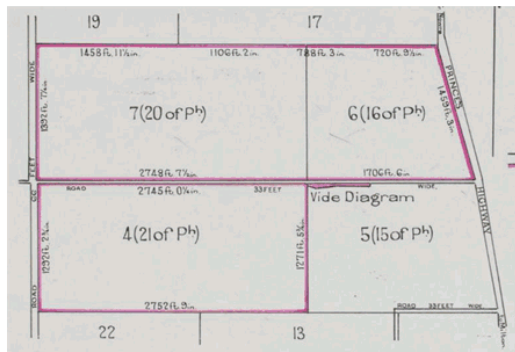


Figure 7. Parcels of land acquired by the Commonwealth in 1944 (Certificate of Title Vol. 5481 Fol. 216)

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.

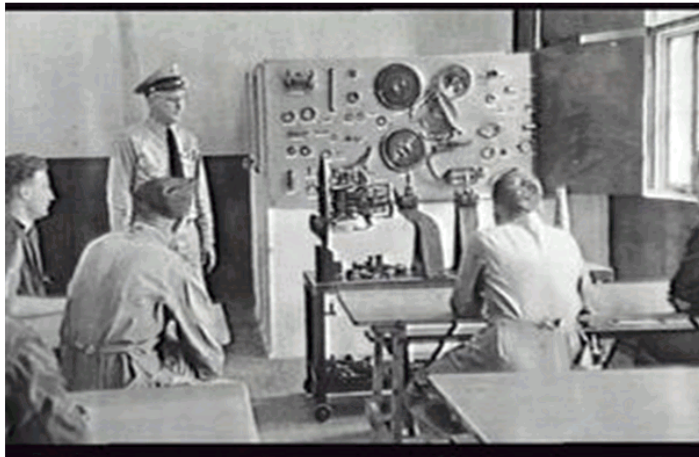


Figure 8. Interior of lecture room at the Base Torpedo Unit, RAAF Air Station, Nowra (Australian War Memorial)

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: <i>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.)</i>	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

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

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)

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

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 Maintenance Workshop was the largest, most costly building on the site. It was 120' x 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)

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

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 Compressor House 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)

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

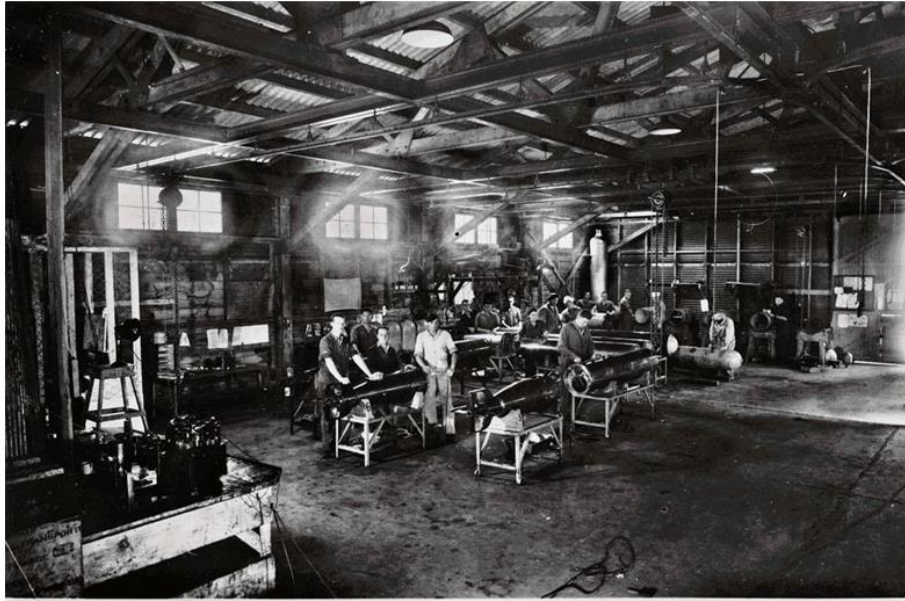


Figure 11. The interior of the torpedo maintenance workshop circa 1942-1943 (Sgt. Smith)



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

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

The Gyroscope, Tool and Consumable Store 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 Administration Building 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 Emergency Power House 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.

Torpedo Store – 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)

Inflammable Store – 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.

War Head Dump – 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.

Water supply – 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.

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

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 torpedoes 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.

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill



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



AUSTRALIAN WAR MEMORIAL

136621

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)

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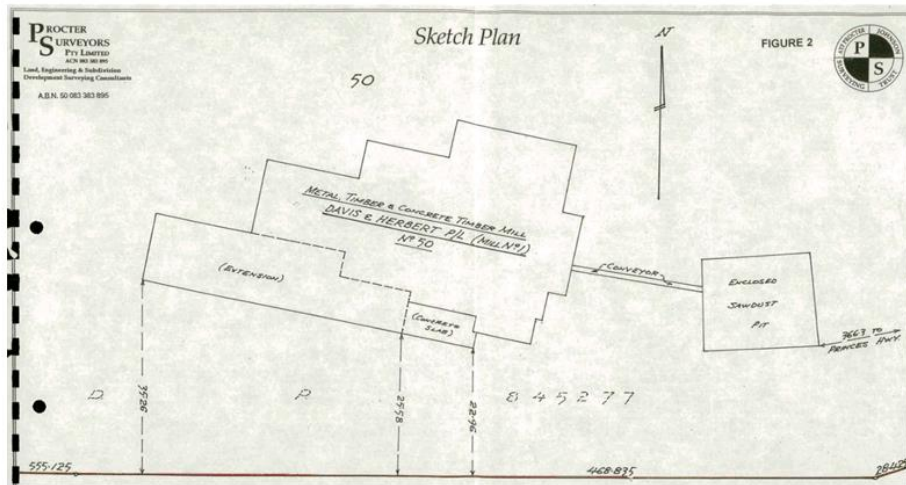


Figure 17. DA05/1217 Extension to Mill No. 1 (Procter Surveyors, 2005)



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.



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.

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill



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

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill



Figure 27. Southern view of the Compressor House

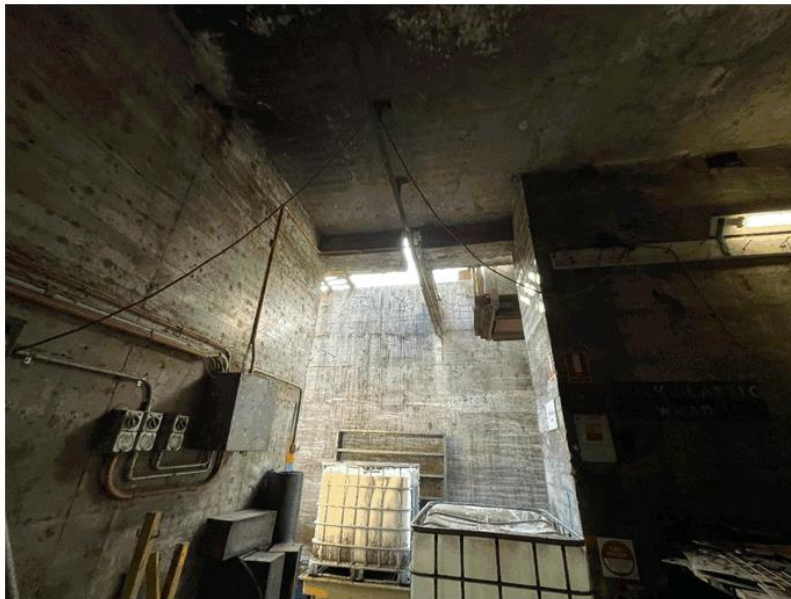


Figure 28. Internal view of the Compressor House

CL22.62 - Attachment 1

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

Torpedo Storage Bunkers



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



Figure 30. Interior of Torpedo Storage Bunker A1

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Figure 31. Torpedo Storage Bunker A2



Figure 32. Interior of Torpedo Storage Bunker A2

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill



Figure 33. Entrance to Torpedo Storage Bunker A2

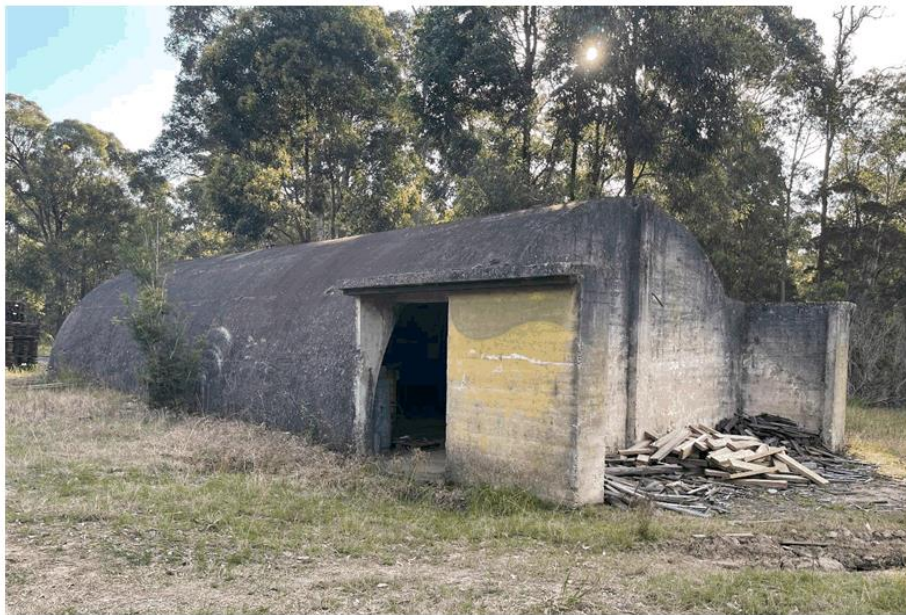


Figure 34. Torpedo Storage bunker A3



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

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

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.

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

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
- 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.
- Constructing defence works.
- Manufacturing war material.
- 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.

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

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

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

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)

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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.

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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;
- c) 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;
- 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 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.

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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.

c) 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 BTU.

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.

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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.

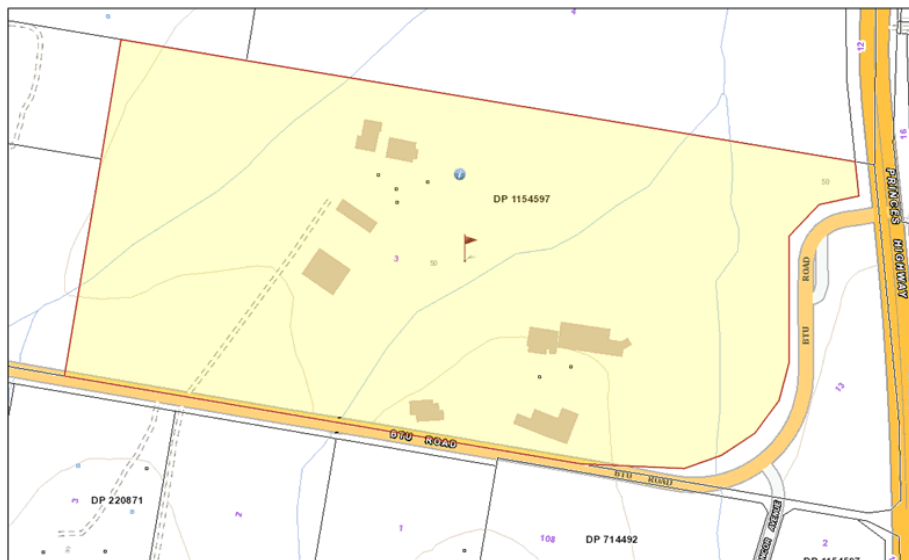


Figure 43. Recommended heritage curtilage

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*.

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

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:
 - i. 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.

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)

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

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

1. 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.
3. 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.

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

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Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

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CL22.62 - Attachment 1

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill

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.

CL22.62 - Attachment 1

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill



Figure 45. 1979 Aerial photograph



Figure 46. 1980 aerial photograph

CL22.62 - Attachment 1

Heritage Assessment, Former BTU Torpedo Workshop, 50 BTU Road, Nowra Hill



Figure 47. 1993 Aerial photo



Figure 48. 2021 aerial



Address all correspondence to: The Chief Executive Officer,
PO Box 42, Nowra NSW 2541 Australia
shoalhaven.nsw.gov.au/contact | 1300 293 111

shoalhaven.nsw.gov.au    

Council Reference: 31157E (D22/18278)

16/12/2021

Email: infrastructure.contributions@planning.nsw.gov.au

Dear Sir/Madam,

Staff Submission – Infrastructure Contributions Reform

The opportunity to provide comment on the NSW Government's Infrastructure Contributions Reform is welcomed. As the timing of the consultation coincides with the local government election period, it has not been possible to report this matter to the Council for consideration as would normally be the case and this is not ideal.

Whilst it is acknowledged that reforming the NSW infrastructure contributions system is needed, the timing of the public exhibition is disappointing, given the significance of the proposed infrastructure contribution reforms. Considerable documentation needed to be reviewed in order to provide a thorough and appropriate response to the proposal. This submission is provided by council staff and an endorsed submission will be provided in 2022. Given that the first meeting of all new Councils across NSW will not be held until at least February 2022, and there will be a number of other matters tabled for these initial meetings, we cannot guarantee that the submission will be endorsed prior to the March 2022 meeting. Given the tight timeframes associated with the roll out of the reforms, it is hoped that our comments will be given due consideration and if appropriate, changes or adjustments made to the legislation and policy framework. Detailed discussions need to also continue with the Local Government sector.

General Comments

- Overall, the reforms appear rushed given that the full content of the practice notes, including the worked examples, could not be exhibited. Ideally, all elements of the reform package should have been part of the exhibition to ensure meaningful consultation opportunities and transparency.
- It is understood that Council will have the opportunity for further consultation on the Transport Project Charge and the Strategic Biodiversity Contribution, but given the tight timeframes associated with the introduction of the reform, it is critical that the consultation is meaningful, and feedback is duly considered.
- Although the package specifies that the Department will continue to work with stakeholders and the community to develop this policy advice, DPIE need to ensure that consultation is undertaken directly with Councils, where appropriate and not just peak bodies like Local Government NSW (LGNSW).

- The Minister has also recently notified the consolidation of 45 *State Environmental Planning Policies* (SEPP) down to 11, in order to simplify the NSW planning system and help provide transparency and certainty. The introduction of a further SEPP solely covering contributions appears to be at odds with this. The NSW Productivity Commission has previously advised that legislative complexity also impacts on housing prices, and as such this aspect remains a concern.
- We look forward to the practice note/s on the Digital Tool which will be critical to streamline transition. Detailed instructions and access to a DPIE support team will also be valuable. Guidance for efficient and consistent use of works-in-kind agreements (WIKAs) is essential and to date, has not been considered in the reforms package. It is also critical that Councils are given significant time (and support) to adjust to the eventual reforms.

The attached table provides a range of comments on the various reform themes. Comments are also provided on whether Council will potentially be better or worse off as a result of the proposed reforms.

The opportunity to provide Council staff comment on the reforms is appreciated and it is requested that our comments be considered when finalising and implementing relevant changes. It is also important that when Shoalhaven's new Council considers this matter in early 2022, any changes or additions they make to this submission are also given serious consideration.

If you need further information about this matter, please contact Peta Brooks, City Futures on (02) 4429 3228. Please quote Council's reference 31157E (D21/541901).

Yours faithfully



Gordon Clark
Director of City Futures

Theme	Staff Response
Local Contributions:	
Facilitating early identification of infrastructure needs	<p>Will Council be worse off from the reform? Yes.</p> <p>Overall, the idea of making development contributions easier is supported, as is the early identification of infrastructure needs. There are, however, a number of concerns including;</p> <ul style="list-style-type: none"> • It is understood that a draft Contributions Plan (CP) will be required to be submitted as part of a Planning Proposal (PP) package to the Gateway (where relevant). Whilst this idea is supported “in principle,” it presents the following issues: <ul style="list-style-type: none"> ○ Regional Councils currently have difficulty resourcing planners, let alone contributions planners (and related discipline support) with the knowledge, experience and capacity to prepare a comprehensive CP in 90 days from the time a PP is lodged with Council. In these circumstances, the 90-day review period for PPs would become unrealistic and should be reviewed by DPIE, as part of the plan making reform that is also underway. ○ It is unclear whose responsibility it will be to prepare the CP package (e.g. Council or proponent). A proponent driven process may have a range of adverse implications for Council, which may not be able to be resolved within the tight prescribed timeframes of the PP process. • Councils often receive criticism in relation to timeframes associated with Development Applications (DA). The decision to temporarily restrict approval of a development is unlikely to be welcomed by the development industry and the reform principles of certainty and efficiency are also likely to be questioned.
s7.11 Contributions & the Essential Works List	<p>Will Council be worse off from the reform? Yes, potentially significantly worse off.</p> <p>Whilst it is appreciated that the reforms are essentially implementing the 29 recommendations handed down by the NSW Productivity Commissioner, we strongly disagree with the implementation of the Essential Works List (EWL) to all s7.11 CPs, where previously it only applied to IPART reviewed plans.</p> <p>The EWL as proposed is inconsistent with the Minister’s commitment to ensuring no council is worse off</p>

following the reforms, as the application of the EWL will significantly and practically reduce the provision of new/upgraded community facilities and infrastructure to meet the demand created by new development. Whilst the short term 3-year reprieve is appreciated, the NSW Government's announcement on delaying the implementation of the EWL will also only create more uncertainty.

Council's CPs will not only require substantial amendments, resulting in significant resource demands across organizations, but Councils will also need to reconsider their commitment to the delivery of certain infrastructure or find alternate funding sources. It is anticipated that Shoalhaven City Council may need to find approximately \$71.1 million to deliver or repay infrastructure that is expected to be deleted from the CP due to the implementation of the EWL. Council will need to consider a replacement funding source for the projects or project elements that will ultimately be deleted from the CP. As many of these projects have already been delivered, grant funding cannot be considered, meaning potentially a significant rate rise, special rate variation or reallocation of funds from other budgets as the only options. Each of these options would mean existing ratepayers paying for infrastructure which specifically results from new development.

Whilst it is agreed that the circumstances of each community are different and a flexible approach is needed to meet the diverse needs of communities, it is unclear how reducing the income received via contributions will enable Councils to adequately meet the needs of growing communities. Councils will still be expected to deliver infrastructure to the existing or increasingly higher standard and will have to fund any shortfall to the base level costings through other means – this will potentially financially disadvantage regional Councils.

IPART recognises that "infrastructure contributions are a key source of funding for Councils," yet the implementation of the EWL will most likely significantly reduce the income available for the provision of infrastructure and community facilities.

It is concerning that there will be less opportunity to collect for social infrastructure and there are limitations to what can be conditioned in development consents to offset this shortfall. The EWL is inconsistent with the infrastructure identified in Council's adopted [Community Infrastructure Strategic Plan](#) (CISP), as well as our communities' expectation for the provision and standard of infrastructure/community services to be provided. It would be extremely concerning if the NSW Government intends to eventually phase out s7.11 contributions, given the proposed changes to s7.12 contributions and the introduction of the RIC?

Based on the above, Council affirms its support to LGNSW and has requested that LGNSW continue advocating on its behalf to (MIN21.691) protect local government from any amendments to infrastructure contributions which leaves Councils and communities worse off and exposed to expending ratepayer funds

	on new infrastructure which is currently and appropriately the responsibility of development. It is questioned how this aspect of the reforms meet the principles of equity and certainty?
Benchmark costs for plan administration	<p>The proposed benchmark cost for plan administration (1.5% of the total value of works to be funded by local infrastructure contributions) may be reasonable for Councils with larger contributions plans, however, for Shoalhaven City Council, 1.5% will not be sufficient. It is acknowledged that there is an option to justify an administration cost higher than 1.5%, however, it would be more appropriate to have a higher administration percentage allocated for regional Councils (and other Councils) with smaller value of infrastructure contributions, but more complex contributions plans.</p> <p>Currently, Shoalhaven City Council allocates 5% of the contributions plan income towards plan administration, including the funding of staff salaries, for dedicated work on the contributions plan and its ongoing administration, website design/maintenance and legal costs. Reducing this to 1.5% would have significant impacts on resourcing. Based on an initial review, the implementation of the benchmark cost for plan administration at 1.5% would result in an annual shortfall for Council's current plan administration costs of \$217,193 or \$4,343,866 over the duration of the plan. This is inconsistent with the Ministers commitment that no Council will be worse off from these reforms.</p> <p>Is it suggested that a plan administration value of up to 5% of total value of works for administration costs would be generally more appropriate for regional Councils. This would provide greater flexibility for Councils and allow appropriate variation, depending on the size of the plan, without having to provide a detailed bottom-up calculation as justification.</p>

<p>Land Value Contributions (LVC)</p>	<p>Will Council be worse off from the reform? Yes, potentially somewhat.</p> <p>In principle, the use of Land Value Contributions (LVC) as an alternate mechanism for collecting contributions is supported, but the following comments are made:</p> <ul style="list-style-type: none"> • Support the optional use of LVC as it will provide flexibility to Councils. Whilst the proposed mechanism has the potential to result in real public benefit, which is a good outcome, more detail is required regarding how the LVC works. For example, can Councils secure land through the LVC at the rezoning stage and still levy for embellishment of that land via s7.11 at the DA stage? • Agree that the LVC is useful where there is fragmented ownership. • The exhibition material states that the CP can be exhibited concurrently with the PP (preferable) or shortly after. Clarification is sought as to what timeframe is considered “shortly after?” • The LVC exhibition paper notes that stakeholders for the technical working group consisted of Local Government NSW, the Planning Institute of Australia, Urban Taskforce Australia, Urban Development Institute of Australia and Landcom. Were any Council technical staff directly involved in the working group? If not, this is a significant oversight given that local Councils will be one of the key stakeholders in the LVC process. • Whilst the LVC improves efficiency and certainty of land required for a public purpose, it is unlikely to assist with housing affordability, as developers will most likely pass on the relevant costs associated with the LVC to end users (e.g. purchasers or mum and dad developers) at the time the lots are sold. • The LVC appears very metro-centric and how it will actually work in regional NSW is queried? It is likely to be utilised by growth center Councils and Councils with future greenfield areas that are not currently zoned for that purpose. Shoalhaven currently has limited urban land available for expansion, that is not already zoned for this purpose, and limited land that will be rezoned for more intensive development at this point. • The LVC is identified as an optional approach to collecting contributions. As such, will there be a model clause requiring the adoption of a CP in an environmental planning instrument (EPI)? If so, we would like to be consulted on the model clause prior to it coming into effect.
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	<ul style="list-style-type: none"> • It is clear that the LVC will be payable where the land is being developed (and conditioned as part of the development consent) or at the sale of the land; however, will the LVC continue to apply in instances where land is transferred to a relative as part of a deceased estate? Additional information is required in this regard. • Concerns are raised regarding the application of the NSW Valuer Generals (VGs) value rather than market value, as the rates are often substantially different. Market value should be applied to ensure there is equity for councils, the community and developers alike with regard to the provision for infrastructure. • Council should be given delegations to make minor revisions to both the boundaries of LVC areas and the percentage of land included within the LVC area post exhibition, similar to the minor changes that can be made to PPs, post-exhibition. Provisions should be implemented within the planning framework to enable this to occur to prevent resource intensive additional consultation that adds little value, as well as minimise risk of consultation fatigue within the community. • Given that the intent of the LVC is to overcome escalating land costs, the following concerns are raised regarding the 20% cap and why it is not supported. <ul style="list-style-type: none"> ◦ The 20% figure appears to be based on older subdivisions in the Sydney area – Are there any contemporary case studies across NSW more broadly that could be applied? In this regard, it may be more appropriate for the value to be set by IPART rather than DPIE. ◦ The 20% rate does not take into consideration the potential variations in the property market at various periods in time. For example: <ul style="list-style-type: none"> - Land values may reduce while material costs increase. - Land valuations in rural areas are usually significantly less than land valuations in urban areas. - Variations in the regional property market can be significant, resulting in funding shortages and further disadvantages to rural communities. ◦ Based on the formula outlined within the exhibition material, where the formula returns a result exceeding the maximum percentage, the developer's infrastructure costs are then expected to be covered by the relevant Council. This could represent a significant and unexpected cost to Council and does not support the reform principles of certainty, transparency and equity, especially as
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	<p>general rate revenue from the exiting community would be contributing to infrastructure that has no direct benefit to them (i.e. no nexus) and is a direct result of the new development.</p> <p>The current reforms outline that an LVC is required by a landowner of an LVC area if the land is sold before the contributions has been satisfied (s7.16C). Whilst Appendix A of the LVC document states that “a LVC Certificate needs to be made available by Council, upon application”, this certificate does not appear to be mandated to form part of a contract of sale, as a s10.7(2) planning certificate is. As a result, this may create a loophole, which would prevent Councils from recouping significant funds. Given the trigger for LVCs and 10.7 Certificates are the same – i.e. required at sale of land, the following is suggested:</p> <ul style="list-style-type: none"> ○ As the EP&A Regulations are being amended as part of the reforms, rather than requiring Councils to resource yet another certificate and associated fee, it is suggested that Schedule 4 of the Regulation be amended to identify if the land is within/ affected by an LVC area. ○ Outstanding LVC charges be placed on Section 603 Certificates. <p>This also supports the reform principles of transparency and certainty.</p>
Pooling of Contributions	<p>Will Council be worse off from the reform? No.</p> <p>The amendments to pooling and borrowing are supported. The ability to include borrowing interest in contributions will assist in recouping some of the actual funds expended.</p> <p>It is unclear how the new contributions planning portal will facilitate imports to a Council's financial system and how pooling would be accounted for and tracked. Further clarification is sought in this regard and consultation requested.</p>
s7.12 Contributions – New Local Levy	<p>Will Council be worse off from the reform? Potentially, if Shoalhaven was to transition to a 7.12 plan in the future.</p> <p>Overall, the list of infrastructure that s7.12 plans can fund is supported, especially that it remains broad and not subject to the EWL. This should remain the case as it provides an opportunity for Councils to transition to a s7.12 plan, should the s7.11/EWL change be mandated in the future.</p> <p>Whilst s7.12 plans may have benefits with regard to flexibility, there are a number of limitations for regional Councils, including:</p>

	<ul style="list-style-type: none"> Based on historic modelling, Shoalhaven is likely to collect significantly less contributions under a s7.12 plan. Whilst we could levy for social infrastructure items should the EWL to s7.11 eventuate, the rate of return would be slower and would delay infrastructure provision. Applying a fixed levy at the subdivision stage generally affects the underlying land value that a developer is willing to pay for land, not the price of housing. Whereas a levy on dwelling construction directly affects the price of housing/affordability. Given the current housing crisis, measures should be being taken that directly contribute to, not undermine housing affordability. This aspect requires further consideration. 7.12 contributions will significantly increase under the new model, with the following being the maximum levied for residential developments in regional NSW: <ul style="list-style-type: none"> \$10,000 being levied per dwelling. \$8,000 for other residential development types. \$4,000 per additional bedroom. <p>We appreciate that the NSW Government has acknowledged that the cost of development differs between Greater Sydney and regional NSW; however, it should be recognised that the cost of development also significantly differs across the regions and “a one size fits all” approach is not considered appropriate.</p> <p>While many metropolitan Councils have indicated that they are considering moving to s7.12 plans only. This decision has been informed by modelling, which has indicated that the new local levy will provide greater flexibility, as well as better financial results. Currently, Shoalhaven is undertaking a comparison between a s7.11 and a 7.12 Plan; however, this will take longer than the exhibition period allows, which limits our current ability to provide specific details on this matter.</p> <p>In addition, DPIE should ensure that s7.12 contributions are able to be charged for rooms that could be used as a bedroom. This will ensure that rooms that are ultimately used as bedrooms are appropriately considered.</p> <p>In its original form, s7.12 provided certainty and simplicity to both local government and the development community. Given the impetus for the reform was to provide certainty and simplicity, it is difficult to see how these principles will be achieved under the new model.</p>
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<p>Draft Environmental Planning & Assessment Amendment (Infrastructure Contributions) Regulation 2021</p>	<p>Will Council be worse off from the reform? Somewhat.</p> <p>The following comments and questions are made in relation to the <i>Draft Environmental Planning & Assessment Amendment (Infrastructure Contributions) Regulation 2021</i>:</p> <ul style="list-style-type: none"> • Support the administrative change from public notification to public exhibition. • Clarification is sought on the following sections: <ul style="list-style-type: none"> ○ 25DA(3) – Draft VPAs available for inspection; ○ 31(2)(b) – Approval of CPs and the Planning Portal <p>From an administration perspective, how will exhibition and notification of VPAs and CPs on the Portal be rolled out?</p> <ul style="list-style-type: none"> • 25HA - Information about planning agreements— annual reports. This represents a greater administrative requirement than is currently outlaid. This may result in resourcing issues for Councils. • 25J(1) – Development and land in relation to which local infrastructure conditions and local levy conditions may be imposed. Council agrees with the allowable exemptions for public, social and affordable housing providers, as well as development carried out by or on behalf of the State. This is consistent with the exemptions outlined within section 2.5 of Shoalhaven Contributions Plan 2019. • 25L - Indexation of cost of providing public amenities and public services. The formular is unclear, is it A or B or A divided by B? <p>The Producer Price Index (PPI) for the quarter does not reflect the total increase of costs for the year. Indexing annually should mean that the indexation percentage is reflective of the same period of time. For example, if Q4 is 8%, Q1 is 5%, Q2 is 10% and Q3 is 1% the inflation for the year is 6%. Limiting Councils to index by the March quarter for the following year would mean an increase of only 1% leaving Councils short by 5%. As such, this should be changed to the average of the entire previous year.</p> <p>Land Value Index (LVI) is not reflective of purchase prices. Contributions are not linked to rating or unimproved values but rather the consumption of resources for community benefit. Shoalhaven has had an increase of 35.9% in the last 12 months with the PPIs June to September quarter only increasing by 1.1%.</p>
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	<ul style="list-style-type: none"> • 25M – Indexation of contribution amounts and rates. LVCs should be reflective of the market value added by rezoning and not an indexation based on LVI or PPI. Rounding up or down to the nearest dollar is immaterial and common practice and shouldn't need to be stated in legislation. • 25P(2) – Land Value Contributions Certificates. Will there be a template LVC Certificate? Also, please see earlier comments relating to the inclusion of the LVC in 10.7 Planning Certificates rather than creating a new certificate. • 25V – Indexation of maximum levy rates and amounts. The formula does not make sense A/B? Unless B is negative growth? • 32(3) – Amend or repeal of a Contributions Plans. The expansion of this section is welcomed. • 33A – Review of Contributions Plans. Specifies that a CP must be reviewed at least once every 4 years. Is this a mandatory 'health check' or will this requirement be satisfied if Council runs a more regular ongoing housekeeping process? • 33B(2) – Review of Contributions Plans - Two year transitional arrangement. Significant resourcing will be required to transition existing plans into the new CP framework, even though this is likely to be a "like for like" transfer. Additionally, the introduction of the EWL which may eventuate in the future, would also require further significant changes to the plan. This places a large resource burden on Councils and there is merit in giving more thought to the transitional arrangements. Would this be a satisfactory reason to seek an extension under 33B(4)? • The following two clauses require the development of a register: <ul style="list-style-type: none"> ○ 34(1) – Contributions Register ○ 34A – Affordable Housing Contributions Register <p>It is appreciated that registers are required for the purpose of data collection and accountability; however, Councils already maintain a number of registers and there are likely to be resourcing issues, if additional ones are needed, given they all require maintaining. Please clarify whether:</p> <ul style="list-style-type: none"> ○ Councils require two separate registers relating to the above, or if a central contributions register containing the above information is possible? ○ The register needs to be in place at the commencement of the first relevant contribution or as of the
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	<p>1 July 2022?</p> <p>Further reporting requirements increase management costs which is a concern as the management portion of the CP is being proposed to be reduced to 1.5%.</p> <ul style="list-style-type: none"> • 35B Information to be included in annual reports of Councils—affordable housing: <ul style="list-style-type: none"> ○ 35B(2)(d) – Affordable Housing reporting – Number of Dwellings delivered in project. We question whether this should be ‘the number of dwellings to be delivered as a result of the project’? The proposed wording in the draft Regulations implies completion, which is addressed by 35B(2)(g). ○ 35B(4) – Information required in annual report. Is a copy of the annual report adequate for the Portal, or is this information in addition to the annual report? • 136K – Conditions on complying development certificates issued for development for which a local infrastructure condition or local levy condition may be imposed. We are pleased to see that contributions are payable before work commences, but query if it should specify that contributions need to be paid prior to the Construction Certificate (CC) or Subdivision Works Certificate (SVC) being issued? • 271A - Contributions Plans for certain development—the Act, s 4.16(11). With regard to 271A(3)(a), will there be guidance on what constitutes a DA that is minor in nature? • Schedule 4 Planning Certificates – Regional Infrastructure Contributions. The inclusion of RIC guidance on the s10.7 Planning Certificate is supported. Further to previous comments, it is suggested that rather than having a standalone LVC Certificate, this information should also be included in planning certificates. • Drafting note 3.2 – The savings and transitional provisions should have formed part of the exhibition documentation.
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Regional Infrastructure Contributions (RIC) – New framework for state infrastructure contributions:

Will Council be worse off from the reform? Yes, particularly if this comes at a cost to s7.11 contributions.

In principle, the development of a scheme committed to the collection and distribution of funds for the purpose of delivering regional infrastructure and strategic biodiversity conservation is generally welcomed. In particular, the following elements are supported:

- The current infrastructure contributions framework has been identified as lacking transparency and certainty for developers, particularly in relation to the existing Special Infrastructure Contributions (SIC) scheme. The proposed RIC aims to create a simpler, more efficient and certain contributions system and aligns with the principles set out in the reforms.
- Often, draft SICs have been introduced well after a rezoning has taken place and the per lot SIC amount is often unfeasible when added with local contributions, resulting in impacts on housing affordability and possibly stalling otherwise viable significant projects.
- Exemption of public housing, seniors housing, and affordable housing, along with hostels and secondary dwellings, will support the delivery and increased supply of such development by potentially improving the feasibility of individual projects.
- The application of a consistent rate across the regions to provide equity when attracting investment or undertaking development.
- The use of the Producer Price Index (RPI) (Road and Bridge Construction NSW) for indexing contribution rates, provided the index will provide a more accurate reflection of cost increases than CPI.
- Infrastructure Delivery Agreements (IDAs) and associated opportunities to receive dedicated land or carrying out works.
- 2-year review period.
- It is essential that RIC funds are spent in the RIC region. Councils need a guarantee that this will continue to be the case long term.
- The NSW Government must demonstrate up front and at regular review periods the ability of the scheme to identify and deliver required infrastructure, balance contributions with attracting investment and development activity, and not impact on the delivery of local infrastructure with downward pressure on the amount of local contributions Councils can collect.

- Exclusion of the area subject to the current *Illawarra-Shoalhaven Special Infrastructure Contribution Scheme* and retention of the Scheme, – an initiative supporting the delivery of the Nowra-Bomaderry Regional Growth Area.

Any transition of the SIC Scheme into the RIC Scheme should include:

- a review of the infrastructure identified to service the Regional Growth Area;
- an update of infrastructure/project costs; and
- the introduction of a forward funding and recoupment mechanism.

Will the RIC supplement the infrastructure proposed to be partly funded by the SIC (currently 10% of estimated cost)? Shoalhaven's submission on the draft SIC Scheme (made as part of the Regional Plan package), recommends a range of adjustments which could be reconsidered in any future transition to the RIC Scheme.

We have a number of concerns regarding the application of the RIC, which are outlined as follows:

- Greater detail is required regarding the equitable collection, prioritisation and distribution of RIC funds between the relevant LGAs within a RIC region. Will the RIC be tied to the *Illawarra Shoalhaven Regional Plan* (ISRP)? If so, the ISRP appears to prioritise West Lake Illawarra; however, the Nowra-Bomaderry urban release areas will also generate a significant proportion of new housing growth. Question what consultation, if any, will occur with local Councils within a RIC region with regard to infrastructure assessment and prioritisation?
- The RIC Framework is a fundamental shift for state agencies, giving them incentives to spend their capital budgets in areas where there is growth. If the distribution of funds is apportioned to population, Shoalhaven will miss out on significant funding, as it is smaller than Wollongong and Shellharbour.
- Whilst the details of the RIC have been released, details regarding the Transport Project Charge (TPC) and the Strategic Biodiversity Contribution (SBC) are subject to further and separate consultation. As a result, it is difficult to provide meaningful comments at this point. Given the significance of the reform, it is queried why consultation has been undertaken without this detail and we question how meaningful future consultation will be, given the reform is due to come into effect in a relatively short timeframe.
- Although the RIC Fund Prioritisation Guideline lacks detail, it specifies that:
 - Local Councils seeking to access RIC funding will be required to undertake a budget bid. Budget bids require resourcing and

- do not provide certainty with regard to funding. This approach should be reconsidered.
- The Guideline will apply to the governance arrangements collected through the Base RIC component. Funds collected through the TCP and SBC will be administered under separate arrangements. This is problematic given the details of these arrangements have not yet been released. This is also an addition layer of information that key stakeholders need to be aware of.
 - The proposed introduction of the RIC SEPP is questioned. Despite the Minister recently committing to reduce the number of SEPPs, the introduction of a further SEPP solely covering contributions appears contradictory to this. This represents an additional planning document, which adds complexity to the planning system and does not necessarily contribute to the principles of the reforms relating to simplicity, certainty efficiency or consistency.
 - We request further clarification with regard to how the RIC will apply to hotels, motels and other developments that are not specified or do not fall into the categories detailed.
 - Currently Councils need to demonstrate an adequate nexus to include infrastructure within a s7.11 plan, but there appears to be no nexus requirements for State government. Why the State government is not required to conduct the same level of assessment in determining the level of infrastructure required to support a precinct is questioned. It seems disingenuous to increase requirements for Councils in this regard, but not for State government.
 - Without the time or resources to assess the findings in the feasibility analysis, it is difficult to support the application of the RIC for commercial and industrial development. The proposed flat rate for new commercial and industrial development does not account for variations in scale or “set-up” such as building configuration, fit-out etc to support the future use. If not done equitably, it may affect the margins of certain types of development and will result in another cost on much needed employment generating development in regional areas and this is a concern. The feasibility modelling informing the proposed rate needs to be based on the lowest common denominator (i.e. base level fit out costs), to ensure equity for investment and development decisions.
 - Resourcing of the RIC is a significant concern for Council, particularly given details relating to the TCP and SBC are yet to be released. Wherever this process can be streamlined, this would be beneficial.

Infrastructure Contributions – Land Use Planning:	
Local Infrastructure Contributions – Planning Proposal Directions	<p>Will Council be worse off from the reform? Possibly.</p> <p>There is generally “in principle” support for ‘Best Practice Process’ and the intention to plan and fund future infrastructure delivery in conjunction with the Planning Proposal (PP) stage. The following aspects of the practice note are supported:</p> <ul style="list-style-type: none"> • Early recognition of infrastructure and subsequent contribution requirements provides certainty for Councils and developers alike. Additionally, this supports the reform principles of certainty, transparency and consistency. • The intention to review CPs, to determine if there are already adequate provisions for amenities and services, or whether an amendment to the CP or a Voluntary Planning Agreement (VPA) is required to supplement the infrastructure. • Existing local contributions plans at either the precinct or Council-wide level should be amended to accommodate the demand generated by a PP for additional public infrastructure, instead of site-specific CPs being created. • Planning and consideration of the need, availability and cost of infrastructure during the initial master planning or structure planning stage is essential; however, the concern is that this may be more difficult to achieve with proponent initiated PPs. • The encouragement of better practice for the consideration of CPs with PPs but highlight that the practice note appears to neglect the negotiation stage of the process and specifically dispute resolution. <p>Whilst a number of initiatives identified within the practice note are supported, the following concerns are raised:</p> <ul style="list-style-type: none"> • The ‘Best Practice Process’ could enable a piecemeal approach to contributions planning that occurs PP to PP. Ideally, the process should be linked to broader strategic plans or growth plans.

	<ul style="list-style-type: none"> • The current 12-month timeframe that is generally granted for the completion of PPs may no longer be sufficient where a CP (or VPA) also needs to be negotiated and executed. The ability to prepare a comprehensive CP within 90 days, especially if design and costings are required is likely to be limited. In relation to timeframes, clarification is sought as page 7 of the exhibition package states that “a draft CP is required to be submitted with the PP package,” whilst page 12 of the LVC overview notes that “the draft 7.11 CP (including the LVC component) is prepared post-Gateway, together with technical studies for rezoning”. Which is correct? Clearly outlining the intent is critical to obtaining feedback. • Further, where Council does not receive adequate information, this may impact significantly on already tight timeframes. • In addition to the above, the ‘Best Practice’ model presented appears to over-simplify the process of preparing a PP and CP concurrently. This model does not consider or accommodate the additional timeframes that may be associated with constrained sites and involve a myriad of additional steps– this is particularly relevant to Shoalhaven. <p>Clarification or additional information is also sought on the following points:</p> <ul style="list-style-type: none"> • How will the ‘Best Practice: Contributions Plans and Planning Proposals’ be integrated into the new PP Guidelines that will shortly be released? The consistency of the reform with the PP Guidelines is important in ensuring that the proposed reforms do not encourage and increase the potential for spot rezoning, where developers can demonstrate an ability to pay and develop infrastructure/ or a public benefit detailed within the CP. The Government also has a focus on speeding up the PP process, this reform has the potential to impact on this intention. • Guidelines and benchmarking should be included in the Practice Note and detail expectations for public amenities and services to assist both Councils and developers. • Request clarification and additional detail on what additional studies are considered appropriate or needed in preparing a CP in this context, particularly where it is related to a proponent-initiated PP.
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<p>Ministerial Directions (general comments)</p>	<p>Will Council be worse off from the reform? Unclear with the limited information available.</p> <p>Although the intention of the Ministerial Directions is positive, it is premature as the details are vague and there is no justification or supporting documentation in the exhibition material.</p> <p>Without this additional detail or guidance, it is difficult to work out if best practice will be achieved. This may have implications on their use and the progression of PPs that are inconsistent.</p>
<p>Dual and shared use of open space and public facilities</p>	<p>Will Council be worse off from the reform? Somewhat.</p> <p><i>Environmental Planning and Assessment (Housing, Infrastructure and Urban Development – Dual and shared use of open space and public facilities) Direction – 2022</i></p> <ul style="list-style-type: none"> • Objective 1(a) and (b) of the Direction has merit; however, clarification is requested and a definition of what constitutes “public amenities and services,” provided within the Ministerial Directions. Without this it is unclear how Councils as assessors, and developers as proponents, quantify what is considered appropriate provision of public amenities and services? <p>The following concerns are raised:</p> <ul style="list-style-type: none"> • Objective (2) is not supported, as it reads more like a note. It states that: “the direction does not seek to reduce the totality or types of public amenities and services to be provided in connection with residential development...” But it is considered likely that the totality of public amenities and services provided will be reduced. • Clause 3 - ‘Where this direction applies’ is unclear. Rather than stating where the Direction applies, it outlines who the Direction applies to. • The Direction states that it ‘does not apply to a planning proposal which only proposes to rezone land for rural residential purposes.’ Why have PPs that only propose to rezone land for rural residential purposes been excluded from the Direction? • The note box detailed in clause 5 is considered confusing.

	<ul style="list-style-type: none"> Clarification is sought in relation to what type of strategies and studies are required to satisfy inconsistency with the Direction, as detailed in clause 6.
Contributions Plans and Planning Proposals	<p>Will Council be worse off from the reform? Somewhat.</p> <p><i>Environmental Planning and Assessment (Local Infrastructure Contributions – Planning Proposal) 2022</i></p> <p>Generally, there is support for the overall intent and objectives of the Ministerial Direction, but the following points are raised:</p> <ul style="list-style-type: none"> Clarification and a definition are again requested on what constitutes “public amenities and services”, within the Ministerial Directions. Without this it is unclear how Councils as assessors, and developers as proponents, quantify what is considered appropriate provisions of public amenities and services? Clarification is sought in regard to clause 4 and when this direction applies, it should not be “in the opinion of Council”, it needs to be quantified to avoid confusion and challenge. The way clause 4 is written raises concern that the Ministerial Direction will not achieve its objective, as there is too much ambiguity/subjectivity. Clarification should be provided, preferably within the Practice Note, regarding what evidence is required to demonstrate that the PP authority has considered the matters detailed within clause 5 when forwarding the PP to the Minister under section 3.34 of the Act. <p>The following concerns are also raised:</p> <ul style="list-style-type: none"> The Ministerial Direction may encourage complex PPs that are supported by a CP and/or VPA; however, the level of negotiation associated with these may significantly affect the timeframe provided for completing a PP. It is considered that the Ministerial Direction may increase uncertainty in the short term.



Address all correspondence to: The Chief Executive Officer,
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Council Reference: 31157E (D21/537180)

14/12/2021

Independent Pricing and Regulatory Tribunal (IPART) NSW
Level 16, 2-24 Rawson Place
SYDNEY NSW 2000

Dear Sir/Madam,

Staff Submission – IPART’s Review of the essential works list, nexus, efficient design and benchmark costs for local infrastructure.

The opportunity to provide comment on IPART’s review of the essential works list, nexus, efficient design and benchmark costs for local infrastructure is welcomed. The extended submission deadline to provide this staff submission is appreciated, however due to the short consultation timeframes and the timing of the consultation (during the Council caretakers’ period) the views in this submission have not at this point been endorsed by the Council.

An endorsed submission will be provided as early as possible in 2022, however, given the first meeting of most new councils will not be until at least February 2022, and there will be a number of other matters tabled for these initial meetings, we cannot guarantee that the submission will be endorsed prior to the March 2022 meeting.

Given the tight timeframes associated with the rollout of the reforms, it is hoped that these comments will be given due consideration and if appropriate, changes or adjustments are made to IPART’s Final Report.

General Comments

It is acknowledged that the IPART Draft Report informs all changes related to s7.11 plans in the proposed NSW Government Infrastructure Contributions Reform.

A response to a number of the ‘Seek Comment’ questions is provided below:

Essential Works List & Funding of Local Infrastructure



1. Do you think our proposed principles-based approach to the EWL, as part of our broader framework incorporating efficient design and delivery and benchmark costs, provides enough certainty? Have we got the balance right between flexibility and certainty?

It is considered that the IPART Review is fundamentally flawed, as the terms of reference set down by the NSW Government for the Review specifically prohibited the consideration of community infrastructure in the Essential Works List (EWL).

It is noted that the EWL is inconsistent with the Minister Stokes commitment to ensuring no Council is worse off following the reforms, as the application of the EWL will significantly and practically reduce the provision of new/upgraded community facilities and infrastructure to meet the demand of new development. Whilst the short term 3-year reprieve is appreciated, the NSW Government's announcement to delay the implementation of the EWL will potentially only create more uncertainty.

Whilst it is agreed that the circumstances of each community are different and a flexible approach is required to meet the diverse needs of communities, it is still unclear how reducing the income received via contributions will enable Councils to adequately meet the needs of communities. Councils will still be expected to deliver infrastructure to the existing or increasingly higher standard and will have to fund any shortfall to the base level costings through other means.

Councils' contributions plans will not only require substantial amendments, resulting in significant resource demands across organisations, but Councils will also need to reconsider their commitment to the delivery of certain infrastructure or find alternate funding sources. It is anticipated that Shoalhaven City Council may need to find approximately \$71.1 million to deliver or repay infrastructure that is expected to ultimately be deleted due to the implementation of the EWL. Council will need to consider a replacement funding source for the projects or project elements that will ultimately be deleted from the Contributions Plan. As many of these projects have already been delivered, grant funding cannot be considered, meaning a significant rate rise, special rate variation or reallocation of funds from other budgets as the only options. Each of these options would mean existing ratepayers paying for infrastructure that is often required solely as a result of new development.

IPART recognises that "infrastructure contributions are a key source of funding for councils," yet the implementation of the EWL will significantly reduce the available income for the provision of infrastructure and community facilities. It is concerning that there is less opportunity to collect for social infrastructure and there are limitations to what can be conditioned in development consents to offset this shortfall. Yet, communities' expectations around the provision and standard of infrastructure and community services are high.

It is acknowledged that the development industry may not support the inclusion of community facilities in the EWL and there is a general desire to keep infrastructure contributions low. However, community infrastructure that is development contingent should be contributed to by the relevant developments. It is difficult to understand why development should not pay towards community infrastructure when it is directly

(proportionally) resulting in the need for the additional service/s. Where, a direct nexus has been established, it is appropriate to levy relevant contributions directly on development and this opportunity should be retained.

The inclusion of borrowing costs for the forward funding of infrastructure in the EWL is strongly supported.

Funding of Local Infrastructure

The ability for Councils to borrow against future rates revenue to help fund community infrastructure is generally not supported. New development is increasing the demand on community infrastructure, and as such, should be appropriately contributing towards its provision. It is accepted that the future population of the new development would be paying towards the repayment of the facilities as part of future rates, but existing rate payers will also be contributing which is not considered equitable.

IPART comments that "While this [the rate peg] should take some pressure off councils with growing communities, for some the additional revenue from the adjusted rate peg may not be sufficient to fund community facilities. These councils would need to seek a special variation that would increase rates for the existing population or obtain funding via voluntary agreements with developers or government grants"

IPART, pg. 25

The additional revenue from the upcoming adjusted rate peg will not be sufficient to fund community facilities. Furthermore, Councils that may be reluctant to increase rates, may not be successful in obtaining grants (not all Councils have the resourcing available to consistently apply for grants) or may not be able to get additional funding via voluntary planning agreements. This may ultimately mean that communities do not get the level of community services that they require as a direct result of the change to the EWL and this is not an acceptable outcome.

Based on an initial review, any additional rate increase in Shoalhaven will generate approximately \$400,000 – \$560,000 per annum (that is, if Council resolves to increase rates). Using an example of a library which generally costs in the vicinity \$15-\$20 million, Council would need to save funds generated from the rate increase for 40 years, which is a long time for a community to wait for much needed essential infrastructure. Importantly, these additional funds are supposed to fund all other infrastructure needs that will no longer be provided through the contributions plan, which is clearly not achievable. This concept will result in an extremely poor outcome for the Shoalhaven community, and as such is not supported.

In this regard it has also been previously noted by councils, "that where communities see the need for infrastructure being driven by new development, raising their rates to pay for this infrastructure will make communities less willing to accept development in their local area."

IPART, pg. 25

Base Level Infrastructure



3. What further guidance on base level, efficient local infrastructure should be included in an updated practice note to assist councils, developers and other stakeholders in preparing and assessing contributions plans? How definitively should the guidance in an updated practice note specify the standards expected of infrastructure (e.g. legislation and other industry standards)?

It is appreciated that what is considered 'base level' can differ between communities and is likely to change over time. However, whilst IPART notes defining 'base level' is considered too prescriptive, the lack of definition does not provide certainty for Councils, the development industry, or the community. As such, further guidance is required in order to remove or replace ambiguity and opportunities for objection to what is considered base level.

It is understood that Councils can fund above base level embellishment through additional means, such as grants and general revenue, however general revenue should not be used to provide infrastructure that is required solely related to new development. It is appreciated that the notion of 'base level' has regard for relevant government regulations, industry standards and community needs, and that the 'most cost effective' does not necessarily mean the lowest upfront cost.

Furthermore, including the provision of land and works that are resilient to climate change, (bridges and flood access roads) and reduce natural hazards associated with climate change in the base level of performance of infrastructure is strongly supported. This is especially important within areas such as Shoalhaven, following the bushfires and floods experienced over the past two years.

Benchmark Costings



4. Are there other items that we should consider benchmarking?
5. Do you agree with our approach to use adjustment factors so that the benchmarks are applicable to a broader range of projects?
6. What other factors increase the complexity of a project that could be used as an adjustment factor?

Generally, the use of adjustment factors is supported so that the benchmark costings are applicable to a broader range of projects. Additionally, the acknowledgement that costs may be different in regional areas as well as for different types of development is welcomed. However, it is disappointing that environmental factors, such as the protection of threatened species or similar, has not been considered in the adjustment factors. Additionally, traffic management and accessibility costs can differ significantly and as such should be considered as an adjustment factor.

The inclusion of "on-costs" in contributions plans, including the funding of specialist investigations, insurances, and compliance costs as a percentage of total construction costs is supported. However, where the supporting information and documentation for deviating from the benchmark costs is to be retained, and whether this will be required

to be documented on the Planning Portal or Council's website, or both; needs clarification and certainty.

Benchmark Costings for Open Space



8. We seek stakeholder views on alternative benchmarks for open space. Is there value in a per person benchmark? How would it work?

The intent of an alternative benchmark to be used for open space is supported, although concern is raised regarding the execution of a per person benchmark for open space.

Further consultation on a benchmark cost for open space is requested.

Project Allowances – Contingency



7. We seek stakeholder views on the approach to project allowances, including the rates and their application

The proposed contingency rates for the planning and design project stages is generally supported; acknowledging that contingency is an allowance that accounts for the level of uncertainty within a project and should be included within the contribution plan. However, it is noted that in the table on page 54 of the Review, there is no consideration or inclusion of contingency for the construction phase of the project. During the construction phase, contingency may be required for bad weather or unforeseen circumstances etc., as such it is requested that a contingency rate be included for the construction stage.

We request further consideration and consultation on the inclusion of a contingency allowance for the construction phase of a project.

Benchmark Costs for Plan Administration – Proposed 1.5%



9. Does 1.5% of the total value of works excluding land broadly reflect the actual cost councils face to administer a contributions plan? If not, what percentage would better reflect the actual cost councils face?
10. What other types of information or data would provide a clear evidence base for the true costs of plan administration?

Currently Council determines the contributions plan administration cost, by calculating the cost of administering the plan each year multiplied by the estimated lifespan of the plan (20 years). The total administration cost is divided by the estimated Equivalent Tenements (ETs) for the lifespan of the plan, based on residential and non-residential projections, and the administration contribution rate is conditioned per development consent based on the applicable ETs. How the proposed 1.5% administration cost total is determined is understood, but it is questioned whether applying the same methodology to levy administration costs would be appropriate? Additionally, Council currently has a preference to cap the administration fees that can be charged per

development consent, to not exceed 10% of the total cost of contribution infrastructure projects levied in the consent. How would this be able to be considered in the proposal?

Further guidance around the methodology for levying administration costs is requested.

It is noted that a "one size fits all" approach does not work. The proposed benchmark cost for plan administration (1.5% of the total value of works to be funded by local infrastructure contributions) may be reasonable for Councils with larger contributions plans, however for Shoalhaven, 1.5% will not be sufficient. It is acknowledged that there is an option to justify an administration cost higher than 1.5%, however, it is considered that it would be more appropriate to have a higher administration percentage allocated for regional Councils (and other Councils) with smaller value of infrastructure contributions, but more complex contributions plans.

Currently, Council allocates 5% of the contributions plan income towards plan administration, including the funding of staff salaries (for dedicated work on the contributions plan) and its ongoing administration, website maintenance and legal costs. Reducing this to 1.5% would have significant impacts on resourcing. Based on an initial review, the implementation of the benchmark cost for plan administration to be set at 1.5% would result in an annual shortfall for Council's current plan administration costs of \$217,193 or \$4,343,866 over the duration of the plan. This is inconsistent with the Minister's commitment that no Council will be worse off as a result of these reforms.

Is it suggested that a plan administration value of up to 5% of total value of works for administration costs would be more appropriate for regional Councils. This would provide greater flexibility to Councils and allow appropriate variation, depending on the size of the plan, without having to provide a detailed bottom-up calculation as justification.

It is strongly requested that this aspect be reconsidered following feedback received from councils, especially those Councils with lower value plans. Council would welcome the opportunity for further discussions about the detail of this aspect.

IPART's Four-Yearly Review of Benchmarks



11. We seek views on our proposed approach to annual escalations and 4 yearly reviews of benchmarks, including the choice of index and timeframe.
12. We seek views on an appropriate feedback or data collection mechanism to obtain reliable and consistent project information to refine the benchmarks over time.

IPART annually updating benchmarks to account for cost escalations, and its intended approach to have a review of benchmarks at least every four years is generally supported. It is noted that plans will not be required be updated annually to reflect the updated benchmarks, rather the applicable benchmark costings can be updated during the four-yearly review process. Additionally, cost escalations only being applied to base costs of infrastructure, and that adjustment factors, on-costs, contingencies plan

management and borrowing costs will be increased proportionally, in relation to construction costs is also generally supported.

In this regard it may be more appropriate for IPART to use ABS Consumer Price Index (CPI) when annually updating the benchmarks, as opposed to ABS Producer Price Index (PPI), as this is more relevant to purchases and construction.

Relationship to Other Planning Reforms

IPART notes they “anticipate that the Design and Place SEPP will contain updated benchmarks for the provision of open space in new developments, including the consideration of active versus passive open space requirements.”

IPART, pg. 32

It is acknowledged that this may be the case, however why the proposed reforms are being undertaken prior to the Design and Place SEPP being notified is questioned. There is currently too much movement in the planning reform space to have any certainty or a clear idea of where we are heading. Thus, and also considering the three-year deferral of the EWL, there would be merit in IPART reviewing its paper again once the new revised NSW Government Policy setting is largely known.

Conclusion

All other recommendations are generally supported, including the calculation of the interest rate, pooling of funds and opportunity to use alternative estimate methods where benchmark costs may not be suitable. These recommendations simplify the process and reviewing the benchmark costs at least every four years and will ensure they are relevant and reflect cost escalations.

However, concern over the negative impacts that the implementation of the 1.5% administration benchmark and EWL will have on income and the provision of community services and infrastructure for public benefit is reiterated. This is also not consistent with the Minister's commitment that no Council will be worse off from these reforms.

Thank you again for the opportunity to provide feedback on this very important matter. Given the relevance of this matter to Shoalhaven, and NSW Councils broadly, it is important that there is additional consultation and engagement with the local government sector to ensure that the final reforms are appropriate, can function as intended and the impacts are balanced.

If you need further information about this matter, please contact Emma Kell, City Futures on (02) 4429 3213. Please quote Council's reference 31157E (D21/537180).

Yours faithfully



Gordon Clark
Director City Futures



Preliminary translation of the employment zones land use tables

Shoalhaven LEP 2014 land use tables (Version 1.0)

CL22.64 - Attachment 3

Employment zones reform

Preliminary translation of Shoalhaven LEP 2014 land use tables



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CL22.64 - Attachment 3

Employment zones reform

Preliminary translation of Shoalhaven LEP 2014 land use tables



Shoalhaven Local Environmental Plan 2014

Zone E1 Local Centre

Direction

The following must be included as either "Permitted without consent" or "Permitted with consent" for this zone—

Building identification signs; Business identification signs; Home businesses; Home industries; Home occupations; Recreation areas; Roads

Guidance

The following needs to be considered by council in finalising the land use table:

1. Land uses - a decision by council as to whether council permits or prohibits –
Pond-based aquaculture; Tourist and visitor accommodation (as the group term) and non-mandated land use sub-terms – backpackers' accommodation; bed and breakfast accommodation; farm stay accommodation; and serviced apartments.
2. Objectives – there may be guidance detailed in 1 Objectives of zone for council feedback. This includes whether to 'retain', 'delete' or 'amend' a local objective.

1 Objectives of zone

- To provide a range of retail, business and community uses that serve the needs of people who live, work or visit the area.
- To encourage investment in local commercial development that generates employment opportunities and economic growth.
- To enable residential development that contributes to a vibrant and active local centre and is consistent with the Council's strategic planning for residential development in the area.
- To encourage business, retail, community and other non-residential land uses on the ground floor of buildings.
- To ensure that development is of a scale that is compatible with the character of the surrounding residential environment. [retain]

2 Permitted without consent

Nil

3 Permitted with consent

Amusement centres; Backpackers' accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Home businesses; Home industries; Home occupations; Hotel or motel accommodation; Information and education facilities; Local distribution premises; Medical centres; Oyster aquaculture; Passenger transport facilities; Places of public worship; Public administration buildings; Recreation areas; Recreation facilities (indoor); Registered clubs; Residential care facilities; Respite day care centres; Restricted premises; Roads; Service

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stations; Shop top housing; Tank-based aquaculture; Veterinary hospitals; [Any other development not specified in item 2 or 4](#)

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Environmental facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Recreation facilities (major); Recreation facilities (outdoor); Research stations; Residential accommodation; Resource recovery facilities; Rural industries; Sex services premises; Signage; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Warehouse or distribution centres; Waste disposal facilities; Water recreation structures; Wharf or boating facilities

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Zone E2 Commercial Centre

Direction

The following must be included as either “Permitted without consent” or “Permitted with consent” for this zone—

Building identification signs; Business identification signs; Home businesses; Home industries; Home occupations; Roads

Guidance

The following needs to be considered by council in finalising the land use table:

1. Land uses – a decision by council as to whether council permits or prohibits –
Pond-based aquaculture
2. Objectives – there may be instructions detailed in 1 Objectives of zone for council feedback. This includes whether to ‘retain’, ‘delete’ or ‘amend’ a local objective.

1 Objectives of zone

- To strengthen the role of the commercial centre as the centre of business, retail, community and cultural activity.
- To encourage investment in commercial development that generates employment opportunities and economic growth.
- To encourage development that has a high level of accessibility and amenity, particularly for pedestrians.
- To enable residential development that is consistent with the Council’s strategic planning for residential development in the area.
- To ensure that new development provides diverse and active street frontages to attract pedestrian traffic and to contribute to vibrant, diverse and functional streets and public spaces.

2 Permitted without consent

Nil

3 Permitted with consent

Amusement centres; Artisan food and drink industries; Backpackers’ accommodation; [Boarding houses](#); [Building identification signs](#); [Business identification signs](#); Centre-based child care facilities; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; [Home businesses](#); [Home industries](#); [Home occupations](#); Hotel or motel accommodation; Information and education facilities; Local distribution premises; Medical centres; Mortuaries; Oyster aquaculture; Passenger transport facilities; Places of public worship; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Registered clubs; Respite day care centres; Restricted premises; [Roads](#); [Seniors housing](#); [Shop top housing](#); Tank-based aquaculture; Vehicle repair stations; Veterinary hospitals; [Any other development not specified in item 2 or 4](#)

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4 Prohibited

Agriculture; Air transport facilities; Airstrips; Bed and breakfast accommodation; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Environmental facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Forestry; Freight transport facilities; Heavy industrial storage establishments; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Jetties; Marinas; Mooring pens; Moorings; Open cut mining; Recreation facilities (major); Research stations; Residential accommodation; Residential care facilities; Resource recovery facilities; Rural industries; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Warehouse or distribution centres; Waste disposal facilities; Wharf or boating facilities

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Zone E3 Productivity Support

Direction

The following must be included as either “Permitted without consent” or “Permitted with consent” for this zone—

Building identification signs; Business identification signs; Home industries; Roads

Guidance

The following needs to be considered by council in finalising the land use table:

1. Land uses - a decision by council as to whether council permits or prohibits –
Pond-based aquaculture
2. Objectives – there may be guidance detailed in 1 Objectives of zone for council feedback.
This includes whether to ‘retain’, ‘delete’ or ‘amend’ a local objective.

1 Objectives of zone

- To provide a range of facilities and services, light industries, warehouses and offices.
- To provide for land uses that are compatible with, but do not compete with, land uses in surrounding local and commercial centres.
- To maintain the economic viability of local and commercial centres by limiting certain retail and commercial activity.
- To provide for land uses that meet the needs of the community, businesses and industries but that are not suited to locations in other employment zones.
- To provide opportunities for new and emerging light industries.
- To enable other land uses that provide facilities and services to meet the day to day needs of workers, to sell goods of a large size, weight or quantity or to sell goods manufactured on-site.
- To allow a diversity of activities that do not significantly conflict with the operation of existing or proposed development. [retain]

2 Permitted without consent

Nil

3 Permitted with consent

Animal boarding or training establishments; Backpackers' accommodation; Boarding houses; Boat building and repair facilities; Building identification signs; Business identification signs; Business premises; Centre-based child care facilities; Community facilities; Depots; Function centres; Garden centres; Hardware and building supplies; Hotel or motel accommodation; Industrial retail outlets; Industrial training facilities; Information and education facilities; Kiosks; Landscaping material supplies; Light industries; Local distribution premises; Markets; Mortuaries; Neighbourhood shops; Office premises; Oyster aquaculture; Passenger transport facilities; Places of public worship; Plant nurseries; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Research stations; Respite day care centres; Roads; Rural supplies; Service stations; Serviced apartments; Shop top housing; Specialised retail

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premises; Storage premises; Take away food and drink premises; Tank-based aquaculture; Timber yards; Vehicle body repair workshops; Vehicle repair stations; Vehicle sales or hire premises; Veterinary hospitals; Warehouse or distribution centres; Wholesale supplies; [Any other development not specified in item 2 or 4](#)

4 Prohibited

[Agriculture; Air transport facilities; Airstrips; Amusement centres; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Correctional centres; Eco-tourist facilities; Entertainment facilities; Environmental facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Helipads; Highway service centres; Home businesses; Home occupations; Home occupations \(sex services\); Home-based child care; Industries; Jetties; Marinas; Mooring pens; Moorings; Open cut mining; Registered clubs; Residential accommodation; Resource recovery facilities; Restricted premises; Retail premises; Rural industries; Sex services premises; Signage; Tourist and visitor accommodation; Transport depots; Truck depots; Waste disposal facilities; Water recreation structures; Wharf or boating facilities](#)

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Zone E4 General Industrial

Direction

The following must be included as either “Permitted without consent” or “Permitted with consent” for this zone—

Building identification signs; Business identification signs; Roads

Guidance

The following needs to be considered by council in finalising the land use table:

1. Land uses - a decision by council as to whether council permits or prohibits –
Pond-based aquaculture; Places of public worship
2. Objectives – there may be guidance detailed in 1 Objectives of zone for council feedback.
This includes whether to ‘retain’, ‘delete’ or ‘amend’ a local objective.

1 Objectives of zone

- To provide a range of industrial, warehouse, logistics and related land uses.
- To ensure the efficient and viable use of land for industrial uses.
- To minimise any adverse effect of industry on other land uses.
- To encourage employment opportunities.
- To enable limited non-industrial land uses that provide facilities and services to meet the needs of businesses and workers.
- To allow a diversity of activities that do not significantly conflict with the operation of existing or proposed development. [retain]

2 Permitted without consent

Nil

3 Permitted with consent

Building identification signs; Business identification signs; Depots; Freight transport facilities; Garden centres; General industries; Goods repair and reuse premises; Hardware and building supplies; Industrial retail outlets; Industrial training facilities; Kiosks; Landscaping material supplies; Light industries; Local distribution premises; Markets; Neighbourhood shops; Oyster aquaculture; Plant nurseries; Roads; Specialised retail premises; Take away food and drink premises; Tank-based aquaculture; Timber yards; Warehouse or distribution centres; Any other development not specified in item 2 or 4

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Camping grounds; Caravan parks; Cemeteries; Centre-based child care facilities; Charter and tourism boating facilities; Correctional centres; Crematoria; Eco-tourist facilities; Educational establishments; Environmental facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Function centres; Health services facilities; Highway service

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centres; Home businesses; Home occupations; Home occupations (sex services); Home-based child care; Information and education facilities; Marinas; Mooring pens; Moorings; Office premises; Open cut mining; Registered clubs; Residential accommodation; Respite day care centres; Restricted premises; Retail premises; Sex services premises; Tourist and visitor accommodation; Water recreation structures; Wharf or boating facilities

PRELIMINARY TRANSLATION

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Zone MU1 Mixed Use

Direction

The following must be included as either "Permitted without consent" or "Permitted with consent" for this zone—

Building identification signs; Business identification signs; Home industries; Roads

Guidance

The following needs to be considered by council in finalising the land use table:

1. Land uses - a decision by council as to whether council permits or prohibits –
Pond-based aquaculture
2. Objectives – there may be guidance detailed in 1 Objectives of zone for council feedback.
This includes whether to 'retain', 'delete' or 'amend' a local objective.

1 Objectives of zone

- To encourage a diversity of business, retail, office and light industrial land uses that generate employment opportunities.
- To ensure that new development provides diverse and active street frontages to attract pedestrian traffic and to contribute to vibrant, diverse and functional streets and public spaces.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To encourage business, retail, community and other non-residential land uses on the ground floor of buildings.

2 Permitted without consent

Nil

3 Permitted with consent

Amusement centres; Attached dwellings; Boarding houses; Building identification signs; Business identification signs; Car parks; Centre-based child care facilities; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Group homes; Information and education facilities; Light industries; Local distribution premises; Medical centres; Multi dwelling housing; Oyster aquaculture; Passenger transport facilities; Places of public worship; Recreation areas; Recreation facilities (indoor); Registered clubs; Residential flat buildings; Respite day care centres; Restricted premises; Roads; Seniors housing; Shop top housing; Tank-based aquaculture; Tourist and visitor accommodation; Vehicle repair stations; Any other development not specified in item 2 or 4

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Environmental facilities; Exhibition homes; Exhibition

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villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Recreation facilities (outdoor); Research stations; Residential accommodation; Resource recovery facilities; Rural industries; Sex services premises; Signage; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Warehouse or distribution centres; Waste disposal facilities; Wharf or boating facilities

PRELIMINARY TRANSLATION

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Zone W4 Working Waterfront

W4 Direction

The following must be included as either “Permitted without consent” or “Permitted with consent” for this zone—

Roads

Guidance

The following needs to be considered by council in finalising the land use table:

Objectives – there may be guidance detailed in *1 Objectives of zone* for council feedback. This includes whether to ‘retain’, ‘delete’ or ‘amend’ a local objective.

1 Objectives of zone

- To retain and encourage industrial and maritime activities on foreshores.
- To identify sites for maritime purposes and for activities requiring direct foreshore access.
- To ensure that development does not have an adverse impact on the environment and visual qualities of the foreshore.
- To encourage employment opportunities.
- To minimise any adverse effect of development on land uses in other zones.

2 Permitted without consent

Building identification signs

3 Permitted with consent

Aquaculture; Boat building and repair facilities; Boat launching ramps; Heliports; Hotel or motel accommodation; Jetties; Kiosks; Light industries; Liquid fuel depots; Markets; Restaurants or cafes; Roads; Serviced apartments; Take away food and drink premises; Vehicle sales or hire premises; Any other development not specified in item 2 or 4

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Camping grounds; Caravan parks; Cemeteries; Centre-based child care facilities; Commercial premises; Correctional centres; Crematoria; Eco-tourist facilities; Educational establishments; Entertainment facilities; Environmental facilities; Exhibition homes; Exhibition villages; Farm buildings; Forestry; Function centres; Health services facilities; Heavy industrial storage establishments; Helipads; Highway service centres; Home businesses; Home occupations; Home occupations (sex services); Home-based child care; Industries; Information and education facilities; Local distribution premises; Mortuaries; Open cut mining; Places of public worship; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Residential accommodation; Resource recovery facilities; Respite day care centres; Restricted premises; Rural industries; Service stations; Sex services premises; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste disposal facilities

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Local Provisions and Schedule 1 – Additional permitted uses

This table lists Local Provisions and Schedule 1 – Additional permitted uses. The department, in reviewing these existing provisions, has prepared a recommendation for how to proceed as part of translation into the new employment zones. Council is asked to review, confirm, or amend the recommendations.

LEP	Clause/Schedule	Provision	Implications for implementation	Recommendation
Shoalhaven LEP 2014	Part 7 Additional local provisions			
	Cl.7.14 Permanent occupation in mixed use developments	Stipulates limitations on the amount of residential and/or tourist and visitor accommodation that can developed in mixed use developments, including in B4 zone.	Nil	Retain provisions.
	Cl.7.16 Ground floor development in Zone B3	Requirements for ground floor development, including no residential accommodation, in B3 zone.	Nil	Retain provision.
	Cl.7.19 Development of the Nowra Civic Precinct	Requirement for preparation and consideration of DCP before development is carried out (land zoned B4)	Site specific provision.	Retain provision.
	Cl.7.26 Increased building height Huskisson TC	Stipulates development criteria that, if met, would allow for increased building height	Site specific provision.	Retain provision.
	Schedule 1			
	Schedule 1, cl.7, 13 Wilfords Lane, Milton	Allows concrete batching plant (land zoned IN2)	Concrete batching plant considered a general industry and therefore not mandated in E4.	Provision can be deleted.
	Schedule 1, cl.9, certain land in Maisie Williams Dr, Mollymook	Allows dwelling houses or dual occupancies (land zoned B4)	Dwelling houses and dual occupancies not mandated in MU1.	Retain provision.
	Schedule 1, cl.12, 188 Camden St Ulladulla	Allows aquaculture (including pond-based aquaculture) (land zoned IN2)	Pond-based aquaculture prohibited in E4.	Retain provision.
	Schedule 1, cl.13, Vincentia District Town Centre	Allows specialised retail premises, garden centres, hardware and building supplies, landscaping material supplies, plant nurseries and timber yards (land zoned B2)	All uses mandated in E1.	Provision can be deleted.
	Schedule 1, cl.19, 9 Browns Rd, South Nowra	Allows caravan parks (land zoned B5)	Caravan parks not mandated in E3.	Retain provision.

90/1912 CCC.JES
Mr. C Crakanthorp

Cowman & Royston Pty Ltd
PO Box 738
NOWRA NSW 2541

November 6, 1990

Dear Sir,

ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979
NOTICE TO APPLICANT OF DETERMINATION OF A DEVELOPMENT APPLICATION

To Mr P. Cowman of Cowman & Royston Pty Ltd., being the applicant in respect of Development Application No.90/1912 (Proposed Quarry & Processing of Shale), relating to the land described as follows:

Lot 4, DP 775296 off Parnell Road, Portion 159,
Parish of Wandrawandian Tomerong

Pursuant to Section 92 of the Act, notice is hereby given that the Development Application has been determined by granting of consent, subject to conditions.

NOTE - When any construction work is involved, the granting of development consent is only the first part of a two-stage process. Before any such work is commenced, a Building Application must first be lodged and approved by Council. See "Advice" section of this letter.

The conditions of the consent and reasons for such conditions are set out as follows:-

Conditions of the City Planner

1. Compliance with Standard Conditions, where applicable, copy of which is attached.

GENERAL CONDITIONS

2. This consent relates to quarrying and processing of shale as illustrated on the plans submitted with development application number 90/1912, referred to as the submitted plans.

Any alteration to the abovementioned plans shall be submitted for the approval of the City Planner prior to submission of the building application. No works, other than those approved under this consent, shall be carried out without first having obtained Council's written consent.

3. To ensure the future amenity of the location, and in order to properly assess the impact of the development at the appropriate time, the approved use shall be limited to a period of thirteen (13) years from the date of endorsement. Modified by D502/1087, D506/1039

The applicant may, however, prior to the expiration date, write to Council seeking reconsideration of this condition.

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LANDSCAPE & REHABILITATION PLAN

4. To maintain and enhance the amenity of the area, a detailed landscape and rehabilitation plan shall be submitted prior to submission of the building application for Council approval.

Such plan shall include and indicate the following measures which shall be immediately implemented -

- (a) general landscape treatment;
- (b) species, numbers and the location of trees and shrubs proposed;
- (c) to reduce the visual impact of the quarry site on the southern approaches to the property, the provision of a heavily landscaped tree and shrub buffer screen along the southern boundary of the site;
- (d) the provision of tree and shrub screen adjacent to the southern walls of the existing buildings and on the southern side of the quarry site;
- (e) rehabilitation and revegetation of all areas on the subject land that have been affected by previous mining works which are not covered by this consent, including the Tomerong Creek area;
- (f) no disturbance to vegetation or soil surface shall take place along the banks of Tomerong Creek. Rehabilitation and revegetation measures undertaken shall enhance the vegetated corridor along Tomerong Creek and the plan shall ensure that sedimentation and erosion does not occur along Tomerong Creek in the future;
- (g) cattle shall be excluded from areas affected by this plan in order to optimise landscaping and rehabilitation potential.

In addition to the above requirements, the landscape and rehabilitation plan shall be prepared in accordance with guidelines endorsed by the Soil Conservation Service and the State Pollution Control Commission and any further requirements of these Authorities shall be included in the plan. Evidence of consultation with the abovementioned Authorities shall be submitted with this plan.

5. Trees shall not be removed other than those located within the area of approved works.

LONG TERM REHABILITATION

6. To ensure the future amenity of the area, the applicant shall submit a site rehabilitation management plan which shall be implemented at the

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expiration of this consent or in the event approved works cease sooner. Such a plan shall be submitted, for Council approval, within three (3) months of the endorsement date of this consent.

The site rehabilitation plan shall be prepared in accordance with requirements of the Soil Conservation Service, the National Parks & Wildlife Service and the State Pollution Control Commission. Evidence of consultation with the abovementioned Authorities shall be submitted with the plan.

In addition to the above, the site rehabilitation plan shall include details of the following measures -

- (a) establishment of the base level in the second year of operation;
- (b) base level quarrying to keep pace with overburden stripping;
- (c) overburden to be used to revegetate quarry walls;
- (d) revegetation and rehabilitation to keep pace with quarrying operations;
- (e) the final wall shape to be established by shattering vertical face using a major explosion to facilitate slumping and accelerate natural weathering;
- (f) cattle to be excluded from the operational area to optimise revegetation potential.

SEDIMENTATION & EROSION CONTROL

7. To reduce and/or eliminate the occurrence of soil erosion and sedimentation, the applicant shall submit an erosion and sedimentation control plan for the approval of Council, prior to the submission of a building application. Such a plan shall comply with the requirements of the Soil Conservation Service and the State Pollution Control Commission (SPCC).

In addition to the requirements of the above Authorities, the plan shall incorporate the following measures which, together with the Soil Conservation Service and SPCC requirements, shall be implemented -

- (a) the quarry floor is to be graded to ensure one discharge point;
- (b) a silt trap, having a minimum capacity of five (5) cubic metres, shall be established in the quarry floor at the discharge point;
- (c) silt build-up shall be regularly removed from the trap to ensure its capacity is not reduced to less than 50% at any time;

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- (d) a siltation dam shall be established immediately having a minimum capacity of 1,000 cubic metres, or in accordance with SPCC requirements, whichever is greater;
- (e) the dam walls shall be vegetated, together with all associated construction disturbance;
- (f) a drain shall be established and contoured from the dam to ensure discharge is not concentrated and a maximum disposal area is achieved.

Evidence of consultation with the Soil Conservation Service and the SPCC shall be submitted with this plan.

DUST POLLUTION

8. The applicant shall apply to the SPCC for a licence under the SPCC Act, with regard to the Clean Air Act 1961.
9. In addition to any requirements of the SPCC in relation to the Clean Air Act 1961, the following requirements shall be complied with unless higher standards are required by the SPCC -
 - (a) the standard of dust concentration at the crushing plant is determined in accordance with the provisions of the Clean Air Regulations, 1964. The solid particles in each cubic metre of residual gases before admixture with air shall not exceed 0.4 grams;
 - (b) all stockpiled soil and overburden shall be suitably shaped and revegetated;
 - (c) the crushing plant shall be fitted with a water spray system which shall be activated so as to prevent excessive dust build-up;
 - (d) the site shall be equipped with holding tanks (in addition to the water storage dam) with adequate storage capacity to spray all unsealed road areas within and adjacent to the site and to spray work areas as required for adequate dust suppression purposes;
 - (e) a water cart of adequate capacity shall be located on the site and all unsealed roads within and adjacent to the site shall be adequately sprayed to prevent dust pollution;
 - (f) the conveyors on the plant shall be covered on the top and to one side;
 - (g) the end of conveyor C4 (which feeds the stockpile) shall be fitted with a dust tube made of conveyor belting. The length of such belting shall be 3-4 metres to prevent dust becoming airborne before the material is formed on the stockpile;

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- (h) the stockpile shall be wet by a wide angle spray fitted to the end of the stockpile feeder conveyor C4;
- (i) additional fine sprays are required at the end of conveyor C3 and at the outlet of the hammermill. The alternative to using sprays is to further enclose the material transfer points of the plan to minimise the emission of dust.

NOISE EMISSION

10. The applicant shall apply to the SPCC for a licence under the SPCC Act with regard to the Noise Control Act, 1974.
11. In addition to any requirements of the SPCC in relation to the Noise Control Act, 1974 the following shall be complied with unless higher standards are required by the SPCC -
 - (a) noise level at the nearest residences shall not be increased by more than 5dBA above existing background levels, that is, the measured L90 level;
 - (b) the new noise source shall be controlled to 10dBA below the L90 levels;
 - (c) no truck movements from the site prior to 7.00 am and later than 4.30 pm;
 - (d) the level of ground vibration shall be controlled to a maximum limit of 5mm/sec;
 - (e) blasting time is restricted to between 10.00 am and 4.00 pm on weekdays only;
 - (f) the time of operation for the approved activity shall be from 7.00 am to 4.30 pm Monday to Friday and 7.00 am to 12.00 noon Saturdays;
 - (g) a turfed earth mound of 2.5m minimum in height is to be maintained around the northern and eastern side of the quarry pit;
 - (h) the drill rig is to operate behind the earth berm at all times;
 - (i) the hydraulic rock breaker shall operate on the quarry floor at all times so noise emissions are shielded;
 - (j) the transfer chutes shall be lined between the end of the conveyor from the primary crusher and feed conveyor to the screen with hard rubber;
 - (k) a noise compliance measurement shall be taken when the implementation of all noise control conditions is completed;

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- (l) monitoring of explosions shall be carried out and the results submitted to the SPCC in order to optimise blast design;
- (m) overpressure levels shall comply with SPCC criteria and guidelines with respect to comfort requirements for residential locations. This may require a reduction of maximum instantaneous charge (MIC) when blasting.

New condition 11 n) - D502/1087
ARTIFACTS/RELICS

- 12. Should any aboriginal artifacts, archaeological relics or rare plants or animals be discovered on the subject site or uncovered as a result of carrying out approved works, the applicant shall notify the National Parks & Wildlife Service of NSW forthwith. No further disturbance to the location shall occur until a clearance has been obtained from that Authority.

BANK GUARANTEE

- 13. To ensure that the landscaping and initial rehabilitation is both carried out and maintained for at least twelve (12) months following the endorsement date of the consent, and to ensure that long-term site rehabilitation is carried out, the applicant shall enter into an irrevocable Bank Guarantee for the amount of \$30,000 together with a landscape and rehabilitation completion and maintenance deed of agreement.

Such documents shall be completed and submitted with the building application.

CONDITIONS RELATIONS TO ROADWORKS

- 14. In the interests of traffic safety, the following requirements of the Local Traffic Committee and City Engineer shall be complied with - *modified by D503/1325*
New condition 14 i) & j) - D502/1087
 - (a) the existing junction of Pine Road and Parnell Roads shall be upgraded to NAASRA Type A, with 3m gravel shoulders;
 - (b) the Parnell Road link of the junction of Pine Forest and Parnell Roads shall be upgraded to a "Desirable Treatment" in accordance with Fig. 5.16 of Part 5 of NAASRA "Intersection at Grade". A flush seal at the junction shall also be extended to 30m to keep the pavement clean;
 - (c) On Parnell Road, just south of the Pine Forest Road junction, there is a sub-standard section of alignment created by a turn that restricts sight distance. The applicant shall carry out roadworks to improve the bend in this section of Parnell Road and to improve the sight distance, to the satisfaction of the City Engineer.

In this regard, Parnell Road shall be bitumen sealed from the Pine Forest Road intersection to the quarry access road to the satisfaction of the City Engineer;

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- (d) the Parnell Road access to the quarry shall be upgraded to at least a Type 2 driveway. The access road into the quarry from Parnell Road to the main office shall be sealed to a minimum width of 6.5m. The access to Parnell Road shall be widened to provide an 8m entry and a 6m exit, with a 1.0m separation at the property boundary;
- (e) the applicant shall negotiate with the City Engineer the provision of an acceptable and safe sight distance to either side of the Parnell Road access point. A number of trees may need to be removed and the applicant shall consult with the City Engineer in this regard;
- (f) the applicant shall widen the Railway Road carriageway to provide passing bays at maximum intervals of 100m to the satisfaction of the City Engineer and shall maintain a water cart of sufficient capacity to spray such road to reduce the dust nuisance from trucks.
- (g) the Railway Road entrance to the quarry shall be widened and upgraded to a Type 2 Driveway to the City Engineer's satisfaction;
- (h) the transportation of shale material from the quarry shall not exceed 1,000 tons per day. Should the applicant wish to exceed this tonnage, the proposal shall be submitted to the Regional Traffic Committee as major upgrading would be required on the access roads.

New conditions 14-17 & 18 DS02/1087
PARKING & STANDING AREAS

- 15. The applicant shall provide an all-weather, dust-free carparking area on the site, capable of accommodating at least ten (10) vehicles. Such carparking facilities shall be constructed and drained to the satisfaction of the City Engineer.
- 16. All machinery standing/parking areas shall be constructed to an all-weather, dust-free standard and drained to the satisfaction of the City Engineer.

EXPLOSIVES & FUEL STORAGE

- 17. All explosives on-site shall be securely stored in accordance with the requirements of the Dangerous Goods Regulations 1978 as administered by the Workers Compensation and Rehabilitation Authority of NSW.
- 18. All fuel stored on the site shall be securely stored in accordance with any requirements under the Dangerous Goods Regulations as administered by the Workers Compensation and Rehabilitation Board.
- 19. The on-site fuel shall be stored in a manner so as to prevent seepage in the event of accidental spill. The storage area shall be adequately bunded to the satisfaction of the City Health Surveyor and

CL22.69 - Attachment 1

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such bunding shall be capable of containing at least 110% of the stored fuel.

New conditions 20 & 21 D502/1087

Endorsement of date of determination - 6th November, 1990

New condition 22 D506/1039

NOTES

This consent is valid for thirteen years from the date hereon, unless an environmental planning instrument prohibiting the development is gazetted within one year of the date hereon. Then the consent is only valid for one year from the date that instrument comes into force.

Section 97 of the Act confers on an applicant who is dissatisfied with the determination of a consent authority a right of appeal to the Land and Environment Court exercisable within twelve (12) months after receipt of this notice.

Advice to Applicants

The following information is supplied to assist in the preparation of plans and specifications in accordance with Part XI of the Local Government Act, 1919 as amended.

- (a) A building application, which is a requirement under Part XI of the Local Government Act, 1919 as amended, together with plans and specifications, in accordance with Ordinance 70 must be submitted to and approved by Council prior to works proceeding.

The following information is supplied to assist in the preparation of the Building Application.

- (b) No signs or advertising shall be erected on or in conjunction with the proposed use of the premises without the prior consent of Council.
- (c) To preserve the amenity of the area, the applicant shall take into account any emissions or discharges under the environmental acts, namely Clean Air Act 1961, Clean Waters Act 1970 and Noise Control (Amendment) Act 1983. Construction, siting and use of buildings and equipment shall comply with the requirements of Council and the State Pollution Control Commission, P.O. Box 1665 Wollongong (042 285755). Evidence of application for any required State Pollution Control Commission licence shall be submitted to Council with the building application.

Yours faithfully,

Enc.

G. A. Wapper,
TOWN CLERK.

CL22.69 - Attachment 1

**NOTICE TO APPLICANT OF
MODIFICATION OF DEVELOPMENT CONSENT**

Environmental Planning and Assessment Act, 1979

DA90/1912 (DS02/1087)

TO:

Cowman Stoddart Pty Ltd being the applicant with respect to DA90/1912 relating to:

**Lot 4 DP 775296
Parnell Rd, Tomerong**

APPROVED USE AND/OR DEVELOPMENT:

Proposed Quarry and Processing of Shale

DATE OF MODIFICATION:

29th October 2002

In response to your request of 6th March 2002 and pursuant to section 96 of the Environmental Planning and Assessment Act, 1979, notice is hereby given that the development consent issued in respect of the abovementioned application and dated 6th November 1990 has been modified by:

a. Replacing Condition 3 with the following:

"3. To ensure the future amenity of the location, and in order to properly assess the impact of the development at the appropriate time, the approved use shall be limited to a period expiring on 6th November 2010."

b. New Condition 11 n)

"11 n) The hammer rig shall be restricted in its operation to between the hours of 9.00 am and 3.00 pm on Mondays to Fridays only with no operation of this plant on Saturdays, Sundays or Public Holidays."

c. New Condition 14 i)

"14 i) To minimise dust emissions, general environmental impact and to improve delineation and priority at the intersection of Gunden Lane and Bayly Road the applicant shall provide the following:-

a) The applicant is to comply with the programme of works as outlined in the letter dated 26th July 2002 as follows:-

MODIFICATION TO DEVELOPMENT CONSENT: 90/1912 (DS02/1087) Page 2

- a. *Sealing of Gunden Lane within 12 months from the date of this modified consent,*
 - b. *Construction of new crossing over Tomerong Creek within 2 years from the date of this modified consent,*
 - c. *Sealing of remainder of southern accessway between a. and b. above within 3 years from the date of this modified consent.*
- b) *Gunden Lane shall be sealed on an approved pavement 7.0 m wide from the intersection of Island Point Rd and extended to a point 30m inside the property boundary. The 30 m extension of Gunden Lane shall be dedicated to Council, at no cost to Council, immediately upon the completion of the works. All works are to be completed within 12 months from the date of this modified consent.*
- c) *Until such time as Gunden Lane is sealed, the existing traffic movements shall be maintained with priority given to trucks using Parnell Road.*
- d) *Bayly Road shall be sealed for a distance of 10m from the intersection with Gunden Lane. The carriageway width shall be 5 m wide on an approved pavement with 0.5 m gravel shoulders.*
- e) *The standard of construction for all roadworks shall be in accordance with Development Control Plan No 100 – Engineering Design Specifications.*
- f) *Outside the hours of operation of the quarry, the property gate shall be closed and display a "Road Closed Hazard" sign in accordance with Roads and Traffic Authority unidirection signs and markings D4-4 or 2 x unidirection signs D4-4-1R and D4-1-1L.*
- g) *Prior to undertaking works within the road reserve, the developer must obtain the approval of Council under Section 138 of the Roads Act, 1993. The developer shall submit the following to Council for approval prior to the issue of a construction certificate:*
- *Detailed plans*
 - *Specifications*
 - *Pavement design; and*
 - *Traffic control plan (which must comply with the RTA's manual - "Traffic Control at Work Sites").*
 - *Insurance details*

Where any works are carried out on or adjacent to a public road, adequate protection shall be provided for the travelling and pedestrian public. Warning and protective devices shall be provided which comply with the provisions of AS 1742.3-1966 Traffic Control Devices for Works on Roads. Details shall be submitted and approved by Council prior to the issue of a construction certificate.

MODIFICATION TO DEVELOPMENT CONSENT: 90/1912 (DS02/1087) Page 3

- h) The developer or his agent must check that the proposed works are not affected by any Council, Integral Energy or telecommunications service. Any required alterations to services will be at the developer's expense.*
- i) The design of road and car park pavements, both on site and on public land, shall be supported by test results for the insitu subgrade material. These tests shall be carried out by a NATA approved laboratory, or may be carried out by Council at the developer's expense.*
- j) Siltation and erosion controls to be inspected and approved prior to the commencement of civil works.*
- k) All works shall be inspected and approved by Council's Development Works Inspector and a compliance certificate issued."*

Note – the works required in 14 i) a) b) and 14 i) a) c) require separate Development Consent.

d. New Condition 14 j

"14 j To ensure safe intersection sight distance is provided in both directions vegetation in the Parnell Road road reserve shall be underscrubbed and maintained."

e. New Condition 20:

"20. Trucks entering and leaving the site are required to drive at a speed that minimises the amount of dust generated from the roads."

f. New Condition 21:

"21 All surface water, draining from disturbed areas in the quarry site, is to be directed to the sediment dam."

All other conditions remain unaltered.

RIGHTS OF REVIEW AND APPEAL

Under section 82A of the Environmental Planning and Assessment Act, 1979 an applicant may request the council to review its determination except where it relates to a complying development certificate, designated development or integrated development. The request must be made within 28 days of the date of the receipt of the determination, with a prescribed fee of 50% of the original DA fee.

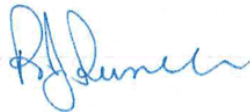
Section 97 of the Environmental Planning and Assessment Act, 1979 confers on an applicant who is dissatisfied with the determination of a consent authority in relation to

MODIFICATION TO DEVELOPMENT CONSENT: 90/1912 (DS02/1087) Page 4

this modification a right of appeal to the Land and Environment Court which must be exercised within 12 months of the date of this notice.

SIGNED on behalf of Shoalhaven City Council:

Signature



Name

Robert Russell
Development Manager
Development & Environmental Services Division

**NOTICE TO APPLICANT OF DETERMINATION OF DEVELOPMENT
APPLICATION**

MODIFICATION OF DEVELOPMENT CONSENT

Environmental Planning and Assessment Act, 1979

DA90/1912

(DS03/1325)

TO:

Cowman Stoddart Pty Ltd
P O Box 738
Nowra NSW 2541

being the applicant or persons entitled to act with respect to DA90/1912 relating to:

146 Parnell Rd Tomerong Lot: 4 DP: 775296

APPROVED DEVELOPMENT:

Proposed Quarry and Processing of Shale

MODIFICATION DATE:

6th February 2004

In response to your request of 14th July 2003 and pursuant to Section 96(1A) of the Environmental Planning and Assessment Act, 1979, notice is hereby given that the development consent issued in respect of the abovementioned application and dated 6th November 1990 has been modified by:

a. Replacing Condition 14(1) (a) and (b) with the following:-

“14 i) To minimise dust emissions, general environmental impact and to improve delineation and priority at the intersection of Gumden Lane and Bayly Road the applicant shall provide the following:-

a) The applicant is to comply with the following programme of works as follows:-

- a. Sealing of Gumden Lane to commence immediately upon approval of engineering plans and to be completed in a timely fashion, at least by 29th May 2004,
- b. Sealing of remainder of southern accessway between a. and c. above within 15 months from the date of this modified consent.
- c. Construction of new crossing over Tomerong Creek within 27 months from the date of this modified consent,

MODIFICATION OF DEVELOPMENT CONSENT DA90/1912

Page 2

- b) Gumden Lane shall be sealed on an approved pavement 6.0 m wide with 0.5 m gravel shoulders from the intersection of Island Point Rd and extended to a point 30m inside the property boundary. The 30 m extension of Gumden Lane shall be dedicated to Council, at no cost to Council, immediately upon the completion of the works. All works are to be completed within 3 months from the date of this modified consent.

All other conditions remain unaltered.

RIGHTS OF REVIEW AND APPEAL

Development Consent under Environmental Planning and Assessment Act, 1979

Under Section 82A of the Environmental Planning and Assessment Act, 1979 an applicant may request the council to review its determination except where it relates to a complying development certificate, designated development or integrated development. The request must be made within 60 days of the date of the receipt of the determination, with the prescribed fee.

Part 17, Rule 1(1) of the Land and Environment Court Rules confers on an applicant who is dissatisfied with this determination a right of appeal to the Land and Environment Court which can be exercised within 60 days after receipt of this notice.

SIGNED on behalf of Shoalhaven City Council:

Signature



Name **Stuart Dixon**
 Senior Development Planner
 Development & Environmental Services Group

CL22.69 - Attachment 1



City Administrative Centre
Bridge Road, Nowra NSW Australia 2541
Phone: (02) 4429 3111 • Fax: (02) 4422 1816 • DX 5323 Nowra
Address all correspondence to
The General Manager, PO Box 42, Nowra NSW Australia 2541

**NOTICE TO APPLICANT OF DETERMINATION OF DEVELOPMENT
APPLICATION**

MODIFICATION OF DEVELOPMENT CONSENT

Environmental Planning and Assessment Act, 1979

DA90/1912

(DS06/1039)

TO:

The Manager
McDonald International Pty. Ltd.
49 Berry Street
NOWRA NSW 2541

being the applicant(s) or persons entitled to act with respect to **DA90/1912**
relating to:

146 Parnell Road, Tomerong
Lot 4, DP775296

APPROVED DEVELOPMENT:

Proposed Quarry and Processing of Shale

MODIFICATION DATE:

17 May 2006

In response to your request of 27th January 2006 and pursuant to s96(2) of the Environmental Planning and Assessment Act, 1979, notice is hereby given that the development consent issued in respect of the abovementioned application and dated 6th November 1990 has been modified by:

- a. Deleting condition 3 and inserting instead:
3. To ensure the future amenity of the location, and in order to properly assess the impact of the development at the appropriate time, the approved use shall be limited to a period expiring on the 06th November 2020.

The applicant may, however, prior to the expiration date, write to Council seeking reconsideration of this condition.

- b. Add new condition 22 as follows:

Road Maintenance

22. The additional 10 years of quarry operation will impact on the adjoining local public road system. The quarry operator shall maintain Parnell Road and Gunden

MODIFICATION OF DEVELOPMENT CONSENT DA90/1912

Page 2

Lane for the life of the development to a standard agreed upon between Council and the quarry operator. To determine the standard of maintenance, a joint inspection of Parnell Road and Gumden Lane is to be conducted annually on the date of this determination (or on the most convenient day closest to the date). The first of such inspection shall taken place in May, 2007.

All other conditions contained in DA90/1912 dated 06th November 1990, as modified by DS02/1087 dated 29th October 2002 and, DS03/1325 dated 06th February 2004 remain unaltered and must be complied with.

RIGHTS OF REVIEW AND APPEAL

Development Consent under Environmental Planning and Assessment Act, 1979

Under Section 82A of the Environmental Planning and Assessment Act, 1979 an applicant may request the council to review its determination except where it relates to a complying development certificate, designated development or integrated development. The request must be made within 60 days of the date of the receipt of the determination, with the prescribed fee.

Part 17, Rule 1(1) of the Land and Environment Court Rules confers on an applicant who is dissatisfied with this determination a right of appeal to the Land and Environment Court which can be exercised within 60 days after receipt of this notice.

SIGNED on behalf of Shoalhaven City Council:

Signature



Name **Robert Russell**
Development Manager
Development & Environmental Services Group

CL22.69 - Attachment 1



Towards Net-Zero Emissions

Annual Energy Review 2020-21



Photo - A new 100 kW ground-mounted solar PV system installed at Nowra Wastewater Treatment Plant

*Report prepared by Darren O'Connell & Andrew Truran
November 2021
HPERM Ref. – D21/508441*

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1 Purpose

At the Shoalhaven City Council Strategy & Assets Committee meeting on 12 November 2019, it was resolved that Council “Endorse the preparation of Annual Energy Review reports to track Council’s performance against energy and emission reduction targets established in Council’s Sustainable Energy Policy.” (HPERM Ref: D19/360041).

The purpose of this report, which covers the 2020-21 financial year (FY2021), is to present an annual analysis of Council’s energy consumption, document energy savings measures recently implemented and identify potential cost-effective measures for future energy efficiency and renewable energy investment. This report will also track performance of Council towards achieving its energy and emissions reduction targets set out in Council’s adopted [Sustainable Energy Policy](#) (POL18/44).

2 Introduction

Energy in the form of electricity, gas and vehicle fuel, is an essential resource for the effective operation of Shoalhaven City Council. Most of Council’s current energy is derived from fossil fuels which are a costly and finite resource which also emit harmful greenhouse gases. From an economical and environmental perspective, it is critical that Council address its future energy needs and commence a strategic transition towards improved energy efficiency and use of more renewable energy. To guide this transition, an annual review of Council’s energy usage, greenhouse gas emissions and energy efficiency measures was conducted (**this report**).

3 Electricity Consumption

The supply of electricity to Council is delivered through three (3) main agreements:

Supply Type	Site Consumption	Number of Sites	FY2021 Consumption (MWh)	FY2021 Total Electricity Spend
Small Sites	<100MWh per Year	~550	5,250	\$1.2M
Large Sites	>100MWh per year	48	27,375	\$4.350M
Street lighting	Unmetered	Aggregated	4,225	\$778k*
TOTAL			36,750	\$6.327M

*Not including Street Light Use of System (SLUOS) charges (approx. \$1.2M)

Figure 1 shows the typical bill breakdown for Shoalhaven Council's Electricity Accounts. Only the energy costs are negotiable (contestable) through retailer agreements as the network and other charges are fixed.

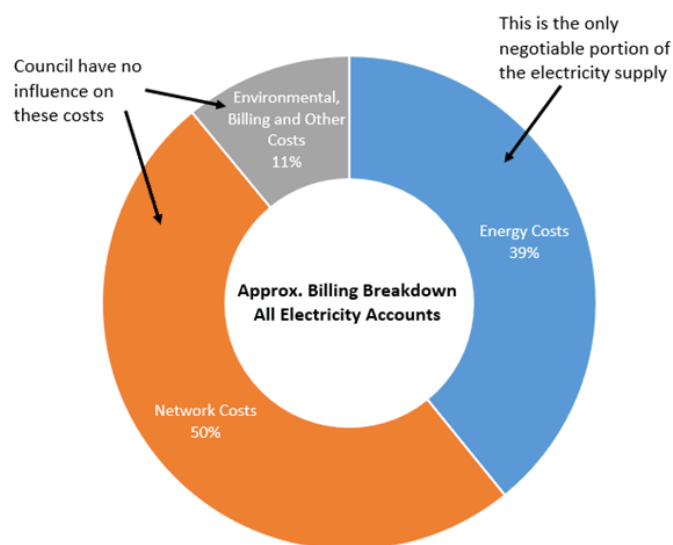


Figure 1. Shoalhaven City Council's typical electricity bill breakdown

In 2020-21, Shoalhaven City Council consumed 36,750 MWh of electricity across its three supply types: Large Sites, Small Sites and Street Lighting, with a total electricity spend of \$6.3M (excluding the \$1.2M for the Street Light Use of System or SLUOS). Over half of Shoalhaven Council's electricity was consumed by Shoalhaven Water's wastewater (30%) and water supply (27%) operations (Figure 2). In terms of the overall cost, wastewater processing (\$2.07M) was more costly than water supply (\$1.29M – Figure 3), with water supply pumps typically operating during 'Off Peak' periods when electricity pricing is cheaper and to avoid excessive network demand charges.

The next largest consumer of electricity in terms of cost was street lighting across the Shoalhaven LGA. Although the majority of Shoalhaven's street lights are owned and operated by Endeavour Energy, Council pays for the power that the lights consume (around \$800K/pa, Figure 3). A Street Light Use of System (SLUOS) charge of approx. \$1.2M per year is also paid by Council to Endeavour Energy, but this comprises costs arising from the operation, maintenance and capital costs of the street lighting network, rather than electricity consumption. An accelerated LED street lighting replacement project was completed during 2020-21 which resulted in annual energy savings to Council of around \$235,000 due to the lower wattage LED lamps installed.

Council's Aquatic Centres and Holiday Haven tourist parks then follow in terms of annual electricity costs with approximately \$685K and \$657K, respectively. Note that these were considerably higher compared to the previous year (i.e. \$529K and \$429K respectively), mostly due to bushfire and COVID-19 disruptions to normal operating conditions throughout 2019-20. These assets are then followed by Civic buildings and community facilities making up \$327K and \$314K of electricity costs, respectively (Figure 3).

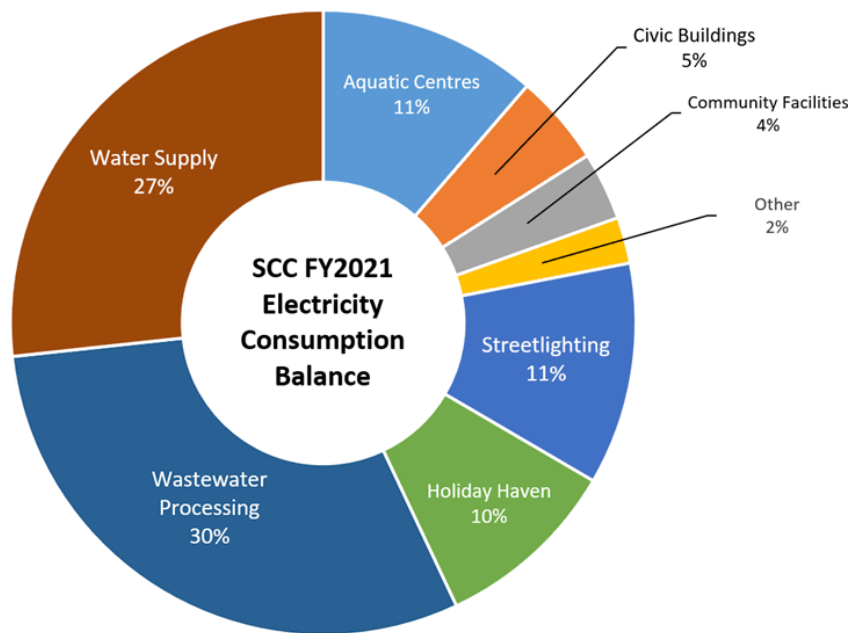


Figure 2. Shoalhaven City Council's 2020-2021 electricity consumption % by functional areas

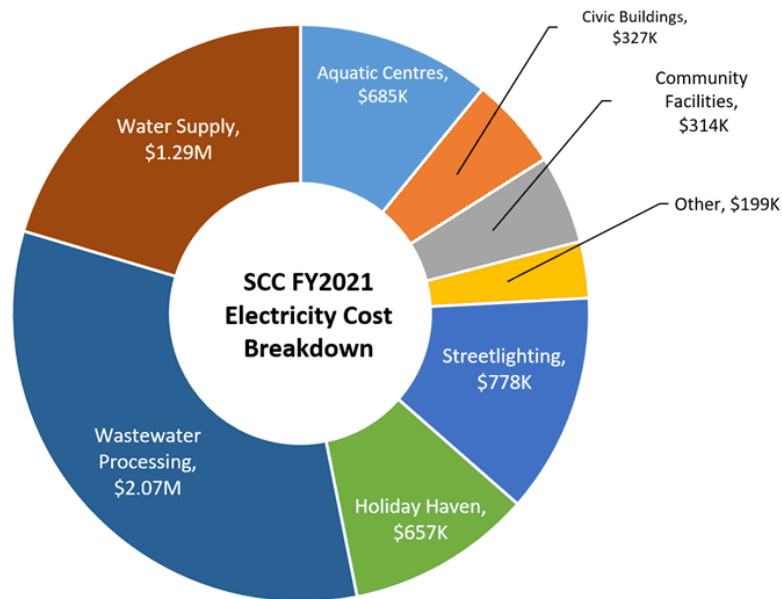


Figure 3. Shoalhaven City Council's 2020-2021 electricity costs by functional areas.

The annual electricity consumption breakdown into groups for all of Shoalhaven Council's assets for 2020-21, compared to previous years, is shown in Figure 4. Unfortunately, the total electricity consumption has shown an upward trend over the past 5 years. Improved energy efficiency practices are encouraged at all sites to reduce electricity consumption, operating costs and corporate carbon emissions.

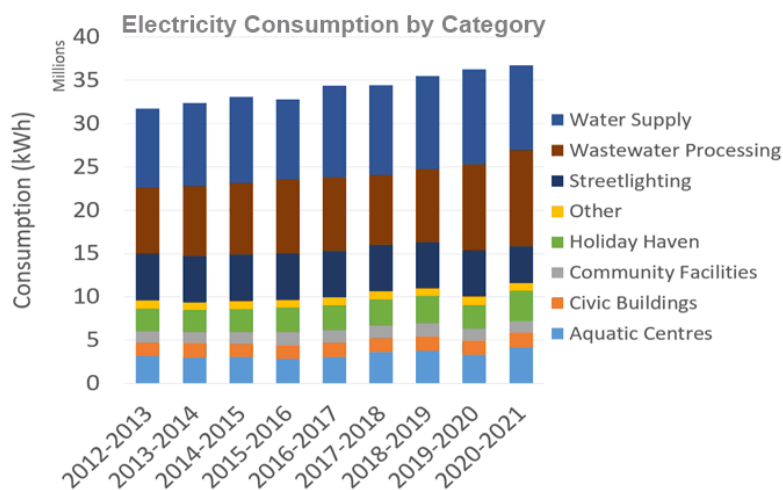


Figure 4. Shoalhaven City Council's annual trend in electricity consumption by group category

4 Fleet Fuel and Gas (Natural & Bottled LPG)

Shoalhaven Council's fleet vehicle fuel consumption increased substantially in 2020-21, more than doubling the fuel amount consumed in 2019-20 (Figure 5). Much of this increase was probably due to a rebound from the COVID-19 movement restrictions in the previous year, as well as extensive bushfire recovery operational work completed in the field.

Although natural gas use remained constant, LPG bottled gas consumption increased slightly in 2020-21, compared to the previous year (Figure 6). Much of the bottled gas is consumed at Council's Holiday Haven Parks and Leisure Centres. It is recommended that these assets consider a move away from gas and electrify their equipment at the end of its working life, where practicable. This 'fuel switch' allows these appliances to be powered by renewable electricity and therefore reduce emissions and running costs.

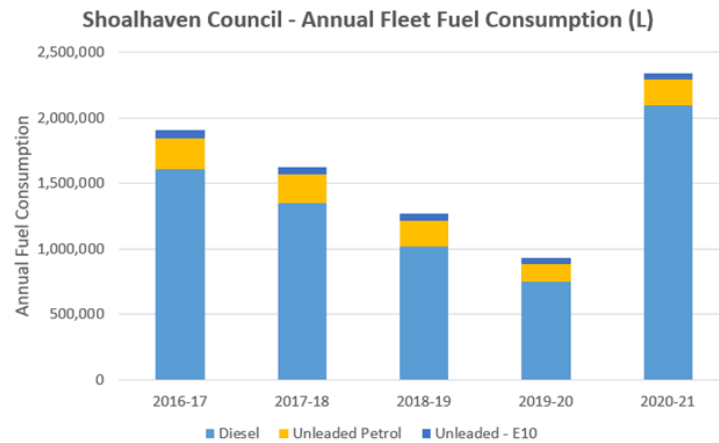


Figure 5. Shoalhaven City Council's annual fleet vehicle fuel consumption

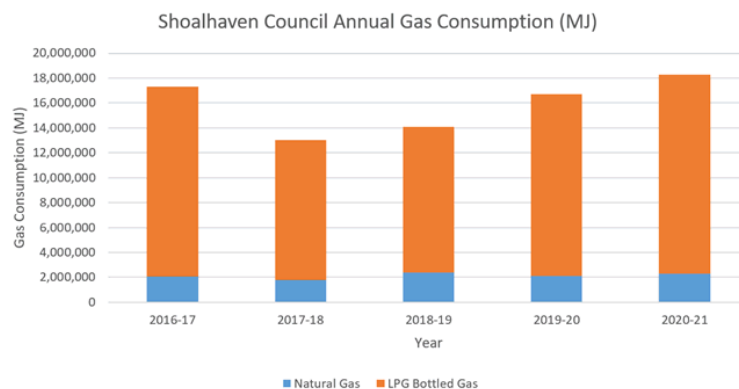


Figure 6. Shoalhaven City Council's annual natural gas and LPG bottled gas consumption

5 Greenhouse Gas Emissions

Shoalhaven City Council's operations emitted a total of **75,059 tonnes** of greenhouse gases (carbon dioxide equivalents or CO₂-e) in 2020-21 (Scope 1, 2 & associated Scope 3 emissions). Council's **purchased electricity** contributed to almost half (44%) of Council's total annual corporate greenhouse gas emissions (Figure 7). Despite having 892 kW of installed solar panels across 32 Council owned assets, this renewable energy supplies only a small portion of Council's electricity needs. The remainder of Council's electricity is generated from coal or gas-fired power stations which results in greenhouse gas emissions due to the combustion of these non-renewable fossil fuels.

Methane and nitrous oxide emissions from Council's wastewater treatment plants are the second highest source of greenhouse gas emissions at 28%. Methane emissions from the Council-operated landfill at West Nowra generated the third largest amount of equivalent greenhouse gas emissions at around 18%, despite some flaring off the gas for carbon emissions reduction purposes. Fleet transport fuels (diesel, petrol etc.) and gas for stationary energy (both natural gas and LPG) make up the remaining 10% of Council's corporate carbon emissions profile.



A new 50 kW solar PV system installed at Bomaderry Wastewater Treatment Plant

Figure 8 shows Council's corporate greenhouse gas emissions for the 2015 baseline year, most recent years and emissions targets for 2025, 2030 and 2050. Although on a steady decline since 2016-2017, this past year 2020-21 showed an 11% increase in emissions compared to the previous year (Figure 9). Much of this increase was due to the large increase in diesel consumption in fleet fuel which jumped from 2,000 tonnes CO₂-e in 2019-20 to almost 6,000 tonnes CO₂-e in 2020-21 (Figure 10). There was also an increase in the past financial year in landfill gas emissions which rose from 11,107 tCO₂-e to 13,397 tCO₂-e. All other sources of Council's carbon emissions increased slightly over this same period. To achieve Council's net-zero emissions and interim reduction targets will take a greater effort in all these areas to actively reduce greenhouse emissions from Council's operations.

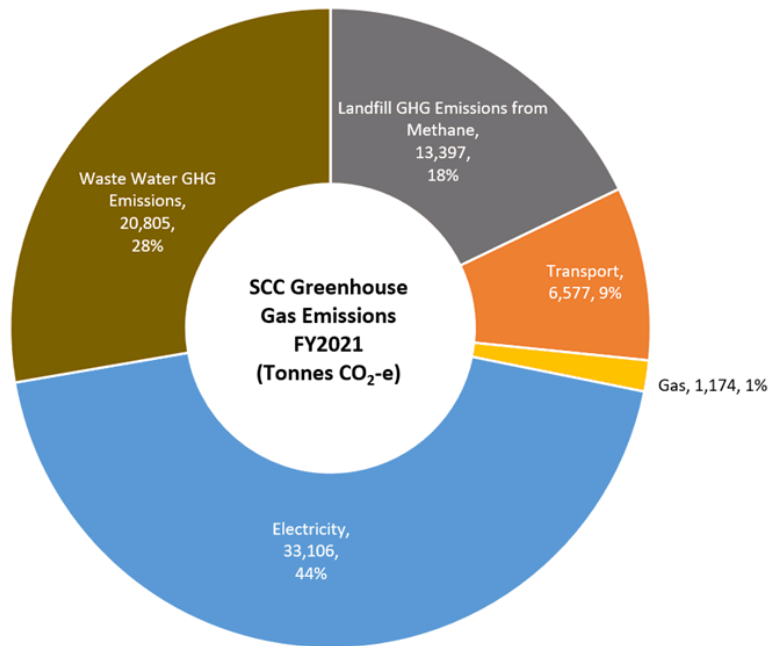


Figure 7. SCC corporate GHG emissions (from all scopes: 1,2 and 3) for 2020-21

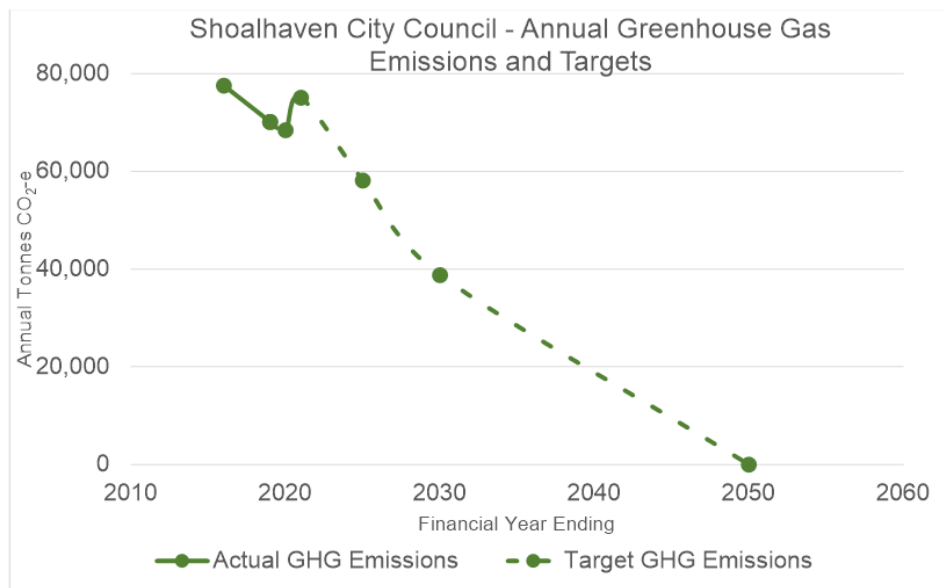


Figure 8. SCC's actual corporate greenhouse gas emissions to 2020-21 and projected targets

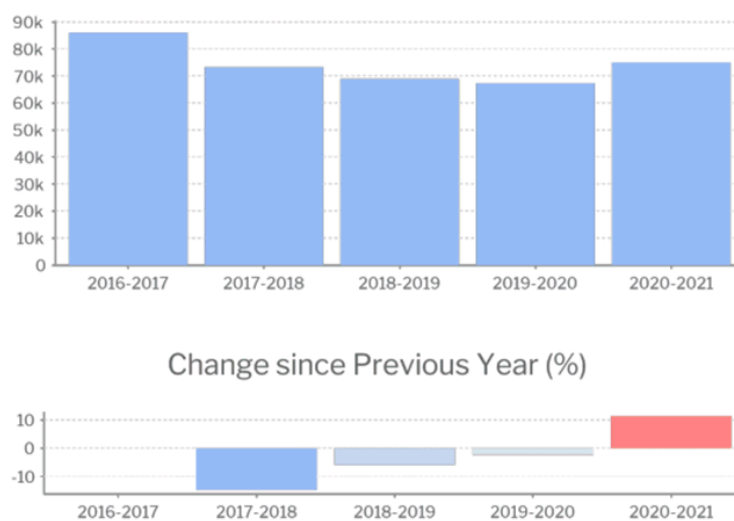
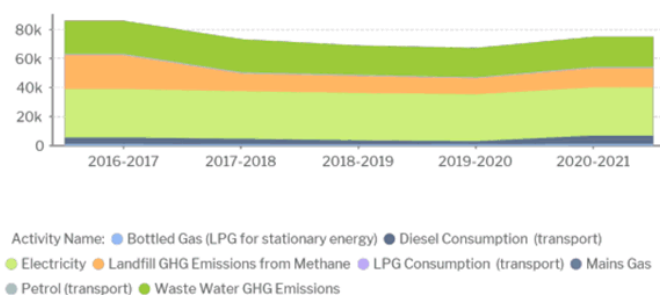


Figure 9. SCC total greenhouse gas emissions trends over past 5 years

Annual Emissions by Activity

Greenhouse Gas Emissions grouped by the activity (source) that produced the emissions.



Percentage of Total

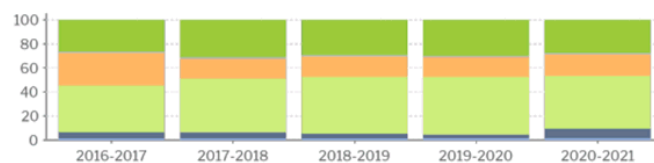


Figure 10. SCC corporate greenhouse gas emissions by activity over past 5 years

6 Cities Power Partnership

Shoalhaven Council is a member of the national Cities Power Partnership (CPP) program. Under the CPP, each member Council makes five action pledges in either renewable energy, energy efficiency, transport or working in partnership to tackle climate change. Progress on the pledges is reported back to the CPP every 6 months. Shoalhaven Council updated and refreshed its 5 pledges in mid-2020 and progress on these pledges has been outlined in **Table 1**.



Table 1: Progress update on Cities Power Partnership Pledges made by Shoalhaven Council

CPP Pledge	2020-21 Progress Update
1. Use council resources to support the uptake of renewable energy	Shoalhaven City Council commenced/completed 12 new solar PV installations (total of 391 kW) on Council assets including several wastewater treatment plants and community halls.
2. Facilitate large energy users' collectively tendering and purchasing renewable energy at a low cost	Council participated in an offer for a renewable Power Purchase Agreement by Procurement Australia in early 2021. The deal was however not considered favorable for Council and therefore did not progress to the binding stage. A new PPA package is currently being considered for Large Sites and Street Lighting.
3. Adopt best practice energy efficiency measures across all council buildings, and support community facilities to adopt these measures	Some progress has been made as far as energy efficient LED lighting upgrades for some Council assets but there are considerable additional savings to be made in energy efficiency.
4. Roll out energy efficient lighting across the municipality	A large LED street lighting upgrade took place during 2020-21 in which 32% of Council's residential street lights were replaced with energy savings LEDs saving on energy costs and carbon emissions.
5. Ensure Council fleet purchases meet strict greenhouse gas emissions requirements and support the uptake of electric vehicles	Council continued its trial of 3 fully electric vehicles (EVs) and now exclusively offer hybrid cars in the small car fleet range. Unfortunately, fleet fuel consumption, specifically diesel, doubled in 2020-21 which increased GHG emissions from this source.

7 Sustainable Energy Policy

Shoalhaven City Council adopted a [Sustainable Energy Policy](#) (POL18/44) on 28 May 2019. The Policy aims to ensure access to affordable, reliable, sustainable and modern energy for both its operations and that of the wider Shoalhaven community. To achieve this, a number of objectives and targets have been adopted and Table 2 shows progress performance towards achieving these targets.

Table 2: Performance towards achieving Sustainable Energy Policy targets

Sustainable Energy Policy Target	Performance Rating
1. Aim to achieve net-zero greenhouse gas emissions by 2050 (consistent with the United Nations Paris Agreement ratified by the Commonwealth Government and the NSW Government's agreed targets). Interim targets to reduce emissions are 25% by 2025 and 50% by 2030, compared to 2015 levels.	▲
2. Seek opportunities to source or generate electricity supply for Council's operations from renewable energy sources, with an interim target of 25% renewables by 2023 and eventually 50% from renewable sources by 2030.	✓
3. Promote relevant initiatives to the community and businesses to increase the uptake of installed rooftop solar panels across the Shoalhaven LGA towards a target of 33% of dwellings by 2025.	▲
4. Upgrade all street lighting to energy saving LEDs by 2025.	✓

KEY - ▲ *Could do better* ✓ *On track to achieve*



Solar PV and Battery installations at Berry and Kioloa as part of Council's Recovery into Resilience project supplying secondary backup power during grid outages

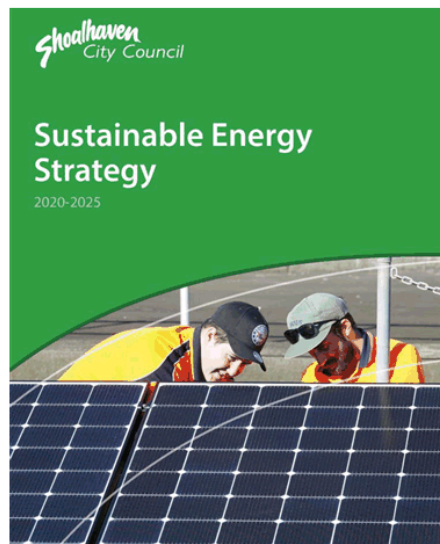
8 Sustainable Energy Strategy 2020-2025

Shoalhaven Council will support its Sustainable Energy Policy by implementing its approved Sustainable Energy Strategy 2020-2025, that identifies priority initiatives to achieve the following objectives:

- **Cleaner Energy:** Transition to cleaner (lower emissions), more sustainable and more affordable energy sources.
- **Less Energy:** Reduce the energy requirement for Council by maximising energy efficiency in all aspects of Council's operations.
- **Measuring and Monitoring Energy:** Ensure systems, processes and expertise are in place to measure, monitor and manage energy consumption and renewable electricity generation effectively.
- **Demonstration of Leadership:** Council will 'lead by doing' to encourage the local community and businesses to also transition to a more resilient, reliable and renewable energy future.

The Sustainable Energy Strategy outlines a range of measures that Shoalhaven Council intends to implement to better manage its energy requirements over the next few years to 2025. The Strategy incorporates comprehensive baseline energy and emissions data, Council's current corporate commitments, and identifies funding opportunities, such as Council's internal Revolving Energy Fund.






Progress on the initiatives in the Strategy during 2020-21 is outlined in Table 3.



8.1 Energy efficiency and demand management




Table 3: Progress and performance against Shoalhaven Council's Sustainable Energy Strategy 2020-2025 initiatives

PERFORMANCE KEY -  Minimal or no progress  Some progress but could do better  On track to achieve  Unknown




ENERGY INITIATIVE	PROGRESS in 2020-21	PERFORMANCE
Upgrade aged Heating, Ventilation and Air-conditioning (HVAC) systems in Council's main administrative and community buildings for significant energy savings	Air-con upgrades commenced/completed at the Nowra Admin Centre, Nowra Library and Shoalhaven Regional Gallery.	
Work in collaboration with Endeavour Energy to further upgrade Shoalhaven LGA street lighting to energy saving LED lights	Across 2020-21, Endeavour Energy replaced 3,641 residential street lights, mostly 50-80 watt Mercury Vapour lamps, with energy savings 17 watt LEDs, under an accelerated street lighting upgrade project. Shoalhaven Council's total spend on this project was \$1,030,403, with part-funding from the NSW Government of \$362,456. The project has resulted in cost savings of \$235,000 p.a., electricity savings of 1,427,647 kWh/pa and a greenhouse gas emissions reduction of 1,313 tonnes of CO ₂ -e. The Stage 2 business case to replace 100% of Council's street lights to LEDs is currently being evaluated.	
Upgrade of Council building, parks and sporting field/court lighting to energy saving LED lights and smart lighting controls	Energy savings LED lighting upgrades were commenced/completed at several Council assets including Nowra showground, Bomaderry Leisure Centre, Bay and Basin Leisure Centre, Ulladulla Leisure Centre, Sussex Inlet Leisure Centre, Lyrebird Park and Frogs Holla. The lighting upgrades at the 4 pools were funded through Council's Revolving Energy Fund.	
Installation and maintenance of Power Factor Correction (PFC) units to reduce maximum network demand charges	It is unclear whether routine maintenance and inspections of PFC units at Council's Large Sites is taking place. PFCs units must be checked by a licenced electrician on a regular basis to ensure they are fully operational. The unit capacitors have a finite life and may not give any apparent warning when they fail. This can result in a loss of savings and unnecessary damage to existing equipment.	
Load shifting of major electrical loads outside critical time slots to avoid excessive network demand charges	As demand charges can make up to one-third of the total electricity bill amount it is important that Large Sites avoid high electricity loads between 4pm and 8pm of working days. Burrier Water Pumping Station, with its energy efficient pumping schedule, has been particularly strict on avoiding these peak demand periods throughout 2020-21 and therefore averted the \$15,000 maximum demand charge.	

ENERGY INITIATIVE	PROGRESS in 2020-21	PERFORMANCE
Energy efficiency measures for Council assets to reduce excessive base load electricity	Nowra Administration Centre continues to have a very high after-hours electricity baseload of around 45 kW. The building's daily electricity load also ramps up to around 150 kW at approx. 5am, presumably when the cleaners arrive and the central air-con system is set to switch on automatically. Further energy investigations are required on this asset to reduce overall power consumption and running costs.	X
Purchase energy efficient plant and equipment for new installations (use the Energy Rating Label, where applicable, the more stars the more energy efficient)	This initiative is difficult to track as it relies on all staff selecting energy efficient appliances in their procurement projects.	?
Consider 'load shedding' opportunities for suitable sites	Load shedding or 'powering down' high electricity consuming sites such as water pumping stations or wastewater treatment plants during times of peak demand for reimbursement is organised through an energy retailer. Shoalhaven Water evaluated this opportunity with an energy retailer but has not participated in the scheme yet. Will require a trial of the initiative first.	▲
Fuel efficiency to be one of the criteria in the tendering and selection of Council trucks, cars and heavy plant	Fleet services has been active in sourcing fuel efficient vehicles for leaseback and pool cars. There are currently 3 fully electric vehicles within Council as well as many hybrids. The smaller cars on Council's leaseback list are now only available as a hybrid. Unfortunately, diesel fuel consumption almost doubled in 2020-21 compared to the previous year so there was a spike in emissions associated with fleet fuel for this past financial year.	▲
Council's Aquatic Centres to adjust pool heating settings for improved energy efficiency and to reduce maximum network demand charges	With pool heating (particularly for outdoor pools) being one of the highest electricity consuming processes for Council, avoiding high power loads during peak demand periods (from 4pm to 8pm on working days) is critical to lowering electricity bill charges. Nowra Pool installed a 38 kW solar PV system in March 2021 which will offset some of the electricity costs associated with pool heating. Further investigation is warranted.	▲
Investigate energy savings solutions for Burrier Pumping Station on the Shoalhaven River	Burrier Water Pumping Station (WPS) uses by far the most electricity of any Shoalhaven Council asset every year. Solar PV installation is limited at the site and would have minimal effect on the electricity load. Switching to renewable energy on a Power Purchase Agreement will help lower emissions but unfortunately there are no obvious ways to improve energy efficiency at Burrier WPS. Demand management has been well practiced by Shoalwater staff to avoid maximum demand charges which are costly (~\$15,000/month) for this Large Site.	✓

8.2 Fuel Switching

ENERGY INITIATIVE	PROGRESS in 2020-21	PERFORMANCE
Transition Council's fleet vehicles to hybrid or fully electric vehicles (EVs) where fit for purpose, cost-effective and rechargeable from renewable energy sources.	Fleet services has been active in sourcing fuel efficient vehicles for leaseback and pool cars. There are currently 3 fully electric vehicles within Council, as well as many hybrids. The smaller cars on Council's leaseback list are now only available as a hybrid. Unfortunately, diesel fuel consumption almost doubled in 2020-21 compared to the previous year so there was a huge spike in emissions associated with fleet fuel for this past financial year.	
Installation of Council-owned electric vehicle (EV) charging stations in strategic locations across the Shoalhaven LGA.	As yet no Council-owned electric vehicle (EV) charging stations exist in the Shoalhaven LGA. The 3 hot spot locations earmarked for fast EV chargers are the SEC, Huskisson and Ulladulla where tourists are prominent. Government grants may be forthcoming to assist Council with the costs to install fast EV chargers.	
At the end of their working life, replace gas hot water systems on Council owned assets with heat pumps or solar hot water.	Gas (both natural mains gas and bottled LPG) is a very expensive fuel for heating and cooking and the carbon emissions from gas appliances cannot be easily negated. With the aim to 'electrify everything', no more gas appliances should be installed at Council assets. Electric appliances can be powered by renewables (either on-site or off-site through electricity plans) and are therefore the best choice for new builds and renovations of Council facilities.	

8.3 On-site Renewable Energy

ENERGY INITIATIVE	PROGRESS in 2020-21	PERFORMANCE																										
Install solar PV systems on suitable Council-owned assets (rooftop or ground-mounted) where the business case is favourable to generate daytime electricity.	<p>There were 12 new solar PV systems installed/commissioned on Council assets in 2020-21 totalling an additional 391 kW of behind-the-meter electricity. The systems installed were as follows:</p> <table><thead><tr><th>SITE</th><th>SIZE in kWp</th></tr></thead><tbody><tr><td>Vincentia Wastewater Treatment Plant</td><td>95</td></tr><tr><td>Sussex Inlet Wastewater Treatment Plant</td><td>31</td></tr><tr><td>Ulladulla Wastewater Treatment Plant</td><td>23</td></tr><tr><td>Flat Rock Water Treatment Plant</td><td>31</td></tr><tr><td>Shoalhaven Heads Wastewater Treatment Plant</td><td>21</td></tr><tr><td>Bomaderry Works Depot - Automotive Workshop</td><td>31</td></tr><tr><td>Nowra Library</td><td>31</td></tr><tr><td>Shoalhaven Indoor Sports Centre</td><td>60</td></tr><tr><td>Nowra Aquatic Centre</td><td>38</td></tr><tr><td>Kioloa Community Centre</td><td>10</td></tr><tr><td>Callala Community Centre</td><td>10</td></tr><tr><td>Huskisson Community Centre</td><td>10</td></tr></tbody></table> <p>An additional 200 kW of installed solar PV are in progress in late 2021 across a number of Council sites.</p>	SITE	SIZE in kWp	Vincentia Wastewater Treatment Plant	95	Sussex Inlet Wastewater Treatment Plant	31	Ulladulla Wastewater Treatment Plant	23	Flat Rock Water Treatment Plant	31	Shoalhaven Heads Wastewater Treatment Plant	21	Bomaderry Works Depot - Automotive Workshop	31	Nowra Library	31	Shoalhaven Indoor Sports Centre	60	Nowra Aquatic Centre	38	Kioloa Community Centre	10	Callala Community Centre	10	Huskisson Community Centre	10	
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Battery storage to be incorporated with solar PV installations where an asset's energy and load profile suits and the business case is favourable.	Storage batteries remain relatively expensive and tend to be utilised where they offer numerous benefits such as backup electricity supply during grid outages. Several community halls throughout the Shoalhaven LGA have/are being fitted out with Tesla Powerwall batteries to supply secondary power during grid outages, as part of the Recovery into Resilience project.																											
Council continues to implement landfill gas methane flaring at its primary landfill facility at West Nowra.	Council's West Nowra Landfill site flared off the methane gas emanating from the waste cells during 2020-21. A new contractor has been selected to re-commence the landfill gas generation facility to turn the biogas into renewable energy to feed into the grid.																											

ENERGY INITIATIVE	PROGRESS in 2020-21	PERFORMANCE
Continue investigations into a mid-scale solar farm (<5 MW capacity) on the Callala Wastewater Treatment Plant site to generate renewable energy to meet some of Council's future electricity needs beyond 2025.	No further progress has been made on this initiative except for liaison with Repower Shoalhaven on the South Nowra Solar Farm development to see how it progresses and performs. There is interest from energy retailers in mid-scale solar farm development so further discussions are proposed.	X

8.4 Off-site Renewable Energy

ENERGY INITIATIVE	PROGRESS in 2020-21	PERFORMANCE
Develop and implement a corporate Power Purchase Agreement (PPA) to source renewable energy off-site (e.g. solar/wind farms) to achieve Council's adopted renewable energy targets.	Shoalhaven Council participated in a non-binding stage of Procurement Australia's renewable PPA in early 2021 but decided it was not a suitable deal for Council's electricity needs. Further work, including engaging an energy market analyst, has commenced to possibly issue a RFT for a renewable PPA in early 2022, subject to approval.	▲
Encourage local community renewable energy uptake for rooftop solar PV and storage batteries for residents and businesses in the Shoalhaven via Council-run: <ul style="list-style-type: none"> - Education and information programs; - Renewable energy bulk-buy programs. 	With COVID lockdowns it has been difficult for Council to organise and host information sessions on renewable energy, solar PV and batteries. Despite these limitations, it has been encouraging to see solar PV installations rise to 26% of dwellings in the Shoalhaven LGA, compared to 18% in 2018.	X
Work with Shoalhaven community groups proposing large scale community energy projects in the region.	Council staff worked with Repower Shoalhaven and Flow Power on their large solar farm nearing completion on Council's old sanitary depot site at South Nowra. Council has also been working with Innovating Energy on their proposal for a biogas plant that would generate renewable power from primarily dairy farm manure.	✓
Participate in emerging energy technologies, such as battery storage, microgrids, embedded networks and Virtual Power Plants (VPP), where opportunities arise and if they support Council or the community's economic, social or environmental outcomes.	Council has embraced the installation of several Tesla Powerwall batteries as part of its fit-out of 19 community halls with secondary power systems for Local Information Hubs. Work has also taken place with Endeavour Energy on their project to create a microgrid with a community battery for Kioloa and Bawley Point villages.	▲

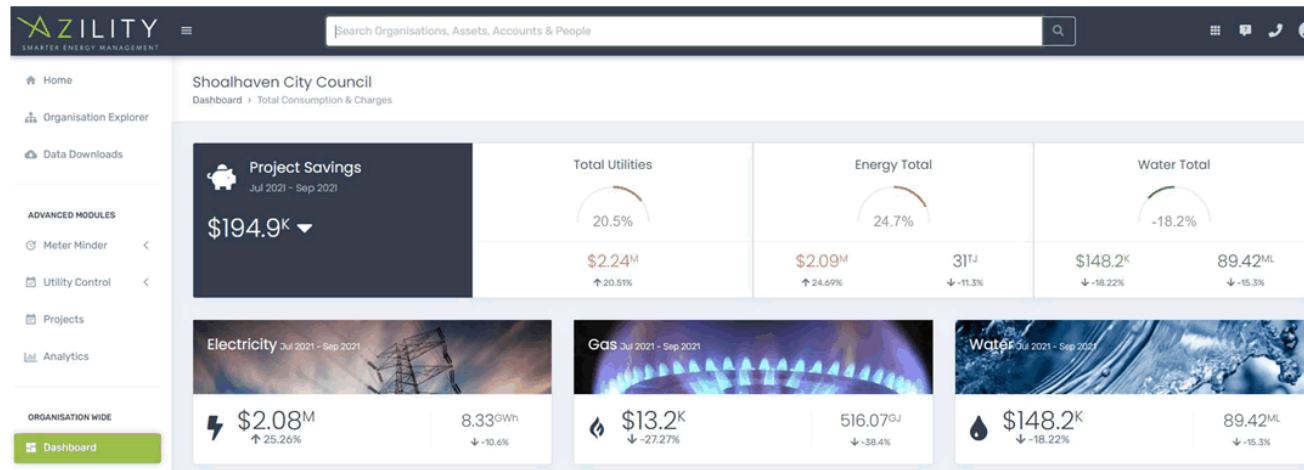
8.5 Carbon Offsets

ENERGY INITIATIVE	PROGRESS in 2020-21	PERFORMANCE
Afforestation projects – carbon sinks	Carbon offsets are not required at present to achieve Council's adopted emissions targets	N/A

8.6 Resourcing, Implementation & Expertise

ENERGY INITIATIVE	PROGRESS in 2020-21	PERFORMANCE
Employ an Energy Manager to coordinate, communicate and implement Council's sustainable energy policy, strategy and plans.	An Energy Management Coordinator contractor has been engaged by Council to implement its sustainable energy policy and strategy, and to project manage and coordinate energy efficiency and renewable energy projects.	✓
Maintain Council's Revolving Energy Fund (REFund) to provide future funds for high priority energy efficiency and renewable energy projects.	The REFund has continued and funded 5 projects with the most recent being an energy-savings LED lighting upgrade at the Shoalhaven Entertainment Centre. Additional investment into the REFund has now been made by Council from the up-front lease payments for the South Nowra Solar Farm which will fund new projects.	✓
Identify and seek funding and financing to implement priority energy savings projects with solid business cases.	Council has been successful in obtaining external grant funding for solar PV/battery installations at 4 showgrounds, Recovery into Resilience grant funding for solar/batteries at 19 community halls, plus accessing both Energy Savings Scheme certificates and RECs for reducing costs for installed energy efficiency and solar PV projects respectively.	✓
To track progress towards its energy and emissions targets, Council will prepare an Annual Energy Review in October every year to publish the previous financial year's energy consumption and greenhouse gas emissions data.	This 'Annual Energy Review' report (this report) is in a new format to report performance against both the Sustainable Energy Policy targets and gauge implementation of the Sustainable Energy Strategy.	✓
Calculate and report on Council's greenhouse gas emissions using acceptable methodology and protocols.	Council using the <i>National Greenhouse & Energy Reporting</i> (NGERS) scheme methodology to calculate and report on its annual carbon emissions sources.	✓

ENERGY INITIATIVE	PROGRESS in 2020-21	PERFORMANCE
Maintain membership to the Climate Council's national Cities Power Partnership (CPP) program and continue implementing pledges under the program.	Council continues to implement its revised pledges under the CPP (see Table 1 above).	✓
Maintain access to an online dashboard energy portal to access and monitor all energy and emissions data, monitoring, reporting and billing.	Azility continues to be well utilised by Council's energy and accounts staff for energy monitoring and billing (see Dashboard screen shot below). Any staff can access the Azility platform via a password, if required.	✓



9 Recommendations

The following sustainable energy actions are priorities for implementing throughout 2021-22 for Shoalhaven City Council:

- Formalise additional energy efficiency projects for the Revolving Energy Fund (REFund) making use of the top-up funds approved by Council from the South Nowra Solar Farm up-front lease payment;
- Subject to approval, seek tenders for a long-term (7-10 years) renewable PPA for Council's Large Sites and Street Lighting electricity supply to achieve sustainability targets, hedge against future expected price hikes and achieve likely cost savings;
- Move 550+ Small Sites to the new NSW Government contract 3062 commencing 1 July 2022 for significant cost savings;
- Identify additional sites and funding opportunities for further solar PV at Council assets;
- Investigate grant funding for fleet EV discounts and for installing EV Fast Charging Stations at the SEC, Jervis Bay and Ulladulla tourist hotspots;
- Partner with Endeavour Energy for the remaining 41% of residential street lights to be replaced with energy savings LEDs;
- Work with Endeavour Energy to facilitate the new Bawley Point/Kioloa community microgrid project;
- Develop an engaging Council webpage on sustainable energy for improved community engagement on local sustainability and energy actions, including the benefits of installing residential and business solar PV.