planning

working beyond expectations

ADW JOHNSON PTY LIMITED

ABN 62 129 445 398 central coast po box 3717 tuggerah nsw 2259 ph. 02 4305 4300 fax. 02 4305 4399 coast@adwjohnson.com.au

section 75W modification

Major Project MP10_0209 Koolewong Marina

Property:

Crown Land above and below the mean high watermark off Brisbane Water Drive being Lot 1 DP 1180719

Applicant:

Marmong Marina Properties Pty Ltd

Date:

November 2014



project management • town planning • engineering • surveying visualisation • economic analysis • social impact • urban planning

www.adwjohnson.com.au



document control sheet

Issue No.	Amendment	Date	Prepared By	Checked By
Α	Draft to Client	16 September 2014	SVD	SVD
В	2 nd Draft to Client	23 September 2014	SVD	SVD
С	3 rd Draft to Client	4 November 2014	SVD	LB
D	Final for Lodgement	17 November 2014	SVD	LB

<u>Limitations Statement</u>

This report has been prepared in accordance with and for the purposes outlined in the scope of services agreed between ADW Johnson Pty Ltd and the Client. It has been prepared based on the information supplied by the Client, as well as investigation undertaken by ADW Johnson and the subconsultants engaged by the Client for the project.

Unless otherwise specified in this report, information and advice received from external parties during the course of this project was not independently verified. However, any such information was, in our opinion, deemed to be current and relevant prior to its use. Whilst all reasonable skill, diligence and care have been taken to provide accurate information and appropriate recommendations, it is not warranted or guaranteed and no responsibility or liability for any information, opinion or commentary contained herein or for any consequences of its use will be accepted by ADW Johnson or by any person involved in the preparation of this assessment and report.

This document is solely for the use of the authorised recipient. It is not to be used or copied (either in whole or in part) for any other purpose other than that for which it has been prepared. ADW Johnson accepts no responsibility to any third party who may use or rely on this document or the information contained herein.

The Client should be aware that this report does not guarantee the approval of any application by any Council, Government agency or any other regulatory authority.



table of contents

1.0	introduc	ation	1			
	1.1	preliminary1				
	1.2	consent authority				
	1.3	3 consultation				
	1.4	summary	2			
2.0	the site	and surrounding environment				
	2.1	location	3			
	2.2	land title	3			
	2.3	ownership	3			
	2.4	physical description				
	2.5	ma10 0209				
3.0	descript	ion of the proposed modification	6			
	3.1	proposed modification and justification	6			
	3.2	aspects of the approval which require amendment	9			
		3.2.1 project approval	9			
		3.2.2 amendments made to the statement of commitments				
		3.2.3 amendments made to the marina environmental operations				
		management plan	14			
4.0	authority	y and stakeholder consultation				
		community consultation				
	4.2	authority consultation	19			
5.0	environr	mental planning and assessment act 1979	21			
6.0	statutory	context and planning controls	23			
	6.1	sepp (major development) 2005				
	6.2	sepp 62 – sustainable aquaculture	23			
	6.3	sepp 71 – coastal protection	23			
	6.4	gosford planning scheme ordinance	25			
	6.5	gosford local enviromental plan 2014				
	6.6	gosford city council development control plan				
		6.6.1 development control plan – 89 scenic quality				
		6.6.2 development control plan – 106 waste management controls				
		6.6.3 development control plan – 111 car parking				
		6.6.4 development control plan – 119 wharves and jetties				
7.0	environr	mental assessment				
	7.1	soils, sediment and water				
		flora and fauna				
	7.3	visual impact				
	7.4	hazard management and mitigation				
	7.5	traffic, access and parking				
	7.6	noise, air and odour quality	31			
	7.7	waste management				
	7.8	aquaculture				
	7.9	heritage and archaeology				
		ecological sustainable development				
		navigation and safety				
		infrastructure provision				
		social and economic impacts				
		crime and safety				
8.0	conclus	ion	34			



APPENDICES

Appendix A Appendix B Appendix C	Amended Plans, Statement of Commitments and MEOMP Major Project Approval for MA10_0209 Confirmation from Department of Planning advising Section 75W process is appropriate
Appendix D	Certificate of Title and Crown Lands Consent for Lodgement
Appendix E	Correspondence from the Department of Primary Industries
Appendix F	Aquatic Ecology Assessment: Addendum
Appendix G	Email correspondence from the Department of Planning
Appendix H	Correspondence from Gosford City Council
Appendix I	Correspondence from the Department of Planning regarding Condition B4



1.0 introduction

1.1 PRELIMINARY

ADW Johnson has been engaged by Marmong Marina Properties Pty Ltd to prepare and lodge a Section 75W modification application with the Department of Planning and Environment ("DPE") to make some minor amendments aimed at improving the overall public amenity, functionality and viability of the project as approved under MA10_0209.

The following report has been prepared pursuant to Section 75W of the Environmental Planning and Assessment Act 1979 (EPandA Act) and addresses the necessary issues that require assessment to assist DoPI in making a determination on the subject application.

Major Project approval was received on 9 May 2012 for the construction of the Koolewong marina on Crown land. Since that time, the proposed Crown lease area has been created and is now described as Lot 1 DP 1180719 which encompasses land above and below mean high water mark ("the site"). The approved marina accommodates 50 permanent berths, amended and upgraded car parking facilities and a change of use to existing office space.

The subject modification seeks to amend the consent in the following ways:

- Replace approved 1.5m x 35m jetty with a 12m x 2m jetty and 10m x 2m gangway;
- Minor changes to the berth size configurations;
- Strengthen the marina construction;
- Incorporating a timber boardwalk for added public enjoyment of the site;
- Add one car park space; and
- Construct external maring amenities.

The proposed changes will continue to be entirely within the approved lease boundaries, will not alter the number of berths, and continue to avoid seagrasses.

In addition to the above physical changes, the proposed modification also requests the removal/amendment to conditions of consent, statements of commitment and provisions within the Marina Environmental and Operational Management Plan (MEOMP). These have come about through the application being taken over from Gemsted Pty Ltd by a new proponent with extensive experience in marinas, most notably Marmong Point Marina. The requirements requiring amendment generally surround their impracticality.

This report should be read in conjunction with the accompanying documentation including:

Plans and Drawings at Appendix A, being:



Drawing No.	Rev	Plan Title	Date
SK6-01	В	Layout Plan	03.07.14
SK01	Α	Boardwalk and Carpark Configuration –	21.01.2014
		Option A	
150134	Α	Proposed Marina for Lot 519 in 11/07	
		D.P.729020 11/07/11 Landscape Plan	
SKO4	-	New Change Rooms, General 14.01.	
		Treatments – Option 2	

- Amended MEOMP (Appendix A);
- Amended Statement of Commitments (Appendix A);
- Major Project Approval for MA10 0209 (Appendix B);
- Confirmation from Department of Planning and Environment advising Section 75W process is appropriate (Appendix C);
- Certificate of Title and Crown Lands Consent for Lodgement (Appendix D);
- Correspondence from the Department of Primary Industries (Appendix E);
- Aquatic Ecology Assessment: Addendum (Appendix F);
- Email correspondence from the Department of Planning (Appendix G);
- Correspondence from Gosford City Council (Appendix H);
- Correspondence from the Department of Planning regarding Condition B4 (Appendix I).

1.2 CONSENT AUTHORITY

The Minister for Planning and Environment is the consent authority for a Section 75W modification to the Major Project approval for Koolewong Marina. This has been confirmed by DPE within Appendix C.

1.3 CONSULTATION

Prior to lodging this application, the proponent has undertaken extensive consultation with all authorities potentially affected by the proposal as well as undertaking additional investigations in regards to the potential effects on seagrass. A meeting was held with Gosford City Council and NSW Maritime on 26 June 2014 where the proposed changes were well received. Representatives from the Department of Planning and Environment and NSW Fisheries were unable to attend this meeting, however their written advice has been sought and is discussed in further detail within the report.

1.4 SUMMARY

Overall, the project continues to comply with all relevant provisions of the now superseded Gosford Planning Scheme Ordinance (GPSO) (being the environmental planning instrument applicable at the time) as well as the Gosford LEP 2014. The amended project can also be undertaken without any additional impact on the local environment.

On this basis, the Department of Planning and Environment is requested to approve the modification of MA10 0209.



2.0 the site and surrounding environment

2.1 LOCATION

The site of the proposed marina is located towards the southern end of Murphys Bay and makes up one of the many inlets of Brisbane Water in the Gosford City Local Government Area. The site is located approximately two kilometres north of Woy Woy, 500 metres south of Koolewong and is situated on the north eastern side of Brisbane Water Drive (refer to Figure 1).



Figure 1: Locality Map

2.2 LAND TITLE

The site is described as Crown land above and below MHWM off Brisbane Water Drive. The site has recently been surveyed to include the approved marina lease boundaries and as such is now known as being Lot 1 DP 1180719 containing a total of 1.57 hectares.

A copy of the Deposited Plan for Lot 1 DP 1180719 is provided in Appendix D.

2.3 OWNERSHIP

Lot 1 DP 1180719 is Crown land under the care and control of the Crown Lands Division of NSW Trade and Investment. A lease has been issued over the land until 9 August 2026 to Marmong Marina Properties Pty Ltd.

A copy of the Certificate of Title is provided in Appendix D.



Land Owners Consent to lodge the modification application is provided in Appendix D.

2.4 PHYSICAL DESCRIPTION

The site consists of an irregular shaped allotment with a total area of 2533m^2 above MHWM which contains a two storey building known as 'The Boathouse'. The ground floor of this building is currently used as a restaurant (The Boathouse Waterfront Restaurant and Function Centre) with the first floor contains offices.

An existing wooden jetty extends approximately 30 metres into Brisbane Water to the north of The Boathouse.

Access is currently gained via a two way ingress/egress off Brisbane Water Drive to the car parking area south-west of the building.

The current car parking layout provides for 30 spaces.

2.5 MA10 0209

The Koolewong Marina was approved under MA10_0209 on 9 May December 2012 and consisted of the following:

- Construction of a 50 berth floating marina (100m x 124.5m) consisting of:
 - o 8 x 13m berths and 6 x 12m berths on the outer arm (14 berths);
 - 2 x 22m berths, 2 x 18m berths and 4 x 15m berths along the central arm (8 berths);
 - 14 x 9m berths, 4 x 8m berths, 8 x 11m and 2 x 12m berths along the inner arm (28 berths);
- Temporary berthing for up to seven boats on the north-eastern side of the outer marina arm;
- Upgrading and raising existing timber jetty (h=1.75m AHD, w=1.5m, l=35m);
- Upgrading and reconfiguration of existing carpark to provide 14 additional spaces (total 44 spaces);
- Change of use to an office space for marina related activities (i.e. site manager, boat broker etc).

Figure 2a and 2b illustrate the project as originally approved.



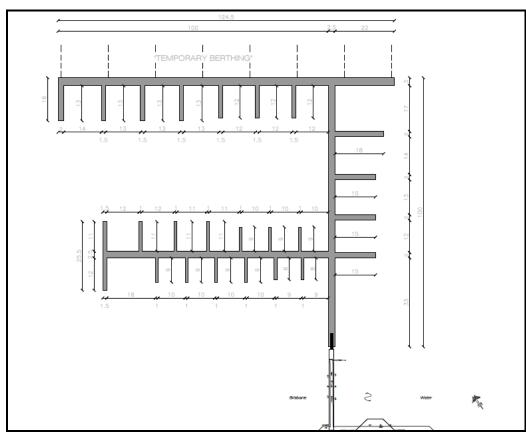


Figure 2a: Approved marina layout

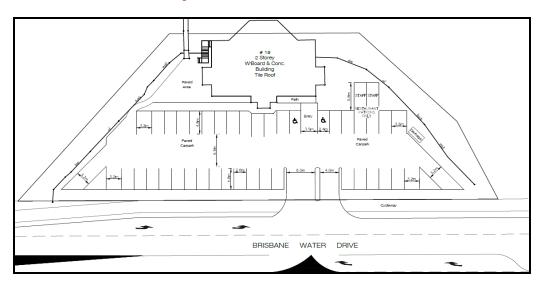


Figure 2b: Approved carpark layout



3.0 description of the proposed modification

3.1 PROPOSED MODIFICATION AND JUSTIFICATION

As discussed above, the original project was submitted by Gemsted P/L; the approval however, was purchased in August 2013 by the now proponent Marmong Marina Properties Pty Ltd. Upon purchasing the approval, they reviewed the approved marina layout, consent conditions, Statement of Commitments (SoC) and MEOMP and discovered a number of aspects of the approval which were either impractical or which could be done better.

Marmong Marina Properties Pty Ltd also operate Marmong Point Marina and as such they have extensive experience in building and operating large scale marinas. It is this experience which has led to the formulation of the following minor amendments which are aimed at improving the overall public amenity, functionality and viability of the project:

1. Amendment: Replace the existing jetty with a 12m x 2m (24m²) jetty constructed from seagrass friendly mesh which is shorter and wider than the previously approved 35m x 1.5m (52.5m²) layout. Inclusion of a 10m x 2m gangway made of seagrass friendly mesh linking the jetty with the floating pontoons.

Existing jetty piles to be removed and replaced with approximately eight x 300mm diameter piles. The exact position of which will be confirmed at Construction Certificate stage.

Reason: Most importantly, under the current approved arrangement in the event of an emergency, the Response crews would have very limited maneuverability access with any of the necessary equipment. This has the potential to pose a real threat to life and property.

The amendments will also enable the jetty to accommodate disabled access in accordance with Condition B12 and E7.

Finally, at the approved length, clients would need to walk out approximately 35 metres before they reach the floating pontoons and their boats – this is an unnecessary and inconvenient distance. Furthermore, the width currently approved at 1.5 metres would not allow clients with trolleys to comfortably pass each other.

- 2. **Amendment**: Amend the size mix of berths to:
 - o 12 x 16m berths (12 berths);
 - o 1 x 25m berth, 8 x 18m berths and 3 x 12m berths along the central arm (12 berths);
 - o 13 x 13m berths and 13 x 12m berths along the inner arm (24 berths); and
 - Retain the seven casual berths unchanged on outer arm.

Reason: The amended layout will accommodate catamaran berths. The size mix will provide a better yield and addresses current industry demand for larger wet berths and will "future proof" the marina for its 30 year lease life.



3. **Amendment**: Marina may require heavier piles (concrete as opposed to hollows) and stronger pontoons with a higher freeboard.

Reason: The marina needs to be a heavier construction than originally proposed as it is believed there is larger and stronger wave action present than originally anticipated. For these reasons, the marina requires a construction which will adhere to the following commitments within the SoC:

Commitment 35: The proposed jetty will be designed for horizontal and vertical wave loads and be closed when waves over-top the deck.

Commitment 36: Marina will be designed to withstand a current jointly occurring with waves with a speed of 0.1 m/s.

4. **Amendment**: Build a timber boardwalk from Council's existing pedestrian path over the northern edge of the land lease to the marina entry.

Reason: This will beautify the whole site and improve public access and enjoyment. Whilst this will add significant capital cost to the project it is considered to be a real benefit to the area by improving access and amenities to the general public. This in turn will attract more people to the existing restaurant and give the area a real "destination" feel.

5. Amendment: Minor amendments to the parking layout to create one additional space by reducing the width for the majority of the marina spaces to 2.4m and the restaurant spaces to 2.5m. Amendments are also proposed providing better connection from the carpark to the marina though the inclusion of an access space.

Reason: The rationale behind the 2.4m width comes from AS 2890.1:2004 where 2.4m is the minimum width for a Class 1 User (being long-term/all-day parking). This width has been accepted for marinas given that marina users generally park their car to use their vessels for the entire day if not for a number of days. The 2.5m width is the minimum width for a Class 2 User (being medium-term parking); with this being appropriate for the restaurant users.

In addition, the approved car parking plan provided no direct connection from the car park to the marina entrance. This will be amended to provide better pedestrian access and connectivity to the marina. The new plan also gains one space giving a total of 45 spaces. The extra car space will be added to the marina parking (for a total of 18 spaces) to accommodate future needs.

6. **Amendment**: Construction of two new high specification en suite amenities for marina client use including a vanity, shower, toilet and change area.

Reason: This will remove the "intrusion" from marina users on the existing office and restaurant facilities inside The Boathouse.



7. Amendment: Modification to the MEOMP.

Reason: Amendments are required to the MEOMP to reflect workable operational and management procedures.

8. Amendment: Modification to the SoCs.

Reason: Amendments are required to the SoCs to correspond the proposed physical amendments and to reflect workable operational and management procedures.

Figures 3a and 3b illustrate the approved marina layout compared to amendments 1 and 2 as described above.

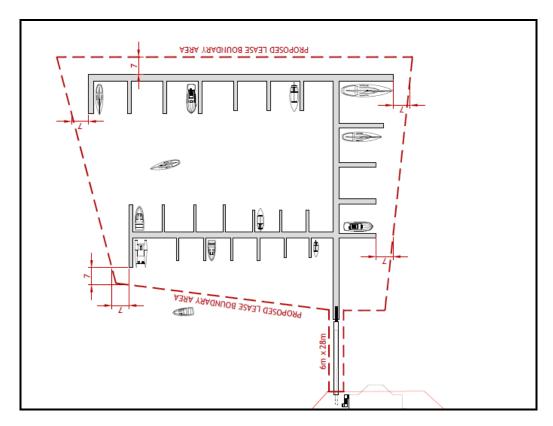


Figure 3a: Approved marina layout showing lease boundary



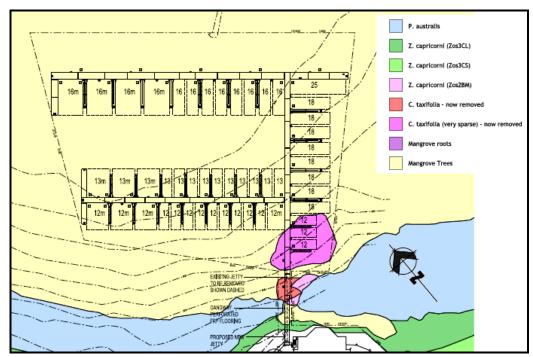


Figure 3b: Proposed marina layout showing lease boundary

As can be seen from Figure 3a and b, the proposed amendments continue to be located entirely within the approved lease boundary and continue to avoid the seagrasses.

A complete set of amended plans, as well as an amended MEOMP and SoCs are provided in **Appendix 1**.

3.2 ASPECTS OF THE APPROVAL WHICH REQUIRE AMENDMENT

3.2.1 Project Approval

The following aspects of the approval will require amendment to correspond to the proposed modifications (additions are shown in red and deletions are struck-through):

Project: Koolewong Marina, comprising:

- construction of a 50 berth marina;
- upgrading and raising of the existing timber jetty;
- upgrading and reconfiguration of the existing car park to provide an additional 14 15 car parking spaces; and,
- change of use to an existing office.

Reason: To correspond to the proposed amended plans.

A1. Development in Accordance with Plans and Documentation

The Proponent shall carry out the project in accordance with:

- a) Major Project Application 10 0209.
- b) The Environmental Assessment for a 50 Berth Marina and Car Park Reconfiguration at Crown Land Above and Below Mean High Water Mark



- Off Brisbane Water Drive Being Lot 519 DP 729020 on behalf of Gemsted Pty Ltd, dated August 2011.
- c) The Preferred Project Report for a Proposed 50 Berth Marina and Car Park at Crown Land Above and Below Mean High Water Mark Off Brisbane Water Drive Being Lot 519 DP 729020 on behalf of Gemsted Pty Ltd, dated December 2011.
- d) Amended Statement of Commitments, as contained within the PPR, prepared by ADW Johnson Pty Ltd and dated December 2011 November 2014.
- e) The following drawings:

Architectural (or Design) Drawings prepared by ADW Johnson			
Drawing	Revision	Plan Title	Date
No.			
<i>001</i>	€	Proposed Marina Layout	20/08/10
SK6-01	В	Layout Plan	03.07.14
<i>001</i>	A	Proposed Car park Layout (44 Spaces)	20107/10
SKO1	A	20107/10 Typical Service Vehicle and	21.01.2014
		Standard Car Turning Templates	
		Boardwalk and Carpark Configuration –	
		Option A	
150134	Α	Proposed Marina for Lot 519 in	01/07/11
		D.P.729020 01/07/11 Light and Services	
		Plan	
04	Α	Figure 4: Erosion and Sedimentation 13/0	
		Control 13/07/11 Plan	
150134	Α	Proposed Marina for Lot 519 in 29/06/	
		D.P.729020 29/06/11 Public Access Plan	
150134	Α	Swing Mooring Plan 05/07/11	
150134	Α	Proposed Marina for Lot 519 in 11/07/1	
		D.P.729020 11/07/11 Landscape Plan	
SKO4	_	New Change Rooms, General 14.01.	
		Treatments - Option 2	

except for:

- a) Any modifications which are 'Exempt and Complying Development' as identified in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 or as may be necessary for the purpose of compliance with the SCA and any Australian Standards incorporated in the SCA.
- b) Otherwise provided by the conditions of this approval.

Reason: To correspond to the proposed amendments and to reflect workable operational and management procedures.

B4. Invasive Algae Removal

The Proponent is required to remove all areas of the invasive algae species Caulwoi erpa taxifolia, as identified in the Aquatic Ecology Assessment prepared by Cardno Ecology Lab Pty Ltd and dated May 2011 (as provided in the EA). The species removal is required to be carried out in consultation with the Department of Primary Industries (Fisheries) and to the satisfaction of the Certifying Authority.



Reason: As discussed above, DPE advised that the removal of the C. taxifolia is no longer required as its removal can often aid in its spread (refer to Appendix I).

B14. Car parking

Car parking at the site shall be provided and maintained in accordance with Drawing 001, Revision A Proposed Carpark Layout (44 Spaces) Typical Service Vehicle and Standard Car Turning Templates, dated 20 July 2010 and contained within Appendix 1a of the EA Proposed Carpark Layout (45 spaces) Typical Service Vehicle Turning Templates, dated 15 September 2014. Details of the proposed car parking shall be provided to the satisfaction of the Certifying Authority prior to the issue of a Construction Certificate. Car Parking shall also accord with the following requirements:

- a) All parking areas and access ways shall be constructed, sealed and drained in accordance with the Council's Development Control Plan 111 Car Parking (Amendment No.1) and associated Engineering Guidelines, and in accordance with AS/NZS 2890.1 2004 Parking Facilities Part 1: Off-Street Car Parking.
- b) As some parking space lengths are only 4.8m in width, the Proponent must ensure that the first 600mm immediately behind the end overhang of the vehicle is unobstructed by another parking space, a footway (or similar), or vegetation.
- c) On-site car parking shall be identified by line-marking.
- d) Disabled car park spaces shall be designed in accordance with AS1428.1 Design for Access and Mobility.

Reason: To correspond to the proposed amendments.

F1. Marina Environmental and Operational Management

The marina is to be operated in accordance with the provisions and requirements of the Draft Marina Environmental and Operational Management Plan prepared by ADW Johnson Pty Ltd, dated December 2011 November 2014 and provided as Appendix 6 of the PPR.

Note: the operating hours for the existing offices are to continue to operate under the existing approvals issued by Council, as required in accordance with condition A10.

Reason: To correspond to the proposed amendments and to reflect workable operational and management procedures.

3.2.2 Amendments made to the Statement of Commitments

The following aspects of the Statement of Commitments (SoCs) will require amendment to correspond to the proposed modifications (additions are shown in red and deletions are struck-through):

Commitment 1 - The Project will be completed in accordance with the submitted plans and descriptions of proposed development provided in this EA Report as part of this Major Project Application and where amended pursuant to Section 75W of the EP&A Act.

Reason: To provide reflect the amended plans and commitments made under this Section 75W application.



Commitment 3 Sediment mobilisation during pile installation will be reduced by the use of hollow steel piles, which displace less sediment than traditional wooden piles.

Reason: As the detailed design of the marina has progressed, it has been discovered that a heavier construction is necessary and as such concrete piles and or hollow steel piles will be required.

The original proposal prepared prior to the engagement of a marina builder was for the marina to be held in place by hollow steel piles with a PVC sleeve and cap. As this construction style was volunteered by the proponent at the time, Cardno included it within their recommendations and subsequently it was captured within the SoCs.

Cardno was engaged in order to assess the likely impacts of replacing hollow piles with solid concrete piles. Their conclusions revealed that the proposed amendment in this regard is unlikely to have any ecologically significant impacts on seagrass habitat.

Full details in this regard are provided within the Aquatic Ecology Assessment: Addendum located within Appendix F.

Commitment 5 – Visual monitoring of water turbidity will be considered undertaken during the installation of piles, to ensure that no sustained or widespread increases in turbidity occur.

Reason: To clarify that visual monitoring will be undertaken during the construction process.

Commitment 8 Vessels with deeper drafts will be housed on the outer arm to maintain greater vessel clearance from the seabed. Deep draft vessels will be berthed in accordance with AS 3962-2001

Reason: The depth of water at the closest point is three metres and this point is also beyond the seagrass line. With this in mind boats with deeper draft should not have an impact on the seagrasses.

Cardno was engaged in order to assess the likely impacts of the proposed berthing amendments on the seagrasses. Cardno concluded that any impacts on turbidity would be less than natural sediment mobilising forces such as wind, waves and tidal currents.

Full details in this regard are provided within the Aquatic Ecology Assessment: Addendum located within Appendix F.

Commitment 12 - Accidental spillages of waste materials including fuels and oils will be contained within floating booms and cleaned up as soon as possible to prevent weathering and subsequent deposition of heavy fractions.

Reason: To ensure all waste products potentially spilt are cleaned up as soon as possible.



Commitment 23 – A northern cardinal marker will be sought from Roads and Maritime Services and On shore signage will be provided at the marina highlighting shallow water the presence and distribution of seagrass and creating a 'vessel exclusion zone'.

Reason: A lit Northern cardinal marker indicating the shallow water depth will provide more protection to the seagrass than signage which can be easily ignored. Signage and information on seagrasses will however be provided as required under SoC 20 and 2.3 of the MEOMP.

Commitment 24 - Amended: The area of C. taxifolia identified within the Aquatic Ecology Report will be removed in conjunction with NSW Fisheries, prior to any construction:

Reason: DPE advised that the removal of the C. taxifolia was no longer required as its removal can often aid in its spread. This is confirmed in its correspondence of 20 August 2012 which is attached within Appendix I.

Commitment 30 - Minimising the widening of the existing jetty.

Reason: The dimensions of the jetty as discussed above are required for safety and access reasons and if approved will not be amended through the inclusion of this SoC.

In addition to the above, Cardno has advised that seagrass is currently located underneath the current jetty. For this reason, the replacement jetty, which will also be constructed using seagrass friendly mesh, is unlikely to have an adverse effect on the seagrass present through shading.

Full details in this regard are provided within the Aquatic Ecology Assessment: Addendum located within Appendix F.

Commitment 31 – Replacing the existing jetty boarding with ecostyle "sea grass friendly" polypropylene decking;

Reason: To allow flexibility when choosing a "sea grass friendly" product.

Commitment 33 Using mesh or similar material for floating structures to allow light penetration.

Reason: As discussed above, as the detailed design of the marina has progressed, it has been discovered that a heavier construction is necessary and as such the deck will need to be constructed in concrete to withstand wave action. Despite this, the deck is not located near seagrass. Mesh deck will be used however over the seagrass area on the jetty and gangway leading to the marina structure.

The original proposal prepared (prior to the engagement of a marina builder) was for the marina to be constructed using a "mesh" style decking. As this construction style was volunteered by the proponent at the time, Cardno included it within their recommendations and subsequently it was captured within the SoCs. Cardno has since reassessed the proposed amendments and have concluded that they are unlikely to have any ecologically significant impacts on seagrass habitat.



Full details in this regard are provided within the Aquatic Ecology Assessment: Addendum located within Appendix F.

3.2.3 Amendments made to the Marina Environmental Operations Management Plan

The following aspects of the Marina Environmental Operations Management Plan (MEOMP) will require amendment to correspond to the proposed modifications (additions are shown in red and deletions are struck-through):

Update to Rev B, Nov 2014.

Section 1.1 - Koolewong Marina is located in Murphy's Bay, part of Brisbane Water, Koolewong, NSW Australia. The street address is Brisbane Water Drive, Koolewong.

The Marina has the following facilities:

- 1. 50 wet berths for vessels ranging in sizes from 8m to 21m 25m in length;
- 2. Temporary berthing;
- 3. Full security provided through CCTV surveillance, and secured entry to marina through individual key card access;
- 4. On-site car parking;
- 5. Recreation room Marina Office and external amenities located on the first floor within the existing Boathouse building; and
- 6. On-site Marina Manager/representative able to assist in all boating and marina related questions.

The Marina layout and berth details are shown within Attachment 1.

Reason: To clarify amenities available to owners/lessees.

Section 1.2 – The Marina will operate during the following hours:

Office Summer 9.00 am to \$\int_0\$.00 pm - 7 days a week

Winter 9.00 am to 5.00 pm - 7 days a week

Marina 24 hour key card access to berth holders

Reason: To reduce summer office hours to standard hours.

Section 1.3.1 – Property Lessee (Gemsted Pty Ltd Marmong Marina Properties Pty Ltd)

The Property Lessee is responsible for ensuring the Marina operations comply with the Conditions of Consent and other applicable Authority requirements.

Reason: To update the proponents details.

Section 1.3.3 – The owners of vessels and the lessees of berths are responsible for ensuring that they comply with the rules of the Marina listed within the MEOMP; the Marina Berth Agreement/Conditions/Rules/Regulations as well as New South Wales law.



Reason: To ensure owners and lessees adhere to all marina rules, regulations and law.

Section 1.5 – The Koolewong marina is run as an accredited clean marina in accordance with Australia's Clean Marina Program. The "Clean Boaties Fact Sheet" is included as an attachment to the MEOMP.

Reason: Section 1.5 has been added to advise that the Koolewong marina will be run as an accredited clean marina in accordance with Australia's Clean Marina Program. The "Clean Boaties Fact Sheet" has also been added as an attachment to the MEOMP.

Section 2.1 - Manager

 The marina Manager/representative will ensure that vessels with deeper drafts will be housed on the outer arm to maintain greater vessel clearance from the seabed.

Reason: As discussed above, the depth of water at the closest point is three metres and this point is also beyond the seagrass line. With this in mind boats with a deeper draft should have an insignificant impact on the seagrasses compared to natural processes. This has been supported by Cardno.

Section 2.2 - Owners and Lessees/Temporary Berth Holders

- The use of copper-based anti-fouling paints and in-situ cleaning of boat hulls that have been treated with copper paints is prohibited within the marina.
 Boats which at present are painted with copper-based anti-fouling paints are encouraged to switch to non-toxic anti-fouling paints.
- No fishing, swimming or diving (except for the cleaning of hulls) from marina or jetty.

Reason: To prohibit the cleaning of all boat hulls within the marina but to allow fishing.

Section 2.3 - Manager

- The Marina Manager will ensure that on-shore and off-shore signage, highlighting the presence and distribution of seagrass, and creating an 'exclusion zone' as depicted in Figure 1 below and in accordance with the Signage Plan, is provided a lit Northern cardinal marker will be installed to provide protection to the seagrass.
- The Marina Manager will ensure that signage is erected in a prominent onshore position to inform Boat owners/lessees of the sea grass exclusion zone depicted within Figure 1.

(Figure 1 amended to reflect amended marina layout)



Reason: A lit Northern cardinal marker indicating the shallow water depth will provide more protection to the seagrass than signage which can be easily ignored.

Section 3.2 - Owners and Lessees/Temporary Berth Holders

- While vessels are moored in the Marina the use of generators, or the running of engines will not be permissible for purposes other than preparing the vessels for departure and checking that boat equipment is functioning.
- The running of generators and engines for checking boat equipment is only permitted between 7.00am and 6.00pm.
- The use of power tools by boat owners will be permitted only between 9.00am and 6.00pm Monday to Friday and 9.00am and 12.00pm on Saturdays.
- Unless required for safe navigation, "bow thrusters" are not to be used in the Marina or the approaches between 10.00pm and 8.00am.

Reason: The above restrictions were not a requirement of any authority or the original Acoustic Consultant, but were instead volunteered by the previous proponent based on the MEOMP for the Gosford Sailing Club, to reduce noise to surrounding residents. The proposed marina however has a significantly different noise environment to the Gosford Sailing Club in that the Main Northern Railway Line and Brisbane Water Drive are located between the marina and the nearest residences in the area.

Section 4 - Manager

• With the exception of bollard lights and navigation lights on the Marina, all lights on the Marina will be turned off outside Marina operating hours.

Reason: Lighting will be required for public safety on the boardwalk and in the carpark. Again, this restriction was volunteered by the previous proponent as opposed to being required by any authority.

Section 5.2 - Manager

 The Manager/representative will undertake regular inspections of the waterways around the marina for detection of any wastes and these will be dealt with immediately. debris, oil slicks, coloured dye and other matter. They will trace the source thereof where possible and report to the respective borth holder for immediate repair.

Reason: To broaden the definition of waste to ensure that all wastes are detected and dealt with immediately in the appropriate fashion.



Section 7.1 - Owners and Lessees/Temporary Berth Holders

 All vessels will be inspected Boat owners' will ensure that their vessel has been inspected for fuel, vapour and gas leaks. Inspections shall include bilges, fuel system leaks, gas equipment and lines, for integrity.

Reason: To clarify that it is the boat owners' responsibility to ensure their vessels do not leak bilge fluid, fuel or gas. It is a liability issue for this to be done by the Marina Manager and unrealistic for the marina manager to have the skill to perform these inspections as there are no onsite mechanical services provided at the marina. Ensuring boat owners' undertake this responsibility will be managed through the MEOMP and Marina Berth Agreement.

Section 7.3.3 - Owners and Lessees/Temporary Berth Holders

 The discharging of sewage directly into Brisbane Water is strictly prohibited and those caught conducting such activities will be reported to the Department of Environment and Heritage and could be subject to significant fines. A list of available pump-out services is provided within Section 9 at the marina.

Reason: The original application did not propose pump out facilities however it is a requirement of Condition B1.

Section 9 – Given the proximity of the marina to nearby oyster farms, pump out facilities are not provided on site. A pump-out facility is provided at the marina, however the following facilities are also available within the area:

Reason: As above within Section 7.3.3.

Section 10.1 - Owners and Lessees/ Temporary Berth Holders

 Vessels with bow thrusters will be allocated on the outermost or northern section of the jetty.

Reason: The use of bow thrusters is required for safe manoeuvring about the marina and they are used in short bursts only. They ensure boats do not enter shallow waters damaging seagrasses as well as minimising collisions with other boats. It is also common for smaller vessels (10m and under) to be fitted with bow thrusters. Given that these vessels will be located in the closer berths, accurate navigation close to the sea grass is imperative.



4.0 authority and stakeholder consultation

4.1 COMMUNITY CONSULTATION

During the original application, 9 submissions were received in support of the project, 3 were neutral and 7 objected. The comments received from the public can be summarized as follows:

Lack of amenities provided (showers and toilets)

Comment: The amendments proposed will provide separate marina toilet and shower facilities.

• Size of the marina (too large)

Comment: The amendments will have no impact on size, with the 50 berths and marina dimensions remaining the same.

Increased traffic

Comment: The amendments will have no impact on traffic generation.

 General environmental concerns particularly regarding the illegal practice of pumping out waste into Brisbane Water

Comment: Conditions of approval require the provision of pump-out facilities to prevent illegal waste dumping. This requirement is not proposed to be changed.

Parking concerns

Comment: The proposed amendments will provide an additional parking space.

Visual impact

Comment: The proposed amendments will improve the visual impact of the proposal through the provision of the boardwalk along with various improved façade and landscaping treatments. Furthermore, the marina will be moved closer to the existing two storey Boathouse building and as such will lessen the visual impact on Brisbane Water views.

Lack of public access

Comment: The provision of the public board walk which will join to Council's existing footpath will encourage public access to the site, the marina, and the existing restaurant, as well as providing better access and linkage from the car park.

• Spread of C. taxifolia. Conditions of approval have been enforced to prevent the spread of C. taxifolia



Taking the above into consideration, the proposed amendments would have only positive impacts on the public particularly through the provision of a public boardwalk which will connect to Councils existing footpath along Brisbane Water Drive. Furthermore, the amendments will in fact satiate a number of the above concerns with the remaining changes having no impact on the rest. For these reasons, on 2 July 2014, the Department of Planning advised that given the minor nature of the modifications proposed, the application would not require notification in this instance (refer to Appendix G).

4.2 AUTHORITY CONSULTATION

During the preparation of the EA, the following consultation was undertaken with the Local Council and relevant State Government Agencies:

Gosford City Council

A meeting was held with Gosford City Council's Acting Manager of Development, Wayne Herd, on 26 June 2014 where the following amendments were of relevance to this authority:

- Building a timber boardwalk from Council's existing pedestrian path to connect to the jetty.
- Reconfiguration of the car park to add one additional space.

Gosford City Council provided the following follow up advice on 30 June 2014:

"Council would be supportive of an amendment which increases the number of car parking spaces, provided the amended layout complies with AS2890 and adequate provision is made for waste vehicles to pick up waste and enter and leave the site in a forward direction."

The proposed parking layout adheres to AS2890 and plans provided within Appendix A illustrate that waste vehicles can enter and leave the site in a forward direction.

Gosford City Council's complete correspondence in this regard is located within Appendix H.

NSW Fisheries

NSW Fisheries were unable to attend the meeting on 26 June 2014 however the proponent was able to meet with them at their Head Office where the following advice provided on 1 September 2014:

"The proposal does not include any dredging, reclamation, harm to marine vegetation, or blockage of fish passage. NSW DPI has reviewed this proposal in light of these provisions and has no objections."

NSW Fisheries complete correspondence in this regard is located within Appendix E.



New South Wales Maritime

A meeting was held with NSW Maritime's Senior Emergency Planning Officer, Alex Hamilton, on 26 June 2014 where the following amendments were of relevance to this authority:

- Shortening the jetty by 10m and subsequent repositioning of the marina closer to shore.
- Amend requirement for seagrass exclusion zone signage to the installation of a lit Northern cardinal marker.

NSW Maritime raised no concern regarding the repositioning of the marina and further discussions will be undertaken surrounding the particulars of installing/maintaining the lit Northern cardinal marker.



5.0 environmental planning and assessment act 1979

MA10_0209 was approved under Part 3A of the EP&A Act. Part 3A of the EP&A Act was repealed on 1 October 2011 and Schedule 6A of the EP&A Act sets out the transitional arrangements applying to projects approved under Part 3A.

Clause 2(5) of Schedule 6A provides:

"A transitional Part 3A project extends to the project as varied by changes to the Part 3A project or concept plan application, to the concept plan approval or to the project approval, whether made before or after the repeal of Part 3A."

Therefore, any modification to the approved project will continue to be dealt with under Part 3A as a Section 75W modification by the Minister for Planning and Environment or by the Department of Planning and Environment officers.

Clause 3 of Schedule 6A of the EP&A Act 1979 states that the provisions of any State Environmental Planning Policy (SEPP) implemented under Part 3A continues to apply in respect of a transitional Part 3A project:

- 3 Continuation of Part 3A—transitional Part 3A projects
 - (1) Part 3A of this Act (as in force immediately before the repeal of that Part and as modified under this Schedule after that repeal) continues to apply to and in respect of a transitional Part 3A project.
 - (2) For that purpose:
 - (a) any State environmental planning policy or other instrument made under or for the purposes of Part 3A, as in force on the repeal of that Part and as amended after that repeal, continues to apply to and in respect of a transitional Part 3A project,"

Based on the above legislation, it is established that the proposed modifications to the approved marina can be assessed as a Section 75W modification application.

Furthermore, Section 75W of the EP&A Act states the following:

75W Modification of Minister's approval

(1) In this section:

Minister's approval means an approval to carry out a project under this Part, and includes an approval of a concept plan.

modification of approval means changing the terms of a Minister's approval, including:

- (a) revoking or varying a condition of the approval or imposing an additional condition of the approval, and
- (b) changing the terms of any determination made by the Minister under Division 3 in connection with the approval.



(2) The proponent may request the Minister to modify the Minister's approval for a project. The Minister's approval for a modification is not required if the project as modified will be consistent with the existing approval under this Part.

Taking the above into consideration, no provisions of Section 75W prohibit or restrict the proposed modifications to the project approval. It is considered that the proposed modifications remain consistent with this section of the EP&A Act 1979.



6.0 statutory context and planning controls

6.1 SEPP (MAJOR DEVELOPMENT) 2005

SEPP (Major Development) 2005 outlines the types of development declared to be a Major Project for the purposes of Part 3A of the EP&A Act. For the purposes of the Major Development SEPP, certain forms of development may be considered a Major Project if the Minister (or a delegate) forms the opinion that the development meets criteria within the Major Development SEPP.

Clause 6 of the Major Development SEPP defines 'Major Development' and includes development described in Schedule 1 - Part 3A Classes of Development.

The approved marina with capacity to moor, berth and store 50 vessels at floating berths in Murphys Bay (within Broken Bay) is development described in Schedule 1 – Part 3A Classes of Development, Group 6 Tourism and Recreational Facilities, Clause 14 Marina Facilities.

On 22 November 2010, the Acting Director General of the Department of Planning, as delegate of the Minister for Planning, formed the opinion that the proposal was a Major Project to which Part 3A of the EP&A Act applies.

Modifications to Part 3A projects can be sought under Section 75W of the EP&A Act, as set out above.

6.2 SEPP 62 - SUSTAINABLE AQUACULTURE

A full Aquatic Ecology Report based in part on the NSW Oyster Industry Sustainable Aquaculture Strategy was submitted as part of the original application, where it was found that the proposal is unlikely to cause any detrimental effects to aquaculture (oyster farming) through contamination. The modifications proposed involve no changes to the way in which oyster farming is potentially affected and as such will continue to adhere to SEPP 62.

6.3 SEPP 71 – COASTAL PROTECTION

The proposed modifications involve providing a public boardwalk which connects from Council's existing pedestrian footbath along Brisbane Water Drive to the marina. This will improve public access to the foreshore and therefore improve the way in which the marina achieves the matters for consideration listed under Clause 8 of the SEPP.

An assessment of the proposed modifications against the provisions of Clause 8 is included in the table below.

SEPP 71 Clause 8	Matters for Consideration	Proposed
а	The aims of the Policy	The proposal is compliant with the objectives of the Policy in terms of protection of the coastal zone and environment.



c	Existing public access to and along the coastal foreshore for pedestrians or persons with a disability should be retained and, where possible, public access to and along the coastal foreshore for pedestrians or persons with a disability should be improved. Opportunities to provide new public access to and along the coastal foreshore for	The proposed modifications will improve public access more so that the current approval.
d	pedestrians or persons with a disability. The suitability of development given its type, location and design and its relationship with the surrounding area.	The proposed modifications will have no impact in this regard.
е	Any detrimental impact that development may have on the amenity of the coastal foreshore, including any significant overshadowing of the coastal foreshore and any significant loss of views from a public place to the coastal foreshore.	The proposed modifications will have no impact in this regard.
f	The scenic qualities of the New South Wales coast, and means to protect and improve these qualities.	The proposed modifications will have no impact in this regard.
g	Measures to conserve animals (within the meaning of the <u>Threatened Species Conservation Act 1995</u>) and plants (within the meaning of that Act), and their habitats.	An Aquatic Ecology Assessment: Addendum has been prepared by Cardno which concludes that the
h	Measures to conserve fish (within the meaning of Part 7A of the <u>Fisheries Management Act 1994</u>) and marine vegetation (within the meaning of that Part), and their habitats.	proposed amendments are unlikely to have any ecologically significant impacts on the seagrass habitat and other marine ecosystems present in the vicinity of the proposed development.
İ	Existing wildlife corridors and the impact of development on these corridors.	N/A
J	The likely impact of coastal processes and coastal hazards on development and any likely impacts of development on coastal processes and coastal hazards.	The proposed modifications will have no impact in this regard.
k	Measures to reduce the potential for conflict between land-based and water-based coastal activities.	The proposed modifications will have no impact in this regard.
I	Measures to protect the cultural places, values, customs, beliefs and traditional knowledge of Aboriginals.	The proposed modifications will have no impact in this regard.
m	Likely impacts of development on the water quality of coastal water bodies.	The proposed modifications will have no impact in this regard.
n	The conservation and preservation of items of heritage, archaeological or historic significance.	The proposed modifications will have no impact in this regard.
0	Only in cases in which a council prepares a draft local environmental plan that applies to land to which this Policy applies, the means to encourage compact towns and cities.	N/A



p(i)	The cumulative impacts of the proposed	
	development on the environment.	are not considered to have
		any adverse cumulative
		impacts on the environment.
p(ii)	Measures to ensure that water and energy	The proposed modifications
	usage by the proposed development is	will have no impact in this
	efficient.	regard.

Taking the above into consideration the modifications continue to achieve the Aims and Objectives and the matters listed under Clause 8 and as such complies with the provisions of the SEPP.

6.4 GOSFORD PLANNING SCHEME ORDINANCE

The subject site is unzoned under Gosford Planning Ordinance Scheme (GPSO) (this being the environmental planning instrument at the time).

The proposed modifications do not alter the use of the site or change the project in anyway which would be contrary to any provisions within the GPSO.

6.5 GOSFORD LOCAL ENVIROMENTAL PLAN 2014

The subject site is zoned *RE1 Public Recreation* and *W2 Recreational Waterways* under the Gosford Local Environmental Plan 2014 (then the Draft Local Environmental Plan 2009).

The proposed modifications, particularly the inclusion of the boardwalk, enhance the way in which the project achieves the following objectives of the RE1 and W2 Zones:

- To enable land to be used for public open space or recreational purposes.
- To provide a range of recreational settings and activities and compatible land uses.
- To protect and enhance the natural environment for recreational purposes.
- To identify areas suitable for development for recreation, leisure and cultural purposes.
- To ensure that development is compatible with the desired future character of the zone.
- To protect the ecological, scenic and recreation values of recreational waterways.
- To allow for water-based recreation and related uses.
- To provide for sustainable fishing industries and recreational fishing.

Taking the above into consideration the modified aspects of the Project continue to complies with the provisions of the Gosford Local Environmental Plan 2014.

6.6 GOSFORD CITY COUNCIL DEVELOPMENT CONTROL PLAN

The following chapters within the Gosford City Council Development Control Plan (this being the environmental planning instrument at the time) are applicable to the proposed modifications:



- Development Control Plan 89 Scenic Quality;
- Development Control Plan 106 Waste Management Controls;
- Development Control Plan 111 Car Parking;
- Development Control Plan 119 Wharves and Jetties.

6.6.1 Development Control Plan – 89 Scenic Quality

The subject site falls within the Landscape Unit of *East Gosford, Point Clare – Koolewong* which has a "local" level of scenic significance. In terms of scenic quality, the proposed modifications have not increased in size and if anything they further beautify the site through the addition of the boardwalk. The marina will also be located closer to the Boathouse Restaurant and will therefore lessen its visual impact on water views.

Taking the above into consideration the modified aspects of the Project continue to complies with development objectives of DCP 89.

6.6.2 Development Control Plan – 106 Waste Management Controls

The proposed method of waste disposal during site preparation, construction and throughout the life of the proposal will continue to be undertaken in accordance with Chapter 106: Waste Management Controls. This is covered under Condition B7 of the Approval.

As with this original proposal, an external contractor will collect all on-site waste one to two times per week. The modified car parking layout will continue to accommodate a standard garbage vehicle, with this being demonstrated within the plan labeled "Attachment 4" within Appendix A.

Taking the above into consideration the modified aspects of the Project continue to complies with development objectives of DCP 106.

6.6.3 Development Control Plan – 111 Car Parking

Parking was a major consideration within the original application, however DCP 111 does not provide a parking rate for marinas. For this reason, the original proposal was assessed under AS 3962–2001.

Taking the above into consideration, DCP 111 has no relevance to the modified aspects of the Project.

Parking in general, is discussed further within Section 8.

6.6.4 Development Control Plan – 119 Wharves and Jetties

The proposed modifications involve minor reconfiguration changes to the marina through amendments to berth sizes and a reduction in the jetty and gangway length

An assessment of the proposed modifications against the provisions of DCP119 is included in the table below.



	•
DCP 119	Proposed/Compliance
Development Standard	
7.3 Visual Character and Natural Landscape	
7.3.3.a Visual Impact Assessment	YES – The proposed amendments will result in the overall marina structure being brought closer to the shore. Given that the marina is located behind the two storey Boathouse Restaurant building, this will further reduce any general visual impact or impact on views over Brisbane Water.
7.3.3.b Natural Landscape Elements: Access Facilities to Brisbane Water to avoid any alteration of the natural ground level of the foreshore.	YES – Given the reclaimed nature of the site, there is no foreshore as such. Despite this, the proposed amendments will improve access to the jetty through the inclusion of a public boardwalk from the Council footpath.
7.3.3.c Building Materials: Non-reflective surfaces, and colours. Natural tones and finishes.	YES - The proposed amendments continue to comply with this requirement through the potential replacement of the hollow metal piles with concrete piles.
7.4 Management Guidelines and Standards	
7.4.1.a Jetties and wharves for short stay by vessels to provide for embarking, disembarking, loading and unloading;	The proposed modifications will have no impact in this regard.
7.4.1.b The length of any jetty/wharf structure should not exceed the dimensions as set out in the Appendix 1. Not exceed average length nearby jetties (30m-50m)	YES – The proposed amendment reduces the jetty length and therefore provides added compliance to this requirement than did the original.
7.4.1.c To maximise the free flow of water beneath the structure a wharf/jetty must not be constructed of solid fill, but must be constructed on piles with a minimum longitudinal spacing of 3 metres	The proposed modifications will have no impact in this regard.
7.4.1.e Height above MHWM	The proposed modifications will have no impact in this regard.
7.4.1.f Jetty Width 0.9m - 1.2m	The original and proposed jetty width does not comply with this requirement. Despite this, the objective behind this requirement is to protect seagrasses which will be achieved through the use of seagrass friendly mesh.
7.4.1.g Handrail 1 side only	The proposed modifications will have no impact in this regard.
7.4.1.i Gates or similar devices will not be permitted.	The proposed modifications will have no impact in this regard.
7.4.1.j Lighting minimal and for safety of users only	The proposed modifications will have no impact in this regard.
7.4.1.k Davits and derricks will not be permitted.	The proposed modifications will have no impact in this regard.
7.4.1.m Jetties shall be adequately maintained .	The proposed modifications will have no impact in this regard.



7.0 environmental assessment

7.1 SOILS, SEDIMENT AND WATER

The proposed amendments bring the marina and associated construction works closer to the area of seagrass (see Figure 4). For this reason, they have the potential to affect the seagrass habitat through mobilisation of sediments and associated water quality changes.

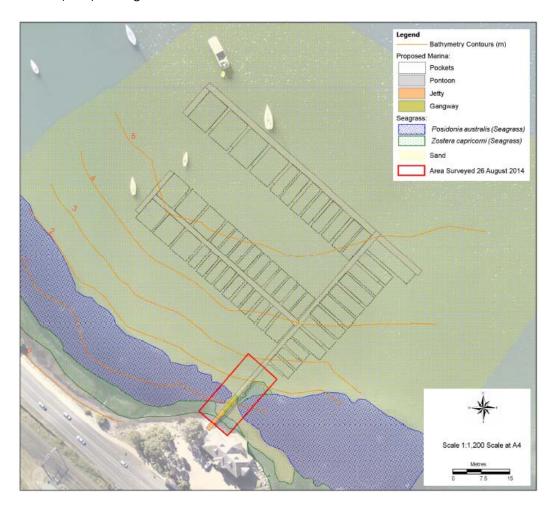


Figure 4: Proposed marina layout and updated seagrass map (Source: Cardno 2014)

Mobilization of Sediment: The proposed amendments bring the marina and associated construction works closer to the area of seagrass and as such they have the potential to decrease water quality in the vicinity through the mobilization of sediments caused by construction boat movements, pile displacement and use and berthing larger boats closer to seagrass areas. In this regard Cardno have provided the following advice:



"Overall, the potential for impact to seagrass habitat through sediment mobilisation during construction is considered to be minimal given the short duration of any turbidity increase. Further, the seagrass present is likely to have a natural tolerance to short term elevation in turbidity associated with natural drivers such as wind, waves and rainfall."

"Although it is possible that the movement of vessels of this size may mobilise fine sediments, such effects are expected to be of short duration (i.e. only while vessels are departing/berthing) and intermittent depending on frequency of vessel usage. The short duration and infrequent nature of these disturbance events indicate that they are likely to have less influence on turbidity than natural sediment mobilising forces such as wind, waves and tidal currents. Further, the existing jetty has historically been frequented by the M.V. Lady Kendall II, a 34 m long timber cruiser, which would operate in depths of approximately -2 m AHD to berth at the existing jetty. Any sediment mobilisation effects of the smaller 18 m vessels proposed for the marina are likely to be considerably less than a vessel of this size".

Taking the above into consideration, the proposed amendment will not have any significant impact on the mobilization of sediments.

7.2 FLORA AND FAUNA

The proposed amendments bring the marina and associated construction works closer to the area of seagrass. For this reason, they have the potential to affect the seagrass habitat through mobilisation of sediments, direct damage to seagrass due to boating activities, and shading of seafloor through marina structures.

Mobilisation of sediments: Discussed above.

Damage to habitats: Construction boat movements have the potential to physically damage seagrasses. In this regard Cardno have provided the following advice:

"The removal and installation of piles from the inshore area also poses a risk to seagrass as a result of increased vessel movements and activities over seagrass habitat (e.g., propeller scars and anchor damage). The likelihood of damage to seagrass can be easily minimised by suitable control measures during construction such as not deploying anchors within seagrass beds and ensuring adequate vessel clearance from the seabed is maintained. Suitable control measures to minimise the likelihood of vessel impacts on seagrasses should be identified in a revised construction management plan."

In accordance with the advice from Cardno, to further reduce the impacts from the mobilization of sediments, the following control measures were included within the SoCs and MEOMP:

- Not deploying anchors within seagrass beds see commitment 18 and 21 and Section 2.3 of the MEOMP;
- Ensuring adequate vessel clearance from the seabed is maintained see commitment 19;



• Inclusion of these aspects within the construction management plan.

Shading of seafloor: The proposed amendments have the potential to increase shading through the widened jetty or the concrete pontoon construction. In this regard Cardno have provided the following advice:

"The proposed $12m \times 2m$ jetty will directly cover an additional area of seagrass of approximately $1.5m^2$ where it currently passes under the existing jetty along the shoreline. Importantly, this section currently has seagrass friendly mesh installed which indicates that the use of similar mesh in the proposed jetty is unlikely to have an adverse effect on the seagrass present through shading.

The 10 m gangway connecting the jetty to the floating pontoons is also to be constructed of light penetrating mesh. The area traversed by the gangway currently has no marine vegetation, however the Z. capricorni bed comes to between 0 - 2 m of the proposed gangway. The use of mesh for the gangway should allow greater light penetration than the existing timber jetty, meaning that shading of the adjacent seagrass should be negligible. Further, the use of mesh may allow future colonisation by seagrass under this section.

To better withstand wave action, the revised marina configuration will use concrete decking for all floating pontoons. Although the use of concrete decking will reduce light penetration, the majority of the floating structure is outside of the seagrass habitat zone, covering a silty seafloor with minimal marine vegetation, so any reduction in primary productivity will be negligible. Where the pontoon extends into the seagrass zone, there is also no direct cover of seagrass by the pontoons.

However, a Z. capricorni bed comes to within 0.5 m to the south-east of the pontoon, so there is potential for some additional shading along the edge of this bed due to the increased width of the pontoon. However, the reduced height of the pontoon to the seabed compared to the existing jetty should also reduce the distance that the shadow is cast, which may at least partially compensate for the increased shading footprint. Importantly, the P. australis bed is located over 2.5 m to the south-east of the pontoon, so there should be no risk of shadow casting to this bed. Overall, the area of potential shading would be small relative to the total area of Z. capricorni present in the vicinity of the proposed marina, and is also compensated by the increased light penetration through the use of mesh for the proposed jetty and gangway, which may allow seagrass expansion in these areas."

Taking the above into consideration, the proposed amendment will not have any significant impact on the seagrass habitat.

7.3 VISUAL IMPACT

The proposed modifications have not increased in size and if anything they further beautify the site through the addition of the boardwalk. The marina will also be located closer to the Boathouse Restaurant and will therefore lessen its visual impact on water views.



7.4 HAZARD MANAGEMENT AND MITIGATION

The proposed modifications will enable a stronger marina construction providing greater protection against the local sea wave climate and storm events in accordance with SoC 39 which requires that the marina be designed to attenuate wave action in accordance with *Australian Standard Guidelines for design of marinas (AS3962)*.

7.5 TRAFFIC, ACCESS and PARKING

Traffic and Access: The proposed amendments will not impact the way in which the original project was assessed in terms of traffic and access given that the berth numbers will remain the same as will the access arrangements onto Brisbane Water Drive.

Parking: Under the original assessment the Department concluded the following within the Director-General's Environmental Assessment Report:

The total result of the proposed car parking arrangement will see the provision of 27 existing car parking spaces attributed to the restaurant and remaining office space; three existing spaces attributed to the marina use (as a result of converting 106.8m² of office space to marina use); and 14 additional spaces created for marina use, creating a combined total of 44 car parking spaces for the site.

The proposed modification now provides one additional parking space which brings the marina parking up to 18 spaces. Using the agreed AS 3962–2001 rate of 0.3 spaces per berth, the proposed parking area would be able to accommodate 60 berths.

The amended parking layout has been able to accommodate the additional space by reducing the width of some spaces designated for marina purposes to 2.4m and the restaurant spaces to 2.5m.

The 2.4m width has been adopted in accordance with AS 2890.1:2004 where it represents the minimum width for a Class 1 User (being long-term/all-day parking). This width has been accepted for marinas given that marina users generally park their car to use their vessels for the entire day if not for a number of days. The 2.5m width is the minimum width for a Class 2 User (being medium-term parking); this being appropriate for the restaurant users.

7.6 NOISE, AIR AND ODOUR QUALITY

The proposed modification requests that the requirement restricting the use of bow thrusters within the MEOMP be removed. The results of this are not expected to have any impact on noise given that the Main Northern Railway Line and Brisbane Water Drive are located between the marina and the nearest residences in the area. Furthermore, this restriction was not a requirement of any authority or the original Acoustic Consultant, but was instead volunteered by the previous proponent.



7.7 WASTE MANAGEMENT

The proposed amendments will not impact the way in which the original project was assessed in terms of waste management.

7.8 AQUACULTURE

The proposed amendments will not impact the way in which the original project was assessed in terms of impact on aquaculture beyond what has been discussed within Section 6.2.

7.9 HERITAGE AND ARCHAEOLOGY

The proposed amendments will not impact the way in which the original project was assessed in terms of heritage and archaeology.

7.10 ECOLOGICAL SUSTAINABLE DEVELOPMENT

The proposed amendments will not impact the way in which the original project was assessed in terms its ability to address the principles of ecological sustainable development.

7.11 NAVIGATION AND SAFETY

The proposed amendments will not impact the way in which the original project was assessed in terms of navigation and safety. Future negotiations will occur with NSW Maritime surrounding the installation/maintenance of the lit Northern cardinal marker.

7.12 INFRASTRUCTURE PROVISION

The proposed amendments will not impact the way in which the original project was assessed in terms of infrastructure provision.

7.13 SOCIAL AND ECONOMIC IMPACTS

As discussed above, the proposed amendments have come about through the approval being taken over by Marmong Marina Properties Pty Ltd. The new proponents have extensive experience in building and operating large scale marinas and this has led to the formulation of amendments aimed at improving the overall public amenity, functionality and viability of the project. Taking this into consideration, the proposed amendments will have the following beneficial social and economic impacts:

- Improve public access and enjoyment of the site;
- Attract more people to the existing restaurant;
- Create a "destination" appeal;
- Improve access to emergency response crews;
- Accommodate disabled access;
- Provide a better berth yield; and
- Provide better amenities.



In general terms, the overall amendments will improve the way the marina is run and therefore its likely success and subsequent employment and flow on effects from this.

7.14 CRIME AND SAFETY

The proposed modifications will improve have beneficial impacts in terms of crime and safety through added casual surveillance from the public use of the boardwalk.



8.0 conclusion

The proposed modifications under Section 75W of the EP&A Act 1979 are aimed at improving the overall public amenity, functionality and viability of the project as originally approved under MA10_0209 through the following means:

- Reducing the existing jetty length;
- Minor changes to the berth size configurations;
- Strengthen the marina construction;
- Incorporating a timber boardwalk for added public enjoyment of the site;
- Adding one additional car park space;
- Adding designated marina amenities;
- Amendments to some commitments and provisions within the MEOMP.

These changes will continue to be entirely within the approved lease boundaries, will not alter the number of berths, and continue to avoid seagrasses. These changes will also address some of the concerns raised by the public during the original notification period.

Consultation has occurred with all authorities potentially impacts by the changes, all of whom have expressed their initial support and raised no issues of concern.

To ensure these changes do not impact on the seagrass, further investigations were undertaken by Cardno who found that the amendments were unlikely to have any ecologically significant impacts on the seagrass habitat.

Taking the above into consideration and having regard to this Environmental Assessment, the proposed modifications are consistent with the intent of the original approval and will not result in any significant adverse impacts on the surrounding environment. It is therefore requested that this Section 75W application be approved by the Minister for Planning and Environment.



appendix a

Amended Plans, Statement of Commitments and Marina Environmental Operations Management Plan



appendix b

Major Project Approval for MA10_0209



appendix c

Confirmation from Department of Planning advising Section 75W process is appropriate



appendix d

Certificate of Title and Crown Lands Consent for Lodgement



appendix e

Correspondence from the Department of Primary Industries



appendix f

Aquatic Ecology Assessment: Addendum



appendix g

Email correspondence from the Department of Planning



appendix h

Correspondence from Gosford City Council



appendix i

Correspondence from the Department of Planning regarding Condition B4