

ENVIRONMENTAL ASSESSMENT

d'Albora Marinas - The Spit, NSW

STATEMENT OF VALIDITY

SUBMISSION OF ENVIRONMENTAL ASSESSMENT

Prepared pursuant to Part 3A of the *Environmental and Assessment Act 1979*.

PROPOSED EXPANSION AND REDEVELOPMENT OF THE D'ALBORA MARINA – THE SPIT.

Environmental Assessment prepared by *Hamptons Development Group Pty Ltd*.

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In respect of	d'Albora Marina – The Spit Western side of the Spit Road, THE SPIT, NSW

APPLICANT AND LAND DETAILS

Applicant	Ardent Leisure Group Hamptons Property Services Pty Ltd
Subject Site	d'Albora Marina – The Spit Western side of the Spit Road, THE SPIT, NSW
Property Description	Lot 102, 103 and 104 in DP 1011363 Parish of Willoughby
Project Summary	Expansion and redevelopment of the existing marina facility located at The Spit.

DECLARATION

I certify that I have prepared the contents of the D'ALBORA MARINA – THE SPIT ENVIRONMENTAL ASSESSMENT in accordance with the requirements of the *Environmental Planning and Assessment Act 1979* and *Environmental Planning and Assessment Regulation 2000* and that, to the best of my knowledge, the information contained in this report / documentation is not false or misleading.

Signature



Name

Kristy Lee

Date

02 FEBRUARY 2011

EXECUTIVE SUMMARY

Hamptons Property Services Pty Ltd has been retained by Ardent Leisure Group, trading as d'Albora Marinas, to prepare an Environmental Assessment to accompany this development application.

The proposed development relates to alterations and additions to an existing commercial marina facility, operated by d'Albora, and located at The Spit, Mosman.

The proposal seeks consent for the expansion and upgrade of the existing d'Albora Marina facility at the site, accommodating an additional 35 vessels, a new marina building for marine-related tenancies, a public deck with a small kiosk and public seating facilities, as well as a new hardstand area with a new travel lift. It is also intended that the proposed works at the site will enhance public use of the facility.

The purpose of the proposed works are to facilitate an increase in the supply of berthing facilities at the site in the 12 metre to 30 metre range, for which there is significant demand, and remove the existing slipway to provide more environmentally sensitive access to the marina *via* the introduction of a new boat lift.

Pursuant to **Part 3A** of the *Environmental Planning & Assessment Act 1979* (EP&A Act), the proposed development has been declared to be of State Significance in accordance with **Section 75B(1)(a)**. As such, in accordance with **Section 75D** of the EP&A Act, the Minister of Planning is the consent authority for the purpose of this application.

As required by **Section 74H** of the EP&A Act, the proponent is to submit to the Director-General, an Environmental Assessment for the proposed development. As part of the preparation of this Environmental Assessment, vital consultation with the community and government agencies was undertaken.

Consultation was undertaken with the following public authorities, by way of a Planning Focus Meeting in January 2008:

- NSW Department of Environment and Climate Change;
- NSW Department of Water and Energy;
- NSW Maritime;
- NSW Department of Lands;
- NSW Roads and Traffic Authority; and
- Mosman Municipal Council.

Mosman Council declined to attend the Planning Focus Meeting; representatives from all other authorities were in attendance. The outcomes of this consultation were included in their written responses to the Department of Planning and the subsequent Director-General Requirements which have been addressed within this Report.

A public consultation session was carried out for residents and interested parties at Mosman Council Library in July 2009. Issues relating to a reported commercial use of the adjacent Spit Reserve were raised by a number of attendees; in viewing the display, it became evident that there was no such use proposed, other than an RTA requirement to widen the filter lane into the site to facilitate safer access and egress by service vehicles.

Overall, a positive response was received in relation to improved public access onto the marina and around the site.

The relevant statutory matters pertaining to the assessment of this application have been detailed and discussed within this Environmental Assessment, which includes Commonwealth matters, State and Regional matters, as well as local matters. Specifically, the proposed development, is permissible with development consent pursuant to the *Mosman Local Environmental Plan 1998* and the *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005*.

Overall, the proposal is generally consistent with the applicable development standards and provisions.

As part of the Director-General Requirements, a number of key environmental impact concerns were required to be addressed. These included:

- **Visual Impact and Amenity;** Richard Lamb & Associates was engaged to undertake a Visual Impact Assessment of the proposed development.

In relation to the design and visual impact of the proposed works, Richard Lamb & Associates concluded that the most notable features of the proposed redevelopment, including the proposed reconfiguration and slight extensions of Arm A and Arm B, would not be highly perceived. In addition, as proposed works are a very small percentage of the total existing extent of the marina, the increased extent would not have any significant visual effect and impact on most of the medium range and distant viewing locations.

With regards to the visual impact of the proposed works on the public domain, Richard Lamb & Associates have concluded that there would be a localised higher effect and impact of the proposed extensions, on the close range waterway locations, a small section of Spit West Reserve, Spit Road and The Spit Bridge. In addition, it was assessed by Richard Lamb & Associates that the proposal would have a low to medium effect and impact on public domain areas within the visual catchment of the development site.

Overall, the Richard Lamb & Associates assessment concluded that the visual effects and impacts of the proposed development are acceptable.

- **Soils, Sediments, and Water;** Martens & Associates were retained to prepare a Stage 1 Contamination Assessment and a Geotechnical, Acid Sulfate Soil and Stage 2 Contamination Assessment for the site and the proposed development.

In relation to water quality impacts, the Martens & Associates report found that the groundwater appeared to be clean; however, results indicated there are a number of contaminate levels above guideline values, which were likely to be a result of minor leaking from small spillages during refuelling of tanks, boats or vehicles.

The Stage 2 Assessment by Martens & Associates identified no contaminants above NSW DEC 2006 guideline levels for commercial and industrial land use. Martens & Associates stated that a Remedial Action Plan is required for the site to address the removal of underground storage tanks identified as a likely source of groundwater hydrocarbon contamination.

In addition, Martens & Associates made a number of recommendations in terms of erosion and sediment control, which have been incorporated in the Draft Construction Management Plan.

With regards to Acid Sulfate Soils (ASS), Martens & Associates undertook site sub-surface investigations to determine the presence of ASS on the site. The conclusion of this assessment was that the materials tested are classified as neither potential ASS, nor actual ASS. On this basis, further site testing and, a site management plan are not considered necessary.

- **Traffic and Access;** Traffix Pty Ltd was retained to undertake a traffic impact assessment of the proposal. The impact assessment concluded that the additional demand for car parking is moderate and as such; the demand can be adequately catered for within the conditions of the existing car parking and the surrounding road network arrangements.

Traffix made a number of recommendations to ensure that adequate management of the available car parking spaces occurs on the site in order to alleviate any potential issues. Traffix consider that the cumulative effect of the recommendations essentially offset the increased parking demand that would otherwise occur, so that the development would be supportable subject to the inclusion of suitable conditions of consent governing the recommendations.

- **Marine Safety and Access;** GBA Coastal Pty Ltd assessed the impacts of vessel movements on the surrounding waters, which included consideration of the proximity and type of passing boat traffic, mooring arrangements, channel arrangements and vessel motions.

The impact on navigation past the marina is considered by GBA Coastal to be modest and manageable. The proposal is considered to have no influence on rowing operations as the marina does not encroach on the rowing course or the fairway and existing separation distances are retained.

The berthed vessels that currently access the marina from the south would continue to do so *as per* the existing situation.

GBA Coastal notes that since wave climate compliance is achieved at all of the proposed berths, then vessel motions at each berth are acceptable.

Overall, GBA Coastal concluded that vessel movements in, and around, the site will not result in adverse conditions regarding such movements.

- **Noise & Air Quality;** Wilkinson Murray Pty Ltd (WM) was retained to prepare a Noise and Air Quality Assessment for the development proposal.

WM made a number of recommendations pertaining to construction noise alleviation which have been incorporated into the Draft Construction Management Plan. Through the implementation of such recommendations, WM consider that the construction impacts associated with the development may be mitigated accordingly.

With respect to the operational impacts from the use of the site, the findings of WM indicate that the operational phases of the development will not result in any adverse noise impacts.

The impact of traffic noise associated with the intensification of development taking place on the site was also assessed by WM and it is concluded in their assessment that the proposed development will not result in any adverse impacts.

WM also assessed the construction activities and operational aspects of the marina in relation to potential air quality impacts and concluded that the proposed development will not result in any adverse air quality conditions as a result of the proposal.

- **Aquatic Flora and Fauna;** W.S. Rooney & Associates (WSRA) was commissioned to undertake an aquatic ecology impact assessment of the proposal.

WSRA identified locally important seagrass beds adjacent to the proposed lease areas and, as it was subsequently recommended that these be protected, alternative design options were explored in order to do so. The proposed hardstand design is the outcome of this process and adequately protects the seagrass beds.

WSRA identified 'pulse' and 'press' aquatic ecological impacts associated with the proposal, pertaining to the construction phase and as a result of additional shading from the proposed extension.

Overall, WSRA consider that the proposal is ecologically sustainable, provided all waste from boat maintenance activities is collected within the hardstand area and properly disposed, and that failsafe mechanisms are in place in the event of accidental spillage from, or damage to, the refuelling and sewage pump out facilities.

- **Hazards and Risk;** In relation to this matter, MA advised that the site is not required to be assessed with respect to *State Environmental Planning Policy No. 33*.
- **Waste;** A Draft Construction Management Plan (CMP) accompanies this application and adequately addresses matters of waste management, as well as the recommendations made by the project consultants.

Overall, as evidenced within this Environmental Assessment and indeed the accompanying consultant studies, impacts have been either avoided through design revisions, or minimised through the implementation of appropriate mitigation measures. In addition, the Draft Statement of Commitments which accompanies this Environmental Assessment provides the commitments by Ardent Leisure during construction and future operation of the project.

In this respect, it is considered that the proposed development is suitable in terms of its environmental impacts.

Furthermore, the long established use of the site as a marina and for maritime activities will result in the proposed works being consistent with the recognised character and nature of the site. As such, given the minimal environmental impacts and the proposal's continuation of an established use, the subject site is suitable for the proposal.

Significant public benefit will accrue through the proposed works. These benefits will include greater public access, *via* the construction of the aforementioned new public deck and the associated outdoor seating area located on the western side of the proposed building. Public safety will also be improved as the proposed building design will increase natural surveillance over the public domain. In addition, the application represents an opportunity to remove the existing slipway and reinstate the sea wall to its original location. This work will provide significant environmental benefits by providing more environmentally sensitive boat access to the marina, and will facilitate the protection of exiting sea grass beds.

Overall, the proposal represents an environmentally sensitive outcome which satisfies the relevant statutory provisions and delivers considerable public and economic benefits.

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1 INTRODUCTION

Hamptons Property Services Pty Ltd has been retained by Ardent Leisure Group, trading as d'Albora Marinas (herein referred to as d'Albora), to prepare an Environmental Assessment (the Report) to accompany a development application. The development application relates to alterations and additions to an existing commercial marina facility, operated by d'Albora, and located at The Spit, Mosman.

Pursuant to Part 3A of the Environmental Planning & Assessment Act 1979 (EP&A Act), this project has been declared to be of State Significant in accordance with Section 75B(1)(a) (Appendix 01). As such, in accordance with Section 75D of the EP&A Act, this declaration enables the Minister of Planning to determine this application.

The purpose of this Report is to detail the proposed alterations and additions at the site and evaluate the works in environmental, social and physical terms. In addition, the Report also evaluates the alternative designs which have been considered during the design development process, as well as the proposal's consistency with statutory requirements. This has been done to ensure that the most desirable outcome has been achieved at the site.

This Report has been prepared in accordance with the Director-General's Requirements, issued by the Department of Planning on 14 May 2008, along with relevant planning legislation, as required by the EP&A Act.

1.1 Structure of the Environmental Assessment

This report is structured as follows:

- **Chapter 2 – The Site and Surrounding Locality:** this chapter provides a description of the site's location, the existing environmental conditions and environmental management regimes. In addition, this chapter analyses the site's opportunities and constraints, as well as how it is complementary to the surrounding locality.
- **Chapter 3 – Previous Development Approvals:** this chapter provides a summary of the current development approvals applicable to the site.
- **Chapter 4 – Proposed Development / Project Description:** this chapter provides a detailed description of the proposed development, the staging of the works and the anticipated operational regime upon completion of works on the site.
- **Chapter 5 – Consultation:** this chapter outlines the consultation process undertaken as part of the environmental assessment and details the issues raised by the relevant stakeholders.
- **Chapter 6 – Consideration of Alternatives:** this chapter provides a summary of the different design options which were considered during the design development and environmental impact study stages.
- **Chapter 7 – Statutory Matters:** this chapter provides an assessment of the proposal against Commonwealth, State, Regional and Local planning instruments and policies.

- **Chapter 8 –Key Matters for Assessment:** this chapter provides a detailed assessment of the proposal in relation to the key issues as required to be addressed under the Director-General's Requirements.
- **Chapter 9 – Draft Statement of Commitments:** this chapter outlines the applicant's commitments to environmental management, mitigation and monitoring measures as a result of development on the site.
- **Chapter 10 – Justification and Conclusion:** this chapter provides a justification and conclusion for the proposal, taking into consideration the environmental impacts, the suitability of the site and the public benefits of the proposal.

1.2 Preparation of this Report

This report has been prepared on the basis of the Director-General's requirements, issued pursuant to **Section 75F** of the EP&A Act (**Appendix 02**).

This report has been prepared in conjunction with the consultants and representatives, as provided at **Table 01**, below.

Table 01: Project Consultant List

Consultant / Representative	Discipline
d'Albora Marinas	Marina Operator
Corben Architects	Project Architect
Montek Surveyors	Project Surveyor
Harvey Hydrographics	Hydrographic Surveyor
Martens & Associates	Project Engineers
UBM Ecological Consultants	Flora & Fauna
WS Rooney & Associates	Aquatic Ecology
Traffix Pty Ltd	Traffic Planning
Richard Lamb & Associates	Visual Impact Assessment
Wilkinson Murray Pty Ltd	Air & Noise Quality
GBA Consulting	Coastal & Marine Engineers
Weir & Phillips	Heritage Impact Assessment
Cosmos Archaeology	Archaeological Assessment
Morris Goding & Associates	Accessibility

While care has been extended in the use of these reports, no responsibilities for any error or omissions is accepted by Hamptons. Each of the reports is provided separately as part of this Environmental Assessment and should be relied on accordingly.

1.3 The Director General's Requirements

As detailed above, this application is to be prepared in accordance with the relevant Director-General's Requirements. For ease of reference, the Requirements have been reproduced below and the location of the assessment of these requirements within this report is provided.

Table 02: Director-General Requirements

Director-General's Requirement	Report Section
<i>General Requirements</i>	
The Environmental Assessment must include:	
• An executive summary;	Executive Summary
• A detailed description of the existing and approved development on site, including all statutory approvals that apply to the development and the existing environmental management/monitoring regime;	Chapter 2 and 3.
• A detailed description of the project including the:	
○ Need for the project;	Chapter 4
○ Alternatives considered;	Chapter 6
○ Engineering and/or architectural plans for the proposed building works;	See accompanying plan.
○ The various stages of the project; and	See accompanying plans and Chapter 4
○ The revised operations of the marina (incorporating the project);	Chapter 4
• Consideration of the project against relevant statutory provisions including the consistency of the project with the Objects of the <i>Environmental Planning and Assessment Act 1979</i> ;	Chapter 7
• A general overview of the environmental impacts of the project, identifying the key issues for further assessment, taking into consideration any issues raised during consultation;	Chapter 8
• A detailed assessment of the key issues specified below, and any other significant issues identified in the general overview of environmental impacts of the project (see above), which includes:	Chapter 8
○ A description of the existing environment; and	Section 2.2
○ An assessment of the potential impacts of both the project and the revised operations on site incorporating the project; and	Chapter 8
○ A description of the measures that would be implemented to avoid, minimise, mitigate, offset, manage and/or monitor the impacts of the project;	Chapter 9
• A statement of commitments, outlining environmental management, mitigation and monitoring measures;	Chapter 9

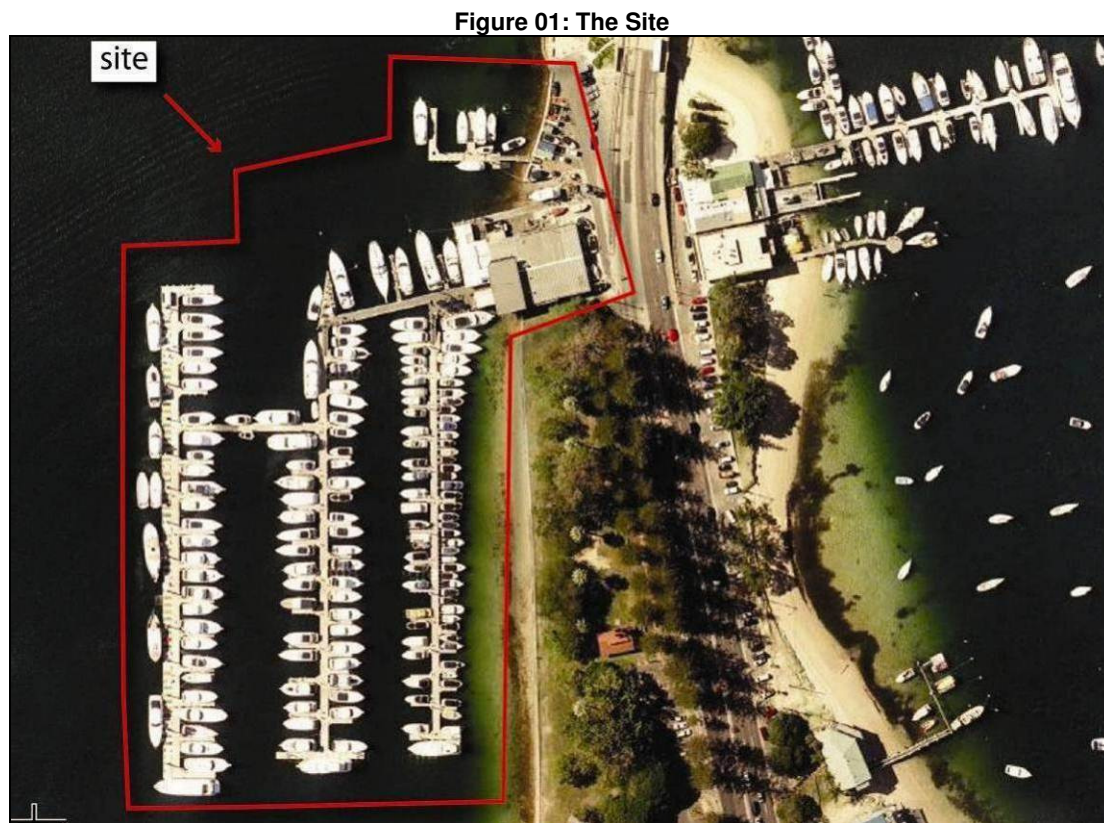
<ul style="list-style-type: none"> • A conclusion justifying the project, taking into consideration the suitability of the site, and the costs and benefits of the project; and 	Chapter 10
<ul style="list-style-type: none"> • A signed statement from the author of the Environmental Assessment certifying that the information contained in the report is neither false nor misleading. 	Statement of Validity
<p><i>Key Issues</i></p> <p>The Environmental Assessment must address the following key issues:</p>	
<ul style="list-style-type: none"> • Visual Amenity – including the: <ul style="list-style-type: none"> ○ design and visual appearance of the proposed works including any lighting and signage; and ○ visual impacts of the project on the public domain, and in particular the waterways of Middle Harbour and the public reserve adjacent to the existing marina; 	Section 8.1
<ul style="list-style-type: none"> • Soils and Water – including the: <ul style="list-style-type: none"> ○ Potential water quality impacts of the project on both surface and ground water resources including the proposed erosion and sediment controls during construction and the proposed stormwater management system during operations; ○ Potential disturbance of contaminated sediments during construction and operation; and ○ Consideration of potential acid sulphate soil impacts; 	Section 8.2
<ul style="list-style-type: none"> • Traffic and Access – including: <ul style="list-style-type: none"> ○ A traffic impact study of the project on the safety and performance of the surrounding road network; ○ The assessment of parking demand, and the potential impacts of this demand on the availability of parking in the adjoining public car park; ○ The navigation and safety impacts on water users in Middle Harbour; ○ The potential loss of public access to the foreshore and waterways of Middle Harbour (including swing moorings and adjacent water based infrastructure); 	Section 8.3
<ul style="list-style-type: none"> • Noise – including construction, operation and traffic noise; 	Section 8.5
<ul style="list-style-type: none"> • Air Quality – including construction and operation; 	Section 8.6
<ul style="list-style-type: none"> • Aquatic Flora and Fauna – including an assessment of any impacts on critical habitats, threatened species, protected species, populations or ecological communities and their habitats in the region; 	Section 8.7

<ul style="list-style-type: none"> • Hazards and Risk – including an assessment of the potential hazards and risks associated with the proposed project. A preliminary risk screening must be completed in accordance with <i>State Environmental Planning Policy No. 33 – Hazardous and Offensive Development</i> (SEPP 33) and <i>Applying SEPP 33</i> (DUAP, 1994), and where necessary, a Preliminary Hazard Analysis (PHA) undertaken; and 	Section 8.8
<ul style="list-style-type: none"> • Waste – identify, classify and quantify the likely waste stream of the project during construction and operation, and describe what measures would be implemented to minimise, reuse, recycle and/or dispose of this waste. 	Section 8.9
<i>References</i>	
The Environmental Assessment should take into account relevant State government technical and policy guidelines, as well as industry guidelines and relevant strategic plans. While not exhaustive, guidelines and plans which may be relevant to the project are included in the attached lists.	Noted.
<i>Consultation</i>	
<p>During the preparation of the Environmental Assessment, you should consult with the relevant local, state or commonwealth government authorities, service providers, community groups or affected landowners. In particular you must consult with:</p> <ul style="list-style-type: none"> • Department of Environment and Climate Change; • Department of Water and Energy; • NSW Maritime; • Department of Lands; • Department of Primary Industries; • NSW Roads and Traffic Authority; and • Mosman Municipal Council. <p>The consultation process and the issues raised must be described in the Environmental Assessment.</p>	Chapter 5

2 THE SITE & SURROUNDING LOCALITY

2.1 Site Details & the Existing Uses

The site is known as 'd'Albora Marinas, The Spit'. It is located on the western side of Spit Road, directly north of The Spit Reserve (**Figure 01**).



Source: www.maps.google.com.au

The site is legally described as Lot 102, Lot 103 and Lot 104 in Deposited Plan 1011363 (**Appendix 03**). The area of each lot is provided at **Table 03**, below.

Table 03: Area Schedule of Allotments

Lot	Area
102	1,485m ²
103	4,910m ²
104	20,208m ²
Total	26,603m²

The site is irregular in shape, with a large proportion of the marina being generally rectangular.

The facility is a leasehold one, with the area on which the building is located and the marina itself, being owned and administered by NSW Maritime Authority.

The registered lessee is Trust Company of Australia. The Trust Company act as Trustee for the publicly listed Macquarie Leisure Trust. This, in turn, owns Macquarie Leisure Operations, trading as d'Albora Marinas. However, since June 2009 Macquarie Leisure Trust Group has changed its name to Ardent Leisure Group.

The marina was acquired by *d'Albora* in January 2000.

The site is currently occupied by 165 berths ranging in vessel lengths, of between 6 and 35 metres. These berths are distributed over five arms, being Arms A-D and N. N-Arm is an existing fixed wooden jetty structure, while Arms A-D are provided with more modern, floating structures.

The majority of private berthing is provided across Arms A-C and N-Arm. These are located on the western side of the site.

Positioned to the north-west of the building is D-Arm which is predominantly used to administer the maintenance functions of the site, in association with the adjoining hardstand area. D-Arm also contains a fuel berth and sewage pump out facility. Both of these facilities are available to private users of the marina, as well as the general public; the sewage facility is operated at no charge.

Visitor berthing is also encouraged at the site, upon request.

The current building, which is located on the eastern side of the site, houses the administrative offices of d'Albora, along with various marine-related tenancies, including boat dealers and brokers; a restaurant and café; and boat maintenance operations. This building is predominantly of single storey form, with a two storey component on the western side of the structure overlooking the marina.

Pedestrian access to the marina is available *via* the frontage on the eastern side of the existing building. This connects with the pedestrian pathway aligning Spit Road and the new pedestrian pathway which has been constructed by Mosman Council through the adjoining Spit Reserve.

Vehicular access for persons visiting the site is generally from Spit Road, *via* the Spit Reserve Car Park. In the 1970's, the then owner of the marina was one of several businesses that contributed to the sealing of this car park under an agreement with the Council. This car parking area does not, however, provide exclusive use for persons using the marina, but is a shared public car parking area to service the locality. The car parking area is maintained by Mosman Council.

On site car parking facilities are located to the north-east of the building, which is accessed from Spit Road. The extent of parking available here is limited to eight car spaces.

A plan of the existing layout of the site may be found at **Appendix 04**; photographs of the site may be found at **Appendix 05**.

2.2 Existing Physical Conditions

An array of existing site conditions have been documented as part of the preparation of this assessment.

2.2.1 Flora & Fauna Conditions

The existing flora and fauna conditions pertaining to the site have been documented by UBM Ecological Consultants Pty Ltd (**Appendix 06**) as follows:

The Study Area lies on the Sydney Sheet of the 1:100 000 Vegetation Map Series (Benson 1992). Benson described the Study Area and environs as predominantly “cleared”.

The closest mapped area of remnant native vegetation is a stand of Sydney Sandstone Gully Forest, which occurs on the rocky spur above “The Spit” (Parriwi Park). Sydney Sandstone Gully Forest also occurs on the western end of The Spit Reserve and around the foreshores of Pearl Bay (Beauty Point Foreshore Walk).

The NSW National Parks and Wildlife Services (hereafter NPWS) has produced a series of vegetation maps for the Cumberland Plain at the scale of 1:25 000 (NPWS 2002a). The NPWS has mapped bushland remnants greater than 0.5 hectares in zone, as opposed to the five (5) hectare limitation used by Benson (1992). However, the Study Area at Spit Reserve is outside the area mapped by NPWS.

An area of Western Sandstone Gully Forest is the closest mapped vegetation unit (NPWS 2002) exist to the south west of the Study Area¹

A full copy of this report may be found at **Appendix 06**.

2.2.2 Aquatic Ecology

Matters of aquatic ecology have been considered by WS Rooney & Associates. The existing aquatic environment has been established to contain the following:

The aquatic habitats found within the study area, defined by the existing and proposed new over-water lease areas from NSW Maritime, are the following (in decreasing relative area):

- *Open water to a maximum depth of -18m (ZFDTG);*
- *Subtidal unvegetated muddy sand;*
- *Seagrass beds;*
- *Narrow sandy intertidal beach;*
- *Rocky intertidal sandstone seawall with occasional rock rubble along the toe;*
- *Timber and concrete piles supporting buildings and the floating marina berths and walkways²*

¹ Flora & Fauna Assessment, UBM Ecological Consultants Pty Ltd. Page 9-10

² Aquatic Ecology Assessment Report, WS Rooney & Associates, Page 7

Further information in this regard may be found at **Appendix 07**.

2.2.3 Existing Wave & Coastal Climate

The existing wave and coastal climate has been considered by GBA Coastal Pty Ltd. This report may be found at **Appendix 08**.

2.2.4 Drainage, Geology and Groundwater

Martens & Associates Pty Ltd were retained to examine the existing drainage, geology and groundwater conditions for the site (**Appendix 09**). In this regard, the following has been established.

Topography & Drainage

Due to the construction of the sea wall along Middle Harbour and the development of the entire Marina site, the site's original grade is unknown. The existing sea wall along the tidal boundary of the site generates a relatively flat site, which drains to the west to Middle Harbour. The landward component of the site is entirely covered by hardstand features and buildings.³

Local Geology

A review of the 1:100 000 Sydney geology series 9130 (1983) indicates that the site is underlain by Quarternary (Holocene) age sediments and potentially some man made fill (dredged estuarine/marine sediments). Field investigations confirm the site is underlain by fill, over deep Holocene sand horizons⁴

Underlying bedrock was not encountered during field investigations; however, it is likely that bedrock at the site is greater than 20m depth.

Groundwater

Groundwater was encountered at the site at approximately 0.1-0.2m AHD....

Based on the site inspection and the local hydrogeological setting, we are of the view that groundwater is mostly dependant on sea level⁵

A full copy of the Geotechnical, Acid Sulfate Soil and Stage 2 Contamination Assessment, prepared by Martens & Associates may be found at **Appendix 09**.

³ Geotechnical, Acid Sulfate Soil and Stage 2 Contamination Assessment, Page 11

⁴ Geotechnical, Acid Sulfate Soil and Stage 2 Contamination Assessment, Page 11

⁵ Geotechnical, Acid Sulfate Soil and Stage 2 Contamination Assessment, Page 12

2.3 History of the Site

The existing heritage conditions have been examined by Weir & Phillips (**Appendix 10**) and the following observations are made in this regard:

The existing buildings at d'Albora Marina at the Spit:

- *are not listed by the Heritage Council under the NSW Heritage Act on the State Heritage Register as heritage items of State Significance; and*
- *are not listed by the Local Council in Schedule 2: Heritage Items, of the Mosman Local Environmental Plan 1998 (Mosman LEP) as heritage items of local significance.*

However, the site adjoins two identified items of built heritage, namely the Spit Bridge and the Explosives Wharf, and two items of archaeological-maritime heritage, namely the Site of the former Explosives Wharf and the Remains of the Former [Spit] Bridge and Seawall.⁶

Such aspects are considered in detail in the Heritage Impact Statement at **Appendix 10**.

The existing archaeological conditions pertaining to the site have been considered by Cosmos Archaeology Pty Ltd and are detailed below:

- *No Aboriginal sites. Items or places – submerged or on land – are known or predicted to occur within the boundaries and scope of the current proposed development footprint;*
- *Two historical cultural sites listed as items of local significance on the Mosman Local Environmental Plan 1998, are situated within the proposed development:*
 - *“Remains of the Former Bridge and Seawall” (NB: only the seawall is located in the development footprint)*
 - *“Site of Former Explosives Wharf”.*
- *The archaeological remains of late 19th century to mid 20th century maritime structures and Spit transport infrastructure – including several phases of earlier boatshed, jetty and slip construction and an early 20th century tramway – are likely to survive within the boundaries of the proposed development footprint;*
- *These archaeological remains dating to the late 19th – mid 20th century are considered “relics” under the NSW Heritage Act 1977 and thus afforded protection within the Act;*

⁶ Heritage Impact Statement, Weir & Phillips Page 16

- *An early 20th Century slip, assessed to be of local cultural heritage significance, also is present within the study area and will be removed as part of the current proposed development;*
- *Archaeological deposits formed from objects discarded – intentionally or unintentionally – from vessels, jetties, slips and boatsheds and artefacts contained within early – mid 20th century land reclamation/fill deposits, are also likely to be present in the boundaries of the current proposed development;*
- *The cultural heritage resource identified within the study area is assessed to range from Minimal to Local Significance; ...⁷*

A full copy of this report may be found at **Appendix 11**.

2.4 Existing Environmental & Management Regime

d'Albora maintains the relevant Environment Protection Licence for the marina, in accordance with **Section 55** of the *Protection of the Environment Operations Act 1979*. A copy of this licence is provided at **Appendix 12**.

The site also maintains “Clean Marina” status, in accordance with the voluntary accreditation system which has been established by the Marina Industries Association of Australia. This accreditation was obtained by d'Albora (and not the previous operators) after the facility was acquired in January 2000.

d'Albora have worked diligently to achieve this status, in accordance with the “clean marina” program which is a national, voluntary accreditation system for marinas, yacht clubs, boat clubs, slips, boatyards and associated industry operators across Australia.

A copy of the Clean Marinas Handbook is supplied at **Appendix 13**.

d'Albora is strongly committed to this program and maintain their accreditation rigorously. It is intended that the ‘Clean Marina’ status requirements would form part of this proposal and that the new works would meet these standards.

⁷ Aboriginal, Historical & Maritime Archaeological Assessment, Cosmos Archaeology, Page iii

2.5 Opportunities & Constraints of the Site

The findings established by the consultant team enabled the identification of a number of site opportunities and constraints that directly influenced the design development process and the subject proposal described in the following chapters.

These opportunities and constraints have been summarised below:

Opportunities

- The typical navigation routes, mapped by GBA Coastal, provide sufficient space for the marina expansion without any adverse impacts with respect to the safe navigation of vessels along these paths;
- The GBA Coastal report notes that the RTA Bridge Operator would not anticipate mustering and bridge passage congestion if expansion was limited;
- The GBA Coastal report notes the local rowing fairway would not be impacted by the marina expansion despite its proximity to the site;
- UBM Ecological Consultants Pty Ltd did not establish any flora species of National or State conservation significance or any naturally occurring native vegetation communities within the Grasslands or Planted Dune areas;
- The cultural heritage resources identified by Cosmos Archaeology Pty Ltd are identified as having minimal local significance within the study area;
- The existing built form on the site does not maintain a heritage listing that would preclude development taking place on the site, as identified by Weir & Phillips;
- The site adjoins two nearby heritage items, of which the design and development outcomes on the site must have adequate regard for, to ensure a positive relationship to the heritage status of these items;
- Martens & Associates Pty Ltd sub-surface investigations found that the materials tested are not classified as either potential Acid Sulphate Soil (ASS) or actual ASS; and
- Traffix Pty Ltd identified a moderate traffic flow into the site and parking areas, with the majority occurring within the 200 space car park to the south of the site within the 'Parking Reserve';
- Traffix Pty Ltd identified opportunities to improve the vehicular access arrangements into and out of the site, particularly as this relates to truck turning movements; and
- There is an opportunity to improve the site's interface and relationship with the southern adjoining public reserve, and broader public facilities within the vicinity of the site.

Constraints

- The UBM Ecological Consultants Pty Ltd report notes that there is potential for the Grey-headed Flying Fox to be utilising the large trees in the Grasslands for dispersal;

- W.S. Rooney & Associates identified a number of valuable aquatic habitats, namely species of Seagrass important to the local ecology, which must be contemplated as part of the design outcome on the site, to ensure adequate preservation;
- The ability to provide for additional parking on the site or within nearby public parking areas is limited due to physical constraints, such as location and access, as well as public opposition to the use of public areas for such purposes;
- Martens & Associates Pty Ltd field observations found ground water fluctuating between 0.1 – 0.2 metres AHD due to the site's proximity to Middle Harbour and the permeability of the underlying sandy soil; and
- Martens & Associates Pty Ltd also note that there are a number of contaminate levels above guideline values, likely as a result of minor leaking from small spillages during re-fuelling of tanks, boats or vehicles.

Appendix 14 illustrates the site's Opportunities and Constraints.

Overall, it is considered that the site's attributes, including the existing aquatic environments, are conducive to the expansion of the marina. This is subject to the appropriate design considerations of constraints in order to avoid or minimise any possible significant impacts to the social, environmental and physical environment of the site and its locality.

2.6 The Surrounding Locality

The site is directly surrounded by other maritime uses including other boat sales, repair and maintenance facilities (**Figure 02**), along with recreational maritime uses, such as restaurants.

However, located further to the north of the site, along the foreshore areas across waterway, are residential properties within the Seaforth locality (**Figure 02**). Located to the east and south-east of the site are a number of other restaurants, these being separated from the site by Spit Road (**Figure 02**).

South of the site is The Spit Reserve Parkland which is owned by the NSW Department of Lands and managed by Mosman Council. Further south of the site is a rowing club, which forms part of the Mosman Rowing Club facilities. A couple of house boats are also moored in this vicinity, which forms part of Pearl Bay. The nearest residential development is located south of Pearl Bay (**Figure 02**).

To the west of the site is Pearl Bay, which leads around to Beauty Point. The land side of this area is comprised of residential dwellings, and the waterside is characterised by a small number of swing moorings (**Figure 02**).

Figure02: Site Context



Source: www.maps.google.com.au

The road hierarchy of the area is dominated by Spit Road which connects the southern and northern sides of Middle Harbour via The Spit Bridge. This major road connects with Manly Road on the northern side of Middle Harbour. The main connector streets which intersect with Spit Road include Parriwi Road, which follows the foreshore on the western side of Spit Road, and Beauty Point Road, which follows the foreshore on the western side.

There are a number of scenic open spaces which are within proximity to the site, namely The Spit Reserve and Parriwi Park (**Figure 02**), whilst parklands front the foreshores of Fisher Bay (to the north east), Sandy Bay (to the east), and Pearl Bay and Beauty Point (to the west).

Photographs of the surrounding locality may be found in **Appendix 05**.

3 PREVIOUS DEVELOPMENT APPROVALS

A request pursuant to **Section 12** of the **Local Government Act 1919**, was lodged with Mosman Council to obtain the previous development approvals pertaining to the site.

A summary of these approvals is provided below.

3.1 Development Application No. 10/91

Mosman Council on 8th January 1992 approved the extension of the existing “Spitler’s Restaurant” located at the site, subject to conditions.

The approval confined the restaurant to 60m² in floor area and required that the applicant construct six car parking spaces within the Spit Reserve public car park. In addition, Condition 5 stipulated that the applicant and successive lessees/owners were to annually purchase from the Council, a total of six car parking stickers for the Spit Reserve car park for use by its patrons, whilst the restaurant is in operation.

3.2 Development Application No. 50/92

Mosman Council resolved, at a Council meeting held on the 28th April 1992, to approve DA 50/92 for the extension of the existing jetty and the establishment of floating pontoons on which the sewage pump out and collection facility were mounted.

This application was in response to the 1992 amendment to the Maritime Services Board Waters and Waterside Lands Regulation to prohibit the discharge of untreated sewerage into Sydney and Middle Harbours.

3.3 Development Application No. 310/92

DA 310/92 was approved, subject to conditions, by Mosman Council on 7th June 1993. This application included an increase in the number of seats and an increase in size and renovation of, the kitchen of the restaurant located at the site.

The total dining area was increased to a maximum of 100m² and the premises was restricted to use as a restaurant only, with the conditions of consent prohibiting the use of the premises for holding receptions (Condition 2). In addition, the hours of operation were conditioned to between 12 noon and 10:00pm on both weekdays and weekends.

3.4 Development Application – Signage Licence

Mosman Council resolved at a Council meeting held on the 3rd August 1993 to grant consent for the development application pertaining to a sign licence. This approval related to an earlier development application which was approved and subsequently objected to by local residents that claimed the sign was not consistent to the approval granted on the 28th January 1993, that the intensity of the light emitted was detrimental and requested clarification of the location of the Mean High Water Mark.

It was concluded that the sign was consistent with the development consent and the illumination was acceptable. Subsequently, the signage licence was granted.

3.5 Development Application No. 9.1998.615.1

DA 9.1998.615.1 was approved on 19th November 1998. Consent was granted for the enlargement of the existing deck/walkway, providing for a garbage and recycling area and waiting area.

3.6 Development Application No. 8.1999.176.1

DA 8.1999.176.1 was approved on 28th June 1999 for the use of the western side of the existing outer arm of the marina for the berthing of four vessels up to 32 metres in length and the relinquishing of six swing moorings, subject to conditions.

3.7 Development Application No. 8.2001.378.1

Mosman Council on 5th March 2002 approved DA 8.2001.378.1, granting consent for alterations to the existing floating dock including the relocation of ice and fuel dispensers, personnel shelter, conversion of five berths on the existing moorings, and the relinquishment of five commercial moorings, subject to conditions.

No other approvals were identified by the Council as part of this request.

4 THE PROPOSED DEVELOPMENT

The proposed alterations and additions to the site are detailed below. This section of the report should be read in conjunction with the Architectural Plans prepared by Corben Architects which accompany this application.

4.1 Project Overview

The proposed alterations and additions have been designed to provide a contemporary facility, with modern boating outcomes that will result in a more accessible marina to the public, as well as an improvement to the infrastructure and services that are provided to the boating community.

The proposed alterations will ensure that the environmental integrity and quality of the marina satisfies and exceeds relevant standards that are essential to the operational activities associated with such a facility.

Public access to the marina will also be increased, thereby ensuring that, while continuing to be a private facility, it is one which is open and inviting to the general public.

The proposal will result in the ability to accommodate additional vessels; improvements to the working components of the marina; improvements to fuel storage and waste treatment; and upgrade works to the building.

Overall, the outcomes are considered to provide essential benefits to the site itself and to the broader community.

4.2 Alterations to the On-Water Facilities

A principle purpose of the proposed additions is to increase the opportunity for berthing facilities at the site. Overall, thirty five new berths will be created across each of the arms.

The configuration of these additions is detailed below:

4.2.1 Extension to Berthing Facilities

In order to accommodate the additional 35 vessels proposed, there are a number of alterations and extensions to the existing arms of the marina facility. The revisions to the berthing structures will allow for the accommodation of vessels ranging in size, between twelve and thirty metres in length, of which there is a significant demand in this locality, with a shortage of such facilities. The proposed changes to each of the Arms is defined below.

A-Arm

A minor extension to A-Arm is proposed to accommodate an additional four vessels, including one vessel up to 18 metres in length on the T-head. It will also be necessary to replace the fingers along this arm to meet modern day standards. The maximum boat length permitted on this Arm is ten metres.

B-Arm

It is proposed to reconfigure B-Arm to accommodate an additional 12 vessels and to include a vessel up to 27.5 metres in length on the T-head. Replacement of the fingers will also be required.

The maximum boat length permitted on this Arm is 12 metres.

C-Arm

It is proposed to re-orientate berths on the western side of C-Arm, from a parallel layout to a perpendicular one, along with reconfiguration of the fingers on the eastern side of the Arm. This will result in the accommodation of 52 vessels, reflecting an increase of 14 vessels over the current situation.

The maximum boat length permitted on this Arm is 25 metres.

In addition, it is proposed that a vessel will be moored on the T-head of this Arm, accommodating a boat up to 35 metres in length.

D-Arm

The proposed works will involve the re-orientation and extension of D-Arm, to accommodate a total of eight vessels, as opposed to the existing capacity of only four. Use of these new berths is intended for on-site boat dealers as a holding area for boats before and after maintenance works, as well as a holding area for the delivery of new boats.

It must be noted that these berths will not be used as permanent customer berths.

In addition, two fuel/sewage pump-out berths will also be located on this Arm, providing significant benefit to the local and public boating community, providing free sewage pump out facilities.

N-Arm

It is proposed to demolish the existing fixed jetty at N-Arm, which has a current capacity of five vessels. This will be reconfigured to accommodate fourteen vessels, including one on the T-head.

The structure will be replaced with a more modern floating system, consistent with the existing modern floating structure of the marina, as opposed to the current fixed pier arrangement. This will minimise the level of penetration of the sea bed and accord with more modern day marina infrastructure that is available to the market.

4.2.2 Slipway & Hardstand Replacement

The proposed works include the replacement of the existing slipway, located on the northern side of the building, with a new hardstand area.

The proposed hardstand area has been designed taking account of ecological conditions. The unusual shape on the northern side ensures that the sea grass community, known as *Zostera capricorni*⁸ will not be adversely impacted either directly, or by overshadowing from, the proposed structure.

A new travel lift will be located on the northern side of the new hardstand, allowing boats to be positioned parallel to the tidal flow, rather than against the tidal flow, which reflects the existing situation. The new travel lift will be able to raise vessels up to 45 tonnes in weight.

This new hardstand area will also accommodate nine car parking spaces and a garbage storage area, servicing the proposed marine workshop tenancies located on the ground floor of the proposed new building.

Pedestrian access to this area will be restricted by a new safety fence around its perimeter to ensure only authorized persons gain access. In addition, vehicular access to the parking area will be *via* the small existing car park to the north-east of the marina.

4.2.3 New Fuel & Sewage Pump Out System

The proposal includes the relocation of the fuel berth and sewerage pump out from N-Arm to D-Arm.

This new system will be available for public, as well as private, use benefiting the local and public boating communities. The proposed location will concentrate the service components of the marina by grouping these services closer together, allowing for greater ease of access through other parts of the marina, without interference.

Installation of the new systems is to coincide with the decommissioning of the existing fuel system.

This new fuel system will be located underground, below the existing on-grade car parking area on the north-eastern side of the site. New fill points and lines will be installed to facilitate this.

⁸ Aquatic Ecology Assessment Report (June, 2008) by W.S. Rooney & Associates

4.3 Alterations to the On-Land Facilities

The proposed changes to the land-based facilities are detailed below.

4.3.1 Replacement of the Existing Building

The proposal includes demolition of the existing building on the site and the construction of a new building to enable the use of two full floors, with a total area of 1,050m². To accommodate the new structure, it is proposed to replace piling beneath the building to ensure longevity.

The proposed ground floor, at RL 1.70, is oriented to face The Spit Reserve, across a pedestrian entry bridge. From this bridge, the ground floor includes a public boardwalk, running east to west, connecting public spaces on the site with ground floor tenancies. In addition, the entry bridge leads into a covered foyer area, separating the eastern and western tenancies on this floor.

The northern portion of the proposed building will include four workshops and an amenities room, oriented to overlook the hardstand area to the north of the building. These workshops have a total area of 246m². It is intended that these will house marine related uses such as boat repair and maintenance businesses.

The eastern portion of the ground floor is a large single tenancy, 294m² in area, which is intended to house a boat dealer's showroom. This tenancy is oriented towards the eastern adjoining outdoor display space. Adjoining this showroom, inside the foyer area, includes a stairway leading to the first floor.

The western portion of the ground floor will include three marine-related office tenancies with a total area of 348m², each with dual access points from the internal foyer area and the western adjoining public deck. The office tenancy in the south-western corner includes an internal stairway to its first floor component. As these tenancies will have dual aspects, passive surveillance is encouraged over the outdoor public deck and internal foyer. Adjoining these tenancies, inside the foyer area is a lift to provide alternative access to the first floor, as well as the male, female and disabled amenities.

Located outside the building, leading to the berthing facilities is a public deck, with a small kiosk and public seating facilities. Positioned at the northern side of this public deck are external stairs, which lead to the restaurant and offices on the first floor level.

The proposed first floor, which is set at RL 6.40, may be accessed *via* the stairway or the lift located in the foyer area. Each of the two access points lead to a bridge area, overlooking a void to the ground floor. This will promote a sense of openness and natural light between the ground and first floor levels.

Located on the eastern side of the proposed first floor is a single, large office tenancy of 462m², including male and female amenities. This proposed office tenancy has windows to the north, east

and south of the building, providing generous outlook to both the southern adjoining reserve and the waterways to the north. This will also reinforce opportunities for passive surveillance over the public domain.

The western side of the proposed first floor includes an extension of the office tenancy positioned below, at the ground floor level. This component of the office tenancy includes a large deck on its western side, overlooking the marina facilities and the waterway. Alternative access to the ground floor level is provided from this deck *via* the external stairway, at the northern end of the deck.

Adjoining this office tenancy to the north is a restaurant with associated kitchen facilities. This restaurant includes dual decks, one facing west, and the other facing north. These are designed to provide generous and desirable outlook over the waterway for patrons of the marina. It is proposed to relocate the existing restaurant on the site to the first floor level to enable an appreciation of views over the waterway.

The external materials will be a mix of recycled materials salvaged from the existing building and complementary materials to the marine character of the locality. This ensures that the scenic quality of the locality is enhanced, particularly when viewed from the public domain and the waterway.

As illustrated at **Drawing No. DA05**, the proposed palette comprises metal louvers, balustrades and cladding, as well as timber cladding and glass. The variety in materials utilised for each elevation results in a desirable aesthetic outcome and demonstrates a high quality architectural result.

The montages which accompany this application clearly demonstrate how the new structure will complement the character of its surroundings.

The proposed roof form is of a high architectural quality, integrating plant areas and solar panels into the overall design, so as not to appear as a services component of the development when viewed from Spit Road.

As detailed on the northern and southern elevations, the proposed roof is of a low pitch, reaching **RL 9.67** for the majority of its length. A small portion of the roof is proposed to reach **RL 11.67**; however, this is setback from the roof edge and will not be a dominant feature of the development.

The incorporation of solar panels into the roof structure has enabled the eastern and western elevations to be visually different, whilst still retaining the roof's complementary nature with the overall built form.

The roof elements which allow for the correct pitch for the solar panels to be achieved also enables skylights to be included into the design, allowing daylight penetration into the first floor and void area down to the ground floor.

4.3.2 Access & Parking

With respect to on-site car parking, nine spaces will be provided on the hardstand area.

As the car parking area located to the east of the site is not leased by the marina, there are no proposed changes to this Council car parking area, which is accessed from Spit Road.

There are also no changes proposed to the parking area located in the Spit Reserve, as this is not leased by the marina.

With regards to vehicular access, it has been noted that the existing entry/egress arrangements are not best-practice, particularly for truck access to the garbage and fuel filling points.

It is therefore proposed to undertake works to the vehicle layoff area on the eastern boundary of the site to improve egress as shown on the architectural drawings. This will improve the safety of egress from the site to Spit Road.

4.3.3 Signage

The proposed signage consists of two new signs, one being the main site sign, and the second being a site identification wall sign.

Located in the north-eastern corner of the ground floor will be a building identification sign which will retain the dimensions of the existing sign. The proposed sign is positioned approximately nine metres south-west of the current site sign location (**Drawing No. DA02**).

The main site sign will have a triangular plate of 6.6m² and a total height of 9.34 metres. This sign, which will replace the existing one, to ensure architectural consistency with the balance of the site, will indicate the marina, along with tenancies contained within the premises.

It is also proposed to provide a low-height wall sign, on the southern side of the building at the intersection of the site, with the neighbouring reserve.

Sign materials will be cladding similar to that used on the paneling of the proposed building to ensure it is integrated with the proposed built form and backlighting will be incorporated for illumination purposes.

4.4 Project Staging

The staging of the project will be as *per* the attached staging plan, prepared by **Corben Architects**.

The plan is not designed to demonstrate the order of works on the site, but simply how the works would be consolidated to ensure that the marina could continue to operate over this period.

This may be summarized as follows:

- **Stage A** will comprise the works to C-Arm and the works to the vehicle lay back as they intersect with Spit Road, to improve the vehicular access arrangements to the site;
- **Stage B** would comprise the works to the hardstand area, along with the works to D-Arm, to improve the overall maintenance facilities at the site at the same time;
- **Stage C** would encompass the reconfiguration of berthing to N-Arm.
- **Stage D** would involve the demolition and reconstruction of the existing building.
- **Stage E** would encompass the reconfiguration of berthing to Arms A and B.

The staging has been designed to ensure that the marina may remain operational at all times. Depending on the sequence of development approval for the site, and the relationship with the relevant season, the works would be encompassed as best saw fit by d'Albora at the time to ensure minimal interference for customers.

In this regard, application is sought to enable staged construction and occupation certificates of the development for each of the individual stages, as provided above. The application is not, however, for a staged development.

4.5 Operation and Management of the Site

It is intended that, with the implementation of the proposed works, the facility will continue to maintain its 'clean marina' status, in accordance with the voluntary accreditation system which has been established by the Marina Industries Association of Australia.

Furthermore, *d'Albora* will continue to maintain the relevant Environment Protection Licence for the marina, in accordance with **Section 55** of the *Protection of the Environment Operations Act 1979*.

4.6 Alteration to Existing Lease

The proposed works will require a change to the lease boundary on the northern, southern and western sides of the marina as follows:

- Between 11.5 and 50 metres to the northern boundary;
- Between zero and 24.5 metres to the southern boundary; and
- Up to 12.5 metres to the western boundary.

Significant public benefit will accrue through the proposed works. These benefits will include greater public access, *via* the construction of the aforementioned new public deck and the associated outdoor seating area located on the western side of the proposed building.

Safety will also be improved as the proposed building design will increase natural surveillance over the public domain.

In addition, the application represents an opportunity to remove the existing slipway and reinstate the sea wall to its original location. This work will provide significant environmental benefits by providing more environmentally sensitive boat access to the marina, and will facilitate the protection of exiting sea grass beds.

The proposed lease changes are not anticipated to preclude public use of, nor be detrimental to the outcomes sought for the public, with respect to use of the waterway.

4.7 Previous Development Consents

Section 75YA of the EP&A Act states that:

- (1) An approval under this Part may be surrendered, subject to and in accordance with the regulations, by any person entitled to act on the approval.*
- (2) A condition of the approval of a project under this Part may require any one or more of the following:*
 - (a) the surrender under subsection (1) of any other approval under this Part relating to the project or the land concerned,*
 - (b) the surrender under section 104A of any development consent relating to the project or the land concerned,*
 - (c) the surrender, subject to and in accordance with the regulations, of a right conferred by Division 10 of Part 4 relating to the project or the land concerned.*

In addition, the Director-Generals Requirements (**Appendix 02**) indicates that the surrender of previous development approvals on the subject land be encouraged, as part of this **Part 3A** Application.

Therefore, in accordance with **Section 75YA(1)**, the current approvals applicable to the site and its operations will be surrendered and consolidated with any future approval under **Part 3A** of the EP&A Act, as described in this application. These are the approvals nominated at **Section 3** of this Report.

5 CONSULTATION PROCESS FOR DETERMINING THE DEVELOPMENT OUTCOME

In accordance with the Director-General's Requirements, this Chapter provides a description of the consultation undertaken as part of the Environmental Assessment. The following Sections outline the consultation process, the consultation with the various landowners, community members and government agencies, including the issues identified during by these stakeholders.

5.1 Consultation Process

Part 3A of the EP&A Act requires consultation to occur at the following stages:

- The Director General of the Department of Planning is required to consult with relevant public authorities (**Clause 75F(4)**); and
- The Director-General is required to advertise and exhibit the Environmental Assessment for a period of 30 days (**Clause 75H(3)**).

Consultation was undertaken with the relevant public authorities, by way of written requirements and a Planning Focus Meeting, undertaken on 31 January 2008. The public authorities which were requested to participate in this process were:

- NSW Department of Environment and Climate Change;
- NSW Department of Water and Energy;
- NSW Maritime;
- NSW Department of Lands;
- NSW Roads and Traffic Authority; and
- Mosman Municipal Council.

Mosman Council declined to attend the Planning Focus Meeting; representatives from all other authorities were in attendance.

In addition to the above, public consultation was undertaken by d'Albora Marinas, during the design and development stage of this proposal.

Further consultation was undertaken with the above public authorities, who were provided with the opportunity to comment upon a Draft Environmental Assessment, as part of the Adequacy Test. Subsequently, the NSW Department of Planning supplied the proponent with feedback from each public authority in relation to these. Additional information, as requested by relevant agencies has since been incorporated into this document.

5.2 Consultation With Public Authorities

As detailed above, consultation was undertaken by way of a Planning Focus Meeting and written submissions from each authority, pertaining to their requirements as part of the Environmental Assessment Process were subsequently provided. A copy of the requirements received are provided at **Appendix 15**.

A summary of the requirements from each authority is supplied below and cross-referenced with the relevant section of this report. In addition, each of the following sections outline the additional comments received from each public authority and a response to any additional matters accordingly.

5.2.1 Department of Environment and Climate Change

Correspondence was supplied by the Department of Environment and Conservation. The summary of requirements is detailed below at **Table 04**.

Table 04: DECC Requirements

Requirement	Section
1. Sufficient information to allow DECC to access the requirements of Section 45 of the POEO Act;	Chapter 7 & 8 Refer to the Architectural Drawings .
2. A detailed description of the project, including maps and drawings detailing the site location and proposed layout;	Chapter 4; Refer to the Architectural Drawings .
3. A detailed description of water, air, and waste management issues. The assessment should include but not be limited to details on the bulk fuel storage, vessel refueling, fuel/sewage pump out berths and the protection measures to be adopted during construction and operation of the facilities;	Water – Engineering Services Report, Appendix 16 Air Noise & Air Quality Impact Assessment, Appendix 17 Waste Construction Management Plan, Appendix 18
4. A detailed description of the piling techniques and the impact on the sea floor;	Engineering Services Report, Appendix 16 Aquatic Ecology Report, Appendix 07
5. Provide details of the proposed wharf demolition methods as well as the management of demolition waste;	Engineering Services Report, Appendix 16 Construction Management Plan, Appendix 18
6. A detailed assessment of noise sources from the development, including both the construction and operation phases;	Noise & Air Quality Impact Assessment, Appendix 17

7. Details of community consultation to be undertaken for the project, including the provision of a complaints handling procedure and a 24-hour telephone contact number;	Section 5 Construction Management Plan, Appendix 18
8. The preparation and implementation of detailed Environmental Management Plans for the project;	Appendix 27
9. Emergency response plans to be initiated in the event of an environmental incident during the construction and operation of the facilities.	Appendix 12 & 13

In addition, the Department of Environment & Climate Change (DECC) provided a number of comments in response to the Environmental Assessment. These have been reproduced below, along with a response to each.

- *A detailed description of the piling techniques and impact on the sea floor*

As detailed at **Chapter 5** of the Engineering Services Report, prepared by Martens & Associates (**Appendix 16**), the proposed piling technique will be standard driven piles. The use of this piling technique will “prevent dredging and suspension of marine sediments and the oxidation of any Potential Acid Sulfate Soils present”.⁹

This is considered to be sufficient details at this stage in the process and should additional information be required, such information may be provided at the Construction Certificate (CC) stage.

- *Details of community consultation to be undertaken for the project, including provision of a complaints handling procedure and a 24-hour telephone contact number.*

In relation to the community consultation undertaken, this has been described at **Section 5.3** of this document. In relation to the community consultation, complaints handling and telephone contact number, these details will be supplied at the CC stage. It is anticipated that this responsibility will be undertaken by the Site Manager/Foreman during the construction hours and the Marina Manager after hours.

- *Details of proposed Environmental Management Plans for the project.*

In accordance with the Draft Statement of Commitments, Environmental Management Plans (EMP) which addresses matters of environmental protection and impact mitigation will be

⁹ Page 21, Engineering Services Report, Martens and Associates May 2010

provided at the CC stage. These EMPs will be prepared in consultation with both DECC and I&I NSW.

- *Details of emergency response plans to be initiated in the event of an environmental incident during the construction and operation of the facilities.*

The Final Construction Management Plan (CMP) which will be supplied at the CC stage will outline procedures for implementation in the event of an environmental incident and will be prepared in accordance with any Conditions of Consent. However, the operation of the marina facilities post-construction will be undertaken in accordance with the d'Albora Marina Operations Manual for The Spit. The relevant sections of this Manual, in relation to environmental incidents have been provided at **Appendix 28**.

- *Details of the installation of the proposed underground petroleum storage tanks and the implementation of vapour recovery stage 1 (VR1) in compliance with the Protection of the Environment Operations (Clean Air) Regulation 2002.*

It must be noted that since receipt of this comment, the *Protection of the Environment Operations (Clean Air) Regulation 2002* has been superseded by the *Protection of the Environment Operations (Clean Air) Regulation 2010* (the Clean Air Regulations).

D'Albora Marinas currently comply with the VR1 requirements under the Clean Air Regulations. This is evidenced by the certification provided at **Appendix 29**.

5.2.2 Department of Water & Energy

No requirements have been received to date in this regard.

5.2.3 NSW Maritime

NSW Maritime, supplied in correspondence dated 21 February 2008, the following:

The Department may wish to note that the Rivers and Foreshores Impact Act 1948 has been repealed and NSW Maritime does not have a role under the equivalent controlled activity provisions of the Water Management Act 2000. These approvals, when required, are now administered by the Department of Water & Energy.

In view of the draft-Director-General's requirements forwarded in email, NSW Maritime advises that it has no further key issues to add for the Projects Environmental Assessment.

The correspondence goes on to request information pertaining to the following matters:

Requirement	Section
Navigation & Safety (regard for existing swing moorings or adjacent water based infrastructure)	Coastal & Maritime Engineering Assessment, Appendix 08
Potential impacts on water based traffic	Coastal & Maritime Engineering Assessment, Appendix 08
Plans complying with NSW Maritime's Guidelines "Depths in Berths & Fairways"	Architectural Drawings prepared by Corben Architects Coastal & Maritime Engineering Assessment, Appendix 08

5.2.4 NSW Department of Lands

NSW Department of Lands (DoL) have not supplied correspondence pertaining to the preparation of the Environmental Assessment.

Throughout the preparation of the assessment, discussions were undertaken between Hamptons and DoL pertaining to matters of adjoining landowner's consent to enable lodgement for landowner's consent with NSW Maritime.

In addition, discussions were undertaken with DoL about potential opportunities for use of the adjoining Spit Reserve to aid vehicle access arrangements to the site. However, due to public opposition to the use of public land for private development purposes, this component of the application was withdrawn.

No further correspondence has been supplied by DoL beyond these discussions.

5.2.5 NSW Roads & Traffic Authority

A number of discussions were undertaken with the NSW Roads & Traffic Authority (RTA) pertaining to the site.

The key area for concern is the matter of site access and the inability for vehicular movements, particularly truck movements to occur in a safe manner from the site, to Spit Road.

A proposal was discussed with the RTA to contemplate the use of the adjoining Reserve, which would have provided a turning circle at the western side of the Reserve, adjacent to the existing building, thereby enabling vehicular access from the site in a forward direction, particularly for trucks.

However, due to public opposition to such arrangements, the inclusion of such was withdrawn.

Detailed design has subsequently been prepared at the site entrance, increasing the vehicle layback, to improve vehicular ingress and egress to and from the site. This is discussed further in the **Traffic Impact Assessment** at **Appendix 19** and is shown on the **Architectural Drawings**.

No other requirements have been supplied by the RTA pertaining to this proposal.

5.2.6 Department of Primary Industries

Correspondence was provided from the Department of Primary Industries and is detailed below, at **Table 05**.

Table 05: DPI Requirements

1. General Requirement	Section
The EIA must include a topographic map of the locality at a scale of 1:25,000. this map should detail the location of all component parts of the proposal, any areas locally significant for threatened species (such as aquatic reserves), and areas of high human activity (such as townships, regional centres and major roads).	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07
The EIA must include a recent aerial photograph (preferably colour) of the locality (or reproduction of such a photograph) should be provided, if possible. This aerial photograph should clearly show the subject site and indicate the scale of the photograph.	Chapter 2
<i>General Requirements</i>	
<ul style="list-style-type: none"> Area which may be affected either directly or indirectly by the development or activity should be identified and shown on an appropriately scaled map (and aerial photographs). 	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07
<ul style="list-style-type: none"> All waterbodies and waterways within the proposed area of development are to be identified. 	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07
<ul style="list-style-type: none"> Description of aquatic vegetation, snags, gravel beds and any other protected, threatened or dominant habitats should be presented. 	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07
<ul style="list-style-type: none"> Area, density and species composition should be included and mapped. 	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07

<ul style="list-style-type: none"> • Identification of recognized recreational and commercial fishing grounds, aquaculture farms and/or other waterways users. 	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07
<ul style="list-style-type: none"> • Presented maps or plans. 	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07
<ul style="list-style-type: none"> • Description of proposal and study area. 	Chapter 2 & 4
<ul style="list-style-type: none"> • Details of the location of all component parts of the proposal, including any auxiliary infrastructure, timetable for construction of the proposal with details of various phases of construction. 	Construction Management Plan, Appendix 18
<ul style="list-style-type: none"> • Size of the area affected. 	Chapter 2
<ul style="list-style-type: none"> • Aspects of the management of the proposal, both during construction and after completion, which relate to impact minimization e.g. Environmental Management Plans 	The Final Construction Management Plan (CMP) which will be supplied at the CC stage will outline procedures for implementation in the event of an environmental incident and will be prepared in accordance with any Conditions of Consent.
<ul style="list-style-type: none"> • Plan of study area 	Site Survey, Appendix 03 ; Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07
<ul style="list-style-type: none"> • Locations and types of land uses present 	Chapter 2
<ul style="list-style-type: none"> • Locations of streams and other waterbodies 	Chapter 2
<ul style="list-style-type: none"> • Land tenure details for all land parcels 	Chapter 2

<ul style="list-style-type: none"> For each freshwater body identified on the plan, the plan should include, either by annotation or by an accompanying table, hydrological and stream morphology information such as: flow characteristics, including any seasonal variations, bed substrate and bed width, tidal characteristics and depth contours 	Coastal & Maritime Engineering Assessment, Appendix 08
<i>Dredging and Reclamation Activities</i>	
<ul style="list-style-type: none"> Purpose of works 	No dredging proposed.
<ul style="list-style-type: none"> Type(s) of marine vegetation in the vicinity of the proposed works 	No dredging proposed.
<ul style="list-style-type: none"> Distance of adjacent marine vegetation from the outer boundary of the proposed works 	No dredging proposed.
<ul style="list-style-type: none"> Method of dredging to be used 	No dredging proposed.
<ul style="list-style-type: none"> Duration of dredging works 	No dredging proposed.
<ul style="list-style-type: none"> Time of dredging works 	No dredging proposed.
<ul style="list-style-type: none"> Dimension of area to be dredged 	No dredging proposed.
<ul style="list-style-type: none"> Depth of dredging activities 	No dredging proposed.
<ul style="list-style-type: none"> Nature of sediment to be dredged, including Acid Sulphate Soil 	No dredging proposed.
<ul style="list-style-type: none"> Method of marking area subject to works 	No dredging proposed.
<ul style="list-style-type: none"> Environmental safeguards to be used during and after works 	No dredging proposed.
<ul style="list-style-type: none"> Measures for minimizing harm to fish habitat under the proposal 	No dredging proposed.
<ul style="list-style-type: none"> Spoil type and source location for reclamation activities 	Geotechnical, Acid Sulfate Soil & State 2 Contamination Assessment, Appendix 09
<ul style="list-style-type: none"> Method of disposal of dredge material 	No dredging proposed.
<ul style="list-style-type: none"> Location and duration of spoil stockpiling, if planned 	Geotechnical, Acid Sulfate Soil & State 2 Contamination Assessment, Appendix 09

<ul style="list-style-type: none"> Volume of material to be extracted or placed as fill 	Not applicable
<i>Activities that Damage Marine Vegetation</i>	
<ul style="list-style-type: none"> Type of marine vegetation to be harmed 	Aquatic Ecology Report, Appendix 07
<ul style="list-style-type: none"> Amount of marine vegetation to be harmed, map distribution of marine vegetation 	Aquatic Ecology Report, Appendix 07
<ul style="list-style-type: none"> Reasons for harming marine vegetation 	Aquatic Ecology Report, Appendix 07
<ul style="list-style-type: none"> Methods of harming marine vegetation 	Aquatic Ecology Report, Appendix 07
<ul style="list-style-type: none"> Construction details 	Aquatic Ecology Report, Appendix 07 Construction Management Plan, Appendix 18
<ul style="list-style-type: none"> Duration of works/activities 	Construction Management Plan, Appendix 18
<ul style="list-style-type: none"> Measures for minimizing harm to marine vegetation under the proposal 	Aquatic Ecology Report, Appendix 07
<ul style="list-style-type: none"> Environmental measures to be employed, if necessary 	Aquatic Ecology Report, Appendix 07 Construction Management Plan, Appendix 18
<ul style="list-style-type: none"> Method and location of transplanting activities or disposal of marine vegetation 	Aquatic Ecology Report, Appendix 07 Construction Management Plan, Appendix 18
<i>Activities that Block Fish Passage</i>	
<ul style="list-style-type: none"> Type of activity eg works in a stream that change flow or morphological characteristics 	Not applicable; Aquatic Ecology Report, Appendix 07
<ul style="list-style-type: none"> Length of time fish passage is to be restricted 	Not applicable; Aquatic Ecology Report, Appendix 07
<ul style="list-style-type: none"> Timing of proposed restriction 	Not applicable; Aquatic Ecology Report, Appendix 07

<ul style="list-style-type: none"> Remediation works 	Not applicable; Aquatic Ecology Report, Appendix 07
<i>Threatened Species</i>	
<ul style="list-style-type: none"> Threatened aquatic species assessment (Section 5c, EP&A Act 1979) 	Not applicable; Flora & Fauna Impact Assessment, Appendix 06
<ul style="list-style-type: none"> Seven Part Test 	Not applicable; Flora & Fauna Impact Assessment, Appendix 06
2. Initial Assessment	Section
The EIA must include:	
<ul style="list-style-type: none"> A list of threatened species, endangered populations and endangered ecological communities. 	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07
<ul style="list-style-type: none"> Discussion in regard to the previous land and water uses and the effect of these on the proposed site, water abstraction/diversion, dredging, de-snagging, reclamation, siltation, commercial and recreational activities 	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07
<ul style="list-style-type: none"> Discussion in regard to possible indirect effects of the proposal on species/habitats in the area surrounding the subject site, eg through altered hydrological regimes, soil erosion or pollution. The study area must extend downstream and/or upstream as far as necessary to take all potential impacts into account. 	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07
3. Assessment of Likely Impacts	Section
The EIA must:	
<ul style="list-style-type: none"> Describe and discuss significant habitat areas within the study area; 	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07
<ul style="list-style-type: none"> Outline the habitat requirements of threatened species likely to occur in the study area; 	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07

<ul style="list-style-type: none"> Indicate the location, nature and extent of habitat removal or modification or removal which may result from the proposed action; 	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07
<ul style="list-style-type: none"> Discuss the potential impact of the modification or removal of habitat; 	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07
<ul style="list-style-type: none"> Identify and discuss any potential for the proposal to introduce barriers to the movement of fish species; and 	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07
<ul style="list-style-type: none"> Describe and discuss any other potential impacts of the proposal on fish species or their habitat. 	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07
For all species likely to have their lifecycle patterns disrupted by the proposal to the extent that individuals will cease to occupy any location within the site, the EIA must describe and discuss other locally occurring populations of such species. The relative significance of this location for these species in the general locality must be discussed in terms of extent, security and viability of remaining habitat in the locality.	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07
4. Ameliorative Measures	Section
The EIA must consider how the proposal has been or may be modified and managed to conserve fisheries habitat on the subject site and in the study area.	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07
In discussing alternatives to the proposal, and the measures proposed to mitigate any effects of the proposal, consideration must be given to developing long term management strategies to protect areas within the study area which are of particular importance for fish species. This may include proposals to restore or improve habitat.	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07

Any proposed pre-construction monitoring plans or on-going monitoring of the effectiveness of the mitigation measures must be outlined in detail, including the objectives of the monitoring program, reporting framework, duration and frequency.	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07
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In addition, the Department of Primary Industries, now the NSW Department of Industry and Investment (I&I NSW), provided a number of comments in response to Draft Environmental Assessment. These have been reproduced below, along with a response to each.

- *Clarification in Section 4.2.2 of the Environmental Assessment that the proposed hardstand area will be constructed on piers and will not include any additional reclamation.*

As detailed at **Section 4.2.2** of this Environmental Assessment, the proposed works include the replacement of the existing slipway, located on the northern side of the building, with a new hardstand area.

In response to the above comment, it can be confirmed that the proposed hardstand area will be constructed on piers and will not include any additional reclamation.

- *A commitment in Section 6 of the Draft Statement of Commitments (Appendix 27) to mitigate potential impacts to seagrasses during construction from barge operation, anchoring, pile driving and sedimentation. Any Environmental Management Plan to be prepared to this effect is to involve consultation with I&I NSW*

W.S. Rooney & Associates, being the Aquatic Flora and Fauna consultant for the project, has provided information in relation to this comment. These have been incorporated into the amended Draft Statement of Commitments which is provided at **Appendix 27** of this document. In relation to the Environmental Management Plan, this will be prepared in accordance with any Conditions of Consent and in consultation with I&I NSW, as requested, and supplied as part of the Final CMP. Mosman Municipal Council

Correspondence was provided by Mosman Council dated 22 February 2008. The key issues which were required to be assessed are summarised below, at **Table 06**.

Table 06: Mosman Council Requirements

Issue to be Addressed	Section
Traffic, access and parking	Traffic Impact Assessment, Appendix 19
Traffic management during construction	Traffic Impact Assessment, Appendix 19 ; Construction Management Plan, Appendix 18
Loss of public open space	Chapter 7
Foreshore pedestrian access	Chapter 7
Biodiversity, ecology and environmental protection	Flora & Fauna Impact Assessment, Appendix 06 ; Aquatic Ecology Report, Appendix 07 ; Engineering Services Report, Appendix 16
Maintenance of a working harbour	Chapter 7
Character	Chapter 7
Intensification of use	Chapter 7
Noise and amenity impacts	Noise & Air Quality Assessment Report, Appendix 17
Alterations and additions	Chapter 4
Impact on trees within Spit Reserve	Flora & Fauna Impact Assessment, Appendix 06 ;
Acid sulfate soils and contamination	Stage 1 Contamination Assessment Report, Appendix 20 ; Geotechnical, Acid Sulfate Soil & Stage 2 Contamination Assessment, Appendix 09
Accessibility	Accessibility Report, Appendix 21
Signage	Chapter 4
Heritage	Heritage Impact Assessment, Appendix 10 ; Aboriginal, Historical & Maritime Archaeological Assessment, Appendix 11

In addition, Mosman Council provided a number of comments in response to the Draft Environmental Assessment. These have been reproduced below, along with a response to each.

- *Draft Mosman Local Environmental Plan 2008 is not addressed within the documentation. Submission to the Department of a report under the Section 68 instrument.*

Pursuant to **Section 75R(3)** of the *EP & A Act*, environmental planning instruments (other than State Environmental Planning Policy (SEPP)) do not apply to an approved project. Therefore, the *Draft Mosman Local Environmental Plan 2008* does not apply. Despite this, an assessment of the proposed development against the relevant provisions of the *Draft Mosman Local Environmental Plan 2008* is provided at **Appendix 30**.

- *The documentation identifies the proposal seeks to vary the 8 metre height development standard, no State Environmental Policy No.1 – Development Standards Objection has been provided.'*

Pursuant to **Section 75R(3)** of the *EP & A Act*, environmental planning instruments (other than State Environmental Planning Policy (SEPP)) do not apply to an approved project. Therefore, as the provisions of the *Mosman LEP* do not apply, an Objection pursuant to SEPP No.1 is not required in this instance.

- *The Noise & Air Quality Assessment identifies the nearest residential receivers as 300m away, when the nearest residential receivers are located on the opposite side of Spit Road at Smiths and Fergusons Boatsheds, both of which contain dwellings.*

Wilkinson Murray has provided a response to this matter at **Appendix 31** which has satisfactorily resolved this matter.

- *The documentation provides insufficient detail in relation to the impact of the development on access for pedestrians, cyclists and vehicles which raises concern in relation to safety, particularly given the regional cycle route located in the immediate vicinity of the site.*

It is considered that matters of public access, including access for pedestrian, cyclists and vehicles has been appropriately and adequately addressed as part of the Environmental Assessment. Specifically, **Section 7.3.1** includes discussion on how the proposed development enhances the degree and quality of public access to the foreshore. In addition, it has been highlighted at this Section of the Environmental Assessment, that the construction of the pathway and cycleway through the Spit Reserve reinforces access to the foreshore.

- *Particulars:*

1. *The existing pathway network in the immediate vicinity of the site is not shown on the plans and there is no detail how the proposal links and impacts on existing pathways both within the road reserve and Spit Reserve.*
2. *No footpath is shown between the development and Spit Road. This is the only means of access along the foreshore given the proposal does not appear to allow for access along the foreshore as required by the relevant policies.*

The accompanying **Architectural Drawings** now detail an indicative position of this recently constructed cycleway and pathway. In addition, Traffix have provided a response to this matter at **Appendix 32** which adequacy resolves this matter.

- *The Terrestrial Flora and Fauna Assessment does not provide a site specific assessment of trees likely to be impacted by the proposal, given the proximity of trees to the proposed works this would be required.*

Hamptons have been advised by the Flora and Fauna Consultant, being UBM Ecological Consultants, that there are no naturally occurring trees within proximity to the site or the proposed works. However, Tree Protection Measures will be included within the Final Construction Management Plan in order to protect any existing trees within proximity to the proposed works. These will be consistent with Mosman Council's Tree Preservation Order and any Conditions of Consent.

- *The Environmental Assessment of Coastal & Maritime Engineering report identifies with regard to sea level rise that from time to time the hardstand and suspended overwater maritime structures would be subject to minor inundation and recommends that power points be located at 2.025m above floor level. The documentation has not addressed the impact of inundation on the garbage storage area and workshops.*

Corben Architects have provided a letter in response to this matter (**Appendix 33**), which concludes that the proposed construction system is sustainable in addressing the impacts off the DECC -Sea Level Rise Policy.

- *The documentation submitted as part of the Preliminary Environmental Assessment for the proposal (that Council was asked to comment on in February 2008) identified that the applicant would be open to a planning agreement to facilitate improvements in Spit Reserve, there appears to be no mention of this in the Environmental Assessment.*

The development, as proposed, at the time of preparing the Preliminary Environmental Assessment (PEA), involved works within the adjoining Spit Reserve. As such, it was submitted

as part of this PEA, that the applicant would be willing to enter into a planning agreement to facilitate improvements to the Spit Reserve.

However, as the proposed development now does not include any works within the Spit Reserve, it is not considered necessary that the applicant enter into a planning agreement.

- *Insufficient detail provided in the Traffic Impact Assessment in relation to on-going servicing of the development.*

Traffix has provided a response to this matter at **Appendix 32**, which is considered to satisfactorily resolve this matter.

- *The Environmental Assessment is not clear in terms of the number of seats to be provided in the restaurant; and*

The restaurant will have a seating capacity of approximately 150.

- *The architectural plans provide RLs and levels to AHD, it is considered that all levels should be to AHD to avoid confusion.*

Corben Architects have provided amended plans which detail RLs to AHD levels.

On the basis of the above, it is therefore considered that the above items have been adequately resolved in response to the preliminary matters raised.

5.3 Public Consultation

A public consultation session was carried out for residents and interested parties at Mosman Council Library in July 2009. It was advertised in the Manly Daily for two weeks prior to the consultation taking place, which was held over the weekend. A display of the proposed redevelopment was then retained in the library for the following week.

The proposed redevelopment display included coloured architectural drawings and photomontages mounted on stands. It also included a fully detailed model, at the scale 1:500, which was displayed on a centre table.

D'Albora Marinas CEO - Craig Karpin, Project Manager – William Loader and Regional Marina Manager – Clemens Overdyke attended the consultation to answer queries from the residents and interested parties. It is estimated that approximately 120 individuals viewed the display.

Issues relating to a reported commercial use of the adjacent Spit Reserve were raised by a number of attendees; in viewing the display, it became evident that there was no such use proposed, other than

an RTA requirement to widen the filter lane into the site to facilitate safer access and egress by service vehicles.

Additionally, a favourable response was received in relation to improved public access onto the marina and around the site.

6 CONSIDERATION OF THE DEVELOPMENT ALTERNATIVES

In preparing the development response for the site, there were a number of matters raised by d'Albora in seeking to achieve their development outcomes for the site, to ensure that a commercial viable development outcome is achieved.

Such desires must be balanced with the requirements put forward by the relevant public authorities and the community in the preparation of the development options for the site.

As such, a number of alternatives were contemplated as part of the design development process. Such alternatives are advised on below to demonstrate that the proposal has been prepared on the basis of a rigorous design exercise to achieve optimum physical, social, environmental and economic objectives.

6.1 Replacement and Redesign of the Existing Facility

From a planning perspective it is relevant to evaluate why it is not a suitable option to demolish all existing infrastructure, both land and water, on the site and replace the facility in entirety.

The simple response in this regard is that of cost. It is also one that relies on the effectiveness of the existing facility. Feedback from public authorities, as part of this process did not result in significant concerns pertaining to the current layout, nor operation of the site.

Given the cost to replace a facility that would be incurred, and on the basis that the current layout and operations are effective, full replacement in this regard is not a viable alternative.

6.2 Relocation of the Existing Building

Early consideration, as part of the design development of the project, included the relocation of the building on the site, towards the southern end of the Spit Reserve. This was discussed with Mosman Council, NSW Maritime and the Department of Lands, prior to the applicant approaching the Department of Planning under the **Part 3A** process. It is, however, a relevant consideration, for the purpose of this assessment.

The benefits of such a proposal were that it was seen to lessen the traffic impacts associated with the widening of the Spit Bridge (which is now not proceeding) and would provide better access between the car parking area and the site.

There was also the potential that the built form would be less intrusive to the landscape in such a location.

Such relocation would have also increased public access to the foreshore underneath the Spit Bridge and been more commensurate with linkages on the eastern side of the Bridge.

However, this was not considered suitable because of the perceived use of public space for a private purpose that would have occurred, despite that a land swap would have been achieved to account for such change.

Concern was also raised about the perception of maintenance facilities in this location which are effectively screened from the roadway, as a result of the location of the Spit Bridge.

As such, the retention of the building in its current location was considered to be the only feasible option.

6.3 Retention of the Existing Built Form

While some concern was expressed with respect to the full extension of the second floor of the building, to ensure that a viable commercial operation is achieved, that responds to patron requirements, the extension is considered necessary in this regard.

The extension of such form will not result in adverse visual conditions from the immediate precinct, particularly that of Spit Road or Spit Reserve. In addition, the separation distance of the building from nearby residential properties is not such that this would cause adverse visual outcomes in this regard, with respect to the bulk and scale of such an extension.

The additional form will also not result in adverse outcomes when viewed from the waterway as the extension will occur on the eastern side of the site; a two storey form is already presented on that part of the site which is closest to the water. The additional floor space will therefore not result in any significant visual change as a result of its implementation.

As such, while the existing part single and part two storey form could be retained and replaced like for like, the outcomes that accrue as a result of this extension will not result in adverse visual impacts from surrounding land uses. In addition, they will improve the commercial viability of the proposal, which results in added infrastructure and investment to the locality and local employment.

In this regard, it is considered a practical outcome, without adverse impact, to extend the first floor of the built form on the site.

6.4 Replacement of Fuel Lines

Evidence has been supplied by **Martens & Associates (Appendix 16)** which suggests that there is some potential for spill from the existing fuel lines.

While an opportunity would potentially be available to avoid works in this vicinity of the site, it is instead proposed that the existing lines be decommissioned and replaced.

d'Albora prides itself on its environmental responsibility and, in this regard, by not replacing the existing system with more up-to-date modern technology, it would be detrimental to both the physical environment and boating community.

As such, the replacement of these lines will ensure that the most modern technology is implemented in this regard and greater protection is afforded to the physical environment.

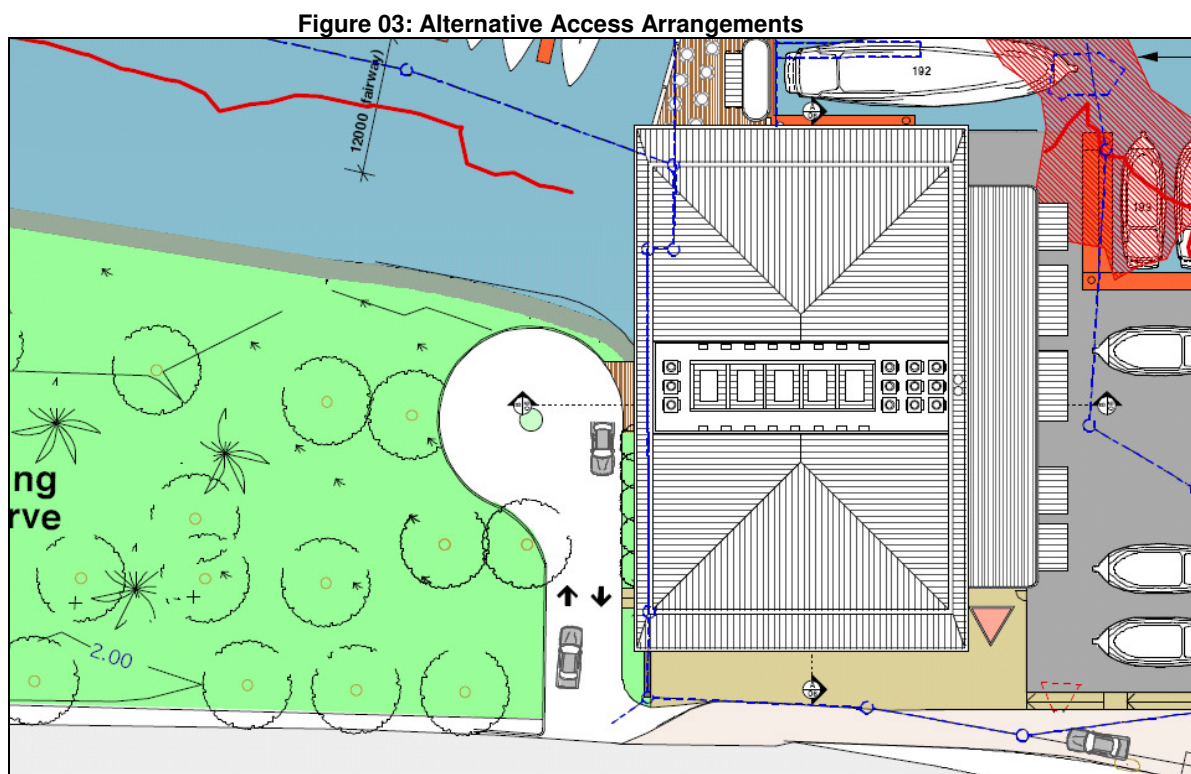
6.5 Provision of an Access Driveway & Turning Circle

Due to a number of concerns raised by Mosman Council and the RTA, alternative access arrangements were contemplated by the Applicant for the proposal.

Such an option included the construction of an access driveway and turning circle on the southern side of the building, as shown at **Figure 03** below).

The purpose of this driveway and turning circle was to facilitate the safe drop-off and pick-up of patrons, whilst alleviating some of the servicing difficulties associated with the location of the site, particularly with respect to truck movements for fuel delivery.

This access driveway and turning circle would have also enabled vehicles to entry and exit the site in a forward direction.



Source: Corben Architects

However, investigations undertaken by WS Rooney & Associates involved the mapping of the ecologically valuable seagrasses present in the area. These investigations found a valuable area on the northern side of the site, below and adjacent to the hardstand area, as shown above.

As such, to ensure that the proposal did not adversely impact upon the viability of this seagrass community, the hardstand and adjoining vessel area was realigned and modified to ensure that shading of this did not occur.

The design outcome, as proposed, was evaluated by W.S. Rooney & Associates and assesses this outcome as follows:

*The most important seagrass area is the *Zostera capricorni* bed and the contiguous *Halophila ovalis* bed immediately north of the existing D Arm of the marina (refer to Figure 1). The *Zostera capricorni* is a moderately dense bed (25-75% cover) and is considered to be valuable as a nursery area, or a potential nursery area, for numerous fish species, including some that are protected and/or may be at risk of significant population decline. For this reason, the design layout of the hardstand area has intentionally avoided the seagrass bed so that no shading of this seagrass will occur.*

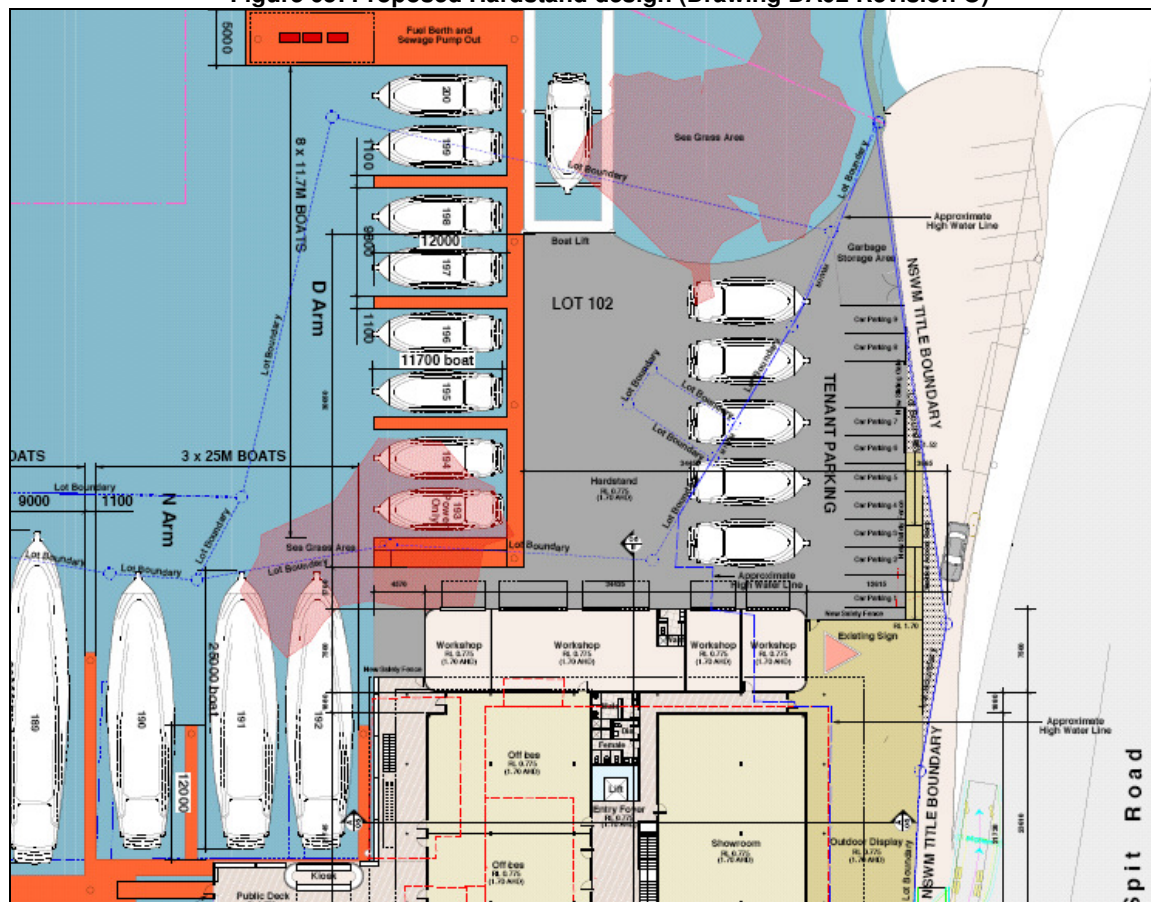
*A small corner of the *Halophila ovalis* bed may be covered by the circular edge of the hardstand; shading at certain times of the day and in some seasons may or may not inhibit the growth of those particular plants; so that a couple of square metres may of this seagrass could be affected by shading. This is not regard as particularly significant due to the relatively sparse cover of *Halophila ovalis* seagrass in this area (2-5% cover).*

*In addition, the sparse bed of *Halophila decipiens* that occurs at the seaward end of the existing slipway will be partially covered by berthed vessels fixed to the western edge of the proposed hardstand. Most of this particular bed is not regarded as ecologically significant because of its very sparse nature (1-2% cover); however, there is a small patch (about 20m²) of much more *Halophila decipiens* (35-50%) cover in the western half of this bed that has more environmental significance (refer to Figure 1). This more dense area of *Halophila decipiens* should be protected from shading or disturbance. The revised layout suggests that this is likely to be the case.¹⁰*

As such, the design of the proposal responds to these communities to ensure that significant disturbance is avoided in the most valuable areas. The design outcome for this area is shown on the Architectural Drawings; an extract of provided below (**Figure 05**).

¹⁰ Aquatic Ecological Assessment Report, WS Rooney & Associates, Page 25

Figure 05: Proposed Hardstand design (Drawing DA02 Revision O)



Source: Corben Architects

6.7 Re-Orientation of C-Arm

The re-orientation of vessels along C-Arm from a parallel to perpendicular configuration is possibly the most fundamental on-water change as part of this application. While such configuration could be maintained, the desire for berthing facilities in this location is high and d'Albora maintains a waiting list for facilities of this nature.

The outcome that is proposed does not seek to maintain vessels of a size that are out of proportion with other vessels on the marina; these are consistent in this regard and will not result in adverse visual impacts when viewed from the waterway and/or residential land uses to the north-west and north of the site.

The development, as put forward, must also be commercially viable and the outcome, by providing additional revenue to the facility, is imperative to improving upon the environmental and management objectives that are sort under this application.

The re-orientation of vessels has also been contemplated by GBA Coastal to ensure that the reorientation of vessels will not result in adverse impacts in terms of navigation. The conclusions of that reporting are that the change will not have any adverse impact in this regard.

As such, the re-orientation of vessels in this location is considered to be a suitable outcome.

7 STATUTORY MATTERS

The proposed development, as defined in the Director-General's Requirements pertaining to the project, is permissible with development consent pursuant to the *Mosman Local Environmental Plan 1998* and the *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005*.

The proposed development has been declared to be of State or regional planning significance, pursuant to **Section 75B(1)** of the EP&A Act.

As such, for the purpose of this application, the Minister for Planning is the consent authority.

The relevant statutory matters pertaining to the assessment of this application are detailed in this Chapter.

7.1 *Commonwealth Matters*

Any application for development on this site must be made with reference to the **Environment Protection Biodiversity Conservation Act 1999** (EPBC Act). This assessment is provided below.

7.1.1 **Environment Protection Biodiversity Conservation Act 1999**

In the event that the proposed development would have a likely impact on matters of national environmental significance, approval would be required under the EPBC Act.

This matter has been contemplated by WS Rooney & Associates, in relation to aquatic ecology. The conclusions of this report are as follows, with respect to the EPBC Act:

... there are possibly four fish species on that modified Commonwealth list that could utilise some of the habitats found at and near this development proposal at one or more stages of their life cycle (usually the juvenile stages):

- *School shark (Galeorhinus galeus)*
- *Eastern blue groper (Achoerodus viridis)*
- *Broadnose sevenspotted shark (Notorynchus cepedianus)*
- *Spotted wobbegong shark (Orectolobus maculatus).*

None of these four species are deemed Endangered or Vulnerable, based on IUCN criteria, and so are not listed as such by the EPBC Act. Therefore a permit is not required by the Commonwealth EPBC Act. ...¹¹

Matters of terrestrial flora & fauna have been assessed by UBM Ecological Consultants. The findings of their investigations, in this regard, are as follows:

¹¹ Aquatic Ecological Assessment Report, WS Rooney & Associates, Page 22

No threatened plant species, populations or ecological communities listed under the ...Commonwealth Environment Protection Biodiversity Conservation Act 1999, were recorded in the Study Area.

No threatened animal species or populations listed under the ...Commonwealth Environment Protection Biodiversity Conservation Act 1999, were recorded in the Study Area.¹²

As such, the proposed development does not require approval pursuant to the EPBC Act.

7.2 State Matters

This application is subject to a number of state planning matters, as detailed and addressed below.

7.2.1 Environmental Planning & Assessment Act 1979 - Objects

Section 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) stipulates the following relevant **Objects** of the EP&A Act, as relevant to this proposal:

(a) *to encourage:*

- (i) *the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
- (ii) *the promotion and co-ordination of the orderly and economic use and development of land,*
- (iii) ...
- (iv) *the provision of land for public purposes,*
- (v) ...
- (vi) *the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats,*
- (vii) *ecologically sustainable development, and*
- (viii) ...

(b) ...

(c) *to provide increased opportunity for public involvement and participation in environmental planning and assessment.*

The proposed development will accord with the Objects of the EP&A Act. It will result in the proper management and use of both land and water facilities that promote both the economic and social welfare of the community. As a result of the proposal, which utilises improvements to marine technology, the environmental outcomes will be improved over and above that of the existing situation, which will also afford social benefit to the community.

¹² Terrestrial Flora & Fauna Assessment, UBM Ecological Consultants, Page iii

In addition, the operation practices of the facility are such that key water quality goals will be achieved.

The orderly and economic use of the land will be a result of this proposal utilising, to the greatest extent possible, existing infrastructure, which will also improve the community benefits of the marine culture that is enjoyed in this location.

In addition, it will also enable further economic benefits through local employment and use of public facilities, such as the pedestrian pathway and the Spit Reserve.

Conservation of ecology will be achieved in accordance with the relevant requirements of both state and federal legislation and the principles of ecologically sustainable development will be adhered to.

In this regard, it is considered that the proposal will satisfy the Objects of the EP&A Act.

7.2.2 Environmental Planning & Assessment Act 1979 – Part 1, Section 5A

Section 5A of the EP&A Act deals with Significant effect on threatened species, populations or ecological communities, or their habitats. Such matters have been contemplated by WS Rooney & Associates and UBM Ecological Consultants, pertaining to matters of aquatic and terrestrial ecology respectively.

In this regard, both studies conclude that the proposal will not impact upon any threatened species, populations or ecological communities or their habitats. Such findings may be contemplated in detail at **Appendix 06** and **07**.

As such, further assessment pursuant to **Section 5A** of the EP&A Act is not required.

7.2.3 Environmental Planning & Assessment Act 1979 – Part 3A

Part 3A of the EP&A Act, deals with Major Infrastructure and Other Projects. The proposed development has been declared in accordance with **Section 75B**, as a project to which **Part 3A** applies, in accordance with **Section 75B(1)**, which states as follows:

This Part applies to the carrying out of development that is declared under this section to be a project to which this Part applies:

(a) *by a State environmental planning policy*

State Environmental Planning Policy (SEPP)(Major Projects) 2005 identifies development to which the development assessment and approval process pursuant to **Part 3A** of the EP&A Act is applicable. In this regard, **Schedule 1** of the SEPP (Major Projects) provides for **Group 6 Tourism and Recreational Facilities**. At **Clause 14, Marina Facilities** are defined as follows:

(1) *Development for the purpose of marinas or other related land or water shoreline facilities that moor, berth or store vessels (excluding dinghies and other small craft) at fixed or floating berths, at freestanding moorings, alongside jetties or pontoons, within dry storage stacks or on cradles in hardstand areas and that:*

- (a) *moor, berth or store more than 30 vessels in Sydney Harbour, Middle Harbour, North Harbour, Botany Bay, Port Hacking, Broken Bay or associated tidal waters, or*
- (b) *moor, berth or store more than 80 vessels in other waters, or*
- (c) *are located in environmentally sensitive areas of State significance, but excluding any development that, in the opinion of the Minister, is only of local environmental planning significance.*

(2) *A reference in this clause to the number of vessels moored, berthed or stored includes a reference (in the case of an existing facility) to the additional number of vessels moored, berthed or stored at the facility.*

As the proposal involves the berthing of more than 30 vessels within Middle Harbour, the proposal may be identified as a project to which **Part 3A** applies. The Minister has advised, pursuant to **Clause 6** of the SEPP (Major Projects) that this is the case.

As such, the Minister for Planning is the consent authority for the purpose of this application (**Section 75D(1)**). **Section 75F** requires that Director-General's Requirements be provided to a proponent detailing the matters for consideration as part of any Environmental Assessment. These may be found at **Appendix 02**. The relevant matters have been attended to through this report, as identified at **Section 1.3**.

7.2.4 Environmental Planning & Assessment Act 1979 – Section 91

Section 91 of the EP&A Act deals with Integrated Development. **Section 91** has been reproduced below at **Table 07** and the relevant approvals that are sought, identified accordingly.

Table 07: Section 91, EP&A Act

Act	Provision	Approval	Applicable
<i>Fisheries Management Act 1994</i>	s 144	aquaculture permit	No
	s 201	permit to carry out dredging or reclamation work	Yes
	s 205	permit to cut, remove, damage or destroy marine vegetation on public water land or an aquaculture lease, or on the foreshore of any such land or lease	No
	s 219	permit to: (a) set a net, netting or other material, or	No

		(b) construct or alter a dam, floodgate, causeway or weir, or (c) otherwise create an obstruction, across or within a bay, inlet, river or creek, or across or around a flat	
<i>Heritage Act 1977</i>	s 58	approval in respect of the doing or carrying out of an act, matter or thing referred to in s 57 (1)	No
<i>Mine Subsidence Compensation Act 1961</i>	s 15	approval to alter or erect improvements within a mine subsidence district or to subdivide land therein	No
<i>Mining Act 1992</i>	ss 63, 64	grant of mining lease	No
<i>National Parks and Wildlife Act 1974</i>	s 90	consent to knowingly destroy, deface or damage or knowingly cause or permit the destruction or defacement of or damage to, a relic or Aboriginal place	No
<i>Petroleum (Onshore) Act 1991</i>	s 9	grant of production lease	No
<i>Protection of the Environment Operations Act 1997</i>	ss 43 (a), 47 and 55	Environment protection licence to authorise carrying out of scheduled development work at any premises.	Yes
	ss 43 (b), 48 and 55	Environment protection licence to authorise carrying out of scheduled activities at any premises (excluding any activity described as a “waste activity” but including any activity described as a “waste facility”).	No
	ss 43 (d), 55 and 122	Environment protection licences to control carrying out of non-scheduled activities for the purposes of regulating water pollution resulting from the activity.	No
<i>Roads Act 1993</i>	s 138	consent to: (a) erect a structure or carry out a work in, on or over a public road, or (b) dig up or disturb the surface of a public road, or (c) remove or interfere with a structure, work or tree on a public road, or (d) pump water into a public road from any land adjoining the road, or (e) connect a road (whether public or private) to a classified road	Yes

<i>Rural Fires Act 1997</i>	s 100B	authorisation under section 100B in respect of bush fire safety of subdivision of land that could lawfully be used for residential or rural residential purposes or development of land for special fire protection purposes	No
<i>Water Management Act 2000</i>	ss 89, 90, 91	water use approval, water management work approval or activity approval under Part 3 of Chapter 3	Yes ¹³

7.2.5 Environmental Planning and Assessment Regulation 2000

The proposed works are subject to the guidelines set out in **Part 1A Major Projects** of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation).

Section 8F, Clause 1, requires that consent must be granted by the relevant owners of the subject land prior to the lodgement of a development application.

In this regard, consent has been granted by New South Wales Maritime and the Department of Lands. These are available at **Appendix 22** and **Appendix 23**, respectively.

7.2.6 State Environmental Planning Policy No 19—Bushland in Urban Areas

State Environmental Planning Policy No 19 – Bushland in Urban Areas (SEPP 19) aims to protect and preserve bushland within urban areas.

Specifically, **Clause 9** of the SEPP applies to the site, being applicable to development adjoining land reserved for public open space. **Clause 9(2)** states:

Where a public authority:

(a) ...

(b) proposes to grant approval or development consent in relation to development on land to which this clause applies,

the public authority shall not carry out that development or grant the approval or development consent unless it has taken into account:

(c) the need to retain any bushland on the land,

(d) the effect of the proposed development on bushland zoned or reserved for public open space purposes and, in particular, on the erosion of soils, the siltation of streams and waterways and the spread of weeds and exotic plants within the bushland, and

(e) any other matters which, in the opinion of the approving or consent authority, are relevant to the protection and preservation of bushland zoned or reserved for public open space purposes

¹³ Reference should be made to the Engineering Services Report, prepared by Martens & Associates, Page 47

This has been addressed in the Terrestrial Flora & Fauna Assessment undertaken by UBM Ecological Consultants which concludes that there will be no adverse impact on terrestrial species (**Appendix 06**).

7.2.7 State Environmental Planning Policy No 33—Hazardous and Offensive Development

State Environmental Planning Policy No 33 – Hazardous and Offensive Development (SEPP 33) aims to ensure that, in determining whether a development is a hazardous or offensive industry, that appropriate measures will be considered to minimise the impact of such development, as detailed at **Clause 2**.

Hazardous Storage Establishments, as defined at **Clause 4**, refers to any establishment where goods, materials or products are stored which would pose a significant risk to the surrounding locality in terms of human health, life and property as well as to the biophysical environment.

The proposed development will involve the storage of fuel tanks underground and as such, the provision of the SEPP must be addressed.

This matter has been addressed in the Engineering Services Report prepared by Martens & Associates and find as follows in this regard:

As shown in Table 3¹⁴ all quantities of dangerous goods kept on site are below the screening thresholds, it can be assumed that, in accordance with SEPP 33, there is unlikely to be a significant risk. The proposed development therefore does not trigger SEPP 33 and does not require a PHA.¹⁵

The full Engineering Services Report is available at **Appendix 16**.

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

State Environmental Planning Policy No. 55 (SEPP 55) – *Remediation of Land* deals with redevelopment of land which is contaminated.

As detailed in **Clause 7**, contamination and remediation must be considered in determining a development application.

Consent for development cannot be granted on contaminated land unless;

(a) *it has considered whether the land is contaminated, and*

¹⁴ Engineering Services Report, Martens & Associates, Page 26

¹⁵ Engineering Services Report, Martens & Associates, Page 26

- (b) *if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and*
- (c) *if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.*

Clause 8 requires development consent for **Category 1 remediation work**.

The proposed remediation work is required on land nominated by **Clause 9(d)**. In this case, the **SEPP (Major Projects)**, at **Schedule 3** identifies that development consent is required for the remediation of contaminated land. **Clause 28** of the **SEPP (Major Projects)** states as follows:

- (1) *Development for the purpose of remediation of land that is category 1 remediation work on a remediation site.*
- (2) *In this clause, category 1 remediation work, remediation and remediation site have the same meaning as in State Environmental Planning Policy No. 55 – Remediation of Land.*

A **Stage 1 and Stage 2 Contamination Assessment** have been undertaken by **Martens & Associates (Appendix 20 and 09)**. The Stage 1 Assessment indicated potential for contamination as a result of fuel storage on the site, and the importation of back fill from an unknown source.¹⁶

In response, a **Stage 2 Assessment** was undertaken, with the following conclusions:

Site investigations (Stage 2 assessment) completed included the collection and analysis of soil samples for a range of parameters determined to assess potential contamination from past and existing uses. The investigation identified no contaminants above NSW DEC (2006) guideline levels for commercial and industrial land use. Following SCC and TCLP testing, the fill in the proposed excavation is classed as 'General Solid Waste' in accordance with EPA (1999) guidelines. The natural soil located below the fill is not contaminated and requires no specific measures for treatment or disposal. This material is considered to be VENM.

A Remedial Action Plan (RAP) is required for the site to address the removal of UST's identified as a likely source of groundwater hydrocarbon contamination. Considering the proposed development will require excavation of fill material, such material is considered 'Inert Waste' and is to be disposed of an appropriate waste handling facility.¹⁷

On the basis of the assessment above, in accordance with **Clause 17** all remediation work will be carried out under the guidelines of the *Contaminated Land Management Act 1997*. The relevant plan

¹⁶ Geotechnical, Acid Sulfate Soil and Stage 2 Contamination Assessment, Martens & Associates, Page 21

¹⁷ Geotechnical, Acid Sulfate Soil and Stage 2 Contamination Assessment, Martens & Associates, Page 33

of remediation, as approved by the consent authority, will be prepared in accordance with the contaminated land planning guidelines.

7.2.9 State Environmental Planning Policy No. 64 – Advertising & Signage

State Environmental Planning Policy (SEPP) No. 64 – Advertising and Signage aims to ensure that any signage and advertising the subject of this SEPP, is visually compatible with its surroundings, provides effective communication in suitable locations, and is of a high design and finish.

The proposal includes two '*Business Identification Signs*'. These are defined, at **Clause 4** as being a sign:

- (a) *that indicates:*
 - (i) *the name of the person, and*
 - (ii) *the business carried on by the person, at the premises or place at which the sign is displayed, and*
- (b) *that may include the address of the premises or place and a logo or other symbol that identifies the business,*
but that does not include any advertising relating to a person who does not carry on business at the premises or place.

Part 2 – Signage applies to this application.

In accordance with **Clause 8**, the consent authority must not grant consent unless it is satisfied that the signage is consistent with the Objectives of SEPP 64 (**Clause 3**) as well as the Assessment Criteria provided at **Schedule 1**. The relevant Objectives have been reproduced below and the proposal's consistency is demonstrated accordingly.

- (a) *to ensure that signage (including advertising):*
 - (i) *is compatible with the desired amenity and visual character of an area, and*

The proposed signage has been designed to be compatible with the proposed materials and finishes of the new marina building located on the site. It is of a scale and form that is commensurate with the existing signage at the site, albeit the freestanding sign is in a different location.

The Visual Impact Assessment Report prepared by Richard Lamb and Associates (**Appendix 24**) concludes that the design of the proposed structure will not have an adverse or significant impact on the visual amenity of the area.

As such, it is considered that the design of the signage will therefore be compatible with the visual character of the immediate locality.

(ii) provides effective communication in suitable locations, and

The proposed 'business identification signs' as described previously at **Section 4** of this report, will provide effective communication of the business being undertaken on the premises to pedestrians and vehicles travelling along the Spit Road and to pedestrians attending the site.

The larger, freestanding business identification sign optimises the same footprint as the existing sign, albeit in a different location. However, this location is considered to be more acceptable, without adverse impact in terms of visual obstruction, and will effectively communicate the uses taking place on the site. As such, it is considered that this sign will be in a suitable location that will effectively communicate the land uses taking place on the site.

The smaller sign proposed for the south-eastern corner of the site forms an appropriate architectural element as a visually identifiable edge to the public domain and as such is considered to be placed in a suitable location that effectively communicates the use of the site.

(iii) is of high quality design and finish, and

The finishes and design of the proposed signage is integrated with the overall design of the proposed buildings, and as such is considered to represent a high quality architectural outcome.

An assessment of the proposal against the criteria detailed at **Schedule 1** of **SEPP 64** is provided below.

Character of the area

As previously detailed, the proposed signage has been designed to match the design, materials and finishes of the proposed new marina building, which as the **Richard Lamb and Associates** report concludes, will not result in adverse visual impact.

As such, it is considered that the proposed signage is compatible with marina character of the surrounding area.

Special areas

The location of the site is such that it is positioned near elements of the waterway, as well as historical elements to the locality.

The replacement of the existing freestanding sign ensures that the important characteristics of the locality are maintained.

In addition, the architectural materials to be employed on this signage ensures adequate and suitable integration with the overall architectural outcomes that are sought for the site.

The proposed signage at the south-eastern corner of the site is considered to provide a small scale identification interface with the pedestrian environment. It will be architecturally consistent, in terms of its design and materials, with the proposed built form and is of a size that recognises the nearby pedestrian area associated with its location.

Overall, it is considered that the proposed signage will have no adverse impacts on the special areas in proximity to the site.

Views and vistas

The proposed signage associated with the use of the site will not compromise or obscure any significant public or private views and vistas, nor impact on the viewing rights of any advertisers.

Streetscape, setting or landscape

The proposed scale and proportions of the signage are consistent with both the marine character of the area and will complement the proposed building design. In addition, the proposed signage structures do not protrude above the highest roof element of the proposed marina building, being consistent with the assessment criteria.

Site and building

As detailed above, the proposed locations for signage on the site are within the confines of the allotment boundaries and suitably positioned, without resulting in visual clutter.

Associated devices and logos with advertisements and advertising structures

As previously detailed, the proposed signage structures are defined as 'business identification signage' under **Clause 4** of SEPP 64 and as such, are not classified as 'advertising structures'. Therefore this is not applicable in this instance.

Illumination

The proposed freestanding sign will be illuminated in accordance with the relevant Australian Standards. Such lighting would form part of any future condition of consent.

Safety

The proposed signage structures on the site will not result in adverse safety matters as a result of the proposal. The freestanding sign will replace a like-for-like arrangement and the signage permitted on the south-eastern side of the site is subtle in form and character to ensure that it will not protrude the adjoining visual landscape and affect abilities of passers-by.

As such, it is considered that the signage outcomes presented for the site will not result in adverse safety implications.

Overall, it is considered that the proposed signage structures on the site are consistent with the requirements of SEPP 64.

7.2.10 State Environmental Planning Policy (Infrastructure) 2007

The proposed development has been considered in terms of State Environmental Planning Policy (Infrastructure) 2007.

Clause 101 addresses Development with frontage to classified road. Spit Road, which adjoins the site, is a classified road and this Clause is therefore relevant to the application.

The proposed development will respond to the objectives of this Clause, as follows:

- (a) to ensure that new development does not compromise the effective and on-going operation and function of classified roads; and*

The proposed development has been assessed by **Traffix Pty Ltd** in terms of the impact of the intensification of use of the site on Spit Road. In this regard, **Traffix Pty Ltd** has concluded the following:

The surveys undertaken show a peak movement of 87 persons in and 19 out between 11am and noon on Saturday and of 89 persons in and 19 out on Sunday between 1pm and 2pm. On the assumption of 55% car driver, this equates to the following vehicle movements:

- 48 in, 10 out on Saturday between 11am and noon; and
- 48 in, 10 out on Sunday between 1pm and 2pm.¹⁸

In this regard, the following has therefore been identified as a result of the projected trip generation:

These are moderate flows that will be spread over all areas that are currently used for marina parking, with the majority occurring within the 200 space car park to the south of the site within the "Parking Reserve".

It may be expected that some of this demand will transfer to the new internal parking area, which could potentially accommodate about 20 veh/hr (10 in, 10 out) during peak periods. This can be readily accommodated with no adverse impact on traffic

¹⁸ Traffic Impact Assessment, Traffix Pty Ltd, Page 18

conditions on Spit Road. These trips will all occur via left turn entries and exits, with improved safety afforded by the significantly improved geometry.

In summary, the traffic impacts are moderate and can be accommodated. Traffic volumes during weekday commuter peak periods are expected to be very moderate and are not critical for assessment purposes.¹⁹

As such, it is considered that **Objective (a)** will be satisfied.

(b) to prevent or reduce the potential impact of traffic noise and vehicle emission on development adjacent to classified roads,

In terms of **Objective (b)**, **Wilkinson Murray Pty Ltd** were retained to address the noise impacts associated with traffic movements to and from the site. In this regard, they have supplied the following:

Traffic counts for the year 2005 from the permanent Spit Bridge counting station and the volumes in each direction have been provided by Traffix traffic consultants. These counts indicate a two-way Annual Average Daily Traffic (AADT) flow of 65,233 vehicles of which about 6-8% would be heavy vehicles.

Allowing for a growth since 2005 of about 1-2% per annum an estimated current 2010 AADT of 70,270 vehicles per day has been determined. Given these volumes, the traffic generated by the Spit Marina will be insignificant in both volumes and the associated noise contribution at surrounding residences.

Accordingly, traffic noise generated by the development will be acoustically acceptable.²⁰

In relation to air quality, **Wilkinson Murray Pty Ltd** has advised the following in terms of additional traffic movements:

A comparison between the traffic volumes on Spit Road and marina operations indicates that any contribution from the marina would be insignificant when compared to the emissions from road traffic. Therefore given the low level emissions associated with Marina operations, current traffic volumes and distances to residences we consider that the operations of the marina will not impact on air quality in the surrounding area.²¹

¹⁹ Traffic Impact Assessment, Traffix Pty Ltd, Page 18

²⁰ Noise & Air Quality Assessment, Wilkinson Murray, Page 21

²¹ Noise & Air Quality Assessment, Wilkinson Murray, Page 23

As such, it is considered that the proposed intensification of use of the site will not result in any adverse impacts to noise or air quality, as a result of increased traffic movements. As such, this Objective is achieved.

Clause 101(2) provides matters that must be addressed by the consent authority. The proposal accords with these as follows:

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

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

There are no alternative accessways into or out of the site; it is proposed to utilize an existing access point to the classified road and improve the access point accordingly.

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

- i. the design of the vehicular access to the land, or*
- ii. the emission of smoke or dust from the development, or*
- iii. the nature, volume or frequency of vehicles using the classified road to gain access to the land, and*

The existing vehicular access to the site from Spit Road will be improved. The proposed arrangements have been considered by **Traffix Pty Ltd** and the following is provided:

Servicing of the site will be significantly improved through the provision of an indented bay that extends further to the site than at present, so that trucks will no longer need to reverse into oncoming traffic travelling north along Spit Road.

This arrangement will accommodate a 12.5 metre HRV which is not presently possible, providing more operational flexibility and improved safety. It is recommended that consideration be given to managing truck deliveries so that they do not occur during the evening on-street peak period or on weekends during summer between about 10am and 4pm.²²

The matters of emissions and vehicular movements have been addressed above. As such it is considered that the requirements of this clause are satisfied.

²² Traffic Impact Assessment, Traffix Pty Ltd, Page 18

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

No additional ameliorative measures are required to accommodate the development, as a result of its location on a classified road.

As such, the requirements of **Clause 101** are satisfied.

Clause 104 of the SEPP (Infrastructure) deals with **Traffic Generating Developments**. Those types of uses which are potentially relevant in this regard are addressed below, at **Table 08**:

Table 08: Clause 104, SEPP (Infrastructure)

Column 1	Column 3 Size or capacity – site with access to classified road or to road that connects with classified road (if access within 90m of connection, measured along alignment of connecting road)	Applicability	Justification
Commercial Premises	2,500m ² in area	No	The commercial premises within the site (i.e. offices) are not greater than 2,500m ² in area.
Refreshment Rooms	300m ²	No	The proposed restaurant is 200m ²
Shops	500m ²	No	No shops are proposed on site
Shops & Commercial Premises	1,000m ²	No	The commercial premises within the site (i.e. offices) are not greater than 2,500m ² in area. No shops are proposed on site
Recreation Facilities	50 or more motor vehicles	No	The use of the site is not classed as a Recreation Facility

On the basis of the above, the proposal is not subject to **Clause 104** of the SEPP (Infrastructure).

7.3 Regional Matters

As a result of recent legislative changes to the NSW planning system, Regional Environmental Plans (REPs) are now classified as 'Deemed SEPPs'. As such, the *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005*, which is relevant to the proposed development, is now a Deemed SEPP.

7.3.1 Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

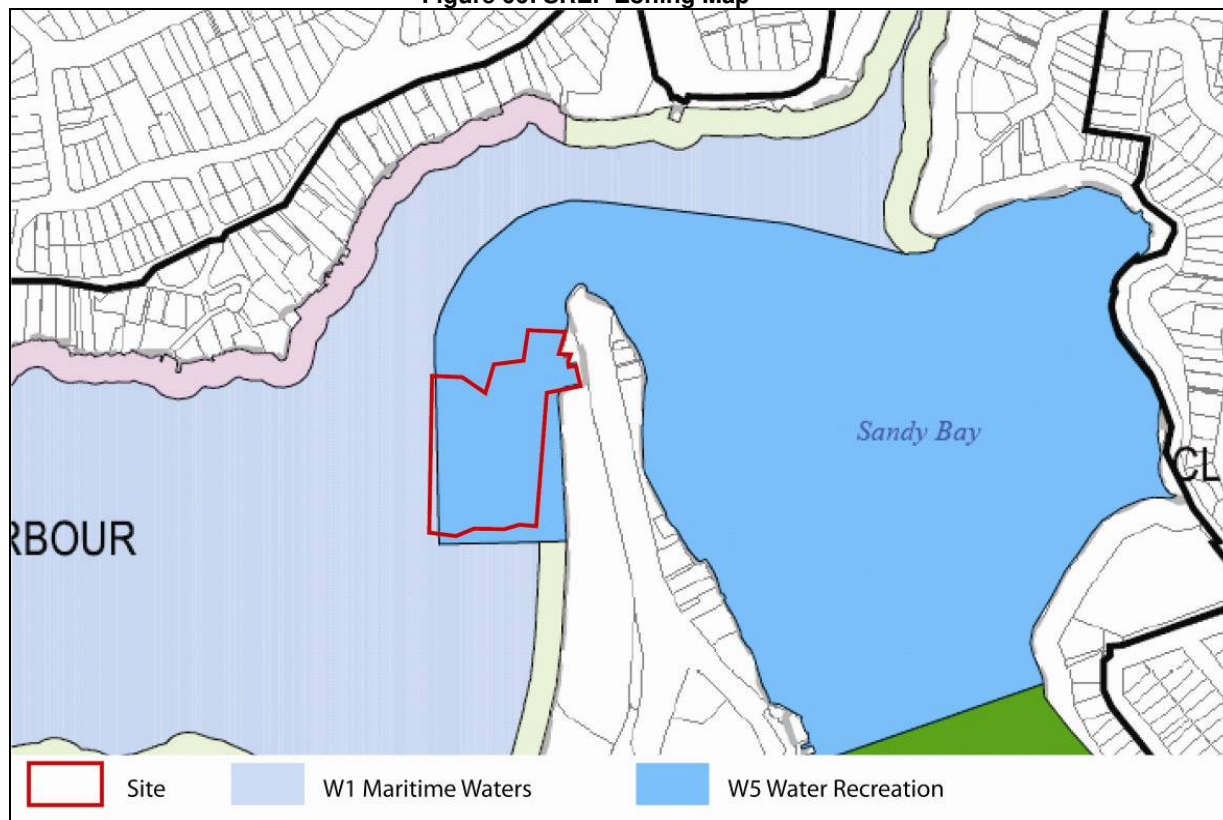
The site is subject to the provisions of the Sydney Regional Environmental Plan (SREP) (Sydney Harbour Catchment) 2005.

The site is predominantly zoned **W5 Water Recreation** (Figure 06). In addition, C-Arm crosses into the **W1 Maritime Waters** zone.

The proposed works, as part of a "commercial marina" are permissible with development consent in both zones.

The site is also located in the **Foreshores & Waterways Area**.

Figure 06: SREP Zoning Map



Source: <http://www.planning.nsw.gov.au>

Clause 2 stipulates the Aims of the SREP. The relevant Aims have been reproduced below and an assessment of the proposal is provided accordingly.

(1) This plan has the following aims with respect to the Sydney Harbour Catchment:

- (a) to ensure that the catchment, foreshores, waterways and islands of Sydney Harbour are recognised, protected, enhanced and maintained:*
 - (i) as an outstanding natural asset, and*
 - (iii) as a public asset of national and heritage significance, for existing and future generations,*

The proposed works will not detrimentally impact upon the environmental qualities of the waterways and assists in maintaining the Sydney Harbour Catchment as an 'outstanding natural asset' by resulting in an overall improvement to the environmental performance of the marina facility.

The proposal will not adversely impact upon heritage items within the vicinity of the site and will promote the setting of these, as a result of sympathetic and integrated improvements to the existing facility.

- (b) to ensure a healthy, sustainable environment on land and water,*

The existing marina facility operates as a 'clean marina' as discussed previously, which will continue as a result of the implementation of the proposed works.

In addition, the relevant environmental protection licences will be maintained to ensure that a sustainable environment is continued to be achieved at the site.

As such, the proposed development will assist in achieving a healthy and sustainable environment, both on land and in the water.

- (c) to achieve a high quality and ecologically sustainable urban environment,*

The proposed alterations and additions to the existing facility will result in the achievement of ecologically sustainable design principles, as defined at **Chapter 8 & 9** of this report.

- (d) to ensure a prosperous working harbour and an effective transport corridor,*

The proposal retains the boat and vessel repair facilities on site, thereby achieving this objective for maintaining a 'working harbour'.

In addition, the proposed changes to the layout of the marina will not result in any adverse impacts on existing transport corridors surrounding the site. Matters of navigation have been contemplated by GBA Coastal Pty Ltd. The outcomes, in this regard, are such that, despite the changes proposed, there will be no adverse impact on existing navigation corridors surrounding the site.

As such, it is considered that the proposed alterations and additions at the site will not hinder the achievement of this objective and the working nature of this site will be maintained.

(e) to encourage a culturally rich and vibrant place for people,

The proposal improves the public areas of the marina, along with improving the linkages with surrounding pedestrian networks, particularly that recently implemented by Mosman Council through Spit Reserve.

The proposed changes to the existing facility will result in extended pedestrian areas, along with spaces for public enjoyment of the marina. These elements will promote a rich and vibrant environment, in a marine, waterfront location that will encourage and facilitate public access to the site.

In this regard, the cultural richness of the site, in terms of its contribution to the marine and waterfront environment will be reinforced.

(f) to ensure accessibility to and along Sydney Harbour and its foreshores,

The proposal achieves this aim as the development will improve public access to the foreshore. The proposed development will include greater public access and a public deck and seating area, located on the western side of the new building.

In a letter dated 22nd February 2008 (**Appendix 25**), Mosman Council detail a number of key issues which need to be addressed as part of this application. One of these issues is that of foreshore pedestrian access.

Mosman Council considers that the proposal represents an opportunity to link The Spit Reserve to the south of the site with Ellery Park, to the north of the site. In addition, Council highlighted that the proposal represents an opportunity to provide a linkage with Council's Bicycle Strategy.

Currently, pedestrian access to Ellery Park is via the car park area adjoining the site to its north. As this car park area does not form part of the site, it is not subject to this proposal.

However, the interface between the site and this area is reinforced as a result of the recent construction of a pedestrian and bicycle pathway, which has been implemented through the Spit Reserve and past the site. This will reinforce pedestrian access to the foreshore area and adequately links with the pedestrian network which runs through the subject site.

As such, the proposal will achieve this Aim.

(g) to ensure the protection, maintenance and rehabilitation of watercourses, wetlands, riparian lands, remnant vegetation and ecological connectivity,

As detailed previously, the proposal will not result in any adverse impacts in terms of terrestrial or aquatic ecology.

Clause 13 provides **Planning Principles** for land within the **Sydney Harbour Catchment**. The principles under this Clause aim to protect and, where practicable, improve the natural assets, water quality and ecological integrity, as well as the hydrological, ecological and geomorphological processes of the catchment area. The planning principles also seek ensure that the visual amenity and unique visual qualities of the harbour are maintained, particularly when viewed from its waters.

The proposal's consistency with these principles is demonstrated at **Table 09**. The planning principles detailed at **Clause 14** pertain to **Foreshores and Waterway Areas** and seek to protect, maintain and enhance the natural assets and unique environmental qualities of Sydney Harbour as well as improve access to, and along, the foreshore. The proposal's consistency with these principles is demonstrated at **Table 09**.

Clause 15 outlines **Planning Principles** in relation to **Heritage Conservation**, which aim to ensure that identified environmental, Aboriginal or European heritage items are recognised for their significance and conserved. The proposal's consistency with these principles is demonstrated at **Table 09**, below.

Table 09: Clause 13 – 15 SREP 2005

CLAUSE 13 – Sydney Harbour Catchment	
Principle	Comment
<i>(a) development is to protect and where practicable, improve the hydrological, ecological and geomorphological processes on which the health of the catchment depends,</i>	The proposal will not hinder the improvement of hydrological, ecological and geomorphological processes in the area.
<i>(b) the natural assets of the catchment are to be maintained and</i>	The proposal will maintain the health of the natural assets of the catchment area. There will be no losses incurred to existing, native vegetation.

<i>(c) decisions with respect to the development of land are to take account of the cumulative environmental impact of development within the catchment</i>	The proposed works will have no adverse cumulative environmental impacts.
<i>(d) action is to be taken to achieve the targets set out in Water Quality and River Flow Interim Environmental Objectives: Guidelines for Water Management: Sydney Harbour and Parramatta River Catchment (published in October 1999 by the Environment Protection Authority)</i>	Noted. Refer to Engineering Services Report (Appendix 16).
<i>(e) development in the Sydney Harbour Catchment is to protect the functioning of natural drainage systems on floodplains and comply with the guidelines set out in the document titled Floodplain Development Manual 2005 (published in April 2005 by the Department)</i>	Noted. Refer to Engineering Services Report (Appendix 16).
<i>(f) development that is visible from the waterways or foreshores is to maintain, protect and enhance the unique visual qualities of Sydney Harbour,</i>	The development will not have a detrimental visual impact, particularly when viewed from the surrounding locality. Refer to Visual Impact Assessment (Appendix 24).
<i>(g) the number of publicly accessible vantage points for viewing Sydney Harbour should be increased</i>	Views to Sydney Harbour will not be hindered by the proposed works. Refer to Visual Impact Assessment (Appendix 24).
<i>(h) development is to improve the water quality of urban run-off</i>	The proposal will not detrimentally alter the quality of urban run-off on site. Refer to Engineering Services Report (Appendix 16).
<i>(i) action is to be taken to achieve the objectives and targets set out in the Sydney Harbour Catchment Blueprint</i>	Noted. Refer to Engineering Services Report (Appendix 16).
<i>(j) development is to protect and, if practicable, rehabilitate watercourses, wetlands, riparian corridors, remnant native vegetation and ecological connectivity within the catchment,</i>	The proposed works will not alter the ecological connectivity within the locality. Refer to Aquatic Ecology Report (Appendix 07) and Flora and Fauna Report (Appendix 06).
<i>(k) development is to protect and, if practicable, rehabilitate land from current and future urban salinity processes, and prevent or restore land degradation and reduced water quality resulting from urban salinity</i>	The proposed works will not alter the urban salinity levels of the site and its surrounds. Further, there will be no adverse impact to the quality of water in the area.

<i>(l) development is to avoid or minimise disturbance of acid sulfate soils in accordance with the Acid Sulfate Soil Manual</i>	The proposed works will not disturb any acid sulphate soils in the area. Refer to the Stage 2 Contamination and Geotechnical Report (Appendix 09).
CLAUSE 14 – Foreshores and Waterways Area	
Principle	Comment
<i>(a) development should protect, maintain and enhance the natural assets and unique the natural assets and unique environmental qualities of Sydney Harbour and its islands and foreshores</i>	The proposal will maintain the natural assets of the adjoining waterways and the environmental qualities of Sydney Harbour, by having no adverse environmental impacts.
<i>(b) public access to and along the foreshore should be increased, maintained and improved, while minimising its impact on watercourses, wetlands, riparian lands and remnant vegetation</i>	<p>The proposed works will improve public access to the waterway through the provision of a public deck and seating area, located on the western side of the new building. In addition, the proposal will improve the publicly accessible sewerage pump-out and fuel facilities at the site.</p> <p>These works will not impact on watercourses, wetlands, riparian lands and remnant vegetation.</p>
<i>(c) access to and from the waterways should be increased, maintained and improved for public recreational purposes (such as swimming, fishing and boating), while minimising its impact on watercourses, wetlands, riparian lands and remnant vegetation</i>	Refer to above.
<i>(d) development along the foreshore and waterways should maintain, protect and enhance the unique visual qualities of the Sydney Harbour and its islands and foreshores</i>	The development will not have a detrimental visual impact, particularly when viewed from the surrounding locality. Refer to Visual Impact Assessment Report (Appendix 24).

<i>(e) adequate provision should be made for the retention of foreshore land to meet existing and future demand for working harbour uses,</i>	There is no reduction of working harbour land as a result of this proposal; the working elements of the facility are being improved to satisfy modern environmental technologies and standards.
<i>(f) public access along foreshore land should be provided on land used for industrial or commercial maritime purposes where such access does not interfere with the use of the land for those purposes,</i>	Public access along the foreshore will not be detrimentally altered as a result of this proposal.
<i>(g) the use of foreshore land adjacent to land used for industrial or commercial maritime purposes should be compatible with those purposes,</i>	The proposed works will orientate the building on-site towards the adjoining public reserve. This will make the use of the marina facilities compatible with that of the reserve.
<i>(h) water-based public transport (such as ferries) should be encouraged to link with land-based public transport (such as buses and trains) at appropriate public spaces along the waterfront,</i>	There are no public transport facilities which service the site.
<i>(i) the provision and use of public boating facilities along the waterfront should be encouraged.</i>	The proposed works includes a publically-accessible fuel and sewerage pump out system.
CLAUSE 15 – Heritage Conservation	
Principle	Comment
<i>(a) Sydney Harbour and its islands and foreshores should be recognised and protected as places of exceptional heritage significance,</i>	The proposed works will not have any adverse impacts on known heritage items. Refer to Appendix 10 .
<i>(b) the heritage significance of particular heritage items in and around Sydney Harbour should be recognised and conserved,</i>	Refer to Appendix 10 .
<i>(c) the natural, scenic, environmental and cultural qualities of the Foreshores and Waterways Area should be protected,</i>	The proposal will not detrimentally impact on the natural assets of the site and its adjoining waterway.
<i>(d) significant fabric, settings, relics and views associated with the heritage significance of heritage items should be conserved,</i>	Refer to Appendix 10 .
<i>(e) archaeological sites and places of Aboriginal heritage significance should be conserved.</i>	Refer to Appendix 10 .

Clause 17 details the **Objectives** of each zone under the SREP.

The **Objectives** of the **W1 Maritime Waters** zone pertain to the protection of waterways for the safe and equitable use by, and the effective and efficient movement of, private, commercial, public and recreational vessels.

The proposed works will be compatible with, and not adversely impact on the effective and efficient movement of vessels within the waterway as evidenced in the **Coastal & Maritime Assessment** prepared **GBA Coastal Pty Ltd (Appendix 08)**.

Although the existing facility sits within a bay, it is not positioned in an area of extensive vessel thoroughfare. The minor portion of the berths that will be within the W1 Maritime Waters zone is not detrimental to the achievement of such objectives.

With regards to the **W5 Water Recreation** zone, the proposed development will be consistent with the **Objectives** as detailed below:

(a) to give preference to and increase public water-dependent development so that people can enjoy and freely access the waters of Sydney Harbour and its tributaries,

The proposed works are to an existing, commercially operated marina facility. However, the proposed works will increase public access to the wharf and the waterway, as well as provide publicly-accessible facilities such as the proposed deck, seating and kiosk area located on the western side of the new building. As such, it is considered that the proposal is consistent with this objective.

(b) to allow development only where it is demonstrated that the public use of waters in this zone is enhanced and will not be compromised now or in the future,

As previously detailed, the proposed works are to an existing, commercially operating marina facility and the works will improve public access to the waterway and include public facilities such as the deck, seating and kiosk area.

Facilities including fuel and sewage pump out will also assist general public access to the site.

In addition, the proposal will result in an improvement to public safety through extra lighting and passive surveillance.

Overall, it is considered that the public use of the waterway is consistent with this objective.

(c) to minimise the number, scale and extent of artificial structures consistent with their function,

The proposal includes the provision of additional berthing facilities, being artificial structures. However, no unnecessary works or structures are proposed which are inconsistent with their function; therefore it is considered that the proposal achieves this objective.

(d) to allow commercial water-dependent development, but only where it is demonstrated that it meets a justified demand, provides benefits to the general and boating public and results in a visual outcome that harmonises with the planned character of the locality,

As previously detailed, the proposed works will result in an additional 35 berthing facilities for vessels between twelve metres and 30 metres to cater for significant demand in the area.

The proposal includes a new fuel and sewerage system, benefiting the general boating community. In addition, the public deck, seating and kiosk area will encourage activity and use of the waterway.

Richard Lamb & Associates were engaged to undertake a visual impact assessment of the proposed works. The findings concluded that the visual impacts of the proposal would be acceptable. This is discussed in further detail at **Section 8.1** of this report.

(e) to minimise congestion of and conflict between people using waters in this zone and the foreshore,

The proposed works will not have a detrimental impact on the efficient and effective movement of vessels through the adjoining waterway, nor there a conflict between users of the waterway and the foreshore.

GBA Coastal Pty Ltd have considered the potential for conflict as a result of the use of the waterway and have established that, despite the additional berthing facilities proposed, in the locations defined, will not result in conflicts in use of the waterway.

(f) to protect and preserve beach environments and ensure they are free from artificial structures,

The proposed works will not have a detrimental impact on nearby beaches, particularly those to the south of the site. All berthing facilities are located on-site and will not require the use of these beaches.

(g) to ensure that the scale and size of development are appropriate to the locality, and protect and improve the natural assets and natural and cultural scenic quality of the surrounding area, particularly when viewed from waters in this zone or from areas of public access.

The proposed works will not result in any detrimental impact to the surrounding locality, including its natural and scenic qualities. As previously detailed, the Visual Impact Assessment prepared by Richard Lamb & Associates has established that the proposal will not result in an adverse visual impact.

On the landward side of the development, the overall height and form of the existing building, will be generally consistent with the existing built form. Further, the articulation and selection of materials and finishes will result in a structure which complements the setting of the site and which is appropriate in terms of its scale and massing.

Division 2 of Part 3 provides **Matters for Consideration**. Those relevant to this application are reproduced at **Table 10** below, along with a discussion on the compliance of the proposal with these Matters.

Table 10: Part 3 Matters for Consideration

Matter for Consideration	Compliance	Comment
21 Biodiversity, ecology and environment protection		
(a) Development should have a neutral or beneficial effect on the quality of water entering the waterways.	Complies	The proposed development will not adversely impact upon the quality of the water entering the waterway (refer to Engineering Services Report, Appendix 16). The proposed development will also continue to operate as a 'clean marina'.
(b) Development should protect and enhance terrestrial and aquatic species, populations and ecological communities and, in particular, should avoid physical damage and shading of aquatic vegetation (such as seagrass, saltmarsh and algal and mangrove communities).	Complies	The proposed development will not hinder the protection and enhancement of terrestrial and aquatic species, populations and ecological communities. Refer to Aquatic Ecology Report (Appendix 07).

(c) Development should promote ecological connectivity between neighbouring areas of aquatic vegetation (such as seagrass, saltmarsh and algal and mangrove communities)	Complies	The development will not compromise the ecological connectivity of aquatic vegetation. Refer to Aquatic Ecology Report (Appendix 07).
(d) Development should avoid indirect impacts on aquatic vegetation (such as changes to flow, current and wave action and changes to water quality) as a result of increased access.	Complies	Refer above. Refer to Aquatic Ecology Report (Appendix 07).
(e) Development should protect and reinstate natural intertidal foreshore areas, natural landforms and native vegetation.	Complies	The proposal will not alter the intertidal area and the natural landform will be retained. No native vegetation will be impacted upon.
(h) The cumulative environmental impacts of the development.	Complies	The proposed works will not result in any adverse cumulative impacts.
(i). Whether sediments in the waterway adjacent to the development are contaminated and what means will minimise their disturbance	Complies	The proposal will not disturb the surface area of the waterway. Refer to the Stage 2 Contamination and Geotechnical Report (Appendix 09).
22 Public access to, and use of, foreshores and waterways		
(a) Development should maintain and improve public access to and along the foreshore, without adversely impacting on watercourses, wetlands, riparian lands or remnant vegetation.	Complies	The proposed development will include greater public access and a public deck and seating area, located on the western side of the new building. In addition, the proposal will improve the publicly accessible sewerage pump-out and fuel facilities at the site.
(b) Development should maintain and improve public access to and from the waterways for recreational purposes (such as swimming, fishing and boating), without adversely impacting on watercourses, wetlands, riparian lands or remnant vegetation.	Complies	The proposal will improve public access to the waterway, without compromising the integrity of the watercourse or existing native vegetation. Refer to Aquatic Ecology Report (Appendix 07) and Flora and Fauna Report (Appendix 06).
(e) The need to minimise disturbance of contaminated sediments.	Complies	The proposal will not cause adverse disturbance to sediments. Refer to the Stage 2 Contamination and Geotechnical Report (Appendix 09).

24 Interrelationship of waterway and foreshore uses		
(a) Development should promote equitable use of the waterway, including use by passive recreation craft.	Complies	The proposed development will not result in any reduction in the equitable use of the waterway.
(b) Development on foreshore land should minimise any adverse impact on the use of the waterway, including the use of the waterway for commercial and recreational uses	Complies	As previously detailed, the proposed development will not adversely impact on the integrity of the waterway or existing native vegetation. In addition, the proposal will not hinder future recreational or commercial uses of the waterways. Refer to the GBA Coastal Engineering Report (Appendix 08).
(c) Development on foreshore land should minimise excessive congestion of traffic in the waterways or along the foreshore.	Complies	<p>The proposed development will not result in a significant amount of additional traffic in the waterway, thereby not contributing to congestion, of vessels in this area. Further, the facility is not located within a significant vessel thoroughfare, thereby not impacting upon the existing movement of vessels through the bay.</p> <p>Refer to the GBA Coastal Engineering Report (Appendix 08).</p>
(d) Water dependent land uses should have priority over other land uses.	Noted	
(e) Development should avoid conflict between the various uses in the waterways and along the foreshores.	Complies	The proposal will not result in any conflict between land uses, instead endeavouring to improve the relationship between private and public arrangements over the current situation.
25 Foreshore & Waterways Scenic Quality		
<p>The scale, form, design and siting of any building should be based on an analysis of:</p> <ul style="list-style-type: none"> (i) the land on which it is to be erected, and (ii) the adjoining land, and (iii) the likely future character of the locality 	Noted	Refer to accompanying Architectural Drawings .

(b) Development should maintain, protect and enhance the unique visual quality of Sydney Harbour and its islands, foreshores and tributaries.	Complies	The proposal will not alter the visual quality of the landscape to any significant degree over the current situation. In addition, the proposed uses are consistent with the existing and surrounding land uses. Refer to the Visual Impact Report (Appendix 24).
(c) The cumulative impact of water-based development should not detract from the character of the waterways and adjoining foreshores.	Complies	The proposal will not result in adverse cumulative impacts on the character of the waterway, nor the adjoining foreshore area. Refer to the Visual Impact Report (Appendix 24).
26 Maintenance, Protection and Enhancement of Views		
(b) Development should minimise any adverse impacts on views and vistas to and from public places, landmarks and heritage items.	Complies	The works will result in limited visual change and there will be no adverse impacts in terms of views and vistas.
(c) The cumulative impact of development on views should be minimised.	Complies	The proposal will not result in any adverse cumulative impacts

Clause 33 states that the consent authority must not grant development consent to development for the purpose of a commercial marina on land within Zone No W1 unless it is satisfied that access between the marina and the foreshore will not be provided on or across land within Zone No W2, W3, W7 or W8. The portion of the proposed development which will be within Zone W1 will be limited to a small part of the C-Arm. As such, access between this portion of the marina and the foreshore will be via the W5 Zone in which the rest of the marina is located, thereby being consistent with this clause.

Clause 36 deals with Development on Land Comprising Acid Sulfate Soils. Matters of excavation, acid sulfate soils and contamination have been addressed in a Geotechnical, Acid Sulfate Soil and Stage 2 Contamination Assessment Report prepared by Martens & Associates; this is available at **Appendix 09**. The conclusions of this report pertaining to Acid Sulfate Soils are as follows:

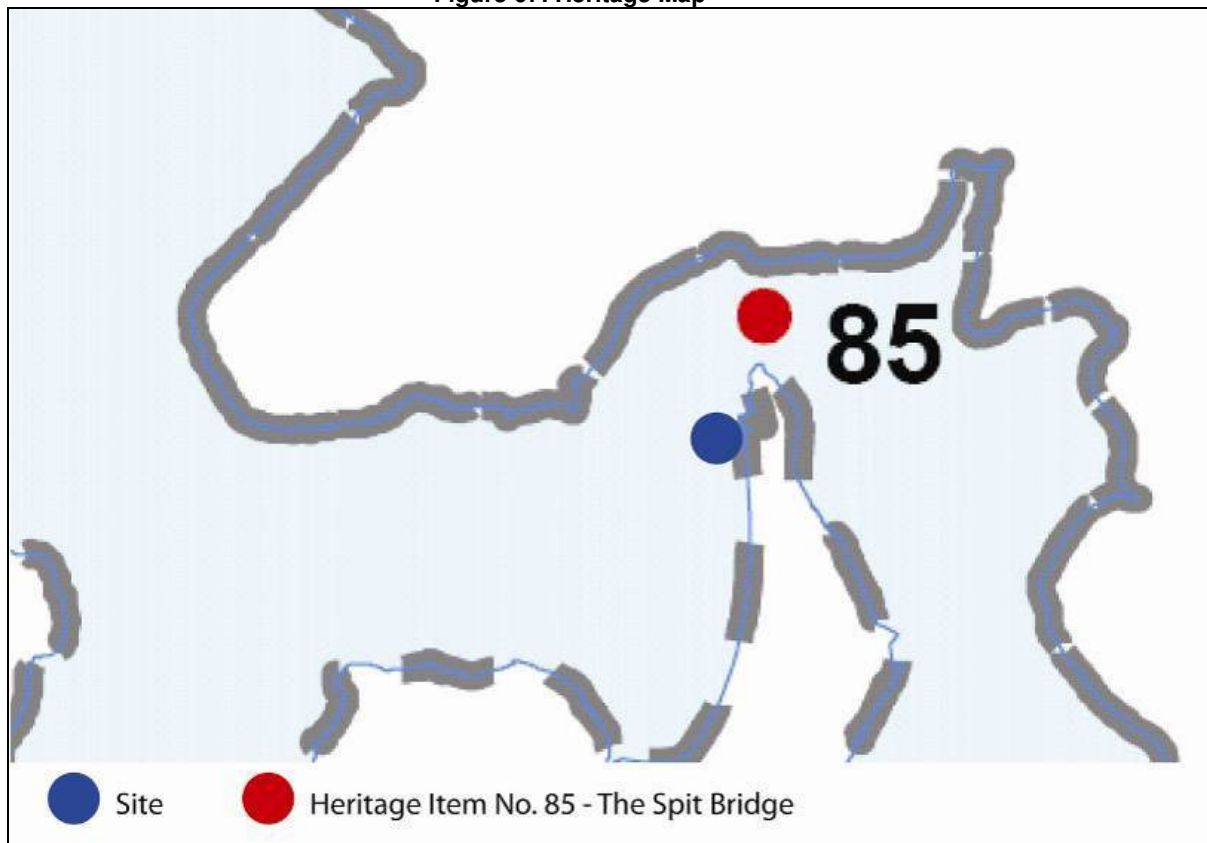
On the basis of site sub-surface investigations and result of the pHKCL and pHOX, the materials tested are classified as neither potential ASS nor actual ASS. On the basis of the above, further site ASS testing and a site management plan is not considered necessary.²³

The site is not a strategic foreshore site; therefore **Part 4** of the SREP is not applicable to this development.

²³ Geotechnical, Acid Sulfate Soil and Stage 2 contamination Assessment, Martens & Associates Page 20.

Part 5 addresses **Heritage**. As detailed in the **Heritage Impact Assessment** prepared by **Weir & Phillips (Appendix 10)**, the existing buildings on the site are not listed under the NSW Heritage Act nor under the Mosman Local Environmental Plan 1998. The site is however, located within the vicinity of heritage item No. 85, known as The Spit Bridge, which maintains Stage heritage significance (**Figure 07**).

Figure 07: Heritage Map



Source: <http://www.planning.nsw.gov.au>

As detailed by Weir & Phillips, the proposal is a modest expansion of the existing marina facility and the majority of the works will take place on its southern side, well away from the Spit Bridge. When viewed from the Spit Bridge, the impact of the new development will be minimal. In addition, the proposal will not alter the size of the curtilage around the heritage item and will therefore allow the Spit Bridge to be read and understood from the existing vantage points.

As a result of the proposed alterations, Weir & Phillips concludes that the proposed development will not have any long-term impact on the heritage significance of the Spit Bridge, being sympathetic to the marine character of the locality and maintaining the visual bulk and dominance of the Bridge within its setting.

Overall, the proposed development will satisfy the requirements of the SREP.

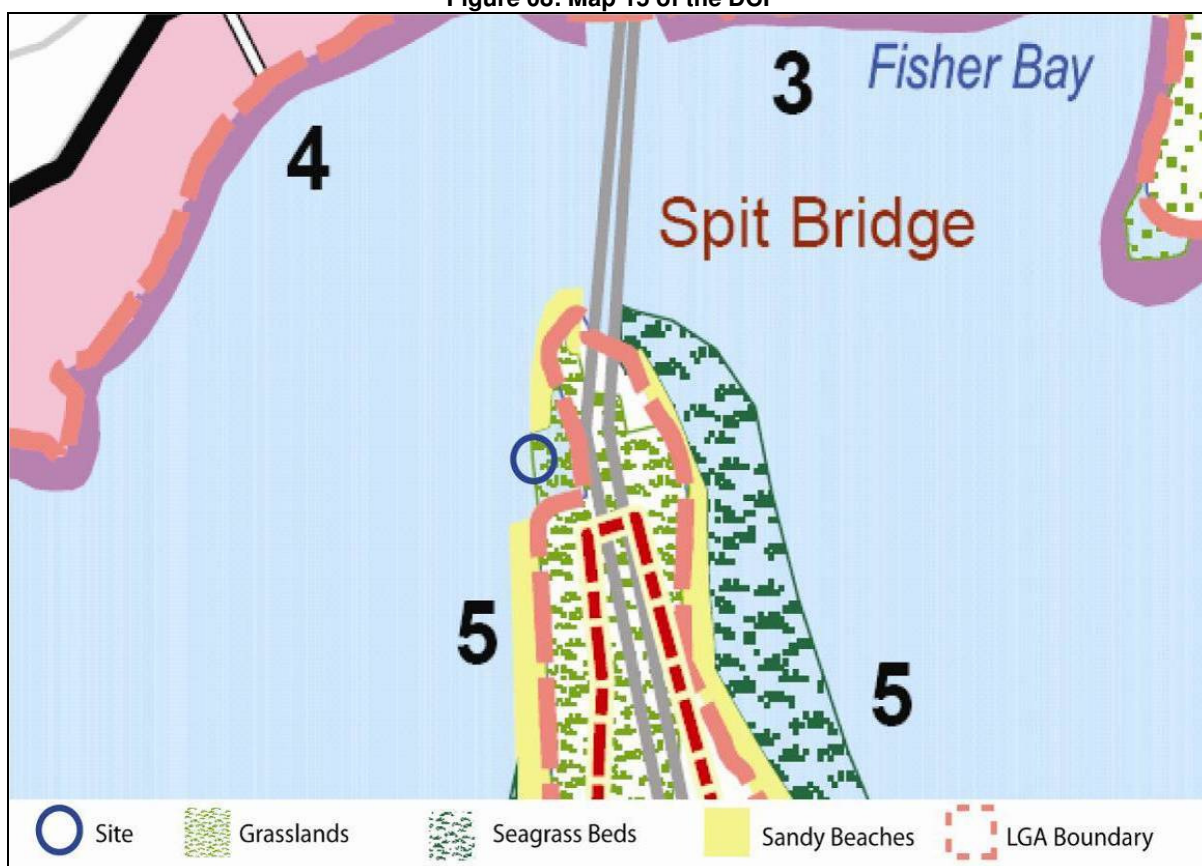
7.3.2 Sydney Harbour Foreshores & Waterways Development Control Plan 2005

The site is also subject to the Development Control Plan for SREP (Sydney Harbour Catchment) 2005 – Sydney Harbour Foreshores & Waterways Area (the DCP).

Part 2 of the DCP deals with **Ecological Assessment**.

In accordance with the Ecological Communities Map detailing areas of ecological significance, the site is situated within Grasslands (terrestrial) and adjacent to Sandy Beaches (aquatic), in accordance with **Map 15 (Figure 08)**.

Figure 08: Map 15 of the DCP



Source: <http://www.planning.nsw.gov.au/>

This Part of the DCP provides Performance Criteria to protect the important communities from adverse effects of development. In accordance with **Table 1** of the DCP, the Grasslands are of 'Low' conservation value, whereas the Sandy Beaches are of 'Medium' conservation value.

Table 4 details the **Performance Criteria** applicable to development within, or adjacent to, 'Low' conservation value terrestrial communities. The proposed works will not result in any loss of existing significant vegetation on site nor on the adjoining public reserve. In addition, the proposal will not detrimentally impact on the soil quality of the site or its adjoining lands.

Table 6 details the **Performance Criteria** applicable to development within, or adjacent to, 'Medium' conservation value aquatic communities. As previously detailed, the proposed development will have no environmental impact upon the adjoining beaches, as all facilities will be within the proposed footprint of the marina and do not require the use of these areas.

As such, the proposal meets the **Performance Criteria** set out in **Part 2** of the DCP.

Part 3 of the DCP addresses **Landscape Assessment**. In accordance with the Map 15 (**Figure 08**), the site is prescribed as being located within **Landscape Character Area No. 5**, which applies to The Spit.

The proposed development will be consistent with the Statement of Character & Intent by improving public access to the foreshore and marina uses, along with proposing works to an existing marina facility.

The proposal is also consistent with the **Performance Criteria** by enhancing the recreational focus of the foreshore, through increased permanent facilities, without adversely impacting on the scenic and visual qualities of the site and its surrounds. There will be no changes to the natural shoreline, nor to the landscape appearance of the site. As such, the proposal will be consistent with the landscape character prescribed for the site.

Part 4 of the DCP deals with **Water Based and Land-Water Interface Development**. **Clause 4.2** provides **General Requirements**. The proposed development will be consistent with these by:

- improving public access arrangements to the waterway area, in particular access to the fuel and sewage pump-out facility and the public deck;
- providing a minimal increase to berthing facilities, without adversely impacting on the flow of vessels within the waterway area, nor causing congestion and conflict;
- providing facilities that are consistent with the existing use of the site, thereby enhancing the visual appearance of the foreshore and warranting such a location;
- ensuring that there will be no interference with recreational activities undertaken in proximity to the site;
- responding to an evident demand as a result on-going enquires received by d'Albora for additional berths for vessels between twelve and 30 metres; and
- retaining the same building height and a similar scale to that of the existing building on-site, keeping the built form to a minimum and of a non-dominant nature.

The proposed development will not decrease the level of public foreshore access over the existing situation; rather, it will provide improved public areas and boating services (**Clause 4.3 – Foreshore access**). In addition, the provision of a new public deck in and around the ground floor uses of the

marina facility presents these spaces as part of the public domain and encourages pedestrian activity and access to the waterway.

The proposal includes the replacement of the existing building on-site. However, there will be no significant increase to the height of the structure, which has been designed to be of the same scale and massing as the existing building. As such, it is considered that this will result in built form which is sympathetic to its surroundings and will not be visually dominant within the landscape (**Clause 4.5**).

Clause 4.6 pertains to **Signage**. The proposal will replace the existing free standing business identification sign and will also include a smaller sign at the south-eastern corner of the site. The proposed signage is consistent with the principles section in this clause as their design ensures that they are representative of the marine character of the locality, are not extensively illuminated and will not intrude the skyline. Signage is discussed in further detail and in relation to State Environmental Planning Policy No.64 at **Section 7.2** of this report.

Clause 4.7 addresses Marinas (Commercial and Private) and stipulates a series of principles which have been discussed below.

Location

The proposal is for works to an existing commercially operated marina facility and as such, its location is suitable. Further, the proposed works will not jeopardise the safe navigation or adversely impact other water users.

Design and Layout

In terms of design and layout, the proposal will provide a minimum number of structures and will not, in any way, “alienate” the waterway, with the proposed works being within the existing envelope of the marina. The proposed structures will be linked to the existing pontoons, with only new piles being required to facilitate the proposal.

There will be no dredging required to accommodate the works and they will improve public access to the fuel and sewerage pump-out facilities, as well as providing a new public deck and seating area. Overall, the impact of the proposal will be consistent with the current operation, in terms of air and water quality and marine habitat.

Facilities and Services

The proposed works will include the relocation of the fuel and sewerage pump-out system. These new facilities will benefit the general boating community, providing improved services. The proposal will also increase the number and variety of berthing facilities available on-site, catering for the current demand in the locality.

Visual Impact

The implementation of the proposal will result in a very limited visual change over the existing situation. As previously detailed, the Visual Impact Assessment, prepared by Richard Lamb & Associates (**Appendix 24**) established that the visual effects and impacts are acceptable in this instance.

Environmental Management

The proposed works will result in a continuation of the existing use of the site and as such, will be consistent with the current Environmental Management practices. There will be no changes with regards to pollutant sources, with appropriate management techniques consistent with current practices.

With regards to traffic and parking, d'Albora Marinas maintains a car parking arrangement with Mosman Council to utilise the nearby parking located within the adjoining public reserve due to the physical constraints associated with locating sufficient parking on-site. As detailed at **Chapter 3** of this report, previous conditions of consent have ensured that the owners of the site annually purchase parking permits for its patrons and therefore dealing with the shortfall of car spaces on the site. In addition to the parking facilities located within the public reserve, there is a small parking facility, owned by Council, to the north-east of the site, providing eight parking spaces.

Use of the subject premises will be consistent with existing operations in terms of noise and will not create any additional impact on land-based uses. Lighting will be improved to encourage activity and the safety of users, however, there are no anticipated impacts associated with the lighting or night navigational safety.

Health and Safety

Health and safety standards will be consistent with current practices at the site.

Overall, the proposed development will be consistent with the requirements of the DCP.

7.4 Local Matters

7.4.1 Mosman Local Environmental Plan 1998

The landward side of the site is subject to the *Mosman Local Environmental Plan 1998 (LEP)*.

Clause 2 provides the **Objectives** of the LEP. The proposed development is consistent with the relevant **Objectives** of the LEP, as follows:

(c) To provide business opportunities for a range of uses, including residential, which encourage local employment and economic growth

The proposed development involves the substantial refurbishment of an existing marina and berthing facilities on the site. The works will improve the available facilities, as well as increase the berthing capacity. The development will therefore ensure economic growth through the attraction of more patrons to The Spit locality. As a result of the increased facilities at the site, employment opportunities will also be created during both construction and on-going operation of the site.

Additional floor space at the first floor of the building will provide additional economic opportunities to the marine industry in this location and local employment. In addition, the extension of floor space will improve the commercial viability of the site and enhance economic growth in this location.

As such, the proposal will satisfy this Objective.

(d) To provide for a range of recreational and sporting opportunities to meet the needs of residents of and visitors to Mosman

The proposal will improve the quality and quantity of facilities available on-site, benefiting the recreational boating community and visitors of Mosman.

(f) To enhance and protect the amenity of Sydney and Middle Harbours.

The proposed alterations and expansions at this site will not adversely impact on the amenity of Sydney & Middle Harbour. In this regard, investigations have been undertaken by Wilkinson Murray Pty Ltd to contemplate the acoustic impacts associated with the increased use of the site. The conclusions of this report are that the proposed alterations and additions at the facility will not result in adverse acoustic conditions.

In addition, the visual change of the waterway, as a result of the proposed alterations and additions will not be so significant that any material change in the visual amenity enjoyed from locations surrounding the site will be affected.

As such, the amenity of Middle Harbour will be protected as a result of this proposal.

(g) To retain views to and from water and foreshore reserves from and to public areas and streets and residential allotments

A Visual Impact Analysis has been undertaken by Richard Lamb & Associates to assess the impact of the proposed alterations and additions to the marina.

Full copies of this report may be found in **Appendix 24**.

(h) To protect and conserve the natural and built heritage of Mosman

Matters of heritage have been dealt with in reports by both **Weir & Phillips** and **Cosmos Archaeology**.

The conclusions of these reports are that the proposed alterations and additions will not result in any adverse impacts to items of natural and built heritage.

Full copies of these reports may be found in **Appendix 10** and **11**, respectively.

(i) To manage change in a way that ensures an ecologically and economically sustainable urban environment in which the needs and aspirations of the community are recognised

The proposed development will serve the needs of the community through upgrading and extending recreational boating facilities that are currently operating from this site. The outcome achieved is suitable in economic terms and results in a minor intensification of the use of the site.

Ecological matters have been addressed and will be appropriately managed.

As such, the use of the site will continue to operate in a sustainable manner within this urban environment.

Part 3 of the LEP addresses **Business Zones**. The site is located in **Zone 3(d) Spit Waterside Business** and the relevant **Aims and Objectives** of the zone are detailed below;

(1) Objectives of Zone 3(d) Spit Waterside Business

- *Maintain The Spit as a prime recreational boating resource and working marine area with associated commercial activities.*

The proposed development includes the extension of berthing facilities to cater for the current demand evident within the locality. The extension of the use in this regard will allow for the retention of the recreational capacity of The Spit and reinforce its role as a boating resource.

In addition, the proposed works to the existing building allows for improved marine-related workshop tenancies, promoting The Spit and its 'working marine area' context. The outcomes will result in improved environmental practices that are reflective of more modern day technology and will ensure that the role as a working marine area is reinforced.

The commercial activities proposed at the site will see the retention of commercial activities that support the marine industry in this location, without adverse impact. Such uses are a subset of the primary use of the site for marine purposes and will be complementary to the existing economic conditions.

- *Allow development which is unlikely to generate additional traffic and demand for additional car parking*

Traffic and parking is discussed at **Section 8.3** of this report.

- *Maintain and improve the scenic quality of The Spit by ensuring the external appearance of buildings is of suitable material and colours and of a height and scale which is unlikely to affect the environment adversely*

The external appearance of the proposed development will not adversely affect the scenic qualities of the area, as the proposed materials and finishes will complement the surrounding environment. The materials employed will be recycled from the existing facility, where possible, and will reinforce the marine characteristics of this locality.

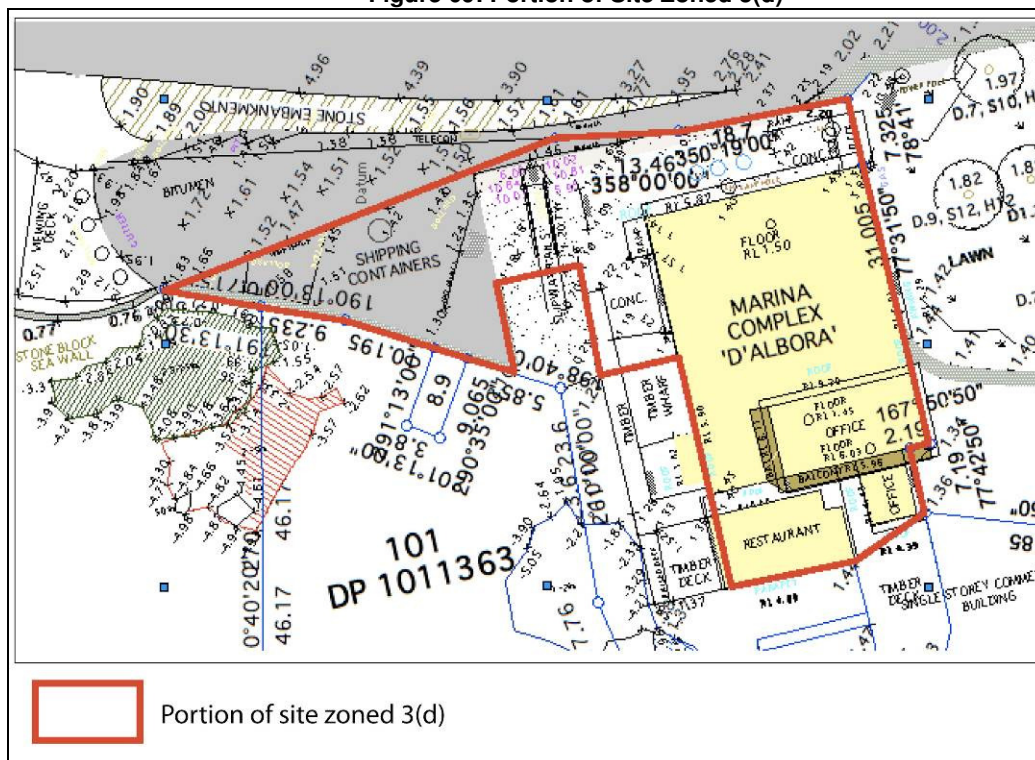
The extension of the building height that is proposed at the first floor level will result in a built form outcome that provides for limited visual change in its context. The scale of such will therefore be commensurate with the existing outcome on the site and will not result in any adverse environmental outcomes.

As stipulated in the development control table of **Clause 16(2)**, the proposed development is permissible with consent, being for the purposes of a 'marina' and 'marine sales and service centres'.

The maximum floor space ratio (FSR) for development within Zone 3(d), as addressed under **Clause 17**, is 1:1. The portion of the site which is in the Zone 3(d) (**Figure 09**) is approximately 1,870m².

Based on this area, the proposed development has a floor space ratio of 0.94:1 and hence does not exceed the maximum permitted FSR for the site.

Figure 09: Portion of Site Zoned 3(d)



Source: Corben Architects

Clause 18 of the LEP addresses building height requirements. The relevant height Objective, as detailed under **Clause 18(1)**, has been reproduced below:

a) To ensure that buildings resulting from new development are compatible with existing buildings in terms of height and roof form to produce a cohesive streetscape

The proposed development will be consistent with this objective, as works to the building will provide an overall outcome that is generally consistent with the height of the existing building. The outcome will not result in an overbearing structure to the surrounding road network, nor to the adjoining Spit Reserve to the south of the site.

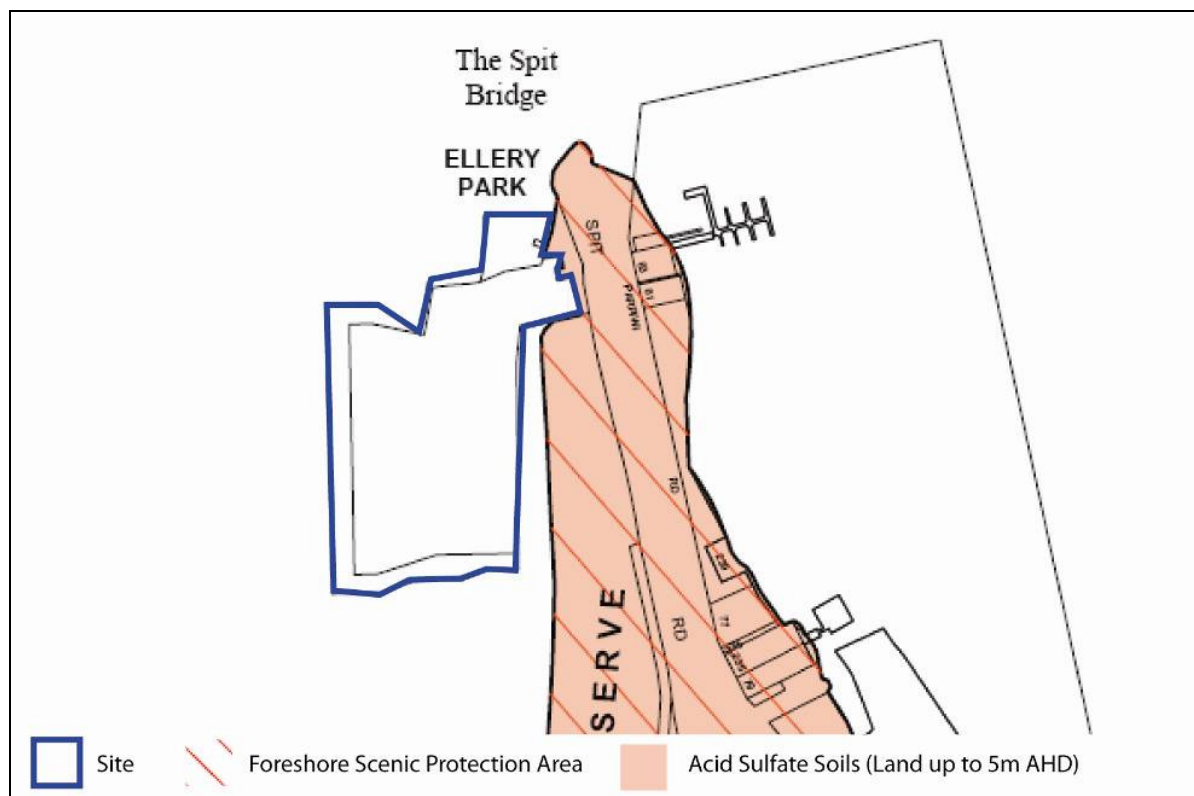
Clause 18(2)(b) stipulates that development within the 3(d) Zone must not exceed eight metres in height. The proposed height of the building will be 9.97 metres, exceeding this maximum height limit. However, the height of the structure is generally consistent with the height of the existing building and is seen as like-for-like replacement in this regard. The design of the roof form on the building has been incorporated to ensure that environmentally sustainable measures are incorporated by way of solar panels. In addition, the modulation of the roof form at this level ensures that a positive architectural expression is achieved with the surrounding landscape. In this regard an appropriate trade-off is achieved by improving the overall architectural expression of the building, without adverse impact.

Part 8 provides Environmental Controls.

Clause 27 deals with **Foreshore Scenic Protection**. As identified in the Foreshore Protection Map (**Figure 10**), the site is located within a Foreshore Scenic Protection Area.

The aim of this area, in conjunction with the *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SREP)*, is to protect and enhance the natural, visual, environmental and heritage qualities of Mosman. As discussed at **Section 7.3** of this report, the proposal is consistent with the SREP.

Figure 10: Foreshore Scenic Protection and Acid Sulfate Soils Map



Source: www.mosman.nsw.gov.au

Clause 28 addresses development within the foreshore building line. As illustrated at **Figure 10** above, the site is not subject to the foreshore building line.

Clause 29 of the LEP deals with the issue of contaminated sites. Matters of contamination have been dealt with at **Section 8.2** of this Report.

Clause 31 details Council's provisions in relation to excavation. The objective of this clause is to control soil erosion, sedimentation, tree loss and drainage impacts associated with land form modifications.

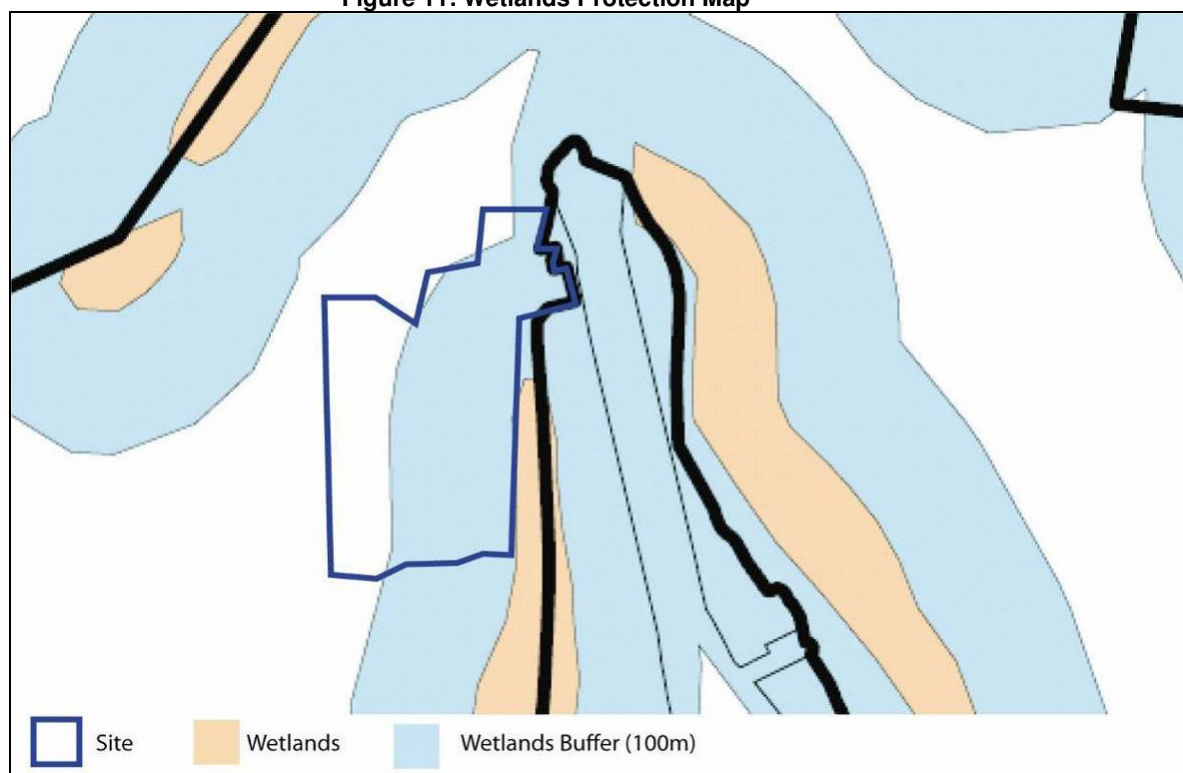
The proposed works to the existing building will involve replacement piling beneath the building, to substantially replace its existing structure. This will ensure the structural longevity of the building.

Therefore a limited amount of excavation is required to accommodate the proposed works and it is considered that these may be undertaken without adverse impacts on soil conditions. Adequate construction techniques will be employed to ensure that no adverse impacts are incurred.

As identified at **Figure 10**, the site is identified as potentially containing Acid Sulfate Soils. This matter has been dealt with at **Section 8.2** of this Report.

Clause 31B deals with **Wetlands**. As identified at **Figure 11**, the site is located in a wetlands area. This matter has been addressed in the Aquatic Ecology Assessment prepared by WS Rooney & Associates at **Appendix 07**.

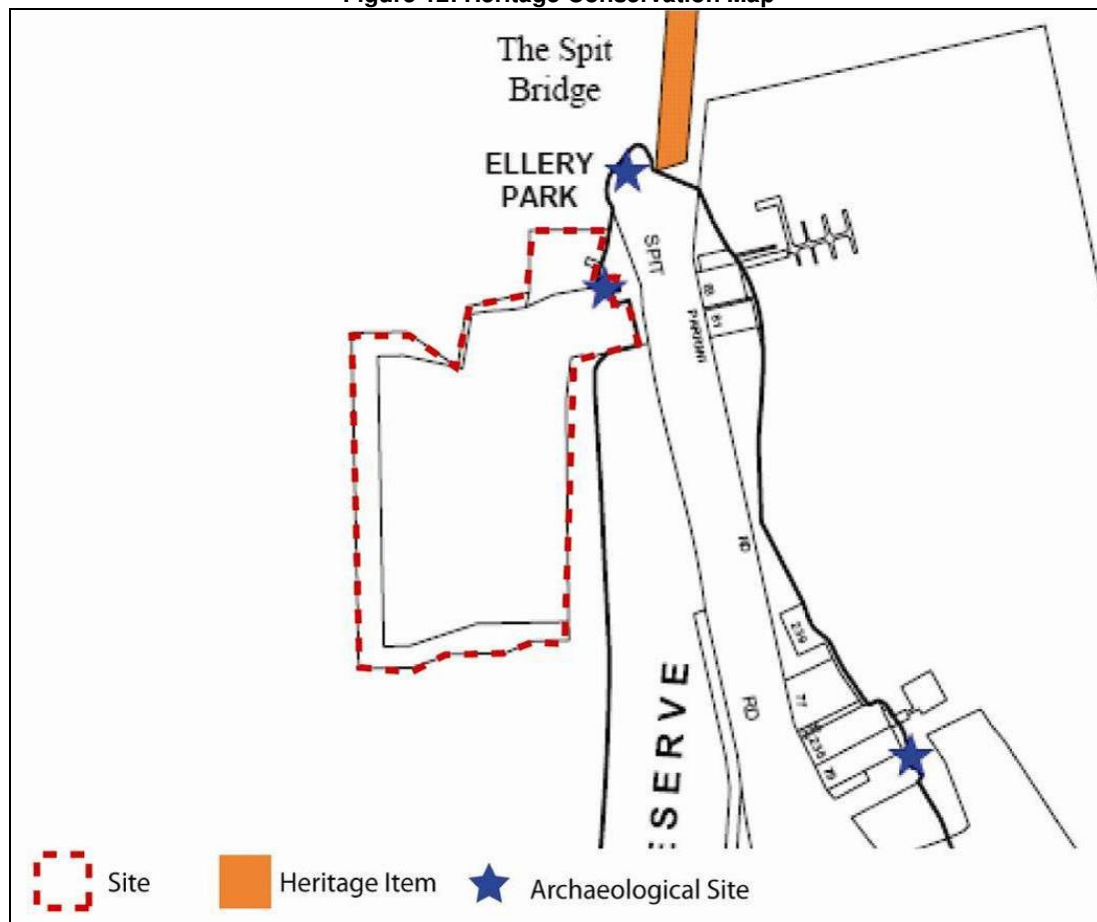
Figure 11: Wetlands Protection Map



Source: www.mosman.nsw.gov.au

Part 9 addresses Heritage Conservation. According to **Figure 12**, the subject site is an identified archaeological site, with an additional archaeological site located within proximity, to the north.

Figure 12: Heritage Conservation Map



Source: www.mosman.nsw.gov.au

The site itself does not contain any items of heritage significance.

The site is within the vicinity of the Spit Bridge, being an item of heritage significance.

Schedule 3 Archaeological Sites of the LEP describes the site as the site of a former Explosives Wharf. However, as discussed in the Weir & Phillips assessment, the Explosives Wharf and its site cannot be accurately located and therefore it cannot be determined with a high level of certainty whether or not the development will have a direct impact on its significance.

Schedule 3 of the LEP also describes the archaeological site to the north of the marina as being the remains of the former Bridge and Seawall. As discussed in the Weir & Phillips assessment, the proposed works are away from these remains and as the proposal is of a modest scale, there will only be a minimal impact on these remains. It is considered by Weir & Phillips that the proposal will continue to co-exist with these remains harmoniously, as it has done so for many years.

The Conclusion of the **Weir & Phillips Heritage Impact Assessment** is as follows:

The proposed works at the d'Albora Marina at the Spit:

- *will not have any long-term impact on the heritage significance of the Spit Bridge;*
- *will not have any additional long-term impact on the heritage significance of the Explosives Wharf;*
- *will not have any additional long-term impact on the heritage significance of the Site of the former Explosives Wharf; and*
- *will not have any long-term impact on the heritage significance of the Remains of the Former Bridge and Seawall.²⁴*

A full copy of this report is available at **Appendix 10**.

7.4.2 Development Control Plan – Mosman Business Centres 2000

The proposed development achieves the aims of the *Development Control Plan – Mosman Business Centres* (DCPMBC) by enhancing the image of Mosman and the achievement of a high level of amenity, as a result of development.

Section 4 of the DCPMBC deals with **Desired Character**.

Specifically, **Section 4.11** details the **Desired Character Objectives** relating to development within the **Spit Waterside Area**.

The objectives state that the Spit must continue to function as the primary recreational boating resource with a working marine area and associated commercial activities. As previously detailed, the proposed development includes a continuation of the marine-related workshop tenancies currently onsite and as such, achieves these objectives. Significant public benefit will accrue through the proposed works, which will include greater public access and a public deck and seating area. This will increase the amenity of public linkages as stated under the Objectives.

Section 5 deals with **Urban Design and Planning Guidelines**, while **Section 6** addresses **Environmental, Amenity and General Guidelines**. Overall, the proposed development complies with these Sections of the DCPMBC, which are reproduced at **Appendix 26**. Key matters are discussed below.

Section 5.4 deals with Urban Design and Planning Guidelines specific to Spit Waterside. The proposed development will be compatible with the objectives of this section as the proposed structure will generally maintain the continuum of built form as it currently exists. The minor extension of the building at the first floor will provide an urban design outcome that is suited to this location, without adverse impact on neighbouring land uses.

²⁴ Heritage Impact Assessment, Weir & Phillips, Page 24

The selection of materials and finishes will complement the waterside location of the site and other marine uses in proximity.

The proposed works will not result in any significant visual change over the existing situation, as evidenced by the accompanying montages.

The Planning Guidelines within this section which pertain to Vehicular Access state that no new access is permitted from Spit Road. The proposed alterations to the existing access point to the site seek to improve a substandard access outcome that currently exists on the site. A new access is not proposed. The changes will, however, allow for egress from the site in a forward direction, which will improve the safety outcomes associated with the use of the site.

Section 6.4 addresses Advertising and Business Signs. The implementation of new signage is dealt with at **Section 7.2** of this Report.

Section 6.5 deals with Retail Displays. The proposal is consistent with the objectives of this section as it will provide active uses and frontages to both Spit Road and the waterway. The proposal includes a large boat showroom tenancy with an additional outdoor display area fronting Spit Road, increasing activity at this frontage as well as visual interest. In addition, the public deck and kiosk space on the western side of the building will promote pedestrian activity and use of the waterfront area.

Overall, the proposal is consistent with the Objectives and Planning Guidelines of this DCP.

7.4.3 Mosman Transport Development Control Policy

The site is subject to the provisions of the *Mosman Transport Development Control Policy* (Transport DCP).

Matters of traffic have been contemplated by Traffix Pty Ltd. The Conclusions of this report, having regard for the matters contained in this DCP, are as follows:

- *The proposed development is expected to result in a moderate increase in parking and traffic demands. This is due to the relatively small increase in marina capacity and to the fact that the areas within the building are ancillary to the marina use and are principally intended to improve the efficiency and amenity of existing tenancies that are to remain;*
- *The traffic demands can be readily accommodated and the operation of the site will be significantly safer and more efficient than the present sub-standard arrangement using Council's roadway. Specifically, as discussed, the existing roadway is unsafe due to the sharp acute angle for left turn exit movements, the potential for headlight glare, the potential for*

onstreet queuing effects and the requirement for trucks to reverse out of the roadway into oncoming traffic which is extremely hazardous and non-conventional;

- In contrast, the proposed new indented kerbside lane will assist vehicle manoeuvring and in effect act as a deceleration lane for access to the site as well as Council's car park;*
- The additional parking demand, though moderate in absolute terms. Cannot be met at peak times during the summer months, based on surveys undertaken. Accordingly, management measures are proposed to reduce private car travel. These measures will apply to existing and future marina occupants as well as staff, so that there is a prospect for a net improvement in parking conditions in the locality;*
- The proposed new indented bay will comply with all relevant standards/guidelines, notably the requirements of AS2890.1 and AUSTROADS the opportunity is available to Council to improve its roadway should it see benefit in doing so;*
- Provision is made for the normal servicing requirements of the site, which are essentially unchanged in their nature and frequency, though with improved access.*

It is therefore concluded that the propose development is supportable on traffic planning grounds²⁵

A full copy of this report may be found at **Appendix 19**.

²⁵ Traffic Impact Assessment, Traffix Pty Ltd, Page 22

8 KEY MATTERS FOR ASSESSMENT

The key matters for assessing the impact of the application are summarised as follows:

- Visual Impact and Amenity
- Soils, Sediments, and Water
- Traffic and Access
- Marine Safety and Access
- Noise & Air Quality
- Aquatic Flora and Fauna
- Hazards and Risk; and
- Waste Management

This section of the report therefore assesses these key matters as set out in the Director-General's Requirements.

8.1 Visual Amenity

Richard Lamb & Associates was engaged to undertake a Visual Impact Assessment of the proposal (**Appendix 24**). This assessment concluded that:

In summary, the visual effects and impacts of the proposed redevelopment are considered to be acceptable and the Application is recommended for development approval on visual grounds.²⁶

The findings of this assessment have been summarised with regards to the Director-General's key issues.

Design and Visual Appearance of the Proposed Works

With regard to the design and visual impact of the proposed works, Richard Lamb & Associates concluded that:

The most notable features of the proposed redevelopment would be a) the change in orientation of vessels in the east-west direction compared to the existing north-south orientation on the west side of Arm C. The slightly greater number, but smaller size of vessels, would be noticeable compared to the existing lesser number but larger size of vessels, b) the vessels proposed to be moored at the THeads of Arm A, B and C (both northern and southern T-Heads of Arm C and southern T-Heads of Arms A and B), c) the proposed extension of Arm N in the northern direction, approximately in the alignment of Arm B and vessel storage on its northern T-Head, d) the proposed relocation and larger extent of Arm D along the western edge of the proposed hardstand, e) the proposed hardstand in the

²⁶ Visual Impact Assessment, Richard Lamb & Associates, Section 4.0

location of the existing slipway and the associated boat lift, f) a new two storey building with a relatively larger second level component compared to the existing stepped back second level along the eastern façade, g) the turning circle and a small number of additional parking to the south of the new marina building.

The proposed reconfiguration and slight extensions of Arm A in the southern direction and Arm B in the northern direction would not be highly perceived.

The proposed redevelopment is a very small percentage of the total existing extent of the marina. The increased extent would not have any significant visual effect and impact on most of the medium range and distant viewing locations.²⁷

Visual Impact on the Public Domain

In terms of the visual impact of the proposed works on the public domain, Richard Lamb & Associates have supplied the following conclusions:

There would be localised higher effect and impact of the proposed extensions, alteration and additions on the close range waterway locations, a small section of Spit West Reserve, Spit Road and The Spit Bridge. Views of the proposed redevelopment would be mostly screened due to the vegetation in Spit West Reserve when seen from private domain locations constituted by commercial developments of the eastern side of spit Road.

There a number of reserves and walking tracks located within the visual catchment of the development site. However, it was assessed that the proposed redevelopment would have low to medium effects and impacts on those locations such as medium range locations on Spit West Reserve, the Pearl Bay foreshore, Quakers Hat Park, walking track below Beauty Point Road, walking track below Delecta Avenue, Parriwi Park, Laura Street Reserve and Spit East Reserve.

The proposed redevelopment would be highly perceivable from medium range locations in Seaforth locality due to direct views of the marina from those locations without any intervening topographic or vegetation features. However, due to the highly elevated and expansive and panoramic nature of the views, the view composition offers very high maritime and urban features compatibility. Hence. Other than higher visibility as in the existing case, the proposed redevelopment would have overall low visual effects and impacts on these locations.

The proposed redevelopment would also be perceivable from public and private domain locations in Beauty Point, however, the vessels on Arm C would provide some screening effect to other components of the redevelopment as in the existing case.

²⁷ Visual Impact Assessment, Richard Lamb & Associates, Section 4.0

The visibility of the proposed redevelopment from Balgowlah Heights, Clontarf, Northbridge and most of the medium and distant waterways location would be similar to the visibility of the existing marina. Hence, there would not be any increased visual effects and impacts on these locations due to the proposal.²⁸

A full copy of this report may be found at **Appendix 24**.

8.2 Soils, Sediments, and Water

As detailed previously, Martens & Associates were retained to prepare a Stage 1 Contamination Assessment and a Geotechnical, Acid Sulfate Soil and Stage 2 Contamination Assessment (**Appendix 20 and 09**).

The findings of these assessments have been summarised below, in relation to the Director-General's key issues.

Water Quality Impacts – Surface and Groundwater

The field observations established ground water fluctuating between 0.1 – 0.2 metres AHD due to the site's proximity to Middle Harbour and the permeability of the underlying sandy soil.

The groundwater appeared to be clean; however results indicate there are a number of contaminate levels above guideline values. The report concludes that the detected groundwater contamination is likely to be a result of minor leaking from small spillages during re-fuelling of tanks, boats or vehicles. As such, Martens & Associates have supplied the following conclusions in this regard, with respect to their findings and necessary remedial action:

Site investigations (Stage 2 assessment) completed included the collection and analysis of soil samples for a range of parameters determined to assess potential contamination from past and existing uses. The investigation identified no contaminants above NSW DEC (2006) guideline levels for commercial and industrial land use. Following SCC and TCLP testing, the fill in the proposed excavation is classed as 'General Solid Waste' in accordance with EPA (1999) guidelines. The natural soil located below the fill is not contaminated and requires no specific measures for treatment or disposal. This material is considered to be VENM.

A Remedial Action Plan (RAP) is required for the site to address the removal of UST's identified as a likely source of groundwater hydrocarbon contamination. Considering the proposed development will require excavation of fill material, such material is considered 'Inert Waste' and is to be disposed of at an appropriate waste handling facility.²⁹

A full copy of this report may be found at **Appendix 09**.

²⁸ Visual Impact Assessment, Richard Lamb & Associates, Section 4.0

²⁹ Geotechnical, Acid Sulfate Soil and Stage 2 Contamination Assessment, Martens & Associates, Page 33

Erosion and Sediment Control

Matters of erosion and sediment control have been identified in the **Martens & Associates Engineering Services Report (Appendix 16)**. The recommendations within this report are detailed below:

All required construction works shall comply with the guidelines and principles set out in the Landcom 'Managing Urban Stormwater' handbook (2004). Locations of sediment and erosion control measures are provided on the site plan in Attachment C.

Mooring Facilities

We understand from discussions with the client that the likely foundation solution will be suspended concrete on driven piles. Construction by driven piles into the seabed will prevent dredging and suspension of marine sediments and the oxidation of any Potential Acid Sulphate Soils present.

Containment Boom

All construction works within Middle Harbour shall be done with a containment boom and silt net surrounding the works area. This will reduce sedimentation impacts during both construction and reduce the impacts of an accidental spill in the works area by containing any potential pollutants.

Sediment Fencing and Straw Bales

It is recommended that sediment fencing and straw bales be installed above the high water mark in the areas where works to upgrade the existing marina are to take place. Stormwater flows are to be redirected around the construction site to prevent the transportation of sediments into the waterway.

This shall also ensure construction materials and waste do not discharge into Middle Harbour during periods of rainfall.

All sediment fencing and straw bales shall be maintained and monitored on a regular basis and after periods of extended rainfall. Any damaged fencing shall be replaced immediately to prevent sedimentation of surrounding waterways. Sediment fencing and straw bales locations and typical specifications are provided in Attachment C.³⁰

As such, it is considered that with adequate control mechanisms in place, erosion and sediment control may be suitably managed at the site.

³⁰ Engineering Services Report, Martens & Associates, Page 21

Disturbance of Contaminated Sediments

As indicated previously a Stage 1 and Stage 2 Contamination Assessment has been undertaken by Martens & Associates with respect to the matter of site contamination. The conclusions of this Assessment are supplied below:

Site investigations (Stage 2 assessment) completed included the collection and analysis of soil samples for a range of parameters determined to assess potential contamination from past and existing uses. The investigation identified no contaminants above NSW DEC (2006) guideline levels for commercial and industrial land use. Following SCC and TCLP testing, the fill in the proposed excavation is classed as 'General Solid Waste' in accordance with EPA (1999) guidelines. The natural soil located below the fill is not contaminated and requires no specific measures for treatment or disposal. This material is considered to be VENM.

A Remedial Action Plan (RAP) is required for the site to address the removal of UST's identified as a likely source of groundwater hydrocarbon contamination. Considering the proposed development will require excavation of fill material, such material is considered 'Inert Waste' and is to be disposed of an appropriate waste handling facility.³¹

In this regard, it is therefore considered that with a suitable Remedial Action Plan in place, adequate mechanisms are available to deal with the matter of contamination.

Acid Sulfate Soil

Martens & Associates have undertaken site sub-surface investigations to determine the presence of Acid Sulfate Soils on the site. The **Conclusions** of this assessment are detailed below:

On the basis of site sub-surface investigations and results of the pHKCL and pHOX, the materials tested are classified as neither potential ASS nor actual ASS. On the basis of the above, further site ASS testing and a site management plan is not considered necessary.³²

As such, no further action or management plan is required in this regard.

A full copy of this report may be found at **Appendix 09**.

³¹ Geotechnical, Acid Sulfate Soil and Stage 2 Contamination Assessment, Martens & Associates, Page 33

³² Geotechnical, Acid Sulphate Soil and Stage 2 Contamination Assessment, Martens & Associates, Page 20

8.3 Traffic and Access

Traffix Pty Ltd was retained to undertake a traffic impact assessment of the proposal, which is provided at **Appendix 19**.

The findings of this report have been summarised below on the basis of the matters raised by the Department of Planning.

Traffic Safety and Impact

Trip generation surveys were undertaken to examine movements to and from the facility. The findings to establish the use of the site, are as follows:

- 48 persons in and 10 out between 11am and noon on Saturday; and
- 48 persons in and 10 out on Sunday between 1pm and 2pm.

On the basis of these estimated trip generation characteristics, the following conclusions are drawn:

These are moderate flows that will be spread over all areas that are currently used for marina parking, with the majority occurring within the 200 space car park to the south of the site within the 'Parking Reserve'.

It may be expected that some of this demand will transfer to the new internal parking, which could potentially accommodate about 20 veh/hr (10in, 10 out) during peak periods. This can be readily accommodated with no adverse impact on traffic conditions on Spit Road. These trips will all occur via left turn entries and exits, with improved safety afforded by the significantly improved geometry.

In summary, the traffic impacts are moderate and can be accommodated. Traffic volumes during weekday commuter peak periods are expected to be very moderate and are not critical for assessment purposes.³³

On this basis, it is considered that the demand for car parking is moderate over the existing situation and such can be adequately catered for within the conditions of the existing car parking and road network arrangements.

Access

Morris Goding & Associates was retained to undertake a disability access assessment of the proposal, which is provided at **Appendix 21**.

³³ Traffic Impact Assessment, Traffix Pty Ltd, Page 18

Parking Demand and Impacts

As a result of surveys undertaken at the site, Traffix have identified the following with respect to provision of car parking to service the facility:

... it is evident that there is likely to be a need for an additional 20 space demand on Saturday and 40 space demand on Sunday. The redesign provides 9 on-site spaces so that there is a shortfall of 11 spaces on a Saturday and 31 spaces on a Sunday, which, if they occur in practice, cannot be accommodated.

It is considered that this shortfall can [be] suppressed and essentially be overcome so that in practice they will not occur. Specifically, existing parking constraints will have a 'self-enforcing' effect, whereby drivers will be discouraged from attending the site. A more appropriate response is therefore to implement measures intended to accommodate the expected patron demand by altering travel choice and/or travel behaviour.³⁴

On the basis of the above, and to ensure that adequate management of the available car parking spaces occurs on the site, the following recommendations have been supplied to alleviate this potential shortfall:

- *The introduction of a staff car pooling policy, whereby higher average car occupancies are encouraged to reduce staff parking demands;*
- *The possible introduction of a shuttle bus service between more remote public parking areas and the marina on weekends, for use by members and their visitors. This will require the identification of candidate/site/s which would need to be the subject of a licensing arrangement to ensure availability and would only be justified in the event of a demonstrated demand. This service has the potential to significantly reduce demands even with the expanded marina and would probably be of benefit to existing patrons. To be effective, the shuttle bus would need to operate with a maximum 15 minute frequency. It is considered that if this initiative were to be taken, a trial period may be a suitable approach rather than the imposition of a condition that may be onerous and potentially ineffective if there is insufficient demand.*
- *The introduction of practices aimed at promoting public transport and taxi usage, particularly for employees. In this regard, it is recommended that management issue staff with taxi vouchers for use on weekends to reduce car usage;*
- *The implementation of a courtesy vehicle for on demand operation in the locality;*

³⁴ Traffic Impact Assessment, Traffix Pty Ltd, Page 15-16

- *The implementation of a taxi hotline; and*
- *The designation of a 'transport corridor' within the marina to coordinate the above initiatives.*

The cumulative effect of the above initiatives is considered to essentially offset the increased parking demand that would otherwise occur, so that the development would be supportable subject to the inclusion of suitable condition/s governing the above matters.³⁵

In this regard, it is therefore considered that, with the adoption of the aforementioned management techniques, concerns pertaining to car parking may be alleviated.

8.4 Marine Safety and Access

GBA Coastal Pty Ltd has assessed the impacts of vessel movements on the surrounding waters. The following is relevant in this regard:

Vessel movements inside and outside the marina have been assessed. Proximity and type of passing boat traffic, mooring arrangements, channel arrangements and vessel motions at berth have all been considered.

The impact on navigation past the marina is considered to be modest and manageable. Navigation within the main channel, passing close to the corner of C-Arm, and vessel mustering during openings, have each been addressed.

The proposal would have no influence on rowing operations. The proposed marina does not encroach on the rowing course or the fairway. Existing separation distances are preserved. The berthed vessels that currently access the marina from the south would continue to do so as per the existing situation.

The existing marina includes some non-complying berth widths. Regularisation to AS 3962 is fully achieved with the proposed arrangement. This covers berthing for both power boats and yachts.

The proposal involves the conversion of the existing 25 single "tie-off strut" 8m berths on A-Arm Inner, to conventional double 8 m berths. The existing berth-type is not endorsed by AS 3962, and a conversion would be regarded as beneficial for berthing function and safety.

Bed depth regularisation is achieved with the proposed arrangement. While depth restrictions currently limit the effective fairway width inshore of A-Arm, GBAC recommends that the proposed arrangement here be accepted on the basis of restricted use, namely that only

³⁵ Traffic Impact Assessment, Traffix Pty Ltd, Page 16

power craft to 8 m in length be permitted to access the fairway; and that all berthing is stern-in to the A-Arm Inner berths.

To account for low water depth, berth number 193 at the southern end of D-Arm would be restricted to power boats.

Since wave climate compliance is achieved at all proposed berths, it follows that vessel motions at berth are acceptable.³⁶

On the basis of the above, it is considered that vessel movements in and around the site will not result in adverse conditions regarding such movements.

8.5 Noise

Wilkinson Murray Pty Ltd were retained to prepare a Noise and Air Quality Assessment for the development proposal (**Appendix 17**).

A summary of the Assessment has been provided below in terms of construction noise impacts; operational noise impacts; traffic noise impacts.

8.5.1 Construction Noise

The noisiest land based construction period is expected to be during the earthmoving phase and, with perhaps six machines including excavations, trucks, a dozer and a grader working around the site simultaneously, a total site sound power of 116 dBA may be expected.

Earthmoving activity is likely to occur in various sections of the development and given the size of the site it would only be that equipment that is in the vicinity of residences would be acoustically significant.³⁷

The assessment goes on to state as follows:

These predictions indicate that in the case of surrounding residential receivers noise levels from construction are expected to comply with established construction noise criteria.

These conclusions are based on good management practices being adopted. The following general recommendations are made to ensure a good acoustic outcome.

- *Machines used on site should be maintained in good condition, particularly considering the exhaust system on diesel powered machines, to minimise noise emissions. Excessively loud*

³⁶ Environmental Assessment for Proposed Alterations and Additions, Coastal and Maritime Engineering Aspects, GBA Coastal Pty Ltd, Page 57

³⁷ Noise & Air Quality Assessment, Wilkinson Murray Pty Ltd, Page 16

machines should be repaired, modified or removed from the site. Sound pressure level measurements should be conducted on all plant prior to works commencing on site.

- *A project manager is available to respond to questions and complaints from the community in a professional and considerate and timely manner.*
- *Signage on site detailing relevant contact personnel and phone numbers.*
- *Reversing alarms should be controlled to the minimum sound level consistent with safety by replacing, shielding or relocating the alarm unit on noisy machines. Preferably, the use of nontonal low level 'quacker' type alarms should be installed on mobile plant.³⁸*

Through the implementation of the aforementioned recommendations, it is considered that the construction impacts associated with the development may be mitigated accordingly.

8.5.2 Operational Noise

With respect to the operation impacts of the use of the site, the following key activities are determined as being noise producing activities:

- *Watercraft leaving and docking at the marina;*
- *Daily low level maintenance on watercrafts (e.g. cleaning, washing, minor repairs);*
- *Use of the sewage pump out or fuelling systems;*
- *Mechanical plant noise (i.e. air condition and services noise); and*
- *Patron noise from the restaurant, particularly outdoor terrace areas.³⁹*

A summary of the potential outcomes associated with operation noise are as follows:

A review of predicted noise levels at surrounding residences indicates compliance with established noise criteria.

In addition, we have reviewed these scenarios whereby adverse wind conditions occur at each of the residential areas, that is a 3m/s South East wind at Seaforth residences, a South West wind to Clontarf residences and a North East to Beauty Point residences. In this scenario, an increase in the order of 3dBA can be expected at Seaforth and Clontarf receivers under adverse conditions.

It is noted that even under adverse conditions compliance with established noise criteria is achieved. Therefore, no noise mitigation measures are required to preserve the acoustic amenity of surrounding residences.⁴⁰

In addition, the matter of sleep disturbance has been contemplated, as a result of the restaurant operating at the premises. The following conclusions are drawn in this regard:

³⁸ Noise & Air Quality Assessment, Wilkinson Murray Pty Ltd, Page 17

³⁹ Noise & Air Quality Assessment, Wilkinson Murray Pty Ltd, Page 18

⁴⁰ Noise & Air Quality Assessment, Wilkinson Murray Pty Ltd, Page 20

Persons on the restaurant balcony potentially shouting have been assessed whereby this noise source may disturb sleep after 10 pm. The noise when halliards strike a mast has not been assessed as most of the marina boats are power boats. This is, in part, due to the Spit Bridge limiting access for sailing craft.

Noise levels due to patrons possibly shouting on the outside northern terrace of the restaurant has been determined to be:

- *Seaforth 27dBA*
- *Clontarf 19dBA*
- *Beauty Point 17dBA.*

Accordingly, noise from patrons will be well below established sleep disturbance criteria and likely to be inaudible at residences.⁴¹

On the basis of the above findings, it is evident that the operational phases of the development will not result in any adverse noise impacts.

8.5.3 Traffic Noise

The impact of traffic noise associated with the intensification of development taking place on the site has been considered by Wilkinson Murray, with the following findings being established:

Traffic counts for the year 2005 from the permanent Spit Bridge counting station and the volumes in each direction have been provided by Traffix traffic consultants. These counts indicate a two way Annual Average Daily Traffic (AADT) flow of 65,233 vehicles of which about 6-8% would be heavy vehicles.

Allowing for a growth since 2005 of about 1-2% per annum an estimated current 2010 AADT of 70,720 vehicles per day has been determined. Given these volumes, the traffic generated by the Spit Marina will be insignificant in both volumes and the associated noise contribution at surrounding residences.

Accordingly traffic noise generated by the development will be acoustically acceptable.⁴²

On the basis of the above, the proposed development will not result in any adverse impacts as a result of the intensification of use on the site.

⁴¹ Noise & Air Quality Assessment, Wilkinson Murray Pty Ltd, Page 20

⁴² Noise & Air Quality Assessment, Wilkinson Murray Pty Ltd, Page 21

8.6 Air Quality

Wilkinson Murray Pty Ltd were retained to assess the air quality impacts associated with the development. This has been assessed from both a construction and operational perspective, as detailed below.

8.6.1 Air Quality During Construction

Construction activities, as they have the potential to impact upon air quality, have been assessed below.

Air quality in the vicinity of the site, during construction, may be affected by the following demolition and construction activities:

- *Removal of buildings;*
- *Breaking up of concrete;*
- *Vehicles travelling on site;*
- *Wind erosion of bare earth surfaces; and*
- *Excavation of the site.*⁴³

The site is at sea level and, consequently, there will be little excavation and associated dust generation with this stage of the project.

The report goes on to state that:

*The closest residential receivers from the site are approximately 300m, and at this distance, it is unlikely that there would be any air quality impacts from construction and demolition on the site.*⁴⁴

On this basis, it is not anticipated that the proposed development will result in adverse air quality conditions, during the construction phase of the project.

8.6.2 Operational Air Quality

Wilkinson Murray have assessed the potential air quality impacts associated with the use of the marina. In this regard, they have identified that the key source of such pollution would be from motor vehicles. The findings of their assessment, in this regard, are as follows:

A comparison between the traffic volumes on Spit Road and marina operations indicates that any contribution from the marina would be insignificant when compared to the emissions from road traffic. Therefore, given the low level emissions associated with Marina operations,

⁴³ Noise & Air Quality Assessment, Wilkinson Murray Pty Ltd, Page 22

⁴⁴ Noise & Air Quality Assessment, Wilkinson Murray Pty Ltd, Page 22

current traffic volumes and distances to residences we consider that the operations of the marina will not impact on air quality in the surrounding area.

*In addition work on the hardstand consisting of pressure cleaning and sanding will generate localised dust concentrations. However, the dispersion of this concentration over the distances to residences will result in no adverse impact.*⁴⁵

8.7 Aquatic Flora and Fauna

W.S. Rooney & Associates (WSRA) was commissioned to undertake a marine flora survey within the vicinity of the existing marina facility and to report on the likely aquatic ecological impacts of the proposal (**Appendix 07**). In the preparation of this report, WSRA followed the 'Guidelines for Assessment of Aquatic Ecology in EIA (draft 2002)' published by the NSW Department of Planning, which required a 'Level 1 or low level', investigation. This level of investigation was determined based on the following factors:

- The assemblage of animals and plants that would be subjected to a pulse or press disturbance is estimated to have a high to moderate inertia (ability to withstand change); a high stability (rate of recovery); and a high resilience (ability to recover).
- The scale of this redevelopment project, in terms of its additional effects on the aquatic environment, is considered to be small compared to most marina construction projects elsewhere, where dredging and/or extensive new over-water structures are required. The degree of uncertainty in the predictions is rated as low.
- The risk of cumulative impacts is rated as low, assuming world's best practice equipment and technology is adopted for capturing spills from fuelling, sewage discharge, and careening facilities.
- The relative importance of most of the animal and plant assemblages in the area is generally rated as low to moderate since the soft-bottom habitat around the existing slipway (between the building complex and D Arm) is currently degraded; organisms presently living within the slipway area (which is proposed to be covered by hardstand) could be considered to be opportunistic and have the highest resilience; and most of the seagrass beds other than the *Zostera capricorni* which occurs north of the proposed redevelopment, are relatively sparse. The *Zostera capricorni* seagrass bed (and associated animals) north of the existing D arm is considered to have moderate to high importance in the area west of the Spit Bridge.

Existing Aquatic Habitats

As previously described, WSRA identified a number of existing aquatic habitats within the study area. These are all valuable to the ecology of the locality as they are generally in good condition, being:

- Open Water to a maximum depth of -18 metres (ZFDDTG);
- Sub-tidal un-vegetated muddy sand;

⁴⁵ Noise & Air Quality Assessment, Wilkinson Murray Pty Ltd, Page 23

- Seagrass Bed;
- Narrow sandy inter-tidal beach;
- Rocky inter-tidal sandstone seawall with occasional rock rubble along the toe;
- Timber and concrete piles surrounding buildings and the floating marina berths and walkways;

The seagrass beds that were identified within and adjacent to the proposed lease areas are regarded as locally important and it is recommended that it should be protected. The density and extent of all species has been accurately mapped by WSRA and presented in the report at **Appendix 07**.

In addition, WSRA identified a small area of the declared noxious weed species *Caulerpa taxifolia*. This was subsequently removed by hand and destroyed by WSRA.

Threatened and Protected Aquatic Species

WSRA reviewed the current NSW Threatened Species lists as well as referring to the new Threatened Species Assessment Guidelines (February 2008) as part of their investigation. The identification, conservation and recovery of threatened fish, aquatic invertebrates, and marine plants in NSW are covered by the Fisheries Management Act, 1994 (FM Act), which identifies four marine fish species as either Critically Endangered or Endangered in NSW waters (Schedule 4 of FM Act):

- **Grey Nurse Shark** (*Carcharias Taurus*); because the preferred habitat for this species is deeper gutters and rocky reefs and offshore islands along the coast, and it is not known to utilise estuaries at any stage of its life cycle, it is very unlikely that the Grey nurse shark would be found at or near this estuarine study area.
- **Southern bluefin tuna** (*Thunnus maccoyii*); the Southern bluefin tuna is historically considered to be rare within the NSW state waters boundary. It does not utilise the estuary for any stage of its life cycle, therefore this species would not be expected to occur within Middle Harbour estuary or be affected by the proposal.
- **Marine brown alga** (*Nereia lophocladia*); has only ever been collected from two localities: Port Phillip Heads and the north and south sides of Muttonbird Island, Coffs Harbour. As such, this species is not likely to occur at, or near, the subject site and can be discounted from further assessment.
- **Marine slug** (*Smeagol hiliaris*); is a very recent entry to the Threatened species list (May 2010), with no information on the Fisheries website about this species, its habitat, and its distribution being available.

In addition, there are currently two marine fish species and one marine alga species listed as being Vulnerable in NSW waters (Schedule 5 of FM Act):

- **Black cod** (*Epinephelus daemeli*); since the study area has no natural rocky shores or large rock outcrops within the immediate vicinity, it is unlikely that this species would be found within any area of impact resulting from the proposal.
- **Great White Shark** (*Carcharodon carcharias*); there are at least two records of the Great white shark inside Sydney Harbour Heads over 100 years ago, but they are not known to require estuarine habitat for any stage of their life cycle and, therefore, are not expected to occur at or near the study area.

There is one marine plant species which has been previously found in Sydney Harbour but is now presumed extinct, being Bennetts seaweed (*Vanvoorsita bennettiana*). Surveys conducted by WSRA within the study area did not observe anything that approaches the description of this species.

There are no listed endangered populations or ecological communities in the marine environment of NSW. In addition to threatened species, there are also a number of protected species from fishing or collecting, being:

- **Ballina angelfish** (*Chaetodontoplus ballinae*);
- **Bluefish** (*Girella cyanea*);
- **Eastern blue devil fish** (*Paraplesiops bleekeri*);
- **Elegant wrasse** (*Anampses elegans*);
- **Estuary cod** (*Epinephelus coioides*);
- **Giant Queensland Groper** (*Epinephelus lanceolatus*);
- **Herbsts Nurse Shark** (*Odontaspis ferox*); and
- **All Syngnathiformes** (including seahorses, seadragons, pipehorses, pipefish, ghost pipefish and seamoths).

The WSRA report details that as a result of rare species distribution and/or particular habitat requirements of such species, they are unlikely to occur in or near the study area, with the exception of some Syngnathiformes. Many of the families of Syngnathiforms are known to inhabit man-made structures such as jetties, piles and mesh nets.

During their study, WSRA observed one species of pipefish in the seagrass within the study area and the Australian Museum Business Services (2003) have documented three other species to be locally common. As such, there a number of families within this protected group that occur within the study area.

Impacts on Intertidal Sandy Beach and Rocky Shore

The only intertidal sandy beach is located west of the Spit Bridge, along the concrete seawall south of the existing marina facility. The WSRA report notes that the proposal will not impact on the wave dynamics or tidal currents that have formed this beach, and, there will be no ecological impact on this beach or the associated thin band of seagrass immediately offshore.

The intertidal rocky shore consists of man-made seawalls on both sides of the marina facility, and, as the WSRA report notes, there will not be any adverse impacts to these as a result of the proposal.

Impacts to Organisms on Timber and Concrete Support Piles

The removal of the old timber piles as a result of the proposal will result in a temporary or 'pulse' impact to the organisms currently attached to these structures, as they will eventually recolonise to the new concrete piles. The loss of the attached organisms will have a temporary effect on the food supply available to browsing animals that forage around the timber piles. This may result in a relocation of these animals for a period of approximately 12 months until new growth becomes attached to the new piles.

Impact on Aquatic Flora and Fauna

The proposal utilises the same basic construction concepts as the existing structures and therefore there will not be any significant additional modifications to water flow and circulation. As such, WS Rooney & Associates considered that water quality will improve once construction is completed, with hydrology and water depths not being altered as there is no dredging proposed.

The seagrass areas should not be significantly impacted by removal, siltation, or shading (with the exception of one small area of sparse seagrass).

The proposed new over-water concrete hardstand area for the provision of a boat maintenance area will add approximately 600m² of shaded area. WSRA note that the habitat affected by this additional shading is un-vegetated soft sediment. Further, mobile species can move into or out of the shaded area at will, and, floating species would not be expected to be in shade for an extensive period of time due to the good circulation at the site as evidenced by the strong ebb-tide current and moderate flood-tide current.

In addition, WSRA conclude that only some very sparse seagrass may be affected by shading from new floating pontoons and berthed vessels on the western side of the new hardstand.

WSRA have identified the aquatic ecological impacts associated with the proposal as follows:

- A 'pulse' impact during demolition and construction associated with turbidity, underwater noise and vibration. This impact will be temporary and is regarded as low.
- A 'press' impact resulting from the shading of an additional 600m², which is likely to result in food limitation for *benthic macrofauna* in that area, thereby likely to result in a reduction in its density and diversity in the area. This impact is regarded as low to moderate.

The WSRA assessment details that it is not expected to be any significant impact on fish and invertebrate species that presently utilise the habitats outside the proposed hardstand area, including any threatened, potentially threatened, or protected species that may occur in the area.

WSRA note that the Endangered Population of Little Penguin (*Eudyptula minor*) may utilise the area around The Spit to forage among seagrass beds, but there is no critical habitat known for this population in or near the study area. In addition, a protected group of species, the *Syngnathiformes* (seahorses, seadragons, pipefishes and related species), are represented within the seagrasses in the area or around the timber piles.

Overall, WSRA consider that the proposal is ecologically sustainable, provided all waste from boat maintenance activities is collected within the hardstand area and properly disposed, and that failsafe mechanisms are in place in the event of accidental spillage from or damage to the refuelling and sewage pump out facilities.

8.8 Hazards and Risk

Martens & Associates have advised that the site is not required to be assessed with respect to SEPP 33. Further details in this regard may be found at **Appendix 16**.

8.9 Waste

A Draft Construction Management Plan (CMP) accompanies this application at **Appendix 18**.

9 DRAFT STATEMENT OF COMMITMENTS

The Draft Statement of Commitments pertaining to this application is provided at **Appendix 27**.

10 JUSTIFICATION AND CONCLUSION

The proposed development seeks consent for the expansion and upgrade of the existing d'Albora Marina facility at the site, accommodating an additional 35 vessels, a new marina building for marine-related tenancies, a public deck with a small kiosk and public seating facilities, as well as a new hardstand area with a new travel lift.

The purpose of this application is to facilitate an increase in the supply of berthing facilities at the site in the 12 metre to 30 metre range, for which there is significant demand, and remove the existing slipway to provide more environmentally sensitive access to the marina *via* the introduction of a new boat lift.

As part of the Environmental Assessment process, a number of key environmental impact concerns were raised. These included:

- Visual Impact and Amenity;
- Soils, Sediments, and Water;
- Traffic and Access;
- Marine Safety and Access;
- Noise & Air Quality;
- Aquatic Flora and Fauna;
- Hazards and Risk; and
- Waste.

However, as evidenced within this report and indeed the accompanying consultant studies, impacts have been either avoided through design revisions, or minimised through the implementation of appropriate mitigation measures. In this respect, it is considered that the proposed works are suitable in terms of their environmental impacts. Furthermore, the long established use of the site as a marina and for maritime activities will result in the proposed works being consistent with the recognised character and nature of the site. As such, given the minimal environmental impacts and the proposal's continuation of an established use, the subject site is suitable for the proposal.

Significant public benefit will accrue through the proposed works. These benefits will include greater public access, *via* the construction of the aforementioned new public deck and the associated outdoor seating area located on the western side of the proposed building. Public safety will also be improved as the proposed building design will increase natural surveillance over the public domain. In addition, the application represents an opportunity to remove the existing slipway and reinstate the sea wall to its original location. This work will provide significant environmental benefits by providing more environmentally sensitive boat access to the marina, and will facilitate the protection of exiting sea grass beds.

Overall, the proposal represents an environmentally sensitive outcome which generally satisfies the relevant statutory provisions and delivers considerable public and economic benefits.