

REVISED ASSESSMENT REPORT

Section 75W Modification

Trinity Point Mixed Use Development (MP06_0309 MOD 2)

1. BACKGROUND

1.1 Proposed Modification

This report has been prepared to assess a revised modification application to the mixed use Trinity Point development (MP06_0309). The modification application proposes to amend the marina layout and design, modify the staging of the marina from two to five stages, remove public access along the breakwater and replace it with public access adjacent to the foreshore and remove the 20 metre (m) boat size limit.

1.2 Subject Site

The site is located at 48C, 49 and 71 Trinity Point Drive, Morisset Park. The site also includes part of Lake Macquarie and is located within the Lake Macquarie local government area (See **Figure 1**).

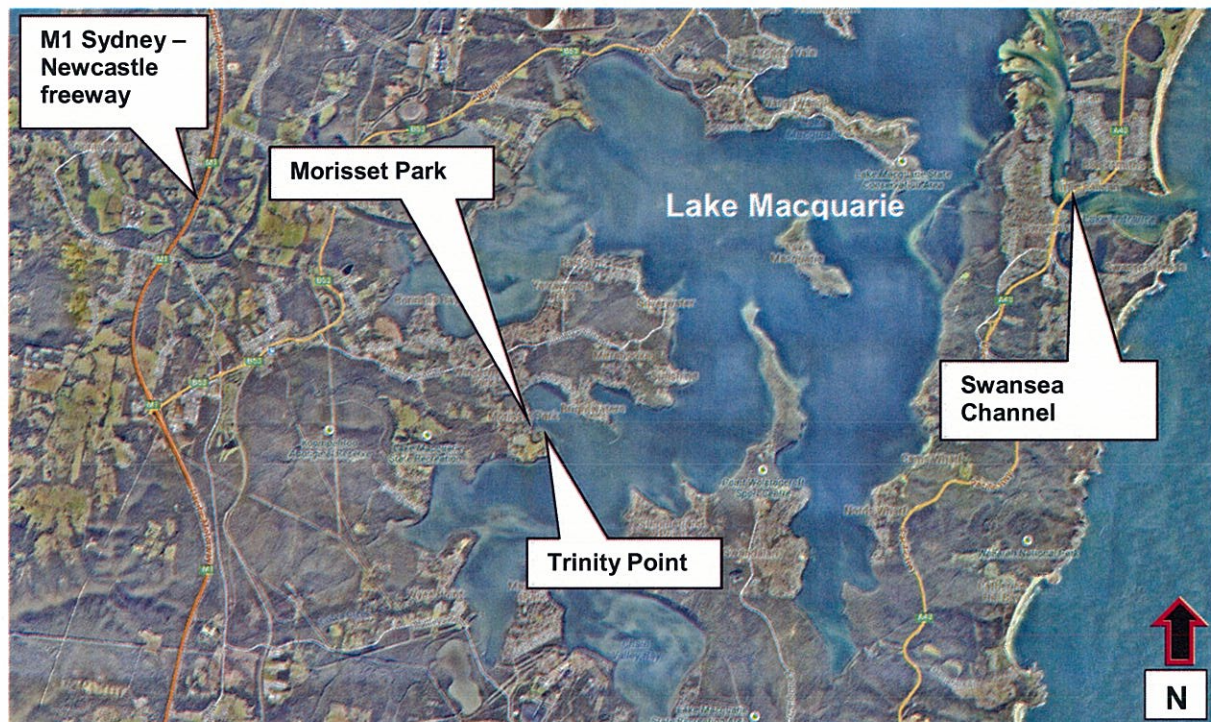


Figure 1: Site Location

Trinity Point is located on Lake Macquarie's south-western shoreline approximately 118 kilometres (km) north of Sydney and 50 km south-west of Newcastle. Lake Macquarie is the largest coastal salt water lake in Australia and is a prime boating destination for both small and large vessels. The Lake is 22 km long, with an average depth of 8 m. Swansea Channel is the main access point between Lake Macquarie and the Pacific Ocean. This channel is always open, however the

channel requires occasional dredging to enable larger vessels to access the lake.

1.3 Previous Approvals

1.3.1 Concept Plan Approval

On 5 September 2009, the then Minister for Planning granted Concept Approval (MP06_0309) for the Trinity Point Marina and Mixed Used Development. The Concept Plan currently permits the following uses:

- 188 berth marina and associated offices, and maintenance facilities (see **Figure 2**);
- 150 accommodation units (75 tourist and 75 residential);
- restaurant, café, function centre, shops and offices; and
- parking, landscaping and a floating boardwalk.

The Concept Plan has been modified on one occasion (referred to as MOD 4) to amend the lapsing date from 5 September 2014 to 1 October 2016.

1.3.2 Original Modification to MP06_0309 (MOD 2)

On 4 October 2013, Johnson Property Group (the Proponent) submitted a request to modify the Concept Plan approval pursuant to section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The modification (MOD 2) sought to amend the staging arrangements for the construction of the marina (from two stages to six stages), and modify the timing of a number of future assessment requirements relating to urban design, traffic, vegetation and stormwater management.

The Department of Planning and Environment (the Department) assessed the application and the Secretary's Assessment Report and Draft Instrument of Modification were forwarded to the Planning Assessment Commission (PAC) on 5 June 2014 for determination, as more than 25 public submissions objecting to the modification were received.

On 16 May 2014, the Proponent lodged a request to revise the marina layout pursuant to Term B1 of the Concept Plan. The Department considered the Proponent's request against the performance criteria specified in Term B1 and approved the revised marina layout on 9 July 2014. A discussion of the changes approved pursuant to Term B1 is provided in **Section 1.3.3** below.

On 16 July 2014, the PAC returned the Secretary's Assessment Report and Draft Instrument of Modification to the Department so that the additional changes approved pursuant to Term B1 of the Concept Plan could be incorporated into the Secretary's Assessment Report and the Draft Instrument of Modification.

1.3.3 Approval of Revised Marina Layout Pursuant to Term B1

As previously outlined, the Proponent sought approval to modify the marina layout pursuant to Term B1 of the Concept Approval. In this regard, Term B1 allows the Proponent to revise the marina design prior to the lodgement of a future project application to ensure the final design of the marina:

- minimises changes to water flow and the flushing characteristics of Bardens Bay;
- minimises wave bounce to reduce impacts on seagrasses;
- reduces the visual impacts of the development; and
- provides adequate protection from southerly winds.

In order to address the performance criteria specified in Term B1 of the Concept Plan, the Proponent sought to:

- provide floating breakwater in lieu of a fixed breakwater;
- install a floating pontoon boardwalk parallel to the shoreline;
- amend the general shape of the marina and breakwater;
- reduce in the number of marina arms from six to five; and

- reduce the overall marina footprint.

It is noted that the revised layout approved under Term B1 did not specify whether public access would be provided along the breakwater. A comparison of the original Concept Plan and the layout proposed to satisfy the requirements of Term B1 of the Concept Plan is provided in **Figures 2 and 3** below.

The Department assessed the proposed revisions to the marina layout and concluded that the revised design satisfied the performance criteria outlined in Term B1 for the following reasons:

- based on the revised wave modelling submitted by the Proponent, the replacement of the fixed breakwater with a floating breakwater would provide suitable wave attenuation, and would improve wind action at water level to enable wind driven currents to flow through the site and improve water circulation in comparison to the approved Concept Plan;
- the use of a floating breakwater would have a lower potential to collect seagrass wrack (sea grass deposits) as the floating break water would require less fixed structures;
- the curved design of the breakwater would reduce the water quality impacts of the development within Bardens Bay, the un-named inlet and Petite Lake in comparison to the approved Concept Plan by maintaining current water circulation patterns within Bardens Bay; and
- the use of a floating breakwater would reduce the visual impacts of the development as the floating breakwater has a lower profile and would not be as exposed as a fixed structure.

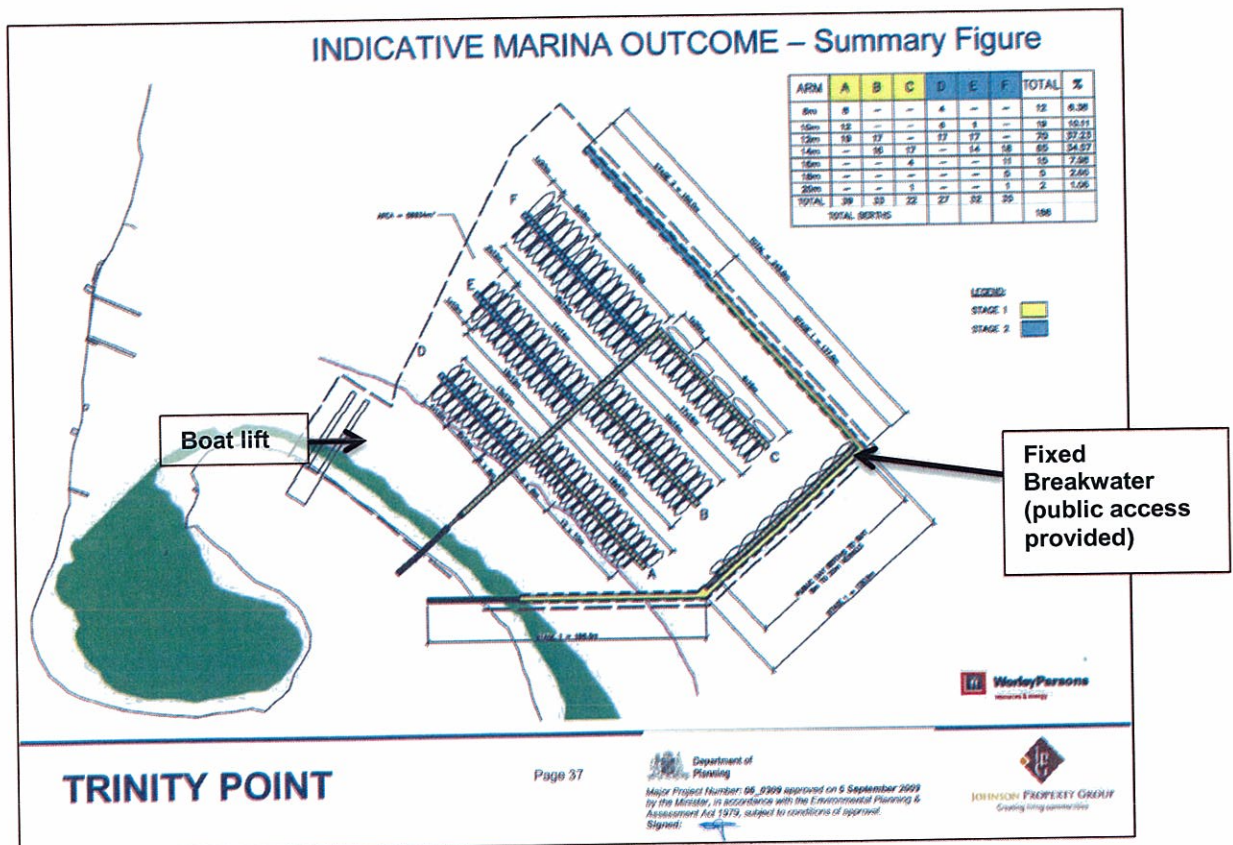


Figure 2: Marina Layout as Approved under the Concept Plan

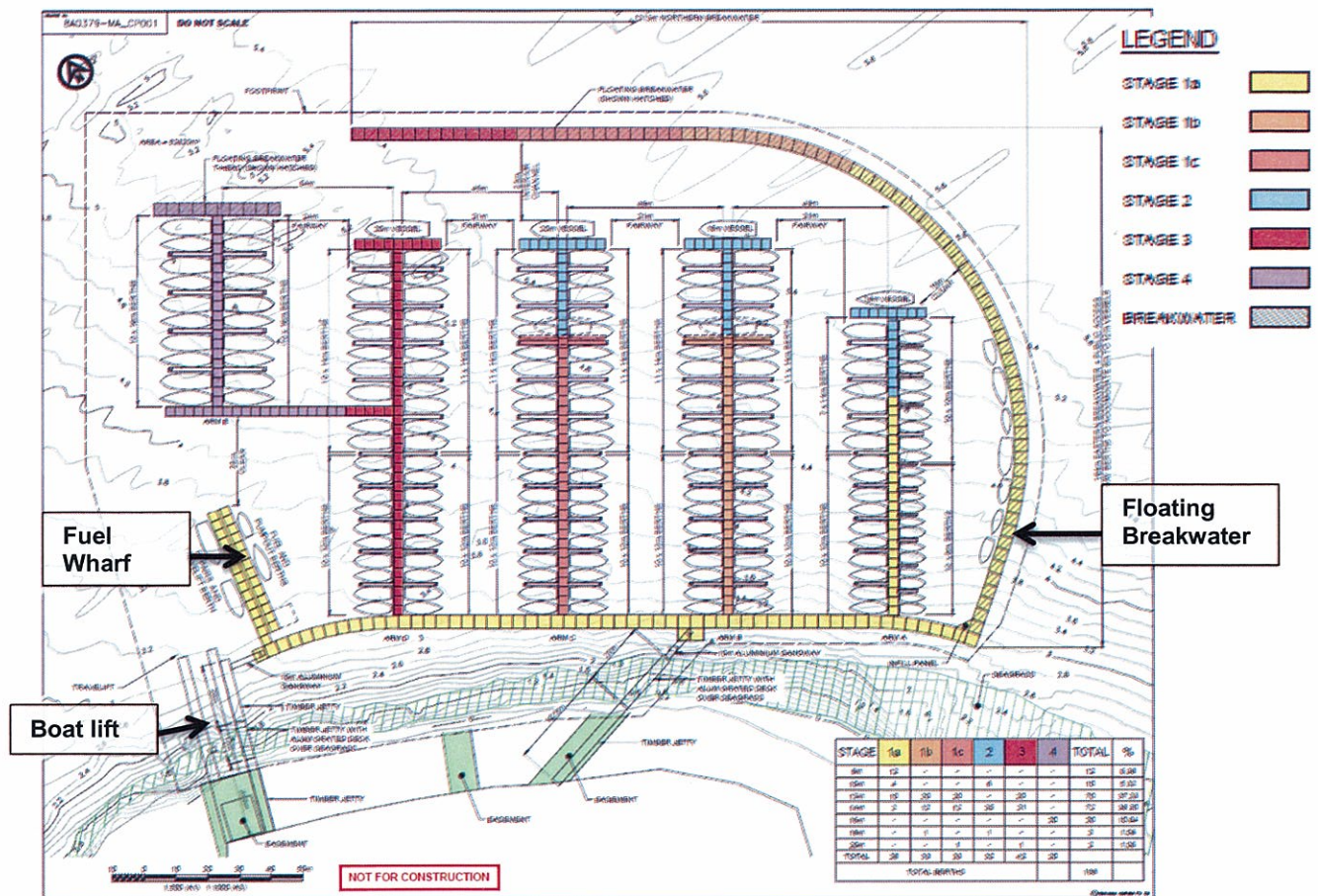


Figure 3: Concept Plan Marina Layout as Proposed Pursuant to Term B1

1.3.4 Amended Modification Application and Justification

Following the approval of Term B1, the Proponent engaged a marina operator who recommended operational improvements and refinements to the marina which led to further detailed design. On 15 August 2014, the Proponent lodged a revised modification application. As a result of further detailed design, the revised modification application includes:

- construction of the marina over five stages (two stages currently approved) (see **Table 1 of Appendix A**) and consequential changes to terms B2, C12, C14, and C29 to reflect the proposed staging arrangements;
- removal of public access along the breakwater and replacing it with public access adjacent to the foreshore;
- removal of the 20 m boat size limit to permit the berthing of vessels up to 30 m in length;
- revision of the marina layout to reduce its overall footprint;
- removal of the slipway, boat lift, maintenance and associated oily bilge facilities;
- permit the construction of a car park in lieu of the vessel hard stand, boat lift and maintenance facility;
- reduction to the building setback to the un-named lake from 30 m to 28 m;
- removal of the requirement to collect further baseline data and conduct hydro-dynamic modelling for Petite Lake as required by terms C11 and C12;
- provision to provide pedestrian access within the Council's foreshore reserve; and
- modification of terms C3, C9 and C19 (as per original MOD 2) to allow the Stage 1 marina development application to address the matters only relevant to its potential environmental impacts.

It should also be noted that the modification no longer includes the temporary car park and marina buildings as originally proposed. In addition, the modification does not seek to alter the land based tourist and residential components of the Concept Plan. The proposed marina layout is depicted in **Figure 4**, and a summary of the key changes to the approved Concept Plan is provided in **Table 2** below.

Table 2: Comparison of key changes to the Concept Plan.

Component	Concept Plan (approved)	Term B1 (approved)	MOD 2 Revised (current application)
Marina stages and vessel numbers	<u>2 Stages</u> Stage 1: 94 berths Stage 2: 94 berths Total: 188 berths	N/A. Staging not addressed.	<u>5 Stages</u> Stage 1a: 72 berths Stage 1b: 8 berths Stage 2a: 15 berths Stage 2b: 47 berths Stage 2c: 32 berths Total: 188 berths
Breakwater design and public access arrangements	Fixed breakwater wall with public access	Floating breakwater	165 m board walk pontoon with public access. Floating breakwater without public access
Marina Overall Footprint	42,990 m ²	40,555 m ²	39,025 m ²
Boat Size Limit	Maximum 20 m	Maximum 20 m	20 m boat size and an allowance for two vessels of up to 30 m
Berthing along break water wall	Casual berthing only	Casual berthing only	Permanent marina berths available along the breakwater wall
Public berths	9 public berths	8 public berths	Approximately 7 public berths
Boat lift, maintenance facility and oily bilge pump out	Provided	N/A	Modification seeks to remove the boat lift, maintenance facility and oily bilge pump out facility
Dredging requirements	No dredging required	No dredging required	No dredging required. However, potential limitations association with yachts >20m accessing the fuel facility and navigating through Swansea channel
Area of seagrass impact	No impact on sea grass	No impact on sea grass. Floating breakwater will reduce the collection of seagrass wrack	No impact on sea grass. Floating breakwater will reduce the collection of seagrass wrack
Car parking	Number of car spaces not specified in Concept Plan. Car parking for the marina to be provided as part of the land based component of the development	N/A	A car park is now proposed in the location of the maintenance facility and boat lift. Approximately 47 car spaces are proposed to be provided at this location

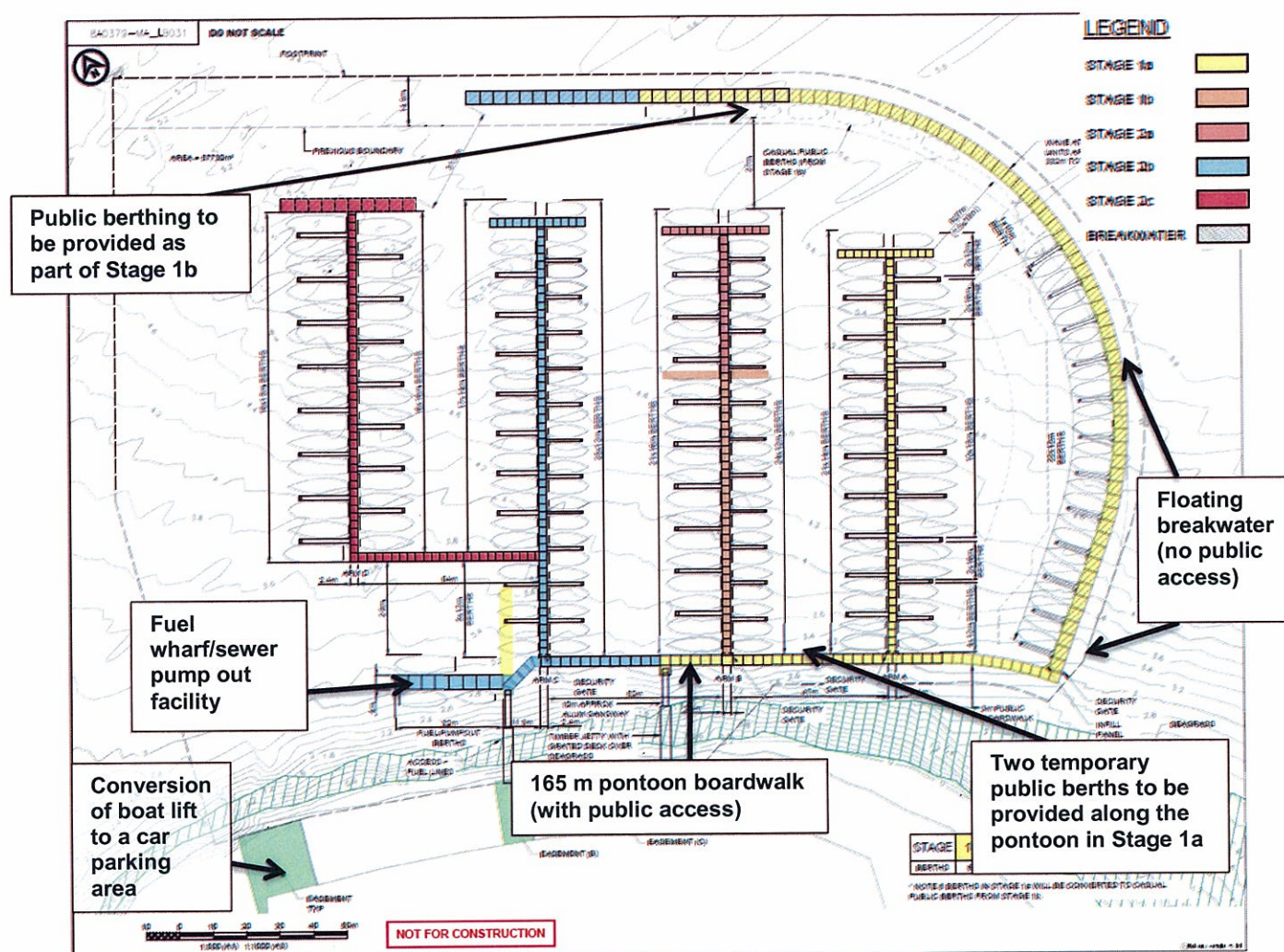


Figure 4: Proposed Marina Layout

3. STATUTORY CONTEXT

3.1 Modification of the Minister's Approval

Approval of MP06_0309 was granted in accordance with Part 3A under section 75J of the EP&A Act. Section 75W of the EP&A Act provides for the modification of the Minister's approval.

The Department notes that the application, as amended, will not increase the total number of berths and will reduce the overall marina footprint. Therefore, the Department is satisfied that the application can be characterised as a modification to the original Concept Plan approval, and can therefore be assessed and determined under section 75W of the EP&A Act.

3.2 Delegated Authority

On 14 September 2011, the then Minister for Planning delegated his responsibility for the determination of Concept Plan applications to the PAC where:

- the local relevant council objects to the application;
- a political donation disclosure statement has been made; or
- there are 25 or more public submissions received in the nature of objections.

The application is being referred to the PAC for determination as the Council objects to the revised public access arrangements and more than 25 public submissions of objection were received.

4. CONSULTATION

As the Proponent revised the modification application, the Department exhibited the revised application on its website from Wednesday 27 August 2014 until Tuesday 9 September 2014. The Department also invited submissions from Lake Macquarie Council (Council), Roads and Maritime Services (RMS), Crown Lands and previous submitters to the modification.

The Department received a total of 59 submissions during the exhibition period. The submissions comprised 52 public submissions (51 objections and one submission of support), five submissions from special interest groups and two submissions from public authorities (Council and RMS). Crown Lands and the Mine Subsidence Board (MSB) submitted comments following the exhibition of the modification. The submissions are attached in full at **Appendix D** and a summary of the agency and public submissions is provided below.

4.1 Public Authorities

The **Council** objected to the revised public access arrangements and advised that it has the following concerns with the amended modification application:

- the proposed change to the building setback from the un-named bay is not supported as the application has not demonstrated that it will not impact on the ecological values of the vegetation located within the foreshore area adjacent to the un-named bay;
- the level of modelling and monitoring is insufficient to determine the impacts of the revised marina layout on Bardens Bay and Petite Lake;
- insufficient information has been provided to identify the environmental impacts associated with the removal of the oily bilge pump-out facility and the proposed reduction in the sewerage pump-out facilities;
- the navigation, social, environmental, and economic impacts associated with removing the 20 m boat size limit have not been adequately addressed;
- references to Petite Lake in terms C11 and C12 should be retained as the revised marina design will still impact on the flushing characteristics of Petite Lake;
- public berthing should be provided within Stage 1a; and
- Council supports the shared pathway over parts of community land.

The Department has reviewed the Council's comments and has concluded that:

- the roadway between the building and the vegetation acts as a physical barrier and therefore the changes to the building setback are not considered to impact on the ecological values of the vegetation within the foreshore area;
- the revised marina layout will reduce the impacts on Bardens and Petite Lake by allowing a more natural flushing regime through the marina and a reduction in sea grass wrack. The revised layout extends 15 m east of Bardens Bay into an area which does not contain seagrass;
- the Department agrees with Council that further information regarding the management of the oily bilge absorbent pads needs to be provided;
- the Department notes Council's concerns in relation to the boat size limit and sought further clarification regarding the number and type of vessels that will be provided on site;
- the Department agrees that modelling should be conducted on Petite Lake to ensure that the marina design will not impact on the flushing characteristics of the Lake;
- the Department agrees that public berthing should be provided as part of Stage 1a; and

- the Department requested that the Proponent address the Council's concerns via a response to submissions (RTS).

The **RMS** did not object to the revised modification application and stated that removing the 20 m boat limit would not significantly impact on navigation subject to the Proponent demonstrating that the marina design can comply with *Australian Standard AS3962 – 2001 Guidelines for Design of Marinas*. The RMS also advised that if the boat lift is removed the Proponent would need to prepare a contingency plan to address how sinking vessels would be retrieved and removed from the site.

The Department has reviewed the comments provided by RMS and agrees that appropriate procedures are required to manage the retrieval of sunken vessels. The Department requested that the Proponent address this issue in its RTS.

Crown Lands did not object to the revised application, however it advised that it does not support public access along the floating breakwater due to potential safety, security and anti-social behaviour issues. Crown Lands support the option of limited to no public access at the point where marina berths commence along the floating breakwater. Crown Lands indicated that this is standard policy for all marinas.

The **MSB** recommended a number of revised mine subsidence design parameters that should be considered in the design of the marina and the land based components of the development. The Department has recommended modifications to Term C27 of the Concept Plan approval to reflect the revised mine subsidence parameters recommended by the MSB.

4.2 General Public

The Department received 52 public submissions (51 objections and one submission of support) and five submissions from special interest groups. These submissions raised the following key issues and concerns:

- the potential environmental, visual, and amenity impacts associated with:
 - the removal of public access along the breakwater;
 - the removal of the 20 m boat size limit;
 - the changes to the marina layout as approved under Term B1;
 - the changes to the building setback requirements;
 - the removal of the oily bilge pump-out facility; and
 - the proposed modifications to remove the reference to Petite Lake in terms C11 and C12 of the Concept Plan.
- the potential impacts associated with dredging within the site and within the Swansea Channel;
- the lack of public berthing within in Stage 1a;
- the lack of baseline data collected to demonstrate that the marina can operate in an environmentally sustainable manner; and
- the environmental impacts associated with the proposed car park.

It should also be noted that a number of submissions objecting to the proposal, supported the removal of the boat lift and maintenance facilities.

4.3 Response to Submissions

The Proponent provided a Response to Submissions (RTS) on 10 October 2014, which included clarification and additional information on the issues raised in submissions (see **Appendix E**). In response to Council's concerns that public berthing should be provided in the initial stages of the development, the Proponent stated that it would incorporate temporary casual berthing (approximately two casual berths) on the internal marina edge of the landward floating boardwalk as part of the Stage 1a development application. The

Proponent also responded to the boat size limit concerns, stating that it is only seeking approval to berth two vessels up to 30 m in length.

The RTS was exhibited on the Department's website and referred to Council for comment. The Council advised that:

- the exclusion of public access along the floating breakwater is not supported;
- it maintains its position on the impacts of the revised marina design on Bardens Bay;
- the maximum boat size limit should be restricted to 20 m until further environmental and social economic impact assessments have been provided;
- the proposed changes to terms C11 and C12 are acceptable;
- it had no objection to the proposed modifications to the sewerage facilities; and
- the 28 m setback would likely result in minimal environmental impact.

Following the lodgement of the RTS, the Department requested further information from the Proponent to determine:

- the design of the floating breakwater including public access arrangements;
- how vessels greater than 20 m will navigate in and out of the site;
- the visual impacts of the revised marina layout;
- the environmental impacts associated with converting the boat lift, slipway and vessel hard stand to a car park; and
- the measures proposed to manage the retrieval and removal of submerged vessels.

5. ASSESSMENT

In its assessment of the modification application, the Department has considered the following:

- the Director-General's assessment reports for the original Concept Plan and earlier modification approvals;
- the Proponent's revised modification application (see **Appendix C**);
- all submissions received by the Department on the amended modification application (see **Appendix D and F**);
- the Proponent's RTS and supplementary information (see **Appendix E**); and
- the information provided by the Proponent to support the revised marina layout approved under Term B1 (see **Appendix G**).

The Department considers the key issues for the proposed modification to be:

- marina layout;
- public access;
- removal of the slipway, boat lift, maintenance facilities and oily bilge pump out;
- modification of the 20 m boat size restriction; and
- modification of terms C11 and C12.

These key issues are assessed in **sections 5.1 to 5.6** of this report. All other issues are assessed in **Section 5.7**.

5.1 Marina Layout

As previously outlined, the Department approved a revised marina design pursuant to Term B1 of the Concept Plan on 9 July 2014. The approved marina design included a floating breakwater instead of a fixed breakwater, along with a revised marina layout to improve the environmental performance of the development. Subsequent to the Department's approval of the revised marina design pursuant to Term B1, the Proponent sought to revise the section 75W modification application to permit:

- the construction of the marina over five stages, instead of two stages as currently approved;
- the removal of the 20 m boat size limit;

- a reduction in the number of marina arms from five to four;
- a reduction to the extent of the marina within Bardens Bay in a westerly direction; and
- the removal of the slipway, boat lift, maintenance and oily bilge facilities, and vessel hard stand and replacement with a car parking facility.

It should be noted that the revised modification application retains the floating breakwater and general shape of the marina consistent with the plan approved by the Department under Term B1. A comparison of the approved and proposed marina layout is provided at **Figure 5** below.

The Proponent has advised that the revisions to the modification application have been sought to:

- reflect the changes to the marina design and layout approved under Term B1 of the Concept Plan;
- revise the staging so that it is commensurate with anticipated market demand;
- enable the berthing of 30 m vessels on-site; and
- reduce the overall marina footprint.

The Department has reviewed the revised marina layout in consultation with Council, RMS and Crown Lands. The Department notes that the Council did not object to the revised marina layout, however it raised concern with the extension of the marina in an easterly direction into Bardens Bay due to the lack of baseline data provided to support this extension, and the provision of adequate public berthing facilities within Stage 1a of the marina. The RMS and Crown Lands raised no objection to the proposed marina layout, however the RMS advised that the final design of the marina should achieve compliance with the relevant Australian Standards for marina design which sets out requirements for safe navigation, loading and stability, services, traffic and car parking. The Department has recommended a future environmental assessment requirement in order to ensure the marina is constructed in accordance with the relevant Australian Standards.

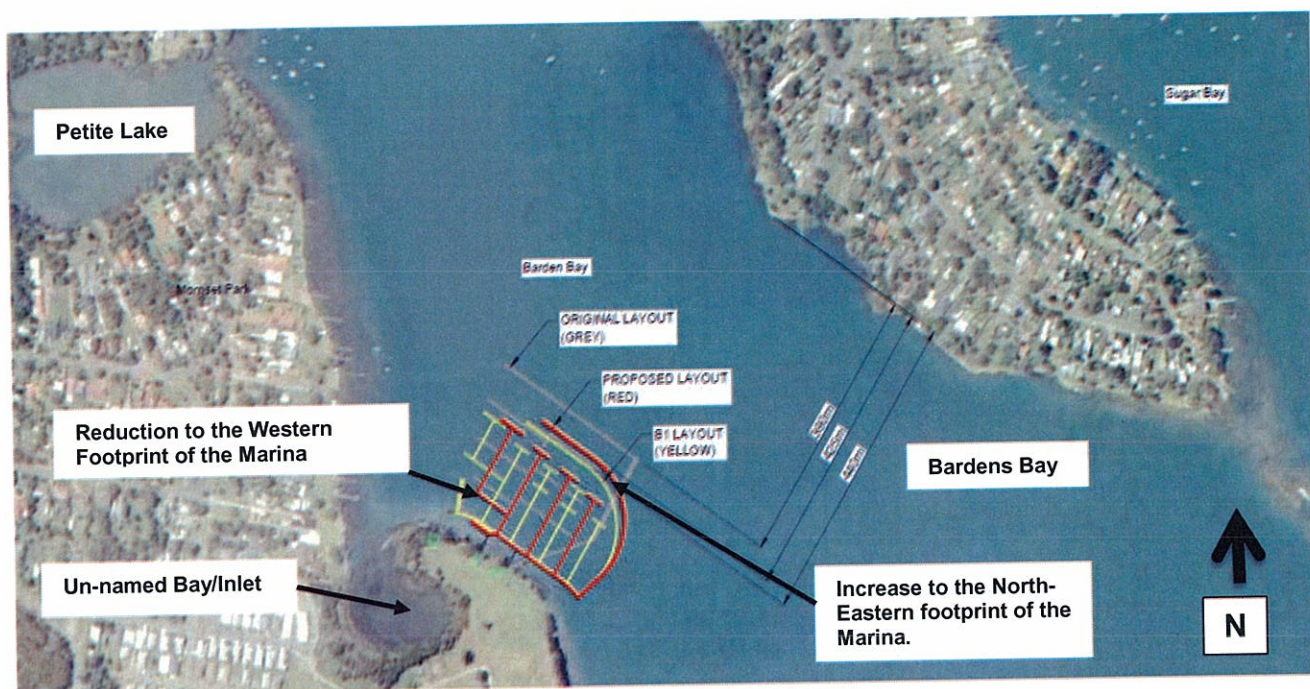


Figure 5: Comparison of Marina Original Marina Layout (grey), Marina Layout as Approved under Term B1 (yellow), and Proposed Marina Layout (red)

The Department has reviewed the Council's comments and notes that the marina will extend an additional 15 m in a north-easterly direction into Bardens Bay from its approved location.

However, the revised design will be reduced by approximately 30 m in a westerly direction away from residential areas (see **Figure 5** above) and the overall footprint will be reduced by approximately 1,530 m². The Department is satisfied that the revised layout will not result in additional visual impacts.

In terms of the staging of the public berthing arrangements, the Proponent has advised that it will provide up to two casual berths within Stage 1a along the boardwalk. The remaining seven berths will be provided within Stage 2b to address the Council's concerns. The Department considers this outcome acceptable on the basis that the number of public berths provided within Stage 1a is commensurate with the number of private berths being created (1 public berth per 27 private berths, as per the ratio proposed under the approved Concept Plan). In order to ensure appropriate public berthing facilities are provided within Stage 1a, the Department has recommended a condition requiring the Proponent to provide up to two casual berths within Stage 1a of the development.

It should also be noted that the development is conceptual and future development applications will require further environmental assessments of the marina. In seeking approval for Stage 2, the Proponent must demonstrate, to the satisfaction of the consent authority that Stage 1 has had negligible impact on water quality.

Given that the proposed revisions to the marina design will result in improvements in the overall environmental performance of the marina, and the issues raised by the Council and the RMS can be addressed via the imposition of conditions, the Department supports the proposed revisions to the marina design.

5.2 Public Access

The Concept Plan included a fixed breakwater which would provide public access to the waters of Lake Macquarie along the north-eastern boundary of the site (see **Figure 6**). The revised application seeks approval to amend the public access arrangements to:

- remove public access along the floating breakwater for safety and security reasons;
- provide alternate public access along the floating pontoon boardwalk which runs parallel to the foreshore (See **Figure 7**); and
- convert the boat access and maintenance facilities to a car park.

The loss of public access along the breakwater was a major concern for Council and the local community. However, a submission from Crown Lands (the land owner) objected to public access being provided along the floating breakwater for safety and security reasons.

The marina operator engaged by the Proponent indicated that uncontrolled public access over open waters extending a substantial distance away from the marina management area would pose a significant safety issue to the public. In addition, public access along the floating breakwater is not encouraged as the floating breakwater may move unexpectedly during high wave action periods which may pose a safety risk to elderly people or young children, as they may be less agile. The marina operator also indicated the public access along private marinas was not common practice in NSW due to the associated public safety risks.

The Department acknowledges the concerns raised in submissions concerning the proposed reduction in public access. However, the Department notes that the modified design does not propose to fully exclude public access from the marina as the boardwalk located near the foreshore will be available for public access (see **Figure 7**).

In addition, the removal of the boat lift and maintenance facilities and conversion of this area to a car park will increase the level of public access within the site and around the foreshore area.

The Department has reviewed the proposed modifications to the public access arrangements across the site and supports the proposed modifications on the basis that:

- Crown Lands (the landowner) does not support public access along the breakwater for safety reasons;
- public safety and security of vessels would be difficult to manage if public access were to be provided along the floating breakwater;
- the Proponent has committed to providing public access along the lineal floating pontoon boardwalk. The pontoon boardwalk will provide safer public access, as the pontoon is located closer to the foreshore where water depths are shallower and foreshore accessibility is better; and
- the proposed public access arrangements will provide a higher level of activation and passive surveillance of the area between the marina and the residential and tourist components of the development in comparison to the approved design concept.

Overall, the Department's assessment concludes that public access along the breakwater is not supported due to public safety concerns, Crown lands (the land owner) not supporting the public access arrangements and as it is not standard practice for marina's to provide public access for safety and security reasons.

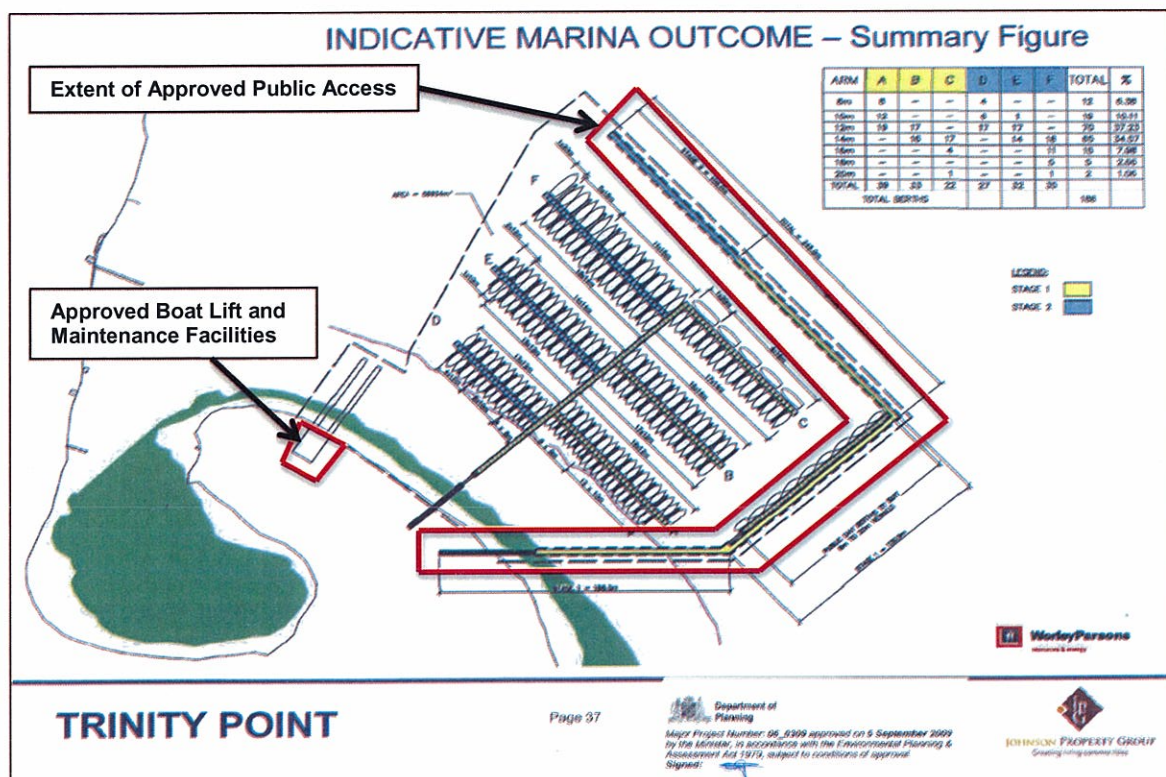


Figure 6: Approved Public Access Arrangements

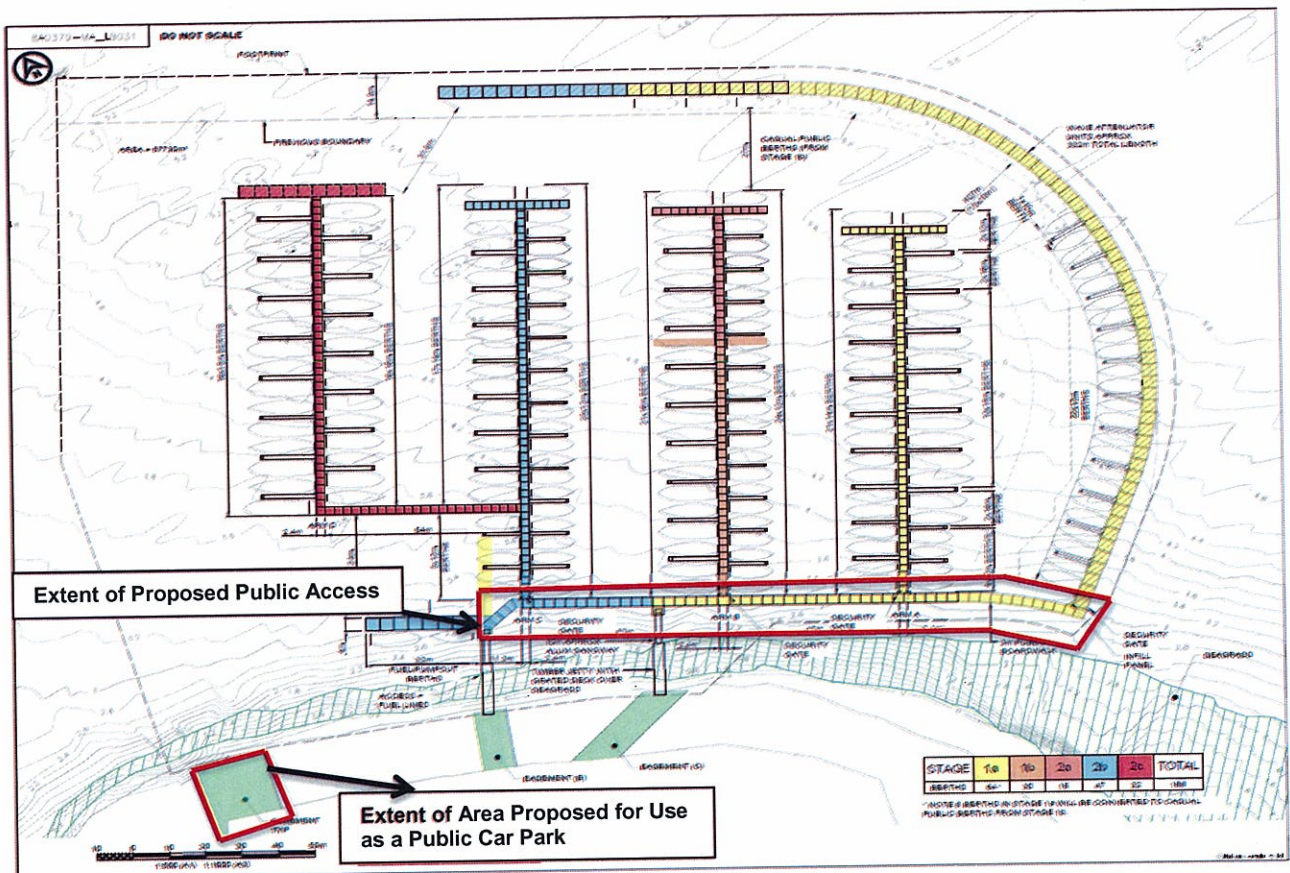


Figure 7: Proposed Public Access Arrangements

5.3 Removal of Slipway, Boat Lift, Maintenance Facilities and Oily Bilge Pump Out

The application seeks approval to remove the slipway, boat lift, and maintenance and oily bilge pump-out facilities and replace them with a car park. The Proponent has advised that this modification is sought on the basis that there are sufficient maintenance and repair facilities available in the broader Lake Macquarie area. In addition, the Proponent has advised that oily bilge can be managed on-site by requiring boat owners to use oily bilge absorbent pads. The management issues will need to be assessed as part of the future development application for the marina.

The Department notes that the Council and the general public supported the removal of the boat lift and maintenance facility, however concerns were raised by both the Council and the general public in relation to the removal of the oily bilge pump-out facility due to environmental concerns (potential water quality impacts). The RMS did not object to these modifications, however it raised concern with the removal of the boat lift, on the basis that the Proponent had not identified an alternate method for managing the retrieval and removal of sunken vessels.

The Proponent's RTS included additional information demonstrating that the use of oily bilge pads in lieu of an oily bilge pump-out facility is an accepted industry practice, and is consistent with current RMS policy. In addition, the RTS proposed the use of a barge contractor to retrieve and remove sunken vessels. The Council reviewed the RTS and advised that the use of oily bilge pads would provide an acceptable environmental outcome. Notwithstanding, the Council requested the imposition of conditions requiring the Proponent to ensure that:

- boat users install oil/fuel drip trays under engines;
- a truck mounted vacuum pump is available should bilge pumping be required; and

- the Environmental Management Plan for the site includes a bilge auditing and management program.

The Department considers that the removal of the maintenance facility and boat lift will have positive environmental impacts such as reduced noise, visual and public amenity impacts.

The Department is satisfied that the removal of the slipway, boat lift, and maintenance and oily bilge pump-out facilities is acceptable subject to the Proponent implementing appropriate measures to manage oily bilge on-site. In this regard, the Department has recommended a modification to Term C15 to ensure that the Responsible Boating Practice Manual is revised to include the management practices for the use and disposal of oily bilge pads on-site including details of how marina users will be educated on the best practise management measures. The Department considers that the requirement for auditing the management of the oily bilge pads can be regulated by Council through the development application for the marina.

In terms of the retrieval of sunken vessels, the Department has recommended that any future development applications relating to the marina must include a contingency plan to address how sunken vessels would be retrieved and removed from the site.

5.4 Modification of the 20 m Boat Size Restriction

A number of principles were approved as part of the Concept Plan and are used to guide the design of the development, including Principle 14 which relates to the design of the marina. The Proponent is seeking approval to modify Principle 14 to remove the 20 m boat size limit to facilitate the berthing of vessels up to 30 m in length.

Subsequent to the lodgement of its RTS, the Proponent clarified that a maximum of two 30 m vessels are proposed to be berthed on-site, at any one time as follows (see **Figure 8** below):

- the temporary berthing of two 30 m vessels on the t-heads of arms A and B in Stage 1B until Stage 2 is completed; and
- following the completion of Stage 2, permanent berthing of two 30 m vessels will be provided on the t-heads of arms C and D.

Concerns were raised by both the Council and the local community regarding berthing of larger vessels due to the potential visual, navigation, amenity and environmental impacts associated with on-site dredging, as well as dredging within the Swansea Channel. It is noted that RMS raised no issues regarding the increase in vessel length.

The Proponent's RTS included supplementary information to identify the visual impacts of the proposal and quantify whether additional dredging was needed both within the subject site or the Swansea Channel.

The Department has assessed the visual and environmental impacts associated with the berthing of two vessels 30 m in length in consultation with the Council and the RMS. A discussion of these issues is provided below.

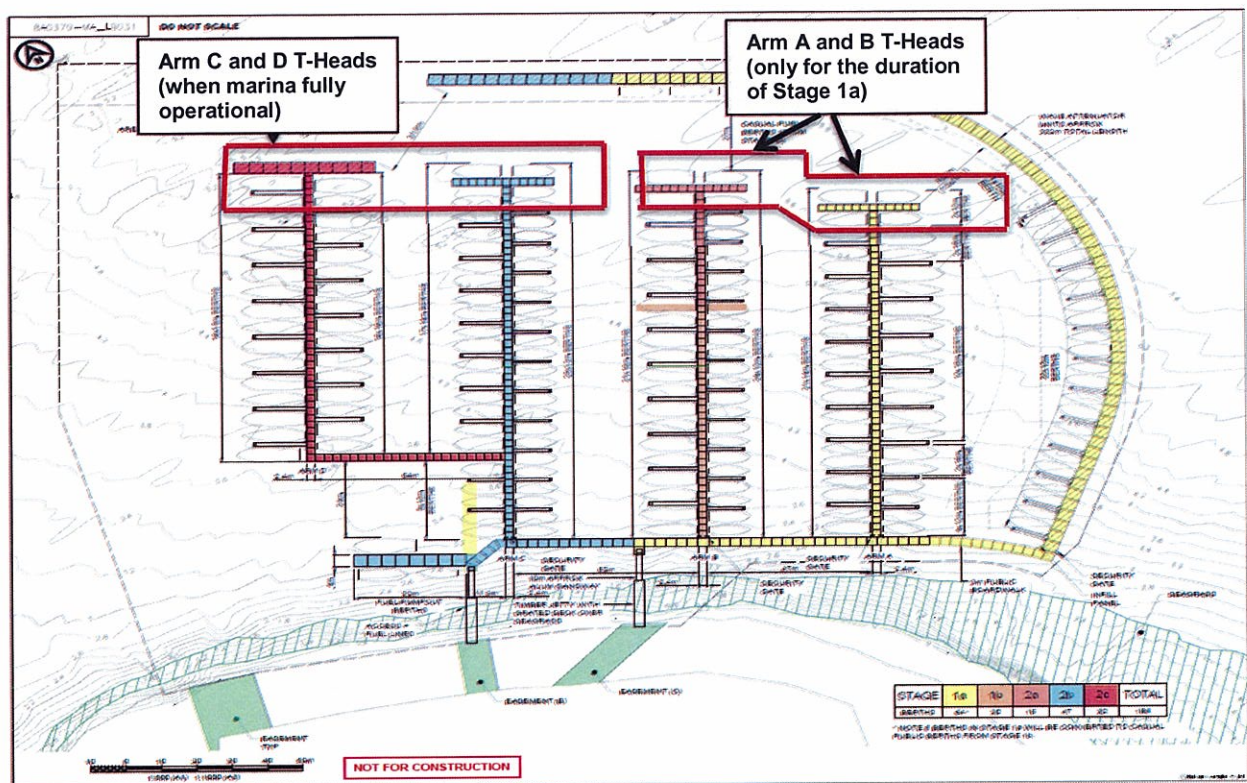


Figure 8: Proposed Location of 30 m Vessels within Stage 1B and Stage 2C of the Development

5.4.1 Visual Impacts

The Proponent provided a supplementary Visual Impact Assessment (VIA) prepared by Richard Lamb and Associates to quantify the visual impacts associated with berthing vessels up to 30 m in length within the existing visual catchment. The VIA concluded that the presence of two vessels up to 30 m in length would be compatible with the Concept Plan and unlikely to cause any significant visual impacts.

The Department has reviewed the VIA provided by Richard Lamb and Associates and agrees that the impacts associated with the revised marina layout and the berthing of two 30 m vessels on-site would have minimal visual impacts for the following reasons:

- the berthing of two 30 m vessels perpendicular to the marina t-heads would have a similar visual impact to the tandem berthing of vessels up to 20 m given the size of the vessels and the overall marina;
- there would be a negligible difference between the height of a 12-15 m vessel and a 30 m power cruiser (5-6 m for a 12-15 m vessel, and 6-6.5 m for a 30 m vessel), and this additional height would not be readily identified at surrounding sensitive receivers;
- views from the water to the site will not be compromised as the height of the vessels would remain below the height of the dense vegetation currently visible from the water anticipated under the approved Concept Plan; and
- the revised marina layout would provide similar visual corridors and would therefore result in similar visual impacts to the marina configuration approved under Term B1.

5.4.2 Navigation and Dredging Impacts

During the exhibition of the modification, the community and the Council raised concern regarding navigation and dredging impacts associated with vessels up to 30 m. However, RMS raised no issues regarding the increase in vessel length. In order to address this issue the Department requested further information from the Proponent.

The Proponent provided supplementary information prepared by Royal Haskoning, dated 12 November 2014, which addresses the navigation and dredging impacts associated with the proposed modifications to the marina configuration and the berthing of 30 m vessels on-site. The Department has reviewed this report and has concluded that:

- the water depth at the fuel wharf/sewer pump-out facility is approximately 3.0-3.6 m which is a sufficient depth for a power vessel of 30 m with a 1.9 m draught to successfully navigate its way to the wharf;
- yachts greater than 20 m may have some difficulty navigating the fuel wharf as their draughts are estimated to be between 2.9-3.4 m. Notwithstanding, the Proponent has advised that if a vessel had a draught that exceeded the Australian Standard requirements it would not be accommodated for at the marina; and
- the marina is capable of being designed to meet *Australian Standard 3965 Marina Guidelines* without the need for dredging.

Based on the above, the Department is satisfied that vessels can safely navigate within the marina lease area. Notwithstanding, the Department has recommended a new term (Term C31) to require the Proponent to provide plans with each development application identifying all signage or navigational aids required to facilitate the safe passage of boats to and within the marina.

In terms of dredging within the marina and the Swansea Channel, the Proponent has confirmed that no dredging is required on-site or within the Swansea Channel. The Department notes that the Council has reviewed the supplementary information provided in the Proponent's PPR and remains concerned that additional and on-going dredging may be required within the Swansea Channel to accommodate the safe passage of vessels in excess of 20 m. Of note, the Council is concerned that as there is no on-going dredging program for the Channel, it is possible that the Channel will not remain at its current depth in the long-term.

The Department has reviewed the Council and community concerns and notes that at present there are six 20-30 m vessels that access other marinas on Lake Macquarie. Given, that the proposal will only facilitate the berthing of two additional 20-30 m vessels, the Department has concluded that the impacts on the lake would be negligible. In addition, the Department notes that the current dredging plan provides for a one-off dredging program once siltation levels in the Channel reach -2.8 m. Given the above, should the Channel remain at a depth of -2.8 m or below, it would be possible for a typical 30 m power vessel to pass through the channel (based on a typical draught of 1.9 m), however it is unlikely that a typical 30 m yacht could safely pass through the channel (based on a typical draught of 3.4 m).

Given the uncertainty about the long-term depth of the Swansea Channel, the Department considers that it would only be appropriate to permit the berthing of two 30 m power vessels on-site, unless an on-going dredging program is established that would enable the safe passage of 30 m yachts through the Channel in the future. It is also noted that yachts may have some difficulty navigating the fuel wharf. As such, the Department has recommended modifications to Principle 14 of the Concept Plan to permit the berthing of two 30 m power vessels at the marina. Yachts may be permitted at the marina if it can be demonstrated that appropriate mechanisms are in place to facilitate the safe passage of 30 m yachts through the Swansea Channel.

5.5 Modification of Terms C11 and C12

To ensure the satisfactory environmental performance of the marina the Concept Plan includes terms C11 and C12 which require the collection and verification of baseline data and 3D modelling of current water flow and flushing characteristics of Bardens Bay, the un-

named bay and Petite Lake. This information is required to understand the environmental impacts associated with the marina.

The Proponent proposes to remove the requirement to collect and verify baseline data and conduct further modelling of Petite Lake as required by term C11 and C12. Petite Lake is a small inlet located off Bardens Bay (see **Figure 5**). The Proponent contends further assessment of Petite Lake is not necessary on the basis that:

- flushing within Petite Lake is mainly driven by tidal fluctuations within Lake Macquarie and freshwater runoff from the catchment; and
- the use of floating pontoons will not change the water levels within Bardens Bay, therefore the revised marina design will have little effect on the flushing characteristics or water quality of Petite Lake.

The Council recognised that there may be some limitations of applying a hydro-dynamic model to assess potential impacts on Petite Lake. However, Council are of the opinion that alternative modelling does exist.

In response to Council's comments, the Proponent sought to modify the terms as follows:

- Term C11(1) to include a qualitative description of Petite Lake, without the need for verified or new data; and
- Term C12(1) to include a qualitative assessment for Petite Lake rather than the 3D hydro-dynamic modelling.

The Department notes that the Council is supportive of the revisions to terms C11 and C12, however, the Department remains concerned that deleting the requirement to verify baseline data and further assess the water flow and flushing characteristics of Petite Lake is not ideal as no baseline data has been collected to enable water quality benchmarks to be established. The Department is of the view that a qualitative assessment for Petite Lake will not provide the level of detail needed to determine the impacts of the marina. As such the Department recommends no changes to Term C11. It is recommended that Term C12 be modified to allow greater flexibility with the hydro-dynamic modeling as follows:

'Term C12 Final Marina Design

Once the verified baseline data is accepted by the approval authority, the final design (both Stage 1 and Stage 2) must demonstrate negligible impact on the environment and include:

1. 3D modelling, or equivalent, of the current water flow and flushing characteristics in Bardens Bay, the un-named inlet at the southern end of Bardens Bay, and Petite Lake. **The modelling methodology is to be approved by consent authority following the verification of the baseline data.**

To ensure Council is satisfied with the modelling, the Department has also recommended that the modelling methodology be approved by the consent authority following the verification of the baseline data.

5.6 Future Environmental Assessment Requirements – Terms C3, C9 and C19

The application seeks approval to amend terms C3, C9 and C19 of the Concept Approval to alter the timing for the lodgement of the revised urban design guidelines, the vegetation management plan and the stormwater management plan. This modification is sought to enable the staging of the plans in accordance with the staging arrangement for the construction of the marina and the land based components of the development. The Department's assessment of the proposed modifications to terms C3, C9 and C19 is provided below.

Term C3 – Urban Design

The Proponent is seeking to defer the lodgement of the Urban Design Guidelines to prior to the lodgement of the first development application for the land based component of the

development. This modification has been sought on the basis that the urban design guidelines referred to in Term C3 do not relate to the marina development as the marina has its own set of guidelines in Principle 14 of the Concept Plan.

The Department agrees that Term C3 relates to the built form requirements for the land based residential and village piazza components of the site, as such the Department supports this modification.

Term C9 – Vegetation Management Plan (VMP)

Term C9 requires the Proponent to prepare a VMP to address the management of riparian vegetation and the rehabilitation of Swamp Oak Floodplain Forest as part of the first development application for the site. The Proponent seeks to amend this term of approval to enable the submission of a VMP as part of the village piazza or accommodation unit development application, rather than with the lodgement of the first development application for the site. This modification has been sought on the basis that the first development application for the marina has already been lodged with the Council and only relates to Stage 1a of the marina and not the land based component of the project.

Based on a review of Term C9, the Department has concluded that the following matters are relevant to the marina component and cannot be deferred to future development applications for the land based component, these matters include:

- the implementation of measures to protect vegetation around the edge of the lake during the construction and operational phases of the marina;
- the reinstatement of 0.05ha of Swamp Oak Floodplain Forest (an endangered ecological community) which will be cleared as a result of the marina development; and
- and ongoing funding and long term maintenance requirements for proposed conservation areas and sensitive ecological marine habitats.

Notwithstanding, the Department considers that it would be appropriate to permit the preparation of a VMP that only addresses the matters that are relevant to the marina component of the application as part of the first development application for the marina, rather than for the whole site. This VMP could then be updated to address the land based components when the first development application for any land based development is lodged. The Department has recommended modifications to Term C9 to facilitate the staged submission of the VMP.

Term C19 – Stormwater Management

The application seeks approval to amend Term C19 to remove the requirement to provide details of the stormwater management system for the whole site at the time of lodgement of the first development application. This modification has been sought on the basis that the stormwater details for the land based component are not required to facilitate the marina development, as the stormwater and pollution control aspects of the marina can be adequately dealt with in the first development application for the marina.

As with the VMP above, a separate stormwater strategy could be prepared for the marina component of the development with a subsequent holistic strategy submitted with the first development application for the land based component of the development. This would allow stormwater to be appropriately managed for each key component of the proposal. Appropriate terms of approval have been incorporated into the recommended Instrument of Modification to enable the staging of the stormwater management plan.

5.7 Other Issues

Table 3: Assessment of Other Issues

Issue	Assessment	Recommendation
Building Setbacks (Term C2)	<p>Due to further detailed design of the project, including redesigns to the marina building envelope the Proponent seeks to amend the building setback from the marina building to the un-named bay from 30 m to 28 m. This is due to the roof line of the marina building extending approximately 2 m towards the un-named bay.</p> <p>A site access road is located between the building and the un-named bay and acts as a physical barrier between the building and foreshore vegetation.</p> <p>Following the RTS, the Council advised that a 28 m setback would likely result in minimal environmental impact. Council is supportive of the modification subject to the Proponent undertaking a detailed assessment of the setback.</p> <p>The Department has reviewed the Council's comments and agrees that the impacts associated with the proposed reduction in the setback would have a negligible environmental impact as the roadway between the building and the vegetation acts as a physical barrier and would provide a level of protection to the values of the foreshore vegetation from any impacts associated with the marina building. For this reason, the Department considers the change in setback to be minor. As the Concept Plan specifies the setbacks requirements for the site further detailed design is considered to be unnecessary.</p>	Accept the proposed modification to Term C2 'Development Parameters'
Marina Staging (Term B2)	<p>The application seeks to increase the number of construction stages for the development of the marina from two to five stages.</p> <p>Concerns were raised in submissions from the public and Council with the proposed staging arrangements, particularly in relation to the lack of public berthing facilities within Stage 1a.</p> <p>The Department has reviewed the proposed staging arrangements and is satisfied that these revisions will not change the environmental impacts associated with constructing the marina as the size, footprint and number of berths is not increasing. However, the Department considers that the Proponent should provide temporary sewerage pump-out, fuel facilities and casual public berths in Stage 1a until full build out is achieved. Following the completion of Stage 1a, approximately 7 public berths will be provided in Stage 1b subject to the control and management of the marina operator. The number of public berths depends on the length of public vessels being berthed at the marina.</p> <p>To address the issues above the Department has recommended a modification to Term B2 which requires the Proponent to provide temporary sewerage pump-out, fuel facilities and casual public berthing arrangement as part of Stage 1a until the location of the final fuel wharf/pump-out facility is</p>	It is recommended that Term B2 be modified to require the Proponent to provide temporary sewage pump-out, fuel facilities and casual public berthing arrangement as part of Stage 1a until the location of the final fuel wharf/pump-out facility is provided and provide details of the casual berthing arrangements for Stages 1 and 2 as part of the first development application.

Issue	Assessment	Recommendation
	<p>provided. In addition, to ensure adequate public berthing is provided for each stage, the Department has recommended a condition requiring the Proponent to provide details of the causal berthing arrangements for Stages 1 and 2 as part of the first development application.</p>	
Car Parking	<p>The car parking for the marina was proposed to be provided underneath the village piazza. The car parking rates for the marina were not specified in the Concept Plan.</p> <p>As the maintenance facility is now proposed to be removed, the Proponent now proposes to utilise this area for marina car parking.</p> <p>The Department has assessed the proposed modification to the marina car parking arrangements and notes that Concept Approval does not identify a car parking rate for marina uses. Notwithstanding, the Department notes that the Traffic Impact Assessment (TIA) prepared to support the approved Concept Plan specifies that 0.3 car parking spaces should be provided per vessel and 0.5 car parking spaces per marina staff member.</p> <p>Based on the rates identified in the original TIA, and the extent of development envisaged under the proposed modification, 58 car parking spaces would be required to service the marina uses. The Proponent has advised that approximately 47 car parking spaces can be accommodated within the former maintenance area. This represents a shortfall of 11 car parking spaces based on the rates identified in the original TIA. In order to address this issue, the Department has recommended a new term of approval (Term C30) requiring the Proponent to address any shortfall in car parking for the marina, in the design of the land based component of the site.</p> <p>In addition, no visual assessment of the car park has been conducted. Therefore, the Department considers that a landscape plan should be provided with the first development application for the marina which incorporates an appropriate level of screening along the northern boundary of the marina car park to ensure the visual impacts of car park are mitigated.</p>	<p>Insert new term of approval which requires the provision of the car parking shortfall to be addressed as part of the first development application for the land based component.</p> <p>Modify Term B5 Principle 8 to include: A landscape plan should be provided with the first development application for the marina which incorporates an appropriate level of screening along the northern boundary of the marina car park to ensure the visual impacts of car park are mitigated.</p>
Pedestrian Access (Term C26)	<p>Public</p> <p>Term C26 of the Concept Plan requires that all pedestrian paths are to be provided within the development site. The Proponent proposes to modify this term to allow pedestrian public access within the site and the Council foreshore area subject to agreement with Council.</p> <p>The Council has advised that it is supportive of this modification.</p> <p>The Department considers the modification to the public access arrangements are reasonable on the basis that it will improve the level of integration between the subject site and the adjoining foreshore and allow greater connectivity around the site reserve in comparison to the approved Concept Plan.</p>	<p>Accept the proposed modification to Term C26 'Public Access'.</p>

Issue	Assessment	Recommendation
<p>Mine Subsidence (Term C27)</p>	<p>Following the approval of the Concept Plan the Chain Valley Mine extension (SSD 5465) was approved. In this regard, the mine extension has the potential to affect the land and water based components of the development as the mine runs underneath Lake Macquarie.</p> <p>The Department consulted with the Mine Subsidence Board regarding the impact of the Chain Valley mine extension on the uses under the Concept Plan. The Mine Subsidence Board recommended a number of revisions to the current mine subsidence design parameters outlined in Term C27 and requested that the Proponent submit a Mine Subsidence Impact Statement prior to the commencement of detailed design, for acceptance by the Board. The Department has updated Term C27 as per the MSB recommendations and has included a requirement which requires the Proponent to submit a Mine Subsidence Impact Statement prior to detailed design.</p>	<p>Update Term C27 to reflect the recommendations made by the Mine Subsidence Board. In addition to updating the mine subsidence parameters. It is recommended that:</p> <ol style="list-style-type: none"> 1. Prior to commencement of detailed design the Proponent must submit a Mine Subsidence Impact Statement (MSIS), to the satisfaction of the Mine Subsidence Board (MSB), which demonstrates how the impact of mine subsidence will be managed. The MSIS shall identify: <ol style="list-style-type: none"> (a) mine subsidence design parameters adopted; (b) the main building elements and finishes; (c) the outcomes of a mine subsidence risk assessment of building elements; (d) mine subsidence mitigation measures proposed for each building element; and (e) comment on the sensitivity of the design to greater levels of mine subsidence. 2. The Proponent shall ensure that the final design for any future development applications incorporates the recommendations of the MSIS (referred to in Term C27 above) to the satisfaction of the MSB prior to commencement of construction. This shall include certification by a qualified structural engineer to the effect that the improvements will remain "safe, serviceable and any damage from mine subsidence will be negligible, localised and readily repairable" taking into consideration the mine subsidence parameters approved by the MSB. 3. The Proponent shall ensure that on completion of any structural works, certification by a qualified structural engineer is forwarded to the MSB, that all improvements have been constructed in accordance with plans approved by the MSB under the relevant development application with supporting documentation.

Issue	Assessment	Recommendation
Consistency with Condition Principle 14.	<p>As discussed in section 5.4, a number of principles were approved as part of the Concept Plan the principles are used to guide the design of the development. Principle 14 relates to the design of the marina, the Proponent is seeking approval to modify Principle 14 of the Urban Design Guidelines.</p> <p>The application seeks approval to update Principle 14 to reflect the proposed modification.</p> <p>The Department has reviewed the revised Principle 14 and considers it to be relatively consistent with the original Principle 14 and the proposed modification.</p> <p>Notwithstanding as discussed in Section 5.4.2 the provision for 30 m yachts is not supported by the Department. As such the Department has recommended that Principle 14 be modified to restrict the 30 m vessels to power boats only.</p>	<p>That the revised Principle 14 be accepted and the following modification be made to the Principle 14:</p> <p>The proposed Marina will provide for boats predominantly up to a maximum length of 20 m with the option to provide up to two berth for power boats between 20-30 m generally in locations as shown in Figure 10b. No dredging is permitted to facilitate the berthing of any vessels.</p> <p>Note: The berthing of yachts in excess of 20 m in the locations identified in Figure 10b may be permitted if it can be demonstrated that these vessels can safely pass through the Swansea Channel.</p>

6. CONCLUSION

The Department has considered the modification request and the Proponent's justification for the amendments. This includes the intent and objectives of the relevant terms of the Concept Approval, in addition to the submissions received from the community, Lake Macquarie Council, the RMS and the Mine Subsidence Board.

The Department acknowledges that the modification is a result of further detailed design following the recommendations made by a marina operator. The modification proposes changes to the marina design and layout which are considered to have a number of environmental benefits.

The Department notes the concerns raised by the community and Council in relation to public access along the breakwater. However, as Crown Lands (the landowner) have objected to public access along the breakwater and given the growing safety and security concerns relating to open waters and public access, the Department does not support public access along the breakwater. The Department considers that providing public access along the boardwalk close to the foreshore is a much safer option.

On balance, the Department supports most of the proposed amendments to the Concept Plan on the basis that the proposed revisions to the marina layout will improve the environmental performance of the marina and will not result in any significant visual or amenity impacts. However, the Department does not support the lack of landscaping requirements for the proposed car park, removal of the requirement to assess the marina's impact on Petite Lake and the provision to permit berthing of yachts up to 30 m due to navigational constraints. Accordingly, the Department has recommended alternate modifications to these terms.

7. RECOMMENDATION

It is RECOMMENDED that the Planning Assessment Commission:

- **approve** the proposed modification under section 75W of the EP&A Act; and
- **sign** the attached notice of modification (in Appendix A)



02/03/15

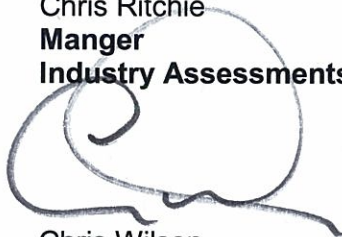
Kate MacDonald
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5.3.15

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