



Marine Habitat Survey

Address | 136 Crescent Road, Newport

Owner | Michael Hannan

Survey Date | 21 March 2025

Report Date | 6 May 2025

Job Number 25-077-08

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1. Report Background

1.1 Purpose of the Report

Crown Lands require that all proposed waterfront development works involving load-bearing structures located below the Mean High Water Mark be reviewed for compliance with environmental regulations. The aim of these regulations is to protect the marine environment, in particular the local fauna and flora such as seagrasses, mangroves and macroalgae. The body responsible for conducting the assessment during the planning stage of the proposed waterfront development is the NSW Department of Primary Industries and Regional Development Fisheries ("NSW DPIRD Fisheries").

The purpose of this report is to provide all the necessary data required for an assessment to be done by NSW DPIRD Fisheries.

1.2 Environmental Considerations

In summary, the main environmental considerations that require assessment by NSW DPIRD Fisheries for waterfront development applications are:

- a) Protection of seagrasses;
- b) Protection of mangroves;
- c) Conservation of the existing ecology; and
- d) Impacts from dredging.

The regulations upon which the environmental considerations are based are discussed below.

The Fisheries Management Act 1994 ("FM Act") applies to habitat and aquatic flora and fauna that have the potential to be affected by a proposed waterfront development. The objectives of the FM Act are to conserve, develop and share the fisheries resources of NSW for the benefits of present and future generations, and in particular to protect key fish habitats and to promote ecologically sustainable development. The FM Act states that

a person must not cut, remove, damage or destroy marine vegetation on public water land, or on the foreshore of any land or lease, except under the authority of a permit issued by the Minister under this Part (205) or of an aquaculture permit.

Two Fish Habitat Protection Plans have also been developed under the FM Act. The first plan deals broadly with dredging and reclamation activities, fish passage requirements, the protection of marine vegetation (in particular mangroves and seagrasses), and the importance of snags. The second plan is specific to the protection of seagrasses. Scientific research has shown that seagrasses are important to the ecology of shallow estuarine environments as they stabilise sediments and maintain water quality, provide shelter and food critical to the survival of a wide variety of juvenile fishes and mobile invertebrates (many of which are of commercial or recreational importance) and play an important role in the cycling of nutrients within estuaries. Seagrasses are a fragile ecological habitat, with many major estuaries in NSW having lost as much as 85% of their seagrass beds in the past

30 to 40 years. In 2012 the population of *Posidonia australis* seagrass (commonly known as strapweed) was listed as an Endangered Population in the estuaries of Sydney under the Fisheries Management Act (Part 7A).

1.3 The Property

The proposed waterfront development of the removal of the existing jetty, ramp, pontoon and mooring piles; and installation of new skid ramp and a new repositioned timber jetty, ramp, pile stabilised pontoon and two mooring piles to create a relocated berthing area is planned for 136 Crescent Road, Newport ("The Property").

For details of the existing structures at The Property and the proposed waterfront development refer to Sections 2.1 and 3.1 respectively.

1.4 On-Site Survey Methodology of The Property

The on-site survey of The Property was conducted at 13:30 on 21 March 2025 by Rick Johnson of Waterfront Surveys Australia. The weather conditions at the time of the survey were overcast with a minimal breeze. The water surface was calm and underwater visibility was approximately 0.75 m. At the time of the survey the tide was rising, with an approximate tidal height of 1.15 m.

The on-site survey area included the footprint of the proposed structures and extended a further 10 m in all directions from the footprint of the proposed structures. The survey was conducted from the shore and inspection of the seabed was done on foot and on snorkel. Photos of each habitat were taken using an underwater digital camera and a description of each differing habitat, and species list of aquatic flora and fauna observed within the survey area, was recorded.

2. Existing Property Details

2.1 Existing Structures at The Property

The Property is located on the eastern shoreline of Winji-Jimmi Bay, in the south-eastern corner of Pittwater - approximately 300 m north of Yachtsman's Park. The Property faces in a westerly direction.

The existing waterfront structures present at The Property at the time of the on-site survey (Photos 1 - 2) included:

- a boatshed on the northern edge of The Property, extending 7 m beyond the MHW and supported on brick piers;
- an area of timber decking (4.5 x 3.7–5.5 m) off the front of the boatshed;
- a timber jetty (6.5 x 1.4 m) extending out from the centre of the timber deck, supported on two middle concrete piers and two jetty end timber piles;
- a timber ramp (6.0 x 1.4 m);
- a longitudinal pontoon (5.3 x 3.8 m) with two sleeved steel stabilising piles on the northern side; and
- two inner timber mooring piles and one outer sleeved steel mooring pile on the southern side of the ramp and pontoon, that created a 10.8 x 6.3 m berthing area.

2.2 Existing Ecology at The Property

2.2.1 Existing Ecology Based on Observations from the On-Site Survey

a) Intertidal Ecology

The intertidal zone within the on-site survey area of The Property consisted of artificial and natural habitats. A low brick seawall sat just beyond the MHW and was fronted by a sloping sandy beach (Photos 1 - 2) which extended offshore for 9.5 m from the wall, finishing in line with the end of the existing timber deck area (see aquatic habitat mapping in Appendix B).

The seawall and sandy beach were bare (Photos 1, 2 and 4). The boatshed piers and deck piers (Photo 3) were colonised by a thick growth of Sydney rock oysters (*Saccostrea glomerata*). The intertidal sections of the existing jetty end piles, pontoon piles and mooring piles were bare. There were two mature grey mangrove trees on the northern side of the existing boatshed (Photo 3).

b) Subtidal Ecology

The subtidal zone within the on-site survey area of The Property started in line with the start of the existing jetty (9.5 m off the seawall) and consisted of a gradually sloping seabed composed of silty sand, that continued offshore for 9 m (Photo 5). The silty sand transitioned to gradually sloping sandy silt at the inner edge of the existing pontoon (Photo 6), and continued uniformly offshore beyond the survey area (see aquatic habitat mapping in Appendix B). The soft seabed across the whole site was bioturbated from the burrowing activities of benthic fauna (Photos 5 - 6).

The soft seabed across the entire site was unvegetated (Photos 5 - 6).

The subtidal sections of the existing timber jetty end piles (proposed to be removed) were colonised by a low density growth of Pacific oysters (*Crassostrea gigas*) along with a thin layer of brown filamentous alga. The existing pontoon piles and mooring piles (one to be removed, three relocated and one to stay in position) were colonised by a low density assemblage of subtidal biota, including brown filamentous alga, Pacific oysters, white ascidians (*Styela plicata*) and bryozoa (frilly *Bugula* sp. and hard *Watersipora* sp.) (Photo 7). The existing pontoon (Photo 8) was colonised by red filamentous alga (*Gelidium* sp.), brown filamentous alga, Sydney rock oysters, white ascidians and hard bryozoa.

Fish observed during the survey included yellowfin bream (*Acanthopagrus australis*) and luderick (*Girella tricuspidata*).

c) Seagrass and Mangroves

No seagrass was observed within the on-site survey area of The Property.

There were two mature grey mangrove trees on the northern side of the existing boatshed. These trees were located north of any construction works or areas of disturbance.

2.2.2 Existing Ecology Based on Government Published Records

NSW DPIRD Fisheries has done extensive mapping of the estuarine habitats and vegetation in all of NSW's estuaries (NSW DPIRD, 2023). The online map of January 2023 indicates the absence of seagrass and mangroves at The Property.

3. Proposed Waterfront Development

3.1 Proposed Structures of the Waterfront Development

The proposed waterfront development at The Property (included in this report in Appendix B) consists of the:

- demolition of the existing timber jetty, ramp, pile stabilised pontoon and three mooring piles;
- cutting back of the existing timber deck on the front of the boatshed by 3.5 m, and the installation of a new pair of piers at the new end to the deck;
- installation of a new timber skid ramp (7.0 x 2.0 m) out from the existing boatshed (located over the removed deck area and some of the demolished jetty);
- installation of a new, relocated timber jetty (3.8 x 1.5 m) as a continuation of the deck along the southern side of the boatshed, supported on one pair of new end piers;
- installation of a new timber ramp (6.5 x 1.5 m);
- installation of a new pontoon (2.4 x 9.0 m) with two stabilising piles on the inner corners. The inner southern mooring pile will stay in place and be re-purposed as a pontoon stabilising pile and the inner northern mooring pile will be relocated 0.5 m inshore and be re-purposed as a pontoon stabilising pile; and
- relocation of the outer mooring pile 1.5 m to the south and relocation of the outer pontoon pile 3 m to the south and re-purposed as a mooring pile, to create a 9 x 5 m berthing area off the front of the new pontoon.

3.2 Assessment of Potential Impacts of the Proposed Development to the Existing Ecology of The Property

3.2.1 Summary of Findings

In summary, the potential impacts on the aquatic ecology at The Property from the removal of the existing jetty, ramp, pontoon and mooring piles; and installation of new skid ramp and a new repositioned timber jetty, ramp, pile stabilised pontoon and two mooring piles to create a relocated berthing area are expected to be minimal, temporary and unlikely to cause significant damage to any marine life.

There were no seagrass habitats within the survey area.

There were two mature grey mangrove trees on the northern side of the existing boatshed. These trees were located north of any construction works or areas of disturbance, and therefore would not be harmed.

The soft seabed across the entire site was unvegetated. As such, the disturbance to the seabed from the installation of new piers and relocation of existing piles would not have any adverse environmental impacts at the site.

The altered shading footprint from the proposed new and relocated structures and from the permanently berthed vessel would have no adverse indirect impacts as the entire seabed was unvegetated.

3.2.2 Detailed Listing of Findings

The potential impacts to the existing ecology of The Property are assessed in detail below in relation to the four main environmental considerations:

- a) Protection of seagrasses;
- b) Protection of mangroves;
- c) Conservation of the existing ecology; and
- d) Impacts from dredging.

a) Protection of seagrasses

No ecological impact from the proposed waterfront development as there was no seagrass present in the survey area.

b) Protection of Mangroves

There were two mature grey mangrove trees on the northern side of the existing boatshed. These trees were located north of any construction works or areas of disturbance, and therefore would not be harmed.

c) Conservation of the Existing Ecology

<i>Development Works</i>	<i>Potential Impact to Existing Ecology</i>	
	<i>Summary</i>	<i>Discussion</i>
Installation of new piers and relocation of existing piles	Loss of a small area of soft subtidal habitat	It has been assessed that the loss of a small area of unvegetated subtidal silty sand/sandy silt would not have any adverse environmental impacts at the site.
Installation of new piers and pontoon	Provide replacement artificial intertidal and subtidal habitats	The installation of the new skid piers, jetty piers and pontoon would provide replacement artificial intertidal and subtidal habitats at The Property, similar to that which is being demolished. It is expected that these new artificial habitats would be colonised by an assemblage of biota similar to that colonising the similar existing structures.

d) Impacts from Dredging

No ecological impact from the waterfront development as there is no dredging required.

Prepared by

A handwritten signature in black ink, appearing to read 'R. Johnson', written in a cursive style.

Rick Johnson

Director of Waterfront Surveys Australia Pty Ltd

Bachelor of Science (Marine Biology), University of Sydney

Environment Institute of Australia and New Zealand member

Appendix A - On-site Survey Photos

The following photographs taken by Rick Johnson during the on-site survey conducted at The Property on 21 March 2025 are provided overleaf:

- Photos 1 - 4. The existing structures at The Property, intertidal habitats and location of the proposed new structures.
- Photos 5 - 6. Unvegetated soft subtidal seabed across the site.
- Photos 7 - 8. Subtidal biota colonising the existing piles and pontoon.

Photo 1. The existing boatshed, timber deck, jetty, ramp, pontoon and mooring piles at The Property.



Photo 2. View inshore of the existing structures – many of which will be replaced in a new location and piles relocated a small distance.



Photo 3. Concrete deck piers (to be removed when the deck is cut back) colonised by oysters. The mangrove tree branches can be seen on the far side of the deck.



Photo 4. Submerged, unvegetated, intertidal sand located in the footprint of the proposed new relocated jetty.



Photo 5. Unvegetated, bioturbated silty sand in the location of the proposed new pontoon.

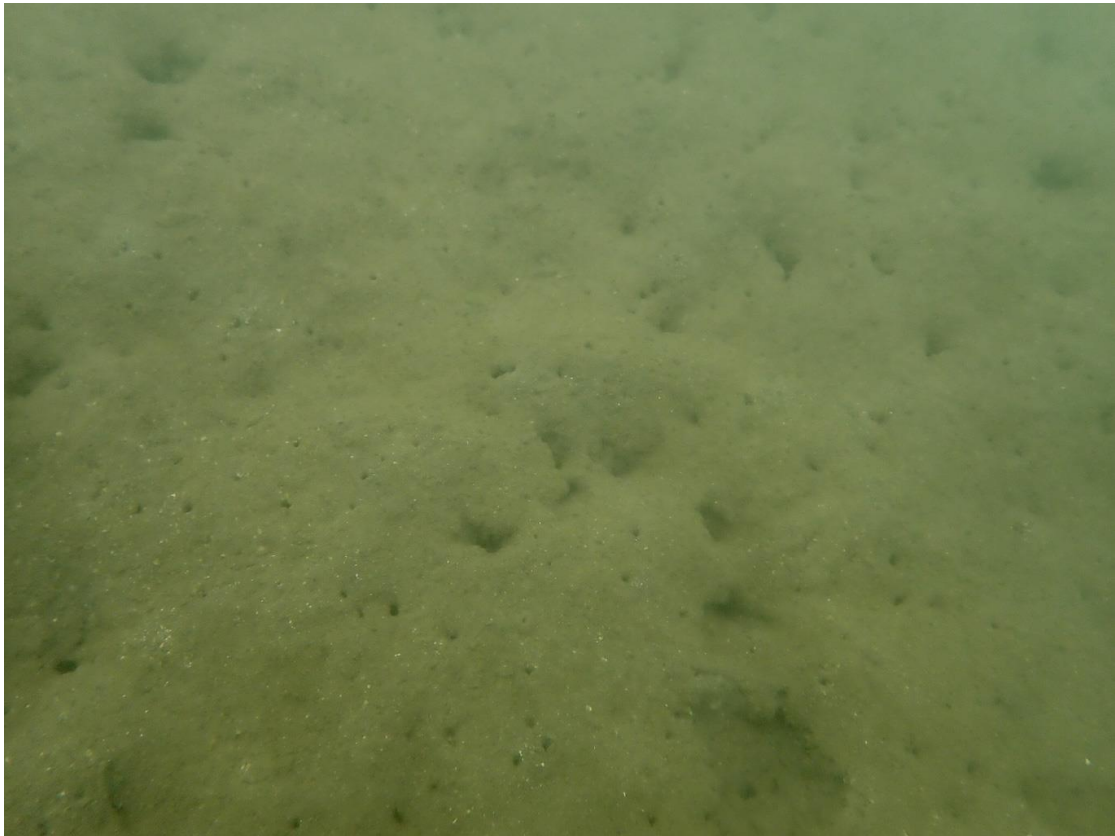


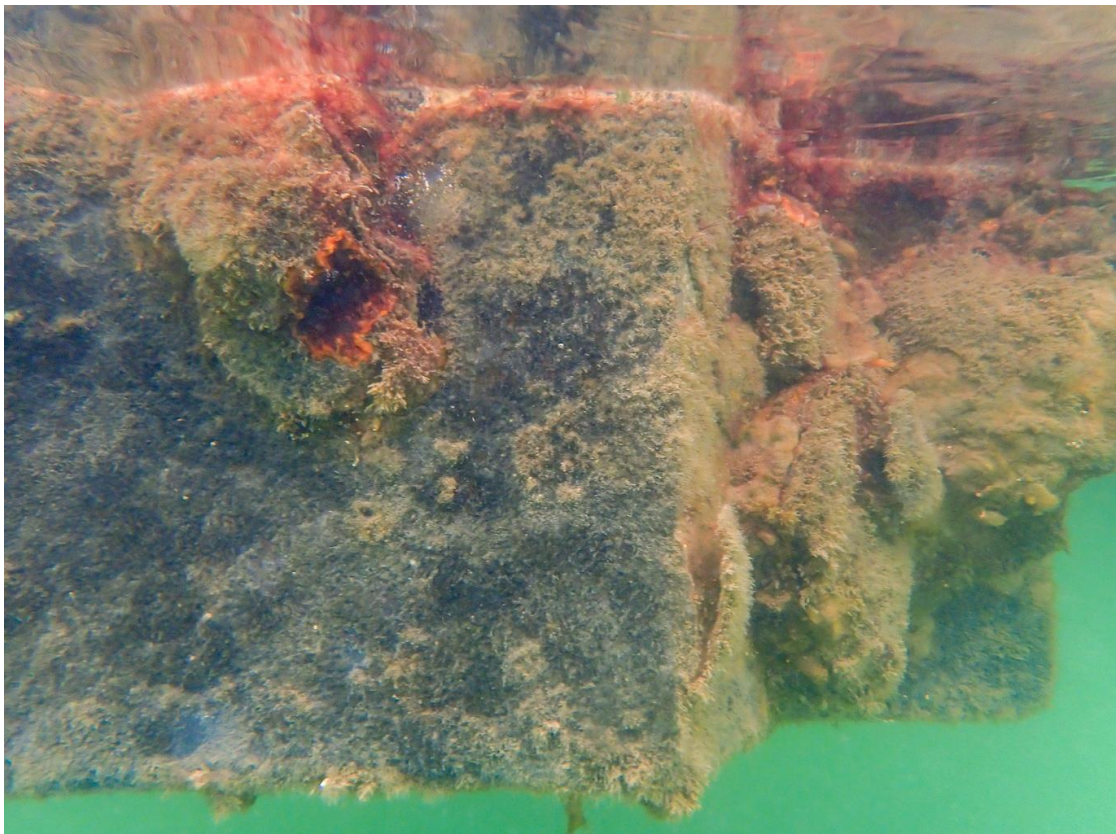
Photo 6. Unvegetated, bioturbated sandy silt in the location of the proposed new berthing area and relocated mooring piles.



Photo 7. Subtidal biota colonising the existing sleeved steel mooring pile (proposed to be relocated).

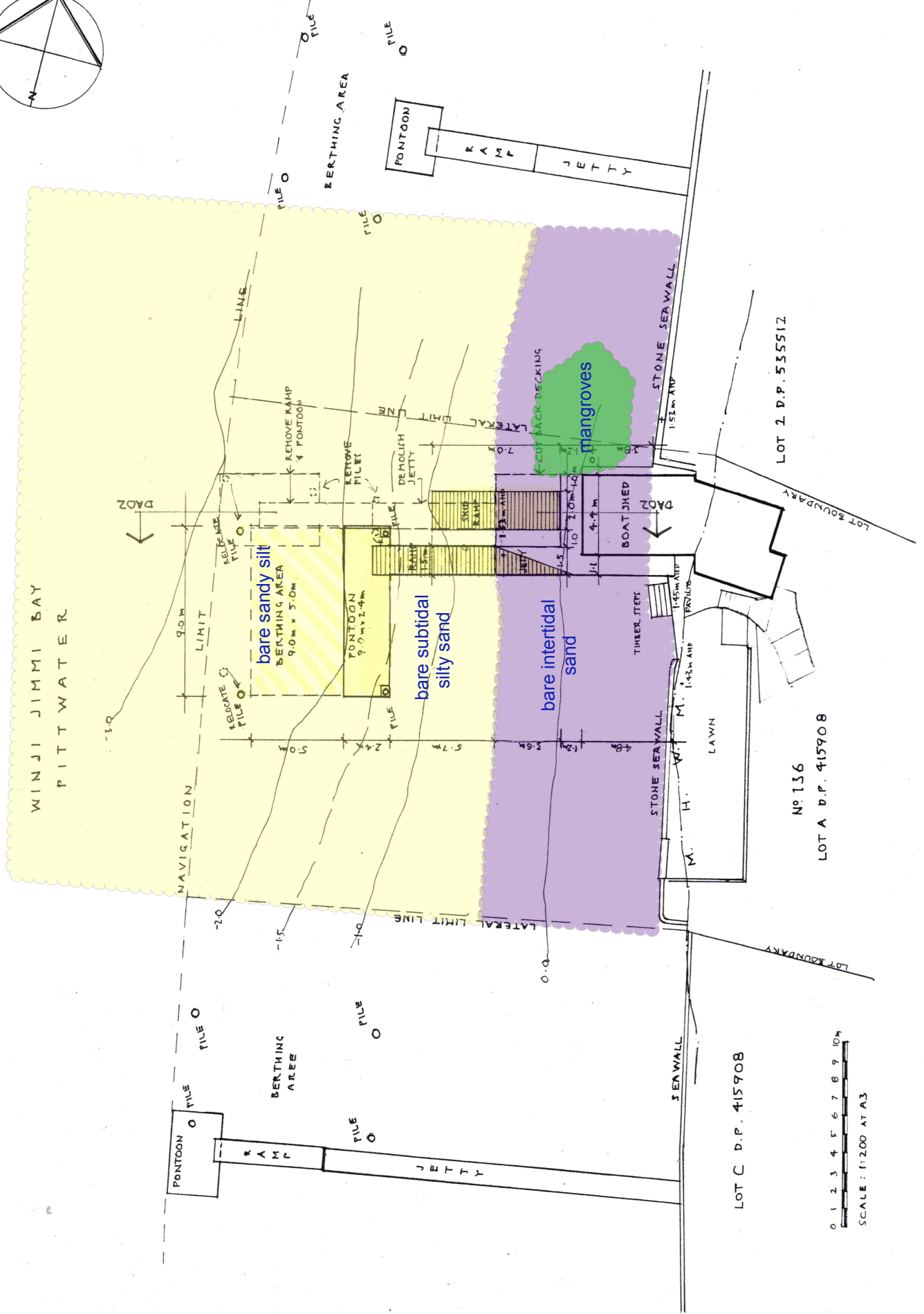
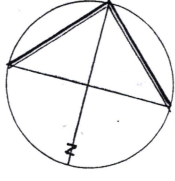


Photo 8. Subtidal biota colonising the existing pontoon (proposed to be removed).



Appendix B - Layout Plan of Waterfront Development and Aquatic Habitat Mapping

The proposed waterfront development design layout plan (provided by Stephen Crosby & Assoc.) and aquatic habitat mapping for 136 Crescent Road, Newport is provided overleaf.



Prepared by
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PONTON &
BERTHING AREA.
SKID RAMP**

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Lot A DP 415908**

For
M. HANNAN

SITE PLAN

Scale	1:200 at A3
Date	APRIL 2025
Drawn	S.C.
Drawing Number	

2054 - DA 01

Appendix C - References

NSW Department of Primary Industries and Regional Development (Jan 2023). *NSW Estuarine Habitat Dashboard*. https://nsw-dpi.shinyapps.io/NSW_Estuarine_Habitat/