DRUMMOYNE WHARF
REDEVELOPMENT

Addendum to review of environmental factors

MAY 2014
Roads and Maritime Services

Drummoyne Wharf Redevelopment

Addendum to review of environmental factors for a change in the position of the wharf

May 2014
**Title:** Drummoyne wharf redevelopment addendum to review of environmental factors for a change in the position of the wharf

**Approval and authorisation**

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<th>Accepted on behalf of Roads and Maritime Services NSW by:</th>
<th>Signed:</th>
<th>Dated:</th>
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<th>Document status</th>
<th>Author</th>
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<tr>
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<td>Peter Mangels</td>
<td>Greg Tallentire</td>
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<td>Greg Tallentire</td>
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I Introduction

The NSW Roads and Maritime Services (RMS) propose to amend the Drummoyne Wharf redevelopment project which was assessed in the Drummoyne Wharf redevelopment review of environmental factors (the original REF; RMS 2014). The proposed change involves the re-positioning of the wharf.

This addendum REF describes and assesses only those aspects of the proposal that have been changed since the determination of the original REF. For ease of identification, and to obtain an understanding of the wider impacts of the project, this addendum REF should be read in conjunction with the original REF.

Relevant to the proposed changes to the proposal, the additional impacts assessed include landscape character and views, social and economic issues, cultural heritage, and air quality.

This addendum REF has been undertaken in accordance with Clause 228 of the Environmental Planning and Assessment Regulation 2000 and is supported by an Landscape Character and Visual Impact Assessment (refer to Appendix B). In doing so, the addendum REF helps fulfil the requirements of Section 111 of the Environmental Planning and Assessment Act 1979 (EP&A Act) which requires that the RMS examine and take into account, to the fullest extent possible, all matters affecting or likely to affect the environment by reason of the activity.

1.1 Background

The original REF was prepared by RPS Australia East Pty Ltd (RPS) on 1 April 2014 and determined on 29 April 2014. As described in the original REF, RMS has proposed to upgrade Drummoyne Wharf including the demolition of the existing wharf and the construction of a new wharf in the same location. The original REF identified that the proposal is essential to provide wharf access for people with a disability to meet the requirements of the Disability Discrimination Act 1992 (DDA) and current legislative standards for disabled access.

The position of the new wharf was approved as follows:

- a bridge and gangway with combined length of about 21.5 metres and up to four metres in width extending from the land at an angle of about 70 degrees.
- a covered pontoon about nine metre wide and 22.5 metre long connected to the northern end of the gangway and oriented parallel to the land.

The approved works commenced on 30 April 2014 and are likely to take about four months, weather permitting. However, the original REF considered impacts for up to six months of construction.

RMS has developed a communications plan for the proposal which includes ongoing communications with community and stakeholders throughout construction (refer to section 5 of the original REF). Additional feedback has been received from nearby landowners raising concerns about potential privacy and issues associated with the position of the new pontoon.

1.2 Justification

Nearby landowners have raised concerns about privacy and view impacts as a result of the proposal. The change to the proposal would reduce the potential for direct views from the wharf into private properties without any additional environmental impacts. The change to the proposal would reduce the overall impact of the proposal and is therefore considered to be justified.
2 Proposed amendment to the proposal

This addendum to the REF is for the re-positioning of the approved wharf to address concerns raised by nearby landowners about potential privacy and view loss issues associated with the position of the new pontoon.

2.1 Consideration of approved wharf position against alternative positions

To address the concerns raised by nearby landowners about potential privacy issues and view loss three alternative options were considered against the current approved wharf position. These options are outlined and considered in Table 2-1 below.

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Comments</th>
</tr>
</thead>
</table>
| 1. Moving the position of the pontoon nine metres to the north-west of the approved location. | - Reduction in potential privacy issues associated with wharf users looking into residences at 128 Lower St Georges Crescent.  
- Reduction in potential view impacts for residences at 128 Lower St Georges Crescent.  
- Potential for privacy issues associated with wharf users looking into residence at 2 Wolseley Street.  
- Potential increase in obstruction of views from 2 Wolseley Street.  
- Would continue to meet the project objectives (refer to section 2.3 of the original REF). |
| 2. Moving the position of the pontoon about 4.5 metres to the north-west of the approved location to ensure that the new wharf extends equally North-West and South-East beyond the limits of the original wharf shelter | - Reduction in potential privacy issues associated with wharf users looking into residences at 128 Lower St Georges Crescent.  
- Reduction in potential view impacts for residences at 128 Lower St Georges Crescent.  
- Potential minor reduction in privacy associated with wharf users looking into residence at 2 Wolseley Street although it is likely that views into residence would be screened by landscaping hedges along the eastern boundary of the property. Refer to section 5.2.2 for further assessment.  
- Potential increase in view impact from 2 Wolseley Street as discussed at section 5.1.2.  
- Would continue to meet the proposal objectives (refer to section 2.3 of the original REF). |
| 3. Retaining a fixed wharf with tidal step. | - This would not provide access in accordance with the DDA and therefore would not meet the proposal objectives (refer to section 2.3 of the original REF). |
| 4. Aligning the pontoon location to the corners of the headland of Menzies Reserve as per Fig 2-3 | - This option is very similar to Item 1 above. The impacts will be the same as Item. |

Alternative 2 is the preferred alternative as it minimises the impacts on all residences and would continue to meet the objectives of the proposal.
2.2 Amendment to the proposal

It is proposed to amend the position of the new wharf so that the covered pontoon is about 4.5 metres further to the north-west than the approved location. This would require the orientation of the combined bridge and gangway to be adjusted to an angle of about 100 degrees to the land. The size of the combined bridge and gangway and the covered pontoon are as described in the original REF.

The changes to the proposal do not involve any changes to the work methodology, construction hours or the disturbance of any land surface.

The new position of the wharf compared to the approved wharf position is shown in figure 2-1.

![Figure 2-1 Site plan showing approved and proposed positions of the wharf](image)

The updated overview of the proposal is shown in figure 2-2 and the proposal drawings at Appendix A.
Figure 2-2 Overview of the proposal and temporary compound site

Fig 2-3 Option suggested by Resident (item 4 Table 2.-1)
3 Consultation

Section 5 of original REF outlines the previous and ongoing consultation to be undertaken for the proposal. Consultation undertaken to date includes discussion with Canada Bay Council and the local MP, the holding of community information sessions, and notification to residents and businesses that could be potentially affected by the proposal.

The proposal was also considered against the requirements of RMS’ Procedure for Aboriginal Cultural Heritage Consultation and Investigation (RMS, 2011) and RMS Cultural Heritage Officer concluded that the proposal was unlikely to have an impact on Aboriginal cultural heritage.

State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) consultation was undertaken with Canada Bay Council due to the listing of the wharf on Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SREP Sydney Harbour). The Foreshore and Waterway Planning and Development Advisory Committee (FWPDAC) were also notified of the proposal in accordance with SREP Sydney Harbour. No objections to the proposal were raised by Canada Bay Council or FWPDAC. The nature of the amended proposal is minor and is not expected to result in any detrimental impacts on the environment or nearby receivers (refer to section 5). As such, additional notification has not been undertaken.

The proposal was re-considered by RMS Cultural Heritage Officer to satisfy the adopted safeguards and mitigation measures and the RMS’ Procedure for Aboriginal Cultural Heritage Consultation and Investigation. It was considered that the changes to the proposal would be unlikely to have an impact on Aboriginal cultural heritage (appendix C).

The community have raised additional issues with the proposal through the ongoing consultation program to those identified and responded to in Section 5 of the original REF. This has resulted in investigations into the possible re-positioning of the wharf and consultation with residents who may be directly affected by this change. Table 3-1 provides an overview of the additional issues that have been raised since the original REF and how these issues have been addressed.

Table 3-1: Issues raised through community consultation and communication

<table>
<thead>
<tr>
<th>Issue</th>
<th>Details</th>
<th>Response / Where addressed in REF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privacy</td>
<td>- Visual intrusion of residents at 128 Lower St Georges Crescent.</td>
<td>- Further consideration for the re-positioning of the wharf to address privacy concerns have been undertaken. As a result, a new position for the covered pontoon about 4.5 metres to the north-west is the subject of this assessment. Impacts on privacy and views are discussed at section 5.2.</td>
</tr>
<tr>
<td></td>
<td>- Concerned that ferry commuters could look into lounge rooms.</td>
<td></td>
</tr>
<tr>
<td>Design</td>
<td>- Request for dimensions</td>
<td>- Dimensions have been provided in the original REF directly to the resident.</td>
</tr>
<tr>
<td></td>
<td>- Unhappy with the design and ‘one size fits all’ approach.</td>
<td>- The upgrade will provide an entirely new wharf which will overcome the past issues with maintenance and closures, significantly reducing the likelihood of future inconvenience.</td>
</tr>
<tr>
<td></td>
<td>- Wharf is too large, why are some smaller in other locations same as other wharves in the program, should be</td>
<td>- The size of the pontoon is dependent on the maritime conditions to ensure pontoon remains stable in most</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Issue</td>
<td>Details</td>
<td>Response / Where addressed in REF</td>
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<tr>
<td>-------</td>
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</tr>
<tr>
<td></td>
<td>designed for the location there isn't parking/traffic capacity at the wharf to accommodate additional passengers - don’t want encourage more traffic in the area to access the wharf.</td>
<td>conditions and meets DDA requirements where possible. Refer to section 3.0 of the original REF. • The upgrade program is to have similar design for all upgraded commuter wharves across the harbour/river to provide a unifying visual theme and help to achieve economies of scale. Refer to section 6.12 of the original REF.</td>
</tr>
<tr>
<td></td>
<td>Maintain a fixed wharf</td>
<td>This option has been considered at section 2.1 and has been found not to meet the DDA and objectives of the project.</td>
</tr>
<tr>
<td></td>
<td>Aligning the pontoon location to the corners of the headland of Menzies Reserve as per Fig 2-3</td>
<td>This option has been considered at section 2.1.</td>
</tr>
<tr>
<td></td>
<td>Wharf could be positioned with pontoon perpendicular with the land.</td>
<td>The orientation of the pontoon is dependent on the maritime conditions to ensure pontoon remains stable in most weather and wave conditions and meets DDA requirements where possible, operational requirements, and navigation. A pontoon in this position is not considered to be practicable as it would:  o Be positioned further into open water and therefore subject to more adverse weather and wave conditions and may require a larger pontoon to ensure the stability of the pontoon and compliance with DDA.  o Stick out into the Parramatta River further creating unnecessary reduction in navigable areas for other vessels. It would also be more visible from surrounding locations potentially increasing impacts on landscape character and view loss from such areas.  o Require increased manoeuvring of ferries when berthing and therefore would not decrease travel times of ferries.</td>
</tr>
<tr>
<td>General</td>
<td>Request a dilapidation report for 2 Wolseley Street</td>
<td>A dilapidation report would be carried out for 2 Wolseley Street.</td>
</tr>
<tr>
<td>Issue</td>
<td>Details</td>
<td>Response / Where addressed in REF</td>
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| • Request reason why Birkenhead Point ferry services stopped and if these services were still operating, would this reduce demand at Drummoyne and allow a smaller wharf to be constructed. | • The operation of the ferry service is outside the scope of the proposal. This enquiry will be forwarded to TfNSW.  
• The size of the wharf is determined by the location and is dependent on the maritime conditions to ensure pontoon remains stable in most conditions and to meet DDA requirements where possible.  
• Refer to section 3.0 of the original REF.                                                                                     |                                                                                                                             |

4 Statutory and planning framework

Consistent with the original REF, the proposed changes do not impact on any conservation agreements and plans of management under the National Parks and Wildlife Act 1974, joint management and biobanking agreements under the Threatened Species Conservation Act 1995 (TSC Act), wilderness areas, critical habitat, threatened species, populations and ecological communities and their habitats or other protected fauna and native plants.

The environmental impacts of the changes to the proposal are not likely to be significant and therefore it is not necessary for an environmental impact statement to be prepared and approval to be sought for the proposal from the Minister for Planning and Infrastructure under Part 5.1 of the EP&A Act. The changes to the proposal are unlikely to affect threatened species, populations or ecological communities or their habitats within the meaning of the TSC Act or Fisheries Management Act 1994 and therefore a Species Impact Statement is not required. The proposed changes to the proposal would not affect Commonwealth land or have an impact on any matters of national environmental significance.

4.1 State Environmental Planning Policies

4.1.1 State Environmental Planning Policy (Infrastructure) 2007

Clause 68(4) of ISEPP permits development on any land for the purpose of wharf or boating facilities to be carried out by or on behalf of a public authority without consent.

Part 2 of the ISEPP contains provisions for public authorities to consult with local Councils and other public authorities prior to the commencement of certain types of development. As part of these requirements, a formal consultation letter was sent to Canada Bay Council notifying them of the proposal in accordance with the ISEPP due to potential impacts on public places. The changes to the proposal do not impact on a public place under the control of Council. As such, re-notification of the proposal to Council was not deemed to be necessary.

No other consultation under ISEPP is considered necessary in respect of the proposed changes.

The proposal is not located on land reserved under the National Parks and Wildlife Act 1974 (NPW Act) and does not affect land or development regulated by State Environmental Planning Policy No. 14 - Coastal Wetlands, State Environmental Planning Policy No. 26 - Littoral Rainforests, State Environmental Planning Policy (State and Regional Development) 2011 or State Environmental Planning Policy (Major Development) 2005.
4.1.2 Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (now a deemed State Environmental Planning Policy)

The proposal remains consistent with the all relevant objectives and matters for consideration of the Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SREP Sydney Harbour).

The FWPDAC, Canada Bay Council, Ausgrid and Sydney Water were consulted about the original proposal and raised no objection.

The changes to the proposal are considered to be minor and do not involve any Ausgrid or Sydney Water assets. It is concluded at section 5.3 that the impact on the heritage significance of the wharf will not change as a result of the changes to the proposal. Therefore, re-notification of the proposal to FWPDAC, Ausgrid, Sydney Water or Canada Bay Council is not considered necessary.

5 Environmental assessment

This section examines and takes into account, to the fullest extent possible, all matters affecting or likely to affect the environment by reason of the proposed changes to the proposal and includes additional site specific environmental safeguards to mitigate the identified potential impacts.

Following a scoping of the changes to the proposal, landscape character and views, social and economic issues, and cultural heritage were considered to require further assessment to understand and manage potential impacts to the environment.

5.1 Landscape character and visual impact

5.1.1 Existing environment

A Landscape Character and Visual Impact Assessment (LCVIA) (refer to Appendix I of the original REF) was prepared by Jane Irwin Landscape Architects in accordance with RMS’ Environmental Impact Assessment-Guidance Note, Guideline for landscape character and visual impact assessment for the original proposal. The LCVIA has since been updated to assess a larger envelope (envelope assessment area) in which the wharf will be located. The envelope assessment area is shown in Figure 5-1. The proposed wharf location is within this envelope assessment area. A copy of the updated LCVIA is provided at Appendix B.
5.1.2 Potential impacts

Landscape character
The positioning of the wharf results in a minor change in the orientation of the gangway and the position of the covered pontoon which now sits about a further 4.5 metres to the north-west. This re-positioning does not result in any changes to the potential impacts on landscape character as identified in the original LCVIA.

Views
Views likely to be affected by any re-positioning of the wharf to within the envelope assessment area are limited to the view identified as Viewpoint 1 within the original LCVIA. The impact on all other view impacts remain the same as those identified in the original LCVIA.

Viewpoint 1 includes views from Menzies Reserve but is also relevant to residents adjoining the reserve being a two storey dwelling at 2 Wolseley Street and a 4 storey residential flat building (with ground floor car park) at 128 Lower St Georges Crescent.

Originally, impacts on Viewpoint 1 were assessed as being high to moderate. This was due to both the sensitivity of the view to change and the magnitude of the proposal also being high to moderate as detailed at section 6.8.2 of the original REF.

The updated LCVIA has assessed the impact of the envelope assessment area on Viewpoint 1. The findings included that the impact will be high to moderate. Some views across the river to Hunters Hill from Menzies Reserve will be obstructed with the increase in the scale of
the wharf, the roof associated with the proposed pontoon, and the change in the orientation of the wharf which is now parallel with the land. This impact is greatest on approach from Wolseley Street where part of the view to the Parramatta River will be blocked by the new wharf. Unobstructed views would remain to the east and south-east towards Cockatoo Island and the CBD and the north-west to other parts of Drummoyne and Hunters Hill.

Some views from properties adjacent to the park may also be affected. The worst affected properties would be the two storey dwelling at 2 Wolseley Street and the 4 storey residential flat building (with ground floor car park) at 128 Lower St Georges Crescent. The orientation of the primary views from these properties are directly across the foreshore property boundary which are not obstructed by the existing wharf. Oblique views to the north-east to parts of Hunters Hill across the river from 2 Wolseley Street and the north-west to parts of Hunters Hill from 128 Lower St Georges Crescent would be partially obstructed by the increase in the size of the wharf within the envelope assessment area. Some of these views however are also currently partially obstructed by vegetation thereby lessening this impact. The extent of this impact at 128 Lower St Georges Crescent also reduces with the rise of each storey above the lowest Level 1 apartments. Overall the impact on the worst affected adjacent residents is considered to be high to moderate.

As such, the impact on views from the re-positioning of the wharf to within the envelope assessment area remain consistent with those assessed in the original REF.

5.1.3 Safeguards and management measures

It is considered that the existing safeguards and management measures are adequate to ensure that the proposed changes to the proposal are acceptable in terms of its impact on landscape character and visual impact.

No additional safeguards or management measures are considered necessary.

5.2 Socio-economic issues

5.2.1 Existing environment

A single storey dwelling at 2 Wolseley Street and a 4 storey residential flat building (with ground floor car park) at 128 Lower St Georges Crescent are located adjacent to Drummoyne Wharf. The private open space area and living areas of these residents are oriented towards the water meaning that any vessels or structures over the water may have the potential to reduce privacy and amenity of these residents.

While it is acknowledged that existing levels of privacy should be maintained where possible this can be difficult for developments fronting the water which are designed to maximise views looking out. It is also noted that the waterway is a publicly accessible area and people can manoeuvre vessels in front of properties and therefore existing levels of privacy are subject to change.

RMS is also aware of anti-social behaviour by some fisherman at the wharf which contributes to a reduced amenity for nearby residents.

5.2.2 Potential impacts

Ongoing consultation with the community has identified that reduced privacy and amenity may result from the approved wharf location. This is mainly due to the increased size of the pontoon and its new orientation parallel to the land.

As detailed at section 3 of the original REF, the design of the wharf is determined by the location and is also dependent on the maritime and weather conditions and the need to meet DDA requirements where possible.
In consultation with residents, further investigations have identified a preferred option to re-position the wharf so that the covered pontoon is located a further 4.5 metres to the north-west of the approved location. Refer to section 2.1.

The re-positioning of the approved wharf as proposed would have the following effect on the privacy of adjacent residents:

- The pontoon would be located further away from the rear of at 128 Lower St Georges Crescent and would provide less opportunity for commuters and other users of the wharf such as fisherman to have direct views to the property. The platform of the pontoon would sit at just above sea level. The lowest apartment at this address is at Level 1. Therefore any potential for direct views would be offset due to level differences and any potential for privacy concerns would be reduced with the increase in the levels of the building.

- The wharf would be located closer to, but not in front of, the rear of 2 Wolseley Street. While the new position of the wharf would be closer, it is not expected that this would result in any substantial impacts on privacy caused by any potential for direct views from commuters and other users of the wharf such as fisherman. This property is oriented directly north away rather than toward the position of the pontoon. It also has landscaping hedges along its eastern boundary which provide screening from Menzies Reserve and parts of the harbour. It is expected that this hedge would also screen potential views from the majority of the pontoon.

Overall, the potential for impacts on privacy and amenity are considered to be minor moderate. This impact is considered to be acceptable given the location of the adjacent developments fronting the harbour and the design requirements of the wharf.

5.2.3 Safeguards and management measures

It is considered that the existing and proposed safeguards and management measures adopted to address potential socio-economic impacts are adequate for the amended proposal.

During further design refinements the opportunity to provide screening at the southern and western corners of the pontoon would be considered. This may include the addition of frosted or etched glass screens.

5.3 Heritage

5.3.1 Existing environment

Drummoyne Wharf is listed within SREP Sydney Harbour (Wolseley Street Wharf) as an item of local heritage significance. As detailed within the original REF, the heritage significance of the Drummoyne Wharf is embodied by its location and its continuity of function including any physical evidence demonstrating its long history of use. Furthermore, its highly scenic visual setting is also considered to contribute to the heritage significance of the site. The fabric of the wharf dating from 2008, is considered to be of negligible heritage significance.

5.3.2 Potential impacts

The original REF identified that the principal significance of the wharf, embodied by its location and continuity of function including any physical evidence demonstrating its long history of use, would be maintained with the re-opening of the wharf. Overall, the proposed development was considered to be both reasonable and appropriate in terms of heritage.

As such, the re-positioning of the approved wharf location as proposed will not result in any additional non-Aboriginal impacts on the significance of the wharf as identified in the original REF.
RMS’s Cultural Heritage Officer has advised that the changes to the proposal would be unlikely to have an impact on Aboriginal cultural heritage (refer appendix C).

5.3.3 Safeguards and management measures

It is considered that the existing safeguards and management measures are adequate to ensure that the changes to the proposal are acceptable in terms of its impact on Aboriginal and non-Aboriginal Heritage.

6 Environmental management

6.1 Summary of safeguards and management measures

No additional environmental safeguards have been outlined in this assessment undertaken in section 5. Therefore the environmental safeguards of original REF (section 7) would be sufficient to minimise any potential adverse impacts arising from the proposed works on the surrounding environment.

7 Conclusion

7.1.1 Justification

The change to the proposal would reduce the potential for direct views from the wharf into private properties without any additional environmental impacts. The change to the proposal reduces the overall impact of the proposal and is therefore considered to be justified.

7.1.2 Objects of the EP&A Act

It is considered that the proposed changes are generally consistent with the objects of the EP&A Act, including the principles of ecologically sustainable development.

7.1.3 Conclusion

The proposal is subject to assessment under Part 5 of the EP&A Act. This addendum to the original REF has examined and taken into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of the proposed changes to the construction hours. Consistent with the original REF, the proposed changes do not impact on any conservation agreements and plans of management under the National Parks and Wildlife Act 1974, joint management and biobanking agreements under the Threatened Species Conservation Act 1995 (TSC Act), wilderness areas, critical habitat, threatened species, populations and ecological communities and their habitats or other protected fauna and native plants.

The environmental impacts of the changes to the proposal are not likely to be significant and therefore it is not necessary for an environmental impact statement to be prepared and approval to be sought for the proposal from the Minister for Planning and Infrastructure under Part 5.1 of the EP&A Act. The changes to the proposal are unlikely to affect threatened species, populations or ecological communities or their habitats within the meaning of the TSC Act or Fisheries Management Act 1994 and therefore a Species Impact Statement is not required. The proposed changes to the proposal would not affect Commonwealth land or have an impact on any matters of national environmental significance.

No safeguards or management measures, in addition to those at section 7 of the original REF, are considered to be required as a result of the proposed changes to the proposal.
8 Certification

This addendum to the Redevelopment of Drummoyne Wharf provides a true and fair review of the proposal in relation to its potential effects on the environment. It addresses to the fullest extent possible all matters affecting or likely to affect the environment as a result of the proposal.

Peter Mangels
Senior Planner
RPS Australia East Pty Ltd
20 May 2014

I have examined this review of environmental factors and accept it on behalf of Roads and Maritime Services.

Bob Rimac
Project Manager, Maritime Infrastructure
Roads and Maritime Services
21 May 2014
Appendix A

Proposal drawings
This drawing is a compilation of survey information and existing building information provided by Norton Survey Partners. Group GSA Pty Ltd takes no responsibility for the accuracy of this information. This drawing is not intended for use in any way other than as a basis for the preparation of consultant drawings and specifications. Group GSA Pty Ltd reserves all rights, including the right to alter, reproduce or transmit this drawing in any way without written permission of Group GSA Pty Ltd.

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LEGEND:
- Area to be demolished & removed allow to terminate all existing services and reconnect as required.
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Do not scale drawings. Use figured Dimensions.

All levels and dimensions are to be checked and verified by the client prior to the commencement of any work, making written permission of Group GSA Pty Ltd.

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**General Notes:**

1. Refer to Structural Engineer Specification and Set Out New Wharf Accordingly.
2. Setout Dimension is Along the Centre Line.
3. Relocate Existing Services Refer to Electrical Engineers Drawings.
4. Check on Site. Distance May Vary Depending on Result of Existing Jetty Removal.
5. Refer to Structural Engineer for Dimensions for Final Setout of Pontoons, Gangway and Bridge.

**Services:**

Roads & Maritime

**Legend:**

- Pod T01 - 22.5m x 9m Steel Pontoon
- Pt T22 - Fixed Location Reader
- Flr - Steel Framed Services
- Tactile Indicators as per Tactile Indicators
- Fixed Location Reader
- GRWY T02 - 16m Single Carriage
- Tactile Indicators
- Fixed Location Reader
- Flr - Steel Framed Services
- Tactile Indicators
- Fixed Location Reader
- Flr - Steel Framed Services

**Preparations:**

- 15/05/14 - Issued for Review
- 01/04/14 - Drummoyne
- 04/11/13 - Published
- 02/10/13 - Checked
- 05/11/13 - Set Out Dims, Seats Rev, X-Ref
- 29/11/13 - Issued for Construction
- 15/07/10 - 1:100 @ A1

**Design:**

- Sydney Wharves Upgrade Program - Drummoyne
- Wharf Plan
Appendix B

Landscape character and visual impact assessment
1.0 INTRODUCTION

The project
This Landscape Character and Visual Impact Assessment (LCVIA) is a component of the REF for the Sydney Harbour Wharves Upgrade Program.

Jane Irwin Landscape Architecture has been engaged by Hansen Yunken for Roads and Maritime Services NSW (RMS) to assess the development proposals for the upgrade of a number of ferry wharves throughout Sydney Harbour. The wharves are within the inner harbour and are currently being used by ferry commuters; recreational vessels; and accessed by the general public.

Assessment envelope
For the purposes of this assessment, and to provide some flexibility should the position of the wharf need to be adjusted due to any site or navigational constraints, an envelope has been used to assess the potential landscape character and visual impacts of the proposal. The height of the new pontoon roof structure would vary according to the tide but would generally be around the same height of the existing roof. The area shown in red outline at Figure 16, combined with the fluctuating height of the pontoon roof structure, forms the envelope that has been used to undertake this assessment.

Purpose and scope of this report
The LCVIA Report has been prepared for RMS as part of the Review of Environmental Factors (REF) for the Drummoyne wharf upgrade.

Under clause 68 (4) of the State Environment Planning Policy (SEPP Infrastructure) 2007, development for the purposes of a wharf may be carried out by or on behalf of a public authority on any land without consent, subject to the requirements of Part 5 of the Environmental Planning and Assessment Act 1979 (the Act). Under the Act, “land” includes the sea.

Part 5 of the Act defines development involving (among other things) the use of land, carrying out of work and demolition and construction of buildings as an activity. When considering an activity RMS as the determining authority must examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity. This is done through the preparation of a REF.

The requirements of an REF are specified in Environmental Planning and Assessment Regulation 2000 (the Regulations) clause 228 (Under the regulations, guidelines have been developed for the likely impacts of marinas and related facilities such as wharves). The guidelines therefore apply to the commuter wharf projects. LCVIA forms one of the environmental factors which requires consideration as part of the REF process. The Department of Urban Affairs and Planning - EIS Guideline - Marinas and Related Facilities - September 1996, sets out issues to consider if a proposal is likely to have a visual impact.

a) Visual impact from adjoining properties and from surrounding land and water — consider potential impacts such as changed or obstructed views due to:
  • The facility form, bulk, colour or reflectivity
  • Lighting from security requirements or night operations
  • Boat mooring and movements
  • The clearing of vegetation
b) Proposed methods of reducing visual impact such as landscaping, materials selection and design and orientation of structures.

Report structure
The structure of this report is as follows:
1.0 Introduction - outlines the purpose of the report including the assessment methodology
2.0 Contextual analysis and brief for the new wharf including urban design objectives for the project
3.0 Landscape Character Impact Assessment
4.0 Visual Impact Assessment
5.0 Summary and Mitigation Strategy

NSW Transport - Road and Maritime Services urban design policies and guidelines
This report has been prepared based on the structure outlined in the RMS Environmental Impact Assessment Practice Note EIA-N04 - Guideline for landscape character and visual impact assessment (EIA- No4 Guidelines) March 2013 and ‘Beyond the Pavement’ 2014 RMS Centre for Urban Design policy.
The guidelines differentiate between visual assessment (the impact on views), and landscape character (the impact on the aggregate of an area’s built, natural and cultural character or sense of place).

Tasks outlined in the guide include:

- Analyse landscape character.
- Identify landscape character zones.
- Assess landscape character impacts.
- Assess the visibility of the proposal.
- Identify key viewpoints.
- Assess visual impacts.
- Refine the concept design to avoid and minimise landscape character and visual impacts.
- Develop a mitigation strategy to minimise landscape character and visual impacts.

These tasks are undertaken to inform the project approval authority, other agencies and the community about the landscape character and visual impact of the proposal and what mitigation strategies should be implemented, as well as improve the proposals overall design.

**Assessment methodology**

According to the terms defined within the EIA-N04 Guideline, both a landscape character and a visual impact assessment have been conducted to determine impacts of the proposal on the character of the place and the views within that place.

The assessment grading for the landscape character assessment and visual impact assessment is set out in table 1 below. Through this table impact is assessed based on both the sensitivity and magnitude.

Landscape character relates to the built, natural and cultural aspects that make a place unique. Landscape character assessments refer to the sensitivity (ability to absorb change) of the character zone to the proposed change and the magnitude or scale of the project within the character zone. EIA-N04 Guideline notes that Landscape Character Assessment is the assessment of impact on the aggregate of an area’s built, natural and cultural character or sense of place.

Visual impact assessments refer to the quality of a view, type of viewer, number of viewers, and how sensitive it is to the proposed change, while magnitude refers to the nature (eg. scale, colour, reflectivity, materials) of the project and its proximity to the viewer. EIA-N04 Guideline refers to visual assessment as the assessment of impact on views. It addresses people’s views of an area from their homes or other places of value in the community.

Based on these two assessment criteria a judgement must be made as to the quality of design outcome, and the strategies for mitigating and balancing the objectives of the project with its impact on its setting.

![Table 1. Landscape character and visual impact grading matrix](image)
2.0 CONTEXTUAL ANALYSIS

**Location**
The study area for the following LCVIA report is Drummoyne Wharf, located at the northern end of Wolseley Street, in the suburb of Drummoyne on the Parramatta River approximately 6km from the CBD.

**Landscape Context**
The wharf is located at the tip of the southern point that frames Drummoyne Bay. To the west lies Drummoyne Bay, a relatively open bay with scattered private boat moorings and a private foreshore interspersed with small reserves at both points and towards the centre of the bay, which provide public access to the harbour. The foreshore of Drummoyne extends to the south east from the wharf, while to the west Cockatoo Island, Spectacle Island and Snapper Island sit within the Parramatta River framed by the peninsulas of Balmain to the south east, Drummoyne to the west and Hunters Hill to the north. Drummoyne wharf operates as a ferry stop along the Rydalmere to Circular Quay route.

**Character of the wharf in its setting**
The existing wharf at Drummoyne is a single timber jetty. At the entrance to the jetty there is a covered ticket collection, signage and timetable point. The northeastern edge consists of a covered waiting area with timber walls to the northwest and southeast for weather protection. Water access stairs are provided at the northeastern end of the wharf. The jetty is enclosed by white painted timber railings and all roofing structures on the wharf consist of timber post and beams with angled roofs made from corrugated iron. The wharf meets the edge of Menzies Reserve with a break in the masonry block foreshore wall. The entrance to the wharf is framed by two palms with a concrete path connecting back through the reserve to Wolseley Street.

**Heritage Context**
RPS has prepared a Statement of Heritage Impact for the proposal and reports that the significance of the wharf is:

"embodied by its location and its continuity of function including any physical evidence demonstrating its long history of use. Furthermore, its highly scenic visual setting is also considered to contribute to the heritage significance of the site. The fabric of the wharf dating from 2008 and is considered to be of negligible heritage significance."

Further to this assessment RPS identify that:
"Drummoyne ferry wharf has been an important transport location since the 1870s. Its use was followed by the development of Victoria Road and the construction of the Iron Cove and Gladesville Bridges allowing vehicular services to and from the Drummoyne area. The establishment of the wharf had a considerable influence on the early development of the surrounding locality with regard to urban and built form. The highly scenic setting of the Drummoyne ferry wharf within Sydney Harbour provides the site with aesthetic value. This value is further reinforced by the impressive views from the site and encompassing the site featuring sites such as Cockatoo Island and Spectacle Island."

![Context map](image_url)
Under the Sydney Harbour Foreshores and Waterways DCP 2005 Landscape Character Type 16 applies to the Drummoyne area;

“These areas have a high degree of built form with waterside commercial, residential, and industrial development dominating the foreshore. The mix of uses provides a distinctive urban character which should be maintained. The intent for these areas is to encourage appropriate waterfront development while protecting the character and amenity of developed areas, foreshores and the shoreline.”

“Any development within this landscape is to satisfy the following criteria:

• Remaining natural elements along the foreshore are preserved.
• Public wharves and jetties are retained to enable continued maritime activities.
• Visual continuity of elements such as beaches is maintained and generally not broken by development.
• Design and mitigation measures are provided between potentially conflicting land uses to minimise noise and amenity impacts.
• Landscaped areas should be provided and incorporated with open space linkages where possible to minimise the contrast between built elements.” - (NSW Department of Planning - Sydney Harbour Foreshores Area Development Control Plan 2005).

Project Description
General Brief
• To repair, renew and upgrade berthing structures in order to extend the design life of the structures.
• To upgrade passenger facilities to meet public expectations.
• To create a functional, distinctive and iconic design theme for Sydney Harbour which will both unify and identify the harbour wharves and ferry commuter system.
• To incorporate current disabled access standards and unify public domain design elements.
• To institute a defined maintenance regime for the relevant wharves with some certainty of ongoing costs.

The proposal would include the demolition and removal of the existing wharf and the construction of a new wharf as set out below:

Demolition and removal of the existing timber wharf.
• The existing wharf including all timber piles, footbridge, shelter, post and rail fencing, and associated facilities such as signage, information totem, seating, and closed circuit television (CCTV) system would be demolished and removed to an offsite location by barges.
Construction of a new wharf

- The wharf design is consistent with the upgrade of a number of wharves around the harbour which read as a family through material selection and architectural form.
- Construction of a concrete bridge about four metres wide by 5.5 metres long connecting the land with a new aluminium gangway. The bridge would be supported by four steel piles. The bridge would be oriented from the land at an angle of about 70 degrees.
- Construction of an aluminium gangway about 16 metres long and about three metres wide. The gangway would connect the concrete bridge with a new floating pontoon. The gangway would be supported by the bridge and the pontoon and its gradient would vary according to the tides.
- Construction and installation of a rectangular shaped steel floating pontoon off the gangway. The nine metre wide by 22.5 metre long pontoon would have a single berthing face. The pontoon would contain a curved zinc roof, glass and stainless steel balustrades and seating. The floating pontoon would be held in place by four steel piles. The orientation of the floating pontoon would be parallel to the land.
- Installation of safety and security facilities including lighting, closed circuit television (CCTV), ladders to the water from the pontoon, a life ring on the pontoon platform and tactile floor treatments.

Ancillary Facilities

- A temporary compound would be established including site sheds, an amenities shed and storage containers for tools and some materials. The location of the compound area is to be confirmed and would be subject to council review and agreement.
- The installation of electrical power lines to provide power to the wharf for lighting and security.
- The installation of water lines and meter to provide water to the wharf for maintenance.
- The proposal would include provision for electronic ticketing systems, which may be implemented in the future but would not be provided as part of this proposal.

The wharf (including the bridge, gangway and pontoon) would be constructed to be accessible to people with a disability for no less than 80 per cent of the high and low tide levels listed in standard tide charts.
The marshalling and storage of most equipment, plant and materials, and the pre-fabrication of parts, pre-casting of headstocks and fit outs, would be carried out by a contractor at an offsite facility. The construction and demolition materials and equipment would be delivered/removed from the site using barges. A majority of the construction and demolition activity would also be undertaken from the barges on the water with only minor works such as connection to services undertaken from the land. Construction contractors would generally arrive at the site via water with only minimal vehicle access to the site required (approximately 2-3 cars per day).

The proposal would require the Drummoyne Wharf to be closed to all ferries, water taxis and other vessels/watercraft for the duration of construction to enable the works to be carried out and would be re-opened to these vessels on completion of construction.

An overview of the proposal including the approximate location of the temporary compound is shown in the figure 3. The mitigation strategy adopted to inform the design of each wharf upgrade is detailed at section 5.
Figure 15. Plan of existing wharf and demolition zone (courtesy of GSA)

LEGEND
- Existing wharf structure to be demolished

Figure 16. Plan of existing wharf and demolition zone (courtesy of GSA)
3.0 LANDSCAPE CHARACTER IMPACT ASSESSMENT

Surrounding Landscape Character

In assessing the landscape character of Drummoyne and how the proposed wharf will fit within this, it is important to consider:

- The character of Drummoyne as built residential waterfront intersected by small reserves including Menzies Reserve where the wharf is located.
- The existing elevation from the water and opposite points as a layering of boat moorings, residential flats and houses interspersed with trees.
- The character of Drummoyne set by the long expanse of waterfront which stretches around from Iron Cove to Five Dock Bay.
- That there is little consistency in the materials or the form, colour etc. in this environment, it is a diverse range of elements including older style masonry facades and more recent rendered facades. The scale of the residential houses and apartment buildings is predominantly 3-6 storeys with some taller buildings occurring further back from the waterfront.
<table>
<thead>
<tr>
<th>Landscape character zone</th>
<th>Description of zone</th>
<th>Description of impact by proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drummoyne</td>
<td>The suburb of Drummoyne occupies the peninsula between Iron Cove and Five Dock Bay. It is surrounded on three sides by the Parramatta River. The peninsula is relatively flat and intersected by two main roads, Victoria Road and Lyons Road. The suburb is predominantly residential with its character tied to the water views that are available throughout the peninsula.</td>
<td>The impact on the suburb of Drummoyne is considered to be low. The character of the suburb is closely tied to its waterfront, however access to water is available at many reserves scattered along the length of the foreshore. The proposed wharf replaces the existing timber jetty with a larger gangway and covered pontoon providing greater amenity for ferry travel. The palette of materials, although different to the timber and corrugated iron structure of the current wharf, ties in with the surrounding maritime character of Drummoyne.</td>
</tr>
<tr>
<td>Drummoyne Bay</td>
<td>A broad open bay on the north eastern face of the Drummoyne peninsula. The bay is predominantly used for private vessel mooring and its foreshore occupied by private residential with some small public reserves. The wharf is located at the southern point of the bay.</td>
<td>The impact on the character of Drummoyne Bay is considered to be moderate. The proposed wharf will form a feature on the southern point of the bay and an increase in scale from the current wharf. The relatively simple contemporary shape and materiality sits well against the diverse forms and materials of building stock along the foreshore.</td>
</tr>
<tr>
<td>Hunters Hill</td>
<td>The suburb to the north of Drummoyne wharf across the Parramatta River. Hunters Hill occupies the peninsula between the Parramatta and Lane Cove rivers. The suburb contains many heritage sandstone buildings, particularly along the main ridgeline streets. Its character is closely tied to the harbour and waterfront as the peninsula is narrow with steep slopes descending to the river from the ridgeline.</td>
<td>The impact on the landscape character of Hunters Hill is considered to be low. The character of Hunters Hills is defined by its residential heritage and distinct topography set by the ridgeline. The ferry connection between Hunters Hill and Drummoyne is buffered by Cockatoo Island. From Hunters Hill, Drummoyne Wharf forms part of the larger harbour landscape separate to its identity.</td>
</tr>
<tr>
<td>Parramatta River</td>
<td>The body of water surrounding the Drummoyne peninsula. Parramatta River extends from Sydney Harbour 25km west to Parramatta. Formed from a drowned river valley the character is twisted with many bays and inlets. Ridges and peninsulas rise steeply up from the river edge in many places.</td>
<td>Due to the long and varied length of the river the impact on landscape character is considered negligible. The proposed wharf will contribute a positive impact on the river by providing, in conjunction with other harbour and river wharves set for upgrade, a unified family of wharves whose colour and form link them across the varied suburbs and landscapes within Sydney Harbour.</td>
</tr>
<tr>
<td>Cockatoo Island, Spectacle Island and Snapper Island</td>
<td>A series of islands at the mouth of the Parramatta River where it meets Sydney Harbour. These islands have held various uses over time. Cockatoo Island is the largest and has a long industrial past.</td>
<td>The impact on the three island adjacent to Drummoyne is considered low. Each island has its own distinct character and history. Cockatoo Island will be the most heavily impacted as the next stop along the ferry route creates a close association between the proposed wharf and the island.</td>
</tr>
</tbody>
</table>
Magnitude - Low
The magnitude of the project within the surrounding landscape character zones is considered to be low. The proposed wharf signals a shift in scale with a larger covered pontoon and gangway, however the impact of this increase in scale is offset by the surrounding context of moored boats and a heavily built foreshore of residential houses and apartment buildings.

Sensitivity - Low
The sensitivity of the surrounding character zones to changes at Drummoyne wharf is also considered to be low. The greatest impact will be felt within the suburb of Drummoyne and on approach from the water where the wharf will form both an arrival point to the suburb and a gateway to the larger landscape of the harbour.

Overall Landscape Character Impact
The overall impact on landscape character is considered to be low. The character of the wharf itself, its marine associations generated through material selection, and its links to a family of wharves spread throughout the harbour reduce the impact of the proposal on the surrounding landscape character.
4.0 VISUAL IMPACT ASSESSMENT

The proposed Drummoyne wharf replaces the existing timber jetty with a larger gangway and pontoon that extends further into the river. The key viewpoints are described in Figure 18.

Distance zones have been established within the visual catchment to aid in assessing the impact on key views. These zones are shown in the diagram below and referenced in the table. Distance has been broken down to:

- Foreground zone (FZ): 0-250m from the viewer.
- Middle ground zone (MZ): 250m to 500m.
- Background zone (BZ): areas greater than 500m from proposed new wharf.

Key viewpoint locations include:

1. Menzies Reserve and adjacent residential properties
2. Utz Reserve (Drummoyne)
3. Rea Reserve (Drummoyne)
4. Wharf Reserve (end of Lyons Road, Drummoyne)
5. Dunlop Reserve (Drummoyne)
6. Lyndhurst Reserve (Hunters Hill)
7. Fern Road Reserve (Hunters Hill)
8. Pulpit Point (Hunters Hill)
9. Kellys Bush Reserve (Hunters Hill)
10. Clarkes Point Reserve (Hunters Hill)

Figure 18. Visibility of project and key viewpoints
<table>
<thead>
<tr>
<th>Viewpoint</th>
<th>Setting</th>
<th>Visible elements</th>
<th>Sensitivity</th>
<th>Magnitude</th>
<th>Distance zone</th>
<th>Overall rating</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Figure 4, 5 &amp; 6</td>
<td>Menzies Reserve and adjacent residential properties</td>
<td>Pontoon and covered walkway</td>
<td>HM</td>
<td>HM</td>
<td>FZ</td>
<td>HM</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Impact will be high to moderate. Some views from Menzies Reserve will be obstructed with the increase in the scale of the wharf, the roof associated with the proposed pontoon, and the change in the orientation of the wharf which is now parallel with the land. This impact is greatest on approach from Wolseley Street where part of the view to the Parramatta River will be blocked by the new wharf. Unobstructed views remain to the east and the north west from the northern portion of the reserve. Some views from properties adjacent to the park may also be affected. The worst affected properties would be the two storey dwelling at 2 Wolseley Street and the four storey residential flat building (with ground floor car park) at 128 Lower St Georges Crescent. The orientation of the primary views from these properties are directly across the foreshore property boundary which are not obstructed by the wharf. Oblique views to the north east from 2 Wolseley Street and the north west from 128 Lower St Georges Crescent would be partially obstructed by the increase in the size of the wharf and its new orientation. Some of these views however are also currently partially obstructed by vegetation thereby lessening this impact. The extent of this impact at 128 Lower St Georges Crescent also reduces with the rise of each storey above the lowest Level 1 apartments. Overall the impact on the worst affected adjacent residents is considered to be high to moderate.</td>
</tr>
<tr>
<td>2</td>
<td>Figure 7</td>
<td>Utz Reserve</td>
<td>Pontoon and covered walkway</td>
<td>L</td>
<td>ML</td>
<td>MZ</td>
<td>ML</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Viewed from a similar range to Pulpit Point but through a screen of boat moorings, the impact on this view is considered moderate to low. Greatest impact will be the change in scale and visibility of the pontoon roof element however its light colour and rounded form will tie it in with the surrounding boats.</td>
</tr>
<tr>
<td>Viewpoint</td>
<td>Setting</td>
<td>Visible elements</td>
<td>Sensitivity</td>
<td>Magnitude</td>
<td>Distance zone</td>
<td>Overall rating</td>
<td>Comment</td>
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</tr>
<tr>
<td>3</td>
<td>Rea Reserve</td>
<td>Pontoon roof</td>
<td>L</td>
<td>ML</td>
<td>MZ</td>
<td>ML</td>
<td>The view is fragmented from the northern point of the bay by the intensity of boat moorings in Drummoyne Bay. The impact on views will be moderate to low with the pontoon roof being the most visible element. The colour and material selection for the roof will ensure that it complements the surrounding marine palette.</td>
</tr>
<tr>
<td>4</td>
<td>Wharf Reserve (end of Lyons Road)</td>
<td>Pontoon and covered walkway</td>
<td>L</td>
<td>M</td>
<td>MZ</td>
<td>ML</td>
<td>The impact is considered moderate to low with the foreground filled with moored boats, pontoons and piles which offset the scale increase in the wharf. The material palette of the wharf sits in harmony with the surrounding boats reducing the sensitivity of the view.</td>
</tr>
<tr>
<td>5</td>
<td>Dunlop Reserve</td>
<td>Pontoon roof</td>
<td>L</td>
<td>L</td>
<td>BZ</td>
<td>L</td>
<td>The intensity of boat moorings along the Drummoyne foreshore fragments the view of the wharf. The most visible elements is the roof of the pontoon as viewed along its southern profile. The impact on views is considered low.</td>
</tr>
<tr>
<td>6</td>
<td>Lyndhurst Reserve</td>
<td>Pontoon</td>
<td>L</td>
<td>L</td>
<td>BZ</td>
<td>L</td>
<td>Impact is low when viewed through moored boats in Lukes Bay. The wharf is fragmented and the scale offset by the surrounding vessels.</td>
</tr>
<tr>
<td>7</td>
<td>Fern Road Reserve</td>
<td>Not Visible</td>
<td>N</td>
<td>N</td>
<td>MZ</td>
<td>N</td>
<td>Negligible impact on view from the public reserve where the scale of the residential buildings block views towards the wharf. Residential properties in this location would experience a moderate impact on views similar to Pulpit Point.</td>
</tr>
<tr>
<td>8</td>
<td>Pulpit Point</td>
<td>Pontoon</td>
<td>ML</td>
<td>M</td>
<td>MZ</td>
<td>M</td>
<td>Impact on views would be moderate. Clear view across the Parramatta River towards Drummoyne from this point. No obstruction from boat moorings so scale increase of pontoon is clearly visible.</td>
</tr>
<tr>
<td>9</td>
<td>Kellys Bush Reserve</td>
<td>Not Visible</td>
<td>N</td>
<td>N</td>
<td>BZ</td>
<td>N</td>
<td>Negligible impact on view as Pulpit Point obscures a clear view towards the wharf and the distance renders the wharf indistinguishable from the rest of the Drummoyne foreshore.</td>
</tr>
<tr>
<td>Viewpoint</td>
<td>Setting</td>
<td>Visible elements</td>
<td>Sensitivity</td>
<td>Magnitude</td>
<td>Distance zone</td>
<td>Overall rating</td>
<td>Comment</td>
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<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>10 Figure 13</td>
<td>Clarkes Point Reserve</td>
<td>Not Visible</td>
<td>N</td>
<td>N</td>
<td>BZ</td>
<td>N</td>
<td>Negligible impact on view as the wharf is difficult to distinguish from moored boats and other built elements along the foreshore.</td>
</tr>
</tbody>
</table>

**Overall visual impact**

The overall visual impact is considered to be moderate to low. Despite the prominent location of the wharf at the southern point of Drummoyne Bay projecting into the Parramatta River, direct views to the wharf are limited to the north and northeast. The majority of views to the proposed wharf particularly in the middle and background zones are fragmented by boat moorings and the natural landforms around the harbour. The increase in size of the proposed wharf along with the roof form over the pontoon, will make the wharf more visible over a greater distance. However, the scale of the wharf when viewed from a distance is offset by the complexity of the built foreshore and intensity of boat moorings, ensuring it does not stand as a single element within the landscape.

Views within the foreground zone will be high to moderately impacted by the increase in scale of the wharf, particularly those from within and around Menzies Reserve. Wolseley Street terminates at Menzies Reserve with views directly to the wharf and the Parramatta River. The view to the water will be reduced from this viewpoint by the increased scale of the pontoon. The mitigation strategies employed during the design of the wharf have reduced the enclosed elements on the pontoon to maximise views through the structure and reduce the impact on views from the surrounding properties and open space.

**5.0 SUMMARY OF URBAN DESIGN PRINCIPLES AND MITIGATION STRATEGY**

**Summary of Impact**

The impact of the proposed wharf at Drummoyne on the surrounding landscape character is considered to be low. The wharf will contribute a positive impact on the suburb itself as an important arrival and departure point for the larger context of the harbour. The design of the wharf places it within a family of similar structures throughout the harbour, preserving the history of water transport and its role in shaping the suburb of Drummoyne.

Due to its prominent location at the southern point of the bay the visual catchment of Drummoyne wharf extends widely to the east and west. Despite this large catchment the impact on views is considered to be moderate to low and primarily affects views immediately surrounding the wharf and those from Hunters Hill. These key views are more heavily impacted by the increase in scale of the wharf as they are viewed across open water. Views from along the foreshore of Drummoyne have a lower impact due to the intensity of boat moorings which fragment the view of the wharf.

For all these views the complexity of the built foreshore at Drummoyne increases the capacity of this environment to absorb a larger scale structure.

**Mitigation Strategy**

Throughout the design process mitigation strategies have been employed to reduce the impact of the proposal on the surrounding landscape character and the visual catchment. These initiatives include:

- Colour and materiality to reference the surrounding maritime environment.
- Reduction of solid elements on the pontoon to retain clear views through the structure.
- Standardisation of wharf elements to link with a larger family of wharves while also adapting to the particular conditions of Drummoyne wharf including scale, foreshore connections and alignment.
- Alignment of new wharf along the line of the existing wharf to limit changes to views and character.
Appendix C

Correspondence from RMS Aboriginal Cultural Heritage Advisor
16/05/2014

Joseph Fanous  
Senior Environmental Manager  
27 Argyle street  
Parramatta NSW 2150

Dear Joseph

Re: Preliminary assessment results for the Drummoyne Ferry works proposed gangway orientation position change proposal based on Stage 1 of the Procedure for Aboriginal cultural heritage consultation and investigation (the procedure).

The project, as described in the Stage 1 assessment checklist, was assessed as being unlikely to have an impact on Aboriginal cultural heritage. The assessment is based on the following due diligence considerations:

- The project gangway orientation position change is unlikely to harm known Aboriginal objects or places.
- The AHIMS search did not indicate any known Aboriginal objects or places in the immediate study area.
- The study area does not contain landscape features that indicate the presence of Aboriginal objects, based on the Office of Environment and Heritage's Due diligence Code of Practice for the Protection of Aboriginal objects in NSW and the Roads and Maritime Services' procedure.
- The proposed compound site, Menzies Park is in a heavily disturbed area.
- The Aboriginal cultural heritage potential of the study area appears to be severely reduced due to past disturbance.

Your project may proceed in accordance with the environmental impact assessment process, as relevant, and all other relevant approvals.

If the scope of your project changes, you must contact me and your regional environmental staff to reassess any potential impacts on Aboriginal cultural heritage.

If any potential Aboriginal objects (including skeletal remains) are discovered during the course of the project, all works in the vicinity of the find must cease. Follow the steps outlined in the Roads and Maritime Services' Unexpected Archaeological Finds Procedure.

For further assistance in this matter do not hesitate to contact me.

Yours sincerely

Barry Gunther  
Senior Aboriginal Cultural Heritage Advisor (ACHA) – Sydney Region  
Roads and Maritime Services