Executive summary

The proposal
Roads and Maritime Services (Roads and Maritime) is carrying out an assessment under Part 5 of the Environmental Planning and Assessment Act 1979 (NSW) (EP&A Act) for a suite of site management works (the proposal) on part of the former Rozelle Rail Yards (the Site). The proposal would remove rail and rail related infrastructure from the Site and would allow existing issues at the Site, such as drainage, waste and noxious weeds, to be appropriately managed.

The key features of the proposal are:
- Site establishment – including fencing, installing temporary site offices, arranging site access, erosion, sediment and drainage controls and defining lay down, stockpile and transfer areas
- Utility location and site investigations
- Removal of waste, existing stockpiles and vegetation
- Removal of existing above ground rail infrastructure, including gantries, railway lines, ballast, sleepers and buildings (but excluding the southern penstock, the switching station, the transformer and rail infrastructure to the east of Victoria Road bridge) and redundant services where intercepted when removing infrastructure (eg gantries and ballast) generally to a depth of 500 millimetres below ground level, except where drainage channels and sediment basins are required
- Site stabilisation comprising reshaping of the ground surface as a result of the site management works and installation of stormwater controls including the construction of drainage channels and sediment basins
- Site completion and handover – de-mobilise all temporary construction materials, plant and equipment installed for the works and leave the Site secure.

It is anticipated that the site management works would be conducted over a period of up to 12 months. After completion of the works, the ‘finished site’ would be managed and maintained to ensure that the surface cover and stormwater controls are operating effectively.

Public display of the Review of Environmental Factors
Roads and Maritime prepared a Review of Environmental Factors (REF) to assess the potential environmental impacts from the site management works. Following completion of the REF, it was publicly displayed for 21 days between 23 November and 13 December 2016 at five locations in Leichhardt, Balmain, Rozelle and Milsons Point. The REF was also made available for download on the WestConnex website from 23 November 2016. The display locations and website link were advertised in the Inner West Courier on 22 November, 29 November and 6 December 2016.

Submissions received
Submissions relating to the proposal as assessed in the REF were received from stakeholders and community. A total of 58 submissions were received in response to the display of the REF comprising seven stakeholder and 51 community submissions.

Submissions were received from the following stakeholders:
- NSW Office of Environment and Heritage (OEH)
- NSW Environment Protection Authority (NSW EPA)
- UrbanGrowth NSW (UrbanGrowth)
- City of Sydney Council
- Inner West Council
- NSW Department of Primary Industries - Water (DPI Water)
- Port Authority of NSW (Port Authority).
While none of the stakeholder submissions objected to the proposal, two objected to the proposed use of the Site for the WestConnex M4-M5 Link project (M4-M5 Link project) (City of Sydney Council and Inner West Council). Five of the stakeholder submissions did not offer a position on the proposal.

Of the 51 community submissions received, 22 objected to particular aspects of the proposal or requested changes to the proposal and 29 raised objections related to the M4-M5 Link project and the wider WestConnex project.

Key issues raised in submissions and responses

Responses to the issues raised by the stakeholders are discussed in Chapter 2 (Response to stakeholder submissions) and responses to the issues raised by the community are discussed in Chapter 3 (Response to community submissions).

The key issues raised in the stakeholder and community submissions and an overview of the responses to these issues have been summarised in Table E1 below.

Table E1 – Summary of key issues raised and responses

<table>
<thead>
<tr>
<th>Summary of Key Issues</th>
<th>Management response confirmed in the Submissions Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project objectives and planning pathway</td>
<td>The NSW Government is in the process of consolidating the ownership of the Site under a single government agency – Roads and Maritime. The proposal is needed to manage the existing environmental and safety issues at the Site and to conduct further investigations of the Site’s characteristics. The REF and Submissions Report have determined that the potential impacts from the proposal are not considered significant. As a result, it is not considered necessary for an EIS to be prepared or approval to be sought under Part 5.1 of the EP&amp;A Act.</td>
</tr>
<tr>
<td>Previous and future consultation</td>
<td>Community and stakeholder consultation was carried out for the proposal prior to, during and after the public display period. The REF was placed on public display for a period of 21 days and stakeholders and the community were invited to make submissions. Responses to the submissions received during the REF display period are outlined in Chapter 2 and Chapter 3 of this Submissions Report. A Communication Plan will be prepared to provide timely and accurate information to the community during the works.</td>
</tr>
<tr>
<td>WestConnex M4-M5 Link project</td>
<td>The proposal does not form part of the M4-M5 Link project. The site management works are required irrespective of whether the M4-M5 Link project is approved and proceeds.</td>
</tr>
<tr>
<td>Future use of the site to include light rail extension</td>
<td>Future use of the Site has not been confirmed and does not form part of the proposal. Retention of rail tracks in situ would not allow the works to be carried out and would constrain further investigations and the installation of erosion and sediment controls. No preferred transport options or corridors have been identified to service future development in the Bays Precinct at this time. The site management works do not preclude future use of the Site for a possible light rail extension.</td>
</tr>
<tr>
<td>Key Issues</td>
<td>Management response confirmed in the Submissions Report</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Existing contamination and future management</td>
<td>The Site is known to contain certain levels of contamination. This contamination is present within stockpiles, structures, the ballast and the fill soil layer beneath the ballast. Contaminants include heavy metals, hydrocarbons and asbestos. These have been considered in an updated conceptual site model (CSM) provided in Appendix E and summarised in section 2.3.1. The excavation of the ballast, fill and soils would disturb these contaminants. To avoid surface water flows mobilising sediments and contamination, a range of measures are proposed. These include: staging of works to limit the size of exposed areas; installation of temporary and permanent erosion and sediment controls; stabilisation of ground surface with appropriate cover and in accordance with advice from a soil conservation consultant and contamination expert; development of a post completion management control to ensure the integrity of the final ground surface is maintained; regular inspections to ensure that erosion and sediment controls and stabilisation techniques are working effectively; and additional soil and stockpile testing. A number of management measures are proposed to manage water quality discharges from the Site, including installing drainage channels and sediment basins and monitoring of water quality in the sediment basins before discharge. Relevant management measures relating to asbestos specifically include preparation of Asbestos Management Plan (AMP) including a requirement for asbestos monitoring, preparation of Hazardous Material Survey and management of asbestos contaminated waste. There is also a number of air quality measures designed to address hazardous materials and dust emissions. An additional management measure is proposed relating to management of asbestos in soils during the ‘finished site’ phase.</td>
</tr>
<tr>
<td>Construction impacts on heritage</td>
<td>The REF has identified that the Rozelle Rail Yards have a moderate degree of historic importance however the Site has experienced a high degree of interference and alterations and displays a low level of overall intactness. Certain structures with some potential heritage significance that are proposed to be removed would be subject to archival recording prior to demolition. Other structures, namely the rail gantries and lighting tower would be removed from the Site and put into storage for potential reuse in future heritage interpretation. The southern penstock would remain and an exclusion zone would be set up around it to protect it from accidental damage during the works. Management measures also include carrying out an Unexpected Heritage Items procedure if unexpected non-Aboriginal and Aboriginal heritage finds are identified.</td>
</tr>
<tr>
<td>Construction impacts on biodiversity</td>
<td>The REF assessed impacts to threatened species, populations and ecological communities listed under the Threatened Species Conservation Act 1995 (NSW) and the Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth). Further assessment of potential impacts to locally vulnerable (non-threatened species) has been carried out alongside a consideration of the impact of the works on feral animals (refer to section 2.6.5, section 3.11 and Appendix B). Additional measures to manage potential impacts to these species would be included in the Flora and Fauna Management Plan (FFMP).</td>
</tr>
</tbody>
</table>
## Summary of Key Issues

<table>
<thead>
<tr>
<th>Amenity impacts to surrounding residents including noise, air quality and traffic impacts</th>
<th>A number of mitigation measures have been proposed to manage potential noise, air quality and traffic impacts during the site management works. An assessment of the ability of trucks to turn around the roundabout on James Craig Road has been provided in section 2.6.8. Preparation of a Noise and Vibration Management Plan, Air Quality Management Plan and Traffic Management Plan are proposed including relevant the requirements for monitoring, procedures for out-of-hours work, traffic safety and community notification of works.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative impacts</td>
<td>The REF provides a cumulative impact assessment. Additional considerations regarding potential cumulative traffic impacts have been discussed in section 2.8.2. Following this assessment a number of updates to the relevant management measure have been made.</td>
</tr>
</tbody>
</table>

## Revised management measures

Roads and Maritime has considered the submissions and whilst no changes to the scope of the works are proposed, additional information and revisions to the management measures have been provided in this report to address issues raised by the stakeholders and the community.

A consolidated set of management measures, including revised and new measures to address issues raised in the submissions are provided in Chapter 4 (Environmental management).
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1 Introduction and background

1.1 The proposal

NSW Roads and Maritime Services (Roads and Maritime) is carrying out an assessment under Part 5 of the Environmental Planning and Assessment Act 1979 (NSW) (EP&A Act) for a suite of site management works (the proposal) on part of the former Rozelle Rail Yards (the Site). The proposal would remove rail and rail related infrastructure from the Site and would allow existing issues at the Site such as drainage, waste and noxious weeds to be appropriately managed.

The key features of the proposal are:
- Site establishment – including fencing, installing temporary site offices, arranging site access, erosion, sediment and drainage controls and defining lay down, stockpile and transfer areas
- Utility location and site investigations
- Removal of waste, existing stockpiles and vegetation
- Removal of existing above-ground rail infrastructure, including gantries, railway lines, ballast, sleepers and buildings (but excluding the southern penstock, the switching station, the transformer and rail infrastructure to the east of Victoria Road bridge) and redundant services where intercepted when removing infrastructure (eg gantries and ballast) generally to a depth of 500 millimetres below ground level, except where drainage channels and sediment basins are required
- Site stabilisation comprising reshaping of the ground surface as a result of the site management works and installation of stormwater controls including the construction of drainage channels and sediment basins
- Site completion and handover – de-mobilise all temporary construction materials, plant and equipment installed for the works and leave the Site secure.

It is anticipated that the site management works would be conducted over a period of up to 12 months. After completion of the works, the ‘finished site’ would be managed and maintained to ensure that the surface cover and stormwater controls are operating effectively.

Roads and Maritime is soon to be the sole owner of the Site and, as such, needs to appropriately manage the land in the future. Roads and Maritime is proposing to use the land for the separate WestConnex M4-M5 Link project (M4-M5 Link project) if that project is approved by the NSW Minister for Planning.

The M4-M5 Link project is subject to separate assessment and determination as an environmental impact statement (EIS) under Part 5.1 of the EP&A Act. Roads and Maritime has lodged a State significant infrastructure application report for the M4-M5 Link project with Department of Planning and Environment (DP&E) and the Secretary has issued environmental assessment requirements for the preparation of the EIS for the M4-M5 Link project. The site management works, which comprise this proposal, do not form part of the State significant infrastructure application for the M4-M5 Link project.

Should the M4-M5 Link project not proceed, the site management works would allow the Site to be more effectively managed prior to another land use being developed in the future.

The location of the Site is shown on Figure 1.1, key features of the Site are shown on Figure 1.2 and the indicative staging plan for the site management works is shown in Figure 1.3.
Figure 1: Site location

KEY
- Site boundary
- Waterway
- Light rail stop
- Local government area
- Light rail

Map produced by AECOM on behalf of the Sydney Motorway Corporation. Map data copyright 2016 Sydney Motorway Corporation, NSW. Spatial data used under licence from the Land and Property Management Authority, NSW © 2016. AECOM/SMC makes no representations or warranties of any kind, about the accuracy, reliability, completeness, suitability or fitness for purpose in relation to the map content.
Figure 1.3: Indicative staging

KEY
- Site access location
- Existing access route
- Southern Penstock and Exclusion Zone
- Open drainage channel
- Site boundary
- Waterway
- LGA Boundary

Construction stages
- Stage 1 - Site establishment (whole of site)
- Stage 2 - Commence clearing site & extend access routes
- Stage 3 - Continue clearing & demolish railway platform & awning
- Stage 4 - Continue clearing and demolish Port Authority building and warehouse
- Stage 5 - Continue clearing
- Stage 6 - Complete clearing and demolish workshop, signal shed and annex
- Stage 7 - Site completion & handover (whole of site)

Note:
Applicable works would be conducted under the Victoria Road bridge. The staging plan shown is indicative only and is subject to change.
1.2 REF Display

The Review of Environmental Factors (REF) was publicly displayed for 21 days between 23 November and 13 December 2016 at five locations, as detailed in Table 1.1.

The REF was published on the WestConnex website and made available for download from 23 November 2016. The display locations, website link and details of how to make a submission on the REF were advertised in the Inner West Courier on 22 November, 29 November and 6 December 2016. A copy of the advertisement and the webpage is provided in Appendix A.

Table 1.1: Display locations

<table>
<thead>
<tr>
<th>Location</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner West Council Leichhardt Service Centre</td>
<td>7-15 Wetherill Street, Leichhardt</td>
</tr>
<tr>
<td>Leichhardt Library</td>
<td>23 Norton Street, Leichhardt</td>
</tr>
<tr>
<td>Balmain Library</td>
<td>370 Darling Street, Balmain</td>
</tr>
<tr>
<td>NSW Roads and Maritime Services Rozelle office</td>
<td>33 James Craig Road, Rozelle</td>
</tr>
<tr>
<td>NSW Roads and Maritime Services Milsons Point office</td>
<td>20-44 Ennis Road, Milsons Point</td>
</tr>
</tbody>
</table>

In addition to the public display, an invitation to comment and a copy of the REF was sent directly to the following stakeholders:
- Inner West Council
- City of Sydney Council
- NSW Department Planning and Environment (DP&E)
- NSW Department of Primary Industries Water (DPI Water)
- NSW Environment Protection Authority (NSW EPA)
- NSW Office of Environment and Heritage (OEH)
- Port Authority of NSW (Port Authority)
- Property NSW (Sydney Harbour Foreshore Authority (SHFA) functions were consolidated with Property NSW in July 2016)
- Sydney Trains
- Sydney Water
- UrbanGrowth NSW (UrbanGrowth).

Roads and Maritime sent notifications to the community about the public display of the REF including:
- A letterbox drop to about 3,200 residents around the Rozelle and Lilyfield area on 7 November 2016 advising of the upcoming release of the REF
- An additional letterbox drop to about 3,200 residents around the Rozelle and Lilyfield area on 23 November 2016 advising of the release of the REF and how to view and provide comments on the REF
- An email to more than about 3,900 people registered on the WestConnex email list on 23 November 2016 advising of the release of the REF and how to view and provide comments on the REF.

Copies of the invitation to comment and the notifications are provided in Appendix A.

Sydney Motorway Corporation (SMC) also doorknocked 31 properties on the southern side of Lilyfield Road at Rozelle on 25 November 2016. The properties are immediate neighbours of the Site on its northern boundary. During this visit, SMC discussed the proposal and advised the residents of the public display of the REF.
The REF stated that staffed displays would be at the Roads and Maritime Rozelle office during the
display of the REF. No staffed displays were held; however, the community engagement
team offered individual meetings to residents that were door-knocked and who contacted the
community information line during the REF public display period. This opportunity was also
publicised in the newspaper advertisements. No requests for individual meetings were received.

1.3 Purpose of the report

This submissions report relates to the REF prepared for the Rozelle Rail Yards – Site Management
Works and should be read in conjunction with that document (AECOM Australia Pty Ltd (AECOM),
2016f). Submissions relating to the proposal and the REF were received from stakeholders and the
community. A total of 58 submissions were received in response to the display of the REF
comprising seven from stakeholders and 51 community submissions.

This submissions report summarises the issues raised and provides responses to each issue.

- **Chapter 2** (Response to stakeholder submissions) provides responses to stakeholders who
  made a submission
- **Chapter 3** (Response to community submissions) provides responses to the issues raised by
  the community
- **Chapter 4** (Environmental management) provides a summary of new or revised environmental
  management measures.

Roads and Maritime has considered the submissions, and whilst no changes to the scope of the
works are proposed, additional information has been included in the responses provided in
**Chapter 2** (Response to stakeholder submissions) and **Chapter 3** (Response to community
submissions) and revisions to the management measures have been provided in **Chapter 4**
(environmental management) to address issues raised by stakeholders and the community. The
key additional information provided includes:

- Additional biodiversity information prepared by EcoLogical Australia (ELA) and provided in
  **section 2.6.5**, **section 3.11** and **Appendix B**
- An updated conceptual site model (CSM) provided in **section 2.3.1** and **Appendix E**
- An assessment on the ability of trucks to turn around the roundabout on James Craig Road
  (swept path assessment) is provided in **section 2.6.8**.

In developing responses to certain issues, existing management measures have been revised
and/or new management measures have been developed. To identify changes to management
measures, new management measures or revised text has been underlined where words have
been added. Where words have been removed, text is marked by strikethrough. A consolidated set
of the latest management measures are provided in **Table 4.1** in **Chapter 4** (Environmental
management).

In addition the word ‘would’ has been replaced with the word ‘will’ in the management measures,
so that if the proposal is approved, the contractor’s environmental management plan and
associated sub plans can directly adopt these management measures.
2 Response to stakeholder submissions

2.1 Overview of stakeholder submissions

Roads and Maritime received seven submissions from stakeholders. Table 2.1 lists the stakeholders and where the issues raised by each stakeholder have been addressed in this chapter.

Table 2.1: Stakeholder respondents

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Submission ID</th>
<th>Section number where issues are addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW Office of Environment and Heritage</td>
<td>A</td>
<td>2.2</td>
</tr>
<tr>
<td>NSW Environment Protection Authority</td>
<td>B</td>
<td>2.3</td>
</tr>
<tr>
<td>UrbanGrowth NSW</td>
<td>C</td>
<td>2.4</td>
</tr>
<tr>
<td>City of Sydney Council</td>
<td>D</td>
<td>2.5</td>
</tr>
<tr>
<td>Inner West Council</td>
<td>E</td>
<td>2.6</td>
</tr>
<tr>
<td>NSW Department of Primary Industries - Water</td>
<td>F</td>
<td>2.7</td>
</tr>
<tr>
<td>Port Authority of NSW</td>
<td>G</td>
<td>2.8</td>
</tr>
</tbody>
</table>

While none of the stakeholder submissions objected to the proposal, two objected to the proposed use of the Site for the WestConnex M4-M5 Link project (M4-M5 Link project) (City of Sydney Council and Inner West Council). However, the M4-M5 Link project is a separate project subject to a separate assessment process in accordance with Part 5.1 of the EP&A Act. The M4-M5 Link project was not assessed within the REF.

The City of Sydney Council submission supported the removal of redundant rail and rail-related infrastructure allowing issues such as waste and noxious weeds to be managed. Five of the stakeholder submissions did not offer a position on the proposal. Responses to the issues raised by the stakeholders are discussed in sections 2.2 to 2.8 below. Table 2.2 summarises the main issues raised by each stakeholder.

Table 2.2: Main issues raised by stakeholders

<table>
<thead>
<tr>
<th>Government agency</th>
<th>Main issues raised</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW Office of Environment and Heritage</td>
<td>No comments raised on the REF</td>
</tr>
<tr>
<td>NSW Environment Protection Authority</td>
<td>Contamination, surface water, waste management, noise and air quality</td>
</tr>
<tr>
<td>UrbanGrowth NSW</td>
<td>Potential impacts to the heritage values of White Bay Power Station</td>
</tr>
<tr>
<td>City of Sydney Council</td>
<td>Biodiversity, heritage, recreation opportunities and consultation</td>
</tr>
<tr>
<td>Inner West Council</td>
<td>Heritage, biodiversity, waste management, contamination, noise and vibration, traffic and transport, acid sulfate soils, flooding and consultation</td>
</tr>
</tbody>
</table>

Submissions report: Rozelle Rail Yards – site management works
March 2017

7
<table>
<thead>
<tr>
<th>Government agency</th>
<th>Main issues raised</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW Department of Primary Industries – Water</td>
<td>Request for further information to be provided now and as the proposal progresses</td>
</tr>
<tr>
<td>Port Authority of NSW</td>
<td>Land owners consent and cumulative traffic impacts</td>
</tr>
</tbody>
</table>

### 2.2 NSW Office of Environment and Heritage

OEH reviewed the REF and did not provide any comments. The submission noted that as the delegate of the Heritage Council of NSW, the Heritage Division of OEH may provide comments. At the time of writing this submissions report, no separate comments had been received from the Heritage Division of OEH.

### 2.3 NSW Environment Protection Authority

#### 2.3.1 Contamination, soil, fill and groundwater

**Issue description – contamination assessment**

The NSW EPA noted that the Interim Factual Contamination Report (IFR) and the Rozelle Rail Yards – Site Management Works REF report presents a general contamination review about fill, surface soil and groundwater conditions at the Site, identifying a number of contaminants of concern to be present. The report does not consider or address these issues in fine detail.

The NSW EPA recommended further environmental investigations, planning and reporting should be carried out at the Site including further delineation of the underground storage tank (UST) and light non-aqueous phase liquid (LNAPL) contamination.

The NSW EPA considered the number of sampling points (51) included in the IFR for the Site characterisation to be low considering that the size of the Site appears to be greater than five hectares (estimate from the scale in the figures as the size of the Site could not be found in the IFR or REF). The NSW EPA noted that the minimum number of samples required for site characterisation should be determined in accordance with the NSW Sampling Design Guidelines (1995).

**Response**

The purpose of the site management works is to deliver a stabilised Site that provides a starting point for future development and prevents potential pollution of the environment from the Site. The proposed works are not associated with a specific development proposal, and there is no specific land use criteria that the works are designed to achieve. Outcomes of the works include the prevention of mobilisation of contaminants that are present on the Site, further assessment of the contamination on the Site to ensure stabilisation objectives are suitable, and removal of some wastes.

As detailed within the REF, the proposed works involve the removal of waste, existing stockpiles, vegetation and above ground infrastructure. The proposed works also involve the removal of railway ballast generally to a depth of 500 millimetres below ground level. Excavation of the fill/soils beneath the ballast is not proposed except as required for the construction of drainage challenges and sediment basins. As the ballast is removed the soil/fill layer will be progressively stabilised. As such, the proposal does not involve significant below ground excavation or final remediation of the Site.
By removing the waste, stockpiles, vegetation and redundant infrastructure the site management works would enable further investigations of the ground conditions to be undertaken for the purposes of assessing and if necessary identifying recommendations for remediating the Site prior to a future change of use or development.

On completion of the site management works the Site would be vacant and secured to ensure there is no access to the general public. The only persons accessing the Site would be workers responsible for on-going maintenance of the ‘finished site’ including monitoring the effectiveness of the environmental controls. These workers would be trained and inducted so as to be familiar with the relevant provisions contained in the Environmental Management Plan (EMP) and sub-plans including the Health and Safety Management Plan (HSMP), Soil and Water Management Plan (SWMP), Asbestos Management Plan (AMP), Flood Evacuation Plan (FEP) and Hazard and Risk Management Plan (HRMP) as they relate to on-going management of the ‘finished site’.

The environmental and health and safety risks associated with the proposed land use on completion of the works would be managed in accordance with a robust environmental management framework. As a result, the risks to the general public, site workers and the environment are considered to be low and acceptable.

Roads and Maritime completed a number of contamination and waste classification assessments before completing the REF having regard to the scope and nature of the site management works and the intended land use at the completion of the works. The results of these contamination and waste classification assessments are contained in Appendix C1, C2, C3 and C4 of the REF and are summarised in Section 6.1 of the REF. These assessments included a desktop review of previous site investigations, historic information, records of contamination and contamination management, geological maps, acid sulfate soil (ASS) and soil maps and information on previous land uses.

The information in this desktop review was augmented by ground investigations that evaluated the condition of the ballast, soil and fill at the Site and assessed the existing waste stockpiles, sleepers and drums identified on-site. Groundwater sampling was also carried out at the Site in 2016 (refer to Appendix C1 of the REF).

This level of investigation (including the number of sampling points) is considered to be appropriate for the purpose of assessing potential impacts related to contamination and soil and groundwater management for the proposed works and given the land use that would result following completion of the works. The site management works would have minimal direct impact on the soil/fill layers beneath the ballast and where these impacts could occur, they would be limited mainly to areas where drainage channels and sediment basins are proposed.

As noted in section 1.1 of the REF, the site management works would allow further contamination investigations to be completed by improving access across the Site from the removal of the vegetation, infrastructure and buildings. These additional investigations would be carried out by the contractor before and during the works, particularly once the vegetation at the Site has been removed and would focus on areas where the works would disturb the soil/fill layer below the ballast. They would allow the soil conditions at the Site to be further delineated, understood and managed. The proposed additional investigations were detailed within section 3.2.1 of the REF.
To confirm that these additional investigations would take place the following management measure (CSGW18) has been added:

Additional stockpile and soil testing will be completed as the works progress. This testing will include:

- Additional testing of existing waste stockpiles where necessary
- Further contamination, acid sulfate soil and groundwater investigations to confirm the number, design and location of sediment basins and drainage channels
- Further contamination investigations to characterise the soil and fill material beneath the ballast (including leachability characteristics) to help confirm the appropriate stabilisation method in different parts of the Site
- Additional in-situ testing of the ballast to evaluate whether it is suitable for reuse or should be disposed off-site.

In addition management and mitigation measure CSGW12 has been modified to state:

A hazardous material (HazMat) survey will be conducted prior to works commencing and during the early stages of the proposal before ground disturbance works start. This survey will be completed by a hygienist and contamination expert and will include the identification of ACM.

Roads and Maritime would continue to discuss the works and the results of further investigations at the Site with the NSW EPA moving forward. As part of a future development at the Site, a more comprehensive contamination investigation would be carried out in accordance with the NSW Sampling and Design Guidelines (1995).

**Issue description – acid sulfate soils**

The NSW EPA noted that the REF indicates in section 6.1.2 (page 53) that “According to information provided by the NSW Department of Planning and Environment, the Site includes three acid sulphate soil classes” (Class 1, 3 and 5). The REF also indicates in Table 6-3 (page 82) that “an Acid Sulfate Soil Management Plan (ASSMP) would be prepared in accordance with the Acid Sulfate Soils Manual (Stone et al 1998). If ASS are encountered, works in the relevant area would be carried out in accordance with the ASSMP.”

The NSW EPA noted agreement that an ASSMP should be carried out as per the indicated manual. However, the NSW EPA also noted that, given the site location and elevation, there is a high likelihood for potential and actual ASS at the Site and this needs to be further assessed with testing, and managed under an appropriate plan.

The NSW EPA recommended further environmental investigations, planning and reporting should be carried out at the Site including ASS testing and development of a management plan.

**Response**

Management measure CSGW10 (refer to Table 4.1 in this report) requires that an ASSMP would be prepared in accordance with the Acid Sulfate Soils Manual (Stone et al, 1998), before the site management works start.

While there is a high likelihood of potential and actual ASS to occur within the natural soils on the Site, the proposed works that would intercept the natural soils are limited to the drainage channels, sediment basins and targeted potholing/trenching to locate services.
As noted in section 6.1.3 of the REF: “The proposal is likely to involve limited impact to the fill and soils beneath the ballast and limited impact to other soils and fill where ballast is not present (eg through vegetation or stockpile removal). The key risk for encountering ASS relates to the limited excavation works required for the construction of the permanent drainage channels and sediment basins or for targeted pot-holing/trenching to locate services. Much of the excavation for the permanent drainage channels and sediment basins would be into the fill beneath the ballast rather than the alluvial soils; however, some potential remains that ASS may be encountered.”

Section 6.2.3 of the REF states that further investigations would be completed, once rail infrastructure and vegetation has been cleared, which would help confirm the specific locations of the sediment basins and drainage channels. These investigations would include testing for ASS to ensure that, where possible, excavations required for these basins and channels would not encounter these soils.

The proposed additional investigations were detailed within section 3.2.1 of the REF. To confirm that these additional investigations will take place the following management measure (CSGW18) has been added:

Additional stockpile and soil testing will be completed as the works progress. This testing will include:
- Additional testing of existing waste stockpiles where necessary
- Further contamination, acid sulfate soil and groundwater investigations to confirm the number, design and location of sediment basins and drainage channels
- Further contamination investigations to characterise the soil and fill material beneath the ballast (including leachability characteristics) to help confirm the appropriate stabilisation method in different parts of the Site
- Additional in-situ testing of the ballast to evaluate whether it is suitable for reuse or should be disposed off-site.

In the event that excavations encounter ASS, works would continue in accordance with the ASSMP (in accordance with management measure CSGW10). Works would be carried out in accordance with a SWMP which would be prepared before the start of construction (in accordance with management measure CSGW3). This management measure outlines that the SWMP would include procedures for handling, testing, storing and managing contaminated soil, surface water and groundwater and methods of preventing soil and water contamination/pollution.

To clarify this further, management measure SWDF2 has been modified to state:

The temporary and permanent sediment basins will:
- Located and sized using design criteria consistent with the Blue Book 2D (DECC, 2008)
- Lined to ensure that high groundwater levels do not reduce the capacity of the basins to store surface water flows
- Emptied (dewatered) of standing water if heavy rain is expected to ensure that they have the capacity to manage surface water flows.

Where possible, the sediment basins will not be located in areas of high contamination and/or areas where acid sulfate soils may be present close to the residual ground surface.

If possible, excavation that may be required for drainage channels and sediment basins will avoid intercepting acid sulfate soils.

The design of drainage channels and sediment basins will also consider health and safety issues.
Issue description – conceptual site model
The NSW EPA noted that the REF report included a CSM (Figure 6-6, page 63). The NSW EPA considered that identification of potential and complete exposure pathways should be included to provide an assessment of the risks to relevant receptors with contamination on-site.

The NSW EPA recommended further environmental investigations, planning and reporting should be undertaken at the Site including refinement of the CSM and assessment of risk from contamination to potential receptors.

Response
As discussed above, the level of assessment completed at this time is appropriate for the purpose of the REF, as the investigations carried out provided sufficient information on the ground conditions at the Site in order to identify sources, pathways and receptors and complete an assessment of potential impacts.

Section 6.1.3 of the REF identified a number of potential impacts that could occur as a result of the site management works. The CSM figure (Figure 6-6 in the REF) was provided to further explain the potential impacts identified. For each potential exposure pathway, Table 6-2 of the REF presented a range of potential safeguards and management measures that could be employed by the contractor during the works to manage potential impacts.

Based on the investigations completed for the REF, a tabulated CSM has been prepared to illustrate the relative risk of each source-pathway-receptor linkage identified for specific aspects of the site management works both prior to and following the implementation of potential safeguards and management measures (refer to Appendix E). The qualitative risk ranking has been completed based on the following:

- Low risk – based on the available information, a complete pollutant linkage is considered to be unlikely
- Medium risk - based on the available information, a complete pollutant linkage may potentially be present, however the likelihood and consequence is considered to be medium
- High risk - based on the available information, a complete pollutant linkage is considered to be likely.

On completion of the site management works the Site would be vacant and secured to ensure there is no access to the general public. The only persons accessing the Site would be workers who would be trained and inducted so as to be familiar with the relevant provisions contained in the EMP and sub-plans including the HSMP, SWMP, AMP, FEP and HRMP as they relate to on-going management of the ‘finished site’.

The Site would also be stabilised and where necessary a surface cover installed in accordance with the recommendations of a soil conservation consultant and a contamination expert to minimise the disturbance/movement of soil and fill material. As noted in section 6.1.3 of the REF, “Works to be carried out during the finished site would be minimal and restricted to maintenance activities. No ground disturbance works are anticipated for the finished site”.

As a result, potential interactions between in situ contamination and the general public, site workers and the environment associated with the ‘finished site’ are considered unlikely and the associated risks are considered low.

Based on this, the CSM in the REF has been prepared to focus on those aspects of the site management works which may result in disturbance and/or exposure of potentially contaminated materials such as soil, fill and railway ballast. The CSM has not been developed to address the finished site upon completion of the site management works.
Therefore, this CSM is high level, indicative and focused on the site management works. Following the completion of site management works, access to the Site would be suitable for undertaking additional data gap investigations required to inform the future development of the Site.

Issue description – asbestos

The NSW EPA noted that, given the presence of asbestos has been identified in a number of areas on-site, the REF report indicates in Table 6-3 (page 82) that an AMP would be implemented. The NSW EPA concurred that the AMP should be prepared by a suitability-qualified practitioner and that asbestos management on-site must also be carried out by a suitably-qualified practitioner. In addition, the NSW EPA noted that if the quantity of asbestos to be removed from Site exceeds 10 metres squared, removal must be performed only by a licensed asbestos removalist.

Section 6.1.3 in ‘finished site’ (page 75) indicates that “Following completion of the works, contaminants (including asbestos) may be present within residual fill materials contained on-site.”

The NSW EPA noted that it was unclear whether or not asbestos on-site would be managed and removed as per the AMP or contained on-site. The NSW EPA recommended further environmental investigations, planning and reporting should be carried out at the Site including appropriate asbestos management on-site, and development of a management plan.

Response

Management measure CSGW11 in the REF notes that an AMP would be prepared for the site management works by a suitably-qualified practitioner before works start. This AMP would be implemented to ensure appropriate asbestos management at the Site.

To address the NSW EPA’s comment about carrying out asbestos management, management measure CSGW11 has been amended as follows:

The AMP would include the following:

- Where required, asbestos management on-site work will be carried out or overseen (as appropriate) by appropriately-licensed and qualified contactors.

To address the NSW EPA’s comment about the removal of asbestos from the Site, management measure RUWM9 has been amended as follows:

A licensed waste management contractor will be used to remove waste from the Site for reuse, recycling or disposal. Asbestos-contaminated waste will not be reused or recycled and will be removed by a licensed asbestos removalist and disposed of to a facility licensed to accept the waste.

While asbestos containing material (ACM) encountered during the works (eg demolition waste, stockpile material and ballast) would be disposed of off-site, residual asbestos may be present in soil and/or fill beneath the ballast. Where residual asbestos may be present in the soil/fill layer, for most of the Site it would not be disturbed and would be contained in situ as part of the site stabilisation works. Where the soil/fill layer does need to be disturbed (eg for the drainage basins) and where it potentially contains asbestos, the excavated material would be handled in line with the AMP (as detailed in management measure CSGW11).
As discussed in section 3.2.1 of the REF: “In order to adequately stabilise the Site, a suitable method would be employed to avoid the potential off-site transport of contaminants to nearby watercourse and waterbodies. The method would be determined by the soil conservation consultant and contamination expert. Depending on the ground conditions in each location stabilisation may involve one or a combination of the following:

- Hydromulch
- Matting
- Geotextile (geofabric)
- Geobinders
- Applying a layer of top-soil or clean fill\(^1\) (usually up to 100 millimetres).

Once a substrate is applied, the new surface would be seeded where necessary.

The REF also states:

“The precise method of stabilising the residual soils/fill beneath the ballast for each part of the Site would be confirmed following completion of a number of additional investigations and in accordance with the advice of the soil conservation consultant and contamination expert.”

There may be other stabilisation options that could be used during the works to achieve the same environmental outcomes. As such management measure CSGW6 is not specific regarding the stabilisation methods that could be used, but instead commits the contractor to engage a soil conservation consultant and contamination expert to advise on the preferred method of stabilisation.

The REF describes various management measures to manage the risk of mobilising asbestos, including:

- “A hazardous material (HazMat) survey will be conducted prior to works commencing and during the early stages of the proposal before ground disturbance works start. This survey will be completed by a hygienist and contamination expert and will include the identification of ACM”
- “An AMP, which will include monitoring procedures, will be prepared by a suitably qualified practitioner”
- “Before and during grubbing and ballast removal, soils/ballast will be wet down to limit the movement of dust and other materials off-site”
- “Appropriate handling, transporting, storing and disposal measures for asbestos, including for soils, fragments and ballast”
- “Biological debris or other hazardous materials such as asbestos will be bagged and removed, or wet down before demolition”
- “The requirement to complete asbestos fibre air monitoring during activities that could liberate asbestos fibres.”

Further detail on the assessment of asbestos with regards to the proposed works is provided in sections 6.1, 6.3 and 6.9 of the REF. Management measures CSGW11, CSGW12, CSGW13, CSGW15, CSGW16, CSGW17, RUWM5, AQ4, AQ5 and AQ6 provide further detail about hazardous material, asbestos and dust management during the works.

Management measure CSGW17 requires the contractor to inspect the Site after the completion of the works to ensure the integrity of the surface cover is maintained. These inspections would be completed by a soil conservation consultant and contamination expert.

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\(^1\) Clean fill in the instance refers to virgin excavated natural material (VENM) or excavated natural material (ENM). The meaning of clean fill has been updated in response to the EPA’s submission in section 2.3.3.
To confirm the requirements about the ongoing management of asbestos at the Site after the works, the following management measure has been added:

The AMP will be revised by a suitably qualified practitioner after completion of the works to guide the management of asbestos during the ‘finished site’. Relevant measures will be developed in accordance with advice from a soil conservation consultant and contamination expert. Where asbestos contaminated soils have been covered, the AMP will outline the monitoring and management provisions required to ensure that the integrity of this cover is maintained.

Issue description – remediation

The NSW EPA has noted that the potential contamination sources and contaminants of concern have been identified at the Site (REF report Table 6-1) and yet remediation works have not been considered in the proposal.

The NSW EPA recommends that a site auditor, accredited by the NSW EPA under the Contaminated Land Management Act 1997 (NSW), is engaged to issue a Section B Site Audit Statement to confirm that the Site can be made suitable for the proposed use subject to an approved remediation plan that is considerate of (as a minimum) asbestos and hydrocarbon contaminants.

Upon the completion of the development, an accredited site auditor issues a Section A Site Audit Statement certifying the Site has been remediated to be suitable for the proposed use.

Response

The proposed site management works involve the removal of waste, existing stockpiles, vegetation and above ground infrastructure. The proposed works also involve the removal of railway ballast generally to a depth of 500 millimetres below ground level. Excavation of the fill/soils beneath the ballast is not proposed except as required for the construction of drainage channels and sediment basins. As the ballast is removed the soil/fill layer will be progressively stabilised. As such, the proposal does not involve significant below ground excavation or final remediation of the Site. By removing the waste, stockpiles, vegetation and redundant infrastructure the site management works would enable further investigations of the ground conditions to be undertaken for the purposes of assessing and if necessary remediating the Site prior to a future change of use or development.

At this point in time it is not necessary to carry out remediation or engage a site auditor to evaluate future land use suitability because:

1. The scope of the site management works relate to removal of waste, stockpiles, vegetation, redundant infrastructure and ballast followed by site stabilisation and reshaping and involve limited excavation of in situ soil and fill materials
2. On completion of the site management works the Site would be vacant and secured to ensure there is no access to the general public. The only persons accessing the Site would be workers who would be trained and inducted so as to be familiar with the relevant provisions contained in the EMP and sub-plans including the HSMP, SWMP, AMP, FEP and HRMP as they relate to on-going management of the ‘finished site’.
3. Further contamination investigations are required to fully delineate the existing contamination at the Site. The site management works would facilitate access to the Site for these investigations
4. The future land use of the Site following the proposal is not yet known and would be dependent on the M4-M5 Link project being approved or another project or land use being developed. Knowing this land use is necessary to inform the final remediation strategy and its requirements
5. A robust environmental management framework has been developed to avoid or mitigate potential impacts associated with the contamination profile of the Site.
As noted in section 2.2 of the REF the works aim to:

- “Remove a number of legacy issues from the Site, including existing stockpiles, wastes, redundant rail infrastructure and noxious weeds
- Confirm the presence, location and status of subsurface utilities
- Limit ground disturbance generally to a depth of 500 millimetres, except where drainage channels and sediment basins are required
- Install erosion, sediment and drainage controls on-site
- Achieve minimal change to the topography of the Site at the conclusion of the works
- Leave the Site in a state that reduces the potential impacts associated with the existing site and allows it to be effectively managed until it is developed in the future.”

As the site management works are not being undertaken to remediate the Site and as the land use on completion of the works would be vacant, stabilised and managed land with restricted access, a remediation plan and Section A and Section B Site Audit Statements are not required for the works.

Nevertheless, a suitably-qualified soil conservation expert and contamination consultant would be involved throughout the works.

2.3.2 Surface water, drainage and flooding

Issue description – quality of water discharged from the Site

The NSW EPA accepts that generally it is permitted to discharge water from construction sites at a maximum of 50 milligrams per litre of total suspended solids. However assessment needs to be given about other potential contaminants that may pollute surface and groundwater during the construction works. The NSW EPA notes information on page 75, Volume 1 of the REF, which indicates that water quality in Rozelle Bay is heavily polluted. While this may be the case, the NSW EPA does not consider this to be a reason or justification for discharges to water management practices that are non-compliant with Section 120 of the Protection of the Environment Operation Act 1997 (NSW) (POEO Act). Therefore, the NSW EPA considers that all site discharges and water management practices must ensure compliance with Section 120 of the POEO Act, this is inclusive of surface water management and site runoff.

Erosion and sediment controls should be carried out in accordance with “Managing Urban Stormwater – Soils and Construction Volume 2D, Main road construction” (DECC, 2008) to be read in conjunction with Volume 1 “Managing urban stormwater: soil and construction” (Landcom, 2004).

Response

The REF presents an assessment of the potential soil, groundwater, surface water and contamination impacts that could occur during the works and from the ‘finished site’. Potentially affected receptors, including Rozelle Bay, have been identified. As noted in section 6.2.2 of the REF, the catchments that feed into Rozelle Bay are heavily urbanised. The chemicals found in the soil at the Site (metals, polycyclic aromatic hydrocarbons (PAHs) etc) are also found in many parts of Sydney and commonly occur within stormwater runoff from urban catchments.

The discussion about the existing water quality of Rozelle Bay was provided in the context of describing the existing environmental conditions in the immediate vicinity of the Site (refer to section 6.1.2 and 6.2.2 of the REF) and not to provide justification for discharges that would not comply with Section 120.
Various design features and management measures have been identified to avoid or minimise potential impacts to receptors and to ensure the site management works and ‘finished site’ comply with Section 120 of the POEO Act, including:

1. The installation and maintenance of temporary and permanent erosion and sediment controls during and after completion of the works. Notably this would include the installation of drainage channels and sediment basins across the Site.
2. Lining sediment basins so that captured surface water cannot interact with groundwater levels if they fluctuate.
3. Separating and managing off-site surface water and on-site surface water so that, off-site flows are not potentially contaminated by works on-site.
4. Staging the works to minimise exposed areas of soil and fill beneath the ballast and stabilising this material as soon as possible to reduce erosion and the potential mobilisation of surface contamination.

The erosion and sediment controls for the works would be detailed within the SWMP which would form a sub-plan to the EMP. As noted in management measure CSGW1 “The SWMP would be prepared … in general accordance with: The Blue Book, Volumes 1 and 2D (Landcom, 2004 and DECCW, 2009)”. It is noted that the reference to DECCW 2009 should be DECC 2008. This measure would be updated to reflect this change.

Also, management measure CSGW2 outlines a number of aims for the site management works, including to ensure that “Surface water flows leaving the Site do not pollute receiving water courses and bodies”.

This aim is further supported by management measure SWDF6, which states that stormwater collected in the sediment basins would be sampled, tested and compared against appropriate discharge criteria before being discharged or removed from the Site. Water would not be discharged from Site unless it met the discharge criteria, which would be developed and documented within the SWMP.

To avoid stormwater leaving the Site in an uncontrolled manner, management measure SWDF2 has been amended to state “The temporary and permanent sediment basins will would be:

- Located and sized using design criteria consistent with the Blue Book 2D (DECCW, 2008)
- Lined to ensure that high groundwater levels do not reduce the capacity of the basins to store surface water flows
- Emptied (dewatered) of standing water if heavy rain is expected to ensure that they have the capacity to manage surface water flows.”

Management measure SWDF4 states that: “In the event of a sediment basin overtopping during a high rainfall event, escaped surface water will would be directed overland to a low point of the Site. As far as practicable, surface water where it will would be contained and appropriately managed on Site.”

Management measure SWDF6 states that: “Stormwater collected in the sediment basins will would be sampled and tested before being appropriately discharged or removed from the Site. Appropriate discharge criteria would be established as part of the future design development and would be documented within the SWMP. Water from these basins will not be discharged off-site if it does not meet the appropriate criteria. Sediments settled in the basins and removed during maintenance would be tested and characterised before being appropriately disposed.”

Refer to sections 6.1 and 6.2 of the REF for a discussion on the management measures proposed to manage contamination and surface water for the site management works.
Roads and Maritime considers that given the implementation of the proposed management measures, pollution of Rozelle Bay is unlikely. Roads and Maritime would consider the results of further investigations, including additional contamination and ASS investigations, and the performance of management measures during the site management works and would amend the measures as required.

### 2.3.3 Resource use and waste management

#### Issue description – assessment and reuse of railway ballast

The NSW EPA understands that friable asbestos was identified in one ballast sample. The NSW EPA advises that care should be taken when classifying the remaining ballast or assessing it for reuse, as friable asbestos maybe present on other parts of the Site, regardless of the outcome of any additional sampling.

The NSW EPA understands preliminary testing was carried out on the ballast as part of the planning works, and additional testing of the ballast would be carried out against the requirements of *The recovered railway ballast order 2014* and *The recovered railway ballast exemption 2014* during the proposed works. According to the REF, "results from this assessment may differ from the preliminary assessment, and therefore there is potential that the ballast may be reused on-site or on another Roads and Maritime project." The results from the preliminary assessment concluded that the ballast was not suitable for reuse, and this data cannot be ignored in favour of a more recent data set.

Further assessment of the ballast is considered necessary given that the sampling carried out to date was preliminary in nature, however this additional data should be considered in conjunction with the data collected to date, and the data set should not exclude any sampling points. Consideration should be given to the source of the ballast, and any contamination encountered, in assessing its suitability for reuse.

#### Response

The REF has confirmed that the Site contains friable and bonded asbestos and recognises that this material requires careful management. The asbestos material on-site may originate from a number of sources (eg rail brake shoes, buildings and structures, insulation for cables). Potential sources of asbestos are noted in section 6.1.3 of the REF. Only limited sampling of rail ballast in stockpiles and in situ has been completed across the Site to date.

Management measure CSGW11 confirms that an AMP would be developed for the works. This plan would contain a suite of measures that would be carried out to ensure that asbestos and asbestos containing materials are managed appropriately.

As stated in section 3.2.1 of the REF: "Additional in situ testing of the ballast would be completed to evaluate the suitability for the ballast to be recycled or disposed off-site. This testing along with visual inspection would help confirm the segregation method to maximise potential reuse and proper disposal of the material."

The purpose of this additional testing is to augment this information and help understand where asbestos may be present. Ballast is present across large areas of the Site and any asbestos contamination within it is likely to vary in terms of volume and presence depending on depth and location.

Where ballast is found to contain asbestos or its presence is unclear, this ballast would not be reused and would be disposed of by a licensed contractor to an appropriately licensed facility in accordance with the AMP.
Where it can be confirmed that asbestos is not within the ballast, this material may be reused, providing the requirements of the Waste and Resource Management Plan (WMP), the NSW EPA (2014) Waste Classification Guidelines Part 1 Classify Waste (Waste Classification Guidelines) and the Recovered Railway Ballast Order 2014 are met. This is consistent with good waste minimisation practices.

As described in management measure CSGW3, the SWMP would include details on: “Stockpiling procedures including specific controls regarding the stockpiling of soils and ballast (including assessment of fouled material and segregation methodologies for potential reuse for both soils and ballast).”

As described in management measure CSGW9, the SWMP would include details on:

- “Procedures for the testing, disposal or reuse of materials, including soils, ballast, vegetation (including adhering soils)"
- Material to be disposed of will be classified in accordance with specifications set out in a WMP and either the NSW Waste Classification Guidelines, Contaminated Land Management Act 1997 (NSW) or the relevant exemption or order relating to the activity. This will include disposal of contaminated materials to appropriately licensed facilities in accordance with NSW Waste Classification Guidelines
- Ballast material not meeting the Recovered Railway Ballast Order 2014 will be disposed of at appropriately licensed facilities, unless it is potentially suitable for segregation and reuse after further testing.”

**Issue description – vegetation waste**

The NSW EPA understands that suitable vegetation (excluding noxious weeds) would be mulched and reused on-site. This would be carried out in accordance with Roads and Maritime Specification G40 (Clearing and Grubbing). Consideration should also be given to the requirements of The Mulch Order 2016 and The Mulch Exemption 2016, particularly if any of this material is designated for off-site reuse.

**Response**

Roads and Maritime notes the requirement of The Mulch Order 2016 and The Mulch Exemption 2016, if this material is to be reused off-site. In the event that vegetation material is to be reused off-site, an inspection for pest, disease and weeds would be carried out by a qualified professional in accordance with The Mulch Order 2016 requirements and the Biodiversity Guidelines: Protecting and managing biodiversity on RTA projects (Roads and Traffic Authority, 2011).

A contamination consultant would also be consulted prior to reusing vegetation waste. At this point it is not intended that this material would be reused on or off-site; rather it would be disposed of at an appropriately licensed facility.

**Issue description – site stabilisation**

The NSW EPA understands that site stabilisation would be required on-site after removal of the ballast. A combination of material would be used for stabilisation, including ‘clean fill’. This is not a term recognised by the NSW EPA and Roads and Maritime should be more specific about what filling material they are using, and the properties that make it suitable for the intended use.

**Response**

Material that would be used for site stabilisation works as part of the proposal would be virgin excavated natural material (VENM) or excavated natural material (ENM). The material would be used only if it has been classified in accordance with legislative and NSW EPA requirements such as the POEO Act, the Excavated Natural Material Order 2014 (NSW EPA, 2014) and the Excavated Natural Material Exemption 2014 (NSW EPA, 2014) and the Waste Classification Guidelines (NSW EPA, 2014d).
Management measure CSGW9 would include an additional item to reflect the requirement of these guidelines:

“The SWMP would include the following:
- In the event that material is brought onto the Site, it will consist of virgin excavated natural material (VENM) or excavated natural material (ENM) that has been classified in accordance with legislative and NSW EPA requirements, including POEO Act, The Excavated Natural Material Order 2014 (NSW EPA, 2014) and The Excavated Natural Material Exemption 2014 (NSW EPA, 2014) and the Waste Classification Guidelines (NSW EPA, 2014d).”

2.3.4 Noise and vibration

Issue description – construction hours
The NSW EPA understands works are expected to be carried out during standard construction hours between:
- 7:00am to 6:00pm Monday to Friday
- 8:00am to 1:00pm on Saturdays
- No work on Sundays or public holidays.

The NSW EPA considers that these works would be carried out while carrying out all feasible and reasonable measures to minimise noise, vibration and community impact. While out of hours works are not anticipated, the NSW EPA considers that should these works be carried out in accordance with Interim Construction Noise Guideline (ICNG) (DECC, 2009) and the Roads and Maritime Construction Noise and Vibration Guideline (CNVG) (2016). This includes notifying the local community in advance of any work planned to be carried out outside of standard hours.

Response
Conducting works outside of standard construction hours is not anticipated for this proposal. Works outside of the standard construction hours would only be considered where it may reduce impacts on the public and local community (eg traffic considerations or utility service disruptions) or is required by other approvals, permits etc (eg a road occupancy licence).

Section 3.2.5 of the REF states: “If work is required outside standard construction hours, it would be carried out in accordance with the ICNG (DECC, 2009) and the Roads and Maritime Construction Noise and Vibration Guideline (2016).”

Except where it is required in an emergency and/or to prevent environmental harm, the local community would be notified at least five days in advance of any work planned to be carried out outside of standard hours if it is required.

To address the NSW EPA’s comment about out of hours work, management measure NV1 has been amended as follows:

“A Noise and Vibration Management Plan (NVMP) will be prepared and implemented as part of the EMP. The NVMP will generally follow the approach in the Interim Construction Noise Guideline (ICNG) (DECC, 2009) and will identify:
- All potential noise and vibration generating activities
- Possible and reasonable mitigation measures to be implemented, taking into account Beyond the Pavement: urban design policy, process and principles (Roads and Maritime, 2014)
- A monitoring program to assess performance against relevant noise and vibration criteria
- Arrangements for consultation with affected neighbours and sensitive receivers, including notification and complaint handling procedures
- Contingency measures in the event of non-compliance with noise and vibration criteria
- A section that outlines ‘out of hours’ work. If work is required outside standard construction hours, it would be carried out in accordance with the ICNG (DECC, 2009) and the Roads and Maritime Construction Noise and Vibration Guideline (2016).

The NVMP would be regularly updated to account for any changes in noise and vibration management strategies.”
2.3.5 Air quality

Issue description – dust

NSW EPA understands that during the works the dust emissions magnitude is classified as small for construction and medium for earthworks.

The proponent should ensure that all works is carried on by such practicable means as may be necessary to minimise dust emissions throughout the duration of the works, and carry out all feasible and reasonable mitigation measures to minimise the release of dust from the premises.

This includes measures to minimise sediment tracking on to public roads, stabilised entry and exit points should be installed in accordance with “Managing Urban Stormwater – Soils and construction Volume 2D, Main road construction” (DECC, 2008) to be read in conjunction with Volume 1 “Managing urban stormwater: soils and construction” (Landcom, 2004).

Response

Potential impacts related to dust have been identified in the REF (refer to section 6.9) and appropriate management measures have been developed to minimise the release of dust and other airborne material from the Site. These measures would be detailed in the Air Quality Management Plan (AQMP) for the proposal.

As stated in management measure AQ1, the “AQMP would be prepared and implemented as part of the EMP”. It would include a progressive strategy to stabilise exposed surfaces to reduce the risk of erosion and dust generation and would cross reference the SWMP as required. CSGW1 requires that a SWMP would be prepared in accordance with various guidelines including The Blue Book, Volumes 1 and 2D (Landcom, 2004 and DECC, 2008).

Measures to minimise sediment tracking on to public roads and to stabilise entry and exit points are detailed in CSGW14 and AQ5 and include:

- “Bunded wheel and undercarriage washing facilities established at exit points for the Site as necessary”
- Where required, vehicles will have loose material removed from their exterior and their wheels washed clean of soils or sediments before leaving the Site. Details of how waste water from this activity would be managed would be outlined in the SWMP
- An adequate area of hardstand will be maintained between the wheel wash facility and the site exit, wherever site size and layout permits
- Vehicles coming to and leaving the Site with full loads will have their loads covered to prevent material being blown out of them”
- “Water-assisted dust sweepers will be used on internal access tracks and local roads where necessary, to remove material tracked out of the Site”
- “Internal access tracks will be inspected and necessary repairs to the surface made as soon as reasonably practicable”
- “Exposed areas will be stabilised as soon as reasonably practicable”
- “Spraying of water on unsealed access roads and on soils/ballast before grubbing and ballast removal.”

Management measure AQ5 provides a complete list of the proposed dust management measures.
2.3.6 Off-road diesel emissions

**Issue description – assessment of off-road diesel emissions**

The environmental impacts associated with off-road diesel equipment can be a major source of fine particles. The NSW EPA recommends that the proponent assess the environmental impacts associated with heavy vehicles including off-road diesel equipment and plant used in the construction of the proposal. This should include but is not limited to:

- Compliance with relevant and current emissions standards as prescribed in Australian Design Rules for heavy duty engines and vehicles
- Strategies for minimising air emissions from off-road diesel equipment including but not limited to graders, bulldozers, loaders etc
- Confirmation that all off-road diesel equipment would meet best available diesel emissions standards or be fitted with an appropriate diesel exhaust treatment device where possible.

**Response**

The REF (section 6.9.3) discusses the potential for the proposal to generate exhaust emissions. A qualitative risk assessment of emissions from plant and equipment has been carried out. This approach is considered appropriate given the short duration of the works and the level of detail currently known about equipment and plant to be used.

While there is potential for emissions to be generated from off-road diesel equipment, the impact these emissions would have on the immediate surroundings would be negligible over and above what is already in the air shed. Impacts due to emissions from the equipment and plant on-site are not likely to be measurable off-site, above the already elevated fine particle levels in this area. While the on-site diesel emissions are considered to be negligible in the context of the local air shed, the REF has included measures to manage exhaust emissions. These are detailed in management measure AQ7 and include:

- “Machinery will be turned off while not in use
- Equipment (including all internal combustion engines) will be properly maintained and running efficiently to ensure exhaust emissions are minimised, where practicable
- All emission controls used on vehicle and equipment will comply with standards listed in Schedule 4 of the Protection of the Environment Operations (Clean Air) Regulation 2010.”

The Australian Design Rules apply to on-road vehicles. Heavy vehicles used for the site management works would comply with the relevant Australian Design Rule.

There is a requirement under the NSW Government Resource Efficiency Policy (GREP) for contractor-supplied and government purchased equipment to comply with the European Union (EU) or United States Environment Protection Agency (US EPA) standards. Section A1 (Air emission standards for mobile non-road diesel plant and equipment) of the GREP requires that for contract-supplied and leased plant and equipment:

- “Procurement contracts requiring the use of mobile non-road diesel plant and equipment would require reporting of engine conformity with relevant US EPA, EU or equivalent emission standards and the fitting of any exhaust after-treatment devices
- The tender selection process would incorporate a weighting for air-emission standards in conjunction with other environmental considerations to ensure it is factored into the selection process and apply a consistent weighting to preference the lowest emission engines.”

The GREP requirements would apply to all heavy duty equipment and plant, including trucks, bulldozers, loaders, graders and any other off-road diesel vehicles entering, leaving or operating on the Site.
2.4 UrbanGrowth NSW

2.4.1 Non-Aboriginal heritage

Issue description – potential impacts to items listed in the White Bay Power Station Conservation Management Plan

The White Bay Power Station sits within a 10 hectare site, a destination within the Bays Precinct Urban Transformation Program. The White Bay Power Station Complex is listed on the NSW State Heritage Register.

Much of the significant heritage features and frameworks around its preservation can be found in the Heritage Council of NSW endorsed Conservation Management Plan (CMP), prepared to ensure the significant features of this asset are maintained in perpetuity.

Any site management works proposed in the White Bay Power Station destination site should refer to all listings and their associated requirements and the CMP to ensure any related elements within the proposed site boundaries do not conflict with the heritage requirements of this building, associated elements and site.

Response

An assessment on non-Aboriginal heritage was carried out by GML Heritage Pty Ltd (GML Heritage). This assessment is provided in Appendix D and is summarised in section 6.4 of the REF. This Heritage Impact Assessment (HIA) identified registered and potential heritage items within and close to the Site. The White Bay Power Station was identified in the HIA as being State heritage listed under the Heritage Act 1977 (NSW).

The HIA and REF noted that the proposal is unlikely to impact the majority of the White Bay Power Station and that the proposed works will not take place within the State heritage register curtilage of the power station. A CMP has been prepared for the power station and covers both the State heritage register curtilage and a number of areas adjacent to, but outside of, this curtilage.

One structure that is closely associated with the power station (but outside of the State heritage register curtilage) is the southern penstock. The structure has been identified in the CMP and is located in the part of the Site to east of Victoria Road bridge. A heritage significance assessment for the southern penstock is included in section 3.3.1 of the HIA (refer to Appendix D of the REF). The proposed works would not directly affect the southern penstock however there is the potential that it could be accidently damaged during the works if measures to protect it are not put in place.

To mitigate any potential for impact to this structure during the works, an exclusion zone would be set up to protect the southern penstock from accidental damage as detailed by management measure NAH7 in Chapter 7 of the REF: "A three metre exclusion zone will be installed around the southern penstock to protect it from accidental damage during the works. No works other than vegetation management would take place in this exclusion area."

There are no other heritage related elements associated with the power station and listed in the CMP which would be affected by the site management works.

The part of the Site to the east of Victoria Road bridge has also been identified as part of the ‘The White Bay Power Station destination’ within The Bays Precinct Transformation Plan (UrbanGrowth NSW, 2015). However its inclusion as part of this ‘destination’ is not relevant for the non-aboriginal heritage assessment of this proposal.
Minimal works are proposed for this area under and east of the Victoria Road bridge. The site management works proposed for this area would include clearance of vegetation and the demolition of the Port Authority building and warehouse. This area, and the buildings within it, do not fall within the White Bay Power Station curtilage and as such no direct and negligible indirect impacts on the power station are expected.

2.5 City of Sydney

2.5.1 Relationship with M4-M5 Link

Issue description – relationship with M4-M5 Link
The REF report advises that Roads and Maritime propose to use the land in the future for the separate M4-M5 Link project if that project is approved by the NSW Minister for Planning. The City of Sydney Council opposes the Site being used for the M4-M5 Link project and continues to question the strategic merit of WestConnex, including Stage 3.

Response
The City of Sydney Council’s opposition to using the Site for the M4-M5 Link project has been noted. As stated in section 1.1 of the REF, the site management works do not form part of the WestConnex M4-M5 Link project. The M4-M5 Link project would be subject to separate assessment and determination under Part 5.1 of the EP&A Act. An EIS is being prepared to assess the environmental impacts associated with the M4-M5 Link project.

The purpose of the site management works is to investigate the Site and allow Roads and Maritime to effectively manage it before it is developed in the future. It is proposed that the site management works would start before the determination of the EIS for the M4-M5 Link project and would be required irrespective of whether or not the M4-M5 Link project is approved.

2.5.2 Management of fauna, flora and heritage

Issue description – management of fauna and flora
With regard to the proposed site management works, the City of Sydney Council supports the removal of redundant rail and rail related infrastructure from the Site, allowing issues at the Site such as waste and noxious weeds to be appropriately managed.

City of Sydney Council expects that all issues relating to flora and fauna at the Site would be managed appropriately.

Response
A biodiversity assessment was undertaken for the site management works and is included in the REF (refer to Appendix F and section 6.6 of the REF). The biodiversity assessment concluded that the proposal is not likely to significantly impact threatened species, populations or ecological communities or their habitats, within the meaning of the Threatened Species Conservation Act 1995 (NSW) (TSC Act) or Fisheries Management Act 1994 (NSW) (FM Act), or threatened species, populations, ecological communities or migratory species, within the meaning of the Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth) (EPBC Act).

The assessment recommended various management measures to avoid or minimise potential impacts on flora and fauna, which have been presented in the REF (refer to section 6.6.4). These management measures include the development and implementation of a Flora and Fauna Management Plan (FFMP), inclusive of a weed management plan to minimise the potential impact on fauna present on-site, manage vegetation removal and limit the spread of weeds.
Additional management measures were identified to manage potential impacts on off-site trees (accidental damage) and fauna (potential impacts to microbats). Refer to the management measures BO1 to BO8 in Chapter 4 (Environmental management) for details on the biodiversity management measures.

**Issue description – management of heritage**
The City of Sydney Council notes the advice in the report that no items on-site are heritage listed but that a number of items have local heritage significance. The City of Sydney Council’s expectation is that these would also be managed appropriately.

**Response**

An assessment of non-Aboriginal heritage for the proposal was carried out by GML Heritage and is provided in Appendix D and summarised in section 6.4 of the REF. Potential impacts on non-Aboriginal heritage from the site management works were discussed in section 6.4.4 of the REF.

No items located on-site are heritage listed however a number of items located on the Site have been assessed in the REF as having potential heritage significance. These items, their heritage significance, potential impacts and relevant management measures are described in the HIA and REF and summarised in Table 2.3 below.

Overall the potential impacts of the proposal on non-Aboriginal heritage were not considered to be significant, provided the appropriate management measures are put in place. Refer to the management measures NAH1 to NAH10 in Chapter 4 (Environmental management) for details on the heritage management measures.

**Table 2.3: Summary of heritage significance, potential impacts and management measures for heritage items on-site**

<table>
<thead>
<tr>
<th>Item</th>
<th>Heritage significance</th>
<th>Potential heritage impacts</th>
<th>Management measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern penstock</td>
<td>Potential State significance associated with the State heritage listed White Bay Power Station</td>
<td>Neutral</td>
<td>Installation of a three-metre exclusion zone around the southern penstock (refer to NAH7)</td>
</tr>
<tr>
<td>Victoria Road bridge</td>
<td>Potential local heritage</td>
<td>Neutral</td>
<td>Works conducted with care under the bridge (refer to NAH8)</td>
</tr>
<tr>
<td>Sandstone cutting, on the north-western boundary of the Site</td>
<td>Potential local heritage</td>
<td>Neutral</td>
<td>Undertaking vegetation clearing works on the sandstone cutting with care (refer to NAH9)</td>
</tr>
<tr>
<td>Item</td>
<td>Heritage significance</td>
<td>Potential heritage impacts</td>
<td>Management measures</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------</td>
<td>---------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Lighting tower</td>
<td>Potential local heritage</td>
<td>The removal of the lighting tower would have a minor adverse impact on the heritage integrity of the Site (through the loss of representative features)</td>
<td>Removal and storage of the lighting tower and overhead rail gantries, where practicable for potential reuse as urban design features which interpret the Rozelle Rail Yards industrial history in a future development of the Site (refer to NAH5) Archival recording of the lighting tower (refer to NAH10)</td>
</tr>
<tr>
<td>Port Authority building</td>
<td>Potential local heritage</td>
<td>Removal of the Port Authority building would result in a minor impact on heritage values of the area</td>
<td>Archival recording of the Port Authority building (refer to NAH6) prior to removal</td>
</tr>
<tr>
<td>Lilyfield stormwater canal</td>
<td>Local heritage significance in the above ground portion north of the Site</td>
<td>No heritage impact, as the works are not expected to be at a depth that would encounter the part of the canal, which is present below the Site</td>
<td>Excavations beneath the ballast and into the underlying fill/soil would not be carried out above the section of the Lilyfield Road stormwater canal that runs beneath the Site (refer to NAH4)</td>
</tr>
<tr>
<td>Rozelle Rail Yards redundant rail infrastructure</td>
<td>Moderate degree of historic importance</td>
<td>The proposed changes to the Site as part of the proposal, including demolition and removal of redundant rail infrastructure and buildings, have the potential to result in a minor adverse impact on the heritage of the local area</td>
<td>Removal and storage of the lighting tower and overhead rail gantries, where practicable for potential reuse as urban design features which interpret the Rozelle Rail Yards industrial history in a future development of the Site (refer to NAH5) At this time Roads and Maritime is investigating the feasibility of storing a selection of railway tracks off-site for potential future interpretation use at the Site</td>
</tr>
</tbody>
</table>
2.5.3 Future use

Issue description – future use
The City of Sydney Council has raised other opportunities for the Rozelle Rail Yards site. In particular, the City of Sydney Council commented on the potential for the Site to offer valuable open space to the inner city and allow connectivity for walking and cycle routes between Rozelle, Lilyfield and Annandale, which are currently severed by the rail yards.

Response
The future use of this Site is still to be confirmed and does not form part of the proposal.

Roads and Maritime proposes to use the land in the future for the separate M4-M5 Link project if that project is approved by the NSW Minister for Planning. As part of the M4-M5 Link project, the Site is proposed to be developed for a road interchange, which would mainly be underground. Should the M4-M5 Link project proceed, a commitment is in place for the residual land to be used as additional open space and improved active transport linkages.

Details of the proposed interchange are in the State significant infrastructure application report for the M4-M5 Link project available on the DP&E website. Further details on the proposed design of the interchange would be included in the EIS for the M4-M5 Link project. Should the M4-M5 Link project not proceed, the site management works would not preclude other potential future developments at the Site and would not preclude other future uses at the Site.

2.5.4 Future consultation

Issue description – future consultation
The City of Sydney is keen to be a part of discussions about the future of the Rozelle Rail Yards.

Response
Roads and Maritime would continue to consult with City of Sydney Council regarding the future use of the Rozelle Rail Yards as it relates to the M4-M5 Link project.

2.6 Inner West Council

2.6.1 Consultation with the Inner West Council

Issue description – REF display period
Inner West Council appreciates the opportunity to comment, acknowledging there is no statutory requirement for public exhibition of this REF. Inner West Council also appreciates the briefing by SMC staff to Inner West Council staff on details of the REF on 12 December 2016.

Notwithstanding, Inner West Council has found it difficult to compile comments within the short (21 day) timeframe, and formally requested an extension of the exhibition period from 21 to 42 days. This has been reinforced by calls for an extension of the exhibition from the community, and the community’s considerable interest in this proposal. Inner West Council has also formally requested a site visit involving staff from Roads and Maritime, SMC, Inner West Council and other key stakeholder groups.

Response
As noted in the submission, although not a statutory requirement under the EP&A Act, the REF was placed on public display for a period of 21 calendar days. The REF display period concluded on 13 December 2016, before the Christmas and New Year period. This decision was made in response to requests from the community and Inner West Council to avoid consultation during the Christmas and New Year period.
In addition, the length of the REF display period is considered to be appropriate given the nature and limited scale of the proposal and the potential environmental impacts identified in the REF. Submissions from stakeholders and the community were invited and are being considered before Roads and Maritime determine whether or not to proceed with the proposal. Section 1.2 of this report summarises how the REF was displayed.

The Inner West Council was provided with a letter on 23 November 2016, which briefly outlined the site management works and details about the display of the REF. The content of this letter is provided in Appendix A.

Roads and Maritime will organise a site visit with Inner West Council.

### 2.6.2 Objection to WestConnex

#### Issue description – objection to the M4-M5 Link project

Inner West Council has no fundamental objection to the proposed surface clean-up of the Rozelle Rail Yards, noting the NSW Government’s intention to carry out this clean-up regardless of the future use of the Site.

However, as part of its position of opposing WestConnex, Inner West Council does not support the Site serving as part of a WestConnex interchange.

**Response**

Inner West Council’s opposition to using the Site for the M4-M5 Link project has been noted. The purpose of the site management works is to investigate the Site and allow Roads and Maritime to effectively manage it before a future development proposal.

The site management works do not form part of the M4-M5 Link project. The M4-M5 Link project would be subject to separate assessment and determination under Part 5.1 of the EP&A Act. An EIS is being prepared to assess the environmental impacts associated with the M4-M5 Link project. The site management works would start before the determination of the EIS for the M4-M5 Link project and are proposed to be undertaken irrespective of whether or not the M4-M5 Link project is approved.

### 2.6.3 Use for light rail

#### Issue description – use for light rail

Consistent with comments from the community, Inner West Council requests the proponent to consider corridors for future light rail extensions. Inner West Council requests that all rail tracks on the Site remain in place until a corridor for a future light rail extension from the existing line at Lilyfield to White Bay and Balmain has been identified and protected.

This has recently been brought to Council’s attention by members of the community, who are concerned that removal of the tracks would make it difficult to identify and protect this corridor. Council supports protection of this corridor as part of its overall position of opposing WestConnex and supporting public transport solutions to Sydney’s traffic problems.

**Response**

The proposal involves the removal of rail and rail related infrastructure from the Site and the appropriate management of existing issues at the Site such as drainage, waste and noxious weeds. Retaining the rail tracks in situ would not allow the sleepers and ballast to be removed or for appropriate erosion and sediment control measures to be installed. It would also potentially constrain further contamination and service investigations associated with the site management works.
Transport for NSW and UrbanGrowth are considering a range of potential transport options to service future development in the Bays Precinct including metropolitan rail, ferry services, bus services and possibly light rail. However, no preferred options or transport corridors have been identified at this stage. In addition, active transport (pedestrian and cycling) linkages are proposed to service the Bays Precinct.

The nature of the site management works does not preclude future use of the Site for a possible light rail extension.

2.6.4 Heritage

Issue description – non-Aboriginal heritage

Inner West Council notes there are no listed heritage buildings on the Site. The only building that may be of concern would be the proposed demolition of the Port Authority building identified as a potential item of local heritage significance.

Inner West Council also notes that the proponent intends to reuse some structures as part of an interpretation of the site’s railway history, eg reuse of the lighting tower and gantries on the Site. Consistent with comments from the community, Inner West Council requests the proponent retain some of the rail tracks in situ as part of the rail history interpretation.

Response

Revised management measure NAH5 states that: “Where practicable, the lighting tower and overhead rail gantries will would be removed and stored off-site to be considered for potential reuse as interpretative features. This will would potentially enable these elements to be incorporated as urban design features which interpret the Rozelle Rail Yards industrial history in a future development of the Site.”

Retaining the rail tracks in situ would not allow the sleepers and ballast to be removed or for appropriate erosion and sediment control measures to be installed. It would also potentially constrain further contamination and service investigations to be carried out as part of the site management works. At this time, Roads and Maritime is investigating the feasibility of placing some of the rail tracks into storage off-site so that they can be used for potential future interpretation purposes.

Issue description – Aboriginal heritage

Regarding Aboriginal heritage, it is noted that the proponent has liaised with the Local Aboriginal Land Council and has carried out a survey to identify any items of Aboriginal heritage, and no such items have been identified.

As this is a surface clean-up only, it is not expected that such items would be discovered as works progress – but if they are, Inner West Council notes that SMC would adopt an ‘unexpected find’ protocol to assess the item. It could be expected that items of Aboriginal heritage may be located deeper beneath the surface, but these would not be affected by the proposed surface works.

Response

The Site and the wider area around Rozelle Bay have been heavily modified and disturbed through industrialisation with numerous developments over time having modified the landscape. Section 6.5 of the REF notes that the desktop searches and site inspection did not identify any areas of known or potential Aboriginal heritage sensitivity, and as the Site is within a highly modified landscape, there are unlikely to be any Aboriginal materials or sites present.
The site management works would aim to limit ground disturbance generally to a depth of 500 millimetres, except where drainage channels and sediment basins are required. The REF states that it is unlikely that items of Aboriginal Heritage would be uncovered during the works and in the event that items of Aboriginal heritage are identified, the Unexpected Heritage Items Procedure (Roads and Maritime, 2015) would be followed. This requirement is presented in management measure AH1. This measure has been further strengthened to include a requirement that staff involved in ground disturbance activities are provided information to allow them to identify potential heritage items.

The revised management measure AH1 now states: *The Unexpected Heritage Items Procedure (Roads and Maritime 2015d)* will be followed in the event that unknown or potential Aboriginal object(s), including skeletal remains, are found during site work.

*Work would only restart once the requirements of that procedure have been satisfied.*

**2.6.5 Biodiversity**

**Issue description – locally uncommon species**

Inner West Council notes that while the proponent has not carried out a full fauna survey, it has carried out a threatened species survey, and no threatened species have been found on the Site.

Inner West Council recommends that further fauna surveys be carried out to determine the presence of locally vulnerable species - named as “target species” in the report Avian Biodiversity Monitoring & Bird Habitat Management within the Leichhardt LGA (Saunders, 2008).

Further, that if present, these species are included in the Flora and Fauna Management Plan (FFMP). Target species named in the Saunders report are: Superb Fairy Wren; Tawny Frogmouth; Southern Boobook; Spotted Pardalote; Yellow Thornbill; Eastern Spinebill; Eastern Yellow Robin; and Grey Fantail. Other locally significant species not listed in Saunders include the Blue-tongued Skink and Ringtailed Possum.

The species have been determined as likely to disappear from the Leichhardt area unless properly managed in terms of habitat preservation. This is particularly the case on weedy, unmanaged sites such as the Rozelle Rail Yards, where many of these species are likely to be present. Tawny Frogmouth, Superb Fairy Wren, Eastern Spinebill and Grey Fantail have been observed next to the railway corridor along Brenan Street, Annandale, which indicates that these species (at least) are highly likely to be present in the Rozelle Rail Yards.

The Rozelle Rail Yards contain the most extensive areas of native small bird habitat in the Leichhardt area. The plant species that comprise this habitat are for the most part exotic weed species. It is a common practice in inner urban areas to preserve these habitats regardless of the fact that they are weedy. Preservation of this habitat should, where possible, be a priority in the FFMP for the Site.

**Response**

As noted in the submission a biodiversity assessment was carried out for the site management works (refer to Appendix F of the REF). This assessment assessed impacts to threatened species, populations and ecological communities listed under the TSC and EPBC Acts.

This assessment was carried out under Part 5 of the EP&A Act which requires a determining authority to consider critical habitats, threatened species, populations and ecological communities, and their habitats and any other protected fauna or protected native plants within the meaning of the *National Parks and Wildlife Act 1974* (NSW).
The REF has considered the Biodiversity Guidelines: Protecting and managing biodiversity on RTA projects (Roads and Traffic Authority, 2011). The guidelines were developed in consultation with the OEH, NSW Department of Primary Industries (Fisheries), biodiversity specialists and Roads and Traffic Authority (RTA) staff including project managers, construction personnel and designers, as a tool to help minimise impacts on biodiversity during construction projects and maintenance works. They provide good practice management and mitigation measures for works carried out by Roads and Maritime and would guide the preparation of the FFMP for the proposal.

Inner West Council in its submission identified a list of ‘target species’ that were defined in the report ‘Avian Biodiversity Monitoring & Bird Habitat Management’ within the Leichhardt LGA (Saunders, 2008). It is noted that some species in Saunders (2008) are also listed under the TSC or EPBC Acts and have been assessed in the REF, such as the Powerful Owl (Ninox strenua).

Roads and Maritime has further considered potential adverse impacts on the ‘target species’ (and other non-threatened species) and included additional mitigation and management measures to be applied through the implementation of the FFMP as part of the site management works.

ELA carried out an assessment of impacts on the target species which is provided in Appendix B of this report. While no surveys have been conducted for those target species, or for other non-threatened flora and fauna, many of the species can be assumed to be present based on the habitat characteristics of the Site, and the proximity of the Site to records from past surveys and reports.

The site management works would require the clearing of the Site, and thus the works would impact on species that are present on or use the Site. The majority of these species are mobile species, or have the ability to move between areas. However, there is still a risk of fauna injury or mortality as vegetation is progressively removed across the Site. Injury or mortality may occur as a result of direct collision with vehicles and equipment. Some species may be able to move away quickly and easily such as some birds. However, other less mobile species, or those which have high fidelity with their home range, may be slower to move away or may not relocate at all, potentially resulting in injury or mortality of the individual. Individuals may also be killed or injured as they are displaced from the Site or while trying to establish in other habitats.

In order to mitigate these potential adverse impacts, management measure BO1 has been updated to state the following:

“A Flora and Fauna Management Plan (FFMP) will be prepared in accordance with Roads and Maritime’s Biodiversity Guidelines: Protecting and Managing Biodiversity on RTA Projects (RTA, 2011) and implemented as part of the EMP. It will include the following:

- Plans showing areas to be cleared and areas to be protected, including exclusion zones
- Requirements set out in the Landscape Guideline (RTA, 2008)
- Pre-clearing survey requirements
- Procedures for unexpected threatened species finds and fauna handling
- Protocols to manage weeds (see below) and pathogens
- Measures to manage the removal of vegetation, which will be carried out in accordance with Roads and Maritime Specification G40 (Clearing and Grubbing)
- Measures to manage noxious weeds including the identification of noxious weeds, protocols for appropriate disposal and measures to prevent the spread of noxious weeds outside of the Site
- Where possible having regard to the proposed work program, carry out the clearing of vegetation for the site management works during the autumn and winter months, primarily March to early August. This timing allows the removal of vegetation to occur outside the breeding times for the majority of species. Spring and early summer months are preferred breeding times for the majority of native species listed in the Inner West Council’s submission
- Use a staged approach for the removal of vegetation, with a break between the clearing of each stage. Use a cautious and slow approach to the clearing of vegetation and create a disturbance before the vegetation’s removal
• Ensure the clearing of the Site, in relation to weed infested areas (including noxious weeds) is carried out in accordance with the Roads and Maritime biodiversity guidelines (Roads and Traffic Authority, 2011) and relevant legislation
• Contractors involved in the clearing of vegetation are to have a fauna handler and local wildlife carer available during clearing. Furthermore, the clearing of vegetation and risk to native species would be included as part of the site induction.”

The additional mitigation measures outlined above will result in a reduced potential for adverse impacts and species would have the ability to seek other habitat through connecting biolinks or stepping stones in the vicinity, such as Whites Creek, Inner West light rail corridor, Jubilee Park, Federal Park, Johnstons Creek, Leichhardt Park, Easton Park and Callan Park.

Issue description – biodiversity corridor
The Rozelle Rail Yards are continuous with the light rail corridor, which is recognised regionally as an important biodiversity corridor (ie the GreenWay, refer to GreenWay Revegetation and Bushcare Plan (January 2011)). Loss of species from the Rozelle Rail Yards would undoubtedly compromise the biodiversity conservation outcomes Inner West Council expects for the GreenWay.

Response
It is considered unlikely that the site management works would have significant and long-term adverse impacts on the conservation outcomes from the GreenWay Biodiversity Strategy and GreenWay Revegetation and Bushcare Plan given that:
• The Site is about 750 metres to the east of the boundary of the GreenWay corridor (refer to Figure 2.1) and therefore would not directly affect it
• The removal of noxious weeds and exotic plants is consistent with the objective of supporting the original vegetation of the area.
• Other vegetation within the locality could also provide a biolink or stepping stone between areas to the east and the GreenWay, such as vegetation associated with drainage lines (eg Whites Creek), urban parks (eg Easton Park), the light rail corridor, roadside vegetation and vegetated backyards.

However, Objective 3 for the GreenWay Biodiversity Strategy (in reference to areas beyond the GreenWay catchment), states:
“Protect and enhance the habitat and migration opportunities for locally significant or threatened native species, populations and communities (including the endangered population of Long-nosed Bandicoot), and allow for their continued evolution and survival in and beyond the GreenWay catchment.”

Given that this objective relates to species evolution and survival within and beyond the GreenWay, the site management works would not support one element of this objective. However, migration opportunities between the GreenWay and the Site have already been compromised to some degree by the existing light rail line/station and the Central Business District (CBD) and South East Light Rail (CSELR) Rozelle maintenance depot facility project close to Catherine Street.

The future use of the Site after the site management works is still to be confirmed. Roads and Maritime proposes to use the land in the future for the separate M4-M5 Link project if that project is approved by the NSW Minister for Planning. Should the M4-M5 Link project be approved, the Site is proposed to be developed into a road interchange, which would mainly be underground. The NSW Government has also committed to the delivery of open space and improved active transport linkages as part of the M4-M5 Link project. Further details on the proposed design of the interchange would be included in the EIS for the M4-M5 Link project.

Should the M4-M5 Link project not proceed the site management works would not preclude other potential future developments at the Site.
Figure 2.1: Location of the GreenWay Corridor as shown in the GreenWay Biodiversity Strategy (Australian Wetlands Consulting, 2012) in relation to the Site

Site Management Works and GreenWay Corridor
2.6.6 Waste and contamination

Issue description – waste disposal facilities
Inner West Council sees a need to identify the various licensed facilities to which the proponent intends taking the differently classified wastes. Inner West Council therefore recommends that the WMP and SWMP to include the names of the ‘suitably-licensed facilities’ for receipt of the various wastes identified under the Waste Classification Guidelines (NSW EPA, 2014). Though the proponent may have a site waste management plan identifying all the things they would do, unless there is accountability and monitoring, then there is no evidence of what did happen ie where did the various waste types end up?

Response
Waste would be disposed of to an appropriately licensed facility(s), which would be determined by the contractor and based on the relevant waste classification. The classification of wastes would be carried out in accordance with the Waste Classification Guidelines (NSW EPA, 2014d).

Waste tracking would be carried out for the works, and would be in line with, the Protection of the Environment Operations (Waste) Regulation 2014 (NSW).

Management measure RUWM11 states that: “A waste register will would be prepared, used and maintained by the contractor to track all wastes generated from the proposal. All records for the disposal of waste will would be retained and kept readily accessible for inspection by relevant regulatory authorities.”

The WMP would detail monitoring and auditing procedures to check that controls are in place and are being carried out (refer to management measure RUWM12).

Issue description – management of contamination
The contamination investigation and associated report appear to be satisfactory. Note that extensive soil and groundwater contamination has been found throughout the entire site due to past contaminating activities.

Contamination is to be managed via an EMP. Should these maintenance works reveal any unexpected finds relating to contamination, Inner West Council is to be notified.

Response
Contamination would be managed in line with the EMP and its sub-plans (SWMP, AMP, ASSMP and AQMP) for the proposal.

Notification of pollution incidents would be in line with the requirements of the POEO Act which requires notification of the NSW EPA and the local authority (Inner West Council) when a pollution incident occurs as defined by Part 5.7 of POEO Act.

Issue description – asbestos
Inner West Council and the community are concerned about disturbance of asbestos within the surface soils on the Site.

Inner West Council notes the proponent would continue to monitor airborne asbestos, and its disposal would be guided by appropriate management plans.

Inner West Council recommends the proponent informs the Inner West Council and surrounding residents of the results of asbestos monitoring and any asbestos issues as they are encountered.
Response

The REF includes a management measure (CSGW12) which proposes a HazMat survey to be conducted during the early stages of the proposal before ground disturbance works start. This survey would be completed by a hygienist and contamination expert and would include the identification of ACM.

An AMP would be prepared and implemented throughout the proposal. As stated in CSGW11, the AMP would include the following:

- "Communication strategy, where required, for notifying the community of asbestos management procedures"
- "A plan of management for each activity or group of activities that, according to the risk assessment, requires controls to complete the works. This plan will include a method for each activity explaining how these controls would be implemented"
- "Appropriate handling, transporting, storing and disposal measures, including for soils, fragments and ballast"
- "Where required, asbestos management on Site Work will be carried out or overseen (as appropriate) by appropriately licensed and qualified contactors"
- "The requirement to complete asbestos fibre air monitoring during activities that could liberate asbestos fibres"
- "An audit and reporting process to check that controls are in place and being implemented."

In addition and as stated in AQ4 and AQ5, the AQMP would include:

- "Biological debris or other hazardous materials such as asbestos will be bagged and removed, or wet down before demolition"
- "Before and during grubbing and ballast removal, soils/ballast will be wet down to limit the movement of dust, asbestos and other materials off-site."

Notification of asbestos related issues would be carried out in line with the AMP. In the event of a pollution incident, notification would be in line with the requirements of the POEO Act; which requires notification of the NSW EPA and the local authority (Inner West Council) when a pollution incident (as defined by Part 5.7 of POEO Act) occurs.

Further detail on the assessment of asbestos with regards to the proposed works is provided in Sections 6.1, 6.3 and 6.9 of the REF. Management measures CSGW11, CSGW12, CSGW13, CSGW15, CSGW16, CSGW17, RUWM5, AQ4, AQ5 and AQ6 provide further detail about the proposed hazardous material, asbestos and dust management during the works.

2.6.7 Noise and vibration

Issue description – management of noise

The assessment within the REF is considered satisfactory, and it is noted that all works would be carried out during daytime hours on Mondays to Saturdays. The REF does, however, identify properties on Lilyfield Road that may be exposed to work activities that may exceed the noise criteria by more than 10 dB(A). Suitable management controls which involve noise/vibration monitoring and community engagement/notification are recommended.

Response

The noise assessment presented in section 6.8 of the REF indicates that after management measures have been carried out, 19 receivers in Noise Catchment Area (NCA) 04 on Lilyfield Road are predicted to have exceedances of more than 10 decibels and four of these receivers are predicted to be highly noise affected.

However, the worst case impact is only expected for a limited duration (around one week) and a range of management measures are proposed such as the NVMP, location of work areas as far as practicable from sensitive receivers, and use of mulcher/chipper limited to the southern area of the Site.
The REF identifies management measures for noise and vibration (measures NV1 to NV11), including additional measures for highly affected noise receivers on Lilyfield Road (management measure NV12).

In regards to monitoring and community engagement/notification, the management measures include preparation of a NVMP which would include (refer to management measure NV1):

- "A monitoring program to assess performance against relevant noise and vibration criteria
- Arrangements for consultation with affected neighbours and sensitive receivers, including notification and complaint-handling procedures
- Contingency measures in the event of non-compliance with noise and vibration criteria."

Following comments received from the community and the NSW EPA, management measure NV1 has been amended to include the following text:

The NVMP would include: *A section that outlines procedures for ‘out of hours’ work. If work is required outside standard construction hours, it will be carried out in accordance with the ICNG (DECC, 2009) and the Roads and Maritime Construction Noise and Vibration Guideline (2016).*

In addition, all sensitive receivers (eg schools, local residents) likely to be affected would be notified before the start of any work that may have an adverse noise or vibration impact (refer to management measure NV2).

The following additional management measures would be carried out for the small number of predicted highly noise-affected receivers in NCA04 on Lilyfield Road as stated in NV12:

"The following additional management measures will would be carried out for the predicted highly noise-affected receivers in accordance with the Construction Noise and Vibration Mitigation – Construction Noise and Vibration Guideline (Roads and Maritime, 2016a):

- Notifying the community through letterbox drops, doorknocking or phone calls
- Verifying demolition noise levels through noise monitoring
- Offering respite or negotiating respite periods. The approach to respite periods will would be confirmed during preparation of the NVMP and in consultation with the affected community."

Refer to the management measures NV1 to NV12 in Chapter 4 (Environmental management) and section 6.8 of the REF for further management measures that would be carried out to manage potential noise impacts.

### 2.6.8 Traffic and transport

#### Issue description – traffic modelling

Total peak period movements are likely to be up to 60 per hour during Stage 4 of construction, with 51 light and nine heavy vehicle movements at peak times. At this same stage of construction it is anticipated that there would be some 164 daily movements - 128 light and 36 heavy vehicle movements. However, the REF permits the contractor to increase movements to 26 heavy vehicle movements/hour during a “peak of peaks” period to reduce the number of days worked. This level of movement does not appear to be included in the proposal’s traffic modelling.

#### Response

The traffic assessment has included the traffic movements that are anticipated during the peak for light vehicles and the ‘peak of peak’ for heavy vehicles (refer to Table 5-2 in Appendix G of the REF).

These light and heavy vehicles have then been converted to Passenger Car Units (PCU) in Table 5-3 (Generated traffic as a percentage of existing traffic) and Table 5-4 (Mid-block performance) of Appendix G of the REF.
**Issue description – Gordon Street access**

The proposal to limit the Gordon Street access point to light vehicles is supported because of potential traffic impacts on residential premises to the north of the Site. Should heavy vehicles use that entry, heavy vehicle access from the City West Link means that the residential precinct to the north of the Site should be protected from impacts from heavy vehicles associated with the site management works.

Lilyfield Road is a strategic bike route carrying significant numbers of commuters during peak periods. It is anticipated that light vehicle traffic accessing the Site would increase conflict on this route during peak periods.

**Response**

Inner West Council’s support for not using the Gordon Street access for heavy vehicles is noted.

The use of Gordon Street for light vehicle access during the site management works would increase the number of light vehicles crossing the cycle path on Lilyfield Road at the Lilyfield Road/Gordon Street intersection. A maximum increase of 51 light vehicle movements in each of the AM and PM peak hours during the peak of construction is anticipated with limited vehicle movements likely during the rest of the day. Note that this is a conservative assessment of the light vehicle movements to be generated from the Site and is unlikely to occur during all stages of the site management works.

An on-road cycle route currently exists on Lilyfield Road in the vicinity of the Site. At the intersection of Lilyfield Road and Gordon Street (refer to Figure 2.2 below), the on-road cycle lane on the northern side of Lilyfield Road is marked with white line markings and solid green lane marking. On the southern side of Lilyfield Road, there is no white line marking or solid green cycle lane markings extending through the intersection. The presence of the on-road cycle lane is indicated by two on-road bicycle markings before and after Gordon Street. Sightlines are generally good in both directions, though kerbside vegetation on the southern side of Lilyfield Road to the east of the intersection does restrict sightlines for drivers and cyclists to some extent.

![Figure 2.2: The Gordon Street and Lilyfield Road intersection view from Gordon Street, looking north east across Lilyfield Road](image)

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Roads and Maritime crash data from 2011 to 2015 has been reviewed and there have been no recorded traffic incidents (inclusive of cyclists and pedestrians) at the Lilyfield Road/Gordon Street intersection in this time period.

The Traffic Management Plan (TMP) and Traffic Control Plan (TCP) would consider measures to minimise conflicts between light vehicles accessing the Site and cyclists. Potential measures could include providing warning signage, providing solid green marking of the cycle lane on the southern side of Lilyfield Road across the Gordon Street intersection and maintaining sight lines at the junction by trimming vegetation on the southern side of Lilyfield Road. Measures would be discussed and agreed with Inner West Council prior to being carried out.

In order to capture the discussion above the following additional management measure (TT8) would be implemented:

*Appropriate measures to improve and maintain sightlines and cyclist/pedestrian safety Lilyfield Road/Gordon Street intersection will be discussed and agreed with Inner West Council.*

It is understood that the Inner West Council is in the process of designing a separated cycleway along Lilyfield Road. Timelines for construction and completion of this cycleway project are currently uncertain and this project is currently in the ‘preparation of draft concept plans’ phase.²

If the cycleway project construction coincides with the site management works, a communication strategy would need to be in place to ensure coordination of traffic movements and works associated with both projects.

To address comments made by Inner West Council and the Port Authority (refer to section 2.8.2) about the potential cumulative effects of other projects, environmental safeguard CU1 has been amended as follows:

"Where relevant, consultation will would be carried out with proponents of other relevant existing and proposed developments, operations or activities (such as the proponent of the CSELR project, the M4 East project truck marshalling area and the Port Authority etc) to increase the overall awareness of project timeframes and impacts. Where necessary, the timing of certain proposal activities (such as heavy vehicle movements and high noise generating activities) will would be managed to avoid coinciding works that may result in adverse cumulative impacts on sensitive receivers, the Port Authority or existing Port Authority tenants. To guide the implementation of this management measure, the communications plan for the works will include:

1. A list of relevant existing operations/activities and cumulative projects
2. Contact details for the principal contractors or proponents or operators for each existing operations/activities or cumulative project
3. Key representative for each project/operation/activity will be contacted at least once a month to discuss their respective program of works. This will include at least monthly consultation with Port Authority, Transport for NSW and the proponent of the M4 East truck marshalling project
4. Details of when key cumulative activities (eg major traffic movements) at each site are planned to be completed
5. A register outlining how cumulative effects have been avoided."

**Issue description – City West Link access**

Concern is expressed that the weekday operating hours include morning and evening peak periods. Without deceleration/acceleration lanes, heavy vehicles are likely to impede flow on the City West Link during these times. Consequently, it is suggested that the hours of operation should be limited to between peak periods.

Without deceleration/acceleration lanes, entry and exit movements on City West Link may increase traffic conflict in the vicinity of The Crescent/Victoria Road and James Craig Road. However, Inner West Council’s Road Safety Officer has advised that if correctly managed, the additional truck traffic may help in reducing general traffic speeds in this area.

The proposal would require removal of trees to provide adequate sight lines for egress from western most access point on City West Link.

In considering the congestion implications on the City West Link it should be noted that while no bus routes exist between Catherine Street and The Crescent, back-up effects of increased congestion could affect routes further up-stream. Further, the City West Link is also used as a route for out-of-service buses returning to the Balmain Road depot.

**Response**

Acceleration and deceleration lanes are not proposed for City West Link given:

- The limited number of heavy vehicle movements proposed
- The limited duration of the site management works (12 months)
- The available sightlines along City West Link from the proposed exit point
- The existing speed environment along this section of City West Link (speed limit of 70 kilometres per hour).

Providing separate entry only and exit only access points for heavy vehicles, as proposed in the REF, would also help in minimising potential conflict with through traffic on City West Link.

At the City West Link (west) access, heavy vehicles exiting the Site could access the right-most lane if required, as there is adequate distance available before the City West Link/The Crescent intersection to allow for trucks to merge safely into the right hand lane. This reduces the risk associated with heavy vehicles merging with through traffic along this section of City West Link.

At the City West Link (east) access, the existing site access is 17 metres wide, which allows a truck and dog to turn into the Site from the kerbside lane. This would reduce the potential impacts for through traffic. A truck and dog is the largest heavy vehicle likely to be required for the proposal. As such, it is considered unlikely that heavy vehicle movements related to the site management works would result in conflicts with other traffic on City West Link. As part of the TMP, signage may be installed on City West Link advising motorists that heavy vehicles would be entering and exiting the Site.

As noted, buses do not operate on City West Link between Catherine Street and The Crescent, with one bus route (433) operating along The Crescent and Victoria Road and out-of-service buses travelling out of the CBD, along City West Link, to the Leichhardt Bus Depot.

As noted in the REF in Table 6-15, the generated peak hour volumes constitute less than two per cent of total existing peak hour traffic and would be expected to fall well within daily traffic variations for these roads. The impact of additional heavy vehicle traffic generated during the construction period on buses using these roads is therefore likely to be negligible.

**Issue description – James Craig Road**

Concern is expressed about the ability of the roundabout on James Craig Road to accommodate the swept path of trucks with dog trailers which are turning around. The ability of this roundabout to cope with such movements does not appear to have been demonstrated in the report.
Response
The roundabout at James Craig Road has been designed to allow heavy vehicles to mount it. Swept assessment (refer to Figure 2.3 below) shows that a 19 metre articulated vehicle, which is larger than a truck and dog vehicle, is able to turn around on James Craig Road by partially mounting the roundabout. No heavy vehicles larger than a truck and dog are expected to access the Site for the proposal.

Figure 2.3: Swept path assessment for the roundabout on James Craig Road

Issue description – parking
Containment of all proposal-related parking on-site is supported.

Response
The Inner West Council’s support of the proposal to provide parking on-site during construction is noted.

Issue description – cumulative effects
Heavy vehicle movements on James Craig Road may conflict with traffic associated with the Exhibition Centre, Silos and Super Yacht Marina during peak event times. It may also conflict with traffic during the decommissioning period for the Exhibition Centre.

The cumulative impacts of construction traffic should be considered, particularly for traffic that may use Parramatta Road and Wattle Street. Such traffic would conflict with construction traffic for the WestConnex M4 East portal. Additionally, modelling for WestConnex M4 East predicts high levels of congestion on Wattle Street during AM and PM peak periods. It is not evident whether WestConnex construction impacts have been included in the traffic modelling for the Rail Yards works, as the REF traffic analysis appears to refer only to existing traffic conditions as its baseline.
Response

A communication strategy with the proponents of other activities that could result in increased traffic on James Craig Road and Port Authority-controlled roads would be developed to manage potential traffic conflicts. These activities would include cruise terminal activities and other peak event activity requiring access via James Craig Road.

The temporary Sydney Exhibition Centre at Glebe Island is no longer hosting events, and it is likely that the works to decommission the centre would be complete by the time the site management works start. Nevertheless, the strategy would manage potential conflicts with other projects or events by ensuring that ‘peak of peak’ times for the works either do not coincide with vehicle movement peaks or peak event times, or that cumulative impacts from both activities would not create a significant traffic impact.

To address comments made by Inner West Council and the Port Authority (refer to section 2.8.2) about the potential cumulative effects of other projects, environmental safeguard CU1 has been amended as follows:

“Where relevant, consultation will be carried out with proponents of other relevant existing and proposed developments, operations or activities (such as the proponent of the CSELR project, the M4 East project truck marshalling area and the Port Authority etc) to increase the overall awareness of project timeframes and impacts. Where necessary, the timing of certain proposal activities (such as heavy vehicle movements and high noise generating activities) will be managed to avoid coinciding works that may result in adverse cumulative impacts on sensitive receivers, the Port Authority or existing Port Authority tenants. To guide the implementation of this management measure, the communications plan for the works will include:

1. A list of relevant existing operations/activities and cumulative projects
2. Contact details for the principal contractors or proponents or operators for each existing operations/activities or cumulative project
3. Key representative for each project/operation/activity will be contacted at least once a month to discuss their respective program of works. This will include at least monthly consultation with Port Authority, Transport for NSW and the proponent of the M4 East truck marshalling project
4. Details of when key cumulative activities (eg major traffic movements) at each site are planned to be completed
5. A register outlining how cumulative effects have been avoided.”

Any cumulative effects from WestConnex M4 East are unlikely to be felt in the vicinity of the Rozelle Rail Yards, as the construction vehicles from M4 East would mainly be heading west from Haberfield. Assuming a worst case scenario for the Parramatta Road/Wattle Street intersection, where all heavy vehicles travelled to and from the Site by passing through this intersection, there would be an increase of 26 vehicles per hour at the intersection which, assuming a signal cycle time of about 140 seconds, would be about equivalent to an additional one vehicle per signal cycle. At this low volume, there are not likely to be significant impacts on traffic operations at the Parramatta Road/Wattle Street intersection, at the other end of City West Link.

Issue description – Traffic Management Plan and Traffic Control Plan

As is usual, much emphasis is placed on the TMP and TCP providing more detailed information. However, Inner West Council’s experience has shown that once a development is approved, Inner West Council can face challenges in ensuring compliance with the TMP and TCP. Consequently, on-going monitoring and implementation of a mitigation response program is recommended to be included.

3 The Sydney Exhibition Centre at Glebe Island is currently being decommissioned and works are expected to continue through February and March 2017, as stated in the Property of NSW Tenant News, January/February 2017, available at http://www.darlingharbour.com/january-february-2017-news/
Preparation of the TMP and the TCP would be carried out in consultation with the Inner West Council where appropriate. The TMP and TCP are required to be submitted and approved, by the Transport Management Centre and by Roads and Maritime before work starts.

The TMP and TCP would include monitoring, review and amendment mechanisms as stated in management measure TT2. Any works resulting from the proposal and covered by the REF may be subject to environmental audit(s) and/or inspections(s) at any time during their duration.

Periodic quality, safety and environmental audits and/or inspections would be conducted depending on the work being carried out at the time by the contractor, SMC and/or Roads and Maritime as required.

Appropriate auditors/inspectors would be engaged depending on the type of audit and the work being audited from external or internal resources. Staff carrying out the audits or inspections would be independent of the work activity being observed.

**Issue description – southern approaches**

Inner West Council also notes that according to Figure 5.12 in Appendix G of the REF, no light vehicles would approach the Site from the south. It would be appreciated if this could be explained.

**Response**

Light vehicles have been distributed by considering the major arterial roads accessing the Site upon which the majority of traffic would be travelling, and the share of light traffic on each of these roads. For the Site, these major arterial roads are Victoria Road, City West Link and Anzac Bridge.

While not every approach route was considered, redistributing the traffic to include The Crescent would not materially impact the assessment. If light vehicle traffic was travelling to the south it would be a relatively small percentage and would likely be split between Balmain Road and The Crescent. Assuming 25 per cent of the light vehicles travelled to the south this would represent around an additional six to seven light vehicle movements per hour in the peak period on each of these roads. This level of additional traffic is insignificant and would have no impact on the performance of these routes.

**2.6.9 Acid sulfate soils and flooding**

**Issue description – acid sulfate soils, groundwater and surface water**

Inner West Council notes that clean-up activities would be confined to the surface so are not likely to disturb acid sulfate soils (ASS) or groundwater. Inner West Council has been pleased to learn from SMC staff that testing for ASS is underway and an initial assessment of groundwater has shown its condition to be fair overall. Council also notes that sediment would not leave the Site (would be trapped in basins) and flooding would not be exacerbated as ground levels would not be significantly altered.

**Response**

The Inner West Council’s submission about ASS, groundwater and surface water has been noted.

**2.6.10 WestConnex Community Liaison Forum (WCLF) comments**

**Issue description – WCLF comments**

The Inner West Council submission included the following extract from discussions on the Rozelle Rail Yards REF at the WCLF meeting held on 1 December 2016:

- The 21-day exhibition period for the Rozelle Rail Yards REF was not considered sufficient, and it was requested that Inner West Council ask for an extension of time
- In the REF for the Rozelle Rail Yards, there is a need to acknowledge Aboriginal heritage, the overall heritage importance of this site, native flora/fauna, asbestos and ASS
Questions were raised as to why the rail lines were being removed, the role of the NSW EPA in the clearing of the Rozelle Rail Yards site, and that SafeWork NSW is unable to be involved with these works.

Concerns were raised about the need for SMC to monitor asbestos, particularly airborne particles. The DP&E Compliance Officer informed the meeting that asbestos would be handled according to management plans.

A request was made to increase the compliance presence for the Rail Yards clean-up, as well as increased compliance for WestConnex Stages 2 [New M5] and Stage 3 [M4-M5 Link].

Subsequently it has been requested that SMC considers the retention/maintenance of existing rail infrastructure, an independent survey of Aboriginal artefacts and a study of native flora and fauna on the site.

Action item 18 from the WCLF meeting was for Council to consider investigating the legality of the removal of rail tracks from the Site.

**Response**

The majority of issues raised above have been addressed in the following sections:

- Public display period of the REF – refer to [section 2.6.1](#)
- Assessment of Aboriginal heritage – refer to [section 2.6.4](#)
- Assessment of biodiversity – refer to [section 2.6.5](#)
- Asbestos and monitoring of asbestos – refer to [section 2.6.6](#)
- Acid sulfate soils – refer to [section 2.6.9](#)
- Independent monitoring of activities – refer to [section 3.19.1](#).

The proposal involves the removal of rail and rail related infrastructure from the Site and the appropriate management of existing issues at the Site such as drainage, waste and noxious weeds. Retaining the rail tracks in situ would not allow the sleepers and ballast to be removed or for appropriate erosion and sediment control measures to be installed. It would also potentially constrain further contamination and service investigations associated with the site management works.

Transport for NSW and UrbanGrowth are considering a range of potential transport options to service future development in the Bays Precinct including metro rail, ferry services, bus services and possibly light rail. However, no preferred options or transport corridors have been identified at this stage. In addition, active transport (pedestrian and cycling) linkages are proposed to service the Bays Precinct. The nature of the site management works does not preclude future use of the Site for a possible light rail extension.

The NSW EPA was consulted with during the preparation of the REF and provided comments on the REF (refer to [section 2.3](#)). Roads and Maritime would continue to consult with the NSW EPA and SafeWork NSW during the site management works as required.

The rail tracks which would be removed as part of the site management works have been closed in line with the *Transport Administration Act 1998* (NSW) and approval to remove the tracks is being sought as part of the site management works.
2.7 Department of Primary Industries - Water

2.7.1 Groundwater

Issue description – information reading groundwater wells and management of potential groundwater impacts

The REF indicates groundwater monitoring wells have recently been constructed within the alluvium and underlying Hawkesbury Sandstone at the site (sections 6.1.1 and 6.1.2, pages 51 and 55). It notes the groundwater wells would be monitored before, during and after completion of the proposal to confirm that groundwater has not been impacted (section 6.1.3, page 68). The REF states the proposal is unlikely to result in a significant impact on groundwater provided appropriate measures are carried out (page 75). It indicates a SWMP would be prepared as a sub-plan of the EMP and it would outline management measures.

The DPI Water requests a copy of:

- The Geotechnical Report that has been prepared for the proposal, including bore logs, geological cross sections and any groundwater study data/investigation records
- The design of the groundwater monitoring program
- A copy of the SWMP and EMP to review.

Response

Geotechnical information in the REF was based on previous investigations conducted at the Site.

Four contamination reports were produced for the REF and include borehole logs for boreholes drilled on-site (Appendix C1, C2, C3 and C4 of the REF). The full versions of the contamination reports, including the borehole logs, are provided in the electronic version of the REF, available at http://sydneymotorway.com.au/review-environmental-factors-rozelle-rail-yards-site-management.

Groundwater monitoring is not proposed as part of the site management works. Some groundwater monitoring was carried out in 2016 and has been reported in the REF (section 6.1 and also in Appendix C1).

Ongoing geotechnical and contamination investigations are being carried out on-site. Once these investigations are complete and documented the relevant reports would be provided to DPI Water when available.

A copy of the SWMP and EMP for the proposal would be provided to DPI Water for its information. Management measure CSGW1 would be amended to include this commitment as follows:

“A SWMP will be prepared as a sub-plan of the EMP in accordance with the requirements of Section 2.1 of Roads and Maritime QA G38 Soil and Water Management. The SWMP will be prepared in consultation with soil conservation consultant and contamination expert and in general accordance with the following:

- The Roads and Maritime Code of Practice for Water Management (RTA, 1999)
- The Roads and Maritime Erosion and Sedimentation Procedure (RTA, 2008)
- Applicable WorkSafe NSW guidelines and NSW EPA requirements.

The SWMP and the EMP will be provided to the NSW Department of Primary Industries - Water for information.”
2.8 Port Authority of NSW

2.8.1 Landowner’s consent

Issue description – landowners consent

No work should be carried out in the area under Victoria Road and to the west of Victoria Road until after completion of the sale of the land between the Port Authority and Roads and Maritime.

For the land east of Victoria Bridge, similarly, Roads and Maritime would be required to have the contractual right to enter the land and carry out the works from the Port Authority before landowner’s consent being provided (a licence from the Port Authority is currently being considered).

Further to the above, it should be noted that there is a requirement for the Port Authority to consult with UrbanGrowth before granting landowner’s consent over the land subject to the proposal and located east of Victoria Road. When Roads and Maritime provides its confirmation, the Port Authority can start the process of consultation with UrbanGrowth on this matter.

It should also be noted that any rail infrastructure at the Site (including on Port Authority land) is not owned by the Port Authority. The rail infrastructure was reserved to rail interests under a contract for sale with the entity formerly known as State Rail Authority. This infrastructure would need to be acquired before its removal.

Response

The NSW Government is in the process of consolidating ownership of the Site under a single government agency - Roads and Maritime. Landowner requirements would change once ownership is consolidated.

Roads and Maritime is also in the process of agreeing a licence with the Port Authority. The licence would recognise a number of permitted uses within the licence area (ie within existing Port Authority land) including site establishment works, stabilisation works and vehicle access and egress over approved routes. It would also outline temporary haulage routes and access management principles. This licence will be finalised prior to the commencement of the site management works and, once agreed, Roads and Maritime would be required to meet the conditions of this licence. A number of the access management principles from the draft licence agreement have been included in the discussion in section 2.8.2 below.

Roads and Maritime is not proposing to remove rail infrastructure in the area under and to the east of Victoria Road bridge. Discussions with the asset owners (Sydney Trains) are ongoing and appropriate arrangements would be made to meet Sydney Trains’ requirements.

2.8.2 Traffic access

Issue description – consideration of cumulative traffic impacts and consultation with the Port Authority

The REF states: “Arrangements for traffic entering Port Authority controlled roads would need to be discussed and agreed with the Port Authority. Considerations would include access arrangements in the event of a special event at the temporary Sydney Exhibition Centre at Glebe Island, and any line-marking changes required near the access point into the Site.”

The temporary Sydney Exhibition Centre has ceased events at its current location on Glebe Island before relocating back to its permanent site. Access arrangements would need to consider cruise ship days and other existing “business as usual” port related traffic requirements given the potential for conflicts in access and egress arrangements on the internal port roads and James Craig Road.
As per the statement in the REF, traffic arrangements on Port Authority-controlled roads would need to be discussed and agreed with the Port Authority before the start of works (ie through the preparation and review of a Construction TMP).

Following completion of the REF and receipt of the original Port Authority submission, a separate project has been proposed on a hardstand area between the White Bay Power Station and Sommerville Road. This project involves the use of this hardstand area as a truck marshalling area for the M4 East project. This truck marshalling area and the site management works would share the same entrance onto Sommerville Road. The Port Authority has therefore requested that the cumulative effect of traffic movements from the proposed site management works and the M4 East truck marshalling area on the operation of the Port Authority roads (Sommerville Road and James Craig Road) is considered.

To ensure that truck movements from both sites do not adversely affect port operations, the Port Authority has suggested that traffic marshals are used to help control the movement of trucks from these two projects and minimise queueing at the James Craig Road / City West Link intersection.

In addition, the Port Authority has noted that Roads and Maritime may not access the Site or Port Authority controlled land via the entry off James Craig Road during the times of 7.00am to 10.00am on ‘Ship Days’ (ie days when a cruise ship is in port). A rolling forecast of Ship Days is publicly available, currently https://www.portauthoritynsw.com.au/cruise/cruise-schedule/

Response
A traffic and transport assessment of the site management works was provided in section 6.7 and Appendix G of the REF. The REF noted in section 3.2.7 that “Heavy vehicles would enter the Site from City West Link or via the Port Authority access point. For City West Link, heavy vehicles would enter the Site by turning left from City West Link into the City West Link (east) access. Heavy vehicles would exit the Site from the City West Link (west) access (either Option 1 or Option 2) and travel east on City West Link. The Port Authority access is at the eastern site boundary to the east of the Victoria Road bridge. It is accessed via James Craig Road, Sommerville Road, and the land controlled by the Port Authority.”

Section 5.3 in Appendix G of the REF, noted that the average truck movements for the busiest stage (Stage 4) of the site management works is 46 movements per day, equating to approximately nine truck movements per hour. In addition there may be up to 18 days when there are increased or ‘peak of peak’ truck movements which would require up 13 truck movements per hour.

As presented in section 6.7.3 of the REF worst case scenarios were assessed for the site management works assuming that all light vehicles used the Gordon Street access and that 100 per cent of the heavy vehicles used each of the City West Link accesses and the Port Authority access. The assessment compared the proposed temporary increase in traffic related to the site management works to existing traffic flows on the surrounding road network and concluded that the works would not change the Level of Service (LOS) on these roads (including James Craig Road).

Whilst a worst case assessment was adopted for the REF, it is unlikely that 100 per cent of the heavy vehicles would only use either the City West Link accesses or the Port Authority access. During the site management works it is more likely that the heavy vehicle movements would be shared between these access points, thus reducing the magnitude of any traffic impact.

Whilst no significant traffic impacts are expected, a number of management measures would be carried out to help manage the traffic from the site management works. Relevant measures include TT2 and TT3 which commit Roads and Maritime to producing a Traffic Management Plan (TMP) and Traffic Control Plan (TCP) for the works, and TT6, which outlines consultation requirements with the Port Authority.
In their submission the Port Authority has noted that there could still be traffic impacts when non-
typical or high traffic generating activities occur particularly those related to the operation of the
cruise terminal when a ship is in port (i.e. on ‘Ship Days’). As such management measure TT3 has
been modified to address this requirement. The modified measure is presented at the end of this
response.

Section 6.13 of the REF included a consideration of cumulative effects. A number of relevant
projects that could result in a cumulative traffic effect were identified and discussed. These
included proposed projects on James Craig Road (e.g. The Sydney Superyacht Marina
Redevelopment). Significant adverse cumulative traffic effects were not expected given the low
volume of additional traffic proposed on City West Link and James Craig Road.

Nevertheless, a communication plan (outlined in management measure CU1), requiring
consultation with the proponents of other activities that could result in increased traffic on James
Craig Road and Port Authority-controlled roads, would be developed to manage potential traffic
conflicts. These activities would include cruise ship terminal activities and other peak event
activities requiring access via James Craig Road. It is understood that the decommissioning of the
temporary Sydney Exhibition Centre at Glebe Island will be completed prior to commencement of
the site management works and therefore this activity would not create any cumulative effects.

The communication plan would manage potential conflicts by ensuring that ‘peak of peak’ times for
the site management works either do not coincide with peak event times or that cumulative impacts
from both activities would not create a significant traffic impact.

Since completion of the REF, the M4 East truck marshalling project has been proposed, but is not
yet approved. The details and the REF for this project are still being finalised and a decision to
proceed has not been made. This project is separate from the site management works and the two
proposals are not interrelated.

Nevertheless, the M4 East truck marshalling project and the site management works could share
the same entrance onto Sommerville Road. The details of the project are still being finalised,
however at this stage the M4 East truck marshalling project is estimated to generate approximately
90 truck movements per day and would operate Monday to Saturday. Up to 45 trucks would travel
to and park in the marshalling area between 4.30am and 6.30am and then these trucks would
progressively leave the marshalling area between 6.30am and 8.00am. The trucks would enter and
exit the marshalling area via James Craig Road and Sommerville Road.

Assuming that all heavy vehicle traffic from the site management works used the eastern access
through the Port Authority land (a conservative assumption), then the combined traffic to be
generated by the site management works and the M4 East truck marshalling project during the
‘peak of peak’ period would be equivalent to around 36 vehicles per hour during the AM peak
(13 movements from the site management works and 23 movements from the M4 East truck
marshalling area). This is because the proposed hours for the site management works and the
proposed hours for the M4 East truck marshalling project are only likely to overlap for a limited
period (between 7.00am and 8.30am). Therefore heavy vehicle movements from both projects
would only overlap on James Craig Road during this time. No cumulative traffic impacts due to
these two projects would be expected for the rest of the day.

Except during periods when the cruise ship terminal is generating significant volumes of traffic, this
level of additional traffic is considered to be within the capacity of the road network and is unlikely
to have a material impact on the performance of the intersection of James Craig Road and City
West Link. Traffic management measures are proposed to ensure that the traffic is managed
appropriately and these would be detailed in the TMP and TCP. This includes a commitment not to
use the eastern access through the Port Authority land during the period of 7am to 10am on cruise
ship days. There are other access points to City West Link which can be used by heavy vehicle
traffic associated with the site management works during these periods.
A separate REF is being completed for the M4 East truck marshalling project. This REF will provide an assessment of the traffic impacts that could arise from this project, including and assessment of cumulative traffic effects.

The Port Authority has suggested that to avoid potential adverse impacts on Port Authority tenants as a result of cumulative traffic using Sommerville Road and James Craig Road:

- Traffic control marshals are used on James Craig Road and Sommerville Road to manage truck movements
- Existing operations along James Craig Road, Sommerville Road and on the Port Authority land are including in the approach to manage cumulative effects outlined in management measure CU1.

To address these requests, management measures TT3 and CU1 have been updated. TT3 now states:

In addition to the above the TMP and TCP would also include:

- Hours of permitted vehicle activity and an out of hours work procedure if required
- A commitment that Roads and Maritime will not access the Site via the entry at James Craig Road during the times of 7.00 am to 10.00 am on ‘Ship Days’ (ie days when a cruise ship is in port)
- Designated staff and contractor parking locations
- Duration of work
- Permitted vehicle types
- Designated areas within the Site for truck turning movements, parking, loading and unloading to allow heavy vehicles to enter and leave the Site in a forward direction
- Sequence for implementing traffic management measures
- Procedures and/or principles for vehicle speed limits and the safe operation of vehicles within the Site
- Potential for a dedicated person to help with exiting trucks at the City West Link (west) access
- A requirement that traffic marshals are used to control the movement of trucks from Roads and Maritime and/or SMC projects and to minimise queueing at the James Craig Road / City West Link intersection.

CU1 has been modified to address comments from Inner West Council (refer to section 2.6.8) and Port Authority about the potential cumulative effects of other projects. CU1 now states:

“Where relevant, consultation will be carried out with proponents of other relevant existing and proposed developments, operations or activities (such as the proponent of the CSELR project, the M4 East project truck marshalling area and the Port Authority etc) to increase the overall awareness of project timeframes and impacts. Where necessary, the timing of certain proposal activities (such as heavy vehicle movements and high noise generating activities) will be managed to avoid coinciding works that may result in adverse cumulative impacts on sensitive receivers, the Port Authority or existing Port Authority tenants. To guide the implementation of this management measure, the communications plan for the works will include:

1. A list of relevant existing operations/activities and cumulative projects
2. Contact details for the principal contractors or proponents or operators for each existing operations/activities or cumulative project
3. Key representative for each project/operation/activity will be contacted at least once a month to discuss their respective program of works. This will include at least monthly consultation with Port Authority, Transport for NSW and the proponent of the M4 East truck marshalling project
4. Details of when key cumulative activities (eg major traffic movements) at each site are planned to be completed
5. A register outlining how cumulative effects have been avoided.”
3 Response to community submissions

3.1 Overview of community submissions

Roads and Maritime received 51 submissions on the REF from the community. Appendix C lists each respondent’s allocated submission number and indicates where the issues from each submission have been addressed in this chapter below. No form letters were received as submissions.

Each submission has been examined individually to understand the issues being raised and categorised according to key issues (eg traffic and transport) and sub-issues (eg traffic safety). A response to each sub-issue has been provided.

Where similar issues have been raised in different submissions, only one response has been provided. This means that while the exact wording of a particular submission may not be presented in the issue summary, the intent of each individual issue raised has been captured. Corresponding responses to the issues have been provided.

Of the 51 community submissions received, 22 objected to particular aspects of the proposal or requested changes to the proposal and 29 raised objections relating to the M4-M5 Link project and the wider WestConnex project.

The main issues raised in the community submissions were associated with:

- Retaining rail infrastructure or the rail corridor for passenger rail
- Issues associated with M4-M5 Link project and not the site management works
- Undertaking the site management works before the M4-M5 Link project is approved
- The use of Gordon Street by light vehicles entering the Site and potential traffic safety concerns
- Potential noise impacts from vehicles and equipment, in particular to residents on Lilyfield Road
- Potential impacts on Aboriginal heritage, non-Aboriginal heritage, flora and fauna.

Various issues associated with biodiversity, heritage and traffic were also raised in a number of the community submissions. Responses to the issues raised by the community are discussed below.

3.2 Need and options considered (strategic justification)

3.2.1 Proposal objectives

Submission numbers

Four submitters raised issues about the proposal objectives, being submission numbers 4, 23, 28 and 43.

Issue description – confirmation of project objectives

Submitters queried the objectives of the proposal, in particular the objective to make the Site available for further investigations and prepare the Site for future use, as the Site does not have a confirmed future use.

Submitters were in favour of deferring the proposal until a future use of the Site is known. Submitters were also concerned that the proposal would impact on future uses for the Site, if carried out before the future use is known. In addition, submitters also noted that waiting to develop a plan that includes the known future use of the Site may possibly minimise or alter the environmental impact of the future works, including impacts on the local community.
Response
The Rozelle Rail Yards site has remained largely disused for a number of years. The Site contains redundant rail infrastructure, waste and contamination. Various fast growing and noxious weeds have grown over a large part of the Site. This presents ongoing environmental management, maintenance and safety issues, and constraints at the Site.

The objectives of the proposal are described in section 2.2 of the REF and state that Roads and Maritime aims to:
- “Remove a number of legacy issues from the Site, including existing stockpiles, wastes, redundant rail infrastructure and noxious weeds
- Confirm the presence, location and status of subsurface utilities
- Limit ground disturbance generally to a depth of 500 millimetres, except where drainage channels and sediment basins are required
- Install erosion, sediment and drainage controls on-site
- Achieve minimal change to the topography of the Site at the conclusion of the works
- Leave the Site in a state that reduces the potential impacts associated with the existing conditions and allows it to be effectively managed until it is developed in the future.”

The proposal is needed to manage the existing environmental and safety issues at the Site and would facilitate the use and/or development of the Site in the future by removing the waste and redundant infrastructure and improving access to surface conditions across the Site. This would allow for further investigation into the location of utilities and the presence of contamination and waste.

The options considered for the proposal are discussed in section 2.3 of the REF. The following were considered:
- Option 1: do nothing
- Option 2: defer the works and incorporate them into a future project
- Option 3: complete the works now (the proposal).

The preferred option of completing the works now has been selected as it would best meet the proposal objectives and allows Roads and Maritime to manage the existing environmental and safety issues on-site. Not undertaking or deferring the works would not allow this objective to be met. Completing the works now would also benefit future development of the Site (including construction of the M4-M5 Link project if it is approved) because the works would remove material and redundant facilities associated with rail and rail related infrastructure from the Site and its constraints and opportunities would be better understood.

It is highly likely that a future project at the Site would need to complete many (if not all) of the works that are proposed and as a result, the environmental impacts for a future project completing the works are likely to be similar. The site management works would not preclude other future land uses and developments at the Site.

3.2.2 Relationship with the M4-M5 Link project

Submission numbers
Thirteen submitters raised issues about the relationship of the proposal with the M4-M5 Link project, being submission numbers 1, 3, 4, 7, 26, 28, 29, 30, 31, 32, 37, 39 and 40.

Issue description – relationship with the M4-M5 Link project
Submitters suggested that the proposal and the M4-M5 Link project were related and raised concern over the proposal going ahead before the M4-M5 Link project has been planned, received planning approval and secured adequate funding.
Submitters were concerned that conducting the works before approval of the M4-M5 Link project may lead to the proposed activities being duplicated, not required or would need amending once the future use of the Site has been determined (whether that be for the M4-M5 Link project or another use). Submitters suggested that the proposed activities (eg removal of rail tracks) only support the use of the Site for M4-M5 Link project and would hinder any other future use.

In addition, submitters objected to the Site being used for WestConnex.

**Response**

The objections to the Site being used for the M4-M5 Link project and WestConnex are noted.

The site management works are needed to manage the existing environmental and safety issues at the Site and would also improve access across the Site which would allow for further investigations into the location of utilities and the presence of contamination and waste. The proposal would benefit future land uses (including both investigations for and construction of the M4-M5 Link project if it is approved and other potential land uses) because the works would remove material and redundant facilities associated with rail and rail related infrastructure from the Site.

The site management works proposal does not form part of the M4-M5 Link project. The site management works would start before the determination of the M4-M5 Link project and would be undertaken irrespective of whether or not the M4-M5 Link project is approved and proceeds.

Roads and Maritime proposes to use parts of the Site for an interchange for the M4-M5 Link project if that project is approved by the NSW Minister for Planning. The M4-M5 Link project is subject to separate assessment and determination under Part 5.1 of the EP&A Act. A State significant infrastructure application report has been submitted to DP&E and the Secretary has issued environmental assessment requirements for preparation of an EIS for the M4-M5 Link project. An EIS is being prepared to assess the environmental impacts associated with the M4-M5 Link project.

The proposal involves the removal of rail and rail related infrastructure from the Site and the appropriate management of existing issues at the Site such as drainage, waste and noxious weeds. Retaining the rail tracks in situ would not allow the sleepers and ballast to be removed or for appropriate erosion and sediment control measures to be installed. It would also potentially constrain further contamination and service investigations associated with the site management works.

Transport for NSW and UrbanGrowth are considering a range of potential transport options to service future development in the Bays Precinct including metro rail, ferry services, bus services and possibly light rail. However, no preferred options or transport corridors have been identified at this stage. In addition, active transport (pedestrian and cycling) linkages are proposed to service the Bays Precinct.

Nevertheless, the nature of the site management works does not preclude future use of the Site for a possible light rail extension.

**Issue description – undertaking the proposal before the M4-M5 Link project has been approved**

Submitters suggested that by conducting the works before the approval of M4-M5 Link project, it allows work to start on M4-M5 Link before approval of that project. Submitters suggested that the proposal should not go ahead until the M4-M5 Link project is approved.
Response

The site management works are proposed to be undertaken irrespective of whether or not the M4-M5 Link project is approved. The site management works are needed to manage the existing environmental and safety issues at the Site and would also improve access across the Site which would allow for further investigations into the location of utilities and the presence of contamination and waste. The proposal would benefit future land uses (including both investigations for and construction of the M4-M5 Link project if it is approved and other potential land uses) because the works would remove material and redundant facilities associated with rail and rail related infrastructure from the Site.

The M4-M5 Link project is subject to separate assessment and determination under Part 5.1 of the EP&A Act. An EIS is being prepared to assess the environmental impacts associated with the M4-M5 Link project.

Completing the site management works now is the preferred option, as it would allow Roads and Maritime to manage existing environmental and safety issues at the Site. The proposal would benefit various future developments at the Site (including the M4-M5 Link project if it is approved and other potential land uses) by removing redundant infrastructure associated with rail and rail related uses from the Site and by improving access to surface conditions across the Site, which would allow for further investigation into the location of utilities and the presence of contamination and waste.

This information would help to inform the design, construction method and assessment of environmental impacts of a future development at the Site.

Issue description – funding should be from WestConnex budget

A submitter suggested that the budget for the proposal should come from the budget for WestConnex as the projects are related.

Response

The site management works are funded by Roads and Maritime.

3.3 Description of the proposal

3.3.1 Work methodology

Submission numbers

Three submitters raised issues about the work methodology, being submission numbers 15, 36 and 49.

Issue description – stabilisation methods

One submitter suggested that local provenance native grasses should be used for reseeding the site surface after the clearing works have been carried out.

Response

As described in sections 3.2.1 and 6.1.3 of the REF, the Site would be stabilised progressively after the staged removal of structures (excluding hardstand area and building slabs) vegetation, waste, infrastructure and ballast.

The precise method of stabilising the residual soils/fill beneath the ballast for each part of the Site would be confirmed after completion of a number of additional investigations and in accordance with the advice of a soil conservation consultant and contamination expert (refer to management measures CSGW6 and CSGW18 in Table 4.1 below).
In general and depending on the ground conditions in each location, ground stabilisation during and after the works may involve one or a combination of the following:

- Hydromulch
- Matting
- Geotextile (geofabric)
- Geobinders
- Applying a layer of top-soil or VENM/ENM (usually up to 100 millimetres).

There may be other stabilisation options that could be used during the works to achieve the same environmental outcomes. As such management measure CSGW6 is not specific regarding the stabilisation methods that could be used, but instead commits the contractor to engage a soil conservation consultant and contamination expert to advise on the preferred method of stabilisation.

Once a substrate is applied, the new surface would be seeded where necessary (following discussions with the soil conservation consultant and contamination expert). Commercially-available grass mix available at the time of the works would be use to reseed the site surface.

Refer to section 3.2.1 of the REF for further discussion on the work methodology including site stabilisation.

**Issue description – construction hours**

Submitters suggested that there is no reason for any out of hours work to occur and that running behind schedule should not result in out of hours work. Submitters were in support of working within standard construction hours to minimise impacts to residents.

**Response**

As stated in section 3.2.5 of the REF, standard construction hours would apply to the duration of the works, in accordance with the ICNG (NSW Department of Environment Climate Change (DECC), 2009). General working hours are:

- 7.00am to 6.00pm Monday to Friday
- 8.00am to 1.00pm on Saturdays
- No work on Sundays or public holidays.

The estimated proposal program of 12 months has been based on these standard hours. Conducting works outside of standard construction hours is not anticipated for this proposal however the REF notes that some out of hours works may be needed and would be considered where the works may reduce impacts on the public and local community (eg minimising utility service disruptions or for traffic and safety reasons). These activities may include truck movements to and from the Site in order to reduce pressure on the local road network during peak periods.

In the event that work is required outside standard construction hours, it would be carried out in accordance with the ICNG (DECC, 2009) and the Roads and Maritime CNVG (2016a). Except where it is required in an emergency and/or to prevent environmental harm, the local community would be notified at least five days in advance of any work planned to be carried out outside of standard hours if it is required.

To address community and NSW EPA feedback about out of hours work (refer to section 2.3.4), management measure NV1 has been amended as follows:

“A Noise and Vibration Management Plan (NVMP) will be prepared and implemented as part of the EMP. The NVMP will generally follow the approach in the Interim Construction Noise Guideline (ICNG) (DECC, 2009) and will identify:

- All potential noise and vibration generating activities
- Possible and reasonable mitigation measures to be implemented, taking into account Beyond the Pavement: urban design policy, process and principles (Roads and Maritime, 2014)
- A monitoring program to assess performance against relevant noise and vibration criteria
• Arrangements for consultation with affected neighbours and sensitive receivers, including notification and complaint handling procedures
• Contingency measures in the event of non-compliance with noise and vibration criteria
• A section that outlines procedures for ‘out of hours’ work. If work is required outside standard construction hours, it will be carried out in accordance with the ICNG (DECC, 2009) and the Roads and Maritime Construction Noise and Vibration Guideline (2016). The NVMP would be regularly updated to account for any changes in noise and vibration management strategies.”

The REF also includes management measure (TT7) which states that:

“In the unlikely event that work needs to be conducted outside standard construction hours, the traffic management plan (TMP) will outline an out of hours works procedure, which will include communication and notification to local residents, businesses and sensitive receivers of the out of hours works and a complaints line.”

Refer to section 3.2.5 of the REF for further information on the construction hours and duration.

3.3.2 Additional information

Submission number
One submitter requested additional information about the proposal, being submission number 6.

Issue description – further information about staging
A submitter requested further information about the staging of the works including:
• An indication as to staging time periods and any extended forecasts past the proposed 12 months, to help residents appreciate the nature and extent of the works for construction
• Information on when the most disturbing, noisy and dusty stages of the works would be carried out so that residents may have longer-term awareness of the timing of the stages.

Response
Section 3.1.1 of the REF indicates that it is anticipated that the activities forming the proposal are likely to be carried out in several stages however there may be some overlap as works progress across the Site. Section 3.2.2 of the REF notes that the works are expected to begin in 2017 and also provides an indicative staging plan and staging program for the proposal.

The indicative stages have been designed to provide continuity and an effective use of workforce, plant and equipment. Implementing the site investigation, clearance and management activities in stages across the Site would help minimise potential environmental impacts such as those associated with erosion and sediment, air quality, noise, contamination, biodiversity and traffic. The works would be undertaken progressively across the Site to minimise the area of disturbance at any one time. During the works, disturbed areas would be progressively stabilised to minimise potential erosion and sediment, contamination and air quality impacts.

Under this indicative program of work, the work activities would be completed during stages, over a period of up to 12 months. It is noted that the staging program provided in the REF is indicative only and may be changed by the contractor before works start provided that the environmental outcomes outlined in the REF can be achieved to minimise potential impacts to the environment. The contractor would determine the timing and spatial distribution of the stages.

The community would be notified about the staging and duration of the proposal in line with the requirements of the Communication Plan (CP) as detailed in management measure O11. The CP would be prepared and implemented as part of the EMP to help provide timely and accurate information to the community during the proposal.
The CP would include (as a minimum):
- Mechanisms to provide details and timing of proposed activities to affected residents
- Contact name and number for complaints.

The CP would be prepared in accordance with the Community Involvement and Communications Resource Manual (RTA, 2008).

The CP would include blanket (periodical) updates with separate notifications for particularly noisy work or night works (if required). Noise generating activities are outlined in section 6.8.3 of the REF (Table 6-25) and the duration of activities are detailed in Appendix H of the REF.

### 3.4 Statutory and planning framework

#### 3.4.1 Adequacy of the REF

**Submission numbers**

Seven submitters raised issues about the adequacy of the REF, being submission numbers 14, 26, 31, 32, 40, 43 and 47.

**Issue description – adequacy of the planning pathway followed**

Submitters raised concerns that the environmental impact of the works requires preparation of an EIS rather than an REF. Submitters raised concern that the findings of the REF are unable to be substantiated and are cause for concern. Submitters called for an EIS to be prepared for the proposal by an independent body, which would include consultation with the community.

**Response**

While development consent is not required (refer to section 4.1 of the REF), section 111 of the EP&A Act requires that Roads and Maritime, as a determining authority, take into account to the fullest extent possible, all matters affecting or likely to affect the environment. Section 112 of the EP&A Act requires that an EIS be obtained for an activity that is likely to significantly affect the environment (including critical habitat) or threatened species, populations or ecological communities or their habitats.

To establish whether an EIS is required and to assist in meeting Roads and Maritime’s obligations under section 111 of the EP&A Act, the REF documented a comprehensive assessment of potential environmental impacts of the site management works and included assessment by technical specialists for contamination, surface water, biodiversity, non-Aboriginal and Aboriginal heritage, noise and vibration and air quality.

The REF was also placed on public display and submissions were accepted from the community and stakeholders. The description of the proposal and assessment of the associated environmental impacts was carried out in the context of:
- The factors in Is an EIS Required? Best Practice Guidelines for Part 5 of the Environmental Planning and Assessment Act 1979 (Is an EIS required? guidelines) (Department of Planning, 1995)
- Clause 228 of the Environmental Planning and Assessment Regulation 2000 (NSW) (refer to Appendix A of the REF for the completed Clause 228(2) checklist for the proposal)
- The TSC Act
- The FM Act
- The EPBC Act.

The environmental assessment presented within the REF, the public display of the REF, consideration of submissions and preparation of this submissions report assists Roads and Maritime to meet the requirements of Section 111 of the EP&A Act to examine and take into account to the fullest extent possible, all matters affecting or likely to affect the environment by reason of the activity.
The assessment found that potential impacts from the proposal, including the ‘finished site’, would not be considered significant. Based on this, it is not considered necessary for an EIS to be prepared or approval to be sought for the proposal from the NSW Minister for Planning under Part 5.1 of the EP&A Act.

The REF included a robust assessment of the potential environmental impacts of the proposal including field surveys, modelling and the preparation of a number of supporting technical studies (contamination, traffic, air quality, noise and vibration, biodiversity and heritage). These technical studies are included in Appendix C to I of the REF.

**Issue description – transparency of the approval process**

Submitters raised concerns about the transparency of the approval process for the REF and the transfer of the land to Roads and Maritime, as Roads and Maritime is the proponent. Submitters were concerned that the approval process may be biased as Roads and Maritime is associated with WestConnex, has an interest in building roads and commissioned the REF. Submitters suggested that the proposal be assessed by an independent organisation, which would consider other potential uses of the Site, including public transport.

Similarly, submitters requested that the determination of the REF take into consideration the submissions received and be carried out by an agency independent of Roads and Maritime, Sydney Motorway Corporation, Transurban, CIMIC and WestConnex.

Submitters were also concerned about Roads and Maritime owning the Site, for the above reasons and requested that if land parcels are to be consolidated, that jurisdiction pass to a body where the members are independent of transport infrastructure.

**Response**

The REF was prepared on behalf of Roads and Maritime in accordance with the requirements of Part 5 of the EP&A Act. Various government agencies, stakeholders and the community have been consulted about the proposal. These stakeholders and details of the consultation activities carried out are summarised in Chapter 5 of the REF. In addition, the REF was placed on public display and submissions from the community and stakeholders have been considered and responded to in this Submissions Report and will be considered when determining the REF.

The REF outlines the details of the site management works, including activities, indicative stages and potential impacts. The proposal is being assessed and determined in line with the requirements of the EP&A Act and in general accordance with Roads and Maritime’s own REF guidance (Environmental assessment procedure for project review of environmental factors - roads (2014)).

The land has historically been owned by various government agencies and is currently owned by four NSW government authorities, namely Rail Corporation NSW, Port Authority of NSW, Roads and Maritime and Property NSW. To help manage some of the legacy issues at the Site and to prepare for a future use, the NSW Government is in the process of consolidating ownership of the Site under a single government agency - Roads and Maritime. This would enable the Site to be managed, and developed in the future, in a coordinated manner.

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4 This document is also available on the Roads and Maritime website [http://rms.nsw.gov.au/](http://rms.nsw.gov.au/)
As Roads and Maritime is taking ownership of the Site, it has a responsibility to manage this land. The REF also notes that Roads and Maritime proposes to use the Site in the future for the separate M4-M5 Link project if that project is approved by the NSW Minister for Planning. The M4-M5 Link project is subject to separate assessment and determination under Part 5.1 of the EP&A Act. An EIS is being prepared to assess the environmental impacts associated with the M4-M5 Link project.

Should the M4-M5 Link project be approved, the Site is proposed to be developed into a road interchange, which would mainly be underground. The NSW Government has also committed to the delivery of open space and improved active transport linkages as part of the M4-M5 Link project. Further details on the proposed design of the interchange will be included in the EIS for the M4-M5 Link project.

**Issue description – suitability/independence of consultant**

Submitters raised concern about the suitability of the REF consultant.

**Response**

The REF has been prepared by a team of qualified professionals, experienced in preparing environmental assessments for similar type and scale of projects in NSW. It presents a balanced, merit-based environmental impact assessment in accordance with the EP&A Act.

The preparation of the REF also involved a range of consultants including:

- EcoLogical Australia Pty Ltd (biodiversity assessment, Appendix F of the REF)
- GML Heritage Pty Ltd (non-aboriginal heritage assessment, Appendix D of the REF)
- Pacific Environment Limited (air quality assessment, Appendix I of the REF)
- SLR Consulting Australia Pty Ltd (noise and vibration assessment, Appendix H of the REF).

**Issue description – assessment of future operation**

A submitter questioned how the operational impacts of traffic and noise etc were assessed and estimated for the Site if the future operation of the Site is unknown.

**Response**

The REF assessed the site management works and the period after these works are complete (the ‘finished site’). The REF focuses mainly on ‘construction’ related impacts arising during the site management works. Once these works are completed the ‘finished site’ would be managed and maintained. The activities and potential impacts associated with the ‘finished site’ phase are minimal by comparison to the potential impacts identified for the site management works.

Any future use and associated construction work on the Site would be subject to a separate environmental assessment and approval process.

### 3.5 Consultation

#### 3.5.1 Level and quality of consultation

**Submission numbers**

Eight submitters raised issues about the level and quality of consultation, being submission numbers 3, 6, 7, 22, 26, 31, 32 and 40.

**Issue description – level and quality of community consultation**

Submitters were concerned that the public had not been adequately consulted with and were not informed of the proposal before surveys and tests were conducted. The submitters were also concerned that the public were not made aware of the potential impacts of the proposal and the proposed removal of the rail lines from the majority of the Site.
Response

A number of community consultation activities have been carried out for the proposal as follows:

- A factsheet for the proposal was prepared and made available at the community sessions held for the M4-M5 Link project in August 2016.
- A letterbox drop to 3,200 residents around the Rozelle and Lilyfield area on 7 November 2016 advising of the upcoming release of the REF.
- A letterbox drop to 3,200 residents around the Rozelle and Lilyfield area on 22 November 2016 advising of the release of the REF.
- An email to more than 3,900 people registered on the WestConnex email list on 23 November 2016 advising of the release of the REF.
- A dedicated webpage was available during the public display of the REF.

Although not a requirement under the EP&A Act, the REF was placed on public display for a period of 21 days and stakeholder and community members were invited to make submissions. The level of community consultation is considered appropriate given the nature, scale and duration of the site management works.

In regards to the geotechnical investigations notifications were issued to the community about these investigations on 25 May and 7 December 2016.

Issue description – consultation with stakeholders

Submitters raised concerns that various stakeholders were not adequately consulted, including:

- The Office of Environmental Protection and the Metropolitan Local Aboriginal Land Council were unaware of the proposal.
- Sydney Transport did not provide an assessment on using the Site for public transport.

In addition, submitters raised that all stakeholders including the community, should be consulted with before removing the rail infrastructure.

Response

Consultation was carried out with a range of stakeholders during the preparation and public display of the REF as well as the preparation of the Submissions Report. The stakeholders that were consulted with included Inner West Council, City of City Council, DP&E, UrbanGrowth, OEH, NSW EPA, DPI Water, Property NSW, Port Authority, Sydney Water, Sydney Trains and the Metropolitan Local Aboriginal Land Council (MLALC). A summary of the stakeholder consultation that has occurred is outlined below.

Stakeholder consultation that occurred during the preparation of the REF is discussed in Chapter 5 of the REF and included:

- Two meetings with Inner West Council held on 13 September 2016 and 14 November 2016 to introduce and discuss the proposal.
- A meeting with the NSW EPA on 17 October 2016 to provide an overview of the proposal.
- A meeting with the Port Authority on 11 October 2016 to discuss the proposal.
- A meeting with Property NSW on 11 October 2016 to discuss the proposal.
- A meeting with Sydney Trains on 5 October 2016 to discuss the proposal.
- A meeting with UrbanGrowth on 10 November 2016 to discuss the proposal.
- A meeting with DPI Water on 22 November 2016 to discuss the proposal.

Stakeholder consultation that has occurred since public display of the REF includes:

- A copy of the REF being provided to the stakeholders listed above as well as to Sydney Water, City of Sydney Council and DP&E.
- A meeting with Sydney Water on 2 December 2016 to discuss the proposal.
- Further briefings on the proposal to Inner West Council on 12 December 2016 and UrbanGrowth on 8 December 2016.
- A teleconference with the Port Authority on 20 December 2016.

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Since the public display of the REF, submissions were received from City of Sydney Council, DPI Water, Inner West Council, NSW EPA, OEH, Port Authority and UrbanGrowth. Responses to these submissions are provided in Chapter 2 (Response to key stakeholder submissions).

A discussion on the future consultation to occur for the proposal is provided in section 3.5.3.

Consultation with the Aboriginal community was carried out during the preparation of the REF as part of the Aboriginal due diligence assessment, conducted in accordance with Stage 2 of the Procedure for Aboriginal Cultural Heritage Consultation and Investigation (PACHCI) (Roads and Maritime, 2011b). The MLALC was identified as the relevant Local Aboriginal Land Council for this assessment and a representative from MLALC participated in the archaeological survey and provided feedback via email. The detail of this consultation is provided in section 6.5 and Appendix E of the REF.

A discussion about the future use of the Site for public transport is discussed in section 3.18.1.

In addition, the community was consulted regarding the removal of the rail infrastructure during the public display of the REF for the site management works. Comments from the community have been considered by Roads and Maritime and responded to in this document.

The stakeholders and the community will be informed when the REF is determined. This report will be made publicly available to surrounding residents and businesses.

Residents would be notified of the start of works at least five days before works start. Refer to section 3.5.2 for further details on the consultation to be carried out before the start and during the site management works.

Issue description – REF display period, timing and duration
Submitters raised concern that the display material was lengthy and the time to make a submission was too short to allow meaningful debate within the community and for the subsequent preparation of a comprehensive submission.

Submitters requested an extension of the display period in 2017, for at least a month.

Response
Although not a requirement under the EP&A Act, the REF was placed on public display for a period of 21 calendar days. The REF display period concluded on 13 December 2016, before the Christmas and New Year period. This decision was made in response to previous requests from the community to avoid consultation over the Christmas and New Year period.

The community was notified of the REF display period in a letterbox drop in November 2016. Submissions from stakeholders and the community were invited and would be considered before Roads and Maritime determines whether or not to proceed with the proposal.

3.5.2 Future consultation

Submission numbers
Four submitters raised issues about future consultation for the works, being submission numbers 6, 15, 19 and 34.

Issue description – future community consultation
Submitters queried the level of community consultation that is planned during the site management works. Submitters called for genuine, accurate, open and transparent consultation about timing of works and potential impacts for example noise, vibration and surface water impacts.
Submitters requested the opportunity to consult with Roads and Maritime in particular in relation to out of hours work. Submitters also request information about how Roads and Maritime would be consulting with stakeholders and the complaints process.

Response

As outlined in section 5.1 of the REF, the objectives of the community and stakeholder consultation for the proposal are to:

- Ensure an open, accountable and transparent community involvement process
- Increase community and stakeholder awareness of the need and development of the proposal, the environmental assessment process and opportunities for participation
- Ensure community and stakeholder concerns regarding environmental and community impacts are considered and addressed where possible and in a timely manner.

To meet these objectives should the proposal be approved, all community and stakeholder consultation would be guided by the following key engagement principles:

- Make the most of all opportunities to involve stakeholders and the community in the proposal
- Arrange engagement activities at times and places that are convenient for stakeholders and provide online options
- Respond to reasonable requests from the community and stakeholders for additional engagement activities and information
- Acknowledge and understand diverse views on proposals
- Use feedback to positively influence project outcomes.

The CP for the site management works would be prepared in accordance with the appropriate Roads and Maritime guidelines and would provide further detail around the objectives of the community and stakeholder consultation for the site management works (refer to management measure OI1). The CP would detail the communication tools and activities for the works. For clarity, the key tools and activities that would be used have been added to management measure OI1. The revised management measure OI1 now states:

“A Communication Plan (CP) will be prepared and implemented as part of the EMP to help provide timely and accurate information to the community during the proposal. The CP will include (as a minimum):

- Mechanisms to provide details and timing of proposed activities to affected residents, including notifications to residents to advise of the start of works (at least five days before start of the activity), duration of activities, any changes to traffic arrangements, any out of hours works (if carried out)
- Regular community updates on the progress of the works and consultation with stakeholders and the community
- Signage around the Site to provide contact information
- A 24-hour project information and complaints management line, web page, contact name, postal address and email address, available throughout the works.

Contact name and number for complaints.

The CP will be prepared in accordance with the Community Involvement and Communications Resource Manual (RTA, 2008).”

All complaints received during the site management works would be acknowledged within eight working hours. When a complaint or enquiry cannot be responded to immediately, a follow-up verbal response on what action is proposed would be provided to the complainant/enquirer within 24 hours of a complaint or enquiry being received. If required, a meeting may be arranged with on-site personnel to help in resolving a complaint.
While not anticipated (refer to section 2.3.4 and section 3.3.1 above), some out of hours work may be needed and would be considered where the works may reduce impacts on the public and local community (e.g. minimising utility service disruptions or for traffic and safety reasons). These activities may include truck movements to and from the Site in order to reduce pressure on the local road network during peak periods.

If work is required outside of standard construction hours, it would be carried out in accordance with the ICNG (DECC, 2009) and the Roads and Maritime CNVG (2016a). Except where it is required in an emergency and/or to prevent environmental harm, the local community would be notified at least five days in advance of any work planned to be carried out outside of standard hours if it is required.

Flooding is discussed in section 3.7.2 of this report and section 6.2 of the REF. In the event that a pollution event occurs, notifications would be issued to the relevant statutory agencies (e.g. NSW EPA) as required by applicable legislation, such as the POEO Act.

**Issue description – UrbanGrowth consultation**

A submitter indicated that Roads and Maritime should communicate and work with UrbanGrowth on the proposed works.

**Response**

UrbanGrowth and Roads and Maritime work together on a range of matters relating to development across Sydney. UrbanGrowth was consulted during the preparation of the REF and provided a submission, which is discussed in Chapter 2 (Response to key stakeholder submissions). A meeting specifically relating to the proposal was held with UrbanGrowth in November 2016 and included a discussion on heritage items located on-site and the timing of the works. Roads and Maritime will continue to consult stakeholders such as UrbanGrowth during the works.

### 3.6 Contamination, soil, fill and groundwater

#### 3.6.1 Contamination

**Submission number**

One submitter raised an issue about soil contamination at the Site, being submission number 17.

**Issue description – exposure of contaminated soils**

The submitter raised concerns about contaminated soil containing arsenic, cadmium and asbestos becoming exposed during the proposed work at the Rozelle Rail Yards.

**Response**

In preparing the REF, contamination investigations and waste classification activities were carried out for various aspects of the Site including in situ soil and fill material, railway ballast, drums of soil and existing stockpiles. Soil, fill, existing stockpiles and ballast have been identified as containing contaminants of potential concern including heavy metals (arsenic, cadmium, copper, lead, nickel and zinc), total recoverable hydrocarbons, PAHs and asbestos.

Activities proposed as part of the site management works (including soil disturbance e.g. vegetation removal, stockpiling) have the potential to create dust and mobilise contaminated soils through air and water erosion. Workers and machinery could also spread contamination if not managed correctly. Further detail on contamination at the Site is provided in section 6.1 and Appendix C of the REF.
A wide variety of established, documented and successful controls and measures exist to avoid and mitigate these potential impacts. Measures to manage ballast, fill, soils and stockpiles would be included in the SWMP for the proposal, which would be a sub-plan to the EMP. These plans and the measures that they could potentially contain are discussed in more detail in section 6.1 of the REF.

Protocols for ongoing inspection, monitoring, maintenance and rehabilitation required as part of the staged works program would be detailed in the EMP. Contingency measures for environmental management during storm/flood events would also be outlined within the EMP. The key design features and management measures that would be carried out to manage exposure of underlying ground surface after staged vegetation, ballast and stockpile removal resulting in the potential mobilisation of contamination that may be present within the Site are summarised below:

- Progressive staging of works to limit the size of exposed areas
- Additional testing of exposed areas for soil contamination and ASS
- Stabilisation of the ground surface with appropriate cover for the surface conditions; stabilisation methods may involve one or a combination of the following: hydromulch, matting, geotextile (geofabric), geobinders, applying a layer of top-soil or VENM/ENM (usually up to 100 millimetres)
- Soil conservation consultant and contamination expert to advise on the preferred method of stabilisation
- Carry out works in accordance with a SWMP and ASSMP
- Develop a post-completion management protocol to ensure that the integrity of the final ground surface is maintained.

Section 3.7.1 below summarises the proposed erosion and sediment controls for the proposal.

3.6.2 Asbestos

Submission number
One submitter raised an issue about asbestos management at the Site, being submission number 6.

Issue description – asbestos management
A submitter requested further explanation of the section in the REF which refers to asbestos. In particular, further explanation was requested for the following statement on page 196 of the REF “there is a possibility of asbestos fibres becoming airborne during the works”.

Response
The REF notes that asbestos has been identified in fill material, ballast, stockpiles and within objects (e.g., brake shoes) in a variety of forms, including friable fibre bundles and non-friable (bonded) ACM. If friable asbestos is disturbed and made airborne it has the potential to result in health risks to on-site workers and off-site sensitive receivers located in close proximity to the works (e.g., members of the public).

A range of standard management measures would be followed to minimise the potential for asbestos to become airborne to avoid the potential impacts of airborne asbestos.

An AMP would be prepared and implemented throughout the works. The AMP would include measures for safe handling, storage, transport and disposal of asbestos and ACM. It would also include a list of measures to avoid asbestos becoming airborne and details about air monitoring to confirm that asbestos was not being mobilised.

During the early stages of the proposal a HazMat survey would be conducted before ground disturbance works start (refer to management measure CSGW12). This survey would be completed by a hygienist and contamination expert and would include the identification of ACM.
The key management measures that would be carried out to manage asbestos fibres becoming airborne during the works are summarised below:

- Carry out works in accordance with AMP
- Carry out works in accordance with Health and Safety Management Plan (HSMP)
- Training of staff and use of personal protective equipment (PPE)
- Carry out regular asbestos fibre monitoring
- Employ standard measures to manage dust emissions (eg cover loads, use of water sprays, wheel wash system, wetting/covering of stockpiles).

As presented in management measure CSGW11, an AMP would be prepared by a suitably qualified practitioner and in accordance with the following relevant guidelines:

- Guidelines for the Assessment, Remediation and Management of Asbestos - Contaminated Sites in Western Australia (Western Australian Department of Health, 2009)
- How to Safely Remove Asbestos Code of Practice (Safe Work Australia, 2016)
- Asbestos related work (Roads and Maritime, 2013a).

The AMP would include the following:

- “Measures for managing soils or ballast that may also contain contamination to ensure that both the asbestos and contamination are managed effectively
- A summary of site conditions including consideration of residual asbestos that may be present, and how it will be managed
- A risk assessment to help identify appropriate measures to protect on-site personnel and the local community
- Communication strategy, where required, for notifying the community of asbestos management procedures
- A list of the potential receptors including site workers, the local community, site visitors, owners and occupiers, and service workers
- The primary exposure concerns including human activities with the potential to generate the release of airborne asbestos fibres and/or natural forces such as wind and water erosion
- A plan of investigation for materials to determine the potential for the release of asbestos fibres
- A plan of management for each activity or group of activities that, according to the risk assessment, requires controls to complete the works. This plan will include a method for each activity explaining how these controls will be implemented
- Appropriate handling, transporting, storing and disposal measures, including for soils, fragments and ballast
- Where required, asbestos management on Site Work will be carried out or overseen (as appropriate) by appropriately licensed and qualified contactors
- The requirement to complete asbestos fibre air monitoring during activities that could liberate asbestos fibres
- An audit and reporting process to check that controls are in place and being implemented.”

In addition the AQMP would include commitments that:

- Biological debris or other hazardous materials such as asbestos would be bagged and removed, or wet down before demolition
- Before and during grubbing and ballast removal, soils/ballast would be wet down to limit the movement of dust and other materials off-site.

Further detail on the assessment of asbestos with regards to the proposed works is provided in sections 6.1, 6.3 and 6.9 of the REF. Management measures CSGW11, CSGW12, CSGW13, CSGW15, CSGW16, CSGW17, RUWM5, AQ4, AQ5 and AQ6 provide further detail about asbestos management during the works.
3.6.3 Acid sulfate soils

Submission number
One submitter raised an issue about ASS being submission number 51.

Issue description – potential acid sulfate soil impacts
A submitter indicated that ASS exist around the Glebe Island area and it is probable that the former mangrove swamp, which was suggested to now be the Rozelle Rail Yards, and the parkland areas near The Crescent and White's Creek and Johnstons Creek, may have ASS issues.

The submitter expressed concern about the potential conversion of sulphites to sulphates if the water table were to be artificially lowered, and that this contamination could, via groundwater or drainage, potentially end up in Rozelle Bay. They requested that ASS be investigated.

Response
The REF notes that certain parts of the Site fall within areas where ASS are considered likely to be present and may be encountered. Potential acid sulfate soils (PASS) are likely to be present in marine and estuarine (alluvial) sediments beneath the Site; however ASS would not be present in the fill beneath the Site.

Only limited ground disturbance and excavation beneath the ballast is likely to occur as part of the works. Three main activities involve ground disturbance, namely, non-destructive excavation and/or potholing for locating services, removal of the ballast, and creation of the drainage channels and sediment basins. Of these activities, only the works to locate services and construct drainage channels and sediment basins are likely to require excavation into the soil/fill beneath the ballast.

The works do not propose to artificially lower the water table. In addition, where excavation beneath the ballast is required, these works would be relatively shallow and would occur in areas of fill beneath the ballast rather than the alluvial soils which are much deeper.

Therefore, some potential remains that ASS may be encountered, but the likelihood of encountering ASS is considered low. As a precautionary measure an ASSMP would be prepared for the site management works, in general accordance with the Acid Sulfate Soil Manual (Stone et al, 1998).

Where possible, lined sediment basins would not be located in areas of high contamination and/or areas where ASS may be present close to the residual ground surface (refer to management measure SDWF2).

Sediment and erosion controls would be established to manage site drainage and potential runoff into Rozelle Bay. Additional measures have been presented in the REF to avoid and mitigate potential impacts on groundwater. Further discussion of ASS, groundwater and the proposed erosion and sediment controls are presented in sections 6.1 and 6.2 of the REF.

3.7 Surface water, drainage and flooding

3.7.1 Water quality and quantity

Submission number
One submitter raised an issue about potential water quality impacts, being submission number 49.

Issue description – management of potential water quality impacts
One submitter suggested that Rozelle Bay would need to be monitored closely so as not to be further contaminated.
Response
Currently the Site has limited controls in place to manage water quality draining from the Site into Rozelle Bay. Without any controls, there is the potential that surface water flows from the Site could transport sediment and contamination off-site and into Rozelle Bay. This risk was identified in sections 6.1 and 6.2 of the REF and suite of design features and management measures were identified to avoid and mitigate this potential impact.

Some of these measures include:
- The installation and maintenance of temporary and permanent erosion and sediment controls during and after completion of the works. Notably this would include the installation of drainage channels and sediment basins across the Site
- Lining sediment basins so that captured surface water cannot interact with groundwater levels if they fluctuate
- Separating and managing off-site surface water and on-site surface water so that off-site flows are not potentially contaminated by works on-site
- Completing the works in a stage manner to minimise exposed areas of soil and fill beneath the ballast and stabilising this material as soon as possible to reduce erosion and the potential mobilisation of surface contamination.

The erosion and sediment controls for the works would be detailed within the SWMP, which would form a sub-plan to the EMP.

Also, management measure CSGW2 outlines a number of aims for the site management works. These include aiming to ensure that “Surface water flows leaving the Site do not pollute receiving water courses and bodies”. This aim is further supported by management measure SWDF6 which states that stormwater collected in the sediment basins would be sampled, tested and compared against appropriate discharge criteria before being appropriately discharged or removed from the Site. Water would not been discharged from site unless it met the discharge criteria, which would be established as part of the future design development and would be documented within the SWMP.

These and other measures presented within the REF would help ensure that discharges from the Site do not pollute Rozelle Bay. In particular, management measures SWDF2, SWDF3 and SWDF4 are associated with sediment basins and drainage controls.

3.7.2 Flooding

Submission number
One submitter raised an issue about flooding at the Site, being submission number 6.

Issue description – changes to flooding patterns
A submitter commented on changes to flooding patterns and the management of potential flooding impacts. In particular the submitter asked whether measures have been put in place in the event flooding occurs and impacts neighbouring land.

Response
The Site currently has minimal known formal surface water conveyance other than the Easton Park drain, an open channel along the base of the sandstone cutting in the western portion of the Site and some stormwater pits and associated pipes. The Site is situated in a topographic low relative to its surroundings, and functions primarily as a storage area for floodwaters. In circumstances where floodwaters are not retained on-site, they leave the Site via a low point on City West Link near The Crescent, and spill over the road and discharge into Rozelle Bay. It is noted that this overtopping of City West Link only occurs in relatively large, infrequent flood events.

The proposal is likely to result in minor reductions (generally up to 500 millimetres across around 70 per cent of the Site) to levels at the Site and it would also remove a number of structures and
buildings. If some topsoil is brought to site for stabilisation purposes, the adjusted levels would still be lower (by around 400 millimetres) than the existing site levels. As a result, the proposals would increase the volume of available flood storage. The works are therefore unlikely to increase the risk of flooding to neighbouring land. In the event that a large flood event occurs, floodwaters would still overtop City West Link and discharge into Rozelle Bay, as they do now.

There is still potential for the proposal to impact overland flows and existing drainage paths on site. These changes would be managed using standard control measures and through the installation of formalised drainage infrastructure, ie the permanent sediment basins and drainage channels.

Management measures to manage potential impacts from flooding were included in the REF. These measures (SWDF9 and SWDF10) include the following:

- “The contractor will monitor weather conditions to identify potential flood conditions and will manage potential flooding impacts in accordance with the EMP. Examples of appropriate controls include the following:
  - Temporary drains on-site
  - Storing equipment and other potential obstructions to flood water on higher ground wherever possible
  - Local reshaping of the land to direct runoff towards sediment basins and maintain low points across the Site”
- “A Flood Evacuation Plan (FEP) will be developed and implemented for the proposal.”

Further information on drainage and flooding is provided in section 6.2 of the REF.

3.8 Resources use and waste management

3.8.1 Waste management

Submission number
One submitter raised an issue about waste management during the works, being submission number 23.

Issue description – waste generation, management and disposal
A submitter raised concerns in regards to the generation, management and disposal of waste during the proposal. The submitter commented on the need to remove waste currently on the site such as toxic waste, weeds and lumber which would require disturbing these items. Concerns were raised around:

- The handling of asbestos-containing material and hazardous wastes, in particular on windy days
- Covering of waste during transport
- Where this waste would be disposed
- The location of waste disposal sites near residences and schools.

Response
The REF identifies a variety of waste streams that could be produced during the works. These include wastes from vegetation, spoil, asbestos, potentially contaminated material, timber railway sleepers, rail tracks, ballast and building materials.
The management of waste generated during the works would be guided by the WMP. The REF (section 6.3.3) stated that:

“The WMP will would aim to:
- Minimise the waste generated during demolition work and effectively reuse and recycle waste materials where possible, rather than dispose waste to landfill
- Store, handle, transport, and dispose of waste in an environmentally-responsible manner that does not cause harm or contamination to soil, air or water
- Provide guidance and controls on the classification of waste and safe treatment and disposal of contaminated and hazardous waste, including asbestos.”

Waste classification would be carried out in accordance with the Waste Classification Guidelines (NSW EPA, 2014d). As a minimum, waste, including waste soils and objects, would be separated, sampled and tested for a range of key potential contaminants.

As stated in management measure RUWM10, materials to be reused would be analysed and assessed in accordance with the National Environment Protection (Assessment of Site Contamination) Measure 1999, amended 2013 (ASC NEPM) and, in regards to ballast, The Recovered Railway Ballast Order 2014, to ensure material is not contaminated and reuse is appropriate.

Material not suitable for reuse or recycling would be disposed of to an appropriately-licensed facility based on the waste classification of the material. The location of licensed facilities has not been determined at this point of time and would be determined by the contractor.

The key design features and management measures that would be carried out to manage potential adverse impacts to the environment as a result of the inappropriate management of waste generated by the proposal are summarised as follows:
- Carry out works in accordance with a WMP
- Carry out measures to maximise resource efficiency and minimise waste
- Waste to be classified in accordance with the Waste Classification Guidelines (NSW EPA, 2014d)
- WMP and SWMP to include procedures for the handling, storage and disposal of contaminated waste
- Waste stockpiles would be located having regard to environmental factors and location of waterways, drainage channels and sediment basins
- Vehicles coming to and leaving the Site with full loads would have their loads covered to prevent material being blown out of them
- The AMP would include appropriate handling, transporting, storing and disposal measures for asbestos, including for soils, fragments and ballast
- A licensed waste management contractor would be used to remove waste from the Site for reuse, recycling or disposal
- Waste would be disposed of to an appropriately licensed facility(s) which would be determined by the contractor.

The WMP and AMP would detail monitoring and auditing procedures to check that controls are in place and being carried out.

Further detail on waste management is discussed in section 6.3 of the REF. Asbestos management, contamination, site stabilisation and dust management are discussed in sections 6.1, 6.2 and 6.9 of the REF.
3.9 Non-Aboriginal heritage

3.9.1 Assessment approach

Submission numbers
Four submitters raised issues about the approach of the non-Aboriginal heritage assessment, being submission numbers 13, 31, 32 and 49.

Issue description – items not assessed
A submitter raised concern that the old Glebe Island Bridge was not mentioned in the REF and that it should be incorporated and restored.

Response
The Glebe Island Bridge is a listed item on the State heritage register and is of State heritage significance. The Glebe Island Bridge was not included in the assessment as it is over 700 metres east of the Site. As a result it is not affected by the proposal.

Issue description – independent assessment of non-Aboriginal heritage
Submitters called for an independent assessment of heritage value (of the Site and immediate area), including industrial heritage.

Response
An assessment on non-Aboriginal heritage was carried out by GML Heritage, which is experienced in carrying out built heritage and archaeology assessments in NSW. The HIA was prepared with reference to the NSW Heritage Office and Department of Urban Affairs & Planning guideline: Statements of Heritage Impact (2002).

The HIA assessed the potential impacts of the works on non-Aboriginal archaeology, built heritage and the industrial context of the Site. The HIA also included management measures to minimise the heritage impacts of the proposal.

OEH was provided with a copy of the REF, including the HIA by GML Heritage. OEH did not have any comments on the REF (refer to section 2.1).

The heritage impact assessment of the proposal prepared by GML Heritage is provided in Appendix D of the REF and is summarised in section 6.4 of the REF.

3.9.2 Non-Aboriginal heritage significance

Submission numbers
Two submitters raised issues about the non-Aboriginal heritage significance of items on-site, being submission numbers 31 and 32.

Issue description – heritage significance of rail infrastructure
Submitters suggested that redundant rail facilities may be an example of rail infrastructure that should be examined (from a heritage perspective).
Response
The HIA prepared by GML Heritage considered rail infrastructure at the Site. The HIA was prepared using the following method:

- Desktop assessment, including a review of environmental planning instruments and searches of relevant heritage registers to identify registered heritage sites and conservation areas within and surrounding the Site, and a review of the relevant legislation and previous studies or assessments of the Site
- Site inspections (June, July and September 2016) to confirm the physical nature of the Site and determine whether any of the remaining elements on-site have heritage significance
- Identification and assessment of potential impacts on heritage values and provision of management measures that are needed to minimise or manage these impacts.

The assessment focused on potential impacts to redundant rail infrastructure present on the Site, recognising the historical role of the Rozelle Rail Yards within the broader network of industrial and freight sites known as the good lines, and addressed individual built heritage items.

Whilst not a listed heritage item, the lighting tower on-site has been identified by GML Heritage as containing local heritage significance, given its association with the use of the Site as a railway yard. The assessment concluded that the removal of the lighting tower would have a minor adverse impact on the heritage integrity of the Site (through the loss of representative features). In accordance with the recommendations of the heritage assessment, archival recording of the lighting tower would be carried out prior to its removal.

Other items associated with the Site’s previous use as a railway yard include the signal shed and annex, overhead railway gantries, rail tracks, traffic control and rail marshalling machinery and platform structures. These items are not heritage listed and have been identified by GML Heritage as having neutral heritage significance against the NSW heritage criteria. It is therefore anticipated that the removal of these items would have a neutral heritage impact.

The HIA recommended that, where practicable, remnant industrial rail infrastructure such as the overhead rail gantries and the lighting tower would be removed and stored off-site to be considered for potential reuse as urban design features which interpret the Rozelle Rail Yards industrial history in a future development of the Site (refer to management measure NAH5). Roads and Maritime is investigating the feasibility of removing and storing off-site a selection of the rail tracks to also allow them to be used as part of any future interpretative urban design for the Site.

The southern penstock is located in the part of the Site to the east of Victoria Road bridge. This structure is closely associated with the White Bay Power Station and is identified in the CMP but outside of the State heritage register curtilage. A heritage significance assessment for the southern penstock is included in section 3.3.1 of the HIA (refer to Appendix D of the REF). The proposed works would not directly affect the southern penstock however there is the potential that it could be accidently damaged during the works if measures to protect it are not put in place. To mitigate any potential for impact to this structure during the works, an exclusion zone would be set up to protect the southern penstock from accidental damage as detailed by management measure NAH7 in Chapter 7 of the REF: “A three metre exclusion zone would be installed around the southern penstock to protect it from accidental damage during the works. No works other than vegetation management would take place in this exclusion area.” No works other than vegetation management would take place in this exclusion area.

There are no other heritage related elements associated with the power station and listed in the CMP which would be affected by the site management works.
3.9.3 Potential non-Aboriginal heritage impacts

Submission numbers
Six submitters raised issues about the potential impacts of the proposal on non-Aboriginal heritage, being submission numbers 5, 15, 31, 32, 36 and 49.

Issue description – impacts to heritage value of the Site
One submitter raised concern over the loss of the Rozelle Rail Yards as a historically important part of the local community.

Response
The heritage significance of the Site and the potential impacts of the site management works on items on non-Aboriginal heritage were addressed in Section 6.4 of the REF and in the HIA in Appendix D of the REF.

Section 5.2.1 of the HIA states: “The proposal represents an overall minor adverse impact to the significance of the Rozelle Rail Yards as a representative industrial rail precinct, located within a network of sites, which were integral in supporting the processes of manufacturing, maritime industry and rail freight transport of goods and materials throughout NSW for the majority of the twentieth century. This minor adverse impact is tempered by the fact that the Site has experienced a substantial loss of integrity, including by change in use, abandonment, loss of original fabric and decommissioning, and now exists within an important but nevertheless fragmented series of industrial areas including Glebe Island, White Bay Power Station and the Darling Harbour goods yard.”

GML Heritage has identified a number of mitigation measures aimed at retaining key elements of significance and interpreting this significance for future generations. While none of the infrastructure on the Site are listed heritage items, the heritage assessment has recommended that, where practicable, the overhead rail gantries and the lighting tower would be removed and stored off-site to be considered for potential reuse as urban design features which interpret the Rozelle Rail Yards industrial history in a future development of the Site. This recommendation is made through management measure NAH5 presented in Table 4.1 of this report. Roads and Maritime is also investigating the feasibility of removing and storing off-site a selection of the rail tracks to also allow them to be used as part of any future interpretative urban design for the Site.

Issue description – management of potential non-Aboriginal heritage impacts
Submitters suggested that items found to be of important industrial heritage should be salvaged and stored until a suitable place of rehabilitation and exhibition found. Items such as the railway gantries, lighting tower and the Port Authority Building and all items listed in Figures 6-10 and 6-17 should be retained to either be incorporated into the future use of the Site or relocated.

Response
The HIA assessed the potential impacts of the site management works on non-Aboriginal archaeology, built heritage and the industrial context of the Site. The HIA also included management measures to minimise heritage impacts of the proposal.

No items located on-site are heritage listed however a number of items located on the Site have been assessed in the REF as having potential heritage significance. These items, their heritage significance, potential impacts and relevant management measures are described in the HIA and REF and summarised below in Table 3.1.

It is noted that Figure 6-10 in the REF shows Easton Park drain and White Creek outlets to Rozelle Bay and Figure 6-17 shows the staircase inside the Port Authority building. The heritage significance of the Lilyfield stormwater canal (part of the Easton Park drain) and the Port Authority building is described in Table 3.1 below.
Table 3.1: Summary of heritage significance, potential impacts and management measures for heritage items on-site

<table>
<thead>
<tr>
<th>Item</th>
<th>Heritage significance</th>
<th>Potential heritage impacts</th>
<th>Management measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern penstock</td>
<td>Potential State significance associated with the State heritage listed White Bay Power Station</td>
<td>Neutral</td>
<td>Installation of a three-metre exclusion zone around the southern penstock (refer to NAH7)</td>
</tr>
<tr>
<td>Victoria Road bridge</td>
<td>Potential local heritage</td>
<td>Neutral</td>
<td>Works conducted with care under the bridge (refer to NAH8)</td>
</tr>
<tr>
<td>Sandstone cutting, on the north-western boundary of the Site</td>
<td>Potential local heritage</td>
<td>Neutral</td>
<td>Undertaking vegetation clearing works on the sandstone cutting with care (refer to NAH9)</td>
</tr>
</tbody>
</table>
| Lighting tower                | Potential local heritage                                                                | The removal of the lighting tower would have a minor adverse impact on the heritage integrity of the Site (through the loss of representative features) | Removal and storage of the lighting tower and overhead rail gantries, where practicable for potential reuse as urban design features which interpret the Rozelle Rail Yards industrial history in a future development of the Site (refer to NAH5) 
Archival recording of the lighting tower (refer to NAH10) |
<p>| Port Authority building       | Potential local heritage                                                                | Removal of the Port Authority building would result in a minor impact on heritage values of the area | Archival recording of the Port Authority building (refer to NAH6) prior to removal                                                               |
| Lilyfield stormwater canal    | Local heritage significance in the above ground portion north of the Site                | No heritage impact, as the works are not expected to be at a depth that would encounter the part of the canal, which is present below the Site | Excavations beneath the ballast and into the underlying fill/soil would not be carried out above the section of the Lilyfield Road stormwater canal that runs beneath the Site (refer to NAH4) |</p>
<table>
<thead>
<tr>
<th>Item</th>
<th>Heritage significance</th>
<th>Potential heritage impacts</th>
<th>Management measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rozelle Rail Yards</td>
<td>Moderate degree of historic importance</td>
<td>The proposed changes to the Site as part of the proposal, including demolition and removal of redundant rail infrastructure and buildings, have the potential to result in a minor adverse impact on the heritage of the local area.</td>
<td>Removal and storage of the lighting tower and overhead rail gantries, where practicable for potential reuse as urban design features which interpret the Rozelle Rail Yards industrial history in a future development of the Site (refer to NAH5). At this time Roads and Maritime is investigating the feasibility of storing a selection of railway tracks off-site for potential future interpretation use at the Site.</td>
</tr>
</tbody>
</table>

The REF also includes a management measure (NAH3) that identifies the procedure that should be followed in the event that items of non-Aboriginal heritage are identified. This measure has been further strengthened to include a requirement that staff involved in ground disturbance activities are provided information to allow them to identify potential heritage items.

The revised management measure NAH3 now states:

*The Unexpected Heritage Items Procedure (Roads and Maritime, 2015) will be followed in the event that any unexpected heritage items, archaeological remains or potential relics of non-Aboriginal origin, including the extension of the Lilyfield Road stormwater canal, are encountered. Work will only restart once the requirements of that procedure have been satisfied. Should elements of listed heritage items be identified during the works (eg the Lilyfield Road stormwater canal), they will be retained in situ.*

*The induction process for work staff involved in ground disturbance will include information to allow them to identify potential heritage items.*

### 3.10 Aboriginal heritage

#### 3.10.1 Assessment approach

**Submission numbers**

Four submitters raised issues about the approach of the Aboriginal heritage assessment, being submission numbers 1, 15, 31 and 32.

**Issue description – independent assessment of Aboriginal heritage**

Submitters called for an independent assessment of Aboriginal heritage value, including an inspection to determine the extent and significance of any sites and/or artefacts.

**Response**

An Aboriginal heritage due diligence assessment has been carried out for the proposal in accordance with Stage 2 of the PACHCI (Roads and Maritime, 2011b). This assessment is provided in Appendix E and summarised in section 6.5 of the REF.
The PACHCI process was developed by Roads and Maritime to guide consultation and investigation of Aboriginal cultural heritage. It sets out an assessment process that is generally consistent with that required by OEH guidelines including:

- *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (DECCW, 2010c)
- *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW, 2010a)
- *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW, 2010b)

The assessment was carried out by conducting a desktop assessment followed by an archaeological survey of the study area. A representative from MLALC participated in the survey.

OEH was provided with a copy of the REF. Following its review, OEH did not provide any comments on the Aboriginal heritage assessment (refer to section 2.1).

### 3.10.2 Potential Aboriginal heritage impacts

**Submission numbers**

Four submitters raised issues about the potential impacts of the proposal on Aboriginal heritage, being submission numbers 3, 15, 31 and 32.

**Issue description – potential impacts to Aboriginal heritage items**

Submitters raised concerns that the Site may contain rare examples of items of Aboriginal heritage and that these items would be damaged by the works. Submitters suggested that there could be evidence of Aboriginal occupation within the proposed depth of 500 millimetres or much lower. Submitters called for a management plan to be put in place to protect any Aboriginal heritage items if identified on-site.

**Response**

The Stage 2 PACHCI assessment conducted for the proposal reported the following:

- The wider area around Rozelle Bay has been heavily modified through industrialisation since it was used by the Aboriginal people. Numerous developments have modified the landscape, including the reclaiming of land from Rozelle Bay, channelling and concreting of the nearby creeks and coastal areas, levelling of the Site, modification of the sandstone surfaces and the importing of fill to the Site. The Site’s disturbed terrain is unlikely to retain Aboriginal archaeological materials in surface or subsurface contexts
- No registered Aboriginal sites or places were identified within the Site, and no sites located nearby are likely to be either directly or indirectly impacted by the proposal
- No surface expressions of Aboriginal objects or places were identified within the Site, and no areas of potential Aboriginal archaeological sensitivity were identified
- The MLALC representative did not identify any areas of Aboriginal cultural attachment
- The creation of sediment basins would require excavation to about two metres depth from current surface levels on Site. The sediment basins are proposed to be located in disturbed areas, where it is unlikely that any items of Aboriginal heritage would be uncovered during excavation.

In the event that items of Aboriginal heritage are identified during the work, the Unexpected Heritage Items Procedure (Roads and Maritime, 2015d) would be followed. The induction process for work staff involved in ground disturbance would include information to allow them to identify potential heritage items. These measures are included as management measure AH1 in Table 4.1 below.
3.11 Biodiversity

3.11.1 Assessment approach

Submission numbers
Eleven submitters raised issues about the approach of the biodiversity assessment, being submission numbers 1, 3, 5, 10, 15, 31, 32, 35, 36, 44 and 51.

Issue description – independent assessment of biodiversity
Submitters called for an independent assessment of biodiversity including a survey of flora and fauna. Suggestions included involving National Parks and Wildlife and/or the NSW EPA, as well as appropriately-qualified Inner West Council officers in the assessment.

Response
A biodiversity assessment was carried out by ELA (2016), to determine the potential impacts of the proposal on biodiversity values. ELA is experienced in carrying out biodiversity assessments in NSW. The assessment was carried out in general accordance with the Environment impact assessment practice note: biodiversity assessment (Roads and Maritime, 2011a).

The biodiversity assessment was carried out in accordance with Part 5 of the EP&A Act, which requires a determining authority to consider critical habitats, threatened species, populations and ecological communities, and their habitats and any other protected fauna or protected native plants within the meaning of the National Parks and Wildlife Act 1974 (NSW).

The assessment was carried out using the following method:
- Desktop review of available information, mapping and relevant databases
- Field surveys of the study area, including targeted threatened fauna surveys for Litoria aurea (Green and Golden Bell Frog), Perameles nasuta (Long-nosed Bandicoot) and Microchiropteran bats
- Assessments of Significance for threatened biota (species, populations, communities) known to exist or have the potential to be present within the study area.

Consistent with EP&A Act requirements, an assessment of Significance (7-part Test) was conducted for the following species, as potential habitat may be impacted by the proposed works:
- Litoria aurea (Green and Golden Bell Frog)
- Perameles nasuta (Long-nosed Bandicoot)
- Pteropus poliocephalus (Grey-headed Flying-fox)
- Miniopterus schreibersii (Eastern Bent-wing Bat)
- Mormopterus norfolkensis (Eastern Freetail-bat)
- Saccolaimus flaviventris (Yellow-bellied Sheathtail bat).

As two of these species, Litoria aurea (Green and Golden Bell Frog) and Pteropus poliocephalus (Grey-headed Flying-fox) are also listed under the EPBC Act, an assessment using Commonwealth guidelines was also carried out.

These assessments determined that the proposal would not have a significant impact on any NSW or Commonwealth listed threatened species, endangered population or threatened ecological community. The biodiversity assessment is provided in Appendix F of the REF.

The OEH was provided with a copy of the REF. Following its review, OEH did not provide any comments on the biodiversity assessment (refer to section 2.1).

Inner West Council did make a number of comments about the biodiversity assessment and these have been responded to in section 2.6.5 and Appendix B of this report, which includes further consideration of non-threatened, local species.
The biodiversity assessment within the REF was completed in line with the relevant legislation and guidance. Additional assessment and management measures have been provided following review of the Inner West Council submissions. As such, no further biodiversity assessment is required.

**Issue description – potential impacts on flora and fauna that were not assessed**

Submitters were concerned that not all flora and fauna present at the Site were identified and assessed including:

- Birds; such as the Buff-banded Rail, Willie Wagtail, blue wrens, herons, Superb Fairy Wren, Silvereye and honeyeaters
- Reptiles; such as Bibron’s Toadlet (*Pseudophryne bibronii*), Stripped Marsh Frog, Blue Tongue Lizard, turtles, frogs, snakes and skinks
- Palm trees.

Submitters were concerned that the proposal might impact the above species, remnant flora and fauna and habitat for small birds, lizards and native grasses.

Submitters suggested that National Parks and Wildlife and/or NSW EPA as well as appropriately qualified Inner West Council officers be involved in ongoing monitoring to ensure that all wildlife are accurately identified, cared for and relocated.

Submitters also suggested particular management measures such as:

- Vegetation clearing should avoid the Superb Fairy-Wren breeding season (usually July to March). If this is not possible, nests should be checked before any vegetation is removed. If eggs or chicks are present then clearing should be delayed until the chicks hatch and leave the nest.
- That the FFMP allow for a staged removal of vegetation, in particular allowing for retention of patches of lantana or any other dense vegetation, weedy or otherwise, until suitable replacement native vegetation is established
- That some built structures which provide cover are left on the ground to ensure habitat retention for small reptiles, Blue-tongue Lizards etc
- That replanting of suitable native species is carried out and managed until such a time as a full management plan is developed for the Site.

**Response**

As mentioned above the biodiversity assessment was carried out in accordance with Part 5 of the EP&A Act.

In response to community submissions and the submission from the Inner West Council (refer to section 2.6.5), which identified a list of ‘target species’, ELA carried out a brief assessment of impacts on these target species. This is provided in Appendix B of this report.

While no surveys have been conducted for those target species, or for other non-threatened flora and fauna mentioned in the community submissions (e.g. Bibron’s Toadlet, Stripped Marsh Frog), many of the species can be assumed to be present based on the habitat characteristics of the Site, and the proximity of the Site to records from past surveys and reports.

The assessment indicated that potential impacts to these species included injury or mortality as a result of vegetation removal, collision with vehicles and/or equipment or as they are displaced from the Site or while trying to establish in other habitats.
In order to mitigate these potential adverse impacts, the FFMP would include the following additional measures:

- "Where possible, having regard to the proposed work program, carry out the clearing of vegetation for the site management works during the autumn and winter months, primarily March to early August. This timing allows the removal of vegetation to occur outside the breeding times for the majority of species. Spring and early summer months are preferred breeding times for the majority of native species listed in Inner West Council’s submission.
- Use a staged approach for the removal of vegetation, with a break between the clearing of each stage. Use a cautious and slow approach to the clearing of vegetation and create a disturbance before the vegetation’s removal.
- Ensure the clearing of the Site, in relation to weed infested areas (including noxious weeds) is carried out in accordance with the Roads and Maritime biodiversity guidelines (Roads and Traffic Authority, 2011) and relevant legislation.
- Contractors involved in the clearing of vegetation are to have a fauna handler and local wildlife carer available during clearing. Furthermore, the clearing of vegetation and risk to native species will be included as part of the site induction."

With the implementation of the existing and additional mitigation measures outlined above, there is a reduced potential for adverse impacts and species would have the ability to seek other habitat through connecting biolinks or stepping stones, such as, Whites Creek, Inner West light rail corridor, Jubilee Park, Federal Park, Callan Park, Johnstons Creek, Easton Park and Leichhardt Park.

Management measure BO1 states:

“A Flora and Fauna Management Plan (FFMP) will be prepared in accordance with Roads and Maritime’s Biodiversity Guidelines: Protecting and Managing Biodiversity on RTA Projects (RTA, 2011) and implemented as part of the EMP."

The Roads and Maritime Biodiversity Guidelines are very extensive and cover a range of topics including, but not limited to:

- Pre clearance
- Exclusion zones
- Clearing of vegetation and removal of bushrock
- Weed management
- Fauna handling
- Aquatic habitats and riparian zones.

They provide guidance on minimising impacts and specific management measures to help guide development. Through the implementation of management measure BO1, these guidelines would be implemented to help avoid or minimise potential impacts on native fauna during the site management works.

A small number of palm trees are present on the Site. The palms trees are exotic species and provide little ecological value to the Site. It is acknowledged that they may provide some foraging habitat for native bird species and/or the Grey-headed Flying Fox.

Refer to section 2.6.5 and Appendix B of this report for further discussion on potential impacts to other non-threatened species.

### 3.11.2 Threatened species and ecological communities

**Submission numbers**

Two submitters raised issues about the potential impact of the proposal on threatened species and ecological communities, being submission numbers 31 and 32.
Issue description – potential impacts on threatened species and ecological communities

Submitters raised concerns that the Site may contain rare examples of flora and fauna.

Response

A biodiversity assessment was carried out by ELA (2016), to determine the potential impacts of the proposal on biodiversity values. The assessment was carried out in general accordance with the Environment impact assessment practice note: biodiversity assessment (Roads and Maritime, 2011a). The biodiversity assessment is presented in Appendix F of the REF.

The assessment found that the Site consists of a typical urban, largely disused, brownfield environment with redundant rail infrastructure. The Site is entirely modified and disturbed, and represented primarily by exotic species and weeds.

The findings of the biodiversity assessment included:

- No threatened flora species are likely to be present at the Site and, as such, no significant adverse impacts on flora as a result of the proposal are expected
- The removal of exotic species, including Weeds of National Significance and declared noxious species, as well as feral animals may have a potential beneficial impact for the local ecology
- No threatened ecological communities were recorded within the Site during the field survey and were not considered to have the potential to occur within the Site. Therefore, the clearing of vegetation at the Site is considered to have no impact on threatened ecological communities
- The Green and Golden Bell Frog has not been recorded at the Site including during the surveys. No potential impacts on the Green and Golden Bell Frog are expected
- No direct or indirect observations of the Long-nosed Bandicoot have been recorded at the Site. No potential impacts on the Long-nosed Bandicoot are expected
- It is considered likely that the Grey-headed Flying-fox would use the Site on occasion for foraging. Potential impacts on this species are indirect and related to the minor foraging potential of the Site. As there are Fig trees next to the Site (eg in Easton Park and Bicentennial Park) and as there is ample foraging habitat within the locality, the clearing of vegetation at the Site would not result in a significant impact on the Grey-headed Flying-fox
- The Eastern Bentwing Bat and the Yellow-bellied Sheathtail-bat were recorded at the Site. Direct impacts on the Yellow-bellied Sheathtail-bat are considered to be limited to foraging habitat and would occur through the removal of all exotic vegetation within the Site. The cavities under the Victoria Road bridge that may present potential roosts for the Eastern Bentwing Bat would not be directly impacted, but indirect impacts such as construction traffic, noise and lighting may occur.

Management measures would be carried out to ensure that these potential impacts are appropriately avoided and/or managed. A range of management measures were proposed in the REF to manage potential impacts to biodiversity. These have been updated and are presented in Table 4.1.

In summary, the REF stated that potential direct and indirect impacts on fauna and flora as a result of the proposal are considered to be neutral and are not likely to cause a significant impact. This is based on the limited size of habitat within the Site in relation to similar habitat in the locality, the disturbed and degraded nature of the habitat present, and the lack of known breeding habitat within the Site.

3.11.3 Feral animal species

Submission number

One submitter raised an issue about the potential impact of the proposal on feral animal species, being submission number 15.
**Issue description – management of potential impacts from feral species**

One submitter raised concern that feral animals and vermin currently on-site would be disturbed by the works and questioned how this would be managed. The submitter suggested that advice be sought on how to minimise this problem from the relevant Inner West Council officer as well as appropriate officers from National Parks and Wildlife and/or the NSW EPA, as well as Health.

**Response**

The fauna surveys conducted at the Site for threatened species also identified a number of foxes and feral cats at the Site. The Site is also likely to provide habitat for rabbits and rodents due to the types of vegetation present (exotic cover) and low occurrence of human disturbance.

The site management works, in particular vegetation clearing, may force resident feral animals out of the Site, and into nearby areas, such as other parts of the old Rozelle Freight corridor, or the Inner West Light Rail corridor. This could increase predation on native species and/or displace native species from their habitat due to increased competition for resources (refer to Appendix B).

In order to mitigate the potential risk to native species, the control of feral animals has been identified as an additional management measure for inclusion in the FFMP. The additional management measures would state that:

- "The FFMP will include measures for the management of feral animals such as carrying out targeted feral animal control prior to and post vegetation removal. Feral animal control will be carried out in line with the relevant ‘model codes of practice’ and ‘standard operating procedures’ for the humane capture, handling and destruction of feral animals in Australia.⁵"

- "Roads and Maritime will carry out feral animal management in consultation with the Inner West Council and other stakeholders (eg Transport for NSW who owns the adjacent rail corridor) to enable a coordinated approach and ensure control efforts are as effective as possible."

### 3.12 Traffic and transport

#### 3.12.1 Assessment and approach

**Submission numbers**

Two submitters raised issues about the traffic and transport assessment, being submission numbers 6 and 15.

**Issue description – definition and quantity of light vehicle**

Submitters queried light vehicles using the Site. A submitter requested more detail on the definition of light vehicle and the anticipated volume of light vehicles. Submitters queried the type of vehicles that would be using the Gordon Street access during the ‘finished site’ phase for maintenance activities.

**Response**

Light vehicle movements during the proposal would be via the Gordon Street access. Heavy vehicle movements would not use the Gordon Street access and would be restricted to the City West Link and the Port Authority access points.

A light vehicle as defined by the Road Transport Act 2013 no 18 (NSW) means a vehicle other than a heavy vehicle within the meaning of the Heavy Vehicle National Law (NSW). A heavy vehicle is a vehicle which has a gross vehicle mass or an aggregated trailer mass of more than 4.5 tonnes, as defined by the Heavy Vehicle National Law (NSW) no 42a.

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⁵ These codes were developed by the Vertebrate Pest Research Unit of the NSW Department of Primary Industries and can be found at [http://www.pestsmart.org.au/animal-welfare/humane-codes/](http://www.pestsmart.org.au/animal-welfare/humane-codes/).
In Table 6-15 of the REF, it is estimated that there would be a maximum increase of around 51 vehicle movements in each peak hour. These movements would be split between different access roads:

- In the AM peak, there would be an increase of 37 vehicles movements on Lilyfield Road, and an increase of 13 vehicle movements on Darling Street
- In the PM peak, there would be an increase of 12 vehicle movements on Lilyfield Road, 13 vehicle movements on Darling Street and 25 vehicle movements on Gordon Street (north of Lilyfield Road)
- As light vehicles access the Site via Gordon Street, there would be an increase of 51 vehicle movements in both the AM and PM peak on Gordon Street south of Lilyfield Road

These are modest increases and are well within the capacity of these roads. Light vehicle movements would mainly be associated with construction workers and a number of small deliveries.

When the proposal is completed, only a small number of light vehicles would be required to enter and exit the Site to conduct minor maintenance work during the ‘finished site’ phase. These vehicles would generally consist of passenger vehicles and the occasional requirements for a small truck for vegetation maintenance activities. The overall number of light vehicles would be low and the potential traffic impact would be minimal.

3.12.2 Potential traffic and parking impacts

Submission numbers

Three submitters raised issues about the potential impact of the proposal on traffic and parking, being submission numbers 6, 15 and 42.

Issue description – management of worker behaviour, potential traffic and parking impacts

Submitters requested the following management measures:

- That any workers entering and leaving site via Gordon Street respect the amenity of residents and avoid noise, conversations and excessive light as they come and go from the Site
- That all vehicles carry appropriate identification including contractors. This suggestion is in response to the issues experienced with contractors involved in M4 East and New M5 projects
- That all vehicles park within the Rozelle Rail Yards and not on local streets

Response

Inductions and training would be provided to staff and sub-contractors outlining their responsibilities in relation to traffic and noise management on-site. Site inductions would highlight the need to limit noise (including from shouting, vehicle stereos, radios, dropping of materials, throwing of metal items and slamming of doors). Further discussion on construction traffic noise is provided in section 3.13.3.

Vehicles would not be labelled with site management works branding due to the number of subcontractors likely to be involved in the works, often for short periods of time, and the difficulty of labelling all work vehicles. In the event that a traffic issue occurs, a complaint can be raised through the 24-hour project information line. Refer to section 3.5.2 for further information on consultation and complaints handling procedures during the site management works.

Parking of all light and heavy vehicles for staff and visitors related to the site management works would be contained within the Site. Vehicles would likely be parked near the site offices and facilities which are expected to be located in the north-western portion of the Site. This part of the Site is not located immediately next to residential properties. As a result, the proposal would not adversely impact on parking in the surrounding area.
3.12.3 Traffic safety

Submission numbers
Two submitters raised issues about the potential impact of the proposal on traffic safety, being submission numbers 6 and 42.

Issue description – traffic safety for motorists, cyclists and pedestrians
Submitters commented on the impacts to safety around the proposed site entrance on Gordon Street near the Gordon Street and Lilyfield Road intersection. Submitters were particularly concerned with the safety of cyclists travelling along Lilyfield Road, due to poor visibility at this intersection and the number of cyclists using the road during peak times.

Submitters requested that safety monitoring of all road users, including vehicles and cyclists, was carried out near the Gordon Street and Lilyfield Road intersection and suitable warnings for motorists and cyclists be displayed, with possibly a lower speed limit imposed on Lilyfield Road, such as 20 kilometres per hour during construction on either side of Gordon Street.

Response
The use of Gordon Street for light vehicle access during the site management works would increase the number of light vehicles crossing the cycle path on Lilyfield Road at the Lilyfield Road/Gordon Street intersection. A maximum increase of 51 movements in the AM and PM peak hours during the peak of construction, and limited vehicles during the rest of the day is anticipated with limited vehicle movements likely during the rest of the day. Note that this is a conservative assessment of the light vehicle movements to be generated from the Site and is unlikely to occur during all stages of the site management works.

An on-road cycle route currently exists on Lilyfield Road in the vicinity of the Site. At the intersection of Lilyfield Road and Gordon Street, the on-road cycle lane on the northern side of Lilyfield Road is marked with white line markings and solid green lane marking. On the southern side of Lilyfield Road, there is no white line marking or solid green cycle lane markings extending through the intersection. The presence of the on-road cycle lane is indicated by two on-road bicycle markings before and after Gordon Street. Sightlines are generally good in both directions, though kerbside vegetation on the southern side of Lilyfield Road to the east of the intersection does restrict sightlines for drivers and cyclists to some extent. Figure 2.2 shows the Gordon Street and Lilyfield Road intersection from Gordon Street, looking north east across Lilyfield Road.

Roads and Maritime crash data from 2011 to 2015 has been reviewed and there have been no recorded traffic incidents (inclusive of cyclists and pedestrians) at the Lilyfield Road/Gordon Street intersection in this time period.

The TMP and the TCP would consider measures to minimise conflicts between light vehicles accessing the Site and cyclists. Potential measures could include providing warning signage, providing solid green marking of the cycle lane on the southern side of Lilyfield Road across the Gordon Street intersection and maintaining slight lines at the junction by trimming vegetation on the southern side of Lilyfield Road. Measures would be discussed and agreed with Inner West Council prior to being carried out.

In order to capture the discussion above the following additional management measure (TT8) would be implemented:

“Appropriate measures to improve and maintain sightlines and cyclist/pedestrian safety Lilyfield Road/Gordon Street intersection will be discussed and agreed with Inner West Council.”
It is understood that the Inner West Council is in the process of designing a separated cycleway along Lilyfield Road. Timelines for construction and completion of this cycleway project are currently uncertain and this project is currently in the ‘preparation of draft concept plans’ phase.6

If the cycleway project construction coincides with the site management works, a communication strategy would need to be in place to ensure coordination of traffic movements and works associated with both projects.

Management measure CU1 addresses potential cumulative projects. Following consideration of the submissions from Inner West Council and Port Authority, CU1 now states:

“Where relevant, consultation will be carried out with proponents of other relevant existing and proposed developments, operations or activities (such as the proponent of the CSELR project, the M4 East project truck marshalling area and the Port Authority etc) to increase the overall awareness of project timeframes and impacts. Where necessary, the timing of certain proposal activities (such as heavy vehicle movements and high noise generating activities) will be managed to avoid coinciding works that may result in adverse cumulative impacts on sensitive receivers, the Port Authority or existing Port Authority tenants. To guide the implementation of this management measure, the communications plan for the works will include:

1. A list of relevant existing operations/activities and cumulative projects
2. Contact details for the principal contractors or proponents or operators for each existing operations/activities or cumulative project
3. Key representative for each project/operation/activity will be contacted at least once a month to discuss their respective program of works. This will include at least monthly consultation with Port Authority, Transport for NSW and the proponent of the M4 East truck marshalling project
4. Details of when key cumulative activities (eg major traffic movements) at each site are planned to be completed
5. A register outlining how cumulative effects have been avoided.”

3.13 Noise and vibration
3.13.1 Assessment approach

Submission number
One submitter raised an issue about the approach of the noise and vibration assessment, being submission number 47.

Issue description – approach of the noise and vibration assessment
Submitters queried the approach taken for the noise assessment including:

- The observations in Table 3 of the noise and vibration report for noise catchment A01 (Lilyfield) are incorrect, as the background noise is not dominated by City West Link given that the area is slightly elevated towards City West Link and Brenan Street is divided by the west City link by the light rail etc
- The assessment does not show the extent of the impact radius figures showing when the noise levels would return to the normal background levels it only shows receivers with minor impacts or receivers with exceedances
- Was a construction estimation completed for the REF showing the distances to all affected receivers in metres?

6 Inner West Council, Lilyfield Road – New Regional Bike Route, accessed 11 January 2017:
Response

During the period of the attended survey at noise monitoring location A01 in NCA 06, the acoustic engineer noted that the ambient noise environment was dominated by road traffic noise from City West Link. This traffic noise alongside frequent aircraft and light rail passbys contribute to the background noise (LAeq) at this location. Vehicle passbys on Brenan Street were infrequent during the measurement period. These observations were representative of the period when the attended measurement was carried out. The high volume of traffic on City West Link is a significant contributor to the local noise environment, even allowing for the distance separation and intervening light rail line and noise barrier.

Given the nature and limited duration of the proposed site management works and the standard hours of construction proposed, noise contour figures were not used to detail noise levels across the Site.

The predicted noise levels within each NCA are conservative. They are measured at the closest receiver to the Site and assume that work activities are being carried out at a location within the Site closest to the receiver. Therefore receivers that are further away within each NCA would experience reduced noise levels as a result of distance attenuation and noise shielding.

Receivers with the potential to experience an exceedance of the proposal noise management levels during site management works post mitigation are identified in Figure 6-33 of the REF. Receivers outside the identified areas are not predicted to exceed the proposal noise management levels and as such the extent of impacts are limited to the areas identified as eligible for additional mitigation.

A number of activities comprising typical plant and equipment were developed to represent realistic worst case noise generating works and these are detailed in section 5.2 of Appendix H of the REF. This information was used to complete the noise impact assessment and to understand the sensitive receivers that may be impacted by the proposed works.

The noise assessment was conservative and based on realistic worst case noise generating works occurring in areas of the Site closest to each receiver. The receiver is the worst case receiver located within each NCA, ie the receiver closest to the Site. The sensitive receivers that could potentially be impacted are shown on the proposal sitemap for the noise assessment (refer to Figure 6-30 of the REF).

All buildings shown within the proposal sitemap (noise) were included in modelling and assessed against the proposal noise criteria. Identified exceedances (impacts) were typically limited to receivers which adjoined the boundary of the proposal and as such the extent of the modelling was deemed to be sufficient to capture all noise impacts from the proposal.

3.13.2 Construction/demolition noise

Submission number

One submitter raised issues about the potential impacts of the proposal from construction/demolition noise, being submission number 15.

Issue description – management of potential construction noise impacts - general

A submitter raised concerns over potential noise impacts during construction of the proposal. The submitter asked for independent monitoring, appropriate and speedy remediation in the event of breaches, including clear promotion of the complaints line and for those next to “sensitive receivers” the implementation of additional mitigation including triple glazing, housing for machinery to muffle sound and noise walls where appropriate.
The submitter also commented on the management of potential construction noise impacts for highly affected receivers on Lilyfield Road (NC04) and requested that all appropriate mitigation steps be employed including verification monitoring and respite offers.

Response
The noise assessment predicted that, before application of any standard management measures, the following noise impacts might be expected for residential receivers in each of the NCAs:

- Receivers in two NCAs (NCA01 and NCA05) are not expected to experience Noise Management Level (NML) exceedances
- Certain receivers close to the Site in three NCAs (NCA06, NCA07 and NCA08) are expected to experience NML exceedances of between one and 10 decibels
- Certain receivers close to the Site in two NCAs (NCA02 and NCA03) are expected to experience NML exceedances of between 11 and 20 decibels, with up to 7 receivers in each NCA potentially being ‘highly noise affected’
- Eight receivers in NCA04 are expected to experience NML exceedances above 20 decibels, with up to 27 receivers potentially being ‘highly noise affected’ during the loudest proposed activity (site stabilisation and use of the mulcher/chipper).

An assessment of the likely duration of noise impacts for NCA04 indicated that:

- The reported worst case impact of an exceedance of 21 to 25 decibels above NML was only likely to occur for around two per cent of the overall works duration (around one week), due to the works progressing through the Site and away from receivers in this NCA
- When an exceedance does occur receivers are predicted to more likely experience a one to five decibel exceedance of NML. This is likely to be the case for around four per cent of the overall duration of the works (around two weeks).

While the duration of the worst case impacts would likely be short in relation to the overall work program, noise mitigation measures would be required to reduce the potential noise impacts associated with predicted NML exceedances when work is being carried out near to the closest receivers.

To mitigate the potential noise impacts described above, a NVMP would be implemented. The NVMP would be prepared by the site management works contractor once the schedule for the work, the equipment to be used and the local geotechnical conditions are confirmed. The NVMP would identify reasonable and feasible mitigation measures to be carried out, taking into account ‘Beyond the Pavement: urban design policy, process and principles’ (Roads and Maritime, 2014).

The noise and vibration assessment assessed the noise impacts after application of standard management measures were carried out (refer to management measures NV1 to NV8). The results of the post-mitigation assessment show that:

- Residential receivers in five NCAs (NCA02, NCA03, NCA04, NCA06, NCA07) would experience NML exceedances of between 0 and 10 decibels
- Nineteen residential receivers in NCA04 would experience NML exceedances of between 11 and 20 decibels
- Four of the residential receivers in NCA04 (located on the southern side of Lilyfield Road at Rozelle) are predicted to be highly noise affected.

Based on guidance provided in the CNVG, the four highly noise affected residential receivers located in NCA04 require further consideration of mitigation measures.

The following additional management measures would be carried out for the four highly noise affected receivers in accordance with Construction Noise and Vibration Mitigation – Construction Noise and Vibration Guideline (Roads and Maritime, 2016a) (refer to management measure NV12):

- “Notifying the community through letterbox drops, doorknocking or phone calls
- Verifying demolition noise levels through noise monitoring
• Offering respite or negotiating respite periods. The approach to respite periods would be confirmed during preparation of the NVMP and in consultation with the affected community.”

In regards to plant and equipment the following would be carried out (refer to management measure NV4):
• “Quieter work methods and equipment will would be adopted including the use of mufflers and silencers where practicable
• The noise levels of plant and equipment items will would be considered in rental decisions and must be compliant with the criteria in Table 2 of the Construction Noise and Vibration Mitigation – Construction Noise and Vibration Guideline (Roads and Maritime, 2016a)
• All plant and equipment will would be properly maintained and operated according to manufacturers’ recommendations in such a manner as to avoid causing excessive noise
• Noise-intensive equipment will would be turned off when not in use
• Only necessary equipment, of an appropriate size and power, will would be on-site.”

In regards to housing for equipment the following management measure has been added to measure NV4:
• “Stationary noise sources, such as the mulcher/chipper that may be used periodically, will be located away from potential receivers where practical and may be shielded or enclosed where feasible and reasonable while ensuring that the occupational health and safety of workers is maintained.”

Section 3.5.2 of this report provides details on the Communication Plan for the proposal. Before the works start, a 24-hour project information and complaints line would be established. This would be operated during the works. Complaints would be investigated and, where possible, resolved. Where required, a meeting may be arranged with on-site personnel to help in resolving a complaint.

As detailed within management measure NV1, the contractor would need to communicate details of the complaints handling procedures with potentially affected neighbours and sensitive receivers.

In addition, all sensitive receivers (eg schools, local residents) likely to be affected would be notified before the start of any work that may have an adverse noise or vibration impact (refer to management measure NV2).

Section 6.8 and Appendix H of the REF provide further detail on the noise assessment and proposed management measures.

3.13.3 Construction traffic noise

Submission number
One submitter raised an issue about the potential impacts of the proposal from construction traffic noise, being submission number 49.

Issue description – management of potential construction traffic noise impacts
One submitter requested that the use of Gordon Street be restricted to light vehicles and standard hours of work, due to vicinity of the site access to residential properties.

Response
As presented in the REF, during the works, the Gordon Street access would only be used for light vehicles.

Light vehicles accessing the Site via Lilyfield Road and Gordon Street are predicted to result in less than a two decibel increase in noise levels. Given the relatively low number of light vehicles that would access the Site via Gordon Street, increases in road traffic noise levels due to light vehicle movements are not anticipated to be perceptible.
Working hours for the proposal are expected to be within standard working hours as per the ICNG (DECC, 2009). Refer to section 3.3.1 for a discussion on working hours for the proposal.

3.13.4 Construction/demolition vibration

Submission number
One submitter raised an issue about the potential impacts of the proposal from construction/demolition vibration, being submission number 15.

Issue description – management of potential vibration impacts
A submitter requested that if residents are impacted by vibration effects from the works, work should be stopped until the source of the vibration is identified and rectified.

Response
The vibration assessment indicated that vibration-intensive equipment is proposed during infrastructure demolition and/or removal using a rock-breaker. This activity is likely to occur in areas of the Site around 50 metres from the nearest receivers in NCA02 and NCA04. Other vibration intensive equipment such as jackhammers are also proposed to be used during the works. This equipment could potentially impact nearby sensitive receivers.

Based on the safe working distances for vibration intensive equipment, for both cosmetic damage and human comfort, presented in the CNVG and Table 29 of Appendix H of the REF, there is adequate separation distance from the works to the nearest sensitive receivers to avoid potential structural impacts on residential buildings. The proposal is therefore unlikely to result in structural or cosmetic damage to nearby receivers from vibration.

In relation to human comfort, the safe working distances relate to continuous vibration. For most construction activities, vibration emissions are intermittent in nature. Higher vibration levels, occurring over shorter periods, are generally considered acceptable by the NSW EPA. The rock-breaker is not expected to operate continuously as part of the proposal and as a result, it is considered unlikely that the human comfort vibration goal would be exceeded.

Management measures have been outlined in regards to demolition vibration impacts and include the following (refer to management measure NV11):

- “If vibration intensive work is required within the safe working distances, vibration monitoring or attended vibration trials will be carried out at the outset to ensure that levels are within relevant criterion
- At locations where the predicted and/or measured vibration levels are greater than the nominated screening levels, a more detailed analysis of the building structure, vibration source, dominant frequencies and dynamic characteristics of the structure will be required to determine the applicable safe vibration level.”

As outlined in management measure NV2, all local properties likely to be affected would be notified before the start of any work that may have an adverse noise or vibration impact. The NVMP would include contingency measures in the event of non-compliance with vibration criteria, as stated in management measure NV1.

Management measures NV9, NV10 and NV11 specifically relate to management of vibration impacts and include:

- “Building condition surveys of heritage structures within 50 metres of vibration intensive equipment will be completed both before and after the work to identify existing damage and any damage due to the work
- The heritage structures will be inspected during preparation of the NVMP to determine the applicable safe vibration level"
If vibration intensive work is required within the safe working distances, vibration monitoring or attended vibration trials will be carried out at the outset to ensure that levels are within relevant criterion.

At locations where the predicted and/or measured vibration levels are greater than the nominated screening levels, a more detailed analysis of the building structure, vibration source, dominant frequencies and dynamic characteristics of the structure will be required to determine the applicable safe vibration level.”

### 3.14 Air quality

For a discussion on issues raised associated with asbestos refer to section 3.6.2.

#### 3.14.1 Dust

**Submission number**

One submitter raised an issue about the potential impacts of the proposal from dust, being submission number 15.

**Issue description – management of potential dust impacts**

The submitter requested particular procedures to manage dust including implementation of Construction Dust Notification Procedures. They requested that the notification procedures be developed in conjunction with SMC and the Inner West Council WestConnex Advisory Group on behalf of the local community.

The submitter requested the procedures address at least the following concepts:

- The implementation of a notification system whereby SMC is able to communicate in a timely manner with the local community and Inner West Council, utilising either mobile phone numbers or appropriate alternatives. Those numbers being those of local residents who have agreed to receive mobile notifications of this nature.
- SMC must give prior notification to the local community where it is reasonable to expect dust will be generated by:
  - The following day’s construction activities on-site; and/or
  - Weather conditions which may produce conditions where dust is likely to escape from the Site
- The notification must be given by close of business of the day before the expected dust activity. Where a dust activity was not envisaged, then SMC must send that notification as soon as practicable after it has become aware that one is likely
- The notification must include:
  - The time when the expected dust activity is to occur
  - The period of time it is expected to continue
  - The direction SMC expects the dust to leave the site and travel in
  - Such other relevant information to allow residents to reduce any negative impacts due to the expected dust activity.

According to the submitter, the implementation of such a procedure would provide residents with the opportunity to close windows and doors, to make alternative provisions for air drying clothes, or alter their planned external activities for the day, thus reducing the amount of dust that would enter their homes and lives.

**Response**

Section 6.4 of the air quality assessment in Appendix I of the REF identified that the works could mobilise dust, which in turn could result in adverse impacts to nearby sensitive receivers. This assessment presented a suite of management and mitigation measures that would both avoid the creation of dust and mitigate potential impacts.
These management measures would be documented within the AQMP for the proposal. This AQMP would be carried out by the contractor. As detailed in management measure AQ5, relevant measures to avoid or mitigate potential dust impacts would include:

- “Loads that may produce dust or odour will would be covered
- **Water will would be sprayed on unsealed access roads and open areas during conditions conducive to dust generation**
- A wheel washing system will would be established for vehicles leaving the Site
- An adequate area of hardstand will would be maintained between the wheel wash facility and the site exit, wherever site size and layout permits
- Internal access tracks will would be inspected and necessary repairs to the surface made as soon as reasonably practicable
- On-site vehicle speed limits will would be established and enforced to prevent dust emissions
- Vehicles and activities will would be confined to the designated work areas to prevent inadvertent encroachment into exposed areas
- **Water-assisted dust sweepers will would be used on internal access tracks and local roads where necessary, to remove material tracked out of the Site**
- Before and during grubbing and ballast removal, soils/ballast will would be wet down to limit the movement of dust and other materials off-site
- Exposed areas will would be stabilised as soon as reasonable and possible (refer to section 6.1 of the REF for further detail on stabilisation)
- Stockpiled material will would be appropriately shaped to reduce wind erosion and covered as appropriate (refer to section 6.1 of the REF for more detail)
- During extreme weather events where dust generation cannot be effectively minimised (such as high winds), dust generating works will would cease until adequate controls can be implemented or until adverse weather conditions subside
- Demolition of buildings and structures will would be carried out using techniques and practices that minimise dust generation. This may include soft stripping the inside of buildings before demolition.”

The AQMP would also include contingency measures in the unlikely event complaints about air quality are received. Work activities would be reviewed if the air quality management measures are ineffective in minimising emissions and dust (refer to management measures AQ2 and AQ3). These management measures would be detailed in the AQMP, a sub-plan of the EMP.

Section 3.5.2 provides details on consultation to be carried out during the works. All communication and engagement activities for the site management works would be carried out in accordance with the appropriate Roads and Maritime guidelines. This would include notifying the surrounding residents and businesses of upcoming works. A 24-hour project information and complaints line would operate while the site management works are underway. Communication pathways would be documented in the CP for the site management works.

### 3.14.2 Odour impacts

**Submission number**

One submitter raised an issue about the potential odour impacts of the proposal, being submission number 6.

**Issue description – potential odour impacts**

A submitter asked for clarification about odour impacts.
Response
There is a possibility of odour impacts to occur during the works. Potential scenarios that may produce odours include:

- Excavating odorous material, such as uncovering oil/petrol stained soil or potentially from exposing ASS
- Spilling odorous material such as petrol while conducting maintenance activities
- Emitting diesel odours from plant and equipment.

However, if these scenarios were to occur, the odour impact would likely be localised to the immediate area around the source.

In the event that odour emissions are generated, work would cease until the source and nature of the odour can be determined and an appropriate course of action carried out. This may include further assessment to determine potential impacts on the nearest sensitive receptors (refer to management measure AQ8).

The AQMP (refer to management measure AQ5) would require that loads that may produce odour would be covered and stockpiled material would be covered as appropriate. If required, odours could be managed using odour suppressants (eg Biosolve) or by covering the odorous material. The level of management would be determined by the contractor in the event that odorous material is encountered.

3.15 Landscape character and visual amenity

3.15.1 Landscape character

Submission number
One submitter raised an issue about the potential impacts of the proposal on landscape character, being submission number 36.

Issue description – potential impacts on landscape character
One submitter raised concerns that the works would change the industrial landscape character of the Site as the railway gantries are a landmark visible from The Crescent and the Annandale foreshore.

Response
The REF acknowledges that the landscape character of the Site is associated with its former use as a railway yard. The railway gantries are noted as being a key element of the landscape character of the Site.

The removal and demolition of the more prominent elements (eg the rail gantries) would change the landscape character of the Site. The REF notes that removal of these elements is likely to result in a low residual impact on landscape character.

Where practicable the overhead rail gantries and lighting tower would be removed and stored off-site to be considered for potential reuse as interpretative features (refer to management measure NAH5).

3.16 Property and land use

3.16.1 Land use

Submission numbers
Three submitters raised issues about the potential impacts of the proposal on land use, being submission numbers 19, 34 and 41.
Issue description – suggested use of the site identified in the Bays Precinct
Submitters raised concerns associated with the Site being identified as a destination as part of the Bays Precinct and the proposal not being consistent with the planned future use for this destination, given the increase in population density including dwellings, commercial and tourist development planned for the Bays Precinct. The submissions identified potential uses listed on the UrbanGrowth website for the Bays Precinct including for raising awareness of, and interpreting heritage of rail transport.

Response
The Site has been identified as a ‘destination’ within The Bays Precinct Transformation Plan (UrbanGrowth 2015), which has the potential to alter the landscape character of the wider area. This destination, being the Rozelle Rail Yards, is identified as a longer-term priority (2022 and beyond) in the plan.

The plan identifies the potential future use of the Rozelle Rail Yards for residential housing, public spaces and employment use, and notes that part of the Rozelle Rail Yards is subject to a proposal for WestConnex (UrbanGrowth, 2015).

Since the release of the Transformation Plan, the NSW Government has announced its intention to use the Rozelle Rail Yards as a site for the planned M4-M5 Link project. Should this project be approved, the Site is proposed to be developed into an interchange, which would mainly be underground, generating new areas of open space for community uses and improved active transport linkages at the surface.

The site management works would prepare the Site for any potential future use, which may include elements consistent with the uses required for the M4-M5 Link project and/or The Bays Precinct Transformation Plan (UrbanGrowth 2015).

3.17 Cumulative impacts

3.17.1 Potential cumulative impacts with other projects

Submission number
One submitter raised an issue about the potential cumulative impacts of the proposal combined with other projects, being submission number 6.

Issue description – cumulative impacts with Central Business District and South East Light Rail Rozelle maintenance depot facility
Submitters raised concerns over potential cumulative impacts with the CSELR Rozelle maintenance depot facility project, located to the west of the Site. Submitters asked the following questions:

• What does the reference to “the majority” of heavy vehicles using City West Link mean?
• How would the combined constructions affect residents? In regards to traffic, noise and amenity and also environmental issues as to the combined impact of pollution through adverse events (such as flooding) where both sites are being excavated.

Response
The REF notes that the construction works underway for the CSELR Rozelle maintenance depot facility (next to the Site to the west) could take place at the same time as the proposal.

The text “the majority of heavy vehicles generated by construction of the maintenance facility would use City West Link” has been sourced from the CSELR EIS (section 4.2.2.2 of Technical Paper 2: Construction Traffic Management Plan). The Technical Paper does not indicate how many heavy vehicles would be used during construction of the CSELR depot site.
Figure 4-7 in the Technical Paper indicates that the heavy vehicle movements from the CSELR depot would use the existing driveway connection onto Lilyfield Road, travel west along Lilyfield Road before turning left onto Catherine Street or Balmain Road and then turning onto City West Link.

An assessment on potential cumulative impacts of the proposal and construction of the CSELR depot site was carried out and is presented in section 6.13 of the REF. The assessment concluded the following:

- **Traffic and transport**: A review of the approval documentation for the CSELR Rozelle maintenance depot has indicated that the volume of traffic generated by this development is anticipated to be low. Considering the site management works would also result in the addition of only a low volume of traffic on City West Link, the potential for both of these projects to result in a significant cumulative impact on the road network is considered unlikely.

- **Noise**: Cumulative exceedances of between 11 and 20 dB are predicted at 16 receivers along Lilyfield Road within NCA02. Cumulative exceedances of up to 10 dB are predicted at 70 receivers along Brenan Street within NCA06. The cumulative noise assessment found that there is a low likelihood that cumulative noise would significantly affect the worst case noise predictions, as the predicted cumulative exceedances (up to 20 decibels) are consistent with the worst case predicted noise levels for the site management works in this area (also up to 20 decibels).

- **Vibration**: In terms of cumulative vibration effects, nearby developments are considered to be a sufficient distance from the works not to result in an adverse cumulative effect on relevant items of heritage significance. Closest receivers on the north side of Lilyfield Road (NCA02) and south side of Brenan Street (NCA06) are setback a sufficient distance from the works to avoid cumulative vibration impacts either in terms of cosmetic damage or human comfort.

- **Air quality**: While dust may be generated by construction of the CSELR depot site; these potential impacts are likely to be temporary. Considering both projects would have a number of detailed measures to control the creation and movement of dust, it is considered unlikely that there would be significant cumulative adverse dust impacts on surrounding receivers.

- **Visual amenity**: The proposed removal of vegetation at the Site may result in more prominent views of the larger sheds to be constructed on the CSELR site, particularly from sections of Lilyfield Road and commuters on City West Link. However, considering the potential impacts to views resulting from the site management works are anticipated to be negligible to low alone, the ‘finished site’ is unlikely to have a significant cumulative impact on landscape character and visual amenity in conjunction with the CSELR project or other nearby developments.

- **Flooding**: The CSELR project includes a north to south drainage line, which drains under City West Link to Whites Creek and a west to east drainage line, which drains into the Rozelle Rail Yards site. Provided that the site management works do not obstruct the flows from this CSELR drainage line, there would be no cumulative drainage and flooding impacts.

The REF included a management measure associated with cumulative impacts (CU1). This measure has been amended following the discussions presented in section 2.6.8 and section 2.81 of this report. The revised measure states:

> "Where relevant, consultation will be carried out with proponents of other relevant existing and proposed developments, operations or activities (such as the proponent of the CSELR project, the M4 East project truck marshalling area and the Port Authority etc) to increase the overall awareness of project timeframes and impacts. Where necessary, the timing of certain proposal activities (such as heavy vehicle movements and high noise generating activities) will be managed to avoid coinciding works that may result in adverse cumulative impacts on sensitive receivers, the Port Authority or existing Port Authority tenants. To guide the implementation of this management measure, the communications plan for the works will include:

1. A list of relevant existing operations/activities and cumulative projects
2. Contact details for the principal contractors or proponents or operators for each existing operations/activities or cumulative project"
3. Key representative for each project/operation/activity will be contacted at least once a month to discuss their respective program of works. This will include at least monthly consultation with Port Authority, Transport for NSW and the proponent of the M4 East truck marshalling project.

4. Details of when key cumulative activities (e.g. major traffic movements) at each site are planned to be completed.

5. A register outlining how cumulative effects have been avoided.

In regards to pollution events in local watercourses and bodies, the REF included a number of measures to manage stormwater at the Site including, progressive clearing, stabilisation of exposed surfaces and construction of drainage lines and sediment basins. Water coming onto the Site from external catchments would be separated where possible from site water via separate drainage channels. Site water would be directed to the sediment basins and collected, before testing and appropriate disposal.

Existing stormwater drains would be protected from site water surface water flows to ensure that site water does not enter Rozelle Bay via these drains and is managed through appropriate erosion and sediment controls.

The site management works would increase the volume of available flood storage at the Site. The works are therefore unlikely to result in adverse changes to flooding mechanisms and extents within the Site or at neighbouring land.

To manage potential flooding impacts, the REF included two management measures:

- **SWDF9**: "The contractor will monitor weather conditions to identify potential flood conditions and will manage potential flooding impacts in accordance with the EMP. Examples of appropriate controls include the following:
  - Temporary drains on-site
  - Storing equipment and other potential obstructions to flood water on higher ground wherever possible
  - Local reshaping of the land to direct runoff towards sediment basins and maintain low points across the Site."

- **SWDF10**: "A Flood Evacuation Plan (FEP) will be developed and implemented for the proposal."

### 3.18 Other issues

#### 3.18.1 Other issues not related to WestConnex

**Submission numbers**

Thirty-eight submitters raised other issues which were not related to the proposal or WestConnex, being submission numbers 3, 7 to 14, 16 to 34, 37 to 41, 43, 45, 46, 48 and 50.

**Issue description – why are the issues at the site only an issue now?**

Submitters noted that the issues at the Site, including noxious weeds and stockpiled waste, have not previously been a concern until this point in time.

**Response**

The land has historically been owned by various government agencies and is currently owned by four NSW government authorities, namely Rail Corporation NSW, Port Authority of NSW, Roads and Maritime and Property NSW.

To help manage some of the legacy issues at the Site and prepare it for a future use, the NSW Government is in the process of consolidating ownership of the Site under a single government agency - Roads and Maritime. This would enable the Site to be managed, and developed in the future, in a coordinated manner.
Roads and Maritime is taking ownership of the Site and, as such, needs to appropriately manage the land from an environmental and safety perspective.

**Issue description – why have some palm trees been removed**
Submitters questioned why a number of palm trees (not *Phoenix canariensis*) have already been removed.

**Response**
Some vegetation removal and tree trimming was required to allow access to the Site for the contamination and geotechnical investigations. These investigations were exempt works under the *State Environmental Planning Policy (Infrastructure) 2007* (ISEPP) and therefore did not require approval. Nevertheless, an environmental impact report was prepared to assess the impacts and recommend appropriate management measures where necessary.

**Issue description – future use of the site**
Submitters suggested the rail infrastructure and/or the rail corridor should be retained for future public rail transport (including a potential light rail depot). In particular, submitters were concerned with the labelling of the rail infrastructure as redundant, as it is the view of the submitters that some rail lines (at least two) could be retained and modified for future use as passenger surface rail.

Submitters suggested that retaining the rail infrastructure and/or rail corridor could save money and effort later in building a passenger light rail line to connect to Balmain or other areas. Submissions suggested that a light rail spur could be reserved as a complement to the proposed Rozelle Rail Yards site management works.

Submitters suggested and requested for various options to be included in the future use of the Site. These included:
- That the Site be used for pedestrian and cycle connections, including from The Crescent to Rozelle and carried on to either side of Iron Cove Bridge
- The Site should be used for public transport and that public land and infrastructure should not be used for motorways
- The Site be used as a green corridor to provide habitat, to help remove car fumes from the air and to be aesthetically pleasing.

One submission requested additional information to be included in the design for the Rozelle Rail Yards including:
- Access to the Balmain peninsular via light rail
- Access across the Glebe Island Bridge via light rail, walking and cycling
- Access westbound for pedestrians and cyclists via the rail cutting (needs to be widened). It was suggested that Lilyfield Road is not a good alternative due to gradients and traffic.

**Response**
The future use of the Site and the potential use of the Site for light rail has been discussed in sections 2.5.3, 2.6.3 and 2.6.10 above and is presented below in response to the community submissions.

The purpose of the works is to investigate the Site and allow Roads and Maritime to effectively manage it before a future development proposal.

Roads and Maritime proposes to use the land in the future for the M4-M5 Link project if that project is approved by the NSW Minister for Planning. Should the M4-M5 Link project be approved, the Site is proposed to be developed into a road interchange, which would mainly be underground. The NSW Government has also committed to the use of residual land for additional open space and improved active transport linkages. Further details on the proposed design of the interchange would be included in the EIS for the M4-M5 Link project.
If the M4-M5 Link project does not proceed, the site management works would prepare the Site for a number of potential future uses, which may include incorporation of active and public transport options, vegetation, habitats and a green corridor; however this would be dependent on the proposed land use and the design or masterplan of a future development. The site management works do not preclude future use of the Site for any number of potential developments.

Retaining the rail tracks in situ would not allow the sleepers and ballast to be removed or for appropriate erosion and sediment control measures to be installed. It would also potentially constrain further contamination and service investigations associated with the site management works.

Transport for NSW and UrbanGrowth are considering a range of potential transport options to service future development in the Bays Precinct including metro rail, ferry services, bus services and possibly light rail. However, no preferred options or transport corridors have been identified at this stage. In addition, active transport (pedestrian and cycling) linkages are proposed to service the Bays Precinct.

Access to Balmain Peninsula and use of the Glebe Island Bridge for light rail are outside the scope of the proposal.

### 3.18.2 Other issues related to WestConnex

#### Submission numbers

Fifteen submitters raised other issues which were not related to the proposal, but were related to WestConnex projects, being submission numbers 2, 5, 8, 11, 12, 17, 23, 27, 28, 38, 42, 43, 45, 46 and 51.

#### Issue description – issues related to stage 3 WestConnex (M4-M5 Link project)

Submitters raised various concerns specific to the M4-M5 Link project which were associated with potential impacts and assessment of impacts, the objectives and design inclusions of the M4-M5 Link project.

#### Response

The issues raised are associated with the M4-M5 Link project, which is not the subject of the REF. An EIS is being prepared for the M4-M5 Link project that will outline the objectives of that project and include an environmental assessment of potential impacts on traffic, air quality, noise, human health, socio economic, biodiversity, heritage, contamination, drainage/flooding, property and land use, urban design, visual and other issues. The EIS for the M4-M5 Link project will be exhibited in 2017.

#### Issue description – issues related to WestConnex in general

Submitters raised concerns about the WestConnex program of works in general. Concerns varied and were generally associated with the objectives of WestConnex, the approval process, documentation of the program and potential impacts.

#### Response

The issues raised are associated with the WestConnex program of works, which is not the subject of the REF. Each WestConnex project is subject to a thorough environmental impact assessment under Part 5.1 of the EP&A Act and if approved, detailed Conditions of Approval. Details of WestConnex projects can be found at [www.westconnex.com.au](http://www.westconnex.com.au) and assessment and approval documents are available on the DP&E Major Projects Assessment website [http://majorprojects.planning.nsw.gov.au/](http://majorprojects.planning.nsw.gov.au/).
3.19 Environmental management

3.19.1 Environmental Management Plan

Submission numbers
Two submitters raised issues about the EMP for the proposal, being submission numbers 13 and 15.

Issue description – independent monitoring of all activities
Submitters requested an independent review of the activities to be carried out at the Site, to ensure public safety in particular due to the contamination at the Site. Submitters requested the following:
- Appointment of an independent, appropriately qualified specialist to monitor the engaged contractor(s) and ensure they comply with best practice. The specialist should have unrestricted access to the Site and contractor vehicles and machinery to ensure compliance
- Inner West Council officers to have access at all times to the Site to independently ensure compliance.

Response
An EMP would be prepared by the contractor to outline the safeguards and management measures identified in the REF, to provide a framework for establishing how these measures would be carried out and to describe who would be responsible for their implementation.

The EMP would be reviewed and approved by SMC and Roads and Maritime before the start of any on-site works. The EMP would be a working document, subject to ongoing change and updated as necessary to respond to specific requirements arising during work.

The EMP would include the following in regards to monitoring:
- Procedures for monitoring and evaluating environmental performance, and for corrective action
- Reporting requirements and record-keeping
- Procedures for emergency and incident management
- Procedures for audit and review.

All works covered by the REF would be subject to environmental audit(s) and/or inspections(s) at any time. Periodical quality, safety and environmental audits and/or inspections would be conducted by the contractor, SMC and/or Roads and Maritime as required. Appropriate auditors/inspectors would be engaged depending on the type of audit and the work being audited from external or internal resources. Staff carrying out the audits or inspections would be independent of the work activity being observed.

External specialists would provide input into the preparation of the EMP as required, for example:
- The AMP would be prepared by a suitably-qualified practitioner
- A HazMat survey would be completed by a hygienist and contamination expert and would include the identification of ACM.

3.20 General

3.20.1 General objection

Submission number
One submitter raised a general objection to the proposal, being submission number 2.

Issue description – general objection
One submitter expressed general concern of the works to be conducted at the Rozelle Rail Yards and the potential impacts to local residents.
Response
The REF has been prepared by a team of qualified professionals and presents a balanced merit-based environmental impact assessment in accordance with the EP&A Act. The assessment found that potential impacts from the proposal, including the 'finished site', would not be considered significant after the implementation of a number of management measures.

Refer to sections 3.1, 3.13 and 3.14 for a discussion of issues raised about traffic and transport, noise and vibration and air quality impacts.

3.20.2 Comprehension of the REF

Submission number
One submitter raised an issue about the readability and language of the REF, being submission number 6.

Issue description – readability/language of the REF
The submitter found that the material provided was largely inaccessible to a layperson, particularly in regards to water sampling.

Response
The REF was prepared in accordance with the Roads and Maritime Services Editorial Style Guide (Roads and Maritime, 2013b), which was developed to help ensure that Roads and Maritime documents are accessible to readers. Where possible, less technical language was used in the REF to describe the existing environment and potential impacts of the works.

Discussion on groundwater and surface water sampling is provided in sections 6.1 and 6.2 and Appendix C1 of the REF.

In addition, a toll-free community enquiries line and email address were available for community members seeking additional assistance to understand the REF.

3.20.3 Omissions and errors

Submission number
One submitter raised an issue about an error in the REF, being submission number 49.

Issue description – incorrect labelling of property as commercial
A submitter expressed concern that a residential property on Lilyfield Road had been incorrectly labelled as commercial.

Response
The particular property was checked and the following figures have been updated to reflect that the property is a residential property.

Figures in volume 2 of the REF that have been corrected are:
- Appendix H Noise and Vibration Assessment:
  - Figure 2: Site plan and NCA boundary
  - Figure 18: Additional mitigation measures
  - Appendix B: Site plan and noise catchment areas
- Appendix I Air Quality Assessment:
  - Figure 6-2: Screening assessment – human receptors near the proposal boundary.

These updated figures from Appendix H and I of the REF have been provided in Appendix D of this report.
Figures 2 and 18 from Appendix H of the REF and Figure 6-2 from Appendix I of the REF were also used in section 6 of the REF as Figures 6-30, 6-33 and 6-34 respectively. As such the updated figures in Appendix D would supersede the detail in Figures 6-30, 6-33 and 6-34. The outcomes of the noise and vibration and air quality assessment were not changed as a result of changing the designation of the property from commercial to residential.
4 Environmental management

The REF for the Rozelle Rail Yards site management works identified the framework for environmental management, including safeguards and management measures that would be adopted to avoid or reduce environmental impacts (section 7.2 of the REF).

After consideration of the issues raised in the submissions and changes to the proposal, a number of safeguards and management measures have been revised and new measures added. Should the proposal proceed, environmental management would be guided by the framework and measures outlined below.

4.1 Environmental management plans (or system)

A number of safeguards and management measures have been identified in order to minimise adverse environmental impacts, including social impacts, which could potentially arise as a result of the proposal. Should the proposal proceed, these management measures would be incorporated into the detailed design and applied during the construction and operation of the proposal.

An EMP (and its associated sub-plans, refer to section 7.1 of the REF) would be prepared by the site management works contractor to describe safeguards and management measures identified. The EMP would provide a framework for establishing how these measures would be carried out and who would be responsible for their implementation.

The EMP would be prepared before construction commences and must be reviewed and certified by Roads and Maritime before the start of any on-site works. The EMP would be a working document, subject to ongoing change and updated as necessary to respond to specific requirements.


4.2 Summary of safeguards and management measures

The REF for the Rozelle Rail Yards site management works identified a range of environmental outcomes and management measures that would be required to avoid or reduce the environmental impacts.

After consideration of the issues raised in the submissions, the environmental management measures for the proposal (refer to Chapter 7 of the REF) have been updated. The main revisions and additions were made to management measures associated with soils, contamination, asbestos, drainage, waste (asbestos), biodiversity, traffic, noise and cumulative impacts. These revisions and additions are presented in Table 4.1.

Additional and/or modified environmental safeguards and management measures to those presented in the REF have been underlined and deleted measures, or parts of measures, have been struck out. Where material changes have been made to these measures, the relevant row in Table 4.1 has been highlighted blue. Simple changes (e.g., changing would to will or corrections) have not been highlighted but the changes are shown by using strikethroughs and underlining.

Should the proposal proceed, the environmental management measures in Table 4.1 would guide the subsequent phases of the Rozelle Rail Yards site management works development.
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| GEN1 | General - minimise environmental impacts during works | An Environmental Management Plan (EMP) will be prepared and submitted for review and endorsement by the Roads and Maritime Environment Manager before starting the activity. As a minimum, the EMP will address the following:  
- Any requirements associated with statutory approvals  
- Details of how the identified safeguards outlined in the REF will be implemented  
- Issue-specific environmental management plans  
- Roles and responsibilities  
- Communication requirements  
- Induction and training requirements  
- Procedures for monitoring and evaluating environmental performance, and for corrective action  
- Reporting requirements and record-keeping  
- Procedures for emergency and incident management  
- Procedures for audit and review  
The endorsed EMP will be implemented during the proposal. | Contractor/ Environment Manager | Work preparation/ detailed design/ during the works |
<p>| GEN2 | General - notification | All businesses, residential properties and other key stakeholders (eg schools, local councils) affected by the activity will be notified at least five days before the start of the activity. | Contractor | Work preparation/ during the works |</p>
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| GEN3| General – environmental awareness           | All personnel working on-site will receive training to ensure awareness of environmental protection requirements to be implemented during the proposal. This will include up-front site induction and regular ‘toolbox’ style briefings. Site-specific training will be provided to personnel engaged in activities or areas of higher risk:  
  - Areas of non-Aboriginal heritage sensitivity  
  - Potential contamination and health and safety issues  
  - Adjoining residential areas requiring particular noise management measures  
  - Traffic management including site access points and parking arrangements.  
  The induction process for work staff involved in ground disturbance will include information to allow them to identify potential heritage items (refer to management measures AH1 and NAH3).  
  Contractors working in close proximity to the Victoria Road bridge will receive a ‘toolbox talk’ on the presence of bats, what they look like, relevant management measures (eg exclusion zone) and what to do if they are encountered or injured (refer to management measure BO5). | Contractor       | Work preparation/ during the works |
<p>| GEN4| General                                     | All environmental safeguards must be incorporated within the EMP and contract specifications for the proposal.                                                                                                                                                  | Project Manager | Work preparation             |
| GEN5| General                                     | A contractual hold point must be maintained until the EMP is reviewed by the Environmental Manager.                                                                                                                                                              | Project Manager | Work preparation             |
| GEN6| General                                     | The Project Manager must notify the Environmental Manager and Communication and Stakeholder Engagement Manager at least ten working days before work commencing to enable appropriate pre-work measures to be implemented.                                               | Project Manager | Work preparation             |</p>
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<tr>
<td>GEN7</td>
<td>General</td>
<td>A risk assessment must be carried out on the proposal in accordance with Roads and Maritime’s requirements. A review of the risk assessment must be carried out after the initial audit or inspection to evaluate whether the level of risk assigned to the works is appropriate. Any works resulting from the proposal and covered by the REF may be subject to environmental audit(s) and/or inspections(s) at any time during their duration.</td>
<td>Project Manager</td>
<td>Work preparation, after first audit</td>
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<tr>
<td>GEN8</td>
<td>General</td>
<td>If changes to the proposal occur after the REF has been determined a post-determination modification may be required. Post-determination modifications will occur in accordance with the Roads and Maritime Environmental assessment procedure: project review of environmental factors (2014). Advice will be sought from the Environmental Manager on whether the proposed modification will require further environmental assessment.</td>
<td>Project Manager</td>
<td>Work preparation/during the works</td>
</tr>
<tr>
<td>GEN9</td>
<td>Consultation</td>
<td>The proposal contractor must undertake the works in consultation with all key stakeholders and be staffed in a manner to minimise disruption, keep residents and stakeholders informed before and during works and effectively manage any complaints arising from the work.</td>
<td>Contractor</td>
<td>Work preparation/during the works</td>
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| CSGW1 | Soil and water – general    | A Soil and Water Management Plan (SWMP) will be prepared as a sub-plan of the EMP in accordance with the requirements of Section 2.1 of Roads and Maritime QA G38 Soil and Water Management. The SWMP will be prepared in consultation with soil conservation consultant and contamination expert and in general accordance with the following:  
  - The Roads and Maritime Code of Practice for Water Management (Road and Transport Authority (RTA), 1999)  
  - The Roads and Maritime Erosion and Sedimentation Procedure (RTA, 2008)  
  - The Blue Book, Volumes 1 and 2D (Landcom, 2004 and DECCW, 2008)  
  - Roads and Maritime Technical Guidelines – Temporary Stormwater Drainage for Road Construction (Roads and Maritime, 2011c)  
  - Applicable WorkSafe NSW guidelines and NSW EPA requirements.  
  The SWMP and the EMP will be provided to the NSW Department of Primary Industries - Water for information. | Contractor | Work preparation |
| CSGW2 | Soil and water - general | The measures contained within the SWMP, Asbestos Management Plan (AMP), Acid Sulfate Soils Management Plan (ASSMP) and other relevant parts of the EMP would aim to ensure that:  
  - Surface water flows leaving the Site do not pollute receiving water courses and bodies  
  - Erosion at the Site is minimised  
  - Potential contamination is managed appropriately and is not spread to cleaner parts of the Site or off-site  
  - Off-site receptors are not impacted by dust  
  - Appropriate asbestos controls are implemented at the Site to avoid potential human health impacts  
  - Direct impacts on groundwater from the proposal are avoided and existing impacts are not further exacerbated. | Contractor | Work preparation/during the works |
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| CSGW3 | Soil and water - general   | The SWMP will include details on the following:  
  - Drainage controls  
  - Erosion and sediment controls  
  - Wind erosion controls  
  - Stockpiling procedures including specific controls regarding the stockpiling of soils and ballast (including assessment of fouled material and segregation methodologies for potential reuse for both soils and ballast)  
  - Procedures for handling, testing, storing and managing contaminated soil, surface water and groundwater  
  - Methods of preventing soil and water contamination/pollution.                                                                                                                                 | Contractor      | Work preparation/ during the works |
| CSGW4 | Soil and water - general   | In addition to the measures outlined in section 6.2 of the REF, this plan will outline:  
  - The areas where ground disturbance works are likely  
  - The inspection program for erosion control structures and management measures  
  - Inclusion of post-completion management and maintenance protocols and a management schedule to ensure the integrity of the final ground surface condition is maintained  
  - Contingency actions that will be implemented in the event that erosion and sediment controls fail, in accordance with the protocols outlined in the specific management plans prepared for the Site.                                                                 | Contractor      | Work preparation/ during the works |
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| CSGW5 | Soil and water – protection of site soil and water | The SWMP will contain the following measures to protect against the potential contamination of site soil and water:  
- Measures to manage the storage of liquids, fuels and chemicals  
- Measures to ensure equipment is maintained and operated in a proper and efficient condition to reduce the likelihood of spills or leaks  
- Measures to manage vehicles leaving the Site to reduce soil on roads and production of dust  
- A site-specific emergency spill plan which will include spill management measures in accordance with the Roads and Maritime Code of Practice for Water Management (RTA, 1999) and relevant NSW EPA guidelines. | Contractor     | Work preparation/during the works |
<p>| CSGW6 | Soil and water – protection of site soil and water | A soil conservation consultant and contamination expert will advise of the preferred method of stabilisation/proposed ground surface before ground disturbance activities commence. They would confirm the preferred method of stabilisation/proposed ground surface as the ballast is removed and the residual soil/fill layer is exposed. | Contractor     | Work preparation/during the works |</p>
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<tr>
<th>No.</th>
<th>CSGW7</th>
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<td>Soil and water – contaminated materials</td>
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<td>Work preparation/during the works</td>
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<td>The SWMP will also outline measures for monitoring, handling, storing and managing contaminated material. It will include the following:</td>
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<td>1. Assessment, development and implementation of appropriate surface covers across the Site in consultation with a soil conservation consultant and contamination expert to minimise disturbance of residual contamination via erosion and runoff</td>
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<td>2. Development of task specific methodologies in consultation with a soil conservation consultant and contamination expert to appropriately stabilise the Site and reduce the potential for surface water contamination</td>
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<td>3. Procedures for identifying potentially contaminated materials</td>
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<td>4. Procedures for separating stockpiled material according to contamination indicators</td>
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<td>5. Measures for the protection of on-site worker health and safety</td>
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<td>7. Measures for sampling and testing of sediment and water contained in the sediment basins, at regular intervals and before discharge or disposal</td>
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<td>8. Measures for the management of odorous material, if encountered</td>
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| CSGW8 | Soil and water - groundwater | The SWMP will contain measures to ensure that impacts on groundwater from the proposal are avoided and existing impacts are not further exacerbated. This will include:  
- The protection of excavations where groundwater could be encountered from surface water flows  
- The progressive stabilisation of soils to reduce the amount of the residual soil/fill exposed at any one time  
- Details regarding the lining and maintenance of the sediment basins  
- Dewatering procedures in line with the Roads and Maritime Technical Guideline Environmental Management of Construction Site Dewatering (RTA, 2011)  
- Measures to protect against leaks and spills. | Contractor | Work preparation/ during the works |
| CSGW9 | Soil and water - disposal | The SWMP will include the following:  
- Procedures for the testing, disposal or reuse of materials, including soils, ballast, vegetation (including adhering soils)  
- Material to be disposed of will be classified in accordance with specifications set out in a Waste and Resource Management Plan (WMP) and either the NSW Waste Classification Guidelines, Contaminated Land Management Act 1997 (NSW) or the relevant exemption or order relating to the activity. This will include disposal of contaminated materials to appropriately licensed facilities out in accordance with NSW Waste Classification Guidelines  
- Ballast material not meeting the Recovered Railway Ballast Order 2014 will be disposed of at appropriately licensed facilities, unless it is potentially suitable for segregation and reuse after further testing  
- In the event that material is brought onto the Site, it will consist of virgin excavated natural material (VENM) or excavated natural material (ENM) that has been classified in accordance with legislative and NSW EPA requirements, including POEO Act, The Excavated Natural Material Order 2014 (NSW EPA, 2014) and The Excavated Natural Material Exemption 2014 (NSW EPA, 2014) and the Waste Classification Guidelines (NSW EPA, 2014d). | Contractor | Work preparation/ during the works |
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<tr>
<td>CSGW10</td>
<td>Acid sulfate soils</td>
<td>An Acid Sulfate Soils Management Plan (ASSMP) will be prepared in accordance with the Acid Sulfate Soils Manual (Stone et al 1998). If ASS are encountered, works in the relevant area will be carried out in accordance with the ASSMP.</td>
<td>Contractor</td>
<td>Work preparation/ during the works</td>
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</tbody>
</table>
| CSGW11a| Asbestos        | An AMP, which will include monitoring procedures, will be prepared by a suitably qualified practitioner and in accordance with the following relevant guidelines:  
- Guidelines for the Assessment, Remediation and Management of Asbestos - Contaminated Sites in Western Australia, May 2009  
- How to Safely Remove Asbestos Code of Practice (Safe Work Australia, 2016)  
- Asbestos related work (Roads and Maritime, 2013a).  

The AMP will include the following:  
- Measures for managing soils or ballast that may also contain contamination to ensure that both the asbestos and contamination are managed effectively  
- A summary of site conditions including consideration of residual asbestos which may be present at the Site, and how it will be managed  
- A risk assessment to help identify appropriate measures to protect on-site personnel and the local community  
- Communication strategy, where required, for notifying the community of asbestos management procedures  
- A list of the potential receptors including site workers, the local community, site visitors, owners and occupiers, and service workers  
- The primary exposure concerns including human activities with the potential to generate the release of airborne asbestos fibres and/or natural forces such as wind and water erosion | Contractor     | Work preparation/ during the works |
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|     |        | - A plan of investigation for materials to determine the potential for the release of asbestos fibres  
     |        | - A plan of management for each activity or group of activities that, according to the risk assessment, requires controls to complete the works. This plan will include a method for each activity explaining how these controls will be implemented  
     |        | - Appropriate handling, transporting, storing and disposal measures for asbestos, including for soils, fragments and ballast  
     |        | - Where required, asbestos management on-site work will be carried out or overseen (as appropriate) by appropriately licenced and qualified contractors  
     |        | - The requirement to complete asbestos fibre air monitoring during activities that could liberate asbestos fibres  
<pre><code> |        | - An audit and reporting process to check that controls are in place and being implemented. | Contractor | After completion of the works |
</code></pre>
<p>| CSGW11b | Asbestos – ‘finished site’ | The AMP will be revised by a suitably qualified practitioner after completion of the works to guide the management of asbestos during the ‘finished site’. Relevant measures will be developed in accordance with advice from a soil conservation consultant and contamination expert. Where asbestos contaminated soils have been covered, the AMP will outline the monitoring and management provisions required to ensure that the integrity of this cover is maintained. | Contractor | Work preparation/during the works |
| CSGW12 | Hazardous materials | A hazardous material (HazMat) survey will be conducted prior to works commencing and during the early stages of the proposal before ground disturbance works start. This survey will be completed by a hygienist and contamination expert and will include the identification of ACM. | Contractor | Work preparation/during the works |
| CSGW13 | Soil, water and hazardous materials | During all stages of the proposal (including the ground disturbance and site stabilisation activities), regular inspections will be completed by the soil conservation consultant and contamination expert, to ensure that the erosion and sediment controls and site stabilisation techniques were working correctly and remained effective. | Contractor | Work preparation/during the works/after completion of the works |</p>
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<td>CSGW14</td>
<td>Material transport</td>
<td>Bunded wheel and undercarriage washing facilities will be established at exit points for the Site as necessary. Where required, vehicles will have loose material removed from their exterior and their wheels washed clean of soils or sediments before leaving the Site. Details of how waste water from this activity would be managed will be outlined in the SWMP. An adequate area of hardstand would be maintained between the wheel wash facility and the site exit where possible. Vehicles coming to and leaving the Site with full loads will have their loads covered to prevent material being blown out of them.</td>
<td>Contractor</td>
<td>Work preparation/during the works</td>
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<tr>
<td>CSGW15</td>
<td>On-site worker protection</td>
<td>A site-specific Health and Safety Management Plan will be developed for the works in accordance with the appropriate guidelines and legislation. The plan would include handling protocols for minimising human contact with contaminated soils and groundwater.</td>
<td>Contractor</td>
<td>Work preparation/during the works</td>
</tr>
<tr>
<td>CSGW16</td>
<td>Training</td>
<td>Staff will be inducted and provided with appropriate training before working with potentially contaminated materials to prevent unnecessary disturbance (e.g. dust generation, asbestos fibre liberation, contaminant mobility).</td>
<td>Contractor</td>
<td>Work preparation/during the works</td>
</tr>
<tr>
<td>CSGW17</td>
<td>Ongoing maintenance</td>
<td>Ongoing inspection and maintenance will be completed at the Site after the completion of the proposal to ensure the integrity of the surface cover is maintained. These inspections will be completed by a soil conservation consultant and contamination expert.</td>
<td>Contractor</td>
<td>Finished site: After completion of the works</td>
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| CSGW18 | Additional Investigations          | Additional stockpile and soil testing will be completed as the works progress. This testing will include:  
- Additional testing of existing waste stockpiles where necessary  
- Further contamination, acid sulfate soil and groundwater investigations to confirm the number, design and location of sediment basins and drainage channels  
- Further contamination investigations to characterise the soil and fill material beneath the ballast (including leachability characteristics) to help confirm the appropriate stabilisation method in different parts of the Site  
- Additional in-situ testing of the ballast to evaluate whether it is suitable for reuse or should be disposed off-site.                                                                                     | Contractor     | Work preparation/ during the works |
| SWDF1  | Soil and water – erosion and sediment | The SWMP will include a range of temporary stabilisation measures to manage the risk of erosion and mobilisation of contamination. In addition the SWMP will include measures such as:  
- Local reshaping of the land to direct runoff towards drainage channels and sediment basins  
- Stabilisation of exposed soils through suitable surface covering, in accordance with the advice of a soil conservation consultant and contamination expert, followed by progressive stabilisation of the Site as early as possible  
- The location and design of erosion and sediment control measures to minimise velocities and settle out sediments  
- Process for monitoring and preparing for wet weather including ceasing works and inspecting sediment controls before and during periods of heavy rainfall  
- Inspection and maintenance of the sediment and erosion controls will take place at regular intervals to ensure the system is working correctly  
- Inclusion of post-completion management and maintenance protocols and a management schedule to ensure the integrity of the final ground surface condition is maintained  
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| SWDF2| Soil and water - drainage     | The temporary and permanent sediment basins will be:  
- Located and sized using design criteria consistent with the Blue Book 2D (DECC, 2008)  
- Lined to ensure that high groundwater levels do not reduce the capacity of the basins to store surface water flows  
- Emptied (dewatered) of standing water if heavy rain is expected to ensure that they have the capacity to manage surface water flows.  
Where possible, the sediment basins will not be located in areas of high contamination and/or areas where acid sulfate soils may be present close to the residual ground surface.  
If possible, excavation that may be required for drainage channels and sediment basins will avoid intercepting acid sulfate soils.  
The design of drainage channels and sediment basins will also consider health and safety issues.                                                                                           | Contractor     | Work preparation/during the works/‘finished site’ after completion of the works |
| SWDF3| Soil and water - drainage     | The SWMP will also include drainage controls for the Site. This will include:  
- Inspection and maintenance of the drainage system will take place at regular intervals to ensure the system is working correctly  
- The direction of runoff and provision of drainage measures during each stage of construction.                                                                                                                     | Contractor     | Work preparation/during the works/‘finished site’ after completion of the works |
<p>| SWDF4| Soil and water - drainage     | In the event of a sediment basin overtopping during a high rainfall event, escaped surface water will be directed overland to a low point of the Site where it will be contained and appropriately managed.                                                                                                                                                                                                                     | Contractor     | During the works/‘finished site’ after completion of the works            |</p>
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<td>SWDF5</td>
<td>Soil and water – erosion and sediment</td>
<td>A registered soil conservation consultant and a contamination expert will be engaged to provide advice in relation to methods of stabilisation of exposed areas of the Site. These specialists will be retained for the life of the proposal to provide advice as required.</td>
<td>Roads and Maritime/ Contractor</td>
<td>Work preparation/ detailed design/during the works</td>
</tr>
<tr>
<td>SWDF6</td>
<td>Surface water and sediment quality</td>
<td>Stormwater collected in the sediment basins will be sampled and tested before being appropriately discharged or removed from the Site. Appropriate discharge criteria would be established as part of the future design development and would be documented within the SWMP. Water from these basins will not be discharged off-site if it does not meet the appropriate criteria. Sediments settled in the basins and removed during maintenance would be tested and characterised before being appropriately disposed.</td>
<td>Contractor</td>
<td>During the works/ ‘finished site’ after completion of the works</td>
</tr>
<tr>
<td>SWDF7</td>
<td>Drainage – damage to existing drainage</td>
<td>The location of existing drainage infrastructure at and under the Site will be identified and confirmed with appropriate protection provided.</td>
<td>Contractor</td>
<td>Work preparation/ during the works</td>
</tr>
<tr>
<td>SWDF8</td>
<td>Drainage – existing drainage</td>
<td>The existing drainage infrastructure will be protected from surface water flows from the Site to ensure that these flows are managed through the temporary and permanent erosion and sediment controls.</td>
<td>Contractor</td>
<td>Work preparation/ during the works/ ‘finished site’ after completion of the works</td>
</tr>
</tbody>
</table>
| SWDF9 | Flooding – construction risk of impact on the floodplain function during a flood event | The contractor will monitor weather conditions to identify potential flood conditions and will manage potential flooding impacts in accordance with the EMP. Examples of appropriate controls may include the following:  
- Temporary drains on-site  
- Storing equipment and other potential obstructions to flood water on higher ground wherever possible  
- Local reshaping of the land to direct runoff towards sediment basins and maintain low points across the Site. | Contractor | During the works |
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<tbody>
<tr>
<td>SWDF10</td>
<td>Flood risk</td>
<td>A Flood Evacuation Plan (FEP) will be developed and implemented for the proposal.</td>
<td>Contractor</td>
<td>Work preparation/‘finished site’ after completion of the works</td>
</tr>
</tbody>
</table>
| RUWM1 | Resource use and waste management - general | A Waste and Resource Management Plan (WMP) will be prepared and carried out as part of the EMP. The WMP will include:  
- Measures to avoid and minimise waste associated with the proposal  
- Classification of wastes and management options (reuse, recycle, stockpile, disposal)  
- Statutory approvals required for managing both on- and off-site waste, or application of any relevant resource recovery exemptions  
- Procedures for storage, transport and disposal of waste materials  
- Plans for monitoring, record keeping and reporting  
- Measures to manage the removal of vegetation waste, which will be carried out in accordance with Roads and Maritime Specification G40 (Clearing and Grubbing). | Contractor     | Detailed design/Works preparation/during the works |

The WMP will be prepared, taking into account the Environmental Procedure - Management of Wastes on Roads and Maritime Services Land (Roads and Maritime, 2014) and relevant Roads and Maritime waste fact sheets.
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</table>
| RUWM2 | Resource efficiency and waste minimisation | The WMP will include cleaner production measures to maximise resource efficiency and minimise waste, including:  
• Staging demolition of buildings so that components can be salvaged for reuse and recycling  
• Adopting demolition techniques to minimise waste volumes generated  
• Application of efficient demolition processes to ensure resourcefulness in the use of energy, water, and natural resources  
• Inclusion of resource efficiency and waste minimisation procedures in contracts to encourage demolition contractors to consider environmental management objectives  
• Providing separate waste containers/skips to ensure waste material segregation and maximise the opportunities for reuse and recycling  
• Safely storing and disposing of residual demolition waste, ensuring the least amount of harm to the surrounding environment  
• Minimising site disturbance to avoid unnecessary excavation. | Contractor       | Works preparation/during the works                                                                                           |
<p>| RUWM3 | Resource procurement         | The contractor will be required to investigate ways to reuse materials on-site, or source material from other Roads and Maritime projects where possible.                                                                                                                  | Contractor       | Works preparation/during the works                                                                                           |
| RUWM4 | Resource procurement         | Procurement will aim to use materials with a recycled content and low carbon footprint where they are cost and performance effective.                                                                                                                                                                                                 | Contractor       | Works preparation/during the works                                                                                           |
| RUWM5 | Waste management – contaminated/hazardous material | Handling, storage and disposal of contaminated waste, including asbestos will be carried out in accordance with the SWMP, WMP and the AMP (where applicable).                                                                                                                                                                               | Contractor       | During the works                                                              |
| RUWM6 | Waste classification          | All waste will be classified in accordance with the Waste Classification Guidelines (NSW EPA, 2014d).                                                                                                                                                                                                                   | Contractor       | During the works                                                              |</p>
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<tbody>
<tr>
<td>RUWM7</td>
<td>Waste management practices</td>
<td>Waste stockpiled at the Site will would be located with consideration to environmental factors such as site slope, drainage, surrounding native vegetation, and the location of waterways, drainage channels and sediment basins.</td>
<td>Contractor</td>
<td>During the works</td>
</tr>
<tr>
<td>RUWM8</td>
<td>Waste management – contaminated/hazardous material</td>
<td>Before testing and classification contaminated or potentially contaminated waste will would be separated from potentially clean waste.</td>
<td>Contractor</td>
<td>During the works</td>
</tr>
<tr>
<td>RUWM9</td>
<td>Waste management – disposal</td>
<td>A licensed waste management contractor will would be used to remove waste from the Site for reuse, recycling or disposal. Asbestos-contaminated waste will not be reused or recycled and will be removed by a licensed asbestos removalist and disposed of to a facility licensed to accept the waste.</td>
<td>Contractor</td>
<td>During the works</td>
</tr>
<tr>
<td>RUWM10</td>
<td>Waste management - reuse and disposal</td>
<td>Materials to be reused will would be analysed and assessed in accordance with the National Environment Protection (Assessment of Site Contamination) Measure 1999, amended 2013 (ASC NEPM) and, in regards to ballast, the Recovered Railway Ballast Order 2014, to ensure material is not contaminated and reuse is appropriate. Material not suitable for reuse or recycling will would be disposed of to an appropriate facility.</td>
<td>Contractor</td>
<td>During the works</td>
</tr>
<tr>
<td>RUWM11</td>
<td>Waste monitoring</td>
<td>A waste register will would be prepared, used and maintained by the contractor to track all wastes generated from the proposal. All records for the disposal of waste will would be retained and kept readily accessible for inspection by relevant regulatory authorities.</td>
<td>Contractor</td>
<td>Works preparation/ during the works</td>
</tr>
<tr>
<td>RUWM12</td>
<td>Waste monitoring</td>
<td>On-site waste monitoring and auditing procedures will would be developed for the proposal, identifying each waste stream, volumes produced, and waste management practices.</td>
<td>Contractor</td>
<td>Works preparation/ during the works</td>
</tr>
<tr>
<td>RUWM13</td>
<td>Waste management practices</td>
<td>New waste streams will would be addressed as they arise and assessed to determine the most suitable management measures to use when handling, storing, transporting and disposing of the waste.</td>
<td>Contractor</td>
<td>During the works</td>
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<tr>
<td>NAH1</td>
<td>Non-Aboriginal heritage – general</td>
<td>A Heritage Management Plan (HMP) will be prepared and implemented as part of the EMP. It will provide specific guidance on measures and controls to be carried out to avoid and mitigate potential impacts on non-Aboriginal heritage.</td>
<td>Contractor</td>
<td>Detailed design/Work preparation/during the works</td>
</tr>
<tr>
<td>NAH2</td>
<td>Non-Aboriginal heritage – unexpected finds</td>
<td>After vegetation clearance, any previously unsurveyed sections of the Site will be examined by an archaeologist to identify the presence of previously unidentified potential heritage items. Any additional items identified will be managed in accordance with the Roads and Maritime Unexpected Heritage Items Procedure (2015d).</td>
<td>Contractor</td>
<td>During the works</td>
</tr>
<tr>
<td>NAH3</td>
<td>Non-Aboriginal heritage – unexpected finds</td>
<td>The Unexpected Heritage Items Procedure (Roads and Maritime, 2015d) will be followed in the event that any unexpected heritage items, archaeological remains or potential relics of non-Aboriginal origin, including the extension of the Lilyfield Road stormwater canal, are encountered. Work will only restart once the requirements of that procedure have been satisfied. Should elements of listed heritage items be identified during the works (eg the Lilyfield Road stormwater canal), they will be retained in situ. The induction process for work staff involved in ground disturbance will include information to allow them to identify potential heritage items.</td>
<td>Contractor</td>
<td>Work preparation/during the works</td>
</tr>
<tr>
<td>NAH4</td>
<td>Non-Aboriginal heritage – archaeological potential</td>
<td>Excavations beneath the ballast and into the underlying fill/soil will not be carried out in areas of low or moderate archaeological potential or above the continuation of the Lilyfield Road stormwater canal or other services.</td>
<td>Contractor</td>
<td>Work preparation/during the works</td>
</tr>
<tr>
<td>NAH5</td>
<td>Non-Aboriginal heritage – interpretation</td>
<td>Where practicable, the lighting tower and overhead rail gantries will be removed and stored off-site. This would potentially enable provide an opportunity for these elements to be incorporated as urban design features which interpret the Rozelle Rail Yards industrial history in a future development of the Site.</td>
<td>Contractor</td>
<td>Work preparation/during the works</td>
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<tr>
<td>NAH6</td>
<td>Non-Aboriginal heritage – Port Authority building</td>
<td>Removal of the Port Authority building will would be carried out only after full archival recording in accordance with NSW guidelines <em>How to Prepare Archival Records of Heritage Items</em> has been carried out (NSW Heritage Office, 1998).</td>
<td>Contractor</td>
<td>Work preparation/ during the works</td>
</tr>
<tr>
<td>NAH7</td>
<td>Non-Aboriginal heritage – southern penstock</td>
<td>A three metre exclusion zone will would be installed around the southern penstock to protect it from accidental damage during the works. No works other than vegetation management will would take place in this exclusion area.</td>
<td>Contractor</td>
<td>Work preparation/ during the works</td>
</tr>
<tr>
<td>NAH8</td>
<td>Non-Aboriginal heritage – Victoria Road bridge</td>
<td>Any works beneath the Victoria Road bridge, including vehicle and equipment movements, will would be conducted with care to avoid potential damage to the bridge.</td>
<td>Contractor</td>
<td>Work preparation/ during the works</td>
</tr>
<tr>
<td>NAH9</td>
<td>Non-Aboriginal heritage – sandstone cutting</td>
<td>Vegetation clearing works on the face of the sandstone cutting will would be carried out being careful to avoid any impact on the surface of the cutting (eg with hand tools if possible). Vegetation will would not be cleared from the top of the sandstone cutting.</td>
<td>Contractor</td>
<td>Work preparation/ during the works</td>
</tr>
<tr>
<td>NAH10</td>
<td>Non-Aboriginal heritage – lighting tower</td>
<td>Removal of the lighting tower will would be carried out only after full archival recording in accordance with NSW guidelines <em>How to Prepare Archival Records of Heritage Items</em> (NSW Heritage Office, 1998).</td>
<td>Contractor</td>
<td>Work preparation/ during the works</td>
</tr>
<tr>
<td>AH1</td>
<td>Aboriginal heritage – general</td>
<td>The Unexpected Heritage Items Procedure (Roads and Maritime 2015d) will would be followed in the event that unknown or potential Aboriginal object(s), including skeletal remains, are found during site work. Work would only restart once the requirements of that procedure have been satisfied. The induction process for work staff involved in ground disturbance will include information to allow them to identify potential heritage items.</td>
<td>Contractor</td>
<td>Work preparation/ during the works</td>
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</table>
| BO1 | Biodiversity | A Flora and Fauna Management Plan (FFMP) will be prepared in accordance with Roads and Maritime’s *Biodiversity Guidelines: Protecting and Managing Biodiversity on RTA Projects* (RTA, 2011) and implemented as part of the EMP. It will include the following:  
  - Plans showing areas to be cleared and areas to be protected, including exclusion zones  
  - Requirements set out in the *Landscape Guideline* (RTA, 2008)  
  - Pre-clearing survey requirements  
  - Procedures for unexpected threatened species finds and fauna handling  
  - Protocols to manage weeds (see below) and pathogens  
  - Measures to manage the removal of vegetation, which will be carried out in accordance with Roads and Maritime Specification G40 (Clearing and Grubbing)  
  - Measures to manage noxious weeds including the identification of noxious weeds, protocols for appropriate disposal and measures to prevent the spread of noxious weeds outside of the Site  
  - Where possible having regard to the proposed work program, carry out the clearing of vegetation for the site management works during the autumn and winter months, primarily March to early August. This timing allows the removal of vegetation to occur outside the breeding times for the majority of species. Spring and early summer months are preferred breeding times for the majority of native species listed in the Inner West Council’s submission  
  - Use a staged approach for the removal of vegetation, with a break between the clearing of each stage. Use a cautious and slow approach to the clearing of vegetation and create a disturbance before the vegetation’s removal  
  - Ensure the clearing of the Site, in relation to weed infested areas (including noxious weeds) is carried out in accordance with the Roads and Maritime biodiversity guidelines (Roads and Traffic Authority, 2011) and relevant legislation  
  - Contractors involved in the clearing of vegetation are to have a fauna handler and local wildlife carer available during clearing. Furthermore, the clearing of vegetation and risk to native species will be included as part of the site induction. | Contractor | Work preparation/during the works |
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<tbody>
<tr>
<td>BO2</td>
<td>Fauna management</td>
<td>If night work is required, a construction exclusion zone of 20 metres around the Victoria Road bridge will be established. This exclusion zone will be established 30 minutes before sunset each day. No works will take place within this zone until 30 minutes after sunrise the next day.</td>
<td>Contractor</td>
<td>Work preparation/during the works</td>
</tr>
<tr>
<td>BO3</td>
<td>Fauna management</td>
<td>If night work is required, any stationary lighting that may be used beyond the 20 metre exclusion zone will be hooded and will face away from the bridge.</td>
<td>Contractor</td>
<td>Work preparation/during the works</td>
</tr>
<tr>
<td>BO4</td>
<td>Fauna management</td>
<td>If practical, timing of works in close proximity to bridge will be carried out in summer (November to March), as the Eastern Bentwing Bats are likely to return to breeding sites (limestone caves) during this time and are less likely to be present.</td>
<td>Contractor</td>
<td>Work preparation/during the works</td>
</tr>
<tr>
<td>BO5</td>
<td>Fauna management</td>
<td>Contractors working in close proximity to the Victoria Road bridge will receive a ‘toolbox talk’ on the presence of bats, what they look like, relevant management measures (eg exclusion zone) and what to do if they are encountered or injured.</td>
<td>Contractor</td>
<td>Work preparation/during the works</td>
</tr>
<tr>
<td>BO6</td>
<td>Fauna management</td>
<td>The unexpected threatened species finds procedure (mentioned above) will also outline specific actions for any microbats observed.</td>
<td>Contractor</td>
<td>Work preparation/during the works</td>
</tr>
<tr>
<td>BO7</td>
<td>Off-site biodiversity</td>
<td>The impact footprint will be clearly defined, with suitable fencing to prevent direct impacts to off-site trees, including to the root zone and overhanging branches, with the exception of minor trimming of overhanging branches. This will include trees directly next to the Site, excluding the vegetation to be removed from the City West Link road corridor. Fencing will be consistent with the Australian Standards for protection of trees on development sites (AS 4970-2009).</td>
<td>Contractor</td>
<td>Work preparation/during the works</td>
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<tr>
<td>BO8</td>
<td>Off-site aquatic biodiversity</td>
<td>A SWMP will be implemented during the proposed work to avoid significant adverse impacts on nearby aquatic ecosystems.</td>
<td>Contractor</td>
<td>Work preparation/ during the works/ ‘finished site’ after completion of the works</td>
</tr>
<tr>
<td>BO9</td>
<td>Feral animals</td>
<td>The FFMP will include measures for the management of feral animals such as carrying out targeted feral animal control prior to and post vegetation removal. Feral animal control will be carried out in line with the relevant ‘model codes of practice’ and ‘standard operating procedures’ for the humane capture, handling and destruction of feral animals in Australia. Roads and Maritime will carry out feral animal management in consultation with the Inner West Council and other stakeholders (e.g., Transport for NSW who owns the adjacent rail corridor) to enable a coordinated approach and ensure control efforts are as effective as possible.</td>
<td>Contractor / Roads and Maritime</td>
<td>Work preparation/ during the works</td>
</tr>
<tr>
<td>TT1</td>
<td>City West Link (west) access</td>
<td>Before work starts at the Site, a decision will be made about which of the City West Link access options will be carried out in consultation with the Transport Management Centre and Roads and Maritime. If Option 1 is chosen, vegetation will be removed to ensure appropriate sight lines. If Option 2 is chosen, an appropriate design will be developed in accordance with Australian Standard 2890.2 and Roads and Maritime Standards.</td>
<td>Contractor</td>
<td>Detailed design/ Work preparation</td>
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| TT2 | Traffic and transport | A TMP and TCP will be prepared and implemented as part of the EMP. The TMP and TCP will be prepared in accordance with the Roads and Maritime Traffic Control at Work Sites Manual (RTA, 2010) and QA Specification G10 Traffic Management (Roads and Maritime, 2015b). The TMP and TCP will include the following:  
  - Confirmation of haulage routes and internal access tracks  
  - Site-specific traffic control measures (including signage) to manage and regulate traffic movement  
  - Requirements and methods to keep the local community and Inner West Council informed of impacts on the local road network  
  - Access to the Site including access and egress locations for heavy and light vehicles and measures to prevent construction vehicles queuing on public roads  
  - A response plan for potential construction traffic incidents  
  - Consideration of other developments under construction (e.g., the CSELR project) to minimise traffic conflict and congestion that may occur due to the cumulative increase in construction vehicle traffic  
  - Monitoring, review and amendment mechanisms. | Contractor       | Detailed design, Work preparation / during the works                                                                                                                                   |
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| TT3 | Traffic and transport        | In addition to the above the TMP and TCP will also include:  
- Hours of permitted vehicle activity and an out of hours work procedure if required  
- A commitment that Roads and Maritime will not access the Site via the entry at James Craig Road during the times of 7.00 am to 10.00 am on ‘Ship Days’ (ie days when a cruise ship is in port)  
- Designated staff and contractor parking locations  
- Duration of work  
- Permitted vehicle types  
- Designated areas within the Site for truck turning movements, parking, loading and unloading to allow heavy vehicles to enter and leave the Site in a forward direction  
- Sequence for implementing traffic management measures  
- Procedures and/or principles for vehicle speed limits and the safe operation of vehicles within the Site  
- Potential for a dedicated person to help with exiting trucks at the City West Link (west) access  
- A requirement that traffic marshals are used to control the movement of trucks from Roads and Maritime and/or SMC projects and to minimise queueing at the James Craig Road / City West Link intersection. | Contractor      | Detailed design/Work preparation/during the works |
<p>| TT4 | Oversize trucks              | The use of oversize trucks is considered unlikely for this proposal. In the event that this changes and oversize trucks are required, the TMP and TCP will be updated and work will be carried out in accordance with the Roads and Maritime guidelines for oversize movements. | Contractor      | Work preparation/during the works |
| TT5 | Coordination of works vehicles | Coordination of the proposal vehicle movements arriving to and departing from the Site will ensure that disruptions to existing traffic on the surrounding road network are minimised.                                                                 | Contractor      | Work preparation/during the works |</p>
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<tr>
<td>TT6</td>
<td>Traffic – Port Authority access</td>
<td>Arrangements for traffic entering Port Authority controlled roads will need to be discussed and agreed with the Port Authority. Considerations will include access arrangements in the event of special events at the temporary Sydney Exhibition Centre at Glebe Island, and any line-marking changes required near the access point into the Site.</td>
</tr>
<tr>
<td>TT7</td>
<td>Traffic and transport – out of hours work</td>
<td>In the unlikely event that work needed to be conducted outside standard construction hours, the TMP will outline an out of hours works procedure, which will include communication and notification to local residents, businesses and sensitive receivers of the out of hours works and a complaints line.</td>
</tr>
<tr>
<td>TT8</td>
<td>Traffic and transport – Gordon Street access</td>
<td>Appropriate measures to improve and maintain sightlines and cyclist/pedestrian safety at the Lilyfield Road/Gordon Street intersection will be discussed and agreed with Inner West Council.</td>
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Responsibility: Contractor
Timing: Work preparation/during the works
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</table>
| NV1 | Noise and vibration - general  | A Noise and Vibration Management Plan (NVMP) would be prepared and implemented as part of the EMP. The NVMP would generally follow the approach in the Interim Construction Noise Guideline (ICNG) (DECC, 2009) and will identify:  
  - All potential noise and vibration generating activities  
  - Possible and reasonable mitigation measures to be implemented, taking into account Beyond the Pavement: urban design policy, process and principles (Roads and Maritime, 2014)  
  - A monitoring program to assess performance against relevant noise and vibration criteria  
  - Arrangements for consultation with affected neighbours and sensitive receivers, including notification and complaint handling procedures  
  - Contingency measures in the event of non-compliance with noise and vibration criteria  
  - A section that outlines procedures for ‘out of hours’ work. If work is required outside standard construction hours, it will be carried out in accordance with the ICNG (DECC, 2009) and the Roads and Maritime Construction Noise and Vibration Guideline (2016).  

The NVMP would be regularly updated to account for any changes in noise and vibration management strategies.                                                                 | Contractor      | Works preparation/during the works                                   |
| NV2 | Noise and vibration - notification | All sensitive receivers (eg schools, local residents) likely to be affected will be notified before the start of any work that may have an adverse noise or vibration impact. The notification will provide details of:  
  - The work to be carried out  
  - The proposal work hours  
  - Contact information for project management staff  
  - Complaint and incident reporting  
  - How to obtain further information.                                                                 | Contractor      | Works preparation             |
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| NV3 | Noise and vibration - training | Induction and training will be provided to staff and sub-contractors outlining their responsibilities for noise management on-site. The inductions will highlight the need to limit noise (including from shouting, vehicle stereos, radios, dropping of materials, throwing of metal items and slamming of doors). The induction will include the following:  
  - All project specific and relevant standard noise and vibration mitigation measures  
  - Relevant licence and approval conditions  
  - Permissible hours of work  
  - Any limitations on high noise generating activities  
  - The location of nearest sensitive receivers  
  - Construction employee parking areas  
  - Designated loading/unloading areas and procedures  
  - Site opening/closing times (including deliveries)  
  - Environmental incident procedures. | Contractor | Works preparation/during the works |
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| NV4 | Noise - equipment       | In regards to plant and equipment the following will be carried out:  
- Quieter work methods and equipment will be adopted including the use of mufflers and silencers where practicable  
- The noise levels of plant and equipment items will be considered in rental decisions and must be compliant with the criteria in Table 2 of the Construction Noise and Vibration Mitigation – Construction Noise and Vibration Guideline (Roads and Maritime, 2016a)  
- All plant and equipment will be properly maintained and operated according to manufacturers' recommendations in such a manner as to avoid causing excessive noise  
- Noise-intensive equipment will be turned off when not in use  
- Only necessary equipment, of an appropriate size and power, will be on-site  
- Stationary noise sources, such as the mulcher/chipper that may be used periodically, will be located as far as practicable from potential receivers where practical and may be shielded or enclosed where feasible and reasonable while ensuring that the occupational health and safety of workers is maintained. | Contractor       | During the works  |
| NV5 | Noise – location of work areas | Work compounds, parking areas, equipment and material stockpiles will be located as far as practicable from noise-sensitive receivers.                                                                                                                        | Contractor       | Works preparation/during the works |
| NV6 | Noise - vehicles        | In regards to vehicles the following will be carried out:  
- The use of engine compression brakes near residential areas will be limited  
- Non-tonal reversing alarms will be fitted on construction vehicles  
- Opportunities to design the internal access tracks to allow for the forward movement of trucks and other plant will be prioritised.                                                                 | Contractor       | Works preparation/during the works |
<p>| NV7 | Noise – location of plant/equipment | Use of the mulcher/chipper will be limited to the southern area of the Site (along the City West Link boundary). This may need movement of vegetation and other material from the clearing area to the mulcher/chipper. | Contractor       | During the works   |</p>
<table>
<thead>
<tr>
<th>No.</th>
<th>Impact</th>
<th>Environmental safeguards and management measures</th>
<th>Responsibility</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>NV8</td>
<td>Noise – timing of works</td>
<td>Specific timing of plant items in each work area will be considered during preparation of the NVMP when the equipment requirements are finalised.</td>
<td>Contractor</td>
<td>Works preparation</td>
</tr>
<tr>
<td>NV9</td>
<td>Demolition vibration</td>
<td>Building condition surveys of heritage structures within 50 metres of vibration intensive equipment will be completed both before and after the work to identify existing damage condition and any damage due to the work.</td>
<td>Contractor</td>
<td>Works preparation/during the works</td>
</tr>
<tr>
<td>NV10</td>
<td>Demolition vibration</td>
<td>The heritage structures will be inspected during preparation of the NVMP to determine the applicable safe vibration level.</td>
<td>Contractor</td>
<td>Works preparation</td>
</tr>
<tr>
<td>NV11</td>
<td>Demolition vibration</td>
<td>If vibration intensive work is required within the safe working distances, vibration monitoring or attended vibration trials will be carried out at the outset to ensure that levels are within relevant criterion.</td>
<td>Contractor</td>
<td>During the works</td>
</tr>
<tr>
<td></td>
<td></td>
<td>At locations where the predicted and/or measured vibration levels are greater than the nominated screening levels, a more detailed analysis of the building structure, vibration source, dominant frequencies and dynamic characteristics of the structure will be required to determine the applicable safe vibration level.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NV12</td>
<td>Noise – highly noise-affected receivers</td>
<td>The following additional management measures will be carried out for the predicted highly noise-affected receivers in accordance with the Construction Noise and Vibration Mitigation — Construction Noise and Vibration Guideline (Roads and Maritime, 2016a):</td>
<td>Contractor</td>
<td>Works preparation/during the works</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Notifying the community through letterbox drops, doorknocking or phone calls</td>
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<td></td>
<td></td>
<td>- Verifying demolition noise levels through noise monitoring</td>
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<td></td>
<td></td>
<td>- Offering respite or negotiating respite periods. The approach to respite periods will be confirmed during preparation of the NVMP and in consultation with the affected community.</td>
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<td>No.</td>
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<td>Environmental safeguards and management measures</td>
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</table>
| AQ1 | Air quality – general          | An Air Quality Management Plan (AQMP) will be prepared and implemented as part of the EMP. The AQMP will include the following:  
* Potential sources of air pollution  
* Air quality management objectives consistent with any relevant published NSW EPA and/or OEH guidelines  
* Mitigation and suppression measures required  
* Methods to manage work during strong winds or other adverse weather conditions  
* A progressive strategy to stabilise exposed surfaces for reduced erosion risk and dust generation (cross referenced to the SWMP as required). | Contractor      | Detailed design/Works preparation / during the works |
<p>| AQ2 | Air quality – general          | The AQMP will include contingency measures in case complaints about air quality are received.                                                                                                                                                               | Contractor      | Works preparation / during the works |
| AQ3 | Air quality – general          | Work activities will be reviewed if the air quality management measures are ineffective in minimising emissions and dust.                                                                                                                              | Contractor      | During the works                |
| AQ4 | Air quality – hazardous material | Biological debris or other hazardous materials such as asbestos will be bagged and removed, or wet down before demolition.                                                                                                                             | Contractor      | During the works                |</p>
<table>
<thead>
<tr>
<th>No.</th>
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</table>
| AQ5 | Air quality – dust emissions | The AQMP will include measures to manage dust emissions. These will include the following:  
  • Loads that may produce dust or odour will be covered  
  • Water will be sprayed on unsealed access roads and open areas during conditions conducive to dust generation  
  • A wheel washing system will be established for vehicles leaving the Site  
  • An adequate area of hardstand will be maintained between the wheel wash facility and the site exit, wherever site size and layout permits  
  • Internal access tracks will be inspected and necessary repairs to the surface made as soon as reasonably practicable  
  • On-site vehicle speed limits will be established and enforced to prevent dust emissions  
  • Vehicles and activities will be confined to the designated work areas to prevent inadvertent encroachment into exposed areas  
  • Water-assisted dust sweepers will be used on internal access tracks and local roads where necessary to remove material tracked out of the Site  
  • Before and during grubbing and ballast removal, soils/ballast will be wet down to limit the movement of dust, asbestos and other materials off-site  
  • Exposed areas will be stabilised as soon as reasonable and possible  
  • Stockpiled material will be appropriately shaped to reduce wind erosion and covered as appropriate  
  • During extreme weather events where dust generation cannot be effectively minimised (such as high winds), dust generating works will cease until adequate controls can be implemented or until adverse weather conditions subside  
  • Demolition of buildings and structures will be carried out using techniques and practices that minimise dust generation. This may include soft stripping inside buildings before demolition. | Contractor      | Works preparation/ during the works |
<table>
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<th>Environmental safeguards and management measures</th>
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</table>
| AQ6 | Air quality – asbestos | An Asbestos Management Plan (AMP) will be prepared by a suitably-qualified practitioner. The AMP will include the following:  
- Investigating material before demolition and stockpile removal to determine the potential for the release of asbestos fibres  
- Completing asbestos fibre air monitoring during activities which could liberate asbestos fibres. | Contractor | Works preparation / during the works |
| AQ7 | Air quality – exhaust emissions | Measures to manage exhaust emissions will include the following:  
- Machinery will be turned off while not in use  
- Equipment (including all internal combustion engines) will be properly maintained and running efficiently to ensure exhaust emissions are minimised, where practicable  
- All emission controls used on vehicle and equipment will comply with standards listed in Schedule 4 of the *Protection of the Environment Operations (Clean Air) Regulation 2010*. | Contractor | Works preparation/ during the works |
<p>| AQ8 | Air quality – odour emissions | In the event that odour emissions are generated, work will cease until the source and nature of the odour can be determined and an appropriate course of action carried out. This may include further assessment to determine potential impacts on the nearest sensitive receptors. | Contractor | During the works |
| AQ9 | Air quality – ash | All wastes are to be removed off-site and disposed of to an appropriately-licensed facility in accordance with the site Waste and Resource Management Plan. No waste will be burned on-site or buried. | Contractor | During the works |
| LCVA1 | Visual amenity – views of the Site | Exposed areas will be progressively stabilised as detailed in sections 6.1 and 6.2 of the REF. | Contractor | Work preparation/ during the works |</p>
<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>LCVA2</td>
<td>Visual amenity – views of the Site</td>
<td>The Site will be left in a tidy state at the end of each day of work. All machinery and equipment, ancillary facilities, and excess material (aside from temporary site offices and sediment basins), will be removed from the Site once the proposal is complete. A site inspection will be carried out to ensure disturbed areas have been stabilised and the Site has been left in a tidy state.</td>
<td>Contractor</td>
<td>During the works</td>
</tr>
<tr>
<td>LCVA3</td>
<td>Visual amenity – views of the Site</td>
<td>Before work commences, additional screening options (eg hoarding or shade cloth) will be investigated in order to restrict views into the Site from surrounding areas.</td>
<td>Contractor</td>
<td>Work preparation</td>
</tr>
<tr>
<td>PLU1</td>
<td>Property access</td>
<td>Access to neighbouring properties and local roads will not be compromised by the proposal. In the unlikely event access restrictions occurred, affected residents or business will be consulted before restrictions take place.</td>
<td>Contractor</td>
<td>Work preparation/during the works</td>
</tr>
</tbody>
</table>
| OI1  | Socio-economic              | A Communication Plan (CP) will be prepared and implemented as part of the EMP to help provide timely and accurate information to the community during the proposal. The CP will include (as a minimum):  
  • Mechanisms to provide details and timing of proposed activities to affected residents, including notifications to residents to advise of the start of works (at least five days before start of the activity), duration of activities, any changes to traffic arrangements, any out of hours works (if carried out)  
  • Regular community updates on the progress of the works and consultation with stakeholders and the community  
  • Signage around the Site to provide contact information  
  • A 24-hour project information and complaints management line, web page, contact name, postal address and email address, available throughout the works.  
  • Contact name and number for complaints.  

The CP will be prepared in accordance with the Community Involvement and Communications Resource Manual (RTA, 2008). | Contractor | Detailed design/Work preparation/during the works |
<table>
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<tr>
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</thead>
</table>
| O12 | Hazards and risk management                 | A Hazard and Risk Management Plan (HRMP) will would be prepared and implemented as part of the EMP. The HRMP will would include the following:  
  - Details of hazards and risks associated with the activity  
  - Measures to be implemented during construction to minimise these risks  
  - Record keeping arrangements, including information on the materials present on the Site, material safety data sheets, and personnel trained and authorised to use such materials  
  - A monitoring program to assess performance in managing the identified risks and where new risks are identified, updated in the HRMP during works  
  - Contingency measures to be implemented in the event of unexpected hazards or risks arising, including emergency situations.  

The HRMP will would be prepared in accordance with relevant guidelines and standards, including relevant Safe Work Australia Codes of Practice, and NSW EPA or Office of Environment and Heritage publications.                                                                                                                                                                                                                                                                                                                                                             | Contractor       | Detailed design/Work preparation / during works |
<p>| O13 | Utilities                                   | Before the start of ground disturbance works, the location of existing utilities will would be confirmed after consultation with the affected utility owners                                                                                                                                                                                                                                                                                                                                                                                  | Contractor       | Detailed design/Work preparation / during the works |
| O14 | Utilities                                   | An unexpected utility find procedure will would be developed before works commencing. In the event that live utilities are unexpectedly uncovered during the works, works will would cease and the procedure will would be implemented.                                                                                                                                                                                                                                                                                       | Contractor       | Work preparation / during the works          |
| O15 | Utilities                                   | On-going consultation with utility owners will would be carried out during the utility identification activities, and in the ongoing protection of live services.                                                                                                                                                                                                                                                                                                                                                                               | Contractor       | Work preparation / during the works          |</p>
<table>
<thead>
<tr>
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<th>Responsibility</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CU1</td>
<td>Cumulative impacts</td>
<td>Where relevant, consultation will be carried out with proponents of other relevant existing and proposed developments, operations or activities (such as the proponent of the CSELR project, the M4 East project truck marshalling area and the Port Authority etc) to increase the overall awareness of project timeframes and impacts. Where necessary, the timing of certain proposal activities (such as heavy vehicle movements and high noise generating activities) will be managed to avoid coinciding works that may result in adverse cumulative impacts on sensitive receivers, the Port Authority or existing Port Authority tenants. To guide the implementation of this management measure, the communications plan for the works will include: 1. A list of relevant existing operations/activities and cumulative projects 2. Contact details for the principal contractors or proponents or operators for each existing operations/activities or cumulative project 3. Key representative for each project/operation/activity will be contacted at least once a month to discuss their respective program of works. This will include at least monthly consultation with Port Authority, Transport for NSW and the proponent of the M4 East truck marshalling project 4. Details of when key cumulative activities (eg major traffic movements) at each site are planned to be completed 5. A register outlining how cumulative effects have been avoided.</td>
<td>Contractor</td>
<td>Work preparation/during the works</td>
</tr>
</tbody>
</table>
4.3 Licensing and approvals

At this time no additional licences or approvals are considered necessary to complete the proposal. As stated in section 4.2 of the REF, “the Protection of the Environment Operations Act 1997 (NSW) (POEO Act) provides for the issue of an Environment Protection Licence (EPL) for premises based scheduled activities pursuant to section 48 of the POEO Act, and non-premises based scheduled activities pursuant to section 49 of the POEO Act. Activities requiring an EPL are listed in Schedule 1 of the Act. The proposal does not meet the definitions of any of the scheduled activities outlined in Schedule 1 of the POEO Act.” However certain management plans may need to be approved by various government agencies and other relevant stakeholders.
5 References


AECOM, 2016f, Rozelle Rail Yards – Site Management Works, Review of Environmental Factors, 18 November 2016, Final, version 1.0, revision 0.


# Terms and acronyms used in this report

<table>
<thead>
<tr>
<th>Term/Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACM</td>
<td>Asbestos containing material(s)</td>
</tr>
<tr>
<td>AECOM</td>
<td>AECOM Australia Pty Ltd</td>
</tr>
<tr>
<td>AHIMS</td>
<td>Aboriginal Heritage Information Management System</td>
</tr>
<tr>
<td>AMP</td>
<td>Asbestos Management Plan</td>
</tr>
<tr>
<td>AQMP</td>
<td>Air Quality Management Plan</td>
</tr>
<tr>
<td>ASS</td>
<td>Acid sulfate soils</td>
</tr>
<tr>
<td>ASSMP</td>
<td>Acid Sulfate Soil Management Plan</td>
</tr>
<tr>
<td>CBD</td>
<td>Central business district</td>
</tr>
<tr>
<td>CMP</td>
<td>Conservation Management Plan</td>
</tr>
<tr>
<td>CNVG</td>
<td>NSW Roads and Maritime Services, Construction Noise and Vibration Guideline (CNVG), Roads and Maritime, 2016, New South Wales Government</td>
</tr>
<tr>
<td>CP</td>
<td>Communication Plan</td>
</tr>
<tr>
<td>CSELR</td>
<td>Central Business District and South-east Light Rail project</td>
</tr>
<tr>
<td>CSM</td>
<td>Conceptual Site Model</td>
</tr>
<tr>
<td>dBA</td>
<td>Decibel measured using a sound level meter with an ‘A-weighting’ filter</td>
</tr>
<tr>
<td>DECCW</td>
<td>NSW Department of Environment, Climate Change and Water</td>
</tr>
<tr>
<td>DECC</td>
<td>NSW Department of Environment and Climate Change</td>
</tr>
<tr>
<td>DP&amp;E</td>
<td>NSW Department Planning and Environment</td>
</tr>
<tr>
<td>DPI Water</td>
<td>NSW Department of Primary Industries Water</td>
</tr>
<tr>
<td>EIS</td>
<td>Environmental impact statement</td>
</tr>
<tr>
<td>ELA</td>
<td>Eco Logical Australia Pty Ltd</td>
</tr>
<tr>
<td>EMP</td>
<td>Environmental Management Plan</td>
</tr>
<tr>
<td>ENM</td>
<td>Excavated natural material</td>
</tr>
<tr>
<td>EP&amp;A Act</td>
<td>Environmental Planning and Assessment Act 1979 (NSW). Provides the legislative framework for land use planning and development assessment in NSW</td>
</tr>
<tr>
<td>Term/Acronym</td>
<td>Description</td>
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</tr>
<tr>
<td>EPL</td>
<td>Environment protection licence</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FEP</td>
<td>Flood Evacuation Plan</td>
</tr>
<tr>
<td>FFMP</td>
<td>Flora and Fauna Management Plan</td>
</tr>
<tr>
<td>FM Act</td>
<td><em>Fisheries Management Act 1994</em> (NSW)</td>
</tr>
<tr>
<td>GML Heritage</td>
<td>GML Heritage Pty Ltd</td>
</tr>
<tr>
<td>GREP</td>
<td>NSW Government Resource Efficiency Policy, July 2014</td>
</tr>
<tr>
<td>HazMat</td>
<td>Hazardous materials</td>
</tr>
<tr>
<td>HDV</td>
<td>Heavy-duty vehicles</td>
</tr>
<tr>
<td>HIA</td>
<td>Heritage impact assessment</td>
</tr>
<tr>
<td>HMP</td>
<td>Heritage Management Plan</td>
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<tr>
<td>HRMP</td>
<td>Hazard and Risk Management Plan</td>
</tr>
<tr>
<td>HSMP</td>
<td>Health and Safety Management Plan</td>
</tr>
<tr>
<td>ICNG</td>
<td>Interim Construction Noise Guideline (DECC, 2009)</td>
</tr>
<tr>
<td>IFR</td>
<td>Interim Factual Contamination Report</td>
</tr>
<tr>
<td>ISEPP</td>
<td>State Environmental Planning Policy (Infrastructure) 2007</td>
</tr>
<tr>
<td>LNAPL</td>
<td>Light non-aqueous phase liquid</td>
</tr>
<tr>
<td>LGA</td>
<td>Local Government Area</td>
</tr>
<tr>
<td>M4-M5 Link project</td>
<td>WestConnex M4-M5 Link project</td>
</tr>
<tr>
<td>MLALC</td>
<td>Metropolitan Local Aboriginal Land Council</td>
</tr>
<tr>
<td>NCA</td>
<td>Noise catchment areas</td>
</tr>
<tr>
<td>NML</td>
<td>Noise management levels</td>
</tr>
<tr>
<td>NSW EPA</td>
<td>NSW Environment Protection Authority</td>
</tr>
<tr>
<td>NVMP</td>
<td>Noise and Vibration Management Plan</td>
</tr>
<tr>
<td>OEH</td>
<td>NSW Office of Environment and Heritage</td>
</tr>
<tr>
<td>PAH</td>
<td>Polycyclic aromatic hydrocarbons</td>
</tr>
<tr>
<td>Term/Acronym</td>
<td>Description</td>
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<tr>
<td>PACHCI</td>
<td>Procedure for Aboriginal Cultural Heritage Consultation and Investigation (Roads and Maritime 2011).</td>
</tr>
<tr>
<td>PASS</td>
<td>Potential acid sulfate soils</td>
</tr>
<tr>
<td>PCU</td>
<td>Passenger Car Units</td>
</tr>
<tr>
<td>POEO Act</td>
<td>Protection of the Environment Operations Act 1997 (NSW)</td>
</tr>
<tr>
<td>Port Authority</td>
<td>Port Authority of NSW</td>
</tr>
<tr>
<td>PPE</td>
<td>Personal protective equipment</td>
</tr>
<tr>
<td>proposal</td>
<td>The site management works</td>
</tr>
<tr>
<td>Property NSW</td>
<td>formerly Sydney Harbour Foreshore Authority</td>
</tr>
<tr>
<td>QA Specifications</td>
<td>Specifications developed by Roads and Maritime Services for use with road work and bridge work contracts let by Roads and Maritime Services.</td>
</tr>
<tr>
<td>REF</td>
<td>Review of Environmental Factors</td>
</tr>
<tr>
<td>Roads and Maritime</td>
<td>NSW Roads and Maritime Services</td>
</tr>
<tr>
<td>RTA</td>
<td>NSW Roads and Transport Authority</td>
</tr>
<tr>
<td>SHFA</td>
<td>Sydney Harbour Foreshore Authority</td>
</tr>
<tr>
<td>SMC</td>
<td>Sydney Motorway Corporation</td>
</tr>
<tr>
<td>SWMP</td>
<td>Soil and Water Management Plan</td>
</tr>
<tr>
<td>TCP</td>
<td>Traffic Control Plan</td>
</tr>
<tr>
<td>the Site</td>
<td>A part of the former Rozelle Rail Yards where the proposal would take place</td>
</tr>
<tr>
<td>TMP</td>
<td>Traffic Management Plan</td>
</tr>
<tr>
<td>TSC Act</td>
<td>Threatened Species Conservation Act 1995 (NSW)</td>
</tr>
<tr>
<td>UrbanGrowth</td>
<td>UrbanGrowth NSW</td>
</tr>
<tr>
<td>US EPA</td>
<td>United States Environmental Protection Agency</td>
</tr>
<tr>
<td>UST</td>
<td>Underground storage tank</td>
</tr>
<tr>
<td>VENM</td>
<td>Virgin excavated natural material</td>
</tr>
<tr>
<td>WCLF</td>
<td>WestConnex Community Liaison Forum</td>
</tr>
<tr>
<td>WMP</td>
<td>Waste and Resource Management Plan</td>
</tr>
</tbody>
</table>
Appendix A

REF consultation material

The following documents are provided in Appendix A:

- Advertisement in the Inner West Courier
- REF webpage
- Stakeholder invitation to comment letter
- REF notification 7 November 2016
- REF notification 23 November 2016.
The Review of Environmental Factors (REF) for the former Rozelle Rail Yards site clean-up is available for public comment from 23 November 2016 for 21 days. You can download a copy of the REF at westconnex.com.au or alternatively you can read a hard copy of the REF at the following locations, during normal business hours:

- **Leichhardt Library** 23 Norton Street, Leichhardt
- **Balmain Library** 370 Darling Street, Balmain
- **Inner West Council Leichhardt Service Centre** 7-15 Wetherill Street, Leichhardt
- **Roads and Maritime Services Rozelle office** 33 James Craig Road, Rozelle
- **Roads and Maritime Services Milsons Point office** 20-44 Ennis Road, Milsons Point.

During the 21-day display period the community can make submissions regarding the work that will be considered as part of the Roads and Maritime Services determination process.

There will be opportunities to speak with members of the Rozelle Rail Yards site management work project team during the display period. For details, please visit westconnex.com.au, call toll free 1800 660 248 or email info@westconnex.com.au.
Review of Environmental Factors - Rozelle Rail Yards site management works

The former Rozelle Rail Yards site is overgrown and derelict from years of disuse. The site has not been operational for more than 20 years and is well overdue for a clean-up.

The NSW Government is planning to undertake a range of activities on the site, to help address these issues. These activities would also facilitate use of the site for future infrastructure purposes, which would include use of the site for WestConnex M4-M5 Link, if that project is approved.

The work would include:

- Site establishment including installing fencing, temporary site offices, erosion, sediment and drainage controls
- Removing waste, stockpiles of materials and vegetation
- Removing existing rail infrastructure, buildings and redundant services
- Site stabilisation and stormwater controls.

Roads and Maritime Services has prepared an environmental assessment of the work, which is set out in a document known as a Review of Environmental Factors (REF). The Rozelle Rail Yards Site Management Works REF includes details on the work, the potential environmental impacts of the work and how these impacts will be managed.

You can download a copy of the REF below.

- Rozelle Rail Yards – Site Management Works Review of environmental factors (Vol. 1)
- Rozelle Rail Yards – Site Management Works Review of environmental factors (Vol. 2 Part A)
- Rozelle Rail Yards – Site Management Works Review of environmental factors (Vol. 2 Part B)
- Rozelle Rail Yards – Site Management Works Review of environmental factors (Vol. 2 Part C)
- Rozelle Rail Yards – Site Management Works Review of environmental factors (Vol. 2 Part D)

Public display

The REF was on public display from 23 November to 13 December 2016 at the Roads and Maritime offices in Rozelle and Milsons Point, Leichhardt and Balmain libraries, and the Inner West Council service centre in Leichhardt.

The public display of the REF was publicised in a number of ways, including:

- Letterbox drop to 3,200 residents around the Rozelle and Lilyfield area on 7 November 2016 advising of the upcoming release of the REF
- Letterbox drop to 3,200 residents around the Rozelle and Lilyfield area on 22 November 2016 advising of the release of the REF
- Advertisements in the Inner West Courier on 22 and 29 November and 6 December 2016 advising of that the REF was open for public comment, display locations and the contact details of the project team
- Email to more than 3,900 people registered on the WestConnex email list on 23 November 2016
- Information on the WestConnex web page posted on 23 November 2016
- Doorknock of residents on Lilyfield Road on 26 November 2016.

During the 21-day display period, community members were able to make submissions regarding the work for consideration as part of the Roads and Maritime Services determination process.

The formal submission period for the REF has now closed.

A submissions report will be prepared to respond to all submissions received during the public display period. This will be made publicly available upon determination of the REF in 2017.

Following the close of the REF display period, community members are still able to comment on the site management works and REF. These comments will be considered in the assessment and determination of the REF; however, will not be included in the submissions report.

Upon determination of the REF by Roads and Maritime Services, Sydney Motorway Corporation and its subcontractors will undertake the clean-up and site management work in 2017. It will take about 12 months to complete.

If you would like to speak with a member of the Rozelle Rail Yards site management work project team, please call 1800 660 248 or email info@westconnex.com.au.
2 December 2016

«First_Name» «Last_Name»
«AddressBlock»

«GreetingLine»

**Invitation to comment - proposed Rozelle Rail Yards site management works**

Roads and Maritime Services is proposing site management works at part of the former Rozelle Rail Yards (the proposal). Sydney Motorway Corporation and its subcontractors plan to undertake the clean-up and site management works on behalf of Roads and Maritime Services.

The site management works would remove redundant rail and rail related infrastructure from the site and allow existing issues at the site such as waste and noxious weeds to be appropriately managed. A review of environmental factors (REF) has been prepared to assess the likely impacts of the proposal under Part 5 of the *Environmental Planning and Assessment Act 1979*. Roads and Maritime Services invites your organisation to comment and advise of any interests, concerns or statutory requirements relating to the proposal. Comments received will be considered in the REF.

The proposal is needed to manage the existing environmental and safety issues at the site. The proposal would benefit future uses of the site, including construction of the separate M4-M5 Link project if that project is approved by the NSW Minister for Planning (subject to a separate environmental impact statement (EIS)).

The proposal would include:

- Site establishment including installing fencing, temporary site offices, erosion, sediment and drainage controls
- Removing waste, stockpiles of materials and vegetation
- Removing existing rail infrastructure, buildings and redundant services
- Site stabilisation and stormwater controls.

It is anticipated that the works would be conducted over a period of up to 12 months, commencing in mid-2017. Following completion of the works, the site would be managed and maintained to ensure that the surface cover and stormwater controls are operating effectively.

The REF includes details of potential impacts that may occur as a result of the work and safeguards and mitigation measures that could be employed during the work to avoid or mitigate potential impacts.
Please find enclosed the REF for your comment. To enable consideration of your comments on the REF, a written response would be appreciated by 13 December 2016.

Please send your written comments to:
Rozelle Rail Yards site management works project team
GPO Box 3905, Sydney NSW 2001
Comments can also be submitted by email to info@westconnex.com.au.

If you would like to discuss the REF, please contact Verity Humble-Crofts on 8099 9164 or via email to verity.humble-crofts@westconnex.com.au.

Yours faithfully,

Peter Jones
Project Director – M4-M5 Link
7 November 2016

Review of Environmental Factors – Former Rozelle Rail Yards site clean-up

Dear Resident

As you may be aware, the former Rozelle Rail Yards site is overgrown and derelict from years of disuse. The site has not been operational for more than 20 years and is well overdue for a clean-up.

The NSW Government is planning to undertake a range of clean-up and site management activities on the site, to help address these issues. The work would also facilitate use of the site for future infrastructure purposes, which would include use of the site for WestConnex M4-M5 Link, if that project is approved.

The work would include:

- Site establishment including installing fencing, temporary site offices, erosion, sediment and drainage controls
- Removing waste, stockpiles of materials and vegetation
- Removing existing rail infrastructure, buildings and redundant services (where intercepted when removing infrastructure)
- Site stabilisation and implementing stormwater controls.

Roads and Maritime Services is currently preparing an environmental assessment of the work, which will be set out in a document known as a Review of Environmental Factors (REF). The REF will include details on the clean-up work, the potential impacts of the clean-up work and how these impacts will be managed.

The REF will be published for community comment and feedback in the coming weeks and we will contact you again with details about the release of the REF and where you can find more information. Details will also be published in the Inner West Courier and on the WestConnex website.

Sydney Motorway Corporation and its subcontractors plan to undertake the clean-up and site management work in 2017. It will take about 12 months to complete.

If you would like to speak with a member of the Rozelle Rail Yards site management work project team, please call 1800 660 248 or email info@westconnex.com.au.

ABOUT WESTCONNEX

WestConnex is part of a broader transport plan for Sydney which includes improved public transport, such as Sydney Metro and light rail, as well as better, more reliable motorway solutions. More than two thirds of WestConnex will be built underground. Once complete, motorists will be able to avoid up to 52 sets of traffic lights and enjoy significant travel time savings.
23 November 2016

Review of Environmental Factors – Former Rozelle Rail Yards site management work

Dear Resident

As you may be aware, the former Rozelle Rail Yards site is overgrown and derelict from years of disuse. The site has not been operational for more than 20 years and is well overdue for a clean-up.

The NSW Government is planning to undertake a range of activities on the site, to help address these issues. These activities would also facilitate use of the site for future infrastructure purposes, which would include use of the site for WestConnex M4-M5 Link, if that project is approved.

The work would include:
- Site establishment including installing fencing, temporary site offices, erosion, sediment and drainage controls
- Removing waste, stockpiles of materials and vegetation
- Removing existing rail infrastructure, buildings and redundant services
- Site stabilisation and stormwater controls.

Roads and Maritime Services has prepared an environmental assessment of the work, which is set out in a document known as a Review of Environmental Factors (REF). The REF includes details on the work, the potential environmental impacts of the work and how these impacts will be managed.

The REF will be on public display from 23 November 2016 for 21 days.

You can download a copy of the REF at westconnex.com.au or alternatively you can read a hard copy of the REF at the following locations, during normal business hours:
- **Leichhardt Library** 23 Norton Street, Leichhardt
- **Balmain Library** 370 Darling Street, Balmain
- **Inner West Council Leichhardt Service Centre** 7-15 Wetherill Street, Leichhardt
- **Roads and Maritime Services Rozelle office** 33 James Craig Road, Rozelle
- **Roads and Maritime Services Milsons Point office** 20-44 Ennis Road, Milsons Point.

During the 21-day display period, the community can make submissions regarding the work that will be considered as part of the Roads and Maritime Services determination process.

To make a submission on the proposal, please send your written comments to:

**Rozelle Rail Yards site management work project team**
GPO Box 3905
Sydney NSW 2001

Comments can also be submitted by email to info@westconnex.com.au

Submissions must be received by Tuesday 13 December 2016.

Upon determination of the REF by Roads and Maritime Services, Sydney Motorway Corporation and its subcontractors will undertake the clean-up and site management work in 2017. It will take about 12 months to complete.

If you would like to speak with a member of the Rozelle Rail Yards site management work project team, please call 1800 660 248 or email info@westconnex.com.au.

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WestConnex is part of a broader transport plan for Sydney which includes improved public transport, such as Sydney Metro and light rail, as well as better, more reliable motorway solutions. More than two thirds of WestConnex will be built underground. Once complete, motorists will be able to avoid up to 52 sets of traffic lights and enjoy significant travel time savings.
Appendix B

Response to submissions about biodiversity
Response to Submissions: Rozelle Rail Yards Site Management Works REF – Biodiversity Assessment

This short letter report responds to the submissions received in relation to the Biodiversity Assessment as part of the Rozelle Rail Yards Site Management Works Review of Environmental Factors (REF). Submissions regarding biodiversity were received from the Inner West Council and community members.

The submissions are outlined below and a response to the submissions is provided on the following pages.

Submissions

Inner West Council

Council notes that whilst the proponent has not undertaken a full fauna survey, it has undertaken a threatened species survey, and no threatened species have been found on the site.

Council recommends that further fauna surveys be carried out to determine the presence of locally vulnerable species - named as "target species" in the report Avian Biodiversity Monitoring & Bird Habitat Management within the Leichhardt Local Government Area (LGA) (Saunders 2008). Further, that if present, these species are included in the Flora and Fauna Management Plan. Target species named in the Saunders report are: Superb Fairy Wren; Tawny Frogmouth; Southern Boobook; Spotted Pardalote; Yellow Thornbill; Eastern Spinebill; Eastern Yellow Robin; and Grey Fantail. Other locally significant species not listed in Saunders include the Blue-tongued Skink and Ring-tailed Possum.

The species have been determined as likely to disappear from the Leichhardt area unless properly managed in terms of habitat preservation. This is particularly the case on weedy, unmanaged sites such as the Rozelle Rail Yards, where many of these species are likely to be present. Tawny Frogmouth, Superb Fairy Wren, Eastern Spinebill and Grey Fantail have been observed in the adjacent railway corridor along Brenan St, Annandale, which indicates that these species (at least) are highly likely to be present in the Rozelle Rail Yards.

The Rozelle Rail Yards contain the most extensive areas of native small bird habitat in the Leichhardt area. The plant species that comprise this habitat are for the most part exotic weed species. It is a common practice in inner urban areas to preserve these habitats regardless of the fact that they are weedy. Preservation of this habitat should, where possible, be a priority in the Flora and Fauna Management Plan for the site.

It is also worth noting that the Rozelle rail yards are continuous with the light rail corridor, which is recognised regionally as an important biodiversity corridor (i.e. the GreenWay). Loss of species from the Rozelle rail yard will undoubtedly compromise the biodiversity conservation outcomes Council expects for the GreenWay.
The Leichhardt Native Revegetation & Biodiversity Management Plan and the GreenWay Revegetation & Bushcare Plan should be noted.

Community members

Issue description – potential impacts of flora and fauna that was not assessed
Submissions were concerned that not all flora and fauna present at the Site were identified and assessed including:

- Birds; such as the Buff-banded Rail, Willie Wagtail, blue wrens, herons, Superb Fairy Wren, Silvereye and honeyeaters
- Reptiles; such as Bibron’s Toadlet (Pseudophryne bibronii), Stripped Marsh Frog, Blue Tongue Lizard, turtles, frogs, snakes and skinks
- Palm trees.

Submissions were concerned that the project might impact the above species and remnant flora and fauna.

Issue description – management of potential impacts on other species and communities
Submissions suggested that National Parks and Wildlife and/or EPA as well as appropriately qualified Inner West Council officers be involved in ongoing monitoring to ensure that all wildlife are accurately identified, cared for and relocated.

Submissions also suggested particular management measures such as:

- Any vegetation removal, if it takes place during the Superb Fairy-Wren breeding season (usually July to March) should only take place after checks for nests and is delayed until breeding is complete, if necessary
- That the Flora and Fauna Management Plan allow for a staged removal of vegetation, in particular allowing for retention of patches of lantana or any other dense vegetation, weedy or otherwise, until suitable replacement native vegetation is established
- That some built structures which provide cover are left on the ground to ensure habitat retention for small reptiles, Blue-tongue Lizards etc
- That replanting of suitable native species is undertaken and managed until such a time as a full management plan is developed for the Site.

Issue description – removal of vegetation from the Site
Submissions raised concerns regarding the removal of vegetation from the site, which provides habitat for small birds, lizards and native grasses.

Issue description – management of potential impacts from feral species
Submissions raised concern that the feral animals and vermin would be disturbed by the works and questioned how this would be managed. Submission suggested that advice be sought on how to minimise this problem from the relevant Inner West Council officer as well as appropriate officers from National Parks and Wildlife and/or the NSW EPA, as well as Health.
Response to Submissions

The submissions from the Inner West Council and community are similar, and can be summarised as follows:

1. No assessment or surveys were conducted for flora and fauna that are not listed as Threatened under the *Threatened Species and Conservation Act 1995* (NSW) (TSC Act) or the *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth) (EPBC Act). Unlisted species include those identified as ‘target species’ or locally uncommon by the Inner West Council and other species known to occur in the locality.

2. Development of a Flora and Fauna Management Plan (FFMP) that includes more detailed mitigation measures to minimise adverse impacts on native fauna. For example, a staged approach to vegetation clearing.


4. Management of feral animals.

Response to issue 1:

Certain developments proposed to be undertaken by a Public Authority (also known as determining authority), such as Roads and Maritime, require an environmental assessment to be conducted under Part 5 of the *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act).

The environmental assessment for flora and fauna is presented within Appendix F of the Review of Environmental Factors (REF) for the works. This assessment assesses impacts to threatened species, populations and ecological communities listed under the TSC and EPBC Acts.

The site management works are an ‘activity by a determining authority’ that has been assessed in accordance with Part 5 of the EP&A Act. Furthermore, the REF has considered the *Biodiversity Guidelines: Protecting and managing biodiversity on RTA projects* (Roads and Traffic Authority 2011). The guidelines were developed in consultation with the NSW Office of Environment and Heritage (OEH), NSW Department of Primary Industries (DPI) (Fisheries), biodiversity specialists and Roads and Traffic Authority (RTA) staff including project managers, construction personnel and designers, as a tool to help minimise impacts on biodiversity during construction projects and maintenance works. They provide good practice management and mitigation measures for works carried out by Roads and Maritime and would be a requirement for any contractors working on the project.

Response to issue 2:

Council identified a list of ‘target species’ that were defined in the report *Avian Biodiversity Monitoring & Bird Habitat Management within the Leichhardt LGA* (Saunders 2008). They requested that if these species are present that they be included in the FFMP. The list of target species, and rare or uncommon species identified in the Saunders (2008) report are provided below in Table 1. It is noted that some species in Saunders (2008) are also listed under the TSC or EPBC Acts and have been assessed in the REF, such as the Powerful Owl (*Ninox strenua*).

However, Roads and Maritime agrees that it is prudent to consider potential adverse impacts on the other ‘target species’ (and other non-threatened species) mentioned in the submissions and to include additional mitigation and management measures to be applied through the implementation of the FFMP. It is noted that the Roads and Maritime biodiversity guidelines (RTA, 2011) outline a number of standard measures for construction, including appropriate management of weeds, storing and stockpiling of materials and sediment and erosion control.

We have undertaken brief assessment of impacts below and suggested additional mitigation measures as part of our response to the submissions received.
Whilst no surveys have been conducted for those target species listed in Table 1, or for other non-threatened flora and fauna (e.g. Bibron’s Toadlet (Pseudophryne bibronii), Stripped Marsh Frog (Limnodynastes peronii)), a number of species can be assumed to be present based on the habitat characteristics of the Site, and the proximity of the Site to records from past surveys and reports. Information on likely local species can be found in (but not limited to):

- Avian Biodiversity Monitoring and Bird Habitat Management within the Leichhardt LGA (Saunders, 2008).
- GreenWay Revegetation and Bushcare Plan; creating an indigenous flora and fauna corridor (GreenWay Sustainability Project, 2011).
- GreenWay; Cooks River to Iron Cove – Flora and Fauna Literature Review (GreenWay Sustainability Project 2011).
- Leichhardt Native Revegetation and Biodiversity Management Plan (Leichhardt Council).

Table 1: Target species identified by Inner West Council submission

<table>
<thead>
<tr>
<th>Species</th>
<th>Residency in LGA*</th>
<th>Breeding period^</th>
<th>Habitat features</th>
<th>Likely site utilisation*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superb Fairy Wren</td>
<td>Common resident</td>
<td>June to February</td>
<td>Habitat types containing suitable dense cover and low shrubs occur. Common in urban parks and gardens.</td>
<td>Likely to use the exotic vegetation on site, particularly the mid-storey shrubs.</td>
</tr>
<tr>
<td>Eastern Spinebill</td>
<td>Uncommon resident</td>
<td>August to December</td>
<td>Variety of habitats including forests, woodlands, flowering shrubs and gardens.</td>
<td>Likely to use the Site. Known from adjacent light rail corridor along Brenan St, Annandale.</td>
</tr>
<tr>
<td>Willie Wagtail</td>
<td>Common resident</td>
<td>August to January</td>
<td>Most habitats except dense forest.</td>
<td>Likely to use the Site.</td>
</tr>
<tr>
<td>Grey Fantail</td>
<td>Uncommon resident</td>
<td>July to December</td>
<td>Most treed habitats. Possibly migrates north in winter</td>
<td>Likely to use the Site, with less potential during winter. Known from adjacent light rail corridor along Brenan St, Annandale.</td>
</tr>
<tr>
<td>Tawny Frogmouth</td>
<td>Uncommon resident</td>
<td>August to December</td>
<td>Variety of habitat types including heath, forest and woodland, urban and rural areas.</td>
<td>Potential to utilise the Site, particularly for foraging. Known from adjacent light rail corridor along Brenan St, Annandale.</td>
</tr>
<tr>
<td>Brown Goshawk</td>
<td>Rare visitor</td>
<td>August to November</td>
<td>Requires timbered habitats. May disperse north during winter</td>
<td>Unlikely to nest within the Site. However, potential to use the site for foraging.</td>
</tr>
<tr>
<td>Powerful Owl (Vulnerable under TSC Act)</td>
<td>Rare visitor</td>
<td>June to September</td>
<td>Uses a variety of vegetation types, but needs old growth trees.</td>
<td>Unlikely to use the Site. Recorded in LGA in 2003, but not in 2005 or 2008 (Saunders 2008).</td>
</tr>
<tr>
<td>Southern Boobook</td>
<td>Uncommon resident</td>
<td>August to December</td>
<td>Variety of habitats from dense forest to open desert.</td>
<td>Potential to utilise the Site, particularly for foraging. Known from adjacent light rail corridor along Brenan St, Annandale.</td>
</tr>
<tr>
<td>Species</td>
<td>Residency in LGA*</td>
<td>Breeding period^</td>
<td>Habitat features</td>
<td>Likely site utilisation*</td>
</tr>
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</tr>
<tr>
<td>Spotted Pardalote</td>
<td>Uncommon resident</td>
<td>September to December</td>
<td>Eucalypt forests and woodlands but also parks and gardens with well-established eucalypt canopy.</td>
<td>Low potential to use the Site, due to the lack of established eucalypt canopy. Recorded in LGA in 2005, but not in 2003 or 2008 (Saunders 2008)</td>
</tr>
<tr>
<td>Yellow Thornbill</td>
<td>Uncommon resident</td>
<td>August to December</td>
<td>Areas dominated by Casuarinas, Acacias or Melaleuca’s rather than eucalypts. Also seen in gardens and parks.</td>
<td>Low potential to use the Site. Recorded in LGA in 2003, but not in 2005 or 2008 (Saunders 2008)</td>
</tr>
<tr>
<td>Eastern Yellow Robin</td>
<td>Uncommon resident</td>
<td>June to December</td>
<td>Range of habitats, from dry woodlands to rainforests. Also found in parks and gardens.</td>
<td>Potential to use the Site. Recorded in LGA in 2003 and 2005, but not in 2008 (Saunders 2008)</td>
</tr>
<tr>
<td>Red-browed Finch</td>
<td>Uncommon resident</td>
<td>September to January</td>
<td>Grassy areas interspersed with dense understorey vegetation, often along creek lines</td>
<td>Low potential to use the Site, due lack of established grassy areas. Recorded in LGA in 2005, but not in 2003 or 2008 (Saunders 2008)</td>
</tr>
<tr>
<td>Blue Tongued Lizard</td>
<td>N/A Not part of Saunders (2008) report</td>
<td>December to April</td>
<td>Requires lots of ground cover for shelter, including leaf litter, rocks and logs</td>
<td>Potential to use the Site. Identified as a commonly sighted species by volunteers within the GreenWay corridor (GreenWay Sustainability Project 2011).</td>
</tr>
<tr>
<td>Common Ringtail Possum</td>
<td>N/A Not part of Saunders (2008) report</td>
<td>Mating: April to December, Young born; mostly May to July.</td>
<td>Almost exclusively tree-dwelling. Nests in a ‘drey’ in a hollow, tree fork or dense vegetation.</td>
<td>Low potential to use the Site, as there is a lack of mature canopy trees.</td>
</tr>
</tbody>
</table>

* Information obtained from Saunders (2008). Target species are provide in Appendix A3-2 of Saunders (2008). It is noted that the Rozelle Rail Yards were not a survey site in this report.


In addition to the species identified in the Inner West Council submission, two additional non-threatened species were mentioned in the community submissions:

- **Striped Marsh Frog** – Is one of the most common frogs of the eastern coast of Australia, where it occurs in a range of habitats, predominantly ponds, but also in other waterbodies including, polluted ditches and swimming pools (Australian Museum website). The Atlas of Living Australia quotes that the “Species is widespread and abundant and there is anecdotal evidence to suggest that the species may be increasing in numbers and extending its range in Queensland. It is often referred to as a weed species in Queensland.”

- **Bibron’s Toadlet** – Occurs along the east coast of Australia and is a common and widespread species. It lives in forests, heathlands and grasslands (Australian Museum website). Given the nature of the Site there is a low potential that the species would be present.
These two species are not listed as Threatened under the Threatened Species and Conservation Act 1995 (NSW) (TSC Act) or the Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth) (EPBC Act). They are protected under the National Parks and Wildlife Act 1974 (NSW) (NPW Act), which protects all native fauna regardless of conservation significance. However in line with Section 98(5) of the NPW Act, this protection does not apply in relation to consents or approvals under Part 4 or Part 5 of the EP&A Act.

It is acknowledged that the site management works would require the clearing of the entire Site, and thus the works would impact on species that are present or use the Site.

The majority of these species, identified as target species in Saunders (2008) and by the community submissions are mobile species, or have the ability to move between areas. However, fauna injury or mortality could still occur as vegetation is progressively removed across the Site. Injury or mortality may occur as a result of direct collision with vehicles and equipment. Some species may be able to move away quickly and easily such as some birds. However, other less mobile species, or those which have high fidelity with their home range, may be slower to move away or may not relocate at all, potentially resulting in injury or mortality of the individual. Species may also be killed or injured as they are displaced from the Site or whilst trying to establish in other habitats.

In order to mitigate the adverse impacts that are likely to occur to the various target species, the FFMP (a sub-plan of the Environmental Management Plan for the works) would include the following additional measures:

- Where possible, undertake the clearing of vegetation for the ‘Site Management Works during the autumn and winter months, primarily March to early August, and undertake the majority of clearing, where feasible having regard to the work program. This timing allows the removal of vegetation to occur outside the breeding times for the majority of species. Spring and early summer months are preferred breeding times for the majority of native species listed above.
- Use a staged approach for the removal of vegetation, such that a break occurs between the clearing of each stage. Use a cautious and slow approach to the clearing of vegetation and create a disturbance prior to the vegetation’s removal.
- Ensure the clearing of the Site, in relation to weed infested areas (including noxious weeds) is undertaken in accordance with the Roads and Maritime biodiversity guidelines (Roads and Traffic Authority 2011) and relevant legislation.
- Contractors involved in the clearing of vegetation are to have a fauna handler and local wildlife carer available during clearing. Furthermore, the clearing of vegetation and risk to native species be included as part of the site induction.

With the implementation of the existing and additional mitigation measures outlined above, there is a reduced potential for adverse impacts and species would have the ability to seek other habitat through connecting biolinks or stepping stones, such as, Whites Creek, Inner West light rail corridor, Jubilee Park, Federal Park, Callan Park, Johnstone Creek, Easton Park and Leichhardt Park.

Management measure BO1 in the REF states that:

“A Flora and Fauna Management Plan (FFMP) would be prepared in accordance with Roads and Maritime's Biodiversity Guidelines: Protecting and Managing Biodiversity on RTA Projects (RTA, 2011) and implemented as part of the EMP.”

The Roads and Maritime Biodiversity Guidelines are very extensive and cover a range of topics including, but not limited to:

- Pre clearance
- Exclusion zones
- Clearing of vegetation and removal of bushrock
- Weed management
They provide guidance on minimising impacts and specific management measures to help guide development. Through the implementation of management measure BO1, these guidelines would be implemented to help avoid or minimise potential impacts on native fauna during the site management works.

**Response to issue 3:**

It is considered unlikely that the site management works would have significant and long-term adverse impacts on the conservation outcomes from the GreenWay Biodiversity Strategy and GreenWay Revegetation and Bushcare Plan.

The site management works would occur approximately 750 metres from the outer eastern edge of the identified GreenWay corridor (Figure 1) and are within the old Rozelle Freight rail corridor. This corridor and freight line is owned by Railcorp and was functional up to the late 1990s with some use through to 2007. The current vegetation condition (highly disturbed and dominated by exotic and non-indigenous species) is an artefact of its previous use and a consequence of being redundant for the last decade.

The vegetation within the Site is likely to provide a stepping stone or biolink to the GreenWay and other vegetated areas in the locality, as do vegetation associated with other drainage lines, urban parks, the light rail, roadside vegetation and vegetated backyards. Whilst the removal of the vegetation for the Site would have an impact, it is considered to be small in the context of the Greenway corridor and the other biolinks / stepping stones in the locality, such as Whites Creek, Inner West light rail corridor, Jubilee Park, Federal Park, Callan Park, Johnstone Creek, Easton Park and Leichhardt Park.

A vision for the GreenWay was developed through consultation with the local community. This vision was identified in the GreenWay Biodiversity Strategy as:

**Biodiversity in our GreenWay is…**

- an important wildlife corridor that is supported by a broader network of green streets and open space, linking habitat areas within and adjacent to the catchment.
- an urban refuge for a wide variety of native plants, animals and other organisms, where biodiversity can adapt and flourish in the face of current and emerging threats.
- supported by a community that feels connected to their local environment and has a sense of ownership of the GreenWay, actively protects the GreenWay and is educated about the importance of biodiversity.

Six objectives were then developed for the GreenWay:

1. Create a flora and fauna corridor which supports the original vegetation of the area, provides habitat, and facilitates movement and migration for a wide range of native plant and animal species throughout the GreenWay catchment;
2. Identify areas within and adjacent to the GreenWay catchment with high biodiversity values that require protection and improve the connectivity between these areas;
3. Protect and enhance the habitat and migration opportunities for locally significant or threatened native species, populations and communities (including the endangered population of Long-nosed Bandicoot), and allow for their continued evolution and survival in and beyond the GreenWay catchment;
4. Engage and educate residents and the broader community, including local businesses and visitors to the GreenWay, to encourage a sense of ownership and participation in protecting and restoring biodiversity in the GreenWay catchment;
5. Mitigate key threats to biodiversity to increase the survival and adaptive capacity of species, populations and ecological communities of plants and animals.
6. Provide strategic guidance to councils, private landowners and major stakeholders on how to coordinate biodiversity management across the four local government areas.
It is acknowledged that the site management works would be inconsistent with the Objective 3 for the GreenWay Biodiversity Strategy (in reference to areas beyond the GreenWay corridor). Similarly if the Greenway is extended towards Rozelle (it is understood that this is a consideration of Council), these objectives may be compromised in the future. However, in its current form, it is considered unlikely that the works would compromise the validity or success of the GreenWay Biodiversity Strategy and the GreenWay Revegetation and Bushcare Plan, as the works are not directly affecting the Greenway catchment or areas immediately adjacent to it. Equally migration opportunities between the GreenWay and the site have already been compromised to some degree by the existing light rail line/station and the Central Business District (CBD) and South East Light Rail (CSELR) Rozelle maintenance depot facility project maintenance depot close to Catherine Street.

The Site currently contains a number of noxious weeds and exotic and non-native plants, the works, by removing the vegetation, would ultimately reduce the ability of these plants to spread throughout the local area and potentially impact the GreenWay catchment. Consequently, this action could potentially support Objective 1.

Response to issue 4:

The site management works have the potential to impact on feral animals, such as Feral Cats, Rabbits, Foxes and Rodents, and in turn, have an adverse impact on native species. The fauna surveys (remote cameras) identified a high number of Foxes and Feral Cats at the Site. The Site is also likely to provide habitat for Rabbits and Rodents due to the types of vegetation present (exotic cover) and low occurrence of human disturbance.

The proposed works at the Site is likely to force resident feral individuals out of the Site, and into nearby areas, such as other parts of the old Rozelle rail corridor, or Inner West Light Rail corridor. This could increase predation on native species and/or displace native species from their habitat due to increase competition for resources.

In order to mitigate the potential risk to native species, the control of feral animals, prior to and following the site management works has been identified as an additional mitigation measure for inclusion in the FFMP. Any control efforts should follow the relevant ‘model codes of practice and standard operating procedures for the humane capture, handling and destruction of feral animals in Australia’. These codes were developed by the Vertebrate Pest Research Unit of the NSW Department of Primary Industries and can be found at http://www.pestsmart.org.au/animal-welfare/humane-codes/.

The control of feral animals should be undertaken in consultation with the Inner West Council and other stakeholders (eg Transport for NSW who owns the adjacent rail corridor) to enable a co-ordinated approach and ensure control efforts are as effective as possible.

The FFMP would include the following measure to manage potential impacts from feral animals:

- Undertake targeted feral animal control prior to and post vegetation removal. Feral animal control would be carried out in line with the relevant ‘model codes of practice’ and ‘standard operating procedures’ for the humane capture, handling and destruction of feral animals in Australia. Target species for the feral animal control should include, Feral Cats, Rabbits, Foxes and Rodents.
- Roads and Maritime would carry out feral animal management in consultation with the Inner West Council and other stakeholders (eg Transport for NSW who owns the adjacent rail corridor) to enable a co-ordinated approach and ensure control efforts are as effective as possible.

Conclusion
The REF has been undertaken in accordance with the EP&A Act and assessed impacts to threatened species, populations and ecological communities listed under the TSC and EPBC Acts. There is no statutory requirement, nor is it common practice to undertake surveys or impact assessments for non-threatened native species.

Furthermore, the REF has considered the *Biodiversity Guidelines: Protecting and managing biodiversity on RTA projects* (Roads and Traffic Authority 2011). The guidelines provide good practice management and mitigation measures for works carried out by Roads and Maritime and would be a requirement for any contractors working on the project.

No targeted surveys for non-threatened species have been conducted, however a number of species can be assumed to be present based on the habitat characteristics on site, and the proximity to previous records and information from past surveys. It is acknowledged that adverse impacts to species not assessed as part of the REF are likely to occur.

A range of additional mitigation measures to reduce potential impacts have been recommended for implementation into the FFMP, which would serve as a sub-plan to the Environmental Management Plan for the works. These measures include a staged and preferred timing approach to vegetation clearance and feral animal control.

Future developments at the Site have the potential to enhance local biodiversity by strengthening greenlinks throughout the local area and across the Site, through the planting of locally appropriate native species. These opportunities include integrating with other local biodiversity enhancement programs, such as the GreenWay.
Figure 1: Context of GreenWay corridor as shown in the GreenWay Biodiversity Strategy (Australian Wetlands Consulting, 2012) and the Site Management Works.
Appendix C

Community submissions reference table
The table below lists the respondent’s allocated submission number, which was emailed to each respondent individually and indicates where the issues from each submission have been addressed in **Chapter 3** (Response to community submissions) of this report.

<table>
<thead>
<tr>
<th>Submission No.</th>
<th>Section number where issues are addressed</th>
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<tbody>
<tr>
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<td>2</td>
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Appendix D

Updated figures from Appendix H and I of the REF

The following documents are provided in Appendix D:

- Appendix H Noise and Vibration Assessment:
  - Figure 2: Site plan and NCA boundary
  - Figure 18: Additional mitigation measures
  - Appendix B: Site plan and noise catchment areas
- Appendix I Air Quality Assessment:
  - Figure 6-2: Screening assessment – human receptors near the proposal boundary.
Figure 2  Site Plan and NCA Boundary Map
Figure 18  Additional mitigation requirements

Key:
- Receivers with minor impacts not requiring additional mitigation
- Receivers identified to require notification and/or verification

Legend:
- Residential
- Commercial
- Other (Educational)
- Other (Medical)
- Other (Place of Worship)
- Other (Childcare)
- Other (Non-residential)
- Site Boundary
- Exceedance >1 dB

Receiver areas that are predicted to exceed NMLA by more than 1 dB following mitigation

SLR Consulting Australia Pty Ltd
Appendix E

Conceptual Site Model Table
<table>
<thead>
<tr>
<th>Potential source and contaminants</th>
<th>Potential exposure pathways</th>
<th>Potential receptors</th>
<th>Prior to implementation of management measures:</th>
<th>Safeguards and management measures</th>
<th>Post implementation of management measures:</th>
<th>Residual risk of contaminant exposure</th>
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<tr>
<td><strong>Potential source:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Medium</td>
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<tr>
<td>• Physical disturbance of stockpiles and the ground surface:</td>
<td>[Details of potential exposure pathways]</td>
<td>• On-site workers and visitors</td>
<td>[Complete exposure pathways]</td>
<td>[Risk of contaminant exposure]</td>
<td>[Details of safeguards and management measures]</td>
<td>[Details of residual risk of contaminant exposure]</td>
</tr>
<tr>
<td>• By an excavator/heavy machinery</td>
<td>[Details of potential receptors]</td>
<td>• Offsite waste management workers (receiving contaminated soil)</td>
<td>[Complete exposure pathways]</td>
<td>[Risk of contaminant exposure]</td>
<td>[Details of safeguards and management measures]</td>
<td>[Details of residual risk of contaminant exposure]</td>
</tr>
<tr>
<td>• During loading and transporting to offsite landfill by truck</td>
<td>[Details of potential receptors]</td>
<td>• Public including nearby off-site residents, workers and visitors on surrounding lands</td>
<td>[Complete exposure pathways]</td>
<td>[Risk of contaminant exposure]</td>
<td>[Details of safeguards and management measures]</td>
<td>[Details of residual risk of contaminant exposure]</td>
</tr>
<tr>
<td>• By vehicle and truck movements</td>
<td>[Details of potential receptors]</td>
<td>[Details of potential exposure pathways]</td>
<td>[Complete exposure pathways]</td>
<td>[Risk of contaminant exposure]</td>
<td>[Details of safeguards and management measures]</td>
<td>[Details of residual risk of contaminant exposure]</td>
</tr>
<tr>
<td>• Exposure and disturbance (by heavy machinery) of underlying ground surface following stockpile, vegetation, ballast and infrastructure removal</td>
<td>[Details of potential receptors]</td>
<td>[Details of potential exposure pathways]</td>
<td>[Complete exposure pathways]</td>
<td>[Risk of contaminant exposure]</td>
<td>[Details of safeguards and management measures]</td>
<td>[Details of residual risk of contaminant exposure]</td>
</tr>
<tr>
<td>• Stockpiling activities</td>
<td>[Details of potential receptors]</td>
<td>[Details of potential exposure pathways]</td>
<td>[Complete exposure pathways]</td>
<td>[Risk of contaminant exposure]</td>
<td>[Details of safeguards and management measures]</td>
<td>[Details of residual risk of contaminant exposure]</td>
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<tr>
<td><strong>Potential contaminants:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Medium</td>
</tr>
<tr>
<td>• Friable and bonded asbestos</td>
<td>[Details of potential exposure pathways]</td>
<td>• On-site workers and visitors</td>
<td>[Complete exposure pathways]</td>
<td>[Risk of contaminant exposure]</td>
<td>[Details of safeguards and management measures]</td>
<td>[Details of residual risk of contaminant exposure]</td>
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<tr>
<td>• Heavy metals</td>
<td>[Details of potential receptors]</td>
<td>• Public including nearby off-site residents, workers and visitors on surrounding lands</td>
<td>[Complete exposure pathways]</td>
<td>[Risk of contaminant exposure]</td>
<td>[Details of safeguards and management measures]</td>
<td>[Details of residual risk of contaminant exposure]</td>
</tr>
<tr>
<td>• Polycyclic aromatic hydrocarbons (PAHs)</td>
<td>[Details of potential receptors]</td>
<td>[Details of potential exposure pathways]</td>
<td>[Complete exposure pathways]</td>
<td>[Risk of contaminant exposure]</td>
<td>[Details of safeguards and management measures]</td>
<td>[Details of residual risk of contaminant exposure]</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Potential source:</th>
<th>Direct human contact with soil/fill/water/contamination</th>
<th>On-site workers and visitors</th>
<th>Yes</th>
<th>High</th>
<th>On-site workers to use appropriate PPE and hygiene practices specific to the nature of the material being handled</th>
<th>Medium</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Offsite waste management workers (receiving contaminated soil)</td>
<td>Yes</td>
<td>High</td>
<td>If excavation works intersect alluvium underlying fill materials, work would be carried out in accordance with an approved ASSMP</td>
<td>Medium</td>
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<tr>
<td></td>
<td></td>
<td>Public including nearby off-site residents, workers and visitors on surrounding lands</td>
<td>Yes</td>
<td>High</td>
<td>Asbestos fibre air monitoring would be completed during activities which could liberate asbestos fibres</td>
<td>Medium</td>
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<tr>
<td></td>
<td></td>
<td>As ground disturbance works proceed, excavated materials would be inspected (visual and olfactory) for signs of potential contamination</td>
<td>Yes</td>
<td>High</td>
<td>Further dust control measures are discussed in this table below and in section 6.9 of the REF</td>
<td>Medium</td>
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<tr>
<td></td>
<td></td>
<td>Soils and ballast would be separated into stockpiles according to odours, staining, fouling (in the case of ballast) and other environmental indicators. Following sorting, they would be placed into uniquely identified stockpiles</td>
<td>Yes</td>
<td>High</td>
<td>Transport of material to landfill with an EPL licence to receive the waste in accordance the waste classification of the material</td>
<td>Medium</td>
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<tr>
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<td></td>
<td>Odours would be managed using odour suppressants eg Biosolve or by covering odorous material</td>
<td>Yes</td>
<td>High</td>
<td>As above and including: Using dust control mesh on site fencing</td>
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<tr>
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<td></td>
<td>Using dust control mesh on site fencing</td>
<td>Yes</td>
<td>Medium</td>
<td>Surfacing internal access roads with crushed rock</td>
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<td>Minimising stockpile areas to the extent practical</td>
<td>Yes</td>
<td>Medium</td>
<td>Wetting down (using water carts/hoses) exposed surfaces, internal access roads, before and during grubbing and ballast removal, stockpiles (including during formation and loading) to minimise dust</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ground disturbance and stockpiling activities would not take place during winds over eight metres per second</td>
<td>Yes</td>
<td>Medium</td>
<td>Ground disturbance and stockpiling works would cease if dust is seen to be blowing off-site and controls would be put in place to manage the issue</td>
<td>Low</td>
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<tr>
<td></td>
<td></td>
<td>Ground disturbance works would be staged depending on weather conditions and/or expected ground conditions to limit the extent of the Site being disturbed at any one time. Works to excavate ballast and stabilise the Site would progressively move across the Site to reduce exposed areas</td>
<td>Yes</td>
<td>Medium</td>
<td>Covering of stockpiles with appropriate material (eg secured geofabric or plastic) when not being formed or removed as necessary (eg adverse weather conditions). Contaminated stockpiles would be covered at all times when not being formed or removed</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Using trailer covers on completion of loading, to prevent load displacement</td>
<td>Yes</td>
<td>Medium</td>
<td>Using trailer covers on completion of loading, to prevent load displacement</td>
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<td>Carrying out asbestos fibre air monitoring during activities which could liberate asbestos fibres</td>
<td>Yes</td>
<td>Medium</td>
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<td>Further dust control measures are discussed in section 6.9 of the REF</td>
<td>Yes</td>
<td>Medium</td>
<td>Further dust control measures are discussed in section 6.9 of the REF</td>
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**Table 1: CSM Table for the Site Management Works**

**Safeguards and management measures**

1. **On-site workers to use appropriate PPE and hygiene practices specific to the nature of the material being handled**
2. **If excavation works intersect alluvium underlying fill materials, work would be carried out in accordance with an approved ASSMP**
3. **Asbestos fibre air monitoring would be completed during activities which could liberate asbestos fibres**
4. **Further dust control measures are discussed in this table below and in section 6.9 of the REF**
5. **Transport of material to landfill with an EPL licence to receive the waste in accordance the waste classification of the material**
6. **As above and including: Using dust control mesh on site fencing**
### Potential Source and Contaminants
- Erosion and transport of sediment/particulates by water from overland flows and stormwater runoff
- Cross contamination of on-site soils during

### Potential Exposure Pathways
- Complete exposure pathways
- Risk of contaminant exposure

### Potential Receptors
- On-site workers and visitors
- Public including nearby off-site residents, workers and visitors on surrounding lands
- Rozelle Bay (ecological and human recreational receptors)

### Prior to Implementation of Management Measures:
- Safeguards and management measures

### Post Implementation of Management Measures:
- Residual risk of contaminant exposure

#### Erosion and transport of sediment/particulates by water from overland flows and stormwater runoff
- On-site workers and visitors
- Public including nearby off-site residents, workers and visitors on surrounding lands
- Rozelle Bay (ecological and human recreational receptors)

#### Yes Medium

- As above and including:
  - Using appropriate sediment controls/drainage design to manage and contain Site runoff (eg directing drainage runoff to drainage channels and sediment basins)
  - Constructing drainage structures such as drainage channels and sediment basins early in the works
  - Forming and lining of drainage channels to convey concentrated flows through the Site. Suitable lining materials would be identified by assessing flow velocities and associated scour potential, and could include geotextiles, jute matting, turf, rock rip rap, shotcrete or concrete
  - Providing check dams (eg stacked rock, silt fences) along drainage channels at appropriate intervals to minimise velocities and assist in settling out sediments
  - Installing culverts or other suitable stabilised crossing arrangements where channels are required to cross internal access roads
  - Where possible locating drainage channels and sediment basins away from areas of high contamination or ASS potential
  - Implementation of management measures such as absorbent booms in sediment basins or close to excavations where slicks are expected or apparent to reduce the risk of runoff/migration of hydrocarbons and other contaminants
  - Silt fences and sediment traps would be installed close to existing stormwater drains, drainage channels and sediment basins in proximity to exposed areas and around stockpiles
  - Ceasing works and inspecting sediment controls during periods of heavy rainfall
  - Undertaking routine water quality monitoring within sediment basins. This would determine its eligibility for discharge. If collected water is not of sufficient quality for discharge, it would be removed off-site for disposal
  - Where residual ballast is present, the Site drainage design should consider the presence of fouled ballast with a possibly lower permeability than surrounding soils. The design should include a safety factor to manage increased stormwater flows if required
  - Ensure drainage design adequately considers flood risks and associated contingency measures such as reducing the size of disturbed areas and increasing the capacity of sediment basins, where practical.

#### Cross contamination of on-site soils during
- On-site workers and visitors
- Public including nearby off-site residents, workers and visitors on surrounding lands

#### Yes Medium

- As above and including:
  - Covering the surface of internal access roads with crushed rock
  - Contaminated stockpiles would be uniquely identified and placed on
<table>
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<tr>
<th>Potential source and contaminants</th>
<th>Potential exposure pathways</th>
<th>Potential receptors</th>
<th>Prior to implementation of management measures:</th>
<th>Safeguards and management measures</th>
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<td></td>
<td>Complete exposure pathways</td>
<td>Risk of contaminant exposure</td>
<td>Residual risk of contaminant exposure</td>
</tr>
</tbody>
</table>
| **Potential source:** Dewatering and disposal of contaminated groundwater | movement and/or storage of material  
  - Physical mobilisation of soil/fill/contaminants to other areas of the Site and off-site  
  - Contaminant leaching from disturbed/exposed RRY soil/fill materials | site residents, workers and visitors on surrounding lands  
  - Rozelle Bay (ecological and human recreational receptors)  
  - Site soils  
  - Underlying groundwater | Yes | Low | Low |
| **Potential contaminants:**  
  - Heavy metals  
  - PAHs  
  - Total recoverable hydrocarbons (TRH) | | | impermeable surfaces, such as plastic sheeting or concrete surfaces  
  - Wetting down (using water carts/hoses) exposed surfaces, internal access roads, before and during grubbing and ballast removal, stockpiles (including during formation and loading) to minimise dust  
  - Ground disturbance and stockpiling activities would not take place during winds over eight metres per second  
  - Covering loads carried by trucks coming to, driving around (where necessary) and leaving the Site to prevent load displacement  
  - Establishment and use of vehicle and plant wash down areas within a designated bunded area and on an impervious surface, before leaving the Site  
  - Water-assisted dust sweepers would be used on the local roads, to remove, as necessary, any material tracked out of the Site. | | |

**Potential source:** On-site equipment  
**Potential contaminants:**  
  - Heavy metals  
  - PAHs  
  - TRH

|                          | Direct contact with groundwater | On-site workers and visitors  
  - Offsite waste management workers (receiving contaminated groundwater) | Yes | Low | Low |
|--------------------------|-------------------------------|---------------------------------------------|----------------------------------|-----------------------------------|------------------------------------------|
|                          | Direct contact of pollution and site soils  
  and infiltration of pollution into groundwater | On-site workers and visitors  
  - Site soils  
  - Underlying groundwater | Yes | Medium | Low |
|                          | | | Implementing controls to protect against spills and leaks. These would include ensuring that plant is in good working order and there is appropriate bunding and use of interceptors under liquid storage areas  
  - Inspections of equipment to check that it is maintained and operated in a proper and efficient condition to reduce the likelihood of spills or leaks  
  - Establishment of vehicle and plant wash down areas within a designated bunded area and on an impervious surface  
  - A specific emergency spill protocol would be developed and included in the SWMP. It would address measures to be implemented in the event of a spill, including initial response and containment, notification of emergency services and relevant authorities (including Roads and Maritime and EPA officers.). | | |