

## **ATTACHMENT 1 STATEMENTS OF COMMITMENT AS AMENDED**

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## ATTACHMENT 1

### STATEMENT OF COMMITMENTS AS AMENDED

*Amendments made for the Conditions of Approval are deletions only which are shown as struck through (eg ~~struck through~~).*

# ~~Schedule 1: Description of Activity~~

~~The Activity is the Southern Sydney Freight Line as described in the:~~

- ~~1. Environmental Assessment for the Southern Sydney Freight Line prepared by Parsons Brinckerhoff, dated 27 April 2006; as modified by the~~
- ~~2. Submissions Report for the Southern Sydney Freight Line prepared by the Australian Rail Track Corporation dated 18 August 2006.~~

# Definitions

<i>Activity</i>	<del>The Activity described in Schedule 1 of this Statement of Commitments.</del>
<i>Ancillary Facility</i>	<del>Temporary facility for Construction that does not form part of the Activity. Examples are an office and amenities compound and a materials storage compound.</del>
<i>Construction</i>	<del>Includes all work in respect of the Activity other than survey, acquisitions, fencing, investigative drilling or excavation, building/road dilapidation surveys, minor clearing (except where threatened species, populations or ecological communities would be affected), establishing site compounds, or other activities determined by the EMR to have minimal environmental impact (e.g. minor access roads, adjustments to services/utilities, etc.).</del>
<i>Construction Work Site</i>	<del>Sites at which Construction works are undertaken including construction work areas, Construction compounds and Construction vehicle access tracks and parking areas.</del>
<i>Department, the</i>	<del>Department of Planning.</del>
<i>Director-General, the</i>	<del>Director-General of the Department (or delegate).</del>
<i>Director-General's Agreement</i>	<del>A written advice from the Director-General (or delegate).</del>
<i>Director-General's Approval</i>	<del>A written approval from the Director-General (or delegate).</del>
	<del>Where the Director-General's Approval is required under a Condition the Director-General will endeavour to provide a response within one month of receiving an approval request. The Director-General may ask for additional information if the approval request is considered incomplete. When further information is requested the time taken for the Proponent to respond in writing will be added to the one month period.</del>
<i>Environmental Assessment</i>	<del>Means the environmental assessment for the Southern Sydney Freight Line prepared by Parsons Brinckerhoff, dated 27 April 2006.</del>
<i>Environmental Management Representative</i>	<del>An independent environmental auditor appointed with the approval of the Director-General to audit the Proponent's performance in implementation of the CEMP.</del>

<del>Minister, the Operation</del>	<del>Minister for Planning. Means the Operation of the Activity, but does not include commissioning trials of equipment or temporary use of parts of the Activity during Construction.</del>
<del>Partial Possession</del>	<del>A period of time in which an area of a railway station platform, stairway, concourse, footbridge or other railway station infrastructure is inaccessible to train passengers so as to enable Construction of the Activity to occur safely and with minimum inconvenience and impact to passengers and station staff.</del>
<del>Proponent Publicly Available</del>	<del>Australian Rail Track Corporation Ltd Available for inspection by a member of the general public (e.g. available on an internet site or at a display centre).</del>
<del>'Reasonable and Feasible'</del>	<del>Consideration of best practice taking into account the benefit of proposed measures and their technological and associated operational application in the NSW and Australian context. Feasible relates to engineering considerations and what is practical to build. Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and nature and extent of potential improvements.</del>
<del>Relevant Councils</del>	<del>Any or all of Campbelltown City Council, Liverpool City Council, Fairfield City Council and Bankstown City Council, as appropriate.</del>
<del>Relevant Government Departments</del>	<del>A government department that has an interest in and/or with a licensing or approval role for the Activity's Construction or Operation.</del>
<del>River</del>	<del>Has the meaning given under the Water Management Act 2002. In summary, this is 'any watercourse, whether perennial or intermittent and whether comprising a natural channel or a natural channel artificially improved'.</del>
<del>Sensitive Receiver</del>	<del>Residence, education institution (e.g. school, TAFE college), health care facility (e.g. nursing home, hospital) and religious facility (e.g. church).</del>
<del>SSFL Corridor</del>	<del>The Southern Sydney Freight Line corridor as described in the Environmental Assessment for the Southern Sydney Freight Line.</del>
<del>Stages</del>	<del>Stages refer to the: division of an Activity into multiple contract packages</del>
<del>Structure</del>	<del>Construction or Operation of an Activity in discrete sections.</del>
<del>Submissions Report</del>	<del>residence, farm shed or other building. Submissions Report for the Southern Sydney Freight Line prepared by the ARTC, dated 18 August 2006</del>
<del>Track Possession</del>	<del>a period of time in which trains are excluded to allow maintenance or Construction.</del>

# Abbreviations

ARI	Average Recurrence Interval
ARTC	Australian Rail Track Corporation Ltd
CEMP	Construction Environmental Management Plan
CLG	Community Liaison Group
dB(A)	Decibel, 'A' weighted scale
DEC	Department of Environment and Conservation. Also includes the Environment Protection Authority and the National Parks and Wildlife Service
EMR	Environmental Management Representative
ICLR	Independent Community Liaison Representative
L <sub>A90</sub>	The noise level exceeded for 90% of a monitoring period, also referred to as the background noise level.
L <sub>Aeq</sub> (9hour)	Equivalent continuous (constant) sound pressure level over a 9 hour period from 10 pm to 7 am.
L <sub>Aeq</sub> (15-hour)	Equivalent continuous (constant) sound pressure level over a 15-hour period from 7 am to 10 pm.
L <sub>Aeq</sub> (15-mins)	Equivalent sound pressure level over a 15 minute interval.
L <sub>A1</sub> (1 minute)	Sound pressure level exceeded for 1% of the time measured over a 1 minute interval.
L <sub>A10</sub> (15-mins)	Sound pressure level exceeded for 10% of the time over a 15 minute period.
OEMP	Operation Environmental Management Plan.
RTA	Roads and Traffic Authority.
SSFL	Southern Sydney Freight Line.

# Administrative

## The Activity

1. ~~The Proponent will carry out the Activity consistent with:~~
  - a) ~~the procedures, safeguards and mitigation measures identified in the Environmental Assessment, as modified by the Submissions Report; and~~
  - b) ~~this Statement of Commitments.~~

~~This Statement of Commitments prevails in the event of any inconsistency with the requirements for the Construction and Operation of the Activity arising out of the documents described in (a) and (b) above.~~

2. ~~This Statement of Commitments does not relieve the Proponent of its obligations under any other Act.~~

## Compliance

### General

3. ~~The Proponent will notify in writing the Director General, Relevant Government Departments and Relevant Councils of the start of the Activity's Construction and Operation. Such notification will be provided at least four weeks before the relevant start date unless otherwise agreed to by the Director General.~~
4. ~~The Proponent will ensure compliance with all of this Statement of Commitments and will implement any measures arising from this Statement of Commitments.~~
5. ~~The Proponent will bring to the Director General's attention any matter that may require further assessment by the Director General.~~
6. ~~The Proponent will comply with any requirements of the Director General arising from the Director General's assessment of:~~
  - a) ~~any reports, plans or correspondence that are submitted to satisfy this Statement of Commitments; and~~
  - b) ~~the implementation of any actions or measures contained in such reports, plans or correspondence.~~

### Staging Report

7. ~~Should the Proponent elect to construct the Activity in Stages, these Stages and their Construction would be consistent with this Statement of Commitments. If Stages are proposed, the Proponent will submit a *Staging Report* to the Director General at least four weeks before Construction commences (or within any other time agreed to by the Director General). The *Staging Report* will:~~
  - a) ~~Describe the Stages; and~~
  - b) ~~Identify how the Statement of Commitments will be addressed in each Stage.~~

## ~~Pre-Construction Compliance Report~~

- ~~8. The Proponent will submit a *Pre-Construction Compliance Report* to the Director-General at least four weeks before Construction commences (or within any other time agreed to by the Director-General).~~

~~The *Pre-Construction Compliance Report* will include:~~

- ~~a) details of how the Statement of Commitments required to be addressed before Construction were complied with;~~
- ~~b) the time when each relevant Statement of Commitments was complied with, including dates of submission of any required reports and/or approval dates; and~~
- ~~c) details of any approvals or licences required to be issued by Relevant Government Departments before Construction commences.~~

## ~~Pre-Operation Compliance Report~~

- ~~9. The Proponent will submit a *Pre-Operation Compliance Report* to the Director-General at least four weeks before Operation commences (or within any other time agreed to by the Director-General).~~

~~The *Pre-Operation Compliance Report* will include:~~

- ~~a) details of how the Statement of Commitments required to be addressed before Operation were complied with;~~
- ~~b) the time when each relevant Statement of Commitments was complied with, including dates of submission of any required reports and/or approval dates; and~~
- ~~c) details of any approvals or licences required to be issued by Relevant Government Departments for the Activity's Operation.~~

## ~~Construction Compliance Reports~~

- ~~10. The Proponent will provide the Director-General, Relevant Councils and any other government department nominated by the Director-General with *Construction Compliance Reports*. The EMR will review the *Construction Compliance Reports* before they are submitted to the Director-General and bring to the Director-General's attention any shortcomings.~~

~~The first *Construction Compliance Report* will report on the first six months of Construction and be submitted a maximum six weeks after expiry of that period (or at any other time interval agreed to by the Director-General). The second, and subsequent, *Construction Compliance Reports* will be submitted at maximum intervals of six months from the date of submission of the first *Construction Compliance Report* (or at any other time interval agreed to by the Director-General) for the duration of Construction.~~

~~The *Construction Compliance Reports* will include information on:~~

- ~~a) compliance with the CEMP and the Statement of Commitments;~~
- ~~b) compliance with any approvals or licenses issued by Relevant Government Departments for Construction;~~



- ~~c) the implementation and effectiveness of environmental controls. The assessment of effectiveness will be based on a comparison of actual impacts against performance criteria identified in the CEMP;~~
- ~~d) environmental monitoring results, presented as a results summary and analysis;~~
- ~~e) the number and details of any complaints, including a summary of main areas of complaint, action taken, response given and intended strategies to reduce recurring complaints;~~
- ~~f) details of any review and amendments to the CEMP resulting from Construction during the reporting period; and~~
- ~~g) any other matter relating to compliance with the Statement of Commitments or as requested by the Director General.~~

~~The Construction Compliance Reports will be made Publicly Available.~~

## **Environmental Impact Audits**

### **Environmental Impact Audit Report – Construction**

- ~~11. The Proponent will prepare an *Environmental Impact Audit Report – Construction* and submit it to the Director General a maximum three months after Construction is complete (or at any other time interval agreed to by the Director General). The *Environmental Impact Audit Report – Construction* will also be submitted to other government departments upon the request of the Director General.~~

~~The *Environmental Impact Audit Report – Construction* will:~~

- ~~a) identify the major environmental controls used during Construction and assess their effectiveness;~~
- ~~b) summarise the main environmental management plans and processes implemented during Construction and assess their effectiveness;~~
- ~~c) identify any innovations in Construction methodology used to improve environmental management; and~~
- ~~d) discuss the lessons learnt during Construction, including recommendations for future Activities.~~

### **Environmental Impact Audit Report – Operation**

- ~~12. The Proponent will submit an *Environmental Impact Audit Report – Operation* to the Director General a maximum 24 months after the Activity begins Operation and at any additional periods that the Director General may require. The *Environmental Impact Audit Report – Operation* will also be submitted to other government departments upon the request of the Director General.~~

~~The *Environmental Impact Audit Report – Operation* will:~~

- ~~a) be certified by an independent person at the Proponent's expense. The certifier will be advised to the Director General before the *Environmental Impact Audit Report – Operation* is prepared;~~
- ~~b) compare the Operation impact predictions made in the Environmental Assessment, Submissions Report and any supplementary studies with the actual impacts;~~

- ~~c) assess the effectiveness of implemented mitigation measures and safeguards;~~
- ~~d) assess compliance with the systems for operation maintenance and monitoring;~~
- ~~e) discuss the results of consultation with the local community, particularly any feedback or complaints; and~~
- ~~f) be made Publicly Available.~~

# ~~Environmental management~~

## ~~Construction Environmental Management Plan~~

- ~~13. The Proponent will prepare a Construction Environmental Management Plan (CEMP) and implement it in accordance with this Statement of Commitments and all relevant Acts and Regulation. The Proponent will obtain the Director General's Approval for the CEMP before Construction commences or within any other time agreed to by the Director General. The CEMP will be reviewed by the EMR before the Proponent seeks the Director General's approval for the CEMP. The EMR will bring to the Director General's attention any shortcomings.~~

~~The Proponent will ensure that the mitigation measures identified in the Environmental Assessment, Submissions Report and in this Statement of Commitments are incorporated into the CEMP.~~

~~The CEMP will:~~

- ~~a) include a Construction program, identifying Construction activities and their location and timing;~~
- ~~b) cover any relevant environmental elements identified by the Proponent, or its contractor, from their environmental due diligence investigations;~~
- ~~c) contain the Construction Sub-Plans required by this Statement of Commitments;~~
- ~~d) be prepared following consultation with Relevant Government Departments and Relevant Councils;~~
- ~~e) be Publicly Available~~
- ~~f) include a community consultation and notification strategy (including local community, Relevant Government Departments, Relevant Councils), and complaints management system;~~
- ~~g) include environmental management details such as:~~
  - ~~i. identification of statutory obligations which the Proponent is required to fulfil during Construction, including all approvals and licences;~~
  - ~~ii. an environmental management structure indicating the responsibility, authority and accountability for personnel relevant to the CEMP;~~
  - ~~iii. the role of the EMR and identification of Construction activities requiring EMR attendance;~~
  - ~~iv. details of the Construction personnel induction and training program;~~
  - ~~v. emergency response procedures;~~
- ~~h) include implementation details such as:~~
  - ~~i. identification of relevant environmental elements;~~
  - ~~ii. measures to avoid and/or control environmental impacts;~~
  - ~~iii. the tools to be use to implement the CEMP such as plans, schedules and work instructions;~~

- i) ~~include monitoring and review details such as:~~
  - i. ~~performance criteria;~~
  - ii. ~~performance monitoring methods;~~
  - iii. ~~auditing and corrective action procedures;~~
  - iv. ~~CEMP review procedures.~~

## Operation Environmental Management Plan

14. ~~The Proponent will prepare an Operation Environmental Management Plan (OEMP) and implement it in accordance with this Statement of Commitments and all relevant Acts and Regulations. The Proponent will obtain the approval of the Director General for the OEMP before Operation commences or within any other time agreed to by the Director General.~~

~~The OEMP will:~~

- a) ~~identify the Operation activities;~~
- b) ~~cover relevant environmental elements identified by the Proponent either from its environmental due diligence investigations or required to satisfy any other licence or approval;~~
- c) ~~include the Operation Sub Plans required under this Statement of Commitments;~~
- d) ~~be prepared in consultation with Relevant Government Departments and Relevant Councils;~~
- e) ~~be made Publicly Available;~~
- f) ~~include environmental management details such as:~~
  - i. ~~identification of statutory obligations which the Proponent is required to fulfil during the Activity's Operation, including all approvals and licences;~~
  - ii. ~~an environmental management structure indicating the responsibility, authority and accountability for personnel relevant to the OEMP;~~
  - iii. ~~details of a personnel induction and training program;~~
  - iv. ~~emergency response procedures;~~
- g) ~~include implementation details such as:~~
  - i. ~~identification of relevant environmental elements;~~
  - ii. ~~measures to avoid and/or control environmental impacts;~~
  - iii. ~~the tools to be used to implement the OEMP such as plans, schedules and work instructions;~~
- h) ~~include monitoring and review details such as:~~
  - i. ~~performance criteria;~~
  - ii. ~~performance monitoring methods;~~
  - iii. ~~auditing and corrective actions procedures;~~
  - iv. ~~OEMP review procedures.~~

~~Alternatively, the Proponent may use its environmental management system, which is aligned with international standard ISO14001:2004, to the extent that it is applicable to the Activity. Should the Proponent elect to use its environmental management system instead of preparing an OEMP, it will provide details of this system to the Director-General demonstrating its application to the Activity.~~

## ~~Environmental Management Representative~~

~~15. The Proponent will request the Director-General's Approval for the appointment of an Environmental Management Representative (EMR) at least eight weeks before Construction commences (or within any other time agreed to by the Director-General). In its request, the Proponent will provide the following information, the:~~

- ~~a) qualifications and experience of the EMR including demonstration of general compliance with relevant Australian Standards for environmental auditors;~~
- ~~b) authority and independence (from the Proponent or its contractors) of the EMR, including details of the Proponent's internal reporting structure; and~~
- ~~c) resourcing of the EMR role. The EMR will be available:~~
  - ~~i. for sufficient time to undertake the EMR role. This timing will be agreed between the Proponent and the EMR and advised to the Director-General in the request for approval;~~
  - ~~ii. at any other time requested by the Director-General;~~
  - ~~iii. during any Construction activities identified in the CEMP to require the EMR's attendance; and~~
  - ~~iv. for the duration of Construction.~~

~~16. The Director-General may at any time immediately revoke the approval of an EMR appointment by providing written notice to the Proponent. Interim arrangements for EMR responsibility following the revocation will be agreed in writing between the Director-General and the Proponent.~~

~~17. The Director-General may at any time conduct an audit of any actions undertaken by the EMR. The Proponent will:~~

- ~~a) facilitate and assist the Director-General in any such audit; and~~
- ~~b) include in the conditions of the EMR's appointment the need to facilitate and assist the Director-General in any such audit.~~

~~18. The EMR is authorised to:~~

- ~~a) consider and advise the Director-General and the Proponent on matters specified in the Statement of Commitments and compliance with such;~~
- ~~b) determine whether work falls within the definition of Construction where clarification is requested by the Proponent;~~
- ~~c) review the CEMP;~~

- ~~d) periodically monitor the Proponent's activities to evaluate compliance with the CEMP. Periodic monitoring will involve site inspections of active work sites at least fortnightly;~~
- ~~e) provide a written report to the Proponent of any non-compliance with the CEMP observed or identified by the EMR. Non-compliance will be managed as identified in the CEMP;~~
- ~~f) issue a recommendation to the Proponent to stop work immediately if in the view of the EMR an unacceptable impact on the environment is occurring or is likely to occur. The stop work recommendation may be limited to specific activities causing an impact if the EMR can easily identify those activities. The EMR may also recommend that the Proponent initiate Reasonable actions to avoid or minimise adverse impacts;~~
- ~~g) review corrective and preventative actions to monitor the implementation of recommendations made from audits and site inspections;~~
- ~~h) certify that minor revisions to the CEMP are consistent with the approved CEMP; and~~
- ~~i) provide regular (as agreed with the Director General) reports to the Director General on matters relevant to carrying out the EMR role including notifying the Director General of any stop work recommendations.~~

~~The Environmental Management Representative will immediately advise the Proponent and the Director General of any incidents relevant to this Statement of Commitments resulting from Construction that were not dealt with expediently or adequately by the Proponent.~~

# Issue specific commitments

## Communication and consultation

~~19. Before Construction commences, and then at maximum three monthly intervals, the Proponent will advertise in relevant newspapers the: nature of the works proposed for the next three months; areas in which these works are proposed; Construction hours; and a contact telephone number.~~

~~The Proponent will ensure that the local community and businesses are advised of Construction activities that could cause disruption. Methods to disseminate this information will be identified in the CEMP and would address the issues identified in Section 10.4.5 of Volume 1 of the Environmental Assessment. Information to be provided will include:~~

- ~~a) details of any traffic disruptions and controls;~~
- ~~b) construction of temporary detours;~~
- ~~c) details of any rail passenger disruptions and alternative transport arrangements;~~
- ~~d) work approved to be undertaken outside standard Construction hours, in particular noisy works, before such works are undertaken; and~~
- ~~e) other items identified in Section 11.3.1 of Volume 1 of the Environmental Assessment.~~

~~20. The Proponent will establish an Activity internet site before Construction commences and maintain the internet site until Construction ends. This internet site will contain:~~

- ~~a) periodic updates of work progress, consultation activities and planned work schedules. The site will indicate the date of the last update and the frequency of the internet site updates;~~
- ~~b) a description of relevant approval authorities and their areas of responsibility;~~
- ~~c) a list of reports and plans that are Publicly Available under this Statement of Commitments and details of how theses can be accessed;~~
- ~~d) contact names and phone numbers of relevant communications staff; and~~
- ~~e) the 24 hour toll free complaints contact telephone number.~~

~~Updates of work progress, Construction activities and planned work schedules will be provided where significant changes in noise or traffic impacts are expected.~~

- ~~21. A Community Liaison Group (CLG) will be formed and hold its first meeting before Construction commences. The CLG will include the EMR and representatives from the Proponent and its head contractor. Community representatives will be identified and selected from relevant community and business groups, individual members of the community adjoining the Activity and representatives from Relevant Councils.~~

~~The Proponent will, at its own expense:~~

- ~~a) maintain the CLG for the duration of Construction unless otherwise approved by the Director-General;~~
- ~~b) provide a chairperson for the CLG. The chairperson will be independent of the Proponent and may be elected from the CLG membership;~~
- ~~c) nominate two representatives to attend all CLG meetings;~~
- ~~d) provide to the CLG regular information on the progress of Construction and related environmental performance;~~
- ~~e) promptly provide to the CLG information that the CLG Chair may reasonably request concerning the Activity's environmental performance;~~
- ~~f) provide access for site inspections by the CLG;~~
- ~~g) provide meeting facilities for the CLG, and take notes of CLG meetings. These meeting notes will be available to CLG members within 14 days of the meeting and should be endorsed by the Chair;~~
- ~~h) where reasonably required by the Chair, arrange consultant(s) to explain technical information to the CLG; and~~
- ~~i) where reasonably required by the Chair, invite representatives from Relevant Government Departments or other individuals to attend CLG meetings.~~

~~Issues for discussion by the CLG include the dissemination of information to the community, design issues related to the Conditions or mitigation measures, the CEMP and Construction activities. The CLG may make comments about these issues which must be considered by the Proponent. The Proponent will report back to the CLG on its considerations of the comments.~~

~~The Proponent may review a CLG's membership and/or the need for the CLG at any time during Construction. The Proponent will seek the Director-General's approval to dissolve a CLG. Any request for dissolution will demonstrate why the CLG is no longer required.~~

~~In the event of any dispute between the CLG and the Proponent, the Proponent's decision is final provided it is consistent with these Statement of Commitments.~~

- ~~22. The Proponent will consult adjacent property owners about implementing mitigation measures that affect their property.~~



## ~~Construction Complaints Management System~~

~~23. The Proponent will prepare and implement a Construction Complaints Management System before Construction commences and maintain the System for the duration of Construction. The Construction Complaints Management System will be consistent with AS 4269 Complaints Handling and include:~~

- ~~a) a 24 hour, toll free telephone number listed with a telephone company and advertised;~~
- ~~b) a system to receive, record, track and respond to complaints within a specified timeframe. When a complaint cannot be responded to immediately, a follow up verbal response on what action is proposed will be provided to the complainant within two hours during night time works and 24 hours at other times;~~
- ~~c) a process for the provision of a written response to the complainant within 10 days, if the complaint cannot be resolved by the initial or follow up verbal response; and~~
- ~~d) a mediation system for complaints unable to be resolved.~~

~~Information on all complaints received, including the means by which they were addressed and whether resolution was reached with or without mediation, will be included in the Construction Compliance Reports and will be made available to the Director-General on request.~~

## ~~Independent Community Liaison Representative~~

~~24. The Proponent will request the Director-General's approval for the appointment of an Independent Community Liaison Representative(s) (ICLR) at least eight weeks before Construction commences (or within any other time agreed to by the Director-General). In its request the Proponent will provide the following information, the:~~

- ~~a) qualifications and experience of the ICLR relating to dispute resolution, facilitation and community involvement;~~
- ~~b) authority and independence (from the Proponent or its contractors) of the ICLR; and~~
- ~~c) resourcing of the ICLR role. The ICLR will:~~
  - ~~i. attend Community Liaison Group meetings as a facilitator;~~
  - ~~ii. monitor the implementation of the Community Involvement Plan and advise the Proponent about its effectiveness;~~
  - ~~iii. be available for direct contact by the community at times and locations identified in the Community Involvement Plan;~~
  - ~~iv. advise the Proponent and EMR about community issues; and~~
  - ~~v. mediate disputes between the Proponent and the community that cannot be resolved directly between the Proponent and community.~~

~~The ICLR will serve for the duration of Construction unless otherwise agreed by the Director-General. The cost of employing the ICLR will be the responsibility of the Proponent.~~

# Flora and fauna

Ref.	Objective	Action	Timing
<b>Corridor commitments</b>			
25	Minimise impacts to flora and fauna during the Construction of the Activity	<p>A Biodiversity Management Sub Plan will be prepared as part of the CEMP. The Sub Plan will be prepared in consultation with Relevant Government Departments and Relevant Councils and include:</p> <ul style="list-style-type: none"> <li>a. plans showing: <ul style="list-style-type: none"> <li>i. terrestrial vegetation communities; important flora and fauna habitat areas; locations where threatened species, populations or ecological communities were recorded; and areas to be cleared. The plans will identify vegetation adjoining the Activity where this contains important habitat areas and/or threatened species, populations or ecological communities;</li> <li>ii. aquatic vegetation communities; important habitat areas; locations where threatened species, populations or ecological communities were recorded; and areas to be cleared. The plans will also identify vegetation adjoining the Activity where this contains important habitat areas and/or threatened species, populations or ecological communities;</li> </ul> </li> <li>b. methods to manage impacts on flora and fauna species (terrestrial and aquatic) and their habitat which may be directly or indirectly affected by the Activity. These will include: <ul style="list-style-type: none"> <li>i. procedures for vegetation clearing, soil management and managing other habitat damage (terrestrial and aquatic) during Construction;</li> <li>ii. methods to protect vegetation both retained within, and also adjoining, the Activity from damage during Construction;</li> <li>iii. a habitat tree management program including fauna recovery procedures and habitat maintenance (e.g. relocating hollows or installing nesting boxes);</li> <li>iv. methods to minimise damage to aquatic habitats;</li> <li>v. where possible, and where consistent with DEC or NSW Fisheries requirements, strategies for re-using in rehabilitation works individuals of any threatened plant species that would otherwise be destroyed by the Activity;</li> <li>vi. performance criteria against which to measure the success of the methods</li> <li>vii. where removal of threatened species is unavoidable, investigations of the potential for translocation or transplantation of the within the immediate area or another suitable donor site will be undertaken in consultation with the DEC, NSW Fisheries and RailCorp and, where Reasonable and Feasible, in accordance with the DEC's recovery plan and RailCorp's management plan for <i>Acacia pubescens</i>;</li> <li>viii. no materials, spoil or machinery will be stored or parked within the drip lines of trees;</li> <li>ix. boring of piles at Cabramatta Creek bridge to minimise impacts to an existing camp of the threatened Grey-headed Flying-fox at Cabramatta;</li> </ul> </li> <li>c. rehabilitation details, including: <ul style="list-style-type: none"> <li>i. identification of locally native species to be used in rehabilitation and landscaping works, including flora species suitable as a food resource for threatened fauna species;</li> <li>ii. methods to remediate affected aquatic habitats or fish passages;</li> <li>iii. the source of all seed or tube stock to be used in rehabilitation and landscaping works including the identification of seed sources within the Activity. Seed of locally native species within the Activity will be collected before Construction commences to provide seed stock for revegetation;</li> <li>iv. methods to re-use topsoil (and where relevant subsoils)</li> </ul> </li> </ul>	Prior to the commencement of Construction.

Ref.	Objective	Action	Timing
		<p>and cleared vegetation;</p> <p>v. measures for the management and maintenance of all preserved, planted and rehabilitated vegetation (including aquatic habitats);</p> <p>d. a Weed Management Strategy including:</p> <p>i. identification of weeds within the Activity and adjoining areas;</p> <p>ii. weed eradication methods and protocols for the use of herbicides;</p> <p>iii. methods to treat and re-use weed infested topsoil;</p> <p>iv. strategies to control the spread of weeds during Construction;</p> <p>e. a program for reporting on the effectiveness of terrestrial and aquatic flora and fauna management measures against the identified performance criteria. Management methods will be reviewed where found to be ineffective</p> <p>f. soil translocation methods for soils likely to contain a large soil seed bank, to be implemented, where Reasonable, as part of the proposed works in Leacock Regional Park</p> <p>g. other management and mitigation measures contained in Section 12.3.4 of Volume 1 of the Environmental Assessment.</p> <p>If any class 1, 2 and 5 noxious weeds are to be removed, the Proponent will obtain a permit from the NSW Department of Primary Industries.</p>	
<b>Precinct and site specific commitments</b>			
26	Minimise Construction impacts to <i>Acacia pubescens</i> .	The Proponent will undertake a targeted survey for <i>Acacia pubescens</i> populations on the side of the Main South Line corridor between Liverpool and Warwick Farm Railway Stations where Construction is proposed. The survey will accurately determine the location of <i>Acacia pubescens</i> populations in relation to the Activity and will establish Construction Work Site boundaries to ensure the protection of all the identified populations during Construction in this location.	During detailed design.
27	Minimise Construction impacts to the Green and Golden Bell Frog.	The Proponent will undertake a targeted survey for Green and Golden Bell Frog populations on the side of the Main South Line corridor between Chester Hill and Villawood Railway Stations where Construction is proposed. The survey will accurately determine any sites of Green and Golden bell Frog populations in relation to the Activity and will establish Construction Work Site boundaries to ensure the protection of all the identified populations during Construction in this location.	During detailed design.
28	Minimise Construction impacts to <i>Pimelea spicata</i> .	The Proponent will undertake a targeted survey for <i>Pimelea spicata</i> populations on the side of the Main South Line corridor between Minto and Leumeah Railway Stations and Carramar and Leightonfield Railway Stations where Construction is proposed. The survey will accurately determine the location of <i>Pimelea spicata</i> populations in relation to the Activity and will establish Construction Work Site boundaries to ensure the protection of all the identified populations during Construction in this location.	During detailed design.

# Indigenous heritage management

Ref.	Objective	Action	Timing
<b>Corridor commitments</b>			
29	Avoid and minimise impacts to Aboriginal heritage items during Construction	<p>An Aboriginal Heritage Management Sub-Plan will be prepared as part of the CEMP. The Sub-Plan will be prepared in consultation with all relevant Aboriginal groups and the DEC and include:</p> <ul style="list-style-type: none"> <li>a. details of the archaeological investigations to be undertaken and any associated licences or approvals required;</li> <li>b. procedures to be implemented if previously unidentified Aboriginal objects are discovered during Construction. If such objects are discovered, all work likely to affect the object(s) will cease immediately and the DEC informed in accordance with the <i>National Parks and Wildlife Act 1974</i>; and</li> <li>c. an education program for Construction personnel on their obligations for Aboriginal cultural materials.</li> </ul>	Prior to the commencement of Construction.
<b>Precinct and site specific commitments</b>			
30	Survey the corridor prior to the commencement of Construction.	<ul style="list-style-type: none"> <li>a. The Proponent will arrange an inspection by a suitably qualified archaeologist of the track bed next to the Georges River north of Liverpool Railway Station at such time during Construction that vegetation clearing occurs in this location. The Proponent will invite representatives of relevant Aboriginal groups to attend this inspection. The Proponent will act on all Reasonable recommendations of the archaeologist and relevant Aboriginal groups in relation to any need for preparation and implementation of a heritage strategy for any Aboriginal heritage items identified during this inspection.</li> <li>b. At such time as the Proponent finalises the exact footprint of the proposed Glenfield flyover and prior to Construction occurring in the vicinity of Leacock Regional Park, the Proponent will arrange for a suitably qualified archaeologist to undertake a final assessment of the potential impact of Construction of the western side of the Glenfield flyover at Leacock Regional Park on recorded Aboriginal heritage items. The Proponent will undertake this assessment in consultation with representatives of relevant the Cubbitch Barta Native Title Claimants, Darug Custodians Aboriginal Corporation, Darug Tribal Aboriginal Land Council, Gandangara Local Aboriginal Land Council and Tharawal Local Aboriginal Land Council. ARTC will act on the collectively agreed recommendations of the archaeologist and Aboriginal groups in relation to any need for preparation and implementation of a heritage strategy for any Aboriginal heritage items identified during this inspection.</li> </ul>	<p>Prior to the commencement of Construction north of Liverpool Railway Station.</p> <p>Prior to the commencement of Construction in the vicinity of Leacock Regional Park.</p>

# Historical relics

Ref.	Objective	Action	Timing
<b>Corridor commitments</b>			
34	Manage impacts to built heritage items during Construction.	<p>A Built Heritage Management Plan will be prepared as part of the GEMP. This plan will be prepared in consultation with the Heritage Office and Relevant Councils and include:</p> <ul style="list-style-type: none"> <li>a. details of any investigations to be undertaken and any approvals required;</li> <li>b. procedures to be implemented if previously unidentified historical relics are discovered during Construction. If such relics are discovered, all work likely to affect the relic(s) will cease immediately and the Heritage Council will be notified in accordance with the <i>Heritage Act 1977</i>; and</li> <li>c. an education program for Construction Work Site personnel on their obligation for historic relics.</li> </ul>	Prior to the commencement of Construction.
32	Avoid impacts to built heritage items during Construction.	If during the course of Construction the Proponent becomes aware of any unexpected historical relic(s), all work likely to affect the relic(s) will cease immediately and the Heritage Council notified in accordance with the <i>Heritage Act 1977</i> .	During Construction.
<b>Precinct and site specific commitments</b>			
<b>Liverpool town centre</b>			
33	Avoid impacts to potential historical relics at Liverpool town centre.	<p>The Proponent will:</p> <ul style="list-style-type: none"> <li>a. prepare a Historical Archeological Assessment and Statement of Heritage Impact for the area between Memorial Avenue and Elizabeth Street; and</li> <li>b. undertake Construction in accordance with any excavation permit(s) issued for Construction in the vicinity of Liverpool town centre, which is an area of archaeological potential.</li> </ul>	During Construction.
<b>Directly affected historic relics (footbridges)</b>			
34	Record the heritage values of directly affected historic relics.	<p>Subject to consultation with RailCorp, the Proponent will:</p> <ul style="list-style-type: none"> <li>c. undertake photographic documentation of the directly affected footbridges identified in Section 2.6 of <b>Technical Paper 3</b> of the Environmental Assessment in accordance with the NSW Heritage Office's (2001) <i>Guidelines for photographic recording of heritage items</i>;</li> <li>d. arrange for storage of the document in (a) in a public archive;</li> <li>e. design footbridge extensions in accordance with Chapter 2 of <b>Technical Paper 3</b> of the Environmental Assessment.</li> </ul>	During detailed design.
<b>Indirectly affected historic relics (viaducts)</b>			
35	Mitigate impacts to indirectly affected historic relics.	<ul style="list-style-type: none"> <li>a. Subject to consultation with RailCorp, the Proponent will design the new rail bridges at the indirectly impacted viaducts identified in Section 2.6 of <b>Technical Paper 3</b> of the Environmental Assessment: <ul style="list-style-type: none"> <li>a. to be structurally independent of the existing;</li> <li>b. if possible, to maintain some physical distance between the two structures so that a visual separation is achieved; and</li> <li>c. that the rhythm of the existing spans be reflected in the new structural spans by careful positioning of new pylons.</li> </ul> </li> </ul>	During detailed design.
<b>Narellan Road level crossing and Camden rail line extension</b>			
36	Manage impacts to historic relics at Narellan Road level crossing and Camden rail line extension.	<p>Subject to consultation with RailCorp, the Proponent will:</p> <ul style="list-style-type: none"> <li>a. undertake photographic documentation of physical evidence of the Narellan Road level crossing and Camden rail line extension; and</li> <li>b. provide copies of the documentation described in (a) to Campbelltown Library.</li> </ul>	Prior to the commencement of Construction.

# Noise and vibration

Ref.	Objective	Action	Timing
<b>Corridor commitments</b>			
<b>Construction Noise and Vibration Management Sub Plan</b>			
37	Manage Construction noise and vibration to ensure compliance with the noise and vibration goals contained in the Environmental Assessment	<p>A Construction Noise and Vibration Management Sub Plan will be prepared as part of the CEMP. The Sub Plan will be prepared in consultation with the Relevant Councils and the CLG and include:</p> <ul style="list-style-type: none"> <li>a. an education program for Construction personnel about noise minimisation;</li> <li>b. identification of each Construction activity, including Ancillary Facilities, and their associated noise and vibration impacts;</li> <li>c. identification of all potentially affected Sensitive Receivers;</li> <li>d. the Construction noise objective specified in this Statement of Commitments;</li> <li>e. the Construction vibration criteria specified in this Statement of Commitments;</li> <li>f. determination of appropriate noise and vibration objectives for each identified Sensitive Receiver (including Liverpool Hospital);</li> <li>g. noise and vibration monitoring, reporting and response procedures;</li> <li>h. assessment of potential noise and vibration from each Construction activity including noise from Construction vehicles and any traffic diversions;</li> <li>i. a description of management methods and procedures and specific noise mitigation treatments that will be implemented to control noise and vibration during Construction;</li> <li>j. justification for any activities outside the Construction hours specified in the Conditions of Approval. This includes identifying areas where Construction noise would not be audible at any Sensitive Receiver;</li> <li>k. procedures for notifying residents of Construction activities that are likely to affect their noise and vibration amenity; and</li> <li>l. contingency plans to be implemented in the event of non-compliances and/or noise complaints.</li> </ul>	Prior to the commencement of Construction of the Activity
<b>Construction hours</b>			
38	Undertake Construction during normal working hours wherever possible.	<p>Construction will be restricted to between the hours of 7:00 am to 6:00 pm (Monday to Friday), 8:00 am to 1:00 pm (Saturday) and at no time on Sundays and public holidays except:</p> <ul style="list-style-type: none"> <li>a. for the delivery of materials required outside these hours by the Police or other authorities for safety reasons; or</li> <li>b. where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or</li> <li>c. where the work is identified in the Construction Noise and Vibration Management Sub Plan and approved as part of the CEMP; or</li> <li>d. any works requiring track possessions subject to the following: <ul style="list-style-type: none"> <li>i. the associated noise levels would be similar to noise levels associated with programmed maintenance works;</li> <li>ii. works which do not include high noise generating works including sheet piling, pile driving, rock hammering/breaking etc unless otherwise agreed by the Director General following consultation with the EPA; and;</li> <li>iii. notification of the community at least 14 days in advance of such works including likely times and duration;</li> </ul> </li> </ul> <p>Local residents will be informed of the timing and duration of work approved under item (c) at least 48 hours before that work commences. Any other work outside the Construction hours will be subject to DEC approval.</p>	During Construction.

Ref.	Objective	Action	Timing
<b>Construction noise objective</b>			
39	Manage Construction noise to achieve the Construction noise objective.	<p>The Construction noise objective for the Activity is to manage noise from Construction activities (as measured by a <math>L_{A10}(15\text{minute})</math> descriptor) so it does not exceed the background <math>L_{A90}</math> noise level by more than 5 dB(A).</p> <p>Background noise levels are those identified in the Environmental Assessment or Submissions Report or otherwise identified in the Construction Noise and Vibration Management Sub Plan.</p> <p>Any activities that have the potential for noise emissions that exceed the objective will be identified and managed in accordance with the Construction Noise and Vibration Management Sub Plan. The Proponent will implement all Reasonable and Feasible noise mitigation and management measures with the aim of achieving the Construction noise objective.</p> <p>If the noise from a Construction activity is substantially tonal or impulsive in nature (as described in Chapter 4 of the <i>NSW Industrial Noise Policy</i>), 5dB(A) will be added to the measured Construction noise level when comparing the measured noise with the Construction noise objective.</p>	During Construction.
<b>Construction noise management</b>			
40	Manage Construction noise from public address systems.	The Proponent will ensure that public address systems used at any Construction site are not used outside the Construction hours detailed in this Statement of Commitments unless otherwise approved through the Construction Noise and Vibration Management Sub Plan. Public address systems will be designed to minimise noise spillage off-site.	During Construction.
41	Manage Construction noise from rock breaking, rock hammering, sheet piling, pile driving and any similar activities.	<p>The Proponent will schedule rock breaking, rock hammering, sheet piling, pile driving and any similar activity only between the following hours unless otherwise approved in the Construction Noise and Vibration Management Sub Plan:</p> <p>a. 9 am to 12 pm and 2 pm to 5 pm, Monday to Friday; and</p> <p>b. 9 am to 12 pm, Saturday.</p>	During Construction.
42	Manage Construction noise from driven piles.	The Proponent will ensure that wherever practical, and where Sensitive Receivers may be affected, driven piles are not used within 20 metres of a building. If driven piles are required they will only be installed where approved in the Construction Noise and Vibration Management Sub Plan.	During Construction.
43	Utilise relevant Operation noise mitigation measures during Construction.	The Proponent will, where Reasonable and Feasible, erect Operation noise mitigation measures as early as possible during Construction to minimise Construction noise impacts.	At the start of Construction.
44	Minimise Construction noise impacts to education institutions.	<p>The Proponent will consult with education institutions and minimise the impact of noise generating Construction works in their vicinity.</p> <p>The Proponent will ensure that Construction works audible at an institution are not timetabled during important events, such as examination periods, unless arrangements acceptable to the affected institutions are made at no cost to the affected institutions.</p>	During Construction.

Ref.	Objective	Action	Timing
<b>Vibration criteria</b>			
45	Manage Construction vibration to achieve the vibration criteria.	<p>Vibration caused by Construction and received at any Structure outside the Activity will:</p> <ul style="list-style-type: none"> <li>a. for structural damage vibration be limited to German Standard DIN 4150 Part 3 <i>Structural Vibration in Buildings - Effects on Structures</i>; and</li> <li>b. for human exposure to vibration be limited to the evaluation criteria presented in British Standard BS 6842 <i>Guide to Evaluate Human Exposure to Vibration in Buildings</i> (1Hz to 80 Hz) for low probability of adverse comment.</li> </ul> <p>These limits apply unless otherwise approved in the Construction Noise and Vibration Management Sub Plan.</p>	During Construction.
<b>Operation noise mitigation</b>			
46	Ameliorate Operation noise impacts.	<ul style="list-style-type: none"> <li>b. The Proponent will undertake further noise impact assessment to confirm the length and height of noise barriers required to achieve the 'planning' noise goals for Sensitive Receiver identified in the Environmental Assessment and in Waldron Road in Sefton.</li> <li>c. Where noise levels are predicted to increase as a result of the Activity to a level above the 'planning' noise goals for Sensitive Receivers identified in the Environmental Assessment, the Proponent will, subject to consultation with the affected community and detailed design, install noise barriers to a maximum height of 4 metres prior to the commencement of Operation.</li> <li>d. The detailed design referred to in (b) would include: <ul style="list-style-type: none"> <li>i. shadow analysis for north facing sites in residential areas;</li> <li>ii. assessment of local flooding impacts; and</li> <li>iii. assessment of potential for graffiti and other forms of vandalism.</li> </ul> </li> <li>e. As identified in Technical Paper No. 2 of Volume 2 of the Environmental Assessment, the Proponent will, subject to consultation with the affected community and detailed design, locate installed noise barriers at approximately 5 metres from the nearest track where the track is at grade or on fill, or on the top of a cutting where the track is in cut. Where noise barriers are proposed, the Proponent will install noise barriers with absorptive surface on the rail side and generally in accordance with the urban and landscape design guidelines and principles identified in Table 3.2 of Volume 4 of the Environment Assessment and following consultation with RailCorp.</li> </ul>	During detailed design.
47	Manage Operation noise impacts.	An Operation Noise and Vibration Management Sub Plan will be prepared as part of the OEMP. The Sub Plan will be prepared in consultation with the Relevant Councils and the CLG and includes a Source Control Plan and monitoring of freight rolling stock noise.	Prior to the commencement of Operation.
48	Review the adequacy of the Operation noise and vibration mitigation measures.	The Proponent will, in consultation with the Director General, review the adequacy of Operation noise and vibration mitigation measures at a time between six (6) months and one (1) year after commencement of Operation. The review will be undertaken consistent with Practice Note VIII of the RTA's Environmental Noise Management Manual (RTA 2001a). The review will consider the Operation noise criteria contained in the Environmental Assessment or Submissions Report. Should the review indicate operational noise levels substantially exceed those predicted in the Environmental Assessment, the Proponent will investigate and implement additional noise mitigation measures. The Proponent will undertake the selection of these measures in consultation with affected landowners and/or occupiers.	During Operation.



# Soil and water management

Ref.	Objective	Action	Timing
<b>Corridor commitments</b>			
<b>Erosion and Sedimentation Control Sub Plan</b>			
49	Minimise erosion and sediment loads in surface water runoff from Construction Work Sites	<p>An Erosion and Sedimentation Control Sub Plan will be prepared as part of the CEMP. The Sub Plan will be prepared in consultation with Relevant Government Departments and Relevant Councils. The Sub Plan will:</p> <ol style="list-style-type: none"> <li>where relevant, be consistent with the Landcom's (2004) guideline "Managing Urban Stormwater - Soils and Construction", the RTA's "Guidelines for the Control of Erosion and Sedimentation in Roadworks" and the Department of Natural Resource's (1998) "Constructed Wetlands Manual";</li> <li>identify the Construction activities that could cause soil erosion or discharge sediment or water pollutants from the site;</li> <li>describe management methods to minimise soil erosion or discharge of sediment or water pollutants from the site including a strategy to minimise the area of bare surfaces during Construction;</li> <li>describe the location and capacity of erosion and sediment control measures;</li> <li>identify the timing and conditions under which Construction stage controls will be decommissioned;</li> <li>include contingency plans to be implemented for events such as fuel spills;</li> <li>identify how the effectiveness of the sediment and erosion control system will be monitored, reviewed and updated; and</li> <li>include the general erosion and sedimentation management and mitigation measures contained in Section 12.3.1 of Volume 1 of the Environmental Assessment.</li> </ol>	Prior to the commencement of Construction of the Activity.
<b>Construction</b>			
50	Ensure that erosion and sedimentation control devices are maintained such that they perform optimally.	<p>An appropriately qualified soil scientist will be consulted according to a schedule identified in the Erosion and Sedimentation Control Sub Plan to:</p> <ol style="list-style-type: none"> <li>undertake inspections of temporary and permanent erosion and sedimentation control devices;</li> <li>ensure that the most appropriate controls are being implemented;</li> <li>check that controls are being maintained in an efficient condition; and</li> <li>check that controls meet the requirements of any relevant approval and/or licence condition.</li> </ol> <p>The results of these inspections and any follow-up actions will be reported in the <i>Construction Compliance Reports</i> required by this Statement of Commitments.</p>	During Construction.
51	Ensure the Activity meets RailCorp's operation and maintenance requirements.	The Proponent will consult with RailCorp during the detailed design of cut batters and embankments to ensure RailCorp's operation and maintenance requirements are addressed.	During detailed design.

# Acid sulfate soils management

Ref.	Objective	Action	Timing
<b>Corridor commitments</b>			
52	Avoid disturbance to acid sulfate soils,	<p>An Acid Sulfate Soil Management Sub Plan will be prepared as part of the CEMP. The Sub Plan will be prepared in consultation with Relevant Government Departments. The Sub Plan will:</p> <ol style="list-style-type: none"> <li>be consistent with the "Acid Sulfate Soils Manual" (Acid Sulfate Soil Management Advisory Committee 1998) or update;</li> <li>include a contingency plan to deal with the unexpected discovery of actual or potential acid sulphate soils;</li> <li>include a water quality monitoring program;</li> <li>include an assessment of the presence of acid sulfate soils;</li> <li>depth to groundwater;</li> <li>measures to neutralise groundwater affected by sulfuric acid produced upon oxidation of pyritic material;</li> <li>details of further investigations to be undertaken to identify the extent of acid sulfate soils at high risk areas where excavation is required;</li> <li>including methods identified in Table 12.8 of <b>Volume 1</b> of the Environmental Assessment; and</li> <li>details of treatment, management and disposal options for excavated material (to prevent acid runoff or leachate).</li> </ol>	Prior to the commencement of Construction.

# Hydrology and flooding

Ref.	Objective	Action	Timing
<b>Corridor commitments</b>			
<b>Inundation levels</b>			
53	Design the Activity to not worsen existing flooding characteristics in any river upstream or downstream of the Activity's elements.	<p>a. <del>The Activity will be designed to not worsen existing flooding characteristics in any river upstream or downstream of the Activity's elements. Not worsen is defined as:</del></p> <p>i. <del>a maximum increase in inundation levels upstream of the Activity of 50 mm in a 1 in 100-year ARI rainfall event; and</del></p> <p>ii. <del>a maximum increase in inundation time of one hour in a 1 in 100-year ARI rainfall event.</del></p>	During detailed design.
54	Design bridges and culverts to not worsen existing flooding characteristics in any river upstream or downstream of the Activity's elements.	<p>a. The Proponent will undertake the design and construction of bridges and culverts in consultation with Relevant Government Departments. The Proponent will ensure the design and construction of bridges and culverts are consistent with NSW Fisheries Guidelines.</p> <p>b. The Proponent will:</p> <p>i. for the SSFL only, appropriately size all new and modified culverts and bridges to carry design flows;</p> <p>ii. undertake a hydraulic assessment to determine the existing capacity of the Bow Bowing Creek and Glenfield Junction Gully to be realigned; and</p> <p>iii. ensure that the design of the rail bridges over Glenfield, Cabramatta and Prospect Creeks avoids the placement of bridge piers in creek beds. The Proponent also design the bridges over these watercourses to maintain the flood depth underneath each bridge.</p>	During detailed design.
55	Avoid impacts to groundwater systems, including groundwater levels, groundwater quality and any groundwater dependent ecosystems	<del>The Proponent will undertake further geological investigations by the installation of piezometers at specific locations on-site to establish water levels and evaluate water quality. These investigations will be used to assess the likely impacts of the Activity on potential groundwater dependent ecosystems, establish water levels and evaluate water quality. Water quality will be evaluated for salinity (total dissolved solids), major anions and cations, and where relevant for Construction purposes, corrosiveness. An assessment of potential groundwater dependent ecosystems will also be undertaken, to evaluate the effects of construction in any such areas.</del>	Prior to the commencement of Construction.
56	Attempt to resolve landowner disputes relating to alterations to flooding characteristics in accordance with the Complaints Management System.	The Proponent will endeavour to resolve amicably any dispute between itself and any landowner about alterations to flooding characteristics caused by the Activity. If the parties cannot reach a mutually satisfactory resolution then the dispute resolution requirements of this Statement of Commitments (the complaints management system) will apply.	Prior to and during Construction and Operation

# Spoil and fill management

Ref.	Objective	Action	Timing
<b>Corridor commitments</b>			
57	Manage stockpiles of soil and other material to minimise erosion.	<p>A Spoil and Fill Management Sub Plan will be prepared as part of the CEMP. The Sub Plan will include:</p> <ol style="list-style-type: none"> <li>the locations of major (defined as a volume greater than 500 cubic metres) spoil stockpiles;</li> <li>the source of imported fill material and where it will be stockpiled and used;</li> <li>methods to re-use or dispose of excess or unsuitable spoil material including estimated volumes and disposal sites;</li> <li>the following general stockpile management measures: <ol style="list-style-type: none"> <li>construct erosion and sediment controls around stockpiles and immediately down-slope of any excavation areas to minimise siltation and sedimentation;</li> <li>separately stockpile different materials;</li> <li>separate different soil and earth layers to minimise the opportunity for mixing of soil types;</li> <li>water (as required) soil and spoil stockpiles to keep them moist and minimise dust and wind erosion;</li> <li>minimise the size of stockpiles and bund or cover stockpiles at the end of each day;</li> <li>no stockpiling of material near roadways or stormwater drains; and</li> </ol> </li> <li>the stockpile management and mitigation measures contained in Section 12.3.1 of <b>Volume 1</b> of the Environmental Assessment.</li> </ol>	Prior to the commencement of Construction.
58	Where possible reuse or recycle spoil and fill.	All material excavated from Construction will be re-used or recycled unless otherwise approved in the Spoil and Fill Management Sub Plan. The Proponent will ensure that the re-use of material generated from Construction is maximised in preference to importing fill.	During Construction.

# Air quality

Ref.	Objective	Action	Timing
<b>Corridor commitments</b>			
<b>Dust Management Sub Plan</b>			
59	Further investigate the air quality impacts of Operation of the the Activity	The Proponent will undertake further air quality monitoring and assessment of Operation of the Activity to include site specific input parameters.	During detailed design.
60	Manage Construction impacts to local air quality.	<p>A Dust Management Sub Plan will be prepared as part of the CEMP. The Sub Plan will identify:</p> <ol style="list-style-type: none"> <li>potential sources of dust;</li> <li>dust management objectives consistent with DEC guidelines;</li> <li>a monitoring program to assess compliance with the identified objectives. Monitoring for dust deposition and particulate concentration will be undertaken according to the DEC Guideline "Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales";</li> <li>mitigation measures to be implemented, including measures during weather conditions where high level dust episodes are probable (such as strong winds in dry weather) and the mitigation measures and safeguards contained in Section 13.3.4 of Volume 1 of the Environmental Assessment; and</li> <li>a progressive rehabilitation strategy for exposed surfaces with the aim of minimising exposed surfaces.</li> </ol>	Prior to the commencement of Construction.
61	Minimise dust caused by Construction vehicles.	Construction vehicles using public roads will be maintained to prevent any loss of load, whether dust, liquid or soils. Facilities will be provided at exit points of all Construction sites/compounds to minimise tracking mud, dirt or other material onto a public road or footpath. In the event of any spillage, the Proponent will remove the spilled material as soon as practicable within the working day of the spillage.	During Construction.
62	Minimise emissions caused by Construction plant and equipment.	<p>The Proponent will ensure that all plant and equipment used in connection with the Activity are:</p> <ol style="list-style-type: none"> <li>maintained in a proper and efficient condition; and</li> <li>operated in a proper and efficient manner.</li> </ol>	During Construction.

# Greenhouse gases and sustainable energy

Ref.	Objective	Action	Timing
<b>Corridor commitments</b>			
63	Minimise Construction energy use.	<p>The Proponent will promote the reduction of greenhouse gases by adopting energy efficient work practices including:</p> <ul style="list-style-type: none"> <li>a. developing and implementing procedures to minimise energy use;</li> <li>b. conducting awareness programs for all site personnel regarding energy conservation methods;</li> <li>c. conducting energy audits during the Activity to identify and address energy waste;</li> <li>d. ensuring air conditioning, lights and other office equipment are switched off when not in use</li> <li>e. ensuring equipment such as air conditioning unit are regularly maintained to ensure they operate at optimum efficiency;</li> <li>f. minimising night-time works, where practical;</li> <li>g. switching off idle equipment;</li> <li>h. operating equipment in the most efficient manner;</li> <li>i. conducting regular maintenance of plant and equipment to ensure machinery operates at optimum efficiency;</li> <li>j. programming Construction works to minimise handling of Construction materials;</li> <li>k. salvaging suitable excavation material for re-use;</li> <li>l. using recycled and/or reprocessed materials;</li> <li>m. ordering exact calculated quantities of materials required and limiting materials packaging;</li> <li>n. storing excess construction materials for later recycling or re-use.</li> </ul>	Prior to the commencement of Construction.

# Property damage and access

Ref.	Objective	Action	Timing
<b>Corridor commitments</b>			
64	Undertake dilapidation surveys of Structure potentially affected by Construction vibration.	<p>Subject to landowner agreement, property inspections will be conducted on all Structures within:</p> <ol style="list-style-type: none"> <li>50 metres of Construction activities that generate vibration impacts;</li> <li>any other locations identified by the Proponent; and</li> <li>any other locations identified by the EMR.</li> </ol> <p>The property inspections will be undertaken consistent with AS 4349.1 "Inspection of Buildings".</p> <p>The owners of all properties on which property inspections are to be conducted must be advised at least two weeks before the inspection of its scope and methodology and of the process for making a property damage claim. A copy of the property inspection report will be given to the owner of each property inspected at least three weeks before Construction that could affect the property commences.</p> <p>A register of all properties inspected will be maintained by the Proponent indicating whether the owner accepted or refused the property inspection offer. A copy of the register will be provided to the Director-General upon request.</p>	Prior to the commencement of Construction.
65	Apply a risk management approach to undertaking dilapidation surveys.	Property inspections need not be undertaken if a risk assessment indicates Structures will not be affected. The risk assessment must be undertaken before Construction commences by geotechnical and construction engineering experts with appropriate registration on the National Professional Engineers Register.	Prior to the commencement of Construction.
66	Rectify or compensate property owners for property damage caused directly or indirectly by the Activity.	The Proponent, where liable, will rectify any property damage caused directly or indirectly (for example from vibration or from groundwater change) by the Activity's Construction or Operation at no cost to the property owner(s). Alternatively the Proponent may negotiate compensation for the property damage with the property owner.	During Construction and Operation.
67	Rectify or compensate property owners for impacts to licensed bores, dams or other property water supply.	Where a licensed bore, dam or other property water supply is adversely affected by the Activity the Proponent will reinstate a water supply of equivalent quality and quantity. Alternatively the Proponent may negotiate compensation for the loss with the landowner.	During Construction and Operation.
68	Minimise Construction impacts to property accesses.	The Proponent will ensure that access to properties is maintained during Construction. The Proponent will ensure that any legal property access affected by the Activity is reinstated to an equivalent standard or that alternative arrangements are negotiated with the relevant property owner.	During Construction.

# Traffic

Ref.	Objective	Action	Timing
<b>Corridor commitments</b>			
69	Repair any damage to road surfaces as a result of Construction.	Road dilapidation reports will be prepared for all roads likely to be used by Construction traffic. These reports will be prepared before Construction commences and after Construction is complete. Copies of the reports will be provided to the relevant roads authority. Any damage resulting from Construction, except that resulting from normal wear and tear, will be repaired at the Proponent's cost. Alternatively the Proponent may negotiate an alternative arrangement for road damage with the relevant roads authority.	Prior to the commencement of Construction and before Construction is complete.
70	Minimise cumulative impacts from multiple Construction Work Sites.	Traffic Management Reports will be prepared as part of the CEMP for the local government areas of Bankstown, Liverpool and Fairfield. The Reports will be prepared in consultation with relevant road authorities and Relevant Councils in accordance with Section 2 of <i>Australian Standard 1742.3-2002 Manual of Uniform Traffic Control Devices, Part 3: Traffic Control Devices for Works on Roads</i> where relevant and will include: <ul style="list-style-type: none"> <li>a. the timing and relationship between Construction Work Sites along the proposed SSFL alignment</li> <li>b. the combined impact of all concurrent works within the Report's study area (e.g. Bankstown, Liverpool or Fairfield local government area) including traffic and transport diversions and spoil truck movements</li> <li>c. measures to ameliorate any combined impacts resulting from concurrent works.</li> </ul>	Prior to the commencement of Construction.
71	Manage the traffic impacts of the Activity during Construction.	<ul style="list-style-type: none"> <li>a. Traffic Management Plans will be prepared as part of the CEMP for: <ul style="list-style-type: none"> <li>i. the bridge upgrades identified in Section 10.3.1 of Volume 1 of the Environmental Assessment;</li> <li>ii. the new rail bridges over roads identified in Section 10.3.2 of Volume 1 of the Environmental Assessment; and</li> <li>iii. the road network changes identified in Section 10.3.3 of Volume 1 of the Environmental Assessment.</li> </ul> </li> <li>b. The Plans identified in (a) will be prepared in consultation with the relevant road authorities and other relevant stakeholders (e.g. bus operators, schools) and in accordance with the RTA's Procedures for use in the Preparation of a Traffic Management Plan (2001b) and, where relevant, Section 2 of Australian Standard 1742.3-2002 Manual Uniform Traffic Control Devices, Part 3: Traffic Control Devices for Works on Roads and other guidelines and include: <ul style="list-style-type: none"> <li>i. identification of all public roads to be used by Construction traffic, in particular roads proposed to transport large quantities of Construction materials. The expected timing and duration of road usage will be stated;</li> <li>ii. management methods to ensure Construction traffic uses identified roads;</li> <li>iii. identification of all public roads that may be partially or completely closed during Construction and the expected timing and duration of these closures. Consideration will be given to programming Construction works to minimise road closures during peak hours and/or holiday periods;</li> <li>iv. impacts on existing traffic (including pedestrians, vehicles, cyclists and disabled persons);</li> <li>v. temporary traffic arrangements including property</li> </ul> </li> </ul>	Prior to the commencement of Construction.



Ref.	Objective	Action	Timing
		access;	
		vi. access to Construction sites including entry and exit locations and measures to prevent Construction vehicles queuing on public roads;	
		vii. a response plan for any Construction traffic incident;	
		viii. monitoring, review and amendment mechanisms;	
		ix. identification of any requirements for road occupancy licences;	
		x. identification of parking for Construction workers; and	
		xi. identification of bus routes.	
72	Design new crossings of the rail corridor to ensure compliance with road authority requirements.	The Proponent will: <ul style="list-style-type: none"> <li>a. where possible, designs all bridges over road crossings to comply with the height clearance requirements of the RTA. It is acknowledged that this commitment will not be achieved at the Woodbrook Road, Casula and Sandal Crescent, Carramar/Moore Street, Canley Vale railway underbridges.</li> <li>b. ensure that no road bridge affected by the Construction works will be re-constructed with a reduced capacity or with any change to traffic conditions during Operation.</li> </ul>	During detailed design.
73	Ensure Operation does not affect emergency vehicle access to any location.	The Proponent will ensure that local access and emergency vehicle access will not be adversely affected by the Operation.	During detailed design.
74	Ensure the safety of Construction Work Site staff undertaking Construction works in roads and the safety of road users during Construction.	Traffic Control Plans will be prepared for all Construction works that are proposed to occur in the road or that will affect trafficable areas (e.g. parking areas). Traffic Control Plans will be completed in accordance with the RTA's <i>Traffic Control at Work Sites</i> guidelines and the <i>Australian Standard 1742.3 Manual of Uniform Traffic Control Devices, Part 3: Traffic Control Devices for Works on Roads</i> and include: <ul style="list-style-type: none"> <li>a. plans showing temporary traffic paths, their delineation and the position of traffic control or warning devices in relation to the location of the works;</li> <li>b. details of after-hours traffic arrangement, if required; and</li> <li>c. instructions for the installation, operation, between-stage rearrangement and ultimate removal of devices at the conclusion of the Construction works.</li> </ul>	Prior to the commencement of Construction.
<b>Precinct and site specific commitments</b>			
<b>Level crossings</b>			
75	Assess opportunities to improve safety at level crossings of the rail corridor.	Prior to the commencement of Construction and in conjunction with detailed design of the Activity, the Proponent will: <ul style="list-style-type: none"> <li>a. undertake a further risk assessment of a third track through the level crossing at the southern end of Casula Railway Station in consultation with RailCorp and implement the risk mitigation measure developed as part of that assessment; and</li> <li>b. undertake a further risk assessment of a third track through the level crossing at Liverpool Hospital in consultation with RailCorp and implement the risk mitigation measures developed as part of that assessment.</li> </ul>	During detailed design.
76	Minimise impacts and disruptions to passenger train services and train passengers and ensure that passenger access to railway stations between Macarthur and	The Proponent will prepare detailed Construction plans for the works required to footbridges and other facilities at Leumeah, Minto, Casula, Warwick Farm, Cabramatta and Sefton Railway Stations and receive RailCorp approval of these plans prior to the commencement of Construction works at these railway stations, including any required Partial Possessions of station platforms. The Proponent will: <ul style="list-style-type: none"> <li>a. design the works at Leumeah, Minto and Cabramatta Railway Stations to maintain easy access (including during Construction) in accordance with the Disability Standards for Accessible Public Transport 2002 made under the <i>Disability Discrimination Act 1992</i>;</li> <li>b. design the new passenger access to Warwick Farm Railway</li> </ul>	Prior to the commencement of Construction at Leumeah, Minto, Casula, Warwick Farm, Cabramatta, Leightonfield and Sefton Railway Stations.

Ref.	Objective	Action	Timing
	Sefton is maintained during passenger train operating times.	<p>Station on the SSFL side in accordance with easy access standards and RailCorp requirements;</p> <p>c. design the Activity at Casula and Sefton Railway Stations such that it does not preclude, prevent or in any other way inhibit any possible future upgrade of these station accesses in accordance with easy access standards and RailCorp's requirements; and</p> <p>d. where commuter car parking spaces are required for Construction and/or Operation of the Activity, arrange for the provision of replacement car parking spaces equivalent to the number of car parking spaces removed such that at no time will there be a net reduction in total commuter car parking at any railway stations as a result of the Activity. Replacement car parking will be in accordance with the requirements of the Building Code of Australia for the provision of designated disabled parking. Where Reasonable and Feasible, replacement commuter car parking will be provided within 400 metres of the affected railway station.</p>	
Leumeah Railway Station			
77	Manage and minimise traffic, transport and access impacts at Leumeah Railway Station.	<p>At Leumeah Railway Station, the Proponent will:</p> <p>a. construct an extended pedestrian footbridge prior to closure of existing access points;</p> <p>b. maintain easy access (lift access) at all times;</p> <p>c. construct new permanent car parking prior to the removal of any parking;</p> <p>d. establish an alternative location for kiss-and-ride while the existing location is closed; and</p> <p>e. prepare Traffic Control Plans for works affecting the station car park.</p>	During Construction.
Minto Railway Station			
78	Manage and minimise traffic, transport and access impacts at Minto Railway Station.	<p>At Minto Railway Station, the Proponent will:</p> <p>a. construct a new pedestrian footbridge prior to closure of the existing access point;</p> <p>b. maintain easy access (lift access) at all times following opening of the new footbridge;</p> <p>c. construct new permanent parking prior to the removal of any car parking;</p> <p>d. progressively relocate the existing bus zone while Construction takes place so that bus stops are maintained; and</p> <p>e. prepare Traffic Control Plans for works affecting Somerset Street.</p>	During Construction.
Casula Railway Station			
79	Manage and minimise traffic, transport and access impacts at Casula Railway Station.	<p>At Casula Railway Station, the Proponent will:</p> <p>a. construct a new pedestrian footbridge prior to closure of the existing access point; and</p> <p>b. prepare Traffic Control Plans for works affecting Casula Road and the level crossing.</p>	During Construction.
Warwick Farm Railway Station			
80	Manage and minimise traffic, transport and access impacts at Warwick Farm Railway Station.	<p>At Warwick Farm Railway Station, the Proponent will:</p> <p>a. construct a new pedestrian footbridge prior to the closure of existing access points;</p> <p>b. construct new permanent parking prior to removal of any parking; and</p> <p>c. prepare Traffic Control Plans for works affecting the station car park.</p>	During Construction.
Cabramatta Railway Station			
81	Manage and minimise traffic, transport and	<p>At Cabramatta Railway Station, the Proponent will:</p> <p>a. extend the pedestrian footbridge prior to the closure of existing access points;</p>	During Construction.

Ref.	Objective	Action	Timing
	access impacts at Cabramatta Railway Station.	<ul style="list-style-type: none"> <li>b. <del>undertake a traffic impact assessment of the proposed shared zone in Broomfield Street;</del></li> <li>c. maintain easy access (lift access) at all times;</li> <li>d. construct new permanent car parking prior to the removal of any parking;</li> <li>e. establish an alternate location for kiss-and-ride while the existing location is closed;</li> <li>f. relocate the existing bus zone while Construction takes place for the shared zone and railway station entry; and</li> <li>g. develop Traffic Control Plans for works affecting Broomfield Street.</li> <li>h. <del>undertake a Parking Study and Pedestrian Access and Mobility Plan as part of the Cabramatta precinct plan</del></li> </ul>	During detailed design.
Sefton Railway Station			
82	Manage and minimise traffic, transport and access impacts at Sefton Railway Station.	<p>At Sefton Railway Station, the Proponent will:</p> <ul style="list-style-type: none"> <li>a. maintain access to the station platform at all times</li> <li>b. construct new permanent parking prior to the removal of any parking;</li> <li>c. establish an alternate location for the taxi stand while the existing location is closed;</li> <li>d. relocate the existing bus zone while the works take place; and</li> <li>e. develop Traffic Control Plans for works affecting Wellington Road.</li> </ul>	During Construction.
Lighthorse Park			
83	<del>Work with Relevant Councils to harness opportunities to coordinate the Activity with other proposed linear transport corridors.</del>	<del>The Proponent will consult with the Relevant Council to establish if it is Feasible for the Relevant Council to undertake preparatory works for the proposed cycleway between Lighthorse Park and Liverpool town centre during Construction.</del>	<del>During detailed design.</del>
84	Minimise impacts and disruptions to users of Lighthorse Park.	<p>At Lighthorse Park, the Proponent will:</p> <ul style="list-style-type: none"> <li>a. maintain pedestrian access from Riverpark Drive to Newbridge Road bridge via Lighthorse Park at all times; and</li> <li>b. replace the existing pathway, ramp and stairs in Lighthorse Park between Riverpark Drive and the Newbridge Road footpath in accordance with Australian Standard AS 1428.1 <i>Design for Access and Mobility – General Requirements for Access – New Building Work</i>.</li> </ul>	During Construction.
Auburn Road bridge			
85	Maintain cyclist and pedestrian access over the rail corridor at Auburn Road during Construction.	The Proponent will include in the Traffic Management Plan for Auburn Road bridge options for an alternate pedestrian and cyclist bridge across the rail corridor in the vicinity of Auburn Road bridge during works to the bridge and an assessment of whether these options are Reasonable and Feasible.	Prior to the commencement of Construction.
86	Minimise Construction impacts and disruptions to users of the Auburn Road overbridge.	<p>At the Auburn Road overbridge, the Proponent will consult with the RTA in relation to the design for the reconstructed Auburn Road Bridge, including consideration of, but not limited to, the following:</p> <ul style="list-style-type: none"> <li>a. design speed</li> <li>b. traffic lane widths</li> <li>c. pedestrian facilities</li> <li>d. provision for all existing public utilities</li> <li>e. street lighting, line marking and signposting</li> <li>f. fencing and barriers</li> <li>g. reconstruction of the southern approach road.</li> </ul>	During Construction.

Ref.	Objective	Action	Timing
Chester Hill Road, Miller Road and Bareena Street railway underbridges			
87	Minimise Construction impacts and disruptions to road users.	The Proponent will schedule the construction of additional road bridge spans at the Chester Hill Road, Miller Road and Bareena Street railway underbridges such that disruption to traffic does not occur at more than one of these Construction Work Sites at any time if cumulative traffic impacts would arise.	During Construction.
Pedestrian access to riverfront parkland between Liverpool and Casula			
88	Maintain pedestrian access to the Georges River between Liverpool and Casula.	The Proponent will ensure that at least one of the three pedestrian accesses under the bridges between Liverpool and Casula (i.e. Woodbrook Road, Mili Park Road 1 or Mili Park Road 2) will be open at any time during Construction to ensure pedestrian access to the riverfront parkland along Georges River.	During Construction.

# Urban design and landscaping

Ref.	Objective	Action	Timing
<b>Corridor commitments</b>			
<b>Pre-Construction Report</b>			
89	Manage the urban design impacts of the Action.	<p>The Proponent will prepare an <i>Urban Design and Landscape Report</i> before Construction commences in consultation with Relevant Councils, RailCorp and the CLG. The Report will present an integrated urban design for the Activity, applying design principles established in the Environmental Assessment and Submissions Report. The Proponent will obtain the approval of the Director-General for the Report before Construction commences or within any other time agreed to by the Director-General. The Report will include design treatments for:</p> <ul style="list-style-type: none"> <li>a. location and identification of existing vegetation and proposed landscaped areas;</li> <li>b. built elements including retaining walls, bridges and noise walls;</li> <li>c. pedestrian and cyclist elements including footpath location, paving types and pedestrian crossings;</li> <li>d. fixtures such as seating, lighting, fencing and signs; and</li> <li>e. batter and retaining structures within public open spaces.</li> </ul> <p>The Report will also include the following information:</p> <ul style="list-style-type: none"> <li>f. graphics for key elements such as sections, sketches, perspective views etc.;</li> <li>g. a schedule of species to be used in landscaping. The derivation of the schedule must be explained including its relationship with the Activity's ecological studies;</li> <li>h. details of the timing and progressive implementation of landscape works considering related environmental controls such as erosion and sedimentation controls and drainage; and</li> <li>i. procedures and methods to monitor and maintain landscaped or rehabilitated areas both inside and outside the Activity.</li> </ul>	Prior to the commencement of Construction.
<b>Operation</b>			
90	Monitor and maintain landscaped areas following the commencement of Operation.	Landscape or rehabilitation works which, following Construction, are not the responsibility of the Proponent must be monitored and maintained by a landscape specialist at the Proponent's expense for a period of three years following completion of any landscaping stage or as otherwise identified in the <i>Urban Design and Landscape Report</i> . The Proponent will implement any required remedial measures to maintain landscaping works to the design standard established in the <i>Urban Design and Landscape Report</i> .	During the first three years of Operation.
<b>Precinct and site specific commitments</b>			
<b>Leumeah Railway Station</b>			
91	Minimise visual impacts at Leumeah Railway Station.	<p>Subject to consultation with RailCorp, the Proponent will:</p> <ul style="list-style-type: none"> <li>a. sensitively design the footbridge extension to the existing structure to provide visual continuity;</li> <li>b. provide hard and soft landscaping on the western side of the railway station to create precinct character;</li> <li>c. prepare detailed architectural plans for the proposed precinct works; and</li> <li>d. provide an avenue of cultural planting to enhance the boundary between the proposed car parking area and the rail corridor.</li> </ul>	During detailed design.
<b>Minto Railway Station</b>			
92	Minimise visual impacts at Minto Railway Station.	<p>Subject to consultation with RailCorp, the Proponent will:</p> <ul style="list-style-type: none"> <li>a. sensitively design the footbridge extension to the existing structure;</li> <li>b. interface between the old and the new portions of the footbridge to provide visual separation of new and existing</li> </ul>	During detailed design.

Ref.	Objective	Action	Timing
		portions;	
		c. prepare detailed architectural plans for the proposed precinct works;	
		d. provide hard and soft landscaping for the west side of the station to create precinct character; and	
		e. provide visual screening of the rail corridor and noise barriers to the dwellings fronting Somerset Street.	
Casula Railway Station			
93	Minimise visual impacts at Casula Railway Station.	Subject to Consultation with RailCorp, the Proponent will: a. sensitively design the footbridge extension to the existing structure; b. maintain the design and character of the existing bridge; c. prepare detailed architectural plans for the proposed precinct works; d. provide the recommended noised wall for the Casual Regional Arts Centre in consultation with Liverpool City Council; and e. provide hard and soft landscaping along the east side of the railway station to create precinct character.	During detailed design.
Warwick Farm Railway Station			
94	Minimise visual impacts at Warwick Farm Railway Station.	Subject to consultation with RailCorp, the Proponent will: a. design the footbridge extension to be structurally independent of the existing station buildings to separate new elements from the existing; b. integrate the new structures with the form of the existing buildings in order to maintain the character of the precinct; c. prepare detailed architectural plans for the proposed precinct works; d. provide hard and soft landscaping along the east side of the station to create precinct character; and e. adopt Crime Prevention Through Environmental Design principles.	During detailed design.
Cabramatta Railway Station			
95	Minimise visual impacts at Cabramatta Railway Station.	Subject to consultation with RailCorp, the Proponent will: a. design the additional structure for the footbridge to provide for a visual separation of new and existing portions; b. design the footbridge with careful detailing of construction joints; c. prepare detailed architectural plans for the proposed precinct works; d. provide hard and soft landscaping along the east side of the station to create precinct character; and e. design for avenue planting along Broomfield Street to act as a partial screen.	During detailed design.
Sefton Railway Station			
96	Minimise visual impacts at Sefton Railway Station.	Subject to consultation with RailCorp, the Proponent will: a. carefully detail the footbridge to provide a balance between the existing structure and the new; b. design the additional span to express the interface between the old and new portions; c. prepare detailed architectural plans for the proposed precinct works; d. provide hard and soft landscaping to the north side of Wellington Road in the precinct to create precinct character; e. provide the recommended acoustic noise wall; and f. engage an arborist to assess the Feasibility of relocating the fig tree proposed for removal.	During detailed design.
Liverpool Railway Station			

Ref.	Objective	Action	Timing
97	Minimise visual impacts at Liverpool Railway Station.	Subject to consultation with RailCorp, the Proponent will include landscaping of the embankment on the eastern side of Liverpool railway Station in the Urban Design and Landscaping Report.	During detailed design.
Farrow Road			
98	Minimise visual impacts at Farrow Road	The Proponent will investigate the type and extent of the proposed landscaping treatment on Farrow Road in consultation with the affected community and Relevant Councils.	During detailed design.

# Hazards and risk management

Ref.	Objective	Action	Timing
<b>Corridor commitments</b>			
99	Investigate existing soil contamination and manage Construction works to minimise hazards and risks from contaminated materials and soils.	<ol style="list-style-type: none"> <li>a. The Proponent will undertake a Phase 1 contamination assessment along the proposed SSFL route to determine the potential for contaminated soil in accordance with the EPA's (1997) Guidelines for Consultants Report on Contaminated Sites and prepare a <i>Contamination Investigation Report</i> in consultation with the DEC and Relevant Councils. The <i>Contamination Investigation Report</i> will: <ol style="list-style-type: none"> <li>i. be prepared in accordance with the DEC Guideline "Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes"; and</li> <li>ii. include a contingency plan to be implemented in the case of the unanticipated discovery of contaminated material during Construction.</li> </ol> </li> <li>b. Also, as part of the CEMP, the Proponent will prepare and implement a Hazards and Risk Management Sub Plan. This Sub Plan will include: <ol style="list-style-type: none"> <li>i. details of the hazards and risks associated with Construction;</li> <li>ii. mitigation measures including contingency plans;</li> <li>iii. requirements for the application of the following control measures to minimise vapour and odour levels: <ul style="list-style-type: none"> <li>➤ monitoring the atmosphere within any excavations and on Construction Work Site boundaries using portable monitoring equipment and comparing with the relevant occupational standards for specific chemicals (e.g. methane, and hydrogen sulphide);</li> <li>➤ where necessary, collection of samples and laboratory analysis;</li> <li>➤ ensuring adequate ventilation is supplied in areas where gases or fumes are likely to be present, e.g. where heavily fouled ballast is present or in former refuelling areas;</li> <li>➤ use of appropriate personal protective equipment;</li> <li>➤ minimisation of the size and staging of excavations;</li> <li>➤ covering and/or wetting excavated contaminated soils;</li> <li>➤ applying odour suppressants;</li> </ul> </li> <li>iv. requirements for the control of subsurface seepage, including (if excavations need to extent to the water table) sampling of water within the excavation and analysis for potential contaminants of concern;</li> <li>v. the following hazardous material management measures: <ul style="list-style-type: none"> <li>➤ an inspection of the railway corridor and sidings to identify possible hazardous materials (e.g. asbestos brake shoes and cable trays);</li> <li>➤ where asbestos will be disturbed, removal by an appropriately licensed contractor and in accordance with the Occupation Health and Safety Regulation 2001 and the Code of Practice for the Safe Removal of Asbestos 2nd Edition [NOHSC:2002(2005)] (National Occupational Health and Safety Commission, 2005);</li> <li>➤ where appropriate, air monitoring for asbestos fibres;</li> <li>➤ removal of synthetic mineral fibres in accordance with the Occupational Health and Safety Regulations 2001 and the National Standard for Synthetic Mineral Fibres [NOHSC:1004(1990)] and National Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC:2006(1990)] (National Occupations Health and Safety Commission, 1990);</li> <li>➤ removal of lead-based paint in accordance with the</li> </ul> </li> </ol> </li> </ol>	Prior to the commencement of Construction.



Ref.	Objective	Action	Timing
		<p>requirements of Australian Standard AS 4361.1-1995 Guide to Lead Paint Management, Part 1: Industrial Applications and Australian Standard AS 4361.2-1998 Guide to Lead Paint Management, Part 2: Residential and Commercial Building; and</p> <ul style="list-style-type: none"> <li>➤ notifying the DEC if any poly-chlorinated biphenyl (PCB) is uncovered;</li> <li>➤ removal of PCB containing capacitors by qualified electricians;</li> <li>➤ storing, conveying and processing any PCB waste or material in accordance with the Chemical Control Order in relation to materials and waste contained in PCB 1987;</li> <li>➤ assessing contamination from coal tar in asphalt and copper chromium arsenate, creosote and other preservatives in timber, ballast and soils;</li> <li>➤ not recycling or reusing any asphalt containing coal tar; and</li> <li>➤ not reusing excavated materials from the Activity in earthworks or other landscaping unless it has been assessed for contamination and certified by accredited auditors for reuse for the specific purpose and location proposed.</li> </ul>	

# Waste management and recycling

Ref.	Objective	Action	Timing
<b>Corridor commitments</b>			
100	Waste generation during Construction of the Activity is minimised and the re-use and recycling of waste is maximised. Waste is only disposed to landfill where re-use or recycling is not possible	<p>As part of the CEMPs the Proponent will prepare a Waste Management Sub Plan. The Sub Plan will address the management of wastes during the Construction stage in accordance with the NSW Government's Waste Reduction and Purchasing Policy. The Sub Plan will identify requirements for:</p> <ul style="list-style-type: none"> <li>a. the application of the waste minimisation hierarchy principles of avoid/reduce/re-use/recycle/dispose;</li> <li>b. waste handling and storage;</li> <li>c. disposal of wastes. Specific details must be provided for cleared vegetation, contaminated materials, glass, metals and plastics, hydrocarbons (lubricants and fuels) and sanitary wastes; and</li> <li>d. any waste material that is unable to be re-used, re-processed or recycled will be disposed at a facility approved to receive that type of waste.</li> </ul> <p>The Sub Plan will include the waste management and avoidance measures included in Section 3.12 of <b>Technical Paper 1</b> of <b>Volume 2</b> of the Environmental Assessment.</p>	Prior to the commencement of Construction.

# Services and utilities

Ref.	Objective	Action	Timing
<b>Corridor commitments</b>			
101	Avoid Construction impacts to services and utilities.	The Proponent will identify the utilities and services (hereafter "services") potentially affected by Construction to determine requirements for diversion, protection and/or support. Alterations to services will be determined by negotiation between the Proponent and the service providers and, where applicable, RailCorp. The Proponent in consultation with service providers will ensure that disruption to services resulting from the Activity are minimised and advised to customers.	Prior to the commencement of Construction.
102	Avoid impacts to RailCorp services and utilities.	<p>For RailCorp services and utilities located within the SSFL Corridor, and subject to agreement with RailCorp, the Proponent will, where practical, relocate above-ground signalling and power services away from the alignment of the Activity to another location within the Main South Line rail corridor that:</p> <ol style="list-style-type: none"> <li>avoids impacts to areas of native vegetation for the pole locations, over which the lines would be suspended;</li> <li>avoids pole locations in riparian zones to watercourses;</li> <li>avoids pole locations that compromise visual amenity and sight lines from residences adjoining the railway corridor by placing the poles at common property boundaries (and not in front of windows);</li> <li>is consistent with the provision of a maintenance access roads as shown in Figure 4.3 of <b>Volume 1</b> of the Environmental Assessment.</li> </ol>	Prior to the commencement of Construction.

# Occupational health and safety

Ref.	Objective	Action	Timing
<b>Corridor commitments</b>			
103	Minimise Construction occupational health and safety risks at Construction Work Sites adjoining RailCorp tracks.	The Proponent will prepare a Safe Working Plan to manage Construction work site activities safely with the adjacent operating railway. The Plan will address the use of separation barriers and RailCorp maintenance access requirements.	During Construction.

# Ancillary Facilities

Ref.	Objective	Action	Timing
<b>Corridor commitments</b>			
104	Avoid environmental impacts from Ancillary Facilities.	<p>The sites for Ancillary Facilities will satisfy the following criteria unless otherwise approved through the CEMP:</p> <ol style="list-style-type: none"> <li>be located within the Activity;</li> <li>have ready access to the road network;</li> <li>be located to minimise the need for heavy vehicles to travel through residential areas;</li> <li>be sited on relatively level land;</li> <li>be separated from the nearest residences by at least 200 m (or at least 250 m for a temporary batch plant) except where adequate screening is provided by a cutting or natural feature;</li> <li>not be within 100 m of, or drain directly to, SEPP 14 wetlands;</li> <li>be located above the 20 ARI flood level unless a contingency plan to manage flooding is prepared and implemented;</li> <li>not require vegetation clearing beyond that already required for the Activity; and</li> <li>not affect the land use of adjacent properties.</li> </ol> <p>The location of the Ancillary Facilities will be identified in the CEMP and will include an analysis against the above criteria. Where these criteria cannot be met the CEMP will demonstrate there will be no adverse impacts from the Ancillary Facility's construction or operation.</p>	Prior to the commencement of Construction.

## References

ARTC 2006, *Code of Practice for Environmental Impact Assessment of Development Proposals in New South Wales*

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Environment Protection Authority 1997, *Guidelines for Consultants Report on Contaminated Sites*

Fairfull, S. and Witheridge, G. 2003, *Why do fish need to cross the road? Fish passage requirements for waterway crossing*. NSW Fisheries

Landcom 2004, *Managing Urban Stormwater: Soils and Construction*

National Occupational Health and Safety Commission 2005, *Code of Practice for the Safe Removal of Asbestos* 2nd Edition [NOHSC:2002(2005)]

National Occupational Health and Safety Commission 2005, *National Standard for Synthetic Mineral Fibres* [NOHSC:1004(1990)] and *National Code of Practice for the Safe Use of Synthetic Mineral Fibres* [NOHSC:2006(1990)]

NSW Heritage Office 2001, *Guidelines for photographic recording of heritage items*  
Roads and Traffic Authority, *Guidelines for the Control of Erosion and Sedimentation in Roadworks*

PlanningNSW 2003, *Community Engagement in the NSW Planning System*

Roads and Traffic Authority 2001a, *Environmental Noise Management Manual*

Roads and Traffic Authority 2001b, *Procedures for use in the Preparation of a Traffic Management Plan*

Roads and Traffic Authority 2003, *Traffic Control at Work Sites*

## ATTACHMENT 2 SECTIONS OF EA REPORT REFERRED TO IN COA

### Proposed urban and landscape design guidelines/principles (Table 3.2 of EA)

Theme	Guidelines/principles
Urban form	<ul style="list-style-type: none"> <li>• Enhance local character and gateways using landscaping and built structures appropriate to the location.</li> <li>• Consider emphasising cultural heritage and past land uses where appropriate along the alignment.</li> <li>• Undertake community consultation to present the available options (e.g. level of screening and materials) for visual and/or noise barriers in the areas identified for implementing those measures.</li> <li>• Consider appropriate screening, including soft landscaping, which responds to the environment in which it is located (e.g. rural, residential, or recreational areas). Avoid changing the type or form of screens in a random manner, where the rationale for doing so is not apparent.</li> <li>• Coordinate with Councils to provide planting in the reserves along the rail corridor, especially where residential streets are adjacent to the corridor.</li> <li>• Consider off-sets in screen alignments along straight sections to avoid a monotonous appearance.</li> <li>• Consider earth mounding used in conjunction with screen walls to reduce their overall height.</li> <li>• Consider noise walls as three dimensional elements, recognising that they are often seen from both sides. Recognise potential for interaction of noise walls with earth mounding and vegetation, and to reflect local character.</li> <li>• Ensure noise walls are designed to suit the surroundings (e.g. transparent materials should be used for areas of scenic interest or earth mounding in more natural environments).</li> <li>• Select textiles and patterns in preference to plain or smooth finishes.</li> <li>• To reduce the occurrence of graffiti, place a line of plantings in front of walls to restrict access.</li> <li>• Apply graffiti-proof coatings on vulnerable surfaces, such as plain concrete surfaces.</li> </ul>
Environment and biodiversity	<ul style="list-style-type: none"> <li>• Retain/enhance views (e.g. of surrounding landscapes, of visual cues along the route, or to cultural icons).</li> <li>• Enhance existing Indigenous vegetation communities by appropriate revegetation of degraded areas, and linking of areas.</li> <li>• Instigate appropriate measures to protect retained vegetation both during and after construction, such as marking, fencing and diverting stormwater channels.</li> <li>• Coordinate with Councils to provide appropriate infill planting along creek corridors and areas of open space to better integrate the proposal into the surrounding landscape.</li> <li>• Ensure the areas of open space separated by the proposal are visually and physically linked.</li> <li>• Consider the location and form of sedimentation basins and associated stormwater controls in relation to the creation of wetlands. Coordinate with Councils.</li> <li>• For creek crossings, examine how habitats can be improved as a result of interventions at creek crossings (e.g. spans should allow for dry benches on the banks under the bridge to facilitate wildlife movement). Also provide vegetation cover on slopes and embankments, and aquatic planting, where appropriate, to control and reduce run-off.</li> </ul>

The rail corridor	<ul style="list-style-type: none"> <li>• Railway station precincts – proposed station construction works at Leumeah, Minto, Casula, Warwick Farm, Cabramatta and Sefton, to include hard and soft landscaping at the new entries to reflect local character. Integrate the design of new landscaping, bus shelters, canopies, signage, street furniture, pedestrian/cycle pathways so that the individual elements combine together to form a defined precinct.</li> <li>• Design new structures to acknowledge the rhythm and structure of existing adjacent bridges or viaducts.</li> <li>• Design new structures to integrate with the surrounding landform and vegetation.</li> <li>• Consider small or shorter bridge structures as an alternative to culverts, where the design could also accommodate the free movement of pedestrians and/or wildlife.</li> <li>• Use batters and a range of slopes within a cut to achieve integrated landscape and grading solutions. Batter slopes should be 1:3, where practical (to allow for planting) and where corridor reserve widths permit.</li> <li>• Rounded slopes should be considered to soften the look of earthworks.</li> <li>• Consider the aesthetic aspect of retained structures (e.g. rock facing or decorative treatments) in highly visible areas.</li> <li>• Consider using terracing, which can then be planted. Terracing can have irregular benching in semi-rural settings and formalised, geometric benching in more urban environments.</li> <li>• Use vegetation to stabilise exposed fill and cutting embankments.</li> </ul>
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