



AUSTRALIAN RAIL TRACK CORPORATION LTD

May 2014

**ENVIRONMENTAL IMPACT AUDIT REPORT –
OPERATION**

for the

SOUTHERN SYDNEY FREIGHT LINE

Prepared by:

Evans & Peck for ARTC

Amendment Record

Date Reviewed	Item	Description of Amendment
Minor amendments to address Department of Planning comments received 28 July 2014		
8/08/14	Table 3-1, item 1.38	Review period included to align with SSFL OEMP
	Table 3-1, item 1.40	Review period included to align with SSFL OEMP
	Table 3-1, item 1.71	Additional detail included for description of actual impact

Table of Contents

	Page No
TABLE OF CONTENTS	III
LIST OF TABLES.....	IV
LIST OF FIGURES	IV
ABBREVIATIONS	V
I INTRODUCTION.....	I
1.1 PROJECT OVERVIEW	1
1.2 PURPOSE AND CONTENT OF THIS REPORT	3
1.3 PROJECT STATUS	3
1.4 AUDIT TEAM AND TIMEFRAME.....	4
1.5 DISTRIBUTION AND APPROVAL	4
2 COMPLIANCE WITH APPROVALS OR LICENCES ISSUED BY RELEVANT GOVERNMENT DEPARTMENTS	5
2.1 NSW GOVERNMENT - EPA	5
2.2 NSW GOVERNMENT - SYDNEY WATER CORPORATION	6
2.3 COMMONWEALTH GOVERNMENT – DEPARTMENT OF ENVIRONMENT	6
3 AUDIT FINDINGS	8
3.1 INTRODUCTION	8
3.2 OPERATION IMPACT PREDICTIONS, ACTUAL IMPACTS AND EFFECTIVENESS OF IMPLEMENTED MITIGATION MEASURES AND SAFEGUARDS.....	8
3.3 MINISTER’S CONDITIONS OF APPROVAL (OPERATIONAL).....	9
3.4 STATEMENT OF COMMITMENTS (OPERATIONAL).....	10
3.5 OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN - OPERATION MAINTENANCE, MONITORING AND REPORTING.....	11
3.6 URBAN DESIGN & LANDSCAPE PLAN – OPERATION PERFORMANCE.....	12
3.7 CONSULTATION WITH THE LOCAL COMMUNITY	12
3.8 CONCLUSIONS	14
.....	



List of Tables

Table 3-1 Operation Impact Predictions, Actual Impacts and Effectiveness of Implemented Mitigation Measures and Safeguards 15

Table 3-2 Minister's Conditions of Approval (Operational).....73

Table 3-3 Statement of Commitments (Operational).....93

Table 3-4 Operational Environmental Management Plan - Operation Maintenance, Monitoring and Reporting.....96

Table 3-5 Urban Design & Landscape Plan - Operation Performance..... 107

List of Figures

Figure 1 Location of Southern Sydney Freight Line 2

ABBREVIATIONS

ARTC	Australian Rail Track Corporation
ASS	Acid Sulphate Soils
ASSMSP	Acid Sulphate Soils Management Sub Plan
BHMSP	Built Heritage Management Sub Plan
BMSP	Biodiversity Management Sub Plan
CAOP	Community Amenity Offset Plan
CEMP	Construction Environment Management Plan
CLG	Community Liason Group
CoA	Condition of Approval
dB(A)	Decibel
DECCW	Department of Climate Change and Water (now OEH & NSW Office of Water)
DEWHA	Department of Environment, Water, Heritage and the Arts (now Department of Environment)
DNR	Department of Natural Resources
DoP	Department of Planning (now DoPI)
DoPI	Department of Planning and Infrastructure (formerly DoP)
DPI	Department of Primary Industries
DSEWPC	Department of Sustainability, Environment, Water, Population and Communities (formerly the Department of Environment, Water, Heritage and the Arts, now the Department of Environment)
EA	Environmental Assessment
EEC	Endangered Ecological Community
EMR	Environmental Management Representative
EMS	Emergency Management Structure
EPA	Environment Protection Authority (formerly OEH)
EPBC	Environment Protection and Biodiversity Conservation Act 1999
EPL	Environment Protection Licence
ESCSP	Erosion and Sediment Control Sub Plan
GMSP	Groundwater Management Sub Plan
LGA	Local Government Area

MFN	Metropolitan Freight Network
OEH	Office of Environment and Heritage (now EPA)
OAQMP	Operational Air Quality Management Plan
OEMP	Operational Environmental Management Plan
OHRMP	Operational Hazards and Risk Management Plan
ONVMP	Operational Noise and Vibration Management Plan
OOH	Out of Hours
POEO Act	Protection of the Environment Operations Act 1997
SFMSP	Spoil and Fill Management Sub Plan
SMS	Safety Management System
SoC	Statement of Commitment
SSFL	Southern Sydney Freight Line
SWMSP	Soil and Water Management Sub Plan
TCA	Transport Construction Authority (formerly TIDC)
TfNSW	Transport for New South Wales (formerly TCA)
UDLP	Urban Design and Landscaping Plan
VDV	Vibration Dose Value

I INTRODUCTION

I.1 PROJECT OVERVIEW

The Australian Rail Track Corporation (ARTC) is undertaking a program of works to improve the efficiency and cost-effectiveness of rail freight services along the North-South Rail Corridor between Melbourne, Sydney and Brisbane. A major bottleneck in the rail freight network existed in southern Sydney, where freight trains shared existing rail lines with the Sydney metropolitan passenger services operated by Sydney Trains. During morning and afternoon peak periods, freight services were not permitted to run due to passenger priority. As a result, freight services could not arrive or depart Sydney at the optimum times.

To alleviate this bottleneck, the ARTC constructed the Southern Sydney Freight Line (SSFL), which involved building a 36 kilometre bi-directional, non-electrified, dedicated freight line from Macarthur to Sefton in south-western Sydney (**Figure I**). The SSFL track is located on the western side of Sydney Trains' Main South Line corridor extending from south of Macarthur through to Ingleburn Railway Station where it connects into an existing six kilometre freight passing loop (constructed in 1995) and continues north to Glenfield Railway Station. The new construction starts again north of Glenfield Railway Station. The SSFL crosses from the western to the eastern side of the corridor on an overpass (or flyover) just north of Sydney Trains' Glenfield Junction where the East Hills Line joins the Main South Line.

The SSFL continues on the eastern side of the rail corridor through Cabramatta and then on the southern side through to Sefton Park Junction. At the Sefton Park Junction the SSFL crosses in an underpass (or deep cutting) to enable connection with the existing Metropolitan Goods Line. The SSFL is located wholly within the Sydney Trains corridor adjacent to their passenger tracks.

To accommodate the SSFL, retaining walls and earthworks were constructed for a new formation. New rail bridges and road bridge extensions were constructed, as were upgrades at six railway stations and their surrounding precincts — Leumeah, Minto, Casula, Warwick Farm, Cabramatta and Sefton — as well as modifications to a number of pedestrian bridges and other supplementary works, such as erection of noise barriers.

The SSFL Project was subject to extensive environmental examination under the NSW Government's *Environmental Planning and Assessment Act 1979* (EP&A Act) and received Approval from the Minister for Planning to proceed on 21 December 2006, subject to 76 Conditions of Approval (CoA) and 104 Statement of Commitments (SoC) relating to its design, construction and operation.

The Director-General's approval for the Construction Environmental Management Plan (CEMP) was received on 27 November 2008, and construction commenced on 29 November 2008.

The 5 km section of SSFL track between the existing Metropolitan Goods Line and Leightonfield, referred to as the Sefton Park Junction to Leightonfield SSFL, became Operational on 24 June 2012, following final agreement between ARTC and RailCorp (now Sydney Trains). A separate Pre-Operation Compliance Report, addressing the requirements of CoA 9, was approved by the Department of Planning and Infrastructure (DoPI) on 19 August 2011 as described in **Section 1.3**.

The SSFL Pre-Operation Compliance Report, addressing the operation of the entire 36km of the SSFL Project which became operational on 23 December 2012, was approved by DoPI on 9 January 2013.

Construction of the SSFL was officially completed on 2 August 2013.



Page 2

I.2 PURPOSE AND CONTENT OF THIS REPORT

This report addresses Condition 12 of the Minister's CoAs for the SSFL Project. CoA 12 states:

“An Environmental Impact Audit Report - Operation must be submitted to the Director-General a maximum 12 months after the Project begins Operation and at any additional periods that the Director-General may require. The Environmental Impact Audit Report - Operation must also be submitted to Relevant Government Departments at the request of the Director-General.

The Environmental Impact Audit Report - Operation must:

- (a) compare the Operation impact predictions made in the EA, Submissions Report and any supplementary studies with the actual impacts;*
- (b) assess the effectiveness of implemented mitigation measures and safeguards;*
- (c) assess compliance with the systems for operation maintenance and monitoring (as required by this approval);*
- (d) discuss the results of consultation with the local community particularly any feedback or complaints; and*
- (e) be certified by an independent person at the Proponent's expense. The certifier must be advised to the Director-General before the Environmental Impact Audit Report – Operation is prepared.*

The Environmental Impact Audit Report – Operation must be made Publicly Available.”

In accordance with CoA 12, this report compares the Operation impact predictions with the actual impacts (**Section 3.2**), assesses the effectiveness of implemented mitigation measures and safeguards (**Section 3.2**), assesses compliance with the systems for operation maintenance and monitoring (**Sections 3.3 to 3.6**), and discusses the results of consultation with the local community (**Section 3.7**).

This report draws on extensive information documented in the *Environmental Assessment, Submissions Report, Urban Design & Landscaping Plan, Project Approval, Operational Environmental Management Plan (OEMP) and its sub-plans (ONVMP, OAQMP, OHRMP), Final Construction Compliance Report, Environmental Impact Audit Report – Construction, Pre-Operation Compliance Report*, the complaints line records for the period from 23 December 2012 to 23 December 2013, and operational monitoring information.

The draft Environmental Impact Audit Report – Operation was provided to the Independent Certifier on 17 April 2014 for their review. The Independent Certifier provided their comments to ARTC on 2 May 2014 and 5 May 2014, requesting a small number of improvements to the report. ARTC amended the report and submitted it to DoPI on 15 May 2014.

I.3 PROJECT STATUS

The [Environmental Impact Audit Report – Construction.pdf](#) provides a detailed description of the SSFL Project history including a major re-evaluation of the Program for delivery in 2009-10, changes to the Program for delivery from 2010 to 2013, and the staged delivery of the Project.

The [SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf](#) provides a cumulative, chronological history of compliance for CoAs and SoCs addressed during the construction period from 29 November 2012 to 2 August 2013.

On 23 May 2011, DoPI emailed ARTC that “Consistent with the advice the Department provided in its meeting with ARTC on 25 January 2011, and taking into account that the project is now being completed in stages, you

are advised that in accordance with condition 6, a Staging Report for the operational requirements of the project is required to be approved by the Director-General”.

The SSFL Project was made Operational in two stages:

- First Stage: The 5km section of SSFL track from Sefton Park Junction to Leightonfield, within the Bankstown City Council Local Government Area became Operational on 24 June 2012, accommodating down freight traffic. Up freight traffic continued to use RailCorp’s suburban line. There was no increase in freight traffic during this First Stage of Operations.
- Final Stage: The bi-directional 36 km SSFL track from Sefton Park Junction to Macarthur became Operational on 23 December 2012.

The final Operational Noise and Vibration Management Plan (ONVMP) ([SSFL OEMP Appendix B ONVMP Final Ver2 Oct 2011.pdf](#) and [SSFL OEMP Appendix B ONVMP Appendix F.pdf](#)) for the full 36 km SSFL was approved on 5 October 2011 ([ONVMP Approval.pdf](#)) pursuant to five requirements which were addressed by ARTC in the ONVMP.

The documentation required by the SSFL Planning Approval for Operation of the **Final Stage** was submitted to DoPI in November 2012. The Operational Environmental Management Plan (OEMP) was submitted to DoPI on 20 November 2012 in accordance with CoA 14. As required by CoA 14, the OEMP incorporated the Operational Air Quality Management Plan (OAQMP, CoA 76) and the Operational Hazards and Risk Management Plan (OHRMP, CoA 70) for the Final Stage. The Department responded on 17 December 2012 with comments on the OEMP, OAQMP and OHRMP. ARTC addressed the Department’s comments on 19 December 2012 and submitted an updated OEMP and subplans. The Department approved the OEMP ([SSFL OEMP 2012 Main Report with Apps A and E Final Ver2.pdf](#)), OAQMP ([SSFL OEMP 2012 Appendix C OAQMP Final.pdf](#)) and OHRMP ([SSFL OEMP 2012 Appendix D OHRMP Final.pdf](#)) on 9 January 2013 ([20130109 Approval for OEMP, OAQMP and OHRMP.pdf](#)).

The Pre-Operation Compliance Report was submitted to DoPI on 21 November 2012 in accordance with CoA9. DoPI provided comments to ARTC on the Pre-Operation Compliance Report on 7 February 2013. ARTC amended the report and re-submitted it to DoPI on 28 March 2013 ([SSFL Pre-Operation Compliance Report Final - Update Mar 13.pdf](#)).

I.4 AUDIT TEAM AND TIMEFRAME

This Audit was carried out by Evans & Peck., who were commissioned by ARTC on 28 March 2014. The draft Audit was completed and submitted to DoPI on 17 April 2014.

I.5 DISTRIBUTION AND APPROVAL

As required by CoA12, this report is to be submitted to the Director-General, with copies also provided to relevant government agencies if requested by the Director-General.

After review and approval by DoPI, this report will be made available to the public via the ARTC website:
<http://www.artc.com.au/>.

2 COMPLIANCE WITH APPROVALS OR LICENCES ISSUED BY RELEVANT GOVERNMENT DEPARTMENTS

No additional approvals or licences were granted by other relevant government departments during the reporting period.

2.1 NSW GOVERNMENT - EPA

During the reporting period for this Report, ARTC was the holder of two Environment Protection Licences (EPLs) issued by the NSW Environment Protection Authority (EPA) under the Protection of the Environment Operations Act 1997 (POEO Act):

- EPL 12971 for Construction ([EPL 12971.pdf](#));
- EPL 3142 for Operations ([EPL 3142.pdf](#)).

2.1.1 EPL 12971

This licence was issued on 26 November 2008 and authorised the carrying out of scheduled development work comprising construction of the SSFL between Birrong and Macarthur. The EPA had issued 72 variations to the EPL up to 30 April 2013.

The final EPA inspection was held on 31 July 2013. This looked at the close out of final works and agreed to a final inspection process to be undertaken by the EMR in preparation for being able to send the final variation by following the end construction on 16 August 2013.

The inspection process was aligned with the EMR inspection schedule and agreed that with the appearance of 'green pick' on formed areas, and EMR assessment (at the 27 August 2013 inspection) that these areas were stable and ready for handover to maintenance contractors for the 12 month maintenance programs, the EPA would agree to a submission for close out of the EPL to occur by 10 September 2013 (2 weeks after 27 Aug).

Once the EPL close out date was finalised, the final EPL Annual Return was submitted to the EPA on 11 November 2013 for the last reporting period.

The EPL required regular reporting to the EPA, including an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints). The Annual Return must be submitted within 60 days after 26 November. The First Annual Return was submitted to the EPA on 20 January 2010 ([AR_1108119_Final_\(signed\).pdf](#)), and the Second Annual Return was submitted on 24 January 2011 ([SSFL 2010 Annual Return 1122145_Final_Signed.pdf](#)). The Third Annual Return was submitted to the EPA on 23 January 2012 ([20120119_SSFL 2010-2011 Annual Return signed.pdf](#)). The Fourth Annual Return was submitted to the EPA on 21 January 2013 ([SSFL 2011-2012 Annual Return 21 Jan 13.pdf](#)).

During the final compliance reporting period in 2013, the Project did not receive any formal show cause letter or penalty infringement notices from the EPA.

On 18 November 2011 ARTC submitted an EPL variation application to the EPA requesting significant changes to EPL 12971, specifically in relation to out of hours (OOH) work approval conditions and reporting requirements. The following changes were approved by the EPA on 9 December 2011 ([L12971 EPL V57 - 9 Dec 2011.pdf](#)):

- L2.2 Exemption from normal hours – Low noise impact construction work;
- L2.6 Additional hours - Local Possessions;
- L2.7 Additional Hours - Weekends (independent of possessions);

- L2.8 Additional hours - Weekday evenings and nights (independent of possessions);
- E11 Special Requirements for Works Permissible Under Conditions L2.6, L2.7, L2.8, E1, E2, E3, E4, E5, E6, E7 and E8.

The additional requested changes were approved by the EPA on 17 February 2012 ([LI2971 Variation Notice 1503679 - 17 Feb 12.pdf](#)):

- R4.1 Monthly Monitoring Report – Deleted
- R4.2 Monthly Complaints Statistics Report – Deleted

The final Monthly Monitoring Report and Monthly Complaints Statistic Report was submitted to the EPA in December 2012: [EPL Monthly Report - December 2012.pdf](#).

ARTC sought to amend the four authorised representatives for the SSFL project, as required under Condition O4.1 of the EPL, on 2 December 2012. Upon the EPA's request, ARTC subsequently submitted documentation on 14 May 2012 to demonstrate the nomination process for an authorised representative: [SSFL - Authorised representatives for the Environment Protection Licence 12971.msg](#).

2.1.2 EPL 3142

This licence was issued on 20 December 2000 and authorises the carrying out of scheduled railway systems activities.

The EPL was extended to cover the area of Operations of the SSFL before the commencement of Operations on 23 December 2012.

The EPL requires regular reporting to the EPA, including an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints). The Annual Return must be submitted within 60 days after 5 September. The most recent Annual Return was submitted to the EPA on 31 October 2013.

During the reporting period for this Report, ARTC did not receive any formal show cause letter or penalty infringement notices from the EPA for the area covered by the SSFL.

2.2 NSW GOVERNMENT - SYDNEY WATER CORPORATION

ARTC is the holder of Sydney Water Conditional Consent No 35767 to discharge saline groundwater as trade waste into the sewer at Sefton Dive. The Consent was first issued in June 2012, and renewed on 8 July 2013: [2013-2014 Trade Waste Agreement.pdf](#).

During the first year of operation of the Trade Waste Agreement in 2012-13, ARTC was required to conduct regular sampling and analyse the water quality for pH and 20 determinands: Ammonia (as N), Biochemical Oxygen Demand, Suspended Solids, Total Dissolved Solids, Grease, Sulphate, Aluminium, Barium, Boron, Chromium, Volatile Halocarbons, Cyanide – Labile, Total Herbicides, Iron, Lead, Manganese, Mercury, Sulphite, Zinc and Total Polynuclear Aromatic Hydrocarbons.

For the second year of operation of the Trade Waste Agreement in 2013-14, ARTC is required to conduct regular sampling and analyse the water quality for pH and 2 determinands: Total Dissolved Solids and Sulphate.

2.3 COMMONWEALTH GOVERNMENT – DEPARTMENT OF ENVIRONMENT

As described in Section 3 of the [SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf](#), ARTC's Environmental Actions Plan for the SSFL Project was approved under the Australian Government's EPBC Act on 23 October 2008. On 10 August 2009, ARTC wrote to the Department of Sustainability, Environment, Water, Population and Communities (DSEWPC, formerly the Department of Environment, Water,

Heritage and the Arts, and now the Department of Environment) informing the Department that ARTC had completed the required Noise Barrier modelling, required as part of DEWHA's approval for the SSFL. ARTC requested DEWHA's approval for the construction of Noise Barriers. This was supplemented on 15 October 2009 by ARTC forwarding to DSEWPC a requested copy of the Operational Noise & Vibration Management Plan for the SSFL. This plan contains details of the noise modelling conducted to help design the noise barriers, including their locations.

DSEWPC wrote to ARTC on 19 October 2011 advising that the SSFL project is now in the post-approval phase, that the Monitoring and Audit Section of the Department is the point of contact for further communication with the Department, and seeking information on the present status of the project in relation to its conditions of approval. ARTC's response included a reference to the SSFL website to view the most recent Construction Compliance Report, from 29 November 2010 to 29 May 2011, and that this and future Construction Compliance reports will be forwarded to DSEWPC.

ARTC wrote to DSEWPC on 22 December 2011, advising that DoPI had recently approved the SSFL Operational Noise and Vibration Management Plan (ONVMP). Attached to ARTC's letter were copies of DoPI's letter of approval, the approved amended ONVMP, and the package of drawings of noise barriers which accompanied and were approved as part of the ONVMP. DSEWPC responded to ARTC on 17 January 2012 that officers of the Monitoring and Audit Section of the Department had considered the plan and were satisfied that it met the noise and visual character requirements set out in the Environmental Action Plan and the conditions of approval ([20120117 Ltr from DSEWPC re ONVMP and noise walls.pdf](#)).

ARTC sought comments from the Department on the draft OEMP on 20 September 2012, to which DSEWPC responded on 22 October 2012 ([DSEWPC response.msg](#)).

On 20 November 2012 ARTC notified the Department of the commencement of Operations of the SSFL on 23 December 2012 ([20121119 Letter to DSEWPC re Final Stage Operation.pdf](#)) as required by CoA 7.

3 AUDIT FINDINGS

3.1 INTRODUCTION

The Audit Checklist contained in Tables 3-1 to 3-5 details the assessment or evidence for compliance based on information submitted to the audit team, information made available online, and the audit team's extensive knowledge of the Project site. The Operation impact predictions are compared with the actual impacts in **Section 3.2**, the effectiveness of implemented mitigation measures and safeguards are assessed in **Section 3.2**, compliance with the systems for operation maintenance and monitoring is assessed in **Section 3.3** (CoAs), **Section 3.4** (SoCs), **Section 3.5** (OEMP actions), **Section 3.6** (UDLP Operation Performance), and the results of consultation with the local community are discussed in **Section 3.7**.

3.2 OPERATION IMPACT PREDICTIONS, ACTUAL IMPACTS AND EFFECTIVENESS OF IMPLEMENTED MITIGATION MEASURES AND SAFEGUARDS

Information in this section is detailed in and addresses the following parts from CoA 12:

(a) compare the Operation impact predictions made in the EA, Submissions Report and any supplementary studies with the actual impacts;

(b) assess the effectiveness of implemented mitigation measures and safeguards.

The assessment of effectiveness is based on a comparison of actual impacts against Operation impact predictions (or performance criteria) as per the definition in CoA 11.

The information and assessments are contained in **Table 3-1**. Source documents for the Operation impact predictions are the EA ([EA Volume 1 - Main Volume.pdf](#), [EA Volume 2 - Technical Papers.pdf](#) and [EA Technical Paper 4 - Aboriginal.pdf](#)) and the Submissions Report ([Submissions Report Chapters 1-4 PR_4208 Rev C.pdf](#) and [Submissions Report Chapters 5-7 PR_4208 Rev C.pdf](#)), and source of each item in the Table is referenced. A reading of the Submissions Report shows that:

- Many of the predictions in the Submissions Report are identified in the earlier EA, as identified in **Table 3-1**;
- The operational Statement of Commitments (Appendix D) in the Submissions Report were included in the SSFL Project Approval. Compliance with these is addressed in **Section 3.4**.

Table 3-1 comprises five columns:

- The first column **Item** lists the Item Number, sequentially from 1.1 to 1.125;
- The second column **Reference** lists the source of the predicted impact, in the EA and/or the Submissions Report. There were no supplementary studies with additional predicted impacts;
- The third column **Predicted Impact** describes the impact stated in the EA and/or the Submissions Report.
- The fourth column **Actual Impact** describes what was or is being delivered by the Project, and its actual impact. Most of the Items were closed out in the Final Construction Compliance Report. For those Items, this column includes hyperlink(s) to UDLP pages or other documents which demonstrate

how the predicted impact was to be delivered, and which CoA or SoC in the Final Construction Compliance Report documents their delivery (in greater detail).

- The fifth column **Effectiveness of Management/Mitigation** assesses the effectiveness of the implemented mitigation measures and safeguards against predicted, describing these as:
 - **Fully effective**, where the actual impact achieved or bettered the predicted impact;
 - **On target**; being delivered, or to be delivered as part of SSFL Operations;
 - **Not effective**, where the actual impact has not achieved the predicted impact;
 - **Not applicable**; not measured as part of SSFL Operations.

The Audit found that of the 125 Items in **Table 3-1**:

- **109 Items are fully effective** with the actual impact delivering the predicted impact, with **101 Items** closed out in the Final Construction Compliance Report;
- **13 Items are on target**, and the predicted impacts are either being delivered or to be delivered as part of SSFL Operations;
- **3 Items were not applicable**, not being measured as part of SSFL Operations;
- There were no Items that were not effective in predicted impact delivery.

3.3 MINISTER'S CONDITIONS OF APPROVAL (OPERATIONAL)

Information in this section is detailed in and addresses the following part from CoA 12, specifically the CoAs:

(c) assess compliance with the systems for operation maintenance and monitoring (as required by this approval);

The information and assessments are contained in **Table 3-2**. The source document for identifying the CoAs to be assessed is the Modified Approval ([20120306 SSFL - Consolidated Approval - MOD 6.pdf](#)) and the [SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf](#).

There are 21 CoAs assessed for operation maintenance and monitoring, including those CoAs in the Final Construction Compliance Report with a description of "All phases of Project" or "Operation", even if closed in the Final Construction Compliance Report, and CoAs with the status of "Delivered by OEMP".

Table 3-2 comprises five columns:

- The first column **Item** lists the Item Number, sequentially from 2.1 to 2.21;
- The second column **CoA** lists the CoA Number;
- The third column **Summary of Requirement** states the CoA from the Project Approval ([20120306 SSFL - Consolidated Approval - MOD 6.pdf](#));
- The fourth column **Compliance Status** assesses the extent of ARTC's operation maintenance and monitoring compliance against the requirement of each CoA, including:
 - **Compliant**, requirements which have been delivered by ARTC;
 - **On target**, requirements which are ongoing, in the process of being delivered and/or are future requirements;

- **Substantially Compliant;**
- **Not Compliant.**

The Audit found that of the 21 Items in **Table 3-2**, ARTC is:

- **Compliant** with **9 CoAs**, with **6 Items** closed out in the Final Construction Compliance Report;
- **On Target** with **8 CoAs**;
- **Substantially Compliant** with **2 CoAs**. In both instances ARTC has prepared and submitted required reports to DoPI, but has not made them available on ARTC's website as required by the CoAs;
- **Not Compliant** with **2 CoAs**. This includes:
 - CoA 12, the preparation and submission of this report. The report was not submitted as required by 23 December 2013, and ARTC did not seek the Director-General's approval for an extension of time until 13 March 2014, well after the due date.
 - CoA 2, which requires that ARTC be compliant with all CoAs. As ARTC is not compliant with CoA 12, it is therefore not compliant with CoA 2.

3.4 STATEMENT OF COMMITMENTS (OPERATIONAL)

Information in this section is detailed in and addresses the following part from CoA 12, specifically the SoCs:

(c) assess compliance with the systems for operation maintenance and monitoring (as required by this approval);

The information and assessments are contained in **Table 3-3**. The source document for identifying the SoCs to be assessed is the Modified Approval ([20120306 SSFL - Consolidated Approval - MOD 6.pdf](#)) and the [SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf](#).

There are 6 SoCs assessed for operation maintenance and monitoring, including those SoCs in the Final Construction Compliance Report with a description of "All phases of Project" or "Operation", even if closed in the Final Construction Compliance Report, and SoCs with the status of "Delivered by OEMP".

Table 3-3 comprises five columns:

- The first column **Item** lists the Item Number, sequentially from 3.1 to 3.6;
- The second column **SoC** lists the SoC Number;
- The third column **Summary of Requirement** states the SoC from the Project Approval ([20120306 SSFL - Consolidated Approval - MOD 6.pdf](#));
- The fourth column **Compliance Status** assesses the extent of ARTC's operation maintenance and monitoring compliance against the requirement of each SoC, including:
 - **Compliant**, requirements which have been delivered by ARTC;
 - **On Target**, requirements which are ongoing, in the process of being delivered and/or are future requirements;
 - **Substantially Compliant**;

- **Not Compliant.**

The Audit found that of the 6 Items in **Table 3-3**, ARTC is:

- **Compliant** with **5 SoCs**, with 3 SoCs closed out in the Final Construction Compliance Report;
- **On Target** with **1 SoC**;
- There were no Items with the status of Substantially Compliant or Not Compliant.

3.5 OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN - OPERATION MAINTENANCE, MONITORING AND REPORTING

Information in this section is detailed in and addresses the following part from CoA 12, specifically the requirements in the OEMP and its sub-plans:

(c) assess compliance with the systems for operation maintenance and monitoring (as required by this approval);

The information and assessments are contained in **Table 3-4**. The source document for identifying the requirements in the OEMP and its sub-plans is the OEMP, which includes all requirements ([SSFL OEMP 2012 Main Report with Apps A and E Final Ver2.pdf](#)).

There are 22 Items assessed for operation maintenance and monitoring.

Table 3-4 comprises five columns:

- The first column **Item** lists the Item Number, sequentially from 4.1 to 4.22;
- The second column **OEMP** lists the category of requirement, for example 'Noise and Vibration';
- The third column **Summary of Requirement to Monitor/Review** states the requirement in Table 5-1 of the OEMP ([SSFL OEMP 2012 Main Report with Apps A and E Final Ver2.pdf](#));
- The fourth column **Compliance Status** assesses the extent of ARTC's operation maintenance and monitoring compliance against the requirement of each OEMP Item, including:
 - **Compliant**, requirements which have been delivered by ARTC;
 - **On target**, requirements which are ongoing, in the process of being delivered and/or are future requirements;
 - **Substantially Compliant**;
 - **Not Compliant**.

The Audit found that of the 22 Items in **Table 3-4**, ARTC is:

- **Compliant** with **11 Items**;
- **On Target** with **11 Items**
- There were no Items with the status of Substantially Compliant or Not Compliant.

3.6 URBAN DESIGN & LANDSCAPE PLAN – OPERATION PERFORMANCE

Information in this section is detailed in and addresses the following part from CoA 12, specifically the requirements in the UDLP, Section 6 Maintenance:

(c) assess compliance with the systems for operation maintenance and monitoring (as required by this approval);

The information and assessments are contained in **Table 3-5**. The source document for identifying the requirements in the UDLP, Section 6 Maintenance is: [20130804 UDLP Section 6 Maintenance.pdf](#).

There are 7 Items assessed for operation maintenance and monitoring.

Table 3-5 comprises five columns:

- The first column **Item** lists the Item Number, sequentially from 5.1 to 5.7;
- The second column **UDLP** lists the category of requirement, for example 'Graffiti Management';
- The third column **Summary of Requirement** states the requirement in the UDLP, Section 6 Maintenance is: [20130804 UDLP Section 6 Maintenance.pdf](#);
- The fourth column **Compliance Status** assesses the extent of ARTC's operation maintenance and monitoring compliance against the requirement of each UDLP Item, including:
 - **Compliant**, including those requirements which have and/or are being delivered by ARTC, and those which are on target to be delivered;
 - **Substantially Compliant**;
 - **Not Compliant**.

The Audit found that of the 7 Items in **Table 3-5**, ARTC is:

- **Compliant** with all 7 Items;
- There were no Items with the status of Substantially Compliant or Not Compliant.

3.7 CONSULTATION WITH THE LOCAL COMMUNITY

Information in this section is detailed in and addresses the following part from CoA 12:

(d) discuss the results of consultation with the local community particularly any feedback or complaints;

During Construction, consultation with the local community was through the four Community Liaison Groups, the four Local Councils and via the SSFL complaints line. Towards the end of Construction the CLGs were dissolved, as approved by the Director-General, with the last CLG (Fairfield) being dissolved in January 2013.

Consultation opportunities, feedback and complaints throughout 2013 were via ARTC's Enviroline, and with Local Councils as part of the process of asset handover.

3.7.1 Enviroline

ARTC's complaints management system Enviroline is described in Section 5 of the OEMP: [SSFL OEMP 2012 Main Report with Apps A and E Final Ver2.pdf](#). ARTC has a dedicated community relations officer responsible for recording and responding to all complaints received.

A total of 10 complaints were received during the Operations reporting period, and all of these have been recorded in the ARTC Enviroline complaints database and responded to. The complaints, on a month-by-month basis, are described below. A complete listing of complaints received during this Operations reporting period, including complaint ID, location, date complaint received, complaint type, description of complaint and close out details, is provided in: [SSFL Complaints Extract - Redacted.pdf](#). Personal details of complainants have been removed from the spreadsheet.

Seven complaints relating to noise and vibration were received during the operations reporting period, and were responded to and closed. Two complaints were related to construction issues. One complaint was a non-project related issue, resulting from the work of another organisation and was referred to the relevant agency to be addressed.

The complaints received in the reporting period, on a month-by-month basis, are summarised as:

- There was one complaint received during January 2013. This complaint was regarding trackwork noise, a construction issue.
- There were two complaints received during April 2013. One complaint was related to property damage due to operational vibration, while the second complaint was related to pass-by noise. Both complaints were responded to and closed.
- There were two complaints received during May 2013. One complaint was related to pass-by noise, while the second complaint was related to property damage due to operational vibration and noise. Both complaints were responded to and closed.
- There were two complaints received during July 2013. One complaint was regarding construction noise and vibration, while the second complaint was a non-project issue and referred to Transport for New South Wales.
- There was one complaint received during August 2013. This complaint was related to pass-by noise. The complaint was responded to and closed.
- There were two complaints received during November 2013. One complaint was related to property damage due to operational vibration, while the second complaint was related to pass-by noise. Both complaints were responded to and closed.

3.7.2 Local Councils

ARTC is consulting with Local Councils on the handover of assets, as described in:

- Item 3.5 (**Table 3-3**) - ARTC successfully negotiated road restoration agreements for LGAs;
- Item 4.20 (**Table 3-4**) – ARTC has successfully handed over landscaping, or is in the process of negotiating landscaping with Local Councils;
- Item 4.21 (**Table 3-4**) – ARTC has successfully handed over assets to Liverpool and Fairfield City Councils.
- Item 5.4 (**Table 3-5**) – As stated for this Item in the UDLP Section 6 Maintenance, no complaints from the community or Councils have been received regarding graffiti ([SSFL Complaints Extract.xlsx](#)). ARTC monitors feedback and is compliant with this Item.
- Item 5.7 (**Table 3-5**) – As stated for this Item in the UDLP Section 6 Maintenance, ARTC monitors feedback and is compliant. No public complaints were received regarding landscaping ([SSFL Complaints Extract.xlsx](#)). Landscape management feedback from Councils has been successfully addressed, with ARTC having handed over landscaping, or is in the process of negotiating landscaping handover, to Councils.

3.8 CONCLUSIONS

This Audit found that ARTC has an ongoing commitment to achieving compliance during the Operational phase of the SSFL. ARTC records were readily provided, and there is a high level of implementation of Operational mitigation measures by remaining SSFL project staff and by ARTC Corridor and Environmental staff.

Monitoring results demonstrated that the Project has generally been successful in achieving:

- The Operation impact predictions when compared with the actual impacts in **Section 3.2**, and the high level of effectiveness of implemented mitigation measures and safeguards as assessed in **Section 3.2**;
- Overall compliance with the systems for operation maintenance and monitoring as assessed in **Section 3.3** (CoAs), **Section 3.4** (SoCs), **Section 3.5** (OEMP actions), **Section 3.6** (UDLP Operation Performance);
- Positive results of consultation with the local community and Local Councils as discussed in **Section 3.7**.

ARTC needs to ensure that those reports (including this one) which are required to be publicly available are placed on the ARTC website.



Table 3-1 Operation Impact Predictions, Actual Impacts and Effectiveness of Implemented Mitigation Measures and Safeguards

Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
1.1	EA10.3.1 Bridge upgrades. Submissions Report 2.5.1 Traffic, transport and access	Bridges upgraded to accommodate the proposed SSFL would have a neutral impact on traffic operation. No roads would have capacity reductions and there would be no change to traffic conditions during operation.	As described in SoC 72 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , all bridges constructed for the SSFL Project complied with the requirements of this SoC which included: <ul style="list-style-type: none"> • where possible, all bridges over road crossings were designed to comply with the height clearance requirements of the RTA. The SoC acknowledged that this commitment would not be achieved at the Woodbrook Road, Casula and Sandal Crescent, Carramar/Moore Street, Canley Vale railway underbridges; • no road bridge affected by the Construction works was re-constructed with a reduced capacity or with any change to traffic conditions during Operation. 	Fully effective. SoC 72 was closed in the Final Construction Compliance Report.
1.2	EA10.3.2 New rail bridges over roads	New rail bridge construction and minor works to road bridges would not affect traffic operations.	As described in SoC 72 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , new rail bridge construction and minor works to road bridges did not affect traffic operations, and complied with the requirements of this SoC which included: <ul style="list-style-type: none"> • where possible, all bridges over road crossings were designed to comply with the height clearance requirements of the RTA. The SoC acknowledged that this commitment would not be achieved at the Woodbrook Road, Casula and Sandal Crescent, Carramar/Moore Street, Canley Vale railway underbridges; • no road bridge affected by the Construction works was 	Fully effective. SoC 72 was closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
			re-constructed with a reduced capacity or with any change to traffic conditions during Operation.	
I.3	EA10.3.36 Road network changes. Submissions Report 2.5.1 Traffic, transport and access	Campbelltown City Council's proposed road connection from Farrow Road to Blaxland Road, Campbelltown, (to provide more direct access to Campbelltown Railway Station), would be affected by the proposed SSFL. An alternative alignment has been identified for the road connection that would be subject to further refinement and appear capable of meeting Campbelltown City Council's objectives.	As described in CoA 35 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC consulted with Campbelltown City Council and RailCorp for the re-alignment of Farrow Road to accommodate the future extension of Farrow Road to Blaxland Road. This resulted in final agreement between the parties, with the Deed of Settlement and Deed of Licence signed on 30 November 2011, and the re-aligned Farrow Road constructed as part of the SSFL Construction works.	Fully effective. CoA 35 was closed in the Final Construction Compliance Report.
I.4	EA10.3.4 Local and emergency services access. Submissions Report 2.5.1 Traffic, transport and access	Local access and emergency services access would not be affected by the operation of the SSFL.	As described in SoC 73 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC has ensured that local access and emergency vehicle access has not and is not being adversely affected by the operation of the SSFL: <ul style="list-style-type: none"> As shown in this Table in Items I.1, I.2 (above) and I.5 (below), CoA 37 and SoCs 72, 77, 78, 81, 80, 79 and 82 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf show how local communities' access is not affected by the Operation of the SSFL. Appendix 3 Annexure J Sefton-Macarthur (SSFL Shared Corridor) of the OHRMP (SSFL OEMP 2012 Appendix D OHRMP Final.pdf) includes an ARTC deliverable that it will allow RailCorp emergency services access to its part of the shared rail corridor. 	Fully effective. CoA 37 and SoCs 72, 77, 78, 81, 80, 79 and 82 was closed in the Final Construction Compliance Report. SoC 73 in the Final Construction Compliance Report, and the OHRMP of the OEMP continue to be delivered on target.
I.5	EA10.3.5 Cyclist and pedestrian access.	All bicycle and pedestrian facilities, including corridor crossings, would be retained. At some stations,	As described in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC has through CoA 37:	Fully effective. CoA 37 and SoCs 77, 78,



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
	Submissions Report 2.5.1 Traffic, transport and access	implementation of the SSFL would change pedestrian movements in accessing the stations, or in using station footbridges to cross the rail corridor. These changes would be the result of the removal of the at grade connections to some station platforms. The provision of new station access, in accordance with the easy access standards, would apply at Leumeah, Minto, Warwick Farm and Cabramatta Railway Stations. At Casula and Sefton Railway Stations, provision has been made for possible future provision of easy access, which are not part of this project. At some stations, pedestrian facilities and pedestrian safety would be improved by the provision of safe pedestrian crossing facilities adjacent to the station.	<ul style="list-style-type: none"> Replaced all existing infrastructure impacted by the Project to at least the existing standard to ensure that there is no net loss in pedestrian access, vehicular access, parking, bus, cyclist and other traffic and transport facilities along the corridor, unless otherwise agreed by the Director-General; Provided station access impacted by the Project to 'easy access' standards at the Leumeah, Minto, Cabramatta and Warwick Farm Station precincts, and in addition to Casula and Sefton Station precincts. Details provided for each of the station precincts are further detailed in SoCs 77, 78, 81, 80, 79 and 82 respectively. 	81, 80, 79 and 82 were closed in the Final Construction Compliance Report.
I.6	EA10.3.6 Vehicle movements. Submissions Report 2.5.1 Traffic, transport and access	The increased rail freight arriving at the terminals in Sydney, Melbourne and Brisbane would generally replace, or be a substitute for, heavy vehicle trips on the interstate road network. It is estimated that there would be 182,468 fewer semi-trailer net tonne kilometre road trips by 2018 (after 10 years of operation of the SSFL).	ARTC Manager Operations advised (personal communication) that the number of freight trains per week (Up and Down) on the Master Train Plan for the SSFL in its first year of operation increased by 26%, from 92 (effective 21 January 2013) to 116 (effective 6 April 2014). The increased rail freight is replacing, or substituting, heavy vehicle trips on the interstate road network. Given that the EA predicted an increase in the frequency of train movements of approximately 130% after 10 years of Operation, the SSFL is on target to deliver 182,468 fewer semi-trailer net tonne kilometre road trips after 10 years of Operation.	On target. To be reviewed by the SSFL after 10 years of Operation under the OEMP.
I.7	EA10.3.6 Vehicle movements. Submissions Report 2.5.1 Traffic,	Increased terminal activity would generate increased local truck traffic on the adjoining road network that connects to the terminals in Sydney, Melbourne and Brisbane. Growth in traffic associated with these terminals would be limited to	As stated in the predicted impact, growth in traffic associated with terminal activity would be limited to existing terminal capacity and the approved conditions of operation (of those terminals) which are likely to address sensitivity of	Not applicable; not measured as part of SSFL Operations.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
	transport and access	existing terminal capacity and the approved conditions of operation which are likely to address sensitivity of surrounding land uses and existing road capacity. It is considered that any indirect local impacts of increasing intermodal terminal activity would not be significant and that there would be wider community benefits of the predicted mode shift.	surrounding land uses and existing road capacity. The impact would be measured as part of the Operation of the terminals, and is not measured as part of the Operation of the SSFL.	
I.8	EA10.3.7 Buses and taxis.	There would be no impact on bus routes from the operation of the SSFL.	As described in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC has through CoA 37: <ul style="list-style-type: none"> Replaced all existing infrastructure impacted by the Project to at least the existing standard to ensure that there is no net loss in pedestrian access, vehicular access, parking, bus, cyclist and other traffic and transport facilities along the corridor, unless otherwise agreed by the Director-General; Provided station access impacted by the Project to 'easy access' standards at the Leumeah, Minto, Cabramatta and Warwick Farm Station precincts, and in addition to Casula and Sefton Station precincts. This included bus zones at each station, ensuring no impact on bus routes. Details provided for each of the station precincts are further detailed in SoCs 77, 78, 81, 80, 79 and 82 respectively. 	Fully effective. CoA 37 and SoCs 77, 78, 81, 80, 79 and 82 were closed in the Final Construction Compliance Report.
I.9	EA10.3.8 Commuter parking	There would be no loss of commuter parking from the station precinct changes required for the implementation of the SSFL. At some stations, commuter parking spaces would be relocated further from the station entrance, but most would still be within 400 metres	As described in Section 4.1.7 of the UDLP (UDLP_revG_final_Page_044.jpg), and in SoCs 77, 78, 79, 80, 81 and 82 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf : <ul style="list-style-type: none"> Overall, there is a net increase of 35 parking spaces, comprising 22 commuter, 9 disabled and 4 staff car 	Fully effective. SoCs 77, 78, 79, 80, 81 and 82 were closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
			<p>parking spaces;</p> <ul style="list-style-type: none"> As approved by DoPI, 17 parking spaces could not be replaced close to Leumeah Railway Station. Campbelltown City Council had already built replacement parking spaces in anticipation of this shortfall, and ARTC contributed \$300,000 funding to Council towards these completed works to make up for the shortfall (identified in the Community Amenities Offset Plan CAOP Plan.pdf). 	
I.10	EA10.3.8 Commuter parking	At Carramar Railway Station, six commuter parking spaces would be removed and relocated within close proximity to the station.	As described in CoA 37, SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , at Carramar Railway Station six commuter parking spaces were removed and relocated within close proximity to the station, as shown in as-built drawing: SN-460[AB].pdf .	Fully effective. CoA 37 was closed in the Final Construction Compliance Report.
I.11	EA10.5 Conclusions	At Cabramatta Railway Station, the proposed shared zone in Broomfield Street, while providing a safer environment for pedestrians and cyclists in the vicinity of the station, may have an impact on traffic flow and a traffic impact assessment is proposed to address this issue	As described in CoA 30 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , prior to the commencement of construction, ARTC undertook a review of proposed traffic, cycle and pedestrian arrangements in the East Cabramatta area in consultation with relevant Government Departments, Fairfield City Council, and the CLG to the satisfaction of the Director-General. The findings and recommendations of the review, providing a safer environment for pedestrians and cyclists and streamlining traffic flow in the vicinity of the station, were approved by DoPI and incorporated into the UDLP. ARTC implemented the identified management and mitigation measures as part of the SSFL Project.	Fully effective. CoA 30 was closed in the Final Construction Compliance Report.
I.12	EA11.2.2	The proposed noise barriers would significantly reduce noise	As described in the ONVMP (SSFL OEMP Appendix B	Fully effective.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
	Operational noise and vibration. Submissions Report 2.5.1 Noise	levels to below the relevant criteria at most locations where they are proposed, including at all nearby schools, places of worship and the Casula Regional Arts Centre.	<p>ONVMP FinalVel_Oct_2011.pdf, SSFL OEMP Appendix B ONVMP Appendix F.pdf), noise barriers were considered to represent the only realistic wide-ranging technique for achieving the level of noise reduction required to meet the “planning” noise criteria at residences and other ‘noise sensitive receivers’ such as schools and Liverpool Hospital where noise levels would increase due to the Project.</p> <p>As described in CoA s 51 and 52 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, ARTC installed 6.3 km of noise barriers and carried out architectural treatments to nominated residential buildings and the Casula Arts Centre, and constructed a colourbond fence to mitigate noise at Warwick Farm Stables.</p>	CoAs 51 and 52 were closed in the Final Construction Compliance Report.
I.13	EA11.2.2 Operational noise and vibration	<p>There are 15 catchments where it would not be possible to achieve the planning criteria in 2018, even with a 4 metre high noise barrier in place. Of these 15 catchments, the highest residual criterion exceedance was predicted at catchment CAB4 — an exceedance of 7dBA (receiver height 12 metres above ground level). At this building 4 metre barrier would result in a reduction of only 2.6dBA for LAeq,24hr. All other buildings in this catchment are at most two storeys in height, and a 4 metre barrier would achieve compliance with the relevant criteria for these two-storey residences.</p> <p>Similar results were predicted for a number of other catchments, including LIV2, CAB5, CVA1, CAR6 and CHE3, all of which are represented by the upper levels of three or four storey apartments. Catchment LIV4 is a vacation day</p>	<p>As described in the Section 8 of the ONVMP (SSFL OEMP Appendix B ONVMP FinalVel_Oct_2011.pdf, SSFL OEMP Appendix B ONVMP Appendix F.pdf), noise barriers were considered to represent the only realistic wide-ranging technique for achieving the level of noise reduction required to meet the “planning” noise criteria at residences and other ‘noise sensitive receivers’ such as schools and Liverpool Hospital where noise levels would increase due to the Project. For those nominated buildings in the EA where it was not possible to achieve the noise planning criteria using noise barriers, architectural treatments were applied to achieve the criteria.</p> <p>As described in CoA s 51 and 52 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, ARTC installed 6.3 km of noise barriers and carried out</p>	Fully effective. CoAs 51 and 52 were closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
		care centre associated with Liverpool Hospital. Similar results were predicted for a number of other catchments, including LIV2, CAB5, CVA1, CAR6 and CHE3, all of which are represented by the upper levels of three or four storey apartments.	architectural treatments to nominated residential buildings and the Casula Arts Centre, and constructed a colourbond fence to mitigate noise at Warwick Farm Stables.	
I.14	EA11.2.2 Operational noise and vibration. Submissions Report 2.5.1 Noise	Operational noise levels from maintenance activities would be lower than under the existing maintenance operations. Overall, maintenance of the proposed SSFL would not add significantly to existing noise levels at any location.	It is concluded in the ONVMP (SSFL OEMP Appendix B ONVMP FinalVej_Oct_2011.pdf , SSFL OEMP Appendix B ONVMP Appendix F.pdf), that: <ul style="list-style-type: none"> In many instances the SSFL would reduce the exposure of residents to noise from maintenance works (Section 6.10 of the ONVMP): Where noise levels from maintenance did increase, the adoption of mitigation measures described in Section 8 of the ONVMP would ensure that noise from maintenance of the proposed track would not significantly increase existing noise levels. The frequency of maintenance for the SSFL is expected to be lower than for the existing track due to the use of concrete sleepers (which require less maintenance) and it being more recently constructed (Section 5.8 of the ONVMP). 	Fully effective , as determined from the ONVMP.
I.15	EA11.2.2 and 11.3.2 Operational noise and vibration	Operational vibration from the SSFL would be expected to comply easily with the criterion of 10 millimetres per second for building damage based on the German Standard DIN4150 and British Standard BS7385:Part 2-1993	As described in Section 7 of the ONVMP (SSFL OEMP Appendix B ONVMP FinalVej_Oct_2011.pdf , SSFL OEMP Appendix B ONVMP Appendix F.pdf), the closest buildings to either the existing or proposed future tracks are at a distance of approximately 15 metres (this includes the Liverpool Hospital.) Measurements described in the ONVMP, from either freight or passenger services, did not exceed 1 millimetre per second at 10 metres from the track for any	Fully effective , as determined from the ONVMP.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
			pass-by. It is clear, therefore, that a limit of 10 millimetres per second for building damage would be easily met at 15 metres.	
I.16	EA 11.2.2 and 11.3.2 Operational noise and vibration	Operational vibration levels are predicted to easily comply with human comfort criteria: • residential buildings, daytime (6 am – 10 pm): 0.2 to 0.4 • residential buildings, night-time (10 pm – 6 am): 0.13.	As described in Section 7 of the ONVMP (SSFL OEMP Appendix B ONVMP Final Ver. Oct 2011.pdf , SSFL OEMP Appendix B ONVMP Appendix F.pdf), the VDV criteria of 0.2 (daytime) and 0.13 (night time) would be met even at 10 metres from every track, easily complying with human comfort criteria.	Fully effective , as determined from the ONVMP.
I.17	EA 12.2.1 Geology and soils	Impacts of excavated soils during operation of the SSFL would be negligible.	As described in the EA in Section 12.2.1, during construction, excavated soils would be stockpiled and separated into material types. Stockpiles would be bunded and, if required, covered to minimise any run-off or wind blown dust. SoC 58 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , states that during 2012 RailCorp requested that ARTC remove excess spoil from site. Around 22,650 tonnes of excess spoil was removed from site and disposed of at landfill, and the remaining 27,000 tonnes of spoil was reused on site to create laydown areas and infill hummocky areas to facilitate rail corridor maintenance. At the end of construction, all major stockpiles that were located in the rail corridor during construction had been removed or reused on site, with the result that the impacts of excavated soils during operation of the SSFL would be negligible.	Fully effective . SoC 58 was closed in the Final Construction Compliance Report.
I.18	EA 12.2.1 Geology and soils.	Potential impacts of acid sulphate soils during operation of the SSFL would be negligible.	As reported in Section 2.7.3 of the SSFL Environmental Impact Audit Report - Construction - Final.pdf , there were	Fully effective . Closed in the



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
	Submissions Report 2.5.1 Geology and soils		no reported occurrences of acid sulphate soils during construction of the Project. As a result, there are no impacts of acid sulphate soils during Operation of the SSFL.	Environmental Impact Audit Report – Construction.
I.19	EA 12.2.1 Geology and soils	Operational impacts associated with the presence of the Glenfield Waste Facility next to the Glenfield flyover would be negligible.	Pages 94 and 95 of the UDLP UDLP_revG_final_Page_096.jpg , UDLP_revG_final_Page_097.jpg show that the northern approach to the Glenfield Flyover was redesigned, realigned and constructed adjacent to the Waste Facility cells, thereby avoiding being constructed on or over the Waste Facility cells. The 2012 photo First Train coming over Flyover_01 on 23-12-12.jpg shows the partially constructed boundary fence separating the flyover and Waste Facility Cells. As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the amount acquired was minimised, and as a result Operational impacts associated with the presence of the Glenfield Waste Facility next to the Glenfield Flyover are negligible.	Fully effective. CoA 64 was closed in the Final Construction Compliance Report.
I.20	Submissions Report 2.5.1 Geology and soils	Without careful management, the large volume of earthworks proposed for the project has the potential to cause erosion and sedimentation problems in areas close to rivers and streams during operation of the proposed SSFL.	As noted in Item I.17 above, during construction, excavated soils would be stockpiled and separated into material types. Stockpiles would be bunded and, if required, covered to minimise any run-off or wind blown dust. SoC 58 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , states at the end of construction, all major stockpiles that were located in the rail corridor during construction had been removed or reused on site, with the result that the earthworks have not caused erosion and sedimentation problems in areas close to rivers and streams during Operation of the SSFL.	Fully effective. SoC 58 was closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
I.21	EA12.2.2 Contaminated/ hazardous materials and waste	<p>Potential contaminated soils or hazardous materials impacts during operation of the proposed SSFL include:</p> <ul style="list-style-type: none"> • spillage of lubricants and fuels from engines and carriages • possibility of major spillages from trains and maintenance plant and vehicles • use of herbicides to control weeds along the railway line • atmospheric deposition of particulates generated by emissions from maintenance plant and vehicles travelling along the maintenance access road or travelling on the railway line • metals contamination from abrasion of wheels on tracks • possible lead dust emissions from refurbishment or deterioration of buildings and infrastructure. 	<p>As described in CoA 70 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, under the OHRMP (SSFL OEMP 2012 Appendix D OHRMP Final.pdf):</p> <ul style="list-style-type: none"> • Hazards and risk mitigation measures to address the potential impacts are detailed in the OHRMP which consists of: <ul style="list-style-type: none"> ○ The Emergency Management Plan including an Emergency Management Structure (EMS); ARTC Incident Management Manual TA 44 Version 4.6; ARTC Incident Management process; and Annexure J Sefton-Macarthur (SSFL Shared Corridor); ○ The Safety Management System (SMS) including ARTC Safety Management Policy; ARTC Safety Management Plan V1.0; Interface Agreement – RailCorp Operations on the ARTC Network; ARTC Risk Management Policy; and ARTC Risk Management Procedure RM-01 Version 6.1. ○ ARTC responsibilities for implementing safety related issues are identified in the SMS, while responsibilities for implementing environmental related issues are identified in the EMS. • <i>Appendix 3 Annexure J Sefton-Macarthur (SSFL Shared Corridor)</i> (SSFL OEMP 2012 Appendix D OHRMP Final.pdf) ARTC's requirement as part of its agreement with RailCorp includes rubbish removal (including operational and maintenance wastes) and vegetation control on the SSFL side of the Corridor. 	<p>On target. CoA 70 is being delivered by SSFL Operations under the OHRMP of the OEMP.</p>
I.22	EA12.2.2 Contaminated/	<p>Operational wastes are predicted to comprise waste generated from maintenance activities and rail line users.</p>	<p>As described in CoA 70 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, under the</p>	<p>On target. CoA 70 is being delivered by</p>



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
	hazardous materials and waste	<p>Typical waste streams include:</p> <ul style="list-style-type: none"> Maintenance activities: Pesticides, green waste, sediments and pollutants contained in water quality control ponds, oils and greases, paper, cardboard, plastic wrapping, containers and other miscellaneous wastes. Freight line users: Gross pollutants and litter (aluminium cans, glass bottles, paper and cardboard packaging, food and other putrescible waste), heavy metals, oils, surfactants, toxic organics, nutrients. 	<p>OHRMP <i>Appendix 3 Annexure J Sefton-Macarthur (SSFL Shared Corridor)</i> (SSFL OEMP 2012 Appendix D OHRMP Final.pdf) ARTC's deliverables as part of its agreement with RailCorp includes rubbish removal (including operational and maintenance wastes) and vegetation control on the SSFL side of the Corridor.</p> <p>Mitigation measures to appropriately manage the impacts of waste generated throughout the operation phase of the SSFL project are outlined in SSFL Waste Management Sub Plan 090219.pdf.</p>	SSFL Operations under the OHRMP of the OEMP.
I.23	EA12.2.3 Ground and surface water	<p>Potential ongoing impacts to be assessed:</p> <ul style="list-style-type: none"> modification of groundwater flows to groundwater dependent ecosystems in areas of groundwater seepage changes to groundwater levels that could result in subsidence, or rising standing water levels that might contribute to salinisation or water-logging (with potential implications for corrosion of construction materials). 	<p>As described in Item 4.12 in Table 3-4 of this report, groundwater was monitored for two monitoring periods after the completion of construction to assess post construction conditions, and to ensure there were no residual impacts of the construction of structures on groundwater.</p> <p>As detailed in Item 4.12, Parsons Brinckerhoff recommended that monitoring be discontinued in accordance with the groundwater management plan in CoA 61 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf. They also recommended that all groundwater monitoring bores be left in place for two years after the final sampling round, after which they should be decommissioned in an appropriate manner so as to not provide a contaminant pathway in the future.</p> <p>ARTC advised the DoPI that the groundwater monitoring has been completed: CoA 61 Groundwater Monitoring Letter to</p>	Fully effective. This item in the OEMP was closed.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
			Department of Planning - 16 January 2014.PDF.	
I.24	EA12.2.3 Ground and surface water	Areas where groundwater levels would be above sumps/excavations and foundations/footings, or where groundwater may potentially infiltrate to fill excavated areas, could cause corrosion	<p>As described in Item 4.13 in Table 3-4 of this report, this impact applies to Sefton Dive. Groundwater is being monitored as described in Section 4 of the OEMP SSFL OEMP 2012 Main Report with Apps A and E Final Ver2.pdf [monitor groundwater and first flush surface water extraction (quantity and quality) being discharged to sewer. Water quality parameters as specified by Sydney Water].</p> <p>As detailed in Item 4.13, ARTC has continued to discharge (and monitor) the saline groundwater to sewer per agreement with Sydney Water throughout 2013, thereby minimising the impact of this groundwater on the Operation of the SSFL.</p>	On target. This Item of the OEMP is being delivered by SSFL Operations.
I.25	EA12.2.3 Ground and surface water	A major impact on surface water flows would result from the proposed alteration of both Bow Bowing Creek at Narellan Road and drainage gully north of the Cambridge Avenue road bridge at Glenfield Junction. It is proposed to realign the section of gully for a distance of approximately 900 metres, including moving the gully from the eastern side of a power substation to the western side.	<p>As described in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf:</p> <ul style="list-style-type: none"> • SoC 54 states that hydraulic assessments were carried out for both creeks to determine their existing capacity, this information being used to design the realignments to minimise the impacts on surface water flows; • CoA 60 states that NSW Government agencies approved the realignments of Bob Bowing Creek and Glenfield Creek, on the basis that the designs of both minimised the impact on surface water flows. <p>Prior to construction, the design of Glenfield Creek was amended so that it would not be moved from the eastern side of the power substation to the western side, further reducing the impact of its realignment.</p>	On target.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/Mitigation
			As described in Item 4.11 in Table 3-4 ARTC is monitoring residual impacts of the Project on surface waters, including visual inspection of realigned creeks and of rip rap dissipators where intertrack drainage enters waterways. The realigned creeks and rip rap structures in the SSFL Project area were inspected during the early January 2014 possession, with the erosion control and matting observed. Bow Bowing creek was inspected again on 3 February 2014.	
1.26	EA12.2.3 Ground and surface water. Submissions Report 2.5.1 Surface water	Operation of the SSFL would have a limited effect on the surface water drainage systems that intersect the proposed SSFL alignment because of the existing Main South Line railway embankment. Once the existing drainage structures have been modified and the new drainage structures constructed, the operational issues would be limited to potential impacts during maintenance because the existing hydraulic capacity of all transverse waterway openings would not be altered.	As described in SoC 54 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC undertook the design and construction of bridges and culverts in consultation with relevant Government Departments. This included: <ul style="list-style-type: none"> • Appropriately sizing all new and modified culverts and bridges to carry design flows; • Undertaking a hydraulic assessment to determine the existing capacity of Bow Bowing Creek and Glenfield Junction Gully to be realigned; • Ensuring that the design of the rail bridges over Glenfield, Cabramatta and Prospect Creeks avoided the placement of bridge piers in creek beds, and maintaining the flood depth underneath each bridge. As a result, operational issues are limited to potential impacts during maintenance because the existing hydraulic capacity of all transverse waterway openings is not altered.	Fully effective. SoC 54 was closed in the Final Construction Compliance Report.
1.27	EA12.2.3 Ground and surface water	While the SSFL would not cross the Georges River, it would be adjacent to the river between Casula and at Liverpool. The SSFL would also be adjacent to the existing Main South	As described in CoAs 62 and 63 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC undertook a Flood Management Study in	Fully effective. CoAs 62 and 63 were closed in the Final



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
		<p>Line railway embankment.</p> <p>It has been estimated that the proposed SSFL embankment would occupy approximately 11 square metres out of a floodway cross sectional area of over 500 square metres for the 100 year average recurrence interval flood event. Therefore, there would be little afflux in the 100 year average recurrence interval event as a result of the SSFL</p>	<p>consultation with relevant Government Departments, Councils and the CLGs, and CoA 63 prior to construction. The SSFL was designed and constructed to not worsen existing flooding characteristics upstream or downstream of the SSFL's elements. Not worsen is defined as:</p> <ul style="list-style-type: none"> • A maximum increase in inundation levels upstream of the Project of 50 mm in a 1 in 100 year ARI rainfall event; and • A maximum increase in inundation time of one hour in a 1 in 100 year ARI rainfall event. <p>The Study found that localised changes in flooding would not worsen existing flooding characteristics along the river between Casula and Liverpool.</p>	<p>Construction Compliance Report.</p>
I.28	EA12.2.3 Ground and surface water	<p>The proposed SSFL railway embankment may also be located within the floodway area for the more regular flood events, such as the 5, 10 and 20 year ARI events. For these events, the proposed embankment between Casula and Liverpool may occupy a large proportion of the floodway area and hence have an impact (either local or wider) on flood levels for these events.</p>	<p>As described in CoAs 62 and 63 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, the Flood Management Study showed that as the SSFL railway embankment would not worsen existing flooding characteristics along the river between Casula and Liverpool for the a 1 in 100 year ARI rainfall event, it has even less impact for more regular flood events.</p>	<p>Fully effective. CoAs 62 and 63 were closed in the Final Construction Compliance Report.</p>
I.29	EA12.2.4 Biodiversity. Submissions Report 2.5.1 Biodiversity	<p>Impact assessments (Appendix B, Volume 2, Technical Paper I) have concluded that a significant impact on threatened flora and fauna is unlikely.</p>	<p>The corridor contains one threatened species of plant (<i>Acacia pubescens</i>) and potential habitat for two threatened species of animal (<i>Green and Golden Bell Frog</i> and <i>Cumberland Plain Large Land Snail</i>).</p> <p>As described in SoCs 26, 27 and 28 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf:</p> <ul style="list-style-type: none"> • For SoC 26 ARTC undertook a targeted survey for 	<p>Fully effective. SoCs 26, 27 and 28 were closed in the Final Construction Compliance Report.</p>



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
			<p><i>Acacia pubescens</i> populations in the rail corridor where Construction was proposed, and implemented measures to ensure their protection. These measures have now been implemented in the OEMP, as described in Item 4.14 in Table 3-4 of this report, to protect these populations during Operation of the SSFL.</p> <ul style="list-style-type: none"> For SoC 27 ARTC undertook a survey for the <i>Green and Golden Bell Frog</i> between Chester Hill and Villawood Railway Stations. The survey indicated that it was unlikely that the Frog would be present in the survey area. For SoC 28 ARTC undertook a survey for <i>Pimelea Spicata</i> between Minto and Leumeah Railway Stations and Carramar and Leightonfield Railway Stations. No <i>Pimelea Spicata</i> were found during the survey, and no suitable habitat for the species was observed. <p>As a result of the above, a significant impact on threatened flora and fauna by Operation of the SSFL is unlikely.</p>	
I.30	EA13.2.2 Built heritage	<p>Built heritage items in the corridor potentially affected include:</p> <ul style="list-style-type: none"> Glenfield Creek Viaduct, south of Casula (item 62) – a new bridge would be located adjacent to the viaduct and be visually and structurally independent. Casula Railway Viaduct, Woodbrook Road (item 63) – a new bridge would be located adjacent to the viaduct and be visually and structurally independent. The railway viaduct at Mill Road/Sheppard Street in Liverpool (item 28) — A new bridge structure is proposed adjacent to the existing heritage viaduct, with the rhythm of the original structure maintained to ensure 	<p>As shown in Section 4.3.4 of the UDLP (UDLP_revG_final_Page_077.jpg) and described in SoC 35 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, ARTC designed existing and new bridges to be structurally independent and maintain a minimum of around 1.6m distance between the two structures. The rhythm of the existing spans was maintained with the pier locations and span sizes in the new structure matching the locations and span sizes in the existing structure. An example is Cabramatta Creek Bridge shown in UDLP Section 4.3.4.</p>	<p>Fully effective. SoC 35 was closed in the Final Construction Compliance Report.</p>



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
		<p>the new bridge is visually unobtrusive.</p> <ul style="list-style-type: none"> Liverpool Town Layout, between Scott Street and the Hume Highway (item 64) – the SSFL would lie in the vicinity of the eastern boundary of the old town layout. The railway viaduct at Railway Parade, Cabramatta (item 43) — a new rail bridge is proposed as the existing pedestrian access and cycleway will be removed. The new viaduct will be kept visually and structurally independent of the existing bridge. Rhythm of original to be maintained. The bridge/viaduct at Sandal Crescent, Carramar (item 51) — the existing pedestrian/bicycle footbridge would be removed from the east side of the bridge and a new bridge is proposed using a steel pony truss structure. The new viaduct will be kept structurally independent, with the rhythm of original to be maintained. 		
I.3I	EA13.2.3 Visual character	<p>Locality A: Macarthur to Minto.</p> <p>The visual effect would generally be low. Works required south of Macarthur Railway Station where the SSFL would connect to the Main South Line would have low visual effects.</p> <p>High visual effects would initially occur at the Narellan Road bridge where Bow Bowing Creek would be realigned. The visual effect would be expected to significantly reduce over time as restoration works become established.</p> <p>At the Leumeah Railway Station precinct the proposed changes would have a moderate visual effect.</p> <p>Overall the proposed SSFL would have a low visual impact on</p>	<p>As shown in the designs and detailed plans for the corridor landscaping and the precinct works in the UDLP and described in CoA 25 and SoC 91 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf for Leumeah, the SSFL has a low visual impact on this locality. Specifically:</p> <ul style="list-style-type: none"> Works south of Macarthur Railway Station where the SSFL connects to the Main South Line have low visual effects, as shown in Section 3.3 of the UDLP (UDLP_revG_final_Page_027.jpg); Works at the Narellan Road bridge where Bow Bowing Creek is realigned initially had high visual effects which are expected to significantly reduce over time as restoration works become established, as shown in UDLP Sections 3.3 and 5.2 	<p>Fully effective. CoA 25 and SoC 91 were closed in the Final Construction Compliance Report.</p>



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
		this locality because of the low sensitivity levels of the area.	<p>(UDLP_revG_final_Page_026.jpg, UDLP_revG_final_Page_099.jpg);</p> <ul style="list-style-type: none"> Works at Leumeah Railway Station including the sensitive design of the footbridge extension to the existing structure to provide visual continuity; hard and soft landscaping on the western side of the railway station to create precinct character; and cultural plantings to enhance the boundary between the car parking area and the rail corridor, as shown in UDLP Section 4.1.6 (UDLP_revG_final_Page_042.jpg, UDLP_revG_final_Page_043.jpg) have a moderate visual effect. <p>These measures resulted in an overall low visual impact on this precinct.</p>	
I.32	EA13.2.3 Visual character	<p>Locality B: Minto to Glenfield</p> <p>Overall, the visual impact between Minto and Glenfield was assessed as moderate due to the high visual effect of the works at Minto Railway Station, the incorporation of the existing Ingleburn to Glenfield passing loop, and the low visual sensitivity of the areas to the western side of the rail corridor.</p>	<p>As shown in the designs and detailed plans for the corridor landscaping and the precinct works in the UDLP and described in CoA 25 and SoC 92 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf for Minto, the SSFL has a moderate visual impact on this locality. Specifically, these areas include:</p> <ul style="list-style-type: none"> The low visual sensitivity of the areas to the western side of the rail corridor, as shown in UDLP Sections 3.3 and 5.2.6 (UDLP_revG_final_Page_023.jpg, UDLP_revG_final_Page_024.jpg, UDLP_revG_final_Page_098.jpg); Incorporation of the existing Ingleburn to Glenfield passing loop, as shown in UDLP Section 3.3 (UDLP_revG_final_Page_021.jpg, UDLP_revG_final_Page_022.jpg); 	<p>Fully effective. CoA 25 and SoC 92 were closed in the Final Construction Compliance Report.</p>



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
			<ul style="list-style-type: none"> Works at Minto Railway Station including the footbridge extension to the existing structure; the interface between the old and the new portions of the footbridge to provide visual separation of new and existing portions; hard and soft landscaping for the west side of the station to create precinct character; visual screening of the rail corridor and noise barriers to the dwellings fronting Somerset Street; as shown in UDLP Section 4.1.5 (UDLP_revG_final_Page_040.jpg, UDLP_revG_final_Page_041.jpg) have a moderate visual effect. <p>These measures resulted in an overall moderate visual impact on this precinct.</p>	
I.33	EA 13.2.3 Visual character	<p>Locality C: Casula to Warwick Farm</p> <p>The visual effect in this locality would be moderate to high, mainly due to the proposed Glenfield flyover, part of which would encroach into the southern portion of Leacock Regional Park.</p>	<p>As shown in the designs and detailed plans for the corridor landscaping and the precinct works in the UDLP and described in CoA 25 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, the SSFL has a moderate to high visual impact on this locality. Specifically, these areas include:</p> <ul style="list-style-type: none"> Glenfield flyover, part of which encroaches into the southern portion of Leacock Regional Park, as shown in UDLP Section 5.2.5 (UDLP_revG_final_Page_096.jpg, UDLP_revG_final_Page_097.jpg); Lighthorse Park between the SSFL and the Georges River in Liverpool, as shown in UDLP Section 5.2.4 (UDLP_revG_final_Page_095.jpg); Georges River embankment in Liverpool, as shown in UDLP Section 4.1.5 (UDLP_revG_final_Page_094.jpg). 	Fully effective. CoA 25 was closed in the Final Construction Compliance Report.
I.34	EA13.2.3 Visual	Locality D: Cabramatta to Villawood	As shown in the designs and detailed plans for the corridor	Fully effective. CoA



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
	character	Overall, the visual impact of the SSFL within this locality would be high due to the high visual effect of the proposed works at Cabramatta Railway Station, Bareena Street and Cabramatta Creek, and the moderate to high visual sensitivity of the areas adjacent to the eastern and southern side of the RailCorp corridor.	<p>landscaping and the precinct works in the UDLP and described in CoA 25 and SoC 95 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf for Cabramatta, the SSFL has a high visual impact on this locality. Specifically, these areas include:</p> <ul style="list-style-type: none"> The high visual effect of works at Bareena Street and Cabramatta Creek, as shown in UDLP Sections 3.1 and 5.2.2 (UDLP_revG_final_Page_016.jpg, UDLP_revG_final_Page_093.jpg); The moderate to high visual sensitivity of the areas adjacent to the eastern and southern side of the RailCorp corridor, as shown in UDLP Section 3.1 (UDLP_revG_final_Page_015.jpg, UDLP_revG_final_Page_016.jpg); Works at Cabramatta Railway Station including the additional structure for the footbridge to provide for a visual separation of new and existing portions; careful detailing of construction joints on the footbridge; hard and soft landscaping along the east side of the station to create precinct character; avenue planting along Broomfield Street to act as a partial screen; as shown in UDLP Section 4.1.2 (UDLP_revG_final_Page_032.jpg, UDLP_revG_final_Page_033.jpg, UDLP_revG_final_Page_034.jpg, UDLP_revG_final_Page_035.jpg) have a high visual effect. <p>These measures resulted in an overall high visual impact on this precinct.</p>	25 and SoC 95 were closed in the Final Construction Compliance Report.
I.35	EA13.2.3 Visual character	Locality E: Leightonfield to Sefton The combination of the high visual effects in some areas and	As shown in the designs and detailed plans for the corridor landscaping and the precinct works in the UDLP and	Fully effective. CoA 25 was closed in the



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
		high visual sensitivity levels in this locality (due to the adjacent residential areas) would result in a high overall visual impact on this locality.	described in CoA 25 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the SSFL has a high visual impact on this locality. Specifically, these areas include the high visual effects and high sensitivity levels due to the adjacent residential areas in Sefton and Chester Hill, as shown in UDLP Section 3.1 (UDLP_revG_final_Page_012.jpg , UDLP_revG_final_Page_013.jpg , UDLP_revG_final_Page_014.jpg).	Final Construction Compliance Report.
I.36	EA13.2.3 Visual character	Visual screens and noise barriers themselves have a visual impact on the environment in which they are placed.	<p>While visual screens and noise barriers have a visual impact on the environment along the SSFL, as described in Section 4.2 of the UDLP and in CoAs 25 and 52 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, ARTC took measures to reduce their impact, including visual impact, by:</p> <ul style="list-style-type: none"> • Consulting with directly affected property owners, relevant Councils and the CLGs; • Detailed design taking into consideration: • The community's requests for softening of the barriers using vegetation plantings, which was included in the final UDLP, Section 4.2 (UDLP_revG_final_Page_058.jpg); • Shadow analysis for north facing sites in residential areas; • Assessing and designing for local flooding impacts; • Assessment of and designing for graffiti and other forms of vandalism, and the development of a graffiti management plan in Schedule 6 of the UDLP (20130804 UDLP Section 6 Maintenance.pdf). 	Fully effective. CoAs 25 and 52 were closed in the Final Construction Compliance Report.
I.37	EA13.2.3 Visual	Earthworks, such as deep cuttings and high fill embankments,	As described in Sections 4.2 and 5 of the UDLP, and in CoA	Fully effective. CoA



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
	character	have a high visual impact and can cause erosion problems in the absence of appropriate mitigation measures.	25 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC successfully took measures to reduce the visual impacts of earthworks, and to design and implement measures to mitigate erosion, including: <ul style="list-style-type: none"> The use of various types of retaining walls as shown in Section 4.2 of the UDLP (UDLP_revG_final_Page_055.jpg); Vegetation planting designs for cuttings and fill embankments as shown in Section 5 of the UDLP (UDLP_revG_final_Page_086.jpg, UDLP_revG_final_Page_087.jpg, UDLP_revG_final_Page_088.jpg, UDLP_revG_final_Page_089.jpg). These plantings were implemented through the Landscape Management Plan. 	25 was closed in the Final Construction Compliance Report.
I.38	EA13.2.4 Air quality	Ozone limiting method NO ₂ prediction results show that the ground level NO ₂ concentrations for both the 2008 and 2018 scenarios would comply with the adopted 1 hour average goal of 246 µg/m ³ at a distance of 50 metres from the SSFL.	As described in Section 3.2.2 of the OAQMP (SSFL OEMP 2012 Appendix C OAQMP Final.pdf) and in Item 4.6 in Table 3-4 , ARTC is on target to review the air quality assessment to confirm NO ₂ impacts of the SSFL as part of its working with rail operators on their improving emission controls for diesel locomotives. NO ₂ audits are planned at 5 and 10 years after the commencement of operation of the SSFL, as per the modelling and assessment methodology used in Chapter 13 of the Environmental Assessment. ARTC will notify the Director-General of the results of these audits within seven days.	On target to be reviewed by the SSFL after 5 and 10 years of Operation.
I.39	EA13.2.4 Air quality	Compliance was predicted with the annual average NO ₂ goal of 62 µg/m ³ at 50 metres from the SSFL under 2008 conditions but was exceeded for 2018 conditions. A separation distance of 400 metres was required under 2018	As described in Section 3.2.2 of the OAQMP (SSFL OEMP 2012 Appendix C OAQMP Final.pdf) and in Item 4.6 in Table 3-4 , ARTC is on target to review the air quality assessment to confirm NO ₂ impacts of the SSFL as part of its	On target to be reviewed by the SSFL after 5 and 10 years of Operation under the



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
		conditions to achieve compliance with the annual average of 62 µg/m ³ (an NO ₂ level of 59.2 µg/m ³ was calculated). However, the modelled increase in annual NO ₂ between 2008 and 2018 of 26 µg/m ³ in 2018 is considered marginal.	working with rail operators on their improving emission controls for diesel locomotives. NO ₂ audits are planned at 5 and 10 years after the commencement of operation of the SSFL, as per the modelling and assessment methodology used in Chapter 13 of the Environmental Assessment. ARTC will notify the Director-General of the results of these audits within seven days.	OAQMP of the OEMP.
I.40	EA13.2.4 Air quality	The predicted carbon monoxide, sulphur dioxide and particulate levels are well within the air quality goals for these emissions and accordingly no off-site impacts are anticipated.	As described in Item 4.5 in Table 3-4 , the EPA has not directed ARTC to undertake additional monitoring of air quality through dust impacts or for other parameters. Additionally, the SSFL enviroline has no record of any air quality complaints (SSFL Complaints Extract - Redacted.pdf) There have been no off-site impacts, and no additional monitoring or reporting has been required.	On target to be delivered by the SSFL, NO ₂ audits are planned at 5 and 10 years after the commencement of Operation.
I.41	EA13.2.5 Social, and EA14.2.2 Impacts during operation	The proposed SSFL would not worsen existing severance to communities during its operation as it would follow the existing RailCorp rail corridor. The proposal would not close existing public crossings along the existing corridor. All existing crossings would remain open to the public including vehicle and pedestrian crossings. The proposal would not, therefore, sever any communities along the corridor during operation of the proposed SSFL.	As previously shown in this Table in Items I.1, I.2, I.4 and I.5 above, CoA 37 and SoCs 72, 73, 77, 78, 79, 80, 81 and 82 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf show how the constructed SSFL has not worsened existing severance to communities.	Fully effective. CoA 37 and SoCs 72, 73, 77, 78, 79, 80, 81 and 82 were closed in the Final Construction Compliance Report.
I.42	EA13.2.5 Social	The social impacts from property acquisition would be mitigated by a design that has avoided residential land. Where corridor widening is required, it would involve only partial property acquisition of relatively narrow strips of land.	As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC minimised property acquisition by a design that avoided residential land. Where corridor widening was required, it involved only partial property acquisition of relatively narrow strips of land.	Fully effective. CoA 64 was closed in the Final Construction Compliance Report.



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I.43	EA13.2.5 Social	The proposal would lead to a number of significant regional, state and national economic benefits through improvements in the competitiveness of rail freight along the North–South Corridor (Brisbane - Melbourne). The proposal would increase the efficiency of rail freight entering and leaving Sydney from the south, which would remove a significant operational bottleneck, reduce travel times for rail freight services between Melbourne-Sydney-Brisbane, and contribute to growth in the market share of rail freight. Improvements of this nature would collectively benefit the NSW and national economies. There is unlikely to be any direct local economic benefit apart from construction employment opportunities, however the regional benefits would filter back down to local economies.	<p>As stated in the predicted impact, the larger scale impact includes significant regional, state and national economic benefits through improvements in the competitiveness of rail freight along the North–South Corridor (Brisbane-Melbourne). Furthermore, there is unlikely to be any direct local economic benefit apart from construction.</p> <p>The regional, state and national economic benefits are unable to be measured as part of the Operation of the SSFL.</p>	Not applicable; not measured as part of SSFL Operations.
I.44	EA13.2.5 Social, and EA14.2.2 Impacts during operation	<p>Pedestrian and cyclist access and circulation would not be substantially altered as a result of operation of the proposed SSFL. No public crossings would be closed as part of the proposal. Existing pedestrian and cyclist crossings would be retained and upgraded to cater for the SSFL and ongoing public use.</p> <p>Pedestrian and cyclist access to all stations would continue to be provided as part of the proposal.</p> <p>Although the location and/or means of access would change at some stations, access would be maintained.</p> <p>At Lighthorse Park, the proposed new pedestrian pathway between Riverpark Drive and the stairs to the Newbridge Road footbridge would be at a gentler gradient than the</p>	<p>As described in CoA 37 SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, ARTC has:</p> <ul style="list-style-type: none"> Replaced all existing infrastructure impacted by the Project to at least the existing standard to ensure that there is no net loss in pedestrian access, vehicular access, parking, bus, cyclist and other traffic and transport facilities along the corridor, unless otherwise agreed by the Director-General; Provided station access impacted by the Project to ‘easy access’ standards at the Leumeah, Minto, Cabramatta and Warwick Farm Station precincts, and in addition to Casula and Sefton Station precincts. Details provided for each of the station precincts are further detailed in SoCs 77, 78, 81, 80, 79 and 82 respectively. 	Fully effective. CoAs 35 and 37, and SoC 84 were closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
		existing pathway and therefore more accessible. The pathway would also be consistent with a proposal by Liverpool City Council for the construction of a cycleway along the western edge of the Main South Line rail corridor between Casula and Liverpool Railway Station.	<p>As described in SoC 84 SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, ARTC has replaced 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>.</p> <p>As described in CoA 35 SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, ARTC has provided a shared cycle/pedestrian walkway adjacent to the Casula Access Road along the Georges River connecting Shepherd Street in Liverpool with the Casula Arts Centre.</p>	
I.45	EA13.2.5 Social	<p>The amenity of passengers at stations would continue to be maintained to ensure that impacts are minimised for passengers using the RailCorp network.</p> <p>The amenity for passengers would be significantly improved with an upgrade of Warwick Farm Railway Station to the easy access standard, and maintaining the easy access standards at Leumeah, Minto and Cabramatta Railway Stations.</p>	The amenity for passengers has been significantly improved with upgrades of Leumeah, Minto, Casula, Warwick Farm, Cabramatta and Sefton railway stations, as shown in the designs and detailed plans for the precinct works in the Section 4.1 in the UDLP (PDF- UDLP.pdf) and described in CoA 37 and SoCs 91, 92, 93, 94, 95 and 96 respectively in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf .	Fully effective. CoA 37 and SoCs 91, 92, 93, 94, 95 and 96 were closed in the Final Construction Compliance Report.
I.46	EA13.2.5 Social	Vehicular access would be maintained at all public crossings during operation of the proposed SSFL.	As previously shown in this Table in Items I.1, I.2, I.4 and I.5 above, CoA 37 and SoCs 72, 73, 77, 78, 79, 80, 81 and 82 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf show that vehicular access would be maintained at all public crossings during operation of the proposed SSFL.	Fully effective. CoA 37 and SoCs 72, 73, 77, 78, 79, 80, 81 and 82 were closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
I.47	EA13.2.5 Social	The operation of the proposed SSFL would not affect circulation of traffic along the railway corridor.	As previously shown in this Table in Items I.1, I.2, I.4 and I.5 above, CoA 37 and SoCs 72, 73, 77, 78, 79, 80, 81 and 82 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf show that the operation of the proposed SSFL would not affect circulation of traffic along the railway corridor.	Fully effective. CoA 37 and SoCs 72, 73, 77, 78, 79, 80, 81 and 82 were closed in the Final Construction Compliance Report.
I.48	EA13.2.5 Social	Local environmental amenity would generally be improved for residents that adjoin the corridor, as noise barriers are proposed along approximately 7.5 kilometres of the route. These barriers would improve the existing acoustic environment.	As described in CoA s 51 and 52 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC installed 6.3 km of noise barriers and carried out architectural treatments to nominated residential buildings and the Casula Arts Centre, and constructed a colourbond fence to mitigate noise at Warwick Farm Stables. These measures improved local environmental amenity for residents that adjoin the corridor.	Fully effective. CoAs 51 and 52 were closed in the Final Construction Compliance Report.
I.49	EA14.2.2 Impacts during operation	Public land – Campbelltown City Council A portion of Gilchrist Park (less than 10 metres in width) in the north eastern corner would be required for acquisition. This would not have a major impact on the recreation area of Gilchrist Park.	As shown in Section 3.3 of the UDLP (UDLP_revG_final_Page_026.jpg), a portion of Gilchrist Park public land (less than 10 metres in width) in the north eastern corner was acquired. As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the amount acquired was minimised so that it would not have a major impact on the recreation area of Gilchrist Park.	Fully effective. CoA 64 was closed in the Final Construction Compliance Report.
I.50	EA14.2.2 Impacts during operation	Public land – disused road reserve for the former alignment of Narellan Road A rectangular portion of land (less than 20 metres by 15 metres) would be required for acquisition. There would not be any land use impacts associated with this acquisition.	As shown in Section 3.3 of the UDLP (UDLP_revG_final_Page_026.jpg), a rectangular portion of public land (less than 20 metres by 15 metres) being disused road reserve for the former alignment of Narellan Road was acquired. As described in CoA 64 in SSFL Final Construction	Fully effective. CoA 64 was closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
			Compliance Report August 2013 - Final Ver.pdf , the amount acquired was minimised so that there would not be any land use impacts.	
I.51	EA14.2.2 Impacts during operation	Public land – Bow Bowing Creek A strip of land (less than 5 metres in width) would be required along a short stretch of Bow Bowing Creek. Impacts on the creek would relate to its proposed realignment to the west and the extent of public access to the proposed Bow Bowing Creek riparian zone would be reduced.	As shown in Section 3.3 of the UDLP (UDLP_revG_final_Page_026.jpg), a strip of public land (less than 5 metres in width) along a short stretch of Bow Bowing Creek was acquired. As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the amount acquired was minimised, with the impacts on the creek relating to its realignment to the west and a reduction in the extent of public access to the Bow Bowing Creek riparian zone.	Fully effective. CoA 64 was closed in the Final Construction Compliance Report.
I.52	EA14.2.2 Impacts during operation	Public land – Campbelltown City Council A strip of land (less than 30 metres at its widest point and extending approximately 450 metres) would be required for acquisition. Direct impact to Council's future plans to redevelop the portion of land required for acquisition (including the proposed Bow Bowing Creek riparian zone), although the majority of Council's land holding would still be available for future development.	As shown in Section 3.3 of the UDLP (UDLP_revG_final_Page_026.jpg), a strip of public land (less than 30 metres at its widest point and extending approximately 450 metres) was acquired. As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the amount acquired was minimised, although it had an impact on Council's future plans to redevelop the portion of land acquired.	Fully effective. CoA 64 was closed in the Final Construction Compliance Report.
I.53	EA14.2.2 Impacts during operation	Public land – Farrow Road A strip of land approximately 20 metres in width along Farrow Road, with the alignment of Farrow Road altered to the west. Direct impacts on the road reserve would result, as the width of acquisition equals the width of the road reservation. Potential impacts on the two adjacent industrial properties could include changes to property access, car parking, circulation within the sites.	As shown in Section 3.3 of the UDLP (UDLP_revG_final_Page_026.jpg), a strip of public land around 20 metres in width along Farrow Road was acquired, with the alignment of Farrow Road altered to the west. As described in CoAs 35 and 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the amount acquired was minimised, with the revised Farrow Road being designed and constructed by ARTC in agreement with	Fully effective. CoAs 35 and 64 were closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
			Council and RailCorp. Impacts on the adjacent industrial properties were minimised, with property access, car parking and circulation within the sites being maintained.	
I.54	EA14.2.2 Impacts during operation	<p>Private land – No. 8 and 10 Farrow Road</p> <p>A strip of land would be required from the two industrial properties fronting Farrow Road with the width determined by the realignment of Farrow Road to the west through the front setback of the properties. Direct impacts on both properties would result, including potential changes in property access, car parking, vehicle circulation within the sites and potential relocation of the office component of the building at No. 8 Farrow Road. Campbelltown City Council's planned future extension of Farrow Road to Blaxland Road could be affected.</p>	<p>As shown in Section 3.3 of the UDLP (UDLP_revG_final_Page_026.jpg), a strip of private land from the two industrial properties fronting Farrow Road (Nos 8 and 10) with the width determined by the realignment of Farrow Road to the west through the front setback of the properties. As described in CoAs 35 and 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, the amount acquired was minimised, with impacts on both properties, including minor changes in property access, car parking, and vehicle circulation within the sites.</p> <p>As noted in Item I.3 above, and as described in CoA 35 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, ARTC consulted with Campbelltown City Council and RailCorp for the re-alignment of Farrow Road to accommodate the future extension of Farrow Road to Blaxland Road. This resulted in final agreement between the parties, with the Deed of Settlement and Deed of Licence signed on 30 November 2011, and the re-aligned Farrow Road constructed as part of the SSFL Construction works.</p>	<p>Fully effective. CoAs 35 and 64 were closed in the Final Construction Compliance Report.</p>
I.55	EA14.2.2 Impacts during operation	<p>Public land – Badgally Road</p> <p>A strip of land less than 8 metres in width would be required along the eastern boundary. This land is currently used for informal commuter car parking. The extent of commuter car parking to be lost would be determined once the detailed design is known; however, due to its informal nature it is</p>	<p>As shown in Section 3.3 of the UDLP (UDLP_revG_final_Page_026.jpg), a strip of public land less than 8 metres in width was acquired along the eastern boundary of Badgally Road. As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, the amount acquired was minimised, with a small</p>	<p>Fully effective. CoA 64 was closed in the Final Construction Compliance Report.</p>



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
		unlikely to cause a major impact.	amount of informal commuter car parking lost.	
I.56	EA14.2.2 Impacts during operation	Private land – RailCorp easement to rear of No. 2, 4, 6, 8, 10, 12 and 14 Watsford Road A strip of land less than 8 metres in width would be required along the rear of each identified property relating to the current RailCorp easement for the 33 kilovolt power line. Existing buildings and site facilities (e.g. car parking) have already been setback from the rear boundary in accordance with the easement. Impacts would relate to a loss of mounding and landscaping and the relocation of RailCorp's 33 kilovolt power line and poles.	As shown in Section 3.3 of the UDLP (UDLP_revG_final_Page_026.jpg), a strip of private land less than 8 metres in width was acquired along the rear of No. 2, 4, 6, 8, 10, 12 and 14 Watsford Road relating to the current RailCorp easement for the 33 kilovolt power line. As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the amount acquired was minimised, with minor impacts related to a loss of mounding and landscaping and the relocation of RailCorp's 33 kilovolt power line and poles.	Fully effective. CoA 64 was closed in the Final Construction Compliance Report.
I.57	EA14.2.2 Impacts during operation	Public land – Campbelltown Road A portion of land would be required underneath Campbelltown Road Bridge. There would not be any land use impacts associated with this acquisition.	As shown in Section 3.3 of the UDLP (UDLP_revG_final_Page_025.jpg), a portion of public land underneath Campbelltown Road Bridge was acquired. As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the amount acquired was minimised, and there were no land use impacts.	Fully effective. CoA 64 was closed in the Final Construction Compliance Report.
I.58	EA14.2.2 Impacts during operation	Public – disused road reserve north of Cambridge Avenue bridge A small portion of land, less than 8 metres in width, would be required. There would not be any land use impacts associated with this acquisition.	As shown in Section 3.3 of the UDLP (UDLP_revG_final_Page_020.jpg), a small portion of disused road reserve less than 8 metres in width north of Cambridge Avenue bridge was acquired. As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the amount acquired was minimised, and there were no land use impacts.	Fully effective. CoA 64 was closed in the Final Construction Compliance Report.
I.59	EA14.2.2 Impacts during operation	Public land – Liverpool City Council and State of New South Wales (Leacock Regional Park) Approximately 1.3 hectares of land would be required along	As shown in Section 5.2.5 of the UDLP (UDLP_revG_final_Page_096.jpg , UDLP_revG_final_Page_097.jpg), around 1.3 hectares of	On Target. CoA 64 was closed in the Final Construction



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
		<p>the south eastern boundary of park, approximately 50 metres in width at the widest point.</p> <p>Potential impacts include visual amenity of the park including it's regional recreation and aesthetic values, viability of the park (in terms of maintenance), loss of approximately 0.4 hectares of Cumberland Plain Woodland, Aboriginal cultural heritage impacts, potential visual and physical severance, and the flyover approach ramp within close proximity to the existing water body and creek. Impacts on park viability are considered to be minor.</p> <p>The recreational and aesthetic values of the park would be affected by noise and visual amenity, associated with the approach ramp and flyover, and passing freight trains.</p> <p>The approach ramps to the flyover could potentially benefit the park amenity by screening the extractive industry and landfill operations on the neighbouring Glenfield Waste Facility site.</p> <p>The flora and fauna assessment concluded that the loss of Cumberland Plain Woodland in the park does not represent a significant biodiversity impact.</p> <p>Potential physical and visual severance of the park from the planned future park on the eastern side of corridor is considered to be a minor impact considering the areas are already physically severed by the rail corridor.</p>	<p>public land along the south eastern boundary of Leacock Regional Park, approximately 50 metres in width at the widest point, was acquired from Liverpool City Council and NPWS. As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, the amount acquired was minimised. Positive and negative impacts include those described in the predicted impact. These impacts were offset in part by vegetation enhancement plantings of 2.1 hectares (due to removal of 0.4 hectares of Cumberland Plain Woodland and 1.7 hectares of Sydney Coastal River-flat Forest ECCs) elsewhere in Leacock Regional Park, as described in CoA 60 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf.</p>	<p>Compliance Report, and CoA 60 is on target, described in Table 3-2.</p>
I.60	EA14.2.2 Impacts during operation	<p>Private land – Glenfield Waste Facility</p> <p>Land would be required along the western boundary of the</p>	<p>As shown in Section 5.2.5 of the UDLP (UDLP_revG_final_Page_096.jpg,</p>	<p>Fully effective. CoA 64 was closed in the</p>



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
		landfill facility, approximately 50 metres in width at the widest point. The construction of the SSFL would prevent resource extraction and replacement landfill in the effected area and would therefore impact on business operations of the landowner.	UDLP_revG_final_Page_097.jpg), private land along the western boundary of the landfill facility was acquired from Glenfield Waste Facility. The northern approach to the Glenfield Flyover was redesigned, realigned and constructed adjacent to the Waste Facility cells, thereby avoiding being constructed on or over the Waste Facility cells. As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the amount acquired was minimised. As a result the construction of the SSFL did not prevent resource extraction and replacement landfill in the effected area and therefore did not impact on business operations of the landowner.	Final Construction Compliance Report.
I.61	EA14.2.2 Impacts during operation	Public land – Commonwealth of Australia (Department of Defence) A strip of land, approximately 8 metres in width at the widest point to the south of the parcel, would be required along western boundary. Potential impacts include extension of the SSFL formation into Sydney Coastal River back to the Flat Forest that lies along the Georges River, including the proposed formation design (form, material and treatment).	As shown in Section 3.2 of the UDLP (UDLP_revG_final_Page_019.jpg), a strip public land approximately 8 metres in width at the widest point to the south of the parcel along the western boundary was acquired from the Department of Defence. As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the amount acquired was minimised. Impacts included extension of the SSFL formation into Sydney Coastal River back to the Flat Forest that lies along the Georges River. This impact was offset by vegetation enhancement plantings of 2.1 hectares in the nearby Leacock Regional Park, described in CoA 60 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf .	On Target. CoA 64 was closed in the Final Construction Compliance Report, and CoA 60 is on target, described in Table 3-2.
I.62	EA14.2.2 Impacts during operation	Public land – Liverpool City Council (former golf course) and Mill Park A strip of land less than 10 metres in width at the widest point (with an average of less than 8 metres) would be	As shown in Section 3.2 of the UDLP (UDLP_revG_final_Page_018.jpg , UDLP_revG_final_Page_019.jpg), a strip public land less than 10 metres in width at the widest point (with an average of	Fully effective. CoAs 33 and 64 were closed in the Final Construction



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
		required along the majority of the western boundary of the riverfront park area and Mill Park. Potential impacts include intrusion of the SSFL formation and proposed formation design (form, material and treatment) on the park's landform and amenity.	less than 8 metres) along the majority of the western boundary of the riverfront park area and Mill Park was acquired from Liverpool City Council. As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the amount acquired was minimised. Impacts included intrusion of the SSFL formation on the park's landform and amenity (negative impact), and construction of the Casula Access Road linking the Casula Arts Centre with Liverpool (positive impact), described in CoA 33 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf .	Compliance Report.
I.63	EA14.2.2 Impacts during operation	Public land – Liverpool City Council (Lighthorse Park) A portion of land less than 25 metres at the widest point (with average of between 10–20 metres) would be required along the western boundary of the park as far south as Riverpark Drive. A 1 metre wide strip of the very northern end of Riverpark Drive would also be required. Potential impacts include intrusion of the SSFL formation and proposed formation design (form, material and treatment) on the park's landform and amenity.	As shown in Sections 3.2 and 5.2.4 of the UDLP (UDLP_revG_final_Page_017.jpg , UDLP_revG_final_Page_018.jpg , UDLP_revG_final_Page_095.jpg), a strip public land less than 25 metres at the widest point (with average of between 10–20 metres) along the western boundary of Lighthorse Park as far south as Riverpark Drive, and a 1 metre wide strip of the very northern end of Riverpark Drive were acquired from Liverpool City Council. As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the amount acquired was minimised. Impacts included intrusion of the SSFL formation on the park's landform and amenity.	Fully effective. CoA 64 was closed in the Final Construction Compliance Report.
I.64	EA14.2.2 Impacts during operation	Public land – Wellington Road A strip of the Wellington Road reserve would be required at the intersection with Auburn Road. It would be less than 4 metres wide at the widest point and would extend approximately 80 metres to the west of the intersection.	As shown in Section 3.1 of the UDLP (UDLP_revG_final_Page_012.jpg), a strip of the Wellington Road reserve was acquired from Bankstown City Council at the intersection with Auburn Road. It is less than 4 metres wide at the widest point and extends approximately 80	Fully effective. CoA 64 was closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
			metres to the west of the intersection. As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the amount acquired was minimised, and there were no land use impacts.	
I.65	EA14.2.2 Impacts during operation	Public land – Llewellyn Avenue A strip of land less than 8 metres in width would be required along the road reserve. There would not be any land use impacts associated with this acquisition.	As shown in Section 3.1 of the UDLP (UDLP_revG_final_Page_014.jpg), a strip public land less than 8 metres in width along the Llewellyn Avenue road reserve in Villawood was acquired from Bankstown City Council. As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the amount acquired was minimised, and there were no land use impacts.	Fully effective. CoA 64 was closed in the Final Construction Compliance Report.
I.66	EA14.2.2 Impacts during operation	There would not be any land severed as a result of the proposed SSFL. All property impacts would relate to intrusions at the boundary of the existing rail corridor.	As shown in Items I.49 to I.65 above in this Table, there has been no land severed as a result of the construction of the SSFL. As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the amounts acquired were minimised, and as a result all property impacts relate to intrusions at the boundary of the existing rail corridor.	Fully effective. CoA 64 was closed in the Final Construction Compliance Report.
I.67	EA14.2.2 Impacts during operation	Shadowing impacts would occur primarily in the northern section of the proposed route during operation of the SSFL. The impacts are caused by the required noise barriers, the east-west orientation of the rail corridor through the Bankstown local government area and existing height of the rail corridor embankment formation. The worst affected stretch is between Chester Hill and Sefton Railway Stations, west of Hector Street, where shadowing at the winter solstice (3pm, 21 June) would impact two residential properties with the shadows extending over the north facing	ARTC undertook shadow analysis associated with noise barriers for north facing sites in residential areas, as described in the UDLP in Section 4.1.2 Wellington Road (UDLP_revG_final_Page_058.jpg , UDLP_revG_final_Page_059.jpg) and Section 4.2.3 Kirrang and Wattle Avenues (UDLP_revG_final_Page_061.jpg , UDLP_revG_final_Page_062.jpg), and in CoA 52 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf . Two residential buildings are impacted.	Fully effective. CoA 52 was closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
		(rear) sides of the buildings.		
I.68	EA15.1.2 Impacts during operation	<p>The assessment of operational risks concluded that the transport of dangerous goods under current operations on the existing Main South Line has a risk profile of 'negligible to moderate' when considering individual risk. This same risk profile exists for environmental risk.</p> <p>An increase in the frequency of train movements of approximately 130% is predicted by 2018. The assessment found that such an increase in train movements could be managed on the SSFL without significantly increasing the individual risk. Similarly, environmental risk from the increase in train movements was found not to significantly increased.</p>	<p>As described in Section 4 of the OHRMP (SSFL OEMP 2012 Appendix D OHRMP Final.pdf) and in Item 4.9 in Table 3-4, ARTC is on target to conduct a periodic assessment at 2, 4, 6, 8 and 10 years from the commencement of operation of the SSFL, for a sample of train services, of dangerous goods movements by class. ARTC will request and compile specific information from train operators that pertain to the classes of dangerous goods moved on the three sample train services to determine whether the actual dangerous goods movements are to exceed the maximum (2018) quantities assumed in the preliminary hazard analysis. Where results of monitoring indicate exceedances are likely to occur, ARTC will notify the Director-General within seven days and provide projected data for the following 10 years together with a Quantitative Risk Analysis to demonstrate that the NSW risk criteria will not be exceeded. ARTC will provide the required information to the Director General within 30 days of notification of monitoring results.</p>	<p>On target to be reviewed by the SSFL after 2, 4, 6, 8 and 10 years of Operation under the OHRMP of the OEMP.</p>
I.69	EA15.1.2 Impacts during operation	<p>The operational risk assessment considered potential societal risk for the most sensitive land use adjacent to the SSFL, which was considered to be the Liverpool Hospital. At current and future train frequencies, most societal risks are likely to be classed as 'as low as reasonably practicable'.</p>	<p>As noted in the EA, current measures to avoid residual risk through rigorous risk identification and management protocols have reduced current operational risk levels on the Main South Line to 'as low as reasonably practicable'. The predicted increase in train movements resulting from SSFL operation would be adequately managed by a combination of existing safety protocols, the improved interface protocols developed as part of the Risk Management Plan for the SSFL, and additional area-specific Incident Management Plans developed to reduce risks to as 'low as reasonably practical'</p>	<p>On target. CoA 70 is being delivered by SSFL Operations under the OHRMP of the OEMP.</p>



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
			<p>for areas along the route with elevated sensitivities.</p> <p>As described in CoA 70 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, under the OHRMP (SSFL OEMP 2012 Appendix D OHRMP Final.pdf) these measures have been carried out and are being implemented. Hazards and risk mitigation measures to address the potential impacts are detailed in the OHRMP which consists of:</p> <ul style="list-style-type: none"> • The Emergency Management Plan including an Emergency Management Structure (EMS); ARTC Incident Management Manual TA 44 Version 4.6; ARTC Incident Management process; and Annexure J Sefton-Macarthur (SSFL Shared Corridor); • The Safety Management System (SMS) including ARTC Safety Management Policy; ARTC Safety Management Plan VI.0; Interface Agreement – RailCorp Operations on the ARTC Network; ARTC Risk Management Policy; and ARTC Risk Management Procedure RM-01 Version 6.1. • ARTC responsibilities for implementing safety related issues are identified in the SMS, while responsibilities for implementing environmental related issues are identified in the EMS. 	
I.70	EA15.2.3 Impacts during operation	It is anticipated that the proposal would result in energy savings, through diversion of freight from road to rail. This expected shift would result in significant reductions in fuel consumption as estimated in Table 15.1 of the EA.	<p>As ARTC is already telling its customers at its website www.betterforbusiness.com.au, every time their business chooses east coast rail instead of road, they're producing three times less CO₂, using three times less fuel.</p> <p>ARTC Manager Operations advised (personal</p>	On target. To be delivered by the SSFL after 10 years of Operation under the OEMP.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
			communication) that the number of freight trains per week (Up and Down) on the Master Train Plan for the SSFL in its first year of operation increased by 26%, from 92 (effective 21 January 2013) to 116 (effective 6 April 2014). The increased rail freight is replacing, or substituting, heavy vehicle trips on the interstate road network, resulting in energy savings.	
I.71	EA15.2.3 Impacts during operation	Energy consumption associated with maintenance is expected to be low.	<p>Energy consumption is associated with locomotives using the line, and vehicles, trains and equipment used for the maintenance of the line.</p> <p>Energy consumption associated with maintenance of the SSFL is not measured separately as part of SSFL Operations.</p> <p>Given the new asset condition of the SSFL, maintenance requirements during the first five years of operation are anticipated to be quite low.</p>	Not applicable; not measured as part of SSFL Operations.
I.72	EA15.2.3 Impacts during operation	The expected mode share shift from road to rail in 2008 (first year of operation) is equivalent to removing nearly 9,490 semitrailer net tonne kilometre trips from the road network on Australia's east coast.	ARTC Manager Operations advised (personal communication) that the number of freight trains per week (Up and Down) on the Master Train Plan for the SSFL in its first year of operation increased by 26%, from 92 (effective 21 January 2013) to 116 (effective 6 April 2014). The increased rail freight is replacing, or substituting, heavy vehicle trips on the interstate road network. There is no information available on the additional semitrailer net tonne kilometre trips.	On target. Being delivered by the SSFL under the OEMP.
I.73	EA15.2.3 Impacts during operation	Estimates of greenhouse gas savings are provided in Table 15.2 of the EA. The estimate of greenhouse gas savings by 2018 is equivalent to refilling an average car fuel tank	ARTC Manager Operations advised (personal communication) that the number of freight trains per week (Up and Down) on the Master Train Plan for the SSFL in its	On target. To be delivered by the SSFL after 10 years of



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
		approximately 2,130 times. This reduction of greenhouse gases would have regional air quality benefits.	first year of operation increased by 26%, from 92 (effective 21 January 2013) to 116 (effective 6 April 2014). The increased rail freight is replacing, or substituting, heavy vehicle trips on the interstate road network with resulting greenhouse gas savings. Given that the EA predicted an increase in the frequency of train movements of approximately 130% after 10 years of Operation, the SSFL is on target to deliver significant greenhouse gas savings after 10 years of Operation.	Operation under the OEMP.
I.74	EA16.3.2 Changes to traffic, transport and access	Road network and traffic within the Leumeah Railway Station precinct — There would be a minor adjustment to the design of the roundabout in the station access road from Plough Inn Road to accommodate the new station entry and adjusted kiss-and-ride spaces, but the works would have no impact on traffic or the operation of the road network.	As shown in the designs and detailed plans for the precinct works in Section 4.1.6 of the UDLP (UDLP_revG_final_Page_043.jpg) and described in SoC 91 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , there was a minor adjustment to the design of the roundabout in the station access road from Plough Inn Road to accommodate the new station entry and adjusted kiss-and-ride spaces, but the works do not impact on traffic or the operation of the road network.	Fully effective. SoC 92 was closed in the Final Construction Compliance Report.
I.75	EA16.3.2 Changes to traffic, transport and access	Pedestrians and cyclists within the Leumeah Railway Station precinct — The width of the new station stairs would be adequate for projected 2021 passenger demands.	As described in SoC 76 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC prepared detailed Construction plans for the works required to new station stairs, footbridges and other facilities at Leumeah, Minto, Casula, Warwick Farm, Cabramatta and Sefton Railway Stations, and received RailCorp approval of these plans prior to the commencement of Construction works at these railway stations. The designs included allowance for projected passenger demands.	Fully effective. SoC 76 was closed in the Final Construction Compliance Report.
I.76	EA16.3.2 Changes	Parking within the Leumeah Railway Station precinct —	As described in Section 4.1.7 of the UDLP	Fully effective. SoC



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
	to traffic, transport and access	There would be no net loss of parking at the station, and the impact on station operations of relocating parking spaces is expected to be minimal.	(UDLP_revG_final_Page_044.jpg , UDLP_revG_final_Page_047.jpg), and in SoC 77 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , as approved by DoPI, 17 parking spaces could not be replaced close to Leumeah Railway Station. Campbelltown City Council had already built replacement parking spaces in anticipation of this shortfall, such that the impact on station operations of relocating the parking spaces is minimal. ARTC contributed \$300,000 funding to Council towards these completed works to make up for the shortfall (identified in the Community Amenity Offset Plan CAOP Plan.pdf).	77 was closed in the Final Construction Compliance Report, after meeting the revised parking plan approved by DoPI.
I.77	EA16.4.2 Changes to the social environment	The proposed works at Leumeah Railway Station would have a moderate visual effect on this precinct, and combined with low visual sensitivity levels at this precinct would result in an overall low visual impact on this precinct.	<p>As shown in the designs and detailed plans for the precinct works in Section 4.1.6 of the UDLP (UDLP_revG_final_Page_042.jpg, UDLP_revG_final_Page_043.jpg) and described in SoC 91 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, ARTC consulted with Campbelltown City Council and RailCorp to:</p> <ul style="list-style-type: none"> • Sensitively design the footbridge extension to the existing structure to provide visual continuity; • Provide hard and soft landscaping on the western side of the railway station to create precinct character; • Prepare detailed architectural plans for the precinct works; • Provide cultural plantings to enhance the boundary between the car parking area and the rail corridor. <p>These measures resulted in an overall low visual impact on this precinct.</p>	Fully effective. SoC 91 was closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
I.78	EA16.5.2 Changes to land use and property	The new station entry at Leumeah Railway Station would function in accordance with RailCorp's station design requirements and have capacity for projected passenger growth to 2021.	As described in SoC 76 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC prepared detailed Construction plans for the works required to new station stairs, footbridges and other facilities at Leumeah, Minto, Casula, Warwick Farm, Cabramatta and Sefton Railway Stations, and received RailCorp approval of these plans prior to the commencement of Construction works at these railway stations. The designs included allowance for projected passenger demands.	Fully effective. SoC 76 was closed in the Final Construction Compliance Report.
I.79	EA16.5.2 Changes to land use and property	Most land uses on the west side of Leumeah Railway Station are industrial and are separated from the station by Bow Bowing Creek. It is unlikely that these land uses would be affected by the proposal.	As shown in Section 4.1.6 of the UDLP (UDLP_revG_final_Page_043.jpg) and described in SoC 91 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the land uses on the west side of Leumeah Railway Station are separated from the station by Bow Bowing Creek. These land use, which are mostly industrial, are not affected by the SSFL.	Fully effective. SoC 91 was closed in the Final Construction Compliance Report.
I.80	EA16.5.2 Changes to land use and property	The Leumeah town centre and residential properties are on the east side of the station and would not be affected by the operation of the proposed SSFL.	As shown in Section 4.1.6 of the UDLP (UDLP_revG_final_Page_043.jpg) and described in SoC 91 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the Leumeah town centre and residential properties which are on the east side of the station are not affected by the operation of the SSFL.	Fully effective. SoC 91 was closed in the Final Construction Compliance Report.
I.81	EA16.5.2 Changes to land use and property	Existing car park facilities at Leumeah Railway Station adjacent to the station would be affected by the proposed SSFL and public land acquisition would be required to widen the corridor (up to 10 metres at the widest point).	As shown in Section 4.1.6 of the UDLP and described in SoC 91 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , car park facilities at Leumeah Railway Station adjacent to the station were affected by the SSFL, and public land acquisition was required to widen the corridor	Fully effective. SoC 91 was closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
			(up to 10 metres at the widest point), shown highlighted in yellow and labelled 'new paved parking area' in UDLP_revG_final_Page_043.jpg .	
I.82	EA17.2.2 Community issues and concerns	At Minto Railway Station, a number of industrial and residential properties currently have access to Somerset Street (west side of Minto Railway Station), which would be impacted by the station precinct modifications.	As shown in Sections 3.3 and 4.1.5 of the UDLP (UDLP_revG_final_Page_023.jpg , UDLP_revG_final_Page_024.jpg , UDLP_revG_final_Page_041.jpg) and described in SoC 92 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , a number of industrial and residential properties which have access to Somerset Street (west side of Minto Railway Station) are impacted to a minor extent by the station precinct modifications.	Fully effective. SoC 92 was closed in the Final Construction Compliance Report.
I.83	EA17.3.2 Changes to traffic, transport and access	Road network and traffic within the Minto Railway Station precinct — The traffic capacity of Somerset Street (one lane in each direction) would not be reduced by width adjustments.	As shown in the drawings in SoC 92 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , Campbelltown City Council used the redesign of Minto Railway Station as an opportunity to alter the road network in Somerset Street adjacent to Minto Railway Station to one-way traffic, with improved park and ride, taxi ranks and bus stop, and improved, safer access for pedestrians and motor vehicle drivers.	Fully effective. SoC 92 was closed in the Final Construction Compliance Report.
I.84	EA17.3.2 Changes to traffic, transport and access	Pedestrians and cyclists within the Minto Railway Station precinct — The width of the new station stairs would be adequate for projected 2021 passenger demands. The proposed raised pedestrian crossing would provide a safer facility for station users.	As described in SoC 76 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC prepared detailed Construction plans for the works required to new station stairs, footbridges and other facilities at Leumeah, Minto, Casula, Warwick Farm, Cabramatta and Sefton Railway Stations, and received RailCorp approval of these plans prior to the commencement of Construction works at these railway stations. The designs included	Fully effective. SoC 76 was closed in the Final Construction Compliance Report.



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			allowance for projected passenger demands. The constructed raised pedestrian crossing was a Cambelltown City Council requirement to provide a safer facility for station users.	
I.85	EA17.3.2 Changes to traffic, transport and access	Bus network and interchange within the Minto Railway Station precinct — The bus stop relocations on Somerset Street would be negligible. The new bus stops would also be provided with new bus shelters which would improve passenger amenity and the functioning of the public transport interchange.	As shown in Section 4.1.5 of the UDLP (UDLP_revG_final_Page_040.jpg , UDLP_revG_final_Page_041.jpg) and described in SoC 92 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the bus stop relocations on Somerset Street was negligible. The new bus stop has been provided with new Evo Bus Shelters which improve passenger amenity and the functioning of the public transport interchange.	Fully effective. SoC 92 was closed in the Final Construction Compliance Report.
I.86	EA17.3.2 Changes to traffic, transport and access	Parking within the Minto Railway Station precinct — There will be no net loss of parking at the station.	As described in Section 4.1.7 of the UDLP (UDLP_revG_final_Page_044.jpg , UDLP_revG_final_Page_047.jpg), and in SoC 78 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , there was a net gain of eight commuter parking and one disabled parking spaces at completion of the works.	Fully effective. SoC 78 was closed in the Final Construction Compliance Report.
I.87	EA17.4.2 Changes to the social environment	The removal of the west ramp at Minto Railway Station would affect the symmetry with the corresponding east ramp, but has a relatively moderate heritage value. The proposal to modify the footbridge would involve a substantial extension to the existing structure, but would only result in a low level of heritage impact.	As described in Section 4.4 of the UDLP (UDLP_revG_final_Page_082.jpg) and SoC92 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the Minto Footbridge is only approximately 14 years old, and therefore the level of heritage impact is low. The design and construction of the extension is sensitive to the existing footbridge and there is a clear expression of the interface between the old and new bridges.	Fully effective. SoC 92 was closed in the Final Construction Compliance Report.
I.88	EA17.4.2 Changes	The proposed works on the west side of Minto Railway	As shown in the designs and detailed plans for the precinct	Fully effective. SoC



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
	to the social environment	Station would result in a high visual effect on this precinct, which when combined with low visual sensitivity levels at this precinct would result in an overall moderate visual impact on this precinct.	works in Section 4.1.5 of the UDLP (UDLP_revG_final_Page_040.jpg , UDLP_revG_final_Page_041.jpg) and described in SoC 92 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC consulted with Campbelltown City Council and RailCorp to: <ul style="list-style-type: none"> • Sensitively design the footbridge extension to the existing structure; • Interface between the old and the new portions of the footbridge to provide visual separation of new and existing portions; • Prepare detailed architectural plans for the proposed precinct works; • Provide hard and soft landscaping for the west side of the station to create precinct character; • Provide visual screening of the rail corridor and noise barriers to the dwellings fronting Somerset Street. <p>These measures resulted in an overall moderate visual impact on this precinct.</p>	92 was closed in the Final Construction Compliance Report.
I.89	EA17.5.2 Changes to land use and property	The construction of the new Minto Station entry and facilities would improve access for station users. The new station entry and facilities would function in accordance with RailCorp's station design requirements and have capacity for projected passenger growth to 2021.	As shown in the designs and detailed plans for the precinct works in Section 4.1.5 of the UDLP (UDLP_revG_final_Page_040.jpg , UDLP_revG_final_Page_041.jpg) and described in CoA 37 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , station access impacted by the Project has been provided to 'easy access' standards at Minto. The provision of lifts, kiss and ride area, new bus stops, taxi ranks and bicycle lockers has improved access for station users.	Fully effective. CoA 37 and SoC 76 were closed in the Final Construction Compliance Report.



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			As described in SoC 76 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC prepared detailed Construction plans for the works required to new station stairs, footbridges and other facilities at Leumeah, Minto, Casula, Warwick Farm, Cabramatta and Sefton Railway Stations, and received RailCorp approval of these plans prior to the commencement of Construction works at these railway stations. The designs included allowance for projected passenger demands.	
I.90	EA17.5.2 Changes to land use and property	Somerset Street would be affected by the proposed SSFL and public land acquisition would be required to widen the corridor (up to 5 metres in width).	As shown in Section 3.3 of the UDLP (UDLP_revG_final_Page_023.jpg , UDLP_revG_final_Page_024.jpg), a portion of public land (up to 5 metres in width) along Sommerset Street was acquired. As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the amount acquired was minimised, and there were no land use impacts.	Fully effective. CoA 64 was closed in the Final Construction Compliance Report.
I.91	EA17.5.2 Changes to land use and property	The proposed Minto Station precinct works and management of operational impacts (e.g. noise and visual) would allow the proposed SSFL to be compatible with the precinct and would not result in short or long-term land use change.	As shown in the designs and detailed plans for the precinct works in Section 4.1.5 of the UDLP (UDLP_revG_final_Page_040.jpg , UDLP_revG_final_Page_041.jpg) and described in SoC 92 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the constructed Minto Railway Station precinct works and management of operational impacts (e.g. noise and visual) result in the SSFL being compatible with the precinct, and do not result in short or long-term land use change.	Fully effective. SoC 92 was closed in the Final Construction Compliance Report.
I.92	EA18.3.2 Changes to traffic, transport	Road network and traffic within the Casula Railway Station precinct — RailCorp has agreed that in the event of the	As described in CoA 33 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC has	Fully effective. CoA 33 was closed in the



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	and access	closure of the Casula level crossing, the crossing will revert to a locked gates emergency crossing for use by emergency services during times of bushfire and floods.	provided a new access road to the Casula Arts Centre, and Casula Level Crossing was closed to traffic in October 2012. The crossing is now a locked gates emergency crossing for use by emergency services during times of bushfire and floods.	Final Construction Compliance Report.
I.93	EA18.3.2 Changes to traffic, transport and access	Pedestrians and cyclists within the Casula Railway Station precinct — Patronage from the east would increase with development of the Casula Powerhouse Regional Arts Centre. The width of the new station stairs would be adequate for projected 2021 passenger demands. Access to the arts centre and Georges River parkland would be provided by the extended pedestrian bridge.	As described in SoC 76 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC prepared detailed Construction plans for the works required to new station stairs, footbridges and other facilities at Leumeah, Minto, Casula, Warwick Farm, Cabramatta and Sefton Railway Stations, and received RailCorp approval of these plans prior to the commencement of Construction works at these railway stations. The designs included allowance for projected passenger demands.	Fully effective. SoC 76 was closed in the Final Construction Compliance Report.
I.94	EA18.4.2 Changes to the social environment	Modifications to the Casula Railway Station would affect the integrity of the footbridge as it would be altered at the eastern end. However, the heritage impact would be low.	As described in Section 4.4 of the UDLP (UDLP_revG final Page 082.jpg) and SoC 93 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the Casula Footbridge is only approximately 10 years old, and the addition to the footbridge is a straightforward extension, therefore the level of heritage impact is low. The design of the extension is sensitive to the existing structure and has maintained the design and character of the existing bridge.	Fully effective. SoC 93 was closed in the Final Construction Compliance Report.
I.95	EA18.4.2 Changes to the social environment	The visual sensitivity surrounding the Casula Railway Station precinct is mainly moderate to high due to the open space areas, although higher areas of visual sensitivity are located on the unaffected west side of the rail corridor (this relates to the residential areas overlooking the Casula Railway	As shown in the designs and detailed plans for the precinct works in Section 4.1.4 of the UDLP (UDLP_revG final Page 038.jpg and UDLP_revG final Page 039.jpg) and described in SoC 93 in SSFL Final Construction Compliance Report August 2013 -	Fully effective. SoC 93 was closed in the Final Construction Compliance Report.



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		Station). The proposed works to the station precinct would have a moderate effect on the precinct, which when combined with a moderate to high sensitivity would result in a moderate to high visual impact.	<p>Final Ver.pdf, ARTC consulted with Liverpool City Council and RailCorp to:</p> <ul style="list-style-type: none"> • Sensitively design the footbridge extension to the existing structure; • Maintain the design and character of the existing bridge; • Prepare detailed architectural plans for the proposed precinct works; • Provide the recommended noise wall for the Casula Regional Arts Centre in consultation with Liverpool City Council; • Provide hard and soft landscaping along the east side of the railway station to create precinct character. <p>These measures resulted in an overall moderate to high visual impact on this precinct.</p>	
I.96	EA18.5.2 Changes to land use and property	<p>The construction of a permanent noise barrier 4 metres in height would be required to minimise noise impacts to the Casula Arts Centre associated with the operation of the proposed SSFL.</p> <p>Public land (riverfront parkland) adjacent to the east boundary of the rail corridor through the precinct would be acquired (less than 5 metres in width) to cater for the additional widened embankment formation.</p> <p>The operation of the SSFL would not influence land use change at Casula and is compatible with the arts centre, which would be acoustically protected.</p>	<p>As described in SoC 93 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, ARTC consulted with Liverpool City Council and RailCorp to provide the recommended noise wall for the Casula Regional Arts Centre. In addition, and as described in CoAs 51 and 52 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, ARTC consulted with Liverpool City Council to design and construct architectural treatments to further mitigate operational noise for the Casula Regional Arts Centre.</p> <p>As shown in Section 3.2 of the UDLP (UDLP_revG_final_Page_019.jpg), public land (riverfront parkland) adjacent to the east boundary of the rail corridor through the precinct (less than 5 metres in width) was</p>	Fully effective. CoAs 51 and 52, and SoC 93 were closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
			<p>acquired from Liverpool City Council to cater for the additional widened embankment formation. As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, the amount acquired was minimised, and there were no land use impacts.</p> <p>The operation of the SSFL does not influence land use change at Casula and is compatible with the arts centre, which is acoustically protected.</p>	
I.97	EA19.3.2 Changes to traffic, transport and access	Pedestrians and cyclists within the Warwick Farm Railway Station precinct —The width of the new station stairs would be adequate for projected 2021 passenger demands.	As described in SoC 76 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC prepared detailed Construction plans for the works required to new station stairs, footbridges and other facilities at Leumeah, Minto, Casula, Warwick Farm, Cabramatta and Sefton Railway Stations, and received RailCorp approval of these plans prior to the commencement of Construction works at these railway stations. The designs included allowance for projected passenger demands.	Fully effective. SoC 76 was closed in the Final Construction Compliance Report.
I.98	EA19.3.2 Changes to traffic, transport and access	Parking within the Warwick Farm Railway Station precinct — There would be no reduction in commuter parking supply at Warwick Farm Railway Station.	As described in Section 4.1.7 of the UDLP (UDLP_revG_final_Page_044.jpg , UDLP_revG_final_Page_046.jpg), and in SoC 80 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , there was a net gain of 41 commuter parking and 2 disabled parking spaces at completion of the works.	Fully effective. SoC 80 was closed in the Final Construction Compliance Report.
I.99	EA19.4.2 Changes to the social environment	The demolition of the existing passenger shelter on the Down platform would not affect the cultural significance of Warwick Farm Railway Station and the proposed modifications to the Railway Station would result in a low	As described in Sections 4.1.3 and 4.4 of the UDLP (UDLP_revG_final_Page_036.jpg , UDLP_revG_final_Page_037.jpg , UDLP_revG_final_Page_082.jpg) and SoC 94 in SSFL Final	Fully effective. SoC 94 was closed in the Final Construction Compliance Report.



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		impact to built heritage.	<p>Construction Compliance Report August 2013 - Final Ver.pdf, ARTC consulted with Liverpool City Council and Railcorp to:</p> <ul style="list-style-type: none"> • Design the footbridge extension to be structurally independent of the existing station buildings to separate new elements from the existing; • Integrate the new structures with the form of the existing buildings in order to maintain the character of the precinct; • Prepare detailed architectural plans for the proposed precinct works. <p>The modifications to Warwick Farm Railway Station resulted in an overall low impact to built heritage.</p>	
I.100	EA19.4.2 Changes to the social environment	<p>The Warwick Farm Railway Station precinct would be modified with an improved station entry, footbridge, stairs and lifts, and extended car parking. These new elements would improve the appearance of the precinct, but also result in a moderate visual effect.</p> <p>The combination of a low to moderate visual sensitivity and a moderate visual effect would result in an overall low to moderate visual impact in the precinct.</p>	<p>As shown in the designs and detailed plans for the precinct works in Section 4.1.3 of the UDLP (UDLP_revG_final_Page_036.jpg and UDLP_revG_final_Page_037.jpg) and described in SoC 94 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, ARTC consulted with Liverpool City Council and RailCorp to:</p> <ul style="list-style-type: none"> • Design the footbridge extension to be structurally independent of the existing station buildings to separate new elements from the existing; • Integrate the new structures with the form of the existing buildings in order to maintain the character of the precinct; • Prepare detailed architectural plans for the proposed precinct works; • Provide hard and soft landscaping along the east side of 	Fully effective. SoC 94 was closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
			<p>the station to create precinct character;</p> <ul style="list-style-type: none"> • Adopt Crime Prevention Through Environmental Design principles. <p>These measures resulted in an overall low visual impact on this precinct.</p>	
I.101	EA19.5.2 Changes to land use and property	The new entrance to Warwick Farm Railway Station would function in accordance with RailCorp's station design requirements and have capacity for projected passenger growth to 2021. The improved access across the corridor and the operation of the SSFL is unlikely to lead to any land use changes on either side of the corridor.	<p>As described in SoC 76 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, ARTC prepared detailed Construction plans for the works required to new station stairs, footbridges and other facilities at Leumeah, Minto, Casula, Warwick Farm, Cabramatta and Sefton Railway Stations, and received RailCorp approval of these plans prior to the commencement of Construction works at these railway stations. The designs included allowance for projected passenger demands.</p> <p>The improved access across the corridor and the operation of the SSFL have not led to any land use changes on either side of the corridor.</p>	Fully effective. SoC 76 was closed in the Final Construction Compliance Report.
I.102	EA19.5.2 Changes to land use and property	Permanent noise barriers 4 metres in height would be constructed on the east side of Warwick Farm Railway Station to minimise impacts generated as a result of the SSFL.	<p>As described in the ONVMP Chapter 8 (SSFL OEMP Appendix B ONVMP Final Ver Oct 2011.pdf, SSFL OEMP Appendix B ONVMP Appendix F.pdf), and in CoAs 51 and 52 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, for a small group of residences in Warwick Farm opposite the railway station, noise mitigation was better effected as treatment to the individual houses rather than as a noise barrier at the rail corridor. Similarly, a Colourbond fence was constructed to provide operational noise mitigation for the Warwick Farm stables.</p>	Fully effective. CoAs 51 and 52 were closed in the Final Construction Compliance Report.



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			Thus, the permanent noise barriers recommended in the EA were replaced with appropriate architectural treatment of buildings and the construction of a Colourbond fence to provide the same benefits.	
I.103	EA19.5.2 Changes to land use and property	A permanent access point to the existing RailCorp corridor would be provided within the car park to ensure that horse riders accessing Warwick Farm Racecourse can continue to access stables adjacent to the corridor further south of the station.	As described in CoA 51 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , to mitigate operational noise at the Warwick Farm stables a Colourbond noise fence was constructed. In doing so, ARTC did not restrict access into the rail corridor of those properties currently requiring access.	Fully effective. CoA 51 was closed in the Final Construction Compliance Report.
I.104	EA20.3.2 Changes to traffic, transport and access	Road network and traffic within the Cabramatta Railway Station precinct— Broomfield Street would be narrowed by one parking lane past the station entrance (of less than 100 metres) to accommodate a new forecourt. The number of traffic lanes in each direction in Broomfield Street would not be reduced, the proposed 65 metre shared zone, with a carriageway width of 6.0 metres, is likely to have an impact on traffic flows through this section of Broomfield Street.	As described in CoA 30 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC consulted with the RTA and Fairfield City Council to undertake a review of proposed traffic cycle and pedestrian arrangements in the East Cabranatta area, including: <ul style="list-style-type: none"> • The identification of design objectives, relevant guidelines and standards, and how these are achieved; • A Pedestrian Access and Mobility Plan; • An assessment of alternative treatments should the proposed 'Shared Zone' design not meet relevant guidelines and standards. <p>The findings and recommendations of the review were incorporated into section 4.1.2 of the UDLP (UDLP_revG_final_Page_032.jpg, UDLP_revG_final_Page_033.jpg, UDLP_revG_final_Page_034.jpg, UDLP_revG_final_Page_035.jpg) and ARTC implemented the</p>	Fully effective. CoA 30 was closed in the Final Construction Compliance Report.



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			identified management and mitigation measures as part of the SSFL, with the result that Broomfield Street was narrowed by one parking lane past the station entrance (of less than 100 metres) to accommodate a new forecourt. The number of traffic lanes in each direction in Broomfield Street was maintained, and traffic speed was reduced to 40 k/h in the vicinity of the Cabramatta Railway Station precinct.	
I.105	EA20.3.2 Changes to traffic, transport and access	<p>Pedestrians and cyclists within the Cabramatta Railway Station precinct — The existing pedestrian ramps providing access to the platforms would be retained. The width of the new station stairs would be adequate for projected 2021 passenger demands.</p> <p>The proposed shared zone would provide a substantially improved environment for pedestrians in Broomfield Street by reducing traffic speed and road crossing distance, as well as reducing identified pedestrian/vehicle conflicts.</p> <p>The Parramatta – Liverpool Rail Trail Cycleway would be retained through Cabramatta by a combination of shared footpath, shared vehicle/cycle lanes and use of the shared zone in Broomfield Street past the station.</p>	<p>As described in SoC 76 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, ARTC prepared detailed Construction plans for the works required to new station stairs, footbridges and other facilities at Leumeah, Minto, Casula, Warwick Farm, Cabramatta and Sefton Railway Stations, and received RailCorp approval of these plans prior to the commencement of Construction works at these railway stations. The designs included allowance for projected passenger demands.</p> <p>As described in CoA 30 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, ARTC consulted with the RTA and Fairfield City Council to undertake a review of proposed traffic cycle and pedestrian arrangements in the East Cabramatta area, including:</p> <ul style="list-style-type: none"> • The identification of design objectives, relevant guidelines and standards, and how these are achieved; • A Pedestrian Access and Mobility Plan; • An assessment of alternative treatments should the proposed 'Shared Zone' design not meet relevant guidelines and standards. <p>The findings and recommendations of the review were incorporated into section 4.1.2 of the UDLP</p>	Fully effective. CoA 30 and SoC 76 were closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
			(UDLP_revG_final_Page_032.jpg , UDLP_revG_final_Page_033.jpg , UDLP_revG_final_Page_034.jpg , UDLP_revG_final_Page_035.jpg) and ARTC implemented the identified management and mitigation measures as part of the SSFL, resulting the shared zone would providing a substantially improved environment for pedestrians in Broomfield Street by reducing traffic speed to 40 k/h and road crossing distance, as well as reducing identified pedestrian/vehicle conflicts. The Parramatta – Liverpool Rail Trail Cycleway is retained through Cabramatta by a combination of shared footpath, shared vehicle/cycle lanes and use of the shared zone in Broomfield Street past Cabramatta Railway Station.	
I.106	EA20.3.2 Changes to traffic, transport and access	Bus network and interchange within the Cabramatta Railway Station precinct — The existing bus interchange on Broomfield Street would be moved slightly closer to the station entrance, but there would be no change to bus routes.	As shown in the designs and detailed plans for the precinct works in Section 4.1.2 of the UDLP (UDLP_revG_final_Page_032.jpg , UDLP_revG_final_Page_033.jpg , UDLP_revG_final_Page_034.jpg , UDLP_revG_final_Page_035.jpg) and as described in SoC 95 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC relocated the existing bus interchange on Broomfield Street slightly closer to the station entrance, but there was no change to bus routes.	Fully effective. SoC 95 was closed in the Final Construction Compliance Report.
I.107	EA20.3.2 Changes to traffic, transport and access	Parking within the Cabramatta Railway Station precinct — There would be no loss in the supply of commuter parking at Cabramatta Railway Station. Some 185 park-and-ride commuters would have further to walk to the station, with the furthest parking spaces some 520 metres to the north	As described in Section 4.1.7 of the UDLP (UDLP_revG_final_Page_044.jpg , UDLP_revG_final_Page_045.jpg), and in CoA 29 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , there was no net change in the number of parking	Fully effective. CoA 29 was closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
		from the station entrance.	spaces at completion of the works. The compensatory car parking was provided, to the greatest extent practicable, within 400 metres of Cabramatta Railway Station. In addressing this issue, ARTC prepared a Parking Plan prior to the commencement of construction in consultation with relevant Government Departments, Fairfield City Council, relevant stakeholders and the CLG, to the satisfaction of the Director-General.	
I.108	EA20.4.2 Changes to the social environment	The Cabramatta Railway station precinct would be altered by the proposal; however, there would be no heritage implications due to the low impact.	<p>As described in Sections 4.4 and 4.1.2 of the UDLP (UDLP_revG_final_Page_082.jpg, UDLP_revG_final_Page_032.jpg, UDLP_revG_final_Page_033.jpg, UDLP_revG_final_Page_034.jpg, UDLP_revG_final_Page_035.jpg) and SoC 95 in SSFL_Final_Construction_Compliance_Report_August_2013_-_Final_Ver.pdf, the design of the footbridge extension is sensitive to the heritage character of the existing bridge.</p> <p>One of the key objectives of the station precinct design was to reflect the village character of the precinct, with detailed architectural plans prepared for the precinct works. While the Cabramatta Railway Station precinct was altered by the SSFL, there were no heritage implications due to the low impact.</p>	Fully effective. SoC 95 was closed in the Final Construction Compliance Report.
I.109	EA20.4.2 Changes to the social environment	The visual impact of the proposal within the Cabramatta Railway Station precinct would be high due to the high visual effect of the proposed works at Cabramatta Railway Station, and the moderate/high visual sensitivity of the areas adjacent to the east side of the RailCorp corridor. However, the	As shown in the designs and detailed plans for the precinct works in Section 4.1.2 of the UDLP (UDLP_revG_final_Page_032.jpg , UDLP_revG_final_Page_033.jpg , UDLP_revG_final_Page_034.jpg and	Fully effective. SoC 95 was closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
		visual impact can be characterised as generally positive.	<p>UDLP_revG_final_Page_035.jpg) and described in SoC 95 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, ARTC consulted with Fairfield City Council and RailCorp to:</p> <ul style="list-style-type: none"> • Design the additional structure for the footbridge to provide for a visual separation of new and existing portions; • Design the footbridge with careful detailing of construction joints; • Prepare detailed architectural plans for the proposed precinct works; • Provide hard and soft landscaping along the east side of the station to create precinct character; • Design for avenue planting along Broomfield Street to act as a partial screen. <p>These measures resulted in an overall high and positive visual impact on this precinct, better integrating the railway station into the town precinct.</p>	
I.110	EA20.5.2 Changes to land use and property	The new Cabramatta Railway Station access would function in accordance with RailCorp's station design requirements and have capacity for projected passenger growth to 2021.	As described in SoC 76 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC prepared detailed Construction plans for the works required to new station stairs, footbridges and other facilities at Leumeah, Minto, Casula, Warwick Farm, Cabramatta and Sefton Railway Stations, and received RailCorp approval of these plans prior to the commencement of Construction works at these railway stations. The designs included allowance for projected passenger demands.	Fully effective. SoC 76 was closed in the Final Construction Compliance Report.
I.111	EA20.5.2 Changes	The new shared zone in Broomfield street would improve	As described in CoA 30 in SSFL Final Construction	Fully effective. CoA



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
	to land use and property	pedestrian access to the station.	<p>Compliance Report August 2013 - Final Ver.pdf, ARTC consulted with the RTA and Fairfield City Council to undertake a review of proposed traffic cycle and pedestrian arrangements in the East Cabramatta area, including:</p> <ul style="list-style-type: none"> • The identification of design objectives, relevant guidelines and standards, and how these are achieved; • A Pedestrian Access and Mobility Plan; • An assessment of alternative treatments should the proposed 'Shared Zone' design not meet relevant guidelines and standards. <p>The findings and recommendations of the review were incorporated into the UDLP (UDLP_revG_final_Page_032.jpg, UDLP_revG_final_Page_033.jpg, UDLP_revG_final_Page_034.jpg, UDLP_revG_final_Page_035.jpg) and ARTC implemented the identified management and mitigation measures as part of the SSFL, resulting in improved pedestrian access to Cabramatta Railway Station, including traffic lights at the pedestrian crossing, from the new shared zone in Broomfield Street.</p>	30 was closed in the Final Construction Compliance Report.
I.112	EA20.5.2 Changes to land use and property	Permanent noise barriers would be constructed to the north and south of Cabramatta Railway Station to minimise noise impacts resulting from the operation of the proposed SSFL on surrounding residential dwellings	As shown in the designs and detailed plans for the precinct works in Sections 4.2.5 and 4.2.6 of the UDLP (UDLP_revG_final_Page_064.jpg , UDLP_revG_final_Page_065.jpg) and described in SoC 95 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , noise barriers were constructed to the north and south of Cabramatta Railway Station to minimise noise impacts resulting from the operation of the SSFL on surrounding residential dwellings	Fully effective. SoC 95 was closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
I.113	EA20.5.2 Changes to land use and property	Land along the west side of Broomfield Street would be acquired (less than 10 metres in width at the widest point) to increase the width of the existing corridor, catering for the construction of the proposed SSFL. This would result in the loss of approximately 185 car spaces and a narrowing of Bloomfield Street. Private property would not be directly affected within this precinct.	As shown in Section 3.1 of the UDLP (UDLP_revG_final_Page_016.jpg), public land along the west side of Broomfield Street (less than 10 metres in width at the widest point) was acquired to increase the width of the existing corridor, catering for the construction of the SSFL. As described in CoA 64 in SSFL_Final_Construction_Compliance_Report_August_2013_-_Final_Ver.pdf , the amount acquired was minimised, resulting in the displacement of approximately 185 car spaces (as described in Item I.107 above) and a narrowing of Bloomfield Street. Private property was not be directly affected within this precinct.	Fully effective. CoA 64 was closed in the Final Construction Compliance Report.
I.114	EA20.5.2 Changes to land use and property	The Cabramatta Railway Station precinct works and management of operational impacts (e.g. noise and visual) would allow the proposed SSFL to be compatible with the commercial areas and residential land uses and would not result in short and long-term land use change.	As shown in the designs and detailed plans for the precinct works in Section 4.1.2 of the UDLP (UDLP_revG_final_Page_032.jpg , UDLP_revG_final_Page_033.jpg , UDLP_revG_final_Page_034.jpg , UDLP_revG_final_Page_035.jpg) and described in SoC 95 in SSFL_Final_Construction_Compliance_Report_August_2013_-_Final_Ver.pdf , ARTC consulted with Fairfield City Council and RailCorp to ensure that the constructed works and management of operational impacts (e.g. noise and visual) at Cabramatta Railway Station allow the SSFL to be compatible with the commercial areas and residential land uses and do not result in short and long-term land use change.	Fully effective. SoC 95 was closed in the Final Construction Compliance Report.
I.115	EA21.3.2 Changes to traffic, transport and access	Bus network and interchange within the Sefton Railway Station precinct — The relocation of the station bus stop some 40 metres to the east would not have a discernable impact on passengers, and bus routes would not be affected.	As described in Section 4.1.1 of the UDLP (UDLP_revG_final_Page_030.jpg , UDLP_revG_final_Page_031.jpg) and SoC 96 in SSFL_Final_Construction_Compliance_Report_August_2013_-_Final_Ver.pdf , ARTC consulted with Fairfield City Council and RailCorp to ensure that the constructed works and management of operational impacts (e.g. noise and visual) at Sefton Railway Station allow the SSFL to be compatible with the commercial areas and residential land uses and do not result in short and long-term land use change.	Fully effective. SoC 96 was closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
			Ver.pdf , the relocation of the station bus stop some 40 metres to the east did not have a discernable impact on passengers, and bus routes were not affected.	
I.116	EA21.3.2 Changes to traffic, transport and access	Pedestrians and cyclists within the Sefton Railway Station precinct — The streetscape around the station would be improved by provision of a new station forecourt area on Wellington Road.	As described in Section 4.1.1 of the UDLP (UDLP_revG_final_Page_030.jpg , UDLP_revG_final_Page_031.jpg) and SoC 96 in SSFL_Final_Construction_Compliance_Report_August_2013_-_Final_Ver.pdf , the streetscape around Sefton Railway Station was improved by provision of a new station forecourt area on Wellington Road.	Fully effective. SoC 96 was closed in the Final Construction Compliance Report.
I.117	EA21.3.2 Changes to traffic, transport and access	Parking within the Sefton Railway Station precinct — Relocation of some 26 commuter parking spaces to the west on Wellington Road would not have a measurable impact on commuters.	As described in Sections 4.1.7 and 4.1.1 of the UDLP (UDLP_revG_final_Page_044.jpg , UDLP_revG_final_Page_031.jpg , UDLP_revG_final_Page_045.jpg), and in SoCs 82 and 96 in SSFL_Final_Construction_Compliance_Report_August_2013_-_Final_Ver.pdf , there was a net gain of 2 commuter parking spaces at completion of the works, and the relocation of around 26 commuter parking spaces to the east and west on Wellington Road did not have a measurable impact on commuters.	Fully effective. SoCs 82 and 96 were closed in the Final Construction Compliance Report.
I.118	EA21.4.2 Changes to the social environment	The new Sefton Railway station entry improvements to the south side of the station would not have any adverse impacts on the building fabric of the station and precinct.	As described in Section 4.1.1 of the UDLP (UDLP_revG_final_Page_030.jpg , UDLP_revG_final_Page_031.jpg) and SoC 96 in SSFL_Final_Construction_Compliance_Report_August_2013_-_Final_Ver.pdf , the new Sefton Railway Station entry improvements to the south side (Wellington Road) of the station do not have any adverse impacts on the building fabric of the station and precinct.	Fully effective. SoC 96 was closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
I.119	EA21.4.2 Changes to the social environment	The proposed modifications to the footbridge and Sefton Railway Station would result in a low impact on the built heritage significance of this item.	<p>As described in Sections 4.1.1 and 4.4 of the UDLP (UDLP_revG_final_Page_030.jpg, UDLP_revG_final_Page_031.jpg, UDLP_revG_final_Page_082.jpg, UDLP_revG_final_Page_083.jpg) and SoC 96 in SSFL_Final_Construction_Compliance_Report_August_2013_-_Final_Ver.pdf, the design of the footbridge extension is sensitive to the heritage character of the existing bridge.</p> <p>The existing station building was unaffected by the SSFL. One of the key objectives of the station precinct design was to reflect the village character of the precinct, with detailed architectural plans prepared for the precinct works.</p>	Fully effective. SoC 96 was closed in the Final Construction Compliance Report.
I.120	EA21.4.2 Changes to the social environment	The visual effect of the proposed SSFL at Sefton Railway Station would be high as the proposal would extend partly outside of the existing RailCorp corridor. The combination of this high visual effect (due to proposed new footbridge at Sefton Railway Station, the loss of a mature fig tree and widened rail corridor for the SSFL) and moderate to high visual sensitivity levels (due to the presence of adjacent residential areas), would result in a high visual and generally positive impact on this locality.	<p>As shown in the designs and detailed plans for the precinct works in Section 4.1.1 of the UDLP (UDLP_revG_final_Page_030.jpg and UDLP_revG_final_Page_031.jpg) and described in SoC 96 in SSFL_Final_Construction_Compliance_Report_August_2013_-_Final_Ver.pdf, ARTC consulted with Bankstown City Council and RailCorp to:</p> <ul style="list-style-type: none"> Carefully detail the footbridge to provide a balance between the existing structure and the new; Design the additional span to express the interface between the old and new portions; Prepare detailed architectural plans for the proposed precinct works; Provide three easy access lifts to Sefton Railway Station and across the rail corridor; Provide hard and soft landscaping to the north side of 	Fully effective. SoC 96 was closed in the Final Construction Compliance Report.



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
			<p>Wellington Road in the precinct to create precinct character;</p> <ul style="list-style-type: none"> • Provide the recommended acoustic noise wall; • Engage an arborist to assess the Feasibility of relocating the fig tree proposed for removal. <p>These measures resulted in an overall high visual and generally positive impact on this precinct.</p>	
I.121	EA21.5.2 Changes to land use and property	Land along Wellington Road would need to be acquired (less than 3 metres at its widest point) to increase the width of the existing corridor for the proposed SSFL. Private property would not be directly affected within this precinct.	As shown in Section 3.1 of the UDLP (UDLP_revG_final_Page_013.jpg), a strip of the Wellington Road reserve was acquired from Bankstown City Council (less than 3 metres wide at the widest point) to increase the width of the existing corridor for the SSFL. As described in CoA 64 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , the amount acquired was minimised, and there were no land use impacts, and private property was not directly affected within this precinct.	Fully effective. CoA 64 was closed in the Final Construction Compliance Report.
I.122	EA21.5.2 Changes to land use and property	Streetscape works to the north side of Wellington Road would improve the visual amenity of the centre.	As shown in the designs and detailed plans for the precinct works in Section 4.1.1 of the UDLP (UDLP_revG_final_Page_030.jpg and UDLP_revG_final_Page_031.jpg) and described in SoC 96 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC consulted with Bankstown City Council and RailCorp to provide hard and soft landscaping to the north side of Wellington Road in the precinct to create precinct character. These measures improved the visual amenity of the centre.	Fully effective. SoC 96 was closed in the Final Construction Compliance Report.
I.123	EA21.5.2 Changes	Permanent noise barriers of up to 4 metres in height would	As shown in the designs and detailed plans for the precinct	Fully effective. SoC



Item	Reference	Predicted Impact	Actual Impact	Effectiveness of Management/ Mitigation
	to land use and property	be constructed to the east and west of Sefton Railway Station to minimise noise impacts on residential properties during operation of the proposed SSFL.	works in Section 4.1.1 of the UDLP (UDLP_revG_final_Page_030.jpg , UDLP_revG_final_Page_031.jpg) and described in SoC 96 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC consulted with RailCorp to provide the recommended acoustic noise wall.	96 was closed in the Final Construction Compliance Report.
I.124	EA21.5.2 Changes to land use and property	The proposed works in the Sefton Railway Station precinct and the proposed SSFL would be compatible with existing land use and not result in short or long-term land use change.	As shown in the designs and detailed plans for the precinct works in Section 4.1.1 of the UDLP (UDLP_revG_final_Page_030.jpg , UDLP_revG_final_Page_031.jpg) and described in SoC 96 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC consulted with Bankstown City Council and RailCorp to ensure that the constructed works in the Sefton Railway Station precinct and the proposed SSFL are compatible with existing land use and did not result in short or long-term land use change.	Fully effective. SoC 96 was closed in the Final Construction Compliance Report.
I.125	EA22.1 Cumulative and strategic impact assessment	The contribution that the SSFL would make to the cumulative impact of the urban and industrial development and associated road and rail infrastructure development in Southern Sydney is relatively small. In some cases the SSFL would reduce cumulative impacts, by providing benefits, in particular to access, economic development and employment, and greenhouse gas emissions.	As described in the above Items in this Table, the SSFL makes a relatively small cumulative impact on the urban and industrial development and associated road and rail infrastructure development in Southern Sydney. In some cases the SSFL reduces cumulative impacts, by providing benefits, in particular to six easy-access railway stations, economic development and employment, and greenhouse gas emissions.	Fully effective. CoAs 25, 30, 33, 35, 37, 51, 52, 60, 62, 63, 64 and SoCs 35, 72, 76, 77, 78, 79, 80, 81, 82, 91, 92, 93, 94, 95, 96 were closed in the Final Construction Compliance Report.

Table 3-2 Minister's Conditions of Approval (Operational)

Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
2.1	I	<p>The Project must be carried out to be consistent with:</p> <p>(a) the procedures, safeguards and mitigation measures identified in the EA for the Southern Sydney Freight Line prepared by Parsons Brinckerhoff, dated April 2006; as modified by the Submissions Report for the Southern Sydney Freight Line prepared by Parsons Brinckerhoff, dated August 2006;</p> <p>(b) the Statement of Commitments (SoC) made in the Submissions Report, as amended in Attachment I to these Conditions of Approval and through the modification request dated 14 December 2011 (MP05_0089 MOD 6);</p> <p>(c) the modification request dated 8 May 2007 (MP05_0089 MOD 1);</p> <p>(d) the modification request dated 23 June 2009 (MP05_0089 MOD 2);</p> <p>(e) the modification request dated 14 July 2009 (MP05_0089 MOD 4);</p> <p>(f) the modification request dated 30 June 2009 (MP05_0089 MOD 3);</p> <p>(g) the modification request dated 14 January 2011 and associated application dated 20 January 2011;</p> <p>(h) the modification request dated 14 December 2011 (MP05_0089 MOD 6); and</p> <p>(i) the conditions of this approval.</p> <p>These CoA prevail in the event of any inconsistency with the requirements for the Construction and Operation of the Project arising out of the documents described in (a) to (h) above.</p> <p>Modification</p>	Compliant	<p>The SSFL Project was and is being carried out to be consistent with:</p> <p>a) The procedures, safeguards and mitigation measures identified in the EA, as modified by the Submissions Report, and as described in Table 3-1 of this report;</p> <p>b) The CoAs and SoCs, including the six approved modifications, as described in Table 3-2 and Table 3-3 of this report;</p> <p>c) Specific CoAs, as described in Table 3-4 and Table 3-5 of this report.</p> <p>This CoA was closed in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf for the Pre-Construction and Construction phases of the Project.</p>



Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
		<i>The requirement was modified by DoPI on five occasions, on 31 July 2009 in Modification 2, on 18 August 2009 in Modification 4, on 14 September 2009 in Modification 3, on 23 March 2011 in Modification 5, and on 6 March 2012 in Modification 6. The modified wording is reflected in the Condition Requirement text above.</i>		
2.2	2	It is the responsibility of the Proponent to implement measures and actions arising from documents described in 1(a) and 1(b) and to ensure compliance with all of these CoA and to implement any measures arising from these CoA.	Not Compliant	<p>As described for CoA 2 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, at the end of construction the Project was compliant with all 76 CoAs and all 104 SoCs.</p> <p>The project is compliant or on target with 19 of 21 of the Operational CoAs and all 6 Operational SoCs. The Project is not compliant with CoA 12, and as a result it is not compliant with this CoA.</p>
2.3	3	These CoA do not relieve the Proponent of its obligations under any other Act.	On Target	Section 2 of the OEMP (SSFL OEMP 2012 Main Report with Apps A and E Final Ver2.pdf) identifies all relevant legislation, and the necessary approvals, licences and permits under the legislation. This CoA is now being met through the implementation of the OEMP.
2.4	4	The Proponent must bring to the Director-General's attention any matter that may require further assessment by the Director-General.	Compliant	<p>As described for CoA 4 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, at the end of construction the Project was compliant with this CoA.</p> <p>This CoA is now being met through the implementation of the OEMP.</p> <p>On 13 March 2014, ARTC wrote to the Director-General requesting an extension of time for the submission of reports to satisfy CoAs 12 and 54. (refer to Item 2.5 below for details).</p>
2.5	5	<p>The Proponent must comply with any requirements of the Director-General arising from the Director-General's assessment of:</p> <p>(a) any reports, plans or correspondence that are submitted to satisfy</p>	On Target	As described for CoA 5 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , at the end of construction the Project was compliant with this CoA.



Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
		these CoA; and (b) the implementation of any actions or measures contained in such reports, plans or correspondence.		<p>This CoA is now being met through the implementation of the OEMP.</p> <p>On 13 March 2014, ARTC wrote to the Director-General requesting an extension of time for the submission of reports to satisfy CoAs 12 and 54. On 24 March 2014, the Director-General agreed to the following timeframes (SSFL Reporting Delivery Timeframes DoPI Mar 14.pdf):</p> <ul style="list-style-type: none"> CoA 12: Environmental Impact Audit Report – Operation (this report) to be submitted no later than 15 May 2014; CoA 54: Operational Noise and Vibration Monitoring Report to be submitted on later than 15 July 2014. <p>ARTC is complying with the requirements of the Director-General and is on target to deliver both reports by the amended timeframes.</p>
2.6	6	The Proponent may elect to construct the Project in Stages provided that these are consistent with the EA, Submissions Report and CoA. Where Stages are proposed, the Proponent may elect to address the requirements of CoA and SoC (including the preparation of plans, reports or other documents) on a Stage specific basis with the agreement of the Director-General.	Compliant	As described for CoA 6 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , at the end of construction the Project was compliant with this CoA. The Director-General approved the SSFL being made Operational in two stages in 2011, and approved the Staging Report on 17 October 2011. This condition was closed in the SSFL Final Construction Compliance Report, and has not been reopened.
2.7	11	<p>An Environmental Impact Audit Report - Construction must be prepared and submitted 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 must also be submitted to Relevant Government Departments upon the request of the Director-General. The Environmental Impact Audit Report – Construction must:</p> <p>(a) identify the major environmental controls used during Construction and assess their effectiveness (the assessment of effectiveness should be based on a comparison of actual impacts against performance criteria</p>	Substantially Compliant	<p>The Environmental Impact Audit Report – Construction (SSFL Environmental Impact Audit Report - Construction - Final.pdf) was prepared by ARTC's SSFL Project to address the requirements of this CoA. The report was submitted on 29 August 2013 (20130829 Ltr to DoPI re Enviro Impact Audit Report.pdf), within the maximum of three months after the end of Construction date of 2 August 2013.</p> <p>ARTC is substantially compliant with this CoA, for while the Report was completed and submitted to DoPI, it was not made publicly available on ARTC's website</p>



Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
		<p>identified in the CEMP);</p> <p>(b) identify any innovations in Construction methodology used to improve environmental management; and</p> <p>(c) discuss the lessons learnt during Construction, including recommendations for future Projects.</p> <p>The Environmental Impact Audit Report – Construction must be made Publicly Available.</p>		
2.8	12	<p>An Environmental Impact Audit Report - Operation must be submitted to the Director-General a maximum 12 months after the Project begins Operation and at any additional periods that the Director-General may require. The Environmental Impact Audit Report - Operation must also be submitted to Relevant Government Departments at the request of the Director-General.</p> <p>The Environmental Impact Audit Report - Operation must:</p> <p>(a) compare the Operation impact predictions made in the EA, Submissions Report and any supplementary studies with the actual impacts;</p> <p>(b) assess the effectiveness of implemented mitigation measures and safeguards;</p> <p>(c) assess compliance with the systems for operation maintenance and monitoring (as required by this approval);</p> <p>(d) discuss the results of consultation with the local community particularly any feedback or complaints; and</p> <p>(e) be certified by an independent person at the Proponent's expense.</p>	Not Compliant	<p>This Report was required to be submitted to the Director-General by 23 December 2013. On 13 March 2014, ARTC wrote to the Director-General requesting an extension of time for the submission of reports to satisfy CoAs 12 and 54. On 24 March 2014, the Director-General agreed to the following timeframes (SSFL Reporting Delivery Timeframes DoPI Mar 14.pdf):</p> <ul style="list-style-type: none"> CoA 12: Environmental Impact Audit Report – Operation (this report) to be submitted no later than 15 May 2014; CoA 54: Operational Noise and Vibration Monitoring Report to be submitted no later than 15 July 2014. <p>While ARTC is not compliant with the original timeframe stated in CoA 12, it will meet the requirements of the Director-General to deliver this report by the amended timeframe.</p> <p>The report has been drafted to deliver requirements (a) to (d), and was reviewed by an Independent Certifier in late April-early May 2014.</p> <p>The Report will be made publicly available on the ARTC website once it is approved by the Director-General.</p>



Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
		<p>The certifier must be advised to the Director-General before the Environmental Impact Audit Report – Operation is prepared.</p> <p>The Environmental Impact Audit Report – Operation must be made Publicly Available.</p>		
2.9	14	<p>An Operational Environmental Management Plan (OEMP) must be prepared in accordance with the Department of Infrastructure, Planning and Natural Resources (2004) Guidelines for the Preparation of Environmental Management Plans, and submitted for the Director-General's Approval at least 4 weeks prior to the commencement of Operation or as otherwise agreed to by the Director-General.</p> <p>If the Proponent has an OEMP for its other projects which is applicable to this Project (for example a certified and operating environmental management system) then that system may be proposed as the OEMP. Details of the existing system must be provided to the Director-General demonstrating its application to this Project.</p> <p>The OEMP must be prepared and implemented in accordance with the procedures, safeguards and mitigation measures identified in the EA, Submissions Report, SoC and CoA and all relevant Acts and Regulations, and in consultation with Relevant Government Departments, Councils, Stakeholders and the CLG(s).</p> <p>The OEMP must incorporate the Operational requirements detailed in the CoA and SoC and include a monitoring and review program which contains (but is not limited to):</p> <ul style="list-style-type: none"> (a) an Operation Noise and Vibration Management Plan; (b) an Operation Air Quality Management Plan; (c) an Operation Hazard and Risk Management Plan; 	Substantially Compliant	<p>As described for CoA 14 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, the OEMP was prepared and is being implemented in accordance with the procedures, safeguards and mitigation measures identified in the EA, Submissions Report, SoCs and CoAs and all relevant Acts and Regulations, and in consultation with relevant Government Departments, Councils, Stakeholders and the CLGs.</p> <p>The final ONVMP (SSFL OEMP Appendix B ONVMP Final Ver Oct 2011.pdf, SSFL OEMP Appendix B ONVMP Appendix F.pdf) for the full 36 km SSFL was approved on 5 October 2011 pursuant to five requirements which were addressed by ARTC in the ONVMP.</p> <p>The Final Stage OEMP was submitted to DoPI on 20 November 2012 in accordance with CoA 14. As required by CoA 14, the OEMP incorporated the OAQMP (CoA 76) and the OHRMP (CoA 70) for the Final Stage. The Department responded on 17 December 2012 with comments on the OEMP, OAQMP and OHRMP. ARTC addressed the Department's comments on 19 December 2012 and submitted an updated OEMP and subplans: SSFL OEMP 2012 Main Report Final Ver2.pdf; SSFL OEMP 2012 Appendix C OAQMP Final.pdf; SSFL OEMP 2012 Appendix D OHRMP Final.pdf. The Department approved the OEMP, OAQMP and OHRMP on 9 January 2013 (20130109 Approval for OEMP, OAQMP and OHRMP.pdf).</p> <p>ARTC is substantially compliant with this CoA, for while the OEMP and sub-plans were completed, submitted to and approved by DoPI, the Final Stage OEMP, OAQMP and OHRMP were not made publicly available on</p>



Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
		<p>(d) a program to monitor any residual impacts of the Project on surface and groundwater including requirements for the monitoring of analyte selenium if any disturbed stockpiles or deposits of steam train boiler ash are proposed to be retained on the Project site;</p> <p>(e) a program to monitor the performance and effectiveness of measures implemented as part of the Biodiversity Management Sub Plan (CoA 60);</p> <p>(f) details of performance and completion criteria, monitoring frequency and duration; and</p> <p>(g) details of responsibility for monitoring and maintenance before and after any asset transfer to the relevant authority.</p> <p>The approved OEMP must be made Publicly Available.</p> <p>Modification</p> <p><i>Minor word changes were made to the requirement by DoPI on 18 July 2007 in Modification 1. The modified wording is reflected in the Condition Requirement text above.</i></p>		ARTC's website
2.10	22	The Proponent must consult property owners about implementing mitigation measures that affect their property. Mitigation measures should be implemented according to a program derived from that consultation if consistent with the Conditions of Approval.	Compliant	<p>As described for CoA 22 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, during planning, design and construction of the SSFL, ARTC consulted with property owners about implementing mitigation measures that affect their property.</p> <p>ARTC is compliant with this CoA which was closed out in the Final Construction Compliance Report.</p>
2.11	27	The ongoing maintenance and operation costs of urban design and landscaping items and works implemented as part of this Approval must remain the Proponent's responsibility until satisfactory arrangements	On Target	Given that Construction was completed in August 2013, the SSFL is still within the first 12 months of maintenance for assets and landscaping. Prior to the transfer of assets ARTC, in conjunction with RailCorp, is



Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
		have been put in place for the transfer of the asset to the relevant authority to the satisfaction of the Director-General. Prior to the transfer of assets the Proponent, in conjunction with RailCorp, will maintain items and works to the design standards established in the UDLP, including the engagement of a landscape specialist and the removal of graffiti within performance standards specified in the UDLP.		<p>maintaining items and works to the design standards established in the UDLP, including the engagement of a landscape specialist and the removal of graffiti within performance standards specified in the UDLP.</p> <p>As described in Table 3-4 in this report:</p> <ul style="list-style-type: none"> Item 4.20 - ARTC has handed over, or is in the process of finalising handovers, of landscaping to Councils; Item 4.21 - ARTC has successfully handed over assets to the relevant authorities including local Councils. <p>ARTC is complying with the requirements of this CoA and is on target to deliver it through implementation of the OEMP.</p>
2.12	51	<p>The Proponent must prepare an Operation Noise and Vibration Management Plan (ONVMP) no later than 6 months from the commencement of construction (or as otherwise agreed by the Director-General). The Plan must confirm noise and vibration control measures in order to achieve the Director-General's Requirements for Environmental Assessment. The Plan must be prepared in consultation with Relevant Government Departments, Relevant Councils, Stakeholders and the CLG(s) and approved by the Director-General.</p> <p>The ONVMP must include details of noise and vibration control measures to be implemented during the Operation stages including:</p> <p>(a) identification of sensitive receivers (including those outside residential areas);</p> <p>(b) identification of the appropriate operational noise and vibration objectives and levels for sensitive receivers;</p> <p>(c) predictions of operational noise and vibration impacts at sensitive receivers;</p>	Compliant	<p>As described for CoA 51 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, the final ONVMP (SSFL OEMP Appendix B ONVMP FinalVeJ Oct 2011.pdf, SSFL OEMP Appendix B ONVMP Appendix F.pdf) for the full 36 km SSFL was approved on 5 October 2011 (ONVMP Approval.pdf) pursuant to five requirements which were addressed by ARTC in the ONVMP.</p> <p>ARTC is compliant with this CoA which was closed out in the Final Construction Compliance Report.</p>



Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
		<p>(d) examination of all Reasonable and Feasible noise and/or vibration mitigation measures;</p> <p>(e) identification of specific physical and managerial measures for controlling noise and vibration including location, type and timing of erection of permanent noise barriers and/or other noise mitigation measures demonstrating best practice;</p> <p>(f) a Source Control Plan which identifies strategies for source controls including:</p> <ul style="list-style-type: none"> i a program of condition monitoring for the purpose of minimising noise emissions from freight rolling stock and maintenance activities; ii targets, assessment, action and review processes for incorporation and implementation of best practice measures; <p>(g) procedures for complaints management, including investigation and monitoring (subject to complainant agreement); and</p> <p>(h) procedures for reviewing the adequacy of operational noise and vibration mitigation measures.</p> <p>If the Director-General considers that the ONVMP does not adequately confirm noise and vibration control measures commensurate with the Director-General's Requirements for Environmental Assessment, the Director-General may direct the Proponent to have the adequacy of noise and vibration control measures identified in the ONVMP independently verified by a noise and vibration expert. The verification will be undertaken at the Proponent's expense and the independent expert must be approved by the Director-General.</p> <p>The Proponent is to implement the identified noise and vibration control measures and make the ONVMP publicly available.</p>		



Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
		<p>Modification</p> <p><i>The requirement was modified by DoPI on 18 July 2007 in Modification 1. The modified wording is reflected in the Condition Requirement text above.</i></p>		
2.13	52	<p>Where required, the Proponent must install physical noise and vibration mitigation measures, subject to:</p> <p>(a) consultation with directly affected property owners, Relevant Councils and the CLG(s); and</p> <p>(b) detailed design taking into consideration:</p> <ul style="list-style-type: none"> i shadow analysis for north facing sites in residential areas; ii assessment of local flooding impacts; and iii assessment of potential for graffiti and other forms of vandalism. <p>Modification</p> <p><i>The requirement was modified by DoPI on 18 July 2007 in Modification 1. The modified wording is reflected in the Condition Requirement text above.</i></p>	Compliant	<p>As described for CoA 52 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, in the design of the required mitigation measures, ARTC consulted with directly affected property owners, relevant Councils and the CLGs, and included in its detailed design shadow analysis for north facing sites in residential areas, assessment of local flooding impacts, and assessment of potential for graffiti and other forms of vandalism.</p> <p>There was no requirement to install vibration mitigation measures.</p> <p>ARTC installed the physical noise mitigation measures specified in the approved ONVMP. This included:</p> <ul style="list-style-type: none"> • Completing the construction of noise walls in Bankstown LGA in Aug 11, in Liverpool LGA in Nov 12, in Campbelltown LGA in Dec 12 and in Fairfield LGA in Jan 13; • Architectural treatments to nominated residential buildings and the Casula Arts Centre and the construction of a colourbond fence to mitigate noise at Warwick Farm Stables, all completed by 19 July 13. <p>ARTC completed all noise mitigation measures for the project in the earliest possible timeframe.</p> <p>ARTC is compliant with this CoA which was closed in the Final Construction Compliance Report.</p>
2.14	53	<p>All noise barriers installed must have absorptive surfaces on the rail side to minimise the impacts of noise reflection.</p>	Compliant	<p>As described for CoA 53 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, the noise barriers for the SSFL Project, which were ordered by ARTC in July 2009, have absorptive</p>



Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
				<p>surfaces on the rail side where required. This consists of a Woodtex absorptive facing on the Hebel noise walls. Woodtex panels were installed on the Hebel noise walls in all locations where a noise-sensitive receiver is located opposite the barrier, the work being completed in January 2013.</p> <p>ARTC is compliant with this CoA which was closed in the Final Construction Compliance Report.</p>
2.15	54	<p>At 1, 2, 5 and 10 years from commencement of Project operations the Proponent must:</p> <p>(a) monitor and review the adequacy and effectiveness of noise and vibration mitigation measures against noise and vibration objectives stated in the Operation Noise and Vibration Management Plan; and</p> <p>(b) review, and revise if required, the Source Control Plan; and</p> <p>(c) review advances in noise standards and best practice noise mitigation technology as well as any State or Federal Government initiatives to manage rail noise.</p> <p>If monitoring indicates any substantial exceedance of stated or emerging noise and vibration objectives, as a result of the Project, the Proponent must identify and implement any additional Reasonable and Feasible mitigation measures.</p> <p>A report of the monitoring and review must be submitted to the Director-General within 4 months of the relevant monitoring period, unless otherwise agreed to by the Director-General. Additional Reasonable and Feasible mitigation measures identified must be installed or implemented to the satisfaction of the Director-General in consultation with DECCW and affected receivers.</p> <p>The monitoring and review, and any subsequent mitigation measures</p>	On Target	<p>The Report after 1 year of Operation was to be submitted to the Director-General by 23 April 2014. On 13 March 2014, ARTC wrote to the Director-General requesting an extension of time for the submission of two reports including this Report. On 24 March 2014, the Director-General agreed that the Operational Noise and Vibration Monitoring Report could be submitted no later than 15 July 2014. (SSFL Reporting Delivery Timeframes DoPl Mar 14.pdf).</p> <p>As described in Items 4.1, 4.2 and 4.3 in Table 3-4 in this report, ARTC is aiming to produce an Operational Noise and Vibration Monitoring Report by 15 July 2014:</p> <ul style="list-style-type: none"> • Monitoring and reviewing the adequacy and effectiveness of noise and vibration mitigation measures against noise and vibration objectives stated in the Operation Noise and Vibration Management Plan; • Reviewing, and revising if required, the Source Control Plan; • Reviewing advances in noise standards and best practice noise mitigation technology as well as any State or Federal Government initiatives to manage rail noise. <p>ARTC is complying with the requirements of this CoA and is on target to deliver the first Report to the Director-General by 15 July 2014.</p>



Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
		<p>must be verified by an independent noise and vibration expert at the Proponent's expense. The independent expert must be approved by the Director-General prior to the relevant review period.</p> <p>For the purposes of this condition, a substantial exceedance is considered to be an exceedance of the LAeq objective by 2dBA, as measured or assessed over a one week period, or exceedance of the LAmax objective by 2dBA, measured or assessed as the energy-mean maximum noise.</p> <p>Modification</p> <p><i>The requirement was modified by DoPI on 18 July 2007 in Modification 1. The modified wording is reflected in the Condition Requirement text above.</i></p>		
2.16	60	<p>The Proponent must prepare and implement a Biodiversity Management Sub Plan (BMSP) in consultation with Relevant Government Departments and Councils and the CLG(s) and in accordance with the SoC as part of the CEMP. The BMSP must include:</p> <p>(a) plans showing:</p> <ul style="list-style-type: none"> 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 Project where this contains important habitat areas and/or threatened species, populations or ecological communities; 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 Project where this contains important habitat areas and/or threatened species, populations or ecological communities; iii. identification of existing disturbed habitat areas (including riparian 	On Target	<p>As described for CoA 60 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, a program of environmental management addressing the requirements of CoA 60 during operation of the SSFL, and monitoring and reporting, are documented in the OEMP in Section 4.5 and Table 5-1 respectively, in CoA 14: SSFL OEMP 2012 Main Report with Apps A and E Final Ver2.pdf</p> <p>This condition is being met by the implementation of the OEMP, as described in Items 4.14 to 4.20 in Table 3-4 in this report:</p> <ul style="list-style-type: none"> • Item 4.14: ARTC is compliant with monitoring the performance and effectiveness of measures implemented for <i>Acacia pubescens</i> as part of the Biodiversity Management Sub-plan (as per CoA 60) as required by CoA 14 (e); • Item 4.15: ARTC is compliant with reviewing the native vegetation enhancement program to be carried out in Leacock Regional Park by OEH and funded by the SSFL Project. The program was agreed by OEH and DoPI to offset an equivalent area of all EEC cleared; • Item 4.16: ARTC is compliant with implementing the first 12 months of landscaping maintenance;



Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
		<p>and aquatic habitat) along the SSFL corridor where rehabilitation, enhancement and landscaping works can be undertaken as part of Construction, to result in a net improvement of habitat and ecological values;</p> <p>(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 Project. These will include:</p> <ul style="list-style-type: none"> i. procedures for vegetation clearing, soil management and managing other habitat damage (terrestrial and aquatic) during Construction; ii. methods to protect vegetation both retained within, and also adjoining, the Project from damage during Construction; iii. a habitat tree management program including fauna recovery procedures and habitat maintenance (e.g. relocating hollows or installing nesting boxes); iv. methods to minimise damage to aquatic habitats; v. where possible, and where consistent with DECCW or DPI requirements, strategies for re-using in rehabilitation works individuals of any threatened plant species that would otherwise be destroyed by the Project; vi. performance criteria against which to measure the success of the methods; vii. where removal of threatened species is unavoidable, investigations of the potential for translocation or transplantation within the immediate area or another suitable donor site will be undertaken in consultation with the DECCW, DPI and RailCorp and, where Reasonable and Feasible, in accordance with the DECCW's recovery plan and RailCorp's management plan for <i>Acacia pubescens</i>; viii. no materials, spoil or machinery will be stored or parked within the drip lines of trees; ix. boring of piles at Cabramatta Creek bridge to minimise impacts to an existing camp of the threatened Grey-headed Flying-fox at 		<ul style="list-style-type: none"> • Item 4.17: ARTC is compliant, as it is on target to deliver ongoing landscaping maintenance after the first 12 months; • Item 4.18: ARTC is compliant with implementing weed management for the first 12 months of landscaping maintenance; • Item 4.19: ARTC is compliant, as it is on target to deliver ongoing weed management after the first 12 months of landscaping maintenance; • Item 4.20: ARTC is compliant with the handover of landscaping to RailCorp and Councils after the 12 months maintenance period. ARTC has handed over, or is in the process of finalising handovers of landscaping to Councils.



Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
		<p>Cabramatta;</p> <p>x. details on how the Proponent will ensure that no more than 2.1 ha of native vegetation including 0.4ha of Cumberland Plain Woodland and 1.7ha of Sydney Coastal River Flat Forest is cleared as part of the Project and only the <i>Acacia pubescens</i> population referred to as 'Population B: Regents Park Triangle, chainage 22.8km' in Section 2 (Flora & Fauna) of Technical Volume 1 of the EA, is removed as part of the Project.</p> <p>xi. methods to minimise damage to riparian and aquatic habitat, and fish passage including but not limited to:</p> <ul style="list-style-type: none"> a. designing and constructing waterway crossings and creek diversions having regard to the "Guidelines for Design of Fish Friendly Waterway Crossings" in consultation with DPI (Fisheries) and DNR; b. designing realignments to Bow Bowling Creek and the drainage gully at Glenfield Junction in consultation with DPI (Fisheries) and DNR; and c. ensuring that the existing alignments of Bow Bowling Creek and the drainage gully at Glenfield Junction are not significantly disturbed whilst realignments to these waterways are being constructed <p>(c) rehabilitation, landscape and enhancement strategy, including:</p> <ul style="list-style-type: none"> i. identification of measures that can be implemented at each site to result in a net improvement of habitat and ecological values; ii. provision of plantings or enhancement measures to offset an equivalent area of all EEC cleared, in consultation with DECCW or Council, as relevant; iii. identification of opportunities where local community groups (such as bush regeneration groups or Land Care groups) can be involved in the rehabilitation, enhancement and landscaping works; iv. identification of locally native species to be used in rehabilitation 		



Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
		<p>and landscaping works, including flora species suitable as a food resource for threatened fauna species;</p> <p>v. methods to remediate affected aquatic habitats or fish passages;</p> <p>vi. the source of all seed or tube stock to be used in rehabilitation and landscaping works including the identification of seed sources within the Project. Seed of locally native species within the Project will be collected before Construction commences to provide seed stock for revegetation;</p> <p>vii. methods to re-use topsoil (and where relevant subsoils) and cleared vegetation;</p> <p>viii. 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> <ul style="list-style-type: none"> i identification of weeds within the Project and adjoining areas; ii weed eradication methods and protocols for the use of herbicides; iii methods to treat and re-use weed infested topsoil; iv strategies to control the spread of weeds during Construction; <p>(e) Performance and completion criteria for the management measures implemented as part of the BMSP (particularly the offset plantings or enhancement measures) and a program for reviewing and monitoring the effectiveness of the implemented management measures against these performance and completion 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; and</p>		



Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
		<p>(h) 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> <p>Modification</p> <p><i>The requirement was modified by DoPI on 18 July 2007 in Modification 3 and on 23 March 2011 in Modification 5. The modified wording is reflected in the Condition Requirement text above.</i></p>		
2.17	61	<p>The Proponent must prepare a Soils and Water Management Sub Plan (SWMSP) in consultation with Relevant Government Departments, and Councils and the CLG(s) and in accordance with the SoC as part of the CEMP. The SWMSP must be prepared in accordance with The Blue Book and must include:</p> <p>a) an Erosion and Sedimentation Control Sub Plan that is fully integrated with the Spoil and Fill Management Sub Plan;</p> <p>(b) an Acid Sulphate Soils Management Sub Plan;</p> <p>(c) a Groundwater Management Sub Plan (CoA (e); and</p> <p>(d) a Surface and Ground Water Monitoring Program that is fully integrated with plans (a) to (c) above and the Hazard and Risk Management Sub Plan referred to in CoA 69.</p> <p>(e) The Groundwater Management Sub Plan (GMSP) will include groundwater investigations and assessment in order to establish water levels, evaluate water quality and to assess the likely impacts of the Project on potential groundwater dependent ecosystems, and existing or project related structures and infrastructure within and adjoining the rail corridor. The GMSP will:</p>	Compliant	<p>As described for CoA 61 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, a program of environmental management addressing the requirements of CoA 61 during operation of the SSFL, and monitoring and reporting, are documented in the OEMP in Section 4.4 and Table 5-1 respectively, in CoA 14: SSFL OEMP 2012 Main Report with Apps A and E Final Ver2.pdf</p> <p>This condition is being met by the implementation of the OEMP, as described in Items 4.10 to 4.13 in Table 3-4 in this report:</p> <ul style="list-style-type: none"> • Item 4.10: ARTC is compliant with monitoring silt levels in the 'Frog Pond' and inverted siphon, and cleanout of these as required; • Item 4.11: ARTC is compliant with monitoring residual impacts of the Project on surface waters, including visual inspection of realigned creeks and of rip rap dissipators where intertrack drainage enters waterways; • Item 4.12: ARTC is compliant with monitoring groundwater for two monitoring periods after construction to assess post construction conditions, and to ensure there are no residual impacts of the construction of structures on groundwater; • Item 4.13: ARTC is compliant with monitoring the residual impacts of the Project on groundwater, as described in Section 4 of the OEMP [monitor groundwater and first flush surface water extraction



Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
		<p>i detail further geological investigations by the installation of piezometers at representative locations along the project route to establish existing ground water levels and evaluate water quality;</p> <p>ii determine whether the Construction and/ or Operation related changes to groundwater would affect surrounding bore users, groundwater dependent ecosystems and species (see CoA 60), or existing and project related structures and infrastructure within and adjoining the rail corridor;</p> <p>iii evaluate water quality for salinity (total dissolved solids), major anions and cations, and where relevant for Construction purposes, corrosiveness;</p> <p>iv identify measures that would be implemented to minimise, manage, mitigate and/ or offset groundwater impacts during Construction; and</p> <p>v identify detailed design measures that would be implemented to minimise, management, mitigate and/ or offset groundwater impacts during Operation.</p> <p>Modification</p> <p><i>Minor word changes were made to the requirement by DoPI on 18 July 2007 in Modification 1. The modified wording is reflected in the Condition Requirement text above.</i></p>		<p>(quantity and quality) being discharged to sewer. Water quality parameters as specified by Sydney Water].</p>
2.18	66	<p>The Proponent shall maintain and operate all environmental control equipment installed or used for the Project in proper and efficient manner.</p>	On Target	<p>As described for CoA 66 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, ARTC maintain and operate all environmental control equipment installed or used for the Project in proper and efficient manner (e.g. to minimise risks of spills and wastes to the environment, or carry out maintenance works within designated areas and/or offsite).</p> <p>For Operation activities, Section 4 and Table 5-1 in CoA 14: SSFL OEMP 2012 Main Report with Apps A and E Final Ver2.pdf describe the</p>



Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
				<p>environmental operations and monitoring requiring control equipment being used by ARTC.</p> <p>Environmental controls include:</p> <ul style="list-style-type: none"> Noise monitoring equipment at various locations. Equipment is calibrated prior to use by the contractor, as evidenced by ARTC Specs.pdf and NATA Calibration Certificate BnK 4231 SN 2035391 (Due Jan 2015) for 2260 WM.pdf First flush system at Sefton Dive. A Technical Maintenance Plan is in place for Sefton Dive pump station, in accordance with the Sydney Water Trade Waste agreement. This Maintenance Plan is not a public document. <p>This condition is being met by ARTC, using environmental control equipment for Items 4.1, 4.4, 4.5, 4.6, 4.7, 4.12 and 4.13, as described in Table 3-4 in this report.</p>
2.19	70	<p>The Proponent must prepare an Operation Hazards and Risk Management Plan (OHRMP) no later than two months prior to the commencement of commissioning of the Project (or as otherwise agreed by the Director-General). As part of the OHRMP the Proponent shall develop, submit for the approval of the Director-General and implement the plans and systems set out as follows:</p> <p>(a) A comprehensive Emergency Plan and detailed emergency procedures for the proposed project. This plan will include detailed procedures for the safety of all people outside of the project who may be at risk from the project. The plan shall be in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 1, "Industry Emergency Planning Guidelines. Alternatively the Proponent may submit a report of a peer review prepared by an independent person, approved by the Director General, confirming that the Emergency Plan adopted by the</p>	On Target	<p>As described for CoA 70 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, the final OHRMP (SSFL OEMP 2012 Appendix D OHRMP Final.pdf) for the full 36 km SSFL was approved on 9 January 2013 as part of the OEMP (20130109 Approval for OEMP, OAQMP and OHRMP.pdf).</p> <p>As part of the OHRMP, CoA 70 requires that ARTC obtain and monitor records of dangerous goods movements by class. ARTC will conduct a periodic assessment at 2, 4, 6, 8 and 10 years from the commencement of operations of the SSFL on 23 December 2012, for a sample of train services. As per the methodology used in the Environmental Assessment Technical Paper 1, the sample will consist of three diverse train services - Superfreighter, Steel and Port Shuttle - that operate on the SSFL. ARTC will request and compile specific information from train operators that pertain to the classes of dangerous goods moved on the three sample train services to determine whether the actual dangerous goods</p>



Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
		<p>Proponent has adequately addressed the principles and objectives detailed in the Department's guideline.</p> <p>(b) A document setting out a comprehensive Safety Management System, covering all operations associated with the Project including the interfaces with the existing system. The document shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to procedures. Records shall be kept on-site and shall be available for inspection by the Director-General upon request. The Safety Management System shall be developed in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 9, "Safety Management". Alternatively the Proponent may submit a report of a peer review prepared by an independent person, approved by the Director General, confirming that the documented safety management systems to be used by the Proponent have adequately included the principles and objectives detailed in the Department's guideline.</p> <p>Commissioning shall not commence until approval has been given by the Director -General.</p> <p>The proponent shall obtain and monitor records of dangerous goods movements by class. If this monitoring indicates that actual dangerous goods movements are to exceed maximum (year 2018) quantities assumed in the preliminary hazard analysis, the Proponent should notify the Director-General giving projected data for the following 10 years together with a Quantitative Risk Analysis to demonstrate that the NSW risk criteria will not be exceeded. This notification should be submitted to the Director-General as soon as the monitoring indicates that an exceedance is likely to occur.</p> <p>Modification</p>		<p>movements are to exceed the maximum (2018) quantities assumed in the preliminary hazard analysis.</p> <p>Where results of monitoring indicate exceedances are likely to occur, ARTC will notify the Director-General within seven days and provide projected data for the following 10 years together with a Quantitative Risk Analysis to demonstrate that the NSW risk criteria will not be exceeded. ARTC will provide the required information to the Director General within 30 days of notification of monitoring results.</p> <p>ARTC is compliant with this CoA and is on target to conduct the periodic assessments.</p>



Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
		<i>The requirement was modified by DoPI on 18 July 2007 in Modification 1. The modified wording is reflected in the Condition Requirement text above.</i>		
2.20	71	The Proponent shall comply with all reasonable requirements of the Director -General in respect of the implementation of any measures arising from the reports submitted in respect of CoA 68 - 70, within such time as the Director- General may agree.	Compliant	<p>As described for CoA 71 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf:</p> <ul style="list-style-type: none"> The reports submitted in respect of CoAs 68 and 69 were approved by DoP on 19 September 2008 (Approval of CoA68 and CoA69.pdf). The Director-General did not identify any requirements in respect of implementation of any measures arising from the reports during Construction, and these two CoAs were closed in the Final Construction Report; The Final OHRMP (SSFL OEMP 2012 Appendix D OHRMP Final.pdf), developed under CoA 70, was approved by DoPI as part of the OEMP on 9 January 2013. <p>The Director-General has not identified any additional requirements in relation to this CoA, and ARTC is therefore compliant with the CoA.</p>
2.21	76	<p>Prior to the Commencement of Operations, or as otherwise agreed to by the Director-General, the Proponent must prepare an Operation Air Quality Management Plan (OAQMP) as part of the OEMP to the satisfaction of the Director-General. The OAQMP would identify:</p> <ul style="list-style-type: none"> a) emission criteria, including long term emission standards; b) strategies and management measures to minimise air quality impacts, including the identification of options for preventing any exceedance of NO₂ criteria; c) monitoring and assessment procedures; d) auditing and reporting requirements; and e) community consultation. <p>The OAQMP is to be prepared in consultation with RailCorp, the DECCW and other freight rail operators (as required) as part of the</p>	On Target	<p>As described for CoA 76 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, the final OAQMP (SSFL OEMP 2012 Appendix C OAQMP Final.pdf) was approved on 9 January 2013 as part of the OEMP.</p> <p>This condition is being met by the implementation of the OEMP, as described in Items 4.4 to 4.6 in Table 3-4 in this report:</p> <ul style="list-style-type: none"> Item 4.4: ARTC is compliant with monitoring air quality through dust impacts; Item 4.5: ARTC is compliant with monitoring air quality through dust impacts if directed by EPA as per EPL 3142 (Condition E9). To date the EPA has not directed ARTC to undertake additional monitoring of air quality; Item 4.6: ARTC is compliant, as it is on target to review the air quality



Item	CoA	Summary of Requirement	Compliance Status	Evidence of Compliance
		<p>OEMP.</p> <p>Should any monitoring indicate substantial exceedance of identified emission criteria, the Proponent must implement Reasonable and Feasible mitigation measures.</p> <p>Modification</p> <p><i>Minor word changes were made to the requirement by DoPI on 18 July 2007 in Modification 1, and on 23 March 2011 in Modification 5. The modified wording is reflected in the Condition Requirement text above.</i></p>		<p>assessment to confirm NO₂ impacts of the SSFL with NO₂ audits at 5 and 10 years after commencement of operation of SSFL.</p>



Table 3-3 Statement of Commitments (Operational)

Item	SoC	Summary of Requirement	Compliance Status	Evidence of Compliance
3.1	56	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.	Compliant	As described for SoC 56 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC resolved amicably all disputes between itself and landowners about alterations to flooding characteristics caused by the SSFL. ARTC is compliant with this SoC which was closed out in the Final Construction Compliance Report.
3.2	59	The Proponent will undertake further air quality monitoring and assessment of Operation of the Activity to include site specific input parameters.	On Target	As described for SoC 59 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , this requirement is being delivered by ARTC through the implementation of the OAQMP (SSFL OEMP 2012 Appendix C OAQMP Final.pdf). Specific actions are described in Items 4.4, 4.5 and 4.6 in Table 3-4 .
3.3	66	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.	Compliant	As described for SoC 66 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , during Construction where liable, ARTC rectified any property damage caused directly or indirectly by the SSFL at no cost to the property owner(s) or negotiated compensation for the property damage with the property owner. There have been three complaints received during 2013 relating to property damage due to operational vibration. All three of these complaints were responded to and closed out - SSFL Complaints Extract - Redacted.pdf . ARTC is compliant with this SoC which was closed out for Construction in the Final Construction Compliance Report.
3.4	67	Where a licensed bore, dam or other property water supply is adversely affected by the Activity the Proponent will reinstate a water supply of	Compliant	As described for SoC 67 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , there were no incidents of adverse



Item	SoC	Summary of Requirement	Compliance Status	Evidence of Compliance
		equivalent quality and quantity. Alternatively the Proponent may negotiate compensation for the loss with the landowner.		impacts on property water supply during construction of the SSFL ARTC is compliant with this SoC which was closed out in the Final Construction Compliance Report.
3.5	69	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.	Compliant	As described for SoC 69 in the SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , at the completion of Construction: <ul style="list-style-type: none"> • Bankstown City Council accepted ARTC's road restoration proposal for the Bankstown Local Government Area on 20 January 2012; • Fairfield City Council and ARTC were negotiating the scope and funding of road restoration within the Fairfield LGA, which has since been concluded: SFL Issues Wed 2 April.pdf; • Liverpool City Council verbally accepted ARTC's road restoration proposal for the Liverpool LGA in July 2013, and has the draft release and waiver to sign: 20130904 Liverpool Council Release and Waiver Rev 3.pdf; • Campbelltown City Council accepted the road restoration undertaken by SSFL in the Campbelltown LGA on 8 July 2013; • There was one instance where damage resulting from Construction was paid jointly by ARTC and TfNSW. Repairs to Riverpark Drive and the carpark at the end of the road in Liverpool were undertaken by TfNSW as part of the Liverpool Turnback project, with the cost of the repairs shared between TfNSW, ARTC and any other third party stakeholders as relevant: FW TAE243 - Liverpool.msg. <p>ARTC is compliant with this SoC which will be closed out when the two Councils return their signed agreements.</p>
3.6	73	The Proponent will ensure that local access and emergency vehicle access will not be adversely affected by the Operation.	Compliant	As described in SoC 73 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf , ARTC has ensured that local access and emergency vehicle access has not and is not being adversely affected by the operation of the SSFL:



Item	SoC	Summary of Requirement	Compliance Status	Evidence of Compliance
				<ul style="list-style-type: none"> As shown in Table 3-I in Items 1.1, 1.2 and 1.5, CoA 37 and SoCs 72, 77, 78, 81, 80, 79 and 82 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf show how local communities' access is not affected by the Operation of the SSFL. <i>Appendix 3 Annexure J Sefton-Macarthur (SSFL Shared Corridor)</i> of the OHRMP (SSFL OEMP 2012 Appendix D OHRMP Final.pdf) includes an ARTC deliverable that it will allow RailCorp emergency services access to its part of the shared rail corridor. <p>ARTC is compliant with this SoC which was closed out for Construction in the Final Construction Compliance Report, and is now being delivered through implementation of the OHRMP under the OEMP.</p>



Table 3-4 Operational Environmental Management Plan - Operation Maintenance, Monitoring and Reporting

Item	OEMP	Summary of Requirement to Monitor/Review	Compliance Status	Evidence of Compliance
4.1	Noise and Vibration	<p>Monitor operational noise levels at 1, 2, 5 and 10 years after operation commencement of the SSFL.</p> <p>Source of requirement:</p> <ul style="list-style-type: none"> CoA 54 (a) ONVMP Appendix B 	On Target	<p>The Report after 1 year of Operation was to be submitted to the Director-General by 23 April 2014. On 13 March 2014, ARTC wrote to the Director-General requesting an extension of time for the submission of two reports including this Report. On 24 March 2014, the Director-General agreed that the Operational Noise and Vibration Monitoring Report could be submitted no later than 15 July 2014. (SSFL Reporting Delivery Timeframes DoPl Mar 14.pdf).</p> <p>ARTC is on target to meet DoPl's timeframe, with ARTC's consultant Wilkinson Murray indicating that the Operational Noise and Vibration Monitoring Report will be completed by 30 June 2014 (RE Wheel sensors.msg).</p> <p>Where possible, ARTC has undertaken monitoring at the sites listed in the ONVMP. However, in the few cases where the listed site was unavailable or the balcony size was too small for monitoring equipment, an alternate site in close proximity to the listed site was chosen. Monitoring not undertaken at 3 Riverpark Drive due to absence of an appropriate monitoring location. Assessment of 3 Riverpark Dr will be provided in the noise report (as per CoA 54) based on results from other locations along the SSFL where noise walls have been constructed. The new monitoring locations are detailed in Section 3 of the SSFL Methodology for Compliance Noise Monitoring Report 12023-1.pdf.</p>
4.2	Noise and Vibration	<p>Review, and revise if required, the Source Control Plan at 1, 2, 5 and 10 years after operation commencement of the SSFL.</p> <p>Source of requirement:</p> <ul style="list-style-type: none"> CoA 54 (b) ONVMP Appendix B 	On Target	<p>The Source Control Plan is being reviewed as part of the Operational Noise and Vibration Monitoring Report to be submitted by 15 July 2014.</p>



Item	OEMP	Summary of Requirement to Monitor/Review	Compliance Status	Evidence of Compliance
4.3	Noise and Vibration	<p>Review advances in noise standards and best practice noise mitigation technology as well as any State or Federal Government initiatives to manage rail noise at 1, 2, 5 and 10 years after operation commencement of the SSFL.</p> <p>Source of requirement:</p> <ul style="list-style-type: none"> CoA 54 (c) ONVMP Appendix B 	On Target	<p>ARTC will review advances in noise standards and best practice noise mitigation technology as part of the Operational Noise and Vibration Monitoring Report, which has received an extension of time to 15 July 2014.</p> <p>Section 4.3 of the SSFL Methodology for Compliance Noise Monitoring Report 12023-1.pdf states that ARTC will review noise monitoring results in consideration of “the noise objectives indicated in the ONVMP and more recent objectives published in Rail Infrastructure Noise Guideline”.</p> <p>ARTC is on target to meet DoPI’s timeframe, with ARTC’s consultant Wilkinson Murray indicating that the Operational Noise and Vibration Monitoring Report will be completed by 30 June 2014 (RE Wheel sensors.msg).</p>
4.4	Air Quality	<p>Monitor air quality through dust impacts.</p> <p>Source of requirement:</p> <ul style="list-style-type: none"> CoA 76 (c), (d) OAQMP Appendix C 	On Target	<p>ARTC’s Corridor representative minimises air pollution impacts on humans and surrounding environment during operation of the SSFL by ensuring regular inspections of operator areas and that contractors:</p> <ul style="list-style-type: none"> Revegetate cleared land where possible; Apply water sprays where applicable; Appropriately maintain vehicles and equipment; Include fugitive emissions and dust emissions in site induction for new workers.
4.5	Air Quality	<p>Monitor air quality through dust impacts if directed by EPA as per EPL 3142 (Condition E9). Additional reporting to be triggered where reasonable community complaints have been received.</p> <p>Source of requirement:</p> <ul style="list-style-type: none"> CoA 76 (c) EPL 3142 Condition E9 OAQMP Appendix C 	Compliant	<p>The EPA has not directed ARTC to undertake additional monitoring of air quality through dust impacts. Additionally, the SSFL enviroline has no record of any air quality complaints (SSFL Complaints Extract - Redacted.pdf). Therefore no additional monitoring or reporting has been required of ARTC.</p>



Item	OEMP	Summary of Requirement to Monitor/Review	Compliance Status	Evidence of Compliance
4.6	Air Quality	<p>Review the air quality assessment to confirm NO₂ impacts of the SSFL with NO₂ audits at 5 and 10 years after commencement of operation of SSFL.</p> <p>Source of requirement:</p> <ul style="list-style-type: none"> CoA 76 (b) OAQMP Appendix C 	On Target	<p>As described in Section 3.2.2 of the OAQMP (SSFL OEMP 2012 Appendix C OAQMP Final.pdf) ARTC is compliant with this Item as it is on target to review the air quality assessment to confirm NO₂ impacts of the SSFL as part of its working with rail operators on their improving emission controls for diesel locomotives. NO₂ audits are planned at 5 and 10 years after the commencement of operation of the SSFL, as per the modelling and assessment methodology used in Chapter 13 of the Environmental Assessment. ARTC will notify the Director-General of the results of these audits within seven days.</p>
4.7	Hazard and Risk	<p>As described in OHRMP, system inspection and testing activities as a component of a contract. Procedures for inspecting and testing of safety related systems are specified in the relevant ARTC Standards, on both a scheduled basis and on a basis of defined events.</p> <p>Source of requirement:</p> <ul style="list-style-type: none"> OHRMP Appendix D 	Compliant	<p>As described in the OHRMP (SSFL OEMP 2012 Appendix D OHRMP Final.pdf) these measures are being implemented in ARTC's on-line EMS and SMS. Hazards and risk mitigation measures to address potential impacts are detailed in the OHRMP which consists of:</p> <ul style="list-style-type: none"> The Emergency Management Plan including an Emergency Management Structure (EMS); ARTC Incident Management Manual TA 44 Version 4.6; ARTC Incident Management process; and Annexure J Sefton-Macarthur (SSFL Shared Corridor); The Safety Management System (SMS) including ARTC Safety Management Policy; ARTC Safety Management Plan VI.0; Interface Agreement – RailCorp Operations on the ARTC Network; ARTC Risk Management Policy; and ARTC Risk Management Procedure RM-01 Version 6.1. <p>ARTC responsibilities for implementing safety related issues are identified in the SMS, while responsibilities for implementing environmental related issues are identified in the EMS.</p> <p>ARTC is compliant with this Item. ARTC records and stores the information for the SMS electronically through its internet and intranet sites as described in Appendix D. Relevant records are available for</p>



Item	OEMP	Summary of Requirement to Monitor/Review	Compliance Status	Evidence of Compliance
				inspection by the Director-General upon request.
4.8	Hazard and Risk	<p>Monitor environmental incidents.</p> <p>Source of requirement:</p> <ul style="list-style-type: none"> OHRMP Appendix D 	Compliant	<p>As described in the OHRMP (SSFL OEMP 2012 Appendix D OHRMP Final.pdf), environmental incidents are monitored and managed in ARTC's on-line Emergency Management Plan which includes an Emergency Management Structure (EMS); ARTC Incident Management Manual TA 44 Version 4.6; ARTC Incident Management process; and Annexure J Sefton-Macarthur (SSFL Shared Corridor).</p> <p>ARTC responsibilities for implementing environmental related issues are identified in the EMS.</p>
4.9	Hazard and Risk	<p>Assessment of dangerous goods movements at 2, 4, 6, 8 and 10 years after operation commencement of the SSFL.</p> <p>Source of requirement:</p> <ul style="list-style-type: none"> CoA 70 OHRMP Appendix D 	On Target	<p>As part of the OHRMP (Section 4 SSFL OEMP 2012 Appendix D OHRMP Final.pdf), CoA 70 requires that ARTC obtain and monitor records of dangerous goods movements by class. ARTC will conduct a periodic assessment at 2, 4, 6, 8 and 10 years from the commencement of operations of the SSFL on 23 December 2012, for a sample of train services as per the methodology used in the Environmental Assessment Technical Paper 1. ARTC will request and compile specific information from train operators that pertain to the classes of dangerous goods moved on the sample train services to determine whether the actual dangerous goods movements are to exceed the maximum (2018) quantities assumed in the preliminary hazard analysis.</p> <p>Where results of monitoring indicate exceedances are likely to occur, ARTC will notify the Director-General within seven days and provide projected data for the following 10 years together with a Quantitative Risk Analysis to demonstrate that the NSW risk criteria will not be exceeded. ARTC will provide the required information to the Director-General within 30 days of notification of monitoring results.</p> <p>ARTC is compliant with this Item and is on target to conduct the periodic assessments.</p>



Item	OEMP	Summary of Requirement to Monitor/Review	Compliance Status	Evidence of Compliance
4.10	Surface Water and Ground-water	Monitor silt levels in the 'Frog Pond' and inverted siphon.	Compliant	<p>The 'Frog Pond' is inspected and silt is removed on a 3 month basis, as evidenced by:</p> <ul style="list-style-type: none"> Line 52 of the April 2014 monthly maintenance schedule: frog_pond_MST.xlsx A completed purchase order for cleaning of the frog pond: DOC160414.pdf <p>The frog pond is also inspected following heavy rain.</p> <p>In response to rubbish build up around the siphon inlet grill and in the siphon, which was found to foul the scour valve actuator, the actuator is operated manually by the signalling team to ensure that the siphon is functioning.</p>
4.11	Surface Water and Ground-water	<p>Monitor residual impacts of the project on surface water (eg where alterations to waterways may be required).</p> <p>Source of requirement:</p> <ul style="list-style-type: none"> CoA 14 (d) 	On Target	<p>ARTC is monitoring residual impacts of the Project on surface waters, including visual inspection of realigned creeks and of rip rap dissipators where intertrack drainage enters waterways. The realigned creeks and rip rap structures in the SSFL Project area were inspected during the early January 2014 possession with the erosion control and matting observed (Copy of SOUTH Possession Program 2013-14_V27_19-12-13.xlsx). Bow Bowing creek was inspected again on 3 February 2014.</p>
4.12	Surface Water and Ground-water	<p>Monitor groundwater after construction is completed to assess post construction conditions, and to ensure there are no residual impacts of the construction of structures on groundwater.</p> <p>Source of requirement:</p> <ul style="list-style-type: none"> CoA 14 (d) 	Compliant	<p>Groundwater was monitored for two monitoring periods after Construction to assess post-construction conditions, and to ensure there are no residual impacts of the construction of structures on groundwater.</p> <p>August 2013 and October 2013 reports and summary letter from Parsons Brinckerhoff include:</p> <ul style="list-style-type: none"> Parsons Brinckerhoff Letter Report - Groundwater Monitoring Summary - January 2014.PDF SSFL GW Monitoring Report - August 2013.PDF SSFL GW Monitoring Report - October 2013.pdf



Item	OEMP	Summary of Requirement to Monitor/Review	Compliance Status	Evidence of Compliance
				<p>Parsons Brinckerhoff found that:</p> <ul style="list-style-type: none"> Groundwater quality data reflect the natural variability of groundwater in the Wianamatta Shale; Minor and intermittent occurrences of dissolved hydrocarbons are likely to reflect historic fuel spills in the rail corridor and/or off-site, and appear to be attenuating naturally; The observed hydrocarbon occurrences are considered to be minor and not indicative of significant impacts due to the rail upgrade activities. <p>Parsons Brinckerhoff recommends that:</p> <ul style="list-style-type: none"> Monitoring be discontinued in accordance with the groundwater management plan; All groundwater monitoring bores be left in place for two years after the final sampling round, after which they should be decommissioned in an appropriate manner so as to not provide a contaminant pathway in the future. <p>ARTC is compliant with this Item, and advised the DoPI on 16 January 2014 that the groundwater monitoring has been completed: CoA 61 Groundwater Monitoring Letter to Department of Planning - 16 January 2014.PDF</p>
4.13	Surface Water and Ground-water	<p>Monitor residual impacts of the Project on groundwater as described in Section 4 of the OEMP [monitor groundwater and first flush surface water extraction (quantity and quality) being discharged to sewer. Water quality parameters as specified by Sydney Water].</p> <p>Source of requirement:</p> <ul style="list-style-type: none"> CoA 14 (d) Sydney Water Conditional Consent 35767 	Compliant	<p>The residual impacts of the Project on groundwater were monitored as described in Section 4 of the OEMP [monitor groundwater and first flush surface water extraction (quantity and quality) being discharged to sewer, with water quality parameters as specified by Sydney Water].</p> <p>ARTC has continued to monitor groundwater being discharged to sewer as per its agreement with Sydney Water throughout 2013 as evidenced by:</p> <ul style="list-style-type: none"> Renewed trade waste agreement (July 2013): 2013-2014 Trade Waste Agreement.pdf



Item	OEMP	Summary of Requirement to Monitor/Review	Compliance Status	Evidence of Compliance
				<ul style="list-style-type: none"> Contract for Water Testing Sefton Dive for Continued Licenced Discharge to Sewer (January 2013) : 03347 - NSW - Contract - Water Testing - copy only.pdf <p>Two examples of groundwater quality monitoring reports, from 2013, are provided below:</p> <ul style="list-style-type: none"> 13.02.06 - ARTC Sample Analysis Reports.docx 13.03.21 - ARTC Sample Analysis Reports.docx <p>ARTC is compliant with this Item and is on target to continue monitoring groundwater residual impacts.</p>
4.14	Biodiversity	<p>Monitor performance and effectiveness of measures implemented for <i>Acacia pubescens</i> as part of the Biodiversity Management Sub-plan (as per CoA 60) as required by CoA 14 (e).</p> <p>Source of requirement:</p> <ul style="list-style-type: none"> CoA 60 CoA 14 (e) & (f) 	Compliant	<p>The performance and effectiveness of measures implemented for <i>Acacia pubescens</i> management as part of the Biodiversity Management Sub-plan demonstrate ARTC's compliance with this Item, as evidenced by:</p> <ul style="list-style-type: none"> An awareness briefing provided to the ARTC Mittagong Provisioning Centre on Wednesday 2 October 2013: SSFL Environmental Aspects.pptx and RE SSFL Environmental Impact Audit - Operation.msg; Environmentally sensitive site signs used to mark locations containing <i>Acacia pubescens</i>: ENVIRONMENTALLY SENSITIVE SITE - SIGN.docx. Corridor staff were advised to ensure signage was still in place, and to erect environmentally sensitive site signs if absent; Warwick Farm location map: catt1_Warwick_Farm_gis_plot_54479997_1.pdf Birrongo location map: catt1_Birrongo_gis_plot_54479995_1.pdf Sefton location map: catt1_Sefton_2_gis_plot_54479996_1.pdf <p>As SSFL is currently in the operations phase, RailCorp has assumed management of the rail corridor. As such, management of vegetation in the rail corridor, including <i>Acacia pubescens</i> will be undertaken by Railcorp, as evidenced by the Metropolitan South Region Management Plan for</p>



Item	OEMP	Summary of Requirement to Monitor/Review	Compliance Status	Evidence of Compliance
				<i>Acacia pubescens</i> : Metro South Acacia Pubescens Mgt Plan.pdf
4.15	Biodiversity	<p>Review the native vegetation enhancement program carried out in Leacock Regional Park by OEH and funded by the SSFL Project. The program was agreed by OEH and DoPI to offset an equivalent area of all EEC cleared.</p> <p>Source of requirement:</p> <ul style="list-style-type: none"> CoA 60 (e) CoA 14 (e) & (f) 	Compliant	<p>As described in CoA 60 in SSFL Final Construction Compliance Report August 2013 - Final Ver.pdf, ARTC agreed to OEH's Project Management Proposal in July 2013, and OEH submitted its first invoice on 29 July 2013.</p> <p>ARTC is still waiting for a Vegetation Rehabilitation and Management Plan from OEH, as evidenced by correspondence with OEH detailing an expected report completion date of mid-May 2014 (RE Co-ordinating Environmental works at Leacock Park with ARTC.msg).</p> <p>ARTC is compliant with this Item and is on target to continue reviewing and funding OEH's annual program of works.</p>
4.16	Biodiversity	<p>Landscaping maintenance as described in the Landscape Management Plan, for first 12 months after planting.</p> <p>Source of requirement:</p> <ul style="list-style-type: none"> CoA 14 (e), (f) & (g) 	Compliant	<p>ARTC has indicated that landscaping maintenance requirements were evidenced on site visits occurring at intervals not exceeding 14 days, during the first 12 months after planting. Examples of landscaping maintenance reporting to ARTC include:</p> <ul style="list-style-type: none"> October 2013 site service reports: October site landscaping reports SFL.PDF November 2013 site service reports: November site landscaping reports SFL .pdf December 2013 site service report: SFL 17.12.13.pdf December 2013 site maintenance reports: SFL Site reports.pdf <p>The first 12 months maintenance period following planting expired at the end of April 2014, as evidenced in item 3.4 of current SFL closeout items/ minutes dated 2 April 2014 (SFL Issues Wed 2 April.pdf). ARTC is compliant with landscape maintenance requirements being carried out for 12 months after planting.</p>
4.17	Biodiversity	Ongoing landscaping maintenance after first 12 months following planting.	On Target	<p>The SSFL has just completed the first 12 months of maintenance, as evidenced in item 3.4 of current SFL closeout items/ minutes dated 2 April 2014 (SFL Issues Wed 2 April.pdf). ARTC is on target that ongoing</p>



Item	OEMP	Summary of Requirement to Monitor/Review	Compliance Status	Evidence of Compliance
		Source of requirement: • CoA 14 (e), (f) & (g)		landscaping after first 12 months of maintenance is due to commence.
4.18	Biodiversity	Weed management for first 12 months of maintenance following planting. Source of requirement: • CoA 14 (e), (f) & (g)	Compliant	ARTC has indicated that weed management site visits during the first 12 months of maintenance occurred at intervals not exceeding 14 days. Examples of landscaping maintenance (including weed management) reporting to ARTC are provided below: • October 2013 site service reports: October site landscaping reports SFL.PDF • November 2013 site service reports: November site landscaping reports SFL .pdf • December 2013 site service report: SFL 17.12.13.pdf • December 2013 site maintenance reports: SFL Site reports.pdf The first 12 months maintenance period following planting expired at the end of April 2014, as evidenced in item 3.4 of current SFL closeout items/ minutes dated 2 April 2014 (SFL Issues Wed 2 April.pdf). ARTC is compliant with weed management requirements being carried out for 12 months after planting.
4.19	Biodiversity	Ongoing weed management after first 12 months of maintenance following planting. Source of requirement: • CoA 14 (e), (f) & (g)	On Target	The SSFL has just completed the first 12 months of maintenance, as evidenced in item 3.4 of current SFL closeout items/ minutes dated 2 April 2014 (SFL Issues Wed 2 April.pdf). ARTC is on target that ongoing weed management after first 12 months of maintenance is due to commence.
4.20	Biodiversity	Handover of landscaping to RailCorp and Councils after 12 months maintenance period. Source of requirement: • CoA 14 (e), (f) & (g)	On Target	ARTC has handed over landscaping, or is in the process of negotiating landscaping handover, to Councils. The SSFL is still within the first 12 months of maintenance. ARTC is on target to hand over landscaping to Liverpool City Council by the end of April, as evidenced by: • Correspondence between Leighton Contractors and Council: FW SFL - Casula parklands landscaping hand back to Liverpool City Council



Item	OEMP	Summary of Requirement to Monitor/Review	Compliance Status	Evidence of Compliance
				<p>.msg</p> <ul style="list-style-type: none"> ARTC meeting minutes (item 3.4): SFL Issues Wed 2 April.pdf <p>ARTC has handed over landscaping to Campbelltown City Council and Fairfield City Council, as evidenced by correspondence with Councils</p> <ul style="list-style-type: none"> Campbelltown City Council: CCC handover letter 8 Jan 2014.pdf and FW SFL Landscaping.msg Fairfield City Council: FW Follow up from todays inspection 4022014.msg <p>There were small areas on the RailCorp side of the rail corridor that were vegetated following Construction works. There was no formal handover to RailCorp, and these areas are now being managed as part of RailCorp's maintenance program under the Shared Corridor Agreement.</p> <p>ARTC is compliant with this Item, and is on track to finalise handover of areas of landscaping to Councils.</p>
4.2I	Assets	<p>ARTC Process Procedure PPI66 Asset Maintenance Works Management details the process used for monitoring the assets, identification of defects and appropriate corrective actions.</p> <p>Source of requirement:</p> <ul style="list-style-type: none"> CoA 14 (e), (f) & (g) 	Compliant	<p>ARTC been maintaining the SSFL for over 15 months, with assets monitored and located defects (including graffiti) entered into the ARTC Works Management System and are removed as required. This is evidenced by:</p> <ul style="list-style-type: none"> Example of graffiti defects in the Works Management System: graffiti defects all.xls Example of graffiti defects removed: graffiti removed.xls Maintenance Schedule Tasks, including graffiti tasks (for May 2014): May MST visual.xlsx Instructions on the development of a graffiti number for ARTC: RE Graffiti Removal number - MFN SSFL.msg Photos of graffiti removal: PICTURES PAINTING.docx <p>ARTC has successfully handed over the following assets to the relevant authorities:</p>



Item	OEMP	Summary of Requirement to Monitor/Review	Compliance Status	Evidence of Compliance
				<ul style="list-style-type: none"> Casula Powerhouse Arts Centre noise mitigation works to Liverpool City Council: <ul style="list-style-type: none"> Agreed process to close out the Casula Powerhouse Arts Centre noise concerns: FW CPAC Noise mitigation (Part 1).msg Peer review report and Council acceptance: FW Acoustic Direction reports (Part 2).msg Broomfield street parking to Fairfield City Council: RE SSFL Broomfield Street Parking.msg Leacock Regional Park rehabilitated area to NPWS: FW Leacock Park Revegetation Handover.msg
4.22	Assets	<p>Ongoing maintenance of ARTC's assets after first 12 months maintenance period, including graffiti management.</p> <p>Source of requirement:</p> <ul style="list-style-type: none"> CoA I4 (g) 	On Target	<p>Located defects (including graffiti) are entered into the ARTC Works Management System and are removed when addressed. This is evidenced by:</p> <ul style="list-style-type: none"> Example of graffiti defects in the Works Management System: graffiti defects all.xls Example of graffiti defects removed: graffiti removed.xls Maintenance Schedule Tasks, including graffiti tasks (for May 2014): May MST visual.xlsx Instructions on the development of a graffiti number for ARTC: RE Graffiti Removal number - MFN SSFL.msg Photos of graffiti removal: PICTURES PAINTING.docx



Table 3-5 Urban Design & Landscape Plan - Operation Performance

Item	UDLP	Summary of Requirement	Compliance Status	Evidence of Compliance
5.1	Urban Design	ARTC will investigate, if required, the noise absorption effect of repainting the Woodtex panelling absorptive surfaces on the rail side of the noise walls.	Compliant	<p>Several panels were painted over during Construction.</p> <p>However, no painting of Woodtex panelling absorptive surfaces on the rail side of the noise walls has been undertaken since the commencement of Operations. Therefore, ARTC has not had to investigate the noise absorption effect of repainting.</p>
5.2	Graffiti Management	Compliance to the Graffiti Removal Schedule.	Compliant	<p>ARTC has followed the graffiti removal schedule as best as practical, in particular focussing on giving high priority to painting over high profile graffiti. ARTC generates Maintenance Schedule Tasks, including graffiti tasks, on a weekly basis and inspects the outside of the noise barriers on a monthly basis. Graffiti is logged in the Works Management System and is actioned on a priority basis. This is evidenced by:</p> <ul style="list-style-type: none"> • Example of graffiti defects in the Works Management System: graffiti defects all.xls • Example of graffiti defects removed: graffiti removed.xls • Maintenance Schedule Tasks, including graffiti tasks (for May 2014): May MST visual.xlsx • Instructions on the development of a graffiti number for ARTC: RE Graffiti Removal number - MFN SSFL.msg • Photos of graffiti removal: PICTURES PAINTING.docx <p>Graffiti removal equipment is ready to be immediately deployed in reaction to any public complaint, although no public complaints have been received regarding graffiti (SSFL Complaints Extract - Redacted.pdf).</p>
5.3	Graffiti Management	Audit of quality by ARTC's Corridor Representative.	Compliant	<p>ARTC has completed track patrol several times throughout the year, during which graffiti has been inspected. Additionally, ARTC inspects the outside of the noise barriers on a monthly basis. Graffiti is logged in the Works Management System which is monitored by the Corridor</p>



Item	UDLP	Summary of Requirement	Compliance Status	Evidence of Compliance
				<p>Representative, and is actioned on a priority basis. This is evidenced by:</p> <ul style="list-style-type: none"> • Example of graffiti defects in the Works Management System: graffiti defects all.xls • Example of graffiti defects removed: graffiti removed.xls • Maintenance Schedule Tasks, including graffiti tasks (for May 2014): May MST visual.xlsx • Instructions on the development of a graffiti number for ARTC: RE Graffiti Removal number - MFN SSFL.msg • Photos of graffiti removal: PICTURES PAINTING.docx
5.4	Graffiti Management	Feedback, compliments, complaints and suggestions from stakeholders.	Compliant	<p>No public complaints have been received regarding graffiti (SSFL Complaints Extract - Redacted.pdf). ARTC monitors feedback and is compliant with this Item.</p>
5.5	Landscape Management	Compliance with the Landscape Management Plan Softworks Specification.	Compliant	<p>ARTC has complied with the Landscape Management Plan Softworks Specification, as evidenced by the following:</p> <ul style="list-style-type: none"> • Consistency Report regarding SSFL landscaping: 20130919 SSFL - Landscaping.pdf • Correspondence from Leighton Contractors: FW Landscaped areas - measured areas Areas 1 to 3.msg. This correspondence identifies the differences between its October review of landscaping and the consistency report in the above file memorandum. Both documents show that the requirements of the CAOP were exceeded.
5.6	Landscape Management	Audit of log books and of quality by ARTC's Corridor Representative.	Compliant	<p>While no log books were kept, ARTC is compliant with this requirement as sufficient information was available in the form of site service and site maintenance reports maintained by the landscaping contractor for ARTC to undertake audits of quality of landscape management. The SSFL Senior Project engineer has undertaken spot checks of site service and site maintenance reports to ensure quality, for example evidence of a spot inspection in November 2013: FW Casula golf course.msg.</p>



Item	UDLP	Summary of Requirement	Compliance Status	Evidence of Compliance
				<p>Examples of landscaping maintenance reporting to ARTC are provided below:</p> <ul style="list-style-type: none"> October 2013 site service reports: October site landscaping reports SFL.PDF November 2013 site service reports: November site landscaping reports SFL .pdf December 2013 site service report: SFL 17.12.13.pdf December 2013 site maintenance reports: SFL Site reports.pdf <p>Evidence of landscaping audit feedback that was created to establish the maintenance program is provided below:</p> <ul style="list-style-type: none"> Landscape actions following inspection 10 October.xlsx Landscape Area 3 17 October.xlsx
5.7	Landscape Management	Feedback, compliments, complaints and suggestions from stakeholders including RailCorp, the four Councils and the community.	Compliant	<p>ARTC monitors feedback and is compliant with this Item.</p> <p>No public complaints were received regarding landscaping (SSFL Complaints Extract - Redacted.pdf).</p> <p>Landscape management feedback from Councils has been successfully addressed, with ARTC having handed over landscaping, or is in the process of negotiating landscaping handover, to Councils.</p> <p>ARTC is on track to hand over landscaping to Liverpool City Council by the end of April, as evidenced by:</p> <ul style="list-style-type: none"> Correspondence between Leighton Contractors and Council: FW SFL - Casula parklands landscaping hand back to Liverpool City Council.msg ARTC meeting minutes (item 3.4): SFL Issues Wed 2 April.pdf <p>ARTC has handed over landscaping to Campbelltown City Council and Fairfield City Council, as evidenced by correspondence with Councils</p>



Item	UDLP	Summary of Requirement	Compliance Status	Evidence of Compliance
				<ul style="list-style-type: none"> Campbelltown City Council: CCC handover letter 8 Jan 2014.pdf and FW SFL Landscaping.msg Fairfield City Council: FW Follow up from todays inspection 4022014.msg <p>ARTC has also successfully handed over the completed rehabilitation area in Leacock Regional Park to NPWS (FW Leacock Park Revegetation Handover.msg).</p>