

Metropolitan Rail Expansion Program

South West Rail Link Concept Plan and Environmental Assessment

Submissions Report

May 2007

Transport Infrastructure Development
Corporation



Parsons Brinckerhoff Australia Pty Limited ABN 80 078 004 798


*Ernst & Young Centre,
Level 27, 680 George Street
Sydney NSW 2000
GPO Box 5394
Sydney NSW 2001
Australia
Telephone +61 2 9272 5100
Facsimile +61 2 9272 5101
Email sydney@pb.com.au*

NCSI Certified Quality System ISO 9001

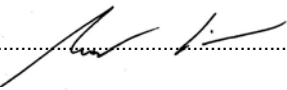
© Parsons Brinckerhoff Australia Pty Limited (PB) [2007].

Copyright in the drawings, information and data recorded in this document (the information) is the property of PB. This document and the information are solely for the use of the authorised recipient and this document may not be used, copied or reproduced in whole or part for any purpose other than that for which it was supplied by PB. PB makes no representation, undertakes no duty and accepts no responsibility to any third party who may use or rely upon this document or the information.

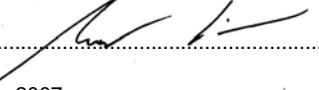
Author: Kathleen Bunting.....

Signed: .....

Reviewer: Hugh Swinbourne.....

Signed: .....

Approved by: Hugh Swinbourne.....

Signed: .....

Date: 4 May 2007

Distribution: TIDC.....

Contents

	Page Number
1. Introduction	1
1.1 Purpose of this report	1
1.2 Overview of the SWRL	3
1.2.1 <i>Summary of the project need and description</i>	3
1.2.2 <i>Scope of the SWRL Concept Plan and approval</i>	4
Stage A.....	4
Stage B.....	5
1.3 The determination process	5
1.4 Structure of this report	6
2. Consultation	7
2.1 Consultation during the exhibition period	7
2.1.1 <i>Exhibition venues</i>	7
2.1.2 <i>1800 project information line, project email and website</i>	7
2.1.3 <i>Advertisements</i>	7
2.1.4 <i>Community newsletter – planning update</i>	8
2.1.5 <i>Letters to affected land owners</i>	8
2.1.6 <i>Community information sessions</i>	8
2.2 Consultation following the exhibition period	9
2.2.1 <i>1800 number and email</i>	9
2.2.2 <i>Website</i>	9
2.2.3 <i>Advertisements</i>	10
2.2.4 <i>Advice to submitters</i>	10
2.2.5 <i>Planning update</i>	10
2.2.6 <i>Meetings</i>	10
3. Consideration of submissions	11
3.1 Overview	11
3.2 Analysis process	11
3.3 Responses to submissions from the community and non-government stakeholders	11
3.3.1 <i>Key environmental issues</i>	12
Property impacts.....	12
Sub-issue – property valuation/acquisition process.....	12
Sub Issue – Impact on property values	15
Sub-issue – other property impacts/issues.....	16
Land use and infrastructure impacts.....	16
Sub-issue – land use impacts	16
Sub-issue – infrastructure impacts	17
Traffic, transport, parking and access.....	18
Sub-issue- parking at Glenfield Station	18
Sub-issue – train operations.....	18
Sub-issue- Traffic impacts.....	19
Sub-issue – pedestrian/cyclist access.....	20
Construction noise and vibration.....	20
Operational noise and vibration	21
Sub-issue – operational noise and vibration impacts	21
Sub-issue – operational noise mitigation	22
Surface water and flooding	22
Flora and fauna	23
Heritage	24
Visual and urban design	25
Sub-issue – visual impacts in vicinity of Cowpasture Road.....	25
Sub-issue – visual impacts of Glenfield South flyover	26
Sub-issue – visual impacts (other)	26
Sub-issue – urban design.....	29
Social impacts	29
Economic impacts	30
Sub-issue – economic and business impacts.....	30
3.3.2 <i>Other environmental issues</i>	30
Other environmental issues	30
3.3.3 <i>Other project issues</i>	31

Contents (continued)

Page Number

Support for SWRL	31
Object to project/proposed alignment	31
Consultation.....	31
Sub-issue - adequacy of consultation.....	31
Sub-issue –requests or suggestions for future consultation	32
Sub-issue – consultation with non-English speaking persons	32
Alternatives –route alignment	33
Sub-issue – request for alternative route alignment	33
Sub-issue –consideration of previous southern alignment	34
Alternative vertical alignments	35
Sub-issue – vertical alignment in vicinity of Western Sydney Parklands and crossing of Cowpasture Road	35
Sub-issue – undergrounding of Glenfield South flyover.....	35
Alternatives – other project components.....	35
Adequacy of EA or assessment process	36
Sub-issue – insufficient information or assessment.....	36
Sub-issue- Inaccuracies in EA	37
Other	38
Sub-issue – SWRL extension.....	38
Sub-issue – approval of SWRL	38
Sub-issue - broader land use/transport planning issues.....	39
Sub-issue -requests for information.....	41
3.4 Responses to issues: government agency issues	42
4. Additional investigations	81
4.1 Introduction	81
4.2 Investigations completed in response to submissions	81
4.2.1 Assessment of alternative horizontal and vertical alignment at Cowpasture Road	81
4.2.2 Assessment of alternative underpass at Glenfield South Junction	82
4.3 Parking provision at Glenfield Station	82
4.4 Stabling facility train wash and access road	84
4.5 Review of vertical alignment at Eastwood Road	87
4.6 Additional Aboriginal heritage assessment	87
4.7 Sustainability workshop	89
4.8 Glenfield Stage A	90
4.8.1 Additional engineering investigations	90
4.8.2 Additional environmental investigations	90
Description of the Glenfield additional car park site	91
Land use, property and infrastructure planning.....	93
Rail corridor and Glenfield North Junction works.....	93
James Meehan Estate worksite.....	94
Glenfield additional car park site	95
Traffic, transport parking and access.....	95
Operational impacts of the Glenfield additional car park	95
Impacts during construction of Stage A.....	96
Noise and vibration	97
Operational rail noise impacts	97
Operational vibration impacts	99
Noise from operation of the Glenfield additional car park.....	99
Construction noise impacts	100
Construction vibration.....	102
Hydrology and surface water	103
Biodiversity	103
Targeted survey for pimelea spicata	103
Impacts of Glenfield additional car park	104
Heritage	105
Visual.....	106
Social benefits and impacts.....	106
Economic and business impacts	107
Other environmental issues.....	107
Statutory planning instruments	112
Commonwealth matters of national environmental significance	112
Conclusion.....	112

Contents (continued)

	Page Number
4.9 Clarifications to the EA	112
5. Modifications to the SWRL Concept Plan	115
5.1 Introduction	115
5.2 Changes to the Stage A works (Glenfield Junction early works)	115
5.2.1 <i>Construction staging</i>	115
5.2.2 <i>Glenfield additional car parking provision</i>	115
5.3 Impacts of the proposed modifications	124
5.3.1 <i>Glenfield North flyover commissioning and operation</i>	124
5.3.2 <i>Glenfield additional commuter car park</i>	124
5.3.3 <i>Conclusions</i>	125
5.4 Modifications to the SoC	125
6. Conclusions and next steps	127
7. References	129

Contents (continued)

Page Number

List of tables

Table 2-1	Community information session details	8
Table 3-1	Key issue count	12
Table 3-2	Responses to issues raised by organisations/agencies	43
Table 4-1	Comparison of proposed and alternative alignment in vicinity of Cowpasture Road	81
Table 4-2	Predicted LA10 construction noise levels – site specific works	100
Table 4-3	Predicted LA10 construction noise levels – corridor earthworks and track construction	101
Table 4-4	Environmental risk analysis of ‘other environmental issues’ associated with Stage A	108

List of figures

Figure 1-1	South West Rail Link (SWRL) location and key components	2
Figure 3-1	Indicative sections of SWRL in vicinity of Bringelly and Cowpasture Road	27
Figure 3-2	Indicative visual impression of Glenfield South flyover (as viewed from Newtown Road, approximately 200 metres from rail line)	28
Figure 4-1	Alternative alignment in vicinity of Cowpasture Road	83
Figure 4-2	Additional commuter car parking provision, Glenfield Station	85
Figure 4-3	Revised indicative train stabling facility concept	86
Figure 4-4	Revised indicative vertical alignment at Eastwood Road	88
Figure 4-5	Indicative construction worksite locations and haulage routes (Stage A)	92
Figure 5-1a to h	Glenfield Junction early works	116

List of appendices

Appendix A	Revised Statement of Commitments (SoC)
Appendix B	Categorisation of community and non-government submissions
Appendix C	Draft SoC from EA and Concept Plan
Appendix D	Additional Aboriginal heritage assessment
Appendix E	Additional traffic, transport, parking and access assessment
Appendix F	Stage A additional noise assessment
Appendix G	Checklist of matters of national environmental significance (Stage A)
Appendix H	Glenfield Junction Stage A engineering drawings

Glossary and abbreviations list

Term/abbreviation	Definition
ARTC	Australian Rail Track Corporation
CBD	Central business district
CEMP	Construction Environmental Management Plan
Concept Plan	The SWRL Concept Plan is included in Part E of the EA and Concept Plan, as amended as described in Chapter 5 of this report. It outlines the scope and staging of the proposal for which TIDC is applying for concept approval under Part 3A of the <i>Environmental Planning and Assessment Act 1979</i> .
DEC	Former NSW Department of Environment and Conservation (now DECC – see below)
DECC	NSW Department of Environment and Climate Change
DNR	NSW Department of Natural Resources
DoP	NSW Department of Planning
DPI	NSW Department of Primary Industries
EA	Environmental Assessment
GCC	Growth Centres Commission
IGANRIP	<i>Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects</i> (Department of Environment and Climate Change 2007)
LEP	Local environmental plan
MoT	NSW Ministry of Transport
MREP	Metropolitan Rail Expansion Program: collective term for the proposed North West Rail Link, CBD Rail Link, and SWRL (also referred to as NewRail and Sector 4)
NCA	Noise catchment area
NWRL	North West Rail Link
proponent	The person proposing to carry out development comprising all or any part of the SWRL, including any person certified by the Minister to be the proponent (such certification to be obtained prior to commencement of the relevant part of the SWRL).
PSNL	Project specific noise level
RTA	Roads and Traffic Authority of NSW
SCA	Sydney Catchment Authority
SoC	Statement of Commitments
SSFL	Southern Sydney Freight Line
SWRL	South West Rail Link
TIDC	Transport Infrastructure Development Corporation
TMP	Traffic management plan
WSROC	Western Sydney Regional Organisation of Councils Ltd

1. Introduction

The proposed South West Rail Link (the SWRL or 'the project') is a dual track, electrified passenger rail line of approximately 13.1 kilometres that would run between Glenfield and Leppington in Sydney's south-west (see Figure 1-1). The project includes a new stabling facility in Rossmore, an upgrade to Glenfield Station, two new stations at Leppington and Edmondson Park and other associated works. The SWRL is a key part of the NSW Government's Metropolitan Rail Expansion Program (MREP) and is an integral component of the Department of Planning's (2005) Sydney Metropolitan Strategy as it is designed to serve the South West Growth Centre, an area of proposed land release and significant growth in Sydney's south-west.

Transport Infrastructure Development Corporation (TIDC) has been directed under section 18 of the *Transport Administration Act 1988* to undertake preparatory work for the MREP, which includes the SWRL.

Part 3A of the *Environmental Planning and Assessment Act 1979* establishes an assessment and approval regime for major infrastructure projects. It applies to development that is declared to be a Part 3A by either a State Environmental Planning Policy or an order by the Minister for Planning published in the NSW Government Gazette. On 7 April 2006, the Minister for Planning made an order declaring the SWRL to be a project to which Part 3A of the *Environmental Planning and Assessment Act 1979* applies.

Division 3 of Part 3A provides for the environmental assessment and approval of a concept plan for Part 3A projects. Relevantly, on 3 July 2006, the Minister for Planning authorised an application to be submitted for approval of a Concept Plan for the SWRL. On 12 July 2006, the Director-General issued Environmental Assessment requirements in respect of the Concept Plan for the SWRL.

TIDC completed the SWRL Environmental Assessment and Concept Plan in November 2006. The purpose of that document was to seek the Minister for Planning's approval for the Concept Plan for the SWRL under Part 3A of the *Environmental Planning and Assessment Act 1979*; and for that purpose, to demonstrate that the Director-General's requirements had been satisfied.

In accordance with section 75H(3) of the *Environmental Planning and Assessment Act 1979*, the Environmental Assessment and Concept Plan for the SWRL (hereafter called 'the EA and Concept Plan') was publicly exhibited from 22 November 2006 to 2 February 2007. During this period, submissions were sought from interested members of the community and other stakeholders. Submissions were received by the Department of Planning after this date, up to 1 March 2007.

1.1 Purpose of this report

The Department of Planning provided TIDC with copies of the submissions it received and, under section 75H(6) of the *Environmental Planning and Assessment Act 1979*, required TIDC to prepare and submit a response to those submissions together with a revised Statement of Commitments (SoC) to reflect any proposed changes to the project. This Submission Report documents and considers the submissions received on the SWRL EA and Concept Plan and outlines TIDC's responses to these submissions.

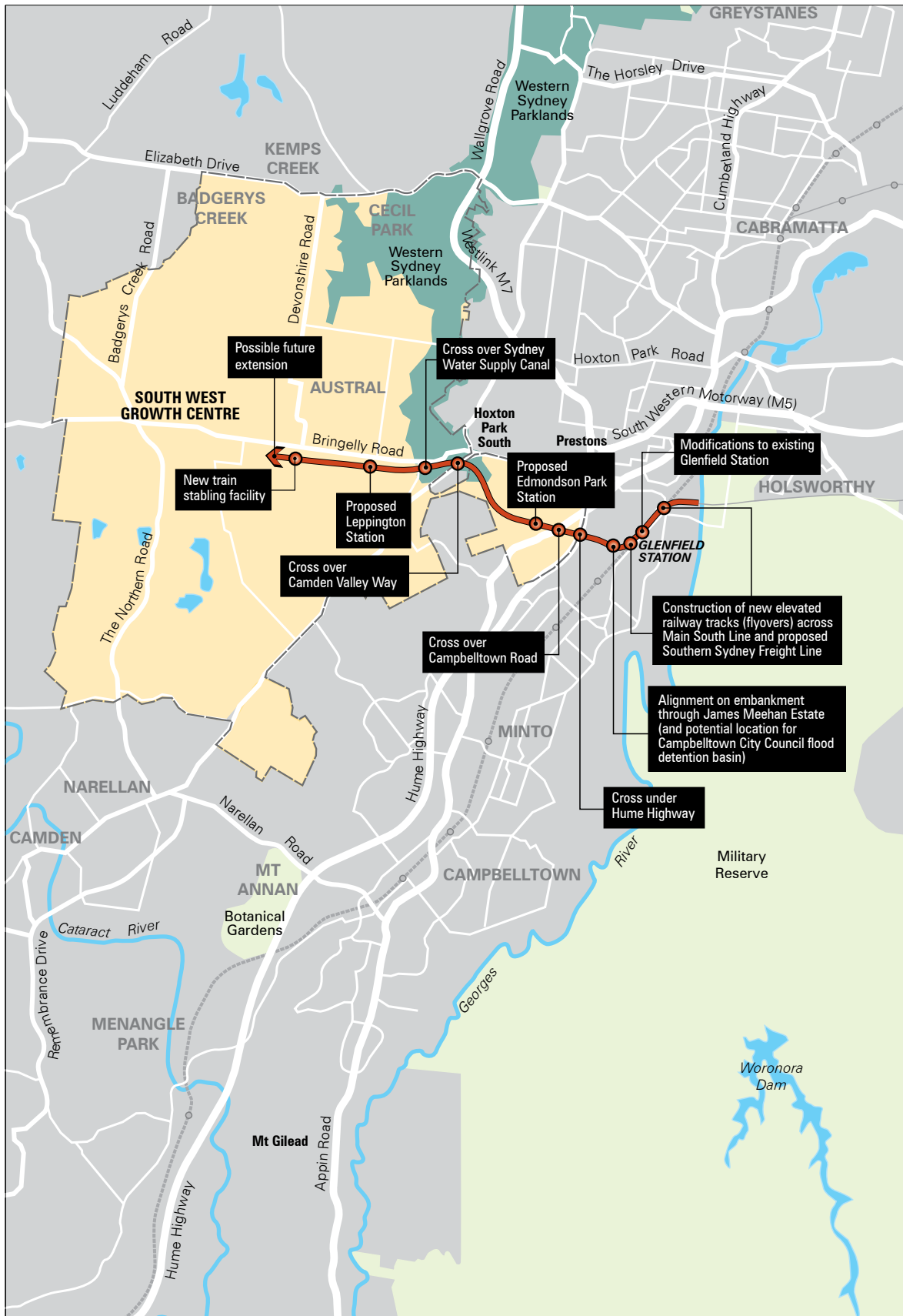


Figure 1-1 South West Rail Link (SWRL) location and key components

— Proposed SWRL (approximately 13.1 kilometres of dual-track railway within approximate 40 metre corridor)

The report also includes details of additional investigations undertaken since the EA and Concept Plan was prepared. Some of the additional investigations were identified as necessary during the preparation of the EA and Concept Plan. In addition, certain investigations were undertaken as a result of consideration of the submissions received.

As a result of TIDC's consideration of submissions and the additional investigations undertaken in respect of the project (as described in Chapter 4), minor modifications to the SWRL project are proposed. This Submissions Report also describes the proposed modifications to the project and contains an environmental assessment of these modifications.

A SoC has been prepared and is set out in Appendix A. This specifies the scope of future environmental impact assessment that would be undertaken and, where appropriate, the management and mitigation measures to be implemented.

1.2 Overview of the SWRL

1.2.1 Summary of the project need and description

The SWRL would support transport growth in a high demand corridor by providing additional services to the East Hills Line and additional stabling for the Sydney metropolitan rail network. It would provide new rail services to the outer metropolitan area, maximising access for new communities. The provision of train services to these areas is expected to encourage a reduction in the use of the private car as the main mode of transport for journeys to and from the South West region; encourage the use of public transport; enhance accessibility for existing and future residents in the South West region; and facilitate integrated transport and land use planning in the South West region, which is necessary to achieve the appropriate levels of urban consolidation and commercial development around transport nodes (TIDC 2006).

In summary, the SWRL project comprises the construction, operation and maintenance of:

- a grade-separated flyover junction over the Main South Line to provide a connection to the East Hills Line north of the Glenfield Station (referred to as Glenfield North Junction)
- approximately 13.1 kilometres of double track within a corridor of approximately 40 metres width over lands to the south and west of the existing Glenfield Junction with the East Hills Line
- modifications to track lay-outs, requiring realignment of approximately 2 kilometres of track and installation of new cross-overs at Glenfield
- reconfiguration of Glenfield Station, including re-location of the station buildings and concourse to provide for centrally loaded platforms, reconfiguring the eastern platform to an island platform and movement of the platforms 80 metres north (The re-configuration would include a high level concourse with easy access, changes to commuter car parking and other changes to surrounding areas to provide additional facilities such as kiss-and-ride and bus stops.)
- flyovers over the Main South Line and the proposed Southern Sydney Freight Line to the south of Glenfield Station and movement of the existing freight track (which will form part of the Southern Sydney Freight Line) slightly west (referred to as Glenfield South Junction)

- two new railway stations, interchanges and commuter car parks at Edmondson Park and Leppington
- a train stabling facility to the west of the new Leppington Station
- ancillary facilities such as power supply, sectioning huts, signalling structures, access roads, and other infrastructure required for the operation and maintenance of rail services and infrastructure.

The railway would initially comprise two tracks; although the 40 metre corridor would provide sufficient width for potential future quadruplication (the addition of two additional tracks to make a total of four tracks) and the construction of cuttings and embankments, as required. (Quadruplication does not comprise part of the current project and if proposed in the future, would be subject to separate assessment and approval.)

A wider, 60 metre rail corridor would be required to allow for the two proposed new stations at Edmondson Park and Leppington. At the proposed train stabling facility, the corridor would be approximately 200 metres wide over a length of approximately 500 metres. The corridor would also be wider than 40 metres through Glenfield Junction and the reconfigured Glenfield Station. Other railway-related ancillary infrastructure such as substations, sectioning huts, maintenance access roads and other operational facilities would also be constructed within this section of the railway corridor, where practicable.

Options for the potential future extension of the SWRL beyond Leppington are not included within the scope of the current project. However planning for the current project does not preclude options for a potential future extension. Further, the planning for a potential future extension is currently being investigated by the Ministry of Transport.

The works comprising the SWRL would be undertaken in two stages. The proposed staging of the SWRL is discussed further in Section 1.2.2 below and in Chapter 20 of the EA and Concept Plan.

1.2.2 Scope of the SWRL Concept Plan and approval

TIDC is seeking approval for the Concept Plan for the SWRL under section 75O(1) of Part 3A of the *Environmental Planning and Assessment Act 1979*. The Concept Plan for the SWRL was described in Part E of the EA and Concept Plan.

The SWRL, as described in the EA and Concept Plan, comprises two stages: Stage A and Stage B, which are explained further below.

Stage A

Section 20.2 of the EA and Concept Plan noted that Stage A would involve:

- commencement of early works (Stages 1 to 4) at Glenfield North Junction and Glenfield South Junction, including:
 - safety fences, services investigations and relocations
 - Glenfield North Junction flyover works: piling, pile caps, substructure and precast superstructure
 - Glenfield South Junction flyover works: piles, pile caps and substructure
 - track and crossover works
 - earthworks and drainage for the future Southern Sydney Freight Line track
- establishment and use of construction worksites (including the establishment of access tracks) at Glenfield and the James Meehan Estate.

The EA and Concept Plan identified that Stage A of the project is fairly well defined, would be likely to have a low risk of significant environmental impacts and could be effectively managed through the SoC and Construction Environmental Management Plan (CEMP). However, further environmental assessment was required to confirm this and would be provided in the Submissions Report (this document).

TIDC has completed further assessment of Stage A and this is documented in Section 4.8 of this report.

As a result of the submissions received during the public exhibition period, the outcomes of the additional investigations detailed in Chapter 4 and release of the NSW Government's (2006a) Urban Transport Statement, some minor changes to the proposed Stage A works are now proposed, as explained in Chapters 4 and 5. A number of changes to the draft SoC for Stage A included in Chapter 21 of the EA and Concept Plan are also proposed. TIDC requests that these modifications be considered by the Minister for Planning in his determination of the project.

Stage B

As explained in Section 20.3 of the EA and Concept Plan, Stage B comprises the construction and operation of the remaining portions of the SWRL:

- the proposed rail lines and associated infrastructure within a defined 40 metre wide corridor between stations and 60 metre wide at the stations
- Leppington Station, Edmondson Station and the train stabling facility west of Leppington Station
- the Glenfield Station upgrade works
- construction sites and ancillary facilities, including power supply, sectioning huts, signalling structures, access roads, and other infrastructure required for the operation and maintenance of rail services and infrastructure.

The EA identified that Stage B of the SWRL is at a less advanced design stage and further environmental assessment of Stage B is needed as the design develops.

As a result of the submissions received during the public exhibition period (see Chapter 3) and the outcomes of the additional investigations detailed in Chapter 4, some changes to the SoC for Stage B of the project are now proposed. TIDC requests that these modifications be considered by the Minister for Planning in his determination of the project.

No changes to the SWRL Concept Plan as it relates to Stage B of the project are proposed.

1.3 The determination process

TIDC has considered and responded to the issues raised by submissions to the EA and Concept Plan in this Submissions Report (see Chapter 3). The Submissions Report is available on TIDC's website (www.tidc.nsw.gov.au).

The Part 3A determination process is summarised as follows:

- Following the lodgement of this Submissions Report to the Department of Planning, the Director-General of the Department of Planning will prepare an Assessment Report for the project (under section 751 of the *Environmental Planning and Assessment Act 1979*).

- The Assessment Report, including a copy of the EA and Concept Plan, this Submissions Report and any advice provided by public authorities, will be submitted by the Director-General to the Minister for Planning for the purpose of the Minister's consideration as to whether to grant approval under Part 3A.
- The Minister will then consider the Director-General's Assessment Report and determine whether to give approval for the project and any conditions that may apply to the approval.
- The determination and the Assessment Report will be published on the Department of Planning's website.

In the event that the Minister determines to give approval for the Concept Plan for the SWRL, section 75P(1) provides that, when giving such approval, the Minister may make any (or a combination of) the following determinations:

- the further environmental assessment requirements for approval to carry out the SWRL or a particular stage of the project under Part 3A of the *Environmental Planning and Assessment Act 1979* (s75P(1)(a))
- that approval to carry out the SWRL or a particular stage of it is subject to Part 4 or Part 5 of the *Environmental Planning and Assessment Act 1979* (s75P(1)(b))
- that no further environmental assessment is required for the SWRL, or any particular stage of it (in which case the Minister may approve or disapprove of the carrying out of the project under Part 3A without further application, environmental assessment or report under Part 3A) (s75P(1)(c)).

1.4 Structure of this report

The report comprises the following Chapters and Appendices:

- Chapter 1 - Introduction: outlines the purpose and structure of this report, and details the determination process.
- Chapter 2 - Consultation: provides an overview of the consultation and public display activities undertaken during and following the EA exhibition period.
- Chapter 3 - Consideration of submissions: reviews the submissions received during and following the exhibition period and outlines TIDC's responses to the issues raised.
- Chapter 4 - Additional investigations: summarises the additional investigations undertaken since the EA was finalised, including investigations in response to submissions received and additional assessment of Stage A of the project.
- Chapter 5 - Modifications to the SWRL Concept Plan: describes and justifies any proposed modifications to the proposal and the SoC.
- Chapter 6 - Conclusions and next steps: provides overall conclusions and outlines the process from here.

2. Consultation

2.1 Consultation during the exhibition period

The EA and Concept Plan for the SWRL was publicly displayed from Wednesday 22 November 2006 to Friday 2 February 2007. Public submissions were invited and sent to the Department of Planning, which then provided a copy of the submissions to TIDC for consideration and response.

The exhibition activities and consultation undertaken during the exhibition period are summarised in the following Sections.

2.1.1 Exhibition venues

The EA and Concept Plan was placed on public exhibition at the following locations:

- Liverpool City Council
- Campbelltown City Council
- Camden Council (John Street and Queen Street centres)
- Department of Planning
- Nature Conservation Council of NSW
- TIDC's offices (Chatswood).

The display included a poster, copies of the EA and Concept Plan (and Summary documents) and copies of the planning update newsletter.

2.1.2 1800 project information line, project email and website

The 1800 project information line and project email address were monitored throughout the exhibition period. Approximately 40 calls and emails were received during this period.

The EA and Concept Plan was also available on the Department of Planning's website, through a link to TIDC's website.

2.1.3 Advertisements

Both the Department of Planning and TIDC advertised the public exhibition of the SWRL.

Advertisements placed by the Department of Planning on the 22 November 2006 and 10 January 2007 appeared in the following papers:

- *Sydney Morning Herald*
- *Daily Telegraph*
- *Campbelltown Advertiser*
- *Camden/Wollondilly Advertiser*
- *Liverpool Leader*.

Advertisements placed by TIDC on 28 November 2006 appeared in the following papers:

- *Liverpool Champion*
- *Macarthur Chronicle*
- *South Western Rural Advertiser.*

Advertisements placed by TIDC on 29 November 2006 appeared in the following papers:

- *Camden Advertiser*
- *Campbelltown Macarthur Advertiser*
- *Liverpool Leader.*

2.1.4 Community newsletter – planning update

Approximately 3,500 planning update newsletters for the project were distributed in November 2006 to residents and businesses in the area surrounding the proposed SWRL corridor. Newsletters were also sent to stakeholders on the project database, and were made available at the public exhibition and community information session venues (see below). The newsletter described the EA and Concept Plan and informed stakeholders about the progress of the planning for the proposed SWRL. The newsletter provided information on the dates and venues for the public exhibition and community information sessions. It also invited submissions to be sent to the Department of Planning.

2.1.5 Letters to affected land owners

Letters and the planning update newsletter were sent to all potentially directly affected land owners. The letter identified that the land owner's property was potentially affected and gave further details of the project.

2.1.6 Community information sessions

Three community information sessions were held during the public exhibition period - one in each local government area. These sessions were advertised in the planning update newsletter, advertisements in the local papers and on the TIDC website. Table 2-1 details the locations, dates and attendance at each session.

Table 2-1 Community information session details

Venue	Date	Attendance	
		Registered attendees	Estimated total (incl. unregistered)
Leppington Progress Hall	2 December 2006	32	55
Glenfield Hall	7 December 2006	15	25
Hilda Davis Centre Liverpool	9 December 2006	1	2

The sessions enabled members of the public to speak to the project team, and view project material. Project material provided at all the sessions included:

- copies of the EA and Concept Plan
- aerial maps with the proposed alignment
- locality maps, which included the proposed alignment, in context to the local area and the South West Growth Centre
- submission forms.

Summaries of the EA and Concept Plan, CD-ROMs of the full EA and Concept Plan, and newsletters were all available for attendees to take away.

Representatives from the Department of Planning were also at the information sessions to talk to community members in relation to property acquisition enquiries and concerns.

Table 2-2 summarises the general issues raised. These have been addressed in the responses to submissions.

Table 2-2 Summary of issues raised at community information sessions

Venue	Issues raised
Leppington	<ul style="list-style-type: none"> ▪ Property acquisition, land valuation and compensation. ▪ Consideration of alternatives. ▪ Additional station at Horningsea Park. ▪ Noise and vibration impacts, particularly from the stabling facility. ▪ Leppington town centre planning and future land use zoning. ▪ Operations.
Glenfield	<ul style="list-style-type: none"> ▪ Parking impacts and future provision for commuter parking at Glenfield. ▪ Visual impacts on Railway Parade (especially flyovers). ▪ Alternative alignments. ▪ Consultation process and community involvement in design development of Glenfield Station. ▪ Operations. ▪ Construction impacts, traffic and transport.
Liverpool	<ul style="list-style-type: none"> ▪ SWRL extension.

2.2 Consultation following the exhibition period

2.2.1 1800 number and email

The 1800 number and email address have been and will continue to be available for the community to contact TIDC with any questions or concerns.

2.2.2 Website

The website was updated following the close of the exhibition period and the Submissions Report is available to download.

2.2.3 Advertisements

Advertisements will be placed in local newspapers advising of the completion of the Submissions Report.

2.2.4 Advice to submitters

A letter will be sent to persons/organisations that sent a submission advising them of the completion of the Submissions Report and their submission number.

2.2.5 Planning update

A planning update newsletter will be distributed to the local community and those on the project mailing list, advising them of the completion of the Submissions Report and outlining the next steps.

2.2.6 Meetings

Meetings have been held with the Department of Planning, Department of Environment and Conservation (now the Department of Environment and Climate Change), Landcom and the Growth Centres Commission since the EA and Concept Plan was prepared. The meetings enabled discussion of specific issues raised in submissions and updates on concurrent processes being managed by these agencies.

Following the completion of the Submissions Report, meetings will be held with stakeholders like local councils, where appropriate, to provide an update and discuss the next steps.

Ongoing consultation with stakeholders and the community will occur during the next stages of the project (see SoCs A9, A10, B3 and B4 in Appendix A).

3. Consideration of submissions

3.1 Overview

In accordance with section 75H of the *Environmental Planning and Assessment Act 1979*, this Section provides responses to the submissions received regarding the EA and Concept Plan for the SWRL.

The Department of Planning received a total of 56 submissions. Of these submissions, 29 were from individuals or local residents, 18 were from government agencies, 4 were from non-government organisations, 2 were from community groups, 2 were from businesses and 1 was from a utility company. A copy of all submissions received by the Department of Planning was provided to TIDC for response.

TIDC's responses to the issues raised in the submissions received forms the basis of this Chapter.

Many of the issues raised were matters of detail that cannot be fully addressed at the Concept Plan level. These issues have been noted and would be addressed as part of further design development and environmental assessment planned for the next stage.

3.2 Analysis process

All non-government agency submissions have been categorised according to the key and specific issues they raised (see Appendix B and Section 3.3). The issues raised in these submissions have been responded to in the overarching categories of 'key' environmental issues (Section 3.3.1), 'other' environmental issues (Section 3.3.2) and other project issues (Section 3.3.3). The key issues discussed relate to the key environmental issues assessed in the EA.

Government agency submissions have been dealt with separately (see Section 3.4), because of the large number of specific, technical issues raised in them. The specific issues raised in the government agency submissions and TIDC's responses to them are provided in Section 3.4.

The draft version of the SoC included in Chapter 21 of the EA and Concept Plan is reproduced in Appendix C for information, as many of the submissions refer to particular draft SoC numbers. TIDC's SoC is included in Appendix A.

3.3 Responses to submissions from the community and non-government stakeholders

A breakdown of the key issues raised in the community and non-government stakeholder submissions is provided in Table 3-1, in the order of most raised to least raised issues. Each number represents the number of submissions that raised the issue at least once.

Table 3-1 Key issue count

Key issue	Number of submissions¹
Property impacts	17
Alternatives – route alignment	15
Support for SWRL	14
Operational noise and vibration	11
Visual and urban design	11
Consultation	11
Traffic, transport, parking and access	10
Alternatives – vertical alignment	7
Adequacy of EA or assessment process	6
Social impacts	6
Economic impacts	4
Object to project	4
Other issues (e.g. SWRL extension)	3
Surface water and flooding	3
Construction noise and vibration	3
Infrastructure and land use impacts	2
Alternatives – other project components (e.g. station locations)	2
Heritage	2
Air quality	2
Flora and fauna	2
Other environmental issues	1

Note 1 This represents the number of submissions that raised a particular issue

3.3.1 Key environmental issues

Property impacts

Sub-issue – property valuation/acquisition process

Due to the number of submissions on the issue (see below), the property acquisition/valuation process is explained as follows, with further responses to specific issues raised detailed in the table below where appropriate.

The acquisition of land (refer Section 10.2.1 in the EA and Concept Plan) for the project is governed by a statutory process under the *Land Acquisition (Just Terms Compensation) Act 1991* (the Act). Acquisition would be undertaken through the Department of Planning (Land Management Branch), by either agreement (negotiation), or as a compulsory process under the Act. A negotiated process would be attempted in all cases in the first instance. If no negotiated agreement can be reached, the Department of Planning (Land Management Branch) is authorised (under the Act) to acquire land by a compulsory process once the project is approved. Furthermore, affected land owners may require the Department of Planning (Land Management Branch) to acquire their property where they would suffer hardship if there is any delay in the acquisition of the land. Hardship acquisition can be requested at anytime, not just once the project is approved, but the obligation to purchase property is only once a project is approved.

The Act makes allowances, where appropriate, to adequately compensate directly affected land owners (whose properties need to be acquired) for market value, severance, special value, disturbance, solatium (i.e. compensation to a person for non-financial disadvantage resulting from the necessity for the person to re-locate from their primary place of residence) and any adverse impact on the residual land if only part of the site is acquired.

As part of this process, the Department of Planning would provide an independent valuer to value each affected property and an offer would be made based on that valuation. Those affected can also commission their own valuations if they wish, the reasonable costs of which would be reimbursed at settlement. That valuation would also be considered by the Department in any offer made. Properties would be valued based on their current market value. The future potential of the land is a factor in the assessment of what is the current market value.

Submission No.	Issue	Response
1, 12, 15, 21, 41, 46, 47, 48, 53	<p>Property valuations/acquisition, including:</p> <ul style="list-style-type: none"> ▪ consideration of impact on long-term residents (particularly the sentimental value) ▪ ability of those affected to buy another property with same attributes in same area ▪ consideration of future potential of the land (including future zoning) ▪ consideration of commercial versus market value ▪ property values noted in report do not reflect real values ▪ compensation for existing infrastructure/investments ▪ consideration of the special infrastructure levy. 	<p>The process is governed by a statutory process, as explained above.</p> <p>There is no allowance under the Act to provide compensation for sentimental value; however, the Act does allow for compensation for directly affected landowners in regard to solatium compensation to a person for non-financial disadvantage resulting from the necessity for the person to relocate from the primary place of residence, as explained above.</p> <p>The impact on the ability to buy another property with the same attributes in the area is noted in the EA and Concept Plan (see Section 10.2.1 and Chapter 17).</p> <p>Future potential is a consideration in the determination of current market value.</p> <p>The only discussion of actual property values in the EA is in the Route Options Report (TIDC 2006) appended to the EA. The values were preliminary estimates prepared for the purpose of the options assessment. They do not represent a firm indication of individual valuations and would not be used for this purpose.</p> <p>The valuations of affected properties would take into account improvements on the properties that are approved development.</p> <p>Land acquisition prices are based on sales of comparable land. The prices achieved in the marketplace reflect the cost and expenses associated with bringing englobo land (mass release of land) onto the market, including the infrastructure levies and Section 94 contributions.</p>
21	<p>Land valuation in deferred matter area in Edmondson Park and consideration of previous zoning as 2(e).</p>	<p>The process and requirements for compensation are determined by the Act, as described above. The deferred matter area is identified in the Liverpool Local Environmental Plan 1997 (LEP). The deferred matter area would be resolved when the rail corridor alignment is confirmed (i.e. if/when concept approval is given). The Department of Planning (Land Management Branch) has advised that the underlying zoning would be determined by enquiry to Council with reference to the surrounding zonings and the previous draft LEP of the area.</p>
4	<p>Relocation (if required due to noise reduction difficulties) should consider current property assets and be within surrounding area.</p>	<p>Only properties that are directly affected would be acquired, as governed by the Act. There is no provision in the Act for compensation to adjacent property owners not directly affected. However, the proponent would have to provide feasible and reasonable noise mitigation to manage any noise impacts on this or other adjacent properties.</p>

Submission No.	Issue	Response
15, 47	Timing of acquisition process – started before exhibition period over.	To date, property acquisition has only occurred east of Edmondson Park. Several land owners along the rest of the SWRL corridor have agreed to have a valuation done and offers have been made based on these valuations. To date no offers have been accepted. Compulsory acquisition cannot proceed until/if the project is approved.
16	Plans to build new house now in limbo.	Negotiations for acquisition are commencing early to minimise concern and impact on those directly affected.
53	Ability of residents to retain remainder of properties if SWRL only directly affects a portion.	The ability of land owners to retain part of their property would depend on the requirements of the project and the cost efficiency of buying part compared to buying the whole of the land. This would be considered on a case by case basis. The SOC also includes a commitment to prepare a Land Asset Management Plan to address land surplus to use, post-construction (see SoC B9 in Appendix A).

Sub Issue – Impact on property values

Submission No.	Issue	Response
17, 46, 50	Property values have been/will be decreased as a result of the project. Property value guarantee should be provided by government.	A number of studies have been undertaken in relation to the effects of rail transit systems on property values. The overall conclusions support that rail infrastructure can have a positive impact on property values, particularly in the vicinity of station locations. A study undertaken by PB (2001) noted that ‘it is clear that in most cases access to rail systems is valued by property owners and there is little support for the suggestion that proximity to rail actually decreases property values.’ Similarly, Booz Allen & Hamilton (1999) undertook a survey of research on the impact of rail transit and property values, and concluded that, in general, proximity to rail is shown to have positive impacts on property values. The relative increase in accessibility provided by the new transit investment is the primary factor in increasing property values. These studies note that a wide range of factors, including surrounding land uses, the real estate market, and proximity to stations, influence the potential for positive impacts on property values. Only properties that are directly affected by the SWRL in terms of land take are subject to compensation under the Act (see further discussion above).
38	Use of developer levies to fund project will inflate the price of new house and land packages.	The decision to use developer levies to fund the project was made by the NSW Government.

Sub-issue – other property impacts/issues

Submission No.	Issue	Response
20	Indirect impacts on Forest Lawn Memorial Gardens Cemetery property.	The proposed alignment avoids any direct impact on the cemetery, recognising that cemetery land is in very short supply and direct impacts would have significant social impacts. Indirect property impacts associated with noise and visual issues would be mitigated, with further design and environmental assessment as proposed in the SoC B41 in Appendix A (see further discussion below under 'Operational noise and vibration' and 'Visual and urban design').
21, 24	Impact on ability to redevelop land in Edmondson Park. Request to purchase land surplus to requirements.	The deferred matter through which the SWRL would pass is defined in the LEP, and would be subject to a rezoning process when the SWRL corridor is confirmed (i.e. if/when the project is approved). The ability to develop this land would depend on the zoning, which would be determined by Council. The site requested for purchase is within the 'deferred matter' area of the LEP and until/if the alignment is approved, the extent of the acquisition required is not confirmed. If only partial acquisition is undertaken (corridor only), the land owner requesting purchase would need to negotiate with the owner of the site for purchase of the land. If the whole of both lots is acquired, disposal of any land would be undertaken in accordance with government disposal guidelines and the SoC.

Land use and infrastructure impacts

Sub-issue – land use impacts

Submission No.	Issue	Response
2	The SWRL will impact on the greenbelt west of Glenfield.	The SWRL is one part of a larger NSW Government commitment to release land for development in the South West Growth Centre, which identified land to be 'protected' as part of the Growth Centre. The large majority of this 'greenbelt' is proposed to be developed as part of the wider Growth Centre development. A draft Conservation Plan for the Growth Centres is currently on exhibition on the Growth Centres Commission's website: http://www.gcc.nsw.gov.au/what's-new.aspx .
16, 49	The SWRL will cross through/destroy the Western Sydney Parklands, which is land reserved for open space and parklands.	The proposed SWRL alignment was selected on the basis of a number of environmental, technical and cost issues and was considered the best alignment on balance as explained in the Route Options Report (TIDC 2006) appended to the EA. The SWRL is not prohibited in any of the zones it crosses. Planning for the Western Sydney Parklands is at an early stage and there is potential for further planning of the precinct to address the SWRL corridor. Consultation was undertaken with the Department of Planning (Land Management Branch) during the preparation of the EA and Concept Plan and would continue during subsequent planning stages of the project to ensure the rail line can be integrated with planning for the Western Sydney Parklands. Where relevant, appropriate measures would be implemented to minimise the visual, noise and access impacts of the project on these sub-precincts (see SoC B8 in Appendix A).

Submission No.	Issue	Response
56	Planning for the SWRL must link with the proposed Leppington town centre.	Some preliminary planning for the town centre was done during the development of the Leppington Station concept. The proponent would also liaise further with agencies responsible for further planning of the town centre as it develops the station design to ensure this integration occurs (see SoC B10 in Appendix A).
40	Further investigation required to determine the precise impact of the SWRL on land use and property before the next phase of the project, along with geotechnical and survey investigations.	Agree. These would occur in the next phase (see SoCs B7 and B45 in Appendix A and Section 20.5 of the EA and Concept Plan).

Sub-issue – infrastructure impacts

Submission No.	Issue	Response
11	Greater consideration should be given to the impact on the Moomba to Sydney and Eastern Natural Gas Pipelines given their importance and the potential for significant safety risks to workers and the general public.	The location of the pipelines was considered during the concept development phase. The design of the SWRL crossing of the pipelines avoids impact on the pipelines. The <i>NSW Pipelines Act 1967</i> , guidelines and Alinta’s procedures would be complied with and this issue would be considered further in consultation with Alinta and other utility owners and operators in the next phase of the design and is covered in SoC B44 in Appendix A.
11	Any proposal to relocate or modify gas infrastructure or construct within the easement of these pipelines would need to be carried out in accordance with the requirements of the <i>NSW Pipelines Act 1967</i> , the <i>Australian Standard for Pipelines – Gas and Liquid Petroleum (AS2885)</i> , and Alinta’s standard operating procedures, with a lead time for implementation of any protection measures of 18 months.	The SWRL proposal does not include relocation or modification to the Moomba to Sydney and Eastern Natural Gas pipelines. Modifications to any other gas installations would occur in consultation with relevant utility owners, as stated in Section 11.1.4 of the EA, prior to construction and adoption of the appropriate design measures and standard construction and occupational health and safety procedures to be implemented in the CEMP.

Traffic, transport, parking and access

Sub-issue- parking at Glenfield Station

Submission No.	Issue	Response
2, 6 and 7	Provision of adequate parking at Glenfield Station during construction and operation.	<p>The NSW Government's new <i>Urban Transport Statement: Responding to the Challenges of Travel and Transport within and across Sydney</i> (the Urban Transport Statement), prepared November 2006, commits to investigate additional commuter parking in the long term.</p> <p>TIDC has done some further assessment of the proposed short-term car parking provision at Glenfield Station, since exhibition of the EA. The form of this assessment and results are described in Chapters 4 and 5. In summary, up to 280 additional spaces are to be built on RailCorp land on the western side of the station, with an additional 15 spaces possible along the access road to the station and school. This is proposed in recognition of the existing strong demand for commuter parking at the Station and would offset the impacts of the SWRL upfront.</p> <p>The additional short-term, at grade parking is proposed as part of the Stage A works for the SWRL. The provision of further car parking at Glenfield, and its delivery as part of the SWRL project would be considered as part of the further assessment, as identified in SoC B12 in Appendix A.</p>

Sub-issue – train operations

Submission No.	Issue	Response
9	Need to reduce travel time between Glenfield and the City by including limited stop trains.	<p>The detailed timetable for services on the SWRL and the wider network has not yet been developed. However, the overall operational plan for the SWRL is described in Chapter 8 of the EA and summarised as follows.</p> <p>The SWRL would provide additional services, including some express services, into the Sydney CBD. Services originating from Campbelltown/Macarthur would stop all stations to Glenfield and then Revesby, Sydenham and Redfern (unless via Airport), and Central. These services would continue in the future through the proposed CBD Rail Link to Chatswood and Epping. Services originating at Leppington would stop all stations to Revesby via Glenfield, then Sydenham and Redfern (unless via Airport), and Central. These services would continue through the new CBD Rail Link to Chatswood and Epping. South of Glenfield, it is proposed that express services to the City via the East Hills Line would interact with Cumberland Line services. On this route, up to four Cumberland Line trains would operate per hour from Campbelltown to Blacktown via Parramatta.</p>
19	Doubling of capacity via East Hills and Granville Lines needs to be for off-peak as well as peak services.	There would be a minimum of 4 trains per hour each via the East Hills and Granville Lines in the peak. The SWRL would be served by at least 4 trains per hour in the off-peak.

Submission No.	Issue	Response
19	Potential for increase in services from Southern Highlands as a result of SWRL improving efficiency on the city-wide network.	The SWRL would provide additional train services to the City via the East Hills Line. Other network constraints may limit the feasibility of increasing direct services to the Southern Highlands.
19	Trains should travel at their optimal speed and avoid unnecessary delays.	Trains would operate at speeds of up to 115 kilometres per hour. Services along the East Hills Line would benefit from improvements associated with the Kingsgrove to Revesby Quadruplication, due for completion in 2010 as part of the Rail Clearways Program.
56	Need to highlight that SWRL will maximise connections between the Growth Centre and Liverpool and Parramatta – where most services will be located.	The SWRL would assist in strengthening these connections. The South Line via Granville would link services from the SWRL directly to Liverpool. Passengers would be able to interchange across the platform at the rebuilt Glenfield Station to Cumberland Line Services to Parramatta. Furthermore, a series of new integrated strategic bus corridors and bus priority measures are also proposed for the Growth Centre, as described in Section 2.3.3 of the EA and Concept Plan, subject to further ongoing review by the Ministry of Transport. These measures would link with the SWRL at new bus/rail interchanges at Edmondson Park and Leppington and assist in enhancing connections to Liverpool and Parramatta.

Sub-issue- Traffic impacts

Submission No.	Issue	Response
17	Narrowing road corridor on eastern side of Glenfield Station would create traffic capacity and hazard problems.	All aspects of the SWRL would be designed to minimise and mitigate hazards to pedestrians and minimise traffic access impacts. Preliminary design work indicates that sufficient width would exist to maintain safe pedestrian and traffic access. These issues would be assessed and mitigated through appropriate design and traffic management measures, which are subject to further assessment in the next phase.
20	The SWRL would have construction traffic impacts on the Forest Lawn Memorial Gardens Cemetery.	Technical Paper 1 of the EA discusses traffic impacts during construction of the SWRL, which are subject to further assessment in the next phase (also refer to the additional assessment in Chapter 4). The assessment concludes that the potential impact on the surrounding road network during construction of the SWRL would be minimal given the current heavy traffic loads experienced by most arterial roads in the South West Growth Centre, and are unlikely to be noticed by motorists in the form of additional congestion. There is a worksite proposed on the northern side of the proposed SWRL corridor, north of the Forest Lawn Memorial Gardens Cemetery, with access from Camden Valley Way. The access to this worksite would be well clear of the entrance to the cemetery. Further assessment of the construction method of the bridge over Camden Valley Way to minimise (and preferably avoid) any closures of the road during construction is proposed (see SoC B18 in Appendix A). Further general assessment of traffic impacts and traffic management measures is also proposed in the next phase (see SoC B16 in Appendix A).

Sub-issue – pedestrian/cyclist access

Submission No.	Issue	Response
19, 56	Stations need to have 'easy access'.	Wheelchair or 'easy access' provision is proposed at all the SWRL stations, and is required by law, as determined by the Commonwealth <i>Disability Discrimination Act 1992</i> and the Government's <i>Disability Standards for accessible Public Transport Guidelines 2004</i> (No. 2).
19	Bicycle storage facilities at stations should be built with sufficient capacity for the future growth in cyclist numbers and in accordance with Australian standards (in consultation with BicycleNSW).	The further design development of the stations and interchanges would accommodate bicycle facilities (see SoC B13 in Appendix A).
51	Request that rail trail be moved to the northern side of corridor to reduce impacts on Cassidy Street residents.	At this stage, no detailed planning of pedestrian and cycle links along the rail corridor has been undertaken. The cyclist and pedestrian access in the vicinity of the SWRL need to be integrated with surrounding land uses and are subject to further design and environmental assessment in the next phase (see SoC B14 in Appendix A).

Construction noise and vibration

Submission No.	Issue	Response
20, 22, 50	Noise and vibration impacts need to be managed during construction.	A concept level assessment of construction noise impacts of the SWRL is included in Technical Paper 5 and Chapter 12 of the EA. Further assessment of construction noise impacts and appropriate mitigation is proposed in the next phase and the SoC addresses this issue (see SoC B31 in Appendix A). TIDC recognises that even with the implementation of best practice construction management measures that adjacent land uses are likely to experience construction noise impacts due to the proximity of the works and the scale of the works proposed. Some impacts are unavoidable for land uses in close proximity; however, the proponent would implement best practice consultation and construction noise management measures to minimise these impacts as much as possible.
50	Timing for release of details of mitigation measures.	As noted above, further assessment of construction noise impacts and appropriate mitigation is proposed in the next phase and the SoC addresses this issue (see SoC B31 in Appendix A). The precise timing of this further assessment is not yet confirmed.

Operational noise and vibration

Sub-issue – operational noise and vibration impacts

Submission No.	Issue	Response
17, 20, 22, 44, 50	Concern about increased noise/vibration levels along the corridor (in general, at Glenfield eastern side, the Glenfield South flyover, and at the Forest Lawn Memorial Gardens Cemetery and Denham Court).	<p>A concept level assessment of operational noise and vibration impacts of the SWRL is included in Chapter 12 and Technical Paper 5 in the EA. Further operational noise and vibration assessment is also proposed in the next phase as the design progresses (see SoCs B33 to B34 in Appendix A). This would be in accordance with relevant guidelines, including the new <i>Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects</i> or the IGANRIP (Department of Environment and Climate Change 2007), which was released subsequent to the completion of the SWRL noise assessment. The proponent would be required to provide feasible and reasonable noise mitigation for the SWRL in accordance with this guideline.</p> <p>In regard to the noise impacts of the flyovers, the concept level noise assessment indicated that noise increase can be minimised on the flyovers with mitigation measures such as low level parapets. These would be considered in the further design and noise assessment for the Glenfield South flyover (see below regarding the North flyover).</p> <p>As described in Section 4.8 of this report, TIDC has done further assessment of the noise and vibration impacts of Stage A of the project, which is now proposed to include full construction and, if required, operation of the Glenfield North flyover. This assessment considered the need for any mitigation for operation of the flyover. Remaining sections of the SWRL (which include the Glenfield South flyover and Glenfield Station works) are subject to further assessment under the IGANRIP and other relevant guidelines, as noted above.</p> <p>The Forest Lawn Memorial Gardens Cemetery would be treated as a sensitive land use under the new IGANRIP, meaning that specific noise trigger levels would apply in the area of the cemetery, against which impacts would be assessed and reasonable and feasible mitigation developed and implemented.</p>
50	Timing for release of details of mitigation measures.	See response above. The precise timing of the definition of mitigation measures for Stage B of the project is not yet confirmed.

Sub-issue – operational noise mitigation

Submission No.	Issue	Response
16	Costing of noise mitigation for the flyover at Glenfield.	Noise mitigation for the SWRL has been costed in TIDC’s preliminary cost estimates for the project.
21	Any acoustic/aesthetic barrier at Edmondson Park should be placed within the cut.	The proponent would be required to provide reasonable and feasible measures to mitigate noise impacts arising from the operating rail line. However, the form or location of noise mitigation along the SWRL (Stage B) has not yet been determined and would be assessed as part of the further design development. If a noise barrier is determined to be the appropriate form of mitigation through this area, visual impacts of any barrier would be considered in consultation with affected land owners.
22	Mitigation measures for noise and vibration should meet noise guidelines.	Feasible and reasonable noise mitigation would be implemented for Stage B of the project where required in accordance with the new IGANRIP and other relevant guidelines, and vibration impacts and mitigation would be further assessed in accordance with the appropriate guidelines (see SoC B32 to B34 in Appendix A). Stage A is discussed further in Section 4.8.
22, 51	Request noise barrier(s) to mitigate noise (Denham Court).	The proponent is required to provide reasonable and feasible measures to mitigate noise impacts arising from the operating rail line. However, the requirement, form or location of noise mitigation along the SWRL (Stage B) has not yet been determined and would be assessed as part of the further design development.

Surface water and flooding

Submission No.	Issue	Response
15, 41	Leppington Station location is inappropriate as susceptible to flooding.	The reasons for the selection of this station location are described in detail in Chapter 6 and the Route Options Report appended to the EA. The Station was moved westwards as the design developed for a number of reasons. A key reason was that the new location would facilitate access to future facilities in the future Leppington town centre. The proposed Station location is situated north of the main area of flood-prone land and any flooding issues are considered to be manageable as outlined in Chapter 13 and Technical Paper 2 (Volume 2 of the EA and Concept Plan). Further flooding assessment is proposed in the next phase to inform the further design development (see SoC B19 in Appendix A).
19	Hydrology must remain a key issue in planning for the SWRL.	Hydrology is identified as a key issue and would continue to be important to the further design development and environmental assessment of the SWRL. This is reflected in SoCs B19 and B20 in Appendix A.
40	Potential for adverse effects on hydrology.	The potential impacts of the project on hydrology were assessed in Chapter 13 (Volume 1) and Technical Paper 2 (Volume 2) of the EA and Concept Plan. Further assessment of this issue is proposed in the SoC to confirm impacts and develop appropriate design and management measures. Additional discussion of the hydrology impacts of Stage A of the project is provided in Section 4.8 of this Submissions Report.

Flora and fauna

Submission No.	Issue	Response
19	Biodiversity must remain a key issue in planning for the SWRL.	Biodiversity is identified as a key issue and would continue to be important to the further design development and environmental assessment. This is reflected in SoCs B21 to B23 in Appendix A.
40	Concern regarding clearing of endangered ecological communities, removal and modification of fauna habitats, alteration of natural flow regimes and unnecessary noise disturbance.	Impacts must be considered within the context of the proposed future urban release. Biodiversity impacts have been minimised as much as possible through route selection and development of the concept. Further efforts would be made in the next phase, including the development of mitigation and management plans. Some impacts are unavoidable. SoCs B21 to B23 in Appendix A clarify the commitments to further assessment of this issue in the further design development, which include a detailed ecological assessment at all construction sites along the project corridor and 'improve or maintain' assessments on biodiversity values consistent with implementation of a method consistent with the <i>draft Growth Centres Conservation Plan</i> (Growth Centres Commission 2007) and the Department of Environment and Climate Change's <i>Draft Guidelines for Biodiversity Certification of Environmental Planning Instruments</i> (2007).
40	Impact on vegetation communities of national and state conservation significance and further fragmentation of remnant bushland habitats, with the potential for significant potential impact on biodiversity.	See above.
40	Oppose use of offsetting as a means of allowing the clearance of native vegetation that is endangered or threatened.	The EA and Technical Paper 3 identify that offsetting is the last option considered (after avoiding, minimising and mitigating impacts).
40	Monitoring of environmental performance of construction so impacts on biodiversity are minimised.	Noted. This would be considered in the next phase and in the development of management plans.
40	Impact on riparian communities and habitats.	The form and size of watercourse crossings are yet to be determined and this would be considered as part of the next stage (see Section 4.9). Box culverts were assumed for the flooding assessment to reflect a worst-case hydrological assessment.

Heritage

Submission No.	Issue	Response
21	Northern alignment would result in loss of greater area of land with environment, conservation and archaeological significance.	As explained in the Route Options Report appended to the EA, cultural heritage issues were considered alongside other issues in the selection of the preferred alignment. Although it was determined that the refined northern route would be likely to disturb more sensitive areas of archaeological value, on balance (considering all of the relevant environmental, construction and operational issues), this option was considered to be the better performing option.
40	<p>Further investigation should be done of:</p> <ul style="list-style-type: none"> ▪ importance of identified cultural heritage items and places located within the proposed construction corridor ▪ areas that were not surveyed ▪ full heritage value and level of impact on the former Ingleburn Military Camp ▪ the crossing of the Sydney Water Supply Upper Canal and associated Bunya Pines and the method by which this occurs. 	Noted. The proponent has committed to undertaking further assessment of these issues (see SoCs B24 to B30 in Appendix A).
53	Consultation with Indigenous stakeholders during route selection.	The assessment for the Route Options Report was desk-top and included a search of the relevant registers of heritage and any native title claims, as well as information available from the existing reports completed as part of the planning for the Edmondson Park LEP area. Consultation with identified Aboriginal stakeholders was undertaken as part of the EA preparation and is proposed to continue in the following project phases.

Submission No.	Issue	Response
53	Process if a significant Indigenous heritage site is found.	<p>A full Aboriginal archaeological survey has not yet been conducted at this early stage of the project. However, some potential Aboriginal sites may be located within the corridor, as identified in the Preliminary Assessment of Aboriginal Archaeological and Cultural Heritage Values in the EA (Technical Paper 6, Volume 3). A full and comprehensive assessment would be carried out to confirm the presence and/or significance of any Aboriginal sites within the corridor in accordance with the <i>Protocol for Aboriginal Stakeholder Involvement in the Assessment of Aboriginal Heritage in the Sydney Growth Centres</i> (the Protocol), and Step 2 of the <i>Precinct Assessment Method for Aboriginal Cultural Heritage in the Sydney Growth Centres</i> (the Precinct Assessment Method), prepared for the NSW Growth Centres Commission (Context Pty 2006a,b). The outcome of this assessment would be to ensure that potentially significant sites are managed appropriately. Any consideration of these sites and their management would be undertaken with full consultation of the identified Aboriginal stakeholders and the Department of Environment and Climate Change. Off-sets would be developed, where necessary, in consultation with the Aboriginal community in regard to any unavoidable disturbance to Aboriginal sites and places and these would be carried out in accordance with the <i>National Parks and Wildlife Act 1974</i> (see SoCs B24, B25 and B30 in Appendix A).</p> <p>In terms of unknown sites/items identified during construction, management measures would be detailed as part of the next stage of assessment, in accordance with relevant legislation and statutory requirements.</p>
53	Addressing of Indigenous heritage issues on properties that could not be surveyed.	As detailed in SoC B25 in Appendix A, subject to property owner approval, areas that were not surveyed in relation to the assessment of non-Indigenous heritage included in the EA would be visited as part of the further assessment.

Visual and urban design

Sub-issue – visual impacts in vicinity of Cowpasture Road

Submission No.	Issue	Response
5, 42, 43, 49	Visual impacts of the proposed vertical alignment of the SWRL in vicinity of Cowpasture Road and Sydney Water Supply Canal.	<p>The SWRL is proposed to go over these structures on a bridge and then on embankment to the west, of up to 10 metres high. The EA (Chapter 16) identifies that the SWRL would have a moderate to high visual impact on visual receivers in this area (in Leppington, west of Cowpasture Road). Some indicative cross-sections have been prepared of the area to indicate the scale of the proposed embankment (see Figure 3-1). A more detailed visual assessment would be prepared as part of the design development (see SoC B36 in Appendix A), which would consider measures to manage visual impacts, including opportunities for improvement, including embankment treatments, bridging design and landscape treatments.</p> <p>The requests for the proponent to lower the vertical alignment in this area (including tunnelling) are discussed below under the heading 'Alternative vertical alignments'.</p>

Sub-issue – visual impacts of Glenfield South flyover

Submission No.	Issue	Response
17	The Glenfield South flyover will be an eyesore and is likely to be damaged by graffiti, which would affect land values.	The visual assessment in the EA (Chapter 16) identifies that this flyover would have a moderate impact on residents in Railway Parade and further east. An artist’s impression of this structure has been prepared (see Figure 3-2). Further visual assessment and design of this flyover is proposed in the next stage (see SoC B36 in Appendix A). SoC B37 in Appendix A includes a specific commitment to develop a design theme for the flyovers to link the rail design together, and ensure they are simple structures, integrated with the surrounding area and finished to a high quality. SoC B3 (see Appendix A) clarifies that the communications processes during the further design development would include opportunities to input into the design of structures. The flyover structures would be designed to discourage graffiti (see SoC B43) and a design theme would be developed as part of the design development to integrate the design with the landscape as much as possible (see SoC B37).

Sub-issue – visual impacts (other)

Submission No.	Issue	Response
21	Visual impact of noise barriers- should be included at concept stage.	The form, location and type of noise mitigation proposed is not yet confirmed and are subject to further assessment, so it is not possible to provide a detailed visual impact assessment of noise barriers at the concept stage. This would be undertaken as part of the further design development and environmental assessment (see SoC B36 and B39 in Appendix A).
22, 51	Visual impacts and mitigation at Denham Court (bushes planted with native vegetation should be considered).	The EA (Chapter 16) identifies that some residents (those closest to the SWRL) in Culverston Avenue and Cassidy Street would see the SWRL in close proximity and visual impacts would be moderate to high. The SWRL would be partially hidden in a cutting in this area, but some vegetation would be removed. The assessment also identifies that moderate visual impacts could occur for some parts of the Denham Court estate, such as Fox Valley Road, where intermittent views of the railway would occur. Further visual assessment is also proposed as part of the further design development (see SoCs B36 to B39 in Appendix A), considering opportunities for improvement, including embankment treatments, the use of earth mounds, bridging design and landscape treatments. Opportunities for ongoing community involvement in the design development would be provided as part of the SWRL communications strategy.



Source: Callinis Cook (2007)

Figure 3-1 Indicative sections of SWRL in vicinity of Bringelly and Cowpasture Roads



Source: Cairdis Cook (2007)

Figure 3-2 Indicative visual impression of Glenfield South flyover
(as viewed from Newtown Road, approximately 200 metres from rail line)

Sub-issue – urban design

Submission No.	Issue	Response
23	Incorporation of artwork into the station designs.	TIDC supports the principle of improving the ambience of station spaces. Public art and interpretation would be incorporated into architectural elements or urban design treatments (see SoC B40 in Appendix A).
56	Urban design needs to enhance physical accessibility of new and existing station surrounds.	This is noted and would be considered in the urban design development of the stations.

Social impacts

Submission No.	Issue	Response
15, 46, 47 (same submitter)	Property acquisition process is creating stress.	This social impact is noted in the EA (see Chapter 17). The negotiation process for acquisition has already commenced to reduce uncertainty in an effort to minimise stress on those affected.
20	The SWRL would create emotional stress for visitors to the Forest Lawn Memorial Gardens Cemetery.	Measures would be developed as part of the further design development to minimise social impacts on sensitive land uses like the Cemetery (see SoC B41 in Appendix A). Noise and visual impacts of the project on users of the cemetery, which are linked to this potential social impact, are to be managed as explained under the headings 'Operational noise and vibration' and 'Visual and urban design'.
51	The rail trail will present opportunities for criminal activities.	The exact route and location of any potential rail trail (pedestrian/cycle pathway) has not yet determined. If and where these are proposed, the location and design of the pathway would adopt Crime Prevention Through Environmental Design (CPTED) principles.

Economic impacts

Sub-issue – economic and business impacts

Submission No.	Issue	Response
20	Impacts on Forest Lawn Memorial Gardens Cemetery business.	These potential impacts are linked to the potential access, visual, noise and social impacts responded to above. Management of these impacts should minimise any potential impacts on the business.
45	Effect of Camden Valley Way overpass on visibility of business near Camden Valley Way.	The SWRL is proposed to travel on a bridge over Camden Valley Way. Further consultation would be undertaken with business owners to minimise impacts on businesses in and around the SWRL project during the further design development, as per the communications processes as outlined in SoC B3 in Appendix A.

3.3.2 Other environmental issues

Other environmental issues

Submission No.	Issue	Response
19	Air quality benefits of SWRL depend on other MREP projects proceeding quickly and will be negated if major road projects carried out.	The SWRL is part of the overall transport strategy for the South West Growth Centre and would have air quality benefits when compared to a no SWRL case.
20	Dust impacts on Forest Lawn Memorial Gardens Cemetery during construction.	As part of the further assessment, consideration would be given to minimising dust impacts on nearby sensitive receivers during construction.
20	Polluted stormwater impacts on Forest Lawn Memorial Gardens Cemetery during construction.	As part of the further assessment, consideration would be given to minimising stormwater pollution impacts on nearby sensitive receivers/environments during construction.
22	Management of contaminated wastes to avoid impacts on residential areas during construction.	The EA includes a number of commitments to manage contaminated materials during construction to avoid impacts on residential areas (see SoCs A34 for Stage A and B46 for Stage B). Any necessary remediation would be undertaken in accordance with standards procedures and guidelines.
49	Sharing infrastructure (and excavation costs) for sewer lines from Leppington to Edmondson Park.	The further assessment would consider whether the design can accommodate any collocation of utilities within the rail corridor (see SoC B10 in Appendix A).

3.3.3 Other project issues

Support for SWRL

Submission No.	Issue	Response
5, 8, 10, 12, 13, 14, 18, 19, 22, 38, 40, 42, 44, 50, 56	Support for the SWRL.	These submissions are noted.

Object to project/proposed alignment

Submission No.	Issue	Response
20, 21, 40, 41, 46	Object to project as a whole or proposed alignment.	These submissions are noted. Only submissions that specifically state an objection are listed here. Some only object to the proposed northern alignment, not the project as a whole. The SWRL is a key component of the MREP announced by the NSW Government in June 2005. The SWRL is also a key transport infrastructure component of the South West Growth Centre.

Consultation

Sub-issue - adequacy of consultation

Submission No.	Issue	Response
15, 46, 47 (same submitter)	Provision of and access to information, including access to the EA, opportunities for input and notification to property owners.	<p>Hard copies of the EA were available for viewing at all the advertised exhibition locations and at the community information sessions. TIDC provided CD-ROMs of the reports on request, and the EA was available for viewing (or printing) from TIDC's website.</p> <p>The consultation undertaken during the development of the project and preparation of the EA is described in Chapter 4 of the EA. A number of opportunities were provided for consultation with individuals throughout all the project phases to date, including a project information line, project website and email address, a public meeting in August 2005 during the exhibition of the Overview Report for the SWRL by the Department of Planning, stakeholder meetings held by TIDC in August and September 2006 and community information sessions during the EA exhibition in December 2006.</p> <p>Letters and the planning update newsletter were sent to all potentially directly affected land owners in November 2006. The letter outlined that the land owner's property was potentially affected and gave further details of the proposal, including dates and locations for the community information sessions. A number of property owners attended stakeholder meetings in August and September 2006 and the community information sessions held in December 2006. A number of property owners also contacted TIDC via the project infoline or email address to ask questions and seek further information.</p>

Sub-issue – requests or suggestions for future consultation

Submission No.	Issue	Response
17, 19, 21, 22, 20	Need for future consultation with community in development of proposal/requests for community consultation.	Ongoing community consultation is proposed with the community throughout the future project phases (see SoCs A9 and B3 in Appendix A). Further opportunities to comment on issues like the urban design of stations, structures and noise mitigation would be provided as part of this process. This would be incorporated within the project's Community Liaison Plan for Stage A, which would also be established to facilitate liaison with affected residents and businesses during construction. TIDC has continued to respond to community and stakeholder enquiries through the project infoline.
19	Need for a public information campaign on operational benefits.	Operational benefits were discussed in the EA and Concept Plan, which was publicly available. This issue would be also considered as part of the communications and consultation processes for the next project phases. A detailed strategy would be implemented to explain how the SWRL would operate well in advance of the project being commissioned.
40, 56	Need for future consultation between TIDC and the Growth Centres Commission to ensure mobility and accessibility outcomes are optimised.	The proponent would work closely with the Growth Centres Commission regarding these issues (see SoCs B11, B14 and B15 in Appendix A). Consultation with the community would be a part of this process in accordance with the SoC B3 in Appendix A.

Sub-issue – consultation with non-English speaking persons

Submission No.	Issue	Response
53	Access to information by non-English speaking persons, and their ability to participate in the submissions process and future consultation.	TIDC has prepared a translation document that advises people they can call the telephone interpreter service. This would be used where appropriate in planning update newsletters in the next project phases. The Department of Planning is able to provide interpreters, where required, to assist those directly affected with the land acquisition/valuation process.

Alternatives –route alignment

Sub-issue – request for alternative route alignment

Submission No.	Issue	Response
5, 18, 43, 44, 49	Request for consideration of alternative alignment (to the south) in vicinity of Bringelly Road, Leppington, to reduce property and other impacts (including visual and noise).	<p>TIDC has investigated moving the alignment in this area, which is compared with the proposed alignment on Figure 4-1. The alternative option is not proposed to be progressed for the reasons outlined in Section 4.2.1.</p> <p>The preferred route alignment was optimised following assessment against a number of criteria, including rail operational, engineering, environmental and cost issues, as explained in the Route Options Report appended to the EA. It is noted that rail design requirements dictate that minor shifts in one section of the line have implications for a length either side.</p>
17	SWRL [new Down East Hills Line] should be constructed on undeveloped western side of rail line at Glenfield, with creation of direct link from Glenfield North flyover to western side of corridor (with operational, visual and noise benefits).	<p>A number of junction configurations at Glenfield have been considered in previous studies, including an option where the East Hills Line joined the South on the western side of the rail corridor.</p> <p>However, this alternative configuration was considered to have a number of operational and cost disadvantages compared with the current proposed layout, including:</p> <ul style="list-style-type: none"> ▪ the inability for services on the SWRL to run on the Main South Line via Liverpool and Granville ▪ the need for a much enlarged northern flyover to span across the entire Main South Line as well as the Southern Sydney Freight Line (SSFL) ▪ the loss of operational flexibility and reliability due to conflicting crossing movements between freight and passenger services ▪ the loss of functionality at Glenfield Station, including cross-platform interchangeability (Freight trains would also need to pass through the station which is not ideal.) ▪ an increase in the footprint of Glenfield Station, with associated cost, traffic/transport and land use impacts.
21, 24	Alignment in vicinity of Denham Court/Edmondson Park - should be placed along the Denham Court boundary (shifted west) in the area of Edmondson Park due to benefits for land management, environmental and heritage values.	<p>The proposed alignment in this area was selected and refined considering the LEP boundary, railway operational issues (i.e. the need to avoid tight reverse curves) and a desire to maximise the developable land in Edmondson Park, while also minimising noise and visual impacts on the existing developed residential area of Denham Court. The proposed alignment is considered the optimal on balance, considering these issues and other assessment criteria. Rail design requirements dictate that minor shifts in one section of the line have implications for a length either side. The design is based on engineering standards, which are determined by safety and operational requirements.</p>

Submission No.	Issue	Response
50	Alignment in vicinity of Denham Court/Edmondson Park – why rail alignment is so close to rear boundaries of Denham Court properties when is no obvious obstruction to moving it eastward, even though this would benefit residents and flora and fauna.	See response above. The alignment was selected to maximise the developable land in Edmondson Park, while also minimising noise and visual impacts on the existing developed residential area of Denham Court. Other operational, engineering, cost and environmental issues (including flora and fauna) were also considered as detailed in the Route Options Report appended to the EA.
41	Alignment in Leppington - TIDC should consider running the rail corridor along Bringelly Road.	<p>The alignment of the SWRL corridor through Leppington was selected and refined considering a range of operational, engineering, environmental and cost criteria, with a key focus on minimising property affectation, and allowing effective integration of Leppington Station with the future town centre as indicated in the South West Growth Centre Structure Plan. The Station (which would be in a cutting at this location would facilitate its future integration with the town centre) is proposed to be located adjacent to Rickard Road to facilitate access to facilities in the future town centre. Rickard Road is identified as being a major north-south transport link.</p> <p>An alignment directly next to Bringelly Road (which is proposed to be upgraded and widened in the future) could create a significant barrier to north-south movements and affect the development of the future Leppington town centre.</p>

Sub-issue –consideration of previous southern alignment

Submission No.	Issue	Response
15, 41, 46, 47, 48	TIDC has not considered another southern alignment option submitted, even though it would cut costs and property acquisitions, is a straighter route and the cemetery land could have been swapped with the State Rail land.	<p>The EA did not consider the alternative southern alignment submitted because a detailed options assessment, including a range of options for the southern alignment, had already been assessed as part of the Route Options Study. The outcome of the assessment demonstrated that a northern alignment is the preferred alignment and a decision was made to proceed with an EA and Concept Plan for the northern alignment. The suggested additional southern alignment only changes a short section of the southern alignment, and does not result in a different outcome when assessed against the northern alignment, based on the same criteria.</p> <p>The proposed SWRL alignment meets the required design standards.</p> <p>The Route Options Report, appended to the EA outlines the history of the development of the northern alignment and provides an assessment of the options considered.</p>
16, 40, 49	Southern alignment option is better/should be considered.	The northern alignment was determined to be the preferred alignment based on a range of criteria and this has been outlined in the Route Options Report and re-iterated within the SWRL EA.

Alternative vertical alignments

Sub-issue – vertical alignment in vicinity of Western Sydney Parklands and crossing of Cowpasture Road

Submission No.	Issue	Response
16, 42, 49	Suggested alternative for SWRL passing under Cowpasture Road and Sydney Water Supply Canal in Leppington.	Tunnelling (or cut and cover construction) of this section of the SWRL corridor is not feasible due to its excessive cost, flooding issues, and the risks associated with the location of critical infrastructure (the Sydney Water Canal and major gas pipelines) at the site.
18, 43	Suggest alternative for lowering vertical alignment in vicinity of Cowpasture Road (Bridge over water canal could be extended and Cowpasture Road lowered and extended under rail line).	This alternative has been assessed by TIDC (see Section 4.2.1), but is not considered feasible for the reasons outlined in Section 4.2.1. The option of the bridge extension would be considered in the further design development and the management of visual impacts through design.

Sub-issue – undergrounding of Glenfield South flyover

Submission No.	Issue	Response
17	Option for underground flyover at Glenfield South.	A dive structure at this location has been considered, but is not considered feasible due to the constraints posed by the necessary grades, constructability issues and flooding issues (see Section 4.2.2 for further explanation).

Alternatives – other project components

Submission No.	Issue	Response
19	Option for retrospective construction of station at Horningsea Park should be retained.	The reasons for selection of the proposed station locations are outlined in Section 6.2.3 of the EA and Concept Plan. The proposed SWRL alignment does not preclude the provision of a station to the south of Horningsea Park, near Bringelly Road. The current Concept Plan does not propose a station at this location for the reasons outlined within the EA and Concept Plan (Section 6.2.3).
40	Alternatives to box culverts may exist that have less impact on the local environment.	The form, location and size of watercourse crossings are yet to be determined (see Section 4.9 and SoC B19 in Appendix A). Box culverts were assumed for the flooding assessment to reflect a worst-case hydrology assessment. See Section 4.9 for further clarification.

Adequacy of EA or assessment process

Sub-issue – insufficient information or assessment

Submission No.	Issue	Response
40	Insufficient investigation has been undertaken to determine the distribution of the species <i>Pimelea spicata</i> , or the detrimental impact the project will have on the population and habitat of the vulnerable Cumberland Plain large land snail.	Further assessment is proposed in the next phase in regard to these and other species – refer SoCs B22 and B23 in Appendix A.
46, 47	The Director-General’s EA requirements have not been met.	The EA was prepared in accordance with the Director General’s requirements. Appendices A and B of the EA summarise where all relevant issues are addressed within the EA.
47	TIDC was required to look into the precinct planning especially around the [Leppington] station.	The South West Growth Centre Structure Plan identifies urban form to inform precinct planning and future decisions on land zoning – it does not zone land. Precinct planning is the responsibility of the Growth Centres Commission as the coordinating authority. The timing for this has not been confirmed. TIDC undertook some preliminary planning of the station precinct to inform the concept, as outlined within the EA. This was undertaken in consultation with the Growth Centres Commission and is considered adequate for the purposes of the EA.
46	Many properties were not accessed during fieldwork even though permission had been given.	The assessments prepared are considered adequate for a concept approval. For various reasons, not all properties that had indicated their approval to enter the site for field assessment could or needed to be accessed on the day. Reasons for this included an inability to get hold of the relevant property owner on the day of survey and/or because there was no need to enter certain properties where adequate survey information could be obtained from adjacent land (e.g. some properties with market gardens and no sensitive habitat did not need to be surveyed for flora and fauna). Field surveys are only one component of the assessment process – background information such as mapping, aerial photography, database searches and previous studies are also used to inform assessments. All directly affected properties would be accessed if and when project approval is obtained, subject to landowner consent.
46	The two refined alignments were refined to make the northern alignment the preferred option.	The northern alignment was adopted as the preferred option for the reasons detailed in the Route Options Report appended to the EA. The northern refined alignment was considered the best overall option considering a range of engineering, operational, environmental and cost criteria.

Submission No.	Issue	Response
20	Lack of detailed information on potential impacts or mitigation measures for Forest Lawn Memorial Gardens Cemetery.	<p>The EA provides a concept level assessment of impacts on this land use, including specific discussion of potential impacts on and mitigation required for the cemetery. Discussion of potential mitigation is provided in Chapters 10, 12, 13, 16 and 17. The recommended mitigation measures are subject to further assessment and there is also a specific commitment in the SoC (see SoC B41 in Appendix A) for the proponent to develop specific measures to minimise impacts on sensitive land uses, which would include the cemetery.</p> <p>The issues raised in the submission are noted and would be further considered in consultation with the Forest Lawn Memorial Gardens Cemetery in the next project phases.</p>
20	Lack of information about future processes, consultation or opportunities to respond.	Sections 4.6 to 4.8 of the EA and Concept Plan outlined what future consultation processes would be followed and opportunities for response. The detailed Community Liaison Plan(s) for the project are yet to be prepared and these would provide more detail on specific consultation proposed in the next project phases (see SoC A9 for Stage A. Consultation process for Stage B would be implemented as per SoC B3.
21	EA fails to consider that northern alignment would result in loss of greater area of land with environment, conservation and archaeological significance.	The EA summarises the assessment of alternative alignments undertaken in the previous route options phase. The Route Options Report appended to the EA explains this process in more detail. Heritage and conservation issues were considered in the assessment together with a range of other criteria.

Sub-issue- Inaccuracies in EA

Submission No.	Issue	Response
19	EA describes existing rail network as 'relatively convenient', which is untrue for users of line outside peak hour.	This statement is subjective. However, it is acknowledged that existing services are more frequent during the peak periods.

Other

Sub-issue – SWRL extension

Submission No.	Issue	Response
8	SWRL extension to Bringelly should proceed.	<p>The SWRL project is being delivered as part of the broader Metropolitan Rail Expansion Program (MREP). A NSW Government announcement of the staging the MREP, including the SWRL, was made in June 2005. The announced completion date for an SWRL extension is 2020, subject to finance, population densities, land release patterns, satisfactory economic appraisals and feasibility assessment. The SWRL extension is not within the scope of the current SWRL project for which TIDC is seeking concept plan approval. However, the proposal does not preclude extension options.</p> <p>As identified in the NSW Government's Urban Transport Statement (2006a), a new Centre for Transport Planning and Product Development has been created within the Ministry of Transport. The Centre is charged with the role of ongoing planning for the MREP, including preliminary investigations into the proposed extension of the SWRL beyond Leppington.</p> <p>The Centre is commencing pre-feasibility investigations into the SWRL extension and would consider a range of corridor and modal options to best meet the transport task for the South West Growth Centre of Sydney, and the proponent would support this work. It is expected that a preferred option would be identified by the end of 2007. The completion of the SWRL extension investigations would not impact on the precinct planning for the South West Growth Centre currently underway.</p>
19	SWRL extension should not be limited to Bringelly - need to look at options and make public.	See above.
40, 56	Failure to plan in advance for extension will have consequences for integrated land use and planning.	See above.

Sub-issue – approval of SWRL

Submission No.	Issue	Response
19	NSW Government and Department of Planning should not reasonably withhold approval of SWRL.	TIDC is seeking concept approval for the SWRL in accordance with Part 3A of the <i>Environmental Planning and Assessment Act 1979</i> .

Sub-issue - broader land use/transport planning issues

Submission No.	Issue	Response
19	<p>Various comments on broader land use/transport planning issues, including:</p> <ul style="list-style-type: none"> ▪ Need to extend transit-oriented development city-wide. ▪ Need to restore Cumberland line to full functionality and then include in the SWRL network. ▪ Bus transitway from Liverpool to Parramatta should also serve parts of the South West Growth Centre. ▪ Precinct planning for stations in South West Growth Centre must take into consideration both pedestrians and cyclists. ▪ The State Government should ensure a safe and effective cycle network is created in the vicinity of the SWRL. ▪ Consideration needs to be given to the Edmondson Park to Ingleburn cycle routes. ▪ Planned upgrade (of Campbelltown Road) between Camden Valley Way and McDonald Road should include safe bicycle facilities. ▪ Planners should consider linking the Western Sydney Parklands cycle paths to the M7 cyclepath. ▪ The bus services serving Leppington station should originate further south (from Camden, Narellan and Harrington Park). ▪ Glenfield Road has inadequate/no bicycle lanes from the new residential developments to the north-west of Glenfield Station. 	<p>The SWRL is being developed as part of an integrated transport network servicing the South West Growth Centre. All of the issues raised in this Submission are broader land use and transport planning issues and, though related, are not specifically the responsibility of the proponent in delivering the SWRL project. The proponent would provide the infrastructure to meet RailCorp's requirements together with interchange facilities (including pedestrian and cycle access), as advised by the Ministry of Transport. The proponent would continue to liaise with the other agencies responsible for transport and land use planning (see SoCs B5 to B11 and B14 in Appendix A).</p> <p>A new Centre for Transport Planning and Product Development has been created within the Ministry of Transport. It is expected that the centre would provide necessary input and advice on transport planning for the South West Growth Centre. The Growth Centres Commission and Councils are responsible for future planning of land uses in the Growth Centre, with input from the Department of Planning (DoP).</p> <p>Some additional specific responses to the above issues raised in this Submission 19 are as follows:</p> <ul style="list-style-type: none"> ▪ Further assessment of pedestrian and cycle linkages is proposed. ▪ The Campbelltown Road upgrade is a separate project being managed by the RTA. ▪ The linking of cycle paths between the Western Sydney Parklands and the M7 is an issue for DoP to consider in its further planning for this precinct. ▪ The preserving of elements of the former Ingleburn Military Camp as part of the Edmondson Park development is a decision for the developer and Council. ▪ The NWRL is currently proceeding through the planning approval process broadly in parallel with the SWRL project. The NSW Government has made a commitment to further assess the feasibility of the CBD Rail Link and the SWRL and NWRL extensions. ▪ Approval has been given to the SSFL.

Submission No.	Issue	Response
	<ul style="list-style-type: none"> ▪ Existing bus transport and access to Glenfield Station is limited to the eastern side of the station and should also be available from the new residential developments on Glenfield Road and new employment lands at CrossRoads Retail Park. ▪ Elements of the Ingleburn Military Heritage Precinct may be worth preserving as a part of the redevelopment of Edmondson Park. ▪ Planning for the centre at Leppington should consider potential for transit orientated development and needs to be expedited. ▪ What are options for transport orientated development at Glenfield Station as part of this project? ▪ Other elements of MREP need to be rapidly completed to facilitate smoother running of the SWRL and wider rail system. ▪ NSW Government should not withhold approval of the SSFL as this is a key element in the timely completion of the SWRL and in allowing freight and commuter rail systems to operate together. 	
21	Requests removal of 'deferred' area' in Edmondson Park and reinstatement of 40 dwellings per hectare allowance in this area.	The deferred matter area would be resolved when the rail corridor alignment is confirmed (i.e. if/when the concept approval is given). The underlying zoning for the remainder of the deferred matter would be determined by Council.

Sub-issue -requests for information

Submission No.	Issue	Response
21	Request further information on extent to which SWRL is positioned within 'deferred' matter area as identified in <i>Liverpool Environmental Plan 1997</i> and future review of the deferred matter area.	The proposed SWRL corridor is wholly located within part of the deferred matter under the LEP. See response above regarding review of deferred matter area (under heading 'Sub-issue - broader land use/transport planning issues').
40	Request further details on pedestrian and cycle facilities that are constructed as part of the station development.	The EA is concept level only. Further assessment of pedestrian and cycle facilities is proposed in the next phase (see SoC B14 in Appendix A).

3.4 Responses to issues: government agency issues

Issues raised in representations by organisation and government agencies regarding the EA and Concept Plan are outlined in Table 3-2, along with TIDC's responses to the issues.

Table 3-2 Responses to issues raised by organisations/agencies

Submission No.	Issues/comments made	Response summary
Campbelltown City Council (No. 3)	Requested extension of exhibition to accommodate Council's meeting cycle.	See full submission from Council below (No. 36). The formal exhibition period was not extended. However, the Department of Planning (DoP) continued to receive and register submissions received after the 2 February 2007.
Western Sydney Regional Organisation of Councils Ltd (WSROC) (No. 25)	<p>The WSROC strongly supports the construction of the SWRL.</p> <p>Full completion of the SWRL and NWRL should not be contingent on the construction of the CBD component.</p> <p>The final project assessment of the SWRL should strongly justify its construction on the grounds of the following:</p> <ul style="list-style-type: none"> ▪ The improved links it will provide to 'higher order' jobs in Western and Eastern Sydney. ▪ The increased accessibility it will provide to higher tertiary education facilities. ▪ The need to provide major transport investment to reduce reliance on private vehicles and to improve air quality in the region. ▪ The potential to reduce the socio-economic impacts of higher fuel prices on car-dependent communities. ▪ The need to redress the historic inequities in transport provision and under-investment in public transport infrastructure in Western Sydney. <p>The SWRL project should commit to the construction of the line to Bringelly and its full integration with the other components of the Metropolitan Rail Expansion Program.</p>	<p>Response noted.</p> <p>The SWRL is not contingent on the CBD component – it is justifiable as a stand-alone project.</p> <p>Noted.</p> <p>The NSW Government announced in June 2005 that the SWRL would be completed by 2012. The SWRL extension project would be completed by 2020, subject to finance, population, land release patterns, economic appraisal and feasibility assessment.</p> <p>As identified in the NSW Government's (2006a) Urban Transport Statement, a new Centre for Transport Planning and Product Development has been created within the Ministry of Transport (MoT). The Centre is charged with the role of ongoing planning for the MREP, including preliminary investigations into the proposed extension of the SWRL beyond Leppington.</p> <p>The Centre is commencing pre-feasibility investigations into the SWRL extension and would consider a range of corridor and modal options to best meet the transport task for the South West Growth Centre of Sydney. It is expected that a preferred option would be identified by the end of 2007.</p>

Submission No.	Issues/comments made	Response summary
	<p>The development of the SWRL should be fully integrated with the planning for the bus corridors and services proposed for the South West Growth Centre.</p> <p>Further detailed assessment and planning for public transport interchanges proposed at stations on the SWRL should be undertaken prior to its commencement.</p> <p>Construction of the line to Bringelly should be integrated with the SWRL (i.e. the extension should be accelerated) to ensure that commuter parking and bus interchange demands are spread across two stations rather than concentrated in the one major centre.</p> <p>Detailed plans should be developed in conjunction with Liverpool City Council providing for the full integration of the following in the design of each Station on the SWRL:</p> <ul style="list-style-type: none"> ▪ local traffic movements ▪ parking and 'kiss and ride' facilities ▪ pedestrian movements, especially in the design of road crossings, footpaths and interchange areas ▪ provision for cyclists (including bicycle locker facilities) ▪ transfers between buses as well as between buses and trains ▪ provision for taxi stands. <p>Assumptions about the use of buses to access the SWRL could lead to significant under-estimates in the demand for commuter parking, particularly in the early years of opening the rail line. The assessment of commuter parking needs to fully consider existing travel patterns and the region's historic high car dependency and include options for providing additional temporary parking at stations and other strategic locations to cope with initial demand.</p> <p>That the proposals for the development of the SWRL are integrated with the plans for the SSFL to minimise any potential operational conflicts.</p>	<p>The proponent would be liaising with the MoT regarding bus connections to the SWRL (see SoC B11 in Appendix A).</p> <p>Interchanges are proposed as part of the SWRL proposal at all three stations as described in the EA. Additional interchange planning would be undertaken as part of further design work, at the SWRL stations.</p> <p>The NSW Government announced in June 2005 that the SWRL and SWRL extension projects would be staged. Parking and bus interchange requirements and demand would be considered in the SWRL extension feasibility study.</p> <p>All three councils would be involved in the detailed planning for the stations (see SoC B11 in Appendix A). The issues listed would all be considered in the further design development of the stations. Additional interchange planning is proposed at the stations as part of further design work.</p> <p>These issues were considered in the traffic and transport assessment—refer to Technical Paper 1. Some additional parking is now proposed at Glenfield in the short term— see Section 5.2.2 of this report. Further assessment of long-term parking at Glenfield and short and long-term parking at the other stations is also proposed (see SoC B12 in Appendix A). Leppington Station parking provision is proposed to be staged as described in the EA. The provision of commuter parking at stations needs to be planned and considered alongside bus servicing plans and other land use development scenarios.</p> <p>The proposal has been integrated with the SSFL. Construction of the proposed SSFL is expected to be completed prior to the anticipated commencement of construction of the SWRL in 2009. This is explained further in Section 10.1.2 of the EA and Concept Plan and the ARTC submission No. 46 (see below). SoC A11 in Appendix A includes a commitment to consult with the ARTC to seek to minimise any cumulative impacts.</p>

Submission No.	Issues/comments made	Response summary
Sydney Catchment Authority (SCA) (No.26)	<p>Issues of concern to the SCA in relation to the potential impact on the Sydney Water Supply Upper Canal are:</p> <ul style="list-style-type: none"> ▪ impact on operational capacity ▪ vibration and security ▪ public safety ▪ stormwater management and water quality ▪ heritage. <p>It is assumed that potential damage to the Upper Canal arising from vibration caused by the construction and operational phase of the rail line will be adequately considered/addressed in the design. The SCA also assumes monitoring will be undertaken to the strictest vibration criteria to confirm the safe working distance at specific sites.</p> <p>The SCA requests that TIDC provides:</p> <ul style="list-style-type: none"> ▪ more detailed information on the proposed works for SCA's information/comment, following the completion of detailed designs to enable a review of potential impacts on water quality, the Canal and associated access/fencing arrangements. ▪ a copy of the Construction Environmental Management Plan. ▪ a copy of any permits or licences, including heritage approvals. ▪ results of vibration monitoring. 	<p>Noted. Potential impacts on this item are discussed in Chapters 15 and 19 of the EA. These issues are believed to be manageable through design and construction measures. TIDC has added a new commitment (see SoC B44 in Appendix A) to clarify that appropriate protection and risk management procedures would be established to protect utilities in consultation with utility owners. Heritage issues would be addressed through SoC B27.</p> <p>This is correct. The SWRL proposal includes bridging over the Sydney Water Supply Canal to minimise potential impacts.</p> <p>Noted.</p> <p>Noted.</p> <p>Noted.</p> <p>Noted.</p>
Landcom (No. 27)	<p>TIDC should begin feasibility studies for the possible SWRL extension (this must occur immediately for the Oran Park precinct).</p>	<p>As identified in the NSW Government's (2006a) Urban Transport Statement, a new Centre for Transport Planning and Product Development has been created within the MoT. The Centre is charged with the role of ongoing planning for the MREP, including preliminary investigations into the proposed extension of the SWRL beyond Leppington.</p> <p>The Centre is commencing pre-feasibility investigations into the SWRL extension and would consider a range of corridor and modal options to best meet the transport task for the South West Growth Centre of Sydney. It is expected that a preferred option would be identified by the end of 2007.</p> <p>The completion of the SWRL extension investigations would not impact on the precinct planning for the South West Growth Centre currently underway.</p>

Submission No.	Issues/comments made	Response summary
	<p>TIDC should engage with the precinct planners (of precincts that may lie on the possible SWRL extension) to confirm if a public transport corridor is required, and if so to confirm likely alignments. It is critical to note that precinct planning will not be delayed to await confirmation of the possible SWRL alignment.</p>	<p>As noted above.</p>
	<p>TIDC should commit to delivery dates for the SWRL proposal in the Submissions Report, as this may affect planning for the Edmondson Park and Oran Park precincts in the short term.</p>	<p>The EA states the indicative timing of the project (operational by 2012).</p>
	<p>TIDC should commit to indicative design dates for the possible SWRL extension in the Submissions Report, as this may affect planning for the Edmondson Park and Oran Park precincts in the short term.</p>	<p>The SWRL extension is not the subject of the EA. As noted above, planning for the extension is being managed by MoT.</p>
	<p>TIDC should actively engage with the Liverpool and Campbelltown City Councils during the project approval stage of planning even though the Minister of Planning is the consent authority for the SWRL.</p>	<p>The SoC includes a number of commitments to actively engage with these councils during the next phase of the project.</p>
	<p>TIDC should commit to engaging with planners preparing locality development control plans for Edmondson Park as it has for planners/project teams preparing precinct plans.</p>	<p>Agreed. The proponent would continue to engage with these planners.</p>
	<p>TIDC should bring forward its project approvals for the locality LB section of the SWRL to coincide with the preparation of the LB locality development control plan.</p>	<p>There is no proposal to fast-track this section of the SWRL. However, the proponent would continue to have ongoing discussions with Landcom to ensure there is coordination between proposals.</p>
	<p>TIDC should coordinate with Landcom regarding future land use options for parcels being acquired within LB to minimise severance and maximise developable areas. (Landcom may be able to assist TIDC in the future disposal/development of this surplus land).</p>	<p>The SoC includes a commitment (see SoC B9 in Appendix A) to prepare a Land Asset Management Plan to address this issue. Landcom would be consulted as a stakeholder in this regard as per SoCs B7 and B10.</p>
	<p>TIDC should relocate the proposed Edmondson Park Station construction sites to the north of the SWRL easement rather than the south.</p>	<p>As detailed in Section 20.5.5 of the EA and Concept Plan, the construction sites shown are indicative only and additional assessment is proposed to confirm their exact location and form in the next phase. The proponent would consider this alternative location as part of this further assessment to ensure the proposed site is acceptable in terms of access, impacts etc.</p>
	<p>TIDC should consult with Landcom and the Liverpool and Campbelltown City Councils during the preparation of the Land Asset Management Plan (to ensure optimal use and early development of surplus land and former construction sites).</p>	<p>The SoC includes a commitment (see SoC B9 in Appendix A) to prepare a Land Asset Management Plan in consultation with the Growth Centres Commission (and Councils where relevant). Landcom would be consulted as a stakeholder in this regard as per SoC SoCs B7 and B10.</p>
	<p>TIDC should minimise the number of commuter car parking spaces available to better comply with the <i>Sydney Metropolitan Strategy's</i> commitment to transit oriented development.</p>	<p>The proposed number of spaces at all the stations is subject to further assessment and would be planned and developed with reference to relevant parking policies, with long-term provision determined considering bus services provision and land use development patterns (see SoCs B12 in Appendix A). The number in the EA for Edmondson Park Station (approximately 250 spaces) is considered consistent with current policies.</p>

Submission No.	Issues/comments made	Response summary
	TIDC should seek opportunities to co-locate the permanent commuter car park with retail and/or residential parking in an unobtrusive indoor purpose-built structure.	The EA and Concept Plan do not preclude this approach. This would be considered in the further assessment of the commuter car parking strategy (see SoCs B11 and B12 in Appendix A).
	TIDC should engage with Landcom and the Liverpool City Council to further refine the design details and staging of the permanent commuter car park.	The SoC (see SoC B11 in Appendix A) includes a commitment to further assess the commuter car parking strategy at Edmondson Park in consultation with Councils. TIDC has included Landcom in this list in its role as developer of Edmondson Park.
	TIDC should support the establishment of an interim commuter car park, if required, in expectation that this land will be unlocked for development once the permanent co-located car park is established.	See above. TIDC has insufficient information on this issue to comment on the appropriateness of this approach now, but it would be considered in the further assessment.
	TIDC should engage with Landcom and the Liverpool City Council to further refine the design details and staging of the interim commuter car park.	See above.
	TIDC should engage with Landcom and the Liverpool City Council during the detailed design of the SWRL in order to identify and optimise pedestrian and cycle access (to prevent the severing of pedestrian and cycle access, particularly in a north-south direction).	The SoC includes commitments to investigate pedestrian and cycle access (see SoCs B13 and B14 in Appendix A). Landcom would be consulted as a stakeholder in this regard.
	TIDC should commit to providing the necessary access infrastructure (e.g. footbridges, underpasses etc.) at TIDC's cost and, if the staging of development requires it, to furthermore provide this infrastructure before construction of the SWRL commences.	This commitment cannot be made at this stage – it is subject to further design development and discussion with relevant stakeholders.
	TIDC should provide noise and vibration mitigation measures at its own cost.	Provision of noise mitigation measures and decisions relating to the provision of noise walls or other mitigation is subject to more detailed assessment as noted within the SoC and in accordance with the new IGANRIP and other relevant guidelines. For new development, noise mitigation is best achieved through a combination of appropriate urban design and provision of noise mitigation, as discussed in Chapter 12 and Technical Paper 5 in the EA.
	TIDC should provide noise and vibration mitigation measures to suit future residential land use as specified in the gazetted rezoning plan, and not existing land use. A 2(e) residential zoning should be assumed in the deferred matter area.	Likely future land use has been considered in the assessments to date. Decisions on the requirement for noise mitigation within the deferred area are subject to a re-zoning decision and can be addressed at the next phase. The proponent would be having ongoing discussions with Landcom in this regard.
	TIDC should consult with Landcom on the recommended mitigation measures and co-ordinate with locality planning process as outlined in Section 5.2 and 5.3 of Landcom's submission.	The proponent would review operational noise issues and mitigation consistent with the new IGANRIP in the next phase (see SoC B32 in Appendix A). Landcom would be consulted as a stakeholder in this regard.

Submission No.	Issues/comments made	Response summary
	<p>Landcom recommends TIDC consults with Landcom as soon as possible in relation to all proposed mitigation measures within locality LB.</p> <p>Noise and vibration mitigation measures should be located within TIDC's land.</p>	<p>See above – this is proposed as part of the next phase.</p> <p>Generally this is likely to be the case. However, currently TIDC does not have sufficiently detailed information to confirm this and it is subject to further design development. In some cases, it may not be appropriate (e.g. mounds partly outside of the 40 metre rail corridor may be negotiated as a better solution). Decisions on the location of noise mitigation if located outside the 40 metre rail corridor, such as noise mounds, would be subject to negotiation with individual land owners.</p>
	<p>TIDC should provide two additional suggested photomontage locations in the Submissions Report, one from the perspective of the town centre looking south-east towards Viewpoint 8, and another from the Edmondson Regional Park looking south towards Viewpoint 8.</p>	<p>It is not practical to provide perspectives for all viewpoints along the corridor, particularly given the early concept level of design development.</p> <p>More detailed visual assessment in this area would be undertaken when further design information is available.</p>
	<p>TIDC should provide an additional suggested photomontage location in the Submissions Report from the perspective of the north-west corner of locality LB, looking south-west towards viewpoint 12 and provide mitigation measures.</p>	<p>Refer to the response provided above.</p>
	<p>TIDC should provide an additional suggested photomontage location in the Submissions Report from the perspective of the north-west corner of locality LB, looking south-west towards viewpoint 15 and provide mitigation measures.</p>	<p>Refer to the response provided above.</p>
	<p>TIDC should furthermore commit to providing mitigation measures for each of the above additional suggested photomontage locations where required in consultation with Landcom, developers, landholders and the relevant council.</p>	<p>Refer to the response provided above.</p>
	<p>The use of the cut-and-cover method of construction should be examined across the entire east-west transect of the town centre, to maximise north-south connectivity, to better integrate that station with retail and commercial uses and to minimise visual, noise and vibration impacts.</p>	<p>The additional cost of providing cut-and-cover would be prohibitive. Other constraints, such as flooding and the need for a crossing over Campbelltown Road, also limit the feasibility of such an option.</p> <p>The current design in a deep cutting allows for the construction of road overbridges and construction of the station concourse at ground level, maximising integration of the town centre. The SoC in Appendix A includes a number of commitments to ensure connectivity and integration within land use planning (see SoCs B5 and B10 in Appendix A).</p>
	<p>TIDC should consider the establishment of Edmondson Park Station below ground, including station concourses, toilets and staff amenities (e.g. Subiaco Station, Perth, WA).</p>	<p>See above. The proponent would ensure high quality urban design outcomes for the stations and their precincts through the use of urban design principles to guide the station design with input from a Design Review Panel (see SoCs B37 and B38 in Appendix A).</p>
	<p>TIDC should design the Edmondson Park Station cut-and-cover section of the alignment to support building loads above the easement (this design should be prepared in coordination with Landcom).</p>	<p>Edmondson Park Station is not proposed to be a cut-and-cover construction (see above).</p>

Submission No.	Issues/comments made	Response summary
	<p>TIDC should engage with the town centre developer and the Liverpool City Council regarding the detailed design of the Edmondson Park Station, and to coincide with the locality development control plan for the locality LG (see Section 5.5 of Landcom’s submission).</p>	<p>This liaison is proposed – see SoC B5 in Appendix A. TIDC would use an Independent Design Review Panel to guide the application of urban design principles throughout the future design and assessment process (see SoC B38). The Independent Design Review Panel has been established by TIDC and comprises of the Government Architect, who Chairs the meetings, two eminent architects, TIDC’s Architectural Manager and relevant project staff. The panel reviews design proposals for consistency with the overall project design objectives, and with State and local government master planning.</p>
	<p>TIDC should lower the watercourses at Crossings 4 and 6 to manage for flooding rather than raising the SWRL vertical alignment around the town centre.</p>	<p>Subject to further flooding assessment and design (as per SoC B20 in Appendix A), the proponent does not intend to lower these watercourses (see further discussion in Section 4.9).</p> <p>SoC B19 in Appendix A proposes this.</p>
	<p>TIDC should engage with the town centre planner/project managers and the Liverpool City Council during the project approval phase of the station to ensure the concept design is not adversely compromised by hydrological issues.</p>	<p>SoC B19 in Appendix A proposes this.</p>
	<p>TIDC should engage with Landcom regarding the <i>Edmondson Park Stormwater Management Review January 2006</i> report, and utilise this study’s findings during its project approvals.</p>	<p>Noted. This would be considered in the next phase of the project.</p>
	<p>TIDC should recognise the previously negotiated conservation offset and positive outcomes before entering into discussions with relevant stakeholders.</p>	<p>The previously negotiated offsets are acknowledged and are discussed in the EA and Concept Plan (Section 14.6.2). These would be considered in the further assessment of this issue.</p>
	<p>TIDC should recognise that Edmondson Park is now proposed to be included in the Growth Centres biodiversity certification; however, the environmental and development outcomes secured during the rezoning phase will not change.</p>	<p>Noted. The points raised would be considered in the further assessment of this issue.</p>
	<p>TIDC consultation with Indigenous groups should be strictly confined to impacts related to the SWRL.</p>	<p>The focus of the consultation is limited to the context of the SWRL within the surrounding environment. Aboriginal stakeholders have been advised that the Edmondson Park development is a separate project.</p>
	<p>TIDC should refer Indigenous groups to the relevant council and/or Landcom (in the case of land it owns or land in Locality LB) should issues arise that are outside of the scope of the SWRL proposal.</p>	<p>Noted.</p>
	<p>TIDC should clarify the role of Glenfield in the Submissions Report, and reflect the intended centres hierarchy of Edmondson Park as a greater centre than that of Glenfield as per the <i>Sydney Metropolitan Strategy</i>. Furthermore, TIDC should engage with the Department of Planning in relation to that for the Subregional Planning Strategy for the area. The Submissions Report should confirm Glenfield’s status as an enhanced transit hub, but subservient in the centres hierarchy to Edmondson Park.</p>	<p>TIDC has been engaging with DoP as part of the subregional planning. The EA indicates that Glenfield may be subject to growth pressure as a result of improved rail services from the SWRL. This would need to be managed as part of the further station precinct planning and the proponent would liaise with DoP and Campbelltown Council about this issue in the further design development (see SoC B6 in Appendix A).</p>

Submission No.	Issues/comments made	Response summary
	<p>TIDC should use the correct label of 'Landcom' in the Submissions Report (not 'LandCom', which may confuse members of the public).</p> <p>The following amendments to the SoC are requested by Landcom:</p> <p>Development controls adjacent to the easement - Commitment 25 – Add Landcom to the list of key stakeholders to engage with, particularly regarding the preparation of the locality development control plan for locality LB.</p> <p>Impacts upon land use of Edmondson Park Station - Commitment 26 – Add Landcom to the list of key stakeholders.</p> <p>Land Asset Management Plan Commitment 29 – Add Landcom to the list of key stakeholders, especially considering construction sites may be located on Landcom land.</p> <p>Locality development control plans - Additional commitment – Add a commitment that TIDC will conform to the locality development control plan planning process as required by the Liverpool City Council during the detailed design for that section of the SWRL located within the Edmondson Park precinct.</p> <p>Commuter parking Commitment 34 – Add Landcom to the list of key stakeholders in regards to the Edmondson Park Station.</p> <p>Maintenance Plan for access points - Commitment 35 – Add Landcom to the list of key stakeholders in regard to sites located within the Edmondson Park precinct.</p> <p>Pedestrian and cycle access across the easement - Commitment 38 – Add a commitment to consult with key stakeholders such as local councils, the Growth Centres Commission and Landcom for access across the SWRL within the Edmondson Park precinct.</p> <p>Noise mitigation design - Commitment 54b – Clarify that noise mitigation will be at TIDC's cost and will be provided to suit future land use (rezoned or within the 'deferred matter'), not current land use where that land is within the Edmondson Park precinct.</p>	<p>Noted.</p> <p>Noted. SoC B5 in Appendix A replaces previous SoC 25. SoC B5 now includes, 'where relevant, other agencies responsible for locality and precinct planning' (see Appendix A). Landcom would also be consulted as a stakeholder as per SoC B3 in Appendix A.</p> <p>SoC B7 in Appendix A replaces previous SoC 26, and includes consultation with 'surrounding land owners', which would include Landcom.</p> <p>The Land Asset Management Plan applies to the entire project (not just Edmondson Park). Where relevant, certain key landholder/developers such as Landcom would need to be consulted.</p> <p>Edmondson Park is also part of the Growth Centre and would also be captured under SoC B10 in Appendix A.</p> <p>The proponent would liaise with Council as detailed in SoCs B5 and B10 in Appendix A.</p> <p>TIDC has been working closely with Landcom over the last 18 months in regard to the Station concept.</p> <p>This commitment has been replaced by SoC B15, but the issue of access is covered in SoC B10 in Appendix A. Where relevant, certain key landholder/developers such as Landcom would need to be consulted.</p> <p>This issue is covered by SoC B11 in Appendix A, which makes reference to Landcom. Note: the SWRL is not an 'easement'. All land required for the project would be acquired and zoned appropriately.</p> <p>Future land use was considered in the EA noise assessment and would be considered in the further design development and assessment. Mitigation would be incorporated 'where reasonable and feasible' in accordance with the IGANRIP and would be determined in the next phase.</p>

Submission No.	Issues/comments made	Response summary
	<p>Station urban design principles - Commitment 57 – Add a principle that recognises that the station design shall seek to overcome issues inherent with rail line dividing the town centre. The Edmondson Park Station design shall provide an expansive pedestrian plaza connecting the northern and southern sides of the town centre, ensuring that there is no visual or physical barrier and encouraging activity on both sides.</p> <p>Landscape and urban design around stations - Commitment 59 – Add Landcom to the list of key stakeholders.</p> <p>Underpasses - Commitment 61d – Commit to seek to provide other access means before providing underpasses within the Edmondson Park precinct. Underpasses encourage crime and will have an adverse effect upon the long-term social sustainability of Edmondson Park.</p> <p>Remediation Action Plan - Commitment 68 – Add a note that TIDC will use the Remediation Action Plan at its own risk. Landcom will not be held liable.</p>	<p>The principles outlined in SoC B37 in Appendix A adequately cover the objectives for the design of the SWRL stations within new town centres.</p> <p>The Edmondson Park Station design has not yet been undertaken and is subject to further design development. The proponent is committed to achieving a high quality urban design outcome.</p> <p>Landcom would be consulted as stakeholder in this regard as per SoC B3 in Appendix A.</p> <p>SoC B39 in Appendix A highlights that if underpasses are proposed anywhere on the SWRL, that they would conform with CPTED principles.</p> <p>The provision of either overpasses or underpasses is directly related to rail design levels and a range of other constraints that are yet to be determined.</p> <p>This SoC has been deleted and a broader commitment to management of contaminated land has been made (see SoC B46 in Appendix A).</p>
Sydney Ports (No. 28)	<p>It is important that works in the interface between the proposed rail corridor and the existing Main South Line at Glenfield Junction provide adequate infrastructure to support the growth of passenger operations in a manner that is not at the expense of existing and projected freight train movements along the corridor.</p> <p>Sydney Ports believes that the grade separation of Glenfield Junction to segregate the SSFL and passenger services will not impede the efficient operation of the SSFL when this project is completed in the next 3 years.</p> <p>It is important that the impact to freight services during the SWRL construction is minimised by ensuring that timely information is provided to affected stakeholders. Sydney Ports requests that it is included as part of any communication strategy on track possessions during the construction period of the SWRL, and requests that such information is provided via established committees and contact networks.</p>	<p>The project has been designed in accordance with RailCorp's operational plans, who would manage and operate the SWRL. Flyovers would separate passenger trains from freight at Glenfield Junction.</p> <p>Response noted.</p> <p>Noted. Possessions are pre-planned. Existing committees and contact networks would be used to ensure impacts on freight are minimised.</p> <p>Sydney Ports would also be consulted as a government stakeholder in accordance with the communication processes detailed in SoC A10 for Stage A and SoC B4 for Stage B, which propose ongoing liaison with government agencies regarding their issues raised.</p>
Department of Primary Industries (DPI) (No.29)	<p>DPI has no objection to the proposal provided that the management/mitigation measures outlined in Section 13.5.2 are implemented (i.e. that the guidelines for fish and fauna friendly waterway crossings are incorporated into the design of the waterway crossings and that DPI is consulted about the final crossing structures).</p>	<p>This is proposed as per SoC B21 in Appendix A.</p>

Submission No.	Issues/comments made	Response summary
	<p>The area covered by the EA is underlain by the Illawarra Coal Measures that contain potential coal resources. Any development in the area needs to acknowledge the presence of this potential resource and make some provision for possible future underground mining of the coal. (This advice has been previously provided; however, the EA only acknowledges receipt of the comments and makes no reference to them in the report itself.)</p>	<p>Noted. At the concept level of assessment, it was not possible to assess the impacts on potential future coal mining. The EA simply noted that this was an issue that could be considered further as part of the design development.</p> <p>It is worth noting that the proposed structures required for the SWRL are simply supported type structures and, as such, would not generally be more prone to damage than domestic structures, which current planning provisions propose to allow on both sides of the railway between Glenfield and Leppington without restrictions placed by potential future coal mining.</p> <p>Any impact of the SWRL project on future underground coal mining and/or coal seam gas extraction in relation to future subsidence is difficult to assess or reasonably or realistically mitigate at this stage. Assessment of the potential for subsidence would usually be undertaken by the proponent of the underground mining and/or coal seam gas extraction, depending on the specific details of the mining and/or coal seam gas extraction proposed.</p>
<p>Department of Environment and Conservation (DEC) (now the Department of Environment and Climate Change or DECC) (No. 30)</p>	<p>Many of the issues raised by the DEC in its submission on the adequacy of the EA for concept approval have not been addressed in the EA. These comments still stand and DEC's current submission should be read in conjunction with our previous submission.</p> <p>The project will need a construction licence and will need to be licensed for operation. TIDC will need to make a separate application to DEC to obtain this licence once project approval is granted.</p> <p>The detailed noise assessment should:</p> <ul style="list-style-type: none"> ▪ identify both noise catchment areas (NCAs) and individual residential receivers, as well as other sensitive receivers (such as schools, hospitals etc.) ▪ employ current best practice rail noise assessment criteria ▪ include an assessment of rail noise impacts for both time of opening and 10 years (nominally) after opening 	<p>Noted. TIDC has met with DECC and will continue to consult with DECC regarding issues raised throughout the EA process.</p> <p>Noted and included in the EA.</p> <p>Noted. The noise assessment in the EA was concept level only. Detailed noise assessment would be done at the next stage in accordance with best practice guidelines, including the new IGANRIP, and in consultation with DEC.</p> <p>Further assessment of noise impacts and mitigation for the Stage A works is detailed in Section 4.8.</p>

Submission No.	Issues/comments made	Response summary
	<ul style="list-style-type: none"> ▪ include a commitment by TIDC and/or RailCorp to implement additional feasible and reasonable measures should post-construction noise monitoring indicate a general trend in exceedance of predicted noise levels. <p>Regarding the stabling facility detailed noise assessment:</p> <ul style="list-style-type: none"> ▪ Additional background noise monitoring should be undertaken prior to commencement of stabling activities to confirm the Project Specific Noise Levels (PSPNLs). ▪ The detailed assessment should consider future land uses potentially impacted by the stabling facility and relevant criteria now and in the future so the required 'design noise performance' of the stabling facility is established. ▪ A conservative approach should be adopted to derive noise goals and feasible and reasonable mitigation should be applied to attempt to achieve the goals (including enclosures). ▪ Further feasible and reasonable mitigation options to minimise noise levels from stabling, brake testing and horn blasting, particularly at night-time, such as complete enclosure(s), should be explored during the detailed design stage. 	<p>See comment above. Noise assessment would also be undertaken consistent with the Industrial Noise Policy (refer SoC B33 in Appendix A).</p>
	<p>Calibration results of the noise assessment are acceptable for the concept phase, provided that additional validation of the model (SoundPLAN) is undertaken in the detailed assessment. This may include validation arising from an operational compliance assessment of the Cronulla Line Upgrade, the Revesby Turnback Project and the Epping to Chatswood Rail Line Project.</p>	<p>See comment above.</p>
	<p>The EA has not considered in any detail the implications of mitigation measures (e.g. residential setbacks) on precinct planning and lot yields. If it is intended that future sensitive development be designed and constructed to mitigate against future rail noise and vibration impacts, the timely provision of a sufficient level of information to inform relevant planning instruments is essential for land use planning authorities.</p>	<p>As mitigation measures are not yet confirmed, detailed assessment of this issue was not possible in the EA. The proponent is committed to management of construction and operational noise and vibration, utilising recognised guidelines as part of the further design development process. Precinct planning for much of the Growth Centre is yet to be undertaken and the proponent would liaise with those responsible as per SoC B5 in Appendix A. TIDC also wrote to the DoP in October 2006 to request that it considers 'potential commercial or light industrial' land uses around the stabling facility in its future planning (as an update to the South West Growth Centre Structure Plan).</p>
	<p>DEC is concerned that mitigation applied to the façade of a noise sensitive receiver will only provide internal acoustic amenity. The detailed design of the project should apply feasible and reasonable mitigation to seek to achieve the external noise goals, where applicable.</p>	<p>TIDC is yet to determine the form or location of noise mitigation along the SWRL. Where required, feasible and reasonable noise mitigation would be implemented where required in accordance with the new IGANRIP.</p>

Submission No.	Issues/comments made	Response summary
	<p>The detailed design should include a detailed assessment of vibration impacts of the project. All feasible and reasonable mitigation measures should be implemented to ensure vibration levels are minimised and meet the criteria.</p>	<p>Feasible and reasonable mitigation measures for operational vibration are proposed to be investigated in consultation with DECC, Councils and RailCorp (see SoC B34 in Appendix A). TIDC has added a new SoC regarding further assessment of construction vibration to clarify the proposal to do further assessment as the design develops (see SoC B31).</p>
	<p>The proponent needs to clearly acknowledge that a Construction Noise Management Plan (CNMP) may not be able to reduce noise from construction works to meet the relevant construction noise goals.</p>	<p>This is acknowledged. It is highly likely that noise levels would still exceed the guidelines in some areas during the most noisy construction activities.</p>
	<p>The two issues of paramount importance in the construction noise assessment are effective communication with, and management of the affected community; and early erection of temporary and, where possible, operational noise barriers.</p>	<p>Noted. TIDC has added a new SoC regarding further assessment of construction noise as the design develops (see SoC B31). This would be considered in the further design development and detailed noise assessment.</p>
	<p>Night-time truck movements to and from construction sites should be limited to minimise sleep disturbance of surrounding sensitive receivers. TIDC should also investigate and implement other suitable measures to minimise noise from truck movements to and from the construction sites, such as restricting the use of engine brakes and clever site layout to minimise maneuvering of heavy vehicles (and the impacts of reversing vehicles).</p>	<p>Noted. This would be considered in the further design development and detailed noise assessment.</p>
	<p>DEC does not consider that the conclusions regarding the impacts on threatened species are justified, as they are based on limited assessment.</p>	<p>Further assessment is proposed. The assessment is appropriate for the concept phase and meets the EA requirements.</p>
	<p>DEC strongly suggests that adequate flora and fauna surveys are undertaken at the concept approval stage, when there is still scope for minor alignment changes to assess the impacts of the proposal compared to alternative options.</p>	<p>Flora and fauna issues were considered in the Route Options Report when there was more scope to amend the alignment. Minor alignment changes in rail projects are limited by design parameters.</p> <p>A habitat-based assessment was prepared, which is considered appropriate for the concept level phase due to stage of design development and restricted property access. Further assessment is proposed in the next phase and would be consistent with maintain or improve principles (see SoCs B22 and B23 in Appendix A).</p> <p>TIDC has had subsequent discussions with DECC regarding this approach.</p>
	<p>It is highly likely that a number of other species (as listed in the DEC submission) are located within or in close proximity to the study area (in addition to the Cumberland Large Land Snail and <i>Pimelea Spicata</i>).</p>	<p>The biodiversity assessment recognises that habitat is present for <i>Pultanaea pedunculata</i>, <i>Marsdenia viridiflora subsp. Viridiflora</i> and <i>Acacia pubescens</i>. Other species were discussed, but habitat was not found to be present. It is recognised that further survey is needed in the next phase.</p>
	<p>If the proponent does not intend to undertake additional survey work at this stage, the assumption should be made that the flora and fauna species contained within the DEC submission response are present in remnants within the corridor, and the EA conclusions changed accordingly.</p>	

Submission No.	Issues/comments made	Response summary
	<p>The DEC requests clarification of the amount of each EEC remaining within the subject site (footprint) and study area (indirect impacts) and the amount of each EEC to be impacted by the project. There is a large inconsistency between Section 3.8.1 (amount of each EEC remaining on-site) and Table 4-1 (EECs to be cleared) in the ecological assessment.</p> <p>The Ecological Assessment refers to Sydney Coastal River Flat Forest as an EEC. This community is no longer listed as an EEC. The newly listed community is River-Flat Eucalypt Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South-East Corner Bioregions, which includes and replaces Sydney Coastal River Flat Forest, but is broader than the previously listed community. The proponent should ensure that all biodiversity assessments be undertaken in accordance with the current listings of EECs, threatened species and populations in line with the Scientific Committee Final Determinations.</p> <p>DEC recommends that the draft SoC contains the following commitments:</p> <ul style="list-style-type: none"> ▪ The proponent will undertake a detailed noise assessment prior to applying for project approval which: <ul style="list-style-type: none"> a. Includes a detailed land use survey to enable the identification of all sensitive receiver locations that require assessment at the detailed design phase. b. Includes a detailed assessment of the proposed construction activities to be undertaken as part of design development and include the investigation of appropriate noise mitigation measures. The detailed assessment should extend to construction traffic noise assessments. c. Considers and adopts current best practice rail noise and vibration assessment criteria applicable to the identified sensitive receivers (this could be achieved by a modification to Commitment 54). d. Includes current best practice noise and vibration prediction methods. Uncertainties in the prediction methods shall be identified and contingencies and safeguards shall be incorporated into the prediction/design process to mitigate against potential prediction inaccuracies. 	<p>The numbers in Table 4-1 are correct. The text is in error.</p> <p>As stated in Section 5.2 of the EA and Concept Plan, it is acknowledged that Sydney Coastal River Flat Forest forms part of the listed River Flat Eucalypt Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner bioregions. The assessment was checked and done on the basis of the new listed community (i.e. all numbers and references to this community relate to the new listed community).</p> <p>The assessment to date has been undertaken to a concept level only. Detailed noise assessment would be done during the next stage of assessment in accordance with best practice guidelines, including the new IGANRIP. The revised noise and vibration SoCs require that any assessment would be done in consultation with DECC (see Appendix A). A commitment has also been added to clarify that further assessment of construction noise and vibration is also proposed.</p> <p>Section 4.8 of this report clarifies the impacts and mitigation associated with Stage A of the project (further assessment completed).</p> <p>This would be considered in the development of the method for the detailed assessment.</p> <p>As above.</p> <p>As above.</p> <p>As above.</p>

Submission No.	Issues/comments made	Response summary
	<p>e. Includes detailed vibration assessments at the detailed design phase to confirm plant and equipment are working within the safe working distances for human comfort at sensitive receivers and vibration measures are implemented to ensure they are minimised and meet the criteria (this could be rectified by a modification of Commitment 56). All feasible and reasonable mitigation measures should be implemented to ensure vibration levels meet the criteria.</p>	As above.
	<p>f. Includes an acoustic assessment of ancillary infrastructure, such as tunnel ventilation, transformers and water treatment plants.</p>	<p>As above. NB: No tunnel ventilation would be required</p>
	<p>g. Includes a consideration of ground-borne noise where barrier mitigation is being proposed for surface track.</p>	As above.
	<p>h. Includes a comprehensive mitigation strategy that adopts all feasible and reasonable mitigation measures to ameliorate against predicted impacts (including airborne noise, groundborne noise, and vibration).</p>	As above.
	<p>i. Involves additional background noise monitoring prior to commencement of stabling activities to confirm the PSNL. It is important that the assessment considers future land uses potentially impacted by the stabling facility and relevant criteria now and in the future, so that the required 'design noise performance' of the stabling facility is established. DEC recommends that a conservative approach be adopted to derive noise goals (i.e. lowest criteria) and that feasible and reasonable mitigation be applied to attempt to achieve the goals and to minimise the noise levels from stabling, brake testing and horn blasting, particularly at night-time. This should include an assessment of whether enclosure of the facility is reasonable and/or feasible as well as alternatives to audible horn testing.</p>	<p>As above. NB: SoC B33 in Appendix A outlines a commitment to further assessment of the stabling facility noise impacts and mitigation.</p>
	<p>j. Identifies key compliance assessment locations and associated noise/vibration performance indicators (criteria) for the purposes of compliance assessment.</p>	As above.
	<p>▪ The proponent will undertake a compliance noise assessment and review of the adequacy of the operational mitigation measures at a time between 6 months and 1 year from first commencement of the operational phase of the project. This should also include a commitment by TIDC and/or RailCorp that additional feasible and reasonable measures will be implemented should post-construction noise monitoring indicate a general trend in exceedance of predicted noise levels. The proponent should also undertake an assessment of rail noise impacts 10 years (nominally) after opening.</p>	As above.

Submission No.	Issues/comments made	Response summary
	<ul style="list-style-type: none"> <li data-bbox="416 258 1321 399">▪ Construction noise monitoring to confirm that noise levels do not significantly exceed the predictions and that noise levels of individual plant items do not significantly exceed the levels specified should be extended to include construction vibration monitoring, particularly for vibratory rollers, pile driving and other construction activities likely to generate ground-borne vibration. <li data-bbox="416 418 1321 475">▪ The proponent will undertake an assessment of derived grasslands and provide for management of affected grasslands. <li data-bbox="416 494 1321 552">▪ The proponent will undertake targeted surveys for Cumberland Land Snail and <i>Pimelea spicata</i> using appropriate survey techniques. <li data-bbox="416 571 1321 679">▪ The proponent will undertake appropriate assessment of the impacts of the project on the fluvial processes and geomorphology of affected creeks, including an assessment of mitigation measures, in consultation with the Department of Natural Resources. <li data-bbox="416 699 1321 788">▪ The proponent will undertake further detailed survey of those areas that could not be accessed or areas that have not been surveyed in sufficient detail to comply with the DEC's Standards and Guidelines for archeological survey. <p data-bbox="416 820 1321 874">Further information is required regarding whether the original offset decisions regarding the rezoning of Edmondson Park accounts for impacts from the SWRL.</p> <p data-bbox="416 938 1321 992">DEC requires confirmation that the SWRL was considered in the gazettal of the Growth Centres SEPP and accompanying Conservation Plan.</p> <p data-bbox="416 1050 1321 1104">A commitment should be made to appropriately mitigate the impacts of any proposed within-stream structures on aquatic ecosystem health.</p> <p data-bbox="416 1114 1321 1222">The proposal involves significant modifications to waterways. Additional assessment including assessment of mitigation measures, in consultation with DNR, is required of the impacts of waterway crossings on the fluvial processes and geomorphology of affected creeks. The SOC should include a commitment for this assessment.</p> <p data-bbox="416 1232 1321 1340">DEC has not been consulted, and has serious reservations, about the alterations proposed to the tributaries of Maxwells Creek at Crossings 4 and 6 as these alterations appear to be in land zoned as Regional Park which has been endorsed by Cabinet.</p>	<p data-bbox="1339 258 2132 284">As above.</p> <p data-bbox="1339 418 2132 472">This would be covered by SoCs B22 and B23 in Appendix A regarding further assessment of biodiversity impacts and mitigation.</p> <p data-bbox="1339 494 2132 549">This would be covered by SoCs B22 and B23 in Appendix A regarding further assessment of biodiversity impacts and mitigation.</p> <p data-bbox="1339 571 2132 651">This issue would be considered as part of the further design and flooding assessment (see SoC B19 in Appendix A). If impacts cannot be avoided by design, additional assessment would be required in the next phase.</p> <p data-bbox="1339 699 2132 807">Agreed. There is an existing commitment to follow the Growth Centre Commission's Precinct Assessment Method in the next phase (see SoC B24 in Appendix A), as previously advised by DECC. These issues are covered by SoCs B24 and B25.</p> <p data-bbox="1339 820 2132 928">The SWRL was an integral part of the release area planning. However, the deferred matter area has not been addressed in terms of off-sets. This would be addressed as part of the further assessment in accordance with the draft Conservation Plan.</p> <p data-bbox="1339 938 2132 1046">The SWRL corridor was considered in the gazettal of the Growth Centres SEPP and is largely contained within the boundaries of the South West Growth Centre. It is, therefore, subject to the provisions of the draft Conservation Plan.</p> <p data-bbox="1339 1050 2132 1104">Subject to further assessment, SoC B21 addresses the proposed approach to the design of waterway crossings.</p> <p data-bbox="1339 1114 2132 1168">See comments above regarding watercourse crossings, which are subject to further assessment.</p> <p data-bbox="1339 1232 2132 1414">Section 13.5 of the EA and Concept Plan noted that further preliminary design was undertaken to demonstrate that the vertical alignment of the SWRL alignment through Edmondson Park (crossings 4 to 6 – Maxwells Creek) could be modified to prevent any lowering of watercourse channels. The vertical alignment of the SWRL is subject to further design development and assessment. At this stage, no lowering of these watercourses is proposed.</p>

Submission No.	Issues/comments made	Response summary
	<p>The EA and the Aboriginal Cultural Heritage Report need to contain clear recommendations which address whether or not any significant Aboriginal sites or values have been identified that need to be considered by the DoP when assessing the application for Concept Approval.</p> <p>Further attempts should be made to receive comments back from all of the Aboriginal community groups with an interest in the proposal, these comments should be incorporated into the EA.</p> <p>Clear recommendations need to be included if any further research, mitigative or protective measures are proposed for the Edmondson Park and Ingleburn Military Camp areas (Section 5.2 Aboriginal Cultural Heritage Report).</p> <p>The SoC should include a commitment to undertake a further detailed survey of those areas which could not be accessed in the preliminary site visit, or areas that have not been surveyed in sufficient detail to comply with DEC's Standards and Guidelines for Archaeological Survey.</p> <p>Undertaking test excavations at site EPCS5 (Section 8 Aboriginal and Cultural heritage Report) needs to be considered when formulating recommendations.</p>	<p>In accord with the EA requirements, DEC requested that the assessment of the SWRL to be undertaken in accordance with GCC's <i>Precinct Assessment Method for Aboriginal Cultural Heritage in the Sydney Growth Centres</i>. Reflecting the Concept Approval process, under Part 3A, it was agreed that the Aboriginal cultural heritage assessment be completed to the end of Step 1. Step 1 of the methodology involves gathering and analysing of existing information and seeking input from the Aboriginal community. In order to provide additional information to assess the SWRL concept, preliminary site visits were undertaken with Aboriginal Stakeholders groups. However, completion of Step 1 of the protocol does not allow for firm conclusions about significance or impacts on identified sites. It did, however, identify issues and key areas for focus in the further assessments.</p> <p>Since the exhibition of the EA, additional work was completed, to ensure that Aboriginal community groups had adequate opportunity to provide input into the outcomes and recommendations of the preliminary report and to fully assess the impacts of the Stage A works. The additional assessment undertaken is document in Section 4.8 of this report.</p> <p>The SoC includes a clear commitment to undertake further assessment in the next phase (see SoCs B24 and 25 in Appendix A).</p> <p>Additional feedback has been sought since the EA was exhibited, as detailed in Section 4.6 and Appendix D of this report.</p> <p>These would be addressed as per the further assessment proposed (see response above).</p> <p>Agreed, refer to SoC B25 in Appendix A.</p> <p>Noted. The requirement for test excavations is not yet known and is subject to further assessment.</p>

Submission No.	Issues/comments made	Response summary
<p>NSW Department of Natural Resources (DNR) (No. 31)</p>	<p>The [cost] savings of aligning the SWRL through the regional park (compared to locating it through many private properties) should be reflected in provisions for minimising the disruption to the core and support to core vegetation and corridor function of those areas of the regional park. This should be reflected by:</p> <ul style="list-style-type: none"> ▪ provision of adequate bridging for suitable areas of embankment and cover sections for suitable areas of cutting, that create, or preferably enhance, the flora and fauna connectivity of areas both sides of the route. ▪ compensatory planting in and over this area to enhance the connectivity. These connections should be a minimum 40m wide and can be slightly wider to accommodate any future pedestrian pathways. It would also significantly offset the acknowledged major adverse impacts on native flora and fauna. <p>The DNR is concerned about the proposed lowering of Maxwells Creek.</p> <p>The following should be noted/considered in a more detailed flooding assessment, and the relevant issues included in the specific SoC recommendations at Edmondson Park Station:</p> <ul style="list-style-type: none"> ▪ The catchment areas for crossings 4 and 5 will be both totally urbanised, as part of the town centre/business district of the new Edmondson Park suburb. These areas will have a near 100 per cent run-off from their respective catchments. These watercourses will probably be fully piped. 	<p>The overall biodiversity strategy outlined in the EA, which would be further developed as per SoCs B22 and B23 in Appendix A, is based on minimising impacts on core and support for core habitat. However, impacts are not specific to the regional park and any offsets or other mitigation need to be considered in the context of broader land development identified for the Growth Centre (i.e. as part of the overall Conservation Plan and Biodiversity Certification process for the Growth Centre). A draft Conservation Plan has now been released for comment and is available for viewing on GCC's website: http://www.gcc.nsw.gov.au/what's-new.aspx.</p> <p>See above. Also, SoC B8 in Appendix A regarding the Western Sydney Parklands now includes consideration of 'habitat corridors'. The option of bridges at waterway crossings would be further considered in the next phase as per SoC B19, which now includes the word 'type' (of drainage structures).</p> <p>See above.</p> <p>Section 13.5 of the EA and Concept Plan noted that further preliminary design was undertaken to demonstrate that the vertical alignment of the SWRL alignment through Edmondson Park (crossings 4 to 6 – Maxwells Creek) could be modified to avoid any lowering of watercourse channels. The vertical alignment of the SWRL is subject to further design development and assessment. At this stage, no lowering of these watercourses is proposed.</p> <p>Noted. However, the assessment assumed that appropriate detention/retention would be incorporated into the design of these areas to ensure there are no adverse impacts on downstream areas. Even if the watercourses were to be piped, overland flowpaths would need to be considered for blockage or larger events. Hence the culvert crossings would still need to accommodate piped and overland flows.</p> <p>This would be considered in consultation with DNR as part of the proposed further assessment.</p>

Submission No.	Issues/comments made	Response summary
	<ul style="list-style-type: none"> To maximise public safety at the station, design of the stormwater from these areas needs to consider the PMF event for a totally urbanised catchment. The catchment for Maxwells Creek above the line is zoned 8(b) <i>National Parks and Nature Reserves</i> (no lowering should occur in any 8(b) zone) and below the line it is 6(a) Recreation – Public (the design there must consider public safety, aesthetics and good urban design). DNR recommends that the station rail line height be raised to minimise any lowering of the creek. Any design for lowering of the creek bed must emulate a natural creek in form and function. 	<p>As noted in Technical Paper 2, the consequences of floods in excess of the 100 year annual return interval event would need to be considered in the design of the station. That is, the consequences of extreme events would be considered to determine the design standard to be set. Urbanisation tends to have a relatively minor effect on flows during extreme events since the rainfall losses as a proportion of the total rainfall becomes relatively insignificant.</p> <p>This would be considered in the further assessment.</p>
	<p>The following should be noted/considered and the relevant issues included in the specific recommendations for crossing 3:</p> <ul style="list-style-type: none"> The crossing over Campbelltown Road and Crossing 3 should be combined into one bridge/viaduct and be sufficiently wide to reflect the important riparian link between the Nature Reserve areas each side of the line along the creek in that location, and prevent further fragmentation of the vegetated area in that location. 	<p>This would be considered in the further assessment of the location, type and size of drainage structures, as per SoC B19 in Appendix A. The design of water crossings would consider 'the quality of riparian habitat present' (see SoC B21 in Appendix A).</p>
	<p>The following should be noted/considered and the relevant issues included in the specific recommendations for crossing 7:</p> <ul style="list-style-type: none"> It appears that a watercourse between crossing 6 and 7 has been missed. There is a northerly flowing watercourse that would cross the rail line approximately 200m before crossing 7. As this area may be an 8(b) zoning, the diversion of this watercourse along the line to crossing 7 is not supported. Where the watercourse should cross the line, it appears to be a 6(a) zone, so there should be no issues in accommodating this extra crossing. 	<p>This watercourse is shown on current aerial photos as draining to Crossing 7, upstream of the railway line via a well defined channel. However, older 1:25000 topographic maps show a watercourse that crosses the proposed railway line south of Crossing 7. If small parts of the catchment still drain via this old flow path just south of Crossing 7, then a small culvert may be required to maintain flows to the riparian area downstream of the railway line. Overflows during larger events could drain to Crossing 7.</p> <p>This issue would be further considered in the next phase of the design.</p>
	<p>The department should be consulted as part of any study into flood assessments.</p>	<p>Agreed. SoC B19 includes 'in consultation with Councils and relevant government agencies' (see Appendix A).</p>

Submission No.	Issues/comments made	Response summary
	For all natural watercourses that are to remain within the new urban areas, or natural outside these areas, these should all be bridged.	At this stage, it is inappropriate to commit to bridging of all watercourses. The EA assumed worst-case conditions (culverts) in the flooding assessment, but bridges would be considered during the further design development and further assessment (see SoC B19 in Appendix A).
	Any vegetation plan should be consistent with, or achieve better outcomes than, the draft guideline provided in Appendix A of this submission.	This would be considered in the next phase.
	Any stream modification works should be consistent with, or achieve better naturalised outcomes than, the attached draft guideline provided in Appendix B of this submission.	This would be considered in the next phase.
Roads and Traffic Authority, NSW (RTA) (No. 32)	The RTA recognises the overall benefits of the proposal as it forms part of the NSW Government's <i>Metropolitan Rail Expansion Program</i> and would significantly improve public transport access to Sydney's south west.	Response noted.
	Regarding the proposed cut and cover crossing of the Hume Highway (F5):	Noted. The option identified in the EA was indicative only and is subject to further assessment. At this early stage of design development, TIDC cannot rule out any options for construction. Any option chosen would seek to minimise traffic disruption.
	<ul style="list-style-type: none"> ▪ It should be noted that the southbound F5 carriageway has been widened at the proposed crossing location to 4 lanes and widening of the northbound carriageway to 4 lanes is due to commence shortly and completion is expected by mid-2008. The new pavement for the extra lanes has been or will be built in the central median. As a result, there is not enough width to allow a two-stage construction of a railway dive structure (most likely a need for 3 stages – one for each carriageway and one for the median). 	Noted. See comment above.
	<ul style="list-style-type: none"> ▪ RTA has a number of issues and concerns with TIDC's proposed method of construction (Hume Highway), as follows: 	Noted. See comment above.
	<ul style="list-style-type: none"> i. The RTA would require the 8 lane capacity to be available during each day. Lane closures at night between 9.30 pm and 5 am could be achieved, but to undertake all roadworks at night would be extremely slow, inefficient and risky. Provision for traffic, including heavy trucks and coaches, would be required to be of very high standard. 	Noted. See comment above.
	<ul style="list-style-type: none"> ii. The alignment of the temporary roadway would be required to be suitable for freeway conditions and would be required to maintain the usual speed limit and must not represent a hazardous area for traffic (especially the high volume of heavy vehicles). 	Noted. See comment above.

Submission No.	Issues/comments made	Response summary
	<ul style="list-style-type: none"> iii. Although it is uncertain how deep the railway excavation would be at this point, it would certainly represent a steep sided excavation (probably shored in the upper portion) that would be extremely hazardous to passing cars and trucks. iv. The worksite for the railway cutting would be a high risk area for workers and would need careful planning and appropriate barriers. Tunnel roof plating and crash rail on the side tracks would be required to protect traffic. v. There is a longitudinal piped drainage line in the median that would need to be diverted and managed with each stage of construction. vi. The entry ramp for southbound traffic from Campbelltown Road is quite close to the railway crossing point and would need to be taken into consideration in designing the temporary traffic arrangements. vii. There is very likely to be ongoing pavement ride problems associated with compaction/settlement of the backfilled excavations. This and other potential risks makes the statement 'The highway would be reinstated back to its original condition after completion of this work' difficult to accept. 	<p>Noted. See comment above.</p> <p>Noted. See comment above.</p> <p>Noted. See comment above.</p> <p>Noted. See comment above.</p> <p>Noted. See comment above.</p>
	<ul style="list-style-type: none"> ▪ RTA would strongly prefer that a tunnel or tunnels be driven under the Highway to minimise or eliminate the impact on the Highway and traffic. <p>Regarding the proposed bridge crossings of Camden Valley Way and Campbelltown Road:</p>	<p>As noted above, the construction method would be further developed in consultation with the RTA during the next phase.</p>
	<ul style="list-style-type: none"> ▪ The proposed bridge crossings structures must take into consideration the RTA's future road widening reservations and proposals. ▪ RTA would prefer a construction methodology that would not require road closures (due to their strategic importance). ▪ In the event of road closures, they would need to be: <ul style="list-style-type: none"> i. Kept to a minimum ii. At night time only, and iii. Any diversion routes should minimise disruption to motorists and nearby residents. ▪ The construction methodology and any temporary alterations to traffic flow should be determined in consultation with and agreed by the RTA. 	<p>Current proposals were considered in the development of the current concept. There is a need for integrated further design development of these structures (i.e. the RTA must also consider the project in its designs).</p> <p>Noted. This would be the objective of the further assessment of the construction method for these bridges as per SoC B18 in Appendix A.</p> <p>Noted. This would be considered as part of the further work.</p> <p>Noted. This is proposed as per SoC B18 in Appendix A.</p>
	<p>Regarding traffic management: the following broad comments are offered in advance of further detailed assessment:</p> <ul style="list-style-type: none"> ▪ It is expected that the RTA will be part of the detailed planning stages providing input in determining haulage routes, impacts on intersections and adopted mitigation measures necessary to minimise impacts to traffic during construction. 	<p>Agreed. The RTA would be consulted during the further detailed assessments as per SoCs B16 and B18. The issues noted below would be considered as part of the further assessment, development of the further design development/construction methodology and management plans.</p>

Submission No.	Issues/comments made	Response summary
	<ul style="list-style-type: none"> ▪ It is expected that appropriate community consultation be undertaken for the life of the project, prior to and during construction, for all stakeholders. 	See comment above and SoCs A9 and B3 in Appendix A.
	<ul style="list-style-type: none"> ▪ Existing roadway capacity on the arterial road network is to be maintained during construction. 	See comment above.
	<ul style="list-style-type: none"> ▪ Existing pedestrian and cycle accesses are to be maintained during construction. 	See comment above.
	<ul style="list-style-type: none"> ▪ Generally no direct access between the arterial road network and the proposed new rail stations would be supported. 	See comment above.
	<ul style="list-style-type: none"> ▪ Provision of parking on arterial roads will not be supported during or after construction. Appropriate construction-related parking requirements are to be provided within construction sites or on non RTA controlled roads. 	See comment above.
	<ul style="list-style-type: none"> ▪ Serious consideration during the design process is to be given to the provision of grade-separated pedestrian connections across arterial roads as a preferred treatment to access the proposed stations. Signalised at grade pedestrian facilities would require justification and satisfy a technical warrant. Pedestrian fences should also be considered on State roads near railway stations to direct pedestrians to cross at nominated pedestrian crossings including pedestrian bridges. 	See comment above.
	<ul style="list-style-type: none"> ▪ High quality pedestrian and bicycle links be provided to access the stations, including bicycle parking facilities at or near proposed stations. 	See comment above and SoCs B13 and B14 in Appendix A.
	<ul style="list-style-type: none"> ▪ Kiss-and-ride facilities are to be located so as not to adversely impact traffic flow on the arterial road network. 	See comment above.
	<ul style="list-style-type: none"> ▪ Modification of traffic control signal (TCS) intersections to allow additional turning movements must not be at the expense of existing levels of service or roadway capacity. Modified signal design plans will be required for any staged constructions impacting the signals and shall be forwarded to the RTA for approval a minimum of 10 days in advance of the commencement of work. 	See comment above.
	<ul style="list-style-type: none"> ▪ New TCS sites should be justified based on a warrant recognised by the RTA and where justified, should be designed and constructed in accordance with current RTA policy, design standards and practice. 	See comment above.
	<ul style="list-style-type: none"> ▪ Transport Management Plans (TMPs) and Traffic Control Plans (TCPs) will need to be prepared, reviewed and approvals sought in accordance with the RTA's relevant road occupancy and worksite construction guidelines and practices. 	See comment above.

Submission No.	Issues/comments made	Response summary
	<ul style="list-style-type: none"> ▪ The construction companies would need to keep records of accidents involving construction vehicles and discuss it with RTA's Transport Management Centre on a regular basis, in order to develop strategies to reduce the number of accidents and their severities. <p>Regarding utilities under or adjacent to RTA controlled roads:</p> <ul style="list-style-type: none"> ▪ Structures on existing or future road corridors shall consider the RTA's future road widening and re-alignment schemes. ▪ If the work involves any installation of utilities, all crossings of RTA controlled roads should be by under boring. The minimum cover shall be 1.2 m to the lowest point of road formation. ▪ Services located under RTA controlled roads are to be maintenance free and any restoration works shall be at no cost to the Authority. 	<p>See comment above.</p> <p>See comment above.</p> <p>See comment above.</p> <p>See comment above.</p>
<p>Liverpool City Council (No. 33)</p>	<p>Council supports the SWRL, but appropriate measures to mitigate impacts need to be incorporated into the final design phase.</p> <p>Planning and operational issues: Edmondson Park:</p> <ul style="list-style-type: none"> ▪ Any planning associated with the preferred northern alignment needs to revisit the urban planning within this area. These studies include: <ol style="list-style-type: none"> i. Vegetation significance and potential off-setting requirements. ii. Assessment of the Aboriginal significance of the area. iii. Noise and vibration issues on existing rural residents and dwellings. <p>Planning and operational issues: South West Growth Centre:</p> <ul style="list-style-type: none"> ▪ It is recommended that preliminary investigations be undertaken to consider the potential extension of the rail link beyond the Leppington Station to service the greater South West Growth Centre. Future planning of the western precincts must not stifle the option for a future rail extension. 	<p>Support noted.</p> <p>As per SoC B5 in Appendix A, the proponent proposes to consult further with Councils and other stakeholders regarding the implementation of appropriate development controls and zoning within the vicinity of the rail line.</p> <p>The NSW Government announced in June 2005 that the SWRL and SWRL extension projects would be completed by 2020, subject to finance, population densities, land release patterns, satisfactory economic appraisals and feasibility assessment.</p> <p>As identified in the NSW Government's (2006a) Urban Transport Statement, a new Centre for Transport Planning and Product Development has been created within the Ministry of Transport (MoT). The Centre is charged with the role of ongoing planning for the MREP, including preliminary investigations into the proposed extension of the SWRL beyond Leppington.</p> <p>The Centre is commencing pre-feasibility investigations into the SWRL extension and would consider a range of corridor and modal options to best meet the transport task for the South West Growth Centre of Sydney. It is expected that a preferred option would be identified by the end of 2007.</p>

Submission No.	Issues/comments made	Response summary
	<p>Planning and operational issues: Operational noise and vibration:</p> <ul style="list-style-type: none"> ▪ Given the density controls imposed by the State Government on the Edmondson Park release area, it should be assumed that dwellings may be required adjacent to the corridor, and within the 30 m from the nearest track centerline. ▪ Developers that already contribute to the infrastructure levy should not have to also fund additional construction costs associated with noise and vibration impacts of the SWRL. It is imperative that any mitigation measures for noise and vibration are wholly contained within the required SWRL corridor. ▪ The operational noise mitigation proposal is inappropriate as it specifies that acoustic standards be incorporated into consent conditions for new residential buildings and that appropriate land uses be identified adjacent to the corridor. It is essential that only Source Control Measures should be considered during the next phase of planning and detailed design. ▪ Of major concern is the continual reference to the term ‘where feasible and reasonable’, especially when used in conjunction with noise and vibration mitigation measures. It is extremely likely that items like noise walls, etc., may be considered as not being ‘feasible’ in the context of the overall project. <p>Environmental Issues: General Comments:</p> <ul style="list-style-type: none"> ▪ The proposal includes significant alteration of watercourses, including considerable cut and fill and diversion of a watercourse, which is likely to have a significant impact on the hydrological functions of the area. It is recommended that the proposal is revisited and these impacts are considered in more detail. Potential impacts of the area as a whole and its ecological functions should be further investigated and mitigation measures (which go further than simply alleviating site-specific flooding issues) should be provided. 	<p>Noted. This would be considered in the detailed noise and vibration assessment.</p> <p>The provision of noise mitigation measures and decisions relating to the provision of noise walls or other mitigation is subject to more detailed assessment as noted within SoC B32 in Appendix A and in accordance with the new IGANRIP. There are a number of factors that need to be considered to determine the best solution, including urban design and visual impacts.</p> <p>Generally mitigation is likely to be within the SWRL corridor. However, currently TIDC does not have sufficiently detailed information to confirm this and it is subject to further design development. In some cases, it may not be appropriate (e.g. mounds partly outside of the 40 metre rail corridor may be negotiated as a better solution). Decisions on the location of noise mitigation if located outside the 40 metre rail corridor, such as noise mounds, would be subject to negotiation with individual land owners.</p> <p>The noise mitigation has not yet been determined and is subject to further assessment as per SoC B32 in Appendix A. The further assessment would be undertaken in accordance with the IGANRIP. This Guideline requires consideration of at source as well as other mitigation measures (including measures at the receiver where new residential development is planned to occur around the rail line).</p> <p>The new IGANRIP requires feasible and reasonable mitigation to be considered. As defined in this guideline, ‘feasibility’ relates to engineering considerations and what can be practically built or modified, given the opportunities and constraints of a particular site. ‘Reasonableness’ relates to application of judgment, taking into account the following factors: noise mitigation benefits, noise levels, and the benefits arising from the development. Further work will be carried out as part of the NSW Rail Noise Strategy, which will provide guidance on reasonable and feasible mitigation measures.</p> <p>The type, location and size of watercourse crossings (including the need for any diversions) are yet to be determined and is subject to further design and flooding assessment as per SoC B19 in Appendix A (also see Section 20.5.3 of the EA and Concept Plan). Subject to this further assessment, no lowering of any watercourses is proposed or considered likely. Once the design is confirmed, further assessment of the impacts of the crossings would be undertaken.</p>

Submission No.	Issues/comments made	Response summary
	<ul style="list-style-type: none"> <li data-bbox="414 443 1314 555"> <p>▪ There are inconsistencies between the Biodiversity Assessment and the Hydraulic Analysis (i.e. the hydraulic analysis assumes culverts will be used for the majority of watercourse crossings). It is recommended that the conflict between these two reports be resolved and that:</p> <ul style="list-style-type: none"> <li data-bbox="459 671 1314 810">i. The reasoning for the proposed locations for the watercourses based on ecological values be provided (a discussion on how the proposed structures meet the guidelines should be provided and reference made to the stream categorisation studies completed by the NSW Department of Natural Resources). <li data-bbox="459 858 1314 1074">ii. The impacts on ecological function caused by the construction of the watercourse crossings be addressed and include an assessment of impacts caused by excessive flow velocities, inadequate flow depth, excessive water turbulence, debris blockage, excessive culvert length, inadequate lighting, excessive variations in water level across the culvert and waterfall effect at the culvert outlet in accordance with the NSW DPI Fisheries <i>Policy and Guidelines for Fish Friendly Waterway Crossings</i> (2003) and <i>Fish Passage Requirements for Waterway Crossings</i> (2003). <li data-bbox="459 1082 1314 1137">iii. The change of floristic composition of riparian vegetation communities caused by alteration of wetting regimes be addressed. <li data-bbox="459 1145 1314 1201">iv. Recommendations be provided for the use of bridge structures to protect ecological values. <li data-bbox="414 1209 1314 1310"> <p>▪ The significant amount of cutting proposed is likely to increase the potential for encountering groundwater. It is recommended that potential impacts caused by the mixing of groundwater and surface waters as well as the impacts on groundwater recharge be further investigated.</p> 	<p data-bbox="1332 256 2114 424">Further assessment of biodiversity mitigation is proposed (see SoCs B22 and B23 in Appendix A). The SWRL is part of a wider proposal to develop the Growth Centre – therefore, biodiversity mitigation measures must be developed in the context of the Conservation Plan and Biodiversity Certification process being implemented for the Growth Centre as a whole.</p> <p data-bbox="1332 440 2114 655">Certain worst-case assumptions were made in the flooding assessment, including the use of culverts. This precautionary approach was necessary as the design of these crossings is yet to be determined (see SoC B19 in Appendix A). The biodiversity assessment (Section 4.2.4 in the EA and Concept Plan) also discusses the possibility of culverts. However, it is acknowledged that Section 4.2.3 of the EA identifies bridges would be provided. This is not the case and is subject to further design development and assessment.</p> <p data-bbox="1332 679 2114 839">See comment above. The crossing details have not yet been resolved as this issue is subject to further assessment, including assessment of any biological impacts. Crossings would be designed in accordance with the NSW DPI Fisheries <i>Policy and Guidelines for Fish Friendly Waterway Crossings</i> (2003) and <i>Fish Passage Requirements for Waterway Crossings</i> (2003).</p> <p data-bbox="1332 863 1464 887">See above.</p> <p data-bbox="1332 1086 2078 1110">Noted. This would be considered in the further detailed assessments.</p> <p data-bbox="1332 1142 2101 1166">Bridges would be considered as part of the further design development.</p> <p data-bbox="1332 1198 2114 1286">Detailed assessment of groundwater impacts was not identified as a key issue for assessment in the Director General’s requirements for the EA. Further assessment is proposed (refer to SoC B45 in Appendix A).</p>

Submission No.	Issues/comments made	Response summary
	<ul style="list-style-type: none"> ▪ The ecological impacts of salinity do not appear to have been adequately addressed (i.e. the report doesn't consider the impact of saline soils on biodiversity). ▪ It appears that the cost of offsetting and the degree of habitat fragmentation has not been considered in the route analysis. It is recommended that these matters be further investigated to help increase affordability and lessen the potential environmental impacts. ▪ It is recommended that any sub plans include a more detailed assessment of the potential impacts of the 'other environmental issues', and detail any site-specific controls required. 	<p>Salinity impacts were not identified in the EA requirements. However, SoC B45 includes consideration of salinity as part of the further design development.</p> <p>Habitat fragmentation was considered in Section 4.1.5 of Technical Paper 3. The impacts need to be considered in context of the wider Growth Centre development. Offsetting is tied to the Biodiversity Certification and draft Conservation Plan for the Growth Centre.</p> <p>Noted. This would be considered in the further assessment.</p>
	<p>Environmental Issues: Comments Specific to the Biodiversity Assessment:</p>	
	<ul style="list-style-type: none"> ▪ The Biodiversity Assessment states that the endangered population <i>Marsdenia viridiflora</i> subsp <i>viridiflora</i> is unlikely to occur and it was not detected during the survey; however the species has been recorded near the proposed rail line. Precaution should be applied when making assumptions on the presence/absence of threatened biodiversity. It is recommended that further targeted surveys be conducted and potential impacts re-evaluated. 	<p>Further survey is proposed as per SoC B22 in Appendix A.</p>
	<ul style="list-style-type: none"> ▪ It is recommended that further targeted surveys be conducted and potential impacts re-evaluated for all threatened biodiversity with known or potential habitat on site. It is also recommended that precaution be applied when making assumptions on the presence/absence of threatened biodiversity and the potential impacts of the proposal. 	<p>See comment above.</p>
	<ul style="list-style-type: none"> ▪ It is recommended that further information and/or justification for survey methods and field techniques be provided along with methodologies for field survey techniques to be employed for future targeted surveys. 	<p>The biodiversity assessment includes a clear description of the approach taken. Further assessment would be undertaken in consultation with DECC (see SoCs B22 and B23 in Appendix A).</p>
	<ul style="list-style-type: none"> ▪ It is recommended that the exacerbation of the following issues due to increased edge effects caused by the proposal be further addressed: <ol style="list-style-type: none"> i. Alteration to natural flow regimes of rivers and streams and their floodplains and wetlands. ii. Clearing of native vegetation. iii. Removal of dead wood and dead trees. iv. Invasion of native plant communities by exotic perennial grasses. 	<p>These processes were considered in the EA report and would be revisited in the next phase of assessment, based on the further design.</p> <p>See comment above.</p> <p>See comment above.</p> <p>See comment above.</p> <p>See comment above.</p>

Submission No.	Issues/comments made	Response summary
	<ul style="list-style-type: none"> ▪ There appears to be no discussion on fire or flooding regimes or a description of the density of weeds present as required by the NSW DEC <i>Draft Guidelines for Threatened Species Assessment</i> (2005). It is recommended that a discussion of these issues be included in the evaluation of potential ecological impacts of the proposal and site-specific recommendations made to mitigate any impacts. ▪ It is recommended that further targeted surveys and evaluation of impacts post survey be undertaken to provide justification for the following statement made in the Biodiversity Assessment: ‘that whilst no threatened species or endangered ecological communities are likely to become extinct, the proposal may have adverse impacts on threatened biodiversity and other native species in the study area.’ ▪ It is recommended that the conclusion ‘that an increase in noise levels will not significantly affect fauna as the majority of species detected during field surveys were generalist species likely to be accustomed to noise’ be reviewed after it is conclusively determined (through targeted surveys and subsequent further evaluation of impacts) that no significant impact on threatened fauna will occur. ▪ It is recommended that negotiation with landholders for those sites where access was restricted for survey be undertaken and previous surveys undertaken on these lands by Eco Logical be furthered considered. ▪ There is a conflict between the findings of the Biodiversity Assessment and the previous survey undertaken by Eco Logical. Eco Logical identifies a regional corridor; however, the Biodiversity Assessment does not support this conclusion. It is recommended that the Biodiversity Assessment further consider the reasoning provided by Eco Logical and the conflict be resolved. ▪ It is recommended that upon completion of the assessment of grassland areas the Biodiversity Assessment be amended to consider any significant findings and that these findings be incorporated into the evaluation of impacts of the proposal. 	<p>The location of weeds and vegetation condition was provided in an Appendix to Technical Paper 3. Flooding /fire regimes and weeds would be addressed in more detail at the next stage. A habitat-based assessment is considered appropriate for the concept level stage.</p>
		<p>Further assessments are proposed as per SoCs B22 and B23 in Appendix A.</p>
		<p>This conclusion recognises that the environment is disturbed with noise already present. This issue would be further assessed in the next stage.</p>
		<p>Surveys by Eco Logical were considered and are referenced in Technical Paper 3. Access would be sought to all properties in the next phase, subject to property owner approval.</p>
		<p>Technical Paper 3 does acknowledge the corridor, but notes that although this vegetation may function as part of a wider local and regional corridor system, the vegetation along the proposed SWRL alignment does not form part of a clearly defined wildlife corridor between larger areas of wildlife habitat (see Section 3.6 of Technical Paper 3).</p>
		<p>Noted. Further consistent would be consistent with the approach detailed in SoCs B22 and B23 in Appendix A.</p>
	<p>Additional Environmental Comments: Waterways:</p>	
	<ul style="list-style-type: none"> ▪ Lowering of the waterway through Crossings 4 and 6 may also require lowering the waterways for significant distances downstream to facilitate natural drainage. This may significantly disturb the waterway environment through the destabilisation of banks and removal of aquatic and riparian vegetation. Altering the hydrological environment may impact on surface water quality and flows and result in a significant change in ecology of the waterway. 	<p>Section 13.5 of the EA and Concept Plan noted that further preliminary design was undertaken to demonstrate that the vertical alignment of the SWRL alignment through Edmondson Park (crossings 4 to 6 – Maxwells Creek) could be modified to prevent any lowering of watercourse channels. The vertical alignment of the SWRL is subject to further design development and assessment. At this stage, no lowering of these watercourses is proposed.</p>

Submission No.	Issues/comments made	Response summary
	<ul style="list-style-type: none"> ▪ The soil landscapes in the region tend towards moderate to high soil erosion, which will increase the potential for erosion and sedimentation. ▪ Decline in water quality through increased pollution and sedimentation during construction and operational phases such as increase turbidity. ▪ Potential to expose saline soil/groundwater particularly at the intersection of the rail line with crossings of major creeks and cuttings. ▪ Potential for interaction of surface and groundwater in areas where significant cutting is proposed which may cause a decline in water quality and increased salinity issues. ▪ Modification of flows which will significantly alter the aquatic ecology such as impacts on colonisation of macroinvertebrate communities. 	<p>This issue and those following appear to be partly restatements of what the EA says and other general comments. TIDC has noted these comments and they would be considered in the further detailed assessments for Stage B. TIDC is not applying to construct Stage B of the project, so some of these issues do not require specific commitments at this stage. TIDC has amended the SoCs regarding 'other' environmental issues – see Appendix A.</p> <p>See comment above.</p> <p>See comment above.</p> <p>See comment above.</p> <p>See comment above.</p>
	<p>Additional Environmental Comments: Biodiversity:</p>	
	<ul style="list-style-type: none"> ▪ Clearing of vegetation including Shale Hills Woodland and Shale Plains Woodland, which are sub units of Cumberland Plain Woodland (an endangered ecological community listed under the <i>NSW Threatened Species Conservation Act 1995</i> and <i>Commonwealth Environmental Protection and Biodiversity Conservation Act 1999</i>). Alluvial Woodland is a sub unit of River Flat Eucalypt Forest (an endangered ecological community listed under the <i>NSW Threatened Species conservation Act 1995</i>). ▪ The removal of: <ul style="list-style-type: none"> i. 5.8 ha of core habitat (core) which is in good condition ii. 9 ha of modified habitat including shrubby regrowth which is in moderate to poor condition (support for core) iii. 35 ha of highly modified habitats (which includes cleared land and poor quality habitat). ▪ Removal or modification of fauna habitat which includes simplification of habitat niches through removal of hollow bearing trees and fallen logs, as well as displacement of native fauna. ▪ The removal of approximately 6 ha of dead wood and trees which constitutes a Key Threatening Process under the <i>NSW Threatened Species Conservation Act 1995</i>. This will remove specific habitat required by fauna, particularly ground dwelling fauna. 	<p>See comment above.</p> <p>See comment above.</p> <p>See comment above.</p> <p>See comment above.</p>

Submission No.	Issues/comments made	Response summary
	<ul style="list-style-type: none"> ▪ Further habitat fragmentation. 	See comment above.
	<ul style="list-style-type: none"> ▪ A high edge to area ration and subsequent encroachment of a diverse range of noxious and environmental weeds and increased levels of predation by introduced animals, as well as generalist native species in edge areas. 	See comment above.
	<ul style="list-style-type: none"> ▪ Increased noise generation which may disrupt breeding cycles, feeding habits and lead to further fragmentation. 	See comment above.
	<ul style="list-style-type: none"> ▪ Alteration to natural flow regimes and potential to influence floristic composition through differing wetting cycles. 	See comment above.
	<ul style="list-style-type: none"> ▪ Significant impacts on threatened biodiversity to the extent where local populations may become extinct. This includes direct, indirect and cumulative impacts. 	See comment above.
	<ul style="list-style-type: none"> ▪ Potential to adversely affect <i>Pimelea spicata</i> which is listed under the TSC Act through loss of individuals, reducing the habitat available for recruitment and displacing the soil seed bank. 	See comment above.
	<ul style="list-style-type: none"> ▪ Potential to have a significant impact on <i>Meridolum corneovirens</i> which is listed under the TSC Act through loss of individuals and reducing suitable available habitat and compacting the soil which modifies soil biota and the food source of the species. 	See comment above.
	<ul style="list-style-type: none"> ▪ Potential to impact on the roosting and foraging habits of five bat species listed under the TSC Act. 	See comment above.
	<ul style="list-style-type: none"> ▪ Potential fauna injury or death during construction and operation. 	See comment above.
	<ul style="list-style-type: none"> ▪ Disturbance of ecological functions such as pollination of native flora resulting in the displacement of specific fauna pollinators. 	See comment above.
	<ul style="list-style-type: none"> ▪ Loss of native seed bank and genetic diversity. 	See comment above.
	<ul style="list-style-type: none"> ▪ Loss of faunal habitat diversity including elements that take a long time to form such as hollow bearing trees. 	See comment above.
	<p>Additional Environmental Comments: Other Considerations:</p>	
	<ul style="list-style-type: none"> ▪ Poorer air quality and greenhouse gas emissions during construction due to operation of road vehicles transporting and removing materials from the site and operation of site plant. Specifically an increase will be incurred in particulate matter from wind erosion during construction. 	See comment above.
	<ul style="list-style-type: none"> ▪ Increased generation of waste and the use of energy and other resources during construction and operation. 	See comment above.
	<ul style="list-style-type: none"> ▪ Environmental hazards such as the potential discharge of hazardous material to the environment resulting in environmental damage. 	See comment above.

Submission No.	Issues/comments made	Response summary
	<ul style="list-style-type: none"> ▪ Exposure of previously protected soil layers during clearing, grubbing and excavation which may lead to an increase in erosion of topsoil and exposure of buried structures, reduction of air quality. ▪ Disposal of wastewater from train washing activities and waste collected from trains during preparation at the train stabling facility. 	<p>See comment above.</p> <p>See comment above.</p>
<p>Camden Council (No. 34)</p>	<p>Council has no objection, subject to further detailed environmental assessments as proposed in the Draft SoC and subject to the following matters being addressed in an amended SoC or as conditions of concept approval:</p>	<p>Response noted.</p>
	<ul style="list-style-type: none"> ▪ All affected property owners should be offered the choice to negotiate for full or partial sale of their property to the DoP (where partial acquisition would not prejudice the orderly and economic development of the land in the future). ▪ Some preliminary planning of the land along the rail corridor (particularly at the proposed Leppington Town Centre) should be undertaken in tandem with the detailed design of the rail line and Leppington Station. ▪ Commuter parking facilities provided at Leppington Station should not be reduced below the initial provision until high quality bus services to the station are provided and unless a survey of car park users demonstrates that the bus services cater to their needs. ▪ Further design work for an interim and future bus rail interchange should be undertaken during the design stage of the project. 	<p>The acquisition process is a statutory process being adhered to in accordance with the <i>Land Acquisition (Just Terms Compensation) Act 1991</i>. A negotiated outcome is preferable. The option of partial acquisition would depend on project requirements and the cost efficiency of buying part compared to buying the whole of the land. It would be considered on a case by case basis. Due to a range of issues including, but not limited to cost of acquisition, loss of access, or whether the property can continue to operate in a commercially viable way, full acquisition may be the appropriate solution; however, this is yet to be confirmed and partial acquisition would be considered where appropriate.</p> <p>TIDC has undertaken some indicative master planning of the town centre to inform the station concept, as described in the EA and the Route Options Report. Detailed planning of the town centre development is subject to the precinct planning process established through the Growth Centres SEPP. In its further design and assessment of the Station (see Section 20.5.3 of the EA and Concept Plan), the proponent would liaise further with stakeholders responsible for planning of the Growth Centre precincts (see SoC B11 in Appendix A).</p> <p>Information within the EA regarding parking provision is preliminary and subject to further assessment (see SoC B12 in Appendix A). No decision on final parking provision numbers has been made. Decisions on long-term parking provision would be subject to government policy and land use development patterns and bus servicing provision.</p> <p>SoC B12 in Appendix A has been amended to clarify that long-term parking decisions would be determined based on government policy, bus services and land use development patterns (see Appendix A).</p> <p>Section 20.5.3 of the EA and Concept Plan states that the proponent would consider transport interchange facilities as part of the Station design. Interchange planning is a key part of the station development and is reflected in the SoC.</p>

Submission No.	Issues/comments made	Response summary
	<ul style="list-style-type: none"> ▪ Where pedestrian and cycle links can be accommodated within or immediately adjacent to the rail corridor, particularly near Leppington Station, they should be designed, funded and constructed as part of the SWRL project. <p>Other issues raised in submission:</p> <ul style="list-style-type: none"> ▪ The EA identifies 32 properties in Leppington would be fully acquired with 10 additional properties partly acquired. In an apparent contradiction, the EA states that all private properties to the west of the Forest Lawn Gardens cemetery are to be fully acquired. ▪ The EA proposed approximately 1,000 'park and ride' spaces at Leppington Station, but the report also states that between 1,200 – 1,600 spaces would be required in the short term, assuming 23% of train users will access the station by bus and 20% of train users will walk to the station. These assumptions are ambitious in the early stages of development, particularly given there is no certainty about the timing of urban development in the vicinity of the station. ▪ Significant noise barriers and separation of residential areas from the stabling facility with industrial development will be required (due to stabling facility operation hours e.g. operation of train horns during early morning hours). 	<p>TIDC cannot provide a commitment to this at this stage of the design development as this issue is subject to further assessment (see SoC B14 in Appendix A).</p> <p>Noted. TIDC has clarified this issue in Section 4.9 of this report.</p> <p>The 1,200-1,600 spaces are indicative numbers regarding anticipated demand for parking. In accordance with government policy, the preliminary proposal for 1,000 spaces reflects the need to encourage a switch to public transport. However, the figures provided are indicative only, for the purpose of preliminary assessment and a more detailed assessment is proposed (see SoC B12 in Appendix A). Also see above responses.</p> <p>The form of mitigation is subject to further assessment as per SoC B33 in Appendix A and the proponent's liaison with other agencies responsible for planning in the vicinity of the rail line (see SoC B5 in Appendix A). TIDC wrote to the DoP in October 2006 to request that it considers 'potential commercial or light industrial' land uses around the stabling facility in future planning (as an update to the South West Growth Centre Structure Plan).</p>
<p>Growth Centres Commission (GCC) (No. 35)</p>	<p>The GCC provided the DoP with comment in June 2006 regarding issues that should be considered in preparing the EA. These issues do not appear to have been addressed in further detail.</p> <p>Operational noise and vibration:</p> <ul style="list-style-type: none"> ▪ A 40 m residential setback is proposed along the rail corridor. The implications of this for land use and lot yield within the Growth Centres precincts need to be carefully considered. 	<p>The EA was prepared in accordance with the EA requirements issued by DoP. Notwithstanding this, GCC's issues as raised in this previous letter are noted and have been considered. TIDC has made a number of commitments to ensure that GCC is involved in the further design development, planning and delivery of the SWRL project.</p> <p>A meeting was held with the GCC to discuss the EA issues and clarify comments.</p> <p>No 40 m residential setback is proposed in the EA. The SWRL is proposed to be located within a corridor of 40 metres width between stations.</p> <p>Land use measures to address noise are proposed to be considered in the next phase in liaison with GCC and other agencies (see SoCs B5 and B10 in Appendix A).</p>

Submission No.	Issues/comments made	Response summary
	<ul style="list-style-type: none"> ▪ Alternate means to achieve noise criteria should be investigated. <p>Traffic, transport, parking and access:</p> <ul style="list-style-type: none"> ▪ Assessment is required of how these relate to the road infrastructure to be provided throughout the Growth Centre, to ensure that connections as proposed can be made. 	<p>As the project is at concept level it is not possible to confirm noise mitigation at this stage. Mitigation measures are proposed to be further investigated in the next phase in accordance with the new IGANRIP and other relevant guidelines (refer to SoC B32 in Appendix A).</p> <p>Road infrastructure in the Growth Centre is not yet confirmed; however assessment did consider the South West Growth Centre Structure Plan and documentation that followed from it, as described in Technical Paper 1.</p>
<p>Campbelltown City Council (No. 36)</p>	<p>Council requests that the following matters are considered in more detail as part of the future planning of the proposal:</p> <ul style="list-style-type: none"> ▪ The design of the embankment, culverts and track within the location of the proposed Glenfield Detention Basin should be to Council's satisfaction, to minimise adverse flood impacts. ▪ Through-traffic should be maintained at all times on the F5 Freeway, Campbelltown Road and Camden Valley Way during construction of the rail corridor bridges and the Hume Highway 'cut and cover' tunnel to minimise the need for traffic diversions onto adjacent roads. ▪ All traffic management arrangements should be referred to Council's Local Traffic Committee for review and endorsement. ▪ The construction tender process should identify means to ensure the minimisation of construction vehicle impacts on intersection capacities. ▪ Station access should be maintained at all times at Glenfield Station, for both rail passengers and for travel between both sides of the station. 	<p>It is noted that Council is not requesting these issues be addressed in the concept approval phase, but can be addressed in the following phase.</p> <p>Noted.</p> <p>Traffic impacts would be minimised. A detailed construction methodology for road crossings would be developed.</p> <p>At this stage it is unlikely that any partial or full closure of other roads would be required. Detailed traffic assessment and consultation with the relevant authority (usually RTA/Council) would be undertaken in accordance with SoC B18 in Appendix A.</p> <p>SoC A12 in Appendix A includes a commitment to prepare Traffic Management Plans (TMPs) relevant to Stage A of the SWRL (which includes the Campbelltown Council area). The TMP(s) would be prepared in consultation with Council.</p> <p>Construction impacts at intersections are proposed to be further assessed as per SoC B16 in Appendix A.</p> <p>Access would be retained for pedestrians and buses would replace trains during possessions.</p>

Submission No.	Issues/comments made	Response summary
	<ul style="list-style-type: none"> ■ A detailed Precinct Plan for Glenfield Station should be developed, in consultation with Campbelltown Council and other relevant stakeholders, to address the following matters: <ul style="list-style-type: none"> i provision of commuter parking, including no net loss of parking on the eastern side of the station and consideration to be given towards the construction of commuter car parking in the air space above the corridor ii provision of a signalised pedestrian crossing on Railway Parade iii reducing impacts on shopper parking in Railway Parade iv construction period arrangements for bus services, taxi services and 'kiss and ride' parking, with bus services to be maintained at all times on Railway Parade. ■ All new commuter parking spaces should be constructed prior to the removal of any existing commuter parking. ■ The applicant should appropriately mitigate all noise impacts of the development upon all affected residents prior to the commencement of the operation of the rail line. ■ The Council and affected residents should participate in the design of the 'flyovers' at Glenfield to achieve an outcome that minimises the visual impact of the structures. ■ All works associated with the project should be at no cost to Council. 	<p data-bbox="1346 260 2112 363">Further design development is proposed for the Glenfield Station upgrade (which does not form part of the Stage A early works proposal) – see Section 20.5.2 of the EA and Concept Plan and SoCs B11 to B13 in Appendix A.</p> <p data-bbox="1346 379 2112 435">The proponent would support station precinct planning around Glenfield and would work with Council in this regard.</p> <p data-bbox="1346 451 2112 722">TIDC has undertaken some further assessment of further parking at Glenfield (see Section 4.8) and proposes (in the short-term) to provide up to an additional 280 spaces on a currently unused parcel of RailCorp land on the western side of the station, with an additional 15 spaces possible along the access road to the station and school. There is little opportunity for additional parking on the eastern side of Glenfield Station without the purchase of land. The new parking on the western side would be provided as part of the Stage A early works and before any parking on the eastern side is removed. Access to parking on the western side of Glenfield is easily accessible via Cambridge Avenue.</p> <p data-bbox="1346 738 2112 794">Further assessment is proposed (see SoC B12 in Appendix A in regard to long-term parking provision at the Station).</p> <p data-bbox="1346 810 2112 850">A signalised pedestrian crossing is a detail for consideration during the next phase.</p> <p data-bbox="1346 866 2112 946">TIDC has not confirmed the construction arrangement for Glenfield Station. Approval is not being sought to construct the station as part of Stage A (only concept approval is being sought for this).</p> <p data-bbox="1346 962 2112 1042">The proponent would provide car parking as part of the Stage A early works on RailCorp land on the western side of the Station (see Section 5.2.2 of this report) prior to any parking removal.</p> <p data-bbox="1346 1058 2112 1137">Mitigation would be developed and implemented in accordance with the new IGANRIP and further assessment of this is proposed (see SoC B32 in Appendix A).</p> <p data-bbox="1346 1153 2112 1233">Additional assessment of noise mitigation for the Stage A early works at Glenfield has been completed since the EA was prepared (see Section 4.8 of this report).</p> <p data-bbox="1346 1249 2112 1329">SoCs A9 and B3 note that communication processes would provide opportunities for stakeholders/the community to have input into such issues.</p> <p data-bbox="1346 1345 2112 1425">The works associated with the project are as identified in the Concept Plan. All these works, as identified and assessed within the EA would be the responsibility of the project proponent.</p>

Submission No.	Issues/comments made	Response summary
RailCorp (No. 37)	<p>RailCorp is very supportive of the proposed rail facility.</p> <p>Further work is required to ensure integration of the SWRL with other forms of transport and the surrounding urban development (integration of transport modes, design of accessways, form of urban development, bus priority, active public areas and street fronts, safer by design measures).</p> <p>RailCorp needs to be actively involved in the future stages of project development. Further work will be required in developing maintenance plans, power supply needs, security requirements, fire and life safety responses, emergency access to stations and track, staff facilities and other aspects of a rail system.</p> <p>RailCorp will be keen for acoustic treatment to be considered as part of an integrated design. It may be feasible to incorporate at or near source control measures like platform profiles and sound absorption. Incorporating acoustic specialists early in the detailed design process is recommended by RailCorp (operational noise and vibration goals will need to be further considered as this work advances).</p> <p>It is possible that operational noise and vibration goals may need to be further considered as work on the new Rail Noise Policy develops.</p> <p>RailCorp recommends that the draft SoC is strengthened with respect to the stabling facility noise investigations (e.g. Commitment 25 in the EA could be improved by specifically referring to the stabling facility and also extending the consultation to include 'appropriate zoning' and the Commitment could refer to aiming to minimise physical mitigation measures).</p> <p>It is noted that Section 13.3.2 of the EA and the Executive Summary of Technical Paper 5 incorrectly states that the sleep disturbance criteria is background plus 5dBA. This should be background plus 15dBA.</p> <p>If the concept approval is to consider the potential for amendments or modifications to the preferred project put forward in the EA that could impact on current and future rail lines, it is essential that RailCorp is nominated as a key participant in any further work.</p>	<p>Response noted.</p> <p>This is proposed (see SoCs B5 to B10 and B11 to B14 in Appendix A).</p> <p>The proponent would be working with RailCorp in a partnership arrangement in the following phases of design development and RailCorp would be involved in all operational design issues.</p> <p>These measures would be considered as part of the further noise assessment. Acoustic specialists would be involved in design process.</p> <p>Noted. TIDC has amended SoC B32 in Appendix A to refer to the new IGANRIP and any other relevant rail noise policies/guidelines.</p> <p>TIDC has amended SoC B5 in Appendix A to include the 'stabling facility' and 'appropriate zoning'. TIDC wrote to the DoP in October 2006 to request that it considers 'potential commercial or light industrial' land uses around the stabling facility in its future planning (as an update to the South West Growth Centre Structure Plan).</p> <p>Correction noted in Section 4.9.</p> <p>Noted. The proponent would be working with RailCorp in a partnership arrangement in the following phases.</p>
Ministry of Transport (MoT) (No. 39)	<p>The MoT supports the project, recognising that it will:</p> <ul style="list-style-type: none"> ▪ improve access to housing, jobs and services by walking, cycling and public transport ▪ increase the choice of available public transport and reduce dependence on cars ▪ reduce the number of trips and distances travelled by car ▪ support the efficient and viable operation of public transport services in south-western Sydney. 	Noted.

Submission No.	Issues/comments made	Response summary
	<p>The Centre for Transport Planning and Product Development has now been established within the MoT to improve coordination of transport planning for Sydney. The Centre will undertake the ongoing planning and coordination for implementation of the MREP, including preliminary investigations into the proposed SWRL extension. The Centre will be undertaking preliminary investigations into the SWRL extension to confirm whether heavy rail is the preferred mode and feed into the precinct planning process for the South West Growth Centre, and will work closely with TIDC and other stakeholders to ensure the preferred option (or options) are integrated with precinct planning for the Growth Centre and detailed planning for the first stage of the SWRL</p>	Noted.
	<p>The MoT is working with bus operators, the RTA and other government departments to develop a network of strategic bus corridors across metropolitan Sydney, as noted in the EA. The MoT should be consulted during both the construction and implementation phases of the development to ensure that no works associated with the rail facilities compromise the development of the strategic bus network as proposed.</p>	Ongoing consultation with MoT is recognised, as identified in see SoC B11 in Appendix A.
	<p>The NSW Government is investing in the development of improved bus services and this needs to be taken into account and supported in the development of the interchanges and networks associated with the SWRL proposal. This extends to pedestrian and bus-friendly street networks, suitable connectivity, and road and bus stop infrastructure.</p>	Noted. The scope of the SWRL project includes the development of stations and interchanges. The development of stations and interchanges necessitate the involvement of key stakeholders, including MoT.
	<p>Interchange and Station design:</p> <ul style="list-style-type: none"> ▪ The rail facilities should be developed in line with the requirements of the <i>Disability Standards for Accessible Public Transport 2002</i>, particularly in terms of information, manoeuvring areas and boarding points. ▪ The Ministry strongly supports the provision of timetable and route information, and for real-time information, enhanced lighting levels and bicycle storage and would welcome the opportunity to be involved in subsequent design stages. ▪ Interchanges should be located as close as possible to station entrances, and must have all-weather cover. ▪ Design of the interchange is to provide for through bus movement (not loops). ▪ Station design must provide for 24 hour/7-day access to driver amenities, with appropriate provision for maintenance. ▪ Provision for bus lay-ups may also be required, and the length of these needs to be discussed (e.g. articulated buses require 38 metres of kerb space). 	Noted. This is a statutory requirement.
		Noted. This is a further design development issue and would be considered in consultation with MoT.
		See comment above.
		See comment above.
		See comment above.
		See comment above.

Submission No.	Issues/comments made	Response summary
	<p>Whilst it is acknowledged that the provision of park-and-ride facilities at Leppington may be warranted as a temporary short-term measure, the Ministry's position is that commuter parking should not be provided where a high frequency bus service is operating (i.e. it should not be provided in the long term).</p>	<p>Noted. Long-term parking provision at stations is subject to further assessment.</p>
	<p>Commuters who have no alternative to the car for travel to work at the centres served by the proposed rail line should be catered for with long stay parking facilities at park-and-ride sites located on the edges of the centre to limit the potential for peak period congestion (impacting on bus reliability) on routes into the centre.</p>	<p>The proposed further assessment of commuter car parking requirements for the SWRL would consider Government policy and relevant bus servicing strategies (see SoC B12 in Appendix A).</p>
	<p>There is scope to introduce shared car parking (used by two or more land uses with peak parking demands that do not coincide) at some or all of the proposed stations as part of the proposed park and ride strategy, implemented in consultation with local councils and under formal agreements. Opportunity exists to reduce the supply of car spaces forecast for park and ride car parking facilities at each of the SWRL stations where shared agreements are negotiated or joint developments are proposed.</p>	<p>The current station concepts do not preclude this. Shared parking opportunities would be considered in the further assessment of long-term parking provision at the Stations as per SoC B12 in Appendix A.</p>
	<p>In the longer term, there may be opportunities to provide commuter car parking beyond Leppington to replace commuter car parking provision within the centre, should an extension of the SWRL proceed.</p>	<p>Noted. This is a matter for consideration as part of investigations into a SWRL extension.</p>
	<p>In assessing opportunities for pedestrian and cycle links, consideration should be given to (at a minimum):</p>	<p>Noted. These comments would be considered in the further planning for pedestrian and cycle links associated with the project, as per SoCs B13 and B14.</p>
	<ul style="list-style-type: none"> ▪ highlighting the role of walking and cycling in increasing rail usage and competitiveness (bicycle travel combines particularly well with rail and has potential to significantly increase its catchment) 	<p>See comment above.</p>
	<ul style="list-style-type: none"> ▪ identifying an effective network that connects the rail stations to local and regional land uses with potential for access by bicycle (other than Western Sydney Parklands) within the given localities 	<p>See comment above.</p>
	<ul style="list-style-type: none"> ▪ providing rail link crossings at the critical desire lines/routes 	<p>See comment above.</p>
	<ul style="list-style-type: none"> ▪ showing how the proposed network fits within the NSW Bicycle Network plans implemented by RTA and with walking and cycling strategies/plans of relevant local councils 	<p>See comment above.</p>
	<ul style="list-style-type: none"> ▪ facilitate detailed planning for: <ul style="list-style-type: none"> ▶ pedestrian and bicycle access within the railway stations precincts ▶ bicycle movement within the railway stations ▶ bicycle storage at the railway stations ▶ provision for bicycles on trains. 	<p>See comment above.</p>

Submission No.	Issues/comments made	Response summary
	<ul style="list-style-type: none"> ▪ consultation with local cycling interests ▪ stating how and when the proposals will be implemented and who will be responsible. <p>Compliance with the <i>Disability Standards for Accessible Public Transport</i> will need to be maintained at all times during construction and implementation.</p> <p>The SWRL community liaison officer should report regularly to MoT's Manager, Community consultation.</p> <p>The Ministry should be included as part of the interchange design team in light of the development of Integrated Network Plans for bus servicing for Regions 2 and 15 (planned for 2007/08).</p> <p>The Ministry requests that further investigation of the following issues be undertaken:</p> <ul style="list-style-type: none"> ▪ Options for closer integration of bus and rail services at the proposed stations. ▪ Parking demand and shared parking opportunities. ▪ Construction traffic volumes and impacts at key intersections and proposed means of mitigation. 	<p>See comment above.</p> <p>See comment above.</p> <p>Agreed.</p> <p>Noted.</p> <p>Noted.</p> <p>Noted. This would be considered as part of the further interchange and station design work, in consultation with MoT.</p> <p>Noted. This would be considered in the further assessment of parking provision at the Stations as per SoC B12 in Appendix A).</p> <p>Noted. This would be considered in the further assessment as per SoC B16.</p>
<p>Department of Defence (No. 52) Received 2/02/07</p>	<p>The SWRL will bring significant regional benefits.</p> <p>The Defence Site at Ingleburn Army Camp, Campbelltown Road, is incorrectly identified in the EA in statements on p68 and the area identified as "Ingleburn Military Complex" in Figure 5.4. The site is 311 ha and an additional 94 ha was sold to the NSW Government around 1993.</p> <p>The zoning of the defence site and thus the proposed rail route is incorrectly described in Section 3.4.1, p44. The Campbelltown LEP 2002 (Amendment No.12) and the Liverpool LEP 1997 (Amendment No.83) were gazetted on 31 March 2006. However, provisions of the LEPs require the dedication of the conservation areas to the State Government in order for the zoning to have effect on the Defence owned land. Thus the Defence site remains zoned as Special Uses Military. The timing of the dedication of the conservation land is dependent upon a decision concerning the NSW Government's priority sale offered to the Commonwealth for the Ingleburn Camp Site.</p> <p>Defence would appreciate an explanation and clarification of the statement "The SWRL corridor is known to be contaminated in some areas, particularly through the former Ingleburn Army Camp (see Chapter 19)". Defence is not aware of any contamination in the SWRL corridor that lies on the Defence site.</p>	<p>Response noted.</p> <p>This clarification is made in Section 4.9.</p> <p>Noted. This has been added as a correction in Section 4.9.</p> <p>The known contamination referred to (and as described in Section 19.7 of the EA and Concept Plan) relates to Landcom's landholdings (not the Department of Defence land).</p> <p>Contamination has not been assessed in detail at this stage (see SoC B46 in Appendix A).</p>

Submission No.	Issues/comments made	Response summary
	<p>As noted in the EA (Section 2.3), the proposed route traverses an area of Defence land that is listed on the Commonwealth Heritage List. The proponent may have to refer to the Department of Environment and Heritage any action that could significantly affect this area.</p>	<p>The requirement was identified within the EA and a commitment (see SoC B26 in Appendix A) has been made to make such a referral if the further assessment indicates that impacts on this area could be significant.</p>
<p>Australian Rail Track Corporation (ARTC) (No. 54)</p>	<p>ARTC supports the project in principle.</p> <p>ARTC would like to ensure that outcomes of the coordination process with TIDC and RailCorp to resolve interfaces with the SSFL at Glenfield are reflected in the consent for the SWRL – in particular, the SWRL will require the relocation of the existing SSFL main line to a new location adjacent to the SWRL. This work would form part of the SWRL project works and require coordination and approval from ARTC.</p> <p>The consent should also refer to approval for staging of construction at Glenfield Junction by ARTC.</p>	<p>Noted.</p> <p>The relocation of the existing Southern Sydney Freight Line (SSFL) main line is proposed as part of the project as described in the EA and Concept Plan (see Section 10.1.2). SoC A11 in Appendix A proposes that the proponent would consult with ARTC regarding the minimisation of cumulative impacts. The proponent would continue to liaise with ARTC in this regard, including details of the construction staging.</p> <p>TIDC has amended the SoC to note that the proponent would ensure the works are consistent with the approved SSFL project (see SoC A11). TIDC has regular coordination meetings with ARTC regarding Glenfield Junction.</p>
<p>Sydney Water (No. 55)</p>	<p>The SWRL will impact a number of existing water mains, including:</p> <ul style="list-style-type: none"> ▪ Glenfield – 250 mm main and 300 mm main located in Glenfield Road and 150 mm main located in Railway Parade. ▪ Edmondson Park- 300mm main located in Campbelltown Road and 200 mm main located in Jardine Avenue. ▪ Leppington- 100mm main located in Camden Valley Way, 375 mm main located in Cowpasture Road, 250 mm main located in Rickard Road, 100 mm main located in Dickson Road, 250 mm main located in Eastwood Road and 150 mm main located in McCann Road. <p>Shut down of recycled water and potable trunk mains will only be permitted in low demand periods.</p> <p>Future recycled water mains impacted upon by the route of the SWRL include:</p> <ul style="list-style-type: none"> ▪ Glenfield- 400 mm main, located in Railway Parade. ▪ Edmondson Park- 375 mm main and 450 mm main located in Campbelltown Road, and 600 mm main located within a planned extension of Croatia Avenue. <p>Final designs and details of construction methods should be provided to Sydney Water for approval prior to commencing construction (to prevent impacts on existing sewer).</p>	<p>Noted. This is a further design development issue that would be considered as per SoC A30 for Stage A and B44 and Stage B.</p> <p>Noted. See comment above.</p> <p>Noted. See comment above.</p> <p>Noted. See comment above.</p>

Submission No.	Issues/comments made	Response summary
	It is recommended that consideration of a recycling tank be included in the hydraulic design (of fire fighting pumps) to contain and reduce water waste.	Noted. This is a further design development issue.
	The developer of the station complexes, tunnels and track, will be required to submit an application to Sydney Water for a servicing compliance certificate. Developers are advised to engage the services of a Water Servicing Coordinator to obtain a Section 73 Certificate and manage the serving aspects of their projects.	Noted. See comment above.