

Appendix A

Revised Statement of Commitments
(SoC)

Statement of Commitments

The Environmental Assessment of the SWRL project and this Submissions Report identify a range of potential environmental impacts and recommended management measures to avoid or reduce the potential impacts of the SWRL. The Concept Plan in Chapter 20 of the EA and Concept Plan and Section 5 of the Submissions Report have identified what TIDC is seeking approval for and where further design and assessment is required.

This Appendix contains a Statement of Commitments (SoC) for the project. The draft SoC in the EA was revised as a result of submissions received and the additional investigations completed. These commitments would be implemented as part of the subsequent phases of project development.

The SoC is provided in two parts (Tables A and B). Table A identifies commitments relating to Stage A and, in particular, commitments relating to the environmental management during construction and operation of these works. Table B identifies commitments relating to Stage B and focuses on the further design and assessments that would be undertaken.

General

In relation to Stage B works, all future design development and assessment identified in Section 20.5 of the *SWRL Environmental Assessment and Concept Plan (November, 2006)* and as proposed within the following SoC would be informed by the recommendations and mitigation measures outlined within the *SWRL Environmental Assessment and Concept Plan (November 2006)* and the SWRL Submissions Report.

Table A Revised SoC: Stage A

Environmental Management Systems

Outcome: *An environmental management framework for the Stage A works to minimise environmental impacts during construction.*

Action

- A1. The construction of the Stage A works would be undertaken in accordance with an Environmental Management System(s) (EMS) to the standard of ISO 14001 or equivalent.
- A2. A Pre-Construction Compliance Report would be prepared and submitted to the Director General of DoP (Director General) at least four weeks before construction commences (or within any other time agreed to by the Director General). The Pre-Construction Compliance Report would include:
 - a. details of how the SoCs and Conditions of Approval required to be addressed before construction were complied with;
 - b. the time when each relevant SoC and Condition of Approval was complied with, including dates of submission of any required reports and/or approval dates; and
 - c. details of any approvals or licences required to be issued by relevant Government Agencies before construction commences.
- A3. A Pre-Operation Compliance Report would be prepared and submitted to the Director General at least four weeks before Operation commences (or within any other time agreed to by the Director General). The Pre-Operation Compliance Report would include:
 - a. details of how the SoC and Conditions of Approval required to be addressed before Operation were complied with;
 - b. the time when each relevant SoC and Condition of Approval was complied with, including dates of submission of any required reports and/or approval dates; and
 - c. details of any approvals or licences required to be issued by relevant Government Agencies for the Project's operation.

- A4. Construction Compliance Reports would be prepared and provided at six monthly intervals during construction to the Director General & relevant Councils and any other Government Agencies nominated by the Director General. The Construction Compliance Reports would include information on:
- a) compliance with the CEMP, relevant SoCs and the Conditions of Approval;
 - b) compliance with any approvals or licences issued by relevant Government Agencies;
 - c) the implementation and effectiveness of environmental controls. The assessment of effectiveness should be based on a comparison of actual impacts against performance criteria identified in the CEMP;
 - d) environmental monitoring results, presented as a results summary and analysis;
 - e) the number and details of any complaints, including a summary of main areas of complaint, action taken, response given and intended strategies to reduce recurring complaints;
 - f) details of any review and amendments to the CEMP during the reporting period; and
 - g) any other matter relating to compliance with the SoCs and Conditions of Approval or as requested by the Director General.
- A5. A Construction Environmental Management Plan (CEMP) would be prepared prior to construction and submitted to the Director General, which would outline the environmental protection measures to mitigate the impact of construction activities. The CEMP would be consistent with ISO14001, the SoCs and any Conditions of Approval including the conditions of any approvals or licences issued by Government Agencies.
- A6. *Environmental Control Maps* (ECMs) would be prepared for each construction site and include site specific management measures identified in the management plans and as required by the SoC or conditions of approval.
- A7. An *Environmental Impact Audit Report (construction)* would be prepared and submitted to the Director General a maximum of three months after construction is complete (or at any other time interval agreed to by the Director General). The *Environmental Impact Audit Report (construction)* would also be submitted to other Government agencies upon the request of the Director General. The *Environmental Impact Audit Report (construction)* would:
- a) Identify the major environmental controls used during construction and assess their effectiveness;
 - b) Summarise the main environmental management plans and processes implemented during construction and assess their effectiveness
 - c) Identify any innovations in construction methodology used to improve environmental management; and
 - d) Discuss the lessons learnt during construction, including recommendations for future developments.
- A8. An independent Environmental Management Representative (EMR) would be appointed prior to construction to advise the Director General and the proponent on compliance with the SoC and conditions of approval.

Communication processes & Stakeholder Management

Outcome: *A clear framework for community and stakeholder involvement through the project development and construction.*

Action

- A9. A Community Liaison Plan would be established and submitted to the Director General prior to construction to facilitate liaison with the local community and stakeholders. This would outline communication processes to be developed and implemented including:
- a) opportunities to input into the design process, where appropriate;
 - b) methods to inform the community, and stakeholders of the progress and performance of the project and issues of interest
 - c) processes to receive and manage complaints
 - d) consultation with affected property owners and local businesses
 - e) protocols to notify community & stakeholders of relevant activities and any incidents should they occur
 - f) opportunities for consultation meetings and methods for selection of community stakeholder representation.
- A10. Ongoing consultation would occur with Government agencies regarding issues raised during previous consultation and as identified within the Environmental Assessment and
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Land use, property and infrastructure planning

Outcome: *Management of interfaces with ARTC infrastructure*

Action

- A11. Consultation would be undertaken with the Australian Rail Track Corporation (ARTC) and RailCorp to ensure the SWRL Stage A works are consistent with the approved Southern Sydney Freight Line project and minimise cumulative impacts.
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Traffic, transport, parking and access

Outcome: *Minimisation and management of traffic, transport and access impacts*

Action

- A12. Site-specific Traffic Management Plans would be prepared for construction work sites and where works are proposed in the road or that would affect trafficable areas. The Traffic Management Plan would be incorporated into the CEMP/ ECM. These plans would be prepared in consultation with the Roads and Traffic Authority, Ministry of Transport, and Campbelltown City Council.
- A13. Measures to mitigate impacts of the various work sites around the Glenfield Junctions on pedestrians and cyclists would be incorporated into the Traffic Management and Traffic Control Plans.
- A14. Prior to construction commencing, intersection counts would be undertaken at the Glenfield Road roundabout in the morning and afternoon peaks to profile existing traffic flows. This data would be used to forecast the impacts on traffic flows through the intersection associated with the proposed additional car park at Glenfield, and clarify the need for any traffic management measures.
- A15. As part of the design development the need to implement a turning circle at the southern end of the Glenfield Station access road to improve the circulation of vehicles would be considered.
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Flora and fauna

Outcome: *Management of biodiversity impacts*

Action

- A16. Prior to construction at the site of the Glenfield additional car park, a biodiversity survey would be completed in accordance with the draft *Threatened Biodiversity Survey and Assessment Guidelines for Developments and Activities* (National Parks and Wildlife Service 2004). This would include targeted surveys for threatened species that have the potential to occur on-site. The site would be surveyed at a time of year suitable for the detection of a range of threatened species (e.g. *Pimelea spicata*). If threatened or rare species are found on-site then suitable mitigation measures would be included in the Flora and Fauna Management Plan.
- A17. A Flora and Fauna Management Plan would be prepared as part of the CEMP/ECM in consultation with relevant Government Departments and Campbelltown City Council.
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Hydrology and surface water

Outcome: *Management of hydrology and surface water during construction*

Action

- A18. Worksite planning on the James Meehan Estate (JME) site would take account of flooding issues in consultation with Campbelltown City Council.
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Heritage

Outcome: *Management framework for Indigenous and non-Indigenous heritage*

Action

- A19. A Heritage Management Plan would be prepared prior to construction and incorporated into the CEMP/ECM. The Heritage Management Plan would address:
- a) details of any additional archaeological investigations to be undertaken and any associated licences or approvals required;
 - b) procedures to be implemented if previously unidentified Aboriginal or Non-Indigenous objects are discovered during construction; and
 - c) an education program for construction personnel on their obligations for Aboriginal cultural materials and Non-Indigenous items.
- A20. Prior to establishment of the construction sites at James Meehan Estate and the commuter car park, a detailed assessment, consistent with the *GCC Precinct Assessment Methodology for Aboriginal Cultural Heritage* would be undertaken.
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Noise and vibration

Outcome: *Management of noise and vibration during construction and operation*

Action

- A21. The detailed design of the Glenfield North Fly-over would incorporate measures to minimise any increases in operational noise levels.
- A22. Prior to construction, a site-specific Construction Noise and Vibration Management Plan (CNVMP) would be prepared as part of the CEMP/ECM. The CNVMP would be developed based on the principles in the TIDC draft Construction Noise Strategy (Rail Projects) for construction noise management and in consultation with DECC (Department of Environment and Climate Change).
- A23. Compliance monitoring of operational noise predictions would be undertaken after opening and following the introduction of the SWRL train timetable.
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Visual impacts, landscape and urban design

Outcome: *Management of visual impacts, landscape and urban design issues*

Action

- A24. Where construction compounds and access roads are visible from surrounding areas, visual screening would be implemented, as appropriate.
- A25. A landscape plan would be prepared for the additional car park and would include the retention of existing trees where possible.
- A26. The proponent would liaise with ARTC to ensure that the tree plantings alongside Hurlstone Agricultural College required by the SSFL approval are not affected by the Glenfield Junction works.
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Air quality

Outcome: *Management of Air Quality impacts during construction*

Action

- A27. An Air Quality Management Plan would be prepared and incorporated into the CEMP/ECM prior to construction to address management of dust during construction, emissions from construction plant and vehicles and any other fugitive emissions.
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Hazard and risk

Outcome: *Management of Hazards and Risks during construction*

Action

- A28. A Hazards and Risk Management Plan would be prepared and incorporated into the CEMP/ECM prior to construction.
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Public safety

Outcome: *Safeguarding public safety during construction*

Action

- A29. All construction compounds and work areas would be fenced off to prevent public access during construction.
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Services and utilities

Outcome: *Minimisation of disruption to services and utilities*

Action

- A30. A Services and Utilities Sub Plan would be developed and incorporated into the CEMP/ECM prior to construction and would:
- identify existing services and utilities around the work sites and provide guidance in the event of an unexpected disruption to utilities and services; and
 - be developed in consultation with relevant utility owners to ensure that any relocations are undertaken in accordance with relevant requirements and/ or guidelines.
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Soils, water quality and groundwater

Outcome: *Minimisation of impacts on soils, water quality and groundwater*

Action

- A31. Measures to control soil erosion and runoff would be detailed in a Soil and Water Management Plan as part of the CEMP/ECM. The Plan would be prepared in consultation with relevant Government Agencies and Campbelltown City Council, and be consistent with the principles and practices outlined in Landcom's (2004) *Managing Urban Stormwater: Soils and Construction*.
- A32. Geotechnical investigations undertaken prior to construction would include an assessment of groundwater levels and groundwater and soil quality to minimise risks
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associated with construction works.

Waste, energy and demand on resources

Outcome: *Management of waste*

Action

- A33. A Waste Management Plan would be prepared as part of the CEMP/ECM and would identify requirements for
- a) the application of waste minimisation hierarchy principles of avoid/reduce/ re-use/ recycle/ dispose; and
 - b) waste handling and disposal.
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Contaminated land and hazardous materials

Outcome: *Early identification and management of any potential contamination*

Action

- A34. A Contamination and Hazardous Materials Investigation Report would be prepared in consultation with the Department of Environment and Climate Change (DECC), RailCorp and Campbelltown City Council to determine the nature, extent and degree of any contamination within the area of works. This would:
- a) be prepared in accordance with relevant DEC Guidelines; and
 - b) include a contingency plan to be implemented in the case of the unanticipated discovery of contaminated material during construction.
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Table B Revised Statement of Commitments - Stage B

Sustainability principles

Outcome: *Project development and delivery based around core sustainability principles*

Action

- B1. Core sustainability principles would be developed for the project covering the following themes:
- a) Energy
 - b) Greenhouse emissions
 - c) Water
 - d) Community and Stakeholder Involvement
 - e) Biodiversity
 - f) Resource Recycling/ minimisation
- To develop the principles a benchmarking exercise would be undertaken to enable clear Sustainability Goals and Objectives to be determined which would provide clear result areas and targets under each theme.
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Design and Construction Strategies

Outcome: *Minimisation of environmental impacts by integrating assessment of environmental issues with development of design and construction strategies*

Action

- B2. A Construction Strategy would be developed to inform planning for and confirm localities of construction sites and construction methodologies would also be developed at each of the construction sites taking into account:
- a. surrounding sensitive land uses;
 - b. existing environmental constraints/sensitivities; and
 - c. ease of access to the arterial road network.
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Communication processes & Stakeholder management

Outcome: *A clear framework for community and stakeholder involvement*

Action

- B3. Communications processes for the community and stakeholders would be developed and implemented throughout design development and further environmental impact assessment for the project. These would include:
- a) opportunities to input into design process such as station precincts and structures and proposed mitigation measures (e.g. noise barriers) for construction and operations;
 - b) methods to inform the community of the progress and performance of the project and issues of interest to the community;
 - c) processes to receive and manage complaints; and
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- d) consultation with affected property owners.
- B4. Ongoing consultation would occur with Government agencies regarding issues raised during previous consultation and as identified within the Environmental Assessment and Concept Plan and the SWRL Submissions Report
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Land use, property and infrastructure planning

Outcome: *Integration of transport and land-use*

Action

- B5. Consultation would be undertaken with Councils, the Growth Centres Commission, RailCorp and where relevant other agencies responsible for locality and precinct planning regarding implementation of appropriate development controls and appropriate zoning within the vicinity of the rail line and stabling facility.
- B6. Liaise with the Department of Planning (Sydney Region West) and Campbelltown City Council about the land use implications of the project for the Glenfield area.
- B7. Land use and property impacts of all elements of the project, including construction sites and all ancillary facilities, would be further assessed in consultation with the Growth Centres Commissions, Councils and surrounding landowners.
- B8. Consultation would be undertaken with the Department of Planning to ensure the rail line can be integrated with planning for sub-precincts 9.6 and 9.7 of the Western Sydney Parklands and, where relevant, appropriate measures would be implemented to minimise the visual, noise, flora and fauna (habitat corridors) and access impacts of the project on these sub-precincts.
- B9. A Land Asset Management Plan to address 'land surplus to use', post construction would be developed jointly with the Department of Planning (Land Management Branch) in consultation with Growth Centres Commission (and Councils where relevant). This plan would investigate opportunities for land amalgamation of parcels severed by the SWRL and identify opportunities for development that is consistent with land use planning, in particular the South West Growth Centre Structure Plan.
- B10. Liaise with Growth Centres Commission, Councils, RailCorp, MoT and land owners involved in future precinct planning in the South West Growth Centre to ensure the design of the project can:
- a) be consistent with and may inform the development of precinct planning, particularly around stations and the stabling facility;
 - b) facilitate connectivity across the corridor and mitigate severance impacts, including opportunities for pedestrian, cycleway and vehicular crossings;
 - c) accommodate any planned collocation of utilities within the rail corridor, where feasible; and
 - d) allow for planned utility crossings of the corridor.
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Traffic, transport, parking and access

Outcome:

- (i) *Stations (including interchanges, commuter parking and other facilities) are planned and delivered to meet current and future traffic, transport and access requirements*
 - (ii) *Future assessment to ensure minimisation of traffic and transport impacts during construction and operation*
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Action

- B11. Design development and assessment of stations and transport interchanges would be undertaken to ensure the integration of the station with the local area and the predicted patronage and mode of access are catered for during operations. The assessment would include consideration of local connectivity requirements; pedestrian modelling (including emergency access); traffic impacts on surrounding road networks; parking requirements and the integration of bus services with the new rail stations. These investigations would be undertaken in consultation with Growth Centres Commission, Councils, RailCorp, Ministry of Transport, Roads and Traffic Authority and Landcom (at Edmondson Park)
- B12. Park-and-ride facilities would be planned and developed with reference to relevant parking policies. Long-term parking provision would be determined with consideration to bus services provision and land use development patterns
- B13. Glenfield, Edmondson Park and Leppington Stations would incorporate bicycle facilities, and pedestrian and cycle access across the project corridor.
- B14. Assessment of existing and planned pedestrian and cycleway linkages, including crossing of the project would be undertaken in consultation with Growth Centres Commission, RailCorp, Councils and surrounding landowners. Where pedestrian and cycleways can be reasonably accommodated within or immediately adjacent to the rail
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corridor and link to existing or planned cycleway networks, consideration would be given to their provision in association with the project.

- B15. Maintenance access points would be identified and planned in consultation with RailCorp, the Growth Centres Commission and Councils.
- B16. Traffic modelling and traffic management analysis would be undertaken for the roads and intersections impacted by the project during construction and operation. This analysis would consider existing and planned road upgrades.
- B17. The design of construction works and staging at Glenfield Station would ensure safe access to the Station and across the rail line.
- B18. A detailed construction methodology for the crossing of the Hume Highway, Campbelltown Rd and Camden Valley Way would be developed in consultation with the Roads and Traffic Authority with the aim of minimising traffic disruptions.

Hydrology and surface water

Outcome: *Further assessment of hydrology and surface water to inform future design development and deliver good environmental outcomes*

Action

- B19. A detailed flood assessment would be undertaken in accordance with appropriate NSW Government guidelines and in consultation with Councils and relevant Government agencies. The assessment would confirm the extent of flooding impacts and inform future design development, in particular the type, location and size of drainage structures along the project corridor.
- B20. Additional flooding assessment to that undertaken in the Environmental Assessment and vertical rail alignment design work would be undertaken at Edmondson Park Station and surrounds and coordinated with Landcom, the Growth Centres Commission and Councils.

Flora and fauna

Outcome: *Assessment and management of biodiversity impacts is consistent with the regional approach to biodiversity management within the South West Growth Centre i.e. maintain or improve biodiversity values.*

Action

- B21. Design of waterway crossings and structures would be undertaken with reference to the *Guidelines for Design of Fish and Fauna Friendly Waterway Crossings* (Fairfull and Witheridge 2003) and *Fish Passage Requirements for Waterway Crossings* (2003) and considering the quality of riparian habitat present, in consultation with the Department of Primary Industries (NSW Fisheries) and other relevant Government agencies.
- B22. A detailed ecological assessment would be undertaken at all construction sites and along the project corridor. The assessment would identify areas to be avoided (construction sites only), construction related impacts and how these would be managed; and where required, describe measures to offset impacts on threatened species and/or endangered ecological communities. This assessment would be undertaken in consultation with the DECC, the Growth Centres Commission, RailCorp and the Commonwealth Department of Environment and Water Resources as appropriate.
- B23. 'Improve or maintain' assessments on biodiversity values would be undertaken to identify potential impacts of the project and benefits from protection measures to be implemented. The methodology adopted for all parts of the project would be consistent with the *draft Growth Centres Conservation Plan* (GCC, 2007) and DEC's *Draft guidelines for biodiversity certification of Environmental Planning Instruments* (2007).

Heritage

Outcome: *Future design development and assessment minimises impacts on indigenous and non indigenous heritage; and proposed management measures are consistent with established protocols and guidelines.*

Action

- B24. Indigenous heritage assessment would be undertaken in accordance with the *Protocol for Aboriginal Stakeholder involvement in the assessment of Aboriginal Cultural Heritage in the Sydney Growth Centres* (Context Pty Ltd. 2006a) and the *Precinct Assessment Method for Aboriginal Cultural Heritage in the Sydney Growth Centres* (Context Pty Ltd. 2006b), in consultation with DECC.
- B25. Subject to property owner approval, areas that were not surveyed in relation to the assessment of Non-Indigenous heritage (as included in the EA and Concept Plan) would be inspected as part of the further assessment.

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- B26. Corridor design development through the former Ingleburn Military Camp would consider the relevant policies and procedures outlined within the *Heritage Analysis of Ingleburn Defence Site* (Godden Mackay Logan, 2001). If required a referral would be submitted to the Commonwealth Department of the Environment and Water Resources.
- B27. Where works have the potential to affect the Sydney Water Upper Canal and associated row of Bunya Pines, the design development would consider the relevant policies and procedures outlined in the *Conservation Management Plan for the Upper Canal, Pheasant's Nest to Prospect Reservoir* (Higginbotham 2002) in consultation with the Sydney Catchment Authority.
- B28. Future design development in the vicinity of Denham Court, Hurlstone Agricultural High School and Macquarie Fields House view sheds would take into consideration the heritage values of the landscape.
- B29. Design of road crossings at Old Cowpasture, Cowpasture Road and Camden Valley Way would be carried out in consultation with the Roads and Traffic Authority to deal sympathetically with and minimise potential impact to the heritage values and view sheds.
- B30. Off –sets would be developed in consultation with the Aboriginal community in regard to any unavoidable disturbance to Aboriginal heritage sites and places. The adopted approach to off-sets would be consistent with the *Aboriginal Stakeholder involvement in the assessment of Aboriginal Cultural Heritage in the Sydney Growth Centres'* (Context Pty Ltd. 2006a) and the *Precinct Assessment Method for Aboriginal Cultural Heritage in the Sydney Growth Centres*.
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Noise and Vibration

Outcome: *Design development and assessment, adopts best practise measures, to minimise construction and operational noise and vibration impacts.*

Action

- B31. Construction noise and vibration assessment and review would be undertaken as part of the future design development and assessment, in accordance with relevant policies and guidelines.
- B32. In regard to operational noise, the *Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects* (DEC, 2007) would be utilised and where appropriate any other relevant guideline to implement the following activities:
- a) Modelling of operational noise impacts (including ground borne noise) in more detail as part of the design development; and
 - b) Identification of reasonable and feasible acoustic mitigation measures to meet the design goals.
 - c) Select representative locations for the project at which it is appropriate to later assess compliance
- B33. In regard to train stabling operational noise, the following would be undertaken:
- a) determine the extent of any physical noise mitigation measures in consultation with the DECC and RailCorp; and
 - b) review the results of RailCorp's investigations into addressing horn noise and consider the feasibility in consultation with RailCorp in implementing a low volume horn test.
- B34. Investigate feasible and reasonable mitigation measures for operational vibration in consultation with local Councils, the DECC and RailCorp.
- B35. Design development and assessment would include assessment of potential construction and operational vibration impacts on the Sydney Water Canal, in consultation with the Sydney Catchment Authority.
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Visual Impacts, Landscape and urban design

Outcome: *Future design development and assessment is informed by best practise landscape and urban design principles and minimises visual impacts.*

Action

- B36. Visual impact assessment would be undertaken as part of design development. This would be undertaken considering both the existing and future urban environment to identify and mitigate the impacts with architectural, landscape and/or urban design treatments. Additional assessments would apply to pedestrian and cycle facilities, proposed bridging structures; cutting and embankment treatments; landscape treatment projects; design of the stations and stabling facility; proposed acoustic treatments; and any visual buffer areas as required.
- B37. The following architectural, landscape and urban design principles would be used to
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guide the design of the stations and transport interchanges, civil works (such as noise walls, embankments, bridge crossings) and the stabling facility concepts:

- a) reinforce the role of the station and transport interchange within its surrounding neighbourhood as the principal transport and community facility within the locality;
- b) stations would be designed in the context of the scale, character and image of the surrounding area and enhance the presentation of the area to visitors, residents and travellers;
- c) maintain or improve the links across the project and to surrounding areas and activities. Where a connection between adjacent areas is desirable, pedestrian bridges or underpasses would be considered;
- d) easy access facilities would be incorporated into the station designs and integrated with the associated transport interchanges;
- e) movement networks should establish comfortable and inviting pedestrian environments and should ensure equitable access within the railway station and associated facilities.
- f) a design theme would be established for bridges and flyovers to link the overall rail design together. The design would ensure that the structures are simple, integrated with the surrounding area and finished to a high quality. Fencing, parapets and any railing on the bridges would also be integrated with the overall design;
- g) establish a hierarchy of access to stations consistent with NSW Government policy package "*Integrating land –use and transport*" (i.e. prioritise public transport and other non-car based access to the rail stations and adjoining areas where possible); and
- h) station precinct design should facilitate new development that reflects the highest standards of design.

B38. TIDC's Design Review Panel would guide the application of urban design principles throughout the design development.

B39. Measures to mitigate visual impacts and deliver high quality design outcomes would include:

- a) where noise walls are proposed, potential visual impacts would be minimised by implementation of urban design measures, to be developed in consultation with adjacent land owners (mitigation might include plantings and high quality facings near residential areas, Glenfield Station and the planned town centres);
- b) earth mounding would be considered where space allows and where significant vegetation would not be lost;
- c) the design of any underpasses would adopt CPTED principles, including the need for unobstructed views into and outside of the underpass, effective drainage and ventilation, wide corridors and good lighting; and
- d) light spill would be minimised as much as possible to reduce impacts on surrounding existing and future residents in accordance with relevant standards.

B40. Public art and interpretation would be incorporated into architectural elements or urban design treatments and would be assessed and implemented with design themes and urban design criteria (e.g. graffiti management).

Social

Outcome: *Future design development and assessment ensures minimisation of impacts on adjoining sensitive land-uses.*

Action

B41. Measures would be developed to minimise impacts on sensitive adjacent land uses (e.g. Forest Lawn Memorial Gardens Cemetery), including consideration of cultural sensitivities and particularly visual and noise impacts.

Economic and business

Outcome: *Potential for economic and business impacts and benefits of the project are given consideration in the future assessment.*

Action

B42. An assessment of the potential impacts and benefits of construction and operation on adjacent businesses would be undertaken in consultation with business owners during the design phase.

Public safety and security

Outcome: *Potential impacts on public safety and security would be addressed through adoption of Crime Prevention Through Environmental Design (CPTED) guidelines in future design development.*

Action

B43. NSW Police CPTED guidelines would be applied to all elements of the project to guide the design of appropriate lighting, fencing of the railway corridor, security measures (including surveillance cameras), graffiti management, help points at stations and other issues.

Services and utilities

Outcome: *To ensure the project addresses potential impacts on utilities and services*

Action

B44. Appropriate protection and risk management procedures would be established to protect utilities (such as the Sydney Water Supply Canal and Moomba Gas pipelines).

Groundwater and salinity

Outcome: *Further assessment is completed to inform future design development and minimise potential risks associated with saline soils and groundwater.*

Action

B45. Geotechnical investigations undertaken would assess groundwater levels and groundwater and soil quality to identify risks associated with saline groundwater and saline soils.

Contaminated land and hazardous materials

Outcome: *Assessment of potential contamination within the SWRL corridor and where appropriate identification of mitigation and management measures.*

Action

B46. Further assessment of potential contamination would be undertaken, to assess the extent or presence of contamination or hazardous materials along the length of the project corridor.

Appendix B

Categorisation of community and
non-government submissions

No.	Date received	Type	Agency / Organisation	Issue	Support for SWRL	consultation	Alternative Vertical alignment	Adequacy of EA and assessment process (insufficient info, errors etc)	Alternatives - Route Alignment	Alternatives other project components (e.g. station locations/ construction sites)	infrastructure and land use impacts	Property impacts	Traffic, Transport, Parking, Access	Construction Noise / Vibration	Operation Noise / Vibration	Surface Water and Flooding	Flora and fauna	Indigenous and Non-indigenous Heritage	Visual and Urban Design	social impacts (e.g. amenity values; construction disruptions)	economic impacts (including project cost)	Air Quality	other (e.g. SWRL extension)	Object to project	Other environmental issues
9	7/12/06	Individual		a) Traffic, transport, parking and access: <ul style="list-style-type: none"> ➢ Citicorp should consider a train timetable where travelling time to city is reduced further from Glenfield Station to the City. At least half of the 8 trains arriving at Glenfield every hour at peak hour could be made very limited stop trains –would make western region more accessible and better linked. 									1												
10	2/12/06	Individual		a) Supports project	1																				
11	4/01/07	Utility owner/operator (natural gas)	Alinta (Agility Management Pty Ltd)	a) Infrastructure impacts and adequacy of EA: <ul style="list-style-type: none"> ➢ Greater consideration should be given to the impact on the Moomba to Sydney and Eastern Natural Gas Pipelines given their importance (they are critical infrastructure as are sole supply of natural gas for the Sydney, Central Coast and Hunter regions) and the potential for significant safety risk to workers and the general public. ➢ 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 NSW <i>Pipelines Act 1967</i>, the <i>Australian Standard for Pipelines – Gas and Liquid Petroleum (AS2885)</i>, and Alinta's standard operating procedures. Implementation of any protection measures or relocation would require a minimum lead time of 18 months. 			1			1															
12	4/01/07	Individual		a) Supports project b) Property valuation issue: <ul style="list-style-type: none"> ➢ If payments are based on future potential, will land acquisition prices take into account the special infrastructure levy? 	1						1														
13	11/01/07	Individual		a) Supports project especially station at Leppington	1																				
14	2/12/06	Individual		a)Support for SWRL: <ul style="list-style-type: none"> ➢ Prefers northern alignment plan as shown in March 2005 plan (Current Proposed Alignments under Investigation) due to noise and visual impacts 	1																				
15	01/02/07	Individual		a) Alternative route alignment (and flooding): <ul style="list-style-type: none"> ➢ Not all options were assessed. TIDC didn't consider the 'other line' which was submitted by residents even though it would cut costs and property acquisitions. TIDC advised that they would not look into this option as so much work had already been done on the other options and they don't want it to go through Denham Court. ➢ TIDC said that the Northern Alignment was refined due to flooding issues at the station. This is false as the station has been moved to even lower ground which is susceptible to flooding 		1		1		1					1				1	1					

No.	Date received	Type	Agency / Organisation	Issue	Support for SWRL	consultation	Alternative Vertical alignment	Adequacy of EA and assessment process (insufficient info, errors etc)	Alternatives - Route Alignment	Alternatives other project components (e.g. station locations/ construction sites)	infrastructure and land use impacts	Property impacts	Traffic, Transport, Parking, Access	Construction Noise / Vibration	Operation Noise / Vibration	Surface Water and Flooding	Flora and fauna	Indigenous and Non-indigenous Heritage	Visual and Urban Design	social impacts (e.g. amenity values; construction disruptions)	economic impacts (including project cost)	Air Quality	other (e.g. SWRL extension)	Object to project	Other environmental issues	
				<p>visual and noise impacts on the park would be reduced. Residents east of the cutting (on both sides and travelling along Camden Valley Way) would have their view towards the Blue Mountains greatly improved (i.e. the railway would be camouflaged into the natural gully on the side of the hill).</p> <ul style="list-style-type: none"> ➤ Money saved from changing the alignment (as above) could be used to enhance links between the Sydney regional park and Leppington Station, by using vacant land along the southern edge of the rail line <p>c) Alternatives – other project components:</p> <ul style="list-style-type: none"> ➤ Instead of railway over Cowpasture Road, the bridge over the water canal could be extended and then Cowpasture Road could be lowered and extended under the rail line. 																						
19	06/02/07 (late)	Non-government organisation	Eco-Transit Sydney	<p>a) Support for SWRL:</p> <ul style="list-style-type: none"> ➤ Agree with many of the objectives of SWRL and Metropolitan Rail Expansion Program. Welcome the stabling facility at Leppington. ➤ There will be many social benefits resulting from the operation of the SWRL ➤ Eco Transit are pleased that the SWRL proposal takes into consideration the principles of Ecologically Sustainable Development ➤ The SWRL needs to be constructed as soon as possible <p>b) Other issues (broader land use/transport planning issues):</p> <ul style="list-style-type: none"> ➤ Transit oriented development should be extended city-wide ➤ The Cumberland line should be restored to full functionality and then included in the network served by the SWRL. ➤ In the absence of the above commitment, the bus transitway from Liverpool to Parramatta should also serve parts of the South West Growth Centre. As an interim measure, the transitway, as extended to Edmondson park (via Bernera Road) should also service Ingleburn Railway Station, with a possible bus-rail interchange at Ingleburn (western side). ➤ Precinct planning for the stations in the South West Growth Centre must take into consideration both pedestrians and cyclists ➤ The State Government should ensure that a safe and effective cycle network is created in the vicinity of the SWRL, in accordance with guidelines for bicycle planning and extend beyond recreational purposes. ➤ Consideration needs to be given to the Edmondson Park to Ingleburn cycle routes. ➤ The planned upgrade (of Campbelltown Road) between Camden Valley Way and McDonald Road should include safe bicycle facilities. ➤ Planners should consider linking the Western Sydney 	1	1		1		1			1		1	1	1					1	1			

No.	Date received	Type	Agency / Organisation	Issue	Support for SWRL consultation	Alternative Vertical alignment	Adequacy of EA and assessment process (insufficient info, errors etc)	Alternatives - Route Alignment	Alternatives other project components (e.g. station locations/ construction sites)	infrastructure and land use impacts	Property impacts	Traffic, Transport, Parking, Access	Construction Noise / Vibration	Operation Noise / Vibration	Surface Water and Flooding	Flora and fauna	Indigenous and Non-indigenous Heritage	Visual and Urban Design	social impacts (e.g. amenity values; construction disruptions)	economic impacts (including project cost)	Air Quality	other (e.g. SWRL extension)	Object to project	Other environmental issues	
				<p>travel at their optimal speed</p> <p>e) Alternatives – other project components:</p> <ul style="list-style-type: none"> ➢ TIDC should retain the option to retrospectively build a station at Horningsea Park as this area is not currently well served by public transport. <p>f) Consultation:</p> <ul style="list-style-type: none"> ➢ A public information campaign, to communicate the doubling of rail capacity from Glenfield to the East Hills line, should be instigated. ➢ The residents adjacent the rail corridor should be kept up to date of progress and issues concerning operational noise <p>g) Operational noise:</p> <ul style="list-style-type: none"> ➢ TIDC should erect noise barriers adjacent to affected residences. ➢ To decrease the effect of operational noise, deeper cuttings could be used in some areas of the corridor <p>h) Hydrology and biodiversity:</p> <ul style="list-style-type: none"> ➢ Hydrology and biodiversity must remain key issues in planning the SWRL: <p>i) Air quality:</p> <ul style="list-style-type: none"> ➢ If the other Metropolitan Rail Expansion Projects do not proceed quickly, the air quality benefits, resulting from operation of the SWRL, to western Sydney will be negated ➢ The air quality benefits resulting from operation of the SRWL will be negated if major road projects are carried out (e.g. Camden Valley Way) <p>j) Other – e.g. SWRL extension, operational plans/issues</p> <ul style="list-style-type: none"> ➢ The extension of the SWRL should not be limited to Bringelly. Options to extend the line through more of the South West Growth Centre should be examined and made public. ➢ The NSW government and DoP should not unreasonably withhold approval for the SWRL. 																					
20	2/02/07	Business	InvoCare (Forest Lawn Memorial Gardens Cemetery)	<p>a) Property and economic impacts:</p> <ul style="list-style-type: none"> ➢ The construction and operation of the SWRL has the potential for significant impacts on the Forest Lawn Memorial Gardens Cemetery business and property <p>b) Adequacy of EA</p> <ul style="list-style-type: none"> ➢ The EA contains no information on potential impacts or mitigation measures for the Forest Lawn Memorial Gardens Cemetery ➢ EA acknowledges general potential for impacts but defers any detail. Need to understand what construction process will be, whether there will be disruption to funeral processions, likely extent and duration of noise, vibration and dust during construction; how stormwater runoff will be managed; operational impacts including noise and noise mitigation, visual impacts and cultural concerns like 	1		1				1	1	1	1					1	1	1		1		

No.	Date received	Type	Agency / Organisation	Issue	Support for SWRL	consultation	Alternative Vertical alignment	Adequacy of EA and assessment process (insufficient info, errors etc)	Alternatives - Route Alignment	Alternatives other project components (e.g. station locations/ construction sites)	infrastructure and land use impacts	Property impacts	Traffic, Transport, Parking, Access	Construction Noise / Vibration	Operation Noise / Vibration	Surface Water and Flooding	Flora and fauna	Indigenous and Non-indigenous Heritage	Visual and Urban Design	social impacts (e.g. amenity values; construction disruptions)	economic impacts (including project cost)	Air Quality	other (e.g. SWRL extension)	Object to project	Other environmental issues	
				<p>Feng Shui.</p> <ul style="list-style-type: none"> ➤ The EA contains no meaningful information about future processes, consultation or opportunities to respond <p>c) Impacts (general):</p> <ul style="list-style-type: none"> ➤ The potential impacts of the SWRL on the Forest Lawn Memorial Gardens Cemetery during construction are through noise, vibration, dust, traffic disruption and polluted stormwater. Through operation the potential impacts would be due to noise, vibration and diminished visual outlook. This would create emotional stress to visitors and in turn cause loss of business and decrease property value. <p>d) Object to project as it stands</p> <p>e) Consultation:</p> <ul style="list-style-type: none"> ➤ The Forest Lawn Memorial Gardens Cemetery would like to remain in contact with TIDC and relative authorities through the development process 																						
21	1/02/07	Community group	Edmondson Park Action Group (C/O PMM)	<p>a) Object to the proposed development</p> <p>b) Property impacts:</p> <ul style="list-style-type: none"> ➤ The proposed route impacts on properties accessed by Jardine Drive, potentially reduces the ability to redevelop 'our' land (within the Edmondson Park Precinct Release Area) for residential development and inhibits our ability to obtain fair compensation in any future land acquisition. Area of concern falls within locality LA in the Edmondson Park Precinct Release Area - identified as deferred matter in LEP, but adjoins residential zones and part of land was previously zoned 2(e). ➤ Believed that, due to location within the Edmondson Park Precinct Release area that 'our' land would be used for residential development. Now however we are being disadvantaged. ➤ Request that any land valuation in the 'deferred matter' area take into consideration that if not for the declaration of the 'deferred matter area, the land would be zoned 2(e) ➤ Owner of Lot 16 requests the right to purchase the adjoining section of 210-220 Jardine Drive (Lot 2 DP 500198) <p>c) Adequacy of EA (and visual/heritage impacts):</p> <ul style="list-style-type: none"> ➤ The EA states why the northern alignment was preferred; however, it fails to take into consideration that the northern alignment would result in loss of a greater area of land with environment, conservation and archaeological significance. ➤ A visual impact assessment of the noise barriers should be included at the concept stage. <p>c)Other –request for info:</p> <ul style="list-style-type: none"> ➤ Further information should be made available to determine the extent to which the proposed rail line is positioned within the 'deferred matter' as identified in the 	1		1	1			1			1				1	1				1	1		

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				<p><i>Liverpool Environmental Plan 1997</i></p> <ul style="list-style-type: none"> ➢ Request further information about the review of the 'deferred area' as flagged in Section 10.2.2. <p>d) Other – wider land use planning issue:</p> <ul style="list-style-type: none"> ➢ As, prior to gazettal of Amendment no. 83 up to 40 dwellings per hectare were allowed in some areas. Demands the removal of the 'deferred area' and reinstatement of the 40 hectares per dwelling in this area. <p>e) Alternative route alignment:</p> <ul style="list-style-type: none"> ➢ The proposed line should be placed along the Denham Court boundary as this can be done without encroaching on land zoned 8(b) and the advantages include improved land management outcomes, decreased impacts on environmental and heritage values within the deferred area. ➢ Current proposal should be repositioned further south and west, within the identified corridor area. It can be confirmed that the curvature can be achieved without encroachment to the 8(b) land <p>f) Operational noise:</p> <ul style="list-style-type: none"> ➢ Any acoustic/aesthetic barrier be placed within the cut <p>g) Consultation:</p> <ul style="list-style-type: none"> ➢ EPAG and their consultants wish to meet with the TIDC design group to forward their case 																					
22	31/01/07	Community group	South West Action Group	<p>a) Support for SWRL: minimises property impacts and cost of land acquisition, no threatened animal species recorded (although part of Cumberland Plain Woodland would be removed); Aboriginal artefacts can be relocated and put on display; agree with relocation of Leppington town centre and stabling yard as original site was prone to flooding.</p> <ul style="list-style-type: none"> ➢ The refined Northern Alignment has a minimal social impact on Denham Court, Forest Lawn Cemetery and Casa Paloma Caravan Park <p>b) Visual Impact:</p> <ul style="list-style-type: none"> ➢ Visual impact is of some concern to Denham Court residents ➢ Implementation of mitigation measures for visual impacts (at Denham Court) such as bunds planted with native vegetation should be considered <p>c) Noise and vibration:</p> <ul style="list-style-type: none"> ➢ Noise and vibration (operational) are a concern and need to be addressed ➢ Noise and vibration should be managed during construction ➢ Mitigation measures for noise and vibration should meet noise guidelines ➢ Requests 3 metre walls to manage noise and vibration issues ➢ e) <p>d) Other environmental issues:</p>	1	1								1	1				1						1

No.	Date received	Type	Agency / Organisation	Issue	Support for SWRL	consultation	Alternative Vertical alignment	Adequacy of EA and assessment process (insufficient info, errors etc)	Alternatives - Route Alignment	Alternatives other project components (e.g. station locations/ construction sites)	infrastructure and land use impacts	Property impacts	Traffic, Transport, Parking, Access	Construction Noise / Vibration	Operation Noise / Vibration	Surface Water and Flooding	Flora and fauna	Indigenous and Non-indigenous Heritage	Visual and Urban Design	social impacts (e.g. amenity values; construction disruptions)	economic impacts (including project cost)	Air Quality	other (e.g. SWRL extension)	Object to project	Other environmental issues	
				<p>the precise impact of the SWRL on land use and property before the next phase of the project. Additional surveying and geotechnical investigations in the rail corridor are also needed.</p> <p>g) SWRL extension:</p> <ul style="list-style-type: none"> ➤ Serious oversight is that there is very little consideration to the extension of the line to serve the planned suburb of Oran Park. Not constructing the final section of the Rail Link now when economies of scale are present will increase the cost of extending the Rail Link later and therefore make it highly unlikely. <p>h) Oppose SWRL/northern alignment:</p> <ul style="list-style-type: none"> ➤ Oppose the northern route in its present form on the basis that 5.6 ha of endangered ecological communities will be cleared to make way for the rail line. <p>i) Alternative route alignment:</p> <ul style="list-style-type: none"> ➤ Southern route should be seriously considered as an option with variations identified to reduce the area of vegetation that is lost. <p>j) Request further information:</p> <ul style="list-style-type: none"> ➤ Would like to see further details on pedestrian and cycle facilities that are constructed as part of the station development. <p>k) Consultation (and traffic, transport, parking and access):</p> <ul style="list-style-type: none"> ➤ TIDC must work closely with the Growth Centres Commission to integrate other forms of transport into the initial plans for the rail link. 																						
41	1/02/07	Individual		<p>a) Objects to SWRL:</p> <ul style="list-style-type: none"> ➤ Totally against the northern alignment <p>b) Alternative route alignment:</p> <ul style="list-style-type: none"> ➤ Residents submitted another southern alignment option to TIDC that doesn't affect so many properties in Denham Court, cheaper to build and run and less property acquisition. TIDC will not look at it. ➤ DoP should consider running the rail corridor along Bringelly Road (due to future road widening, could share the cost with the RTA and limit those affected to residents along Bringelly Road) <p>c) Flooding impacts:</p> <ul style="list-style-type: none"> ➤ The station's location is in a very low area which is affected by floods – can't be built there. <p>d) Property impacts:</p> <p>Issue with land acquisition prices (current market value versus future potential value) – resident's lands are investments and they should benefit from them</p>				1			1					1								1		
42	2/02/07	Individual		<p>a) Support for SWRL</p> <p>b) Design of the SWRL concept:</p> <ul style="list-style-type: none"> ➤ Concerned re alignment's height over Cowpasture Road <p>c) Alternative vertical alignment:</p> <ul style="list-style-type: none"> ➤ Suggest possibility of track passing under the water 	1		1													1						

No.	Date received	Type	Agency / Organisation	Issue	Support for SWRL	consultation	Alternative Vertical alignment	Adequacy of EA and assessment process (insufficient info, errors etc)	Alternatives - Route Alignment	Alternatives other project components (e.g. station locations/ construction sites)	infrastructure and land use impacts	Property impacts	Traffic, Transport, Parking, Access	Construction Noise / Vibration	Operation Noise / Vibration	Surface Water and Flooding	Flora and fauna	Indigenous and Non-indigenous Heritage	Visual and Urban Design	social impacts (e.g. amenity values; construction disruptions)	economic impacts (including project cost)	Air Quality	other (e.g. SWRL extension)	Object to project	Other environmental issues
				canal d) Visual impacts: ➤ Looking north from Leppington, residents may see trains passing through the neighbourhood at tree-top height																					
43	2/02/07	Individual		a) Property impacts: ➤ Rear of residents property is partially affected b) Alternative route alignment: ➤ Consider moving alignment slightly to the south (50-80 metres) c) Design of the SWRL concept: ➤ Concerned regarding alignment's height over Cowpasture Road – trains would pass through Leppington at tree-top height d) Alternative vertical alignment/visual impacts: ➤ Consider lowering alignment and adjusting the route to lessen impact on locals, the area and Sydney Regional Park			1		1			1							1	1					
44	2/02/07	Individual		a) Alternative route alignment: ➤ Consider moving alignment closer to Byron Road (so that it uses less of the Resident's farm) b) Design of the SWRL concept/alternative vertical alignment: ➤ The alignment is too high c) Noise impacts: ➤ Concern over noise impacts to the neighbourhood d) Support for SWRL: ➤ Project is needed and happy for it to use some of land	1		1		1						1										
45	21/02/07 (late)	Business	Leppington Farm Pet and Hardware Pty Ltd	a) Business impacts: ➤ Concerned that the Rail Bridge Overpass will affect visibility of the business (and of those in the same complex)																	1				
46	8/02/07 (late)	Individual		a) Alternative route alignment ➤ Was told that the desired line for a train is a straight line (the southern alignment is the straight route) and why considered when will also be used for freight ➤ Not all options were assessed. TIDC didn't consider the 'other line' which was submitted by residents even though it would cut costs and property acquisitions. ➤ Denham Court residents would have been aware of the proposed rail at the time of purchase, the alignment change cannot be justified. b) Property impacts/acquisition: ➤ Believes won't get enough money from property acquisition to buy another property with the same attributes in the area, and will lose further future potential/ability to work at property. There are no similar properties available. ➤ The uncertainty of the South West Growth Centre has lowered property prices. ➤ Believes the residents should be paid what a developer		1		1	1			1									1			1	

No.	Date received	Type	Agency / Organisation	Issue	Support for SWRL	consultation	Alternative Vertical alignment	Adequacy of EA and assessment process (insufficient info, errors etc)	Alternatives - Route Alignment	Alternatives other project components (e.g. station locations/ construction sites)	infrastructure and land use impacts	Property impacts	Traffic, Transport, Parking, Access	Construction Noise / Vibration	Operation Noise / Vibration	Surface Water and Flooding	Flora and fauna	Indigenous and Non-indigenous Heritage	Visual and Urban Design	social impacts (e.g. amenity values; construction disruptions)	economic impacts (including project cost)	Air Quality	other (e.g. SWRL extension)	Object to project	Other environmental issues
				even though it would cut costs and property acquisitions. b) Property impacts/acquisition: ➢ Believes won't get enough money from property acquisition to buy another property with the same attributes in the area, and will lose further future potential/ability to work at property.																					
49	30/01/07	Individual		a) Alternative route alignment ➢ Previous southern option is a better option in terms of train speed and running time. ➢ If the northern alignment is accepted, would prefer it to be moved to the back of (my) property. b) Land use impacts: ➢ The project is destroying the Western Sydney Parkland. c) Alternative vertical alignment: ➢ It would be cheaper to move Cowpasture Road closer to the canal and for the rail line to run under the canal and Cowpasture road, in a cutting. ➢ A vertical alignment running under Cowpasture Road and the Water Canal would save large amounts of electricity by cutting out the climb from Camden Valley Way. d) Noise and visual impact: ➢ A vertical alignment running under Cowpasture Road and the Water Canal would reduce noise and visual impacts. e) Property impacts/alternative route alignment: ➢ A slight modification to the alignment (bringing it to the south or making it more circular) would decrease the amount of land that needs to be acquired. ➢ Moving the northern alignment to the back of (my) property would save the cost of acquiring useless land. f) Consultation/Infrastructure impacts: ➢ You could consult with the Water Board about running sewer lines from Leppington to Edmondson Park and then perhaps sharing the excavation cost.		1	1		1		1	1			1					1					
50	31/01/07	Individual		a) Alternative route alignment (and flora and fauna): ➢ Why is the rail alignment so close to the rear boundaries of (eastern) Cassidy Street and several Culverston Avenue residences when there is no obvious obstruction to moving the line eastward? ➢ Is the plan to build the line as close to the Edmondson Park/Denham Court boundary as possible to minimise the impact on future urban development in Edmondson Park,	1				1		1			1	1		1		1						

No.	Date received	Type	Agency / Organisation	Issue	Support for SWRL	consultation	Alternative Vertical alignment	Adequacy of EA and assessment process (insufficient info, errors etc)	Alternatives - Route Alignment	Alternatives other project components (e.g. station locations/ construction sites)	infrastructure and land use impacts	Property impacts	Traffic, Transport, Parking, Access	Construction Noise / Vibration	Operation Noise / Vibration	Surface Water and Flooding	Flora and fauna	Indigenous and Non-indigenous Heritage	Visual and Urban Design	social impacts (e.g. amenity values; construction disruptions)	economic impacts (including project cost)	Air Quality	other (e.g. SWRL extension)	Object to project	Other environmental issues	
				<p>or is it simply for profit?</p> <ul style="list-style-type: none"> ➤ Wouldn't a widened "green-zone" inbetween the Denham Court and Edmondson Park be better for both the benefit of existing residents and for the preservation of flora and fauna? <p>c) Construction and operational noise:</p> <ul style="list-style-type: none"> ➤ When will details of mitigation measures for construction and operational noise be released? <p>d) Visual:</p> <ul style="list-style-type: none"> ➤ When will details of mitigation measures for visual impacts be released. <p>e) Property impacts:</p> <ul style="list-style-type: none"> ➤ There will be a price difference between a property located next to the rail line compared with a similar property in Denham Court located away from the rail line. Will the Government guarantee protection of property values for affected residents for if and when they choose to sell? <p>g) Support for SWRL:</p> <ul style="list-style-type: none"> ➤ The project is important to the broader community, particularly for the future residents of south-west Sydney. 																						
51	2/02/07	Individual		<p>a) Operational noise/visual impact:</p> <ul style="list-style-type: none"> ➤ Resident is dependent on the 'dense bushland screen' and 'acoustic barriers' for mitigation of the noise and visual impacts of the proposal. ➤ A 'rail trail' as proposed would be contrary to the above noise and visual mitigation measures. <p>b) Social impacts:</p> <ul style="list-style-type: none"> ➤ Concerned by the opportunities for criminal activities that the 'rail trail' will present (due to its isolation and proximity to property). <p>c) Traffic, transport, parking and access:</p> <ul style="list-style-type: none"> ➤ Please move the 'rail trail' to the northern side of the corridor to reduce impacts on Cassidy Street residents. 								1		1					1	1						
53	2/02/07	Individual		<p>c) Consultation:</p> <ul style="list-style-type: none"> ➤ How has TIDC ensured that non English speakers have had access to information and ability to participate in the submissions process? ➤ How will TIDC ensure that this process occurs during implementation of the project? <p>d) Property impacts:</p> <ul style="list-style-type: none"> ➤ Will landowners be able to retain the remainder of their properties if the SWRL only cuts across a portion? ➤ Will landowners be compensated for existing infrastructure and investments on their properties? 		1					1							1								

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				e) Heritage impacts: <ul style="list-style-type: none"> ➤ Were Indigenous stakeholders asked to comment on the alternative routes, even if they did not run directly through heritage sites? ➤ What will happen if a significant heritage site is found on the proposed route? ➤ How will heritage issues be addressed on properties which cannot be surveyed (due to owners refusal)? 																					
56	2/02/07	Non-government organisation	Council of Social Services of NSW (NCOSS)	<p>a) Support for SWRL:</p> <ul style="list-style-type: none"> ➤ NCOSS is broadly supportive of the SWRL. NCOSS is also supportive of the refinements to the initial planning ➤ If planning for the SRWL is integrated adequately with existing and new transport networks and services meet community expectations, the SWRL will improve connectivity. ➤ The SWRL will enhance public transport for new residents in the South West Growth Centre. ➤ Construction of the SWRL concurrently with development of the region presents an opportunity for best practice in integrating sustainable transport and land use planning. <p>b) Transport and access:</p> <ul style="list-style-type: none"> ➤ NCOSS recommends that all new stations be fully accessible and that upgrades of existing stations include 'easy access'. ➤ Even though the SWRL is designed to link both the East Hills and South lines, there appears to be little discussion about maximising the connections between the Growth Centre and Liverpool and Parramatta where the majority of services will be located. <p>c) Urban design:</p> <ul style="list-style-type: none"> ➤ Integrated planning should aim to incorporate urban design that enhances physical accessibility of new and existing station surrounds. <p>d) Other – SWRL extension:</p> <ul style="list-style-type: none"> ➤ Failure to plan in advance (for the extension of the SWRL to Rossmore and Bringelly) will have consequences for integrated land use and planning. Plans should ensure adequate public transport connectivity. NCOSS recommends a 'stage 2' plan for this future expansion. <p>e) Infrastructure and land use impacts:</p> <ul style="list-style-type: none"> ➤ Planning for Leppington Station must link with the proposed Leppington Town Centre as it provides the opportunity to create residential 	1	1				1		1							1			1			

Appendix C

Draft SoC from EA and Concept
Plan

21. Draft Statement of Commitments

The Environmental Assessment of the SWRL project has identified a range of potential environmental impacts and recommended management measures to avoid or reduce the potential impacts of the SWRL. The Concept Plan in Chapter 20 has identified what TIDC is seeking approval for and where further design and assessment is required.

This Chapter outlines a draft Statement of Commitments proposed by TIDC. Following concept approval, the finalised commitments would guide subsequent phases of the project development.

The draft Statement of Commitments is provided in two parts (Tables 21-1 and 21-2). Table 21-1 identifies commitments related to Stage A and, in particular, commitments related to the environmental management during construction of these works. These commitments may be added to following completion of the further assessment identified in Section 20.4. Table 21-2 identifies commitments related to Stage B and focuses on the further design and assessments that would be undertaken.

Table 21-1 Draft Statement of Commitments: Stage A

Action	
Environmental Management Systems	
1.	The construction of the Stage A works would be undertaken in accordance with an Environmental Management System(s) (EMS) to the standard of ISO 14001 or equivalent.
2.	The proponent would prepare a Pre-Construction and Pre-Operation Compliance Report. During construction, a construction compliance report would be prepared at 6 monthly intervals.
3.	An Environmental Impact Audit Report (Construction) would be prepared and submitted to the Director-General within 3 months following completion of construction.
4.	The proponent would prepare a Construction Environmental Management Plan (CEMP) prior to construction, which would outline the operating conditions and temporary environmental protection measures to mitigate the impact of construction activities. The CEMP would be consistent with the statement of commitments any conditions of approval and include the conditions of any licences issued by government authorities.
Communication processes	
5.	A Community and Stakeholder Involvement Plan would be established prior to construction commencing to facilitate liaison with potentially affected residents and businesses. This would include public notifications and opportunities for consultation meetings with community stakeholder representation.
Environmental management	
6.	The proponent would appoint an independent Environmental Management Representative (EMR) prior to construction to advise the Director General and the proponent on compliance with the conditions of approval.
Land use, property and infrastructure planning	
7.	Consultation would be undertaken with the ARTC regarding construction timing and minimisation of cumulative impacts.
Traffic, transport, parking and access	
8.	Construction traffic impacts are to be managed in accordance with a three-level hierarchy of plans: <ul style="list-style-type: none"> a) High level Traffic Management Reports prepared for local government areas that address cumulative traffic impacts across a number of construction work sites. b) Site-specific Traffic Management Plans that focus on individual construction work sites. c) Traffic Control Plans for each location where works are proposed in the road or that would affect trafficable areas.
9.	Measures to mitigate impacts of the various work sites, around Glenfield Junctions, on

Action

pedestrians and cyclists would be incorporated into the Traffic Management and Traffic Control Plans.

Flora and fauna

10. The proponent would prepare a Flora and Fauna Management Plan prior to construction. This would include a revegetation plan and measures to control noxious weeds.

Heritage

11. The proponent would prepare a Heritage Management Plan prior to construction.

Noise and vibration

12. A Construction Noise and Vibration Management Plan would be prepared prior to construction.
13. Where practicable construction works would be undertaken during standard construction hours (7am – 6pm Monday to Friday and 8am to 1pm Saturdays).
14. Construction activities during weekend possessions would be managed to ensure that noise intensive construction works are undertaken during the daytime periods. Noise emissions during the night time period would be kept to a minimum, except where activities are critical to restoring rail services.

Visual and urban design

15. The proponent would liaise with ARTC regarding the placement of tree plantings alongside Hurlstone Agricultural College as mitigation for the SSFL project, to avoid any subsequent requirement to disturb or remove plantings as part of the construction works for the Glenfield Junction works.

Air quality and greenhouse gases

16. The proponent would prepare an Air Quality Plan prior to construction which would address management of dust during construction, emissions from construction plant and vehicles and other fugitive emissions.

Economic

17. As part of the Community and Stakeholder Involvement Plan, the proponent would consult with surrounding business owners during construction planning and where possible address their concerns.

Hazard and risk

18. The proponent would address construction issues through a Hazards and Risk Management Plan which would be developed prior to construction.

Public safety

19. All construction compounds and work areas would be fenced off to limit public access during construction.

Services and utilities

20. A Services and Utilities Plan would be developed prior to construction to identify existing services and utilities around the work sites and to provide guidance in the event of an unexpected disruption to utilities and services.

Soils, water quality and groundwater

21. Measures to control soil erosion and runoff would be detailed in a Soil and Water Management Plan prior to construction. The Plan would be prepared in consultation with relevant government departments and councils, and would be consistent with the principles and practices outlined in LandCom's (2004) *Managing Urban Stormwater: Soils and Construction*.

Waste, energy and demand on resources

22. Measures would be included in the CEMP regarding spoil re-use and disposal. Opportunities would be investigated to maximise re-use of construction spoil during design and other construction and demolitions waste.

Contaminated land and hazardous materials

23. Any necessary remediation would be completed prior to construction.
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Table 21-2 Draft Statement of Commitments - Stage B

Action

Further assessment

The Proponent would undertake the necessary environmental and design investigations listed in Section 20.5 of this report, and in addition, undertake the following:

Communication processes

24. Communications processes would be developed and implemented throughout delivery of the project. These would include:
 - a) opportunities to input to mitigation measures for construction or operations
 - b) methods to inform the community of the progress and performance of the project and issues of interest to the community
 - c) processes to receive and manage complaints
 - d) consultation with affected property owners, including property inspections, where appropriate
 - e) protocols to notify stakeholders of relevant activities and any incidents should they occur
 - f) ongoing liaison with government agencies regarding their issues of concern as detailed in Chapter 4 of this report.

Land use, property and infrastructure planning

25. The proponent would consult with Councils, the Growth Centres Commission and RailCorp regarding implementation of appropriate development controls within the vicinity of the rail line.
26. Land use and property impacts of the Edmondson Park and Leppington Stations and associated facilities would be further assessed (in conjunction with Growth Centres Commission, Councils and surrounding land owners).
27. Detailed assessment would be undertaken to confirm those properties directly affected by the SWRL.
28. Consultation would be undertaken with the Department of Planning to ensure the rail line can be integrated with planning for sub-precincts 9.7 and 9.6 of the Western Sydney Parklands and, where relevant, appropriate measures would be implemented to minimise the visual, noise and access impacts of the project on these sub-precincts.
29. A Land Asset Management Plan to address 'land surplus to use', post construction would be developed in consultation with Growth Centres Commission (and Councils where relevant). This plan would investigate opportunities for land amalgamation of parcels severed by the SWRL and identify opportunities for development that is consistent with land use planning, in particular the South West Growth Centre Structure Plan.
30. The proponent would liaise with agencies responsible for future precinct planning in the South West Growth Centre to ensure the design of the SWRL makes allowance for:
 - a) any reasonable measures to improve connectivity across the corridor to mitigate severance impacts, including opportunities for pedestrian bridges and other access
 - b) potential collocation of utilities or other beneficial land uses of the rail corridor, where feasible.

Traffic, transport, parking and access

31. Pedestrian modelling and further assessment of mode of access for normal and emergency access at Glenfield, Edmondson Park and Leppington Stations would be undertaken.
32. Assessment of provision of pedestrian and cycleway linkages alongside the SWRL and at various crossing points would be undertaken.
33. Investigations into additional commuter parking facilities at Glenfield Station would be undertaken. As a minimum, the objective would be to replace those that would be lost as a result of SWRL works.
34. Park-and-ride facilities at the Edmondson Park and Leppington Stations would be reviewed during further design. This is to be undertaken with reference to relevant parking policies and in consultation with the Growth Centres Commission, Councils, RailCorp and the Ministry of Transport.
35. In consultation with RailCorp, the Growth Centres Commission and Councils, a Maintenance Plan would be prepared to designate appropriate maintenance access points to the rail corridor.
36. Appropriate traffic modelling and traffic management analysis would be undertaken at intersections where there is potential for increased congestion during the SWRL construction.

Action

37. Ongoing liaison would be undertaken with transport stakeholders, including the Roads and Traffic Authority, councils, bus companies and the Ministry of Transport, during design development.
38. Glenfield, Edmondson Park and Leppington Stations would incorporate pedestrian and cycle access across the SWRL corridor, and easy access would be provided in accordance with the Commonwealth Government's Disability Standards for Accessible Public Transport Guidelines 2004 (no.2).
39. A more detailed construction methodology for the crossing of the Hume Highway would be developed in consultation with the Roads and Traffic Authority with the aim of minimising traffic disruptions.
40. A construction methodology would be developed in consultation with the Roads and Traffic Authority to minimise any closures to Campbelltown Road and Camden Valley Way during bridge construction.

Hydrology and surface water

41. A more detailed flood assessment would be undertaken to confirm the extent of flooding impacts and inform future design development, in particular the location and size of drainage structures.
42. Additional flooding assessment and vertical rail alignment design work would be undertaken at Edmondson Park Station and surrounds and coordinated with Landcom, the Growth Centres Commission and Councils.

Flora and fauna

43. Design of waterway crossings and structures would be undertaken with reference to the Guidelines for Design of Fish and Fauna Friendly Waterway Crossings (Fairfull and Witheridge 2003) and in consultation with NSW Fisheries.
44. The proponent would liaise with the Department of Environment and Conservation, the Growth Centres Commission, Councils, RailCorp and the Commonwealth Department of Environment and Heritage (for species listed under the Environment Protection and Biodiversity Conservation Act 1999 and endangered ecological communities), to resolve mitigation measures for residual biodiversity impacts arising from the SWRL project. This may include, but would not be limited to, the establishment of off-sets, bio-banking and other appropriate measures.
45. Targeted biodiversity assessments would be undertaken during suitable survey seasons to confirm the findings of the habitat assessment (Technical Paper 5), including:
 - a) targeted surveys for *Pimelea spicata* (during the peak flowering season, or when other western Sydney populations of this species are known to be in flower)
 - b) targeted surveys for the Cumberland Land Snail following suitable rainfall
 - c) surveys to determine the extent and condition of derived grassland along the proposed SWRL corridor alignment.

If the construction footprint of the SWRL (including the location and extent of construction work sites) changes, further biodiversity assessment would be undertaken if appropriate and the management and mitigation measures refined appropriately.

Heritage

46. As the design development for the proposed SWRL progresses the proponent would follow the *Protocol for Aboriginal Stakeholder involvement in the assessment of Aboriginal Cultural Heritage in the Sydney Growth Centres* (Context Pty Ltd. 2006a) and the *Precinct Assessment Method for Aboriginal Cultural Heritage in the Sydney Growth Centres* (Context Pty Ltd. 2006b). This would identify management and mitigation strategies to be employed during construction and operation.
47. Subject to property owner approval, areas with access constraints that were not surveyed in relation to the assessment of Non-Indigenous heritage included in the Environmental Assessment would be visited as the design develops. This additional assessment would identify management and mitigation strategies to be employed during construction and operation.
48. Proposed design work with the potential to impact on the former Ingleburn Military Camp would consider the relevant policies and procedures outlined in the *Heritage Analysis Ingleburn Defence Site* (Godden Mackay Logan 2001)
49. A referral regarding impacts on the former Ingleburn Military Camp would be submitted to the Commonwealth Department of Heritage if required.
50. Where works have the potential to affect the Sydney Water Upper Canal and associated row of

Action

- Bunya Pines, the design development would consider the relevant policies and procedures outlined in the *Conservation Management Plan for the Upper Canal, Pheasant's Nest to Prospect Reservoir* (Higginbotham 2002).
51. Future design development in the vicinity of the Denham Court, Hurlstone Agricultural High School and Macquarie Field House viewsheds would include measures to mitigate the potential impact on the landscape through appropriate sympathetic planting and landscaping.
 52. Design of road crossings at Old Cowpasture, Cowpastures Road and Camden Valley Way would be carried out in consultation with the Roads and Traffic Authority to deal sympathetically with and minimise potential impact to the heritage values and viewsheds.
 53. Off-sets would be developed in consultation with the Aboriginal community in regard to any unavoidable disturbance to Aboriginal heritage sites and places.

Noise and Vibration

54. In regard to operational noise, the proponent would:
 - a) Assess operational noise impacts in more detail as part of the design development
 - b) Provide acoustic mitigation measures to meet, where reasonable and feasible, the design goals (in situations where land use planning and consent condition measures do not provide adequate protection)
55. In regard to train stabling operational noise, the proponent would:
 - a) Determine the extent of any physical noise mitigation measures
 - b) Review the results of RailCorp's investigations into addressing horn noise and consider the feasibility in consultation with RailCorp in implementing a low volume horn test.
56. In regard to operational vibration, the proponent would investigate feasible and reasonable mitigation measures in consultation with local Councils and RailCorp if buildings are within approximately 30 metres of the nearest track centreline.

Visual and urban design

57. The following urban design principles would be used to guide the design of the Edmondson Park and Leppington Stations, the Glenfield Station upgrade and the stabling facility (where relevant):
 - a) Each railway station is to reinforce the role of its surrounding neighbourhood as a principal transport, commercial and community centre within the locality.
 - b) Each railway station and the stabling facility is to be designed in the context of the scale, character and image of the surrounding area (desired or existing) and enhance the presentation of the area to visitors and travellers.
 - c) Railway station access is to maintain or improve the cross-railway line connections or links to surrounding areas and activities. Where a connection between adjacent areas is desirable, pedestrian bridges or underpasses would be considered.
 - d) Easy access facilities and links are to be incorporated into the station designs and surrounding interchanges.
 - e) Railway station design should maintain visibility and protect and enhance built or natural features.
 - f) Urban design should create a civic presence for the railway station as befits its role as a focus of human activity.
 - g) Movement networks should improve existing, or establish new comfortable and inviting pedestrian environments, including disability access within the railway station and adjoining areas. There should be emphasis on the application of 'crime prevention through environmental design' principles.
 - h) Public transport and other non-car based travel should be given priority connection to the railway station and its adjoining areas.
 - i) Station precinct design should facilitate new development that reflects the highest standards and quality of architectural design, taking into account the existing built context and values.
58. The proponent would prepare a detailed Urban and Landscape Design Plan; this would include proposed station works, the stabling facility and the corridor as a whole.
59. For Leppington and Edmondson Park Stations, the proponent would liaise with the Growth Centres Commission, the Department of Planning, local councils, RailCorp and other land owners involved in the precinct planning, to ensure that the Landscape and Urban Design Plan and further design of the station and stabling facility concepts are consistent with and, may inform precinct planning.

Action

60. Further visual assessment would be undertaken as part of future design development. This would be done in association with consideration of urban design changes and opportunities for improvement. Additional assessments would include proposed bridging structures; cutting and embankment treatments; landscape treatment projects; detailed design of the stations and stabling facility; proposed acoustic treatments; and the final width and location of any visual buffer areas.
61. General measures to mitigate visual impacts would include:
- a) Where noise walls are proposed, potential visual impacts would be minimised by implementation of urban design measures, to be developed in consultation with adjacent property owners (mitigation might include plantings and high quality facings near residential areas, Glenfield Station and the planned town centres) as far as possible.
 - b) Earth mounding would be considered where space allows and where vegetation would not be lost.
 - c) A design theme would be established for bridges and flyovers to link the overall rail design together. The design would ensure that the structures are simple, integrated with the surrounding area and finished to a high quality. Fencing and any railing on the bridges would also be integrated with the overall design.
 - d) The design of any underpasses would adopt safer by design principles, including the need for unobstructed views into and outside of the underpass, effective drainage and ventilation, wide corridors and good lighting.
 - e) Light spill would be minimised as much as possible to reduce impacts on surrounding existing and future residents.
 - f) Lighting around stations and car parking areas would also be specifically designed to reduce light spill to nearby residents, whilst still meeting public safety requirements.

Social

62. The proponent would develop measures to minimise negative impacts on the Forest Lawn Memorial Gardens Cemetery, including consideration of cultural sensitivities and particularly visual and noise impacts.

Economic and business

63. The proponent would:
- a) Assess the magnitude of the impacts of construction on adjacent businesses during construction and undertake consultation with business owners during construction planning to address their concerns.
 - b) Liaise with the Department of Planning (Sydney Region West) and Campbelltown Council about the planning implications of the SWRL project for Glenfield.

Public safety

64. NSW Police 'Safer by Design' principles, including appropriate lighting, fencing of the railway corridor, security measures, installation of surveillance cameras and help points at stations, would be applied to all new facilities.

Services and utilities

65. The need for temporary on-site sewerage facilities in lieu of the development of the release areas (Edmondson Park and Leppington) would be further investigated.

Soils, water quality and groundwater

66. Geotechnical investigations undertaken during future design would also assess groundwater levels and quality to minimise risks associated with saline groundwater.

Contaminated land and hazardous materials

67. Consultation would be undertaken with the Department of Defence/ relevant land owners to clarify contamination issues on former defence lands to be affected by SWRL and, where necessary, determine the appropriate remediation methods.
68. LandCom's Remediation Action Plan (for its current landholdings in the Edmondson Park release area) would be used as a basis for further sampling and remediation investigations on relevant portions of the remainder of the SWRL corridor.
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