

# Environmental Assessment



**SIMTA**

**SYDNEY INTERMODAL TERMINAL ALLIANCE**

Transitional Part 3A Concept Application

August 2013

**urbis**



TABLE OF CONTENTS

<b>Statement of Validity</b> .....	<b>1</b>
<b>Executive Summary</b> .....	<b>3</b>
<b>1 Introduction</b> .....	<b>8</b>
1.1 Background to Proposal .....	8
1.2 Project Objectives .....	9
1.3 Value of Project .....	10
1.4 Director-General’s Environmental Assessment Requirements .....	11
1.5 Proponent and Project Team .....	12
<b>2 Detailed Description</b> .....	<b>13</b>
2.1 Location .....	13
2.1.1 Regional Context .....	13
2.2 Local Context .....	14
2.3 Site Description .....	17
2.3.1 SIMTA Site .....	17
2.3.2 Rail Corridor Land .....	20
2.4 Planning Context .....	23
2.4.1 Environment Protection and Biodiversity Conservation Act 1999 .....	23
2.4.2 Environmental Planning and Assessment Act 1979 .....	23
2.4.3 State Environmental Planning Policy (Major Development) 2005 .....	25
2.4.4 State Environmental Planning Policy (Infrastructure) 2007 .....	25
2.4.5 State Environmental Planning Policy No 55 – Remediation of Land .....	25
2.4.6 Greater Metropolitan Regional Environmental Plan No 2 – Georges River Catchment .....	26
2.4.7 Liverpool Local Environmental Plan 2008 .....	26
2.4.8 Development Control Plans .....	29
2.5 Project Components, Operations and Design Elements .....	30
2.5.1 Site Layout and Land Uses .....	30
2.5.2 Built Form Controls .....	32
2.5.3 Staging .....	34
<b>3 Strategic and Project Justification</b> .....	<b>36</b>
3.1 Suitability of the Site .....	36
3.2 Alternatives to the Preferred Project .....	37
3.3 Need For and the Objectives of the Project .....	38
3.3.1 Increasing Freight Rail in NSW .....	38
3.3.2 Catchment Demand .....	39
3.3.3 Cumulative Impacts .....	40
3.4 Relationship to Adjoining Land and School of Military Engineering Site .....	44
3.5 Consistency with State and Commonwealth Policies .....	45
3.5.1 NSW 2021: A Plan to Make NSW Number One .....	45
3.5.2 Sydney Metropolitan Plan 2036 .....	46
3.5.3 Draft Metropolitan Strategy for Sydney to 2031 .....	47
3.5.4 NSW Long Term Transport Master Plan .....	48
3.5.5 State Infrastructure Strategy 2012-2032 .....	48
3.5.6 South West Subregion Draft Subregional Strategy .....	49
3.5.7 Action for Air .....	50
3.5.8 Railing Port Botany’s Containers .....	51
3.5.9 Port Freight Logistics Plan .....	53
3.5.10 Draft National Ports Strategy and National Land Freight Strategy Discussion Paper .....	53
3.5.11 Draft NSW Freight and Ports Strategy .....	53

3.6	Consistency with Project Objectives.....	54
<b>4</b>	<b>Assessment of Key Issues .....</b>	<b>56</b>
<b>5</b>	<b>Transport and Access .....</b>	<b>57</b>
5.1	Overview .....	57
5.2	Assessment Methodology.....	57
5.3	Assessment of Key Issues.....	59
5.3.1	Transport and Accessibility Impact Assessment .....	59
5.3.2	Existing and Planned Transport Infrastructure .....	61
5.3.3	Vehicle Movements .....	65
5.3.4	Cumulative Impacts and Mitigation Measures.....	67
5.4	Legislative Requirements .....	72
5.5	Summary and Conclusion.....	72
<b>6</b>	<b>Noise and Vibration .....</b>	<b>73</b>
6.1	Overview .....	73
6.2	Assessment Methodology.....	73
6.3	Assessment of Key Issues.....	74
6.3.1	Noise and Vibration Impact Assessment.....	74
6.3.2	Potential Cumulative Impacts .....	77
6.4	Legislative Requirements .....	77
6.5	Summary and Conclusion.....	77
<b>7</b>	<b>Biodiversity .....</b>	<b>79</b>
7.1	Overview .....	79
7.2	Assessment Methodology.....	79
7.3	Assessment of Key Issues.....	81
7.3.1	Flora and Fauna .....	81
7.3.2	Riparian Corridors.....	86
7.3.3	Potential Cumulative Impacts .....	88
7.4	Legislative Requirements .....	89
7.5	Summary and Conclusion.....	90
<b>8</b>	<b>Hazards and Risks .....</b>	<b>91</b>
8.1	Overview .....	91
8.2	Assessment Methodology.....	91
8.3	Assessment of Key Issues.....	92
8.3.1	Hazards and Risks Assessment.....	92
8.3.2	Hazard Industry Planning Advisory Paper No 6 .....	93
8.3.3	Bushfire Impact Assessment .....	93
8.3.4	Potential Cumulative Impacts .....	94
8.4	Legislative Requirements .....	94
8.5	Summary and Conclusion.....	95
<b>9</b>	<b>Contamination.....</b>	<b>96</b>
9.1	Overview .....	96
9.2	Assessment Methodology.....	96
9.3	Assessment of Key Issues.....	97
9.3.1	Contamination Assessment and Remediation Options .....	97
9.3.2	Natural Soil Constraints .....	100
9.3.3	Potential Cumulative Impacts .....	101

## TABLE OF CONTENTS

9.4	Legislative Requirements .....	101
9.5	Summary and Conclusion .....	101
<b>10</b>	<b>Stormwater and Flooding .....</b>	<b>102</b>
10.1	Overview .....	102
10.2	Assessment Methodology .....	102
10.3	Assessment of Key Issues .....	103
10.3.1	Hydrological Impacts and Flooding .....	103
10.3.2	Potential Cumulative Impacts .....	108
10.4	Legislative Requirements .....	109
10.5	Summary and Conclusion .....	109
<b>11</b>	<b>Air Quality.....</b>	<b>110</b>
11.1	Overview.....	110
11.2	Assessment Methodology .....	110
11.3	Assessment of Key Issues .....	112
11.3.1	Air Quality Impact Assessment.....	112
11.3.2	Greenhouse Gas Impact Assessment.....	113
11.3.3	Potential Cumulative Impacts .....	115
11.4	Legislative Requirements .....	115
11.5	Summary and Conclusion .....	115
<b>12</b>	<b>Heritage .....</b>	<b>117</b>
12.1	Overview.....	117
12.2	Assessment Methodology .....	117
12.3	Assessment of Key Issues .....	119
12.3.1	Indigenous Heritage Significance .....	119
12.3.2	Non-Indigenous Heritage Significance .....	122
12.3.3	Potential Cumulative Impacts .....	129
12.4	Legislative Requirements .....	129
12.5	Summary and Conclusion .....	130
<b>13</b>	<b>Visual and Urban Design .....</b>	<b>131</b>
13.1	Overview.....	131
13.2	Assessment Methodology .....	131
13.3	Assessment of Key Issues .....	132
13.3.1	Visual Impact .....	132
13.3.2	Design Analysis and Justification .....	135
13.4	Potential Cumulative Impacts .....	137
13.5	Summary and Conclusion .....	137
<b>14</b>	<b>Utility Servicing.....</b>	<b>138</b>
14.1	Overview.....	138
14.2	Assessment Methodology .....	138
14.3	Assessment of Key Issues .....	138
14.3.1	Service Demands .....	138
14.3.2	Current Servicing Capacity and Locations .....	139
14.3.3	Augmentation of Existing and Proposed Utilities.....	140
14.3.4	Potential Construction Impacts and Cumulative Impacts .....	141
14.4	Summary and Conclusion .....	141

<b>15</b>	<b>Assessment of Additional Issues</b>	<b>142</b>
15.1	Overview	142
15.2	Health Impacts	142
15.3	Economic Impacts	143
15.4	Climate Change	144
15.5	Ecologically Sustainable Development (ESD)	146
15.6	Waste Management	147
<b>16</b>	<b>Environmental Risk Analysis</b>	<b>148</b>
<b>17</b>	<b>Consultation</b>	<b>166</b>
17.1	Government Authorities	166
17.2	Service and Infrastructure Providers	168
17.3	Specialist Interest Groups and the Public	168
<b>18</b>	<b>Draft Statement of Commitments</b>	<b>172</b>
<b>19</b>	<b>Summary and Conclusion</b>	<b>187</b>
<b>Appendix A</b>	<b>Quantity Surveyor Certificate</b>	<b>193</b>
<b>Appendix B</b>	<b>Director-General’s Environmental Assessment Requirements</b>	<b>194</b>
<b>Appendix C</b>	<b>Liverpool DCP 2008 Compliance Table</b>	<b>195</b>
<b>Appendix D</b>	<b>Land Use and Staging Plans</b>	<b>196</b>
<b>Appendix E</b>	<b>Urban Design and Landscape Report</b>	<b>197</b>
<b>Appendix F</b>	<b>Transport and Accessibility Impact Assessment</b>	<b>198</b>
<b>Appendix G</b>	<b>Freight Demand Modelling</b>	<b>199</b>
<b>Appendix H</b>	<b>Rail Access Report</b>	<b>200</b>
<b>Appendix I</b>	<b>Noise Assessment</b>	<b>201</b>
<b>Appendix J</b>	<b>Flora and Fauna Assessment</b>	<b>202</b>
<b>Appendix K</b>	<b>Riparian Assessment</b>	<b>203</b>
<b>Appendix L</b>	<b>Hazards and Risks Assessment</b>	<b>204</b>
<b>Appendix M</b>	<b>Preliminary Environmental Site Assessment</b>	<b>205</b>
<b>Appendix N</b>	<b>Phase 1 Environmental Site Assessment</b>	<b>206</b>
<b>Appendix O</b>	<b>Stormwater and Flooding Environmental Assessment</b>	<b>207</b>
<b>Appendix P</b>	<b>Flood Study and Stormwater Management</b>	<b>208</b>
<b>Appendix Q</b>	<b>Air Quality Impact Assessment</b>	<b>209</b>
<b>Appendix R</b>	<b>Greenhouse Gas Assessment</b>	<b>210</b>
<b>Appendix S</b>	<b>Aboriginal Cultural Heritage Assessment</b>	<b>211</b>
<b>Appendix T</b>	<b>Non-Indigenous Heritage Assessment</b>	<b>212</b>

TABLE OF CONTENTS

<b>Appendix U</b>	<b>Visual Impact Assessment</b> .....	<b>213</b>
<b>Appendix V</b>	<b>Utilities Strategy Report</b> .....	<b>214</b>
<b>Appendix W</b>	<b>Screening Level Health Risk Assessment</b> .....	<b>215</b>
<b>Appendix X</b>	<b>Economic Assessment</b> .....	<b>216</b>
<b>Appendix Y</b>	<b>Climate Risk Assessment</b> .....	<b>217</b>
<b>Appendix Z</b>	<b>Waste Management Strategy</b> .....	<b>218</b>
<b>Appendix AA</b>	<b>Environmental Risk Assessment</b> .....	<b>219</b>
<b>Appendix BB</b>	<b>Community and Stakeholder Consultation Outcome Report</b> .....	<b>220</b>
<b>Appendix CC</b>	<b>Social Impact Commentary</b> .....	<b>221</b>

**FIGURES:**

<b>Figure 1</b>	<b>– Regional Context Plan (Reid Campbell 2011)</b> .....	<b>13</b>
<b>Figure 2</b>	<b>– Local Context Plan (Reid Campbell 2012)</b> .....	<b>14</b>
<b>Figure 3</b>	<b>– Local Context Photographs (Urbis 2010)</b> .....	<b>16</b>
<b>Figure 4</b>	<b>– Aerial Photograph (Urbis 2010)</b> .....	<b>17</b>
<b>Figure 5</b>	<b>– SIMTA Site - Deposited Plan (Lot 1)</b> .....	<b>18</b>
<b>Figure 6</b>	<b>– SIMTA Site Photos (Urbis 2010)</b> .....	<b>19</b>
<b>Figure 7</b>	<b>– Rail Corridor and Indicative Rail Link Land (Reid Campbell 2012)</b> .....	<b>22</b>
<b>Figure 8</b>	<b>– Rail Corridor – Lot Descriptions (Reid Campbell 2012)</b> .....	<b>22</b>
<b>Figure 9</b>	<b>– Liverpool Local Environmental Plan 2008 - Land Use Zoning Map Extract</b> .....	<b>27</b>
<b>Figure 10</b>	<b>– Concept Plan – Land Uses (Reid Campbell 2012)</b> .....	<b>30</b>
<b>Figure 11</b>	<b>– Concept Plan – Indicative Staging (Reid Campbell 2012)</b> .....	<b>35</b>
<b>Figure 12</b>	<b>– Moorebank Freight Catchment Area – with SIMTA 2016 - Unconstrained (Hyder: 2013)</b> .....	<b>41</b>
<b>Figure 13</b>	<b>– Moorebank Freight Catchment Area – with SIMTA 2025 – Unconstrained (Hyder: 2013)</b> .....	<b>41</b>
<b>Figure 14</b>	<b>– Moorebank Freight Catchment Area – with SIMTA 2016 – Constrained (Hyder: 2013)</b> .....	<b>42</b>
<b>Figure 15</b>	<b>– Moorebank Freight Catchment Area – with SIMTA 2025 – Constrained (Hyder: 2013)</b> .....	<b>42</b>
<b>Figure 16</b>	<b>– Existing and Planning Freight Clusters, Intermodal Terminals and Freight Corridors (Metropolitan Plan 2036)</b> .....	<b>47</b>
<b>Figure 17</b>	<b>– Subregional Transport Related Infrastructure (Extract, Metropolitan Transport Plan 2036)</b> ..	<b>49</b>
<b>Figure 18</b>	<b>– Container Movement Through SIMTA Proposal (HYder: 2013)</b> .....	<b>65</b>
<b>Figure 19</b>	<b>– Project Train Paths (Hyder: 2013)</b> .....	<b>65</b>
<b>Figure 20</b>	<b>– Proposed Upgrading Works at M5 Motorway/Moorebank Avenue Interchange (Hyder: 2013)</b> .....	<b>69</b>
<b>Figure 21</b>	<b>– Indicative Staging Programme and TEU THresholds (Hyder: 2013)</b> .....	<b>70</b>
<b>Figure 22</b>	<b>– Suggested Package of Public Transport Mitigation Measures (Hyder: 2013)</b> .....	<b>71</b>
<b>Figure 23</b>	<b>– Sensitive Receivers (Wilkinson Murray: 2013)</b> .....	<b>75</b>
<b>Figure 24</b>	<b>– Location of Threatened Flora Species Recorded in Study Area (Hyder: 2013)</b> .....	<b>82</b>
<b>Figure 25</b>	<b>– Location of Threatened Fauna Species Recorded in Study Area (Hyder: 2013)</b> .....	<b>83</b>
<b>Figure 26</b>	<b>– GHG Emissions Savings (Hyder: 2012)</b> .....	<b>114</b>
<b>Figure 27</b>	<b>– Results of Field Surveys (AHMS: 2012)</b> .....	<b>119</b>
<b>Figure 28</b>	<b>– Key View Locations Used in Visual Analysis (Reid Campbell: 2013)</b> .....	<b>132</b>
<b>Figure 29</b>	<b>– Current Utility Service Capacity and Locations (Reid Campbell 2011)</b> .....	<b>140</b>
<b>Figure 30</b>	<b>– Adaptation Actions for Mitigation of Priority Climate Change Risks (Hyder: 2012)</b> .....	<b>145</b>
<b>Figure 31</b>	<b>– Risk Analysis Categories and Criteria (Hyder: 2013)</b> .....	<b>148</b>

<b>Figure 32</b> – Criteria for Evaluating Likelihood (Hyder: 2013).....	149
<b>Figure 33</b> – Criteria for Establishing Consequence (Hyder: 2013).....	149

**PICTURES:**

<b>Picture 1</b> – Adjoining Commonwealth land to the east of SIMTA, looking east from SIMTA .....	16
<b>Picture 2</b> – Adjoining Commonwealth land to the east of SIMTA, looking west from Wattle Grove .....	16
<b>Picture 3</b> – Looking east across the School of Military Engineering from Casula .....	16
<b>Picture 4</b> – Looking east to the School of Military Engineering from the Casula Powerhouse .....	16
<b>Picture 5</b> – Looking south along the existing passenger railway line from Casula Railway Station.....	16
<b>Picture 6</b> – Looking north-east along the Georges River from Casula Powerhouse.....	16
<b>Picture 7</b> – Existing warehouse buildings .....	19
<b>Picture 8</b> – Warehouse and parachute drying tower .....	19
<b>Picture 9</b> – Undeveloped land portion to south .....	19
<b>Picture 10</b> – Existing disused rail line .....	19
<b>Picture 11</b> – Existing unscreened container storage .....	19
<b>Picture 12</b> – Existing vehicle access and storage areas .....	19

**TABLES:**

<b>Table 1</b> – Response to Director-General’s Environmental Assessment Requirements .....	11
<b>Table 2</b> – Lot Descriptions of the Rail Corridor .....	20
<b>Table 3</b> – Greater Metropolitan Regional Environmental Plan No 2 – Georges River Catchment: Planning Control 21 – Development in Vegetation Buffer Areas .....	26
<b>Table 4</b> – Indicative Staging Plan.....	34
<b>Table 5</b> – Objects of the <i>Environmental Planning and Assessment Act 1979</i> .....	36
<b>Table 6</b> – Truck Movements to the SIMTA site (Hyder: 2013).....	66
<b>Table 7</b> – Native Vegetation within the Study Area and SIMTA Proposal (Hyder: 2013) .....	85
<b>Table 8</b> – Development and Mitigation Options .....	124
<b>Table 9</b> – Identified Visual Impacts (Reid Campbell: 2013) .....	133
<b>Table 10</b> – Ecologically Sustainable Development Opportunities .....	146
<b>Table 11</b> – Summary of Waste Management and Minimisation Strategies .....	147
<b>Table 12</b> – Draft Statement of Commitments.....	172



# Statement of Validity

**Submission of Environment Assessment:** prepared under Schedule 6A of the *Environmental Planning and Assessment Act 1979*.

## Environmental Assessment prepared by:

Name:	Jennifer Cooper (Associate Director)
Address:	Urbis Pty Ltd. Level 23, Tower 2, 201 Sussex Street Sydney NSW 2000
In respect of:	Concept Plan - SIMTA Moorebank Intermodal Terminal Facility (Application MP 10_1093)

## Applicant and Land Details

Applicant:	SIMTA (Sydney Intermodal Terminal Alliance)
Land to be developed:	SIMTA site (former DNSDC Site) Moorebank Avenue, Moorebank  Part of: Commonwealth lands between SIMTA site and East Hills Railway Line, Railway land including within the East Hills Passenger Line Corridor Privately owned land north of East Hills Passenger Line, east of Cumberland & South Passenger Line and Southern Sydney Freight Line and west of Georges River (including Glenfield Waste Disposal Centre) Land west of the Georges River, north of the above privately owned land Railway land along shared railway line – Cumberland & South Passenger Line and Southern Sydney Freight Line Main Southern Railway corridor Georges River
Lot and DP	Lot 3001 in Deposited Plan 1125930  Lot 1 in Deposited Plan 825352  Lot 2 in Deposited Plan 825348  Lots 1 and 2 in Deposited Plan 1061150  Lot 1 in Deposited Plan 712701  Lots 5-7 in Deposited Plan 833516  Lot 51 in Deposited Plan 515696  Lot 52 in Deposited Plan 517310  Lots 101-104 in Deposited Plan 1143827  Lot 91 in Deposited Plan 1155962  Lot 4 in Deposited Plan 1130937

Conveyance Book 76 Number 361

Crown Land

Project Summary:

Concept Plan proposal for an Intermodal Terminal Facility including a rail corridor to the Southern Sydney Freight Line (with indicative rail link), intermodal terminal, warehouse and distribution facilities, freight village (ancillary site and operational services), stormwater, landscaping, servicing and associated works.

**Declaration:** I certify that the contents of the Environmental Assessment, to the best of my knowledge, have been prepared as follows:

- (a) In accordance with the requirements of the *Environmental Planning and Assessment Act 1979* and *Environmental Planning and Assessment Regulations 2000*; and
- (b) The information contained in this report is true in all material particulars and is not misleading.

.....  
Signature

Name: Jennifer Cooper

.....  
Date: 12 August 2013  
.....

# Executive Summary

This Environmental Assessment report (**EA**) has been prepared on behalf of the Sydney Intermodal Terminal Alliance (**SIMTA**), a consortium of Qube Holdings and Aurizon (formerly QR National), and in respect of Concept Plan Application No 10\_0193 (**Concept Plan Application**) which seeks concept approval in respect of the SIMTA Moorebank Intermodal Terminal Facility (**SIMTA proposal**).

An earlier Environmental Assessment for the SIMTA proposal was lodged with the Department of Planning and Infrastructure (**Department**) and publicly exhibited from 28 March 2012 to 28 May 2012. This amended EA has been prepared:

- Following the Director-General's designation of the SIMTA proposal under clause 8F(1)(e) of the Environmental Planning and Assessment Regulation 2000 (NSW) (Clause 8F Designation). The designation of the SIMTA proposal as a project on land with multiple owners has the effect that the consent of the owner of land on which the project is to be carried out is not required in respect of the making of the Concept Plan Application.
- To incorporate responses to issues raised by the Department of Planning and Infrastructure and other key stakeholders in their assessment of the earlier Environmental Assessment and associated draft Submissions Report and Preferred Project Report.
- To reflect and incorporate changes proposed by SIMTA to minimise potential impacts of the proposal, including:
  - Reduction in the width of the rail corridor.
  - Relocation of the rail link within the East Hills railway corridor.
  - Introduction of a temporary rail siding.
  - Rationalisation of the proposed rail infrastructure by including additional land parcels to the Concept Plan Application to accommodate the proposed rail corridor and rail link.

The SIMTA site comprises 83 hectares of land at Moorebank Avenue, Moorebank which is currently occupied by the Defence National Storage and Distribution Centre (**DNSDC**). The Department of Defence is proposing to relocate the DNSDC to the adjacent land to the north owned by the Commonwealth. Construction of the facility was originally scheduled to commence in December 2012 and be completed by mid-2014.

The Concept Plan also nominates a rail corridor to the south and south-west of the SIMTA site connecting to the Southern Sydney Freight Line, including an indicative rail link. The SIMTA site is surrounded by Commonwealth owned land, including the School of Military Engineering (**SME**) to the west and undeveloped land held by the Department of Finance to the east. The SME site is planned to be redeveloped as an intermodal terminal, currently referred to as the Moorebank Intermodal Company Limited (**MICL**) Proposal (formerly known as the Moorebank Project Office (**MPO**) proposal).

The Concept Plan application seeks approval for the redevelopment of the SIMTA site as an intermodal terminal facility with warehouse and distribution facilities. The proposal comprises the following key components:

- **Intermodal Terminal Facility** providing a port-shuttle freight rail service between Port Botany and the SIMTA site. The Intermodal Terminal Facility will provide capacity for up to approximately one million containers (twenty-foot equivalent units or TEU) throughput per annum, accommodating the forecast catchment demand for Western and South Western Sydney.
- **Rail Corridor** – the Concept Plan includes a nominated rail corridor which is proposed to accommodate a rail link 20 metres and variable in width to connect the SIMTA site with the Southern Sydney Freight Line via the East Hills Railway Corridor and Commonwealth owned and privately owned land. Based on the findings of the environmental assessment of the key issues outlined in **Sections 4-15**, an indicative rail alignment has been included in the Concept Plan Environmental

Assessment. The design of the rail link will be subject to a further detailed application and approvals process.

- **Intermodal Terminal** – the terminal is proposed to include on-site freight rail sidings of up to 1,200 metres in length to accommodate local freight trains to Port Botany. Freight will arrive by rail and be transported to the warehouse and distribution facilities within the SIMTA site, or be directly loaded on to trucks for transport to warehouses and nearby logistics centres. Exports and empty freight containers will be transported to the facility by truck and then loaded onto rail for transport back to Port Botany. The terminal will contain four permanent rail sidings and one temporary rail siding, with areas for container handling and storage.
- **Warehouse and Distribution Facilities** - approximately 300,000m<sup>2</sup> of warehouses with ancillary offices will be constructed to the east of the intermodal terminal. These buildings are proposed to be constructed in stages in response to site servicing availability and market demands. It is expected that warehouses will range in size, depending on tenant needs.
- **Freight Village** – approximately 8,000m<sup>2</sup> of support services will be provided on site. These may include site management and security offices, meeting rooms, driver facilities and convenience retail and business services.

The Concept Plan application for the redevelopment of the SIMTA site has been lodged to enable the timely and efficient delivery of an intermodal terminal facility at Moorebank. The Environmental Assessment for the SIMTA Intermodal Terminal Facility has been prepared in accordance with the Director-General's Environmental Assessment Requirements (DGRs) issued by the Department of Planning and Infrastructure on 24 December 2010. Key points arising from the Environmental Assessment are summarised below:

- There has been strong and consistent policy support at both Commonwealth and State level for the expansion of the rail freight network across NSW. In particular, the development of an intermodal terminal facility at Moorebank has been proposed since 2004. The Concept Plan application lodged by SIMTA will facilitate the timely development of this facility by the private sector as identified within existing and draft strategic planning policy including *Railing Port Botany's Containers*, *Draft National Ports Strategy and National Land Freight Strategy Discussion Paper* and *Draft NSW Freight and Ports Strategy*.
- The SIMTA proposal has been assessed based on the forecast demand for one million TEU, within Sydney's West and South-West subregions. The proposal by the Moorebank Intermodal Company Limited (MICL) Proposal (formerly known as the Moorebank Project Office (MPO) proposal on the adjacent Commonwealth owned land would service the same catchment area, meaning that should the proposal obtain approval and commence operation of an intermodal terminal, it would reduce the ability for the SIMTA site to achieve full operational capacity. The cumulative impact of the SIMTA proposal and a future MICL proposal would be substantially the same and accordingly, the cumulative impacts have been fully assessed within this proposal.
- The SIMTA proposal will not restrict the siting and layout options for the MICL proposal as outlined within the *Moorebank Intermodal Terminal Project Detailed Business Case*, dated 6 February 2012. As such, there is no reason to further delay the SIMTA proposal while the relocation of the School of Military Engineering and its future development is further resolved by the MICL.
- The proposal is entirely consistent with strategic planning and transport policies as it will make a significant contribution to the key freight objective of the NSW government to increase the proportion of container freight being moved by rail from Port Botany to 28%.
- The proposed development is permissible with Ministerial consent under the provisions of Schedule 6A of the *Environmental Planning and Assessment Act 1979* (EPA Act 1979), *State Environmental Planning Policy (Infrastructure) 2007* and the *Liverpool Local Environmental Plan 2008*. It has been demonstrated that the proposal complies with each of the relevant state environmental planning instruments. It has also been demonstrated that the proposal satisfactorily responds to the local controls.

- The key issues for all components of the project identified in the DGRs have been assessed in detail, with specialist reports underpinning the key findings and recommendations outlined in the Environmental Assessment. It has been demonstrated that each of the impacts identified in the assessment of the key issues will either be positive or can be appropriately mitigated as summarised below:
  - **Transport and Access** – the assessment has demonstrated that there is a clear benefit arising from the proposal with regard to its strategic contribution to the development of the intermodal network and the increased share of container freight being moved by rail. There are forecast capacity issues for the local and regional road network, however, it has been demonstrated that these are irrespective of whether or not the SIMTA proposal proceeds. A range of infrastructure and non-infrastructure related mitigation measures have been identified to reduce these impacts.
  - **Noise and Vibration** – it has been demonstrated that the SIMTA proposal will be able to meet the relevant noise and vibration criteria for surrounding land uses through the implementation of a number of mitigation measures during the construction and full capacity operational phase to minimise its potential impacts.
  - **Biodiversity** – the SIMTA site has been determined to be of limited conservation significance and its redevelopment will have minimal ecological impacts. The construction of the rail corridor has the potential to have a more significant impact, particularly on the *Personia nutans*, which is located to the south of the SIMTA site on the Commonwealth owned land, however, the rail link and associated corridor will be located to avoid this species as far as practicable (including by utilising existing railway lands within the East Hills Passenger Line Corridor). Where impacts cannot be avoided, mitigation measures will be implemented to ameliorate impacts on biodiversity values during and following construction, including the use of biodiversity offsets.
  - **Hazards and Risks** – the potential on-site and off-site hazards and risks have been identified, with a list of recommendations for further assessment to be undertaken at the detailed application stage, once the final layout and operational issues have been further resolved.
  - **Contamination** – it has been demonstrated that the SIMTA site is suitable for the proposed use, subject to further site investigations, including a Site Management Plan. A preliminary environmental assessment has been undertaken for the rail corridor lands including the indicative rail link. Further investigations will be completed as part of the future detailed application(s). A Contamination Management Plan is to be prepared as part of a Construction Environmental Management Plan to address any expected or unexpected contaminated materials during the construction process.
  - **Stormwater and Flooding** – the stormwater, flooding and erosion sediment impacts have been identified and mitigation measures have been incorporated into the proposal. These measures will facilitate the treatment of stormwater quantity and quality in the future construction and operational phases of the project in accordance with the relevant legislative requirements.
  - **Air Quality** – the *Air Quality Impact Assessment* concludes that the SIMTA proposal will not exceed air quality criteria during construction or operation. The regional impacts of the SIMTA proposal are expected to result in a net reduction in emissions for NO<sub>x</sub> and PM. The changes in emissions when considered at the regional level and impacts on regional air quality would be negligible. The *Greenhouse Gas Assessment* has demonstrated that the SIMTA proposal can achieve an annual GHG saving of 43,206 tCO<sub>2e</sub> per annum through its operational and transport efficiencies
  - **Heritage** – the assessment has concluded that there is no indigenous heritage significant potential on the SIMTA site, having regard to the extensive earthworks and development that has already been undertaken to accommodate the existing site activities. The potential impacts are likely to occur within the rail corridor and mitigation measures are provided to address these potential impacts. The non-indigenous heritage impact assessment has concluded that the principal impact of the proposal will be on the SIMTA site, particularly with regard to the World War II buildings. The report recommends that a Statement of Heritage Impacts should be produced and submitted with the future detailed planning approval application(s).

- **Visual and Urban Design** – a comprehensive assessment has been undertaken with regard to the potential visual impacts arising from the SIMTA proposal and it has been concluded that the impact is relatively low, having regard to the existing DNSDC industrial buildings and the mitigation measures to screen the intermodal terminal facility. The design analysis has demonstrated that the proposed built form controls will satisfactorily guide the siting and layout of the future staged development.
- **Utilities** – it has been demonstrated that all required utility services can be connected to the site and are capable of accommodating the proposed intermodal terminal facility, subject to the augmentation and upgrading of the existing facilities.
- Further to the issues listed within the DGRs, the proponent has identified a number of additional important issues that are assessed within the Environmental Assessment. It has been demonstrated that each of the impacts arising from these additional issues will also be positive or appropriately mitigated as summarised below:
  - **Health Impacts** – the potential health impacts associated with the proposal have been assessed and indicate that acute or chronic health impacts are unlikely to result from the emissions associated with the SIMTA proposal on an individual or cumulative impact basis.
  - **Economic Impacts** – the employment generating potential of the proposal has been assessed and it has been determined that the proposed intermodal facility will generate a significant number of direct and indirect jobs. It will also result in a number of other economic benefits, including net travel time and labour cost savings.
  - **Climate Change** – the possibility of severe weather events associated with climate change has been assessed with regard to the SIMTA proposal. Appropriate mitigation measures have been recommended for the construction and operational phases which will be incorporated into the future detailed planning approval applications.
  - **Ecologically Sustainable Development (ESD)** – a range of ESD initiatives have been proposed, including site management policies and strategies, materials selection and energy and water demand management and on-site renewable energy generation. These initiatives will contribute to the sustainable management of the proposal and minimising its ecological footprint. Further, there are considered to be regional ESD benefits arising from the shift towards rail based freight transport.
  - **Waste Management** – a waste management strategy has been prepared to achieve best practice waste reduction, waste minimisation and waste management at the SIMTA Intermodal Terminal Facility and help reduce the amount of waste sent to landfill.
- An environmental risk analysis has been undertaken to identify the potential environmental impacts associated with the proposal. This analysis includes a risk ranking for each of the potential impacts, which is then reassessed taking into account the proposed mitigation measures to then identify the residual risk ranking. This analysis has concluded that the proposed mitigation measures to be implemented within the SIMTA proposal will result in no unacceptable environmental risks.
- Consultation was undertaken with a range of parties during the preparation of the Environmental Assessment, including Commonwealth, State and local government authorities, service and infrastructure providers, specialist interest groups and the local community. Each of the relevant issues raised during the consultation process has been addressed within the Environmental Assessment.

It has been demonstrated that the proposed redevelopment will result in a number of significant benefits, including:

- Reduction in congestion and heavy vehicle movements along the M5 Motorway between Port Botany and Moorebank by 2,735 vehicles per day.
- Restoration and regeneration of degraded areas of vegetation to improve the overall biodiversity quality of the rail corridor land.

- Improvements to the water quality of surrounding riparian corridors, including the Anzac Creek and Georges River through the introduction of more rigorous on-site water management and water quality control measures.
- A positive impact on regional air quality, including a net reduction in emissions for NO<sub>x</sub> and PM. and annual greenhouse gas saving of 43,206 tCO<sub>2</sub>e.
- Creation of 850 direct and indirect jobs per annum over the six year construction period and 7,100 direct and indirect jobs once the facility is fully operational.
- Reduction in truck vehicle kilometres travelled of approximately 13 million kilometres per annum and net travel time savings of approximately 530,400 hours per annum, with associated labour cost savings of \$18.6 million per annum (2011 figures).

The potential direct, indirect and cumulative impacts of the proposed intermodal terminal facility have been identified and thoroughly assessed. It is considered that the potential impacts can be satisfactorily mitigated through a range of measures that will be addressed as part of the future detailed planning approval applications and throughout the construction and operational phases of the project. A Draft Statement of Commitments has been prepared listing each of these mitigation measures.

Overall, the assessment concludes that the development proposed in the Concept Plan application is in the public interest and approval is recommended.

# 1 Introduction

## 1.1 BACKGROUND TO PROPOSAL

This Environmental Assessment report (**EA**) has been prepared on behalf of the Sydney Intermodal Terminal Alliance (**SIMTA**), a consortium of Qube Holdings and Aurizon (formerly QR National), and in respect of Concept Plan Application No 10\_0193 (**Concept Plan Application**) which seeks concept approval in respect of the SIMTA Moorebank Intermodal Terminal Facility (**SIMTA proposal**).

An earlier version of the Environmental Assessment for the SIMTA proposal was lodged with the Department of Planning and Infrastructure (**Department**) and publicly exhibited from 28 March 2012 to 28 May 2012. This amended EA has been prepared:

- Following the Director-General's designation of the SIMTA proposal under clause 8F(1)(e) of the Environmental Planning and Assessment Regulation 2000 (NSW) (Clause 8F Designation). The designation of the SIMTA proposal as a project on land with multiple owners has the effect that the consent of the owner of land on which the project is to be carried out is not required in respect of the Concept Plan Application.
- To incorporate responses to issues raised by the Department of Planning and Infrastructure and other key stakeholders in their assessment of the earlier Environmental Assessment and associated Preferred Project Report, including:
  - Department of Finance and Deregulation
  - Department of Defence
  - Australian Rail Track Corporation Ltd
  - Railcorp
  - Transport for NSW
  - Roads and Maritime Services
  - Office of Environment and Heritage
  - Heritage Council of New South Wales
  - NSW Office of Water, Department of Primary Industries
  - NSW Environment Protection Authority
  - NSW Health
  - Liverpool City Council
  - Bankstown City Council
  - Campbelltown City Council
  - Local land owners and residents
- To reflect and incorporate changes proposed by SIMTA since the period of public exhibition to minimise potential impacts of the proposal, being:
  - **Reduction in the width of the rail corridor** – it is proposed to reduce the width of the straight-line section of the rail corridor to the south of the DNSDC land from 30 metres to 20 metres. The



proposed amendment will reduce the potential impacts on *Persoonia nutans*, as less clearing of vegetation will be required on the Commonwealth owned land to accommodate the rail link.

- **Relocation of the rail link within the East Hills railway corridor** – it is proposed to relocate the rail link further south so that it is accommodated within the existing East Hills railway corridor (which is already being used for railway purposes as reflected in its SP2 – Special Infrastructure zoning). The rail link will extend further south to enter the railway corridor and extend north from the Glenfield Waste Disposal Centre to provide a safe and functional connection to the SSFL.
- **Introduction of a temporary rail siding** – it is proposed to provide an additional temporary rail siding within the SIMTA site to provide a total of five rail sidings, including four permanent and one temporary siding. The fifth rail siding would minimise the potential impact on the continued Defence National Storage and Distribution Centre (**DNSDC**) operations and use of the eastern part of the site during the staged redevelopment. The fifth rail siding would be decommissioned as further stages of the SIMTA proposal are constructed and the DNSDC vacates the site. The proposal would not result in any additional impacts as the construction footprint would not increase and the number of rail movements would remain the same.
- **Rationalisation of the proposed rail infrastructure by including additional land parcels to the Concept Plan Application to accommodate the proposed rail corridor and rail link** – as a result of the relocation of the rail link, it is proposed to add seven new land parcels to the Site Description to which the Concept Plan Application relates (ie comprising areas within the revised rail corridor). The details of the additional land parcels are provided in **Section 2.3**.

The proposal comprises the redevelopment of 83 hectares of industrial zoned land at Moorebank Avenue, Moorebank for use as an intermodal terminal facility. The site is currently occupied by Department of Defence, however, it is proposed to relocate the DNSDC to the adjacent land to the north owned by the Commonwealth. Construction of the facility has commenced and is scheduled to be completed by mid-2014.

A rail corridor and indicative rail link is also proposed between the planned intermodal terminal facility and the Southern Sydney Freight Line (**SSFL**), which is currently under construction. The proposal forms a vital infrastructure component for Sydney's future economic and productivity growth. It will allow efficient rail freight transport from Port Botany to Sydney's west and south-west by utilising the freight capacity on the SSFL. It will also contribute in achieving an increase in rail-based freight transport within Sydney and NSW.

The significance of the SIMTA Intermodal Terminal Facility was recognised in its declaration as a 'Major Project' under (the now repealed) Part 3A provisions of the *Environmental Planning and Assessment Act 1979 (the EP&A Act)*. The Minister for Planning issued correspondence on 9 November 2010 confirming that the proposal was a development of a kind described in Schedule 1, Group 8, Clause 23 of *State Environmental Planning Policy (Major Development) 2005* and a project to which Part 3A of the EP&A Act applied.

The Minister also issued separate correspondence dated 9 November 2010 authorising the submission of a Concept Plan for the proposed development. The Director-General's Environmental Assessment Requirements (**DGRs**) for the Concept Plan were subsequently issued by the Department of Planning on 24 December 2010.

This EA has been prepared in accordance with the relevant provisions of the EP&A Act, given its status as a "Transitional Part 3A Project", and the provisions of the DGRs.

## 1.2 PROJECT OBJECTIVES

The key objectives for the project are to deliver an intermodal terminal facility which:

- Is strategically located to utilise existing and future Metropolitan, State and National rail freight and road networks, including the Southern Sydney Freight Line and the M5 and WestLink M7 motorways.

- Will provide capacity for an annual throughput of up to one million TEU to meet the forecast demand for Western and South Western Sydney and make a significant contribution to achieving Federal and State land use, freight and logistics policies, including the NSW Government target of 28% of container freight being transported by rail.
- Will assist with alleviating freight-related road congestion between Port Botany and Moorebank, particularly along the M5 Motorway.
- Will enable growth of the freight and logistics industry to better service the South West and Western Sydney catchments.
- Is appropriately designed and managed to provide operational efficiencies and to appropriately mitigate impacts on the local community.
- Realises the economic benefits of rail distribution, including reduction in truck vehicle kilometres and net travel time savings.
- Provides warehousing and distribution opportunities in an appropriate location, in turn providing employment opportunities and associated economic and social benefits.

The principal aim of the Concept Plan application is to establish clear parameters that will guide the future delivery of the intermodal facility in a staged manner. It proposes a range of built form controls to guide the siting and layout of the intermodal terminal facility, including both the rail infrastructure and the warehouse buildings. It also includes a range of controls that will provide for the appropriate management and/or mitigation of the potential environmental, social and/or economic impacts during both the construction and operational phases of the development.

This application seeks approval of the SIMTA Concept Plan. Following approval, a detailed design process will be undertaken and further approval applications relating to the construction work will then be lodged on a staged basis. The approval applications will include more detailed documentation of the proposed development and a comprehensive assessment of its compliance with the provisions outlined in the Concept Plan.

### 1.3 VALUE OF PROJECT

Capital investment value (CIV) is defined in the *Environmental Planning and Assessment Regulation 2000* as follows:

*capital investment value of a development or project includes all costs necessary to establish and operate the project, including the design and construction of buildings, structures, associated infrastructure and fixed or mobile plant and equipment, other than the following costs:*

- (a) amounts payable, or the cost of land dedicated or any other benefit provided, under a condition imposed under Division 6 or 6A of Part 4 of the Act or a planning agreement under that Division,
- (b) costs relating to any part of the development or project that is the subject of a separate development consent or project approval,
- (c) land costs (including any costs of marketing and selling land),
- (d) GST (within the meaning of A New Tax System (Goods and Services Tax) Act 1999 of the Commonwealth).

The CIV of the proposed development is \$490 million. A Quantity Surveyors Certificate of Cost report certifying CIV of the development is attached as **Appendix A**.

## 1.4 DIRECTOR-GENERAL'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

The following table provides a summary of the Director-General's Environmental Assessment Requirements (**DGRs**) issued by the Department of Planning on 24 December 2010. The table also identifies where each requirement has been addressed within the Environmental Assessment report. A copy of the DGRs is attached as **Appendix B**.

**TABLE 1 – RESPONSE TO DIRECTOR-GENERAL'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS**

REQUIREMENT	REFERENCE
<b>GENERAL REQUIREMENTS</b>	
Environmental Assessment (EA) including:	
▪ Executive Summary	<b>Page 3</b>
▪ Detailed Description	<b>Section 2</b>
▪ Strategic and Project Justification	<b>Section 3</b>
▪ Assessment of Key Issues	<b>Section 4-15</b>
▪ Draft Statement of Commitments	<b>Section 18</b>
▪ Certification	<b>Page 1</b>
<b>KEY ISSUES</b>	
▪ Transport and Access	<b>Section 5</b>
▪ Noise and Vibration	<b>Section 6</b>
▪ Biodiversity	<b>Section 7</b>
▪ Hazards and Risks	<b>Section 8</b>
▪ Contamination	<b>Section 9</b>
▪ Stormwater and Flooding	<b>Section 10</b>
▪ Air Quality	<b>Section 11</b>
▪ Heritage	<b>Section 12</b>
▪ Visual and Urban Design	<b>Section 13</b>
▪ Utilities	<b>Section 14</b>
<b>ENVIRONMENTAL RISK ANALYSIS</b>	<b>Section 16</b>
<b>CONSULTATION</b>	<b>Section 17</b>

## 1.5 PROPONENT AND PROJECT TEAM

The Environmental Assessment has been prepared by Urbis with specialist reports prepared by a range of consultants and sub-consultants. The key disciplines and members of the project team are listed below:

- Access, Traffic and Parking – Hyder
- Air Quality – Pacific Environment Limited (formerly known as PAE Holmes)
- Biodiversity (Aquatic Impact) – ALS Water Science Group
- Biodiversity (Flora and Fauna) – Hyder
- Climate Change – Hyder
- Community Consultation – Elton Consulting
- Contamination – Golder Associates
- Economic Impacts – PriceWaterhouseCoopers and Urbis
- Greenhouse Gas Impacts – Hyder
- Hazards and Risks – Hyder
- Health Risks – Toxikos Toxicology Consultants
- Indigenous Heritage – Archaeological & Heritage Management Solutions Pty Ltd
- Noise and Vibration – Wilkinson Murray
- Non-Indigenous Heritage – Artefact Heritage Solutions
- Social Impacts – Urbis
- Stormwater and Flooding – Hyder
- Urban Design and Visual Impact – Reid Campbell
- Urban Planning – Urbis
- Utilities and Services – Hyder
- Waste Management – Hyder

## 2 Detailed Description

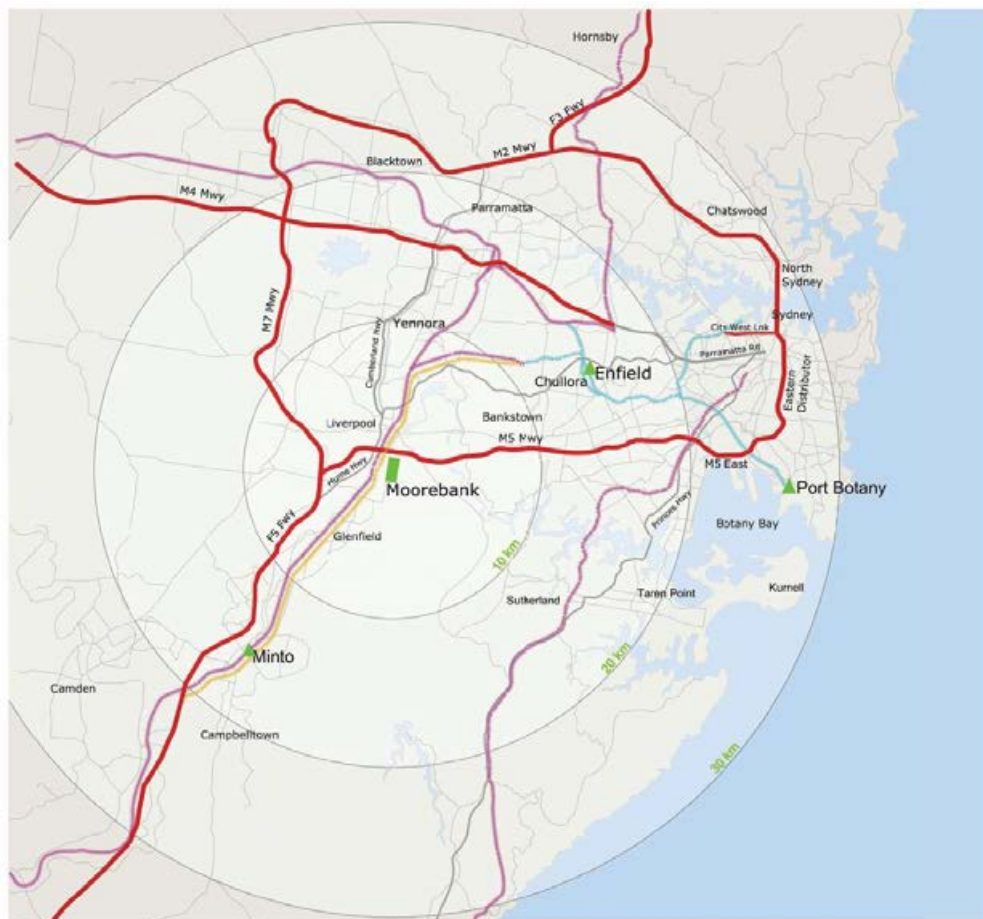
### 2.1 LOCATION

#### 2.1.1 REGIONAL CONTEXT

The SIMTA site is located approximately 27 kilometres south-west of the Sydney Central Business District (**CBD**) and approximately 26 kilometres west of Port Botany. The site is situated within the Liverpool Local Government Area (**LGA**), in Sydney's South Western Subregion, approximately 2.5 kilometres from the Liverpool City Centre.

The site is located approximately 800 metres south of the intersection of Moorebank Avenue and the M5 Motorway. This intersection provides on- and off-ramps in an eastern and western direction, allowing vehicles to turn left and right at each of the four ramps, as well as to move north and south through the intersection. The M5 provides the principal road based link between the site, Sydney CBD and Port Botany. It also provides access to the key employment and industrial lands within the South Western Sydney Subregion. The M5 links with the WestLink M7 Motorway to the west, providing access to the broader metropolitan and State road network.

**FIGURE 1 – REGIONAL CONTEXT PLAN (REID CAMPBELL 2011)**



#### LEGEND

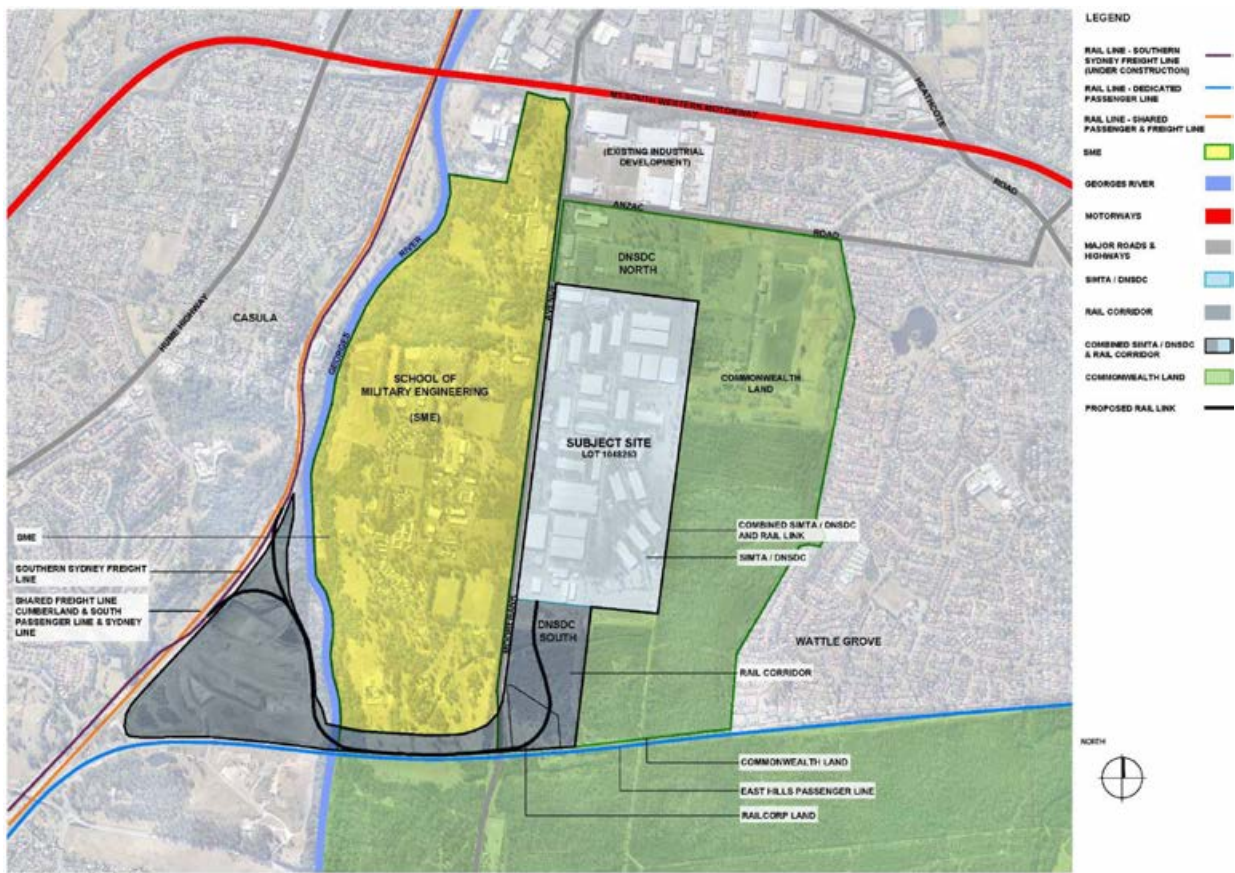
-  RAIL LINE - DEDICATED FREIGHT
-  RAIL LINE - PLANNED SOUTHERN SYDNEY FREIGHT LINE
-  RAIL LINE - SHARED PASSENGER & FREIGHT
-  HIGHWAYS & MAJOR ROADS
-  MOTORWAYS & FREEWAYS
-  PROPOSED MOOREBANK INTERMODAL TERMINALS
-  EXISTING INTERMODAL TERMINALS

The Southern Sydney Freight Line (**SSFL**) is located one kilometre to the west of the proposed SIMTA site. The SSFL is a 36km dedicated freight line between Macarthur and Chullora. The SSFL commenced operations in January 2013 and aims to improve rail freight movements through Sydney to increase productivity and the overall competitiveness and reliability of the Interstate Rail Freight Network<sup>1</sup>.

## 2.2 LOCAL CONTEXT

The SIMTA site is approximately 2.5 kilometres to the south of Liverpool City Centre. The site is also located near a number of significant industrial areas, including Moorebank (Yulong and Amiens) and Warwick Farm to the north, Chipping Norton to the north-east, Prestons to the west and Glenfield and Ingleburn to the south-west. The Moorebank Industrial Area comprises approximately 200 hectares of industrial development, the majority of which is located north of the M5 Motorway between Newbridge Road, the Georges River and Anzac Creek. This industrial area supports a range of industrial uses including freight and logistics, heavy and light manufacturing, office and business park developments.

**FIGURE 2 – LOCAL CONTEXT PLAN (REID CAMPBELL 2012)**



Other dominant surrounding land use includes the Department of Defence land, which comprises:

- The School of Military Engineering, on the western side of Moorebank Avenue directly adjacent to the SIMTA site. As noted previously, this site is proposed to be redeveloped as an intermodal terminal by the Moorebank Intermodal Company Limited (**MICL**).
- The Holsworthy Military Reserve, to the south of the site on the southern side of the East Hills Passenger Railway Line.
- The Commonwealth residual land located to the north of the SIMTA site which is proposed to accommodate the relocated DNSDC operations.

<sup>1</sup> Ministerial Release, *New Line to Reduce Congestion on Sydney Rail Network Opens*, 21 January 2013

- The Commonwealth residual land to the east between the SIMTA site and the Wattle Grove residential area.

The Glenfield Waste Disposal facility is located to the west of the SIMTA site. This triangular portion of land is generally bound by the Georges River to the east, the East Hills railway line to the south and the South and Cumberland railway lines and future SSFL to the west.

Nearby residential areas include Wattle Grove, Moorebank, Holsworthy and Casula, which are located to the east and north east. Wattle Grove is within the closest proximity, located approximately 400 metres east of the SIMTA site, while the Casula residential areas is approximately one kilometre west of the SIMTA site and approximately 400 metres west of the proposed rail corridor land and indicative rail link. These residential areas are generally characterised by low-density detached dwellings varying in age, with Casula being an older subdivision occurring in the late 1950s, while the residential areas of Moorebank and Wattle Grove are newer subdivisions occurring in the late 1970s through to the early to mid-1990s.

Moorebank Avenue is located immediately west of the SIMTA site. It runs in a north-south direction and provides a direct connection between the Liverpool City Centre, M5 Motorway on/off ramps to the north, and the Glenfield/Macquarie Fields residential areas to the south. The closest passenger railway stations are Casula (approximately 1 kilometre to the west), Liverpool (approximately 2.5 kilometres to the north) and Holsworthy (approximately 3 kilometres to the south-east). While Casula is located in closest proximity of the site, the railway station is physically separated from the SIMTA site by the Georges River with no current connection to provide for direct pedestrian movements to/from the SIMTA site. Liverpool and Holsworthy railway stations are located further from the SIMTA site, however, the Route 901 bus service provides regular connections to/from Anzac Road, north of the SIMTA site. Liverpool is an interchange station that services the South, Cumberland, Bankstown and Inner West railway lines. Holsworthy is located on the East Hills line, which runs immediately south of the SIMTA site. The SIMTA site includes an existing rail spur from the East Hills railway line. This rail spur is no longer in use, noting that the East Hills line is a dedicated passenger line.

The Georges River runs along the western boundary of the School of Military Engineering. Anzac Creek runs to the south of the SIMTA site and along the eastern boundary of the Commonwealth Land, linking to Chipping Norton Lake and the Georges River to the north. Existing drainage channels through the SIMTA site drain towards the south-east and north-east corner of the site into Anzac Creek and along the western boundary to Georges River.

**FIGURE 3 – LOCAL CONTEXT PHOTOGRAPHS (URBIS 2010)**



**PICTURE 1 – ADJOINING COMMONWEALTH LAND TO THE EAST OF SIMTA, LOOKING EAST FROM SIMTA**



**PICTURE 2 – ADJOINING COMMONWEALTH LAND TO THE EAST OF SIMTA, LOOKING WEST FROM WATTLE GROVE**



**PICTURE 3 – LOOKING EAST ACROSS THE SCHOOL OF MILITARY ENGINEERING FROM CASULA**



**PICTURE 4 – LOOKING EAST TO THE SCHOOL OF MILITARY ENGINEERING FROM THE CASULA POWERHOUSE**



**PICTURE 5 – LOOKING SOUTH ALONG THE EXISTING PASSENGER RAILWAY LINE FROM CASULA RAILWAY STATION**



**PICTURE 6 – LOOKING NORTH-EAST ALONG THE GEORGES RIVER FROM CASULA POWERHOUSE**



## 2.3 SITE DESCRIPTION

### 2.3.1 SIMTA SITE

The SIMTA site is located on the eastern side of Moorebank Avenue in Moorebank. The legal description of the property is Lot 1 in Deposited Plan 1048263. The site has the following key features:

- Total site area of approximately 83 hectares.
- The allotment is regular in shape, with a length of 1,382 metres and a width of 600 metres.
- The site topography is relatively flat with a low hill on the eastern part of the site.
- The site has direct frontage to Moorebank Avenue, which is a publicly used private road.

An aerial photograph showing the location of the SIMTA site is provided in **Figure 4** below. A reduced sized copy of the deposited plan and photographs of the SIMTA site are provided in **Figure 5** on the following pages.

**FIGURE 4 – AERIAL PHOTOGRAPH (URBIS 2010)**



The SIMTA site has been associated with the military since the early 1900s, including its use as a training camp in 1907 and as a military storage facility from 1944<sup>2</sup>. The site was sold by the Commonwealth in 2003, however, the Department of Defence continues to lease the site, which is now commonly known as the Defence National Storage and Distribution Centre (**DNSDC**) site. The DNSDC is planning to relocate their operations to the Commonwealth owned land located immediately to the north of the SIMTA site.

<sup>2</sup> *Artefact, Non-Indigenous Heritage*, 5 June 2013



**FIGURE 6 – SIMTA SITE PHOTOS (URBIS 2010)**



**PICTURE 7 – EXISTING WAREHOUSE BUILDINGS**



**PICTURE 8 – WAREHOUSE AND PARACHUTE DRYING TOWER**



**PICTURE 9 – UNDEVELOPED LAND PORTION TO SOUTH**



**PICTURE 10 – EXISTING DISUSED RAIL LINE**



**PICTURE 11 – EXISTING UNSCREENED CONTAINER STORAGE**



**PICTURE 12 – EXISTING VEHICLE ACCESS AND STORAGE AREAS**

## 2.3.2 RAIL CORRIDOR LAND

The Concept Plan application includes a proposed rail corridor to the south and south-west of the SIMTA site which is proposed to accommodate a rail link between the site and the SSFL. The lot descriptions of the affected land are described in **Table 2**. The total land area within the rail corridor is approximately 75 hectares. It will generally be 20 metres wide along its straight alignments (eg through the Commonwealth owned land to the south of the SIMTA site), however, its width may vary in other sections, depending on engineering requirements and site conditions (eg turning requirements in certain locations may require a wider corridor, while the co-location of the rail link within the existing East Hills Railway Corridor may require a reduced width).

An indicative rail link is proposed within the rail corridor, anticipated to be approximately 3.5 kilometres in length. It will provide two connections to the SSFL, each of which run south-east along the eastern boundary of the Glenfield Waste Disposal Centre, before crossing the Georges River and then further east within the existing East Hills Railway Corridor before turning north and entering the SIMTA site. The final alignment of the rail link will be determined through further design development which will be undertaken prior to lodgement of a subsequent detailed approval application over the rail corridor land.

**TABLE 2 – LOT DESCRIPTIONS OF THE RAIL CORRIDOR**

LOT	DEPOSITED PLAN	PROPERTY ADDRESS/DESCRIPTION	OWNER
3001	1125930	Moorebank Avenue, Moorebank (land immediately south and south-west of SIMTA site)	The Commonwealth of Australia
1	825352	Railway land including the East Hills Passenger Line	RailCorp NSW
2	825348		
1	1061150		
2	1061150		
1	712701		
5	833516	Privately owned land north of East Hills Passenger Line, east of Cumberland & South Passenger Line and Southern Sydney Freight line and west of Georges River	Helen Louise Kennett, Figela Pty Ltd and JC and FW Kennett Pty Ltd
7	833516		RailCorp NSW
51	515696		JC and FW Kennett Pty Ltd
52	517310		
104	1143827		
103	1143827		Figela Pty Ltd
91	1155962		JC & FW Kennett Pty Limited
4	1130937	Land west of the Georges River, north of the above privately owned land	The Commonwealth of Australia
6	833516	Railway land along shared railway line – Cumberland & South Passenger Line and Southern Sydney Freight Line	RailCorp NSW
101	1143827		
102	1143827		
Conveyance Book 76	Number 361	Main Southern Railway Corridor	RailCorp NSW
-	-	Georges River	Crown Land

The land affected by the proposed rail corridor is highlighted in grey and the indicative rail link is shown as a dotted line in the Land Use Drawing shown in **Figure 7**. A separate map including the lot descriptions is provided as **Figure 8**. The key features of the rail corridor land, including the previous and current and uses, is provided below.

- **Commonwealth Land** - the majority of the Commonwealth land between the SIMTA site and the East Hills Railway Corridor is undeveloped, containing native vegetation including Castlereagh Scribbly Gum Woodland, Castlereagh Swamp Woodland, and River Flat Eucalypt Forest. Small pockets of land have been cleared for past rail-related activities. This land is traversed by Anzac Creek which drains into the Georges River and includes a disused railway spur which connects into the East Hills Railway Line. Additional Commonwealth land is located to the west of the Georges River, north of the privately owned land described further below.
- **Railway Land** - the railway land includes the East Hills Railway Corridor and land along the shared railway line – Cumberland & South Passenger Line and the Southern Sydney Freight Line. This land is already being used for railway purposes and has been predominantly cleared of vegetation.
- **Privately owned land** – the Glenfield Waste Disposal Centre is a triangular shaped site bound by the Georges River, Cambridge Avenue and the South and Cumberland Railway Lines which is currently used for waste disposal and extractive activities. It is traversed by the East Hills Railway Corridor before it connects into the South and Cumberland Railway Corridor. A review of aerial photographs associated with the contamination assessment for the proposed rail corridor<sup>3</sup> indicated that the site was used for agricultural activities until the quarry first appeared in the early-mid 1970s.

Both the rail corridor and the indicative rail link shown in **Figure 7** have been assessed as part of the Concept Plan application. The specialist reports submitted with the Environmental Assessment have generally considered the potential impact of the rail link being located anywhere within the rail corridor land. However, the urban design and visual impact specialist assessments have considered the indicative rail link in detail to understand its potential impacts.

---

<sup>3</sup> Golder Associates, *Phase 1 Environmental Site Assessment*, 17 April 2013

FIGURE 7 – RAIL CORRIDOR AND INDICATIVE RAIL LINK LAND (REID CAMPBELL 2012)

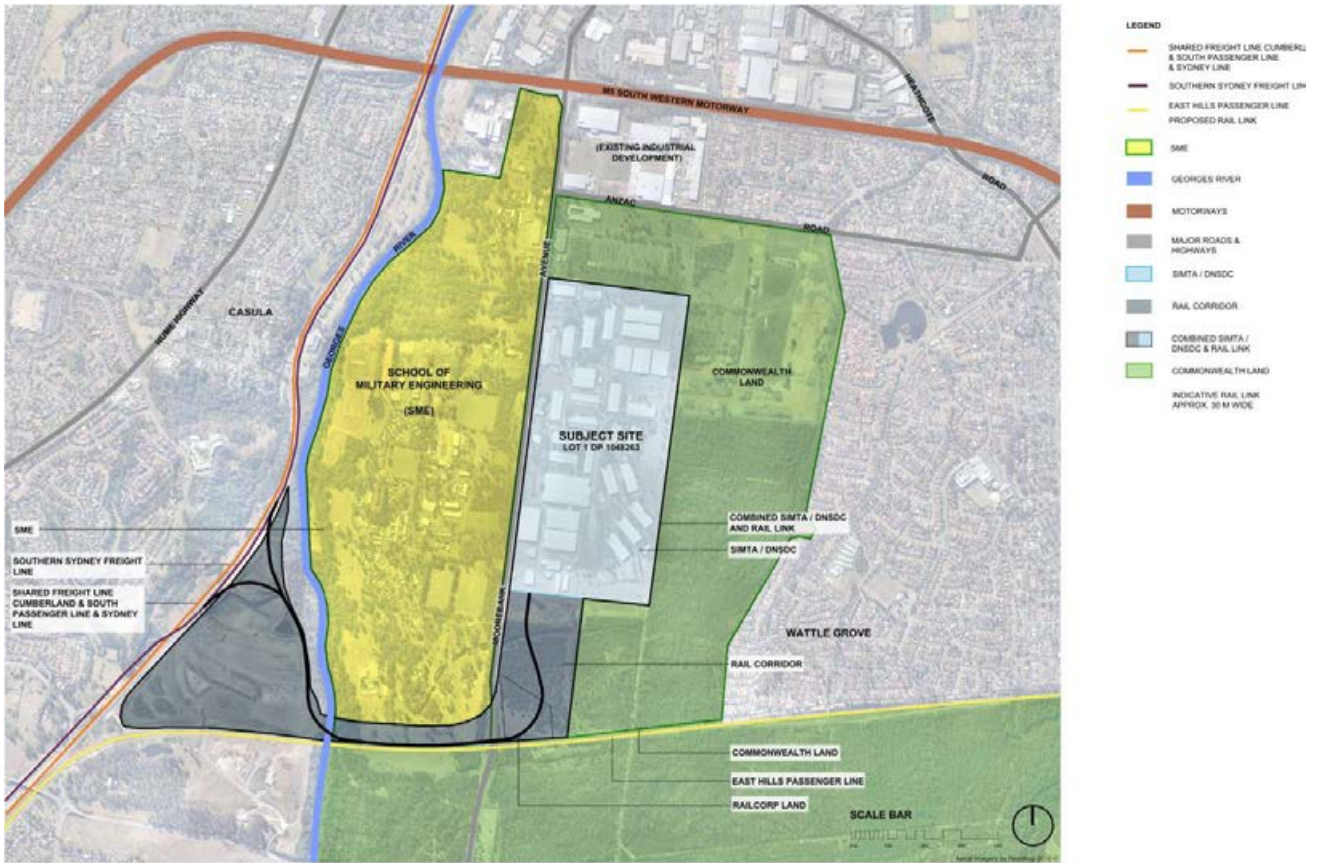
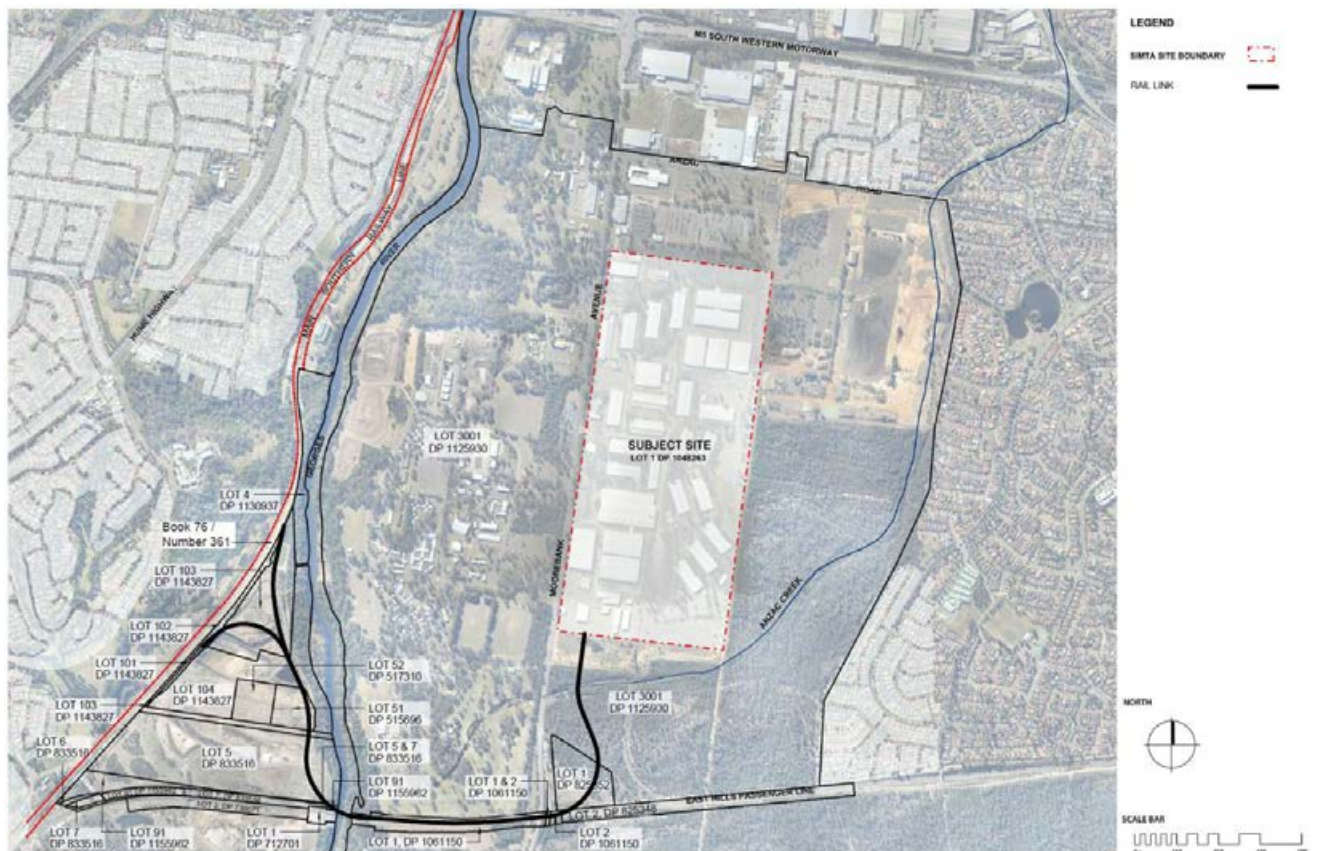


FIGURE 8 – RAIL CORRIDOR – LOT DESCRIPTIONS (REID CAMPBELL 2012)



## 2.4 PLANNING CONTEXT

The key environmental planning instruments applying to the site are listed below:

- *Environment Protection and Biodiversity Conservation Act 1999*
- *Environmental Planning and Assessment Act 1979*
- *State Environmental Planning Policy (Major Development) 2005*
- *State Environmental Planning Policy (Infrastructure) 2007*
- *State Environmental Planning Policy No 55 - Remediation of Land*
- *Greater Metropolitan Regional Environmental Plan No 2 - Georges River Catchment*
- *Liverpool Local Environmental Plan 2008*
- *Development Control Plans*

The key provisions that are relevant to the proposal are identified and briefly discussed in the following sub-sections.

### 2.4.1 ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (**the EPBC Act**) provides that actions which will have, or are likely to have a significant impact on a matter of national environmental significance require the approval from the Commonwealth Minister for Sustainability, Environment, Water, Population and Communities (**the Minister**).

The Minister has determined that the SIMTA proposal is a controlled action requiring assessment and approval under the EPBC Act before it can proceed. The relevant controlling provisions are:

- Listed threatened species and communities (Sections 18 and 18A, EPBC Act).
- Commonwealth land (Sections 26 and 27A, EPBC Act).

It is proposed to offset the residual significant impacts on threatened species, populations and communities by way of biodiversity offsets. A *Preliminary Biodiversity Strategy* has been prepared and will be used to facilitate ongoing discussions with the Commonwealth Department of Sustainability, Environment, Water, Populations and Communities (**SEWPaC**) and the NSW Office of Environment and Heritage (**OEH**). A copy of the *Preliminary Biodiversity Strategy* is included with the *Flora and Fauna Impact Assessment* which is attached as **Appendix J**.

### 2.4.2 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

This report has been prepared in accordance with the Part 3A transitional provisions contained within Schedule 6A of the *Environmental Planning and Assessment Act 1979* (**the EP&A Act**). Section 3(1) provides that the now repealed Part 3A provisions of the EP&A Act continue to apply to a transitional Part 3A project. In particular:

- A declaration was obtained from the Minister for Planning confirming that the proposal is a project to which Part 3A of the Act applies, taking into account the provisions of Clause 6 and Schedule 1 of the Major Development SEPP and Section 75B of the EP&A Act.
- Authorisation was sought from the Minister for Planning for the preparation of an application for Concept Plan approval in accordance with Section 75M of the EP&A Act.
- The Director-General was requested to issue Environmental Assessment Requirements to inform the preparation of the Environmental Assessment in accordance with Section 75F of the EP&A Act.

Accordingly, the Minister has the ability to approve the proposed development, taking into account the following matters:

- The proposed development on the SIMTA site is permitted under the provisions of *State Environmental Planning Policy (Infrastructure) 2007* (the Infrastructure SEPP) and *Liverpool Local Environmental Plan 2008* (refer to **Section 2.4.4** and **Section 2.4.7**).
- The proposed rail link on land zoned SP2 Infrastructure (Defence) is permitted in accordance with the provisions of the Infrastructure SEPP (refer to **Section 2.4.4**).
- The proposed works within the land zoned RE1 Recreation is permitted in accordance with the provisions of Section 75O(3) and Section 75R of the EP&A Act. The Minister may (but is not required to) take into account the provisions of any environmental planning instruments (other than state environmental planning policies) in determining a Concept Plan. The land is not considered to be an 'environmentally sensitive area of State significance' having regard to the significant disturbance of the site during its use for extractive industry and landfill. The site is also not appropriately defined as a 'sensitive coastal location'. Accordingly, the Minister may approve the proposed works, irrespective of the provisions of the Liverpool LEP.

The following additional provisions in Part 3A of the EP&A Act are relevant to the proposal:

- Section 75U provides that certain authorisations are not required for a Concept Plan (or Project) Application, including (but not limited to):
  - A permit under section 201, 205 or 219 of the *Fisheries Management Act 1994*.
  - An approval under Part 4, or an excavation permit under section 139, of the *Heritage Act 1977*.
  - A permit under section 87, or a consent under section 90, of the *National Parks and Wildlife Act 1974*.
  - An authorisation referred to in section 12 of the *Native Vegetation Act 2003* (or under any Act to be repealed by that Act) to clear native vegetation or State protected land.
  - A permit under Part 3A of the *Rivers and Foreshores Improvement Act 1948*.
  - A bushfire safety authority under section 100B of the *Rural Fires Act 1997*.

Further, Division 8 of Part 6 of the *Heritage Act 1977* does not apply to prevent or interfere with the carrying out of an approved project.

- Section 75V states that certain authorisations cannot be refused if it is necessary for carrying out an approved project and is to be substantially consistent with the approval under this Part. These include (but are not limited to):
  - An aquaculture permit under section 144 of the *Fisheries Management Act 1994*.
  - An environment protection licence under Chapter 3 of the *Protection of the Environment Operations Act 1997* (for any of the purposes referred to in section 43 of that Act).
  - A consent under section 138 of the *Roads Act 1993*.
  - A licence under the *Pipelines Act 1967*.
- If the Minister approves the Concept Plan and delegates assessment of future stages to be under Part 4, the authorisations listed in Section 75U cannot be refused if it is necessary for carrying out the project or that stage of the project and substantially consistent with the development consent.