Liverpool city council
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Our Ref: 137033.2012
Contact: Milan Marecic (02) 9821 9317

June 4 2012

Mr Sam Haddad
Director- General
Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2000

Dear Mr Haddad,

Re: Concept Plan Application 10_0193, SIMTA Intermodal Freight Moorebank

I write in response to the public exhibition of Concept Plan Application 10_0193. Firstly, I would like to thank your staff in allowing Council five extra working days to submit its comments in relation to this proposal.

The proposal is of significant concern to Council and its residents. In light of the volume and technical nature of the exhibition documents, Council has engaged a consultant to assist Council in reviewing the Concept Plan and Environmental Assessment.

The cost of the proposal is estimated at $490 million and will result in the largest intermodal terminal in NSW. The site encompasses 83 hectares of land, not including the land required to connect the site by rail to the South Sydney Freight Line. Liverpool's residents have for some time expressed concern through a variety of means including submissions to all levels of government, public rallies, addressing Council meetings and the formulation of resident action group and website. Council's response to residents regarding many of their concerns has been to wait for the Environmental Assessment, as it would provide specific particulars regarding the development design, operational details, probable timing of the operation and the associated mitigation measures to externalities.

However, upon reviewing the reports placed on public exhibition, it is clear that the documentation lacks sufficient detail for a Concept Plan application. The application does not provide enough detailed information to allow a proper assessment of the impacts. Many of the technical studies appear to withhold information which would be expected to have been produced for a proposal of this scale. Some reports provide conclusions that would have relied upon detailed modelling, however the modelling results and methodology have in many instances has not been provided.

Councils submissions consists of this letter and the attached peer review by Cardno. The following comments are provided to supplement the Peer Review document;

General

- The technical studies do not relate to each other, some describing different types of development.
- On the application documentation alone, Council has significant concerns over much of the methodology and lack of detail.
- There are no benefits of clustering intermodal terminals and as such, the Government (State and Commonwealth) needs to finally make a binding decision on which (if any) of the intermodal terminals proposed for Moorebank would be built to service South-West Sydney.
- The application contains a limited scope of mitigation measures with a 'leave it to Project Application' approach offered as solution.
- The lack of detail with certain aspects of the proposal gives the impression that the applicant has either not as yet determined the exact nature and scale of the proposal or are 'keeping their options' open in terms of the exact operation of the facility. Alternatively another assumption may be that some specific details have been omitted due to significant off-site impacts.

Flooding and Stormwater

- Council considers that stormwater quality will be substantially affected by the development including accidental spills of lubricant and the like. Comprehensive on-site treatment facilities should be designed and constructed using WSUD principles.
- Many of the impacts on flooding behaviour cannot be determined due to the lack of details for the rail spur. The EA makes broad statements regarding the internal stormwater flows and stormwater quality, yet no details or site layouts have been provided to demonstrate how this was going to be achieved.

Aboriginal Heritage:

- A full review of the cultural heritage and archaeological study should be undertaken and made accessible to the community.

European Heritage:

- Removal of the heritage structures out of the original context would have a drastic adverse impact on their significance.
- Efforts should be made to retain as many of the existing heritage buildings with adaptive reuse. A comprehensive interpretation strategy would be needed to communicate the history of the place.
- Comprehensive archival works would be required.
- A landscape plan would be required to reduce adverse impacts on heritage items.

Health

- In the event a freight facility is approved, Council should not be dedicated as the regulatory authority for ongoing noise and air quality monitoring due to the limited ability to respond to and maintain compliance checks.
- The Minister for Office of Environment and Heritage should make this a 'Scheduled Premises', requiring approval from the NSW EPA.

Traffic

- The reports indicate that a fair proportion of the traffic will head to the south and that an extension of Cambridge Avenue to link with the M5 Motorway could be appropriate. However, there is no firm commitment for road upgrades to facilitate this access or a southern by-pass in the general locality.
- The matter of accelerated pavement deterioration of Council's road assets, while mentioned in the Peer Review, is hidden amongst the broader discussion. There needs to be a specific consideration in this regard including the identification of nearby commercial/distribution centres and warehousing facilities, likely access routes for freight trucks and an assessment of pavement damage arising from the significant increase in freight trucks (in addition to required capacity enhancements).

- The traffic report could not have arrived to its conclusions without detailed modelling; however the results and parameters of the modelling are not contained within the application suggesting that the certain results may not be supportive of the proposal.
- The likely destination of freight containers need to be specified in order to ascertain the impact in Councils assets and residents.
- Request that if either intermodal proposal is supported, Moorebank Avenue should be dedicated as an arterial road and maintained by the Roads and Maritime Services.
- The Director-General Requirements included an assessment of impacts of the project on local and regional roads. The EA makes no reference to two major connector roads, comprising Governor Macquarie Drive and Nuwarra Road. These roads are in close proximity to the proposed developed and likely to be used for the distribution of freight between Liverpool and the adjoining urban centres of Fairfield and Bankstown.

Conclusion
The proposal in its current form does not allow for an adequate assessment, compromising the ability of the community to provide meaningful input. Council recommends that the Minister does not endorse the Concept Plan and requests that any future application specifically address the shortfalls detailed in Councils submission. This would allow Council and its residents to adequately determine the local and regional impacts of the proposal.

Should you require any further information on this matter, please do not hesitate to contact Milan Marecic, on 9821 9500.

Yours sincerely

Farooq Portelli
General Manager

Attachments:
- Sustainable Environmental Comments
- SIMTA Intermodal Terminal Proposal Peer Review of Environmental Assessment, Cardno June 2012

Attachment 1; Liverpool City Council comments from Sustainable Environment

It is noted that only general plans for the site have been included in the application. Further, the rail link location has not yet been finalised and therefore, it is not possible to accurately ascertain the likely impacts of the proposal. On the information available, the following comments are to be considered;

- It is recommended that Section 2.4 (Context, planning framework and State/Local Government requirements) discusses additional relevant State and Local Government requirements. Relevant environmental planning instruments may include the NSW *Threatened Species Conservation Act 1995*, NSW *Fisheries Management Act 1994*, NSW *Water Management Act 2000*, *State Environmental Planning Policy No 19--Bushland In Urban Areas*, *State Environmental Planning Policy No 44--Koala Habitat Protection*, *Greater Metropolitan Regional Environmental Plan No 2--Georges River Catchment*, *Liverpool Local Environmental Plan 2008* and *Liverpool Development Control Plan 2008*, depending on land ownership.
- It is recommended that Section 2.5 (Environmental impact assessments under Commonwealth, State or Territory legislation) contains details on the proposed environmental impact assessments under State legislation.
- It is recommended that further details on relevant migratory species are included in Section 3.1(e) (Listed migratory species) to support the conclusion that the site is unlikely to be "important habitat" for these species.
- It is recommended that Section 3.3(d) (Outstanding natural features) includes a discussion on the Georges River.
- It is recommended that Section 3.3(j) (Other important or unique values of the environment) includes a discussion on Leacock Regional Park, which is in close proximity to the proposal.

My comments on the Existing Ecological Values Report are outlined below:

This report can only be considered as a preliminary report as the detailed plans have not been finalised. Consequently, the proposal does not contain the level of detail which is required to gain a clear understanding of likely impacts. As noted above, it is recommended that once plans have been developed further, Council has the opportunity to appropriately assessed the impacts.

- It is recommended that the survey methodology and effort is described. Without these details, it is not possible to determine whether the survey would be considered adequate. The study appears to be restricted to the primary site only. To ensure that all associated impacts are considered, it is recommended that the assessment incorporates all areas which may be impacted upon, including the location of the rail connection and areas which may be indirectly impacted upon.
- It is recommended that the reference to the Cooks River on page 14 is changed to the Georges River. It is recommended that a fauna habitat map is included to assist with interpreting the report.
- It is recommended that a map showing the specific location of the threatened species recorded onsite is included (only a broad habitat map for the two threatened flora species has been included).
- Given the apparent limitations of the White, A & Pyke, G (2010) reference for Green and Golden Bell Frogs, (Green and Golden Bell Frogs have recently been recorded within Hammondville despite this reference stating that this population is extinct), it is recommended that the low likelihood of occurrence assigned to the species is reassessed, particularly in the absence of details on field methodology employed to detect this species.

- Given that the Cumberland Plain Land Snail is known to occur in Castlereagh Woodlands, and has been recorded from sites which are in close proximity to this proposal, it is recommended that the low likelihood of occurrence assigned to the species is reassessed, particularly given that this species is often difficult to detect during field surveys.
- It is recommended that lists of the species recorded on-site, and within each quadrant are included to provide transparency.
- An impact assessment has only been provided for two threatened flora species recorded on-site. It is recommended that all relevant threatened and migratory species which may be impacted upon (that is, species considered to have a moderate, high or recorded likelihood of occurrence) are assessed to ensure that they are adequately considered.

The following comments are provided regarding the impact assessment for *Grevillea parviflora* subsp. *parviflora:*

- It is recommended that further rationale for the following statement is provided: "*It is estimated that at least 420 ha of potential habitat exists within the Holsworthy area to the south of the site.*" Without knowing the reasoning or source behind this statement, it is not possible to comment on its reliability.
- Given the level of uncertainty in the count of individuals in the entire population (the source, date and extent of population is ambiguous within the referenced source - Department of Sustainability Environment Water Population and Communities 2011a), it is recommended that the conclusion that there are more than 200 individuals within the population is further justified. It is further recommended that the method for determining what was considered an individual is outlined.
- The genetics and distribution of individuals of the local population is not known. Therefore, it is not known whether the portion within the site, which is thought to occur at the north western extent of the population, is genetically important for the local population. It is recommended that these uncertainties are considered when concluding whether there is likely to be a long term decrease in the size of the population or disruptions to the breeding cycle.
- The portion of the population within the site is noted to be isolated due to the limited seed dispersal. It is recommended that pollination vectors (insects) are also considered when discussing connectivity.
- The section regarding critical habitat states that <0.5% of the potential habitat for the population would be affected, which contradicts the figure used elsewhere (2%). It is recommended that this is rectified.

Given the above matters, it is considered that the conclusion that no significant impact would occur to this species is not adequately justified.

The following comments are provided regarding the impact assessment for *Persoonia nutans*:

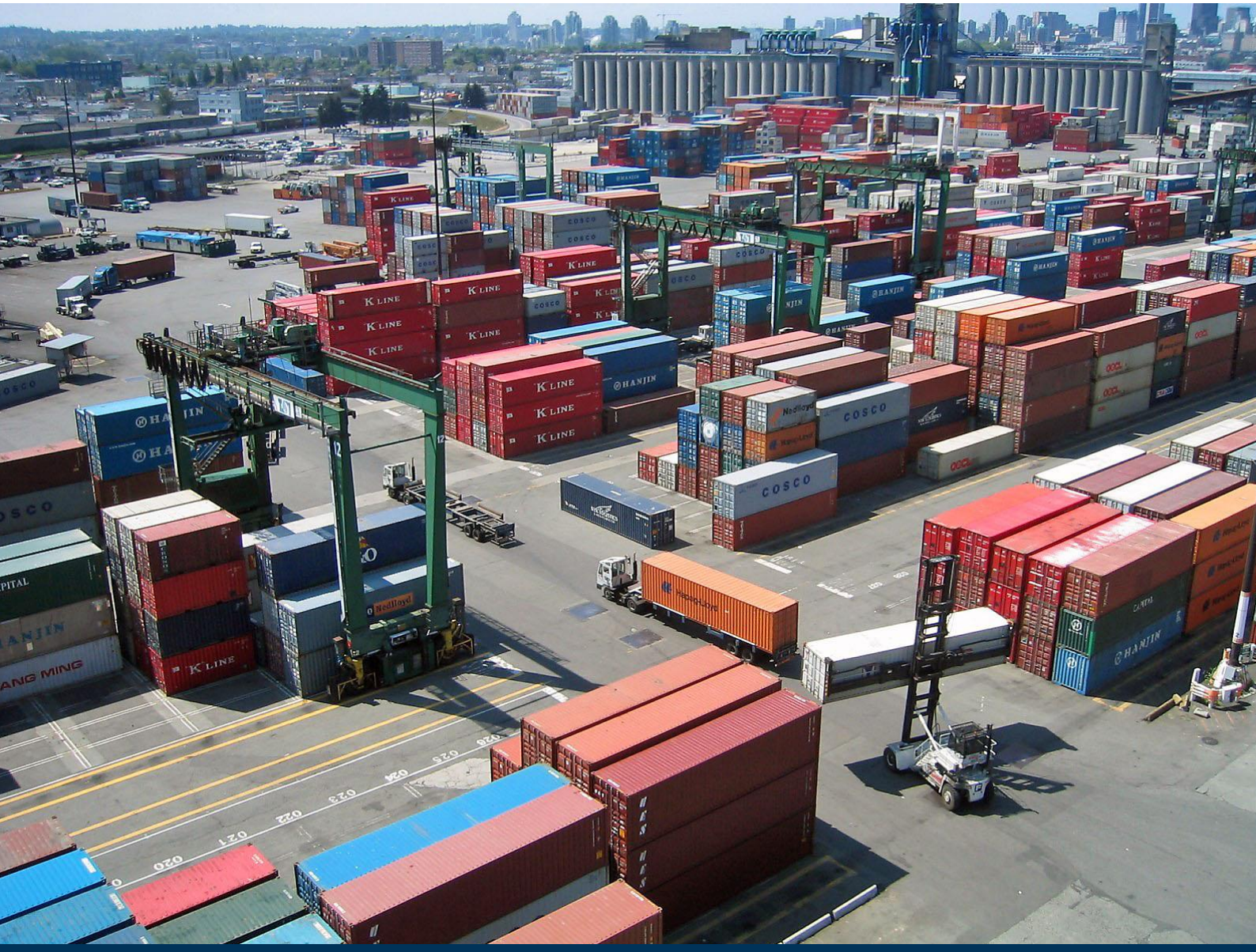
- It is noted that some critical information is sourced from a report titled Flora Survey and Assessment for Moorebank Defence Site (URS, 2004). If this source is relied upon, it is recommended that this document is made readily accessible.
- It is recommended that the following statement is further justified: "*Whilst the population of the species in this area is unknown, nine individuals of the species were recorded previously in four distinct locations in vegetation to the east of the site (URS 2004). It is hence considered likely that this habitat, and other habitat to the south, contains a moderately large population of the species as mature plants and/or as a soil-stored seed bank. The plants within the subject site are therefore likely to make up a small proportion of this population.*" It is considered that in its current form, there is a large level of uncertainty in this conclusion.

- The report states the following: "*The smaller disjunct populations located in the southern portion of the species' distribution are estimated to constitute less than 1% of the population of the entire species are unlikely to be critical to the survival of the species (NSW Department of Environment and Conservation 2005).*" The reference provided did not conclude that the smaller populations are unlikely to be critical to the survival of the species. Therefore, it is recommended that further justification for this statement is provided, particularly given that the southern populations may have genetic importance.
- The section regarding critical habitat states that <0.5% of the potential habitat for the population would be affected, which contradicts the figure used elsewhere (2%).

Given the above matters, it is considered that the conclusion that no significant impact would occur to this species is not adequately justified.

Overall, it is considered that the conclusion that "*no EPBC Act listed threatened species, population or ecological community is likely to be significantly affected by the project*" is not adequately justified by the report.

END



SIMTA Intermodal Terminal Proposal

Peer Review of Environmental Assessment

Project Number: 112083-01/Report 001 Rev 0

Prepared for: Liverpool City Council

June 2012

Cardno (NSW/ACT) Pty Ltd
ABN 95 001 145 035
Level 1
47 Burelli Street, Wollongong
NSW 2500 Australia
PO Box 1285
Wollongong NSW 2500
Telephone: 02 4228 4133
Facsimile: 02 4228 6811
International: +61 2 4228 4133
cfr@cardno.com.au
www.cardno.com.au

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1/06/2012	Melissa Mostyn	MMM

Prepared by
for and on behalf of
CARDNO (NSW/ACT) PTY LTD

Connie Lau
Senior Planner

Reviewed by

David Laing
Senior Principal/NSW Planning Manager

Executive Summary

The Sydney Intermodal Terminal Alliance (SIMTA) has lodged a Concept Application with the Department of Planning and Infrastructure (DoPI) under Part 3A for an intermodal terminal facility at Moorebank. The proposed facility is expected to provide capacity for approximately 20% of the freight throughput experienced in Port Botany and will be the largest Intermodal Terminal in Australia.

Another intermodal terminal is also being proposed immediately adjoining the site by the Commonwealth Government, under the Department of Finance and Deregulation (DFD). The Moorebank Project Office (part of DFD) is managing the delivery of that intermodal terminal project.

The SIMTA and the Moorebank Project Office together will provide a total capacity of 2.5 million (twenty-foot equivalent units (TEU) per annum, which will represent approximately 50% of the total freight throughput experienced in Port Botany by 2025.

Liverpool City Council is concerned about the potential impacts of both proposed facilities and has engaged Cardno to peer review the technical documents submitted by SIMTA.

The assessment of the SIMTA's proposal seeks to answer the following questions:

- *Does the EA contain adequate investigations and details of the development (albeit on a Concept Plan level) to inform a valid assessment of the proposal?*
- *Does it comply with the statutory planning requirements?*
- *Do the technical investigations comply with best practice guidelines? Are they based on appropriate assumptions? Have they drawn valid conclusions and do they address the Director General's Requirements?*
- *What are the impacts on the Liverpool's community and Council's assets? Are the proposed mitigation measures sufficient to address the impacts?*
- *What are the cumulative impacts for two intermodal terminals? Are they justified and do they represent the most efficient and orderly use of the land in accordance with the objectives of the Environmental Planning and Assessment Act 1979.*

Our assessment focuses on the key components of the EA, including the scope of the development, the impact assessment, the strategic justifications and the statutory compliance.

Overall, we found that the EA and the supporting documents do not contain sufficient information to allow a proper assessment of the project. Critical information on the scope of the development, the required off-site infrastructure upgrade works and the operation of the proposal are missing. In particular:

- There is limited detail on the connection with the Southern Sydney Freight Line (SSFL), which is the most critical piece of infrastructure to enable the operation of the intermodal terminal. This connection has two key components:
  1. The physical railway link between the site and the SSFL, which requires:
     - Approval from ARTC to allow for the connection and its proposed timing
     - Approval from neighbouring land owners (including the Commonwealth Government) who are affected by the railway line
     - Potential addition to the existing East Hill passenger line rail corridor
     - An expansion of the existing grade separation bridge at Moorebank Ave to allow for the widened rail corridor
     - Railway crossings at Anzac Creek and Georges River, which need to be appropriately design to address the potential flooding issue.

2. Upgrades or expansionary infrastructure to the SSFL to support the additional freight requirements proposed by SIMTA. This requires confirmation from the ARTC to identify the scope, timing and funding of the upgrades, noting ARTC cannot reserve capacity for future users.

There is little evidence in the submitted documents that these matters can be delivered.

- There is no evidence in the submitted documents to suggest that there is an urgent need for two intermodal terminals in Moorebank, to be in operational at a similar timeframe in a cost effective manner. The application has not identified the demand for such a large number of containerised freight within the south western Sydney catchment area and has not considered any alternative options, such as rationalising the Commonwealth Government's proposal or expanding the existing the capacities of other IMTs servicing Port Botany.
- The proposed timing of the proposed development is questionable. The Defence National Storage and Distribution Centre (DNSDC) is currently occupying the site in a leasehold arrangement until 2013, with two five-year options. There is no indication in the submitted documents that the DNSDC is vacating the site in 2013.
- The quality of the concept plan lacks details and there is limited information in the submitted documents to describe the scope of the development, the off site works and the operation of the proposal. This is critical to understand the relationship of the proposed development with the adjoining site and the potential impacts.
- The environmental impact assessments (including traffic, air, noise, contaminated land and heritage) focus only on SIMTA's site and there is no consideration of the off site impacts. They are also based on inconsistent assumptions and areas of affectation. The data or modelling inputs for those assessments are not readily available to verify the results. A significant amount of additional modelling and assessment is required to properly identify the scope of the development, consider its impacts on the local Liverpool community and develop mitigation measures to address any concerns.
- Commonwealth listed threatened species and heritage items are located within the site, however additional approvals under the Commonwealth Environmental Protection and biodiversity Conservation (EPBC) Act have not been obtained. At a minimum, a confirmation from the Commonwealth Department regarding the requirement for additional approval is necessary in the Concept Application stage to demonstrate compliance with the EPBC Act.
- The level of consultation with the community and stakeholders is not sufficient. The community has difficulties understanding the large volume of documentation being exhibited. The consultation letters also confuse this development with the Commonwealth proposal adjoining the site.
- The indicative perspective images are misleading as they are showing a development similar to a business park, with white collar workers walking around the site. This raises questions on the reliability of the documents.

Due to the shortcomings in the proposal and the information gaps identified in our assessment, we do not consider the Environmental Assessment provides adequate information to allow a determination of the project. A list of the additional information required has been provided in the report. The applicant needs to address all deficiencies before Council and DoPI can consider the full scope of the development and establish the mitigation measures to manage any impacts on the local community and local assets.

We recommend Liverpool City Council raise their objections to the proposal with DoPI and seek for additional information to address the deficiencies in the documents.

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1 Introduction

The Sydney Intermodal Terminal Alliance (SIMTA) has lodged a Concept Application under Part 3A, with the Department of Planning and Infrastructure (DoPI) for an intermodal terminal facility at the Defence National Storage and Distribution Centre (DNSDC) site at Moorebank. The proposed facility is expected to provide capacity for approximately 20% of the freight throughput experienced in Port Botany will be the largest Intermodal Terminal in Australia until the Commonwealth Government is completed.

There is also another intermodal terminal being proposed by the Commonwealth Government located immediately adjoining the SIMTA's proposal. This Commonwealth facility will have a larger capacity than the SIMTA facility, and together, they will provide enough capacity for approximately 50% of the total freight throughput experienced in Port Botany. The Commonwealth Government has lodged a Preliminary Environmental Assessment (PEA) with DoPI for their intermodal facility.

Liverpool City Council is concerned about the potential impacts of both proposed facilities and has engaged Cardno to peer review the technical documents submitted by SIMTA.

This report presents Cardno's review of the concept application submitted with the application.

1.1 Background of the Proposed Development

Since 2004 Moorebank has been identified as a suitable location for an intermodal facility, being strategically located along the M5 and M7 West Link ring roads and rail network with connections to Sydney's ports via the Southern Sydney Freight Line (SSFL) (refer **Figure 1**). It has ready access to the South Western Sydney growth areas, which will support large area of industrial lands. Both the State and Federal Governments have repeatedly stressed the significance of Moorebank as the preferred location for an intermodal facility in South West Sydney to ease the freight traffic off the Sydney road network and assist in achieving the rail share target of 40%.

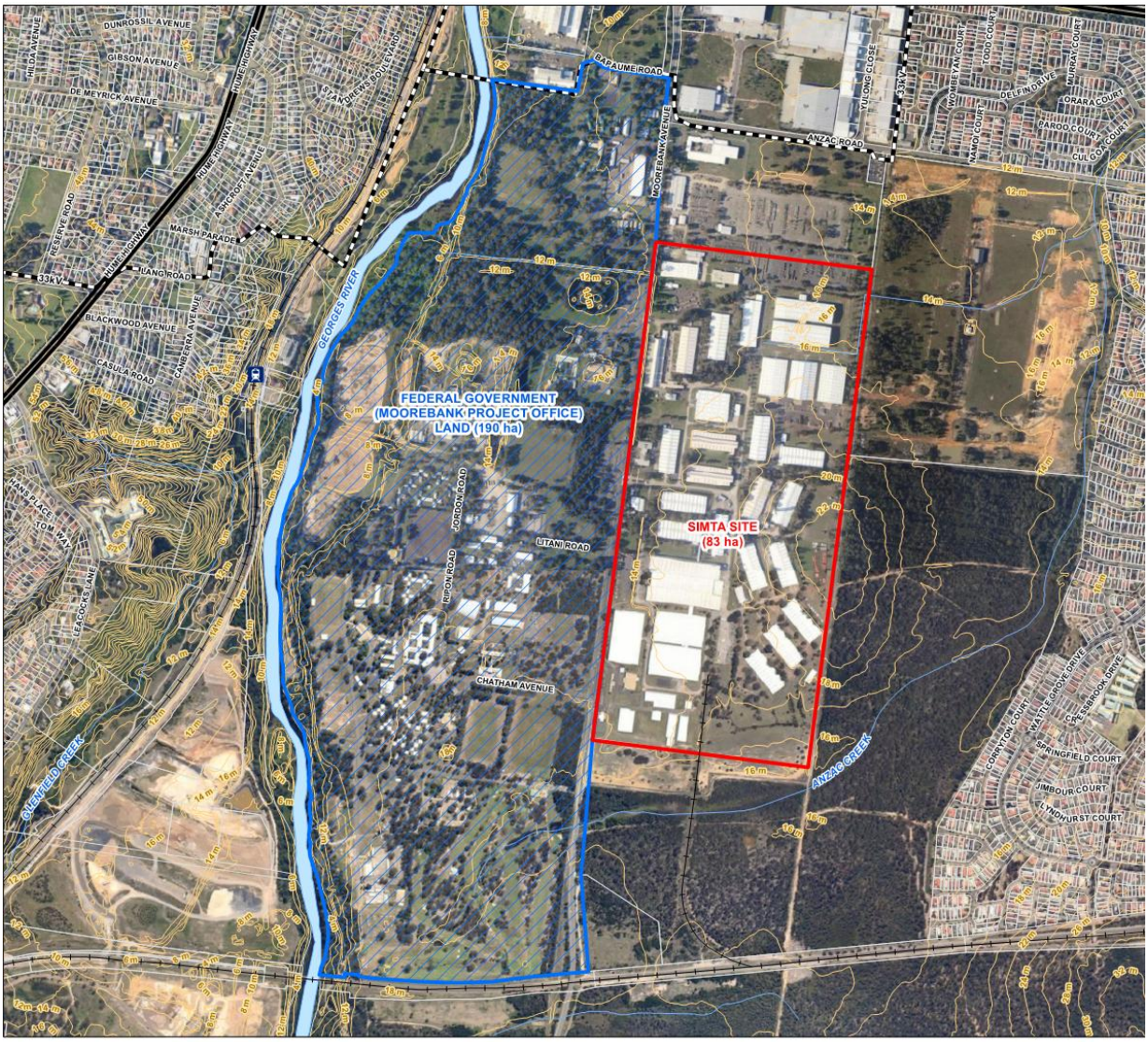
The Federal Government has already committed $70 million to undertake a feasibility study for development of their land at Moorebank into an intermodal terminal servicing local and interstate freight movements. It is larger and has the capacity to accommodate 1.5 million twenty-foot equivalent unit (TEU) per annum and will be designed, constructed, and operated by a single or a number of private operators.

By comparison, SIMTA's proposal is a privately owned intermodal operation seeking approval to handle a capacity of 1 million TEU per annum and will only service freight to and from Port Botany. SIMTA's site was originally owned by the Department of Defence as its Defence National Storage Distribution Centre (DNSDC). The site is now owned by a subsidiary of Qube Logistics Pty Ltd and Queensland Rail and is currently leased back to the Department of Defence until 2013 with two five-year options. The site was subject to a rezoning application for business park purposes and in 2003 it was rezoned from a Special Use Military zone to a General Industrial zone. .

Both facilities claimed that they will be operating independently from each other. **Figure 1** (overleaf) shows the two sites in context.

Both proposals are currently under assessment by the NSW DoPI as State Significant Developments. SIMTA's proposal was lodged one year earlier than the Commonwealth Government's proposal. Whilst SIMTA's application is now on public exhibition, the Federal Government's proposal is still in its PEA stage, but it is noted that a detailed feasibility study has been completed to inform the scale and development model of the Commonwealth Government proposal. In addition, market briefings for both current and prospective freight operators were conducted in October 2011 and May 2012. However, detailed project descriptions and impact assessments have not been provided for the Commonwealth Government's proposal.

Figure 1 – SIMTA's and Federal Government's Sites for Separate Intermodal Terminals



While acknowledging the scope of this review is focused on the SIMTA's proposal, this project needs to be assessed in conjunction with the Federal Governmental proposal to ensure the most efficient and coordinated use of the land, and to assess the potential cumulative impacts of both projects on the Liverpool community.

1.2 Objectives of this Peer Review

This peer review seeks to answer the following questions about the SIMTA's proposal:

- Does the EA contain adequate investigations and details of the development (albeit on a Concept Plan level) to inform a valid assessment of the proposal?
- Does it comply with the statutory planning requirements?
- Do the technical investigations comply with best practice guidelines? Are they based on appropriate assumptions? Have they drawn valid conclusions and do they address the Director General's Requirements?
- What are the impacts on the Liverpool's community and Council's assets? Are the proposed mitigation measures sufficient to address the impacts?
- What are the cumulative impacts for two intermodal terminals? Are they justified and do they represent the most efficient and orderly use of the land in accordance with the objectives of the Environmental Planning and Assessment Act 1979.

1.3 Methodology

This assessment focuses on the following four critical components of the development proposal, which are the fundamental elements of any environmental assessments:

- **Strategic Justification** of the project within the context of the Government's objective to achieve a rail mode shift of 40%, with consideration of the demand for and supply of intermodal terminals within the South Western Sydney catchment, and having regard to the proposed Federal Government intermodal terminal that adjoins the SIMTA's site.
- **Scope of the Development**, which includes all the on-site and off-site works, and the practicality /constructability of these works
- **Impact of the Proposed Development**, including the on-site and off-site works.
- **Next steps** for Liverpool City Council, SIMTA and the DoPI to complete the assessment and make a determination for the proposed development.

Our peer review is based on the following methodology and research:

1. Establish a project team to include all relevant specialists required to peer review all of the EA documents.
2. Inspect the surrounding areas of the site to understand the geographic context and its interaction with the adjoining Moorebank Project Office's site and the SSFL.
3. Research on the State and National strategies on freight transport to determine the current and future demand for freight logistic infrastructure and intermodal terminal across Sydney, as well as the catchment requirements for intermodal terminals. This can inform the need for the proposed SIMTA development and allow an assessment on the appropriateness of the capacity proposed by SIMTA, in conjunction with the additional capacity proposed by the Federal Government.
4. Liaise with Council's officers to identify the key allowing them issues to be weighted. This allows the identification of primary and secondary issues to enable more targeted assessments.
5. Review the concept design and layout of the intermodal facility and the associated rail spur line to determine if the proposed development can be physically constructed on the site, taking into account site constraints, geometric and other requirements.
6. Review available desktop information on local and regional needs and review of available economic analysis relevant to the proposal.

7. Review the impact assessments submitted by the applicant, consider the assumptions and methodology of the assessments, identify gaps, if any, to allow thorough consideration of the mitigation measures and options for SIMTA and Liverpool City Council.
8. Workshops with environmental, social, engineering and traffic specialists to coordinate the analysis of the impact assessments.
9. Workshops with Council's staff to discuss their issues and identify the impacts on the Liverpool communities and Council's assets.
10. Identify upgrades required on the local road network and infrastructure provision and assess the practicality in upgrading the roads and providing the required utilities to service the site. Identify the ownership of the lands that are used for the off-site works and consider the implication of fragmented ownership on the proposal.
11. Consider the effectiveness and efficiency of co-locating two intermodal facilities in Moorebank and identify the opportunities to share the infrastructure to minimise the potential impacts on the surrounding environment and residents.

1.4 Project Team

Cardno has established a project team to undertake a comprehensive of all of the specialist studies and the EA submitted by SIMTA. Our project team includes the following experts:

- Strategic and Statutory Planning
- Traffic and transport
- Stormwater and Flooding
- Urban Design / Landscaping / Heritage
- Air
- Noise
- Green House Gas (GHG) / Environmental Risks
- Contaminated Land
- Economics
- Social Planning
- Infrastructure
- Civil Engineering

1.5 Structure of the Report

This report is organised as follows:

- **Chapter 2** – first pass review of the information submitted by the applicant and the scope of the proposed concept development to determine if the applicant has submitted sufficient information to address the DGRs.
- **Chapter 3** – assesses the proposal against the statutory planning framework
- **Chapter 4** – technical assessments on the impact studies submitted by the applicant to consider if the assessments are undertaken in accordance with legal and best practice guidelines. Identify the questions or additional information that need to be submitted by the applicant to clarify the conclusions of the assessments. Identify the likely scope of mitigation measures
- **Chapter 5** – assess the strategic need of this development to determine if the proposed scope of the development is the most efficient approach to address Government's policy. Consider the cumulative impacts as a result of two intermodal terminals in Moorebank.
- **Chapter 6** – draw conclusions on the peer review assessment and provide recommendations on the next step of the assessment process.

1.6 Limitations

This assessment is based on secondary information (i.e. already readily available) gathered over a limited period, and is therefore subject to limitation. This information has not been individually verified and is therefore subject to the limitations of its original purpose.

This report does not constitute an alternative environmental assessment of the proposal or propose a determination of the application. Rather, it is a peer review to determine if the application has addressed all statutory and legal requirements, and appropriately considered the merits and justifications for the project. This report is intended to guide further discussion with State agencies, Councils, relevant stakeholders, the community and the applicant.

2 Scope of Development

This chapter provides a first pass review of the information submitted by the applicant and assesses the scope of the proposal based on our understanding of the on-site and off-site works required to enable the intermodal terminal to commence operation.

2.1 Adequacy Test – Compliance with Director General's Requirements

The EA must be prepared to address all clauses under the Director General Requirements. Section 1.4 of the applicant's EA refers the individual items of the DGRs to the specific sections of the report. However, it does not state how the DGRs are being met in the proposed development.

Table 2.1 shows our assessment on the EA against the DGRs. The details of our assessments are further discussed in the following chapters of this report.

Table 2.1 – Compliance with Director General's Requirements

DGRs Item	Cardno's Assessment	Compliance
1. General Requirements		
2. Executive Summary	An executive summary is provided	✓
3. Detailed description of the project, including: - Location, site description and planning context - Project components, operations and design elements	Limited information is provided on the project description, its design and operations. The staging description is unrealistic as it suggested that construction of the rail siding will commence in mid 2012. Off-site works essential to service the development are missing. See **Section 2.2** below for details of our assessment.	×
4. Strategic and Project Justifications - Suitability of the site in accordance with the object of the EP&A Act - Alternatives considered - Needs for the proposal - Relationship with adjoining development, including adjoining intermodal terminal proposal by the Moorebank Project Office - Consistency with relevant State policies and plans	• The applicant suggested that the layout of the proposal provides the highest operational and safety efficiencies. However, the assessment focuses on the internal layout of the proposal and does not provide information on the off site works, especially the rail siding that connects to the Southern Sydney Freight Line (SSFL) that is fundamental to intermodal facility. • There is limited assessment on the cumulative impacts of the proposed development and the adjoining proposal by the Moorebank Project Office. • The description on the impacts of relocating the current uses is not accurate as it is not related to the existing lease terms with the Department of Defence which current occupies the site. Section 6 provides details of our assessments on the strategic justifications for the proposed development and the cumulative impacts of two intermodal facilities in Moorebank. It also	×

DGRs Item	Cardno's Assessment	Compliance
	considers the current lease arrangement with the Department of Defence and identifies its implications on the current proposal. Based on our assessment, we do not believe the EA provides valid assessment to address all requirements identified in this section of the DGRs.	
5. Assessment of key issues	Due to the extensive issues identified in this part of the DGRs, further assessment is provided in Chapter 4 of this report.	Refer Chapter 4
6. Draft Statement of Commitments	Due to the lack of information on the off site works, the scope of the commitments proposed by the applicant is not considered sufficient to address the potential impacts.	×
Key Issues	Due to the extensive issues identified in this part of the DGRs, further assessment is provided in Chapter 4 of this report.	Refer Chapter 4
Environmental Risk Analysis	An environmental risk analysis is provided in the application.	Refer Chapter 4
Consultation	The applicant had invited a number of stakeholders to a Planning Focus Meeting and the applicant claimed that the meeting constituted consultation in accordance with the DGRs. The Planning Focus Meeting was held before the issue of the DGRs, but there was no following up to the meeting during the EA preparation process. In terms of community consultation, Cardno forms the view that the applicant has not undertaken adequate consultation with the interest groups and the public given the diversity of the demographic profile living in Liverpool **Chapter 4.9** of this report provides a detailed assessment of the consultation process and outcomes described by the applicant.	×

On the basis of the above assessment, Cardno considers the submitted EA does not comply with the DGRs as follows:

- It does not identify the full extent of off site works necessary to allow the full assessment of the proposed development.
- It does not consider the relationship and impact of the proposal with the adjoining intermodal facility proposed by the Moorebank Project Office.
- It does not consider the rationale and cumulative impacts of two intermodal facilities in virtually the same location.
- It has not adequately undertaken the required level of consultation with stakeholders and the communities.
- The assessment on impacts is inconclusive and does not allow the determination of the full scope of mitigation measures that are required to be address the impacts as part of the proposal.

All of the above statements will be further described in detail in the following sections of this report.

2.2 Scope of Development

2.2.1 Project Components

What SIMTA Said?

The EA states the development includes the following project components:

- Rail Corridor
- Intermodal Terminal
- Warehouse and Distribution Facilities
- Ancillary Terminal Facilities

Rail corridor - the exact location and design of the rail spur connection will be resolved as part of the future Project Application (PA), but anticipated to include:

- Bridge over Anzac Creek
- A crossing under Moorebank Ave in proximity to the existing grade separated crossing which supports the existing East Hill Railway Line.
- Bridge over Georges River
- Maintenance access track

Intermodal Terminal

- 4 rail tracks of approximately 650 to 1,200m long
- Container hardstand of app. 90,000m^2 on both sides of the rail tracks for container sorting and storage
- Terminal administration offices and ancillary operational facilities of app. 2,100m^2.
- 24 hours a day, 7 days a week to enable continuous receipt and dispatch of freight

Warehouse and Distribution Facilities

- App. 100,000m^2 of warehouse floorspace located directly adjacent to the Intermodal Terminal

Ancillary Terminal Facilities

- Site management, security offices, administration offices, sleeping facilities for drivers, café, etc

Cardno's Assessment

The above descriptions provided in the main EA report do not align with the description in the traffic assessment (*Page 82 of Appendix D Technical Note 1 Strategic Freight Demand*), which assumes the following uses:

- **Warehouse and Distribution Centres** – GFA of 292,000m^2
- **Office and Ancillary** – GFA of 4,400m^2
- **Retail (eg. food outlets and convenience stores)** – 1,700m^2

- **Small hotel of 80 rooms**
- **Intermodal Terminal**

The items in red above denote those uses that are mentioned in the EA report but are not shown on the Concept Plan. Whilst retail shops in the form of food outlets and convenient stores are needed to service the workers on the site, the small hotel of 80 rooms have not been mentioned in any other documents and we cannot identify any logical reasons to provide a hotel on site.

The warehouse and distribution centres are also significantly larger than what is proposed in the EA report. The inconsistent information makes it impossible to assess the development and its associated impacts.

Recommendations

The development components as currently described are inconsistent. The applicant needs to clarify:

- The size of the warehouse and distribution centres
- The types of proposed retail activities
- The justifications and need for a hotel
- Where are these activities located and how do they relate to the surrounding land uses and Moorebank Ave?
- How would they operate?

2.2.2 Quality of Concept Plan

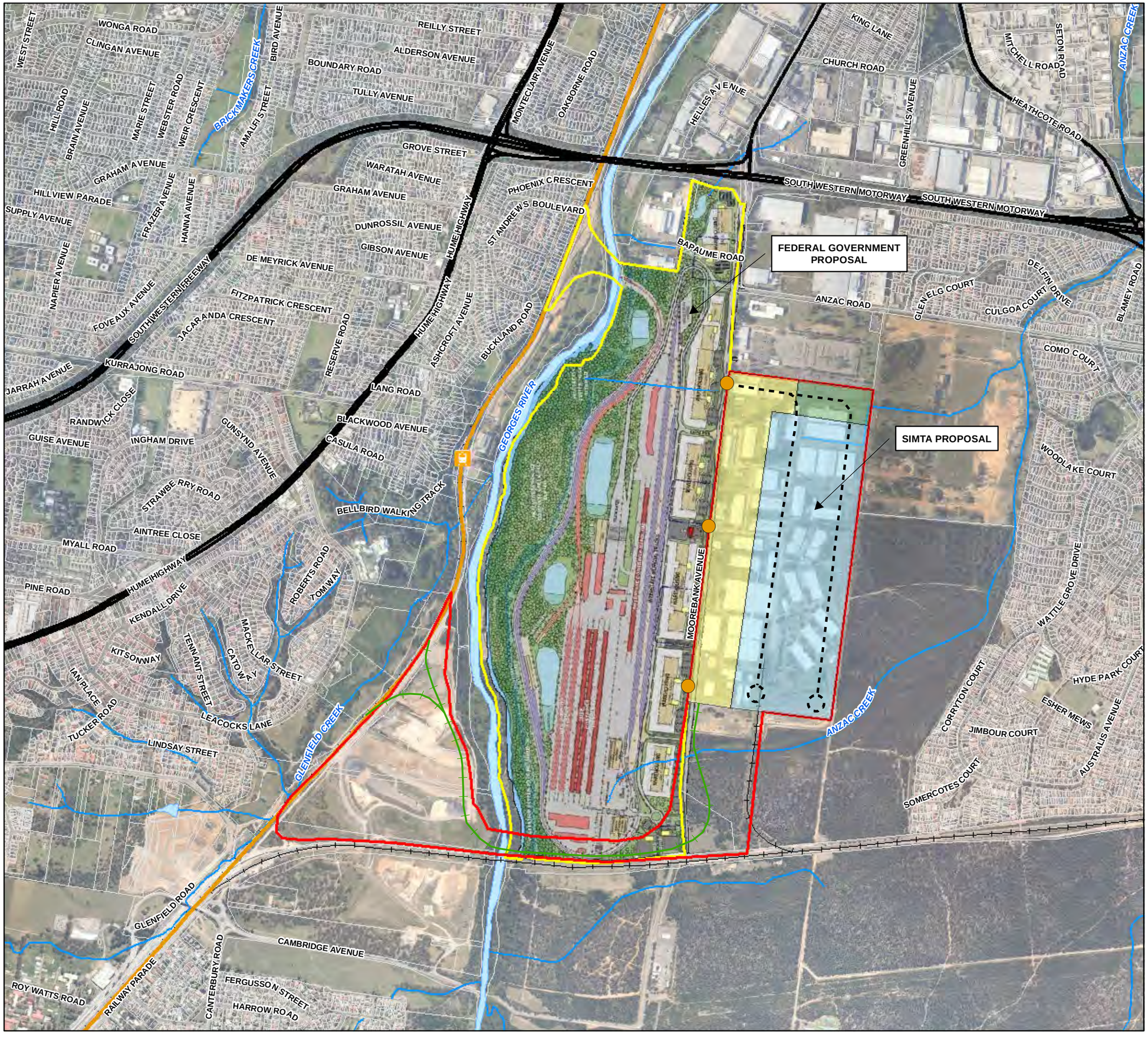
What SIMTA Said?

The indicative concept plan submitted with the application shows three precincts and a few dotted lines representing the potential internal roads and potential entry points. **Figure 2** illustrates the SIMTA proposal, within the context of the surrounding land uses and the adjoining Moorebank Project Office's proposal.

Cardno's Assessment

The plan contains no indication of how the proposal will operate and does not include any envelopes of building structures on the site. It is more akin to a Structure Plan, which normally contains less information than a Concept Plan. We therefore do not believe the submitted Concept Plan can be approved for the following reasons:

- It does not include information on built forms and scale to allow assessment on the visual impacts. Given the proposed maximum height of 32m, significant visual impact on the residents and the surrounding land uses is likely.
- Whilst there are indications of the floor spaces of particular uses, the lack of information on building footprint does not allow an assessment on the traffic and car parking impacts.
- It does not allow appropriate assessment on ecology, heritage and flooding issues.
- Two of the three access points at the southern portion of the site do not relate to any indicative internal roads and the limited information does not allow an assessment on the logic of the location of these access points. It does not allow an assessment on public safety and its impact on Moorebank Ave.



SIMTA and Federal Government Proposals

PROPOSED INTERMODAL TERMINAL

Legend

- SIMTA Intermodal Terminal Proposal
- Major Entry Exit Point
- Railway Stations (LPI)
- Major Roads (LPI)
- Possible Internal Roads
- Southern Sydney Freight Line
- Railway (Passenger Line)
- Indicative Rail Link (Approx 30m Wide)
- Watercourses (LPI)
- Cadastre (LPI, 2011)
- Major Waterbodies (LPI)
- Freight Village
- Intermodal Terminal Facility
- Warehouse & Distribution Centre
- Proposed Moorebank Intermodal Terminal Proposal

FIGURE 2

N W E S

1:15,000 Scale at A3

Metres

0 200 400 600 800 1,000

Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2012-06-01
Coordinate System: GDA 1994 MGA Zone 56
Project: 112083-01
Map: G1009_ConceptPlanProposals.mxd 01

Aerial imagery supplied by NearMap and associated third party suppliers (April 2012)

- The indicative rail spur connecting to the SSFL seems to be located within the Moorebank Project Office site and overlaps the proposed internal road within the adjoining development. There is no information on how this over lapping land uses will be resolved.
- **Figure 2** suggests that there is no co-ordination in the design of the two proposals and it also suggests that there will be two separate rail spurs linking the two sites with the SSFL. This is an inefficient use of the land.

Recommendations

A more detailed Concept Plan is essential to allow an appropriate level of assessment on the proposal. The applicant must provide an appropriate Concept Plan and it must include:

- A realistic depiction of the indicative building footprint and envelopes of all structures on site
- All proposed uses on the site and how these uses physically relate to each other
- Concept design of the internal road network showing road widths and turning areas
- Concept design of the access points
- Relationship of the proposed accesses with the entry points to the adjoining Moorebank Project Office intermodal facility
- Concept design of the rail corridor of appropriate width within the site and how the warehouses and the intermodal terminal physically relate to the rail corridor.
- Concept design of the rail spur outside the site boundary, including appropriate curvature and correct location that does not overlap on the adjoining Defence land.
- Concept design of the bridges across Anzac Creek and Georges River
- Concept design of the grade separated crossing at Moorebank Ave and the East Hills Passenger Line showing the extent of upgrades required to the crossing
- Concept design of the proposed duplication of the East Hills Passenger Line showing how this additional rail line can be physically fit and the widening of the existing railway corridor.

2.2.3 Railway Spur & Connection to SSFL

The railway spur that connects the site and the SSFL is the most critical piece of infrastructure for the intermodal terminal. The facility cannot operate without the railway spur,

What did SIMTA say?

The EA provides an indicative rail link as an orange dotted line. There is limited description of the exact location and the design of the rail spur. The EA explains that the information will be provided in the future Project Application stage.

In Technical Note 6 Strategic Rail Capacity Analysis report (Appendix L of the EA), page 14 states that:

- *Access to the Glenfield Waste Disposal site and rail corridor was restricted and no field investigation was undertaken to substantiate the concept rail alignment.*
- *The full spectrum of engineering investigations will be undertaken at the project application stage.*

Design parameters of the rail spur were identified, including the need for flood study, geotechnical investigation, environmental reports to manage site constraints, and earthworks and site remediation works on the waste disposal site.

It is noted in the Technical Note that Australian Rail Track Corporation Ltd (ARTC), who owns and constructs the SSFL, currently does not have sufficient train path to service SIMTA's requirements if no improvements were carried out by ARTC to alleviate this limitation. ARTC is not in a position to reserve capacity for a future user.

In ARTC's letter to SIMTA (Stockland who was part of SIMTA at that time) dated 17 October 2011, ARTC suggested that:

ARTC has undertaken some preliminary modelling that indicates that although the SSFL in its initial configuration would not be able to accommodate up to the 21 port shuttles per day (required by SIMTA)… it is likely to be feasible to accommodate this additional traffic with appropriate investments.

To accommodate 21 services in addition to other forecast traffic will require additional expansionary infrastructure. ARTC's preliminary modelling indicates that the additional task may require two 750m loops between Leightonfield and Moorebank and the extension of the existing Moorebank loop and full duplication of the Botany line. It is important to note that this based only upon an initial review and more detailed analysis would be required to confirm this assessment.

Sites for the proposed loop have been identified based on the availability of adequate corridor width. However, the sites have not had any engineering or environmental feasibility undertaken on them and as such are conceptual solutions only... None of the identified enhancement projects have been costed and no funding has been allocated towards them…

ARTC will be able to give a more detailed response on the scope, timing and cost implications of the requested capacity when SIMTA is in a position to make a formal path request.

Cardno's Assessment

The statements from the ARTC suggested that:

- Whilst there is a mechanism for SIMTA to request the ARTC to investigate the required expansionary infrastructure to support the capacity proposed by SIMTA, there is no commitment from ARTC on the timing, scope and cost of the upgrades to the SSFL that are essential to support the SIMTA's proposal.
- The connection to the SSFL is the most important piece of infrastructure to allow the operation of this development. There is no indication that this connection can be established and the timing for the expansionary works is unknown.
- The expansionary works to the SSFL must form part of this project and the details of these works should be provided in the submitted documents in order for the Government to assess the environmental impacts prior to granting any determination. These works must form part of the scope of the proposed development.
- Commitment from ARTC is also critical to give certainty to the Government and the affected community about the extent and timing of the works.
- Our assessment based on the limited information on the rail link from the site to SSFL (**Figure 3**) suggested that the proposed rail spur includes unnecessary curves that have not been tested geometrically. A substantial amount of investigations, including flooding, geotechnical, ecology, bushfire and site contamination need to be undertaken, even on a preliminary level, on the rail spur land to confirm the capability of the site to supports the development.
- The proposed rail spur to the south of the site contains threatened species that are listed in the Commonwealth Environmental Protection and Biodiversity Conservation (EPBC) Act and this rail spur is creating the most significant environmental impacts out of all of the structures proposed in this application. Limiting the size of this rail spur will assist in alleviating the environmental impacts of the proposal. Straightening the alignment as shown in **Figure 3** can create a safer and more

efficient route that makes use of the existing disused railway line. However, no options are provided in the EA.

- In undertaking the schematic design of the rail alignment options, reference has been made to the Transport for NSW RailCorp ESC 210 Track Geometry and Stability – Version 4.6 Issued August 2011. The schematic design of the rail alignment options has taken into consideration the constraints associated with this site.
- The following design criteria have been adopted for the schematic design of rail alignment:
    - Minimum horizontal radius R = 200m in accordance with Table 3 – Normal Design Limits for Sidings
    - Minimum length of straights 100m in accordance with 5.2.3 Long and Short Intervals
    - Maximum gradient G = 1% in accordance with Table 3 – Normal Design Limits for Sidings
    - Minimum 30m wide rail corridor as adopted from Environmental Assessment SIMTA prepared by Urbis March 2012.
- The Cardno alternative rail alignment option consists of supporting infrastructure including bridges and fill embankments only. No viaducts are required, which is necessary for the SIMTA rail option.
- Regardless of which rail spur option, an approximate area of 10ha land acquisition is required and there is no evidence in the submitted documents suggesting that this issue has been resolved.

Overall, Cardno considers that the proposal is premature as it does not provide a solution to connect the proposed facility with the SSFL without major expansionary infrastructure. All of these upgrade works are fundamental to the operation of the proposed Intermodal Terminal. If any component of these works is not feasibility due to engineering, financial, land ownership or environmental constraints, the proposed Intermodal Terminal will not be able to function.

Recommendations

Because the railway spur and the SSFL expansionary infrastructure are crucial parts of the proposal, the location, concept designs, land owners commitment and financial arrangement of these works must be addressed in the application to allow appropriate assessment of the full extent of the proposal. Without this information, the determination of this application is premature.

The application must therefore provide the following additional information:

- Concept design of the rail spur and alternative locations and design and justifications for the chosen design options.
- Concept design of the crossing on Anzac Creek and Georges River and the grade separated crossing at Moorbank Ave and the existing passenger line.
- Consideration of using the existing disused railway line for the proposed rail spur.
- Consideration of using the proposed rail spur of the Moorebank Project Office's proposal and evidence to demonstrate that SIMTA and the Moorebank Project Office have made an effort to resolve this matter.
- Concept design of all expansionary infrastructure to the SSFL required to provide the required capacity sought by SIMTA.
- Commitments from the ARTC to the expansionary infrastructure and indication of the funding arrangement, timing of the delivery and the scope of works.
- Evidence that land ownership issues are resolved for the expansionary infrastructure and the rail spur.
- Preliminary environmental assessment to be undertaken for the rail spur alignment and the expansionary infrastructure.

DATE PLOTTED: 18 May, 2012 - 3:04pm

South Western Motorway - M5

OVERHEAD POWER LINES

BRIDGE CROSSING GEORGES RIVER

Anzac Road

Moorebank Avenue

Hume Highway

Southern Sydney Freight Line

Georges River

Proposed IMT site

SIMTA site (DNSDC)

School of Military Engineering (SME)

LOT 103/1143827
LAND ACQUISITION
REQUIRED = 1.5Ha

LOT 104/1143827
LAND ACQUISITION
REQUIRED = 0.3Ha

LOT 51/515696
LAND ACQUISITION
REQUIRED = 0.5Ha

LOT 5/833516
LAND ACQUISITION
REQUIRED = 0.8Ha

LOT 5/833516
LAND ACQUISITION
REQUIRED = 0.8Ha

LOT UNKNOWN
LAND ACQUISITION
REQUIRED = 2.4Ha

BRIDGE WIDENING FOR ROAD UNDER

BRIDGE WIDENING FOR ROAD UNDER

LOT 5/833516
LAND ACQUISITION
REQUIRED = 0.3Ha

VIADUCT REQUIRED FROM Ch1300-2050

BRIDGE CROSSING GEORGES RIVER

BRIDGE CROSSING ANZAC CREEK

LOT 3001/1125930
LAND ACQUISITION
REQUIRED = 1.4Ha

LOT 3001/1125930
LAND ACQUISITION
REQUIRED = 2Ha

LOT 3001/1125930
LAND ACQUISITION
REQUIRED = 1.6Ha

East Hills Passenger Line

CROSSING UNDER MOOREBANK AVE

LOT 1/825352
LAND ACQUISITION
REQUIRED = 0.7Ha

LOT 1/825352
LAND ACQUISITION
REQUIRED = 0.7Ha

N

Project
MOOREBANK INTERMODAL TERMINAL PROJECT

LEGEND:

- SIMTA PROPOSED RAIL ALIGNMENT (30m CORRIDOR)
- CARDNO POSSIBLE ALTERNATIVE SIMTA RAIL ALIGNMENT (30m CORRIDOR)
- IMT PROPOSED RAIL ALIGNMENT (30m CORRIDOR)

Cardno

Cardno (NSW/ACT) Pty Ltd

Status	Scale		Drawing Number	Date	Revision
CONCEPT	1:10000 @ A3	**FIGURE 3**	JOBNo.-SK01	17/05/2012	1

2.2.4 Staging & Timing

What SIMTA Said?

The Traffic and Transport report (Appendix K of the EA document) Page 90 provides an indicative development staging, as shown in **Table 2.2**:

Table 2.2 – Indicative Development Staging

Indicative Time Frame	Indicative Development Yields
2012/13 (1)	Commence development of Rail Terminal.
2015	Completion of Rail Terminal and transport of containers to and from Port Botany. Initial container throughput is expected to be approximately 200,000 TEUs.
2021	Completion of warehouse building and ancillary facilities. Total container throughput expected to be approximately 500,000 TEUs.
2031/ 2035	Ultimate development with container throughput one million TEUs.

Note: (1) Commencement year for Rail terminal will be dependent on Concept Plan Approval.

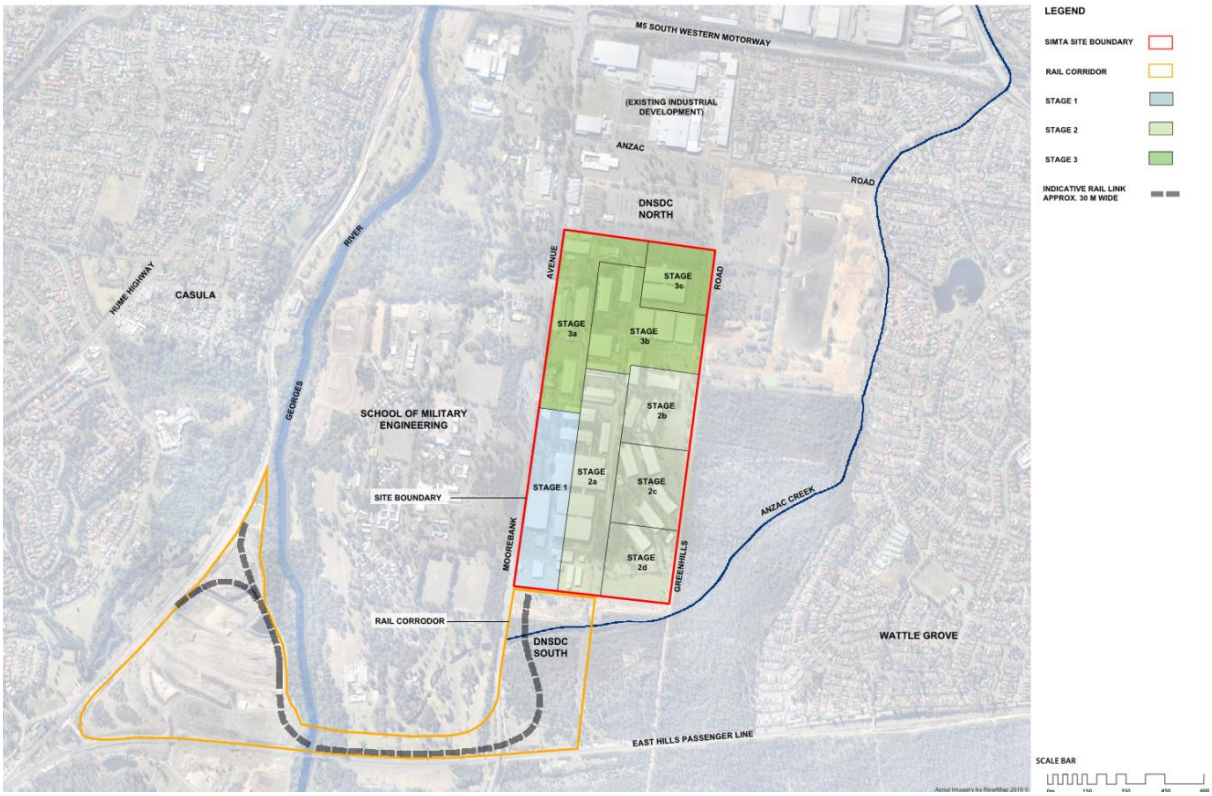
(Source: Hyder (2012) Moorebank Intermodal terminal Facility (MITF) – Traffic and Transport)

It suggests an indicative timing of 2015 to commence transportation of containers to and from Port Botany, with an initial container throughput of 200,000 TEUs.

There is no other information to justify the timing of the proposal.

The applicant has also submitted a staging plan (**Figure 4** below). However, the staging plan provides no description on the works contained in each stage.

Figure 4 – SIMTA's Staging Plan



(Source: Reid Campbell Concept Plan – Staging (Appendix D of EA Report))

Cardno's Assessment

The timeframe identified by SIMTA is unrealistic. Cardno's research suggested the following issues that can significantly affect the timing of the proposal:

- The SIMTA's site is currently leased to the Commonwealth Government as the Defence National Storage and Distribution Centre (DNSDC). The Defence logistics currently have a lease on the SIMTA's site until 2013 with two five-year options to extend to 2023.
- As discussed above, ARTC has indicated that they cannot reserve the freight line capacity for speculative users. Significant expansionary infrastructure is required to the SSFL to provide the capacity sought by SIMTA. To date, no commitment has been provided by the ARTC to undertake the works.
- A 2012/13 commencement to develop the rail terminal will require immediate planning approval for such works. However, this is only a Concept Application and a Project Application will need to be submitted to allow the construction of such works. No evidence has been provided to indicate that there are agreements from the adjoining owners to allow the rail spur to traverse their lands. The ownership plan in **Figure 5** shows that SIMTA will require consent from at least five land owners plus those that own lands affected by the required SSFL expansionary infrastructure. Only limited environmental assessments have been carried on the rail spur land and there is no indication on the geotechnical constraints on the landfill site.
- The adjoining intermodal terminal proposal by the Federal Government Moorebank Project Office states its intention to commence the construction of the Stage 1 works in 2013. Their staging plan is shown in **Figure 6.**
- There are obvious relationships between the two developments and the associated upgrade works required near the site. It is important to align the timing of the construction of the projects to minimise any impacts on the surrounding residents and activities. However, this is not discussed in the submitted documents.

ID	Owner	Lot and DP
1	Commonwealth of Australia	3001/1125930
2	State Rail Authority of NSW	1/825352
3	Trust Company Limited	1/1048263
4	Commonwealth of Australia	3002/1125930
5	Commonwealth of Australia	4/1130937
6	Figela Pty Ltd	103/1143827
7	JC & FW Kennett Pty Ltd	52/517310
8	JC & FW Kennett Pty Ltd	104/1143827
9	JC & FW Kennett Pty Ltd	51/515696
10	Ms Helen Louise Kennett and Kennett Pty Ltd	5/833516
11	Rail Corporation NSW	102/1143827

Liverpool city council
creating our future together

Ownership Plan

PROPOSED INTERMODAL TERMINAL

Legend

- SIMTA Intermodal Terminal
- Indicative Rail Link (Approx 30m Wide)
- Land Ownership Parcels
- Cadastre (LPI, 2011)

FIGURE 5

N
W E
S

1:12,000 Scale at A3

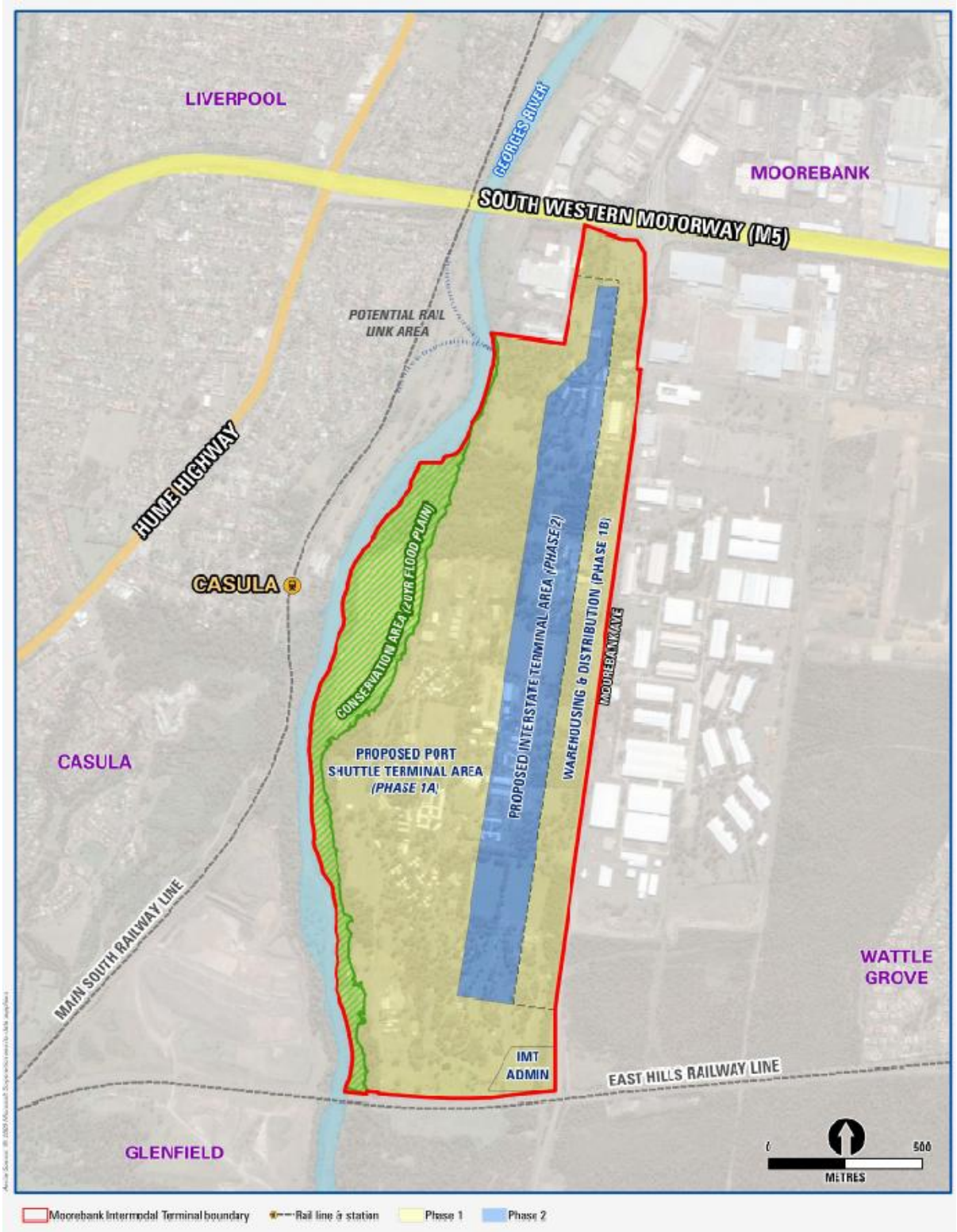
Metres
0 100 200 300 400 500

Cardno

Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2012-06-01
Coordinate System: GDA 1994 MGA Zone 56
Project: 112083-01
Map: G1005_OwnershipPlan.mxd 02

Aerial imagery supplied by Near Map and associated third party suppliers (April 2012)

Figure 6 - Staging Plan for Federal Government's Proposal



(Source: Commonwealth Department of Finance and Deregulation (2011) Moorebank Intermodal Terminal Preliminary Project Environmental Overview in support of the Application (Figure 5.1))

The above are all significant issues and failure to resolve any of the above will jeopardise the timing of the project, making the assessment invalid.

Recommendations

The determination of the current proposal is premature and it has not demonstrated whether the fundamental development issues are resolved. The applicant should submit the following additional information:

- Written confirmation from the Department of Defence that the DNSDC will vacate the site upon the expiry of the current lease term.
- Evidence of communication with affected land owners affected by the proposed rail spur and their indicative consent for such works to traverse their land.
- Commitments from the ARTC to the expansionary infrastructure and indication of the funding arrangement, timing of the delivery and the scope of works.
- Evidence that land ownership issues are resolved for the expansionary infrastructure and the rail spur.
- Revised staging and timing schedule and revised assessments to align with the revised timeframes
- A realistic staging plan showing how different stages of the development relate to each other and the works involved in each stage. Provide realistic timing for each stage of construction.
- A staging program that combines the proposed timeframe for the SIMTA's and the Moorebank Project Office's proposal. Evidence to demonstrate how the proposed construction timeframe can be co-ordinated to minimise impacts on the residents and adjoining activities.

2.2.5 Operational Details

No operation details are included in the EA documents. This is necessary to allow the assessment of the impacts arising from the proposal.

Recommendations

The following additional information is required:

- Details of how the intermodal terminal operates within the site, eg. how containers are loaded and unloaded from the trucks and onto the train wagon, the relationship between the warehouse and the terminal, movement pattern of the trucks, procedures to handle, store and move containers, any quarantine or security controls of the content of the containers, etc.
- Detailed description of the routes that will be used by the trucks to the development site and consideration of the traffic management requirements for the routes, including any proposed induction to truck drivers to use the chosen routes.
- Number of workers on site at any one time. Resting places for workers and its capacity.
- Accident handling procedures.

3 Statutory Compliance

This chapter assesses the proposed development against the relevant strategies and legislation.

3.1 Commonwealth Legislation

3.1.1 Environmental Protection & Biodiversity Conservation (EPBC) Act 1999

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) is Commonwealth environment and heritage legislation which applies to matters of national significance. This Act requires approval from the Commonwealth Minister for the Sustainability, Environment, Water, Population and Communities for any action that has, will have or is likely to have a significant impact on listed matters of National Environmental Significance. These matters are:

- World Heritage properties.
- National Heritage places.
- Wetlands of international importance.
- Threatened species and ecological communities.
- Migratory species.
- Commonwealth marine or land areas.
- Nuclear actions (including uranium mining).

Rightly identified by the applicant, the subject site contains the following matters that would require a referral to the Commonwealth Minister:

- **National Heritage (Sections 15B and 15C)** – the SIMTA is listed on the Commonwealth Heritage list as a *National Heritage Place*. The heritage inventory is included in **Appendix A** of this report.
- **Threatened Species and Communities (Sections 18-19)** – the land contains threatened flora (*grevillea parvifora subsq. Parviflora, persoonia nutan, acacia pubescensi)* and threatened fauna species *(pteropus poliocephalus)*
- **Commonwealth Land (Sections 27-27A) –** the proposed rail corridor traverses Commonwealth Land

This is no indication in the applicant's report that a referral has been made to the Commonwealth Minister regarding the above matters. A confirmation from the Commonwealth Minister is usually required in a Concept Application.

As the proposal is likely to remove all building structures on the site and affect flora and fauna species, both are listed as items of National Significance, a preliminary confirmation from the Commonwealth Minister is necessary in the Concept Plan stage to demonstrate the suitability of the land to support the proposal.

Recommendations

- The applicant must submit evidence that a referral to the Commonwealth Minister under EPBC Act has been carried out, and the appropriate assessment be submitted with the EA in accordance with the outcomes of the referral.

3.2 State Legislation

3.2.1 Environmental Planning & Assessment (EP&A) Act 1979

Whilst the development complies with the statutory requirements under the now repealed Part 3A of the EP&A Act, the assessment against Clause 5 of the Act below suggests that the proposal does not comply with the objectives of the Act and should not be approved in its current form.

(a) to encourage:

(i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,

Cardno's Assessment

- The application has not provided the full scope of the development, including on site and off site works, to allow the identification of the potential impacts.
- Whilst acknowledging the environmental benefits of an intermodal terminal in reducing truck movements and promoting rail freight, this argument needs to be balanced by the potential localised traffic, air and noise impacts that are likely to occur around Moorebank. There is no indication these impacts will be addressed.
- The submitted documents have not provided sufficient evidence to demonstrate there is a real need for this proposal within the strategic context of the approved/committed intermodal terminals in Sydney. Whether the proposal will promote substantial economic welfare to western Sydney is questionable.
- As demonstrated in the following chapter, the proposal will create localised social, environmental and economic impacts to Liverpool LGA and these impacts have not been identified and appropriately addressed.

(ii) The promotion and co-ordination of the orderly and economic use and development of land.

Cardno's Assessment

We do not believe the proposal promotes the orderly and economic use of land because:

- There is no demonstrable need for two intermodal terminals locating next to each other and we question if such co-location will increase the efficiency of the logistic chain of freight movement.
- There is no indication of the site layout and no information to allow an assessment of the design to ensure an orderly use of the site.
- A new spur line at the southern boundary of the site is proposed to connect the terminal with SSFL. However there is no consideration on using the existing disused railway line for the same purpose. There is no indication of the condition of the existing disuse railway line and no assessment on why this railway line cannot be used. The construction of the proposed new railway corridor will remove a significant amount of threatened species and the impact can be simply addressed by using the existing railway line.
- Both SIMTA's and the Moorebank Project Office's facilities incorporate separate rail spurs in different locations to connect the terminals with the SSFL. There is no assessment on the capacity of the rail spurs in relation to the operation of the terminal and there is no justification on why there are two spur lines in different locations. This layout contradicts the objective to promote an orderly and economic use of land.

(iii) The protection, provision and co-ordination of communication and utility services

Cardno's Assessment

- This proposal will require augmentation of utility and infrastructure. However, the unclear scope of the development and the uncertain timing do not allow a full assessment on the capacity of the existing utilities and the scope of upgrades required as well as the timing of the upgrades.

(iv) the provision of land for public purposes

Cardno's Assessment

- Whilst no public uses are being proposed in this development, the total privatisation of the site as an intermodal terminal will take away all opportunities for the public to use the land and appreciate the military significance of the site and its National heritage values.

(v) the provision and co-ordination of community services and facilities, and

Cardno's Assessment

- This objective is not applicable. We do not believe the provision of travel demand measures to the workers on site as stated in the submitted report will benefit the local communities.

(vi) the protection of the environment, including the protection and conservation of native animals and plants including threatened species, populations and ecological communities and their habitats

Cardno's Assessment

The proposal does not maximise the opportunities to protect the threatened species on the site:

- The proposed rail spur has not been designed to minimise disturbance to the land, and will create significant impacts on the existing threatened species of National Significance on the site. The impacts have not been addressed.
- There is no mitigation measures proposed to minimise any potential impacts.
- There is insufficient information in the proposal to identify and assess the impacts on the threatened species.

(vii) Ecological sustainable development

Cardno's Assessment

- There is insufficient information in the concept plan and in the EA reports to assess if the proposal constitutes ecologically sustainable development.

(viii) the provision and maintenance of affordable housing

Cardno's Assessment

- This objective is irrelevant to this project

(b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State

Cardno's Assessment

- This objective is irrelevant to this project

(c) to provide increased opportunity for public involvement and participation in environmental planning and assessment

Cardno's Assessment

- As identified later in this report, the community consultation undertook by the applicant as part of the EA process is poor. The consultation program missed key demographic groups which represent the Liverpool community and it has not made the project information accessible to the public. It has not provided sufficient opportunity for public involvement.

3.3 Local Legislation

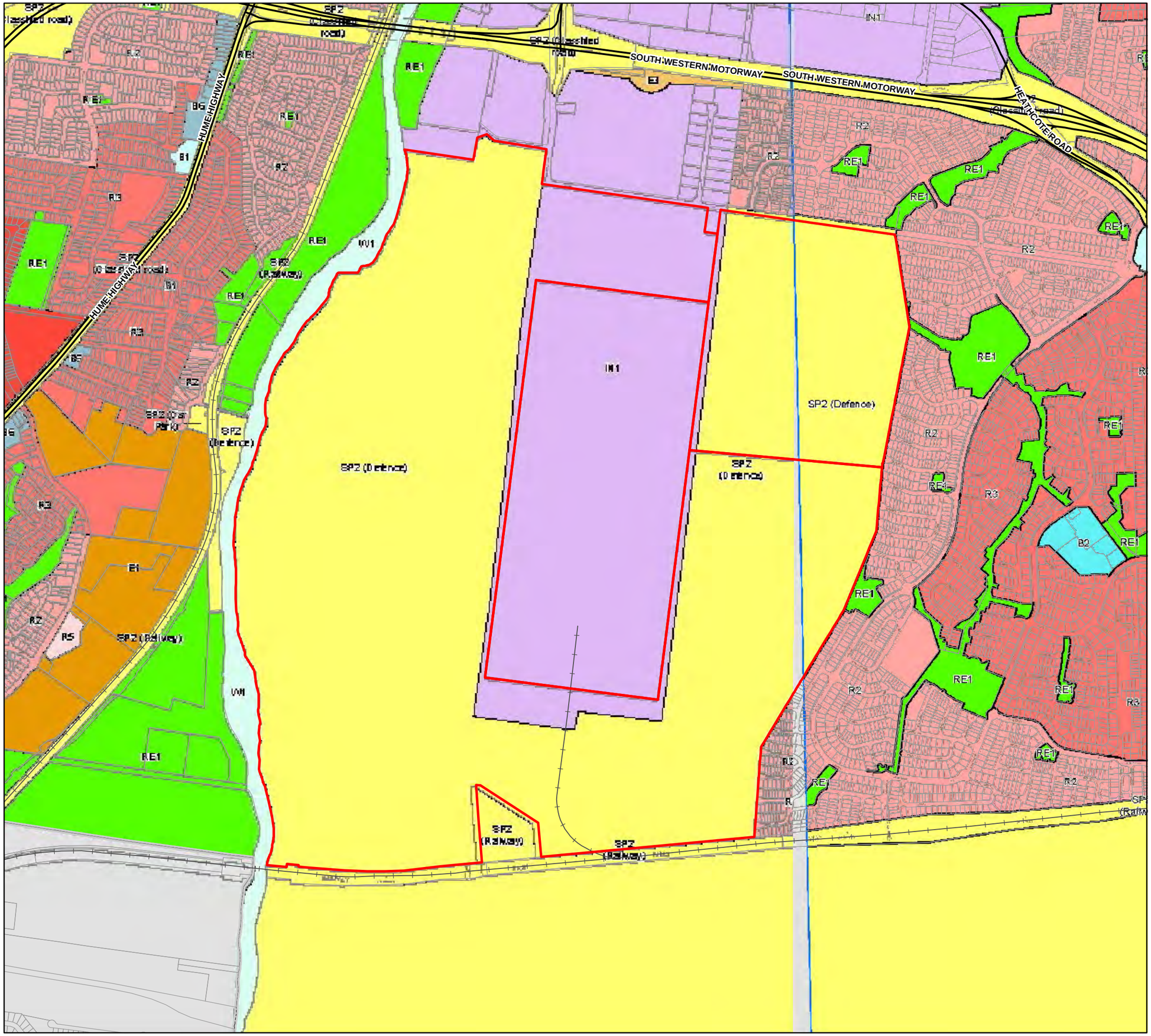
3.3.1 Liverpool Local Environmental Plan (LEP) 2008

The Liverpool LEP has zoned this site IN1 General Industrial zone. This is shown in **Figure 7**.

Whilst complying some of the current objectives and zoning table of the LEP, Cardno noted that the site was originally rezoned for a *Business Enterprise* zone and supported by the site specific Development Control Plan (adopted in 2003). However, the introduction of the State Government LEP template has removed the site specific controls on this site and the IN1 General Industrial zoning permits a range of industrial, including freight transport facility. The inappropriate translation of the zoning controls has allowed a use that was not initially intended in the original rezoning application.

3.3.2 Development Control Plan – Moorebank International Technology Park

A site specific DCP was prepared to support the rezoning application. The original DCP 49 was undertaken for the Moorebank International Technology Park and it covers this site and two adjoining lots to the north and north east of the site (known as Amiens and Yulong). DCP 49 was subsequently amalgamated into a comprehensive Liverpool DCP 2008 in accordance with the State Government Planning Reform. Part 2.4 of DCP 2008 is the old DCP 49 and the visions and controls are targeted as the originally proposed technology park. The SIMTA does not comply with the intent of the DCP or any appropriate controls.



Site Plan

PROPOSED INTERMODAL TERMINAL

Legend

- Area of Interest
- Major Roads (LPI)
- Railway (LPI)
- Cadastre (LPI, 2011)
- LGA Boundaries (LPI)

Liverpool Local Environment Plan 2008

- B1 - Neighbourhood Centre
- B2 - Local Centre
- B4 - Mixed Use
- B5 - Business Development
- B7 - Business Park
- E1 - National Parks and Nature Reserves
- E2 - Environmental Conservation
- E3 - Environmental Management
- E4 - Environmental Living
- IN1 - General Industrial
- IN2 - Light Industrial
- IN3 - Heavy Industrial
- R2 - Low Density Residential
- R3 - Medium Density Residential
- R5 - Large Lot Residential
- RE1 - Public Recreation
- RE2 - Private Recreation
- RU1 - Primary Production
- RU2 - Rural Landscape
- RU3 - Forestry
- RU4 - Rural Small Hodlings
- SP1 - Special Activities
- SP2 - Infrastructure
- SP3 - Tourist

FIGURE 7

N W E S

1:12,500 Scale at A3

Metres

0 200 400 600 800

Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2012-06-01
Coordinate System: GDA 1994 MGA Zone 56
Project:212002-01-356
Map: G1002_ZoningPlan.mxd 01

4 Environmental Impact Assessments

This section provides peer reviews of the Environmental Impact Assessments submitted as part of the Environmental Assessment for the Concept Application.

4.1 Traffic & Transport

The following is a review of the traffic and transport information provided in the Transport and Accessibility Impact Assessment prepared by Hyder Consulting (*Appendices K of the EA report, dated August 2011*).

4.1.1 Overview of SIMTA's Transport & Accessibility Impact Assessment

- Traffic forecasts were determined by using a strategic traffic model specifically developed for investigating the traffic impact from the SIMTA proposal. The demand estimates used in the model were based on the Sydney-wide Strategic Travel Model (STM) developed by the Bureau of Transport Statistics (BTS). The Strategic Model undertook detailed calibration and validation.
- A Paramics model was also developed to assess the road network capacity with and without the SIMTA proposal on roads within the immediate vicinity of the site.
- The employment data used in future 2031 traffic models was from the NSW Government's population and employment forecast sourced from BTS.
- The basis for the road network used in the model was not clear. The EA report mentioned the road network was especially prepared to address the SIMTA site. A copy of the road network model was not provided.
- Both traffic models were prepared for the current (2011) situation and for the future (2031) situation with and without SIMTA when it was assumed the SIMTA site would be fully operational.
- The proposal only identifies four road upgrade works, stating that the existing road network will be operating efficiently after the proposal is in operational and when it is at full capacity. These include:
    - *Widen Moorebank Avenue to four lanes between the M5 Motorway/Moorebank Avenue grade separated interchange and Northern SIMTA site access. Some localised improvements will be required around central access and southern access points;*
    - *Concurrent with four lane widening on Moorebank Avenue, the Moorebank Avenue/Anzac Road signal will require some form of widening at approach roads;*
    - *A new traffic signal at SIMTA northern entry and egress points with the Moorebank Avenue;*
    - *Potential upgrade works at the M5 Motorway/Moorebank Avenue grade separated interchange to cater for both background and additional SIMTA traffic growth.*

4.1.2 Assumptions in SIMTA's Traffic Models

Port Botany Container Terminal

- In 2009/10 Port Botany handled 1.9 million TEUs, up from 1.8 million TEU in 2008/09 (a TEU is a twenty foot equivalent unit container). In 2009/10, imports were 1.0 million TEUs, exports were 0.4 million TEU and the export of empty containers was 0.5 million TEUs.
- The projected growth of container trade at Port Botany is 6.7% per annum based on Sydney Ports Corporation (SPC) planning assumptions.

- By 2018 Port Botany is projected to handle 3.2 million TEUs per year. Port Botany will require an amendment to the current development consent to handle more than 3.2 million TEUs per annum.
- By 2025 Port Botany will reach its projected capacity of 5.0 million TEUs per annum (subject to outcomes of the planning approval).
- To relieve congestion on the road network in Sydney, the NSW State Plan 2010 sets out the target to increase the proportion of container freight movements by rail out of Port Botany to 40% by 2016.

TEU Assumptions

- The SIMTA site is approximately 83 hectares
- SIMTA will have capacity to handle 1.0 million TEUs per annum (estimated) by 2016.
- Approximately 60% of containers are 40 foot containers which are equivalent to two TEUs.
- 2,740 TEUs per day by rail

Employment

- The EA report estimated employment on the SIMTA site at around 2,260.

Traffic Generation

- The EA report mentioned that traffic generation from the SIMTA site would be based on *The RTA Guide to Traffic Generating Developments*.

Rail Movement Assumptions

- The SIMTA site would generate approximately 21 trains per day, which is approximately one train in and out every hour of the day and night

Truck Movement Assumptions

- The SIMTA site will generate 2,638 trucks movements per day (1,603 articulated trucks and 1,035 rigid trucks)

Car Movement Assumptions for the SIMTA site

- 4,516 person movements per day
- 80% of person movements by car
- 3,613 car movements per day (19.1% in AM Peak Hour (7-8am) and 17.4% in PM Peak Hour (4-5pm))

Public Transport Movements for the SIMTA site

- 2011 current mode share to Moorebank area is car (84.7%), Train (2.1%) and Bus (1.0%)
- 2031 assumed mode share to Moorebank area is car (51.5%), Train (5.0%) and Bus (30.0%)
- Peak Period bus services were proposed between the SIMTA site and the Liverpool and Holsworthy Rail Stations

4.1.3 Cardno's Assessment

Traffic Modeling Results & Road Upgrades

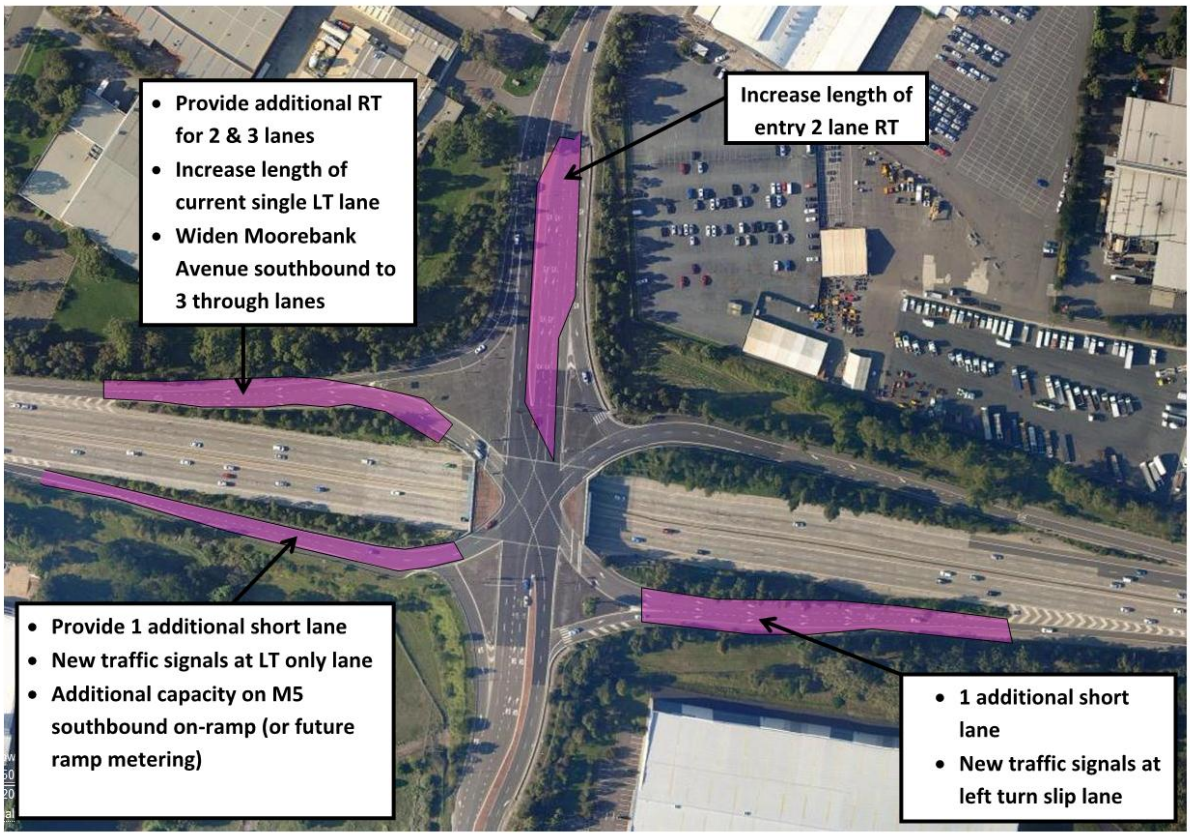
Overall, the calibration and validation of the traffic models indicate that the estimate of current traffic movements is within acceptable orders of accuracy. However, we have reservations on the potential impacts identified in SIMTA's proposal due to the limited details provided in the report and the unclear assumptions used.

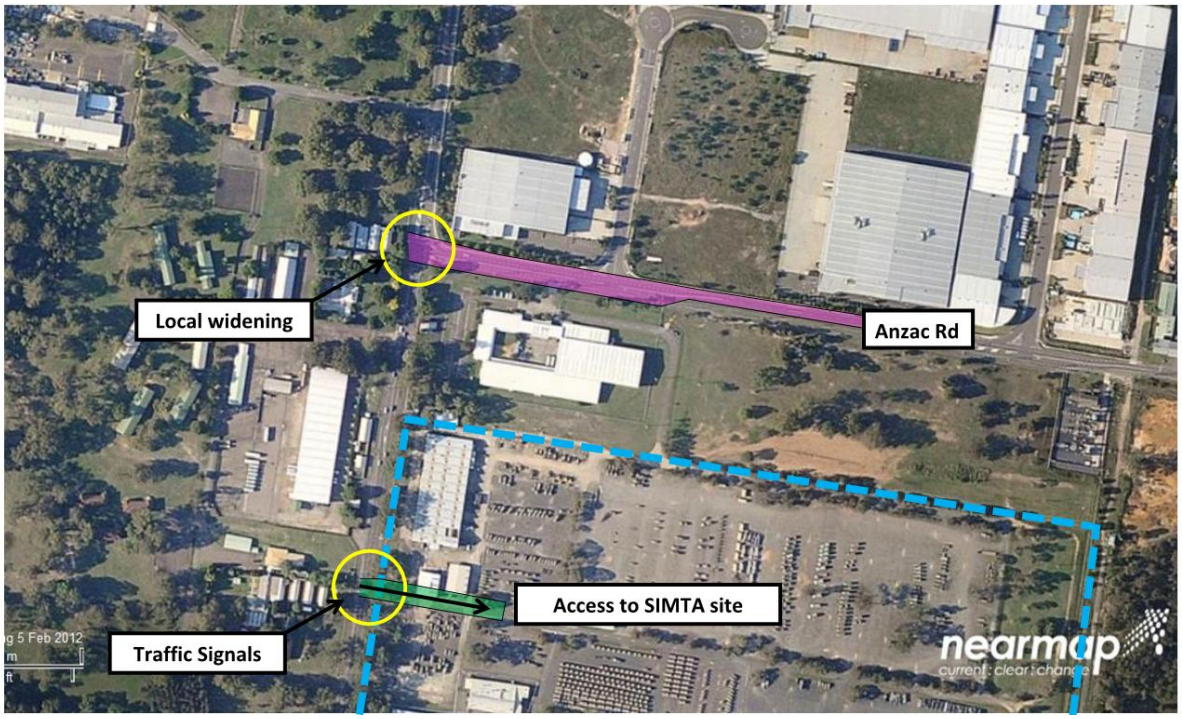
Several figures have been produced to estimate the impact of SIMTA in 2031 and to compare the traffic capacity at several key intersections around the site with and without SIMTA in 2031. The report indicates that SIMTA will only have a minor impact on local intersections as it will only take up the spare capacity that will be available at that time. It also indicates that the only road works required is the widening of the ramps on the M5/Moorebank Avenue interchange, the widening of Moorebank Avenue and the installation of traffic signals at the Moorebank Avenue/Anzac Road intersection. SIMTA's proposed road upgrades are shown in **Figure 8**.

We question the limited scope of road upgrades for the following reasons:

- The basis for the estimate of 2031 traffic flows is not clear in order to understand the truck movements and to justify the limited impacts of traffic generation identified in SIMTA's traffic model. For example the traffic model did not include the proposed Commonwealth Intermodal Terminal which is also to be located in Moorebank.
- There were only general comments provided about the 2011 or 2031 road networks used in the transport models, specifically in the Liverpool LGA. On this basis Cardno cannot assess the impact of future car and truck traffic on Council's local and regional roads.
- The increase in truck traffic in the Liverpool LGA will have an impact on Council's Regional and Local roads with respect to the traffic capacity of these roads and the structural capacity of the road pavements to carry the additional truck loads. The EA report does not provide any traffic data to assess the damage the increase in truck traffic will have on their roads
- The charts in **Annex A** graphically show the results from the SIMTA's reports of the future 2031 traffic models at 13 locations around the SIMTA site. The plans show those intersections operating at Levels of Service less than LoS F and at LoS F; Level of Service F means that the section of road or intersection has failed and as such it is at an unsatisfactory level of service with excessive queuing. LoS F was chosen to highlight the seriousness of the section of road or intersection to accommodate additional traffic and therefore show that further detailed investigations would be required to determine what measures would be required to allow these sections of road or intersections to operate at a higher level of service such as at LoS D or E in the peak hours.

Figure 8 - Road Upgrades Proposed by SIMTA





- **Table 4.1** illustrates the SIMTA results in 2031 with and without SIMTA which suggests SIMTA will not be the cause of the failure at these intersections as the intersections will have already failed. This requires further justification by undertaking traffic modelling at intermediate years to show the impact of SIMTA as the SIMTA project ramps up from 2015 to 2025.

Table 4.1 – Intersection Performance With and Without SIMTA

Intersection	2031 LoS Without SIMTA	2031 With SIMTA
Moorebank Avenue/Anzac Road	< LoS F	> LoS F
M5 Motorway/Moorebank Avenue	< LoS F	< LoS F
M5 Motorway/Hume Highway	> LoS F	> LoS F
Moorebank Avenue/Heathcote Road	< LoS F	> LoS F
Moorebank Avenue/Newbridge Road	> LoS F	> LoS F
Hume Highway/Camden Valley Way	< LoS F	> LoS F
Hume Highway/Kurrajong Road	> LoS F	> LoS F
Hume Highway/De Meyrick Avenue	> LoS F	> LoS F
Hume Highway/Hoxton Park Road/Macquarie Street	> LoS F	> LoS F
Terminus Street/Speed Street	> LoS F	> LoS F
Newbridge Road/Nuwarra Road	< LoS F	> LoS F
Heathcote Road/Nuwarra Road	> LoS F	> LoS F

- There is no traffic flow data from the traffic models to justify the recommended upgrades proposed at the above 12 locations or who would be responsible for the cost of these upgrades.
- Plans in **Annex A** also support the situation that in 2031 SIMTA will not be the ultimae cause of the future intersection upgrades. The Plans show that:
  - The 2011 AM and PM Peak Hour Level of Service
  - The 2031 AM and PM Peak Hour Level of Service With and Without SIMTA
  - A comparison of the 2011 and 2031 AM and PM Peak Hour Levels of Service With and Without SIMTA
  - A comparison of the 2031 AM and PM Peak Hour Levels of Service With and Without SIMTA
- The percentage of SIMTA cars and trucks as a percentage of the background cars and trucks in 2031 if SIMTA was not developed. The percentages are significant as SIMTA could add up to 84% of additional trucks on the Hume Highway, 350% on Moorebank Avenue and up to 22% on the M5 west of Moorebank Avenue. This is shown in **Figures 9-12** below.

  For example **Figures 9 and 10** show that in the AM Peak Hour in 2025 the projected number of trucks on Moorebank Avenue will increase by 350%. This was calculated by estimating the number of trucks on Moorebank Avenue with and without SIMTA as follows
  - Without SIMTA it was estimated there would be 113 trucks per hour on Moorebank Avenue
  - With SIMTA there would be 509 trucks per hour which includes non SIMTA and SIMTA truck movements
  - Therefore SIMTA would provide 396 (509-113) truck movements which is an increase in truck movements or 350% i.e. (396*100/113) above the projected background truck movements.

M-6 M7 Motorway Nth of Kurrajong Rd		
Year	% Δ SIMTA Cars	% Δ SIMTA Trucks
2010	-	-
2015	2%	1%
2025	4%	2%
2031	4%	2%

M-4 M5 West of Moorebank		
Year	% Δ SIMTA Cars	% Δ SIMTA Trucks
2010	-	-
2015	1%	14%
2025	2%	22%
2031	2%	19%

M-5 M5 East of Moorebank		
Year	% Δ SIMTA Cars	% Δ SIMTA Trucks
2010	-	-
2015	2%	5%
2025	3%	7%
2031	2%	6%

M-8 Hume Hwy btw Myall and Pine		
Year	% Δ SIMTA Cars	% Δ SIMTA Trucks
2010	-	-
2015	3%	48%
2025	5%	84%
2031	4%	77%

M-7 M5 Sth of Campbelltown Rd		
Year	% Δ SIMTA Cars	% Δ SIMTA Trucks
2010	-	-
2015	2%	8%
2025	3%	14%
2031	3%	13%

M-1 Moorebank South of Anzac		
Year	% Δ SIMTA Cars	% Δ SIMTA Trucks
2010	-	-
2015	19%	209%
2025	32%	350%
2031	29%	315%

M-2 Anzac Rd, East of Moorebank		
Year	% Δ SIMTA Cars	% Δ SIMTA Trucks
2010	-	-
2015	41%	0%
2025	69%	0%
2031	62%	0%

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SIMTA Background Traffic Plan *AM Peak Hour*

PROPOSED INTERMODAL TERMINAL

Legend

- SIMTA Intermodal Terminal
- Traffic Statistic Zones
- Railway (LPI)

Road Hierarchy (LPI)

- RMS - State Owned
- LCC - Regional Road
- Local Roads

FIGURE 9

N W E S

1:25,000 Scale at A3

Metres
0 250 500 750 1,000

Cardno

Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2012-06-01
Coordinate System: GDA 1994 MGA Zone 56
Project:212002-01-356
Map: G1029_BackgroundTrafficAMPeak.mxd 01

Aerial imagery supplied by BingMaps and associated third party suppliers

M-6 M7 Motorway Nth of Kurrajong Rd		
Year	SIMTA Cars	SIMTA Trucks
2010	-	-
2015	117	8
2025	235	16
2031	235	16

M-4 M5 West of Moorebank		
Year	SIMTA Cars	SIMTA Trucks
2010	-	-
2015	128	152
2025	255	305
2031	255	305

M-5 M5 East of Moorebank		
Year	SIMTA Cars	SIMTA Trucks
2010	-	-
2015	166	44
2025	331	87
2031	331	87

M-8 Hume Hwy btw Myall and Pine		
Year	SIMTA Cars	SIMTA Trucks
2010	-	-
2015	107	99
2025	214	198
2031	214	198

M-7 M5 Sth of Campbelltown Rd		
Year	SIMTA Cars	SIMTA Trucks
2010	-	-
2015	107	99
2025	214	198
2031	214	198

M-1 Moorebank South of Anzac		
Year	SIMTA Cars	SIMTA Trucks
2010	-	-
2015	345	198
2025	690	396
2031	690	396

M-2 Anzac Rd, East of Moorebank		
Year	SIMTA Cars	SIMTA Trucks
2010	-	-
2015	345	0
2025	690	0
2031	690	0

SIMTA Car and Truck Movement Plan *AM Peak Hour*

PROPOSED INTERMODAL TERMINAL

Legend

- SIMTA Intermodal Terminal
- Traffic Statistic Zones
- Railway (LPI)

Road Hierarchy (LPI)

- RMS - State Owned
- LCC - Regional Road
- Local Roads

FIGURE 10

N W E S

1:25,000 Scale at A3

Metres

0 250 500 750 1,000

Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2012-06-01
Coordinate System: GDA 1994 MGA Zone 56
Project:212002-01-356
Map: G1030_CarTruckAMPeak.mxd 01

Aerial imagery supplied by BingMaps and associated third party suppliers

M-6 M7 Motorway Nth of Kurrajong Rd		
Year	% Δ SIMTA Cars	% Δ SIMTA Trucks
2010	-	-
2015	2%	1%
2025	3%	2%
2031	3%	2%

M-4 M5 West of Moorebank		
Year	% Δ SIMTA Cars	% Δ SIMTA Trucks
2010	-	-
2015	1%	14%
2025	2%	21%
2031	2%	18%

M-5 M5 East of Moorebank		
Year	% Δ SIMTA Cars	% Δ SIMTA Trucks
2010	-	-
2015	2%	4%
2025	3%	7%
2031	2%	6%

M-8 Hume Hwy btw Myall and Pine		
Year	% Δ SIMTA Cars	% Δ SIMTA Trucks
2010	-	-
2015	2%	46%
2025	4%	80%
2031		

M-7 M5 Sth of Campbelltown Rd		
Year	% Δ SIMTA Cars	% Δ SIMTA Trucks
2010	-	-
2015	1%	8%
2025	2%	14%
2031	2%	13%

M-1 Moorebank South of Anzac		
Year	% Δ SIMTA Cars	% Δ SIMTA Trucks
2010	-	-
2015	17%	197%
2025	25%	291%
2031	20%	242%

M-2 Anzac Rd, East of Moorebank		
Year	% Δ SIMTA Cars	% Δ SIMTA Trucks
2010	-	-
2015	31%	0%
2025	45%	0%
2031	38%	0%

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SIMTA Background Traffic Plan
PM Peak Hour

PROPOSED INTERMODAL TERMINAL

Legend

- SIMTA Intermodal Terminal
- Traffic Statistic Zones
- Railway (LPI)

Road Hierarchy (LPI)

- RMS - State Owned
- LCC - Regional Road
- Local Roads

FIGURE 11

N W E S

1:25,000 Scale at A3

Metres
0 250 500 750 1,000

Cardno

Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2012-06-01
Coordinate System: GDA 1994 MGA Zone 56
Project:212002-01-356
Map: G1031_BackgroundTrafficPMPeak.mxd 01

Aerial imagery supplied by BingMaps and associated third party suppliers

M-6 M7 Motorway Nth of Kurrajong Rd		
Year	SIMTA Cars	SIMTA Trucks
2010	-	-
2015	107	8
2025	214	16
2031	214	16

M-4 M5 West of Moorebank		
Year	SIMTA Cars	SIMTA Trucks
2010	-	-
2015	116	152
2025	233	305
2031	233	305

M-5 M5 East of Moorebank		
Year	SIMTA Cars	SIMTA Trucks
2010	-	-
2015	151	44
2025	302	87
2031	302	87

M-8 Hume Hwy btw Myall and Pine		
Year	SIMTA Cars	SIMTA Trucks
2010	-	-
2015	97	99
2025	195	198
2031	195	198

M-7 M5 Sth of Campbelltown Rd		
Year	SIMTA Cars	SIMTA Trucks
2010	-	-
2015	97	99
2025	195	198
2031	195	198

M-1 Moorebank South of Anzac		
Year	SIMTA Cars	SIMTA Trucks
2010	-	-
2015	314	198
2025	629	396
2031	629	396

M-2 Anzac Rd, East of Moorebank		
Year	SIMTA Cars	SIMTA Trucks
2010	-	-
2015	314	0
2025	629	0
2031	629	0

SIMTA Car and Truck Movement Plan
PM Peak Hour

PROPOSED INTERMODAL TERMINAL

Legend

- SIMTA Intermodal Terminal
- Traffic Statistic Zones
- Railway (LPI)

Road Hierarchy (LPI)

- RMS - State Owned
- LCC - Regional Road
- Local Roads

FIGURE 12

N W E S

1:25,000 Scale at A3

Metres
0 250 500 750 1,000

Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2012-06-01
Coordinate System: GDA 1994 MGA Zone 56
Project:212002-01-356
Map: G1032_CarTruckPMPeak.mxd 01

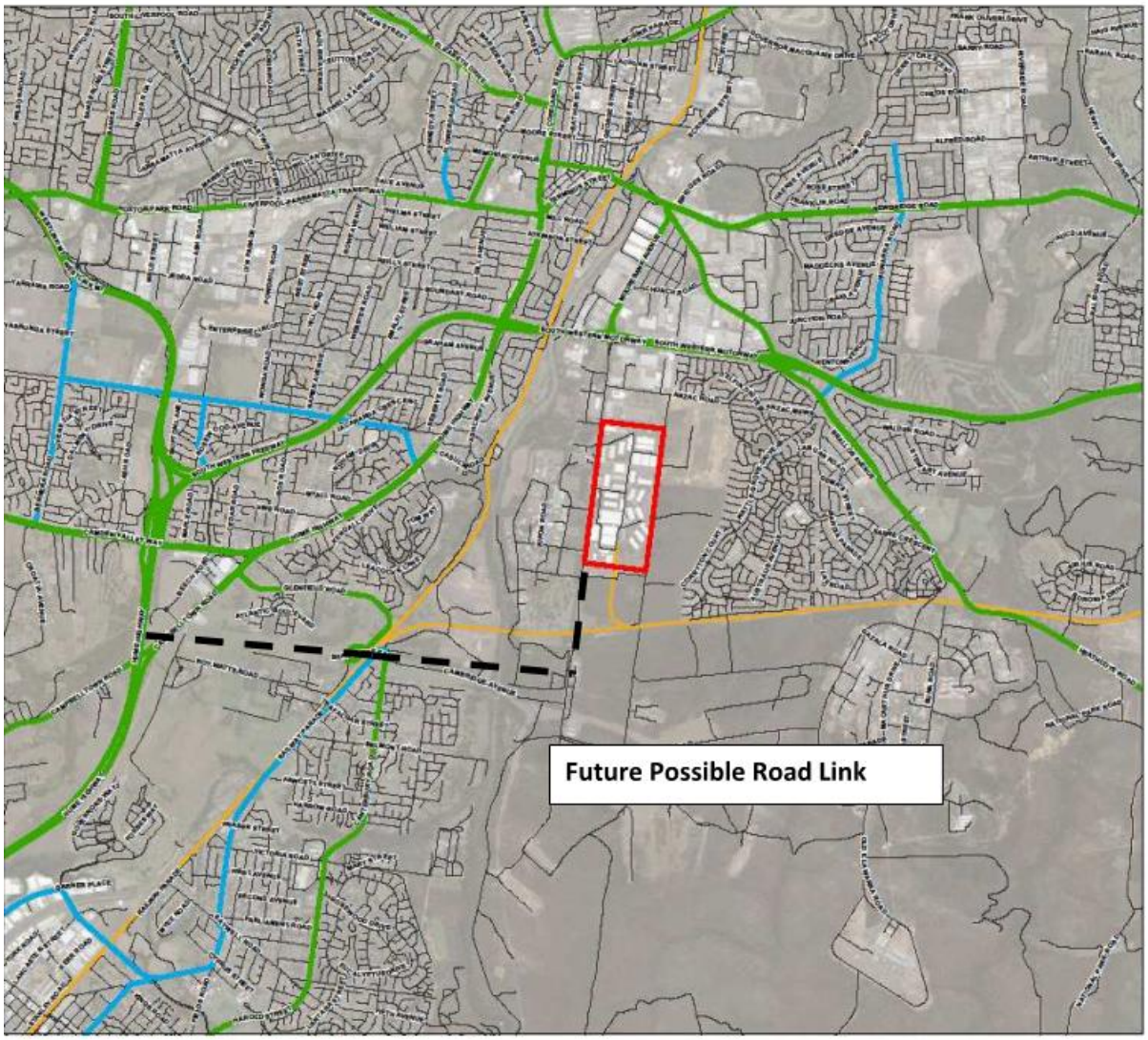
Aerial imagery supplied by BingMaps and associated third party suppliers

Alternative Access

SIMTA's proposal can only obtain access from Moorebank Ave. The traffic models have not included a **risk assessment** of the future 2031 road network. For example only one major access road has been assumed for access to the SIMTA site and this is through Moorebank Avenue from the north. A serious accident on this section of Moorebank Avenue would prevent or severely restrict all cars and trucks from entering and leaving the site.

There is the possibility of accessing the SIMTA site from Moorebank Avenue south of the site (see **Figure 13**). This would require the construction of a new road link between the Hume Highway and Moorebank Avenue via Cambridge Avenue. LCC has set aside an undeveloped corridor of land for such a road link. From the traffic results produced, the need for this road link should have been tested to determine whether it would have increased traffic capacity to the site. This road link is however not considered in the SIMTA's assessment.

Figure 13 – Future Road Link



4.1.4 Recommendations for Addressing Deficiencies in the Traffic Analysis

To address the deficiencies of the traffic and transport section of the EA Report, several key steps need to be undertaken:

- Details of the 2011 and 2031 road networks used in the Strategic and Paramics Models should be made available.
- Details of the future land use data for the 2031 transport model should be made available especially the assumptions adopted for the Liverpool LGA.
- The transport modelling should be repeated to include the Commonwealth Intermodal Site when details become available.
- The traffic modelling should by undertaken for intervening years to show the impact of intermodal traffic as either/or the SIMTA and Commonwealth intermodal sites ramp up from 2015 to 2031.
- Make available the AM and PM peak hour traffic flow results produced by the transport models on all roads within the Liverpool LGA included in the model. The modelled results should clearly distinguish traffic flows without either intermodal terminal and with one or other or both intermodal sites. The traffic flow results must clearly show the car and truck movements generated by the intermodal sites on Council roads.
- The traffic models should be undertaken to include the southern access route to the site via a new road link between the Hume Highway and Moorebank Ave via Cambridge Ave.
- A more robust determination of the level of employment on the site should be undertaken as there is some scepticism on the employment levels used in the EA report. The number of employees on the site directly relate to the number of car movements to and from the site in the peak hours.

4.2 Air

Overall, the Air Quality assessment submitted by the applicant shows an acceptable level of impact, however it does not provide the detail of how the assessment was undertaken which is required to validate this conclusion. There is limited assessment on the cumulative impacts of the subject development and the Commonwealth Government's proposal, and there are questions over the ability of the local air shed to accommodate further development without exceeding the relevant annual PM_{10} air quality standard. Some air pollutants have not been adequately assessed.

Our assessment is summarised as follows:

1. The identified background conditions are described as:
    - Stability class F is dominant in the area – a condition under which dispersion is poor (Section 4.1 of the PAE Holmes report).
    - There were 3 occasions in 2009 when background 24 hr PM_{10} levels were exceeded (excluding known dust storms)
    - There have been occasional exceedences of $PM_{2.5}$ advisory levels
    - There have been occasional exceedences of ozone standards
    - No odour impact is considered. Levels of odour would be influenced by the goods handled, and could be managed through approval conditions and management plans limiting the handling of potentially odorous materials, or by requiring all such handling to be done within a dedicated warehouse with suitable ventilation and air treatment systems.
2. PM and NO_2 emissions are considered in detail.
3. Annual average background PM_{10} levels are close to the air quality criteria. The approval of the SIMTA facility will make it difficult to approve subsequent applications, and consequently a full cumulative impact assessment is considered essential. This has not been provided.

4. $PM_{2.5}$ criteria are advisory and subject to review. Regulatory requirements may therefore change, and the site may struggle to comply. Conditions of approval should require the operator to comply with any changing standard formally adopted by state or national government within a reasonable (defined) time period.
5. CO is not considered in detail, but the explanation given in section 3.3 as to why this is the case is adequate.
6. SO_2 emissions are not considered significant in the report due to declining S concentrations in diesel fuel. Despite this, it would be helpful to know something about background levels so an informed judgement can be made. An approval condition should also specify S content in all fuel used in vehicles at or visiting the site.
7. Organic hydrocarbons and airborne toxics do not appear to receive adequate consideration. Section 3.5 discounts them on the basis of there being 500m from the point of emission to the receptors. A large number of personnel will be present on site, and the nearest receptor is 200m not 500m. These pollutants are therefore not considered to be adequately assessed.
8. Ozone is acknowledged as being an issue in Sydney in section 3.6 and 4.2.4, but receives no further consideration in the impact assessment. A more detailed impact assessment of this parameter is required, and a management plan is required.
9. Traffic is considered only along Moorebank Avenue. This pre-supposes that all traffic travels to the site along this road to the South Western Motorway. Impacts should be revised using a more realistic forecast of off site traffic movements.
10. It is noted in section 5.2 of the report that more recent emission factors may now be available, however it is considered unlikely by both the author and Cardno that the use of updated factors will materially affect the conclusions.
11. Construction impacts are not addressed in any detail, however the statement that these should be addressed through CEMPs for each stage of construction are reasonable.
12. General best practice mitigation measures are proposed, and these are generally considered appropriate, however the following additional measures should also be applied, noting that additional recommended mitigations generally involve imposing approval conditions or management plan requirements rather than development of physical infrastructure:
    - Access routes to the site should be documented and controlled;
    - Handling of odorous materials should only occur in dedicated warehouses with odour abatement systems, or handling of these materials should be prohibited;
    - Low S diesel fuel should be used at all times;
    - Additional air quality monitoring stations should be installed and operated by the proponent.
    - Adequate construction related air quality management plans should be required before construction commences.
13. Costs for the above mitigation measures should be pushed to the operator through permit requirements.
14. The operator should be required through an approval condition to monitor and make publically available data on air quality at local receptors to verify the model predictions. A staged approval could be considered whereby full operating capacity is not approved until operation at a lesser capacity has been demonstrated not to exceed air quality standards.

The technical comments and questions made in relation to the PAE Holmes Air Quality Impact Assessment are outlined in **Table 4.2** below.

Table 2.2 – Air Quality Assessment

Comment	Implication
No information is provided in relation to the model inputs used in dispersion modelling (emission sources). For example: • What values have been assigned to each emission point? Height, dimensions of source, any restrictions at point of emission?	Technical adequacy of existing modelling cannot be fully evaluated. Ground level concentrations at sensitive receptors may be underestimated.
No information is provided in relation to the model inputs used in dispersion modelling (emission characteristics). For example: • What is the discharge rate, discharge temperature, concentration at point of release?	Technical adequacy of existing modelling cannot be fully evaluated. Ground level concentrations at sensitive receptors may be underestimated.
No information is provided in relation to the model inputs used in dispersion modelling (physical characteristics of receiving environment). For example: • How are building structures accounted for? • How is topography incorporated?	Technical adequacy of existing modelling cannot be fully evaluated. Ground level concentrations at sensitive receptors may be underestimated.
It is unclear how road transport emissions have been modelled. AUSPLUME will model them as a point source. Is it more appropriate to model as a line source (eg using AusRoads?)	Adequacy of approach used needs to be demonstrated
Some of the results tables and graphs make predictions based on a year of meteorological; data. It is assumed that this is 2009 in all cases, but this is not made clear (eg Figure 6.1, Table 6.2)	Observation. No material implication.
The value of 51ug/m^3 in section 4.2.1 seems inconsistent with the value of 34 ug/m^3 shown in Table 4.3	Requires clarification or correction
The average 2008 data reported in Table 4.4 is questioned. (Assumed that this is an error)	Requires clarification or correction
The emission factors in Table 5.3 for moving and idling trucks are reported as being the same and are questioned	Requires clarification or correction
Data in Table 6.1 requires clarification. It is unclear which data includes background levels, and which does not.	Requires clarification

4.2.1 Recommendations

The following additional information is required from the applicant:

- The proponent should clarify whether there will be any refrigerated or frozen materials handling and storage. No emissions related to refrigeration have been considered, and if refrigeration is proposed this is required.
- Will there be any space heating of warehouses? No on site fuel consumption for space heating of warehouses or offices has been considered.
- An impact assessment for ozone, hydrocarbons and airborne toxics is required as these pollutants have not been adequately assessed.
- Technical details of the dispersion model inputs is required (see Table 2 above) in order that the assumptions made in the modelling can be reviewed.

- Information on background SO_2, and hydrocarbon levels should be provided.
- A justification is required to show that the areas surrounding the development have an air quality suited to the additional emissions the facility will generate. This should be in the context of variability in background air quality across the Sydney basin.
- Dispersion modelling results should be provided as contours of maximum ground level concentrations as well as tabulated data at the nominated receptor so that that the impact at any point can be reviewed.
- A justification of why vehicle movement beyond Moorebank Avenue does not require consideration should be provided
- It is noted that the background levels of some pollutants are already high. Although it would appear that the addition of emissions from the SIMTA terminal will not cause any criteria to be exceeded, it will reduce available headroom for new industry or other emission sources to enter the area, possibly restricting future development. A discussion of this issue is required, particularly in respect of cumulative impacts and the proposed Commonwealth facility. For example, it is noted that PM_{10} annual average in 2009 was 26 ug/m^3, and that the predicted SIMTA contribution was 2 ug/m^3 giving a total of 28 ug/m^3 once SIMTA is operational. With a PM_{10}criteria of 30 ug/m^3 the ability for future developments is questioned.

4.3 Noise

4.3.1 Summary of SIMTA's Noise Impact Assessment

An acoustic impact assessment has been undertaken by PAE Holmes and the report identifies several key noise and vibration impacts from the development and these are:

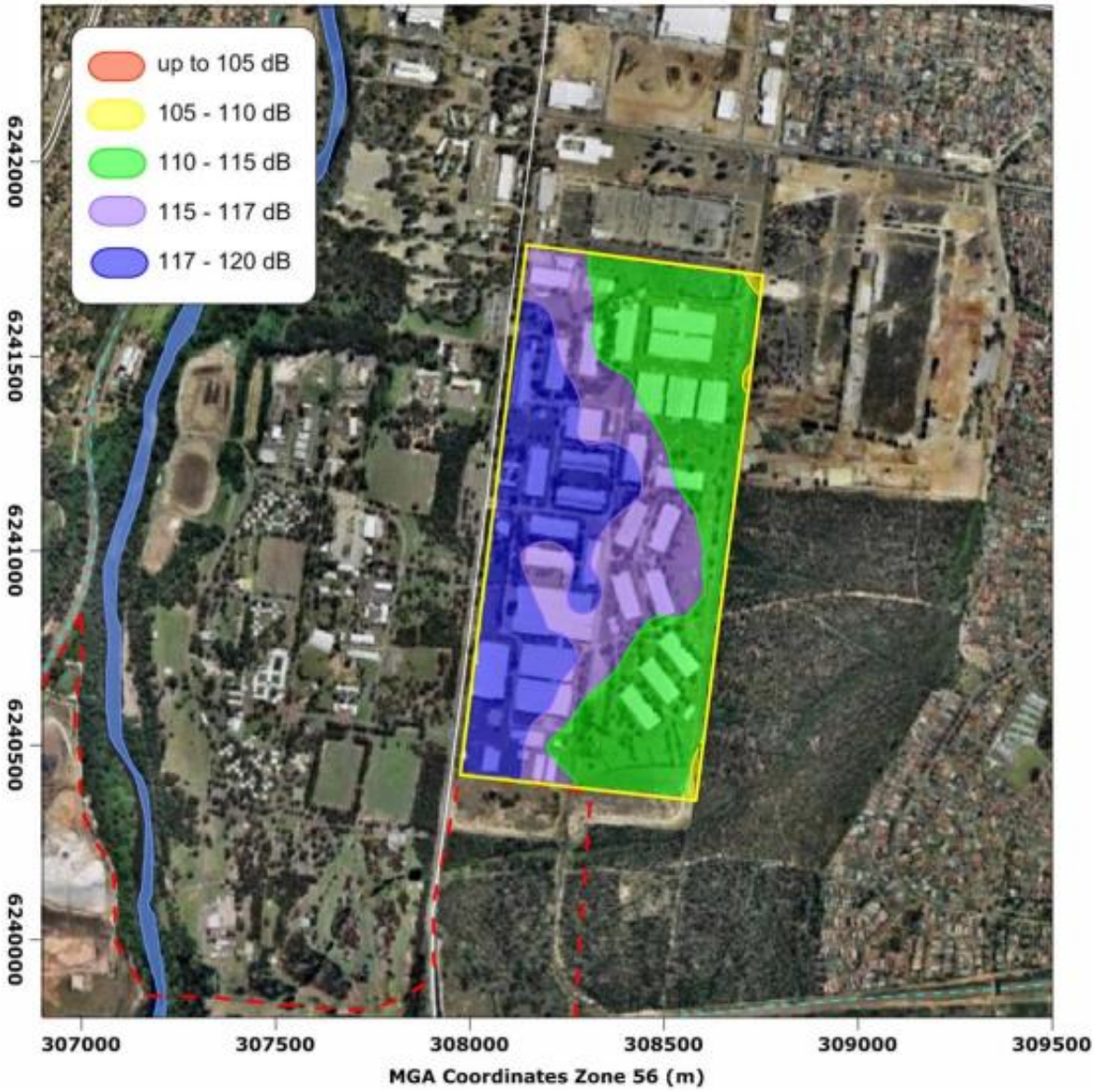
- Construction noise and vibration;
- Rail generated noise impacts from the SSFL;
- Road traffic noise impacts on Moorebank Avenue;

The acoustic report has referenced the required statutory acoustic assessment guidelines for the project and concludes that based on the assessment, the development is "acoustically appropriate and relatively well located". The key findings of the assessment are as follows:

- Background noise monitoring has been undertaken at three locations, representative of the nearest affected residential (civilian) areas to the site;
- Construction noise and vibration impacts have been assessed and note a marginal exceedence of the criteria at residential receivers at Holsworthy and Wattle Grove however impacts are manageable;
- Road noise impacts on Moorebank Ave between the site and the connection to the M5 Motorway result in a 3dB(A) increase in noise levels and 0.5dB(A) on the M5 Motorway itself;
- Rail noise impacts are within the IGANRIP criteria for new rail corridors and therefore no specific noise mitigation treatments are required;
- Noise emissions from the site "indicate that the potential for noise impact at surrounding residences will be relatively low…"
- Overall, the report suggests that the development is "acoustically appropriate and relatively well located":

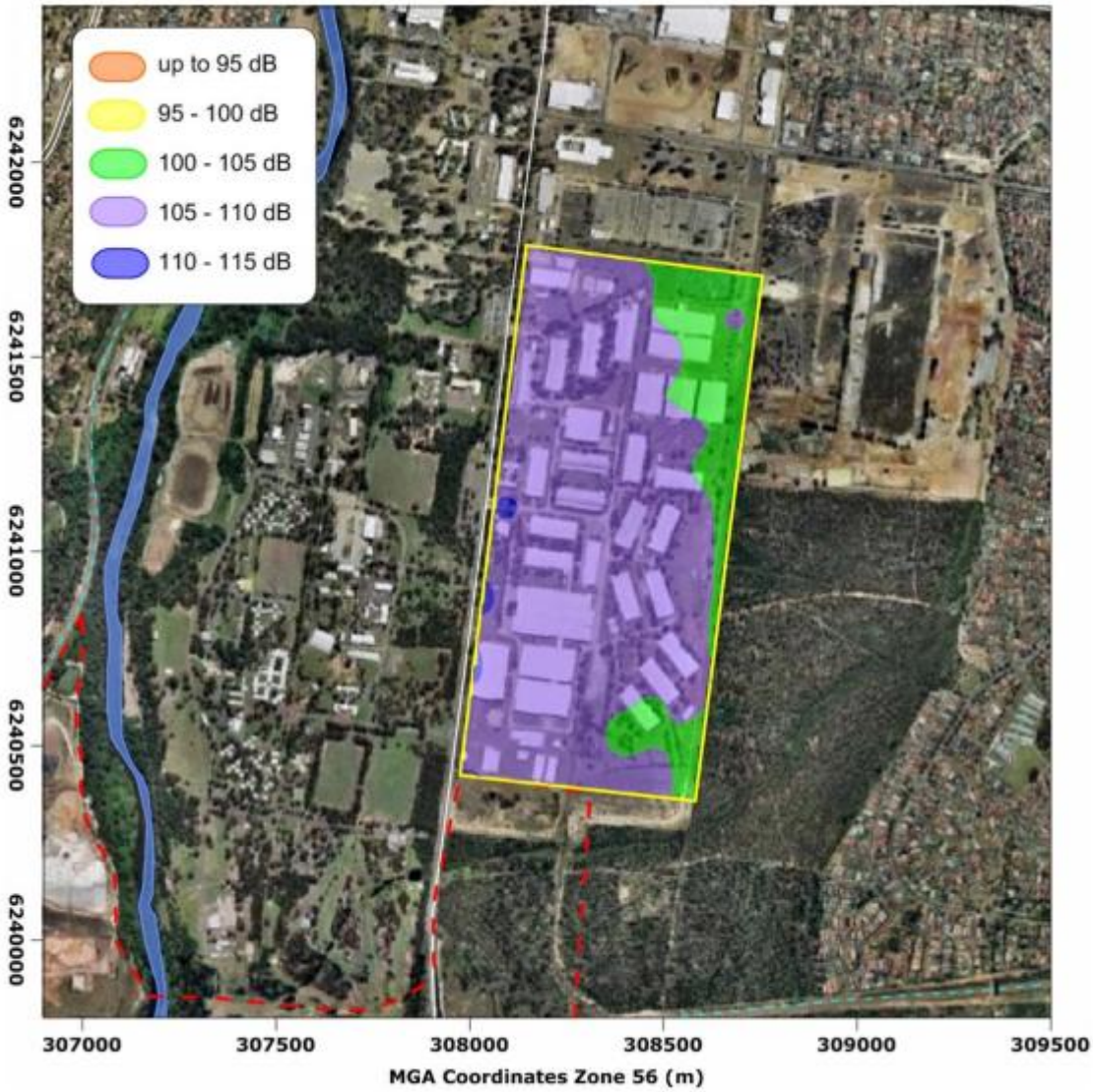
The modelling results are reproduced in **Figures 14 and 15.**

Figure 14 – Recommended Sound Power Levels (L_{Aeq}) to meet Daytime Project Specific Noise Level at the Nearest Residences (dBA/100m^2)



(Source: PAE Holmes (2011) Noise Impact Assessment for Moorebank Intermodal Terminal (Figure 5.1))

Figure 15 - Recommended Sound Power Levels (Laeq) to meet Evening/Night Time Project Specific Noise Levels at the Nearest Residences under Worst Cast Meteorological Conditions



Source: PAE Holmes (2011) Noise Impact Assessment for Moorebank Intermodal Terminal (Figure 5.2)

Further, the acoustic report concludes that:

- Further detailed acoustic assessments of the site will be required, including planning for the location of building structures on the site and locating noisy activities appropriately on the site;
- A construction noise and vibration management plan is required.

4.3.2 Cardno's Assessment

With reference to the DGRs, we consider that the acoustic assessment has been prepared as a feasibility assessment and not a detailed assessment as the report lacks considerable detail and it appears that there is no agreed site concept plan. We consider that such details are required particularly for a development of this scale and nature. We also note inconsistency with the PAE Holmes air quality assessment report in relation to the approach to the assessments. Clarification is also sought regarding the "design" years used for the acoustic assessment, ie site specific operational noise, road traffic noise and rail noise impacts.

The acoustic report has generally addressed the noise assessment guidelines in the DGR's however has not satisfactorily addressed operational noise emission from the site.

Operational Noise

As noted above, the acoustic assessment does not appear to have been based on an agreed site layout and therefore assumptions regarding the operation of the site have been made. Sound power levels are provided in the report for typical plant and general operations that would be consistent with a freight terminal however it is unclear if these typical levels have been prepared on the basis of noise measurements undertaken at similar, existing facilities. It is anticipated that the levels used may have been sourced through PAE Holmes internal data, possibly obtained through previous projects. This is unclear. It is also noted that PAE Holmes has prepared an air quality assessment of the proposed SIMTA site and that report has used an existing freight terminal as a basis for assessing potential air quality impacts.

The acoustic assessment has been carried out by determining limit sound power levels across the site (see **Figures 14 and 15** above), in order to comply with the site specific operating noise criteria (obtained from the NSW Industrial Noise Policy – INP), including sleep disturbance at the nearest noise sensitive receivers. However, it is not clear where these noise levels have been calculated to, in order to provide site noise "limits" and if these levels are feasible, as there does not appear to be an agreed site plan for the site. Clarification is also required to confirm if the predicted levels are the aggregate of combined site operations, road and rail traffic on the site itself. Calculating noise levels in this manner would be consistent with a feasibility study, where limited information is available regarding site specific operations, placement of buildings etc. The proposed Concept Plan design has not been tested to demonstrate if these calculated noise levels are achievable on the site. It also does not provide any guidance to the future operators on how to manage and monitor the noise emission to these levels. Location of plant and equipment on site is critical for an acoustic assessment.

Section 5.2.1 of the report provides conceptual recommendations for potential locations of general activity, ie car park to the north east or south east of the site, for example. This is acceptable as a planning measure however further detailed assessment will be required to assess the noise impacts from higher impact activities such as gantry cranes and other on site activities for example:

- Operation of beepers on gantry cranes;
- Operation including reversing beepers on mobile cranes on site;
- Shunting of diesel locomotives and wagons;
- Containers being dropped or impacting on each other whilst being positioned on site.

We note that the acoustic assessment has identified the use of gantry cranes and rail shunting as noise sources on the site that have the potential to cause sleep disturbance however the location of these noise sources relative to adjoining noise sensitive receivers is critical in determining the potential for sleep disturbance and mitigation measures where required. The above impact generating sources will require assessment against the sleep disturbance criteria and under temperature inversion conditions as per the NSW Industrial Noise Policy.

Road traffic noise impacts have been addressed however the road traffic flows nominated in the report are not clearly identified. Inputs required for clarification include at least the following:

- Which is the base case year for assessment of noise impacts?
- Which is the year modeled for "no development"?
- Which is the year modeled for "with development"?

Based on an inspection of the site undertaken by Cardno, a new business park is being developed to the north of the site, on Anzac Road (Moorebank Business Park). This site is likely to incorporate warehouse type facilities for storage and distribution of goods – several buildings on the site are currently functioning as warehouse type buildings and it is reasonable to assume that there will be road freight trucks servicing this business park, accessing the site via Moorebank Ave. It is unclear in the acoustic report whether this business park has been taken into consideration for the assessment of vehicular traffic noise impacts on Moorebank Ave for each of the scenarios outlined above. The greater road noise impact will be when both the SIMTA site and business park are fully operational.

At this stage it is unclear if the Commonwealth Government Moorebank Project Office's site, on the west side of Moorebank Ave will be constructed and operational at the time of the SIMTA site. It is considered that the Steele Barracks (currently on the proposed IMT site) is a noise sensitive receptor as there are teaching facilities as well as some anticipated sleeping quarters. The majority of the existing buildings on this site are located approximately 200 metres from Moorebank Ave and it is reasonable to expect that noise impacts from an increase in road traffic noise would be partly mitigated by horizontal distance attenuation however the Barracks should be more satisfactorily addressed in the report on the basis that the Moorebank Project Office's site may not be constructed/ operational at the time of the SIMTA site.

Construction Noise

The acoustic assessment has provided satisfactory detail for construction noise impacts to adjoining noise sensitive receivers however has correctly identified that further detailed assessment is required and this is acceptable. A more detailed construction noise and vibration assessment would typically be undertaken during detailed design stages of the development, when a Construction Contractor has provided a detailed construction methodology including proposed plant and scheduling of works, for example.

Cumulative Noise Impact

The acoustic assessment report has clearly identified that the assessment is specific to noise emissions from the SIMTA site only. The report does acknowledge that the current Steele Barracks may be developed into a similar functioning site, ie intermodal freight terminal including road transit access from Moorebank Ave and the M5 Motorway and freight rail access from the existing southern freight line.

Noise impacts from the Moorebank Project Office's site may impact on noise sensitive areas within the SIMTA site such as administration buildings and office areas which would require acoustic treatment to the façade of these buildings to meet typical internal noise levels (refer to Australian Standards AS/NZS2017:2000 - Acoustics – Recommended design sound levels and reverberation times for building interiors). We also note that road traffic noise along Moorebank Ave will increase as a result of both sites functioning and it is considered that this scenario would need to be assessed in further detail.

Rail noise impact will also increase along the SSFL and it is reasonable to assume that the number of trains entering and exiting the Moorebank Project Office's site would be similar to the SIMTA site based on the size of the site and assumed similar function. Therefore the increase in noise levels with the Moorebank Project Office's site operating as well as SIMTA may be approximately 3dB(A) above those predicted in the SIMTA acoustic report. The predicted levels may still be within the design acoustic criteria but would require a more detailed study for night time rail movements in particular (when the acoustic criteria is more stringent). It is recommended to consider that earth berms or noise

barriers may be required for planning purposes if both sites are operational to mitigate rail noise impacts but will require assessment to identify feasible locations with respect to geotechnical considerations, flooding etc and extents of treatments.

4.3.3 Recommendations

Our peer review suggests that the submitted noise report does not provide accurate assessment of the noise impact on the residents. In particular, the operational noise conclusions made by the assessment with recommended sound power levels provide limited guidance to the design of the facility and it is not clear if the Concept Plan design has tested based on these levels. The recommended sound power levels are also difficult to implement during the operation of the facility.

The following additional information is necessary to allow a thorough assessment of the project:

- Operational noise and vibration impacts are required to be assessed based on an agreed concept plan for the site where details of on-site structures such as warehouse buildings, rail entry and exit points and internal loops are clearly positioned;
- Consideration of enclosures for container loading and unloading onto freight trains and road haulage trucks should be provided;
- Clarification of sound power levels of plant and equipment is required, ie. are they based on actual measurements of comparable installations?
- Confirmation that all residential receivers have been included in the acoustic assessment, including new land releases at Glenfield and Casula and areas where noise exceedance is currently experienced.
- An operational stage noise model of the site using an agreed concept site plan and clarified sound power levels (as noted previously) would provide a more satisfactory acoustic assessment which would identify the requirement for noise mitigation to control noise impacts to the nearest noise affected receivers. This may indicate the need to factor in and provide suitable locations for earth berms, noise walls, position of buildings on the site to provide acoustic screening from noisy site activities etc;
- Impulsive and transient noise sources associated with the operation of the site requires further consideration, ie trains shunting, containers being handled on site (dropping of containers, containers being loaded onto empty train wagons etc) as these noises will carry across the site and potentially be audible at the nearest noise sensitive receivers, particularly during temperature inversions;
- Further consideration should be given to the assessment of cumulative noise impacts as it may be possible that the SIMTA site and Moorebank Project Office's sites may operate simultaneously, which may influence location of buildings and noise sources on the site (SIMTA).

4.4 Land Contamination

4.4.1 Summary of SIMTA's Phase 1 Environmental Site Assessment

Golder Associates was engaged to prepare a Phase 1 Environmental Site Assessment. The submitted report is a desktop study without intrusive investigations.

Investigation Area

Golder's assessment covers the rail corridor lands only - ie, the area outside the DNSDC or proposed intermodal terminal site. Golder noted that the SIMTA site is approximately 82 ha in area, while the rail corridor lands cover approximately 65 ha.

Previous Investigations

The report made reference to a series of previous investigations that have been undertaken in the general project area, which focused on the SIMTA site not the rail corridor lands. These previous investigations include:

- Douglas Partners who have completed a number of investigations at the SIMTA site, as early as 1980 through to 2009. These reports were not viewed by Golder's.
- A series of further investigations by various consultants have also been commissioned, however the collation of information appears to be inconsistent.
- Golder's indicate that the most pertinent information is contained in the URS (2002) Investigation Report Review and the Contamination Management Pty Ltd (2002) Summary Site Audit Report and Site Audit Statement (NSW EPA Accredited Site Auditor – William Ryall).

Areas of Environmental Concern – SIMTA's Site

11 Areas of Environmental Concern (AEC) have been identified on the SIMTA site by the previous investigation undertake by URS (2002. These figures are however not included in the Golder's report. It is also unclear whether these 11 AECs referred to by Golder's include the railway corridor lands.

Golder's note that the AECs are to be managed through the implementation of a Site Management Plan (SMP). The SMP was endorsed by the Site Auditor and included the following requirements:

- Implementation of a groundwater monitoring program.
- Investigation of USTs near the south-west corner of the site.
- Integrity testing of the waste oil tank in the north-west corner of the site.
- Investigation and remediation of filled areas of the south-east corner of the site.
- Assessment of the presence and risk posed by fragments of grenades in the south-east corner of the site identified in the Milsearch (2000) assessment.

It is unclear how the SMP is or has been implemented and how it relates to the proposed development. No data has been provided to demonstrate that the SMP has been implemented.

Areas of Environmental Concern – Rail Corridor Site

Golder's has identified five Areas of Environmental Concern (AEC) within the railway corridor lands and these are shown in **Figure 16** below and consist of:

- ***Area 1*** *– the area immediately south of the proposed SIMTA site, where historic information has noted that partially remediated areas of unauthorised dumping may have occurred;*
- ***Area 2*** *– the bushland area south of the proposed SIMTA site development, where historic information has noted that potential UXO associated with the former grenade ranges may exist. This areas also has evidence of illegal dumping, with historic reports and the site inspection noting the presence of building rubble and other waste materials;*
- ***Area 3*** *– Lot 1 DP825352 (owned by Railcorp) has been subjected to extensive filling with the area levelled approximately 2-2.5m higher than the surrounding areas;*

- ***Area 4*** *– the south-western portion of the golf course, where historic information has noted the former training facility, the mock Viet Cong village, was demolished with potential tunnel materials buried in the area;*
- ***Area 5 –*** *the Glenfield Quarry and Waste Disposal Facility, where extractive and waste disposal is being undertaken in accordance with a current EPL; and*

All areas of the site – potential unidentified buried waste as well as the use of pesticides and herbicides for pest and/or weed control.

Of particular concern is Area 5 as it is an operating landfill and will have the highest environmental risk. However, there is limited information on the management of this land.

Site Remediation

For SIMTA's site, Golder's note that a previous site audit prepared by Contamination Management Pty Ltd (2002) concluded that the site is considered suitable for continuing commercial/ industrial use, including use as a storage and distribution centre. The audit was a non-statutory audit of the site, prepared in accordance with the Contaminated Land Management Act 1997.

For the Rail Corridor area, Golder's suggested that extractive and waste disposal activities are being undertaken in accordance with a current Environment Protection Licence.

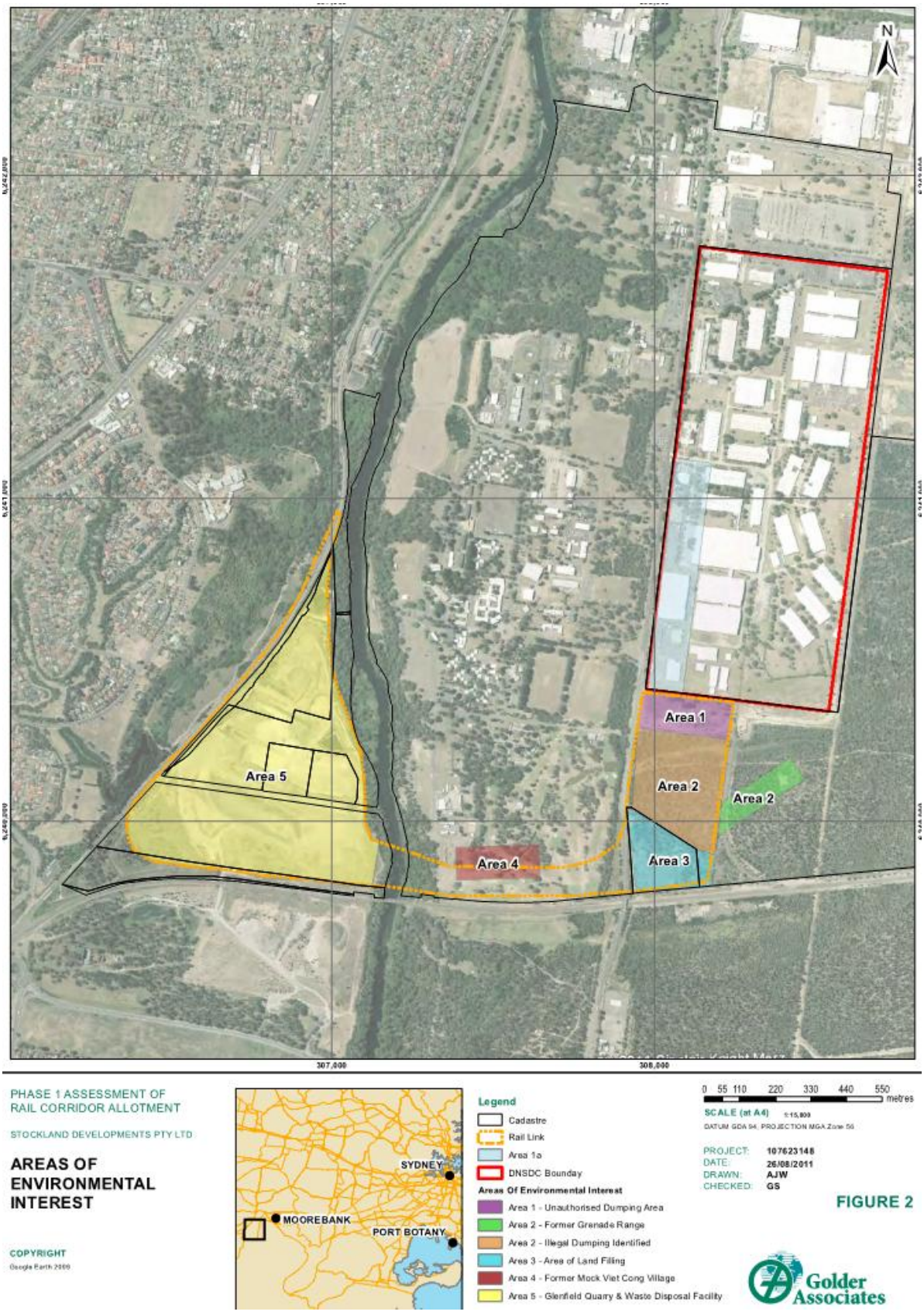
Golder's recommended further intrusive investigations in the Rail Corridor area, potentially including the implementation of a Contamination Management Plan as part of a Construction Environmental Management Plan for the area. However, this investigation has not been undertaken and it is unclear what level of mitigation measures are required in the future development.

Other Comments in accordance with DGRs

General comments provided in the Golder's report:

- Historical and current activities at the SIMTA site and within the Rail Corridor lands are potential sources of contamination within the study area.
- Aerial photographs indicate that the types of land uses at the site, do not appear to have significantly changed since the completion of the Site Audit Statement in 2002.
- The site is relatively flat.
- Acid Sulphate Soils are unlikely to occur in the area (ARUP 2008).
- ANZAC Creek is ephemeral, flowing to the NE to Lake Moore on the Georges River.
- Two aquifers shallow and deep – presumed to be between 6m and 11mbgl are likely to be present at the site.

Figure 16 - Areas of Environemntal Interest



(Source: Golder Associates (2011) Phase 1 Environmental Site Assessment Rail Corridor Land for SIMTA Moorebank Intermodal Terminal Facility (Figure 2))

4.4.2 Cardno's Assessment

SIMTA's Site

The Golder's report does not contain information or plans to show the level of contamination within the SIMTA site. There is no assessment on this land and Golder's relies on investigations undertaken in 2002 as part of the rezoning of the land. As a minimum, the old reports including plans, assessments and recommendations need to be submitted with the EA to identify the level of contamination and ensure appropriate implementation of the site remediation measures. It also needs to specify the site management measures that have been carried out. If the previous reports identified the need for a Phase 2 assessment, such investigation needs to be undertaken as part of this EA.

The Site Audit Statement appears to have been completed around 10 years ago and accordingly is based on information collated prior to this date while the previous storage uses was operating. There is no indication of the land boundaries to which the audit applies.

Whilst the previous reports suggested that the site is suitable for the continued operation of warehouse and storage, it does not consider all of the land uses proposed by this application, including the potential hotel use and/or accommodation.

The lack of data from previous investigations, including the investigation boundary, identified AECs and recommended management measures make it impossible to assess the potential land contamination on the SIMTA's site, the level of additional investigations required, the appropriateness of recommended site remediation measures for this development and how a Remediation Action Plan (if any) aligns with the development program and its monitoring framework.

Rail Corridor Site

The Golder's report provides a desktop assessment on the rail corridor lands, however, there is no indication of the type of management measures that may be required to remediate land contamination issues as a result of a former landfill. Remediation of landfills is a highly specialised exercise, whereby the remediation measures are informed by extensive monitoring and testing data. The report does not detail the significance of these measures and the potential impact on human health and safety.

The Golder's report suggested the development of a Contamination Management Plan for the project construction to cover the following aspects:

- *Handling, stockpiling and assessing potentially contaminated materials encountered during the development works;*
- *Assessment, classification and disposal of waste in accordance with relevant legislation;*
- *Landfill gas management during the excavation, handling, and stockpiling of waste materials, if excavation is required during the development, in the area of the Glenfield Quarry and Landfill; and*
- *A contingencies plan for unexpected contaminated materials, such as materials that is odorous, stained or containing anthropogenic materials that may be encountered during site works.*

Each of the above aspects will involve extensive management and all of which require ongoing monitoring and assessments. Each remediation measure will potentially require development consent.

A Contamination Management Plan must be carried out to identify options and strategies to undertake remediation works and monitoring programs. These need to align with the proposed timing of the development and must be implemented in the Statement of Commitments. The involvement of the

site auditor and Council's environmental officer is also necessary to manage the implementation of the Management Plan.

Compliance with DGRs

The Golder's report in its current form does not comply with the DGRs because:

- It does not provide assessment or information of the SIMTA's site.
- It does not identify the remediation options and there is not recommended management measures for the ongoing construction and operation of the development and the monitoring requirements.

4.4.3 Recommendations

The Golder's report does not provide sufficient information to allow an appropriate assessment of the level of contamination on the site and the development of remediation measures to address these issues.

As a minimum, the applicant must provide:

- Details of previous remediation and validation reporting (if any) prepared for the SIMTA site and any requirements for remediation, monitoring or other management measures.
- A Contamination Management Plan for the SIMTA's site based on an appropriate and updated environmental assessment to show the remediation measures and monitoring program required to allow the construction of the site.
- A Contamination Management Plan for the rail corridor site to identify the appropriate remediation measures and monitoring program required to allow the construction of the rail corridor.
- A program showing the timing of the remediation works and they align with the construction program of the intermodal terminal project.
- Ongoing monitoring, auditing and reporting requirements.

4.5 Urban Design & Landscaping

4.5.1 Background

The SIMTA site and its environs are of relatively flat and low lying topography (RL's 14-16). Notwithstanding its heritage significance, the site generally supports industrial style development including warehousing and logistics facilities and would not be expected to have any particular visual significance in its locality. Of more significance would be the impact of development of the site and the associated rail corridor on views from sensitive local areas such as the nearby residential suburbs and places of heritage significance. The Heritage Assessment has identified views from Glenfield Farm as particularly significant and potentially threatened by development of the rail corridor close to the curtilage of the Farm.

With regard to urban design, the current industrial zoning of the land leads to an expectation that the existing general industrial character of the site would remain. It would also be expected, however, that any re-development of the site would be of high quality, incorporating best practice in contemporary urban design for industrial estates. Specific guidelines for industrial development on and in the vicinity of the SIMTA site are included in Part 2.4 (Moorebank Defence Lands) of the Liverpool Development Control Plan, 2008. Notwithstanding that the SIMTA proposal is not required to comply with Liverpool LGA planning controls due to its State Significant status, it would be expected that the area specific planning and design guidelines included in the DCP would be broadly followed in the development.

4.5.2 Summary of SIMTA's Urban Design & Landscaping Assessments

The Environmental Assessment includes a visual impact assessment. Essentially, its outcomes are:

- The SIMTA development would generally be in keeping with the existing industrial character of the area. The majority of structures, apart possibly from some tall plant and equipment, would be screened from much of the surrounding area by nearby development patterns.
- Most prominent views would be at localized boundaries including Moorebank Avenue, Anzac Road and the Wattle Grove residential boundary. Views from these locations would not change dramatically from the currently available industrial views and would, in fact, be improved by proposed landscape buffers on the boundaries of the site.

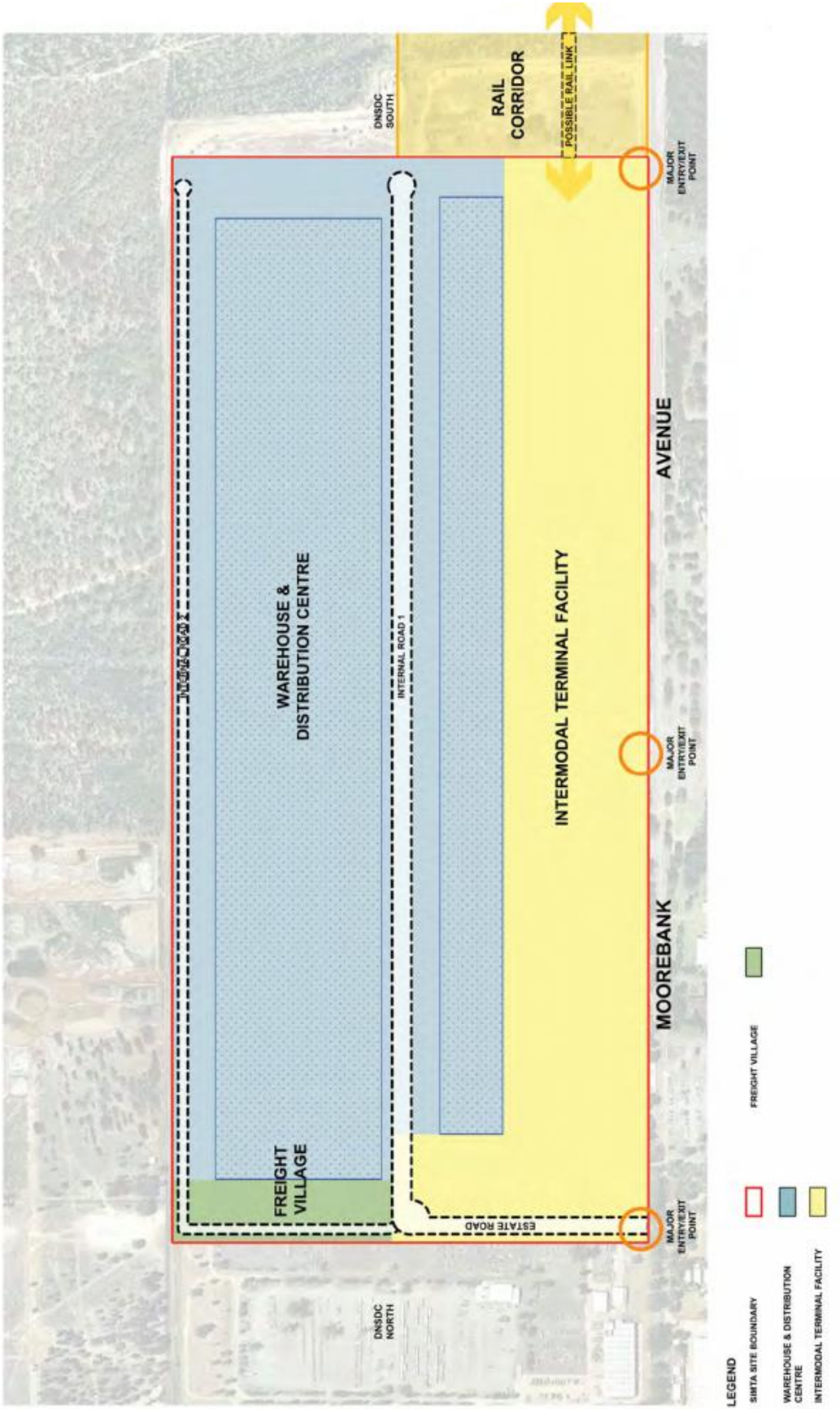
The Urban Design and Landscape Report prepard by Reid Campbell includavdes an Indicative Precinct and Land Use Plan which provides the following broad layout of the site (**Figure 17**).

The plan proposes that the intermodal terminal, presumably including the rail line, truck movement corridors and loading / unloading plant, would occur on the portion of the site fronting Moorebank Avenue. The warehouse and distribution centre, incorporating the majority of building stock within the development, is proposed to be constructed on the rear (Eastern) portion of the site. Rail access is proposed via a new corridor joining the site at its south western corner, adjacent to Moorebank Road. An existing currently disused rail line that joins the site approximately midway along its southern border, is not proposed to be used and is described as 'not a viable option' (S.2.5).

The report includes broad principles for achievement of high quality urban design but no drawn urban design or built form concept is included.

The Landscape Design report again includes principles for landscape design which incorporate landscape buffer zones around the site and broad avenue treatments. Typical building forms, character images and landscape treatments are included for warehousing, support areas and general industrial development (pg. 62-64 of the Urban Design Report). These are shown in the **Figures 18 – 22** below.

Figure 17 – Indicative Precinct and Land Use Plan



(Source: Reid Campbell (2011) Urban Design and Landscape Report (pg.6))

Figure 18 - Indicative Perspective - Moorebank Ave Entrance

(Source: Reid Campbell (2011) Urban Design and Landscape Report (pg.62))

Figure 19 - Indicative Perspective - Northern Entry on Moorebank Ave

(Source: Reid Campbell (2011) Urban Design and Landscape Report (pg.62))

Figure 20 - Indicative Perspective – Internal Road 1

(Source: Reid Campbell (2011) Urban Design and Landscape Report (pg.63))

Figure 21 - Indicative Perspective - Internal Road 2

(Source: Reid Campbell (2011) Urban Design and Landscape Report (pg.63))

Figure 22 - Indicative Perspective - Freight Village

(Source: Reid Campbell (2011) Urban Design and Landscape Report (pg.64))

4.5.3 Cardno's Assessment

Whilst the scope and methodology of the visual assessment may be adequate, the assessment does not include sufficient detail on the site planning and urban design to enable meaningful urban design or visual assessments to warrant a determination of the project. It is reasonable to expect that the application would include design information at least to the same level of detail that has been provided for the current intermodal proposal on the Moorebank Project Office's on the western side of Moorebank Avenue.

The construction of a new rail link as proposed would appear to be an inefficient outcome without detailed assessment of the viability of other rail connection options including use of the existing rail link to the East Hills Line or sharing of a rail connection with the adjacent Moorebank Project Office's site.

The indicative perspective images included in the Landscape Report are unrealistic representation of a typical intermodal terminal. The indicative streetscape and buildings are more representatives of a business park than an intermodal terminal. **Figures 23 to 25** show the typical intermodal facilities and they are quite different from what the applicant has portrayed. Note that **Figure 23** is an extract from a cover of the submitted EA report.

Figure 23 - Images of Existing Intermodal Terminal – from Applicant's EA Report

(Source: Urbis (2011) Environmental Assessment)

Figure 24 - Image of an Intermodal Terminal

Figure 25 - Image of an Intermodal Terminal

4.5.4 Recommendations

The application should include a site layout plan indicating as a minimum:

- The conceptual layout of the site including building envelopes, main road layouts, arrangement of the terminal facility and broad landscape zones;
- Existing components of the heritage fabric of the site that are to be retained and which are to be removed; and
- A 3D model of the site developed as per the concept plan
- Revised perspective images showing realistic representations of the intermodal terminal and the ware houses.

4.6 Visual Assessment

4.6.1 Summary of SIMTA's Visual Impact Assessment

A Visual Impact Assessment was undertaken by Reid Campbell to support the Environmental Assessment. It assesses the impacts from 35 public vantage points within 1km of the site. A 3D massing model was developed to inform the likely maximum and realistic visual impact at individual view points. The model and assessment include the intermodal facility development and the rail corridor. The modeling suggests that there will be minimal visual impact due to both the rail line and the structures on site. This is mainly because of the distance of surrounding land uses to the subject site and the existing visual and vegetation barriers.

4.6.2 Cardno Assessment

The assessment has not identified clear envelopes of structures, height, massing and site layout to confirm if the modeling is based on valid assumptions. The digital images generated by the visual impact assessment show different structures from that shown in the Urban Design report.

4.6.3 Recommendations

To clarify the methodology undertaken by the applicant, the following additional information should be submitted:

- The images of model showing the massing, forms, scale, height and layout of all the structures on site.
- Description of the height and size of all structures.

4.7 European Heritage

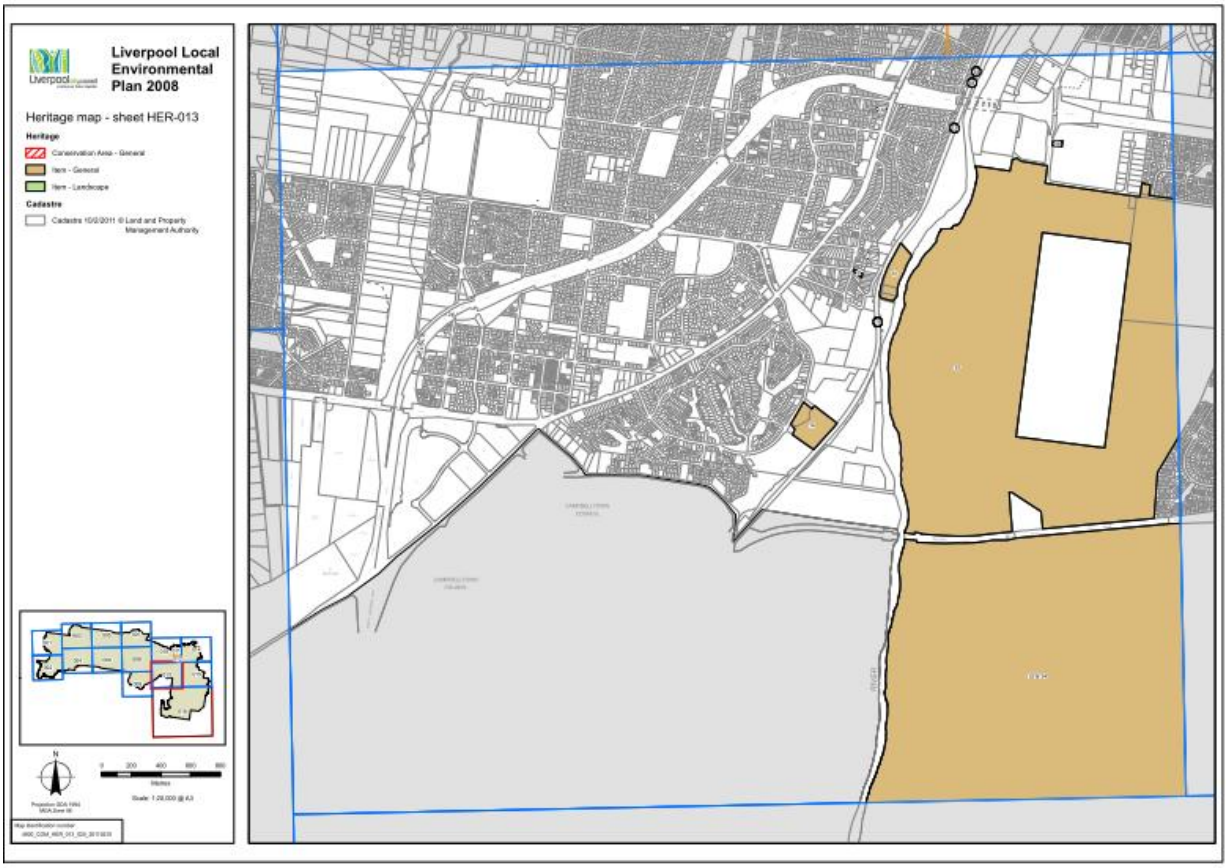
4.7.1 Background

The SIMTA site and its environs include numerous items of heritage significance listed under local and National statutes.

The Defence National Storage and Distribution Centre, which comprises the entire SIMTA site, is listed on the Commonwealth Heritage List and is protected under the Environmental Protection and Biodiversity Conservation Act 1999.

The Australian Army Engineers Group is listed as Heritage Item No.57 in Schedule 5 of the Liverpool Local Environmental Plan, 2008. The School of Military Engineering, which occurs on land adjoining the SIMTA site to the west, is included within this Item as is land on the other three sides of the SIMTA site (Refer **Figure 26** Liverpool LEP, 2008 Heritage Map Sheet HER-013).

Figure 26 - Heritage Map



(Source: Liverpool City Council LEP)

4.7.2 Summary of SIMTA's European Heritage Assessments

The Environmental Assessment includes a non-indigenous heritage report prepared by Artefact. The report concludes, inter alia:

- That the DNSDC site has high European heritage significance and constitutes a 'rare surviving example of a WWII military complex' (Executive Summary P.i).
- That the development of the SIMTA would be "likely to involve the demolition or removal of all or some of the heritage buildings on the DNSDC site, the construction of new buildings and landscape modification …" (op. cit.).
- Conservation, adaptive re-use and relocation of some of the WWII structures would mitigate the impact of the proposal on the site's heritage significance.
- The proposal has substantial potential to impact on adjoining and other local heritage items including, notably, the Australian Army Engineers Group (School of Military Engineering). Impacts on Glenfield Farm and Kitchener House would potentially be moderate but could be adequately mitigated.
- As the Concept Application does not provide detail regarding buildings on the site, it is not possible to make any specific assessment of the impact of the proposal on Heritage Significance. In this regard, the heritage report concludes that there is inadequate information in the Concept Application package to allow an assessment of heritage impacts as required by the first dot point in the DGR's.

With respect to dot points 2 & 3 in the DGR's, the report includes a table of development and mitigation options indicating the likelihood of the option occurring, the significance of the consequent impacts on heritage value and the effectiveness of the possible mitigation measures. The table rates conservation of the WWII buildings insitu as the best outcome for preservation of the heritage value of the site. However, this option is rightly given a low likelihood of being implemented. The demolition of all WWII structures is considered to have a moderate likelihood of occurring and this outcome is rated as having a significant impact on the heritage values of the DNSDC site. An option including demolition of some buildings, retention for adaptive reuse of some others and relocation to other sites of the remainder is given a high likelihood of occurring. The report comments that impacts of this option on heritage values of the site would depend on the end combination of the three outcomes but in any case it would be significant.

4.7.3 Cardno's Assessment

Three critical points arise out of the assessment of heritage impacts that accompanies the SIMTA Concept Application:

- The site and its surrounds are of high heritage significance as a result of their military history and a number of remaining buildings and building groups;
- The development of the SIMTA will have a substantial impact on the heritage values of the site and its surrounds. The level of impact will be dependent on the design details of the SIMTA which are as yet unavailable.
- It is not possible to make a specific assessment of the heritage impacts of the proposal with the amount of information currently available.
- The assessment does not address the DGRs.

4.7.4 Recommendations

It is recommended that the applicant should be required to provide the following additional information with regard to heritage impacts:

- A concept plan including building envelopes and indicating, as a minimum, what buildings on the site are proposed to be retained, relocated or demolished;
- A revised heritage report, based on the above described concept plan that adequately addresses the relevant DGR's.

4.8 Social Impacts

4.8.1 Background

Whilst acknowledging that the DGRs have no specific social impact assessment requirements, it is implied that social impacts will be considered when assessing the following matters in accordance with the DGRs.

- *"Objects of the Act",*
- *"its relationship to interaction with surrounding development" and*
- *"the requirement to consult with "specialist interest groups, and the public including adjoining and affected landowners".*

4.8.2 Summary of SIMTA's Social Impact Assessment

Urbis has provided an assessment of surrounding demographics, social policy context and identification of social impacts resulting from the proposed development. The report relies on the Community Consultations Outcomes Report (Elton 2011) for identification of impacts.

The assessment includes:

- A demographic profile of the South- West Subregion, Liverpool LGA, and the suburb of Moorebank
- A review of relevant documents and policies and their implications for the development of an intermodal terminal at Moorebank; and
- Identification of a range of potential community impacts and benefits based on findings of the draft community consultation report and recommendations of other specialist reports.

The report identifies a number of potential social impacts based on specialists reports including traffic, air quality, light spill, noise and vibration, locational issues, employment, and cumulative impacts. These potential impacts are discussed elsewhere so no further qualitative or quantitative research has been undertaken by the proponent.

Urbis' report makes a number of recommendations to reduce or mitigate social impacts and include:

- Consider landscaping design to minimize visual impacts and light spill
- Consider a vehicle efficiency and emissions reduction program for the facility
- Potentially extend the reach of the pedestrian and cycle infrastructure
- Consider facilities that service the employees and local community including a child care facility

4.8.3 Cardno's Assessment

A review of the report found the following outstanding issues that are not addressed in the assessment:

- Loss of higher order jobs and density of jobs in the Moorebank area due to proposed lower order employment activity. The quantity and type of employment proffered does not provide opportunities for upskilling and capacity building in the local community. This is contrary to the employment objectives of Liverpool City Council.
- Analysis of the ABS 2006 SEIFA Index of Disadvantage indicates that Liverpool LGA (Index score of 966) is a relative disadvantaged area in NSW and is the 5th most disadvantaged LGA in Sydney SD.
- Disturbed sleep patterns from 24 hr noise operation which is likely to have a greater impact on young families. Wattle Grove and Moorebank both have higher number of families with 0-4 year olds compared with the national average.
- Stress related illnesses from decreased amenity – the significant increase in car and truck movements in locality has the potential to increase already high background noise and pollution levels.
- The significant increases in car and truck movements and higher pollution levels may decrease propensity of residents to walk or be active in their local community. A lower level of exercise has significant consequences for overall health and social inclusion.
- Increased congestion at Moorebank/ M5 intersection will increase travel times for both public and private transport users of Moorebank and Wattle Grove. This congestion and increased travel times will also impact on bus timetabling in locality.

- The development also has the potential to reduce the accessibility to the Georges River.
- No consideration has been given to the scale of the proposal and potential for greater social impacts resulting from development. Best practice social impact assessment would take into consideration equity issues for the affected residents of Moorebank and Wattlegrove.
- No demographic profile of the suburb of Wattle grove – residents who are most likely to be affected by proposal. Residents of Holsworthy and Hammondville are also likely to be affected by proposal.
- No tertiary research has been undertaken of residents in Wattle grove to ascertain their concerns. A survey of residents in the affected communities may illuminate a number of potential social impacts not identified elsewhere.
- Some of the proposed benefits such as the potential for child care and recreational facilities (such as walking tracks and pedestrian/cycleways) on site may not be ideal given the potential noise/pollution and public safety concerns of pedestrian movements in an area with a high number of trucks and car movements.

In summary, the report does not take into consideration of a number of issues and proposed mitigation measures may not be appropriate for the proposed use and intensity of development.

4.8.4 Recommendations

Before a decision is made, it is recommended that the applicant undertake a full social impact assessment to ascertain the spectrum of likely impacts on surrounding residential areas and measures required to mitigate impacts. This should include the following:

- A survey of residents in Wattle Grove and Moorebank to gain an understanding of the potential social impacts on these residents,
- A detailed demographic profile of the suburbs of Wattle Grove, Holsworthy, and Hammondville,
- An assessment of fairness and equity issues for residents of Wattle Grove and Moorebank given scale and nature of operation.
- Review of the adequacy of proposed mitigation measures given the industrial nature of proposed activity,
- Review the impact on accessibility to the Georges River,
- An assessment of off-site benefits to surrounding community.

4.9 Public Consultation

4.9.1 Background

Director General's Requirements (DGRs) issued in 2010 requires the applicant to provide an *"appropriate level of consultation with relevant parties to be undertaken during the preparation of the Environmental Assessment"*. Cardno has reviewed the consultation program against the *Guidelines for Major Project Community Consultation (Department of Planning October 2007)* and our assessment is provided below.

4.9.2 SIMTA's Communication to Local Residents

The communication strategy consisted of two distinct phases.

1. **A 'one way' dissemination of information** - distribution of 11,600 letters (dated 10 July 2010) to residents with accompanying factsheets. The letter detailed SIMTAs intention for development of site, background information and means of consultation activities including website and 1800 phone number. No feedback or information is sought from residents or key stakeholders during this stage. However, the letters to the residents seem misleading as it seems to confuse the SIMTA's with the Federal Government's proposal. There is no indication that there are two different projects.
2. **'Passive feedback'** - collecting feedback from residents and key stakeholders via a number of methods including hotline, and one-on-one stakeholders consultations.

There is no information in report which describes how information was actively sought from residents and key stakeholders.

4.9.3 Consultation Methodology

SIMTA's Consultation Methodology

Elton (2011) has undertaken two distinct consultation periods:

3. **Pre preliminary Environmental Assessment in October 2010** – Information provision about the proposal and briefings to high level government, business and community stakeholders
4. **August 2011** – Community consultation and seeking feedback from a wide range of stakeholders including the broader community.

The applicant has undertaken a range of consultation methods in compliance with the Guidelines for Major project Community Consultation. Consultation methods included:

- Provision of basic information about proposal to community
- Briefings to high level government, business and community stakeholders
- A Community Information Centre (CIC) which was open to the public for five weeks between 11 February 2011 and 19 March 2011 and Thursdays 3pm-6pm, Fridays 12noon93pm and Saturdays 11am-2pm. In response to community feedback and low attendance levels on weekdays the CIC opened for extended hours on Saturdays between 10am and 3pm. The CIC was aimed at providing face to face conversations, as well as a forum to communicate detailed and quality information about proposal. The CIC also produced a number of materials for members of the public including:
    - Information boards
    - Factsheets
    - Contact cards
    - Feedback forms
    - Sign in sheet
- Stand alone project website
- Email feedback system
- Free call information hotline
- Community information newsletters

The key objectives of the consultation activities were to:

- Identify key community stakeholders with an interest in the project
- Provide accurate and relevant information about proposal to local residents and community stakeholders to create awareness about the proposal
- Provide a means by which stakeholders could comment on the proposed plans prior to their finalization
- Provide the project team with the opportunity to incorporate stakeholder feedback into the planning and development process.

The level of community participation in consultation activities is shown in **Table 4.3** below

Table 4.3 – Community Participation

Consultation Activity	Number of Persons
Visitors to the Community Information Centre between 11 February and 8 April 2011	70
One-on-one stakeholder meetings with Project Team	8
Stakeholders who sent emails between July 2010 and August 2011	70
Phone enquiries between July 2010 and August 2011	35
Distribution of letters to residents, July 2010	11,000
Distribution of news updates, October 2010	8,600
Distribution of letter to residents, Wattle Grove and Casula combined, February 2011	8,600

(Source: Elton (2011) Community and Stakeholder Consultation Outcomes Report)

The report also states that in August 2010, 500 people attended a rally organized by Liverpool City Council opposing the development of the SIMTA proposal. In addition a local action group known as the Liverpool Action group has become more active and has been conducting its own meetings in the community.

Finally, the report recognises that there has been consistent negative media coverage of proposal and was particularly heightened during the NSW Election.

Cardno's Assessment

Cardno's review of the consultation methodology concludes that the consultation undertaken by SIMTA is poorly targeted for the following reasons:

- It did not appear to have engaged the different ethnic groups in Liverpool LGA. It is unclear whether translators or translation of information was made available for persons with a cultural and linguistically diverse (CALD) background living in the community. This is critical given the high number of residents who do not speak English in the LGA and their input may have been limited by unsuitability of materials and information presented.
- The issue / response matrix (p10-23) reads like a prepared 'frequent questions and answers (FAQs). As such it is unclear who was consulted and what their concerns were.
- The Community Information Centre (CIC) was located 7kms from SIMTA site and situated off the main Liverpool centre with irregular opening times (two or three days a week). The location of the CIC is not easily accessible to the community and this does not encourage community participation.
- It is difficult to determine the overall level of community support for or against project. Negative media reports and complaints made to Liverpool Council indicate a very high degree of concern of residents from this proposal.

- The outcomes of the report do not indicate geographical areas of resident concerns and is difficult to ascertain the level and type of concern by location.
- The report does not discuss the potential for cumulative impacts resulting from the Federal Intermodal proposal.
- Continued negative media coverage indicates that the community consultation process has not been successful in building long term relationships with community or the proponents reputation in community.

4.9.4 Identifications of Issues

SIMTA's Report

A summary of issues raised during the consultation period are provided on p5 of report and include:

- Air quality
- Traffic
- Cumulative impacts of the potential for two adjacent terminals
- Noise
- Light spill
- Proximity to residential areas
- Character of local area
- Environmental impacts

A number of positive impacts were also identified which included:

- Increased employment opportunities as a result of proposal, and
- Investment in the local area.

Cardno's Assessment

- No analysis of the hierarchy of issues/complaints is provided in the report which makes it difficult to assess the level of concern by issues. This hierarchy of issues may elucidate which issues are of most concern to residents.
- No evidence that community ideas and input has been incorporated into submitted concept application and overall project design.

4.9.5 Recommendations

Communication Methodology

It is unclear if the consultation methodology is adequate and is carried out based on the best practice guidelines for Major Project Community Consultation.

As a minimum, the applicant must provide additional information to demonstrate the level of consultation that has been carried out to ensure unbiased, inclusive and accessible communications between the applicant and the residents. This should include details on:

- How the residents with a cultural and linguistically diverse (CALD) background are involved in the process?
- Whether the location of the CIC is appropriate or are there any options for a more accessible location?
- The reason why a resident survey has not been carried out given the significance of the project?
- Does the consultation distinguishes between the two intermodal terminals projects – one by SIMTA and one by the Moorebank Project Office?

Addressing Community's Issues

It is unclear if community feedback has been appropriately addressed. As a minimum, the applicant must provide additional information to address the following questions:

- Which issues were raised by particular stakeholder groups?
- How each issue is proposed to be addressed in the environmental assessment, and
- Whether the proposal has been altered as a result of feedback received.

4.10 Economic Impact Assessment

Urbis has provided an economic assessment of the proposed SIMTA Intermodal Terminal. The purpose of the study is to assess the potential economic impacts of the development and operation of the proposed Intermodal Terminal.

The Report summarises the following positive benefits to the region as:

- Employment generation
- Reduction in heavy vehicle traffic on Sydney's roads
- Improved import and export speed efficiency to boost Australia's productivity and economic performance by rail;
- Long term improved air quality, decreased greenhouse gas emission and motor vehicle accident rates; and
- Better promotion of industry development, investment and jobs in South Western Sydney

A number of issues have been identified in the report and these are discussed below.

4.10.1 Employment Figures

What SIMTA Said

The report finds employment generation of proposal as the main economic benefit of proposal. The report bases its employment figures on a PwC Employment Forecasts for the SIMTA Moorebank Intermodal Terminal, June 2010 report and on an estimated construction costs. It suggested that the proposal will generate 850 construction jobs per annum over the full six year construction period and 6,225 direct and indirect ongoing jobs. These numbers are broken down as follows:

- **Direct Construction Generated Employment** – annual direct construction job of 340 per annum, with a total of 2,040 construction jobs being created over the six year construction period.
- **Indirect Construction Generated Employment** – 510 indirect jobs per annum or 3,060 indirect jobs over the full estimated construction period.

- **Direct Ongoing Jobs –** 2,840 direct jobs once the facility reaches its capacity of 1 million TEU per annum
- **Indirect Ongoing Jobs** – 4,260 indirect jobs.

Cardno's Assessment

As the PwC Report is not included in the EA submission, there is not enough information to adequately assess the number of jobs generated by the proposal. In addition, the construction costs are based on the estimated construction costs of the project. Again, only the Quantity Surveyor Cost Certificate has been provided and there is insufficient information to review the construction costs.

Other issues include:

- Multipliers have been used to calculate indirect employment figures for during construction and ongoing operations. Intermodals by their nature do not require large amounts of inputs to operate. Quite simply Intermodals merely transport goods that have already been made, the majority of which are made overseas. The use of indirect multipliers in not suitable when assessing the total number of jobs supported by proposal and should be discounted from analysis. The likely inputs of warehousing which include stationary, cardboard boxing etc is negligible. Removing this from the analysis would reduce the number of jobs for operational phase by 4,260 and employment figures for the site would be less than 30 employees per hectare required by the Metropolitan Strategy (p36).
- The construction period of 6 years provided on p35 differs to the estimated construction period of 10 years found in the EA. This is important as estimated construction jobs are based on number of years of construction (p35). Due to discounting, this will also reduce the present value of the benefits identified.
- Employment figures presented in the Economic Assessment is approximately 600 jobs higher than the Hyder Technical note found in the Transport and Accessibility Impact Assessment (p i of executive summary).
- It is noted that the density of employees for warehousing is 1 job per 160sqm of warehouse floorspace compared to 1 per 250sqm found elsewhere. Whilst justification is provided, no sensitivity or comparison to other intermodals has been provided. This equates to a third more persons employed in warehousing compared with warehousing at the intermodal compared to warehousing located elsewhere.
- Future labour saving technology including automation of packing/unpacking may further decrease the level of employment onsite.
- The report does not draw any obvious conclusions between lower employment numbers and warehousing from this proposal and in Liverpool LGA limiting the ability of Liverpool LGA to meet its Metropolitan Strategy employment targets.

4.10.2 No Alternatives Considered to the Preferred Project

- In 2002, the subject site was rezoned for business park purposes providing higher order employment in the Moorebank area and Liverpool LGA more generally. The assessment should have considered other higher order economic and employment uses as intended by the rezoning.
- The report does not identify any alternatives that were considered to the preferred project. This should include an assessment of the benefits and costs of any alternatives in comparison to the preferred alternative to allow the preferred alternative to be identified.
- One alternative should be considered is the "do-nothing". There is a need to consider the current use of the site and loss of existing employment. Although this is largely the result of a policy decision to relocate the National Defence and Distribution Centre to Holsworthy, the report should take this into consideration when determining the net result in employment figures.

- The assessment should also consider the loss of jobs in trucking caused by proposal, and whether this off-sets some of the gains at the Liverpool facility.

4.10.3 Impact Assessment

It would normally be expected that there are a number of studies to provide a justification for the project. A number of productivity gains have been identified but the report does not identify any costs whatsoever. In summary, there is little information on the expected costs and impacts associated with the proposal. Potential costs and impacts may include:

- Capital and operating costs of the development
- Purchase of land for rail corridor
- Associated rail infrastructure costs
- Impacts from increased vehicular traffic in surrounding areas.
- Other externalities as appropriate including lower amenity and environmental pollution (noise, dust, ozone) in locality.

These costs would normally be compared against the benefits to allow a proper assessment of the economic justification of the project.

4.10.4 Cumulative Impacts

The report does not appear to adequately address the impact of and on the Federal Government's Intermodal proposal. Potential economic impacts could include non-financial viability of the Federal proposal. In addition, the report does not take into consideration:

- Liverpool City Council's key planning documents 'Growing Liverpool 2021' and the economic development aspirations including the need for higher order employment.
- The cumulative economic impacts from both proposals have not been discussed.
- Does not take into consideration the future trends in container origin/destination in Liverpool LGA. Some discussion of container trends is discussed in other appendixes found elsewhere in application.

4.10.5 Recommendations

Overall, the report does not constitute a complete economic assessment of the proposal. The following issues need to be addressed in a revised report:

- The potential negative economic impacts as a result of SIMTA proposal and as such do not constitute a true economic assessment. Negative economic impacts include purchase of land for rail corridor, costs for likely infrastructure upgrades, and constraint of land east of site for development purposes.
- Alternative higher order economic uses of the site.
- Impact on the Federal Governments Proposal.
- Potential cumulative impacts of both proposals.
- Potential negative impacts resulting from externalities as a result of proposal.

Furthermore, it is impossible to assess the potential benefits of proposal as these are based on the PwC Report titled *'Employment Forecasts for the SIMTA Moorebank Intermodal Terminal, June 2010'* which has not been included in any documentation. The applicant needs to supply this report to allow assessment of the economic impact assessment.

4.11 Stormwater & Flooding

4.11.1 Flood Behaviour

The SIMTA site is located outside of the 100 year ARI flood extents of Anzac Creek. This is reflected in the Hyder modelling of the site, and in the original extents generated in the Anzac Creek FRMS&P (2009). PMF extents are observed to inundate a significant portion to the south of the SIMTA site, which places this area within the low flood risk precinct.

Proposed filling of the site to provide flood immunity has impacts on the PMF only, with impacts of up to 50mm shown for downstream flood extents. Impacts appear to dissipate at the South Western Motorway, although the mapping provided does not incorporate the full extents of the PMF impacts (which continue off the page).

It is recommended that these PMF impacts be further quantified and assessed, particular in terms of any implications to emergency response planning or the safety of people in accordance with the FDM (2005).

The PMF impact map provided by Hyder (2011) does not appear to incorporate a 'was dry now wet' parameter, which would be valuable in assessing whether any properties would anticipate further flood affectation as a result of the proposal. It should be noted however that flood maps provided for this peer review are of such low resolution as to be generally illegible, and legible copies of the Hyder reports would be required to confirm such commentary.

Figure 2 of the FSSM report (Hyder, 2011) indicates external catchment inflows entering the site from the west and the north. The inflow located approximately midway along the western site boundary is draining from a sealed carpark area of the IMT site, which is piped under Moorebank Avenue and discharged into a concrete lined channel through the SIMTA site (as described in the FSSM, Hyder 2011). It is understood that these flows are proposed to be diverted towards Outlet C (on the north-west of the SIMTA site); although it appears that the flooding impacts of this diversion have not been incorporated into the flood model. However, it is unclear as to whether details have been provided for the diversion due to generally illegible drawings provided for the peer review. Legible copies of the Hyder reports would be required to perform a thorough assessment.

The FSSM report (Hyder 2011) indicates that flows which currently enter the SIMTA site along its northern, southern and western boundaries may be impeded and diverted. Indicative sketches of potential civil design options are provided, although clarification is required to ensure that off-site impacts have been thoroughly quantified and mitigated as necessary. It is unclear as to whether details have been provided for the diversion, due to generally illegible drawings provided for the peer review. Legible copies of the Hyder reports would be required to perform a thorough assessment.

4.11.2 Cumulative Impacts

No discussion has been identified within the Hyder reports (2011) which addresses the anticipated impacts of other proposed developments, or the cumulative impacts associated with them (e.g. adjacent IMT site).

4.11.3 Hydrological Impacts

The FSSM (Hyder 2011) presents an assessment of hydrological impacts in Section 5.1 Water Quantity, which generally satisfies the DGR in this respect. Drains software was adopted for hydrological modelling of the site.

The FSSM (Hyder 2011) demonstrates that increases to peak flows resulting from the proposal have been mitigated through provision of OSD, up to the 100 year ARI event only (PMF peak flows are shown to be increased), which is consistent with Liverpool City Council DCP (2008) and broader principles contained within the NSW Government's Flood Prone Land Policy.

Results of DRAINS modelling presented indicate that hydrological impacts have been effectively mitigated for the proposed site, although sufficient information to support this finding is lacking in some respects:

- A developed scenario catchment plan for the site is provided, however no existing scenario site catchment plan is provided for reference. As such it is difficult to qualify changes in flood behaviour proposed for the site.
- The report indicates that 'detention storage details are included in the accompanying design drawings', however it is unclear as to whether details have been provided due to the generally illegible drawings provided for the peer review. Legible copies of the Hyder reports would be required to perform a thorough assessment.
- Parameters of proposed OSD Basins A, B and D are summarised in Table 2 of the FSSM (Hyder 2011), however locations or footprints of these basins could not be identified in the drawings provided. Table 2 indicates that the three proposed basins are to be located in the NE, SE and NW corners of the SIMTA site. A proposed stormwater catchment plan is presented in Figure 4 and again in Appendix F of the FSSM report (Drawing no. FIG-F2), which notes "location of proposed detention devices indicative only". On the contrary, this drawing does not indicate any of the proposed basins. Such details may have been provided in the drawings contained within Appendix G of the FSSM report; however this cannot be confirmed due to the generally illegible drawings provided for the peer review. Legible copies of the Hyder reports would be required to perform a thorough assessment.

4.11.4 Stormwater Quality

Stormwater quality improvement devices have been modelled and results presented in the FSSM report (Hyder 2011). Results presented in the report indicate that the proposed devices are effective in achieving the water quality objectives (WQOs) as prescribed in the Liverpool City Council DCP (2008).

Although peer review of the modelling data is beyond the scope of this assessment, proposed treatment devices were found to comprise approximately 3% of the total site area. This appears reasonable given that substantial reuse is proposed through the incorporation of rainwater tanks, and also considering that highly effective bio-retention devices have been adopted.

The Hyder reports provided were of a resolution which rendered much of the accompanying drawings and figures illegible. As such, it is difficult to comment on the configuration of the devices proposed. However, it appears that at least some of the bio-retention devices are integrated with OSD. In such integrated approaches, it is necessary to exclude the extended detention depth required for water quality from the OSD volume adopted in peak flow calculations. Clarity should be sought as to whether this has been considered in the FSSM report (Hyder 2011).

4.11.5 Strategic & Statutory Considerations

Diversion channels are proposed and details are provided in the drawings contained within Appendix G of the FSSM report. However this cannot be confirmed due to the generally illegible drawings provided for the peer review. Legible copies of the Hyder reports would be required to perform a thorough assessment.

4.11.6 Consultation

DGRs specifically require that the proponent undertake an appropriate level of consultation with relevant parties during preparation of the EA, including adjoining and affected landowners.

The FSSM report (Hyder 2011) indicates that adverse impacts resulting from the management of external catchments 'may be open to negotiation with the various stakeholders', while no evidence of such negotiation or consultation is provided. The FSSM report highlights that civil design options may be adopted to avoid such impacts, however the effectiveness of such mitigation options has not been quantified or demonstrated in the FSSM report (as discussed in Section 4.1 of this report). If mitigation of impacts cannot be demonstrated, consultation with affected landowners (as per DGRs) will be appropriate.

4.11.7 Recommendations

Based on our assessment, the following additional information should be provided by the applicant:

- If mitigation of impacts from the impediment / diversion of external catchments cannot be demonstrated, consultation with affected landowners (as per DGRs) will be appropriate.
- Clarity should be sought as to whether an integrated approach has been adopted for bio-retention / OSD devices. Drawings provided for this peer review are of such low resolution as to be generally illegible, and legible copies of the Hyder reports would be required to confirm the approach adopted.
- If an integrated approach has been adopted, checks should be made to ensure that the extended detention depth required for water quality has been excluded from the available OSD volume adopted in peak flow calculations.
- PMF impacts should be further quantified and assessed, particular in terms of any implications to emergency response planning or the safety of people in accordance with the FDM (2005).
- The PMF impacts map should be extended to incorporate the full extent of downstream impacts.
- The PMF impact map should be amended to include a 'was dry now wet' parameter, which would be valuable in assessing whether any properties may anticipate further flood affectation as a result of the proposal.
- Legible copies of the Hyder reports would be required to confirm the assessment, including a Full set of flood maps included in the unmodified Anzac Creek FRMS&P, existing scenario site catchment plan
- Off-site impacts of impediment / diversion of existing catchments should be qualified to demonstrate the effectiveness of the proposed mitigation measures.

4.12 Environmental Risk Assessment

Overall, the environmental risk analysis submitted by the applicant lacks detail and there is limited assessment on the cumulative impacts of the subject development and the Commonwealth Government's proposal. Our assessment is summarised as follows.

- Table 3 of the Environmental Risk assessment sets out the consequence criteria used in the risk assessment. Guidance is given on assessing safety, financial and operational risks, but no guidance is provided on assessing consequence of environmental risks. Since the purpose of the assessment is to assess environmental risk this is considered inappropriate, and the risk assessment should be reviewed with reference to environmental consequence. An example set of environmental consequence criteria is provided in **Table 4.4**. (Note that the title of Table 3 in the Hyder report is incorrect and should refer to consequence not likelihood).
- The risk of increased traffic impact on local roads and rail is described as high even after mitigation measures are applied. The principal mitigation measures proposed all require additional studies to be undertaken. It is recommended that these studies are undertaken and made available for review before the EA is determined. Documents identified in the risk assessment as being required include:
    a. Detailed transport and accessibility impact assessment;
    b. Traffic management plan;
    c. Strategic and project modelling;
    d. Assessment of the road and rail infrastructure quality to determine capacity to handle increased traffic.
- Justification is required as to why the risk of increased traffic impact on local roads and rail risk was not assessed as Very High both before and after mitigation. A likelihood criteria of A (Almost Certain) and consequence criteria of 4 (Major) or 5 (Severe) would both result in Very High Risk ranking, and would seem appropriate.
- Air quality risk is shown to be reduced from Very High to Medium by the application of an Air Quality Management Plan. Justification for this needs to be provided as it is unclear what practical measures are available to reduce the risk by this margin.
- As a result of the first bullet point above, it is not clear that environmental risk has been adequately addressed and whether the results presented address financial, safety and operational risks instead.
- Table 4 of the Hyder Environmental Risk Analysis presents the results of the environmental risk analysis. It does not provide the likelihood or consequence assigned to each risk either before or following mitigation. This information is needed in order to enable the reader to understand how the risk ranking has been derived.
- A staging plan is required to help the reader understand the period over which risk will apply, and the timing at which the risk will be present. This is particularly true for risks related to the build up of traffic over time, and for construction related impacts.
- Disruption to the community during construction is shown to be reduced from Very High to Medium by the application of Community Consultation and Involvement Plan. Justification for these needs to be provided as it is unclear what practical measures are available to reduce the risk by this margin.
- There is no indication of how cumulative impacts have been incorporated into the assessment. In particular, what background traffic increases are expected? What other developments are planned or known?

Table 4.4 – Example of Environmental Consequence Criteria

Consequence Element		Consequence Magnitude Categories				
		Minimal	**Minor**	**Moderate**	**Major**	**Catastrophic**
Magnitude	**Spatial**	A single pool	A reach or river or part of a catchment	Multiple reaches or whole catchment	Multiple catchments	Whole of basin
	Intensity	Low level behavioural, lifespan or condition effect	Acute impacts on some species	Moderate impact on growth, recruitment or survival rates	Lethal impacts on some species	Lethal for individuals or a community
Temporal	**Duration**	Single incident or transient effect	Short term impact, single generation	Medium term	Long term, multiple generations	Permanent
	Timing	Occurs outside breeding times	Occasional interruption of feeding or breeding	Interrupts one life cycle	Regularly interrupts life cycle	Permanent interruption of life cycle
Ecological	**Values**	Previously disturbed areas	Parkland	Native fauna and flora	Conservation area of listed species	Wilderness of Nationally threatened species
	Sensitivity	Will recover completely	Will recover with some changes	Moderate change to ecosystem functioning	Significant change to ecosystem functioning	Will not recover
Social	**Number of People**	Some people indirectly impacted	Some people directly impacted or several indirectly	Several people directly impacted or many indirectly	Large number of people directly impacted	Loss of Life
	Heritage	Impact on item of minimal significance	Impact on multiple items of low significance	Impact on significant item	Impact on multiple significant items	Major impact on protected item
	Political	Single negative press article	Multiple negative pres articles	Significant public interest	Leads to an enquiry	Change of Government
Economic	**Financial**	Minimal losses	Several thousand dollars lost revenue or remediation costs	Half million dollars in lost revenue or remediation costs	One million dollars lost in revenue or remediation costs	Several million dollars in lost revenue or remediation costs.

- There is no discussion or information on who has responsibility for implementing the identified control measures. This is of particular relevance where infrastructure upgrades are required (For example in road or intersection upgrades). Each mitigation or control measure needs to have a responsibility assigned, with indicative costs identified to ensure that adequate funding is in place prior to approval. Responsibility should consider both responsibility for implementation and for funding provision.
- No information is provided about what materials or goods may be handled at the terminal. A clear statement is required to identify hazard classes of goods which will be accepted, and to identify any goods and materials which will not be handled.

- The risk assessment seems to accept the loss of threatened species without fully identifying mitigation measures.
- With regard to the risks, the following comments are provided:

Table 4.5 - Comments on Environmental Risk Analysis (Table 4 of the Hyder document)

Issue	Cardno's Comment
Transport and Access	Additional potential impacts need consideration including: • Increased accident rates • Exceeding road capacity • Pavement Failure • Increased traffic on local and residential roads • Decreased access to existing properties • Bringing forward upgrade works and costs No information is provided on other developments and land use changes which will occur in addition to the SIMTA proposal. Consequently cumulative impacts do not appear to be adequately considered. The control measures need to give some consideration to who is responsible for implanting them, and how will they be funded, eg. for traffic, how will the s94 plan be applied, and how will funding contributions be agreed?
Noise and Vibration	Assessment covers only operational noise from locomotives. Other noise and vibration sources including trucks moving on local roads and the site, site equipment and manual handling operations also need to be considered.
Biodiversity	The risk assessment seems to accept the loss of threatened species without fully identifying mitigation measures. The number of individuals of threatened species to be lost needs to be quantified, and the mitigation strategy needs to be identified. Offsetting strategies should be documented as appropriate. Without knowing the number of individuals to be lost, the residual risk of Low does not seem justified. It is suggested that until the route is known this cannot be assessed as having being reduced from Medium by the proposed mitigation measures.
Riparian	Success criteria need to be documented for the OEMP in relation to monitoring and maintenance of riparian vegetation and water and sediment control structures, and a commitment needs to be made to corrective action in the event that the success criteria are not being achieved.
Hazards and Risks (Storing and handling dangerous goods on site)	No information is provided about what materials or goods may be handled at the terminal. A clear statement of any goods and materials which will not be handled is required. Mitigation measures are considered weak. Additional mitigation measures should include the storage of hazardous goods in dedicated areas with adequate chemical and fire protection systems. Pre-approval systems should also be in place for the handling of any such materials.
Greenhouse Gas / Utilities	An additional control measure should be required as a permit condition to include the onsite generation of renewable energy to offset the net increase in GHG emissions. (It is noted that the installation of solar panels on warehouse roofs will be more cost effective at the time of construction than as a later retrofit).

Issue	Cardno's Comment
	This may also reduce the level of risk assigned to the 'utilities' category.
Air Quality	Risk is shown to be reduced from Very High to Medium by the application of an Air Quality Management Plan. Justification for this needs to be provided as it is unclear what practical measures are available to reduce the risk by this margin.

4.12.1 Recommendations

The following additional information is required from the applicant:

- The scale used in assessing environmental consequence as part of the risk assessment should be documented, and the risk assessment should be revised as necessary with reference to this scale.
- The likelihood and consequence assessment before and after the application of mitigation measures should be provided for all risks.
- The following documents are identified as being control measures to manage transport and access risk. As key documents in controlling a major project risk, they should be provided prior to the EA being determined:
  - Detailed transport and accessibility impact assessment;
  - Traffic management plan;
  - Strategic and project modelling;
- Assessment of the road and rail infrastructure quality to determine capacity to handle increased traffic.
- Further justification of the transport and access risk ranking before and after application of mitigation measures is required.
- Justification of how an Air Quality Management Plan will reduce the air quality risk from Very High to Medium is required.
- Justification of how a Community Consultation and Involvement Plan will reduce the risk of community impacts during construction from Very High to Medium is required.
- Potential cumulative impacts need to be addressed.
- Responsibility for implementation of each mitigation measure needs to be identified, along with responsibility for funding each mitigation measure.
- Information about the classes of hazardous or dangerous materials which may be handled at the terminal should be clearly stated in order that the required mitigation measures and residual risks can be adequately assessed.
- An assessment of the potential for on site renewable energy generation and use should be provided.

4.13 Green House Gas Assessment

4.13.1 Key Findings

- The lack of consistency in the proposal description between the air quality, noise and green house gas (GHG) reports suggests a poorly defined scope of works.
- The results presented are not justified, and the input data and calculations undertaken should be transparently provided.
- Impacts in the rail corridor are poorly considered and this should be included.
- From information provided, it is considered likely that emissions have been underestimated.
- Inclusion of solar panels on warehouse roofs should be a permit requirement, with the requirement stating that the amount of installed capacity should be sufficient to offset in full the GHG emissions the site is responsible for. (It is noted that installation at the time of initial construction is more cost effective than retrofitting at a later date, and also that this may facilitate a shift from diesel driven plant and equipment to electrical equipment with a corresponding reduction in air pollutants and noise).
- The climate risk assessment identifies the rail corridor as being flood prone. Recommended mitigation measure is to 'incorporate adaptive capacity measures'

4.13.2 Inconsistent Assumptions

The GHG, air quality and noise assessments appear to use different assumptions on what the proposal includes, giving an overall impression of uncertainty as to what is being proposed, and an inconsistent assessment. Some specific examples are given in **Table 4.6**.

Table 4.6 - Inconsistent Assumptions

Topic	Assumption in Air Quality assessment	Assumption in GHG assessment
Buildings on site	Buildings are not described, or accounted for in the modelling	It is stated on page 11 that there is sufficient information on the terminal to accurately assess construction requirements, however it is not stated anywhere how many buildings there are, or what dimensions.
Operational emission sources	Assumed emission sources documented, and based (pro-rata) on similar Enfield site	Emissions sources are stated, and differ from those in the Air Quality report.
Cranes	Assumed to be diesel powered	Assumed to be electrically powered
Fork Lift Trucks and site vehicles	Included in assessment	Not included in assessment
Train emissions	Emissions from locomotives travelling and idling included	Emissions are not clearly considered, but are alluded to.
Cold Storage	No refrigeration plant (or associated emissions) is considered.	A cold warehouse is referred to throughout, however no assessment of potential GHG emissions associated with refrigerant plant is made.

Construction Staging	Not identified or considered	Follows a 5 stage staging plan with a reference to Hyder 2011 as the source. (Section 2)
Construction impacts	Minor consideration – largely deferred to CEMP	Assessed
Operational impacts	Assessed	Assessed

4.13.3 Calculation of Emission Levels

Calculations throughout the document are not substantiated, and it is impossible to verify the quantified emissions presented. The report should include (likely as an appendix) details of all calculations undertaken in a spreadsheet file and this needs to be submitted. In particular, the lack of the following information prevents the results being verified:

- No emission factors are provided at any point in the report
- Tables 4, 8, 12, 16, 20 all list the types of equipment to be in operation, but do not indicate how many items of each type have been considered, or how long each type of equipment is expected to operate for.
- Calculation of diesel fuel consumption is based on fuel tank size, and an assumption that each tank is filled every 2 days. Some justification that this is realistic is required.
- Table 22 does not present the embodied emission (either per unit or in total) of the materials listed
- No data is provided on the number or size of buildings included in the assessment.
- There appears to be no consideration of vehicles on site including trucks or fork lift trucks used by the facility, or freight trucks moving on the site or along Moorebank Ave
- There are data gaps in Table 5 which appears to show 0 fuel use for demolition, clearing and grubbing and contamination removal. This possibly leads to an underestimation of emissions.
- There is an inconsistency between Tables 26 and 28, with one presenting a VA/m^2 for offices of 75, and one presenting 100.

Vegetation clearance is considered only in terms of decomposition of cleared grass at a composting facility. No consideration is given to the long term land use change

Vegetation clearance is described on page 14 as being '50,000m^2 of grass at 0.15m depth'. No account is taken of clearance of vegetation from the rail corridor, which we understand to be significantly greater in terms of biomass.

Section 4.4 provides an assessment against an alternative scenario, which is considered speculative, largely irrelevant and possibly misleading. Suggest it should be removed or more fully justified as being a valuable comparison.

Mitigation measures presented are appropriate, but do not consider explicitly the potential for on site offsetting of emissions. Inclusion of solar panels on warehouse roofs should be a permit requirement, with the requirement stating that the amount of installed capacity should be sufficient to offset in full the GHG emissions the site is responsible for. (It is noted that installation at the time of initial construction is more cost effective than retrofitting at a later date, and also that this may facilitate a shift from diesel driven plant and equipment to electrical equipment with a corresponding reduction in air pollutants and noise).

4.13.4 Recommendations

The following additional information is required from the applicant:

- A collated set of assumptions used in the air quality, noise and vibration, GHG and traffic reports should be provided. Where different input data has been used, this should be documented, and a justification made as to why the assessments undertaken can be relied upon when determining the magnitude of impacts.
- Additional data should be provided which enables the data presented to be verified. In particular, model input data and assumptions should be provided, ideally in a spreadsheet format.
- Activities in the rail corridor, including vegetation clearance should be documented and fully assessed.
- An assessment of the potential for on site renewable energy generation to off set the project GHG emissions should be provided.

4.14 Fauna & Flora

4.14.1 Summary of SIMTA's Fauna & Flora Assessment

A Flora and Fauna Assessment, including desktop and field assessment, has been conducted by Hyder Consulting to support the EA. The report identifies several ecological impacts from the development and these are:

- Loss of native vegetation, including Endangered Ecological Communities and threatened flora species;
- Loss of fauna habitat including that of threatened and migratory species;
- Impact on fauna connectivity;
- Alteration and degradation of aquatic habitats;
- Edge effects and weed invasion.

The report acknowledges limitations including inability to access the western portion of the site and lack of information regarding the area of impact across the site.

The report identified two threatened plant species listed under the EPBC Act And TSC Act- the endangered *Persoonia nutans* and the vulnerable species *Grevillea parviflora subsp. parviflora*, were recorded in the rail corridor lands to the south of the SIMTA site. The populations in these areas are relatively large and are considered to be of significant conservation value. Another threatened plant species, the vulnerable *Acacia pubescens*, was recorded to the east of the SIMTA site.

Five threatened ecological communities listed under the TSC Act were identified in the study area, based on analysis of existing vegetation maps and ground truthing:

- Castlereagh Scribbly Gum Woodland in the Sydney Basin bioregion
- Castlereagh Swamp Woodland
- River-flat Eucalypt Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South-east Corner bioregions
- Freshwater Wetlands on Coastal Floodplains of the NSW North Coast, Sydney Basin and South-east Corner bioregions
- Cumberland Plain Woodland in the Sydney Basin Bioregion

All threatened ecological communities in the study area are located within the rail corridor lands.

Detailed terrestrial fauna surveys across the study area identified the presence of five exotic and 54 native fauna species, including three threatened fauna species; Eastern Bent-wing Bat (*Miniopterus schreibersii oceanensis*), Southern Myotis (*Myotis macropus*) and Grey-headed Flying Fox *(Pteropus poliocephalus*). The probability of threatened species recorded within 10 kilometres of the study to occur within the study area was assessed and it is possible that 16 species may occur in the study area on a temporary or transient basis, predominantly highly mobile species such as bird and micochiropteran bats.

Three broad terrestrial habitat types were identified within the study area; remnant vegetation, riparian habitats and cleared and disturbed areas. Notable habitat features across the study area that offer potential shelter and foraging resources to fauna include flowering trees and shrubs, damp areas and watercourses, well-developed leaf litter in places and several hollow-bearing trees. There is, however, an absence of other important features such as large hollow-bearing trees, rocky features and hollow logs across the site.

The SIMTA site is considered to be of limited conservation significance and ecological impacts within the site are likely to be low.

The majority of likely impacts on threatened species and communities will occur as a result of construction of the rail spur. The extent of scale and impacts within the rail spur cannot be quantified until the alignment of the rail link has been finalised. The requirement for a 30 metre wide zone of clearing and/or disturbance will result in the removal and fragmentation of threatened communities and threatened plant populations. As the exact area to be cleared and/or disturbed is not yet known, the impacts cannot be assessed with any certainty, a conclusion on the significance of impacts and the potential requirement for additional assessment cannot be made at this stage.

4.14.2 Recommendations

The following additional information is requested to allow thorough assessment of the report:

- The full scope of the development, including a concept deign of the rail spur, needs to be included in the application to allow for appropriate assessment of the fauna and flora impact. Due consideration must be given to the 2 threatened plant species on the site. The population of Persoonia nutans is considered very significant and is considered the highest biodiversity constraint in the study area. The population of Grevillea parviflora subsp. parviflora is also of significance and impacts on this population should be minimised.
- A referral to the Commonwealth Minister under the EPBC Act should be undertaken as part of this application to confirm if an approval is required.
- Design of the rail corridor link to avoid or at least minimise impacts on these 2 threatened plant species should be considered to conserve areas of remnant vegetation and remnant woodland which would act to mitigate impacts on the 3 threatened fauna recorded at the site.
- A map of all ecological constraints needs to be prepared to inform the design of the rail corridor link. Following the design stage, the Flora and Fauna Assessment will need to be resubmitted to include a full impact assessment.

5 Project Justification

This section assesses the project justification for the proposed SIMTA intermodal terminal based on the current and projected demand for contain freight, the capacity of SSFL and the Federal Government's Moorebank Project Office proposal opposite the site.

5.1 Demand for Container Freight in Sydney

5.1.1 Summary of SIMTA's Assessment

SIMTA commissioned Price Water House Coopers (PwC) to undertake a need assessment for the proposed intermodal terminal at Moorebank. The PwC report suggests that SIMTA is critical to ensure the Government policy to shift 40% container freight movement by rail out of Port Botany is achieved by 2016. In the absence of SIMTA, the currently Sydney region intermodal terminal capacity will be limited at 0.67 million TEU, comprising the aggregate capacity of the Enfield, Yennora, Minto and Villawood intermodal facilities, which represents only 24% of containers transported by rail in 2016.

5.1.2 Cardno's Assessment

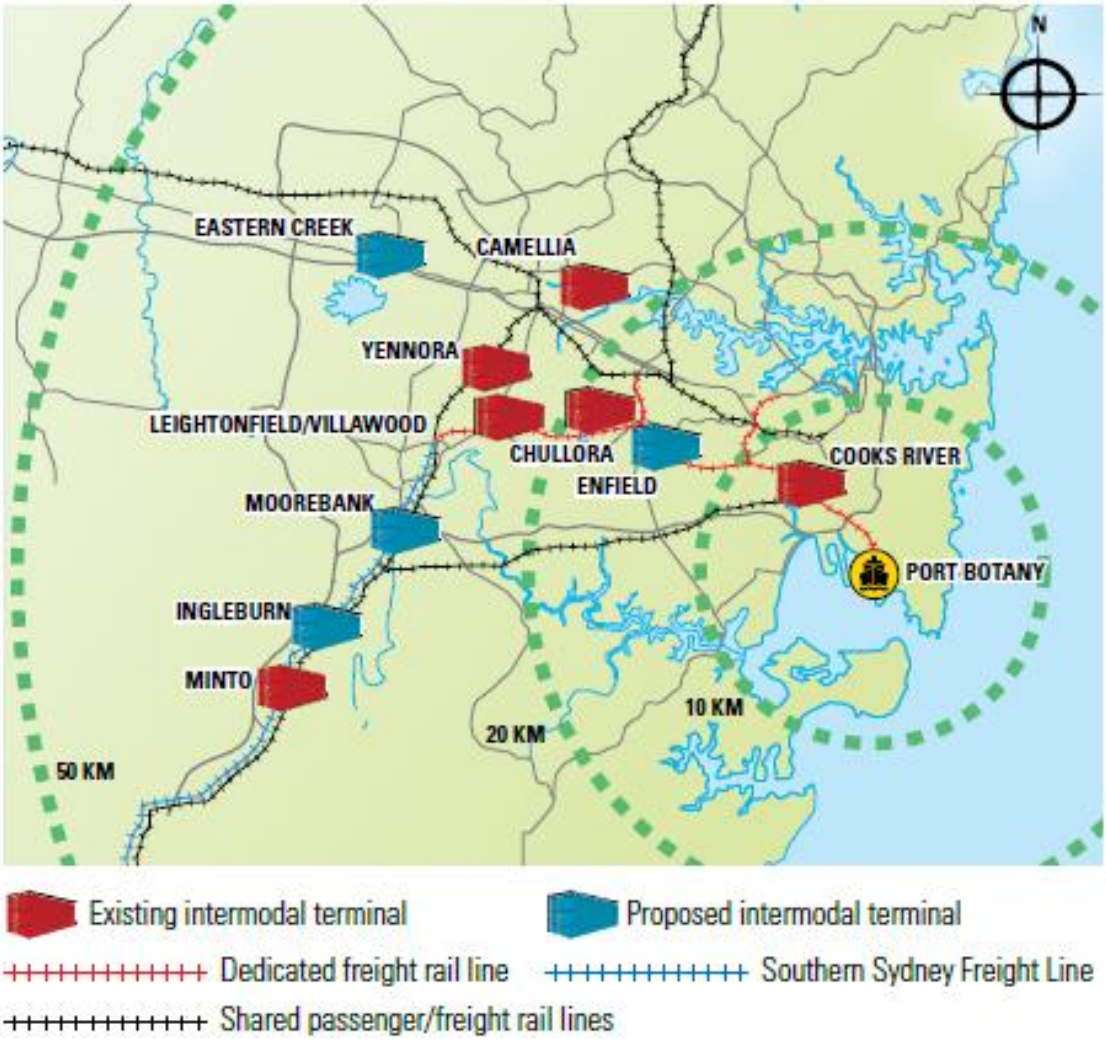
Our assessment acknowledges the following assumptions adopted by SIMTA:

- The NSW Government has set a target to increase the proportion of all container freight movement by rail out of Port Botany to 40% by 2016.
- Port Botany container freight demand will continue to increase by approximately 6.7% per year. Sydney Port Corporation (SPC) has a capacity limit of 3.2 million TEU per annum under its current consent. The proposed expansion of SPC will increase the capacity to approximately 5.0 million TEU per annum and this will be subject to further environmental assessment. The projected increase in the container trade will mean that Port Botany is likely to reach it's capacity of 3.2 million TEU by around 2018. (Currently, Port Botany is handling approximately 2.0 million TEU per annum).
- There are currently three intermodal terminals (IMT) operating in Sydney and another one at Enfield commencing in 2016. These IMTs include:
    - Minto (0.15 million TEU per annum),
    - Yennora (0.17 million TEU per annum),
    - Villawood (0.05 million TEU per annum) and
    - Enfield (0.30 million TEU per annum – to be commenced in 2016).

In total, the existing and planned IMTs have the capacity to handle **0.67 million TEU per annum**.

A plan showing these IMBs are provided in **Figure 27**.

Figure 27 - IMBs in the Greater Metropolitan Sydney



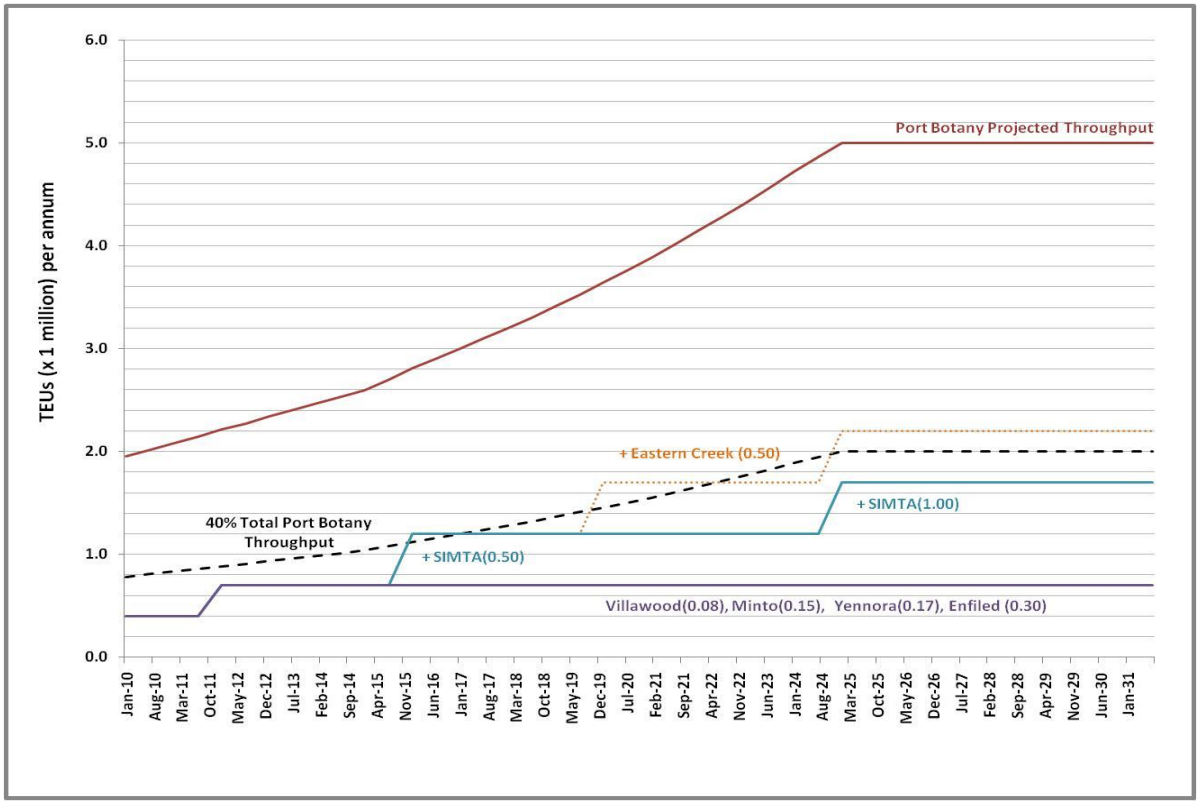
(Source: Department of Finance and Deregulation, Moorebank Project Office (2011) Information Paper Moorebank Intermodal Terminal Project)

We found the following fundamental issues relating to the SIMTA's assessment:

- SIMTA has failed to include the planned but not approved IMTs into the consideration of its demand analysis. These include the adjoining Commonwealth Government's proposal, which will have a capacity for 1.5 million TEU per annum and the Eastern Creek proposal, which will have a capacity for approximately 0.5 million TEU per annum.
- Whilst Port Botany accounts for almost the entire volume of containerised import/export trade throughput in NSW. Most intermodal terminals service both local and interstate trades due to the ability to cover both markets once the infrastructure is established. However, the SIMTA's proposal has no mentioned of transfer to rail for inter-state or inter regional delivery, yet this option has not been ruled out.
- SIMTA's demand analysis is based on unpublished data that is impossible to verify.

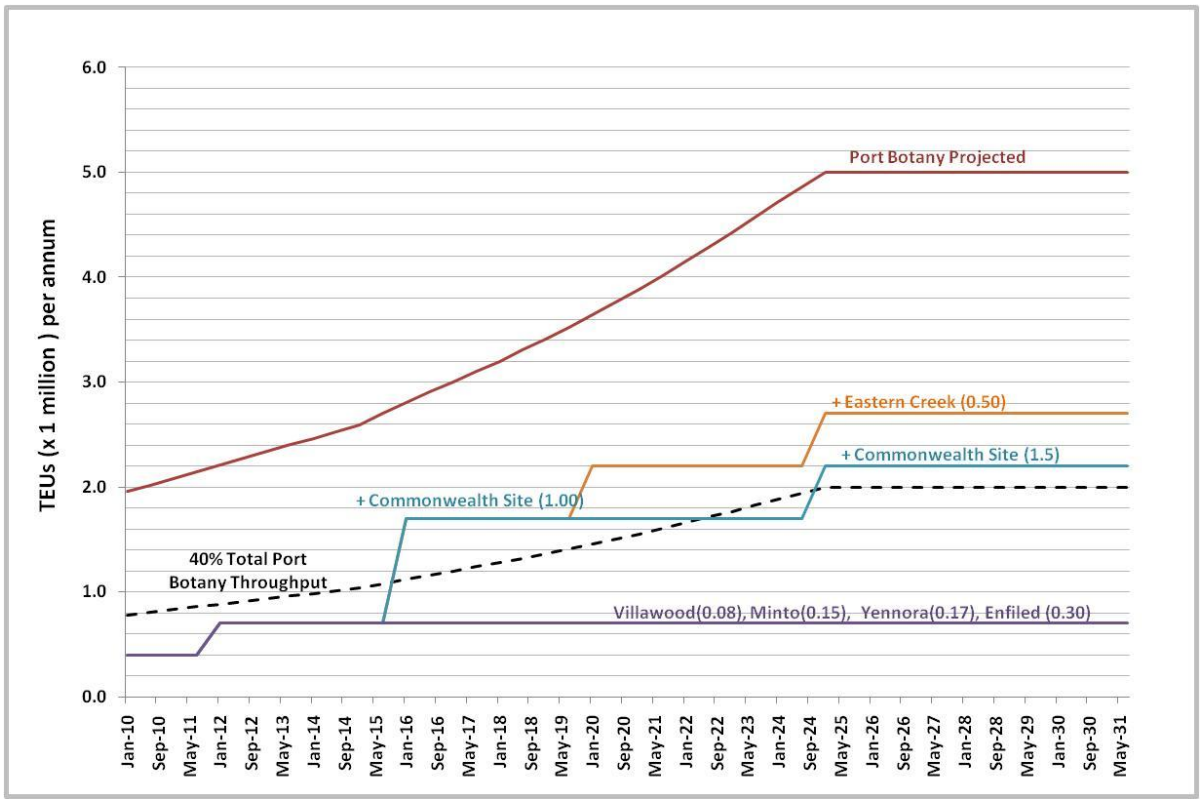
Cardno has analysed the SIMTA's and the Government's figures and prepared the following two graphs showing the relationship between the growth in TEUs handled by the Port Botany terminal, projected growth in the movement of TEUs by rail and the opportunity/need for intermodal terminals. These are shown in **Figures 28 and 29** below.

Figure 28 - Forecast Demand with SIMTA & Eastern Creek



(Source: Cardno's Analysis of SIMTA's and other Proposals)

Figure 29 - Forecast Demand with Eastern Creek & without SIMTA



(Source: Cardno's Analysis of SIMTA's and other Proposals)

Figure 28 shows SIMTA starting in 2016 and reaching capacity by around 2025 on top of existing or future intermodal terminals. **Figure 28** analyses the timing proposed by the Moorebank Project Office in their Preliminary EA report and on their website. The Commonwealth Government's documents suggested a timing of mid 2017 to commence operation for the initial 1.0 million TEU, and ramp up to 1.5 million TEU by 2024.

Whilst both charts show the need for additional intermodal terminals to achieve the Government 40% mode shift target, it also suggests that both Eastern Creek and the Commonwealth Government's proposal would provide sufficient capacity to service the growth in demand for containerised freight. The volume of information contained in the Commonwealth Department of Finance and Deregulation website suggests that the project is well underway as follows:

- Funding allocation of $70.0 million in the 2010-11 Budget to complete the Feasibility Study and to support the potential relocation of the School of Military Engineering and other Australian Defence Force units to Holsworthy.
- Establishment of a project team (the Moorebank Project Office) within the portfolio of the Department of Finance and Deregulation to develop the Feasibility Study and manage the project. The Moorebank Project Office includes representatives from Finance, the Department of Defence and the Department of Infrastructure and Transport.
- Lodgement of a Preliminary Environmental Assessment with the NSW Department of Planning and Infrastructure as a State Significant Development.
- Completion of initiatives studies, including Aboriginal and European Heritage assessment and Ecological assessment to inform the Environmental Assessment of the project.
- Community Information Sessions in October 2011 with local residents at Casula and Wattle Grove to view the project and provide feedback, plus ongoing releases of community updates
- Release of invitation for market participation in the design, construction and operation of the terminal by the private sector
- Market Sounding/Briefing meetings to brief interested stakeholders on the advancement of the Project and its proposed implementation plan.

SIMTA's proposed operational date of 2016 is both doubtful and unrealistic as it has not resolved the key connection with the SSFL and there is no evidence in the submitted documents showing commitments from the ARTC to undertake further investigations on the expansionary infrastructure and funding of such works. If SIMTA wishes to commence operation in 2016, these off-site infrastructure will need to be included in the current EA proposal, but there is no indication of the scope of such works.

5.1.3 Recommendations

SIMTA's proposal has not been identified in the current planned IMT development program and there are no appropriate justifications on the demand for the project within the identified timeframe, which is a key requirement under the DGRs. If SIMTA wants to undertake the project in the specified timeframe, the following additional information is required:

- Demonstrate commitment from ARTC in relation to the expansionary infrastructure to service the SIMTA's site and the funding arrangement.
- Provide the scope and concept design of the expansionary infrastructure and the environmental assessment for such works.
- Undertake further need assessment on the demand for SIMTA's proposal, taking into account the capacity proposed by the Moorebank Project Office and the Eastern Creek project.
- Undertake research and provide raw data from the existing IMTs showing their capacities and the split between local and inter state freight.

5.2 Location of SIMTA & Geographic Distribution of IMT

A Technical Note on the Strategic Freight Demand, prepared by Hyder was submitted with the SIMTA's project. The Technical Note seeks to:

- determines the catchment size served by SIMTA and each IMT in 2016 and 2025,
- determine the container truck movements within the SIMTA catchment as input into detailed traffic engineering evaluation of the report, and
- determine the overall movement of container trucks to/from Port Botany and other IMTs with and without ISIMTA as input into the metropolitan wide project team.

The Technical Note provides valid information on the geographic catchment and this analysis needs to be considered in the context of the planned Commonwealth Moorebank proposal and the Eastern Creek proposal.

It is important to note that the operation of an IMT is predicated by the total cost of the container supply chain and the market catchment for distribution of containers. The locations, distribution and volume of container freight generated in each catchment area influence the demand for the IMT. Warehouses choose to use an IMT as oppose to using a road base transport system because of the cost and time saving provided by the IMT. If the warehouse is located outside a certain distance of the IMT, the cost of transporting containers to the IMT will become uneconomically and they will either choose to travel directly to Port Botany or travel to another IMT closer to their location.

In essence, there is no obvious benefit of clustering IMTs in one location because the ultimate decision is based on the distance and efficiency of transporting goods from warehouses to Port Botany. It is therefore important to design a network of IMTs to capture the different warehouse locations and to plan for the truck routes to maximise the efficiency of traveling from the warehouses to the IMT and to minimise the impacts on the local road network.

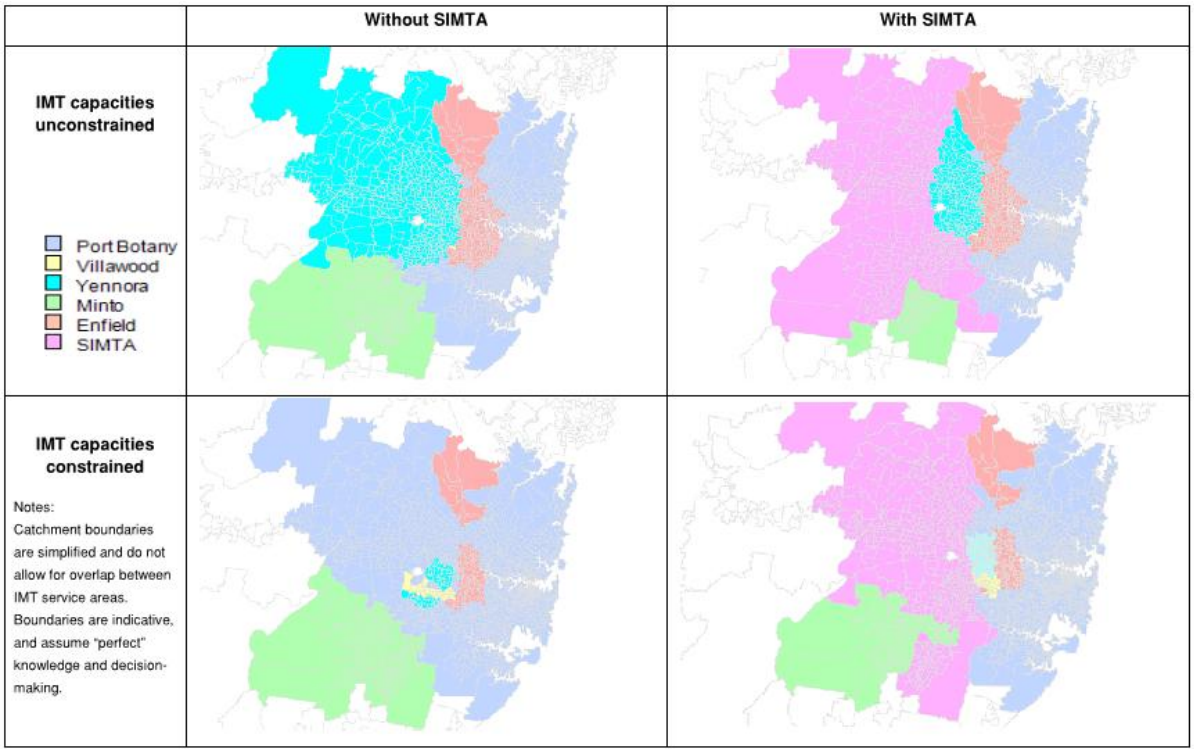
5.2.1 Summary of SIMTA's Strategic Freight Demand Assessment

SIMT's proposal includes catchment plans based on:

- Container distribution data obtained from a survey in March 2000 – this forms the base container distribution data;
- Projected container distribution based on the current forecasts of changing employment types in Sydney. It distinguishes between blue collar, white collar and retail employment and suggests that blue collar employment is the most appropriate available forecast to measure container activities.

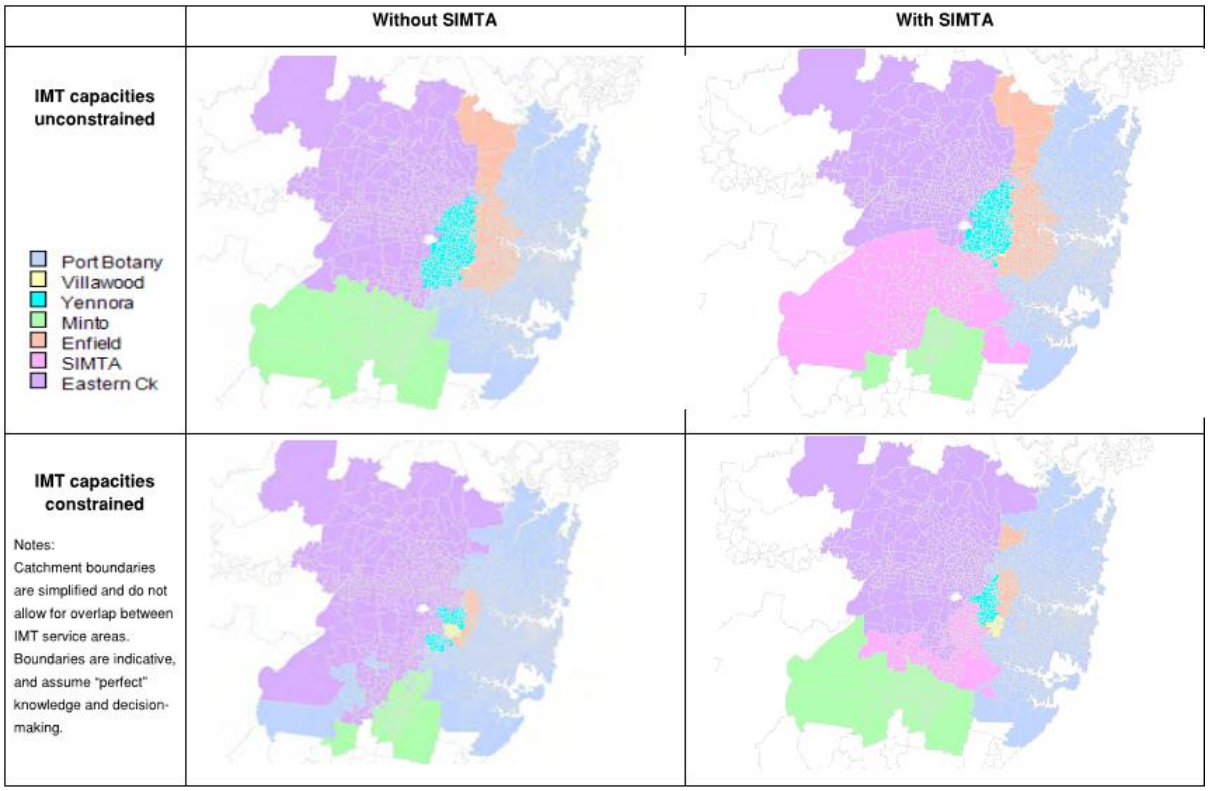
The IMT catchments were then determined based on the maximum throughput of each IMT and using the forecast regional container demand (generated based on employment forecast data) to model the most cost effective supply chain. These catchments are identified in **Figures 30 and 31**.

Figure 30 - IMT Catchment Maps 2016



(Source: Hyder (2011) Technical Note 1 Strategic Fright Demand (Appendix D of Traffic and Transport Impact Assessment), Pg 21)

Figure 31 – IMT Catchment Map – 2025



(Source: Hyder (2011) Technical Note 1 Strategic Fright Demand (Appendix D of Traffic and Transport Impact Assessment), Pg 22)

Based on the catchment analysis, the Hyder report suggests that:

- *In 2016, if SIMTA is not operational, direct trucking from Port Botany would delivery over 70% of the market, largely as a result of inadequacy of IMT capacity, not because they are uncompetitive in terms of supply chain costs.*
- *With SIMTA in operation, it has the capability to attract a significant proportion of the TEU market (up to 35%), thus reducing the trucking demand from Port Botany to as little as 40% of the total import market.*
- *Even in 2016, when SIMTA would still be in start-up mode, it is sufficiently cost competitive to attract its long-term target throughput of 500,000 import TEUs per annum. The timing of the staged development of SIMTA may somewhat reduce its market capture in early years, but the latent demand nevertheless would still exist.*
- *Note, in 2016, there is sufficient demand forecast for SIMTA to operate at 100% of its final capacity, taking the demand for Yennora and Enfield in excess of the capacity of these terminals.*
- *By 2025, additional IMT capacity will be essential to deliver the forecast 5 million TEU through Port Botany. A location in west-northwest Sydney has been assumed. In 2025, SIMTA would attract containers from a reasonably clearly defined and localised catchment including Liverpool and part of the South West and Industrial West.*
- *Without SIMTA, much of Liverpool would be served by road direct from the Port.*
- *By 2025, the demand for containers in the South West would exceed the current capacity of Minto IMT. In the analysis it has been assumed that sufficient IMT facilities would be available to meet this demand, although none is currently being planned.*

On the basis of the catchment analysis, Hyder evaluats the impacts on the local road network at two levels:

- Metropolitan wide changes in truck movement and the resultant changes in vehicle km of travel and other environmental indicators.
- Additional truck traffic generated by container movement from and to the SIMTA proposal, including the number and geographic distribution of trick trips.

However no data has been provided in the Strategic Freight Demand report or the main Traffic report.

5.2.2 Recommendations

Cardno is unable to make a full assessment of the SIMTA's proposition in its catchment analysis due to the lack of clarity in the data used and the unclear assumptions. In order to understand the full implications of SIMTA's assessment, the following additional information should be provided:

- There is no information on the source of the base year container distribution data, other than quoting a survey undertaken in March 2000. There is no source of the survey and no indication of the detail, assumptions or methodology of such survey. This information should be provided and the raw data of the survey should be submitted.
- Using employment data and employment projection to determine container distribution is not considered appropriate without understanding the assumptions of the original employment projection. It is more appropriate to use the current and future industrial land use data (ie. current and future zoning) to determine container distribution. Additional analysis of zoning should be undertaken to further derive a pattern of container distribution for the base year and future years.
- No consideration of the Moorebank Project Office's proposal and its affectation to the SIMTA's catchment is provided. The report notes that the Commonwealth proposal is not as advanced as the SIMTA's proposal. However Eastern Creek, which has not even progressed to a development application stage, is included. There is inconsistent assumption in the methodology.

A new catchment analysis should be submitted taking into account all planned proposals, including SIMTA, Moorebank Project Office and Eastern Creek.

- The catchment plans and distribution forecast do not include any indications of the truck routes assumptions used in the model. It is noted that the model uses the 'most cost effective supply chain' to determine the catchment area of the individual industrial activity. The modeling results and truck routes need to be presented in the additional information submitted by SIMTA, as well as the data behind the model.
- As suggested in the traffic assessment in **Chapter 4.1** above, the main Hyder traffic report has not considered the impacts on the local road network and there is insufficient information to determine the likely truck routes and the potential impacts. These information need to be submitted for further consideration on impacts on local roads.
- Based on the revised catchment and demand analysis, justification needs to be given to provide the reasons for co-locating two IMTs at the same location with a total capacity of 2.5 million TEU per annum. If the demand within the identified catchment does not justify such capacity, the proposal needs to be revised to consider the following alternatives:
    - Reduce the capacity of this development to meet the required demand within the appropriate timeframe.
    - Consider the opportunities to upgrade or expand the existing IMTs, based on the catchment demand, current and future warehouse distribution and truck movements

6 Conclusions

This report focuses on the key components of the EA, including the scope of the development, the impact assessment, the strategic justifications and the statutory compliance.

The overall conclusion is that the EA and the supporting documents do not contain sufficient information to allow a proper assessment of the project. There are a number of shortcomings with the application which can be summarised as follows:

6.1 Scope of Development

- The definition of the scope of the development is unclear
- There is limited consideration of the off site works required to undertake the project in its initial phases.
- The land use on the site is unclear and inconsistent between different reports.
- The location, scale and height of the structures on the site is unclear.
- The quality of the submitted Concept Plan does not contain sufficient information to allow valid assessment of the proposal.
- There is no indicative commitment from the landowners, whose lands will be affected by the off site works of this proposal, to allow for this development.
- The timing of the proposal does not align with the existing lease term and there is no indication that the existing tenant will vacate the site to allow the construction of the project to commence in mid 2012.
- There are no commitments from stakeholders, in particular the ARTC, to allow connection from the site to the SSFL.
- The indicative perspectives are misleading and they do not provide appropriate representation of the development.
- The concept design does not take into account the adjoining Moorebank Project Office's proposal. There is no obvious coordinated design between the two proposals.

6.2 Environmental Impact Assessment

- The environmental impact assessments are not based on the full scope of the assessment and there are limited assessments on the offsite works.
- All recommended mitigation measures identified in the impact assessments are not included in the proposed scope of works and the report simply defers these works to the project application stage. Even if this is a Concept Application, the full scope of the development is fundamental to ensure the project can be delivered as per the applicant's proposal. The lack of information does not allow an appropriate level of impact assessment.
- There is no indication of the proposed routes of truck movements between the warehouses and the intermodal terminal. The environmental impacts resulting from the increase in truck movements on local and regional roads cannot be assessed.
- The proposal seems to have significantly over-estimated the economic and employment benefits of the development.
- There is no consideration of the cumulative impacts as a result of the subject development and the Moorebank Project Office's proposal.

- The appropriateness of the consultation methodology (when taking into account local demographics) is questioned and there is no evidence to show that the issues identified by the public have been addressed in the proposal.
- Due to the un-coordinated design between this and the Commonwealth Government's proposals, the development represents an inefficient use of land, which is contrary to the objective of the EP&A Act.
- The proposed development does not comply with the local planning controls.

6.3 Strategic Justification

- There is no consideration of the need for two IMTs in one location.
- The demand analysis is based on unpublished documents and it is impossible to verify the assessments.
- There is no assessment on the volume of container import/export within the Liverpool catchment area and there is no evidence to justify the proposed 1.0 million TEU.
- The methodology for the catchment analysis is inappropriate and there is no evidence to show that there is sufficient demand in the catchment to support two IMTs in Moorebank.
- There is no consideration of an alternative design or proposal, either by expanding the existing IMTs in Sydney or by combing with the Commonwealth Government's proposal to address the demand.

7 Recommendations

Having regard to the report's findings, it is recommended that Liverpool City Council lodge an urgent submission to the DoPI requesting the following matters be addressed and the application be readvertised.

7.1 Description of Development

A revised description of the proposed development should be provided to include:

- The size of the warehouse and distribution centres
- The types of proposed retail activities
- The justifications and need for a hotel
- Where are these activities located and how do they relate to the surrounding land uses and Moorebank Ave?
- How would they operate?

7.2 Detailed Concept Plan

A detailed concept plan must be submitted to include:

- A realistic depiction of the indicative building footprint and envelopes of all structures on site
- All proposed uses on the site and how these uses physically relate to each other
- Concept design of the internal road network showing road widths and turning areas
- Concept design of the access points
- Relationship of the proposed accesses with the entry points to the adjoining Moorebank Project Office intermodal facility
- Concept design of the rail corridor of appropriate width within the site and how the warehouses and the intermodal terminal physically relate to the rail corridor.
- Concept design of the rail spur outside the site boundary, including appropriate curvature and correct location that does not overlap on the adjoining Defence land.
- Concept design of the bridges across Anzac Creek and Georges River
- Concept design of the grade separated crossing at Moorebank Ave and the East Hills Passenger Line showing the extent of upgrades required to the crossing
- Concept design of the proposed duplication of the East Hills Passenger Line showing how this additional rail line can be physically fit and the widening of the existing railway corridor.

7.3 Proposed Rail Spur

Details of the proposed rail spur must be submitted to include:

- Concept design of the rail spur and alternative locations and design and justifications for the chosen design options.
- Concept design of the crossing on Anzac Creek and Georges River and the grade separated crossing at Moorbank Ave and the existing passenger line.

- Consideration of using the existing disused railway line for the proposed rail spur.
- Consideration of using the proposed rail spur of the Moorebank Project Office's proposal and evidence to demonstrate that SIMTA and the Moorebank Project Office have made an effort to resolve this matter.
- Concept design of all expansionary infrastructure to the SSFL required to provide the required capacity sought by SIMTA.
- Commitments from the ARTC to the expansionary infrastructure and indication of the funding arrangement, timing of the delivery and the scope of works.
- Evidence that land ownership issues are resolved for the expansionary infrastructure and the rail spur.
- Preliminary environmental assessment to be undertaken for the rail spur alignment and the expansionary infrastructure.

7.4 Timing and Staging

The applicant must provide the following confirmation on the timing of the development:

- Written confirmation from the Department of Defence that the DNSDC will vacate the site upon the expiry of the current lease term.
- Evidence of communication with affected land owners affected by the proposed rail spur and their indicative consent for such works to traverse their land.
- Commitments from the ARTC to the expansionary infrastructure and indication of the funding arrangement, timing of the delivery and the scope of works.
- Evidence that land ownership issues are resolved for the expansionary infrastructure and the rail spur.
- Revised staging and timing schedule and revised assessments to align with the revised timeframes
- A realistic staging plan showing how different stages of the development relate to each other and the works involved in each stage. Provide realistic timing for each stage of construction.
- A staging program that combines the proposed timeframe for the SIMTA's and the Moorebank Project Office's proposal. Evidence to demonstrate how the proposed construction timeframe can be co-ordinated to minimise impacts on the residents and adjoining activities.

7.5 Operational Details

- Details of how the intermodal terminal operates within the site, eg. how containers are loaded and unloaded from the trucks and onto the train wagon, the relationship between the warehouse and the terminal, movement pattern of the trucks, procedures to handle, store and move containers, any quarantine or security controls of the content of the containers, etc.
- Detailed description of the routes that will be used by the trucks to the development site and consideration of the traffic management requirements for the routes, including any proposed induction to truck drivers to use the chosen routes.
- Number of workers on site at any one time. Resting places for workers and its capacity.
- Accident handling procedures.

7.6 EPBC Referral

- The applicant must submit evidence that a referral to the Commonwealth Minister under EPBC Act has been carried out, and the appropriate assessment be submitted with the EA in accordance with the outcomes of the referral.

7.7 Traffic Assessment

To address the deficiencies of the traffic and transport section of the EA Report several key steps need to be undertaken:

- Details of the 2011 and 2031 road networks used in the Strategic and Paramics Models should be made available.
- Details of the future land use data for the 2031 transport model should be made available especially the assumptions adopted for the Liverpool LGA.
- The transport modelling should be repeated to include the Commonwealth Intermodal Site when details become available.
- The traffic modelling should by undertaken for intervening years to show the impact of intermodal traffic as either/or the SIMTA and Commonwealth intermodal sites ramp up from 2015 to 2031.
- Make available the AM and PM peak hour traffic flow results produced by the transport models on all roads within the Liverpool LGA included in the model. The modelled results should clearly distinguish traffic flows without either intermodal terminal and with one or other or both intermodal sites. The traffic flow results must clearly show the car and truck movements generated by the intermodal sites on Council roads.
- The traffic models should be undertaken to include the southern access route to the site via a new road link between the Hume Highway and Moorebank Ave via Cambridge Ave.
- A more robust determination of the level of employment on the site should be undertaken as there is some scepticism on the employment levels used in the EA report. The number of employees on the site directly relate to the number of car movements to and from the site in the peak hours.

7.8 Air

The applicant must submit a revised air impact assessment to include:

- Clarification on whether there will be any refrigerated or frozen materials handling and storage. No emissions related to refrigeration have been considered, and if refrigeration is proposed this is required.
- Will there be any space heating of warehouses? No on site fuel consumption for space heating of warehouses or offices has been considered.
- An impact assessment for ozone, hydrocarbons and airborne toxics is required as these pollutants have not been adequately assessed.
- Technical details of the dispersion model inputs is required (see Table 2 above) in order that the assumptions made in the modelling can be reviewed.
- Information on background SO_2, and hydrocarbon levels should be provided.
- A justification is required to show that the areas surrounding the development have an air quality suited to the additional emissions the facility will generate. This should be in the context of variability in background air quality across the Sydney basin.

- Dispersion modelling results should be provided as contours of maximum ground level concentrations as well as tabulated data at the nominated receptor so that that the impact at any point can be reviewed.
- A justification of why vehicle movement beyond Moorebank Avenue does not require consideration should be provided
- It is noted that the background levels of some pollutants are already high. Although it would appear that the addition of emissions from the SIMTA terminal will not cause any criteria to be exceeded, it will reduce available headroom for new industry or other emission sources to enter the area, possibly restricting future development. A discussion of this issue is required, particularly in respect of cumulative impacts and the proposed Commonwealth facility. For example, it is noted that PM_{10} annual average in 2009 was 26 ug/m^3, and that the predicted SIMTA contribution was 2 ug/m^3 giving a total of 28 ug/m^3 once SIMTA is operational. With a PM_{10}criteria of 30 ug/m^3 the ability for future developments is questioned.

7.9 Noise

Application must submit a revised noise impact assessment to include:

- Operational noise and vibration impacts are required to be assessed based on an agreed concept plan for the site where details of on-site structures such as warehouse buildings, rail entry and exit points and internal loops are clearly positioned;
- Consideration of enclosures for container loading and unloading onto freight trains and road haulage trucks should be provided;
- Clarification of sound power levels of plant and equipment is required, ie. are they based on actual measurements of comparable installations?
- Confirmation that all residential receivers have been included in the acoustic assessment, including new land releases at Glenfield and Casula and areas where noise exceedance is currently experienced.
- An operational stage noise model of the site using an agreed concept site plan and clarified sound power levels (as noted previously) would provide a more satisfactory acoustic assessment which would identify the requirement for noise mitigation to control noise impacts to the nearest noise affected receivers. This may indicate the need to factor in and provide suitable locations for earth berms, noise walls, position of buildings on the site to provide acoustic screening from noisy site activities etc;
- Impulsive and transient noise sources associated with the operation of the site requires further consideration, ie trains shunting, containers being handled on site (dropping of containers, containers being loaded onto empty train wagons etc) as these noises will carry across the site and potentially be audible at the nearest noise sensitive receivers, particularly during temperature inversions;
- Further consideration should be given to the assessment of cumulative noise impacts as it may be possible that the SIMTA site and Moorebank Project Office's sites may operate simultaneously, which may influence location of buildings and noise sources on the site (SIMTA).

7.10 Land Contamination

The following additional information must be provided:

- Details of previous remediation and validation reporting (if any) prepared for the SIMTA site and any requirements for remediation, monitoring or other management measures.

- A Contamination Management Plan for the SIMTA's site based on an appropriate and updated environmental assessment to show the remediation measures and monitoring program required to allow the construction of the site.
- A Contamination Management Plan for the rail corridor site to identify the appropriate remediation measures and monitoring program required to allow the construction of the rail corridor.
- A program showing the timing of the remediation works and they align with the construction program of the intermodal terminal project.
- Ongoing monitoring, auditing and reporting requirements.

7.11 Urban Design & Landscaping

The application should include a site layout plan indicating as a minimum:

- The conceptual layout of the site including building envelopes, main road layouts, arrangement of the terminal facility and broad landscape zones;
- Existing components of the heritage fabric of the site that are to be retained and which are to be removed; and
- A 3D model of the site developed as per the concept plan
- Revised perspective images showing realistic representations of the intermodal terminal and the ware houses.

7.12 Visual Impact

The following additional information must be submitted:

- The images of model showing the massing, forms, scale, height and layout of all the structures on site.
- Description of the height and size of all structures.

7.13 European Heritage

The following additional information must be submitted:

- A concept plan including building envelopes and indicating, as a minimum, what buildings on the site are proposed to be retained, relocated or demolished;
- A revised heritage report, based on the above described concept plan that adequately addresses the relevant DGR's.

7.14 Social Impacts

The applicant must undertake a full social impact assessment to ascertain the spectrum of likely impacts on surrounding residential areas and measures required to mitigate impacts. This should include the following:

- A survey of residents in Wattle Grove and Moorebank to gain an understanding of the potential social impacts on these residents,
- A detailed demographic profile of the suburbs of Wattle Grove, Holsworthy, and Hammondville,
- An assessment of fairness and equity issues for residents of Wattle Grove and Moorebank given scale and nature of operation.
- Review of the adequacy of proposed mitigation measures given the industrial nature of proposed activity,
- Review the impact on accessibility to the Georges River,
- An assessment of off-site benefits to surrounding community.

7.15 Public Consultation

The applicant must provide additional information to demonstrate the level of consultation that has been carried out to ensure unbiased, inclusive and accessible communications between the applicant and the residents. This should include details on:

- How the residents with a cultural and linguistically diverse (CALD) background are involved in the process?
- Whether the location of the CIC is appropriate or are there any options for a more accessible location?
- The reason why a resident survey has not been carried out given the significance of the project?
- Does the consultation distinguishes between the two intermodal terminals projects – one by SIMTA and one by the Moorebank Project Office?

The applicant must also provide additional information to address the following questions:

- Which issues were raised by particular stakeholder groups?
- How each issue is proposed to be addressed in the environmental assessment, and
- Whether the proposal has been altered as a result of feedback received.

7.16 Economic Impacts

The applicant must submit the following additional information:

- The potential negative economic impacts as a result of SIMTA proposal and as such do not constitute a true economic assessment. Negative economic impacts include purchase of land for rail corridor, costs for likely infrastructure upgrades, and constraint of land east of site for development purposes.
- Alternative higher order economic uses of the site.
- Impact on the Federal Governments Proposal.
- Potential cumulative impacts of both proposals.
- Potential negative impacts resulting from externalities as a result of proposal.

The applicant needs to supply PwC Report titled *'Employment Forecasts for the SIMTA Moorebank Intermodal Terminal, June 2010'* to allow assessment of the economic impact assessment.

7.17 Stormwater & Flooding

The applicant should submit the following additional information:

- If mitigation of impacts from the impediment / diversion of external catchments cannot be demonstrated, consultation with affected landowners (as per DGRs) will be appropriate.
- Clarity should be sought as to whether an integrated approach has been adopted for bio-retention / OSD devices. Drawings provided for this peer review are of such low resolution as to be generally illegible, and legible copies of the Hyder reports would be required to confirm the approach adopted.
- If an integrated approach has been adopted, checks should be made to ensure that the extended detention depth required for water quality has been excluded from the available OSD volume adopted in peak flow calculations.
- PMF impacts should be further quantified and assessed, particular in terms of any implications to emergency response planning or the safety of people in accordance with the FDM (2005).
- The PMF impacts map should be extended to incorporate the full extent of downstream impacts.
- The PMF impact map should be amended to include a 'was dry now wet' parameter, which would be valuable in assessing whether any properties may anticipate further flood affectation as a result of the proposal.
- Legible copies of the Hyder reports would be required to confirm the assessment, including a Full set of flood maps included in the unmodified Anzac Creek FRMS&P, existing scenario site catchment plan
- Off-site impacts of impediment / diversion of existing catchments should be qualified to demonstrate the effectiveness of the proposed mitigation measures.

7.18 Environmental Risk Analysis

- The scale used in assessing environmental consequence as part of the risk assessment should be documented, and the risk assessment should be revised as necessary with reference to this scale.
- The likelihood and consequence assessment before and after the application of mitigation measures should be provided for all risks.
- The following documents are identified as being control measures to manage transport and access risk. As key documents in controlling a major project risk, they should be provided prior to the EA being determined:
  - Detailed transport and accessibility impact assessment;
  - Traffic management plan;
  - Strategic and project modelling;
- Assessment of the road and rail infrastructure quality to determine capacity to handle increased traffic.
- Further justification of the transport and access risk ranking before and after application of mitigation measures is required.
- Justification of how an Air Quality Management Plan will reduce the air quality risk from Very High to Medium is required.
- Justification of how a Community Consultation and Involvement Plan will reduce the risk of community impacts during construction from Very High to Medium is required.

- Potential cumulative impacts need to be addressed.
- Responsibility for implementation of each mitigation measure needs to be identified, along with responsibility for funding each mitigation measure.
- Information about the classes of hazardous or dangerous materials which may be handled at the terminal should be clearly stated in order that the required mitigation measures and residual risks can be adequately assessed.
- An assessment of the potential for on site renewable energy generation and use should be provided.

7.19 Green House Gas Assessment

The following additional information is required form the applicant:

- A collated set of assumptions used in the air quality, noise and vibration, GHG and traffic reports should be provided. Where different input data has been used, this should be documented, and a justification made as to why the assessments undertaken can be relied upon when determining the magnitude of impacts.
- Additional data should be provided which enables the data presented to be verified. In particular, model input data and assumptions should be provided, ideally in a spreadsheet format.
- Activities in the rail corridor, including vegetation clearance should be documented and fully assessed.
- An assessment of the potential for on site renewable energy generation to off set the project GHG emissions should be provided.

7.20 Flora and Fauna Assessment

The following additional information is required form the applicant:

- The full scope of the development, including a concept deign of the rail spur, needs to be included in the application to allow for appropriate assessment of the fauna and flora impact. Due consideration must be given to the 2 threatened plant species on the site. The population of *Persoonia nutans* is considered very significant and is considered the highest biodiversity constraint in the study area. The population of *Grevillea parviflora subsp. parviflora* is also of significance and impacts on this population should be minimised.
- A referral to the Commonwealth Minister under the EPBC Act should be undertaken as part of this application to confirm if an approval is required.
- Design of the rail corridor link to avoid or at least minimise impacts on these 2 threatened plant species should be considered to conserve areas of remnant vegetation and remnant woodland which would act to mitigate impacts on the 3 threatened fauna recorded at the site.
- A map of all ecological constraints needs to be prepared to inform the design of the rail corridor link. Following the design stage, the Flora and Fauna Assessment will need to be resubmitted to include a full impact assessment.

7.21 Demand for the Proposed Development

The following information must be submitted in order to assess the need for the project:

- Demonstrate commitment from ARTC in relation to the expansionary infrastructure to service the SIMTA's site and the funding arrangement.
- Provide the scope and concept design of the expansionary infrastructure and the environmental assessment for such works.
- Undertake further need assessment on the demand for SIMTA's proposal, taking into account the capacity proposed by the Moorebank Project Office and the Eastern Creek project.
- Undertake research and provide raw data from the existing IMTs showing their capacities and the split between local and inter state freight.

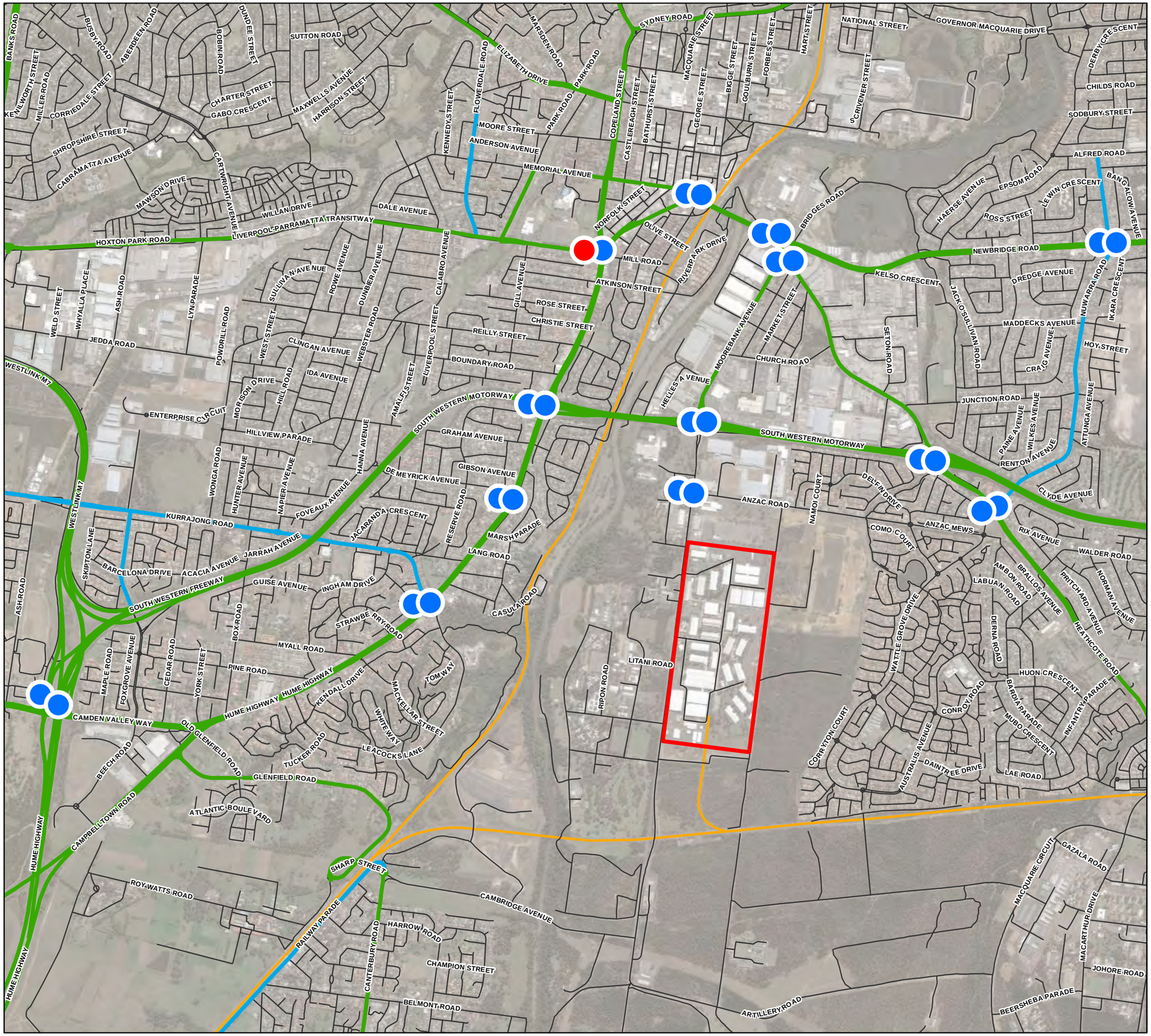
7.22 Catchment Analysis

The following additional information is required:

- There is no information on the source of the base year container distribution data, other than quoting a survey undertaken in March 2000. There is no source of the survey and no indication of the detail, assumptions or methodology of such survey. This information should be provided and the raw data of the survey should be submitted.
- Using employment data and employment projection to determine container distribution is not considered appropriate without understanding the assumptions of the original employment projection. It is more appropriate to use the current and future industrial land use data (ie. current and future zoning) to determine container distribution. Additional analysis of zoning should be undertaken to further derive a pattern of container distribution for the base year and future years.
- No consideration of the Moorebank Project Office's proposal and its affectation to the SIMTA's catchment is provided. The report notes that the Commonwealth proposal is not as advanced as the SIMTA's proposal. However Eastern Creek, which has not even progressed to a development application stage, is included. There is inconsistent assumption in the methodology. A new catchment analysis should be submitted taking into account all planned proposals, including SIMTA, Moorebank Project Office and Eastern Creek.
- The catchment plans and distribution forecast do not include any indications of the truck routes assumptions used in the model. It is noted that the model uses the 'most cost effective supply chain' to determine the catchment area of the individual industrial activity. The modeling results and truck routes need to be presented in the additional information submitted by SIMTA, as well as the data behind the model.
- The main Hyder traffic report has not considered the impacts on the local road network and there is insufficient information to determine the likely truck routes and the potential impacts. These information need to be submitted for further consideration on impacts on local roads.
- Based on the revised catchment and demand analysis, justification needs to be given to provide the reasons for co-locating two IMTs at the same location with a total capacity of 2.5 million TEU per annum. If the demand within the identified catchment does not justify such capacity, the proposal needs to be revised to consider the following alternatives:
    - Reduce the capacity of this development to meet the required demand within the appropriate timeframe.
    - Consider the opportunities to upgrade or expand the existing IMTs, based on the catchment demand, current and future warehouse distribution and truck movements

Annex A

A. Traffic Modelling Results (Cardno)



2011 Peak Hour

PROPOSED INTERMODAL TERMINAL

Legend

- SIMTA Intermodal Terminal

Level of Service

- AM
- LoS <F
- LoS >F
- PM
- Railway (LPI)

Road Hierarchy (LPI)

- RMS - State Owned
- LCC - Regional Road
- Local Roads

N W E S

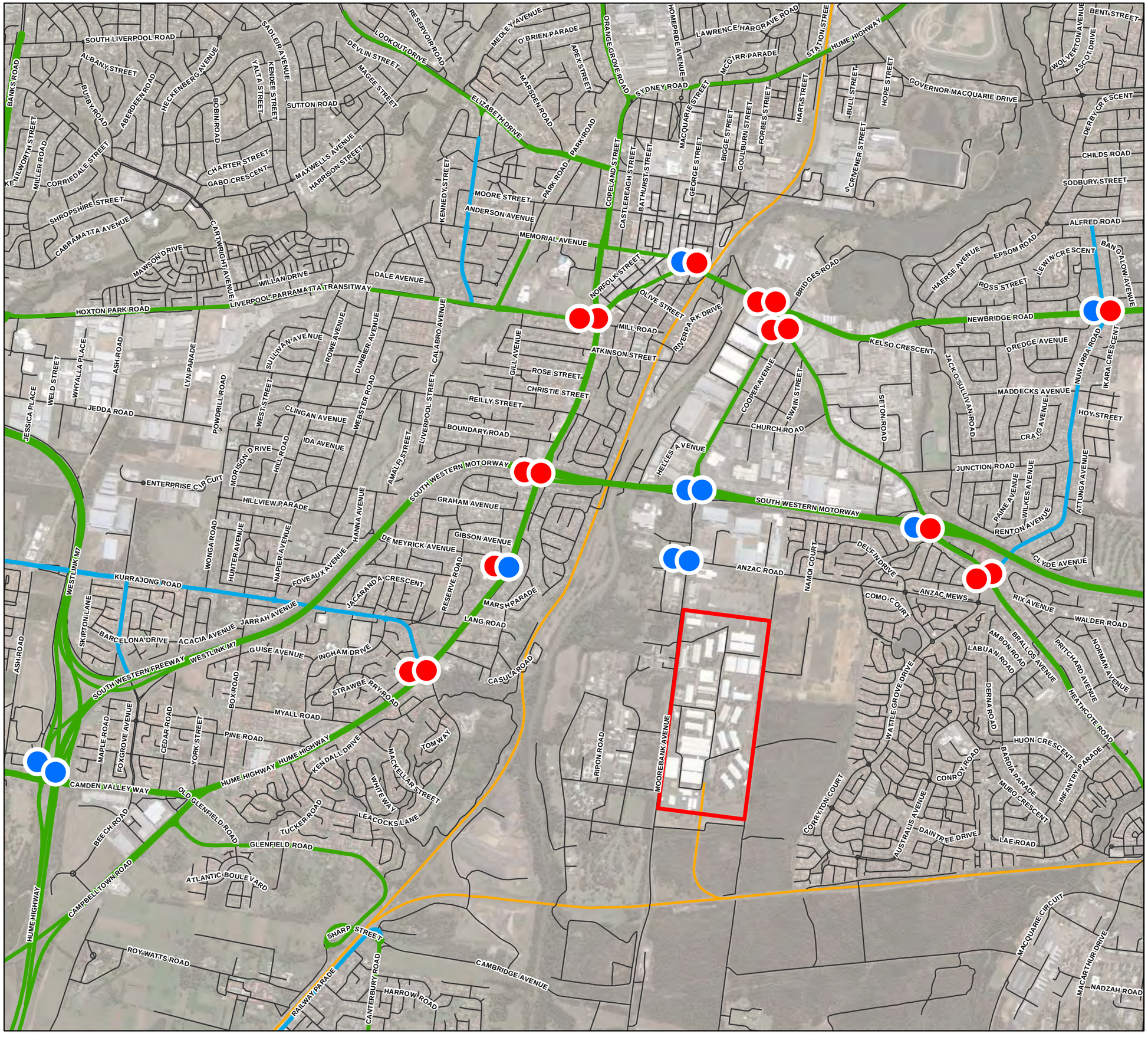
1:25,000 Scale at A3

Metres

0 250 500 750 1,000

Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2012-06-01
Coordinate System: GDA 1994 MGA Zone 56
Project:212002-01-356
Map: G1022_LoS2011Peak.mxd 01

Aerial imagery supplied by BingMaps and associated third party suppliers



2031 Peak Hour Without SIMTA

PROPOSED INTERMODAL TERMINAL

Legend

- SIMTA Intermodal Terminal

Level of Service

- AM
- LoS <F
- LoS >F
- PM
- Railway (LPI)

Road Hierarchy (LPI)

- RMS - State Owned
- LCC - Regional Road
- Local Roads

N W E S

1:25,000 Scale at A3

Metres

0 250 500 750 1,000

Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2012-06-01
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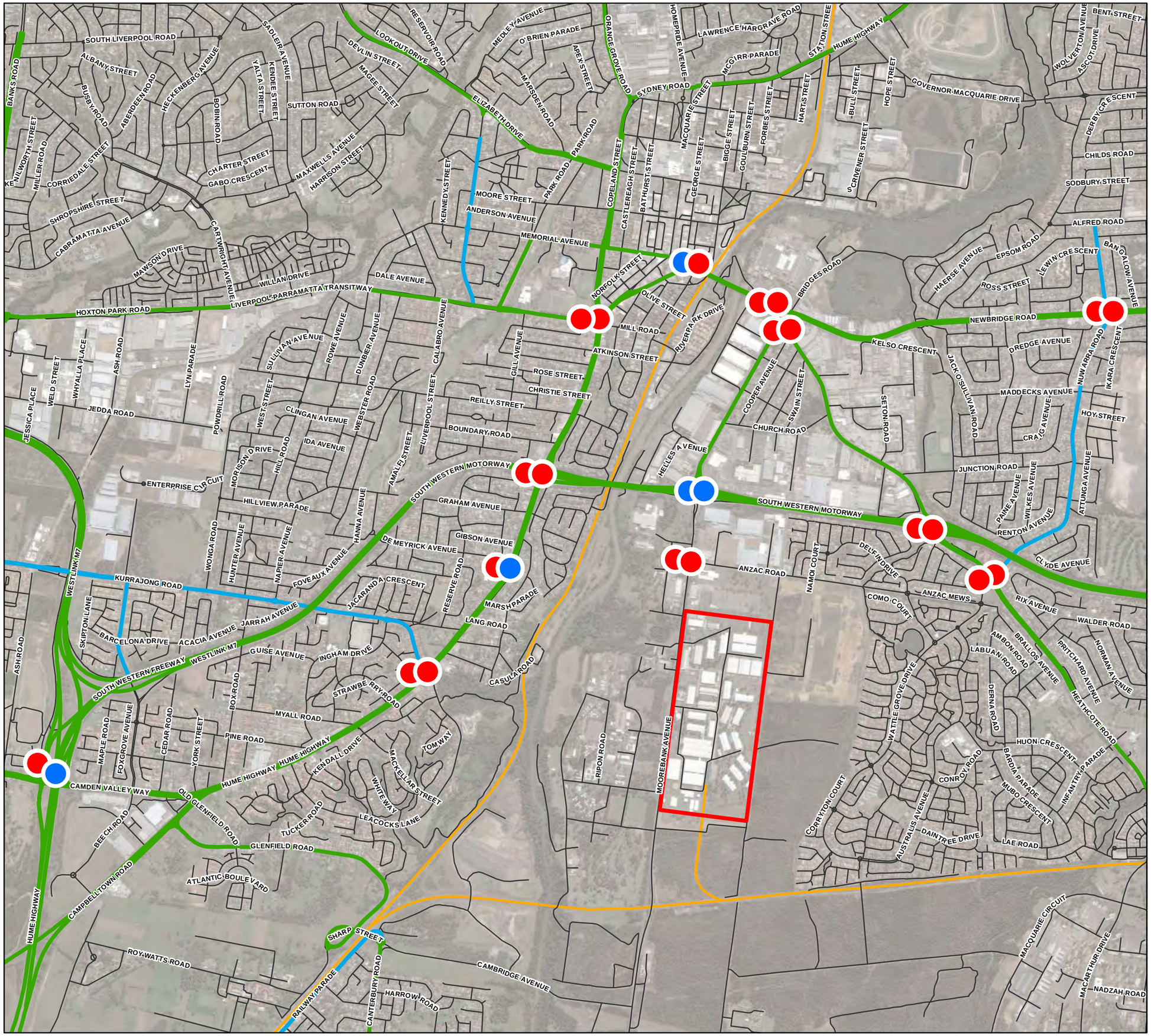
Project:212002-01-356
Map: G1023_LoS20313PeakWithoutSimta.mxd 01

Aerial imagery supplied by BingMaps and associated third party suppliers



2031 Peak Hour With SIMTA

PROPOSED INTERMODAL TERMINAL

Legend

SIMTA Intermodal Terminal

Level of Service

- AM
- LoS <F
- LoS >F
- PM

Railway (LPI)

Road Hierarchy (LPI)

- RMS - State Owned
- LCC - Regional Road
- Local Roads

N
W E
S

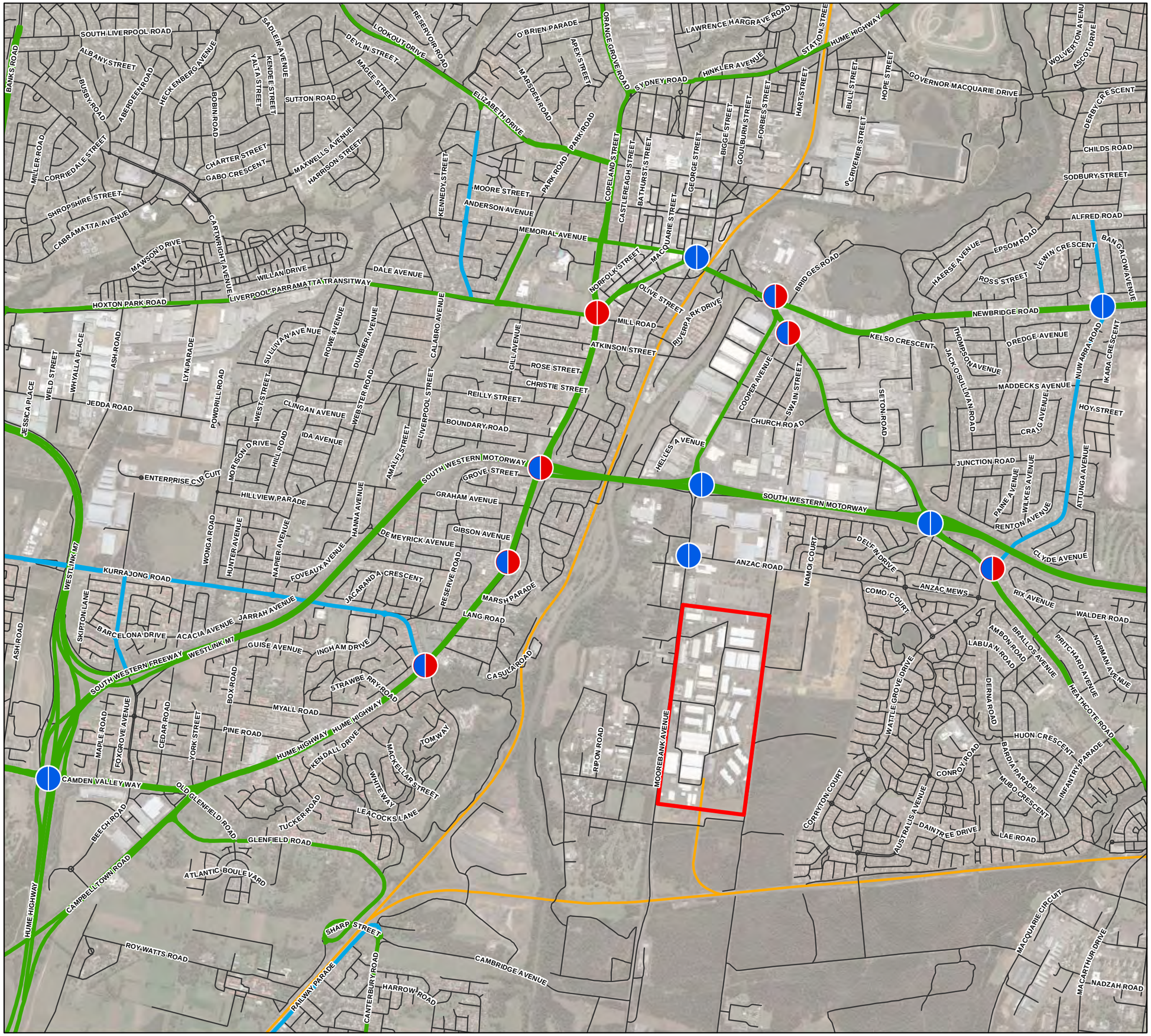
1:25,000 Scale at A3

Metres

0 250 500 750 1,000

Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2012-06-01
Coordinate System: GDA 1994 MGA Zone 56
Project:212002-01-356
Map: G1024_LoS2031PeakWithSimta.mxd 01

Aerial imagery supplied by BingMaps and associated third party suppliers



AM Peak Hour 2011 vs 2031 Without SIMTA

PROPOSED INTERMODAL TERMINAL

Legend

- SIMTA Intermodal Terminal
- 2011 / 2031
- Railway (LPI)

Road Hierarchy (LPI)

- RMS - State Owned
- LCC - Regional Road
- Local Roads

N

W E

S

1:25,000 Scale at A3

Metres

0 250 500 750 1,000

Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
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Project:212002-01-356
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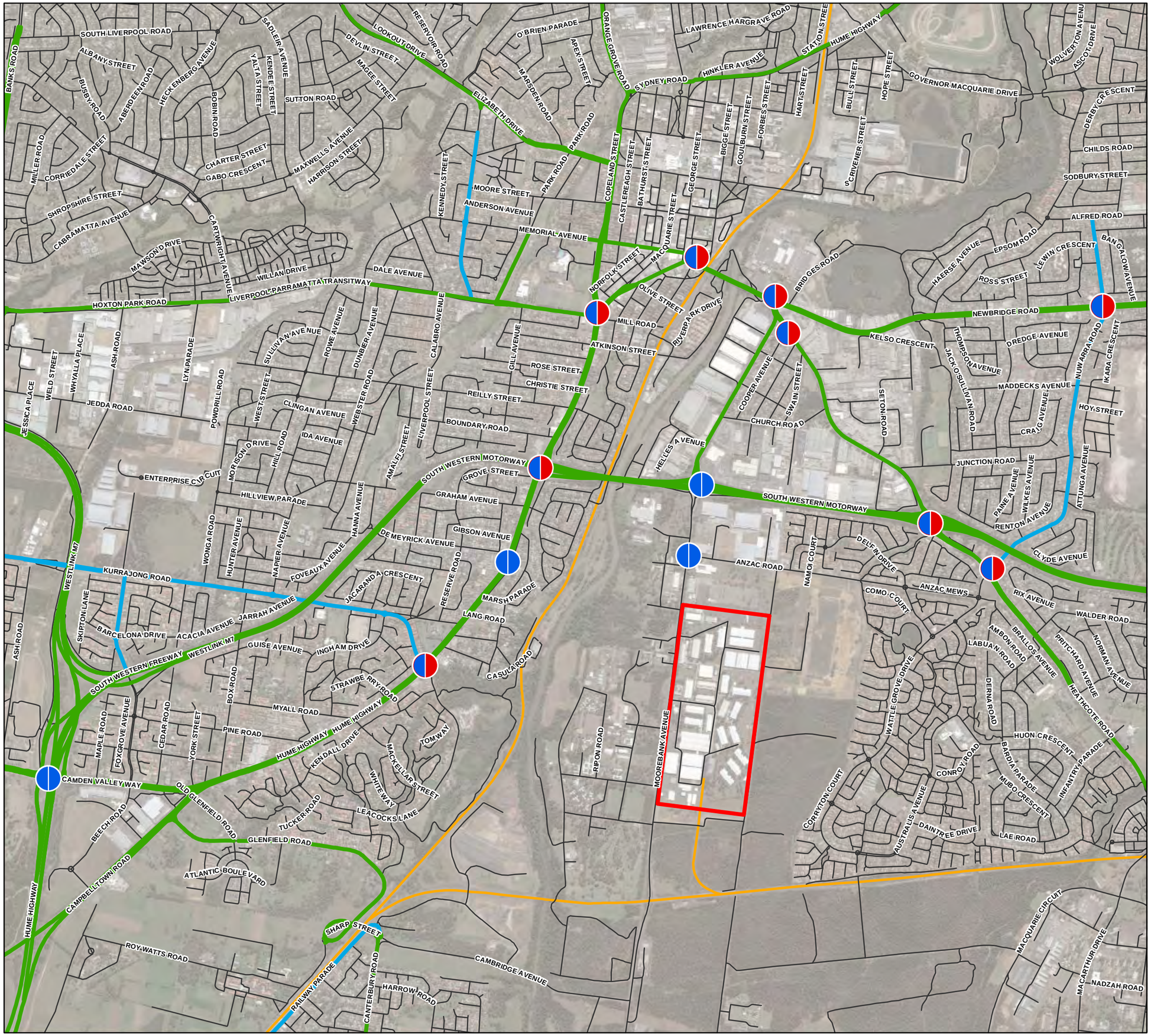

PM Peak Hour 2011 vs 2031 Without SIMTA

PROPOSED INTERMODAL TERMINAL

Legend

- SIMTA Intermodal Terminal
- 2011 / 2031
- Railway (LPI)

Road Hierarchy (LPI)

- RMS - State Owned
- LCC - Regional Road
- Local Roads

N
W E
S

1:25,000 Scale at A3

Metres

0 250 500 750 1,000

Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
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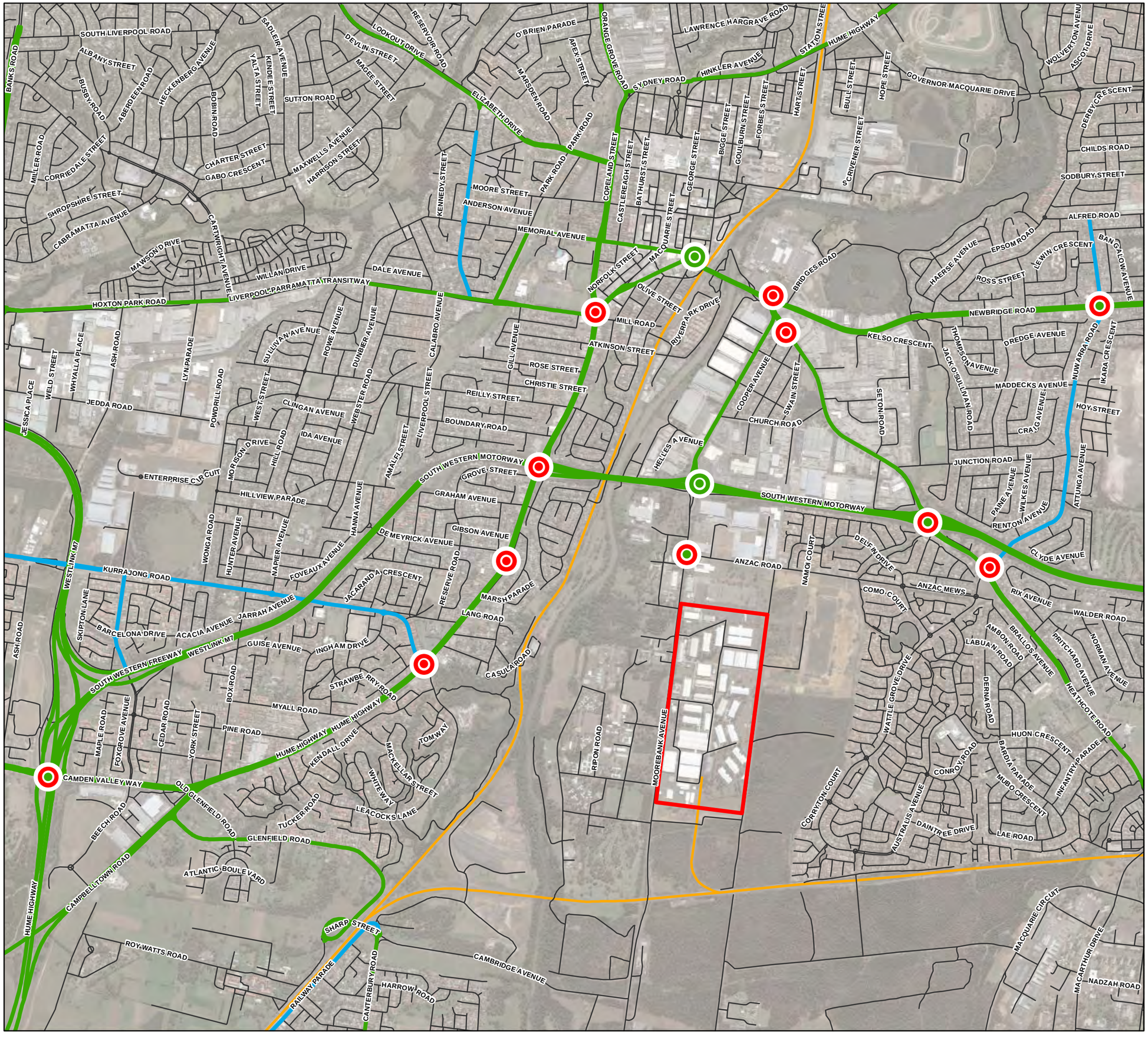
Aerial imagery supplied by BingMaps and associated third party suppliers



2031 AM Peak Hour With & Without SIMTA

PROPOSED INTERMODAL TERMINAL

Legend

- SIMTA Intermodal Terminal
- WITH → WITHOUT
- Local Roads
- Railway (LPI)

Road Hierarchy (LPI)

- RMS - State Owned
- LCC - Regional Road

N W E S

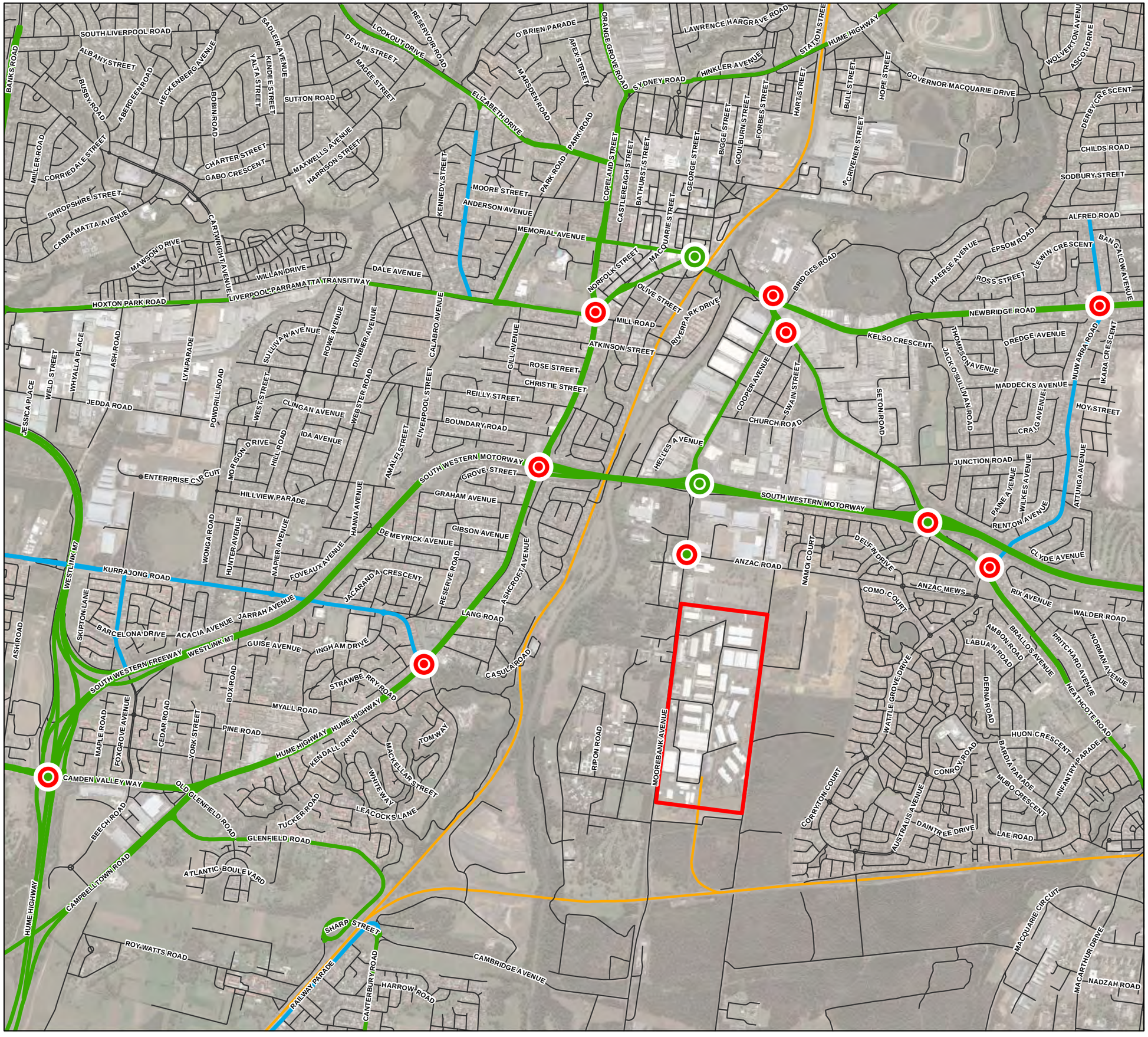
1:25,000 Scale at A3

Metres

0 250 500 750 1,000

Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2012-06-01
Coordinate System: GDA 1994 MGA Zone 56
Project:212002-01-356
Map: G1027_LoS2031AMPeak.mxd 01

Aerial imagery supplied by BingMaps and associated third party suppliers



2031 PM Peak Hour With & Without SIMTA

PROPOSED INTERMODAL TERMINAL

Legend

- SIMTA Intermodal Terminal
- WITH → WITHOUT
- Local Roads
- Railway (LPI)

Road Hierarchy (LPI)

- RMS - State Owned
- LCC - Regional Road

N W E S

1:25,000 Scale at A3

Metres

0 250 500 750 1,000

Cardno

Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2012-06-01
Coordinate System: GDA 1994 MGA Zone 56
Project:212002-01-356
Map: G1028_LoS2031PMPeak.mxd 01

Aerial imagery supplied by BingMaps and associated third party suppliers

campbelltown
city council

25 May 2012

Ms K Seretis
Manager – Rail and Ports Projects
Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2011

Dear Ms Seretis

Re: Exhibition of Environmental Assessment for SIMTA Intermodal Terminal Facility (MP_10/23873)

I refer to the Department's notification of a Concept Application and its accompanying Environmental Assessment (EA) for the SIMTA Intermodal Terminal Facility at Moorebank. Council appreciates the opportunity to comment on the proposal and raises the following issues and matters for further investigation and consideration by the Department. Council is not supportive of the proposal given the range and extent of potential impacts associated with the Development.

1. **Conceptual Rail Access**

Council notes the rail access proposed to service the development site is conceptual in its nature, with what appears to be limited detailed discussion undertaken with adjoining land owners to ensure that this vital link is constructed as part of the development. The EA's comment that *"The final alignment of the rail link will be determined through further design development which will be undertaken prior to lodgement of a subsequent Project Application over the rail corridor land"* is not considered satisfactory. The rail link is an absolutely vital component and should be considered as part of the development.

Failure to secure the appropriate rail access must mean that the proposed intermodal facility cannot proceed.

There has been little information provided with the application that provides any security for the link's construction, noting that the EA indicates that the proponent does not own or have access to the land at this point in time.

Civic Centre Queen Street Campbelltown PO Box 57 Campbelltown NSW 2560 DX5114
Telephone 02 4645 4000 Facsimile 02 4645 4111 TTY 02 4645 4615
Email council@campbelltown.nsw.gov.au Web www.campbelltown.nsw.gov.au
ABN 31 459 914 087

The uncertainty associated with this link's potential to be constructed and the resultant impact that its non-delivery would have on the numbers of containers delivered/exported by road versus rail, is of major concern to Council.

Accordingly, Council would recommend that any approval of the Application incorporate the following condition:

> *The rail link to/from the Southern Sydney Freight Line is to be constructed and operational prior to commencement of any operations at the SIMTA site.*

2. Impacts on the Local Road Network

Council is aware that as a result of existing work being undertaken in the vicinity of the SIMTA site, the link from Moorebank Avenue to the M7 (via the M5) is currently at or very near capacity. The capacity problem for this portion of the M5 would be exacerbated by the SIMTA proposal as trucks entering and leaving the SIMTA site travel to/from other employment lands and beyond.

Council is very conscious that existing capacity issues with this road link beyond the site would be likely to result in heavy road traffic utilising its roads through Glenfield and Macquarie Fields (including residential areas) in a bid to access the M7 or F5 (Hume Highway) southbound. Particular concern is held by Council over the:

- capacity and suitability of the Cambridge Avenue causeway to accommodate increased heavy vehicle traffic flows given its limited width and height above the Georges River that often results in its regular closure during periods of rain;
- impact of trucks using Cambridge Avenue which is a local road; and
- impact of trucks using Glenfield Road to access the Casula M7 interchange and Hume Highway/F5 southbound.

Therefore, Council would request that any approval of the application include the following conditions:

> *The Cambridge Avenue Georges River crossing shall be upgraded such that it is suitable for the dual carriageway crossing of heavy vehicles and at a height that precludes its closure during rain periods.*

> *That a new road link between the Glenfield Road overbridge and Campbelltown Road be constructed to ensure that traffic related to the SIMTA development does not pass through residential areas as vehicles head in a north westerly direction.*

3. Other Matters

Council also requests the Department's consideration of the following issues as part of its assessment of the proposal:

- Investigation of the Moorebank Road access for the development noting that it is not a public road at this time;
- Potential noise impacts resulting from the movement of trucks, trains and containers at the site;
- Potential increase in NO_x and particulate emissions from diesel engines (truck and locomotive) in an area known to have poor air drainage; and
- The proposal's relationship to a similar development on the adjoining property along Moorebank Avenue which is presently in the planning/investigation phase.

Council appreciates the opportunity to comment on the proposal and respectfully requests that detailed consideration be given to Council's concerns raised in this letter, particularly with regard to provision of the rail link and the proposal's impact on local roads.

Council would be pleased to elaborate on these matters by means of further discussion with the Department. With this in mind, please contact me on (02) 4645 4575 to make mutually convenient arrangements to meet.

Yours sincerely

Jeff Lawrence
Director Planning and Environment

BANKSTOWN CITY COUNCIL
PO Box S, Bankstown NSW 1885 PH 02 9707 9999 FAX 02 9707 9495

General Manager

5 June 2012

Mr Chris Wilson
Executive Director Major Projects Assessment
NSW Department of Planning & Infrastructure
GPO Box 39
Sydney NSW 2001

Attention: Ms Kylie Seretis Manager Ports and Rail Infrastructure Projects

Dear Mr Wilson

Submission on Environmental Assessment – Concept Plan for SIMTA Intermodal Terminal proposal at Moorebank

Council acknowledges the opportunity to make a submission on the SIMTA Intermodal proposal at Moorebank.

Council is supportive of the establishment of a network of appropriately located intermodal terminals in Sydney to be connected to Port Botany by way of dedicated freight rail lines, to cater to the continuing rapid growth in container freight through Port Botany.

However, Council is of the view that, as a precondition to the approval for such facilities, the environmental impacts need to be adequately assessed and mitigated and also ensuring that the short, medium and long-term rail and road infrastructure capacity issues have been effectively addressed.

As it is now certain that the Commonwealth is going ahead with its proposal for a larger intermodal facility of 1.2 million TEU capacity at the same location on the SME site and that it would like to see the development of a freight intermodal hub at Moorebank, the cumulative impacts of these two clustered and significantly large intermodals must be assessed.

This is only possible if the two projects of a combined capacity of 2.2 million TEU are assessed together and the pros and cons of clustering two significantly large facilities at the same location are objectively assessed by an independent expert panel.

The City of Bankstown, being an adjacent local government area in close proximity to the proposed site, is likely to be impacted by the two proposals, particularly due to the increased heavy freight traffic through its road network, the increased noise vibration along the rail corridor, the significant potential for air quality impacts on the regional airshed, resulting in adverse impact on the health of its community.

The flow-on effects on Bankstown's arterial road networks are likely to be considerable, as some of the roads and intersections are already at or near capacity and experiencing low level of service and congestion.

In a number of areas, the assessment by the proponent has not responded to the requirements in the DGR. These are outlined in some detail in the attached comprehensive submission by Council.

Based on the review of the SIMTA proposal by Council, the submission includes a number of important recommendations.

Council's key recommendations, among others, include:

- A decision be made by the Minister to assess the two intermodal proposals (the SIMTA and the Commonwealth) together by an independent expert panel, to ensure an effective assessment of their cumulative impacts and to ensure effective and complementary mitigation measures are in place to address these.
- The proponent be required to resubmit their Concept Plan Application, with necessary further investigation and assessment to address the deficiencies identified by Council in a number of areas in the assessment of impacts from the SIMTA proposal (e.g. traffic, road and rail access capacity, air quality, noise, obtrusive lighting and risk analysis etc) as well as the proponent's failure to consider the cumulative impacts from the Commonwealth proposal, as otherwise in its current form the application has not fully responded to the DGR and therefore is not supportable.
- State and Federal Government commitment to funding a wider strategy of arterial road upgrading works be secured to support the two IMTA proposals, prior to and as part of assessing either of the IMT proposals further.
- That the relevant recommendations from the 2005 Freight Industry Advisory Board report (*Railing Port Botany's Containers*), which has been included in the DGR as an adopted Government policy, be complied with in the assessment of the proposal. These include the requirements that:
  - Future expansion of the East Hill passenger line is not compromised by the IMTs and must be ruled out at the beginning.
  - A 'zero tolerance' policy involving heavy penalties in respect of container road traffic travelling through designated residential precincts is adopted and residential road networks in the wider catchment of the intermodal terminals be identified and designated prior to approval, in order to give effect to this policy.
  - An appropriate financial disincentive to carrying containers from Port by road be legislated and applied.

Council would appreciate if the concerns raised in its submission relating to the deficiencies in the SIMTA proposal and the recommendations resulting from these receive the due consideration they merit.

Should you require further information on this or would like to discuss, please feel free to contact me on 02 9707 9524 or matthew.stewart@bankstown.nsw.gov.au

Yours sincerely

Matthew Stewart
General Manager

Attached: Submission

Bankstown City Council's Submission on Concept Plan - Application for the SIMTA Intermodal Terminal at Moorebank

1.0 Introduction

This submission is the outcome of a review by Bankstown City Council of the Concept Plan for the proposed SIMTA Moorebank Intermodal Terminal facility with an ultimate annual handling capacity of 1,000,000 TEU containers.

Council is supportive of the establishment of a network of appropriately located intermodal terminals in Sydney to be connected to Port Botany by way of dedicated freight rail lines, to cater to the continuing rapid growth in container freight through Sydney Port.

However, Council is of the view that, as a precondition to the approval for such facilities, the environmental impacts need to be adequately assessed and mitigated as necessary as well as ensuring that short, medium and long-term rail and road infrastructure capacity issues have been effectively addressed.

As it is now certain that the Commonwealth is going ahead with its proposal for another intermodal facility of even a higher capacity of 1.2 million TEU at the same location on the SME site and that it would like to see the development of a freight intermodal hub at Moorebank, the cumulative impacts of these two clustered and significantly large intermodals must be assessed. This is only possible if the two projects of a combined capacity of 2.2 million TEU are assessed together and the pros and cons of clustering two significantly large facilities are objectively assessed by an independent expert panel.

Both the projects are significantly large and of similar ultimate capacities of 1.2 million TEUs (Commonwealth) and 1 million TEUs respectively. On implementation these IMTs are likely to be Australia's largest for decades to come.

Recommendation

1. That the SIMTA and the Commonwealth IMT proposals be assessed together by an independent expert panel to ensure the cummulative impacts are effectively taken into consideration and addressed.

2.1 The 2005 Freight Infrastructure Advisory Board (FIAB) Report

In October 2005, the then Minister for Planning released the report entitled *Railing Port Botany's Containers – A Plan to Ease Pressure on Sydney's Roads*, which was prepared by the Freight Infrastructure Advisory Board (FIAB) established and commissioned by the Government to assist in the formulation of the Government's Port Freight Plan for Sydney.

This report has been included in the Director-General's Requirements (DGRs) for the SIMTA proposal as an adopted policy/plan for the NSW Government, thus providing the relevance and applicability in the assessment of the SIMTA proposal.

The report includes a number of recommendations which are relevant to the proposed SIMTA development and issues raised in this submission. These recommendations, among others, include:

- Ensure that access to the Moorebank site is delivered in a way that does not compromise the future expansion of the East Hills passenger line.
- Ensure planning for Moorebank includes design buffers to reinforce the site's separation from residential development and provide public recreation facilities along both sides of the Georges River.
- The Government adopt a 'zero tolerance' policy involving heavy penalties in respect of container road traffic travelling through designated residential Precincts
- Before projects are approved, residential areas surrounding intermodal terminals be designated in order to give effect to this policy.
- The Australian Rail Track Corporation assess the infrastructure requirements of the Sydney Metropolitan Freight Network including additional staging and passing loops.
- The timing of construction works to amplify the M5 and new road connections between the Port and the M4 take into account the Government's success in moving containers off road and onto rail.
- In the interim, planning proceed for the provision of additional truck capacity in both these corridors.
- The NSW Government pursue the implementation of a national truck tracking scheme in consultation with the industry.
- The issue of tracking intermodal trucks be revisited as soon as these new nationally consistent arrangements are in place.
- The Government legislate for a Freight Movements Management Act to give effect to the Freight Infrastructure Charge.
- The Government consider a Charge set at $30 per TEU, collected on all import and export containers
- The Charge be fully rebated for Containers carried to or from the Port by rail and Containers carried to or from the Port by road during designated night-time off peak hours.

Although some of these recommendations may require NSW Government's strategic programs for implementation, nonetheless, these recommendations are pertinent to the issues raised in the following sections.

2.2 Rapid growth in container freight through Port Botany

Container freight through Port Botany has been increasing at an average rate of 7% per annum i.e. doubling in ten years and has already exceeded 2 million TEUs, earlier than previously predicted.

According to the forecast data included in the November 2011 NSW Government submission to Infrastructure Australia entitled, *Port Botany and Sydney Airport Improvement Program* (p v), "Port Botany containerised freight volumes are expected to increase over 3.5 times or by 5.5 million TEU from 2010/11 to 2030/31. Heavy vehicles trips forecast to increase by 2.2% per annum between 2006 and 2036 and light commercial vehicle trips by 1.1% per annum.

This indicates that even if both the SIMTA and Commonwealth IMTs are fully operational by 2031, more than 5 million TEUs will still need to be carried by road freight.

3.0 The Development of an Intermodal Hub at Moorebank: Cumulative impacts of both SIMTA and Commonwealth proposals must be effectively assessed

The Federal Government has already expressed that it would like to see the development of a freight intermodal hub at Moorebank and accordingly progressing its proposal for the Commonwealth's Moorebank Intermodal facility at the SME site on Moorebank Avenue, which is in close proximity to and opposite the SIMTA site on the same road.

Both the projects are significantly large and of similar ultimate capacities of 1.2 million TEUs (Commonwealth) and 1 million TEUs respectively. On implementation these IMTs are likely to be Australia's largest for decades to come.

While the SIMTA project is currently at concept plan exhibition stage, the EIS for the Commonwealth's project is likely to be on exhibition within months, sometime later this year.

As both projects are at the same location, are of significantly high and similar capacity of 1million TEUs or more each (even individually Australia's largest and combined total capacity of 2.2 million TEUs) and both have identical 24/7/365 days operations - there is no scope for assessing the two proposals in isolation and independent of each other. This is particularly because in reality their combined and cumulative impact will be no different from a single facility of the combined total capacity.

Therefore, if any meaningful assessment of environmental impacts and infrastructure capacity to support the two operations is the objective, the cumulative impacts of the two projects need to be assessed and taken into consideration.

However, the SIMTA proposal documents on exhibition admittedly do not include any information about the cumulative impacts of the two proposals.

The various volumes/parts of the SIMTA Concept Plan and environmental assessment documents on exhibition include self-contradictory statements about assessment of cumulative impacts of SIMTA and the Commonwealth proposals, which contrary to the explicit requirement included in the DGR (Director-General's Requirements).

By way of examples:

On one hand, SIMTA's *Environmental Assessment, Part 3A Concept Application* document (p 4) states:

"The cumulative impact of the SIMTA proposal and a future Moorebank Project Office proposal will be substantially the same and accordingly, the cumulative impacts have been fully assessed within this proposal."

On the other hand, SIMTA's Transport and Accessibility Impact Assessment Vol 1(p 105) states -

"At the time of undertaking this traffic impact assessment, actual information on the size and potential traffic generation from the SME site was not available."

This is contrary to the following specific requirements included in the DGR (p2) that *transport and access* assessment must, among others, include:

"Cumulative impacts, particularly with regard to existing and proposed freight distribution facilities in the locality and potential cumulative mitigation measures..."

Regarding assessment of potential cumulative ecological impacts of the two proposals, SIMTA's *Environmental Assessment, Part 3A Concept Application* document (p 79) states:

"The cumulative impact of the development of intermodal terminals on both sites can only be quantified once environmental investigations of the SME site are undertaken as part of an application for an intermodal terminal on that site."

In regards to noise and vibration, the DGR (p 2) requires that assessment carried out should include but not limited to *"noise and vibration from all activities and sources (on and offsite) and impacts to adjoining receivers..."*

In response, SIMTA's *Environmental Assessment, Part 3A Concept Application* document (p 71) states:

"Rail Noise – noise modelling was undertaken based on 42 rail movements per 24 hours spread equally across the day, resulting in 26 movements per day period (7am to 10pm) and 16 movements per night period (10pm to 7pm) along the indicative rail link." –

This clearly indicates that noise assessment was done for the SIMTA proposal only and not for cumulative impact from the two proposals.

Similar statements have been made (in p 71) regarding road traffic noise and industrial noise resulting from typical plant/equipment and operations inside the SIMTA site only and not based on noise levels that would be already existing from other sources, including the adjoining Commonwealth intermodal's operation.

The same document from SIMTA (in p 72 under section 6.3.2 *Potential Cumulative Impacts*) then goes on to add:

"Noise modelling undertaken for the SIMTA proposal assessed the full one million TEU capacity of the freight catchment demand. The effect of development of the School of Military Engineering site would be to distribute this total freight volume between the two sites and would result in a diffusion of noise generation sources over a greater area and the reduction of freight movements along a proportion of the SSFL and nominated rail corridors for both developments."

Although SIMTA's "revised" document is dated March 2012, when the Commonwealth's Moorebank Project Office (MPO) had already progressed its proposal including finalisation of the planned capacity of 1.2 million TEU capacity, the above statement from SIMTA seems to have conveniently overlooked the facts and made an assumption that the two facilities (SIMTA and MPO) will have a combined total capacity of 1 million TEUs only.

Also, there is no evidence or technical basis to support that *"the development of the School of Military Engineering site would be to distribute this total freight volume between the two sites and would result in a diffusion of noise generation sources over a greater area and the reduction of freight movements along a proportion of the SSFL and nominated rail corridors for both developments"*, when the two planned facilities are:

- Of similar capacities (SIMTA 1m TEUs and MPO 1.2 million TEUs),
- Located next to each other
- Would be serviced by the same freight rail line/corridor and rail spurs next to each other
- Road traffic generated by both would be impacting the same stretches of surrounding road network and same sound receivers off-site

The points noted above suffice to demonstrate that the information in the documents on exhibition have not been based on any assessment of the cumulative impacts of the two proposed facilities.

A further review of the SIMTA Concept Plan and environmental assessment documents on exhibition appears to suggest that these documents are inadequate and deficient and have not responded the requirements included in the Director-General's Requirements under Section 75 of the Environmental Planning and Assessment Act 1979. This will be dealt with more specifically in the following sections in this submission.

Recommendations

Council recommends that for the reasons stated above:

2. The proponents be required to resubmit their Concept Plan Application, with necessary further investigation and assessment to consider the cumulative impact of both the SIMTA and Commonwealth proposals, as in its current form the application has not fully responded to the DGR and therefore not supportable.
3. A decision be made by the Minister to assess the two intermodal proposals (the SIMTA and the Commonwealth) in conjunction with each other, to ensure an effective assessment of their cumulative impacts and ensuring effective and complementary mitigation measures are in place.

4.0 Transport and Accessibility Impact Assessment

4.1 Road transport accessibility: cumulative impacts of proposals

A review of the information presented by the proponent demonstrates the following deficiencies in assessment:

- The DGR required the proponent's assessment to include, but not limited to: *"Cumulative impacts, particularly with regard to existing and proposed freight distribution facilities in the locality and potential cumulative mitigation measures..."*

SIMTA's Transport and Accessibility Impact Assessment Vol 1(p 105) states: *"At the time of undertaking this traffic impact assessment, actual information on the size and potential traffic generation from the SME site was not available."*

In addition to this, SIMTA's Environmental Assessment Part 3A Concept Application (p 39) states to the contrary: *As the SIMTA proposal has already been assessed on the total catchment demand, it is considered the potential cumulative impacts of the DFD* [Commonwealth] *proposal are relatively minor."*

Nothing can be further from fact than this, as the Commonwealth has already committed more than $0.5 billion to the 1.2 million TEU project and have well progressed it through the development of a detail business case, have already received the DGR and expected to exhibit the EIS later this year.

- Although SIMTA's Environmental Assessment Part 3A Concept Application (p 39) document identified two major surrounding projects (Goodman Fielder Bakery facility at 90 Moorebank Avenue and a 500,000MT construction waste recycling facility at Newbridge Road) both of which have already received DGRs – these were also conveniently excluded in the assessment.

There is therefore no evidence in the documents exhibited that the cumulative impacts of the proposal and the Commonwealth's Intermodal proposal as well as other major surrounding projects were taken into consideration at all.

4.2 Road infrastructure capacity issues

The proponent's argument in relation to relieving road congestion simply by transferring a certain volume of freight by rail, which will simply re-introduce and redistribute even greater number of heavy vehicles in the project's catchment to distribute the containers or unpacked goods, is unsubstantiated and therefore not tenable. Further analysis of cumulative traffic impacts of these heavy vehicles are essential, prior to considering the proposal.

The large areas of South West and West Sydney, which is the catchment area for the SIMTA's proposal, is forecast to experience continued significant increase in future traffic volumes to accommodate higher growth in population, employment and economy. By 2031, population in the major high growth areas to the west M5 corridor is forecast to grow by 108%. This growth would increase background traffic growth higher than all historical growth.

The assumptions used by the proponents for the future traffic projections do not appear to reflect the future background traffic growth appropriately, particularly thousands of heavy freight vehicles from the Port to South Western Sydney which will still carry containers not carried by rail. More specifically, its modelling did not use the freight traffic to be generated by the relatively larger Commonwealth Moorebank Intermodal, to be built next to the SIMTA facility. According to the proponent, the SIMTA development alone is forecast to increase average traffic growth on Moorebank Avenue up to 3.1% p.a. Given that the Commonwealth intermodal is of a higher capacity, the combined impact is expected to be more than double. This renders the proponents findings to be deficient and without any sound basis.

However, in spite of the above, the model forecasts critically low level of service (F) at the key intersections in the projects core area during both AM or PM peak, simply because of background traffic growth to 2031 and regardless of SIMTA development and will require upgrading.:

- M5 Motorway/Hume Highway
- Moorebank Avenue/Heathcote Road
- Moorebank Avenue/Newbridge Road

The M5 Motorway/Moorebank Avenue interchange is forecast to be operating with LoS D in the PM peak. A number of regional road upgrades will be required regardless of the SIMTA proposal, which means these upgrades will need to be brought forward as priorities within short to medium term.

The proponent's traffic assessment identified the following road network capacity improvements required by 2031, when the SIMTA site is fully developed, to cater for the additional traffic demands in the core area:

- Widen Moorebank Avenue to four lanes between the M5 Motorway/Moorebank Avenue grade separated interchange and the Northern SIMTA site access. Some localised improvements will be required around central access and southern access points;
- Concurrent with any four lane widening on Moorebank Avenue, the current Moorebank Avenue/Anzac Road traffic signals will require some form of widening at approach roads;
- A new signalised intersection at the Northern SIMTA entry and egress with the Moorebank Avenue; and
- Potential upgrade works at the M5 Motorway/Moorebank Avenue grade separated interchange to cater for both background and additional SIMTA traffic growth.

However, even in the absence of any firm commitment for funding or delivery timeframe, the proponents modelling used these as "committed schemes", causing concern about the validity of the results of the modelling.

Although the site is hardly serviced by public transport (only one bus service and kilometres away from rail stations), the employee traffic generation rather have been underestimated, based on the flawed assumption of "scope to encourage greater public transport share.

4.3 Potential traffic impact on Bankstown

The proponent has not assessed the potential traffic impact of the proposal outside the immediate "core area", particularly the wider catchment including adjacent road network in Bankstown likely to have both direct and flow-on impact.

- Bankstown's industrial areas include Chullora – Potts Hill, Padstow – Bankstown, Milperra – Airport and Villawood – Sefton. Although in future, once Enfield IMT is operational, bulk of the containers to Bankstown's industrial precincts should travel by road (on mainly state roads) from Enfield IMT, however the western areas of Milperra and Villawood will have better road access from Moorebank.
- Bankstown's industrial and employment centres are accessed predominantly from state roads (e.g. Canterbury Road/Milperra Road, M5, Hume Highway, Rookwood Road, Woodville Road/Henry Lawson Drive), which are already operating at or near capacity in peak hours. Therefore, any further flow-on impact will result in deteriorated service.
- The traffic impact of the two proposed intermodal terminals (IMT) in Moorebank on the adjacent road network in Bankstown LGA is expected to result in an increase in heavy freight traffic, which is likely to continue to grow, as the two IMTs are developed to their full capacities. Although a proportion of the existing direct trucking traffic from Port Botany is expected to be replaced by traffic from both Enfield and Moorebank IMTs, there will still be net growth in heavy traffic on Bankstown roads due to the IMTs and the because of rapid growth in containers through Port Botany.
- It is likely that the two IMTs will induce establishment of bulky/heavy goods warehouses and distribution centres in Bankstown, resulting in increased heavy freight traffic.
- Also, because container numbers are increasing at the rate of 7% annually, even if they are able to transport by rail 2m containers to the two IMTs at Moorebank by 2031, by then they will still have to carry another 4.6 million containers by road to various parts of Sydney, bulk of these will be destined for West and South Western Sydney. This is where the already congested, at capacity or near capacity freight and commuter routes through Bankstown will become challenging.

- The identified traffic impact of the SIMTA Moorebank IMT on Newbridge Road will flow on, beyond the "inner" area, to Milperra and Canterbury Roads and Henry Lawson Drive. These roads are already seen as an alternative to the M5 motorway during peak hours.
- Southbound peak hour traffic in Henry Lawson Drive already extends for kilometres because of the low level of service at the Milperra Road intersection.
- The level of service at the "meccano set" intersection (the Hume Highway and Henry Lawson Drive) results in congestion in all four directions.
- The only solution to further deterioration in service at both of these intersections is considered to be grade separation.
- Henry Lawson Drive particularly north of Milperra Road and the intersection with Milperra Road are already experiencing low levels of service. Because of normal growth and flow-on impact, it will deteriorate further however the RMS has only recent resurfaced this section of Henry Lawson Drive so that there does not appear to be any plans for upgrading in the near future.
- The RMS will need to bring forward the upgrading of Henry Lawson Drive and the intersection with Milperra Road.
- The M5 is already in its peak hour capacity and congested. The widening of the M5 west will be of some assistance, however the M5 East, if not duplicated, will remain the real bottleneck.
- For large trucks the steep westbound rise out of the tunnel slows traffic flow considerably. The proposed M5 east duplication will have a flatter, and hence faster exit for westbound traffic.

Recommendations

4. To comply with the DGR, the proponent be required to further investigate the traffic and transport impacts of the proposal to include cumulative impacts from:

   (a) Commonwealth's Moorebank IMT development.
   (b) Increased freight vehicles on road due to rapid growth of containers through Port Botany and South-west and Western Sydney's share of the extra 5.5 million TEU containers that will still be carried by road in 2031, as explained above and in Section 2.2 of this submission.
   (c) Traffic impact on a wider regional catchment, including Bankstown LGA, of the SIMTA proposal

5. State and Federal Government commitment to funding a wider strategy of arterial road upgrading works be ensured to support the two IMT proposals, prior to assessing either of the proposals further.

6. Heavy vehicle movements associated with the project should be restricted to the major road network and not travel through residential areas, as recommended in the 2005 FIAB report and includedin the DGR:

   - *"The Government adopt a 'zero tolerance' policy involving heavy penalties in respect of container road traffic travelling through designated residential precincts."*
   - *"Before projects are approved, residential areas surrounding intermodal terminals be designated in order to give effect to this policy."*

- *"The issue of tracking intermodal trucks be revisited as soon as these new nationally consistent arrangements are in place."*

7. To address the challenges of achieving the 40% target of freight by rail, Government implement the following recommendations from the 2005 FIAB report, as part of considering the two major IMT proposals:

   - *"The Government legislate for a Freight Movements Management Act to give effect to the Freight Infrastructure Charge."*
   - *"The Government consider a Charge set at $30 per TEU, collected on all import and export containers."*
   - *"The Charge be fully rebated for Containers carried to or from the Port by rail and Containers carried to or from the Port by road during designated night-time off peak hours."*

4. 4 Rail Access Issues

Information and analysis presented by the proponent in the SIMTA proposal documents are deficient, including some uncertainties, and inadequate for any objective assessment of the proposal. This is because:

- There is some confusion regarding the rail services required for the SIMTA proposal, when fully developed. In various parts of the proponent's documents 21 services or 21 movements or 42 movements have been used. Also, no information has been presented on the actual or forecast demand versus capacity to be available on rail route from Port Botany to the SIMTA site via SSFL, which is still under construction. This route is part of the Sydney-Melbourne rail freight route and demand is growing.
- The DGR for the SIMTA proposal includes the 2005 FIAB report as an adopted policy document of the NSW Government, making it mandatory for the proposal to comply with the report's relevant recommendations, which states:

  "Ensure that access to the Moorebank site is delivered in a way that does not compromise the future expansion of the East Hills passenger line."

- Any likely requirement for encroaching into future expansion capacity of the East Hills passenger line need to be ruled out from the beginning, to comply with the FIAB recommendations, included in the DGR.

- The proposal indicated that *"The rail link will be subject to a separate Project Approval application"*, rendering the proposal premature for assessment in its present form, in the absence of confirmation from SSFL/ARTC about the scope, route, additional expansionary infrastructure (may require two 750m loops between Leightonfield and Moorebank and the extension of the existing Moorebank loop and full duplication of the Botany line (based on initial review) funding and delivery timeframe.

- SIMTA proposal may need up to 10ha of land acquisition in different terrains and ownerships, where no flooding, geotech, ecological, contamination assessment have been carried out.

- Because the railway spur and the SSFL expansionary infrastructure are crucial parts of the proposal, the location, concept designs, land owners commitment and financial arrangement of these works must be addressed in the application to allow the proper assessment of the proposal. Without this information, the determination of this application is premature.

Recommendations

8. That the proponent be required to address the deficiencies in rail access issues of the proposal explained above and re-submit the proposal for assessment.
9. That a clarification and confirmation about the available capacity along SSFL be obtained from the ARTC, to objectively assess the proposal.
10. Any likely requirement for encroaching into future expansion capacity of the East Hills passenger line need to be ruled out from the beginning, to comply with the FIAB recommendations, included in the DGR.

5.0 Air Quality Issues

The air quality assessment for the proposal, as presented in the documents exhibited, have been inadequately scoped, methodologically flawed and therefore the 'findings' remain technically unsubstantiated. The Executive Summary (p 5) of the proponent's EA: *Part 3A Concept Application* summarises the air quality assessment as follows:

"Air Quality – the assessment concludes that the SIMTA proposal will not exceed air quality criteria during the construction or operational phases, subject to the implementation of a range of mitigation measures. Further, it has been demonstrated that the proposal will result in a net positive impact on air quality at the regional level, taking into account the increased use of rail based freight transport."

This claim does not seem to have any sound technical basis, as it is overly based on the premise of limited air quality benefits from the use of rail based freight (e.g. taking off the roads 2,700 heavy vehicles). In fact, the assessment has conveniently overlooked facts, including:

- A greater number of heavy diesel vehicles will be reintroduced and redistributed in the Intermodal's catchment area for carrying containers or goods unpacked at the IMT.
- The assessment has not included background air pollutants to be emitted along the rail corridor from diesel locomotive rail freight services by others in the future at full corridor capacity utilisation, including the Commonwealth's Moorebank IMT or several other major surrounding projects which received DGRs (see Section 4.1 above).
- Even when both the IMTs are fully developed at Moorebank by 2031, an extra 5.5 million TEUs will be carried by road freight in Sydney, significantly impacting the background air pollutant level.
- No assessment has been carried out for emissions of fine particulate matter $PM_{2.5}$ and ultra-fine PM_1, which are particularly significant for diesel emissions and are known carcinogenic compounds having significant adverse impacts on human health and respiratory systems.
- Some air pollutants have not been adequately assessed (ozone, hydrocarbons and other airborne toxics)

- The proposal completely lacks in operational and other details (e.g. type of locomotives, maximum train and truck idling time etc), without which any air quality assessment is incomplete.
- Some emission estimates have been based on assumptions used for the under construction Enfield Intermodal, which cannot be verified or validated, rather than on data from any existing and operational IMT in NSW, inter-state or overseas.
- Meteorological conditions such as annual frequent dust storms and dispersion capacity of the airshed has been misinterpreted or over estimated and exceedance data have been trivialised or arbitrarily excluded. This has resulted in uncertainty about how regional airshed (such as Bankstown) will be impacted.
- Council is concerned that the growth in heavy vehicle movements from the intermodal through Newbridge Road, M5, Henry Lawson Drive and Milperra Road will have an adverse impact on local air quality and health of residents in the Bankstown LGA.

Recommendations

11. That the proponent be required to address the deficiencies in the air quality impact assessment of the proposal, as explained above and re-submit the proposal.
12. That the proponent's assumptions and modelling for air quality impact assessment be peer reviewed by an independent expert, prior to any approval being given to the proposal.

6.0 Noise Impact Assessment

In regards to noise and vibration, the DGR (p 2) requires that assessment carried out should include but not limited to *"noise and vibration from all activities and sources (on and offsite) and impacts to adjoining receivers..."*

However, SIMTA (in p 72 under section 6.3.2 *Potential Cumulative Impacts*)'s EA document states:

"Noise modelling undertaken for the SIMTA proposal assessed the full one million TEU capacity of the freight catchment demand. The effect of development of the School of Military Engineering site would be to distribute this total freight volume between the two sites and would result in a diffusion of noise generation sources over a greater area and the reduction of freight movements along a proportion of the SSFL and nominated rail corridors for both developments."

This statement itself demonstrates the lack of any sound technical basis in the proponent's noise assessment assumptions.

The SIMTA proposal's EA: Part 3A Concept Application (Executive Summary, p 4) concludes:

*"**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 construction phase to minimise its potential impacts."*

In response, SIMTA's *Environmental Assessment, Part 3A Concept Application* document (p 71) states:

"Rail Noise – noise modelling was undertaken based on 42 rail movements per 24 hours spread equally across the day, resulting in 26 movements per day period (7am to 10pm) and 16 movements per night period (10pm to 7pm) along the indicative rail link." –

This clearly shows a lack of consideration of the noise impact from rail movements servicing the adjoining Commonwealth IMT and also background noise levels existing in the rail corridor.

That noise impact mitigation along the SSFL corridor can be a significant challenge is evident from the following observations included in the Noise & Vibration Assessment Report for the under construction Southern Sydney Freight Line (Report No. 05032, Wilkinson Murray, April 2006, Executive Summary, p 2).

"Noise monitoring and calculations undertaken for the assessment of indicated that these "planning criteria" are already exceeded at a large number of noise-sensitive locations along the route, due to a combination of passenger and freight movements."

"some residual exceedances of 3dBA or more are predicted, even with the proposed noise barriers in place."

"In particular, treatment of individual buildings is not generally considered reasonable due to:

- *The large number of receivers at which predicted noise levels after barrier treatment still exceed the "planning" noise criteria; and ....."*

Therefore, the actual SSFL residual noise impact levels depicted above, even with mitigation measures (such as 4m high noise barriers) proposed demonstrates the lack of any rigour in the SIMTA proposal's noise assessment.

There is no evidence that an assessment of the noise impact of heavy vehicle traffic generated by the proposal has been carried out. Some mitigation measures have been talked about the industrial noise resulting from typical plant/equipment and operations inside the SIMTA site only and not based on noise levels that would already be existing from other sources, including the adjoining Commonwealth intermodal's operation.

The noise assessment has been prepared as an inadequate preliminary assessment and not a detailed assessment as there is considerable detail that is not included in the report (including impact on sleep disturbance).

For both intermodals a more detailed study for night time rail movements is required in particular

6.1 Noise impacts in Bankstown

Assuming that the freight trains will travel 40km/h and approximately 900-1000m long, the high frequency of freight trains will cause continual noise impacts on the communities in Chester Hill and Sefton. SIMTA proposal seems to project freight train movements beyond the scope of SSFL. Whether the noise mitigation works completed for SSFL is adequate in mitigating impacts from the SIMTA freight movement projections, especially around Chester Hill and Sefton rail corridor.

Recommendations

13. That the proponent be required to address the deficiencies in the assessment of noise impact of the proposal explained above and re-submit the proposal.
14. The noise impact assessment by the proponent be peer reviewed by an independent expert, prior to any approval being given to the proposal.
15. Council be provided with clarification on whether the noise mitigation works completed for SSFL is adequate to mitigate the freight movement projections, especially around Chester Hill and Sefton Rail corridor, from SIMTA and Commonwealth IMTs at Moorebank.

7.0 Impact of Obtrusive Outdoor Lighting

The proponent's Environmental Assessment does not mention compliance with the relevant Australian Standards for obtrusive lighting, light spill and sky glow. The EA should provide modelling outcome and further advice on how the proposal complies with the *AS4282-1997 Control of Obtrusive Effects of Outdoor Lighting*, rather than making a mere statement about using suitable light fittings.

8.0 Environmental Risk Analysis

Although the EA has identified significantly high risk in some areas, the risk analysis by the proponent then downgraded and recategorised these arbitrarily and without providing any credible mitigation measure. This is particularly true for air quality, noise, traffic, greenhouse gas, stormwater/flooding and onsite storage of hazardous materials.

Given the significant deficiencies and flaws in the proponent's EA as outlined above throughout this submission, the Environmental Risk Analysis of the proposal lacks any sound basis and needs to be objectively prepared afresh and peer reviewed by independent experts.

Recommendations

16. That the propent be required to provide further assessment of impact from obtrusive outdoor floodlighting from a 24/7/365 operation and credible evidence about how the proposal will comply with the *AS4282-1997 Control of Obtrusive Effects of Outdoor Lighting*
17. That the the Envirobnmental Risk Analysis of the proposal be objectively prepared afresh and peer reviewed by independent experts.

NSW GOVERNMENT | Department of Primary Industries

OUT12/10721

Ms Rebecca Newman
NSW Department of Planning & Infrastructure
GPO Box 39
SYDNEY NSW 2001

Dear Ms Newman

Re: Exhibition of Environmental Assessment for SIMTA Intermodal Terminal Facility – Concept Plan (MP10_0193)

Reference is made to your letter dated 21 March 2012 requesting comment and advice from the Department of Primary Industries on the above proposal.

It is noted that in response to your concurrent letter to the NSW Office of Water, that Office has replied separately by letter dated 24 May 2012. A copy of that letter is attached for information. Many of the issues raised by the NSW Office of Water and, as detailed below, by NSW Fisheries are similar. In particular, both agencies identify the necessity to be consulted in the detailed design of watercourse crossings and outlet structures. As such it is requested that the condition of consent that the Office of Water seeks in this regard includes consultation jointly with Fisheries NSW.

The proposal does not raise any issues from an agricultural or forests perspective.

It is also noted that the bed of the Georges River is Crown land and that a Crown road traverses part of the area to the west of the Georges River identified as the location of the proposed rail link. The proponent will need to obtain relevant approvals under the *Crown Lands Act 1989* and the *Roads Act 1993* respectively for any works that affect these lands. Crown Lands may require the Crown road be closed. The proponent should be advised to liaise with the local (Parramatta) office of Crown Lands when determining the final proposed alignment of the rail link relative to this Crown road and the associated bridge over the Georges River, and in respect to the subsequent required approvals or other actions.

It is understood that there are no comments to make on the proposal from a minerals perspective. However Mineral Resources is now a separate agency within the Resources and Energy division within NSW Trade & Investment (and not part of the Department of Primary Industries) and separate contact should be made to confirm this advice if required. I also suggest consideration, if not already undertaken, be given to the need for a wider referral of this application to NSW Trade & Investment.

The Department of Primary Industries, through Fisheries NSW, is responsible for the conservation and protection of fish stocks and key fish habitats within NSW. It is noted that

NSW Department of Primary Industries
Level 6, 201 Elizabeth Street, Sydney NSW 2000
PO Box K220, Haymarket NSW 1240
Tel: 02 8289 3999 Fax: 02 9286 3208
ABN 72 189 919 072 www.dpi.nsw.gov.au

the Georges River is an important habitat for the migratory Australian Bass, a popular recreationally-fished species. The construction of a railway line across the Georges River has the potential to impact upon this, and other, important key fish habitat.

Fisheries NSW has considered the environmental assessment and proposed mitigation measures and raises no objection to the proposal provided the following aspects of the draft Statement of Commitments are implemented:

- Best practice erosion and sediment control measures are used so that potential impacts on aquatic habitats are mitigated.
- A Vegetation Management Plan is prepared prior to construction.
- Waterway crossings are designed in accordance with Fisheries NSW *Policy and Guidelines for Fish Friendly Waterway Crossings* and *Why Do Fish Need to Cross the Road?: Fish Passage Requirements for Waterway Crossings* (See: http://www.dpi.nsw.gov.au/fisheries/habitat/protecting-habitats/toolkit#Policies-&-guidelines).
- Management plans to be prepared prior to construction indicating how potential impacts to the riparian and aquatic zones are minimised in respect to each of the construction, operation, and maintenance components of the project.
- The proposed stormwater treatment measures to mitigate the potential reduction in water quality to the Georges River are incorporated.

Fisheries NSW notes that there is no detail in respect to the design and construction of the proposed waterway crossings at this (concept) stage. The proponent should be required to consult with Fisheries NSW during finalisation of the design of the waterway crossing and when developing the Construction and Operation Management Plans relating to the waterway crossing and any other works within the riparian zone. In designing the waterway crossing the principles stated on pages 129 and 130 of the draft Statement of Commitments are recommended. Further, it is critical that the passage of fish in the Georges River is not completely obstructed during bridge construction.

The Environmental Assessment notes, in Section 3.3.2, that the Commonwealth Government is investigating the feasibility of developing another intermodal facility on neighbouring land on the opposite side of Moorebank Avenue. The construction of two intermodal facilities in this area could result in the construction of two bridges across the Georges River in close proximity to each other. The preference of this Department is that one bridge only be constructed over the river. Further, the possibility of two bridges so close to each other emphasises the necessity to ensure that the bridge designs are wholly consistent with fish-friendly crossing design principles. This is specifically required to support the migratory populations of the Australian Bass within the river.

Should you require any further information on these matters, please contact Carla Ganassin on (02) 9527 8552 or carla.ganassin@dpi.nsw.gov.au.

Yours sincerely

Phil Anquetil
Executive Director, Business Services

Date: 29 May 2012

NSW GOVERNMENT | Department of Primary Industries
Office of Water

Contact Elizabeth Cala
Phone 02 4904 2533
Fax 02 4904 2503
Email elizabeth.cala@water.nsw.gov.au
Our ref ER 21151

Your ref MP 10/23873

Infrastructure Projects
Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Attention: Rebecca Newman

Dear Rebecca

Exhibition of Environmental Assessment SIMTA Intermodal Terminal Facility (MP 10_0193)

I refer to your letter of 21 March 2012 inviting a submission on the proposed project.

The NSW Office of Water has reviewed the environmental assessment for the project and provides the following recommends of conditions of approval on the basis that the former legislative provisions under Part 3A of the *Environmental Planning and Assessment Act 1979* apply and provided the proposal receives project approval.

Recommended Conditions of Approval

1. The Proponent shall ensure that all water supplies for the project are sourced from an authorised and reliable supply.
2. The Proponent shall ensure that the taking of water for purposes other than water supply, such as dewatering during construction, is appropriately authorised.
3. The design and construction of watercourse crossings and outlet structures is to be in accordance with the *NSW Office of Water Guidelines for Controlled Activities*.
4. Watercourse crossings and outlet structures shall be designed in consultation with the NSW Office of Water.
5. The Soil and Water Management Plan and the Erosion and Sediment Control Plan shall be prepared in consultation with the NSW Office of Water.
6. The Proponent shall carry out the project in accordance with the Statement of Commitments.

If you require further information please contact Elizabeth Cala, Planning and Assessment Coordinator on (02) 4904 2533 at the Newcastle office.

Yours sincerely

Mark Mignanelli
Manager, Major Projects Mines and Assessment
24 May 2012

Australian Government
Department of Defence
Defence Support Group

RECEIVED
30 MAY 2012
Director-General

[redacted]
Head Infrastructure
Infrastructure Division
Brindabella Business Park (BP3-2-A001)
PO Box 7925
Department of Defence
CANBERRA BC ACT 2610
[redacted]

HI-ID/OUT/2012/AF10853929

Mr Sam Hadadd
Director General
Major Projects Assessment
Department of Planning and Infrastructure
PO Box 39 Sydney NSW 2001

PMU020488

Dear Mr Hadadd

Submission on Sydney Intermodal Terminal Alliance's Intermodal Terminal Facility Environmental Assessment

The attached submission provides the Department of Defence's commentary on the Environmental Assessment (EA) lodged by the Sydney Intermodal Terminal Alliance (SIMTA) on 28 March 2012 with the NSW Department of Planning and Infrastructure (DP&I).

The submission focuses on how the EA has considered and addressed the potential impact of the proposed SIMTA development on the following two elements of the Australian Defence estate:

a. The School of Military Engineering (SME) and other Australian Defence Force (ADF) Units as currently located at Moorebank; and

b. The Defence National Storage and Distribution Centre (DNSDC), which currently occupies the site on which SIMTA is proposing to construct the Intermodal Terminal Facility. SIMTA has proposed the partial consolidation of the DNSDC operations to the north of the SIMTA site.

My point of contact within the Department for any enquiries [redacted]

Yours sincerely,

[redacted]

28 May 2012

Enclosure:
1. Comments on potential impacts of the proposed SIMTA development on the Department of Defence.

Attachment 1

Potential Impacts of the Proposed SIMTA development on the Department of Defence

The EA document (p. 40) identifies:

> *The School of Military Engineering (SME) is located on the western side of Moorebank Avenue, opposite the SIMTA land. The assessment of the key issues has given consideration to the potential impacts of the SIMTA proposal on the existing uses within the SME.*

Despite this acknowledgement, however, Defence contends that many of the impact assessments in fact do not acknowledge the impact residential amenity receivers on the SME site. Consequently, minimal consideration is given to the possibility of the Defence Units remaining on site and to potential impacts that the proposed neighboring development would have on existing Defence activities until they are relocated. There is no acknowledgement or understanding of the activities conducted on site at either SME or by other Defence units. The SIMTA documentation generally assumes that SME (and other Moorebank units) would have relocated prior to development (both construction and operations) of the SIMTA proposal. It may not be the case that SME has relocated before the construction phase of SIMTA occurs, and therefore the proposal needs to address the potential impacts on the activities on the SME site in particular. Educational and residential functions are performed at SME, particularly noting that these activities are closer to the proposed SIMTA site than those generally described in the EA documentation as being the closest receptors, and Defence is concerned that the SIMTA proposal would have significant - if not unacceptable - impacts on the Defence personnel who live and work on the site.

1.1. Staging and consolidation

- Section 2.7.3 of the EA identifies the construction phase commencing in '*mid 2012 with operations commencing mid 2015*'. Given the current timing of the planning approvals process this timeline does not appear realistic.
- Defence may exercise its contractual right to extend the lease on the DNSDC site, which is owned by SIMTA, for up to 5 years when it expires in March 2013. SIMTA's proposed development of the IMT may therefore be delayed until 2018 even if the approval to develop the site is received.

1.2. Impacts on the School of Military Engineering

- Defence is concerned about the impacts on the residential school and other Defence units at Moorebank during the construction and operation of the SIMTA proposal should it proceed as suggested. SIMTA's environmental studies need to reflect likely impacts which are currently not adequately documented.
- In Section 2.7.1.2 SIMTA's EA incorrectly notes that the closest residential receivers are located in Wattle Grove, misrepresenting the proximity of the residential like property uses on the SME site.

- SIMTA's development would preclude future passenger train station development at Moorebank that would potentially service the SME population or future workforce. The rail link passes through Lot 1 in DP825352, which is owned by RailCorp and which has had a planning proposal for the development of a passenger rail station on this land for almost 20 years since the East Hills rail line was constructed.

1.3. Impacts on adjoining Commonwealth land

- Defence is concerned about impacts on its property associated with the proposed widening of the Defence owned Moorebank Ave. The issue is not explained adequately in the EA. Defence is also unclear on any proposed responsibilities or arrangements for the proposed capital upgrades and ongoing maintenance.

- Defence is concerned about traffic impacts on access to the North DNSDC site and potential impacts on the development of the West Wattle Grove site for the relocation and establishment of the DNSDC under Defence Logistic Transformation Program (DLTP). Mitigation strategies are not adequately explained in the SIMTA proposal.

- It is not clear what is proposed within the 30 m wide corridor on the SME land and the Southern Commonwealth land associated with the proposed rail link. It is not clear how SIMTA proposes to compensate Defence for the loss of the unencumbered use of that land, noting the land is also identified as being required for the proposed Commonwealth intermodal.

- Defence is not clear if there would be any impacts of the proposed northern rail connection to the SSFL on the Commonwealth owned Lot 4 in DP1130937 on the Western side of the Georges River adjoining the Glenfield Tip site. Defence has a strong interest in understanding what impact SIMTA's proposal would have on its land.

- The proposal would impact on the Defence owned Cambridge Ave and Moorebank Ave by allowing trucks to turn south, and may be in breach of the existing road use arrangement SIMTA has with Defence.

- Defence is unable to agree to any development on its lands until further information is provided on which appropriate decisions could be made.

1.4. SIMTA operations

- It is not clear if SIMTA's proposed terminal operations include provision for emergency locomotive and train stabling on site or within the proposed rail corridor. It is also unclear what rail infrastructure is required within the rail corridor (e.g. number of tracks, arrival and departure rail roads, turnouts, etc).

- It is unclear from the submission exactly how the terminal is proposed to operate, though the estimated time for each heavy vehicle to pass through the terminal is understood to be around 30 minutes. This has the potential to create a situation where the number of heavy vehicles waiting to enter the SIMTA site exceeds the internal storage capacity within the site, potentially resulting in heavy vehicle parking along the verge of Moorebank Ave. There is a high possibility that trucks would arrive early to avoid missing their booked time slot and wait idling along Moorebank Ave for their time to

enter the terminal. There are three issues associated with this activity: air quality, noise and road safety. How these matters would be addressed is not included in the EA.

- The EA does not adequately address air quality and noise impacts on living quarters at SME prior to SME's move to Holsworthy. Factors that should be considered are 'hum' noise and concentrated air emissions. Queuing along Moorebank Ave would create a road safety concern when heavy vehicles would try to negotiate a re-entry into Moorebank Ave which has a speed limit of 50 km/hr from a stationary mode. The intended mitigation measure is not described adequately.

- Furthermore, access to the site via the southernmost entry (non-signalised left-turn only) involves both private and heavy vehicles. During peak arrival times, it is unclear whether there is sufficient space for holding what could be a significant number of vehicles waiting to enter the terminal. The entry process is assumed to involve documentation/security checks for all entering traffic.

- Impacts of the proposed development on the training of working dogs on the SME site have not been adequately addressed.

- Under the staged approach to development of the SIMTA site, DNSDC would be required to consolidate on site and cohabit with SIMTA for up to eight years which would involve construction and operation phases. It has to be demonstrated that a consolidation plan can be developed to meet Defence's needs before any commitments could be made to consolidate. The indicative timing (Section 2.7.3) for staging development suggests commencement of the construction from mid-2012 (less than 2 months' time). This appears to be an extremely short period of time in which any potential consolidation could occur.

1.5. Environmental aspects

1.6. General

- Insufficient detail was provided in the proposal to allow any meaningful evaluation of the likely impacts on the environment.

1.7. Traffic

- Defence is concerned with the lack of explanation of intended mitigation in relation to increased traffic generated by the proposed development and how it would affect the following:
  - Air quality
  - Noise and vibration
  - Trucks queuing / waiting area
  - Road safety
  - Other road users
  - Southern access to Defence owned Cambridge Ave.

- In 2010 approximately 17,500 vehicles per day traversed Moorebank Ave, with 875 of these being heavy vehicles. SIMTA's development would generate an additional 6,200 movements per day (2,600 heavy vehicle and 3,600 car movements) associated with the SIMTA site development. This would have maintenance cost implications for Defence. SIMTA does not indicate how these costs would be addressed.

  Heavy vehicle movement along Moorebank Ave is around 5% (875 movements) a day of the total traffic of 17,500 vehicles per day. The addition of the SIMTA related heavy vehicle movements could raise heavy vehicle movement to around 15% of all traffic, or nearly three times the proportion of heavy vehicles currently on this road. Defence as an adjacent landowner needs to be assured that safe access can continue to be provided to its properties.

  This issue is particularly important for the section of Moorebank Ave between the proposed northernmost entry (signalised) to SIMTA and the southernmost (non-signalised left-turn only) entry. All three proposed entry points have been identified as catering for heavy vehicle movements. The rate of arrival on a standard weekday could be as regular as one heavy vehicle every 30 seconds.

- Impacts of the proposed SIMTA site entry points and the current signalised access to SME (Chatham Ave) are unclear and require further explanation.

- The EA states (Section 5.3.4) that '*actual information on the size and potential traffic generation from the SME site was not available*'. Defence is unclear if the traffic impact assessment has adequately addressed traffic impacts taking into account traffic generated by all adjacent land users. It should be clarified how SIMTA has dealt with this issue.

- It is unclear how any future access off Moorebank Ave for the potential redevelopment of DLTP at West Wattle Grove would be impacted by the proposed SIMTA development and associated traffic impacts. Defence is unclear how access may work under such a scenario.

- Northern access points proposed in the SIMTA proposal have not considered that the relocation of DNSDC to the DLTP site at West Wattle Grove has occurred and the potential concentration of traffic in that area.

- It is unclear that the proposed widening of Moorebank Ave to four lanes between the northern most SIMTA access point and the M5 would be sufficient in terms of level of service. There is no proposed upgrade on that part of Moorebank Ave south of that point on which vehicles associated with activities at SME rely for access to that site.

1.8. Heritage

- Construction of the SIMTA proposal would probably necessitate the demolition of all, or at least a majority of the site's heritage buildings. Despite the proposed mitigation strategies of archival recording, and possible relocation to a new site, the required demolition would represent an impact on heritage values.

- The assessment acknowledges that the DNSDC is highly significant for its evidence of WWII infrastructure: the proposed development's impact on these values is conceded to be 'significant'. Despite this, the assessment concluded that 'It is necessary to conserve

the site's heritage values *where possible*' "(emphasis added)" (p. 121). Similarly, the only commitment to mitigate impact is to 'mitigate this impact where practicable' (p. 113). These conclusions are not commensurate with the assessed significance of the values to be impacted.

- Defence is concerned about the impact of SIMTA development on the European heritage values on the site. The proposal involves full site development, which could potentially mean the demolition of all heritage buildings. Despite assurances about best endeavours to retain where possible, there appears to be little prospect for these structures to be adapted for re-use as a part of site wide redevelopment. The requirements of any Defence site Heritage Management Plan (HMP) may be useful to assist in guiding the proponent in relation to these heritage issues.

- The report incorrectly concludes that there are no non-Indigenous heritage constraints for the land within the SME along the railway corridor. The potential for impacting the remains of sand mining infrastructure (loading bins adjacent to the river, and a light rail line) present in this area from 1917 to 1930s has not been identified or addressed and this area may have indigenous heritage implications.

- The only firm minimum commitment regarding the extent to which impact to historic heritage values would be mitigated is the conduct of archival recordings and of further archaeological investigation at select areas. Many potential mitigation options are presented, but it is likely that following archival recording, all heritage items would be demolished without any further mitigation (such as in-situ conservation, adaptive reuse or relocation of selected items). This level of impact is not adequately acknowledged or assessed, nor would be effectively mitigated under the assessment commitments.

1.9. Ecology

- Indirect impacts from the SIMTA proposal itself are likely to be minor. However, the proposed rail spur would result in significant impacts to biodiversity as a result of vegetation clearing along the alignment of the rail spur. This vegetation is recorded as being in good condition. The proposed SIMTA rail spur would include clearing of vegetation in the proposed conservation area of the Moorebank IMT. The extent of the impact of clearing is not known as final design and proposed alignment of the rail spur is not complete. However an attempt should be made to determine the extent of clearing as a basis for seeking concept plan approval.

- It is not clear what SIMTA proposes as environmental offsets to compensate clearing the Commonwealth land.

- Vegetation mapping presented in the SIMTA ecological assessment identifies vegetation on the site to the north of the SIMTA site. Two vegetation maps presented in the ecological assessment identifies native vegetation on the northern site, although the distribution, extent and type of vegetation differs in the two maps. All vegetation mapped is listed as a threatened ecological community under the NSW *Threatened Species Conservation Act 1995*. No ground truthing has been completed to confirm vegetation on site or to determine the presence of threatened species.

1.10. Light spill

- The visual impact assessment report (p. 103) notes '*It is considered the location with the most potential for light spill is the rail transfer and container loading area*', which is closest to SME. While it was difficult to verify SIMTA's claim on the level of light spill, Defence notes that SIMTA incorrectly assumed the nearest residential property was some 400 m away from the site. Defence residential accommodation located within the critical 150 m radius would be adversely impacted, especially at night. More information is required by Defence to make a judgement regarding the proposed lighting arrangement, and its potential impact on the Defence people who live and work at SME.

1.11. Noise and vibration

- The Noise Impact Assessment recommends that noise levels from within the site are required to meet internal noise criteria. But, the assessment should also include a prediction of noise levels on sensitive receivers from noise generating activities from the SIMTA proposal.

- Operation activity and construction works as part of the SIMTA proposal would potentially be audible at the SME and may trigger external and internal noise criteria for an education institution. The SIMTA proposal should assess noise impacts at all stages of development, including assessment of simultaneous construction and operation.

- It is very likely that noise impacts from the SIMTA proposal would fall on the DNSDC population which would remain on the SIMTA owned land (currently under lease by DNSDC), and have not been addressed in the EA.

- Noise impacts from the SIMTA proposal on the proposed DLTP population which would move to the Wattle Grove site are anticipated and have not been addressed in the EA.

- No mitigation measures were proposed to minimise Defence's exposure to noise and vibration. The SME population would particularly be impacted by the noise and vibration during the construction phase. It is not clear which scenario is likely to generate the worst case noise and vibration levels: during the initial construction stage, or during the operation of the 600 m port shuttle and staged construction of the terminal.

- Noise and vibration impacts during both construction and operation phases on the residential function (principally by night) performed at SME need to be considered.

- Noise and vibration impacts during both construction and operation phases on the education function (principally by day) performed at SME need to be considered. The rail infrastructure is proposed on the western side of the SIMTA site, closest to SME (approximately 250 to 300 m). The submission claims (Section 6.2) that '*the SIMTA proposal is acoustically appropriately located for its use with relatively large buffer distances to residences and near proximity to major roads*'. This statement should be validated with reference to specific detail on buffer distances, and seems to indicate that SIMTA does not recognise the residential nature of SME.

- Section 6.3.1 states that '*vibrations from roller or impact piling could be perceptible from the residences in Holsworthy ... though limited in duration*'. It is unclear what the

vibration impacts would be during the construction phase of these activities on operations at SME.

- The noise assessment report notes (p. 9) '*noise levels at the army barracks, west of the site, are represented by monitoring Site 1. The army barracks are subject to levels of traffic noise associated with the Moorebank Avenue. An industrial noise contribution to the area of less than 35 dBA has been estimated based on site observations and noise measurements*'. It is unclear whether the stated industrial noise contribution to the area of less than 35 dBA would have any impact on the educational and residential functions at SME. Defence seeks a clarification on the nature of impact on these functions specifically.

- The noise assessment report identifies (p. 14) a site specific construction noise management level of 42 dBA in relation to the SME. The construction noise management level identified for the Wattle Grove residential community, which is further from the site, is 39 dBA. Defence seeks clarification as to why the lower management level for Wattle Grove has not been applied to the SME.

- The EA has assumed that noise criteria for the SME site is consistent with the surrounding land use and applied noise criteria for 'urban' sources, as opposed to Wattle Grove where 'suburban' noise criteria is applied. Defence is of the view that a suburban land use assumption should also be applied to the SME given that it is extensively residential.

- The EA provides projected specific construction and operational noise levels at key receiver sites. There is no context provided in the assessment as background levels are not included for comparison.

- The noise assessment report (p. 32) states that from figures 5-1 and 5-2 '*it can be seen that areas to the west of the site could accommodate noisier equipment than towards the east of the site*'. Clarification is required as to why this is the case and whether this assessment took into account the existence of educational and residential functions continuing to be undertaken within the SME site.

- The noise assessment report (p. 37) notes '*Traffic associated with the SIMTA proposal travelling along the approximately 600 metre section of Moorebank Avenue to the M5 is expected to result in an increase of up to 3 dBA in this section of road. This represents a small but just noticeable increase in noise level. There are however, no residential receptors immediately adjacent to this section of Moorebank Avenue to which this criterion applies*'. It is noted elsewhere in the submission that all three access points are to be used by heavy vehicles, not just the northern access point. Therefore clarification needs to be sought as to whether the 3dBA increase applies also to the middle and southern access points, which are closer or adjacent to residential dwelling within the SME site.

- The assessment approach and statement of compliance requires clarification. Based on the individual plant noise levels in the report, where two or more dominant noise generating plant items are in simultaneous operation the recommended source noise levels are likely to be exceeded and the operation noise goals would not be met at nearest receivers.

- Operational noise assessments resulting from traffic generated along Moorebank Ave have made an incorrect assumption that there are no residential receivers along Moorebank Ave. As the SME facility provides for residences, the noise impacts should be reassessed. Similarly, rail traffic noise has not considered residences in the SME.

1.12. Contaminated land management

- The potential hazards and risk assessment report (p. 22) identifies the potential risk activities associated with the transport of goods to and around the SIMTA site. The potential risks listed do not include off site vehicle movement, which should be added to the list.

- It is unclear from the submission (Section 8.3.1) what types/natures of dangerous goods may be handled through the IMT facility and what potential risks and mitigation strategies they may pose for the occupants of the SME site.

- The potential hazards and risk assessment report (p. 14) notes that '*Land use safety planning is essentially a mechanism for dealing with actual or potential conflicts between sources of risk, such as potentially hazardous industrial developments, and surrounding land uses. These guidelines focus on the land use safety implications of industrial hazards, in particular those arising from loss of containment of hazardous materials leading to fires, explosions and toxic releases*'. The EA has not assessed the potential risk to the possible redevelopment of DLTP on the West Wattle Grove site from loss of containment of dangerous goods within the SIMTA site.

- Disturbance and mobilisation of contaminants from development of the SIMTA site migrating towards the SME or DNSDC would be at the detriment of the respective land and site users.

- Provided that mitigation and management measures are adequately identified and implemented there is a low risk that contamination would migrate to the SME or the proposed DLTP at Wattle Grove site. More information on the extent and nature of contamination on the SIMTA site is required to provide a better understanding of the contamination issues on site and potential risk to Defence.

- Further assessment is required to gain a better understanding of the nature and extent of potential impacts that a rail link crossing Defence land would have on the SME and the potential for these impacts to present risks to the SME.

- The SIMTA proposal would need to consider the types of potentially hazardous goods stored on the SIMTA site relative to goods stored in the relocated DNSDC functions within the SIMTA site (in the short term) and the proposed DLTP site at Wattle Grove (in the long term), with respect to separation distances.

1.13. Visual impact

- Visual impact was described as "relatively low". Defence seeks clarification as to how the replacing of DNSDC warehousing (around 15 m high) on the site with 32 m high gantry cranes and 40 m high light poles can be described as 'low' visual impact from the western side of Moorebank Ave. Mitigation measures, including planting of trees with height of 20 m at maturity, may not be sufficient to minimise the visual impact.

- The submission does not appear to have considered any visual impacts of the proposed development from within the SME site. There are clear views from within this site across Moorebank Ave into the SIMTA site. Defence seeks to clarify whether these visual impacts have been assessed.

- The visual impact assessment report (p. 108) states '*Besides secure perimeter fencing there is very little landscaping or other visual screening to shield operations from the public view and that of surrounding developments*'. This appears to be inconsistent with claims elsewhere that the development of vegetation within buffers would be a visual impact mitigation measure.

- The visual impact assessment report (p. 79) states that '*Most views from within this area looking north towards the proposed development will be from existing industrial areas or from commuters travelling along Moorebank Avenue*'. This statement does not appear to acknowledge the sizeable population on site at SME and the impact on views for that population of the development of the SIMTA site.

- The visual impact assessment report does not present any representation of the visual impacts of development of the SIMTA site by night. Defence would like to request such a representation.

1.14. Air quality

- Potential impacts to air quality at SME are anticipated. The SME has not been identified as a sensitive receptor to air quality impacts predicted as a result of construction and operation of the SIMTA proposal. Assuming that SME was to remain in situ, at least during the construction phase of the SIMTA proposal, it should be considered as a receptor for the purposes of further assessments.

- The relocation of the DNSDC to the north and adjacent to the SIMTA site has not been considered in the assessment. If the DNSDC was to consolidate to the north of the SIMTA site, the facility would be the closest receptor to the SIMTA proposal. The EA needs to articulate the potential construction and operation impacts on the DLTP as a result of the SIMTA proposal.

- Queuing of trucks waiting to enter the facility along Moorebank Ave would likely create air quality impacts. The EA needs to articulate the potential impacts on the nearby Defence population from the queuing of trucks both during construction and operation phases of the SIMTA proposal.

- Further information is required to gain a more comprehensive understanding of the anticipated impacts to air quality and the intended management of these impacts.

1.15. Health Risk Assessment

- It should be noted that the population of SME is closer in just about every case than the receptors identified in Table 3.3 of the HRA Report (p. 27).

- Section 7 of the HRA Report (p. 52) addresses uncertainty analysis. It is not clear from this report what happens to air quality and impacts if the most modern equipment is not used on this site. This issue should be addressed.

1.16. Cumulative impacts

- SIMTA deals with the cumulative impact assessment on the basis of total demand for freight throughput for the area being capped at 1M TEU. Therefore, the number of trains, heavy vehicles and terminal operating equipment required to handle this 1M TEU is the same whether it is handled on one site or two. A cumulative impact assessment of both proposals operating to full capacity as per each proposals full design specifications has not been undertaken and therefore a complete potential cumulative impact assessment has not be undertaken.

1.17. Utilities

- It is not clear if the proposed utilities services to the SIMTA site can be accommodated within existing easements on Commonwealth land.

1.18. Property impacts

- SIMTA identified expansionary infrastructure would be required to facilitate its development. Items that affect the Commonwealth are listed below:

  a) Upgrade of Defence owned Moorebank Ave to a four-lane dual carriageway at the expense of the Commonwealth land currently occupied by the SME and other Defence Units.

  b) Extension of Moorebank Ave overpass (over the East Hills line) which has a potential to encroach onto the SME land due to raised elevation requiring a retaining wall.

- SIMTA proposed easements for connecting services infrastructure along the Greenhills Road axis. SIMTA currently does not have an easement along Greenhills Road south of Anzac Road. These connections need to be consistent with the development of the West Wattle Grove site for DNSDC.

- The West Wattle Grove land earmarked for the potential redevelopment of DNSDC under DLTP is described in Section 3.4 as *'there are no current plans to develop this land'*. This statement should be corrected to reflect the proposal by the Defence to potentially develop this land.

- For the purposes of undertaking further technical investigations, the proponent envisages access to potentially affected land for intrusive environmental site assessment purposes. Defence is unclear about the nature and timing of these proposed intrusive assessments.

1.19. Flooding and stormwater issues

- Increased impervious areas and removal of surface management infrastructure on the SIMTA site has the potential to increase flows discharged from the site which flows across the SME site to the Georges River via the existing constructed channel, increasing flooding and erosion risk.

- A review of the Flood Study and Storm Water Management (Hyder 2011c) shows that there will be a reduction in flows crossing the SME site in events up to and including the 100 year Average Recurrence Interval (ARI) flood event however there will be significant increases in probably mean flood (PMF) flows. As the required design standard is 100 year ARI, Defence requires confirmation that increased flows have been sufficiently mitigated by the proposed onsite detention.

- An increase in flood levels of 0.1 – 0.2 m is anticipated on the area of the SME site which drains to Anzac Creek as a direct impact from the SIMTA proposal. This is considered a significant impact and may restrict future development of the SME site should the land use change.

- The proposed bridge crossing of the Georges River may impact on SME site flooding and land stability. There has not been an assessment made of the potential flood impacts of the proposed bridge crossing of the Georges River.

- There is currently no runoff draining north towards the proposed DNSDC site from the SIMTA site nor is there likely to be post development of the SIMTA site. Therefore provided appropriate drainage and attenuation is provided in the SIMTA proposal it is not considered likely that there would be any hydrological impacts on the proposed DNSDC site.

- The SIMTA development would need to consider appropriate stormwater mitigation and attenuation devices irrespective of the existing and proposed surrounding land use.

- Potential impact of SIMTA site development on flooding of the SME site (particularly the car park opposite DNSDC HQ).

- SIMTA notes that there is a need to ensure the rail infrastructure is immune from flooding, and any rise in flood levels associated with climate change. In making the rail component immune to climate change flood effects, Defence would need to know of any potential change to the 100-year ARI on adjacent Defence land.

1.20. National security

- SIMTA's development may pose a security threat to Defence activities at the SME. The topography in the area is relatively flat and the line of sight from SIMTA's site is currently obscured by trees and shrubs. The development proposes 32 m high gantry cranes and 40 m high light poles which could serve as a viewing platform to oversee training operations at the SME and expose Defence to a high risk of a third party being able to better interpret Defence operational methods and practices.

1.21. Land owner consultation

- The EA does not demonstrate adequate engagement by the proponent regarding Commonwealth land and Defence use of it.

Australian Government

Department of Finance and Deregulation

Reference: DGP11/00040 [redacted]

Mr Sam Hadadd
Director General
Major Projects Assessment
Department of Planning and Infrastructure
PO Box 39 Sydney NSW 2001

RECEIVED
31 MAY 2012
Director-General

Dear Mr Hadadd

Submission on Sydney Intermodal Terminal Alliance's Intermodal Terminal Facility Environmental Assessment

The following submission incorporates the Department of Finance and Deregulation (Finance) commentary provided via the Moorebank Project Office (MPO) on the Environmental Assessment (EA) lodged by the Sydney Intermodal Terminal Alliance (SIMTA) on 28 March 2012 with NSW Department of Planning and Infrastructure (DP&I).

The comments focus on the following three categories:

1. Comments on the EA affecting the Department of Defence (Defence) – assessment of the potential impact by the proposed SIMTA development on the:

   a) School of Military Engineering (SME) and other Defence Units prior to their proposed relocation; and

   b) Defence National Storage Distribution Centre (DNSDC) if partially consolidated to the north of the SIMTA site and the DNSDC functions to be located to the nearby SIMTA site at West Wattle Grove under the Defence Logistics Transformation Project (DLTP).

   This is addressed in Section 1 of this submission.

2. Comments on the EA affecting the proposed Moorebank Intermodal Terminal project (Moorebank IMT) that was announced by the Australian Government on 23 April 2012 – consisting of a high level evaluation of information for completeness necessary to carry out cumulative impact assessment as part of the environmental assessment for the Moorebank IMT and; identification if the information provided by SIMTA in the technical reports is adequate and what impact it has on the current scope of works. This is addressed in Section 2 of this submission.

3. General overview of SIMTA's methodology and approach for consistency and accuracy. This is addressed in Section 3 of this submission.

Further to the comments in the above categories, there are a number of important points that need to be understood concerning SIMTA's proposal in the context of surrounding land on all sides owned by the Commonwealth (Defence) coupled with Defence's lease (DNSDC) with SIMTA over the same portion of land that SIMTA proposes to commence construction of its Intermodal Terminal in mid 2012 and commence operations in mid 2015.

a) *DNSDC Lease* - I am advised that Defence intends to exercise its right by taking up the first five year options until 2018 noting that Defence has been planning to re-locate the DNSDC to a new site on Defence land at West Wattle Grove (an adjacent site to the north and north-east of the current site) under the Defence Logistic Transformation Project. This project has not yet been approved by Government and if approved, the earliest time in which Defence could construct and move to its new site is around end 2014. If not approved, it is likely that Defence would remain until 2023 at which time Defence would consider a range of alternate options.

b) *Moorebank Ave* – owned by Defence and not suitable for use by a large number of heavy vehicles and would require a significant capital investment and ongoing maintenance by SIMTA to support its proposed intermodal terminal operations.

c) *Defence land south of the SIMTA site* - owned by Defence that SIMTA proposes develop for its rail infrastructure. Defence has not provided Owners Consent to the development of rail infrastructure on its land.

d) *Defence land to the north and west of the SIMTA site* – currently occupied by Defence with no plans to vacate.

I am aware that the Department of Defence will also be making comments on the SIMTA EA.

My point of contact within the MPO for any enquiries [redacted]

Yours Sincerely

[redacted]

Moorebank Project Office
28 May 2012

Attachment:

1. Moorebank Project Office comments of on the Environmental Assessment (EA) lodged by the Sydney Intermodal Terminal Alliance (SIMTA)

Attachment 1

MOOREBANK PROJECT OFFICE COMMENTS OF ON THE ENVIRONMENTAL ASSESSMENT (EA) LODGED BY THE SYDNEY INTERMODAL TERMINAL ALLIANCE (SIMTA)

1. Comments and concerns affecting the Department of Defence (Defence) - noting that Defence will be making a separate submission

The EA document (p. 40) identifies:

> *The School of Military Engineering (SME) is located on the western side of Moorebank Avenue, opposite the SIMTA land. The assessment of the key issues has given consideration to the potential impacts of the SIMTA proposal on the existing uses within the SME.*

We note however that many of the impact assessments still do not acknowledge the residential receivers on the SME site in their assessments. As a result, minimal consideration is given to the possibility of the Defence Units remaining on site and to potential impacts the proposed neighbouring development would inflict on the existing Defence activities until they are relocated. There is no acknowledgement or understanding of the activities conducted on site at either SME or by other Defence units. The SIMTA documentation generally assumes that SME (and other Moorebank units) have relocated prior to development (both construction and operations phases) of the SIMTA proposal. It certainly may not be the case that SME has relocated before the construction phase of SIMTA occurs, and therefore the proposal needs to address the potential impacts of activities on the SIMTA site on the activities on the SME site in particular. SIMTA needs to be aware that important Defence related capability educational and associated residential functions are performed at SME, and which are placed closer than those generally described in the EA documentation as being the closest receptors.

1.1. Staging and consolidation

- Section 2.7.3 of the EA identifies the construction phase commencing in '*mid 2012 with operations commencing mid 2015*'. Given the current timing of the planning approvals process this timeline does not appear reasonable.
- It is understood that Defence is going to exercise its contractual right to extend the lease on the DNSDC site, which is owned by SIMTA, for up to 5 years when it expires in March 2013. SIMTA's proposed development of the IMT may therefore be delayed until at 2018 even if the approval to develop the site is received.

1.2. Impacts on the School of Military Engineering

- Defence is concerned about the impacts on the residential school and other Defence units at Moorebank during the construction and operation of the SIMTA proposal should it proceed as suggested. SIMTA's environmental studies need to reflect likely impacts which are currently not adequately documented.
- In Section 2.7.1.2 SIMTA's EA still notes that the closest residential receivers are located in Wattle Grove, effectively ignoring the proximity of the residential like property uses on the SME site.

- SIMTA's development precludes future passenger train station development at Moorebank that would potentially service the SME population or future workforce. The rail link passes through Lot 1 in DP825352, which is owned by RailCorp who has had a planning proposal for the development of a passenger rail station on this land and has had so for almost 20 years since the East Hills rail line was constructed.

1.3. Impacts on adjoining Commonwealth land

- Defence is concerned about impacts on its property associated with the proposed Moorebank Ave widening. These are inferred but not explained adequately in the EA. Defence is also unclear on any proposed responsibilities or arrangements for the proposed capital upgrades and ongoing maintenance.
- Defence is concerned about SIMTA traffic impacts on access to the North DNSDC site and potential impacts on the development of the West Wattle Grove site for the relocation and establishment of the DNSDC under Defence Logistic Transformation Program (DLTP). Mitigation is not adequately explained.
- Defence is not clear what is proposed within the 30 m wide corridor on the SME land and the Southern Commonwealth land associated with the proposed rail link. It is not clear how SIMTA proposes to compensate Defence for the loss of the unencumbered use of that land.
- Defence is not clear if there are any impacts by the proposed northern rail connection to the SSFL on the Commonwealth owned Lot 4 in DP1130937 on the Western side of the Georges River adjoining the Glenfield Tip site. Defence has a strong interest to understand what impact SIMTA's proposal would have on its land.
- SIMTA impacts Cambridge Ave and Moorebank Ave by allowing trucks to turn south, and may be in breach of the existing road use arrangement it has with Defence.
- Defence is unable to agree to any development on its lands until further information is provided, and on which appropriate decisions can be made.

1.4. SIMTA operations

- Defence is not clear if SIMTA's proposed terminal operations include provision for emergency locomotive and train stabling on site or within the proposed rail corridor. It is also unclear what rail infrastructure is required within the rail corridor (e.g., number of tracks, arrival and departure rail roads, turnouts, etc).
- It is unclear from the submission exactly how the terminal is proposed to operate, though it is noted that the estimated time for each heavy vehicle to pass through the terminal is around 30 minutes. This has the potential to create a situation where the number of heavy vehicles waiting to enter the SIMTA site exceeds the internal storage capacity within the site, potentially resulting in heavy vehicle parking along the verge of Moorebank Ave. There is a high possibility that trucks would arrive early to avoid missing their booked time slot and wait idling along Moorebank Ave for their time to enter the terminal. There are three issues associated with this activity: air quality, noise and road safety. How these matters would be addressed is not included in the EA.
- The EA does not adequately address air quality and noise matters affecting Defence living quarters prior to SME's move to Holsworthy. Factors that should be considered are 'hum' noise and concentrated air emissions. Queuing along Moorebank Ave would

create a road safety concern when heavy vehicles would try to negotiate a re-entry into Moorebank Ave which has a speed limit of 50 km/hr from a stationary mode. Again the intended mitigation measure is not described adequately.

- Furthermore, the proposed access to the SIMTA site via the southernmost entry (non-signalised left-turn only) involves both private and heavy vehicles. During peak arrival times, it is unclear whether there is sufficient space for holding what could be a significant number of vehicles waiting to enter the terminal. The entry process is assumed to involve documentation/security checks for all entering traffic.
- Impacts of the proposed development on the training of working dogs on the SME site have not been adequately addressed. This training will in all probability continue unitl the end of 2014.
- Under the staged approach to development of the SIMTA site, DNSDC will be required to consolidate on site and cohabit with SIMTA for up to eight years which will involve both SIMTA construction and operation phases. It needs to be demonstrated that a consolidation plan can be developed to meet Defence's needs before any commitments could be made to consolidate. The indicative timing (Section 2.7.3) for staging development suggests commencement of the construction from mid-2012 (less than 2 months' time). This appears to be an impossibly short period of time in which any potential consolidation could occur.

1.5. Environmental aspects

1.5.1. General

- Insufficient detail was provided in the proposal to allow any meaningful evaluation of the likely impacts on the environment including direct and indirect impacts on the Commonwealth land.

1.5.2. Traffic

- Defence is concerned with the lack of explanation of intended mitigation in relation to increased traffic generated by the proposed development and how it would affect the following:
  - Air quality
  - Noise and vibration
  - Trucks queuing / waiting area
  - Road safety
  - Other road users
  - Southern access to Defence owned Cambridge Ave.
- In 2010 approximately 17,500 vehicles per day traversed Moorebank Ave, out of which 875 were heavy vehicles. SIMTA's development would generate an additional 6,200 movements per day (2,600 heavy vehicle and 3,600 car movements) associated with the SIMTA site development. This would have maintenance cost implications for Defence. SIMTA does not indicate how these costs will be addressed.
- Heavy vehicle movement along Moorebank Ave is around 5% (875 movements) a day of the total traffic of 17,500 vehicles per day. The addition of the SIMTA related heavy

vehicle movements could raise heavy vehicle movement to around 15% of all traffic, or nearly three times the proportion of heavy vehicles currently on this road. Defence as an adjacent landowner needs to be assured that safe access can continue to be provided to their properties.

- This is particularly so for that section of Moorebank Ave between the proposed northernmost entry (signalised) to SIMTA and the southernmost (non-signalised left-turn in only) entry. All three proposed entry points have been identified as catering for heavy vehicle movements. The rate of arrival on a standard weekday could be as regular as one heavy vehicle every 30 seconds.
- Impacts of the proposed SIMTA site entry points and the current signalised access to SME (Chatham Ave) are unclear.
- The EA states (Section 5.3.4) that '*actual information on the size and potential traffic generation from the SME site was not available*'. Defence is unclear if the traffic impact assessment has adequately addressed traffic impacts taking into account traffic generated by all adjacent land users. It should be clarified how SIMTA has dealt with this issue.
- It is unclear how any future access off Moorebank Ave for the potential redevelopment of DLTP at West Wattle Grove would be affected by the proposed SIMTA development and associated traffic impacts. Defence is unclear how access may work under that scenario.
- Northern access points proposed in the SIMTA proposal have not considered that the relocation of DNSDC to DLTP site at West Wattle Grove has occurred and the potential concentration of traffic in that area.
- It is unclear that the proposed widening of Moorebank Ave to four lanes between the northern most SIMTA access point and the M5 will be sufficient in terms of level of service. There is no proposed upgrade on that part of Moorebank Ave south of that point on which vehicles associated with activities at SME rely for access to that site.

1.5.3. Heritage (Aboriginal and non-Aboriginal)

- Construction of the SIMTA proposal would probably necessitate the demolition of all, or at least a majority of the SIMTA site heritage buildings. Despite the proposed mitigation strategies of archival recording, and possible relocation to a new site, the required demolition represents both a physical loss, and the end of operation continuity which commenced with the WWII storage facility on the SIMTA site.
- The assessment acknowledges that the DNSDC is highly significant for its evidence of WWII infrastructure. The proposed development's impact on these values is conceded to be 'significant'. Despite this, it is concluded that 'It is necessary to conserve the site's heritage values where possible' (p. 121). Similarly, the only commitment to mitigate impact is to 'mitigate this impact where practicable' (p. 113). These conclusions are not commensurate with the assessed significance of the values to be impacted.
- The Defence is concerned about the impact of SIMTA development on the European heritage values on site. The proposal involves full site development, which could potentially mean the demolition of all heritage buildings. Despite assurances about best endeavours to retain where possible, there appears to be little prospect for these structures to be adapted for re-use as a part of site wide redevelopment. The requirements of any Defence site Heritage Management Plan (HMP) may be useful to assist in guiding the proponent in relation to these heritage issues.

- The report incorrectly concludes that there are no non-Indigenous heritage constraints for the land within the SME along the railway corridor. The potential for impacting the remains of sand mining infrastructure (loading bins adjacent to the river, and a light rail line), present in this area from 1917 to 1930s has not been identified or addressed.
- The only firm minimum commitment regarding the extent to which impact to European heritage values will be mitigated is the conduct of archival recordings and of further archaeological investigation at select areas. Many potential mitigation options are presented however, it is likely that following archival recording, all heritage items would be demolished without any further mitigation (such as in-situ conservation, adaptive reuse or relocation of selected items). This level of impact is not adequately acknowledged or assessed, nor would be effectively mitigated under the assessment commitments.

1.5.4. Ecology

- Indirect impacts from the SIMTA proposal itself are likely to be minor. However, the proposed rail spur would result in significant impacts to biodiversity as a result of vegetation clearing along the alignment of the rail spur. This vegetation is recorded as being in good condition. The proposed SIMTA rail spur would include clearing of vegetation in the proposed conservation area of the Moorebank IMT. The extent of the impact of clearing is not known since final design and proposed alignment of the rail spur is not complete. However an attempt should be made to determine the extent of clearing as a basis for seeking concept plan approval.
- It is not clear what SIMTA proposes as environmental offsets to compensate clearing the Commonwealth land.
- Vegetation mapping presented in the SIMTA ecological assessment identifies vegetation on the site to the north of the SIMTA site. Two vegetation maps presented in the ecological assessment shows native vegetation on the northern site, although the distribution, extent and type of vegetation differs in the two maps. However all vegetation mapped is listed as a threatened ecological community under the NSW *Threatened Species Conservation Act 1995*. No ground truthing has been completed to confirm vegetation on site or to determine the presence of threatened species.

1.5.5. Light spill

- The visual impact assessment report (p. 103) notes '*It is considered the location with the most potential for light spill is the rail transfer and container loading area*', which is closest to SME. While it was difficult to verify SIMTA's claim on the level of light spill without knowing details, it is noted that SIMTA assumed the nearest residential property was some 400 m away from the site. Defence residential accommodation located within the critical 150 m radius would be adversely impacted especially during nocturnal times. More information is required by Defence to make a judgement regarding the proposed lighting arrangement.

1.5.6. Noise and vibration

- The Noise Impact Assessment recommends noise levels from within the site to meet internal noise criteria. However, the assessment needs to include a prediction of noise levels on sensitive receivers from noise generating activities from the SIMTA proposal.

- Noise impacts from the SIMTA proposal on the SME site are anticipated. Operation activity and construction works as part of the SIMTA proposal would potentially be audible at the SME and may trigger external and internal noise criteria for an education institution. The SIMTA proposal should assess noise impacts at all stages of development, including assessment of simultaneous construction and operation.
- Noise impacts from the SIMTA proposal on the DNSDC population which would remain on the SIMTA owned land (currently under lease by DNSDC) are anticipated and have not been addressed in the EA.
- Noise impacts from the SIMTA proposal on the proposed DLTP population which would move to the West Wattle Grove site are anticipated and have not been addressed in the EA.
- No mitigation measures were proposed to minimise Defence's exposure to noise and vibration. The SME population would particularly be impacted by the noise and vibration during the construction phase. It is not clear which scenario is likely to generate the worst case noise and vibration levels: during the initial construction stage or during the operation of the 600 m port shuttle and staged construction of the terminal.
- Noise and vibration impacts during both construction and operation phases on the residential function (principally by night) performed at SME need to be considered.
- Noise and vibration impacts during both construction and operation phases of SIMTA on the education function (principally by day) performed at SME need to be considered. The rail infrastructure is proposed on the western side of the SIMTA site, closest to SME (approximately 250 to 300 m). The submission claims (Section 6.2) that '*the SIMTA proposal is acoustically appropriately located for its use with relatively large buffer distances to residences and near proximity to major roads*'. This statement should be validated with reference to specific detail on buffer distances.
- Vibration (Section 6.3.1) states that '*vibrations from roller or impact piling could be perceptible from the residences in Holsworthy ... though limited in duration*'. It is unclear what the vibration impacts would be during the construction phase of these activities on the operations at SME.
- The noise assessment report notes (p. 9) '*noise levels at the army barracks, west of the site, are represented by monitoring Site 1. The army barracks are subject to levels of traffic noise associated with the Moorebank Avenue. An industrial noise contribution to the area of less than 35 dBA has been estimated based on site observations and noise measurements*'. It is unclear whether the stated industrial noise contribution to the area of less than 35 dBA would have any impact on the educational and residential functions at SME. Defence would like to seek a clarification on the nature of impact on these functions specifically.
- The noise assessment report identifies (p. 14) a site specific construction noise management level of 42 dBA in relation to the SME. The construction noise management level identified for the Wattle Grove residential community, which is further from the site, is 39 dBA. Defence would like to seek a clarification as to why the lower management level for Wattle Grove has not been applied to the SME.
- The EA has assumed that noise criteria for the SME site is consistent with the surrounding land use and applied noise criteria for 'urban' sources, as opposed to Wattle

Grove where 'suburban' noise criteria is applied. Defence is of the view that a suburban land use assumption should also be applied to the SME given that it is extensively residential.

- The EA provides projected specific construction and operational noise levels at key receiver sites. There is no context provided in the assessment as background levels are not included for comparison.
- The noise assessment report (p. 32) states that from figures 5-1 and 5-2 '*it can be seen that areas to the west of the site could accommodate noisier equipment than towards the east of the site*'. Clarification should be sought as to why this is the case and whether this assessment had taken into account the existence of educational and residential functions continuing to be undertaken within the SME site.
- The noise assessment report (p. 37) notes '*Traffic associated with the SIMTA proposal travelling along the approximately 600 metre section of Moorebank Avenue to the M5 is expected to result in an increase of up to 3 dBA in this section of road. This represents a small but just noticeable increase in noise level. There are however, no residential receptors immediately adjacent to this section of Moorebank Avenue to which this criterion applies*'. It is noted elsewhere in the submission that all three access points are to be used by heavy vehicles, not just the northern access point. Therefore clarification needs to be sought as to whether the 3dBA increase applies to the middle and southern access points as well, which are closer or adjacent to residential dwelling within the SME site.
- The assessment approach and statement of compliance requires clarification. Based on the individual plant noise levels in the report, where two or more dominant noise generating plant items are in simultaneous operation the recommended source noise levels are likely to be exceeded and the operation noise goals would not be met at nearest receivers.
- Operational noise assessments resulting from traffic generated along Moorebank Ave have made an incorrect assumption that there are no residential receivers along Moorebank Ave. The SME facility provides for residences, as such, the noise impacts should be reassessed. Similarly, rail traffic noise has not considered residences in the SME.

1.5.7. Contaminated land management

- The potential hazards and risk assessment report (p. 22) identifies the potential risk activities associated with the transport of goods to and around the SIMTA site. The potential risks listed do not include off site vehicle movement, which should be added to the list.
- It is unclear from the submission (Section 8.3.1) what types/natures of dangerous goods may be handled through the IMT facility and what potential risks and mitigation strategies they may pose for the occupants of the SME site.
- The potential hazards and risk assessment report (p. 14) notes that '*Land use safety planning is essentially a mechanism for dealing with actual or potential conflicts between sources of risk, such as potentially hazardous industrial developments, and surrounding land uses. These guidelines focus on the land use safety implications of industrial hazards, in particular those arising from loss of containment of hazardous materials*

leading to fires, explosions and toxic releases'. The EA has not assessed the potential risk to the possible redevelopment of DLTP on the West Wattle Grove site from loss of containment of dangerous goods within the SIMTA site.

- Disturbance and mobilisation of contaminants from development of the SIMTA site migrating towards the SME or DNSDC would be at the detriment of the respective land and site users.
- Provided that mitigation and management measures are adequately identified and implemented there is a low risk that contamination would migrate to the SME or the proposed DLTP at West Wattle Grove site. The existing extent and nature of contamination on the SIMTA site is required to provide a better understanding of the contamination issues on site and potential risk to Defence.
- Further assessment is required to gain a better understanding of the nature and extent of potential impacts that a rail link crossing Defence land would have on the SME and the potential for these impacts to present risks to the SME.
- The SIMTA proposal would need to consider the types of potentially hazardous goods stored on the SIMTA site relative to goods stored in the relocated DNSDC functions within the SIMTA site (in the short term) and the proposed DLTP site at West Wattle Grove (in the long term), with respect to separation distances.

1.5.8. Visual impact

- Visual impact was described as "relatively low". Defence seeks clarification as to how the replacing of DNSDC warehousing (around 15 m high) on the site with 32 m high gantry cranes and 40 m high light poles can be described as 'low' visual impact from the western side of Moorebank Ave. Mitigation measures including planting of trees with height of 20 m at maturity may not be sufficient to minimise the visual impact.
- The submission does not appear to have considered any visual impacts of the proposed development from within the SME site. There are clear views from within this site across Moorebank Ave into the SIMTA site. Defence seeks to clarify whether these visual impacts have been assessed.
- The visual impact assessment report (p. 108) states '*Besides secure perimeter fencing there is very little landscaping or other visual screening to shield operations from the public view and that of surrounding developments'*. This appears to be inconsistent with claims elsewhere that the development of vegetation within buffers would be a visual impact mitigation measure.
- The visual impact assessment report (p. 79) states that '*Most views from within this area looking north towards the proposed development will be from existing industrial areas or from commuters travelling along Moorebank Avenue*'. This statement does not appear to acknowledge the sizeable population on site at SME and the impact on views for that population of the development of the SIMTA site.
- The visual impact assessment report does not present any representation of the visual impacts of development of the SIMTA site by night. Defence would like to request such a representation.

1.5.9. Air quality

- Potential impacts to air quality at SME are anticipated. The SME has not been identified as a sensitive receptor to air quality impacts predicted as a result of construction and operation of the SIMTA proposal. Assuming that SME were to remain in situ, at least during the construction phase of the SIMTA proposal, it should be considered as a receptor for the purposes of further assessments.
- The relocation of the DNSDC to the north and adjacent to the SIMTA site has not been considered in the assessment. If the DNSDC was to consolidate to the north of the SIMTA site, the facility would be the closest receptor to the SIMTA proposal. The EA needs to articulate the potential construction and operation impacts on the DLTP as a result of the SIMTA proposal.
- Queuing of trucks waiting to enter the facility along Moorebank Ave would create air quality impacts. The EA needs to articulate the potential impacts on the nearby Defence population from the queuing of trucks both during construction and operation phases of the SIMTA proposal.
- Further information is required to gain a more comprehensive understanding of the anticipated impacts to air quality and the intended management of these impacts.

1.5.10. Health Risk Assessment

- It should be noted that the population of SME is closer in just about every case than the receptors identified in Table 3.3 of the HRA Report (p. 27).
- Section 7 of the HRA Report (p. 52) addresses uncertainty analysis. It is not clear from this report what happens to air quality and impacts if the most modern equipment is not used on this site. This issue should be addressed.

1.5.11. Cumulative impacts

- SIMTA deals with the cumulative impact assessment on the basis of total demand for freight throughput for the area being capped at 1M TEU. Therefore, the number of trains, heavy vehicles and terminal operating equipment required to handle this 1M TEU is the same whether it is handled on one site or two. A cumulative impact assessment of both proposals operating to full capacity as per each proposals full design specifications has not been undertaken and therefore a complete potential cumulative impact assessment has not be undertaken.

1.6. Utilities

- It is not clear if the proposed utilities services to the SIMTA site can be accommodated within existing easements on Commonwealth land.

1.7. Property impacts

- SIMTA identified expansionary infrastructure would be required to facilitate its development. Items that affect the Commonwealth are listed below:

  e) Upgrade Moorebank Ave to a four-lane dual carriageway at the expense of the Commonwealth land currently occupied by the SME and other Defence Units.

f) Extension of Moorebank Ave overpass (over the East Hills line) which has a potential to encroach onto the SME land due to raised elevation requiring a retaining wall.

- SIMTA proposed easements for connecting services infrastructure along the Greenhills Road axis. SIMTA currently does not have an easement along Greenhills Road south of Anzac Road. These connections need to be consistent with the DLTP development of the West Wattle Grove site for DNSDC.
- The West Wattle Grove land earmarked for the potential redevelopment of DNSDC under DLTP is described in Section 3.4 as '*there are no current plans to develop this land*'. This statement ought to be corrected to reflect the proposal by the Defence to potentially develop this land.
- For the purposes of undertaking further technical investigations, the proponent envisages access to potentially affected land for intrusive environmental site assessment purposes. Defence is unclear about the nature and timing of these proposed intrusive assessments.

1.8. Flooding and stormwater issues

- Increased impervious areas and removal of surface management infrastructure on the SIMTA site has the potential to increase flows discharged from the site which flows across the SME site to the Georges River via the existing constructed channel, increasing flooding and erosion risk.
- A review of the Flood Study and Storm Water Management (Hyder 2011c) shows that there will be a reduction in flows crossing the SME site in events up to and including the 100 year Average Recurrence Interval (ARI) flood event however there will be significant increases in probably mean flood (PMF) flows. As the required design standard is 100 year ARI, Defence requires that increased flows have been sufficiently mitigated by the proposed onsite detention.
- An increase in flood levels of 0.1 – 0.2 m is anticipated on the area of the SME site which drains to Anzac Creek as a direct impact from the SIMTA proposal. This is considered a significant impact and may restrict future development of the SME site should the land use change.
- The proposed bridge crossing of the Georges River may impact on SME site flooding and land stability. There has not been an assessment made of the potential flood impacts of the proposed bridge crossing of the Georges River.
- There is currently no runoff draining north towards the proposed DNSDC site from the SIMTA site nor is there likely to be post development of the SIMTA site. Therefore provided appropriate drainage and attenuation is provided in the SIMTA proposal it is not considered likely that there will be any hydrological impacts on the proposed DNSDC site.
- The SIMTA development would need to consider appropriate stormwater mitigation and attenuation devices irrespective of the existing and proposed surrounding land use.
- Potential impact of SIMTA site development on flooding of the SME site (particularly the car park opposite DNSDC HQ) is unclear.
- SIMTA notes that there is a need to ensure the rail infrastructure is immune from flooding (and any rise in flood levels associated with climate change. In making the rail

component immune to climate change flood effects, Defence would need to know of any potential change to the 100-year ARI on adjacent Defence land).

1.9. National security

- SIMTA's development may pose a security threat to Defence activities at the SME. The topography in the area is relatively flat and the line of sight from SIMTA's site is currently obscured by trees and shrubs. The development proposes 32 m high gantry cranes and 40 m high light poles which could serve as a viewing platform to oversee training operations at the SME and expose Defence to a high risk of a third party being able to better interpret Defence operational methods and practices.

1.10. Land owner consultation

- The EA does not demonstrate adequate engagement by the proponent regarding the Commonwealth land and Defence's use of it.

2. Comments affecting the proposed Moorebank Intermodal Terminal project

Generally, the information provided in the documentation at times seems to deal more with construction phase impacts and potential mitigation measures rather than also dealing with operations phase impacts.

2.1. Impacts on adjoining Commonwealth land

- MPO is concerned about the impacts on the Commonwealth property associated with the proposed Moorebank Ave widening. MPO is also unclear on any proposed responsibilities or arrangements for the proposed capital upgrades and ongoing maintenance of enabling infrastructure.

2.2. Rail link connection issues

- MPO made public its proposed design of the Moorebank IMT on the SME site in October 2011. This information included indicative rail layout and supporting infrastructure. SIMTA's rail design conflicts with MPO's design of the rail connection and therefore SIMTA needs to consider an alternative rail alignment.
- MPO is unable to agree to any development on the Commonwealth lands until further information is provided, and on which appropriate decisions can be made.
- SIMTA's development precludes future passenger train station development at Moorebank that would potentially service the local population/workforce.
- There's an existing RailCorp rail connection to the East Hills Line that may be affected.
- SIMTA's proposed rail alignment through Glenfield tip could result in the potential contamination of the ground water table and the river through a puncture of water-proof membranes by piers that would be required to support the viaduct connection to the SSFL.
- MPO is concerned about management of noise and vibration issues associated with the rail connection to the SSFL, as the SSFL is on viaduct and crosses over the Cumberland /South line from the eastern to the western side. This is not explained adequately.

- The land south of the SIMTA site has been identified by the Commonwealth as a possible preservation area. The Commonwealth needs to understand potential impacts on that land.
- SIMTA's indicative rail corridor appears to leave a slither of the SME land out located between the fence of the East Hills line and SIMTA's rail corridor southern boundary. The future of that unencumbered slither of land is unclear and if it would become unusable.
- Rail corridor infrastructure – it is unclear from the information presented exactly what rail infrastructure is proposed in this corridor land. Our rail technical advisor has suggested it may require two track rail, locomotive stabling, as well as rail crossovers depending on the proposed track layout within the SIMTA site.

2.3. Planning

- The RailCorp land and the potential use of it for the SIMTA rail link seems to ignore the fact that RailCorp has had a planning proposal for the development of a passenger rail station on this land and has had so for almost 20 years since the East Hills rail line was constructed. The development of the SIMTA site would potentially preclude that site from being developed as originally planned.
- A terminal control tower is proposed. It is unclear what would be the height of this structure.

2.4. Environmental aspects

2.4.1. Ecology

- Flora and Fauna Assessment (p. 123) – the 0.5 ha patch of vegetation located within and adjoining the south-western corner of the study area was mapped as Cumberland Plain Woodland by National Parks and Wildlife Service (NPWS) (2002)/Tozer (2003) and Department of Environment, Climate Change and Water (DECCW) (2009). In the absence of field assessment of this patch, it has been assumed that this vegetation is consistent with the critically endangered ecological community Cumberland Plain Woodland as defined under the TSC Act. It has been assumed for the purpose of the assessment that this 0.5 ha patch of Cumberland Plain Woodland lies outside of the footprint of the proposed rail corridor. Provided that this area of vegetation is retained and that appropriate safeguards are installed and maintained as necessary during construction operations, including highly visible exclusion fencing, sediment and erosion controls and Tree Protection Zones, it has been considered unlikely that the SIMTA proposal represents a significant impact to the community. This appears to be a significant assumption.
- Concerns about the potential impact on *Grevillea parviflora* and other threatened species as a result of the development of the rail corridor. The indicative alignment in Figure 3 shows little prospect of avoiding impacts.
- In the environmental risk analysis table (p. 104) reduction to impacts through the design process should be added as a control measure. In other words, SIMTA should be encouraged to engage in a design process which identifies an engineering solution which minimises impacts and that cheaper engineering solutions are not a default outcome.

- Environmental offsets – the SIMTA proposal proposes consideration of the rehabilitation of the Defence land south of the SIMTA site that is not used as part of the rail corridor as a potential contribution to meeting any assessed requirements under the bio-banking scheme. It is unclear whether this is has been discussed with the landowner and whether it may be able to form part of any mitigation strategy.
- It is stated that no survey has been undertaken of the Glenfield tip land, and it is noted that there is no survey of the RailCorp land either. Given that these two parcels are necessary for the rail link to the SIMTA site, a survey of these site's should ideally be undertaken with the consent of the relevant land owners as soon as possible to determine the potential nature of any flora and fauna impacts.
- The flora and fauna assessment (Section 4.2.2) states that '*the rail corridor generally supports the highest abundance of and highest quality of fauna habitat components within the study area*'. To be certain what the potential effects and impacts might be before Concept Plan approval were given, more detail on the rail link alignment is required so more detail of the impacts can be assessed and understood.
- The flora and fauna assessment (p. 142) does not appear to address the potential effects of proposed terminal lighting may have on the foraging habits of the Eastern Bent-Wing bat.
- The environmental assessment states that the ecological values of the SME site are unknown and that cumulative impacts of the development can only be quantified once environmental investigations of the SME site are complete. The existing ecological values at the SME site were made publically available via the Moorebank IMT website in August 2011.

2.4.2. Visual impacts

- It is claimed (Section 2.4.1.3) that the location of the terminal warehouses will provide for '*limiting the visibility of the large scale built form from external vantage points, including Moorebank Avenue*'. Subsequently the visual impact assessment indicates that the impact of the proposed facility from Moorebank Ave will be high.
- The visual impact from the south along Moorebank Ave (rail overpass) is described as *'moderate'*. Clarification is sought that the visual assessment from this location has considered visual impacts of the rail infrastructure which accesses the proposed site from the south on the eastern side of Moorebank Ave.
- The view of the SIMTA proposal from the north of the site towards the south would be highly prominent at this location (p. 127 of the EA). It is assumed that this viewpoint is not sensitive resulting in a low visual impact due to its location in an already established industrial zone. The relocation of DNSDC and potential mitigation measures would need to be considered.

2.4.3. Traffic

- Separation of light and heavy vehicle movements is desirable but the way access to the SIMTA site is proposed it promotes the mixing of all traffic (heavy, light and public transport), particularly at the northern most access point.
- The SIMTA proposal suggests that staff car parking on site would cater for around 80% of staff using personal occupancy vehicles (POVs), meaning that 20% arrive by public transport. Given that under the base case 20% of staff will be arriving by public

transport, then there is no need to provide car parks for these staff. Under the proposals TDM measures, it promotes a stretch target for public transport mode share of 30%. The submission claims to be able to potentially reduce the number of car spaces by over 600, and yet capturing an additional mode share to public transport would only result in the need to provide some 200 less car spaces. The reduction of 600 odd car spaces does not appear to be substantiated.

- The Traffic and Transport Report (p. 12) Table 2-1 does not identify Cambridge Ave in the road hierarchy. It is unclear whether any vehicle traffic accessing the SIMTA site will use Cambridge Ave, and if so it should be considered for inclusion in this table.
- The SIMTA proposal assumes that catchment demand would reach one million TEUs by 2025 and infers that this is the maximum throughput capacity of the catchment. As such, the traffic assessment approach is to assess cumulative impacts based on a maximum catchment capacity and the maximum operating capacity of the SIMTA proposal.

2.4.4. Lighting

- Light spill – the submission claims that proposed landscaping (p. 117) and works will reduce the visual impacts and the effect on light spill. Given any landscaping will take some time to reach maturity a transition strategy to manage these potential impacts may need to be identified.
- The Urban Design & Landscape report (p. 46) states that '*design and lux of any internal or spot lighting shall be designed to avoid off-site and traffic safety impacts*'. Noting that the proposed 40m light poles in the terminal area are proposed for the western most boundary of the SIMTA site, it is unclear how reflection and glare can be managed for road users of Moorebank Ave.

2.4.5. Noise and vibration

- Operational noise (Section 6.3.1) assumes that of the road traffic along Moorebank Ave '90% heading north to the M5 Motorway and 10% heading north to Newbridge Road'. It is unclear if this means that 10% of traffic heads south from the site along Moorebank Ave. If so, there does not appear to be any discussion of the potential impacts of those movements.
- The noise impact assessment report (p. 3) assumes a train turnaround time of two hours, which does not match the economic report assumption that it takes one hour for trains to turn around at the IMT. Further, the PwC report assumed truck turnaround of 1.25 hours at the IMT, but the assumption for the purposes of noise modelling is much less at 30 minutes. This reduction of time in the assumption for the noise modelling may result in understated noise impacts.
- Cumulative noise impacts have considered the one million TEU capacity of the freight catchment demand and assumed that the total freight volume would be distributed between the two sites. As such, in relation to diffused noise generation sources, the SIMTA EA does not assess full operation of both proposals and does therefore not represent a complete cumulative impact assessment.

2.5. Security issues

- The SIMTA proposal promotes access by public transport services through the terminal site. It is unclear under this proposal how site security would or could be maintained

under such a scheme as the terminal operator would have no control over the passengers who use this service who are not terminal employees. This could be a significant issue.

- The Flora and Fauna assessment claims that as the proposed rail corridor will be fenced, no increase in rubbish dumping or arson is expected. It is unclear how this outcome is arrived at noting the history of railway corridor breaches.

2.6. Operational and economic impacts

- SIMTA terminal operating concept. It is unclear just how long trains will take to be serviced within the site. There is a reference to an assumption of 80 containers being unloaded in one hour and this assumption would need to be confirmed.
- The economic impacts report (p. 38) assumes that trains take one hour to load/unload at the port and at the IMT for the purposes of estimating the labour productivity gains. The application of this assumption could have two effects – potentially compromising the terminal operations by increasing the truck throughput to unworkable levels and potentially causing significant congestion outside the site boundary. It may also result in an overstatement of the labour productivity gains. The validity of this assumption has not been demonstrated in the SIMTA EA.

2.7. Cumulative impacts

- The DGR's indicate the need to consider 'the relationship with the Steele Barracks/School of Military Engineering site and investigations being undertaken by the Moorebank Project Office'. Although this could potentially be ambiguous, they are in fact separate issues – one is the relationship with Steele Barracks and the other the investigation by MPO. SIMTA appears to have somewhat addressed the investigation by MPO but do not appear to adequately countenance a scenario where SME continues to operate at least during the proposed SIMTA development phase. MPO would like to request that this issue be investigated, assessed and reported on.
- Cumulative construction impacts associated with exposed soils and remediation assume that construction of the SIMTA proposal does not occur at the same time as any development at the SME site.

2.8. Other issues

- The waste management strategy report (p. 15) lists the waste the proposed facilities are likely to generate during operations. It omits the likelihood of medical waste which ought to be added to the list as the facility would have a first aid facility.

- Other comments for consideration are as follows:

a) In the EA document (Section 2.7.2), there is no reference in the description of the ancillary terminal facilities (Freight Village) to an 80 room hotel that is proposed on site and which is proposed to be four storeys high.

b) SIMTA proposes a system for the management of truck arrivals and departures. Details of this system ought to be sought in order to understand just how the proposed system will contribute to managing the on-site truck emissions.

c) Employment opportunities – the SIMTA submission states (p. 118) the proposal 'provides potential opportunities to support and improve employment outcomes for Aboriginal people'. It is unclear how this is proposed to be achieved.

d) The proponent seeks to mitigate the potential traffic impacts through traffic distribution modelling (TDM) and a mode shift to public transport. Whilst a proposed strategy (p. 120) is to provide 'peak period and SIMTA shift work responsive express buses', it is unclear what commitment to funding these services the proponent is making.

e) Stormwater detention on SIMTA site - it is unclear from the submission just what quantity of stormwater detention capacity is proposed for the site.

f) The report is inconsistent in that elsewhere the rail infrastructure within the terminal area is described as four tracks, but within the Urban Design & Landscape Report (p. 28) it is described as five tracks.

g) Generally for the purposes of assessment, the nearest residential dwelling is identified as being some 400m from the SIMTA site. The HRA Report (p. 19) identifies the nearest residential area as being within 200 metres to the north east of the site on the corner of Anzac Road and Delfin Drive. This inconsistency should be addressed.

h) Table 5.1 of the Air Quality Assessment (p. 27) incorrectly identifies the proposed warehousing at the SIMTA site as 250,000 m^2 rather than the 300,000 m^2 as cited elsewhere in reports. It is unclear whether this impacts any findings of the air quality assessment.

i) Table 5.2 of the Air Quality Assessment (p. 30) identifies the number of trucks idling on site during the busiest hour as 24. This may not be representative of the number of heavy vehicle throughput on site during this period of time noting that up to one vehicle on average may arrive at the site every 30 seconds (up to 120 in an hour).

j) Section 5.3 of the Air Quality Assessment (p. 34) identifies the transient nature of train movements based on one train per hour. This is not consistent with figures cited elsewhere which ultimately involve 21 return train movements per day (42 movements per day or close to 1.75 movements per hour.

2.9. Incidental issues

2.9.1. Capital costs

- The capital investment value of the proposed development is $490m. It is unclear what this estimate is comprised of and whether the rail link connection to the SSFL is included.

2.9.2. Property

- The EA document does not identify the river bed of the Georges River as one of the potentially affected properties.

2.9.3. Other issues

- The SIMTA submission reports a rail freight mode share of 23%. It is understood to be significantly lower than that at around 17%.
- Whilst the Moorebank IMT proposal visual assessment has yet to be undertaken, it is unlikely to present the same nature of potential impact on Glenfield Farm as that associated with the SIMTA proposal. This is mainly due to the location of the rail access point for the Moorebank IMT well to the north of that proposed by SIMTA.
- It is not clear whether staff car parking is proposed to be grade or in structures.
- Figure 7 of the Climate Risk Assessment Report contains errors in the mapping.
- Incorrect reference in the HRA Report (p. 11) to the site – suggests it covers an area of 220 ha comprising 194 ha of Government owned land and 83 ha which is owned by SIMTA.
- The artist's impression of the urban village (Urban Design & Landscape report p. 59) does not appear to identify or depict a building structure for the proposed hotel up to four storeys high.
- There may be limited opportunities to '*create a business park or campus experience throughout the site*' (Urban Design & Landscape Report p. 60).

3. General overview of SIMTA's methodology and approach for consistency and accuracy

- This section highlights issues that have surfaced during the MPO review:

3.1. Cumulative impact

3.1.1. The SIMTA EA approach

- The SIMTA proposal has identified surrounding projects within the suburb of Moorebank without a commentary on any potential cumulative impacts that may arise from these identified projects. These projects have been sourced from the DP&I website, the *Environment Protection and Biodiversity Conservation Act* 1999 Public Notices website and the Liverpool City Council website.
- The SIMTA proposal provides a broad statement that cumulative impacts as a result of the Moorebank IMT are considered relatively minor and would be restricted to construction impacts (p 39). There is no detail provided to substantiate this assumption.

- It is assumed that the potential for exacerbated impacts from the result of dangerous and hazardous materials would be mitigated due to separation distances. However, this is not substantiated by a concept design of the SIMTA proposal.
- Cumulative impacts have been assessed on a maximum catchment throughput of one million TEUs. It has been assumed that if two adjacent intermodal terminals are developed, that freight would be distributed between the two and neither site would operate to an intended full capacity. As a result, cumulative impacts would be dispersed between the two sites. This relies on the assumption that the catchment does not exceed a maximum container throughput of one million TEUs after 2025.

3.1.2. Adequacy of information for the MPO IMT EIS assessment

The following information gaps have been identified during a review of the technical reports supporting the SIMTA EA. The information requirements and additional assessments provided below are necessary to appropriately assess the cumulative impacts of construction and operation of the SIMTA proposal and the Moorebank IMT.

3.1.3. Noise and vibration

The Noise Impact Assessment (Hyder 2011) does not provide a sufficiently detailed assessment of potential noise impacts to enable our assessment to determine representative noise goals or potential cumulative noise impacts where both developments are constructed and operated. Information omitted from the assessment would need to be resolved before an assessment of cumulative impacts could be undertaken.

The construction noise assessment is sufficient to make assumption when assessing cumulative construction noise.

3.1.4. Air quality

A number of technical issues have not been addressed in the Air Quality Impact Assessment (Hyder 2011). While the approach adopted is considered within the requirements of the NSW DECs Approved Methods for the Modelling and Assessment of Air Pollutants in NSW, the assessment lacks detail necessary to gain a comprehensive understanding of the impacts of the SIMTA proposal on the SME site. The following aspects of the Air Quality Impact Assessment (Hyder 2011) have not been assessed and would require further assessment:

- Impacts during the construction phase have not been assessed.
- Emission estimates have not been based on operational data for the SIMTA proposal (a scaled factor from the Enfield ILC has been used). No specific details of staging or operations have been provided.
- A full emissions inventory does not appear to have been provided.
- Assessment has been made for Particulate Matter (PM_{10}) and Oxides of Nitrogen only. $PM_{2.5}$ has been assessed qualitatively. Total suspended particulates, dust deposition, carbon monoxide, sulphur dioxide and organic compounds/air toxics have not been assessed.
- Meteorological conditions under which worse case impacts occur have not been defined.

- Key sources of emissions have not been fully quantified (contributions of each source to predicted incremental levels).
- Locomotive impacts, from trains entering and leaving the SIMTA site have not been assessed.
- Impacts with mitigation have not been assessed.

3.1.5. Hydrology

More detail is required regarding the proposed bridge crossing the Georges River. A hydraulic assessment including the location of the bridge and proposed design drawings are required to assess the cumulative impacts of the SIMTA proposal and the Moorebank IMT proposal. Provided that water quality objectives are met and mitigation and management measures for surface water are constructed as proposed, there is little risk of cumulative impacts resulting from surface water and water quality of both the SIMTA proposal and the Moorebank IMT proposal.

3.1.6. Ecology

The ecological information provided is good and of sufficient detail to compile a cumulative impact assessment. However the extent of impacts is not clear since final design of the rail spur is not provided. This will limit the usefulness of a cumulative impact assessment at this stage.

3.2. Throughput capacity

- SIMTA's proposal appears to only consider IMEX demand of 1M TEUs and any intention of processing the interstate freight is only considered if it occurs on the eastern most boundary of the current SME site. No discussion of throughput volume it would generate is provided.
- The strategic freight demand included in the SIMTA proposal has considered a maximum catchment demand of one million TEUs by 2025. The assessment infers that two adjacent intermodal terminals would operate below their maximum throughput capacity due to a lack of demand, which is potentially a sub-optimal outcome for each of the two proposals. This assumes that catchment demand does not increase beyond 2025.

3.3. IMT Operations

- There is no evidence of commitment from the ARTC that the enabling infrastructure can be built in time for the start of SIMTA operations to meet the forecast growth.
- The SIMTA reporting of throughput capacity of other terminals in Sydney varies within their submission. Any inconsistencies should be addressed.
- The proposed number of SIMTA car parking spacing is inconsistent with the number of employees working there and assumptions made regarding the public transport mode share.

3.4. Rail link

- There would be noise associated with the raised rail connection to the SSFL and tight radii of curvature.

- The SIMTA proposal requires additional investment in rail infrastructure to facilitate freight rail capability at full capacity (p. 58). The SIMTA proposal has not considered the feasibility of anticipated rail infrastructure that is required.

AUSTRALIAN RAIL TRACK CORPORATION LTD

Kylie Seretis
Manager – Rail and Ports
Infrastructure Projects
Department of Infrastructure and Planning
GPO Box 39
SYDNEY NSW 2001

28 May 2012

Attention: Rebecca Newman

Dear Ms Seretis,

Environmental Assessment for SIMTA Intermodal Terminal Facility (MP 10_0193)

Thank you for the opportunity to comment on the EA for the above project.

At the outset, I would like to state ARTC's in principle support for proposals of this nature which seek to facilitate a mode shift from road to rail, and ARTC's preparedness to work with the proponent to progress the proposal.

Additional detailed comments are provided below.

General Comments

At this stage, ARTC has had preliminary discussions with the proponent but has not yet received a detailed proposal from the proponent for the connection to the SSFL.

The proposal for the SSFL connection will be assessed by ARTC in accordance with the provisions of the ARTC Interstate Access Undertaking, which has been accepted by the ACCC. The Undertaking provides that ARTC's consent to network connections is conditional upon a number of matters, including:

- the impact of the configuration of the connection on the capacity of the ARTC network;
- interface and safety impacts;
- compliance with ARTC train control directions for entry to and exit from the ARTC network;
- ARTC's engineering and operational standards; and
- the owners of the connection meeting the initial and continued costs associated with constructing and maintaining the connection.

As the proponent correctly notes in Appendix L, the requirements for any required capacity enhancement to the ARTC network will also need to be addressed in accordance with the relevant provisions of the ARTC Interstate Access Undertaking.

Prior to the commissioning of the connection, ARTC will require that a Connection Agreement be entered into with ARTC concerning the commercial arrangements for the connection and an Interface Agreement will be required to meet the requirements of the NSW Rail Safety Act 2008.

ARTC also notes that the connection to the SSFL will traverse RailCorp land and accordingly RailCorp's consent will be required.

Comments on Appendix L - Technical Note 6 – Strategic Rail Capacity Analysis

ARTC provides the following specific comments on the Technical Note:

- Page 5 – ARTC's assessment of the practical capacity of the SSFL (in its initial configuration, prior to any future capacity enhancement) is approximately 24 trains per direction per day (not 32-35 trains per day as stated)

- Page 6 – ARTC has advised the proponent, and the proponent has recognised, that ARTC is not in a position to reserve capacity for a future user (see letter from ARTC's Chief Executive Officer dated 17 October 2011 attached to the Technical Note). The word "not" appears to have been omitted from the relevant sentence in the fifth paragraph on page 6.

- Page 6 – It is stated that "It should be noted that ARTC will need to validate that the anticipated 21 services required by SIMTA will be sufficient to support one million TEU terminal." This is a matter for the proponent or its nominated rail operator(s) to validate, not ARTC.

Recommended conditions of approval

ARTC recommends that the following be included in the conditions of approval for the Concept Plan:

"The proponent shall:

- obtain the consent of ARTC with respect to the connection to the Southern Sydney Freight Line (noting that the granting of consent by ARTC is subject to the provisions of ARTC's Interstate Access Undertaking).

- work with ARTC to identify the timing, scope and staging of any required capacity enhancement to the ARTC Network (noting that the granting of access for train services

ARTC

AUSTRALIAN RAIL TRACK CORPORATION LTD

At the Project Approval stage, ARTC also recommends that conditions requiring the entering into of necessary Connection and Interface Agreements be included. Additional recommended approval requirements may be identified at the Project Approval stage.

Please do not hesitate to contact me (02 8259 0706) or Derek Rogers (02 8259 0708) should you require further information or wish to clarify any matters raised in this letter.

Yours sincerely,

Terry Bones
Project Director
Metropolitan Freight

NSW EPA

Your reference: MP10/23873
Our reference: DOC12/12538
Contact: Sarah Deards 9995 6816

PCU034185

Rebecca Newman
Infrastructure Projects
Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Dear Ms Newman

EPA response to public exhibition of Environmental Assessment for SIMTA Intermodal Terminal Facility (MP10_0193)

I refer to the letter from the Department of Planning and Infrastructure (DP&I) dated 21 March 2012, inviting the NSW Environment Protection Authority (EPA) to make a submission regarding the Environmental Assessment (EA) for the SIMTA Intermodal Terminal Facility.

The EPA has reviewed the EA and provided comments and recommendations in relation to the conditions of approval for the key issues of noise and air quality (Attachments 1 and 2).

Please note that, in accordance with the *Protection of the Environment Operations Act 1997*. Liverpool City Council is the appropriate regulatory authority for this proposal, not the EPA. However, on Council's request, the EPA agreed to provide comments and recommendations in relation to the key environmental issues of noise and air quality.

The EPA and Office of Environment and Heritage (OEH) are now separate agencies with distinct responsibilities. This letter covers EPA's response only. I understand that OEH will be making a separate submission.

The EPA would appreciate receiving a copy of the submissions received by DP&I in relation to the exhibition of the EA and to have the opportunity to comment on the draft conditions of approval for the project, if approval is recommended by DP&I.

If you wish to discuss any of the issues raised in this letter, please contact Sarah Deards on 9995 6816.

Yours sincerely

24/5/12.

GREG SHEEHY
A/Director Metropolitan
Environment Protection Authority

Attachment 1: Comments and recommended conditions on the EA for the SIMTA Intermodal Terminal Facility – Noise
Attachment 2: Comments and recommended conditions on the EA for the SIMTA Intermodal Terminal Facility – Air quality

PO Box 668 Parramatta NSW 2124
Level 7, 79 George Street Parramatta NSW
Tel: (02) 9995 5000 Fax: (02) 9995 6900
ABN 30 841 387 271
www.environment.nsw.gov.au

Attachment 1: The EPA's comments and recommended conditions on the Environmental Assessment for the SIMTA Intermodal Terminal Facility – Noise

The EPA has reviewed the Concept Plan Noise Impact Assessment (NIA) contained within Appendix O of the EA, and has identified a number of issues that should be rectified to enable an adequate assessment of the noise impacts of the proposal. Please note that in the absence of any information regarding specific Council policies that may be relevant to this proposal, the EPA's review of the NIA is based on the guidance provided in relevant NSW Government policies for noise (e.g. the Industrial Noise Policy (INP; EPA 2000)). Issues of concern to the EPA are as follows:

- The EPA notes that the NIA does not contain an assessment of construction and operational noise impacts to residential receivers in Glenfield. This is particularly relevant for the potential impacts from the proposed rail spur. It also appears that there is a residential receiver at Hazelwood Park, Glenfield, on the northern side of Cambridge Avenue, just north of the residential development of Glenfield, which has not been included in the NIA.
- The NIA does not contain predicted operational noise levels at sensitive receivers, so the EPA is not able to recommend noise limits for the proposal. The NIA includes shaded areas of the site showing sound power levels, which if achieved, will result in noise levels at the receivers not exceeding the Project Specific Noise Levels (PSNLs). The EPA's usual practice is to recommend noise limits based on predicted noise levels, not necessarily the PSNLs, as outlined in the Application Notes on the EPA website. Therefore, for this Concept Plan, the EPA recommends that the conditions of approval require the project to achieve noise levels no greater than the PSNLs at the sensitive receivers, but that predicted noise levels are provided in any further detailed assessment of environmental impacts from the site.
- The EPA notes that the assessment of potential rail noise from the rail spur is limited in the NIA, and that a discussion of potential impacts compared with those of the Southern Sydney Freight Line is all that is provided in the NIA. It is not clear whether the proposed rail spur is on private land or operated by RailCorp, ARTC or the proponent. If the rail spur is located on private land the INP requires the potential noise from the rail spur to be assessed against the INP, together with other activities on site, which would form part of the site noise limits.
- The EPA notes that while the NIA indicates that some traffic will continue north on Moorebank Avenue after the intersection with the M5 and travel past residential receivers, there are neither predicted traffic noise levels nor a predicted increase in traffic noise levels for these receivers.

Recommended Conditions of Concept Approval – Noise and Vibration

Noise and Vibration Management Plan

The proponent must prepare and implement a Noise and Vibration Management Plan that covers all premises-based activities and transport operations. The plan must include but need not be limited to:

(a) Copies of the Concept and Project Noise Impact Assessments;
(b) Copies of the Project Approvals under which the development operates;
(c) The operational noise and vibration limits in the Concept and Project Approval;
(d) Assessment of potential noise and vibration from the proposed operation against the limits in the Concept and Project Approval;
(e) Description of management methods and procedures and specific noise mitigation treatments that will be implemented;
(f) A system that allows for periodic assessment of Best Management Practice (BMP) and Best Available Technology Economically Achievable (BATEA) that has the potential to further reduce noise levels from the facility;
(g) Effective implementation of identified BMP and BATEA measures, where considered feasible and reasonable;
(h) Measures to monitor noise performance and respond to complaints;
(i) Measures for community consultation including site contact details; and
(j) Noise monitoring and reporting procedures.

Construction Noise and Vibration Management Plan

The proponent must prepare and implement a detailed Construction Noise and Vibration Management Plan (CNVMP), prior to commencement of construction activities, that includes but is not necessarily limited to:

(a) Identification of each work area, site compound and access route (both private and public);
(b) Identification of the specific activities that will be carried out and associated noise sources at the premises and access routes;
(c) Identification of all potentially affected sensitive receivers;
(d) The construction noise and vibration objectives identified in the Environmental Assessment;
(e) Assessment of potential noise and vibration from the proposed construction methods (including noise from construction traffic) against the objectives identified in the Environmental Assessment;
(f) Where the objectives are predicted to be exceeded, an analysis of feasible and reasonable noise mitigation measures that can be implemented to reduce construction noise impacts;
(g) Description of management methods and procedures and specific noise mitigation treatments that will be implemented to control noise and vibration during construction, including the early erection of operational noise control barriers;
(h) Procedures for notifying residents of construction activities that are likely to affect their noise and vibration amenity; and
(i) Measures to monitor noise performance and respond to complaints.

Traffic Noise Management Strategy

A Traffic Noise Management Strategy (TNMS) must be developed by the proponent, prior to commencement of construction and operation activities, to ensure that feasible and reasonable noise management strategies for vehicle movements associated with the facility are identified and applied, that include but are not necessarily limited to the following:

(a) Driver training to ensure that noisy practices such as the use of compression engine brakes are not unnecessarily used near sensitive receivers;
(b) Best noise practice in the selection and maintenance of vehicle fleets;
(c) Movement scheduling where practicable to reduce impacts during sensitive times of the day;
(d) Communication and management strategies for non-licensee/proponent owned and operated vehicles to ensure the provision of the TNMS are implemented;
(e) A system of audited management practices that identifies non-conformances, initiates and monitors corrective and preventative action (including disciplinary action for breaches of noise minimisation procedures) and assesses the implementation and improvement of the TNMS;
(f) Specific procedures for drivers to minimise impacts at identified sensitive receivers; and
(g) Clauses in conditions of employment, or in contracts, of drivers that require adherence to the noise minimisation procedures and facilitate effective implementation of the disciplinary actions for breaches of the procedures.

Attachment 2: The EPA's comments on the Environmental Assessment for the SIMTA Intermodal Terminal Facility – Air quality

The EPA has reviewed the proposal with regard to air quality impacts and found that the proposal could be developed in a manner that does not cause exceedances of OEH's air quality impact assessment criteria.

The EPA has provided recommended conditions of concept approval below. Specifically, prior to Project Approval for each stage of the development, the proponent must:

- Review and commit to best practice process design and emission controls;
- Update the air quality impact assessment based on the final project design, operating regime and include best practice emission controls; and
- Revise the air quality Statement of Commitments. Commitments must be measurable, enforceable and auditable.

Recommended Conditions of Concept Approval – Air Quality

Best Practice Process Design and Emission Control

A report that reviews and details best practice process design and emission controls applicable to the proposal must be prepared and submitted to Department of Planning and Infrastructure for each stage of the proposal. The report must:

- Demonstrate that the project has incorporated best practice facility and process design to minimise idling emissions at the terminal; and
- Demonstrate that the project has incorporated best practice emission control to effectively minimise all air emissions. Consideration must be given, but not limited to:
    - Best practice non-road emission standards;
    - Fuel switching; and
    - Electrification of terminal plant.

Air Quality Impact Assessment

An updated air quality impact assessment must be prepared and submitted to Department of Planning and Infrastructure for each stage of the proposal.

- The assessment must be undertaken in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (2005)* (or its most recent version);
- Air emissions must be based on final project design with consideration of worst-case meteorological and operating conditions and cumulative impacts from contemporaneous operations including the proposed Federal Government Moorebank Intermodal Terminal;
- The Assessment must identify measures proposed to manage and monitor the efficiency and performance of air pollution control techniques; and
- Particular consideration shall be given to:
    - Cumulative air impacts at a local and regional level;
    - Assessment of both construction and operational emission scenarios from the proposal;
    - Mitigation and management measures that will be implemented to reduce the emission of all air pollutants including (as applicable):
        - Solid particles;
        - Sulfur oxides;
        - Nitrogen oxides;
        - Hydrocarbons; and
        - Other toxic air pollutants.

Statement of Commitments

An updated air quality Statement of Commitments must be prepared and submitted to Department of Planning and Infrastructure for each stage of the proposal. The Statement of Commitments must:

- Be measurable, enforceable and auditable;
- Benchmark emission control efficiency for each mitigation measure included in the Project Approval air quality impact assessment; and
- Nominate and assign measurable performance indicators to each mitigation measure assumed in the Project Approval air quality impact assessment.

NSW GOVERNMENT
Heritage Council of New South Wales

3 Marist Place
Parramatta NSW 2150

Locked Bag 5020
Parramatta NSW 2124
DX 8225 PARRAMATTA

Telephone: 61 2 9873 8500
Facsimile: 61 2 9873 8599

heritage@heritage.nsw.gov.au
www.heritage.nsw.gov.au

Kylie Seretis
Manager – Rail & Ports
Infrastructure Projects
Department of Planning & Infrastructure
GPO Box 39
SYDNEY NSW 2001

Attention: Rebecca Newman

Dear Ms Seretis

RE: Request for Heritage Council comments on Environmental Assessment currently on public exhibition for SIMTA Moorebank Intermodal Terminal Facility (MP10_0193).

Reference is made to your letter of 21 March 2012 (received by the Heritage Branch on the 27th March) requesting any comments that the Heritage Council may have regarding the Environmental Assessment (EA) currently on Public Exhibition for SIMTA Moorebank Intermodal Terminal Facility. This letter was accompanied by a 4 volume hard copy report and one copy on CD which included a Non-Indigenous Heritage Assessment by Artefact Heritage Services (Appendix V). It is noted that the Heritage Council has previously commented on this project in December 2010 and November 2011.

With regard to previous comments, the Heritage Council has considered the information contained within the Environmental Assessment and provides the following comments:

1. The Heritage Council notes the inclusion of Table 13 in the EA (Development & Mitigation Options) as requested in previous correspondence. It is considered that this allows the various options for development/re-use and their subsequent impacts to the heritage buildings at the site to be fully understood.
2. Based on the information contained within the EA and Appendix V the proposed mitigation measures and subsequent Draft Statement of Commitments relating to Non-Indigenous Heritage within the Concept Plan are considered appropriate at this stage in the project's lifetime.

   However, once the projects design and scope of works is further refined, these DSoC must be revised to take into consideration any additional impacts resulting from this ongoing refinement of works.

3. The Statement of Heritage Impact to identify any impacts to Glenfield Farm must be submitted to the Heritage Council for comment and endorsement prior to any works being approved or taking place which could impact on the State Heritage Listed property.
4. Prior to any historical archaeological investigations taking place, the proposed Excavation Director must submit a statement to the Heritage council detailing their suitability to undertake the works against the Heritage Council Excavation Directors Criteria.

Inquiries on this matter may be directed to Katrina Stankowski on 98738569 or via email at Katrina.Stankowski@heritage.nsw.gov.au.

Yours sincerely

18/04/2012

Vincent Sicari
Manager
Conservation Team
Heritage Branch, Environment and Heritage, Policy and Programs Group
Office of Environment & Heritage

AS DELEGATE OF THE NSW HERITAGE COUNCIL

NSW GOVERNMENT | Office of Environment & Heritage

Your reference: MP10/23872
Our reference: DOC12/14514
Contact: Richard Bonner, 9995 6833

Ms Kylie Seretis
Manager – Rail and Ports
Infrastructure Projects
Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Attention: Lisa Chan

Dear Ms Seretis

I refer to your letter of 21 March 2012 inviting comments from the Environment Protection Authority (EPA) on the Environmental Assessment (EA) for the SIMTA Intermodal Terminal Facility.

As you may be aware the NSW Government established the EPA as an independent statutory authority separate from the Office of Environment and Heritage (OEH) on 29 February 2012. The EPA is responsible for licensing and regulating air emissions, contaminated sites, hazardous materials, noise, pesticides, forestry activities, waste and water quality. OEH manages reserves established by the *National Parks and Wildlife Act 1974,* develops policy on environmental matters, and regulates biodiversity, Aboriginal cultural heritage, European heritage, waters and rivers, wildlife and native vegetation.

OEH has reviewed the EIS and provides the attached comments in relation to Aboriginal Cultural Heritage, biodiversity and flooding. Comments in relation to European heritage may be provided separately by OEH's Heritage Branch. OEH also understands the EPA has made a separate submission.

If you wish to discuss any of the issues raised in this attached comments, please contact Richard Bonner on 9995 6833.

Yours sincerely

Lou Ewins 1/6/12

LOU EWINS
Manger Planning and Aboriginal Heritage
Conservation and Regulation, Metropolitan
Office of Environment and Heritage

Attachment 1: OEH's comments on the Environmental Assessment for the SIMTA Intermodal Terminal Facility
Attachment 2: NSW OEH Interim Policy on Assessing and Offsetting Biodiversity Impacts of Part 3A, State Significant Development (SSD) and State Significant Infrastructure (SSI) Projects

PO Box 668 Parramatta NSW 2124
Level 7, 79 George Street Parramatta NSW
Tel: (02) 9995 5000 Fax: (02) 9995 6900
ABN 30 841 387 271
www.environment.nsw.gov.au

Attachment 1: OEH comments on the Environmental Assessment for the SIMTA Intermodal Terminal Facility

1. Aboriginal Cultural Heritage

OEH notes the assessment report (appendix U) identifies three areas of potential archaeological deposit (PAD) as well as an area of cultural interest (Area 1). It is unclear why the areas identified as: PAD 1; that part of PAD 2 located within the Royal Australian Engineers Golf Course; and Area 1 have been considered as they are outside the project area and the proposed rail corridor.

OEH also notes that aerial photographs from 1986 and 1994 suggest the area of PAD 3 is smaller than indicated in figure 33 of the assessment report.

2. Biodiversity

OEH notes the significant biodiversity values of the site are confined to the proposed rail corridor which will connect the Intermodal Terminal with the Main Southern Railway. These values include two plants species (one endangered and one threatened) and five endangered ecological communities (EECs) listed under the *Threatened Species Conservation Act 1995* (TSC Act).

While the extent of scale and impacts on the biodiversity values within the rail corridor will not be known until the 30 metre wide alignment of the proposed rail link has been finalised as part of a future development application, OEH broadly supports the draft commitments proposed to avoid, mitigate and offset impacts.

In considering the location of the rail link within the corridor OEH recommends that priority be given to avoiding impacts on *Persoonia nutans.* This is based on the listings under the TSC Act, which indicates *Persoonia nutans* is less able to suffer a loss of a population than *Grevillea parviflora* ssp *parviflora.*

In determining offsets for unavoidable biodiversity losses, OEH concurs with the draft commitment reference to the *Principles for the Use of Biodiversity Offsets in NSW* (OEH 2011) but recommends any offset strategy developed be consistent with the 2011 *NSW OEH Interim Policy on Assessing and Offsetting Biodiversity Impacts of Part 3A, State Significant Development (SSD) and State Significant Infrastructure (SSI) Projects* which is currently being trialled in partnership with the Department of Planning and Infrastructure (see attachment 2). Ideally a 'tier 1: improve or maintain' standard should be the biodiversity outcome with offsetting requirements calculated using the Biobanking Assessment Methodology BBAM.

3. Flooding

The primary objective of the Government's Flood Prone Land Policy is to reduce the impact of flooding and flood liability on individual owners and occupiers of flood prone land and reduce private and public losses resulting from floods. The most appropriate method to assess the development of flood prone land is through the floodplain risk management process which is detailed in the *NSW Floodplain Development Manual (2005).*

Under the NSW Government's Flood Prone Land Policy, local councils have the prime responsibility for floodplain risk management including areas affected by local overland flooding and determining the acceptability of flood impacts. OEH therefore recommends close consultation with Liverpool City Council throughout the planning and design process to ensure the proposed development meets Councils' flood risk management objectives.

OEH notes the *Flood Study and Stormwater Management* (FSSM) report is limited to the Anzac Creek catchment. Given part of the proposal (catchment C) is within another sub-catchment of the Georges River it is recommended an assessment of this sub-catchment should also be undertaken. Both Anzac Creek and Georges River sub-catchment assessments should take into

Words missing?

OEH also notes that post development flood level increases of up to 5 mm for the 100 year ARI nine hour event and 0.25m for the PMF one hour event are predicted. As noted in the *Flora and Fauna Assessment* report, land predicted to be impacted by flooding south of the site contains significant biodiversity values. OEH therefore recommends the impacts of any increase in the incidence of flooding on these values be assessed.

In relation to the design of three on-site detention basins proposed by the FSSM report to address post development discharges into the Anzac Creek catchment, OEH recommends they be assessed to ensure:

- consideration has been given to the entire catchment wide drainage system for an ultimate development scenario which includes the neighbouring potential future residential along the north east boundary; and
- they will act in unison as one system.

OEH also recommends consideration be given to the risks of the proposed basins overtopping during flood events and for the effective management of these events on downstream development, evacuation routes and infrastructure. Clarification should be sought on whether they should be assessed in accordance with the risk management requirements of the NSW Dams Safety Committee.

Other flood rated matters that should be addressed include:

- the potential long term cumulative impacts of the proposed filling in light of the potential development of adjacent sites (east and west) as this may alter predictions for the 100 year flood and larger floods event.
- the likely isolation of the site during events larger than the 100 year ARI flood event. In this situation the site would be classified in accordance to the Flood Emergency Response Planning Classification of Communities (DECC Guideline), as High Flood Island (HFI) and may require re-supply by boat or air. If the provision of adequate support was not possible, evacuation would be required before isolation occurs.
- whether the adopted blockage factor of 25 per cent is appropriate. OEH recommends the views of Liverpool City Council on this matter be sought.

NSW OEH interim policy on assessing and offsetting biodiversity impacts of Part 3A, State significant development (SSD) and State significant infrastructure (SSI) projects

Approved by the Chief Executive Officer 25 June 2011

1 Introduction

Offsetting is one practical tool for decision makers who have to balance the relative environmental, social and economic merits of development proposals under the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The NSW Office of Environment and Heritage (OEH) has developed the Biobanking Scheme to provide a structured, market driven approach to offsetting. The Biobanking Scheme requires proposals to meet the 'Improve or maintain' standard, and is based on sound science and robust, transparent rules.

The Biobanking Scheme is voluntary and many proposals in NSW are assessed outside the Scheme. The majority of these proposals have been assessed by the Department of Planning and Infrastructure (DP&I) as major projects under Part 3A of the EP&A Act. DP&I have now repealed Part 3A. Most developments that would previously have been assessed and determined under Part 3A will now fall into either:

- Part 4 – State Significant Development (SSD): these will be projects put forward by the private sector and determined by the Planning Assessment Commission.
- Part 5.1 – State Significant Infrastructure (SSI): infrastructure projects undertaken by or on behalf of public authorities and determined by the Minister for Planning and Infrastructure.

There are also transitional arrangements for existing projects that will continue to be assessed and processed as Part 3A projects. For the purposes of this policy these existing proposals will continue to be referred to as Part 3A; SSD and SSI are referred to collectively as 'State significant projects'.

A proportion of Part 3A and State significant projects also affect nationally listed threatened species and threatened ecological communities (TECs). These proposals are considered by the Department of Sustainability, Environment, Water, Population and Communities (DSEWPC) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The question of suitable offsetting often arises in the context of these decisions. This policy seeks to provide a consistent and transparent approach to impact assessment and offsetting for projects assessed under Part 3A or as SSD or SSI. This policy also provides the basis for aligning NSW and Commonwealth assessment and offsetting processes by providing an assessment pathway that is likely to satisfy both NSW and DSEWPC requirements provided that certain standards are met.

This policy will operate on a trial basis in partnership with DSEWPC and DP&I until 30 June 2012, and will be reviewed at the end of this period.

2 Scope and application

This interim policy relates to proposals that are assessed by DP&I under the Part 3A, SSD or SSI provisions of the EP&A Act, and are not being considered as part of the Biobanking Scheme.

This interim policy:

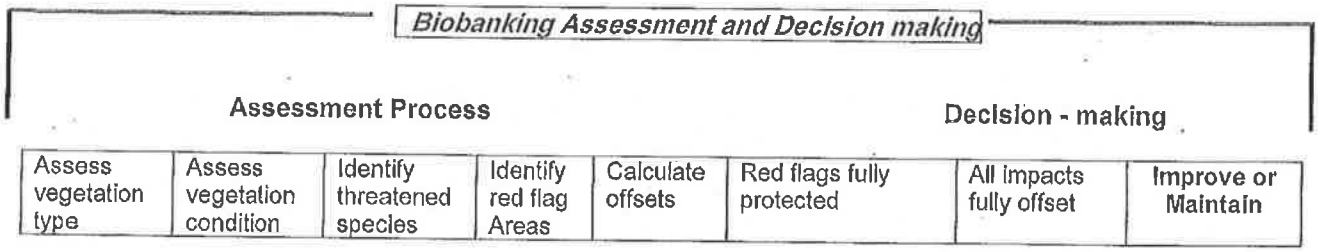
- acknowledges that proposals assessed as State significant projects or Part 3A do not have to meet the "Improve or maintain" standard, which is required under the Biobanking scheme;
- nevertheless, adopts the use of the Biobanking Assessment Methodology (BBAM) for the purpose of:
  - quantifying and categorising the biodiversity values and impacts of State significant projects or Part 3A proposals;

- establishing, for benchmarking purposes, the offsets that would be required if the State significant project or Part 3A proposal had been expected to meet the improve or maintain standard;
- provides a structured approach to determining how proposals may, in lieu of meeting the improve or maintain standard, meet one of two alternative standards established under this policy.

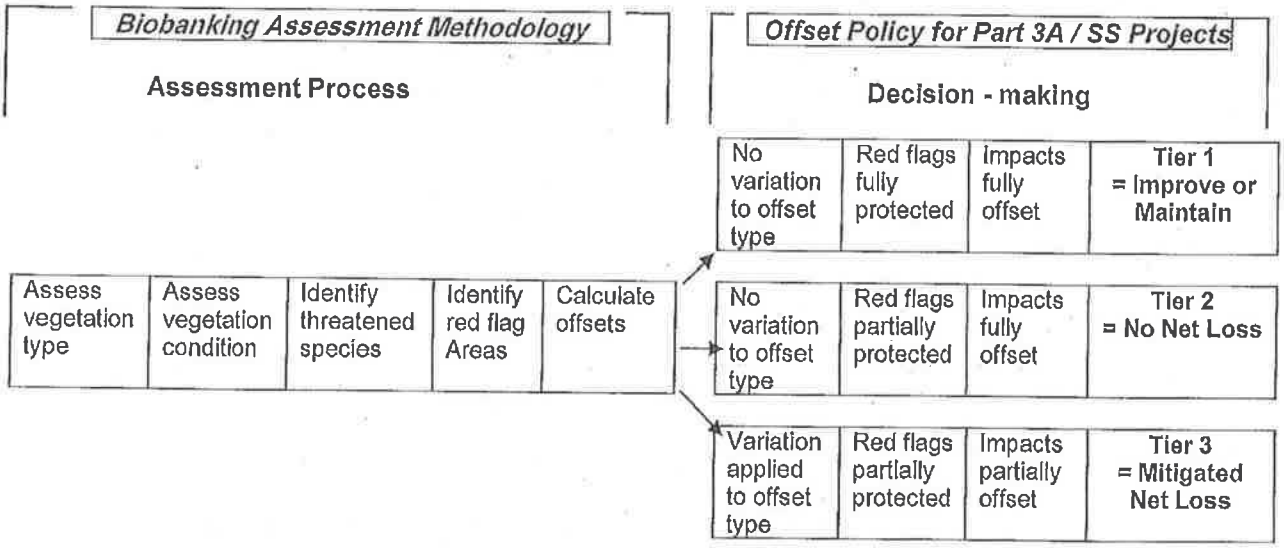
Diagram 1 illustrates how the BBAM is applied under this policy, in contrast to its application under the BioBanking Scheme.

Diagram 1: Application of the Biobanking methodology to Part 3A and State significant (SS) project offsetting decisions

A. BIOBANKING SCHEME



B. INTERIM OFFSETS POLICY FOR PART 3A or SS PROJECT DEVELOPMENTS



This interim policy does not apply to:

- decisions on developments under Part 4 or 5 of the EP&A Act (except SSD under Part 4 or SSI under 5.1 of the EP&A Act); or
- decisions on the making of environmental planning instruments (EPIs) under Part 3 of the EP&A Act.

3 Definitions

BBAM:	Biobanking Assessment Methodology
Biobanking Credit Calculator:	As defined under the BBAM
Biodiversity Credits:	Ecosystem or species credits required to offset the loss of biodiversity values on development sites or created on biobank sites from management actions that improve biodiversity values
DGRs:	Director-General's Requirements for either an EIS (issued by DP&I) or a SIS (issued by OEH)

EARs	Environmental Assessment Requirements
Ecosystem credit:	As defined by the *Threatened Species Conservation Act 1995* (TSC Act)
EPI:	Environmental Planning Instrument as defined by the EP&A Act
ESD:	Ecologically Sustainable Development
State significant project:	Collectively State significant development and State significant infrastructure projects
Planning authority:	A person or body exercising and consent or approval role under the EP& A Act – usually a Council or DP&I;
Proponent:	A person or body seeking consent or approval under the EP&A Act.
Red flag:	As defined by the BBAM – areas of particular conservation significance of sufficient scale to be viable over the medium to long term.
Relevant planning decisions	Decisions made by DP&I under Part 3A, 4 or 5.1 of the EP&A Act
Variation criteria:	Options outlined in this policy vary the offsetting requirement in certain circumstances
Species credit:	As defined by the TSC Act
SSD:	State significant development as defined by the EP&A Act
SSI:	State significant infrastructure as defined by the EP&A Act
Threatened Species concurrence and consultation decisions:	Decisions made under section 79(B), in the case of Part 4 EP&A Act matters, and sections 112B and 112C, in the case of Part 5 matters
Voluntary planning Agreement	A planning agreement as defined by the EP&A Act

4 OEH's policy on impact assessment and offsetting

Attachment A sets out the process for Part 3A proposals considered under this policy. It is expected to be similar for State significant projects (this will be confirmed after release of the new regulations outlining the State significant project process).

4.1 Determining offset requirements

Under this policy, the Biobanking Assessment Methodology (BBAM) is used for the following purposes:

- to describe, quantify and categorise the biodiversity values and impacts of a proposal;
- to identify, for benchmarking purposes, the offsetting that would be required to meet the improve or maintain standard; and
- to provide the information for calculating offsets under this policy.

The BBAM is an assessment tool that allows the impacts of a proposal and its offsetting requirements to be calculated in a consistent and transparent way. The BBAM can be applied on:

- a voluntary basis by the proponent, either on a formal basis as part of the Biobanking Scheme, or as part of the assessment of a State significant project or Part 3A proposal;
- by OEH to inform its submissions to the DP&I on State significant project or Part 3A proposals. In such cases OEH would be using the assessment information provided by the proponent to assess likely impacts and calculate offset requirements.

OEH will support both of these options being implemented by:

- Amending and then recommending standard Environmental Assessment Requirements for State significant projects or Part 3A to include the option for the proponent to use the BBAM in his or her environmental assessment; and
- Internally applying the BBAM to State significant projects or Part 3A proposals using the information provided by the proponents in their Environmental Assessment; and using that

assessment and this policy as the basis for OEH submissions on State significant projects or Part 3A proposals. (See Attachment A.)

Due to resourcing constraints it will not be possible for OEH to undertake this work for all State significant projects or Part 3A proposals but all efforts should be made to use the BBAM where the State significant project or Part 3A proposal is or is likely to be an EPBC Act controlled action.

Where it is not possible due to resourcing constraints to apply the BBAM, offsets are to be negotiated on a case by case basis and in accordance with OEH's offsetting principles (See http://www.environment.nsw.gov.au/biocertification/offsets.htm). The *NSW OEH interim policy on assessing and offsetting biodiversity impacts of Part 3A, State significant development (SSD) and State significant infrastructure (SSI) projects* is not relevant to offsets that have been calculated without applying the BBAM.

The Policy provides for a range of mechanisms to be used to implement offsets (ie. not only biobanking credits) in view of the currently limited supply of biodiversity credits on the market.
The Policy describes 3 possible outcomes that proposals should strive to meet depending on the circumstances. These outcomes are described in Table 1.

Table 1: Offsetting calculations using the BBAM*

Outcome achieved	Level of impact	Offsetting requirement
- Improve or maintain (Tier 1)	- red flag assets protected and clearing only occurs within the variation rules set by the BBAM	- calculated by the credit calculator**
- No net loss (Tier 2)	- some/all red flags not protected and clearing allowed outside the variations rules permitted by the BBAM	- calculated by the credit calculator**
- Mitigated net loss (Tier 3)	- as for 'no net loss'	- calculated by the credit calculator but then amended by the offset variation criteria contained in Attachment A of this policy to a minimum land offset to clearing ratio of 2:1

* These standards do not apply where the BBAM has not been used as it is not possible to identify red flags or credit requirements in the absence of the BBAM assessment.
** The difference between Tier 1 and 2 relates only to the clearing of red flags. The amount of offsetting required is the same for both Tiers

OEH's submissions will advocate that proposals deliver at least one of these outcomes, with "improve or maintain" (Tier 1) being preferred.

4.2 Determining an appropriate outcome

Tier 1: "Improve or Maintain"

While not required of State significant projects or former Part 3A proposals, the "Improve or Maintain" nevertheless represents a high standard of biodiversity protection. OEH should set out in its submissions to DP&I the requirements for meeting this standard. DSEWPC has advised that proposals that meet the "Improve or Maintain" standard are likely to satisfy its requirements for impact assessment and offsetting.

A proposal can fall short of the "Improve or Maintain" standard in two main ways: either red flag assets are to be cleared outside the rules allowed by the BBAM; and/or the amount and type of offsetting secured is inconsistent with the requirements of the BBAM credit calculator.

Tier 2: Negotiating a "No Net Loss" outcome

'No Net Loss' is attained when it is proposed to clear red flags outside the variation rules permitted by the BBAM, but all impacts are to be fully offset in accordance with the BBAM requirements.

In deciding whether this is appropriate, consideration should be given to:

a) whether any feasible alternatives exist that would avoid clearing;

b) the value of the resource (in the case of extractive industries) or other economic benefits and the likely contribution of the proposal to local and regional economies.

Most Part 3A proposals and State significant projects are of social and economic significance to State and regional economies. It is for DP&I to compare and balance the significance of economic or social benefits, and potential environmental (including biodiversity) impacts and gains.

DP&I has prepared draft social and economic impact assessment guidelines to assist decisions makers balance social, economic and environmental outcomes. OEH will work with DP&I on the preparation of these guidelines and their subsequent integration with future versions of this policy.

Proposals that meet the 'No Net Loss' outcome may satisfy DSEWPC requirements for impact assessment and offsetting provided that a sound economic and social justification for anticipated impacts is provided.

Tier 3: Negotiating a "Mitigated Net Loss" outcome

"Mitigated Net Loss" occurs when red flag assets are to be cleared and this clearing is considered acceptable under the requirements set out for no net loss; and the amount and type of offsetting proposed is inconsistent with the requirements of the BBAM credit calculator. In considering whether the mitigated net loss standard is appropriate, consideration should be given to:

a) whether the credits required by the calculator are available on the market;
b) whether alternative offset sites (other than credits) are available on the market;
c) the overall cost of the offsets and whether these costs are reasonable given the circumstances.

Should any of these circumstances apply, then it is reasonable to apply the variation criteria to the point that:

a) suitable offset sites can be found within a reasonable[2] timeframe;
b) the costs of offsetting is brought within a reasonable range; and
c) an offset to clearing ratio of at least 2:1 vegetated to cleared hectares is achieved.

The variation criteria are set out at Attachment B. In summary the variation criteria:

- Make provision for the conversion of ecosystem credits to another type of ecosystem credit;
- Make provision for conversion of one type of ecosystem credit to another type of ecosystem credit and for the waiving of species credits in some circumstances;
- Remove the need for offsets where clearing is minimal and confined to non-threatened vegetation; and
- Make provision for the conversion of ecosystem and species credits to hectares which, in turn, allows the land value of the offset to be estimated. In this way, approvals can be issued that specify either the hectares or the financial contribution that would need to be made to secure the land required for offsetting.

OEH should set out in its submissions to DP&I the requirements for meeting this standard.

Proposals that meet a mitigated net loss outcome will be considered on merit by DSEWPC.

5 Securing an offset site

5.1 Criteria for determining suitability of an offset site

OEH offset principles require offsets to be managed under effective and secure long term management arrangements. Dedication of land under the *National Parks and Wildlife Act 1974* (NPW Act), and the establishment of biobanking sites with Biobanking Agreements under the TSC Act, meet this requirement because:

a) The unambiguous principal objective of ongoing site management is biodiversity conservation;

[2] What is "reasonable" is contingent upon a range of factors and needs to be considered on a case by case basis.

b) Management is undertaken in accordance with a Plan of Management;

c) There is reasonable likelihood that sufficient resourcing will be available to implement the Plan of Management over-time;

d) The arrangements are in-perpetuity, and conservation obligations are transparently transferred and disclosed to any new owners of the land through appropriate administrative procedures; and

e) There are appropriate accountability mechanisms to secure the outcomes and these mechanisms cannot be altered without alternative and comparable offsetting arrangements being put in place.

f) An alternative to establishing biobanking sites is to retire biobanking credits, where appropriate credits are available. The Minister for Planning may approve a project under Part 3A subject to a condition that requires a proponent to acquire and retire biodiversity credits of a specified number and class (section 75JA, EP&A Act). S.89I and 115ZC allow approvals for all State significant projects to include conditions that require biodiversity credits to be obtained and retired by the proponent.

Other conservation mechanisms may also meet the criteria in certain circumstances. These include:

a) Conservation Agreements under the NPW Act;

b) Trust Agreements under the *Nature Conservation Trust Act 2001* (NCT Act);

c) A Property Vegetation Plan registered on title under the *Native Vegetation Act 2003* (NV Act); and

d) A Planning agreement under s93F of the EPA Act.

The suitability of these mechanisms (or any other mechanism) depends on whether the proposed arrangements are likely to result in the management of the land in accordance with the five criteria above.

5.2 Offsetting and reservation under the NPW Act

If an offset site is proposed that may involve the transfer of land to OEH for reservation under the NPW Act, then consultation must occur with the relevant PWG Branch Director at the earliest possible stage. No commitment should be made to accept an offset involving new reserves without the agreement of the Deputy Chief Executive, PWG. Similarly, no commitment should be made to accept offsets involving other forms of in-perpetuity protection without the agreement of the relevant sponsoring body.

6 Implementation and accountabilities

Staff may use the BBAM only if they have been trained. Some Catchment Management Authorities (CMAs) have indicated an interest in participating in offsetting discussions and may be available to assist OEH to undertake this work. OEH, however, will remain the lead Agency responsible for offsetting negotiations on behalf of the Environment portfolio. Positions with significant responsibilities under this interim policy are listed below.

Position	Responsibility
Director, LEC Manager, Conservation Policy and Strategy, LEC	Policy development and review
Manager, Biodiversity and Vegetation Programs	Issue biobanking statements and agreements State-wide co-ordination of biobanking program Overall program support including Biobanking helpline, Workshops and Training and accreditation programs.
Regional Director, EPRG	To approve the communication of BBAM outcomes to proponents and planning authorities To approve amendments to credit requirements in accordance with the requirements of this policy To liaise with PWG Branch Directors on offset proposals involve new reserves
Manager, Planning and Aboriginal Heritage,	To approve use of BBAM by OEH staff when dealing with

EPRG Manager, Metro Projects and Support (Metro only), EPRG Manager Environment and Conservation Programs (NW only), EPRG Manager, Regional Operations, EPRG	SSD, SSI or Part 3A matters
Regional Operations Officers, EPRG Catchment Management Officer, CMA	Must be trained in BBAM in order to apply to methodology

7 Policy review

This interim policy will be reviewed by 30 June 2012.

8 Contacts for further advice

For further advice on this policy please contact:
Ms Julie Ravallion, Manager, Conservation Policy and Strategy on 02 9995 6729

For advice offsetting and new reserve proposals please contact Mr Ray Fowke, Environment Planning Advisor on 02 9585 6607

For advice on the Biobanking Scheme please contact the Biobanking helpline.

9 Related policies and other documents

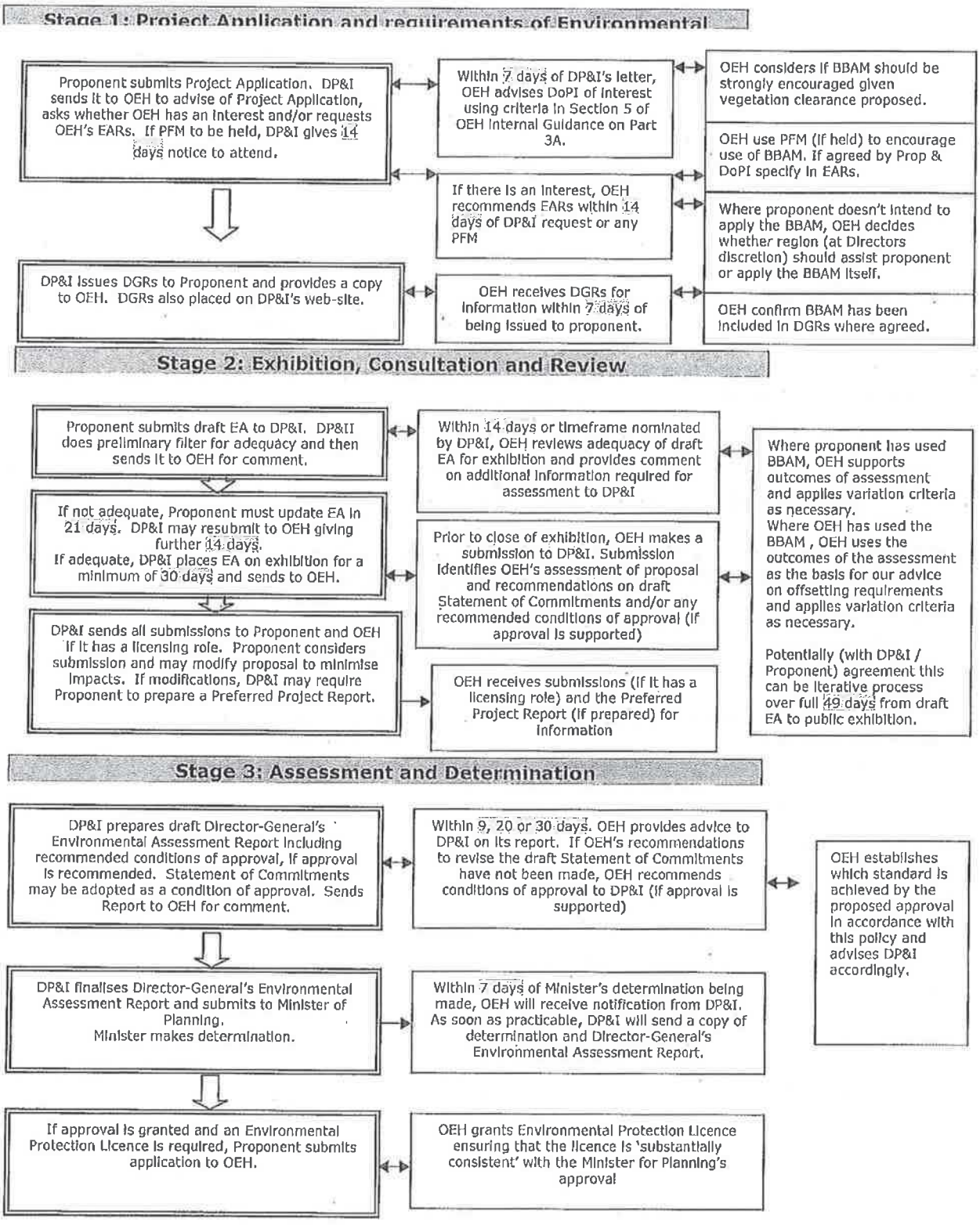
BioBanking Assessment Methodology and Credit Calculator Operational Manual, March 2009, http://www.environment.nsw.gov.au/resources/biobanking/09181bioopsman.pdf

OEH's offsetting principles can be found at:
http://www.environment.nsw.gov.au/biocertification/offsets.htm

The Department of Sustainability, Environment, Water, Population and Communities' draft offsetting policy can be found at:
(http://www.environment.gov.au/epbc/publications/draft-environmental-offsets.html)

Attachment A: **Typical Project Application's Process under Former Part 3A**

Note: The project application process for State significant projects is under development (as of July 2011)



Notes - All times are in calendar days.

DP&I	Department of Planning and Infrastructure	EARs	Environmental Assessment Requirements
DGRs	Director-General's Requirements	PFM	Planning Focus Meeting
EA	Environmental Assessment		

DP&I /Proponent Statutory Requirements | OEH Statutory Requirements | Offset Policy Requirements

Attachment B: Variation criteria for mitigated net loss (Tier 3)

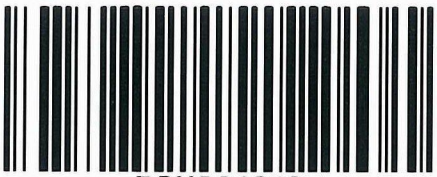
To achieve Tier 3 - mitigated net loss standard, the following variation criteria may be applied to the offsetting requirements of the BBAM. The minimum area standard is an offset to clearing ratio of 2:1.

Variation criteria	**When is this option appropriate**	**How**
a) Convert ecosystem credits for one vegetation type to any vegetation type within the same vegetation formation in the same IBRA bioregion	When no matching ecosystem credits are available	Review to biometric vegetation database to identify vegetation types in the same formation in the same IBRA bioregion. Number of credits should be the same.
b) Convert one type of species credit to another type of species credit with the same or more endangered conservation status	When species credit is not available and the matching species credit is considered a greater conservation priority.	Review conservation status of species Number of credits should be the same
c) Remove/reduce the need for offsetting	Where clearing is minimal (less 4 ha) and where the vegetation is not a highly cleared vegetation type or a Commonwealth or State listed TEC.	Identify and remove credits required for offsetting vegetation under 4ha and for vegetation types that aren't greater than 70% cleared or a Commonwealth or State listed TEC
d) Convert ecosystem credits required to hectares and, if necessary, convert hectare figure to an estimate of land value	Where suitable offset sites are known to exist but: • there is insufficient time to secure the offset sites at the time the decision is made; or • the proposal is to use the services of a third party provider such as the Nature Conservation Trust to secure offset sites and an estimate of cost is required.	Convert credits required to hectares using the credit to ha converter[1] and ensure that the approval: • specifies the type, location and condition of offsets; and • secured offset sites in accordance with the requirements of section 5 of this Policy. An estimate of the cost of the offset can be made by using a Valuer Generals estimate of land value.
e) Waive the requirement for species credits NB: This criteria should not be used for EPBC Act listed species where the proposal is a controlled action	Where no matching credits are available and all ecosystem credits have been obtained in accordance with this policy	Remove the requirement
f) Convert ecosystem credits to a regional conservation priority as identified in a regional conservation plan or similar	When no matching credits are available and variation 1 is not feasible	Identify areas of high conservation priority in existing regional conservation plans or similar. Convert credits required to hectares[1]. Identify eligible offset sites and ensure areas are of sufficient size, condition and landscape context.

[1] OEH is currently finalising an excel spreadsheet which converts credits to hectares. This spreadsheet will be lodged on the OEH intranet site.

South Western Sydney &
Sydney Local Health Districts
Public Health Unit

NSW GOVERNMENT Health Population Health



Ms Kylie Seretis
Manager-Rail and Ports
Infrastructure Projects
NSW Department of Planning & Infrastructure
GPO Box 39 Sydney NSW 2001

Our ref: 05-31-10

28 May 2012

Dear Ms Seretis

Re: Exhibition of Environmental Assessment for Moorebank Intermodal Terminal (SSD - 5066) Moorebank Avenue, Liverpool

Thank you for your letter to this Public Health Unit of 21 March 2012 advising the above Environmental Assessment is on exhibition and inviting comments. Moorebank falls within the region covered by our Public Health Unit and we have prepared a submission on behalf of South Western Sydney Local Health District and the NSW Ministry of Health. In this instance we have prepared comments, in consultation with the Ministry of Health's Environmental Health Branch.

1. Consultation

We were given the opportunity to view a draft Environmental Assessment and we submitted comments on those documents on 20 October, 2011. The documents now on exhibition are largely unchanged and no adjustment has been made in light of our comments.

We note that in the current documents, with respect to health impacts, in Section 15.2-*Assessment of Additional Issues* (p 137) there is reference to consultation with the Department of Health, particularly regarding air quality and human health. A similar statement is again made in Section 17 (p114). We are not aware of any such consultation.

We have not been given the opportunity to participate in any of the local consultations that the proponent may have organised. However, the Ministry of Health and this Unit have been approached by the local community expressing concern about health impacts of the intermodal development with a particular focus on air pollution. These concerns are reasonably summarised in Appendix AA of the Environmental Assessment.

On p16 Appendix AA (Air quality and health impacts) there is a reference to undertaking the risk assessment in accordance with NSW Health Department Guidelines. NSW Health does not have specific air quality guidelines and we would usually refer to National Environment Protection Council monographs and or NSW Protection of the Environment Operations legislation or policies. However, the general principles of the enHealth guidelines for *Assessing human health risks from environmental hazards* have been followed which is the process we usually suggest is followed.

South Western Sydney and Sydney Local Health Districts Public Health Unit
PO Box 374 Camperdown, NSW, 1450, Australia
Telephone: 9515 9420 Facsimile: 9515 9440

2. Air quality and possible health effects

The health risk assessment for air pollutants is dependent on models prepared by the consultants PAE Holmes (Appendix J). Taking a base assumption of locomotive, truck movements and heavy machinery use for a maximal hour, the consultant calculates emission rates in grams per second for NOx and PM10 for each source.

The consultants rely heavily on more detailed work previously done for the intermodal site at Enfield and apply a scaling factor (3.3) to arrive at emission rates for different sources and allocate these source emissions to various points within the SIMTA site. They then use a plume model to estimate incremental additional NOx and PM10 at each of 7 residential receptor sites on every side around the site. Background pollutants levels from the nearby EPA Liverpool monitoring site or Bankstown site are added to generate a year's worth of predicted data for NOx and PM10 and PM2.5 exposure. The health risk assessment (Appendix J, Toxikos consultants) takes this base data and develops hazard indexes based on pollutant exposure at the receptor sites for days or hours when pollutant levels are toward the higher end of the concentration distribution.

In general, the approach to modeling the air quality impacts adopted by the consultants appears adequate. However, we have concerns that some of the underlying assumptions may be incorrect and may lead to an underestimate of air quality and potential health impacts. We make the following comments on the methods and the findings.

- The consultants rely on a scale factor of 3.3 to generate emissions data from previous work done for the Enfield Intermodal EIS. This is based on the difference in maximum TEU handling capacity, i.e. 300,000 per annum for the Enfield site and 1,000,000 per annum for the Moorefield's site. For example, 24 truck movements (idling) are scaled to 80 truck movements (idling). This is a relatively simple scaling and does not seem to be a safe assumption at least for truck movements. The proponents in their own traffic modelling study (Appendix K Transport and Accessibility Impact Statement Volume 1 section 7.4.5) estimate that daily truck movements at maximum capacity will be 2,368 each weekday and truck traffic will peak between 2 and 3pm at an estimated 245 truck movements for this hour. This estimate of maximum hour truck activity is three-fold greater than that used by the consultants and will affect the calculated emission rates for idling trucks and moving trucks substantially.
- Choice of receptors seems reasonable except that the defence army base is excluded as a receptor site. There may be grounds for treating this site differently from residential receptors. However, it is our understanding that defence personnel reside there. Some estimate of impacts is warranted including training if applicable.
- The use of the nearby (3km) Liverpool OEH monitoring station to generate background air quality data for each receptor site is probably not ideal. Some direct ground level measurements at some of the receptor sites would provide a more accurate estimate of whether incremental additional exposure from the Intermodal activity would lead to regular increases above guideline limit values at some receptor sites. These need not be long term measurements but could validate the use of the Liverpool monitoring station data. We note that some residential receptor sites are already close to main roads and may have NO_2 or PM2.5 exposures higher than that recorded at the Liverpool site.
- Overall the focus on NOx and PM10/2.5 is reasonable and an assumption of 90% of PM10 fraction as PM2.5 is acceptable.
- It is noted that there are occasional exceedances for PM2.5 at receptor sites 2 and 3 in the scenarios. These are of limited duration and we agree that as currently calculated these occasional excursions above 25ug/m^3 average for a 24 hour period are probably not of great health significance (and appear to be mainly driven by variation in background pollution). However, as noted above the baseline assumptions about truck movements appear unsafe, the number of days when advisory guideline limits are exceeded could be greater.

- The approach taken in the "Health Risk Assessment" document (Appendix I) is a guideline limit approach, rather than calculation of risk of various health events. This is an acceptable approach. However, given the concerns above that we have about base assumptions of truck movements and some possible variation in baseline NOx and PM10/2.5 at some receptor sites we believe that this health risk assessment will need to be modified.
- Notwithstanding the above comments, given some inbuilt conservatism in the models the health risks from any additional air pollution are likely to be low. However, given problems with base assumptions we recommend that the modelling be redone.

2. Noise

The noise assessment largely is only a preliminary assessment and is careful to recommend that further detailed assessment will be required at each stage, if approval is given. While construction noise might be manageable because noise legislation largely restricts hours of building work, the potential health impacts from operational activities concern us. Continuous 24 hour, 7 day, operational noise is likely to be a significant issue, particularly at night. This has the potential to significantly impact on people's health and wellbeing.

It is noted in the Noise Impact Assessment (Appendix O) Sec 4.3.2 that in considering sleep disturbance criteria, the consultant indicates there are shortcomings with current ENCM criterion and more detailed analysis may be required. In Sec 5.2.2, the conclusion is noise generation will be compatible with the proposed usage as an intermodal terminal and warehouse facility. In this regard while broadband alarms along with placement of buildings may assist with noise reduction, it is well known that transient noise events, especially at night, have potential to cause considerable annoyance, sleep disturbance, and hence health issues. With a facility of this nature this could include truck queuing, and idling, containers banging, trains braking and so forth. While noting the preliminary background measurements and modeling, the qualification given to the community in the Community and Stakeholder Outcomes Report that all relevant criteria are ***likely*** to be met during operation of the facility (p18) seems to be less than satisfactory.

With residential receptors being in close proximity we consider noise is likely to be one of the more significant environmental considerations that could impact on health. We think that this is of such significance that the expertise of the Environment Protection Authority (EPA) is required and we would like to have the opportunity to canvas our concerns with that Agency. (See comments in 6 below).

3. Light spillage

Light spill is an important issue and it is noted in the Community and Stakeholder Outcomes Report that, while measures are planned to quantify and mitigate its effects on the SIMTA site, if the adjacent proposed intermodal development occurs on the School of Military Engineering site there could be cumulative impacts.

The Visual Impact Assessment report, Section 08, discusses light spill and indicates this will be within Australian Standards and there will be no impacts. This is outside our area of expertise but again intrusive light into residential receptors could be of concern. It is noted again these conclusions by the consultants Reid Campbell are based on preliminary concepts so it will be important that if the project proceeds more work is done on this issue including cumulative impacts.

4. Road accidents and fatalities

There are no considerations in the traffic models presented of the likelihood of additional accidents and fatalities resulting from an increase in truck movements at various intersections. This issue has been raised by those concerned about the development. It would be useful if this question could be covered.

5. Hazards and Risks Assessment

This is covered in Appendix Q and it is noted that the potential for health risks from land contamination will be assessed. We regularly receive these reports to review either in conjunction with councils or the EPA Contaminated Sites Unit. It is noted that further work will be undertaken to assess those issues.

From an operational perspective I would draw your attention to recent changes to the Protection of the Environment Legislation Amendment Act 2011. This requires reporting pollution incidents immediately to all relevant response agencies including the Environment Protection Authority (EPA) the Ministry of Health, the WorkCover Authority, Fire and Rescue NSW and the local authority. These changes have probably come in since these reports were drafted but the requirements should be factored into emergency response plans.

6. Other

The assessment of environmental impacts for a development of this nature is complex. It is noted that the proximity to residential receptors is variable for impacts, being as close as 200 metres for air (Toxicos p20) and 400 metres from the site for light impacts (P117 Reid Campbell).

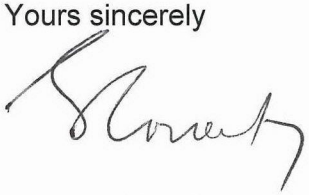
This is a significant, 'nationally recognised', infrastructure project. We understand there is still some clarification regarding who will be the ARA in this instance for environmental impacts. With no disrespect to councils' capabilities and in light of significant community concern we feel that it would be more appropriate if the EPA was the Appropriate Regulatory Authority (ARA). We often work with that agency on other large projects and recommend that comment is sought from EPA. We would be happy to work with them given that this project, if approved, will have a need for ongoing environmental assessments as recommended in the various consultants' reports.

As previously raised by the Ministry, for a nationally recognised infrastructure project we strongly recommended that a comprehensive health impact assessment (HIA) be conducted. There is an assumption that there will be an improvement in air quality either in the local region of Liverpool or in the Sydney Basin because of reduction in truck movements along the M5 corridor and a HIA is a useful process to identify net regional health gains or losses. It is interesting that with the concurrent Federal Government proposal in the same precinct, we were able to table a similar suggestion regarding the usefulness of a HIA for such a major project which has been supported by the proponent.

In summary, it is of concern that the various studies are rather open ended and that there is an assumption that there has been consultation with the Ministry of Health. We would like to see the involvement of the EPA in assessment of environmental emissions and impacts which falls under their legislation and have the opportunity to work with them further on the assessment of impacts of the development on the local community.

Thank you for considering these comments and should you require further clarification please contact Stephen Conaty or Graham Burgess at SSW PHU on 9515 9420.

Yours sincerely



Stephen Conaty
Director
South Western Sydney and Sydney Local Health Districts' Public Health Unit

NSW GOVERNMENT | Transport for NSW

Ms Kylie Seretis
Manager – Rail and Ports
Infrastructure Projects
Department of Planning and Infrastructure
GPO Box 39
Sydney NSW 2001

Dear Ms Seretis

Thank you for your letter of 2 April 2012 advising the exhibition of the Environmental Assessment for the Sydney Intermodal Terminal Alliance (SIMTA) terminal and inviting a submission from Transport for NSW (TfNSW).

TfNSW has prepared a comprehensive response. Comments are divided into two categories:

- Issues where TfNSW believes the Department of Infrastructure and Planning Director General's requirements have been insufficiently addressed (points 1-7)
- Other matters that TfNSW requests clarification/consideration (points 8-9).

TfNSW is supportive of the development of intermodal facilities at Moorebank in Sydney. Moorebank is a unique and ideal location for an intermodal terminal. It is located close to major freeways, it has a logical catchment of freight and logistics businesses within 10 kilometres and adjoins the Southern Sydney Freight Line (SSFL).

The strength of the location is demonstrated by the fact that there is private sector interest in the Moorebank Site (this SIMTA proposal) as well as the Commonwealth proposed Moorebank Intermodal Terminal (MIT) Project.

Delivering the best overall outcome for the Moorebank Site is an important area of focus for TfNSW. This position recognises the need for a port focused terminal and the development of a future interstate freight terminal. Given this, it is important that the approach taken to development in the precinct considers the current and future land use in the entire Moorebank Site. TfNSW believes the key single issue to achieving this integrated approach is to ensure there is a single rail connection from the SSFL to both the SIMTA and MIT sites. This integrated freight rail alignment should be well clear of the East Hills Line Corridor and must not have any connection to it.

TfNSW is the owner of the Moorebank Station Site. The Department of Planning and Infrastructure will be aware it cannot recommend the SIMTA proposal for approval until land owners' consent, including that of TfNSW is obtained.

18 Lee Street Chippendale NSW 2008
PO Box K659 Haymarket NSW 1240
T 8202 2200 F 8202 2209
www.transport.nsw.gov.au
ABN 18 804 239 602

As outlined above TfNSW is supportive of the SIMTA intermodal terminal facility but believes the Concept Plan as submitted requires additional work in a number of areas. A comprehensive response to submissions will be required from the proponent.

This whole of TfNSW response includes the comments of Roads and Maritime Services (RMS) and RailCorp.

It is the TfNSW position that the submissions report should clearly address the detailed issues attached. In summary the key issues are:

- The integration of rail access for the SIMTA and MIT sites as described above and the need for the SIMTA submissions report to address the MIT Summary Detailed Business Case released in April 2012.
- The SIMTA proposal to construct a dedicated freight railway line from the Southern Sydney Freight Line to the SIMTA site. The SIMTA proponent needs to submit an unsolicited proposal to the NSW Government for a rail corridor through the potential Moorebank Station site. An unsolicited proposal will need to be endorsed by the NSW Government prior to TfNSW and/or RailCorp issuing any landowners consent.
- A scaled engineering plan of the proposed SIMTA rail alignment relative to lands owned by RailCorp is required. This plan will need to include track alignments of RailCorp assets including allowance for future quadruplication of the East Hills Line.
- The SIMTA Concept plan description of the projects interaction with the adjoining Moorebank Intermodal Terminal (MIT) is superficial. An integrated approach is required that addresses Director General Requirements.
- The project cites outdated State Plan goals as one of the central justifications for the project. This needs to be updated throughout the concept plan.
- No allowance for road transport of interstate containers or Moorebank Intermodal Terminal (MIT) employee trips has been included.

TfNSW requests the opportunity to discuss the proposed response to submissions and to meet with the project proponents before the response to submissions is finalised.

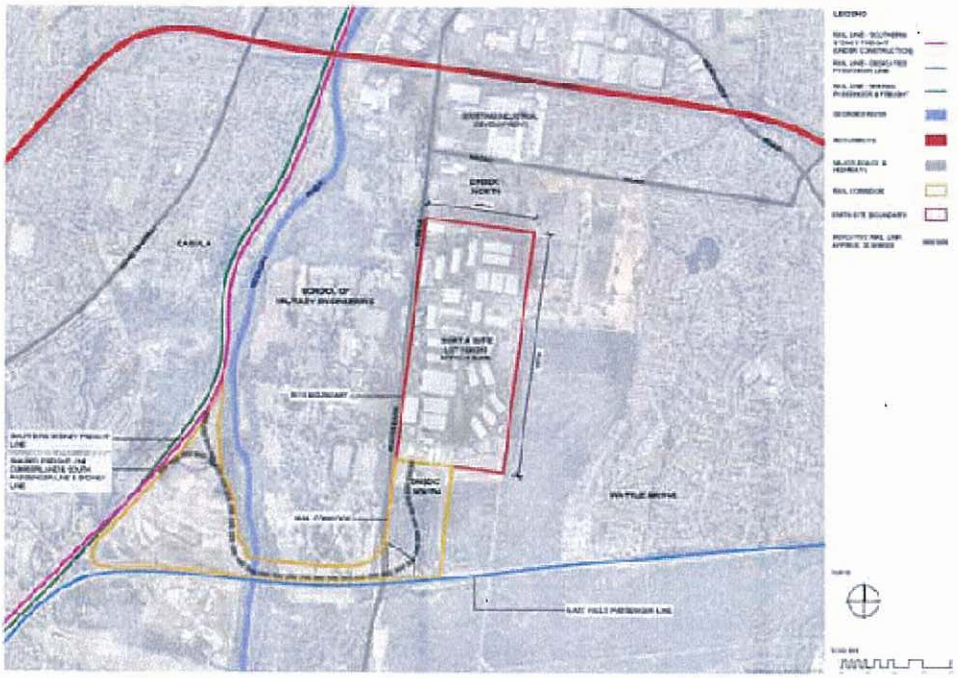
Should you have any questions regarding freight rail issues please contact Mr Nicholas Angelos, Project Manager, Freight Development and Investment on 8202 2405 or Nicholas.Angelos@transport.nsw.gov.au. For other issues the contact is Tim Dewey, Senior Land Use and Transport Planner, on 8202 2188 or Tim.Dewey@transport.nsw.gov.au

Yours sincerely

Bryony Cooper
A/Principal Manager
Integrated Transport Planning and Land Use
Planning and Programs Division

Issue:

1. **Insufficient response to Director General's Requirements/General Requirements/A detailed description of the project ...including site layout**



The proposed rail alignment between the Southern Sydney Freight Line and the SIMTA site is 30 metres wide and occupies 65 hectares. The sketch plan (above) from the concept application indicates the corridor runs from the eastern boundary of the Glenfield Waste Disposal Centre, crosses the Georges River, then runs along the southern boundary of the School of Military Engineering before turning north through the potential Moorebank Station. It then re-enters Commonwealth land before reaching the SIMTA site.

TfNSW believes the sketch of the rail alignment is inadequate and ambiguous as to whether the proposed 30 metre wide alignment incurs into the East Hills Corridor land owned by RailCorp. This is commented on further below. It is clear the proposal traverses the centre of the potential Moorebank Station site.

The Director General's Requirements require a detailed description of the project including site layout. TfNSW suggests it is reasonable to interpret the requirements to include a detailed plan of the freight line alignment between the Southern Sydney Freight Line and the SIMTA site. The sketch above is inadequate for this purpose and while the rail connection will be the subject of a separate application, the concept in its current form cannot be endorsed without greater clarity.

TfNSW first preference would be that the SIMTA freight line alignment to be integrated with the MIT proposal and located well to the north of the East Hills Line corridor such that TfNSW can preserve the future option of quadruplication of the East Hills Line unencumbered in any way by construction or operation of the SIMTA freight line.

Quadruplication of the East Hills Line would also include allowance for service roads and signalling infrastructure which may require TfNSW to utilise land outside the current boundaries of the East Hills Line Corridor especially given the presence of additional complicating factors such as the nearby ethane gas pipeline.

If the proponent can demonstrate that there is no alternative to sharing a portion of the East Hills Line corridor then TfNSW may be prepared to discuss this issue further. These discussions would be subject to the following minimum conditions:

- There is no physical rail track connection proposed between the freight line and a future quadruplicated East Hills passenger line
- The proponent had submitted an unsolicited proposal to the NSW Government (see below) which authorised TfNSW to negotiate potential access to the East Hills Line corridor and the site for the proposed Moorebank Station.
- That SIMTA makes design provision for a future electrified and quadruplicated East Hills Line within RailCorps existing land holdings. The design must demonstrate safety provision, be consistent with current RailCorp and other relevant standards, including track alignment leading toward Glenfield Junction. The design should take account of all other RailCorp assets (e.g. signalling) as well as the nearby ethane gas pipeline.
- Funding of any design, collateral or early works affecting RailCorp track or preservation needs of future track arising from any proposed private freight line works will need to be agreed
- The proponent will need to demonstrate that the construction of the freight alignment will not impact on RailCorp operations or future quadruplicated track. Any other impacts will need to be shown to be compatible with the existing Track Possession Program
- Confirmation the freight line design will not preclude future quadruplication of the East Hills Line at the critical locations of Georges River and Moorebank Avenue bridges.

TfNSW notes that the SIMTA private freight line proposal will require separate negotiations with Australian Rail Track Corporation (ARTC), the owner/operator of the Southern Sydney Freight Line, to which it connects. Some of the negotiations with ARTC are also likely to require TfNSW and/or RailCorp involvement given the major civil works and property access likely to be required.

What the response to submissions should provide

TfNSW requests that as part of the response to submissions the proponent provides a scaled rail engineering plan of their intended alignment that reflects the following principles:

- The new freight track being located well to the north of the current East Hills Line and outside of RailCorp owned land and lands which RailCorp may need to acquire in the future for a quadruplicated East Hills Line including zones for construction and location of critical utility services.

2. **Insufficient response to Director General's Requirements/General Requirements/Strategic and Project Justification/Consistency with the aims and objectives of relevant State policies and plans**

The Director General's Requirements require the proponent to demonstrate consistency with the aims and objectives of relevant State policies and plans.

The NSW State Plan is *NSW 2021 A Plan To Make NSW Number One*. The plan was released in September 2011. The current goal in relation to rail freight is to *Double the proportion of container freight movements by rail through NSW Ports by 2020.* The relevant page from the current State Plan is attached at Annexure A.

The SIMTA Concept Plan is dated March 2012 but references a pre September 2011 State Plan Goal (for example Executive Summary page 4) of 40% of rail container freight being moved by rail from Port Botany by 2016. Every transport related appendix in the Concept Plan references the pre September 2011 State Plan goal. The submission report should clearly justify the need for and objectives of the project with reference to the current State Plan goal.

It should be noted the document *Railing Port Botany's Containers to Ease Pressure on Sydney's Roads'* was a 2005 document presented to the then Minister for Infrastructure and Planning for consideration. It is not current government policy.

The current NSW freight rail policy can be referenced in chapter 7 of the *NSW Long Term Transport Master Plan Discussion Paper.* This will be expanded upon when the TfNSW Freight Strategy and the Draft Long Term Transport Masterplan are released in coming months.

Appendix K, *Transport and Accessibility Impact Assessment* at section 2.5 references the NSW Bike Plan. Given work has started on a new Long Term Transport Masterplan the NSW Bike Plan is no longer current policy. The current position on cycling can be referenced at 5.2.6 of the *NSW Long Term Transport Master Plan Discussion Paper.* This will be expanded when the Draft Long Term Transport Masterplan is released in coming months.

Appendix K, *Transport and Accessibility Impact Assessment* at section 4.1.2 references a number of documents that are not the current policy of the NSW Government. These include:

- State Infrastructure Strategy, June 2008
- Metropolitan Transport Plan, February 2010
- NSW State Plan 2010
- Container Freight Improvement Strategy, 2010

What the response to submissions should provide

Resubmission of the concept plan and critical appendixes justified on the basis of the current Government objectives. These appendixes should include at a minimum:

- Appendix L *Strategic Rail Capacity Analysis*
- Appendix N *Economic Assessment*
- Appendix K *Transport and Accessibility Impact Assessment*

Resubmission of Appendix K to reference up to date cycling policy and remove outdated policy references.

The policy directions in Appendix K, Section 2.5 should reference the *NSW Long Term Transport Master Plan*

3. **Insufficient response to Director General's Requirements/Consultation with Transport for NSW**

SIMTA representatives have previously been advised about the need to submit an unsolicited proposal to the NSW Government for any incursion by the rail corridor on land owned by the NSW Government. The SIMTA representatives were provided with copies of two documents that would assist this process 1. *Working with Government – Guidelines for Privately Financed Projects* and 2. The Independent Commission Against Corruption document *Direct negotiations – Guidelines for managing risks in direct negotiations.*

TfNSW is unaware of any unsolicited proposal submitted by SIMTA to date for incursion on the potential Moorebank Station Site. The TfNSW, Rail Transport Strategy Branch within the Planning and Programs Division will be a key source of advice to Government on potential future uses of the potential Moorebank Station Site. The use of RailCorp land is an unsolicited proposal the proponent will need to follow the NSW Government's guideline document *Unsolicited Proposals: Guide for Submission and Assessment.* Further the unsolicited proposal will need to be approved by the NSW Government prior to TfNSW/RailCorp issuing any land owner's consent. The Department of Planning and Infrastructure will be aware it cannot recommend the SIMTA proposal for approval until land owners' consents are obtained.

What the response to submissions should provide

The submissions report should clearly articulate when an unsolicited proposal for incursion on NSW Government owned lands can be expected. Any such proposal should include a scaled engineering plan of the alignment relative to lands owned by the NSW Government.

Some of the issues the NSW Government will be seeking to resolve when the unsolicited proposal is received and which in any event the submission report response is expected to address are:

- Proposed agreement of commercial and property ownership or leasing arrangements for the SIMTA freight line within the Moorebank Station Site and potentially within the East Hills Railway Corridor.

- Resolution of technical issues. For example although Moorebank Avenue is a private road controlled by the Department of Defence, property investigations to date suggest the embankments for the Moorebank Avenue bridge may be the responsibility of RailCorp.

- How SIMTA intends to cut through the Moorebank Avenue embankment immediately adjacent to the overbridge abutments. This will also require detailed negotiations with TfNSW.

4. **Insufficient response to Director General's Requirements/General Requirements/Dot Point 3 and Key Issues/Transport and Access/ Relationship and Interaction with the adjoining Moorebank Intermodal Terminal Site.**

A key issue arising from the Director General's requirements for the SIMTA concept plan is the need for the project to demonstrate its relationship to and interaction with the adjoining MIT development. The MIT proposal is at a similar stage in the environmental planning process. It is noted the Director General's requirements for the MIT site also require the proponents to demonstrate their relationship and interaction with the SIMTA site.

TfNSW does not support the conclusion that the SIMTA Environmental Assessment (Section 3.4 of Concept Plan) has given detailed consideration to the adjoining development. It is however noted the *Moorebank Intermodal Terminal Project Summary: Detailed Business Case* was not released until April 2012 after the release of the SIMTA concept plan and there may have been limited consultation between the MIT proponent and the SIMTA proponent in the lead up to the release of the business plan.

With the release of the MIT business case, TfNSW now expects the SIMTA submissions report to address a number of issues in their submissions report of particular concern to TfNSW that were not addressed in the SIMTA concept plan which include:

- Addressing the optimal outcome from the TfNSW perspective of a single point of access/egress from the Southern Sydney Freight Line and a shared siding connecting to both the SIMTA and MIT sites including any interim arrangements in the period up until the MIT site is constructed. Alternatively provide a letter from the ARTC supporting the construction of separate connections for the SIMTA and MIT connections.

- The detailed plans submitted should also clearly show how access into the MIT facility may also be achieved. The SIMTA plans and MIT plans as currently provided are mutually exclusive.

5. **Insufficient response to Director General's requirements/Key Issues/Transport and Access/ Access to and from the project including Southern Sydney Freight Line.**

Appendix L of the SIMTA proponent's response is the *Strategic Rail Capacity Analysis.* TfNSW notes the letter from the Australian Rail Track Corporation attached to the appendix. TfNSW seeks clarification on a number of aspects of this report as follows:

- The *Need for the rail link* in Appendix L is based on an outdated State Plan goal as commented on elsewhere in this response.

- TfNSW requests the submissions clarify whether the train path numbers presented on page 4 of appendix L represent 'inbound' trips only as the heading suggests or in fact represent 'round trips' as other sections in the concept plan suggest and therefore need to be doubled to account for total train movement between Moorebank and Port Botany.

What the response to submissions should provide

TfNSW requests that the submissions report clarify whether the train path numbers presented on page 4 of appendix L represent inbound trains only or need to be doubled to account for trains returning to Port Botany.

If the train numbers need to be doubled TfNSW requests that appendix L be updated to accurately reflect the number of train movements to and from Port Botany. Other areas of the concept plan that rely on the table at page 4 of appendix L such as Table 5 of the Transport and Access report should also be updated.

6. Insufficient response to Director General's requirements Transport and Accessibility Impact Assessment

The submitted Transport and Accessibility Impact Assessment (TAIA) report has not fully assessed the cumulative traffic impact of both the Sydney Intermodal Terminal Alliance (SIMTA) and the Moorebank Intermodal Terminal Facility (MIT), which was requested as part of the Director General's requirements. In this regard, the following issues shall be addressed:

6.1 No allowance for road transport of interstate containers or MIT employee trips

It is noted that the MIT Preliminary Project Environmental Overview in support of the Application prepared by the Commonwealth Department of Finance and Deregulation (December 2011) indicates that the proposed MIT will be used for both the container freight from Port Botany as well as interstate containers.

The submitted SIMTA report assesses the traffic impact of processing 1 million twenty foot equivalent units (TEUs) from Port Botany only and has not included any interstate containers. This issue was previously raised with representatives from SIMTA at a meeting on 3 March 2011.

What the response to submissions should provide

The employee trip generations calculated in the TAIA do not include the employee trips generated from both the SIMTA and MIT. This should be updated to include both in the response to submissions.

6.2 Clarification of traffic assignments

The traffic assignments associated with both the SIMTA and MIT need to be clarified as Moorebank Avenue, Cambridge Avenue (east) and Anzac Road (apart from small sections of Moorebank Avenue and Anzac Road) are currently owned and maintained by the Department of Defence. However, these single carriageway roads are heavily used by the public. The Department of Defence may seek to make these roads public roads by transferring ownership of Moorebank Avenue and Cambridge Avenue (east) to Council.

In particular, the existing causeway over the Georges River that links Cambridge Avenue (West) and Cambridge Avenue (East) would not be suitable to accommodate a marked increase in heavy vehicle movements and would need to be upgraded before traffic generated from SIMTA and MIT could be permitted to travel south.

What the response to submissions should provide

As result of the above, the traffic generation, trip distribution and traffic assignments that have been adopted shall be updated to take into account the full cumulative traffic impact of both Intermodal Terminal Facilities.

6.3 Validation of Paramics model - what the response to submissions should provide

The following information shall be submitted to RMS to validate the submitted Paramics model:

a) Electronic copies of the traffic survey data and video footage of current traffic conditions at the existing intersections should be submitted to RMS.

b) Strategic modelling input and output data, which includes the following:

- Figures of base and future year Network and Zonal System within the surrounding road network.
- Figures of base and future year AM and PM peak hour vehicle flow within the surrounding road network.
- O/D matrics of vehicular trips (both car and truck) in excel format.
- Selected links for vehicular trips produced and attracted

The report shall assess the traffic impact of the proposed development on the existing intersections along Moorebank Avenue between Helles Avenue and High Lane. In this regard, Figure 3-6 of the report states that the intersections on Moorebank Avenue at Helles Avenue, Church Road and Industrial Park were modelled. However, the results of this modelling were not presented in the report.

6.4 Weaving movements on Moorebank Avenue - what the response to submissions should provide

The submitted TAIA has not addressed the increase in weaving movements for westbound traffic on the M5 between Moorebank Avenue and Hume Highway as a result of the proposed development. The increase in weaving movements at this location will affect the performance of the Moorebank Avenue and Hume Highway interchanges on the M5. The developer shall investigate mitigation measures to address this weaving issue.

6.5 Truck traffic generation - what the response to submissions should provide

TfNSW considers that the estimated truck traffic generated from the SIMTA proposal (approximately 2,600 daily truck movements) appears low. TfNSW considers it more likely that an intermodal terminal with 1 million TEU from Port Botany and a 1.0 million TEU rail operation from Inter State will generate approximate 20,700 daily truck movements. This is ten times more than the truck generation estimated for the SIMTA proposal.

In addition, Point 2 of the RMS letter dated 7 November 2011 (copy attached) requested sensitivity testing for truck movements associated with empty containers. The proponents consultant (Hyder) has previously advised that this sensitivity testing will be provided. To date, RMS has not received this information.

It is noted that total inbound and outbound trips to the site during AM peak hours (7-9 am) is 1406 trips and the report estimates that these trips will be evenly distributed throughout the two hour AM peak. However, the report states that the shift will commence at 8 am and therefore, it is likely that the majority of the total trips in the AM peak (7-9 am) will occur between 7-8am. The assumptions and the percentage of employee trips in different time periods in Appendix B should be clarified.

6.6 Deterioration of key intersection performance outside the core area as a result of SIMTA proposal

Appendix C – Future Road Network Capacity of the TAIA states "the results show that outside the core area, there is no significant adverse impact on key roads following the introduction of the SIMTA proposal". However, the output data from the traffic models illustrates that the SIMTA proposal will have a direct impact on the performance of a number of existing intersections outside of the core area as follows:

- The delay at the interchange of M5 Motorway with Heathcote Road is predicted to increase in 2031 AM peak from 59 to 90 sec/veh (+52%) and in 2031 PM from 108 to 131 sec/veh (+21%).
- The delay of Heathcote Road/Nuwarra Road intersection is going to increase in 2031 AM from 94 to 120 sec/veh (+28%) and in 2031 PM from 78 to 126 sec/veh (+62%).
- The delay of Newbridge Road/Nuwarra Road intersection will increase in 2031 AM from 50 to 75 sec/veh (+50%) and in 2031 PM by 13%.
- The 2031 AM delay of Hume Highway/De Meyrick Avenue intersection is expected to increase from 177 to 220 sec/veh (+24).
- The 2031 AM delay of Hume Highway/Kurrajong Road intersection is going to increase from 239 to 294 sec/veh (+23%).

What the response to submissions should provide

The response to submissions should comprehensively address all the above issues.

6.7 Deterioration of key intersection performance inside the core area as a result of SIMTA proposal

The output data results from the traffic models presented in the addendum report indicate that the SIMTA proposal will have a significant traffic impact on existing intersections within the core area as follows:

- M5 Motorway/Hume Highway interchange, particularly westbound off-ramp – the right turning traffic delay would increase from 148 to 243 sec/veh (+64%) in 2031 PM with SIMTA scenario (Table C3) is compared against 2031 PM without SIMTA (Table C1). The Hume Highway right turn (south to east) delay would increase from 96 to 172 sec/veh (+79%).
- SIMTA generated traffic will have a significant traffic impact on Moorebank/Heathcote Road intersection. Modelling results of 2031 PM scenarios without and with SIMTA traffic (Tables C1 & C3) show that an average delay per vehicle of Moorebank Right turn into Heathcote Road east would increase from 124 to 218 (+76%), and Heathcote Road traffic turning right from 692 to 867 sec/veh (+25%) accordingly.
- At Moorebank Avenue/Newbridge Road intersection substantial increase of delay attributed to SIMTA generated traffic is predicted in 2031 PM for Newbridge Road left turning traffic from 115 to 143 sec/veh (+24%).

6.8 Signalised Intersection on Moorebank Avenue

It should be noted that the Department of Defence proposes a new signalised intersection on Moorebank Avenue, south of Anzac Road, which is likely to be located in proximity to the proposed new signalised intersection (northern access) on Moorebank Avenue associated with the SIMTA proposal. RMS advises that the minimum spacing between new signalised intersections is 120 metres on traffic efficiency and road safety grounds.

What the response to submissions should provide

The applicant should consult representatives of the Department of Defence to ensure that there is sufficient spacing between the proposed signalised intersections.

6.9 Road upgrades as a result of SIMTA proposal

Proposed road upgrades are recommended only for a small number of intersections that are directly impacted by the SIMTA development. In addition, no evidence is given that the proposed intersection upgrades will mitigate the traffic generated by the proposed development.

What the response to submissions should provide

These upgrades should be tested in the traffic models and their traffic performance reported.

6.10 M5 Motorway/Moorebank Avenue Interchange

RMS have reviewed the proposed road upgrade works at the M5 Motorway/Moorebank Avenue interchange listed in Table 9-1 of the TAIA and provide the following comments:

- Road Infrastructure upgrade Options 1 and 5 are likely to have marginal traffic benefits as they involve one additional short lane for the M5 westbound off-ramp and a short extension of an existing right turn lane on the Moorebank Avenue northern approach.
- Road infrastructure upgrade Options 2 and 4 for the westbound on-load ramp from Moorebank Avenue to M5 appears to be contradictory as Option 2 involves ramp metering, which will increase queuing on the on-ramp and Option 4 is to increase capacity for the on-load ramp.
- The potential upgrade listed as Option 3 would involve more than just widening the eastbound off-load ramp at Moorebank Avenue interchange from 2 to 3 right turn lanes. This interchange upgrade is likely to involve a substantial widening of the existing viaduct over the M5. The applicant should demonstrate the full scope of works involved in this interchange upgrade

What the response to submissions should provide

The response to submissions should address the above issue.

6.11 Modelling results indicate significant traffic impacts on road Network as a result of SIMTA proposal

The modelling results presented in the Addendum indicate that traffic to/from SIMTA will have a significant traffic impact on the road network at several critical locations, which are as follows: .

- M5 Motorway/Hume Highway interchange, particularly westbound off-ramp – the right turning traffic delay would increase from 148 to 243 sec/veh (+64%) when 2031 PM with SIMTA scenario (Table C3) is compared against 2031 PM without SIMTA (Table C1). The Hume Highway right turn (south to east) delay would increase from 96 to 172 sec/veh (+79%).
- SIMTA generated traffic will have significant impact on Moorebank/Heathcote Road intersection. Modelling results of 2031 PM scenarios without and with SIMTA traffic (Tables C1 & C3) show that an average delay per vehicle of Moorebank Right turn into Heathcote Road east would increase from 124 to 218 (+76%), and Heathcote Road traffic turning right from 692 to 867 sec/veh (+25%) accordingly.
- At Moorebank Avenue/Newbridge Road intersection substantial increase of delay attributed to SIMTA generated traffic is predicted in 2031 PM for Newbridge Road left turning traffic from 115 to 143 sec/veh (+24%)

What the response to submissions should provide

The applicant has not recommended any upgrades for the abovementioned intersections which are directly impacted by the proposed development. In order to achieve a sustainable transport outcome and mitigate freight impacts to the operation of the road network, in the surrounding area as identified in the traffic model. A comprehensive package of road infrastructure upgrades should be depicted and submitted to RMS for review, clearly indicating impacts and alleviation proposed.

7. Insufficient response to Director General's requirements /Key Issues/ Noise and Vibration and Air Quality including direct and indirect greenhouse gas emissions

The Director General requirements require the SIMTA proponent to address noise and vibration issues from all activities and sources (on and offsite). The Director General requirements for air quality require the proponent to consider (among other things) air pollution sources, atmospheric pollutants, direct and indirect greenhouse gas sources.

TfNSW considers the current response to be inadequate for the following reasons:

7.1 Air Quality General

As detailed in section 6 Roads and Maritime Services have concerns about the predicted traffic volumes outlined in the SIMTA concept plan. For comparison with numbers quoted in other sections of the SIMTA assessment the road traffic noise analysis predicts that the traffic on Moorebank Avenue (Table 5.7) would increase to 23,400 vehicles per day from 17,400 vehicles per day. Emissions from road vehicles are very dependent on the predicted traffic volumes.

If the proponent and DP&I ultimately agree the 23,400 figure is less than the traffic RMS expects to be generated then the air quality and noise impacts of traffic in Moorebank Avenue need to be reassessed.

7.2 Greenhouse Gas Emission

The comparison of greenhouse emissions from transport appears to be based on a misunderstanding. It is stated in Appendix G (page 41) that the "Use of rail to transport freight from Port Botany through the intermodal terminal to the Moorebank freight catchment can be considered approximately 40 times more efficient than transport by road to the same catchment area. This is due to the efficiencies gained from transporting much larger quantities of freight (81 TEU) by a single train journey as opposed to a single truck journey (2 TEU)."

This statement ignores the greenhouse emissions resulting from the distribution of containers by road from the terminal and is incorrect. It appears to be stating that the greenhouse emissions from one train journey are one fortieth of those from forty truck journeys. The greenhouse emissions from the train will be less than those from the trucks but much higher than one fortieth of the truck emissions. The proponent should address this issue in their response to submissions.

7.3 Noise

The SIMTA Environment Assessment limits consideration of the impact of the proposal to the terminal and to the SSFL link. The potential noise impact of SIMTA trains on the SSFL is assumed to have been covered in the SSFL Environment Assessment. In Appendix O (Section 5.2.3.2, page 37), it states that:

> *"...it is anticipated that full operation of the SIMTA proposal would generate up to 21 trains (or 42 movements) per day and that these trains would enter and leave the site via the SSFL. The SSFL is currently being constructed and has been designed and planned to include capacity for other similar intermodal facilities in Sydney, including this one."*

Examination of the SSFL Environment Assessment shows that existing and proposed freight terminals are discussed but the proposed 42 freight movements per day from the SIMTA site has not been anticipated or accommodated. Section 2.5.6 in the SSFL assessment states that the "proposed terminal intermodal terminal at Moorebank is not dependent on access to the SSFL as there is good access to the Main South Line." Table 7.5 of the SSFL assessment allows for an increase of only four extra "Port Link" train movements per day between 2008 and 2018.

TfNSW has noted the proposed SIMTA alignment travels through sections of Glenfield tip and notes there is little detail on what remediation works (e.g. piling) are proposed to permit rail operations in a former landfill area. Appendix L section 6 confirms no field investigation was undertaken to substantiate the concept rail alignment. Therefore TfNSW considers it likely that the proposed rail alignment will change.

The key issue for TfNSW is that the noise report submitted at project assessment stage will reflect the final alignment.

What the response to submissions should provide

It is suggested that the submissions report:

- Uses the traffic generation rate proposed by RMS as the basis for air quality predictions and the proponent resubmits Appendix O *Noise Impact Assessment*;
- The proponent calculates accurate greenhouse gas emission figures for the freight train movements and resubmits Appendix G Greenhouse Gas Assessment; and
- The proponent supplies the detail on what remediation works it is proposing for the traverse of Glenfield tip and otherwise commits to noise modelling of the final rail alignment and identifying noise mitigation options to support achievement of targets.

8. State of the art rolling stock

The SIMTA concept plan makes repeated references to "State of the Art" rolling stock (for example pg 24 of the Executive Summary).

What the response to submissions should provide

TfNSW requests further detail on the following points:

a. The proponent should define the technical parameters it will use to determine state of the art rolling stock? In particular what noise mitigation features will the rolling stock contain?

b. What proportion of rolling stock will be state of the art on the first day of operations and throughout the life of the project?

c. How will SIMTA ensure all rolling stock entering its site is state of the art on the first day of operation and over the life of the project?

9. Bus services

Whilst TfNSW regards the assessment of bus operations in Appendix K – *Transport and Accessibility Impact Assessment* as adequate TfNSW does not regard it as optimal. Having regard to both the SIMTA site on the eastern side of Moorebank Avenue and MIT site on the western side of Moorebank Avenue TfNSW believes a better outcome would be.

d. *Short term* – Operate a Glenfield Station to Liverpool Station Shuttle bus down Moorebank Avenue serving both developments;
e. *Long term* – Subject to funding and proponent contribution rationalise routes 870, 871 and 872 (all travelling Campbelltown to Liverpool via Glenfield and the Cross Roads). This could potentially involve discontinuing the 871 service, increasing the frequency of the 872 service and rerouting the 870 service to operate via Moorebank Avenue. Annexure B contains a diagram of this preferred outcome.

What the response to submissions should provide

An evaluation of this changed bus servicing arrangement.

Attachment A

TARGETS	PRIORITY ACTIONS
ENHANCE RAIL FREIGHT MOVEMENT • Double the proportion of container freight movement by rail through NSW ports by 2020	Moving more freight quickly and economically by rail through our ports is critical to accommodate high forecasted growth in freight movements, particularly through Port Botany. Achieving this target will maximise the operational capacity of our ports and ease road congestion. Actions to achieve this target include: • Develop and deliver the *NSW Freight Strategy*, integrated with strategic land use and transport planning • Prioritise the delivery of the *Port Botany Landside Improvement Strategy* to improve the efficiency of Port Botany, which currently handles 95% of container movements in NSW • Complete the creation of a third terminal and five new container berths at Port Botany to increase the capacity of the port • Undertake detailed modelling to determine future operating capacity of NSW ports including analysis of landside infrastructure and options to increase the use of rail to service ports.

Attachment B