Secretary's Environmental Assessment Requirements

Section 78A(8A) of the *Environmental Planning and Assessment Act* Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*

Application Number	SSD 14-6766
Proposal Name	SIMTA Intermodal Terminal Facility – Stage 1 (250,000 TEUs) State Significant Development Construction and operation of an intermodal terminal facility comprising the following components: a) Truck processing and loading areas; b) Rail loading and container storage areas; c) Administration facility and associated carparking; and d) Rail connection to the intermodal terminal facility and Southern Sydney Freight Line.
Location	Moorebank Avenue, Moorebank
Applicant	Sydney Intermodal Terminal Alliance (SIMTA)
Date of Issue	December 2014
General Requirements	The Environmental Impact Statement (EIS) must meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 the Environmental Planning and Assessment Regulation 2000 including but not limited to: o a summary of the EIS; o a statement of the objectives of the development, including consideration of container trade numbers (import and export); and the development's consistency with the aims and objectives of relevant State policies and plans; of uture trends in container origin/destination in Sydney, intermodal capacity and demand, and identification of the terminal's freight catchment area and freight split; of the development's relationship to and interaction with adjoining development, including the proposed intermodal on the School of Military Engineering site and consideration of cumulative impacts of the two intermodals; of an analysis of feasible alternatives to carrying out the development, having regard to its objectives, including the consequences of not carrying out the development; of an analysis of the development, including an assessment, with a particular focus on the requirements of the listed key issues, in accordance with clause 7(1)(d) of Schedule 2 of the Regulation (where relevant), including for normal and worst case scenarios (as relevant); of an identification of how relevant planning, land use and development matters (including relevant strategic and statutory matters) have been considered in the impact assessment (direct, indirect and cumulative impacts) and/or in developing management, mitigation, and monitoring measures, including 79C of the Environmental Planning and Assessment Act 1979 (EP&A Act), applicable State Environmental Planning Policies (SEPPs) and the nature and extent of any prohibitions that apply to the development and demonstration that the site is suitable for the proposed use in accordance with SEPP 55; of a compilation of the development taking into consideration the objects of the EP&A Act; and

 detail how ESD principles (as defined in clause 7(4) of the Regulation) will be incorporated in each stage of the development.

Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development (construction and operation), proposed mitigation measures and potentially significant residual environmental impacts after the application of proposed mitigation measures. Where additional environmental impacts are identified through this risk analysis, an appropriately detailed impact assessment of the additional environmental impacts shall be included as part of the Development Application.

Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include:

- adequate baseline data;
- consideration of potential cumulative impacts due to other development in the vicinity;
- measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment;
- a health impact assessment of local and regional impacts associated with the development, including those health risks associated with relevant key issues; and
- consideration of the cumulative impacts of this proposal with the adjacent Moorebank Intermodal Terminal proposal.

The EIS must be accompanied by a report from a qualified quantity surveyor providing:

- a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Environmental Planning and Assessment Regulation 2000) of the proposal, including details of all assumptions and components from which the CIV calculation is derived. The Report shall be prepared on company letterhead and indicate the applicable GST component of the CIV;
- an estimate of the jobs that will be created by the future development during the construction and operational phases of the development; and
- certification that the information provided is accurate at the date of preparation.

Key issues

The EIS must address the following specific matters:

1. Statutory and Strategic Context – including but not limited to:

Addressing the relevant planning provisions, goals and strategic planning objectives in the following:

- NSW 2021;
- draft Metropolitan Plan for Sydney (March 2013);
- Draft South West Subregional Strategy;
- Railing Port Botany's Containers;
- Action for Air:
- NSW Freight and Ports Strategy 2013; and
- the Commonwealth's draft National Ports Strategy and National Freight Strategy

2. Compliance with the Approved Concept Plan

The EIS shall demonstrate that the proposal is consistent with the Concept Plan approval MP 10 0193 dated 29 September 2014 (as modified).

3. Air Quality – including but not limited to:

A comprehensive air quality impact assessment including:

a) An assessment in accordance with the Approved Methods for the Modelling

- and Assessment of Air Pollutants in New South Wales (2005) (or its later version and updates);
- b) Taking into account the final project design with consideration to worstcase meteorological and operating conditions;
- c) Quantitatively assessing the predicted emission of:
 - i. Solid particles;
 - ii. Sulphur oxides;
 - iii. Nitrogen oxides; and
 - iv. Hvdrocarbons.
- Assessing cumulative air impacts at a local and regional level (including but not limited to contemporaneous operations such as those of the proposed Commonwealth Government MIT; and
- e) A comprehensive air quality management plan that includes at least the following information:
 - Explicit linkage of proposed emission controls to the site specific best practice determination assessment and assessed emissions;
 - Explicit linkage of assumed engine standards and operational management systems;
 - iii. The timeframe for implementation of all identified emission controls:
 - iv. Proposed key performance indicator(s) for emission controls;
 - v. Proposed means of air quality monitoring including location (on and off-site), frequency and duration;
 - vi. Poor air quality response mechanisms;
 - vii. Responsibilities for demonstrating and reporting achievement of key performance indicator(s);
 - viii. Record keeping and complaints response register; and
 - ix. Compliance reporting.
- f) An assessment of construction related impacts including dust and wind erosion from exposed surfaces and proposed mitigation measures and safeguards to control dust generation and other airborne pollutants and to minimise impacts on nearby receptors.

4. Best Practice Review – including but not limited to:

The preparation of a comprehensive review of intermodal operational best practice process design, emission control and management measures that might feasibly and reasonably be applied to each stage of the project, and to benchmark those measures against best practice. The review should:

- a) clearly demonstrate that the Proponent will at each project stage adopt and implement best practice facility and process design and management measure to the extent that is reasonably practicable, to minimise operational air pollutant and noise emissions at the terminal and on the rail link;
- b) include a detailed evaluation of feasible and reasonable mitigation and management measures including:
 - assessment of best practice international emission standards for locomotives and non-road plant and equipment;
 - ii. assessment of retrofit opportunities for older vehicles, locomotives and equipment;
 - iii. maintenance and operational practices for vehicles, locomotives and equipment;
 - iv. electrification of terminal plant;
 - v. reduction of 'long-duration' idling of diesel locomotives, prime movers and cargo handling equipment through:
 - driver/operator training about how to reduce air quality impacts associated with 'long-duration' idling;
 - automatic engine shut down/start up system controls whereby engine stopping or starting is implemented without operator action;
 - 'shore power connection' being electricity mains plug-in points for enabling locomotives and trucks to switch over to mains power

and shut down main engines otherwise used to generate power required for:

- transport refrigerated units/containers;
- o cabin climate control; and
- o other accessories and equipment.
- the application of queuing theory to minimise truck loading/unloading wait times and resultant queuing and idling in the terminal facility and on access roads.
- c) Define an acceptable threshold where idling becomes 'long-duration' using an evidence based approach; and
- d) include predicted annual cumulative, daily and one minute amounts of air pollutants emitted and non-renewable fossil fuel consumed (by typical diesel locomotives, prime movers, fixed body trucks, yard trucks/holsters and cargo handling equipment expected to regularly operate at the terminal) as the basis for defining the term 'long-term' duration idling as it would apply to the terminal facility.

The following noise requirements shall be included in the best practice review:

- a) determine the number of maximum noise events at residences due to freight train operations on the rail link (including curve squeal noise);
- identification of all feasible and reasonable measures to minimise and mitigate noise impacts from the operation of the terminal and rail link such as:
 - i. use of locomotives that meet or exceed Australian and international benchmarks for low noise operation:
 - ii. use of automatic rolling stock wheel defect detection and response system;
 - iii. permanently coupled wagons with low noise equipment such as steering bogies;
 - iv. noise attenuated enclosures for reversing vehicles; and
 - alternative options to the use of traditional 'beeper' type reversing/ movement alarms.
- c) assessment of an ongoing noise compliance and response system including a framework for on and off-site noise monitoring during operation:

5. Traffic and Transport – including but not limited to:

A Traffic Impact Assessment that assesses intersection and road network impacts, including impacts on Cambridge Avenue. The traffic assessment shall:

- a) take into account the Guide to Traffic Generating Development (RTA);
- b) undertake a realistic and justified range of peak hour generation scenarios (to be determined in consultation with TfNSW);
- c) undertake detailed model analysis to confirm network operation and identify intersection upgrade requirements;
- d) consider the constructability constraints of proposed upgrade(s) at key intersections, such as vehicle sweep paths, geometry and sight lines;
- e) assess construction traffic impacts, including:
 - the identification of routes and the nature of existing traffic on these routes:
 - ii. an assessment of construction traffic volumes (including spoil haulage/delivery of materials and equipment to the road corridor and ancillary facilities); and
 - iii. potential impacts to the regional and local road network (including safety and level of service) and potential disruption to existing public transport services and access to properties and businesses.
- f) assess operational traffic and transport impacts to the local and regional road network, including:
 - i. changes to local road connectivity and impacts on local traffic arrangements, road capacity/safety;
 - ii. traffic capacity of the road network and its ability to cater for predicted future growth and

- iii. monitoring of vehicle numbers on Cambridge Avenue.
- g) Give consideration to the use of heavy vehicles able to move two 40 foot containers;
- h) Provide an outline operational Traffic Management Plan to manage vehicle movements to and from the site, including contingency measures should the M5 and Moorebank Avenue be obstructed.
- i) provide an updated Traffic Management and Accessibility Plan including:
 - i. measures to prevent heavy vehicles accessing residential streets to maintain the residential amenity of the local community
 - ii. public transport;
 - iii. cyclist facilities; and
 - iv. driver code of conduct.

In particular, the Traffic Impact Assessment must identify upgrades and other mitigation measures required to achieve the objective of not exceeding the capacity of the following intersections and roads:

- a) Moorebank Avenue / Newbridge Road;
- b) Moorebank Ave / Heathcote Road;
- c) Cambridge Ave;
- d) M5 Motorway / Moorebank Avenue;
- e) M5 Motorway / Heathcote Road; and
- f) M5 Motorway / Hume Highway.

6. Rail – including but not limited to:

Addressing the requirements of TfNSW including;

- a) detailed design and engineering drawings for the rail link, including the freight line track, supporting infrastructure and clearances with the East Hills Passenger Line and the relocation of any Sydney Trains services and infrastructure, prepared by an Asset Standards Authority Authorised Engineering Organisation;
- identifying the forecast annual train movements including an estimated range of daily train movements, and the capacity of existing and proposed rail network to handle predicted increases in traffic, based on appropriate empirical evidence and modelling; and
- c) demonstrate how the use of the proposed Moorebank Station site would ensure priority access by Sydney Trains at all times.

An assessment of the impacts of the rail link on the Glenfield Waste Facility in consultation with the EPA, including:

- details of the quantity of landfilled waste to be removed, the location from where it will be removed, the methodology to be utilised and the estimated timeframe for the removal and reburial;
- b) proposed measures to mitigate odour impacts on sensitive receivers, including an undertaking to apply daily cover to any exposed waste in accordance with benchmark technique 33 of the document Environmental Guidelines: Solid Waste Landfills, NSW EPA 1996;
- any proposed impacts on pollution control and monitoring systems including existing groundwater and landfill gas bores and their subsequent repair/ replacement;
- d) the proposed methodology to ensure that the landfill barrier system disturbed in the removal process is replaced/ repaired to ensure its ongoing performance. The Proponent should detail matters such as sub grade preparation/ specifications, line installation/ reinstallation procedures and construction quality assurance procedures;
- e) a commitment to providing the EPA with a construction quality assurance report within 60 days of the completion of the works referred to in (d) above; and
- f) an overview of any access and/or materials/ equipment storage arrangements with Glenfield Waste Facility in relation to the construction of the project.

7. Noise and Vibration – including but not limited to:

An updated assessment of noise and vibration impacts. The assessment shall:

- assess construction noise and vibration impacts associated with construction of the intermodal facility including rail link, including impacts from construction traffic and ancillary facilities. The assessment shall identify sensitive receivers and assess construction noise/vibration generated by representative construction scenarios focusing on high noise generating works. Where work hours outside of standard construction hours are proposed, clear justification and detailed assessment of these work hours must be provided, including alternatives considered, mitigation measures proposed and details of construction practices, work methods, compound design, etc;
- assess operational noise and vibration impacts and identify feasible and reasonable measures proposed to be implemented to minimise operational noise impacts of the intermodal facility and rail link, including the preparation of an Operational Noise Management and Monitoring Plan;
- c) be prepared in accordance with: NSW Industrial Noise Policy (EPA 2000), Interim Construction Noise Guideline (DECC 2009), Assessing Vibration: a technical guide (DEC 2006), the Rail Infrastructure Noise Guideline (EPA 2013), Development Near Rail Corridors and Busy Roads Interim Guideline (DoP 2008), and the NSW Road Noise Policy 2011;
- All site-dedicated locomotives must meet EPA Noise Limits for Locomotives contained within the NSW operational rail licences for operation of new or substantially modified locomotives operating on the NSW network; and
- e) Any future application shall include a train noise strategy including, but not limited to, train operational procedures and driver training that minimise noise on the rail link and within the intermodal terminal.

8. Infrastructure Upgrades/Contributions – including but not limited to the following:

- a) an assessment of the impacts of the project on local infrastructure, demonstrating that satisfactory arrangements are in place to support and mitigate any impacts of Stage 1 of the Concept Plan, including applicable costs, timing, TEU thresholds and approval pathways for such measures;
- draft Voluntary Planning Agreement (VPA) addressing the following matters:
 - i. consultation with relevant bus provider(s) regarding the potential to extend the 901 bus service; and
 - ii. consultation with the relevant authority to facilitate the delivery of any part of the site or surrounds that will be upgraded, embellished, constructed or dedicated to the Commonwealth, Transport for NSW or the relevant Council that is directly attributable to the carrying out of the proposal.

The draft VPA may also include a commitment to pay developer contributions to the relevant consent authority or undertake works-in-kind towards the provision or improvement of public amenities and services.

Note: The VPA must be executed prior to the determination of the Stage 1 SSD pursuant to condition 1.9 of the Concept Plan approval.

- Consideration of any relevant Council's Developer Contributions Plan (or equivalent document requiring developer contributions); and
- d) Consideration of vehicle monitoring on Cambridge Avenue during operation of the project, to ensure any impacts are captured and adequately mitigated as a result of the project.

9. Soil and Water – including but not limited to:

An assessment of soil and water impacts for the entire site including rail link. The assessment shall:

a) assess impacts on surface and groundwater flows, quality and quantity,

- with particular reference to any likely impacts on Georges River and Anzac Creek;
- assess flooding impacts and characteristics, to and from the project (including rail link), with an assessment of the potential changes to flooding behaviour (levels, velocities and direction) and impacts on bed and bank stability, through flood modelling, including:
 - i. hydraulic modelling for a range of flood events;
 - ii. description, justification and assessment of design objectives (including bridge, culvert and embankment design);
 - iii. an assessment of afflux and flood duration (inundation period) on property; and
 - iv. consideration of the effects of climate change, including changes to rainfall frequency and/or intensity, including an assessment of the capacity of stormwater drainage structures.
- c) Include a detailed and consolidated site water balance;
- d) Include details of the water supply source(s) for the proposal including any proposed surface water and groundwater extraction;
- e) Assess potential cumulative impacts on water resources, and any proposed options to manage the cumulative impacts;
- address drainage issues associated with the development / site, including stormwater, drainage infrastructure and incorporation of Water Sensitive Urban Design measures;
- g) undertake an assessment of surface water quality during construction (including reference to water quality objectives for the relevant catchment where objectives have been determined), including an identification of works that may impact water quality, and a summary of proposed mitigation measures in accordance with Managing Urban Stormwater – Soils & Construction Volume 1 2004 (Landcom) and Volume 2 (DECC 2008);
- h) consideration of stormwater management during operation of the site with the objective of maintaining or improving existing water quality;
- consider whether the existing sewerage system can cater for the proposal and whether environmental performance of the existing system will be impacted;
- identify and assess the soil characteristics and properties that may impact or be impacted by the project, including acid sulfate soils;
- k) include a bulk earthworks strategy detailing the volume of spoil to be extracted from the site, planned reuse and amount of material to be imported; and
- include a contamination assessment in accordance with the guidelines made under the Contaminated Land Management Act 1997 and in consultation with the EPA for the subject site including the Glenfield Waste Facility. The assessment shall include:
 - i. the potential environmental and human health risks of site contamination on the project site;
 - ii. a Remediation Action Plan;
 - iii. consideration of implications of proposed remediation actions on the project design and timing; and
 - iv. a Phase 2 environmental site assessment of the project site including rail corridor.

10. Heritage including but not limited to:

An assessment of the heritage impacts of the proposal. The assessment shall:

- a) consider impacts to Aboriginal heritage (including cultural and archaeological significance), in particular impacts to Aboriginal heritage sites identified within or near the project should be assessed. Where impacts are identified, the assessment shall demonstrate effective consultation with Aboriginal communities in determining and assessing impacts and developing and selecting options and mitigation measures (including the final proposed measures); and
- b) consider impacts to historic heritage. For any identified impacts, the

assessment shall:

- i. include a statement of heritage impact;
- ii. be undertaken by a suitably qualified heritage consultant(s);
- iii. outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the measures). Mitigation measures should include (but not be limited to) photographic archival recording and adaptive reuse of buildings or building elements on site);

Note: Where historical excavation is proposed, the heritage consultant undertaking the assessment must meet the NSW Heritage Council's Excavation Director criteria

11. Visual Amenity, Urban Design and Landscaping – including but not limited to:

An assessment of visual impacts. The assessment shall:

- include a description of the visual significance of the affected landscape including an analysis of views from key vantage points;
- b) include artist's impressions of the development from key vantage points;
- assess the visual impact of the project on the landscape character of the area, including built form (materials and finishes) and the urban design (height, bulk and scale) of key components including container stacking heights, lighting, bridge crossings, and views to and from the project;
- d) consider lighting impacts in the local area, analyse and describe the contribution and impacts of the proposed facility on light spill at the local scale and to sensitive receivers;
- e) include details of hard and soft landscaping treatment and design (including proposed road upgrades relevant to that stage and reinstatement of riparian vegetation); and
- f) proposed management/mitigation measures to address the visual impact of the proposal.

12. Biodiversity – including but not limited to:

A flora and Fauna assessment. The assessment shall:

- a) assess impacts on the biodiversity values of the site and adjoining areas, including Endangered Ecological Communities and threatened flora and fauna species and their habitat, groundwater dependent ecosystems, impacts on wildlife and habitat corridors, riparian land, and habitat fragmentation and details of mitigation measures, having regard to the range of fauna species and opportunities for connectivity (terrestrial, arboreal and aquatic) across the rail link between the site and the East Hills Passenger Line;
- b) consider of the OEH's *Threatened Species Survey and Assessment Guidelines*
 - (www.environment.nsw.gov.au/threatenedspecies/surveyassessmentgdlns.htm), any relevant draft or final recovery plans, Fish Passage Requirements for Waterway Crossings, Policy and Guidelines for Fish Friendly Waterway Crossings (DPI) and Commonwealth Significant Impact Guidelines:
- include a Vegetation Management Plan that has been prepared in consultation with the NSW Office of Water;
- d) document how impacts to the Persoonia nutans and the Grevillea parviflora subsp. Parviflora flora species have been minimised through the detailed design process;
- e) assess and document impacts related to the proposed project in accordance with the *Framework for Biodiversity Assessment* (OEH 2014), unless otherwise agreed by OEH, by a person accredited in accordance with s142B(1)(c) of the *Threatened Species Conservation Act 1995*; and
- f) include a comprehensive offset strategy, in accordance with the NSW Biodiversity Offsets Policy for Major Projects including the Framework for Biodiversity Assessment (OEH 2014), consistent with the 'avoid, minimise

or offset' principle.

13. Hazards and Risks – including but not limited to:

A preliminary risk screening completed in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development* and *Applying SEPP 33* (DoP 2011), with a clear indication of class, quantity and location of all dangerous goods and hazardous materials associated with the proposal. Should preliminary screening indicate that the proposal is 'potentially hazardous,' a Preliminary Hazard Analysis (PHA) must be prepared in accordance with *Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis* (DoP 2011) *and Multi-Level Risk Assessment* (DoP 2011). The PHA should:

- a) Estimate the risks from the facility;
- b) Be set in the context of the existing risk profiles for the intermodal facility and demonstrate that the proposal does not increase the overall risk of the area to unacceptable levels; and
- c) Demonstrate that the proposal complies with the criteria set out in the Hazardous Industry Planning Advisory Paper No. 4 Risk Criteria for Land Use Safety Planning.

Other Issues

14. Waste – including but not limited to:

An assessment of liquid and/or non-liquid waste generated on the site, how it will be identified, quantified, classified, documented and disposed of. The assessment shall also include a description of measures to be implemented to manage waste in accordance with the waste hierarchy.

15. Bushfire Management – including but not limited to:

An assessment against the *Planning for Bushfire 2006* (NSW Rural Fire Service).

16. Property and Infrastructure – including but not limited to:

- Assessing the impacts on affected properties and land uses, including impacts relating to access, land use, business activities, future development potential, and property acquisition; and
- Assessing the service demand, capacity and augmentation of existing and proposed utilities and infrastructure, including any relocation as a result of the development.

17. Staging

The EIS is to include details regarding the staging of the proposed development, including likely timing for construction and operation of the rail link, in relation to the overall Concept Plan.

18. Ecologically Sustainable Development (ESD)

The EIS shall detail how the development will incorporate ESD principles in the design, construction and ongoing operation phases of the development.

Plans and Documents

The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the *Environmental Planning and Assessment Regulation 2000*.

In addition, the EIS must include the following:

- site layout plan, including carparking and container storage areas;
- architectural drawings (floor plans, elevations, sections);
- site survey plan, showing existing levels, location and height of existing and adjacent structures/buildings;
- swept path analysis;
- site analysis plan;
- landscape plan, including any public domain works;
- preliminary construction management plan, inclusive of a construction traffic management plan;

	 geotechnical and structural report; signage details; and schedule of materials and finishes
Consultation	During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. In particular you must consult with: In particular you must environment; In particular your environment environment; In particular your environment; In particular yo
Further consultation after 2 years	If you do not lodge a development application and EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Secretary in relation to the preparation of the EIS.