NSW GOVERNMENT | Transport for NSW

Mrs Carolyn McNally
Secretary
Department of Planning and Environment
22-33 Bridge Street
Sydney NSW 2000

Attention: Lisa Mitchell

Dear Mrs McNally Carolyn.

Moorebank Intermodal Terminal Project, Environmental Impact Statement (EIS)
State Significant Development No. 5056

Thank you for your letter inviting Transport for NSW (TfNSW) to comment and provide advice on the recommended conditions of consent for the proposed Moorebank Intermodal Terminal Project.

TfNSW has considered the Moorebank Intermodal Terminal EIS material. Key issues are:

- TfNSW supports the Department of Planning and Environment proposal to include a 'satisfactory arrangements' clause for regional infrastructure as part of the rezoning. This will ensure that a suitable mechanism is in place to secure contributions that will mitigate the impacts of the development on the State transport network.

- TfNSW requests the proponent be conditioned to develop a detailed traffic model to study the local impacts.

- TfNSW requests that the proponent be conditioned to implement a driveway monitoring regime and to be conditioned to adopt shift changeover times outside the AM and PM peak periods.

- TfNSW requests that measures designed to ensure that freight rail noise are considered correctly and mitigated as a key community issue.

Suggested detailed conditions of consent are attached at **Tab A**.

Additional notations of some detailed property issues raised by Roads and Maritime is also requested at **Tab B**.

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The TfNSW contact remains Simon Hunter, A/General Manager Land Use and Integrated Transport. Simon can be contacted on 8202 2577 or via email simon.hunter@transport.nsw.gov.au.

Yours sincerely

Anissa Levy 19/12/14.
Deputy Director General
Planning & Programs

Merry Christmas!

S014/18763
PP14/18779

Tab A Consolidated Recommendations

Planning Agreement between the Minister for Planning and the Proponent

Discussion

No objections are raised to rezoning of the site from SP2 Special Uses (Defence) to E3 Environmental Management and IN1 General Industrial. TfNSW supports the proposed amendment to the Liverpool Local Environmental Plan (LEP) 2008, which includes the provision of a "satisfactory arrangements" clause for regional transport infrastructure upgrades.

These 'satisfactory arrangements' should include the provision of regional infrastructure to mitigate the impact of the development on the State transport network. NSW and Roads and Maritime would be available to advise DP&E in the course of discussions with the proponent.

Recommendation

- *The proponent could consider requesting the Minister for Planning enter into a planning agreement for mitigation of State Road impacts associated with the rezoning. TfNSW and Roads and Maritime will provide advice to Department of Planning and Environment throughout this process which will detail the agreed road / transport infrastructure upgrades required to mitigate the impacts of the development on the State transport network and the timing of their delivery.*

Traffic modelling

Discussion

It is noted that high level modeling in EMME2 allied to intersection modeling in the SIDRA package has been undertaken for the Concept Plan. More detailed traffic model assessment needs to be developed to support the project application. It should be noted that TfNSW and Roads and Maritime may shortly be undertaking precinct wide modeling of the area. This work may potentially be available to inform any detailed investigation required by the proponent subject to prior discussion and agreement by the TfNSW and Roads and Maritime Executive.

Recommendation

It is suggested that the proponent is conditioned to:

- *Examine in greater detail the local and area wide traffic impacts on the greater operation of the strategic road network through the use of micro or mesoscopic traffic models. As a minimum, the analysis should examine the detailed origin and destination information alongside intersections and scenarios listed within the Moorebank Intermodal Terminal Traffic, Transport and Accessibility Impact Assessment Report by Parsons Brinkerhoff dated September 2014. Consultation should be undertaken with TfNSW / Roads and Maritime to define the geographical area covered by the model and associated modelling assumptions as well as the modelling package proposed to be used.*

- *As part of the micro or mesoscopic traffic analysis mentioned above, the proponent should subsequently identify the scope and timing of future road infrastructure upgrades in the form of an "agreed" Statement of Commitments. This information should be provided during the response to submissions and then updated as part of any future DA.*

Driveway Monitoring and Conditioned Shift Changeover Times

Discussion

The proponent represents that much of the traffic generated from the site would be outside of road network peak periods and instead would occur during shoulder and out-of-peak periods. For example:

- Page 56 Table 4.3 of *Technical Paper 1 Traffic and Transport Impact Assessment* advises 87 inbound and 87 outbound B-double and semi movements inbound and outbound to the terminal during the peak hour in 2030.

- Page 59 Table 4.5 of the *Technical Paper 1 Traffic and Transport Impact Assessment* predicts 84 inbound Moorebank warehouse peak hour movements inbound and 84 outbound heavy truck movementss in the peak hour 2030.

- Page 60 Table 4.7 of the *Technical Paper 1 Traffic and Transport Impact Assessment* predicts 84 staff light vehicle generation in the AM peak (inbound) from 2030 onwards.

The low peak period traffic generation rates advised by the proponent has implications for the level of mitigatory infrastructure that the proponent may be asked to provide given the demands on infrastructure reflect low generation rates. It is suggested that there is a need for a condition that ensures the MITP site peak period traffic generation rates do not exceed those advised in the EIS. If the traffic generation does exceed that in the EIS or future rates of traffic generation developed by future, more refined traffic generation models, then the proponent should provide mitigating infrastructure or monetary contributions to mitigate this impact.

Recommendation

It is suggested that the proponent is conditioned to:

- *Develop a site driveway monitoring program that will monitor all vehicular movements into and out of each of the proponent's site driveways. The program will note the type of vehicle travelling in or out of the site of for each hour of the day for every day of the year. These traffic generation numbers will be presented for comparison against the traffic generation rates advised in the EIS or against the traffic generation rates that may be generated by future more refined traffic model models outputs and agreed to by either TfNSW or Roads and Maritime. The proponent should also develop a suite of compensatory infrastructure and/or monetary payments in case the advised level of site vehicular movements is exceeded. When the proponent has developed their driveway monitoring regime the acceptance of the proposed program by the Department of Planning and Environment should be subject to a letter of endorsement from TfNSW or Roads and Maritime.*

- *Program shift changeover times in accordance with those times proposed in the EIS.*

Workplace Travel Plan

Discussion

The proponent's commitment to a workplace travel plan at Section 8.4 of *Technical Paper 1 Traffic and Transport Impact Assessment* is supported. An appropriate condition to complement this existing commitment is proposed.

Recommendation

It is suggested that the proponent is conditioned to:

- *Develop a workplace travel plan for the future operational stages. The plan would implement various travel demand management measures to actively promote alternative modes of transport usage. The workplace travel plan proposed should be endorsed by TfNSW.*

Clarifications

Recommendation
It is requested that the proponent responds to the following issues.

Chapter 11 – Traffic, transport and access Technical Paper 1 – Traffic and Transport Impact Assessment	
Chapter / Reference	**Issue**
Chapter 11, Section 11.1, p11-5	*Issue* The report states that "each of these models was calibrated and validated to 2011". Such calibration and validation is likely to be at a general level across the modelled area (greater Sydney metropolitan region), and not focused on the study area. This might lead the model to under or over represent congestion in the study area and potentially invalidate any conclusions drawn from the modelled outputs. *Recommendation* In the response to submissions the proponent should advise whether any model validation checks against observed counts, travel times, or other observed data for the study area and surrounds were undertaken and if so where these are documented in the EIS. These issues should be documented in the response to submissions.
Chapter 11, Section 11.4.3, p11-38	*Issue* Apparent typographical error. PCU factors for rigid trucks (2.0) and articulated trucks (4.0) are missing from the text. *Recommendation* Clarification of this issue is provided in the response to submissions.
Technical Paper 1, Section 4.2.2, p57	*Issue* The assumption of 100% utilisation for the pallets-to-vehicle conversion for semi-trailers and rigid trucks is not listed in the report. *Recommendation* Clarification of this issue is provided in the response to submissions.
Technical Paper 1, Appendix J, Section 3.6, Table 3.2, p21	*Issue* The distribution plots do not include any sort of scale. However, the size of the circles in the vicinity of the M4-M7 Light Horse Interchange implies that there is potentially a considerable access issue for articulated trucks. The proponent should advise whether this issue was explored any further (by the proponent) and what was concluded. *Recommendation* Clarification of this issue is provided in the response to submissions.

Bus Services

Discussion

The site should be designed to ensure direct pedestrian access paths are provided between proposed warehousing sites and bus stops on Moorebank Avenue. Pedestrian facilities should be provided at proposed signalised intersections on Moorebank Ave to ensure the safe crossing of Moorebank Ave to access corresponding bus stops.

The MIT applicant should work with the SIMTA applicant to design a bus turnaround facility on Moorebank Ave at the southern end of the MIT and SIMTA sites, near Chatham Ave. The 901 bus service is currently able to turnaround at this location due to the low level of traffic, however will not be able as part of the increased traffic from the development and operation of the MIT and SIMTA facilities.

Recommendation

It is suggested that the proponent is conditioned to:

- *Identify and provide a bus turnaround facility on Moorebank Avenue with swept path dimensions sufficient to cater for a 14.5 metre long non rear-steer bus.*
- *Site should be designed to ensure there are direct pedestrian access paths between the proposed warehousing sites and bus stops on Moorebank Avenue.*
- *Provide appropriate pedestrian facilities on Moorebank Avenue (in consultation with Roads and Maritime and noting the need for approval from Roads and Maritime) to ensure the safe crossing of Moorebank Ave to access corresponding bus stops.*

Noise and Vibration

Noise generation

Limitations to using regular maintenance of freight trains as noise mitigation measure

Compliance with environmental protection licences insufficient to control operational rail noise

Use of SSFL and rail noise exposure at Casula

Discussion

Noise generation

Table 12.28 of the EIS states that under neutral weather conditions noise from the on-site operations is up to 13dBA above the project noise criteria and noise from the rail access connection to the Southern Sydney Freight Line (SSFL) is up to 17dBA above the project noise criteria. Under adverse weather conditions, noise emissions may be 1 to 3dBA louder than under neutral conditions. The EIS predictions show that Casula residents will be potentially exposed to the greatest noise impact. Further the EIS predicts (pg 12-35) that freight train movements on the access connection to the SSFL would generate very high noise levels at residences in the Casula area.

As the EIS notes (pg 12-33):

> *".. noise levels at receptors .. would be dominated by noise from IMEX trains."*

However, when describing measures proposed to mitigate source noise associated with the project (pg 12-43 *Control of Source Noise Emissions)* the proponent specifically excludes measures that promote the use of low-noise IMEX port shuttle trains. The EIS for the adjacent Sydney Intermodal Terminal Alliance (SIMTA) project included a commitment to "*state-of-the-art rolling stock*" and the SIMTA project team has received advice from TfNSW officers in the Freight and Regional Development Division to define appropriate noise performance goals for rolling stock accessing the SIMTA site.

The design of the terminal access rail lines is also of concern from a rail noise perspective. The curves proposed for approach and departure rail lines and also on-site railroads are of a radius that is likely to produce significant instances of squeal noise. Of particular note are the rail vehicles (container wagons) that have a significant proclivity to squeal. Although the proponent notes recent studies that demonstrate curves can give rise to squeal noise that is substantially louder than straight track conditions, the EIS has adopted a non-conservative curve noise correction of +3dBA (Sound Exposure Level (SEL) and L_{Amax}). In contrast the Epping to Thornleigh Third Track (ETTT) project adopted a curve noise correction (+9dBA SEL, +21dBA L_{Amax}) for Beecroft curves which are similar in radius to curves shown in the MIT conceptual layouts.

Limitations to using regular maintenance of freight trains as noise mitigation measure

Regular maintenance undoubtedly assists with noise mitigation from a single locomotive but it is not an effective way of mitigating noise in sensitive urban areas subject to up to 53 freight trains per day (Reference table S.4 EIS Summary).

Department of Planning and Environment (DPE) will be aware that many freight trains on the state freight rail network can be 40-50 years old. Even with regular scheduled maintenance their noise profile is severely limited by the technology available at the time of their construction.

The regular maintenance of rolling stock in the suite of mitigation measures to control operational noise, however the proponent's focus should be on the adoption of low noise rolling stock and effective lubrication techniques to ensure noise control is effective.

Compliance with environmental protection licences insufficient to control operational rail noise

It is understood that freight locomotives servicing the project would be approved for use under environmental protection licences to operate on the network, based on noise performance. Older locomotives at the time the licence system was introduced in 2001 were approved for ongoing use (grandfathered) even though it is understood those locomotives are amongst the noisiest operating on the network.

Locomotives approved under EPA's licence regime have variable noise performance so this mechanism alone would not be sufficient to achieve best practice performance in an area of high freight train volume.

Use of SSFL and rail noise exposure at Casula

The EIS (Table 12.24) notes that the SSFL, with a future capacity of 62 freight train movements per day, would generate substantial noise impact at Casula residences (including Lakewood Crescent, St Andrews Boulevard and Buckland Avenue). FRD understands that compliance noise monitoring undertaken by the Australian Rail Track Corporation (ARTC) for the SSFL suggests that current usage of the SSFL is only a fraction (around 20%) of the current capacity of 48 freight train movements per day.

Should the Moorebank Intermodal Terminal be approved, additional freight movements on the SSFL will increase rail noise exposure at Casula residences. Appropriate noise controls will need to be examined, to ensure noise from the SSFL meets its project approval conditions.

Recommendation

It is suggested that the proponent is conditioned to:

- *Provide site access only to modern rolling stock that incorporate low noise locomotives, steering bogies (to control curve squeal) and permanently coupled wagons (to control noise from bunching).*

- *Adopt curve noise countermeasures including a review of the proposed site layout and rail access to the mainline to increase the radii of curved track, and effective lubrication techniques where curved track < 500m radius is unavoidable.*

- *Provide a report into the use of hybrid trains for port shuttle operations and also to hybrid engines for onsite mobile equipment. TfNSW would be prepared to assist in the review of the report.*

Rail Access

Discussion

It is possible that the southern rail access option proposed by the proponent involves incursion onto the East Hills Railway Line Corridor owned by Rail Corp / Sydney Trains. No land owners consent should currently be assumed.

Sydney Trains advises that it only considers providing land owners consent once the full DA package is lodged and considered. The package will need to include detailed engineering plans provided by an authorised engineering organisation acceptable to Sydney Trains. A rail access deed would also be necessary if incursion onto Rail Corp land is proposed.

Recommendation

It is suggested that the proponent is conditioned to:

- *Provide supporting documentation if access onto the East Hills Railway Line is proposed. As a first step this should be scaled engineering plans that extend from the SIMTA site to Glenfield Junction clearly showing how future quadruplicated rail track and associated infrastructure (service track, traction supply signalling and fencing) can be accommodated alongside the freight line proposed by the applicant. All work should be prepared by an authorised engineering organisation acceptable to Sydney Trains and the outputs must be submitted for review to Sydney Trains.*

Property Requirements

Recommendation

It is suggested that the proponent is conditioned to:

- *Liaise with TfNSW / Roads and Maritime to identify the future property requirements on the proponent's site that are necessary to accommodate the future road infrastructure upgrades necessary to address the identified capacity and weave movements on the M5 Motorway fronting the site.*

- *Prohibit access across the northern boundary of Lot 100 in DP1049508 which on to the South Western Motorway.*

Confirmation Road Works at no cost to Roads and Maritime

Recommendation

It is suggested that the proponent is conditioned to:

- *Document that that all works associated with the proposed development shall be at no cost to Roads and Maritime.*

Air Quality

Discussion

The EIS notes (p 17-38)

> *"Importantly, the assessment predicted that no additional [air quality] exceedance events would occur as a result of construction or operational emissions at the Project site."*

The focus of the emission review is therefore on ensuring air quality impacts are minimised and so avoiding any conflict between land uses in the area. Emission sources from freight operations were identified in three groups:

- Diesel locomotives, including the 'port shuttle' and interstate trains, and on-site shunting engines; these are *"a significant source of emissions during the operation of the Project"* (EIS, p17-18)
- Off-terminal transport vehicles (OTVs) , including delivery trucks, heavy goods vehicles, and passenger cars. These are "*expected to be a significant contributor of emissions to the local airshed*" (EIS p17-19)
- Warehousing and fugitive emissions are comparatively minor. Onsite mobile emissions have lower pollution level.

In achieving a satisfactory level of air quality, the assessment assumed a number of details regarding project operation. It is emphasized that these measures are important in achieving the desired outcome.

Recommendation

It is recommended the proponent notes that TfNSW wishes to work toward developing conditions of consent for this development that will achieve a number of practical outcomes to improve air quality. The proponent is requested to provide comment on the following as potential conditions at a later stage of development consent:

- Locomotives on site (IMEX, interstate and shunting) meet best practice international emissions standards for locomotives and non-road plant and equipment, and the proponent commits to achieving these standards on an ongoing basis.

- Minimise idling on site for all vehicle (both locomotives and trucks). Acknowledging that idling can avoid fuel use for engine shut-down and re-start. Proponent should ensure that idling protocols are investigated and specified for relevant types of engines, to be documented in the Air Quality Management Plan.

- Identify practical approaches that will ensure that 'all on-road trucks would comply with the Euro V emission standards' (Mitigation measure 10AI)

- Assessment of retrofit opportunities for older vehicles, locomotives and equipment.

- The proponent investigates hybrid vehicles, and hybrid engines for onsite mobile equipment.

Construction Management Strategy

Discussion

The proponent should establish an overall strategic framework for construction traffic management. Within the overall strategy a Construction Traffic Management Plan should be developed for each stage of the work. For example early works forms one plan, stage 1 a second plan et cetera. This will allow evaluation of each stage against the aims of the over-arching strategy.

Key issues that it is suggested are covered in the development of an overall Construction Management Strategy includes the following issues:

- Preventing queues from affecting adjacent intersections along Moorebank Avenue and the operation of the M5 Motorway / Moorebank Avenue interchange in the AM and PM peak periods.
- Detail construction vehicle routes, number of trucks, hours of operation, access arrangements, parking and traffic control measures.
- Modifying access locations in response to the upgrade of Moorebank Avenue.
- Minimising heavy vehicle movements through residential roads.
- Reducing volumes of construction vehicles travelling during peak periods.
- Maintaining access to neighbouring properties.
- Provision of alternate suitable pedestrian, cycle and public transport facilities.
- Developing a communication plan to provide relevant information to the appropriate authorities, bus operators and local community.
- Implementation of Traffic Control Plans and Variable Message Signs.
- Obtaining Road Occupancy Licences.
- Developing an emergency response plan for the upgrade of Moorebank Avenue.
- Submission of the early works CTMP to the Council and Roads and Maritime for approval prior to the issue of any Construction Certificate.

Recommendation

The proponent develops an overall Construction Traffic Management Strategy and a Construction Traffic Management Plan for early works.

Tab B – Detailed Roads and Maritime Property Issues

Discussion

A strip of land has previously been dedicated as Public Road by private subdivision (DP 1049508) along the Moorebank Avenue frontage of the subject property as highlighted in yellow shading in attachment 1 and 2 below.

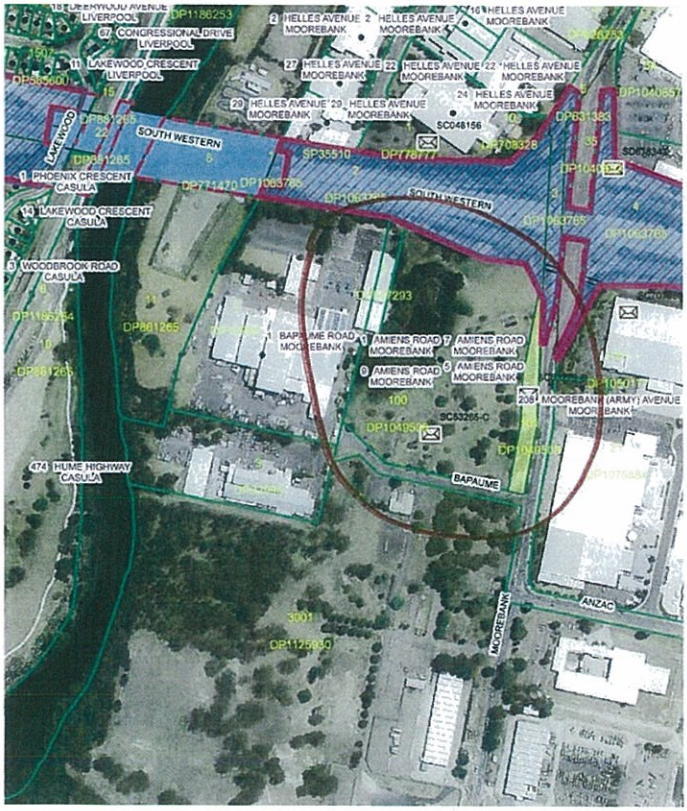
Roads and Maritime has no other current approved proposal that requires any part of the subject property for road purposes, noting that road widening and associated property set-back may be required along the M5 Motorway frontage as further planning is progressed to address the M5 weave issues.

Therefore, there are no objections to the development proposal on property grounds. However, as detailed in proposed conditions above, access is denied across the northern boundary of Lot 100 in DP1049508 on to the South Western Motorway.

Interlink Roads Pty Ltd (ILR) requires access to be retained for maintenance purposes to the proposed GPT pit detailed in the yellow text box in 'Maintenance Access requirements' in TAB B.

Attachments

Attachment 1



Attachment 2