



**MODIFICATION REQUEST:
Enfield Intermodal Logistics Centre –
Modification 6
Cosgrove Road, Strathfield South
(MP 05_0147 MOD 6)**

***Proposed subdivision, site layout adjustments,
inclusion of former Toll lease area, and
meteorological monitoring at the Intermodal
Logistics Centre.***



Director-General's
Environmental Assessment Report
Section 75W of the
Environmental Planning and Assessment Act 1979

November 2012

ABBREVIATIONS

Department	Department of Planning and Infrastructure
DCP	Development Control Plan
Director-General	Director-General of the Department of Planning and Infrastructure
EA	Environmental Assessment
EAR	(Director-General's) Environmental Assessment Report
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPA	NSW Environment Protection Authority
ILC	Intermodal Logistics Centre
LEP	Local Environmental Plan
LIC	Light Industrial/Commercial (area)
Minister	Minister for Planning and Infrastructure
OEHS	NSW Office of Environment and Heritage
ONMP	Operation Noise Management Plan
Part 3A	Part 3A of the <i>Environmental Planning and Assessment Act 1979</i>
Proponent	Sydney Ports Corporation
REF	Review of Environmental Factors
TEU	Twenty-foot equivalent unit

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EXECUTIVE SUMMARY

Sydney Ports Corporation (the Proponent) was granted project approval for the development of an Intermodal Logistics Centre (ILC) at Enfield on 5 September 2007 by the then Minister for Planning. The project was approved under Part 3A of the *Environmental Planning and Assessment Act 1979*. Subsequent to project approval, the Proponent has requested a number of modifications relating to noise mitigation measures, internal road layout, stormwater management, dust monitoring, management of contaminated materials, and warehousing and distribution.

The approved project is located in the Strathfield local government area and comprises the acceptance of 300,000 twenty-foot equivalent unit (TEU - one TEU is equivalent to one twenty foot container) per annum of containerised cargo by rail from Port Botany for redistribution by road to markets in central western Sydney. The project will be supported by warehousing for the unpacking/packing of containers, light industrial/commercial premises, empty container storage areas, and distribution facilities.

The approved project specifically excluded the Toll Lease area which is located in the central part of the site as it was subject to a long-term lease until 2021. However, in 2008, Toll terminated its lease with the Sydney Ports Corporation. Consequently, the Proponent now proposes to use the Toll lease area and is seeking its inclusion within the ILC project.

The Environmental Assessment for the project included a general layout for the ILC. Consequent to early contractor involvement in the detailed design of the project, the Proponent proposes a number of changes to the site layout including: re-adjustments to the precincts to improve the site operability, access and functionality; adjustments to permanent noise walls; and changes to the location and design of sedimentation basins.

In order to accommodate these changes, and include the Toll lease area as part of the project, the Proponent has submitted a request under Section 75W of the *Environmental Planning and Assessment Act 1979* to modify the project approval. The modification request also includes allowing flexibility in the use of meteorological monitoring data, and clarity of the timeframe over which on-site meteorological monitoring is undertaken. In addition, the modification request seeks approval to subdivide the land to allow for long-term leasing.

The Modification Application was placed on exhibition from 22 May to 7 June 2012. The Department received three submissions from public authorities during the exhibition period which raised the following key issues:

- conflicts between the proposed subdivision and approved land uses (including areas originally proposed for landscaping and land dedicated as a Community and Ecological Area);
- impacts on overland flow and flooding consequent to changes in the site layout;
- noise impacts arising as a result in the reduction of the northern noise wall;
- the effectiveness and suitability of stacked empty storage containers as acoustic barriers;
- removal of the on-site meteorological station and therefore absence of on-site data for use in assessing operational air quality and noise impacts; and
- impacts associated with the possible demolition of the former Toll lease area including traffic, contamination and noise.

No public submissions were received during or post the exhibition period.

A Response to Submissions Report was submitted by the Proponent on 19 July 2012 providing a response to issues raised in submissions. An amended plan of subdivision for the site was submitted on 28 September 2012 in response to concerns raised by the Department and Strathfield Council regarding the subdivision of the southern portion of the Enfield ILC site.

The Department has undertaken an assessment of the proposed modification request based on the Proponent's Modification Application, submissions received during its exhibition, and a review of the Proponent's Response to Submissions Report. The Department considers that the proposed changes, by reason of their nature and extent, do not constitute a radical transformation of the terms of the existing project approval. In addition, the Department is of the view that the proposed changes to the site layout would improve site operability.

On balance, the Department considers the modification request to be justified and is of the opinion that the proposed amendments can be undertaken in an environmentally responsible manner based on the existing conditions of approval, commitments made by the Proponent in the original Environmental Assessment, and the amendments to the conditions as recommended by the Department consequent to its assessment of the Modification Application. The Department therefore recommends that the modification application be approved, subject to conditions.

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1. BACKGROUND

On 5 September 2007, the then Minister for Planning approved the Enfield Intermodal Logistics Centre (ILC) under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The approved project is located on the site of the former Enfield Marshalling Yards, Cosgrove Road, Enfield (Figure 1) and is within the Strathfield local government area. The project has an estimated capital investment value of \$150M, and is being undertaken by Sydney Ports Corporation (the Proponent).

The project site extends from the intersection of the Hume Highway and Roberts Road, South Strathfield in the north, to the intersection of Cosgrove Road and Punchbowl Road, Enfield to the south. The western boundary of the site comprises the new Enfield Marshalling Yards and Wentworth Street, Greenacre, while the western boundary is Cosgrove Road, Enfield. Access to the site is currently provided via Cosgrove Road.

Land use surrounding the proposed project is mixed and comprises existing commercial and light industrial development mainly located along the western and the eastern sides of Wentworth Street and the eastern side of Cosgrove Road, and residential development associated with the suburbs of South Strathfield to the north-east and east, Chullora and Greenacre to the west and south-west, Belfield to the south and south-east and Enfield further east. The nearest residential dwellings are located immediately east of the site on Cosgrove Road. To the north-west and west, residential development occurs south of the Hume Highway and west of Roberts Road (within 100 metres of the site boundary) and in the south east along Wentworth Street.

Main construction works commenced in 2011 and are estimated to be completed by 2013. Upon completion, the ILC will accept a maximum throughput of 300,000 TEU (one TEU is equivalent to one twenty foot container) per annum of containerised cargo by rail, including from Port Botany, for redistribution by road to markets in central western Sydney. The approved project includes:

- demolition, relocation and removal of former railway buildings and structures;
- earthworks and drainage, including the levelling of the site, formation of landscape mounds and detention basins and removal of unsuitable materials; and
- construction and operation of -
 - an intermodal terminal for the loading and unloading of containers,
 - rail sidings, railway lines and other works to connect to the existing freight line,
 - warehousing for the packing and unpacking of containers and the short-term storage of cargo,
 - empty container storage facilities, for the storage of empty containers to be later packed or transferred back to the port or regionally by rail,
 - light industrial/commercial area fronting Cosgrove Road,
 - access works including the construction of a road bridge over the new marshalling yards for access to Wentworth Street and an upgrade of the entrance to the site from Cosgrove Road, and
 - internal roads, administration buildings, diesel and LPG storage and fuelling facilities, container washdown area, vehicle maintenance shed, installation of site services (all utilities, stormwater and sewerage), and construction of noise walls.

Modifications to the approval under Section 75W of the EP&A Act include:

- Modification 1 - On 7 October 2008, the Executive Director, Major Project Assessments, as delegate for the Minister for Planning, approved a modification amending condition 3.2 regarding construction dust monitoring, including the technology to be used and the duration of monitoring;

Figure 1: Project Location



- **Modification 2** - On 30 March 2009, the Director-General, as delegate for the Minister for Planning, approved a modification amending condition 2.43 regarding the requirements for a Site Audit Statement so as to avoid project delays arising from the time required between the remediation of contaminated areas and the preparation and completion of a Site Audit Statement prior to the commencement of construction. This modification also included the addition of condition 1.3A which allowed for the staging of the project
- **Modification 3** - Modification 3 is a pending application that has not progressed.
- **Modification 4** - On 27 May 2010, the Director, Infrastructure Projects, as delegate for the Minister for Planning, approved a modification in relation to noise mitigation measures, the internal road layout, stormwater detention and treatment, warehousing and distribution, and the wording of a number of construction related conditions.
- **Modification 5** – On 10 November 2011, the Minister for Planning and Infrastructure approved a modification for the onsite relocation and reuse of excavated material (deemed unsuitable for engineering fill at the ILC operational areas) on and around the stockpile located at the southern part of the site and referred to as 'Mt Enfield'.

2. PROPOSED MODIFICATION

On 30 April 2012, Sydney Ports Corporation submitted a request to modify the project approval for the Enfield ILC to allow for adjustments to the site layout, inclusion of the Toll lease area as part of the ILC project, subdivision of the ILC site, flexibility in the use of meteorological monitoring data, and clarity of the timeframe over which on-site meteorological monitoring is undertaken. The key aspects of the modification are described below.

2.1 Adjustments to Site Layout

The approved site layout is shown in Figure 2 and includes warehousing and light industrial/commercial activities along the eastern part of the site, container storage in the north-west and south west of the site, terminal and service areas in the central part of the site, and landscaping in the south.

Consequent to early contractor involvement in the detailed design of the project, the Proponent proposes to make a number of adjustments to the site layout. The revised site layout is illustrated in Figure 3 and involves changes to:

- the layout of the Light Industrial/Commercial (LIC) area and the conceptual location of the component buildings – this includes increasing the approved gross floor areas for LIC areas Y and Z and decreasing the approved gross floor space areas for LIC areas W and X (resulting in an overall increase in the gross floor space from 40,614 m² to 40,989 m²), decreasing the front boundary setback of LIC area W (refer Figure 3 for location) from 10 metres to eight metres, and including a section of land approximately 55 metres long and 15 metres wide into LIC area Z;
- the Service Area/Terminal Area – this involves integrating the Service and Terminal Areas (refer Figure 3) to facilitate access/egress and the internal movement of vehicles;
- the location and sizes of the stormwater detention basins – this comprises relocating basin B to the north and reducing its capacity from 8,582 m² to 8,002 m², increasing the capacity of basin C from 1,400 m² to 2,722 m², and relocating basin D to the east and increasing its capacity from 14,760 m² to 15,500 m²;
- the length of permanent noise walls – this includes shortening the proposed northern noise wall at its northern end by approximately 75 metres (i.e. approximately 20% of the overall length) and extending the eastern noise wall from 43 metres in length to 77 metres around basin D; and
- the layout of the Southern Empty Container Storage Area A – this involves extending the area southwards around stormwater detention basin D and constructing temporary acoustic barriers from empty containers (as required) to align with operations in the extended area.

Figure 2 – Approved Site Layout

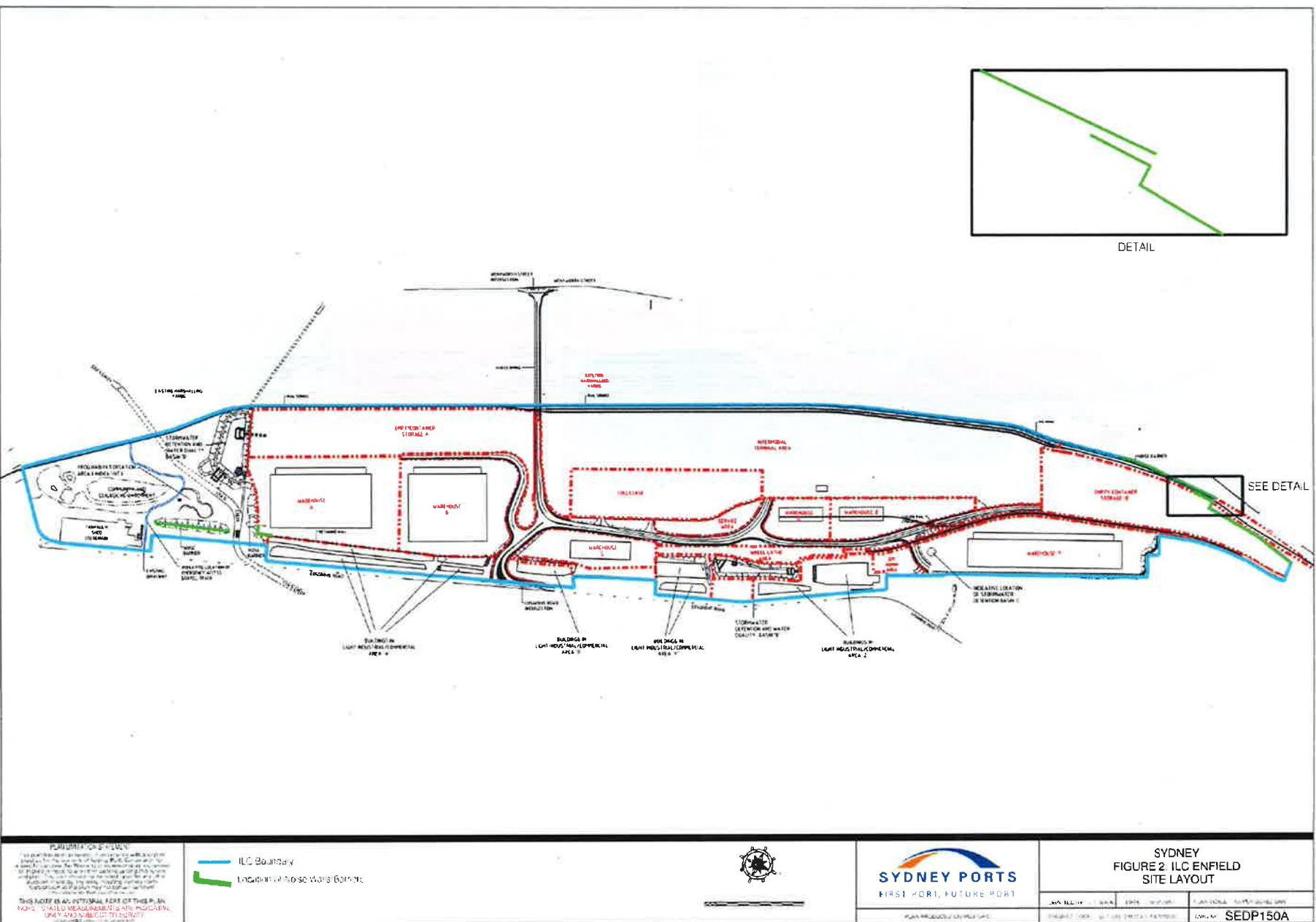
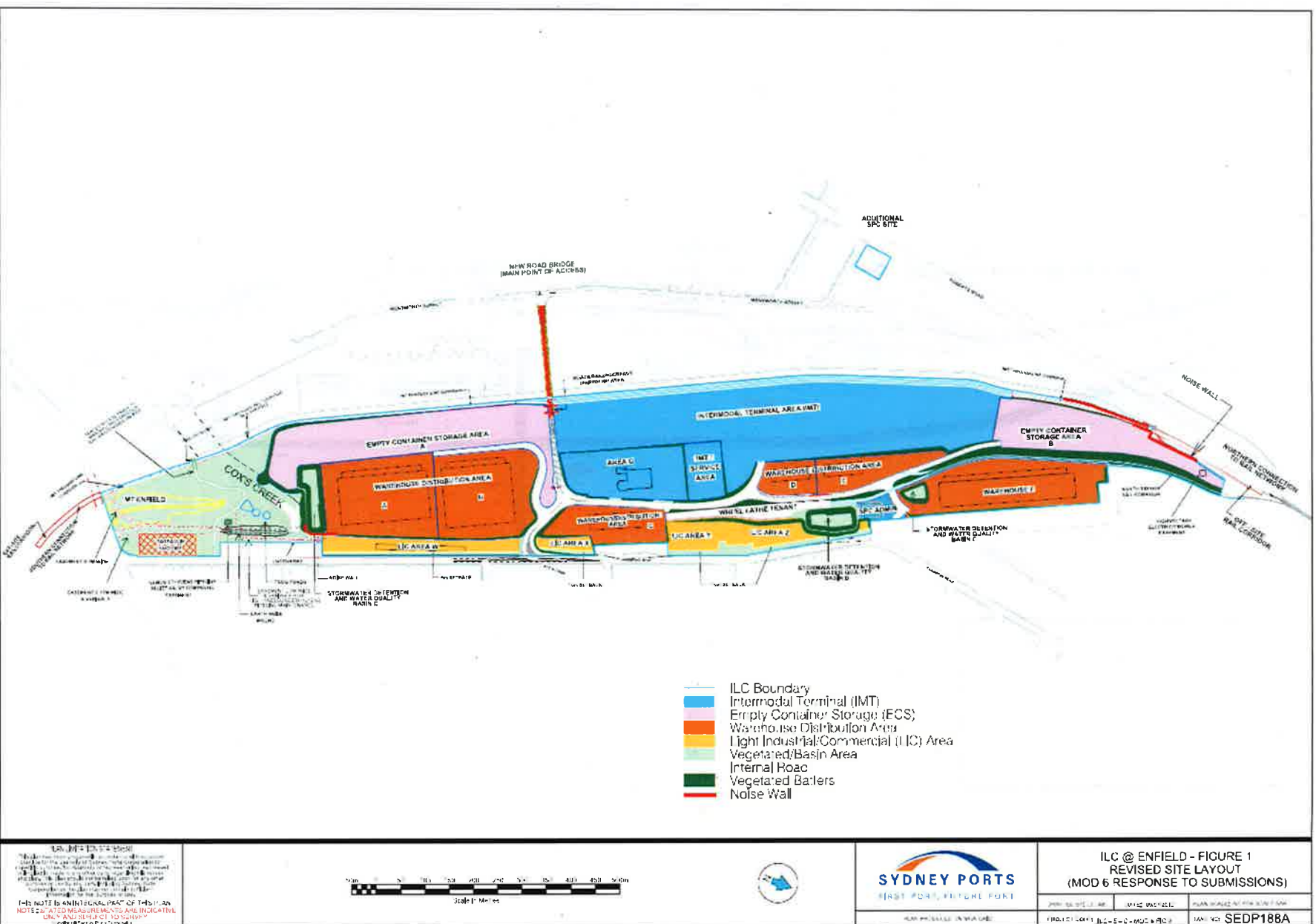


Figure 3 – Proposed Site Layout



To address the proposed changes in the site layout, the Proponent has requested the following modifications to the project approval:

- conditions 1.1, 1.2, 1.6, 1.9, 1.11, 2.31 – amend the conditions to include reference to the document *Intermodal Logistics Centre at Enfield, Modification Application No.6, Early Contractor Involvement, Detailed Design Adjustments and Subdivision* (Sydney Ports, April 2012); and
- condition 1.9 – amend the Maximum Precinct Gross Floor Areas in Table 2 to reflect the new maximum gross floor areas specified in the document *Intermodal Logistics Centre at Enfield, Modification Application No.6, Early Contractor Involvement, Detailed Design Adjustments and Subdivision* (Sydney Ports, April 2012).

2.2 Toll Lease Area

The former Toll lease area is located in the central area of the ILC site (refer Figure 2) and is located within Lot 14 DP1007302, as is the majority of the ILC site. The lease area was used as a container storage depot and transport logistic centre and has warehouse and service infrastructure in place. The site was subject to a long-term lease until 2021, however, in mid-2008 Toll terminated its lease with the Proponent.

The approved project specifically excluded the Toll Lease area as it was assumed that the long-term lease operations would continue during ILC operations. Consequent to the Toll lease area being vacated, the Proponent has requested that the project approval be modified to include the Toll lease area as part of the intermodal terminal area or as warehousing. The Proponent has advised that depending on the final use of the area, construction works may range from upgrades to the existing building, pavement and infrastructure to demolition of existing building and infrastructure, ground treatment and levelling, and pavement resurfacing.

To address the inclusion of the Toll lease area, the Proponent has requested that condition 1.1 be amended to include the document *Intermodal Logistics Centre at Enfield, Modification Application No.6, Early Contractor Involvement, Detailed Design Adjustments and Subdivision* (Sydney Ports, April 2012), and condition 1.2 (which refers to condition 1.1) be amended to reflect the inclusion of the document in condition 1.1.

2.3 Site Subdivision

The ILC will comprise several long-term tenants all of whom would be subject to long-term leases with the Proponent. In accordance with Land and Property Information requirements, the registration of a lease of land in excess of five years can only be completed by the preparation and registration of a Plan of Subdivision. Consequently, the Proponent proposes to subdivide the ILC site and has requested that the project approval be amended to include subdivision of the site. The original subdivision plan is included as Figure 4. This plan has since been amended to address concerns raised in submissions (refer to Section 5.5).

2.4 Meteorological Monitoring

The Proponent has requested that condition 2.20 be modified to be consistent with the requirement for air quality monitoring. In addition, the Proponent has requested that conditions 2.20 and 3.1 be modified to allow the use of meteorological data from nearby Bureau of Meteorology stations during time of repairs or maintenance of the on-site meteorological station.

[illegible]

3. STATUTORY CONTEXT

3.1 Modification of the Minister's Approval

Pursuant to Schedule 6A of the EP&A Act, the approved project is a *transitional Part 3A project* and therefore Part 3A of the EP&A Act continues to apply in respect of the project.

Section 75W (2) of the EP&A Act provides that a Proponent can request the Minister to modify the approval of a project. The Minister's approval is not required if the project, as modified, will be consistent with the original approval. The subject modification is not consistent with the approval, but would not result in a radical transformation and therefore an assessment in accordance with Section 75W of the EP&A Act is considered appropriate.

3.2 Consistency with Planning Instruments

NSW 2021

The NSW Government's State plan *NSW 2021* is a 10 year plan aimed at rebuilding the economy, providing quality services, renovating infrastructure, restoring government accountability, and strengthening the local environment and communities. A key target of the strategy is to enhance rail freight movement to accommodate the high forecasted growth in freight movements and ease road congestion.

The proposed modification will enhance operations at the intermodal facility. Development of the facility is consistent with *NSW 2021* in that it will enable increased throughput of freight within the Sydney region, and maximise the distance containers travel by rail and minimise the distance travelled by road.

Metropolitan Plan for Sydney 2036

The NSW Government's *Metropolitan Plan for Sydney 2036* provides a broad framework for managing growth and development of Sydney over a 25 year period. One of the objectives of the Plan (E3) is to provide employment lands to support the economy's freight and industry needs, including retaining strategically important employment lands and strengthening existing freight and industry clusters. Under the Plan, broad functions of employment lands include freight and logistics, notably the Strathfield-Enfield area.

The proposed modification is consistent with the objectives of the Plan in that the project will provide freight and logistics facilities required by the freight industry.

Draft Inner West Subregional Strategy

Subregional strategies are a key planning tool to implement the *Metropolitan Plan for Sydney 2036*. The draft *Inner West Subregional Strategy* covers the Ashfield, Burwood, Canada Bay, Leichhardt and Strathfield local government areas.

Key Action IW A1.2.2 of the Subregional Strategy states "*The Department of Planning and Sydney Ports Corporation to work with Strathfield Council to ensure employment lands are protected and enhanced to support the planned Enfield Intermodal Logistics Centre, and maximise the local economic development benefits of any future infrastructure investment*". It also states "*Subregional important employment lands are located adjacent to Enfield Marshalling yards. The retention of employment land at this location is essential to support future infrastructure and aligns with the NSW Government's in principle agreement to increase the proportion of freight transported by rail*". The proposed modification is consistent with this key action in that the amendments to the project are aimed at ensuring that on-site operations are efficient and effective.

Strathfield Planning Scheme Ordinance 1969

Under the Strathfield Planning Scheme Ordinance, the Enfield ILC site is zoned Special Uses "B" (Railways) (Special Use Zone). This zoning permits buildings or works to be constructed or carried out for any purpose with the consent of the responsible authority. The proposed subdivision of the site for freight and logistics activities is consistent with the zoning.

Draft Strathfield Local Environmental Plan 2011

Strathfield Council exhibited a draft local environmental plan (LEP) from January to March 2012. The Plan is currently under consideration by the Department. Pursuant to the Plan, the majority of the site is zoned IN1 General Industrial with the area known as "Community and Ecological Area" zoned RE1 Public Recreation. The proposed land uses and subdivision in the area proposed to be zoned IN1 General Industrial is consistent with the objectives of the zoning. The Department is currently considering the RE1 Public Recreation zoning for consistency with the approved land uses in this area.

The proposed size of some of the lots is less than the 20,000 square metres proposed in the draft LEP (refer to Section 5.5). The Proponent's submission on the draft LEP objected to the proposed zoning of the Community and Ecological Area and to the Enfield ILC being identified on the draft LEP "Lot Size Map".

4. CONSULTATION AND SUBMISSIONS

4.1 Exhibition

Under Section 75X(2)(f) of the EP&A Act, the Director-General is required to make the modification request publicly available. After accepting the modification application (and supporting documentation), the Department publicly exhibited the modification application from 22 May 2012 until 7 June 2012 on the Department's website and at:

- the Department of Planning and Infrastructure, Information Centre, Sydney;
- the Nature Conservation Council of NSW; and
- Strathfield City Council.

The Department also advertised the public exhibition in the Canterbury-Bankstown Express on 22 May 2012, the Central Courier on 23 May 2012, and the Inner Western Suburbs Courier on 24 May 2012, and notified relevant State and local government authorities of the exhibition in writing. In addition, the Department notified Qenos Pty Ltd in writing as it is the owner of the ethylene pipeline which is located within an easement that runs along and within the north-eastern boundary of the site. The written notifications and advertisements invited submissions on the modification.

The Department received three submissions during the exhibition period (refer Appendix B). The submissions were from the Environment Protection Authority (EPA), Office of Environment & Heritage (OEH), and Strathfield Council. The EPA and OEH did not object to the proposed modification, however they did raise issues for the Department's consideration. Although Strathfield Council did not state outright that it objected to the proposed modification, it indicated that it had significant concerns over certain aspects of the modification, that a number of the proposed amendments were not acceptable, and that it opposed the proposed temporary acoustic barriers. A summary of the issues raised in the submissions is provided below.

No public submissions were received during or post the exhibition period.

4.2 Submissions

The **OEH** advised that its key issue is ensuring the protection of the Green and Golden Bell Frog, and that as long as pre-clearance surveys are carried out and exclusion fences are put in place, it has no concerns regarding the modification.

The **EPA** raised concern that no management measures have been proposed to ensure that container handling or other noisy activities are not undertaken in the area affected by the shortening of the northern noise wall. Consequently, it recommended that any approval for the proposal include a condition stating that container handling shall not be undertaken in the area affected by the removal of the noise wall, and that the area be marked on a map. The EPA also recommended that the conditions of approval regarding noise limits remain unchanged.

The EPA also raised concern over the proposed removal of the on-site meteorological monitoring station once the site has been sealed. The EPA considers that an on-site station is the most accurate and appropriate source of meteorological data to enable operational noise monitoring, and therefore recommended the station remain on site during the operation of the facility. The EPA indicated that it had no objection to the Proponent using Bureau of Meteorology data when the on-site station is offline due to maintenance.

Strathfield Council raised a number of issues of concern including:

- changes to the extent of the Community and Ecological Area and consequent inconsistency with the draft Strathfield LEP 2011;
- the reduction in the amount of landscaped areas resulting in diminished site aesthetics, reduced screening of the site from surrounding areas, and reduced biodiversity opportunities;
- conflict between the proposed subdivision pattern with the intent of the original approval for the southern section of the site becoming a "Community, Heritage and Ecological Area", in particular the reduction in the amount of land dedicated for community, ecological and heritage purposes;
- lack of assessment of the full impacts associated with the inclusion of the Toll lease area, including site contamination, drainage, impacts associated with demolition, and truck movements;
- compliance with noise management levels will only be at a majority of residential receivers during the majority of time periods, rather than at all residential receivers during all time periods;
- the use of stacked empty containers as acoustic barriers rather than erecting permanent noise walls;
- the lack of management procedures to ensure that noise issues which may arise during the operation of the facility are adequately addressed;
- the length of time the on-site meteorological station would be offline for maintenance;
- adequacy of the drainage system to convey stormwater flows;
- discharges to Cox's Creek, changes to overland flow paths, and potential flooding of neighbouring sites;
- the failure of the noise assessment to address noise generated by shunting carriages; and
- location of the site entry point on Cosgrove Road opposite residences.

In regards to the location of the site entry point on Cosgrove Road, the Cosgrove Road access point was designated as part of the approved internal road amendments proposed in Modification 4. Strathfield Council raised no objection at that point of time. Further, the access point and track works were subject to a Review of Environmental Factors (REF - prepared for the Australian Rail Track Corporation, January 2011). The REF states that a letter was sent to Council on 15 February 2010 inviting feedback and that Council's issues were fully considered. As such, this issue is not addressed in this report.

In regards to Strathfield Council's concern that the noise assessment did not address the noise generated from shunting carriages, the Department notes that modification is not introducing any new elements in regards to shunting operations or modifications to the approved project that would increase noise levels associated with shunting at sensitive residential receivers. The noise assessment addressed the impacts associated with the proposed changes to the approved layout. Further, condition 2.19 of the project approval requires train operations, including shunting within the ILC, to comply with the project noise limits specified in condition 2.17. Consequently, this issue is not addressed any further in this report.

4.3 Proponent's Response to Submissions

Upon review of the submissions received, the Proponent prepared a Response to Submissions Report to address each of the issues raised. As part of this process, the Proponent reviewed each submission and made specific comment on each of the issues raised. A copy of the Response to Submissions Report is attached as Appendix C.

The Response to Submissions Report was forwarded to the EPA and Strathfield Council for comment in light of the concerns raised in their respective submissions. The EPA restated its concerns regarding the shortening of the northern noise wall, and indicated that although the on-site meteorological monitoring station is the most accurate source of weather data for noise monitoring, it would accept the use of weather data from the Canterbury Racecourse Automatic Weather Station, operated by the Bureau of Meteorology.

Strathfield Council reiterated its concerns regarding the subdivision of the southern portion of the site into three lots (Lots 19, 20 and 25), meteorological monitoring, site drainage, impacts associated with the inclusion of the Toll lease area, and the use of empty containers as acoustic barriers. Consequent to the concerns raised over the subdivision of the southern part of the site, the Proponent amalgamated Lots 19, 20 and 25 into a single lot (refer Figure 5).

5. ASSESSMENT

As noted in Sections 2.1 to 2.4, the proposed Modification Application involves a number of amendments to the project. The nature and scale of the impacts associated with each of the project amendments varies across the proposed amendments. Consequently, the Department's assessment of the modification request is dealt with on the basis of each of the key amendments. In undertaking the assessment, the Department has taken into consideration the Modification Application, submissions received, and Response to Submissions Report.

5.1 Inclusion of Former Toll Lease Area

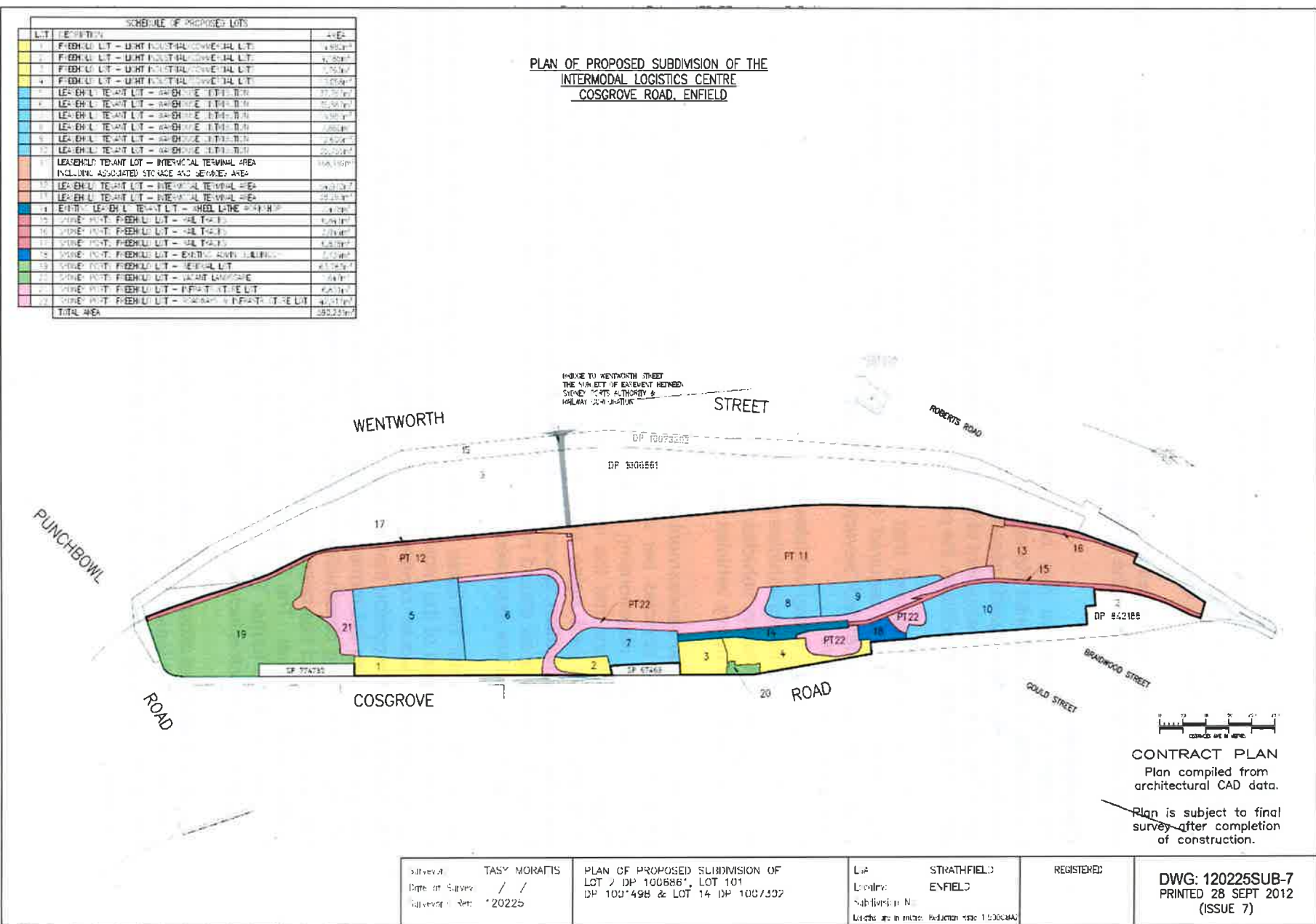
Issue

The former Toll lease area is located in the central area of the ILC site. The lease area was used as a container storage depot and transport logistic centre and has warehouse and service infrastructure in place. The site was subject to a long-term lease until 2021. However, in mid 2008, Toll terminated its lease with the Proponent.

The approved project specifically excluded the Toll lease area as it was assumed that the long-term lease operations would continue during ILC operations. Consequent to the area being vacated, the Proponent has requested that the project approval be modified to include use of the former Toll lease area part of the intermodal terminal area or as warehousing.

The Proponent has advised that the future ownership and design of the former Toll lease area is yet to be finalised. Depending on the final use, construction works in the area may range from upgrades to the existing building, pavement and infrastructure, to demolition of existing building and infrastructure, ground treatment and levelling, and pavement resurfacing.

Figure 5 – Revised Plan of Subdivision



As the final use of the site has not been determined, the Proponent has not assessed the potential construction impacts that may arise from redevelopment of the site, advising that these would be dealt with in a Construction Environmental Management Plan prepared in accordance with condition 6.2 of the project approval.

Strathfield Council raised concern that the full impacts of any redevelopment of the site, in particular those arising from the pavement reconstruction, had not been considered.

Consideration

Although the Proponent has committed to assessing construction-related impacts in the Construction Environmental Management Plan for the project, the Department is of the opinion that any construction impacts associated with the inclusion of the former Toll lease area should be assessed prior to redevelopment of the site as redevelopment has the potential to generate traffic and noise impacts. In addition, the potential for site contamination is yet to be confirmed.

The Proponent has advised that should pavement resurfacing take place, approximately 1,300 trucks would be required to bring material to the site over several weeks. The Proponent has not defined "several". Possible traffic scenarios over 10, 15, 20 and 25 day periods are as follows:

- 10 days – 130 heavy vehicles per day;
- 15 days – 86 heavy vehicles per day;
- 20 days – 65 heavy vehicles per day; and
- 25 days – 52 heavy vehicles per day.

The project's original assessment assumed an average of 29 heavy vehicles per day with a peak of 75 heavy vehicles per day during the overlap of the provisions of road and rail infrastructure and warehousing. Based on the above possible traffic scenarios, the Department considers that the increase in the number of heavy vehicle movements, and consequent traffic and noise impacts, could be significant. As such, the Department considers that demolition, ground treatment and levelling, and pavement resurfacing in the former Toll lease area should not be approved until such time that the impacts associated with such activities are assessed.

The use of the former Toll lease area for freight and transport logistics operations was taken into consideration as part of the project's original assessment, as it was assumed that the long-term lease operations would continue simultaneously during ILC operations. Accordingly, the Department is of the opinion that any future use of the former Toll lease area should be limited to being consistent with the former operations and impacts, particularly in light of the absence of information regarding construction impacts and potential future uses of the site. A condition of approval to this effect has been agreed to by the Proponent and is included in the recommended instrument of approval. The Department is of the opinion that a condition specifically approving the inclusion of the former Toll lease area is not required as it is addressed in the Proponent's documentation which is included in condition 1.1 of the recommended instrument of approval.

The project approval allows for a maximum throughput of 300,000 TEU per annum (condition 1.5) and the former Toll lease area would be required to operate within this maximum throughput. Consequently, inclusion and use of the site would not result in any variations to operational traffic volumes.

5.2 Changes to Layout of Light Industrial Commercial Areas

Issue

Following further consideration of existing site conditions (e.g. topography, excavation requirements, avoiding construction over the existing Qenos pipeline easement), the Proponent proposes to modify the approved site layout in order to improve site operability, access and functionality. The proposed operational site layout is shown in Figure 3 and includes changes to the layout of the Light Industrial Commercial (LIC) areas and the conceptual location and gross floor areas of the LIC buildings. The Proponent considers that the adjustments are not significant and do not affect the impact assessment carried out as part of the project's original assessment.

In regards to gross floor space, the Proponent proposes to increase the LIC gross floor area by around 375 m² (i.e around 0.9%). The approved and proposed gross floor areas are set out in Table 1.

Table 1: LIC Approved and Proposed Gross Floor Areas

LIC Area	Approved Gross Floor Space Area (m ²)	Proposed Gross Floor Space Area (m ²)
W	18,010	14,995
X	4,749	4,191
Y	6,996	7,790
Z	10,859	14,013
Total	40,614	40,989

The amendments to the LIC also include decreasing the setback of area W from 10 metres to eight metres consequent to changes in the form and fabric of the retaining wall behind area W. The original proposal involved the construction of a vertical concrete retaining wall. However, in order to enhance the visual amenity of the site, and maximise landscaping, a vegetated batter is proposed to be constructed. The proposed batter will be wider than the concrete wall and extend into area W. Consequently, in order to accommodate the proposed buildings and infrastructure in area W, the area has been moved two metres eastwards towards Cosgrove Road.

The amendments to the LIC also involve revising the layout of area Z to include a section of land approximately 55 metres long and 15 metres wide located immediately east of the existing Quenos pipeline easement and adjacent to the outlet of the Central Drain. This area was previously designated for landscaping and is identified in the document *Green and Golden Bell Frog, Frog Protection Plan, Intermodal Logistics Site at Enfield* (Biosphere Environmental Consultants, 2009) as a potential frog habitat area. However, it does not form part of the proposed "Frog Habitat Creation Area" for the Green and Golden Bell Frog as detailed in the document *Intermodal Logistics Centre at Enfield, Green and Golden Bell Frog, Frog Management Plan* (Sydney Ports, 2010).

Strathfield Council raised concern over the inclusion of the land area designated for landscaping stating that there has been a significant reduction in the amount of landscaped areas when compared to the original approval, consequent to amendments to the site layout approved under previous modifications. Council also recommended that the current proposal to include the area previously designated for landscaping as part of area Z be refused in order to retain consistency with the originally approved landscape areas.

Consideration

The Department considers that an increase of 0.9% in the gross floor space of the LIC area is not a significant increase and would not lead to significant impacts above those previously assessed. In addition, the proposed gross floor space is consistent with *Part D – Industrial Development* of the *Strathfield Consolidated Development Control Plan 2005* (Strathfield

DCP) in that it complies with the maximum floor space ratio of 1:1 (where the floor space ratio is defined as the ratio of the gross floor areas of any building or buildings to the area of the site on which the building or buildings are to be erected).

In regards to setbacks, Section 2.6, Part D of the Strathfield DCP specifies a minimum setback of 10 metres from the front boundary for industrial developments. However, it also states that if nearby existing industrial buildings have setbacks less than this, a variation on setback may be considered. The proposed front boundary setback distances of areas X, Y and Z is 10 metres and therefore consistent with the DCP. Although the proposed front boundary setback distance of area W is 8 metres, the Department considers this variation acceptable as several nearby industrial buildings along Cosgrove Road have front setback distances less than 10 metres, in some cases 5 metres or less. In addition, the reduced setback would not impact on residences as land uses on the opposite side of Cosgrove Road in the vicinity of area W predominantly comprise industrial developments, with a small strip of parkland (Begnell Park) fronting the southern most part of area W.

The setback is also further justified on the basis that it would allow for the construction of a vegetated batter to the west of area W, as opposed to a vertical concrete wall, and hence enhance the visual amenity of the site.

The 55x15 metre land area to be included in area Z was previously designated for landscaping. Strathfield Council raised concern over the apparent gradual decrease in the amount of landscaped area (consequent to amendments approved as part of previous modifications) compared to the original proposal. The Proponent has advised that although there would be a reduction in the total landscaped area in area Z, the total amount of landscaping within the site has been increased from an initial 12.1 hectares to 12.3 hectares, as the vertical concrete retaining walls within the site have been replaced with grassed batters. The batters will be vegetated with a native grass mix similar to that approved for the southern "Community and Ecological Area".

In regards to Strathfield Council's concerns regarding reduced screening of the site, ILC tenants and operators will be required to carry out landscaping within their lease areas in accordance with the layout shown in Figure 3 i.e. along the site perimeter adjacent to Cosgrove Road. The Department notes that the proposed 55x15 metre parcel of land is not visible from residences due to the intervening industrial area and hence the removal of the landscaped area would not impact on the visual amenity of residential receptors.

In regards to potential impacts on the Green and Golden Bell Frog, although the proposed landscaped area was identified as a potential habitat site for the Green and Golden Bell Frog, no species have been identified in the area during targeted frog surveys and inspections, nor was the area designated as a habitat area to be retained during the construction and operation of the site. The Proponent has committed to implementing the mitigation measures set out in the *Green and Golden Bell Frog, Frog Protection Plan, Intermodal Logistics Site at Enfield* (Biosphere Environmental Consultants, 2009) prior to and during construction works (i.e. installation of frog protection fences, and undertake frog clearance surveys), as per the recommendation of the OEH in its submission. As such, the Department considers that the inclusion of the land area into area Z would not adversely impact on Green and Golden Bell Frogs, or their habitat.

Consequently, the Department is of the opinion that the proposed amendments to areas W, X and Z would not result in significant additional environmental impacts to those predicted in the project's original assessment and recommends conditions 1.1, 1.2, 1.6 and 1.11 of the project approval be modified to refer to the modification application, as requested by the Proponent. The Department also recommends that condition 1.9 be amended to reflect the new maximum gross floor areas for the LIC, as proposed by the Proponent. These recommendations are reflected in the attached recommended instrument of approval.

5.3 Integration of Service and Terminal Areas

Issue

The approved Services Area covers an area of 6,148 m², and is located to the north of the former Toll lease area and midway between the two Empty Container Storage Areas A and B (Figure 2). The Proponent proposes to integrate the Service Area with the Terminal Area (as shown in Figure 3) to facilitate access/egress and the internal movement of vehicles. Under the proposed arrangement the Service Area would become an integral part of the terminal and together would occupy an area of 8,800 m². Land uses in the Service Area would be consistent with the uses identified in previous approval documentation, including uses supplementary to the terminal and ILC operations (e.g. container wash down facility and maintenance activity shed).

Consideration

The integration of the Services and Terminal Area would not result in any additional impacts as operations in the amalgamated area would be consistent with the approved operations. Consequently, the Department considers the proposed integration of the two areas to be acceptable.

The Department does not consider that the issue requires a specific condition of approval as it is already addressed in the documentation provided by the Proponent, which forms part of modified condition 1.1 in the recommended instrument of approval.

5.4 Changes to Empty Container Storage Area A

Issue

Consequent to the proposed relocation of stormwater detention basin D to the east, the Proponent proposes extend the area of operations of the Empty Container Storage Area A southwards to occupy the area previously used by basin D. The key issue associated with the proposed extension of the operational area is noise.

In order to mitigate potential noise impacts, the Proponent intends to utilise stacked empty storage containers as an acoustic barrier in Empty Container Storage Area A. Modification 4 included an assessment and approval of the use of stacked empty containers (10 containers long by four containers high) at the south-eastern and south-western perimeters of Empty Storage Container Area A whenever reach stacker operations are occurring in the area. The current modification involves extending the line of stacked containers southwards in line with the extension of operational activities in Empty Container Storage Area A. The containers would be positioned prior to undertaking any activities in the area.

The dominant noise sources associated with the operation of Empty Container Storage Area A are metal "clang" associated with the pick up and put down of containers, lifting equipment (reach stackers), and heavy vehicle movements. The Proponent has undertaken a noise impact assessment to determine the potential operational noise impacts associated with the changes to Empty Container Storage Area A (as well as changes to the site layout, inclusion of the former Toll lease area and modifications to northern noise wall). Operational noise impacts were assessed against the maximum allowable noise contributions specified in condition 2.17 of the project approval. The assessment considered noise impacts during the day (7:00 am to 6:00 pm), evening (6:00 pm to 10:00 pm) and night-time (10:00 pm to 7:00 pm) periods. The assessment also considered the potential for sleep disturbance.

The Proponent's noise assessment addressed the potential noise impacts associated with container stacking in Empty Container Storage Area A on sensitive residential receivers with and without the use of empty containers as an acoustic barrier. The assessment indicated that with no containers in place to act as a noise barrier, daytime and night-time intrusive noise criteria would be exceeded by up to 5 dBA at the western end of Blanche Street under the worst case scenario. In addition, the daytime and night-time intrusive criteria would be exceeded by 1 dB(A) and 4 dB(A), respectively, at Wentworth Street (south) under the worst case scenario.

However, should containers be used as an acoustic barrier, only the night-time intrusive criterion would be exceeded under the worst-case scenario, and this would occur at Wentworth Street (south) by 1 dBA.

Sleep disturbance criteria would be exceeded by 6 dBA at the western end of Blanche Street and 8 dBA at Wentworth Street (south) without containers being used as an acoustic barrier, and by 7 dBA at Wentworth Street (south) with containers in use as an acoustic barrier where the stacked containers and barriers are at the same height. However, where containers are stacked one container height less than the containers stacked as an acoustic barrier, the noise assessment predicted compliance with the sleep disturbance criteria.

Strathfield Council expressed concern regarding the use of shipping containers as acoustic barriers in Empty Container Storage Area A, in particular their unsightly aesthetics and inherent risks associated with the temporary stacking of containers (e.g. the potential for them to be moved and the acoustic barrier creeping out of position). Consequently, Council recommended that the temporary barriers be replaced with permanent noise walls.

Strathfield Council also raised concern over the potential noise exceedance, stating that the noise limits should be met at all sensitive receiver locations for all assessment periods. In addition, Council noted that it is paramount that operational noise levels comply with the project-specific noise criteria at all times as in the event it receives noise complaints relating to the operation of the facility, it is powerless to respond other than to forward the complaint to the Department. In addition, Council stated that the Proponent should commit to immediately addressing and rectifying noise issues of concern to Council and residents as they arise.

Consideration

In regards to Strathfield Council's concern over the visual impact of the use of empty containers as an acoustic barrier, the Department considers that the use of containers would not significantly increase the visual impact of the project due to the distance between the operational area and visual receptors, and intervening infrastructure. In addition, it would be difficult to distinguish between containers stacked as acoustic barriers and those stacked for distribution as part of normal operations.

In regards to the issue of temporary versus permanent acoustic barriers in Empty Container Storage Area A, the Proponent has indicated that the noise modelling undertaken to date is based on the assumed use of the storage area and worst-case scenario. There is the potential that the future tenant may not carry out container storage operations in the far southern part of Empty Container Storage Area A at night-time, or utilise the entire area for container storage. Consequently, the Proponent argues at this stage it is not reasonable to construct permanent acoustic barriers.

The Department accepts that it is not desirable to construct permanent acoustic barriers until such time that operational activities are further defined in Empty Container Storage Area A and the effectiveness of temporary acoustic barriers is assessed based on actual operations. The Proponent is bound by existing conditions to ensure that the noise limits specified in the project approval are complied with. In addition, condition 3.3 requires the Proponent to undertake noise audits at various throughput stages, including developing a timetable for the implementation of measures necessary to ensure compliance with the noise-related conditions of the approval in the event that noise levels exceed the project noise limits. The first audit is to be undertaken within 90 days of reaching an annual throughput of 50,000 TEU. Subsequent audits are to be undertaken at 150,000 TEU and 250,000 TEU, or as may be directed or agreed by the Director-General.

Although condition 3.3 provides for amendments to be made to the type and extent of proposed acoustic barriers should noise levels not comply with the project noise limits, there is the potential that the timing of the audits could immediately precede the construction of temporary acoustic barriers and night-time operations in Empty Container Storage Area A.

This means that considerable time could pass before the effectiveness of the temporary barriers is assessed. Consequently, the Department recommends that condition 3.3 be amended to include that the Proponent undertake a noise audit within 30 days of operations commencing in Empty Container Storage Area A. A condition to this effect has been agreed to by the Proponent and is included in the recommended instrument of approval.

As noted above, the operational noise assessment predicts that under the worst-case scenario the maximum allowable noise criteria would only be exceeded during the night-time period and only at Wentworth Street (south). At this location, the noise criteria would be exceeded by 1 dB(A) which is not discernible to the human ear. As previously noted, operations at the Enfield ILC must comply with the maximum allowable noise contributions set out in condition 2.17 of the approval. The outcomes of the modelling assessment do not dictate the noise level to be achieved. Rather the onus is on the Proponent to develop and implement measures to ensure compliance. The Department considers that independent noise auditing at various stages of the project together with the implementation of additional feasible and reasonable noise mitigation measures where exceedances are identified, as required by conditions 3.3 and 3.4, would ensure that compliance is achieved.

In regards to the inherent risk associated with the use of containers as acoustic barriers (e.g. removal, non-placement of containers or incorrect placement) in Empty Container Storage Area A, the Proponent argues that this could be addressed through condition 6.5(a)(iv) which requires the Proponent to include details of all management methods and procedures that will be implemented to control individual and overall noise emissions from the site in the Operation Noise Management Plan (ONMP). Notwithstanding, the Department considers that there is the potential for this issue to be overlooked and consequently recommends that condition 6.5(a) be modified to specifically address the procedures and measures to be implemented to ensure that containers are in place prior to operations, in the required location, and are to the correct height and length. The attached draft instrument reflects this recommendation and has been agreed to by the Proponent.

In regards to Council's request that the Proponent commit to address and rectify noise issues as they arise, the Department is of the opinion that this is adequately addressed by conditions 5.1 and 5.2 which require the Proponent to develop a complaints procedure and record any actions taken in relation to the complaint, and condition 6.5a)(v) which requires the Proponent to develop reactive and proactive strategies for dealing promptly with any noise complaints as part of the ONMP.

5.5 Adjustments to Permanent Noise Walls

Issue

Modifications to Northern Noise Wall

The approved project currently includes the construction of a five metre high noise wall within the site boundary along the north-west boundary of Empty Container Storage Area B (referred to herein as the northern noise wall). The noise wall would comprise two overlapping noise walls with one section extending approximately 195 metres south from the northern-most point of Empty Container Storage Area B and the other section running a further 178 metres to the south. Each section would be contiguous and free from openings and gaps.

The modification involves shortening the proposed noise wall at its northern end by approximately 75 metres. The decision to reduce the length of the noise wall is based on the presence of a high-tension overhead transmission line and its support structure, including a high voltage tower, at the northern end of the site. The original proposal involved stacking empty containers in the far northern part of Empty Container Storage Area B. However, following consideration of the operations involved in container stacking, the Proponent has concluded that this is not feasible as there is limited space for equipment to travel north of the tower, and safety considerations in moving heavy equipment in the vicinity of the tower. Consequently, the Proponent has advised that operations to the north of the tower would be limited to less noisy activities including some

materials storage, maintenance activities, storage and repair of single level containers, parking and movement of light equipment.

The Proponent's noise assessment addressed the shortening of the proposed northern noise wall and predicted that operational noise levels would comply with the project specific amenity and intrusive noise levels at sensitive residential receivers located to the west of the northern noise wall, assuming operations are limited to the activities described above. However, sleep disturbance criteria would be exceeded by 6 dBA at the eastern end of Jean Street should containers be stacked four high during the evening period. This exceedance is inconsequential to the shortening of the noise wall. The noise assessments undertaken for the project approval and Modification 4 also predicted exceedances of the sleep disturbance criteria should containers be stacked above the height of the noise wall.

The Proponent's noise assessment indicates that in the event that containers are only stacked two high, sleep disturbance criteria would be complied with at nearby sensitive residential receivers. In addition should empty containers be limited to a stack height of three, and purpose-stacked containers (four high) are strategically placed at perimeter locations to shield adjacent sensitive residential receivers, compliance with the sleep disturbance criteria should be achieved.

The EPA expressed concern that there are no measures in place to ensure container handling and other noisy activities do not occur to the north of the transmission tower in Empty Container Storage Area B to ensure project limits are complied with. Consequently, it recommended that the noise limits remain unchanged and that a condition be included stating that container handling shall not be undertaken in the area that will be affected by the shortening of the noise wall. It also recommended that the area be marked on a map and referenced in the condition. Following review of the submissions report, the EPA reiterated its previous recommendation that the approval include a specific condition requiring that container handling operations are not undertaken in the area affected by the removal of part of the northern noise wall.

Modifications to Eastern Noise Wall

The approved project also includes a five metre high, 43 metre long L-shaped noise wall at the south-eastern corner of Warehouse A hardstand area (referred to herein as the eastern noise wall) (refer Figure 2). The barrier is to be located 23 metres to the north and 20 metres to the west of the corner of the hardstand area. Under the current proposal, it is proposed to extend the wall from 43 metres to 77 metres in length on a modified curve L-shaped layout around stormwater detention basin D. The return section would be 17 metres in length. The extension is due to the relocation of stormwater detention basin D to the east and Warehouse A to the north.

Consideration

Northern Noise Wall

In regards to the shortening of the proposed northern noise wall, the Department accepts that the location of the high voltage tower would restrict operations that could be undertaken north of the tower. There are also safety considerations in moving heavy equipment in close proximity to the tower. Consequently, forklift container stacking operations to the north of the tower are not feasible or desirable.

The Department acknowledges that provided activities to the north of the proposed shortened noise wall are limited as per the proposed modification, the shortening of the noise wall would not impact on the acoustic amenity of nearby sensitive residential receivers. Notwithstanding, the Department is of the opinion that the EPA's concern that there are no measures in place to ensure that container stacking and other noisy activities do not occur is valid. In regards to the EPA's recommendation that a new condition of approval be incorporated to limit the use of the area surrounding the high voltage transmission tower, the Proponent argues that the ability to prescribe such activities already exists by way of the Operation Noise Management Plan (ONMP) and as such a new condition of approval is not warranted.

The Department is concerned that there is the potential for the issue to be overlooked in the preparation and assessment of the ONMP, particularly if significant time elapses between the approval of Modification 6 and the submission of the ONMP. Consequently, the Department recommends that condition 6.5(a) be amended to require the ONMP to specify the management measures that would be implemented to ensure that container stacking is not undertaken north of the noise wall and that activities undertaken north of the noise wall comply with the maximum allowable noise contributions. These recommendations have been agreed to by the Proponent and are reflected in the recommended instrument of approval.

In regards to the use of stacked empty containers as a supplementary acoustic barrier in Empty Container Storage Area B, the Department acknowledges the importance of ensuring that the containers are stacked to the correct height and length, and in the right location during the daytime period. In this regard, the Department has recommended condition 6.5(a) be amended to require the ONMP to include details of the management measures and procedures that would be implemented in Empty Container Storage Area B (and A) to ensure that acoustic barriers constructed from storage containers are established at the correct time, height, length and location so as to achieve compliance with the project noise limits.

Eastern Noise Wall

In regards to the extension of the eastern noise wall, the Department considers this to be acceptable as it would further mitigate operational noise impacts at sensitive residential receivers located to the east of the site. The Department is of the opinion that the proposed modification to the eastern noise wall does not require a specific condition of approval as it is addressed in the documentation provided by the Proponent which in turn is included in modified condition 1.1 of the recommended instrument of approval.

5.6 Subdivision

Issue

The Enfield ILC site currently comprises three lots – Lot 2 DP1006861, Lot 101 DP1001498, and Lot 14 DP1007302 (refer Figure 1). The original application and project approval did not include subdivision of the site. The ILC will comprise several long-term tenants which would be subject to long-term leases of land with Sydney Ports Corporation as the landlord. In accordance with Section 7A of the *Conveyancing Act 1919* (and Land and Property Information requirements), registration of a lease of part of land in a single title in excess of five years can only be completed by the preparation and registration of a "Plan of Subdivision". Therefore, to facilitate the site activities as contemplated in the planning approval (i.e. long-term tenancy of operational areas), the Proponent proposes to subdivide the site into lots each with separate Certificates of Title. The original plan of subdivision, as included in the Modification Application, is illustrated in Figure 4.

In addition, the Proponent has indicated that the proposed subdivision of the site will facilitate the provision of separate service point provisions to the boundary of the lots. In particular, Sydney Water has advised that it is unable to make provision for separate water and sewer connections for each separately leased premise unless a plan for subdivision is demonstrated.

The subdivision includes freehold lots (i.e. Light Industrial/Commercial area), leasehold tenant lots (Warehouse Distribution and Intermodal Terminal areas), and Sydney Ports Corporation Freehold Lots (rail tracks, existing administration buildings, landscaped lands, Mt Enfield area, Tarpaulin Factory, main internal roadway, infrastructure areas and detention basins). All necessary services easements would be determined and established on the final subdivision plan once physical works have been completed and subdivision approval obtained. The final subdivision and subdivision certificate would be lodged with the Land and Property Information for registration.

Strathfield Council raised concern over the proposed subdivision of the southern part of the site into three lots. The southern part of the site comprises Mt Enfield, the Tarpaulin Factory and proposed constructed habitat for the Green and Golden Bell Frog, and was designated in its

entirety as a "Community and Ecological Area" in the project's Environmental Assessment (EA). Council is of the opinion that there is no advantage or justification provided for the subdivision of the southern part of the site and that it conflicts with the intent of the original approval for the area to be a Community and Ecological Area. Further, Council indicated that the proposed subdivision undermines the preservation of the area as it creates potential opportunity for the sale or leasing of the lots, particularly Lot 19 which includes the corner of Punchbowl Road and the Tarpaulin Factory.

Council also raised concern that the subdivision of the site would further limit landscaping in the eastern section of the site to an unacceptable amount, and as such did not support the subdivision layout in its present form unless more areas were dedicated to general landscaping to be more consistent with the original approval.

Council did not raise any concerns in regards to the subdivision of the remainder of the site, including lot sizes.

Consideration

The Department concurs with Strathfield Council's statements that there is insufficient justification for the proposed subdivision of the southern part of the site and that it is inconsistent with the original intent and approval for the area. Following further discussions with the Proponent, whereby the Department outlined its and Council's concerns regarding the proposed subdivision of the southern portion of the site, the Proponent agreed to retain the southern area as a single lot (Lot 19 - refer Figure 5). Consequently, the Department considers the amended subdivision of the entire Enfield ILC site acceptable.

The proposed subdivision is consistent with the overall landuse pattern of the approved project. The Enfield ILC is currently zoned Special Uses "B" (Railways) (Special Use Zone) under the Strathfield Planning Scheme Ordinance (PSO). There are no known subdivision restrictions within the Special Uses Zone in the PSO.

In its response to the Submissions Report, Strathfield Council noted that it has prepared a draft Local Environmental Plan (LEP). The LEP is currently before the Department for consideration. The draft *Strathfield LEP 2011* proposes that the southern portion of the site remain a single lot and is zoned RE1 Public Recreation to suit and support the area as a Community and Ecological Area, with the remainder of the site zoned IN1 Industrial.

As noted above, the southern portion of the site comprises three distinct land uses – Mt Enfield, Tarpaulin Factory and Green and Golden Bell Frog Habitat. The Department notes that no open access or unrestricted public recreational use of the southern portion of the site was recommended in the EA. Rather, the area was approved to provide restricted and supervised community access opportunities, to facilitate Green and Golden Bell Frog habitat and breeding, and to provide a buffer between the site and adjoining residences. Mt Enfield would be an undeveloped area of the Enfield ILC site and have restricted access to the general public. Visitors would be escorted to a lookout area at the top of Mt Enfield via a secure delineated pathway. Additionally, the Heritage Precinct would be used for display of the heritage listed Pillar Water Tank, along with heritage interpretation panels relating to the previous use of the site as a rail marshalling yard.

The Department accepts the Proponent's position that the southern portion of the site is unsuitable for unrestricted public recreation due to the future regular movement of rolling rail stock and rail maintenance vehicles within the active rail corridor on the western side, access track and access easement that traverse three sides of the area, the steep slopes of Mt Enfield and the proposed Green and Golden Bell Frog habitat. Consequently, the Department agrees to the southern portion of the site being deemed as residual land on the subdivision plan, rather than recreation.

Although Lot 19 would be titled "residual lot", land uses within the site must remain consistent with the approved project. Consequently, the Department has recommended a condition of approval in this regard in the recommended instrument of approval.

The Department has also recommended a number of conditions of approval (consistent with subdivision approvals), requiring the Proponent to:

- obtain a Compliance Certificate pursuant to the *Sydney Water Act 1994*;
- connect each lot to services, drainage and utilities; and
- create easements for services, drainage and maintenance or any other encumbrance required for joint or reciprocal use of part or all of the proposed lots.

Although the Strathfield PSO does not place restrictions on lot sizes, the draft *Strathfield LEP 2011* recommends a minimum lot size of 20,000 m² for the Enfield ILC. The Proponent has requested that the ILC be excluded from the draft Lot Size map (similar to the adjoining rail facility land) as:

- the Proponent needs to subdivide parts of the site into lots smaller than 20,000 m² in order to enter into lease agreements;
- subdivision via a community title or strata subdivision scheme is not feasible as not all leases will be in respect of buildings in which case the strata schemes legislation does not apply; and
- the Proponent is not in a position to construct buildings and warehouses and infrastructure required by future tenants in order to effect a strata subdivision.

Alternatively, the Proponent suggested that consideration could be given to including a provision within Schedule 1 (Additional Permitted Uses) of the LEP to allow for subdivision of land, irrespective of the lot size without consent by a public authority.

The Department considers that it is not appropriate to place restrictions on lot sizes as the size of each lot is dependent on the activities to be undertaken and lease arrangements. Further, the Department notes that Strathfield Council did not raise any objection to the proposed lot sizes in its submission on the EA and response to the Submissions Report for the EA. Consequently, the Department recommends that the proposed lots (and associated sizes) be approved. The Department does not consider that the issue of lot sizes requires a specific condition of approval as it is already addressed in the documentation provided by the Proponent, which forms part of modified condition 1.1 in the recommended instrument of approval.

5.7 Stormwater Management

Issue

The Enfield ILC site is located within the Upper Cooks River Catchment. Four drainage lines flow beneath the site, including Cox's Creek which traverses the site in an underground, reinforced concrete culvert. The creek discharges into an open concrete-lined canal within the site near Cosgrove Road.

The approved project included three stormwater detention basins. As part of Modification 4, changes to the design capacity were made to all three basins. Under the proposed modification, the Proponent proposes to again amend the design capacity of all three basins. Table 2 provides details on the proposed design changes along with the design capacities as proposed in the EA and as approved under Modification 4.

Table 2: Stormwater Detention Basin Volumes

Basin	EA Design (m ³)	Modification 4 (m ³)	Proposed (m ³)
B	8,000	8,582	8,002
C	700	1,400	2,722
D	16,600	14,760	15,500
Total	25,300	24,742	26,224

In addition to changes in the design volume, the position of Basin B is proposed to move northwards, utilising the existing site topography more efficiently. The Proponent also proposes to relocate basin D to a location adjacent to Warehouse A (refer Figure 3), to allow more efficient use of the existing site topography, thus reducing cut and fill activities, and providing better levels and grades for drainage.

Strathfield Council raised concern that the proposed drainage arrangements could change catchment behaviour and adversely impact on the Cox's Creek channel which is critically under capacity, resulting in overland flow through Railcorp's Marshalling Yards during the 1 in 100 year ARI. Council also noted that flooding is common in the low points of Roberts Road and Wentworth Street and attributes this to the inadequate capacity of the drainage conduit through the marshalling yards and Enfield ILC site, and blockage of the overland flow path due to the raised rail embankment along the western boundary of the marshalling yards site.

Council also indicated that the proposed method of stormwater runoff management does not meet its standard requirements stating that surface runoff from upstream properties has not been adequately catered for, and that surface flow paths should be provided to convey all flows to the 1 in 100 year standard. Further, Council advised that raising surface ground levels above predevelopment levels is unacceptable as it would adversely impact on the overland path flow and result in flooding of the site and adjoining properties.

Consideration

The proposed modification is consistent with the approved project in that runoff from each sub-catchment would be directed to the on-site stormwater detention basins for both flow attenuation and water quality treatment prior to discharge from the site.

In regards to Strathfield Council's concerns over flows to Cocks Creek, the Proponent has calculated the pre- and post-development discharges to the creek for the 2, 10 and 100 ARI rainfall events (refer Table 3). The resultant calculations indicate that the modified detention basin arrangements and reconfiguration of internal site sub-catchments are consistent with the approved project, and Strathfield Council's *Stormwater Management Code* (1994), in that post-development peak discharges do not exceed the pre-development peak discharges for the 2, 10 and 100 year ARI events.

Table 3: Pre- and Post-development Flows to Cocks Creek

Event ARI (years)	Pre-development Flow to Cocks Creek (cubic metres per second)	Post-development Flow to Cocks Creek (cubic metres per second) as per Modification 6
2	1.3	1.1
10	2.2	1.4
100	3.7	3.4

The Department acknowledges Strathfield Council's concerns regarding the under capacity of Coss Creek (the southern culvert). However, the basic principle that the project shall have no external impacts for the accepted ARI events has been factored into the design of the stormwater management system and would apply under the proposed modification. Consequently, the Department considers that the redesign of elements of the onsite stormwater detention system is consistent with the project approval and recommends that condition 2.31 be modified to reference the modified basin layout and size information, as provided in the modification documentation submitted by the Proponent.

Although the capacity of stormwater detention basin D would be reduced compared to that described in the project's original assessment, its overall treatment performance would not. Data provided by the Proponent indicates that the percentage load reduction in regards to total suspended solids, total phosphorus and total nitrogen would be consistent with the load reduction targets adopted by the Cooks River Sustainability Initiative, of which Strathfield Council is a member (refer Table 4). The load reductions would also be consistent with the targets for bioretention systems provided in *Managing Urban Stormwater: Harvesting and Reuse* (Department of Environment, Climate Change and Water, 2006).

Table 4: Water Quality System Performance of On-site Stormwater Detention Basins

Stormwater Detention Basin	Bioretention Area (square metres)	Percentage Load Reduction Total Suspended Solids	Percentage Load Reduction Total Phosphorus	Percentage Load Reduction Total Nitrogen
Target Reduction <i>Best Practice Stormwater Targets, Cooks River Sustainability Initiative</i>		85	65	45
Target Reduction <i>Managing Urban Stormwater: Harvesting and Reuse</i>		70-90	50-80	30-50
B	1,300	89	76	46
C	500	85	73	49
D	1,825	89	76	46

In regards to Strathfield Council's concerns regarding overland flows and flooding arising from development and regrading of the site, the Proponent has advised that falls across the site have been slightly altered to suit the modified locations of the detention basins only. To determine the potential impacts associated with the changes in grade, the Proponent undertook additional hydraulic modelling to confirm that the modifications to the approved project would not exacerbate flood levels in Coss Creek either upstream or downstream of RailCorp's Marshalling Yards or the ILC site. The resulting 10, 20 and 100 year ARI flood levels for pre- and post-development conditions are summarised in Table 5. The modelling predicted that the modified project would not increase flood levels at either the upstream or downstream boundaries of RailCorp's Marshalling Yards, downstream of the ILC site at Cosgrove Road, or for overland flows through the ILC site.

Consequently, the Department is satisfied that the proposed amendments to the on-site stormwater management system would not exacerbate existing flooding issues in the locality.

The Department acknowledges Strathfield Council's concerns regarding existing localised flooding in the areas neighbouring the ILC site. However, these are not attributable to, nor will they be exacerbated by, the project and as such it is not appropriate for the proposed modification to be used as a mechanism for resolving existing stormwater management and flooding issues external to the site.

Table 5: Flood Levels in Cox's Creek Pre and Post Development

Location	10 Year ARI			20 Year ARI			100 Year ARI		
	Pre	Post	Diff (m)	Pre	Post	Diff (m)	Pre	Post	Diff (m)
Upstream Enfield Marshalling Yards at culvert entrance	16.14	16.13	-0.01	16.33	16.31	-0.02	16.76	16.75	-0.01
Boundary between Enfield Marshalling Yards and ILC	16.11	16.09	-0.02	16.31	16.28	-0.03	16.75	16.73	-0.02
Downstream of railway arch culverts	12.63	12.63	-	12.63	12.63	-	12.63	12.63	-
Upstream of Cosgrove Rd culverts	13.08	13.08	-	13.14	13.14	-	13.26	13.26	-

Notes: Results are quoted to the nearest 0.01 m which is considered the limit of modelling accuracy.
A negative value indicates a reduction in flood level under post development conditions.
Values shown as "-" indicate the relative difference value is negligible, being less than 0.01 m.

5.8 Meteorological Monitoring

Issue

Condition 2.20 of the project approval requires the Proponent to install, operate and maintain a meteorological monitoring station at the site. This has been installed and monitors temperature, wind speed, wind direction and solar radiation, in accordance with condition 3.1. Neither of the two conditions of approval state the duration for which the station is required to operate.

The EA for the project indicated that a meteorological monitoring station would be installed with the primary purpose of collecting sufficient data to identify adverse air quality impacts on nearby residential receivers that can be attributed to construction earthworks. Meteorological (and air quality) monitoring and assessment were not proposed to be undertaken during operation of the project as the air quality assessment undertaken as part of the EA predicted that the potential for air quality impacts was not significant. In addition, the EA did not refer to the use of the station for any other purposes (e.g. noise assessment). Consequently, the Proponent argues that the meteorological station is solely for the purpose of collecting data to be used in the assessment of air quality impacts during the construction of the Project, and has requested that condition 2.20 be modified to require that on-site meteorological monitoring only be undertaken until such time that all large exposed areas have either been landscaped or sealed.

The Proponent has also requested that conditions 2.20 and 3.1 be modified to allow the use of meteorological data from nearby Bureau of Meteorology stations (Canterbury, Sydney Olympic Park and Bankstown Airport) during time of repairs (e.g. due to vandalism) or maintenance of the on-site meteorological station.

In its submission, the EPA raised concern regarding the proposal to remove the station once the site has been sealed, stating that a station located on the project site is the most accurate and appropriate source of meteorological data to enable operational noise monitoring to be undertaken. Consequently, the EPA recommended that the station remain on site and be maintained during the operation of the intermodal facility.

Following review of the Submissions Report, and discussions with the Proponent, the EPA advised that the weather station located at the Canterbury Park Racecourse, and operated by the Bureau of Meteorology, could be used as representative of site weather conditions for the purpose of determining compliance with the project noise limits. However, it reinforced its previous position that an on-site station is the most accurate source of weather data for noise monitoring, and recommended that should the station be removed, condition 2.17 be modified to require that weather data for the purposes of undertaking noise monitoring be taken from the Canterbury Racecourse Automatic Weather Station. The EPA noted that if the Canterbury station is to be used, the Proponent would not be able to qualify the data with any site observations.

The EPA supported the use of meteorological data from nearby Bureau of Meteorology monitoring stations during times of repairs or maintenance of the on-site meteorological station.

In its submission, Strathfield Council indicated that constant operation of the on-site station is a high priority particularly during the construction period and consequently recommended that a timeframe be placed on the amount of offline time. In its response to the Submissions Report, Council suggested that the maximum offline period be restricted to 48 hours.

Consideration

The Director-General's Environmental Assessment Report (EAR) acknowledges that air quality emissions from the site would comply with applicable air quality criteria and that resultant air quality impacts would be negligible. Notwithstanding, it stated that the Proponent should be required to undertake background air quality monitoring prior to the commencement of construction and to maintain this program throughout the construction and operational phases of the project and that this was stipulated as a condition of approval. The EAR also stated that the Department recommended that annual reports detailing the results of the monitoring program be submitted to the Department to outline the air quality performance of the project as detailed in the conditions of approval.

The project approval does not contain requirements relating to monitoring during the operation of the project nor does it contain requirements relating to annual operational reporting or operational air quality criteria. The only requirements relating to air quality monitoring are conditions 3.2 and 6.3(e). Condition 3.2 requires the Proponent to monitor ambient dust concentrations during construction until all large areas have either been landscaped or sealed. Condition 6.3(e) requires the Proponent to develop a Construction Dust Management Plan.

Although the Proponent committed to undertaking air quality monitoring during construction, no such commitment was made for operation of the project. The Proponent's Statement of Commitments for operation of the project only committed to maintaining equipment to ensure the best environmental performance.

Therefore, should the monitoring station remain on site post construction, there is no requirement to use the data for the purpose of assessing and reporting compliance with applicable air quality criteria. As such, the Department supports the Proponent's request that conditions 2.20 and 3.3 be amended to limit on-site meteorological monitoring until such time that all large areas have either been landscaped or sealed, consistent with condition 3.2. This recommendation is reflected in the recommended instrument of approval.

The EAR and project approval were silent on the source of the meteorological data to be used for noise monitoring, referring only to the installation and operation of a meteorological station in terms of air quality impacts.

In regards to the Proponent's request to utilise meteorological data from other nearby Bureau of Meteorology meteorological stations when the on-site meteorological station is offline for repairs or maintenance, this is supported by the Department as the alternative would be to not use any data and hence potential dust impacts could not be assessed. The Department concurs with the EPA's advice that data should be from the nearest Bureau of Meteorology station and, as such, recommends that conditions 2.20 and 3.1 be amended to require the Proponent to utilise weather data from the Bureau of Meteorology's Canterbury Racecourse Automatic Weather Station or other nearby stations in the event that the Canterbury station is offline. Conditions 2.20 and 3.1 have been modified to reflect this position.

In regards to Strathfield Council's recommendation that a timeframe be placed on the amount of offline time, the Department does not consider this to be reasonable as the amount of time required to maintain or repair the on-site equipment would vary depending on the nature and extent of the breakdown and/or damage, and availability of parts.

6. CONCLUSION AND RECOMMENDATIONS

Sydney Ports Corporation has approval to construct and operate the Enfield ILC. The Enfield ILC will provide for the transfer of containerised cargo accepted by rail for redistribution by road to markets in central western Sydney.

The various modifications to the existing approval, as indicated by the Proponent, have generally been necessitated by:

- refinements resulting from further consideration of existing site conditions and constraints (e.g. topography, excavation requirements, avoiding the Qenos pipeline and stormwater management);
- requirements relating to leasing and provision of utility point provisions; and
- termination of the existing lease between Toll and Sydney Ports Corporation.

The Department, in its assessment of the proposed modifications, has reviewed the Proponent's Modification Application and the Response to Submissions Report. Additionally, submissions from the OEH, the EPA and Strathfield were considered carefully. The Department is of the view that the need and justification provided by the Proponent for the majority of the requested modifications are satisfactory and that appropriate environmental outcomes would be maintained, subject to the implementation of the recommended conditions of approval.

Although the Department has no objection to the inclusion of the former Toll lease area, it has not agreed to its demolition as the Proponent has not undertaken an assessment of the potential contamination, traffic and noise impacts that may arise consequent to demolition, excavation and pavement resurfacing.

In addition, the Department has not agreed to the Proponent's original subdivision plan for the site which involved subdivision of the southern portion of the site into three lots. Consequent to further discussions, the Proponent has revised the original subdivision plan and the three lots have been amalgamated into a single lot. This will ensure that uses within the southern part of the site remain consistent with the approved project. The Department has also recommended several conditions relating to the subdivision of the site, consistent with the requirements applied to industrial subdivisions.

The shortening of the northern noise wall and change in the layout of Empty Container Storage Area A present some potential but manageable noise impacts. Accordingly, the Department has recommended conditions of approval to be included in the ONMP to address this issue. The Department considers that the project can proceed in a manner that meets acceptable noise criteria should the recommended conditions be implemented.

Consequently, the Department recommends that the Minister approve the modification request, subject to the recommended conditions of approval.



14.11.12

Executive Director
Majors Projects Assessment



16/11/12

Deputy Director-General
Development Assessment
and Systems Performance



Director-General

20/11/2012



Minister Hazzard

11 DEC 2012

APPENDIX A MODIFICATION REQUEST

See the Department's website at <http://majorprojects.planning.nsw.gov.au>.

APPENDIX B SUBMISSIONS

See the Department's website at <http://majorprojects.planning.nsw.gov.au>.

APPENDIX C RESPONSE TO SUBMISSIONS REPORT

See the Department's website at <http://majorprojects.planning.nsw.gov.au>.

APPENDIX D RECOMMENDED MODIFYING INSTRUMENT
