Request for Director General Requirements: Preliminary Environmental Assessment

Site F: Enfield Intermodal Logistics Centre

April 2014

urbis

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1 Introduction

This Preliminary Environmental Assessment has been prepared by Urbis on behalf of Aglink Global and provides an assessment relating to the proposed use and built form on 'Site F' of the Enfield Intermodal Logistics Centre (EILC) associated with the Aglink use. This report details the proposed use of Section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act) to accommodate this. The Preliminary Environmental Assessment is intended to facilitate the issuing of Director General Requirements.

On 5 September 2007 the NSW Minister of Planning issued approval for Major Project Application MP05_0147 under Part 3A of the EP&A Act for the EILC including the following uses on the site:

- Empty container storage.
- Intermodal terminal area.
- Light industrial / commercial area.
- Warehousing areas (including landscaping).

The subject site, 'Site F' is one of six areas within EILC approved for a 'warehouse use' for intermodal storage and packaging of freight with associated indicative warehouse building designs.

The proposed Aglink Global use is for an intermodal agricultural commodities storage and handling facility. This use broadly entails the inbound movement of bulk agricultural commodities including grain, cotton and forestry products by road and rail from regional locations, unloading, storage and treatment of commodities in silos and warehouse facilities and the containerisation and transporting of these commodities via freight rail shuttle to Port Botany pending its exportation by ship.

The outbound movement entails the unloading of imported agricultural commodities including fertilizer, chemicals, and feed additive products railed shuttled into warehouse facilities via Port Botany and then redistributed via bulk road and rail movements to regional upcountry locations for agricultural use.

The proposed use is consistent with:

- Current NSW Government strategies guiding freight movement including the NSW Freight and Ports Strategy 2013 and the NSW Long Term Transport Master Plan. The proposal assists in meeting the aim to double freight volumes through NSW by 2031 and supports the EILC as part of a metropolitan network of intermodal terminals.
- The industrial nature of the EILC and the surrounding industrial development including the adjacent industrial estate to the east of Cosgrove Road.
- The use of the approved EILC development as an intermodal terminal and its location adjacent to the railway and connections to Port Botany.
- The approved use of the site under MP05_0147 for a 'warehouse use'. The proposal retains its anticipated purpose for '*temporary freight storage and/or packaging/repackaging'*.

To accommodate the proposed use and the associated built form on 'Site F', the following amendments are required to MP05_0147:

- Amendment of the approved built form is required to allow bulk grain and agricultural commodities to be stored and transported to and from the port.
- Modified built form to include grain silos, pits, garner bin, container loading areas and transfer elevator towers.

- Modification to the approved maximum height limit of 12m (which relates to warehousing) to a maximum height on the site of 26m to accommodate the elevator tower and silos and facilitate the proposed warehouse building of 18m.

- An amendment to the built form footprint to reflect the proposed built form.

It is proposed that the use and operation of the site form part of a Section 75W application seeking to appropriately amend MP05_0147. In summary, this Preliminary Environmental Assessment provides:

- An overview of the EILC and the subject 'Site F'.

- Summary of MP05_0147 and relevant conditions of consent.

- Description of the proposed Aglink Global use and the associated built form.

- The statutory context of the proposal and justification of the proposed use of Section 75W of the EP&A Act.

- Assessment of the proposed use against relevant strategic policy.

- Preliminary assessment of the key issues including:

  - Built form

  - Air quality

  - Acoustic impact

  - Visual impact

  - Ecological impact

  - Traffic and transport

  - Contamination

  - Land ownership

- Conclusion of the assessment and the proposed next steps

This report is accompanied by the following information:

TABLE 1 – SUPPORTING DOCUMENTS

APPENDIX	REPORT
A	Indicative Layout Plan
B	Site F: Indicative Concept Plan and illustrative elevation

2 Enfield Intermodal Logistics Centre and Site F

2.1 BACKGROUND

The EILC site was previously the Enfield Marshalling Yards which was developed initially in 1916 as a steam locomotive depot supporting the Clyde Yard in Auburn. This operation ended in 1993 when the facility reached its capacity. Much of the site remained vacant with the exception of the redevelopment on the western edge of the site as a new marshalling yard, owned by RailCorp and operated by Pacific National. Site F formed part of the Diesel Electric Locomotive Maintenance Centre (DELEC) accommodating a fuelling facility and various buildings interconnected by a number of services.

On 5 September 2007 the NSW Minister of Planning issued approval for Major Project Application MP05_0147 under Part 3A of the EP&A Act. Early works and site preparation at the EILC as approved has been underway for some time. Completed works include a 200m bridge, a noise wall, north rail connection works on RailCorp land and construction of frog ponds. Civil works include site preparations of the empty container storage and warehouse areas, ramp pavement to the bridge, rail through-road, asphalt paving of the intermodal terminal area and installation of mains power to the site.

Part of the site has been acquired by the Australian Rail Track Corporation (ARTC) including the site's southern area allowing work to be undertaken on the south rail connection.

2.2 THE EILC SITE LOCATION AND ANALYSIS

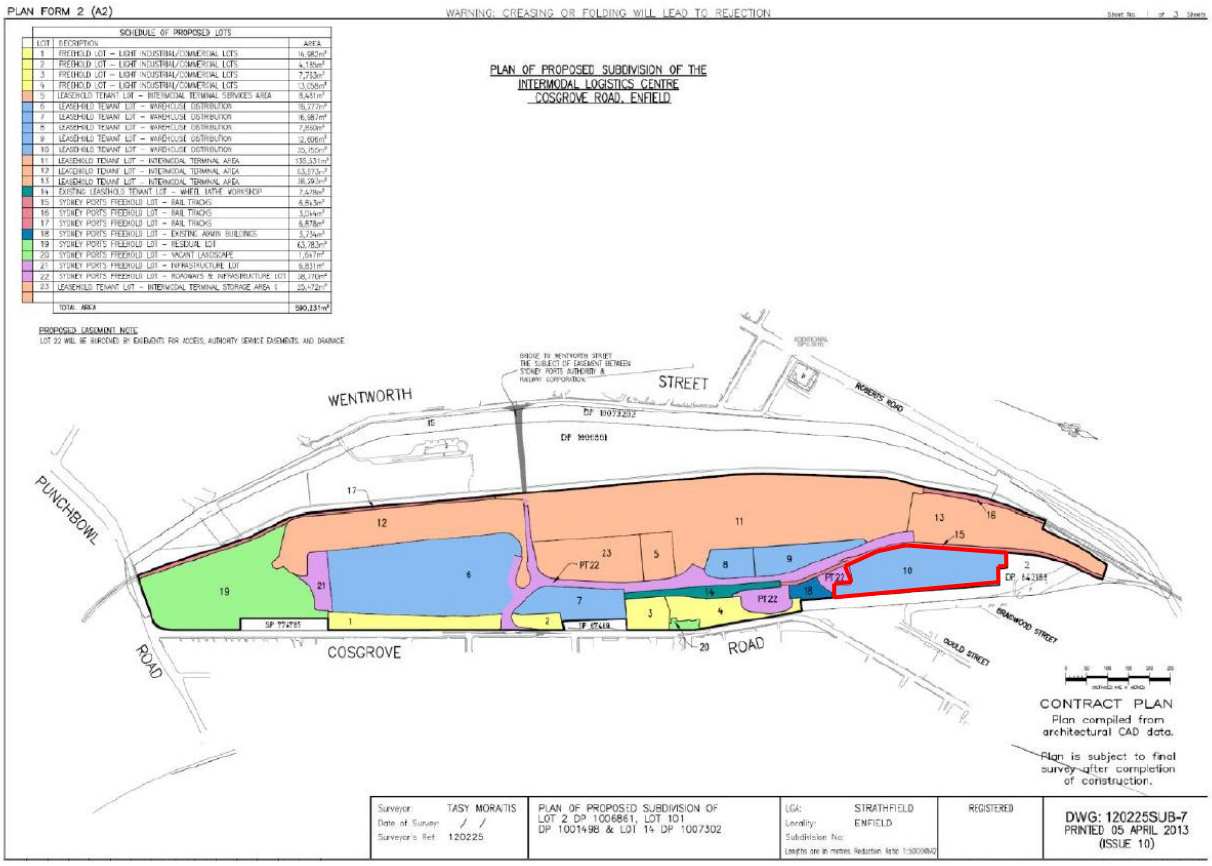
The NSW Ports owned EILC is located at Strathfield South, approximately 15km by road from the Sydney Central Business District and 18km by rail from Port Botany. It covers an area of approximately 60 hectares and is approximately 0.5km in width and over 2 km in length.

The EILC land consists of the following lots:

- Lots 2 and 3 DP 1006861
- Lot 101 DP 1001498
- Lots 14 and 15 DP 1007302
- Lot 1 DP 950438

The approved subdivision plan (as modified) is provided in Figure 1. This subdivision layout was approved as part of Modification 8 of MP05_0147 and has yet to be registered.

FIGURE 1 – APPROVED SUBDIVISION PLAN



Site F

The site is surrounded by the suburbs of Greenacre and Chullora to the east, Belfield to the south, Rookwood to the north and South Strathfield to the east.

Site F, the subject site, has a site area of 35,755sqm. Some of the services associated with its use for DELEC were disconnected and retained in-situ. The DELEC stormwater culvert remains in operation and runs inside the southern boundary.

FIGURE 2 – EILC LOCATION (SIX VIEWER)

The Site Site F

The EILC site is generally bound by the following uses:

- West: The New Enfield Marshalling Yard, railway line and rail siding and existing industrial development further to the east of Roberts Road.
- East: Cosgrove Road and existing industrial development further to the east.
- North and South: Existing residential land on either side of Punchbowl Road to the south and to the north-west.

3 Project Application Approval MP05_0147

The establishment of the EILC intermodal terminal was part of NSW Ports strategy for responding to the predicted growth in container trade at Port Botany and increase the use of rail to carry containers from Port Botany to the distribution centres in metropolitan Sydney.

On 5 September 2007 the NSW Minister of Planning issued approval for Major Project Application MP05_0147. The approved development is as follows:

> *Construction and operation of the Enfield Intermodal Logistics Centre with capacity to accept a maximum throughput of 300,000 TEU (one TEU is equivalent to one twenty-foot container) per annum, including:*
>
> - *Demolition, relocation or 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, as required;*
> - *Construction and operation of:*
>   - *An intermodal terminal for the loading and unloading of containers;*
>   - *Rail sidings, railway lines and associated 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, and installation of site services (all utilities, stormwater and sewerage).*

Since its approval, MP05_0147 has been modified a number of times including the following modifications which apply to Site F:

- Modification 4 (approved May 2010): Included revision of operational areas of the warehouse on Site F from 38,551sqm to 39,434sqm.
- Modification 6 (approved November 2012): Subdivision layout allocating 35,755sqm for Site F.

The approved Indicative Layout Plan (ILP) for the EILC is provided in **Appendix A**. The ILP provides areas for the following uses:

- Empty container storage.
- Intermodal terminal area.
- Light industrial / commercial area.
- Warehousing areas (including landscaping).

A total of six warehouse areas were approved as part of MP05_0147 allocated as 'Warehouses A – F' and located in the eastern most half of the site. The Aglink Global use is proposed on Site F, at the north eastern extent of the site.

Table 2 provides a summary of the approval elements of MP05_0147 in relation to construction and use of the warehouses and specifically Site F.

TABLE 2 – SUMMARY OF APPROVED ELEMENTS

CRITERIA	REQUIREMENT
'Warehouse' Use	The warehouses are to be used for: *Freight handling, container handling, temporary freight storage and/or packaging/repackaging, or for activities ancillary to these uses, or the intermodal terminal and empty container storage areas.*
Warehouse Layouts	Warehouses are to be generally located and configured with the detailed design plans.
Warehouse Height	All warehouses require a wall height clearance of 10m, with the top of the roof being no more than 12m. Each warehouse shall not exceed a height of 12 metres at its highest point (excluding minor ancillary structures such as communications equipment or solar panelling).
Caps on Movement	Movement are limited to a maximum throughput of 300,000 TEU per annum, as measured at the rail to intermodal terminal interface.
Warehouse Footprints	Warehouse F: 13,500sqm
Subdivision and Leasable Areas	Warehouse F has a leasehold tenant lot of 35,755m^2.

4 The Proposed Modification

4.1 PROPOSED USE

The proposed use of Site F to accommodate the Aglink Global development is for an intermodal agricultural and forestry commodities storage and handling facility. The operation of this use includes:

- Inbound movement of bulk agricultural commodities including grain, cotton and forestry products by road and rail from regional locations. It is proposed that both inbound and outbound movements will be made by rail and road. However, in the first instance movements will be via road until rail infrastructure access is arranged (refer below).
- Delivery of bulk grain commodities such as wheat, barley, sorghum, canola and pulses received from regional locations and deposited into on-site grain pits.
- The grain is to be transported from the grain pits by elevator transfer into grain silos.
- Enclosed fumigation of the grain is undertaken to control insect pests and will be conducted within silos to relevant Australian Standards.
- The grain will then be loaded into garner bins and packaged into containers which are stored at the Intermodal Terminal rail sidings awaiting export to Port Botany.
- The warehouse will be used for the importation of agricultural products in containers. Whole cottonseed will be transported to the site, unloaded in the warehouse (with empty containers being returned to the container yard) and then export containers will be filled with the cottonseed within the warehouse.
- The grain is then transported via freight rail shuttle to Port Botany pending its exportation by ship.

Table 3 details the proposed import and export of freight and the proposed method for transferring bulk commodities on and off the site.

TABLE 3 – PROPOSED IMPORT AND EXPORT PROCESS

	COMMODITIES	METHOD	RECIEVED	OUTPUT
Imports	Fertilizers and feed additives (meals)	Imported in 20 and 40 foot containers.	Railed from Port Botany to Enfield via the intermodal terminal rail sidings, lifted onto skell semi trailer and unloaded into the proposed warehouse on Site F.	Loaded onto bulk road trucks and modified top-loading rail containers for delivery into regional consumption areas.
Exports	Grains and oilseeds	Delivery from regional production areas via bulk road trucks and via modified top-loading rail containers.	Unloaded into the silo complex within Site F as follows: ▪ Road receivals directly via silo road hopper. ▪ Rail receivals via the intermodal terminal rail sidings and skell semi trailer into silo road hopper.	Loaded onto 20 and 40 foot export containers, shuttled to Port Botany via rail.

	COMMODITIES	METHOD	RECIEVED	OUTPUT
Exports	Cottonseed	Delivery from regional production areas via bulk road. trucks and via modified top-loading rail container.	Unloaded into the warehouse complex within Site F as follows: ▪ Road receivals directly into warehouse. ▪ Rail receivals via the intermodal terminal rail sidings and skell semi trailer into warehouse.	Into 20 and 40 foot export containers and shuttled to Port Botany via rail.

It is proposed that bulk commodities will be transported by rail through the use of open top container and intermodal wagon as described in Section 4.3.However, in the longer term, there may be a need to transport grain into traditional bulk containers. This will be subject to need and demand and would be achieved via a rail spur into Site F.

Bulk rail wagons will arrive at Site F after being loaded at upcountry receival depots and will be discharged into a rail hopper under the rail line. Grain will be fed into the silo complex via a purpose built elevator.

4.2 CONCEPT PLAN

Indicatively, the proposed intermodal grain storage and handling facility would require the following built form on Site F (shown on the Indicative Concept Plan in **Appendix B**):

- Grain pits for the unloading of grain
- Two garner bins at approximately 50 metric tonne (mt) each
- Duel container loading areas
- Transfer elevator tower with transfer drag at a maximum height of 26 metres
- A total of 22 grain silos as follows:

TABLE 4 – APPROXIMATE NUMBER AND CAPACITY OF SILOS

NUMBER	APPROXIMATE CAPACITY EACH	TOTAL
10	330mt	3,330mt
8	550mt	4,400mt
4	1,200mt	4,800mt
TOTAL		12,530mt

The footprint for silos will be approximately 6,300sqm (based on 105m x 60m)

- A small warehouse of approximately 5,525sqm (based on dimensions of 85m L x 65m W x 18m H)
- Two storey demountable ancillary office space
- Twelve parking spaces for employees

- Rail spur and rail hopper will be constructed on Site F from the existing rail line to the north of the site within EILC. This will be subject to future feasibility and demand.

These details demonstrate the proposed indicative structures, arrangements and uses on the site. Detailed design including bulk and scale of infrastructure will be developed and presented as part of the Section 75W application.

4.3 ACCESS

Access to the site will be consistent with MP05_0147 which allows access from Cosgrove Road and Wentworth Street before continuing to the approved access point through the EILC as shown on the Indicative Layout Plan provided in **Appendix A**.

Trucks configurations anticipated to service the site by road will range from single trailer semis (26mt), truck or dog combinations (33mt) and B/Doubles (40mt).

The following will also be used to transport bulk commodities:

- Open Top Container - Top loading container/wagon will have a capacity of 55mt of grain. These open top containers will move grain / cottonseed / fertilizer / feed additives on both rail and road

- Intermodal Wagon – Intermodal wagons will be used to transport top loading containers on rail with the ability to lift containers on and off the rail line.

Top-load wagons will be freighted upcountry on rail to be loaded with grain or cottonseed and returned to the EILC on intermodal rail wagons into the intermodal rail sidings. These will be lifted off the rail onto skell truck and shuttled into the proposed silo or warehouse complex.

Top-load wagon will be inverted into road receival hopper and discharged or inverted and tipped into the warehouse complex. Top-load wagons will then:

- Be loaded with imported products from warehouse and shuttled to the intermodal rail sidings, loaded onto rail for delivery into regional consumption areas; or

- Return empty containers by rail, loaded onto intermodal rail wagon and freighted upcountry to be loaded with grain / cottonseed.

4.4 THROUGHPUT CAPACITY

The proposed throughput capacity is anticipated to be as follows:

- The anticipated TEU movements per annum are as follows:
  - Average: 45,455 per annum (based on 175 TEU per day)
  - Maximum anticipated: 72,727 per annum (based on 280 TEU per day)

  Refer Section 7.4.2 for further discussion on throughput capacity.

- Movements may be moderately influenced by the season and be subject to peak recieval periods. However, planning and operations management will be employed to minimise these variations.

4.5 HOURS OF OPERATION

Flexible operating hours are required to minimise restrictions of deliveries during peak periods. Hours of operation will be consistent with the Project Approval MP05_0147 and operate 24 hours per day.

4.6 EMPLOYEES

A maximum of approximately 12 staff are anticipated for daily operations on the site at any one time as follows:

- Nine operation staff for sampling / weighbridge / truck drivers / hopper attendants; and
- Three office admin / management staff.

4.7 JUSTIFICATION

The proposed development will utilise Site F for an intermodal agricultural and forestry products storage and handling facility where bulk commodities are stored and packaged and transported via freight rail to Port Botany and exportation by ship. The proposed use:

- Reflects the growth in the container trade and increases the proportion of containers moved by rail from the intermodal terminal in the Sydney metropolitan area.
- The anticipated freight volumes by rail will assist in managing the growth of road freight and utilise a site within an approved intermodal terminal which increases rail mode share and manages the rapidly growing container trade.
- Maximises the sites connections to the metropolitan road network via Roberts Road / Centenary Drive, Hume Highway, M4 and M5 and the proximity to the existing dedicated freight line.
- Limits handling by using standardized containers which reduces costs and proposed the use of silos which will maintain the product to a higher standard.
- Provides a cost effective solution toward the handling and loading of large numbers of shipping containers from a storage compound, to underneath grain silos for loading and then for delivery to the rail face.
- The use optimizes the NSW regional rail network to move bulk commodity products both inbound and outbound.
- The proposed use of the site is consistent with the Australian Government, Department of Agriculture; 'Infrastructure and Australia's Food Industry Research Report' November 2013 by:
  - Utilising the intermodal infrastructure to support a growing food industry and ensure the cost effective and efficient movement of food.
  - Supporting Australian agriculture production and agrifood industry.

5 Statutory Planning Context

5.1 SECTION 75W OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

MP05_0147 was approved under Part 3A of the EP&A Act. In 2011 the NSW Government repealed Part 3A of the EP&A Act and announced that new projects would no longer be accepted in the Part 3A assessment system.

Pursuant to Schedule 6A of the amended EP&A Act, the approved project is defined as 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 as follows:

> ***75W Modification of Minister's approval***
>
> *(1) In this section:*
>
> *Minister's approval means an approval to carry out a project under this Part, and includes an approval of a concept plan.*
>
> *Modification of approval means changing the terms of a Minister's approval, including:*
>
> *(a) revoking or varying a condition of the approval or imposing an additional condition of the approval, and*
>
> *(b) changing the terms of any determination made by the Minister under Division 3 in connection with the approval.*
>
> *(2) The proponent may request the Minister to modify the Minister's approval for a project. The Minister's approval for a modification is not required if the project as modified will be consistent with the existing approval under this Part.*
>
> *(Our emphasis)*

Accordingly, it is proposed that the development of Site F to accommodate the Aglink Global use form part of a modification of the Major Project approval in accordance with Section 75W of the EP&A Act.

The proposed amendment to the built form to allow grain storage facilities and associated structures is detailed in Table 4 below.

TABLE 5 – PROPOSED INDICATIVE AMENDMENTS TO THE MAJOR PROJECT APPROVAL

	APPROVED	PROPOSED
Use	Warehouse: *Freight handling, container handling, temporary freight storage and/or packaging/repackaging, or for activities ancillary to these uses, or the intermodal terminal and empty container storage areas.*	No amendment to the use is required.
Built form	Indicative warehouse buildings	Indicatively, the built form will include: ▪ Grain pits ▪ Garner bins

	APPROVED	PROPOSED
		▪ Dual container loading areas ▪ Transfer elevator tower ▪ 22 grain silos ▪ Ancillary office space ▪ Rail spur
Height	All warehouses require a wall height clearance of 10m, with the top of the roof being no more than 12m.	▪ A maximum height on the site of 26m to accommodate the transfer elevator tower. ▪ The indicative height of the warehouse is 18m. ▪ The height of the silos is approximately 15.5m.
Caps on Movement	Movement are limited to a maximum throughput of 300,000 TEU per annum, as measured at the rail to intermodal terminal interface.	The proposed use does not require any amendments to the cap on movements across the EILC. A maximum of 72,727 TEU per annum is proposed and would be included in the maximum capacity for the EILC site.
Footprints	Warehouse F: 13,500sqm	The built form includes a number of structures with varying footprints. Indicatively, the site coverage would consists of the silos structure of 6,300sqm, warehouse of 5,500sqm and office admin 300sqm resulting in an indicative site coverage of 12,100sqm (less than that anticipated for warehouse use).
Subdivision and Leasable Areas	Warehouse F has a leasehold tenant lot of 35,755sqm.	The proposed use does not require any amendments to the leasehold tenant lot area.

The Land and Environment Court case *Barrick Australia Ltd v Williams* clarified that the Minister for Planning's power to modify a Part 3A approval under Section 75W can be used for changes that have *'limited environmental consequences'* beyond those approved in the original project assessment. Accordingly, further details and preliminary assessment is now provided demonstrating that the modifications would lie within these parameters. Accordingly, Director General Requirements are requested to guide the preparation of the Environmental Assessment and the relevant specialist supporting documentation.

It is understood that the consent authority for a S75W modification application NSW P&I or the Planning Assessment Commission (PAC). The application would be referred to Strathfield Council for comment as part of the assessment process.

5.2 JUSTIFICATION FOR THE PROPOSED USE OF SECTION 75W

The use of Section 75W is considered appropriate in context of the following considerations:

- The Aglink Global proposal retains the use of the site for a 'warehouse' including '*freight handling, container handling, temporary freight storage and/or packaging/repackaging'* as per the approved definition for warehousing. Accordingly the proposed use is compatible with the existing approval and the expected activities to be carried out on Site F. Further, the use will continue to assist in meeting the aim to double freight volumes through NSW by 2031 and supports the EILC as part of a metropolitan network of intermodal terminals.

- The proposed built form will include a number of structures which remain compatible with the industrial nature of the EILC and the surrounding industrial development including the adjacent industrial development to the east of Cosgrove Road. The use of silos is consistent with adjacent land uses such as:

  - The George Western Foods site to the north west of the site which also accommodates silos which are of a larger scale that those proposed on Site F.

  - The cement batching silos located adjacent to Roberts Road to the north west of the EILC.

  - The large electricity superstructures which travel through surrounding Strathfield suburbs and along key roads such as the Hume Highway.

- The preliminary environmental assessment provided in Section 7 demonstrates that the proposed use has '*limited environmental consequences'* when compared to the approved use and built form as follows:

  - The site will have minimal visibility from surrounding residential precincts and is compatible with the surrounding industrial sites.

  - The proposed throughput of the site is within the total TEUs permitted per annum and is appropriate in context of the scale and use of the site.

  - Given that the site preparation works on the site have been approved and is largely cleared, there is no anticipated impact on local ecology. Further, Site F is located 1400m north of the identified frog habitat areas.

  - The contamination and proposed excavation beyond the caped layer can be managed and will be guided by the existing Site Management Plan and a Site Audit Statement which will be prepared as part of the Section 75W application.

  - Traffic and access to the site will be generally in accordance with that anticipated as part of MP05_0147. The resulting traffic generation will be assessed further as part of the Section 75W application.

6 Strategic Context

6.1 NSW 2021: A PLAN TO MAKE NSW NUMBER ONE

The NSW 2021 is a 10–year plan to guide policy and budget decision making in NSW. In relation to freight movement, the plan targets the enhancement of rail freight movement by doubling the proportion of container freight movement by rail through NSW ports by 2020.

This is considered critical to accommodate high forecasted growth in freight movements, particularly through Port Botany and maximise the operational capacity of ports and ease road congestion and is to be achieved through the following:

- Developing and delivering the NSW Freight Strategy, integrated with strategic land use and transport planning (refer Section 6.2).
- Prioritise the delivery of the Port Botany Landside Improvement Strategy to improve the efficiency of Port Botany, which currently handles 95% of container movements in NSW.
- Complete the creation of a third terminal and five new container berths at Port Botany to increase the capacity of the port.
- Undertake detailed modelling to determine future operating capacity of NSW ports including analysis of landside infrastructure and options to increase the use of rail to service ports.

The proposal is consistent with NSW 2021 by resulting in a reduction in the growth of truck movements on road networks between EILC and Port Botany.

6.2 NSW FREIGHT AND PORTS STRATEGY 2013

The Freight and Ports Strategy 2013 aims to ensure freight is at the forefront of the NSW economy with a doubling of freight volumes through NSW to nearly 800 million tonnes by 2031. The main strategies to achieve this are given as:

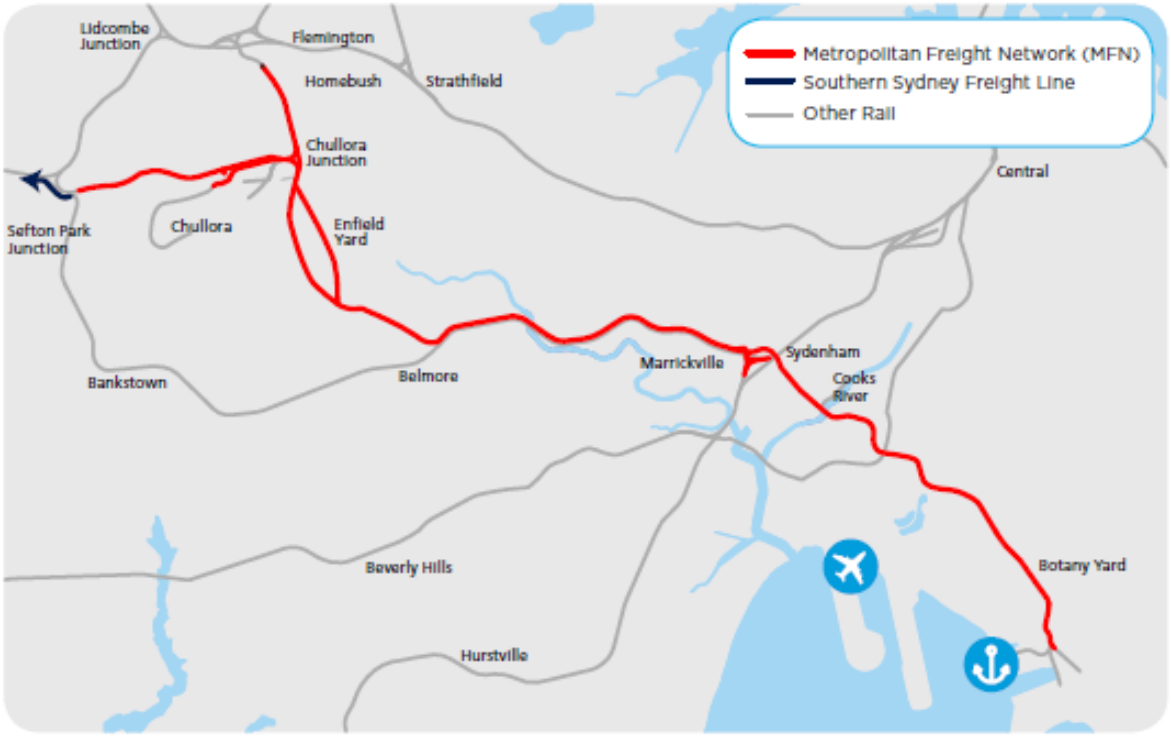
- *A strategic focus to ensure policy; infrastructure and land-planning initiatives deliver a freight network where capacity and performance can meet demand.*
- *An efficient and effective freight network which is the cornerstone of economic productivity and growth.*
- *Investing heavily in new infrastructure to deliver greater capacity across the transport network.*

The Freight and Ports Strategy 2013 identifies that an ongoing lack of forward planning in metropolitan and regional NSW is anticipated to result in further under provision of intermodal terminals and result in new intermodal developments which do not maximise on the existing and planned improvements to road and rail networks.

In the Sydney metropolitan area, the EILC is identified as addressing some of these planning issues assisted by its connection to a dedicated rail freight line and proximity to an established industrial area with links to Metroad 3 and the Hume Highway. A similar model is proposed for the proposed intermodal terminals at Moorebank, which are close to the Southern Sydney Freight Line and the M5, Hume Highway and M7.

Figure 3 shows key freight destinations including the EILC and Port Botany.

FIGURE 3 – KEY FREIGHT DESTINATIONS (NSW FREIGHT AND PORTS STRATEGY 2013)



The Freight and Ports Strategy 2013 identifies that 85% of import and export containers which originate or at destined for locations within 40km of Port Botany. Approximately, 14% of freight movements occur by rail and with road remaining the predominant transport mode. The proposed development will mode share increasing the rail efficiency by providing both inbound and outbound freight by rail as well as road. This will also reduce the long-term environmental impacts associated with truck movements.

The Freights and Ports Strategy 2013 also identifies that successful intermodal terminals across the State include value-add services, either within the terminal or nearby including freight consolidation and de-consolidation, warehousing and cross dock operations and container storage.

The EILC combined a number of opportunities for these value-add services with the site including container storage, intermodal terminal area, light industrial / commercial area and warehousing. The proposed modification to Site F seeks to accommodate silos which have the capability to load rail wagons, ancillary office space and warehousing area. The proposed use maximises its location within the intermodal terminal by transporting containers to the Intermodal Terminal Area for transportation via freight rail shuttle to Port Botany pending its exportation by ship.

The proposal is consistent with the purpose of the intermodal terminal for bulk freight produce and contributes to the aim to double freight rail volumes throughout NSW.

6.3 NSW LONG TERM TRANSPORT MASTER PLAN

The NSW Long Term Transport Masterplan coordinates land use planning with transport planning including integration of freight and passenger movement. One of twelve identified action areas is given as follows:

> *Improving freight efficiency and productivity through major investments and efficiencies in the road and rail freight networks and at ports, airports and intermodal terminals, and through the Bridges for the Bush program to improve regional connectivity.*

The NSW Long Term Transport Masterplan seeks to grow future freight network capacity development and this has included the EILC. Identified action in the short to medium term is to develop a metropolitan network of intermodal terminals seeking to increase the share of freight that is transported by rail by developing an efficient and competitive network of intermodal terminals. The proposal relies on the dedicated freight lines of the railway to transport grain by rail to Port Botany and then onto a variety of destinations by ship.

7 Preliminary Environmental Assessment

7.1 BUILT FORM

The indicative built form footprint is shown on the concept plan provided in **Appendix B**. The built form is considered appropriate and acceptable with consideration to the following:

- The proposed built form will consist of a number of elements, the main built form being silos and associated elevator tower. While it is proposed to increase the height limit on the site from 12m to 26m, this is considered appropriate as follows:
  - To reflect the end user of the site and the modification for the key purpose of grain storage
  - It is not anticipated to result in any adverse visual or amenity impacts as discussed in Section 7.2.
  - Reflects the varied height of anticipated structures within the EILC presented by the empty container storage areas which will continually change the visual appearance of the site.
- Site F was included in MP05_0147 for the purposes of 'warehousing' and the proposed built form is compatible in nature.
- Indicative setbacks are shown which allow for access road and car parking to be accommodated and prevent an over development of the site.
- The proposed silos are consistent with the existing silos on the George Western Foods site to the north west of the site (and at significantly smaller scale) and reflect the industrial nature of the area.

Architectural Plans detailing the proposed built form will be provided as part of the Section 75W application with associated elevations. Site landscaping will be included on the eastern boundary of the site to Cosgrove Road to enhance the visual presentation of the site to the surrounding public domain.

7.2 AMENITY

7.2.1 AIR QUALITY

The storage of grain requires fumigation within the silos for the purpose of insect control. The fumigation will be conducted in sealed silos to AS2628 Standards with the required application and withholding periods as per manufacturers recommendations with trained staff. This is a standard procedure for grain storage and is subject to strict controls under Aglink Global established processes. Due to the controlled and sealed nature of the fumigation process, this will not impact on the air quality or present a risk to human health. Details of the fumigation process and compliance with the necessary standards and controls will be included as part of the Section 75W application.

Under the conditions of consent for MP05_0147, Condition 2.22 states the following in relation to dust emissions:

> *2.22 The Proponent shall design, construct, commission, operate and maintain the project in a manner that minimises or prevents the emission of dust from the site including wind blown and traffic generated dust.*

The proposed development will satisfy the requirements of this control and ensure that both construction and operational dust will be controlled to minimise the emission of dust. This will be through site management measures and procedures to ensure that grain is not exposed to wind environments and that the site is suitably constructed to minimise traffic dust.

The construction process will be controlled through erosion and sedimentation management processes which will be detailed in a Section 75W application.

7.2.2 ACOUSTIC IMPACT

Acoustic testing will be carried out as part of the Section 75W application to ensure that the proposed operations on the site will not impact on residential amenity or the amenity or surrounding land users. Given the separation of Site F from residential uses and the approved nature of the site as an intermodal terminal, it is anticipated that acoustic impact will be manageable.

7.2.3 LIGHTING

The proposed lighting of the site will be designed to allow for safe working conditions in all areas during night time operations. However, the levels of lighting will be designed to ensure that there is no light spill which will affect residential uses and result in amenity impacts.

7.2.4 VISUAL IMPACT

The previous use of Site F formed part of the DELEC development and included a fuelling facility and various other industrial style buildings. The approved character of Site F as part of the overall EILC site and its use as an intermodal terminal is predominantly industrial facilitating freight movements across NSW. Accordingly, both the history and future of the site is industrial in nature.

The site is surrounded by adjoining industrial land uses which are compatible with the built form proposed as part of this development as discussed in Section 7.1 and is therefore in keeping with the adjoining land uses. The pattern of development surrounding the site screens it from much of the surrounding area.

In terms of visual impact the most sensitive uses which surrounding the EILC are local residential areas. Site F is located:

- Approximately 242m to the nearest residential development to the west which is on the western side of Roberts Road, a 6 lane carriageway. This substantial separation of Site F and the residential uses includes the rail corridor comprising the new Enfield Marshalling Yards which borders the EILC immediately to the west. The scale of this rail corridor makes it a prominent feature in the area and adjacent container storage areas and terminal areas would buffer any visual impacts presented by the proposal.

- Approximately 430m to the nearest residential development to the north east through the adjoining industrial area which is 350m wide.

- Approximately 480m to the nearest residential dwelling to the east through an adjoining industrial area. Mature street tree planting along Cosgrove Road forms a well-vegetated edge and although this becomes less consistent with some large gaps in the northern section, the site is immediately adjacent to compatible industrial development to the east including container storage.

Accordingly, the extent of separation between the site and residential uses greatly limits visual amenity impacts. Potential views of the site may occur along Cosgrove Road where topography provides some elevation however this is viewed in context of the adjoining industrial area to the east.

There are high level views of the site from Roberts Road. However, this is a key arterial road connection and is not anticipated to present a substantial visual impact to passing traffic.

A visual assessment of the proposed built form will form part of the Section 75W application.

7.3 ECOLOGICAL IMPACT

The site forms part of the former DELEC site where development included office building, amenities building, wheel lathe shed turntable, fuel storage tanks on or in proximity to the site:

The Flora and Fauna Report prepared to accompany the Project Application MP05_0147 concluded the following with regard to potential ecological impacts as a result of the EILC proposal:

The areas on which construction of the ILC site would impact directly are highly modified and in poor condition. During construction, the ILC site would involve the removal of only highly disturbed, weed infested or non-native/ornamental vegetation, which has little habitat value for all but the most disturbance tolerant species.

The ILC site was identified as providing marginal habitat for the Green and Golden Bell Frog. In 1996, a Green and Golden Bell Frog pond was created in the new Enfield Marshalling Yards and Green and Golden Bell Frogs have been sighted at this pond. Green and Golden Bell Frogs are also present in the nearby Juno Parade Brick Pit site and a long-term management program is underway for the frogs on this site. The creation of an additional Frog Habitat Area was incorporated into the proposed development to minimise the impact of any further disturbance or habitat loss that may result from the development of the EILC as well as assisting with the conservation of the species.

Figure 4 shows the habitat present in the south eastern portion of the study area (Areas 1 and 3) which meets most criteria for Green and Golden Bell frog habitat. The Frog Habitat Area is located to the south of the site and is not anticipated to be affected by the proposed Aglink Global use.

FIGURE 4 – FLORA AND FAUNA PRECINCTS AND FROG HABITAT AREAS

Site F

Further, MP 05_0147 approved demolition of structures on the site which included the DELEC buildings and structures, relocation or removal of former railway buildings and structures and earthworks and drainage including the levelling of the site, formation of landscape mounds and detention basins and removal of unsuitable materials, as required. Accordingly, the site has been substantially cleared with a capping layer added to the surface and impact to local ecology is considered to be minimal.

7.4 TRAFFIC AND TRANSPORT

7.4.1 ACCESS

Access to the EILC will be consistent with the Project Approval which allows for access to the site by Cosgrove Road and Wentworth Street. No amendment to the site access arrangements will be sought as part of a Section 75W application. Access to Site F will be as shown on the Indicative Layout Plan.

Accordingly, access to the site is has already been assessed and considered entirely appropriate for the approved use as an intermodal terminal.

7.4.2 THROUGHPUT CAPACITY AND TRUCK MOVEMENTS

Condition 1.5 of the consent for MP05_0147 states the capacity limits of the EILC and states the following:

> *The project shall be limited to a maximum throughput of 300,000 TEU per annum, as measured at the rail to intermodal terminal interface.*

This was based on the expectation that:

- 150,000 TEUs per annum would be sent by rail from the port to Enfield
- 150,000 TEUs per annum would be returned to the port by rail.

TEU is defined as follows:

> *Twenty foot equivalent unit – one TEU equals one twenty foot container.*

The total maximum permitted TEU movements is 300,000 per annum based on the following:

- Botany to EILC: 150,000 per annum
- EILC to Botany: 150,000 per annum

The anticipated TEU movements per annum are as follows:

- Average: 45,455 per annum (based on 175 TEU per day)
- Maximum anticipated: 72,727 per annum (based on 280 TEU per day)

This represents an average of 15.2% of the total permitted TEUs per annum and an anticipated maximum of 24.2% TEU per annum.

However, it should be noted that the Aglink Global use will operate in counter flow to the majority of tenants accommodated at EILC as what would ordinarily constitute an ‘empty leg’ for the containers running from EILC to Botany will be utilised in this instance to transport goods as described in Section 4.1. Accordingly this calculation accounts for both inbound and outbound movements and therefore compared to the majority of other uses on the site, this calculation effectively doubles the counting of container movements on Site F.

Calculating this based on number of movements from EILC to Port Botany only, the proposed TEU movements are as follows:

- Average: 22,727 per annum
- Maximum anticipated: 36,364 per annum

This represents an average of 7.6% of the total permitted TEUs per annum and an anticipated maximum of 12.1% TEU per annum.

The areas generating the majority of throughput on the EILC will be the warehouse areas with containers moving into the storage and terminal areas across the site. Given the size of Site F as the second largest warehouse site of the approved six sites and in context of the total EILC development, the proposed throughput is considered to be appropriate allowing adequate capacity to accommodate other uses on the site.

In the initial stages, deliveries are anticipated to be by road until rail access has been arranged. Based on the anticipated TEUs:

- Based on both inbound and outbound the average volume truck movements are 117 per day and a maximum of 186.
- Based on number of movements from EILC to Port Botany only, the average number of trucks is 58 and the maximum number would be 93 inbound trucks.

The safety of truck movements through the site and local area will be assessed as part of the Section 75W application.

The estimated rail movements and anticipated timing for progression from road to rail movements is as follows:

- 20-30% of all movements by rail for the first two to three years.
- 45-60% of all movements by rail within three to five years.
- Greater than 60% of all movements after five years.

A rail spur and associated infrastructure is proposed as part of the modification for the purpose of receiving and unloading bulk grain wagons. This will be subject to future demand and need.

7.4.3 TRAFFIC AND ACCESS

Trucks transporting grain into the site will be travelling from regional origination points within NSW and carrying grain loads generally into key access routes including the M5 Motorway, Roberts Road, the Hume Highway and M4 Motorway which are easily accessed from the site. During MP05_0147, a traffic assessment of the original proposal was undertaken and the traffic generated by the proposed ILC was distributed onto the surrounding road network, based on the forecast market area for the ILC. This report concluded that on most key roads, the impact in peak hour traffic (morning and afternoon) resulting from the development of the ILC is minimal.

Access into the EILC site will be as approved under MP05_0147. Access to the site will be consistent with the approved access point through the EILC as shown on the Indicative Layout Plan. The site will be accessed by single trailer and B/Doubles trucks and via open top containers and intermodal wagon. Full containers will be shuttled back to the Intermodal Terminal Area, via prime mover with skell trailer attached (or be transported by rail spur in the longer term) The movement of heavy goods vehicles is typical of an intermodal terminal and its container trade.

A full traffic and access report will be prepared as part of the Section 75W application and will include an assessment of construction and operational traffic generation.

7.5 CONTAMINATION

Site F is part of the former DELEC site and was a network of rail lines, a fuelling facility and various buildings interconnected by services and as a result has been identified as containing contaminated soils.

During demolition of these structures in accordance with the consent for MP05_0147 footings were removed to a minimum of approximately 1m below ground level. Some of the services which existed on the site were retained in-situ and disconnected such as fuel lines, oily water rising mains, electrical services, a cast iron water supply and hydrant system, sewers and clean water and dirty water stormwater drainage lines.

The majority of Site F has been remediated with removal of services limited to areas that are to be remediated as follows:

- The western part of Site F is likely to be impacted by asbestos fibres from the former maintenance and operation of trains and rolling stock in this part of the site and from the dilapidation of structures clad in asbestos cement sheeting that were formerly present.

- Soils in the eastern part of Site F were unlikely to be impacted by asbestos as the activities and structures referred to above were not associated with this area.

- In accordance with the RAP, asbestos impacted soil in the former DELEC area was dealt with via an 'In-Situ Capping Strategy'. This involves retaining the contaminated material safely and securely on site by capping it under material that meets the Remediation Acceptance Criteria (RAC) in the RAP or is appropriately validated as clean fill material such as imported Virgin Excavated Natural Material.

- In accordance with the RAP, to reduce the risk of any exposure to asbestos fibres in the soil during construction or later activities the potentially impacted soils were In-Situ Capped with suitable materials.

Impacted soil material which remains in place in the lease area under a clean capping layer include:

- Previous surface soils that potentially contain asbestos fibre not visible from the surface.

- Previous surface soils that contain some oil stains.

- Previous soils which were impacted by petroleum hydrocarbons (TPH), but at concentrations below the adopted site specific health risk assessment criteria

A Site Management Plan (SMP) for Area F has been drafted for the site and works will be undertaken in accordance with this document including any excavation beyond the capping layer for inclusion of the grain pits.

Development of Site F will be in accordance with the SMP, when undertaking works that will penetrate the capping layer. A CEMP (construction environmental management plan) for their construction / development works will be prepared as part of a Section 75W application including excavation and contamination management with requirements for works that penetrate the capping layer.

In accordance with Condition 2.43, a Site Audit Statement will also be prepared as follows:

> *2.43 Prior to the commencement of construction works associated with the project that may disturb contaminated areas of the site, the Proponent shall submit to the Director-General a Site Audit Statement(s), prepared by an accredited Site Auditor under the Contaminated Land Management Act 1997, verifying that the area of the site on which construction is to be undertaken has been or can be remediated to a standard consistent with the intended land use. A final Site Audit Statement(s), prepared by an accredited Site Auditor, certifying that the contaminated areas have been remediated to a standard consistent with the intended land use is to be submitted to the Director-General prior to operation of the remediated site(s).*

The SAS will include requirements for a Validation Report to be provided to the Site Auditor demonstrating that the site remains suitable for commercial / industrial use.

8 Conclusion

It is proposed that the development of 'Site F' to accommodate the Aglink Global use form part of a modification of Major Project MP05_0147 in accordance with Section 75W of the EP&A Act for the following reasons:

- The approved project is defined as 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 proposal retains the use of the site for a 'warehouse use' including '*freight handling, container handling, temporary freight storage and/or packaging/repackaging'* as per the approved defined use for the site.
- The proposed built form which remain compatible with the industrial nature of the EILC and the surrounding industrial development.
- The preliminary environmental assessment demonstrates that the proposed use has '*limited environmental consequences'* when compared to the approved use and built form.
- Reflects the growth in the container trade and increases the proportion of containers moved by rail from intermodal terminals in the Sydney metropolitan area and regional NSW.

It is therefore requested that Director General Requirements are issued with respect of a Section 75W application for the modification of MP05_0147.

Disclaimer

This report is dated April 2014 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Aglink (**Instructing Party**) for the purpose of Planning Report (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

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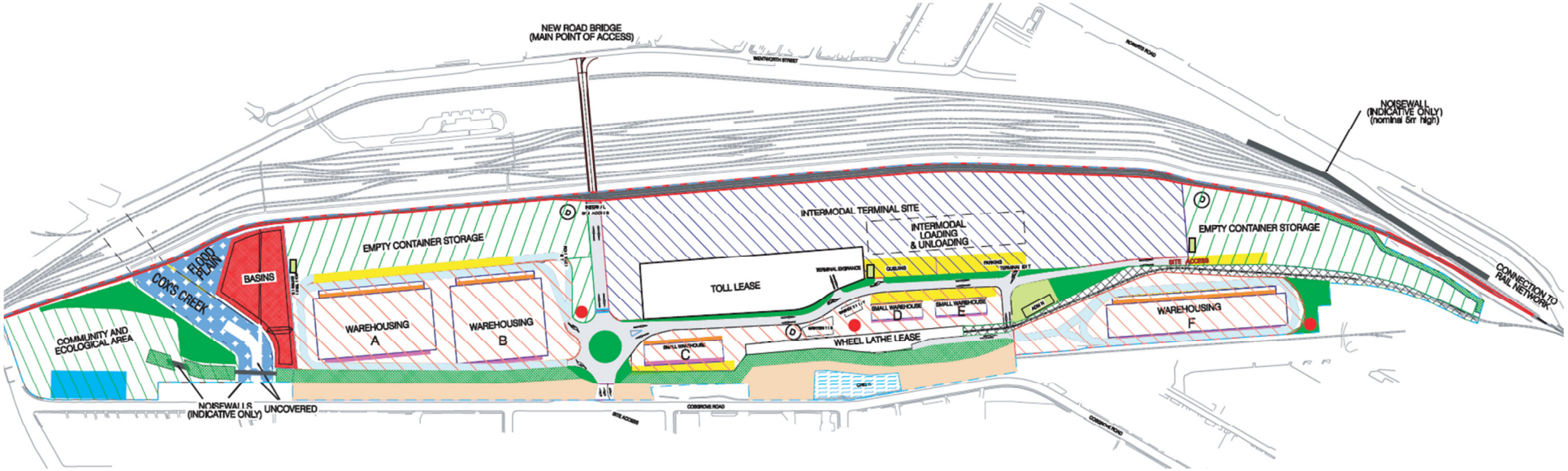
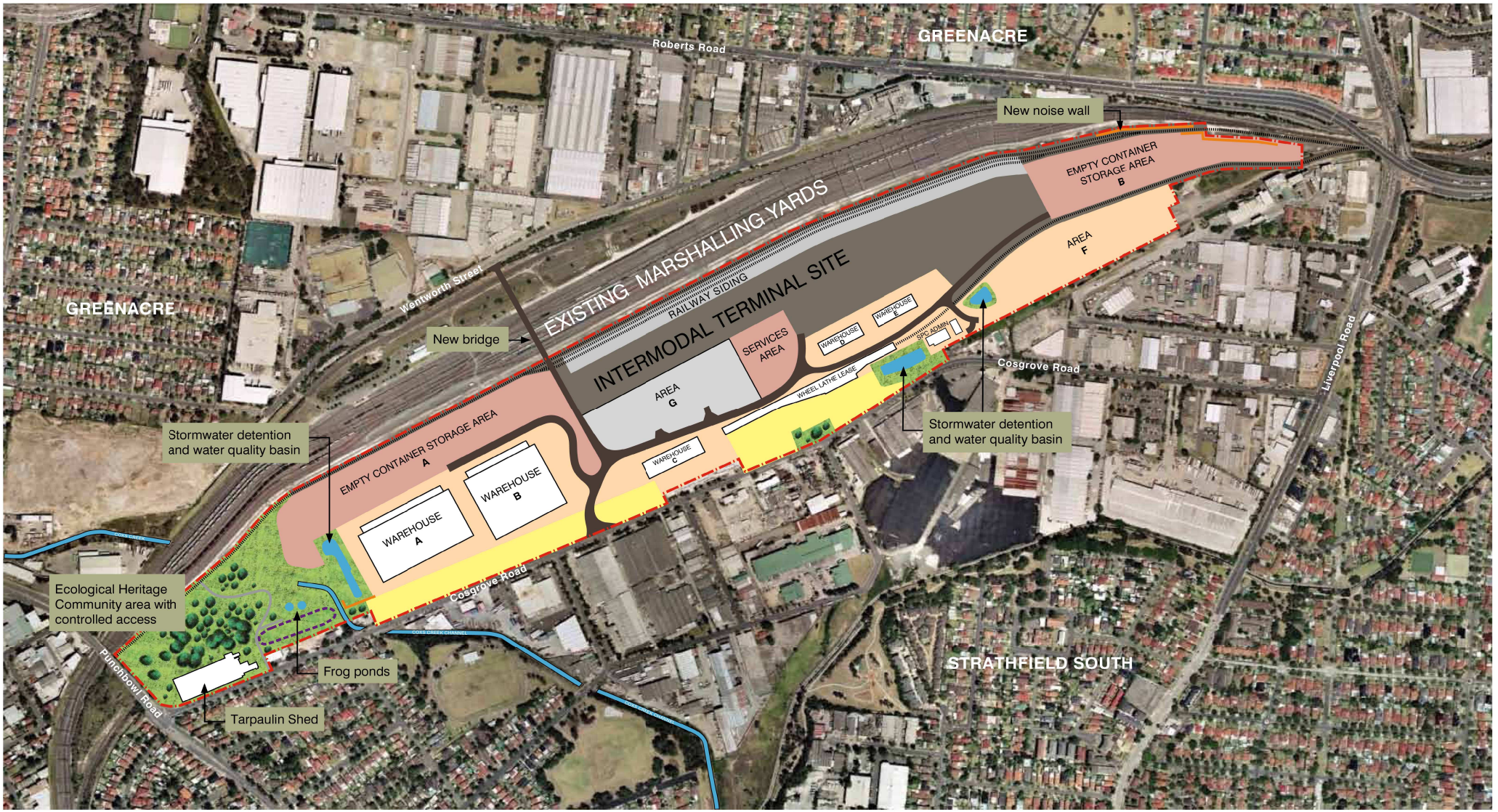
This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

Appendix A Indicative Layout Plan

FIGURE 1 – INDICATIVE LAYOUT PLAN FROM MP 05_0147 AS MODIFIED





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THIS NOTE IS AN INTEGRAL PART OF THIS PLAN
NOTE : STATED MEASUREMENTS ARE INDICATIVE ONLY AND SUBJECT TO SURVEY
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Appendix B - ILC Concept Layout Design 2011

SYDNEY PORTS
FIRST PORT, FUTURE PORT

PLAN PRODUCED ON MGA GRID

ENFIELD ILC PRECINCT
CONCEPT LAYOUT DESIGN
CURRENT OCTOBER 2011

DRAFTED BY: SDS
DATE: 01/11/2011
PLAN SCALE: AS PER SCALE BAR
DWG NO: SEDP065C

Appendix B Site F: Indicative Concept Plan

INTERMODAL TERMINAL RAIL SIDINGS

INTERMODAL TERMINAL AREA

LOT 14
D.P. 1007302

EMPTY CONTAINER
STORAGE B

Indicative future
location of rail spur

Existing Rail Line

Staff Car Park

Warehouse 5,525m²
With ancillary office,
approx 300m²

Hard Stand
Empty containers
and storage

LOT 2

D.P. 1006861

BASIN F

Silos
Indicative only. Sizes to be determined

**Garner bins and
loading areas**

LOT 2

D.P. 842188

COSGROVE ROAD

Indicative Concept Plan

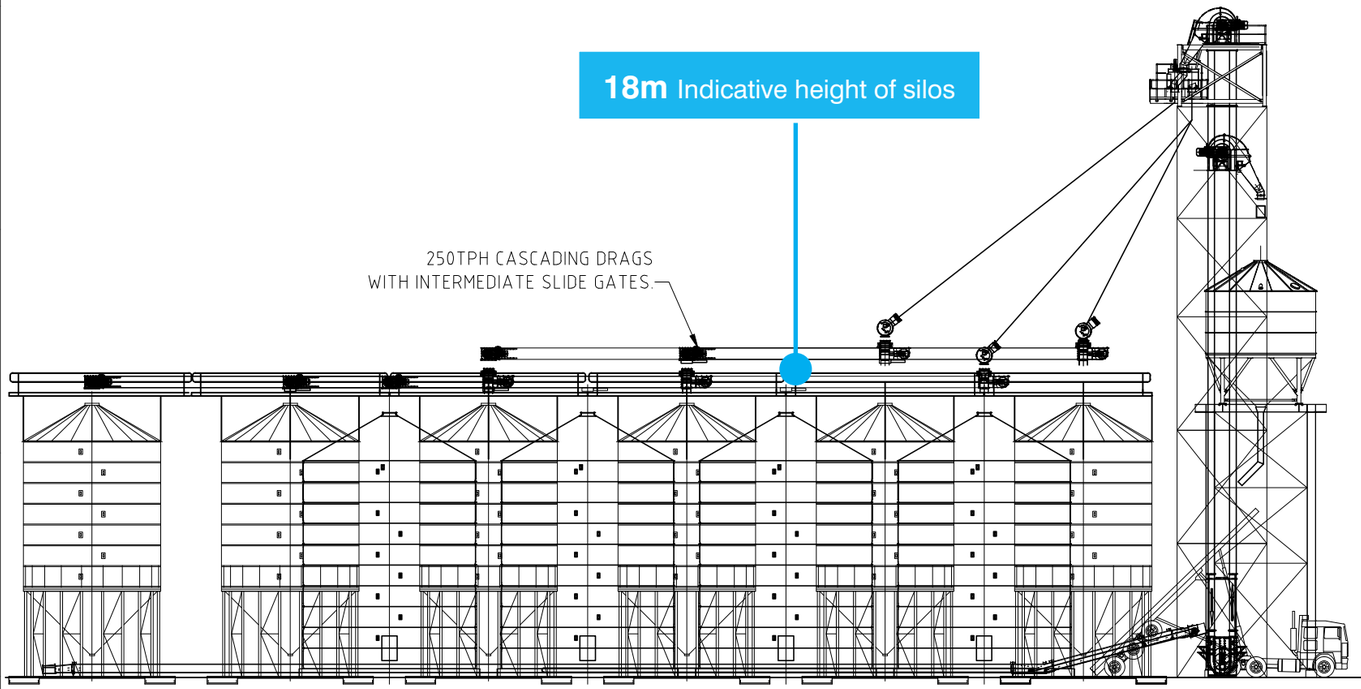
0 20 40 60 100
Metres

urbis

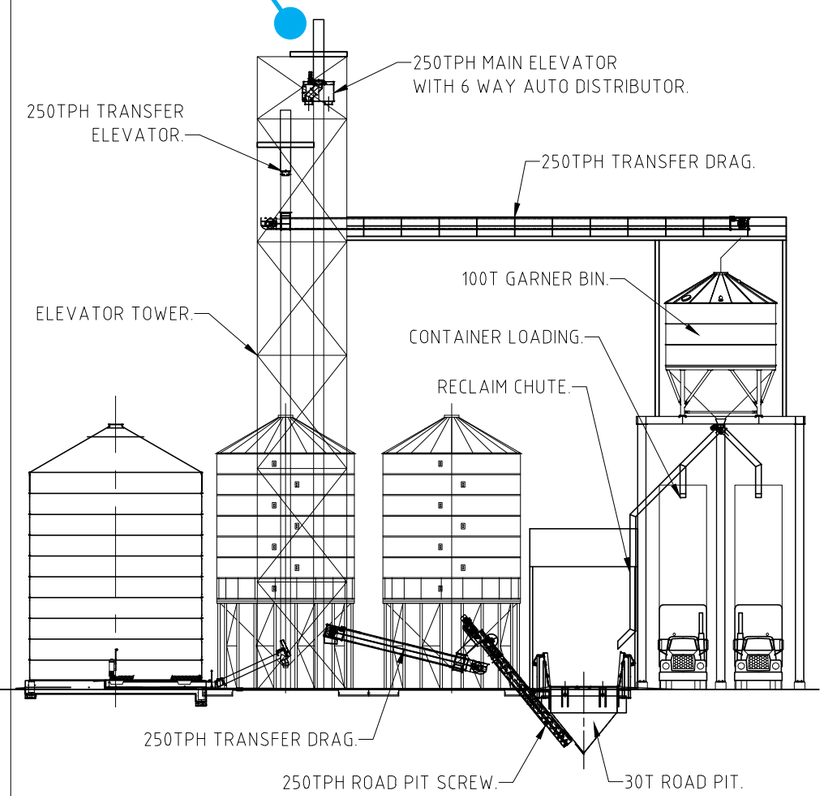
Illustrative Elevation

26m Approximate height of elevator towers

18m Indicative height of silos



SIDE VIEW.



END VIEW.

FILE NO:
JOB NO:
PLOT DATE: 17/11

REFERENCE DRAWINGS	REV	DATE	REVISION DESCRIPTION	DRN	CHK	APP'D

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SCALE 1:150

AGLINK NARROMINE NSW
PROPOSED GRAIN STORAGE & CONTAINER

LOADING FACILITY.
ELEVATIONS. SHEET 3.

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